



**CONTRACT AND BID DOCUMENTS FOR  
FORCE MAIN PROJECT**

Prepared By



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**CONSTRUCTION DOCUMENTS  
PROJECT MANUAL**

**BID SET – NOT FOR  
CONSTRUCTION JANUARY 2025**

**Engineer's Estimate: \$860,000**

**TABLE OF CONTENTS**

	<u>Page</u>
00 11 16 – NOTICE INVITING BIDS .....	6
00 21 13 – INSTRUCTIONS TO BIDDERS .....	9
ARTICLE 1. SECURING DOCUMENTS .....	9
ARTICLE 2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS .....	9
ARTICLE 3. INTERPRETATION OF DRAWINGS AND DOCUMENTS .....	9
ARTICLE 4. PRE-BID CONFERENCE .....	10
ARTICLE 5. ADDENDA .....	10
ARTICLE 6. ALTERNATE BIDS .....	10
ARTICLE 7. COMPLETION OF BID FORMS .....	10
ARTICLE 8. MODIFICATIONS OF BIDS .....	11
ARTICLE 9. SUBCONTRACTORS .....	11
ARTICLE 10. LICENSING REQUIREMENTS .....	11
ARTICLE 11. BID GUARANTEE (BOND) .....	11
ARTICLE 12. IRAN CONTRACTING ACT OF 2010 .....	12
ARTICLE 13. NONCOLLUSION DECLARATION .....	12
ARTICLE 14. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION .....	12
ARTICLE 15. BIDDER INFORMATION AND EXPERIENCE FORM .....	12
ARTICLE 16. WORKERS' COMPENSATION CERTIFICATION .....	12
ARTICLE 17. SIGNING OF BIDS .....	13
ARTICLE 18. SUBMISSION OF SEALED BIDS .....	13
ARTICLE 19. OPENING OF BIDS .....	13
ARTICLE 20. WITHDRAWAL OF BID .....	14
ARTICLE 21. BIDDERS INTERESTED IN MORE THAN ONE BID .....	14
ARTICLE 22. SUBSTITUTION OF SECURITY .....	14
ARTICLE 23. PREVAILING WAGES .....	14
ARTICLE 24. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS .....	14
ARTICLE 25. INSURANCE REQUIREMENTS .....	15
ARTICLE 26. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS .....	15
ARTICLE 27. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES .....	15
ARTICLE 28. PERMIT AND INSPECTION FEE ALLOWANCE .....	15
ARTICLE 29. FILING OF BID PROTESTS .....	15

## TABLE OF CONTENTS

(Continued)

	<u>Page</u>
ARTICLE 30. BASIS OF AWARD; BALANCED BID .....	16
ARTICLE 31. AWARD PROCESS.....	16
ARTICLE 32. EXECUTION OF CONTRACT .....	16
ARTICLE 33. QUESTIONS .....	17
ARTICLE 34. FLEET COMPLIANCE.....	17
ARTICLE 35. TIMELINE.....	17
00 41 43 – BID FORMS .....	18
ARTICLE 1. INFORMATION ABOUT BIDDER.....	28
ARTICLE 2. LIST OF CURRENT PROJECTS (BACKLOG) .....	31
ARTICLE 3. LIST OF COMPLETED PROJECTS – LAST THREE YEARS .....	32
ARTICLE 4. EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE.....	33
ARTICLE 5. VERIFICATION AND EXECUTION .....	34
00 52 13 – CONTRACT .....	40
00 61 13 – BOND FORMS .....	44
00 72 13 – GENERAL CONDITIONS.....	53
ARTICLE 1. DEFINED TERMS .....	53
ARTICLE 2. CONTRACT DOCUMENTS.....	57
ARTICLE 3. PRECONSTRUCTION AND CONSTRUCTION COMMUNICATION.....	58
ARTICLE 4. CONTRACT DOCUMENTS: COPIES & MAINTENANCE.....	58
ARTICLE 5. EXAMINATION OF DRAWINGS, SPECIFICATIONS AND SITE OF WORK .....	58
ARTICLE 6. MOBILIZATION .....	59
ARTICLE 7. EXISTENCE OF UTILITIES AT THE WORK SITE .....	60
ARTICLE 8. SOILS INVESTIGATIONS .....	60
ARTICLE 9. CONTRACTOR'S SUPERVISION .....	61
ARTICLE 10. WORKERS.....	61
ARTICLE 11. INDEPENDENT CONTRACTORS.....	61
ARTICLE 12. SUBCONTRACTS.....	61
ARTICLE 13. VERIFICATION OF EMPLOYMENT ELIGIBILITY .....	62
ARTICLE 14. REQUESTS FOR SUBSTITUTION .....	62
ARTICLE 15. SHOP DRAWINGS.....	63
ARTICLE 16. SUBMITTALS .....	64
ARTICLE 17. MATERIALS .....	64

## TABLE OF CONTENTS

(Continued)

	<u>Page</u>
ARTICLE 18. PERMITS AND LICENSES.....	65
ARTICLE 19. TRENCHES.....	65
ARTICLE 20. TRAFFIC CONTROL.....	66
ARTICLE 21. DIVERSION OF RECYCLABLE WASTE MATERIALS.....	67
ARTICLE 22. REMOVAL OF HAZARDOUS MATERIALS.....	67
ARTICLE 23. SANITARY FACILITIES.....	67
ARTICLE 24. AIR POLLUTION CONTROL.....	68
ARTICLE 25. LAYOUT AND FIELD ENGINEERING.....	68
ARTICLE 26. TESTS AND INSPECTIONS.....	68
ARTICLE 27. PROTECTION OF WORK AND PROPERTY.....	69
ARTICLE 28. CONTRACTOR'S MEANS AND METHODS.....	69
ARTICLE 29. AUTHORIZED REPRESENTATIVES.....	69
ARTICLE 30. HOURS OF WORK.....	69
ARTICLE 31. PAYROLL RECORDS.....	70
ARTICLE 32. PREVAILING RATES OF WAGES.....	72
ARTICLE 33. PUBLIC WORKS CONTRACTOR REGISTRATION.....	72
ARTICLE 34. EMPLOYMENT OF APPRENTICES.....	73
ARTICLE 35. NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY.....	73
ARTICLE 36. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS.....	74
ARTICLE 37. LABOR/EMPLOYMENT SAFETY.....	74
ARTICLE 38. INSURANCE.....	74
ARTICLE 39. FORM AND PROOF OF CARRIAGE OF INSURANCE.....	78
ARTICLE 40. TIME FOR COMPLETION AND LIQUIDATED DAMAGES.....	79
ARTICLE 41. COST BREAKDOWN AND PERIODIC ESTIMATES.....	80
ARTICLE 42. PROGRESS ESTIMATES AND PAYMENT.....	80
ARTICLE 43. SECURITIES FOR MONEY WITHHELD.....	82
ARTICLE 44. CHANGES AND EXTRA WORK.....	82
ARTICLE 45. FINAL ACCEPTANCE AND PAYMENT.....	94
ARTICLE 46. OCCUPANCY.....	95
ARTICLE 47. INDEMNIFICATION.....	95
ARTICLE 48. PROCEDURE FOR RESOLVING DISPUTES.....	96
ARTICLE 49. AGENCY'S RIGHT TO TERMINATE CONTRACT.....	99
ARTICLE 50. WARRANTY AND GUARANTEE OF WORK.....	102
ARTICLE 51. DOCUMENT RETENTION & EXAMINATION.....	104



**TABLE OF CONTENTS**

*(Continued)*

	<u>Page</u>
ARTICLE 52. SEPARATE CONTRACTS .....	105
ARTICLE 53. NOTICE AND SERVICE THEREOF .....	105
ARTICLE 54. NOTICE OF THIRD PARTY CLAIMS .....	105
ARTICLE 55. STATE LICENSE BOARD NOTICE.....	106
ARTICLE 56. INTEGRATION.....	106
ARTICLE 57. ASSIGNMENT OF CONTRACT .....	106
ARTICLE 58. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY 106	106
ARTICLE 59. ASSIGNMENT OF ANTITRUST ACTIONS .....	106
ARTICLE 60. PROHIBITED INTERESTS.....	107
ARTICLE 61. CONTROLLING LAW.....	107
ARTICLE 62. JURISDICTION; VENUE .....	107
ARTICLE 63. LAWS AND REGULATIONS .....	107
ARTICLE 64. PATENTS.....	107
ARTICLE 65. OWNERSHIP OF CONTRACT DOCUMENTS .....	107
ARTICLE 66. NOTICE OF TAXABLE POSSESSORY INTEREST .....	108
ARTICLE 67. SURVIVAL OF OBLIGATIONS.....	108
ARTICLE 68. FLEET COMPLIANCE.....	108
00 73 13 – SPECIAL CONDITIONS.....	109
01 00 00 – GENERAL REQUIREMENTS.....	112
EXHIBIT “A” CHANGE ORDER FORM.....	1
TECHNICAL SPECIFICATIONS.....	
<b>DIVISION 01 – GENERAL REQUIREMENTS</b>	
01 10 00 SUMMARY	
01 20 00 PRICE AND PAYMENT PROCEDURES	
01 25 00 SUBSTITUTION PROCEDURES	
01 30 00 ADMINISTRATIVE REQUIREMENTS	
01 33 00 SUBMITTAL PROCEDURES	
01 40 00 QUALITY REQUIREMENTS	
01 50 00 TEMPORARY FACILITIES AND CONTROLS	
01 60 00 PRODUCT REQUIREMENTS	
01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS	
<b>DIVISION 02 – EXISTING CONDITIONS</b>	
02 01 20 PROTECTING EXISTING UNDERGROUND UTILITIES	
02 41 00 DEMOLITION	

**TABLE OF CONTENTS**  
(Continued)

**Page**

**DIVISION 31 – EARTHWORK**

- 31 05 13 SOILS FOR EARTHWORK
- 31 05 16 AGGREGATES FOR EARTHWORK
- 31 10 00 SITE CLEARING
- 31 22 13 ROUGH GRADING
- 31 23 17 TRENCHING

**DIVISION 33 – UTILITIES**

- 33 34 00 SANITARY UTILITY SEWAGE FORCE MAINS

APPENDICIES.....

APPENDIX A – FORCE MAIN PROJECT DRAWINGS

APPENDIX B – CONSTRUCTION DETAILS

APPENDIX C – ENCROACHMENT PERMITS

END OF TABLE OF CONTENTS

## 00 11 16 – NOTICE INVITING BIDS

NOTICE IS HEREBY GIVEN that the Governing Board of the Big Bear Area Regional Wastewater Agency (“Agency”) invites and will receive sealed Bids up to but not later than **2:00 PM on Tuesday, February 18<sup>th</sup>, 2025** at the office of the Agency, located at 121 Palomino Drive, Big Bear City, California, for the furnishing to Agency of all labor, equipment, materials, tools, services, transportation, permits, utilities, and all other items necessary for the **FORCE MAIN PROJECT** (the “Project”). At said time, Bids will be publicly opened and read aloud at the Agency Office. Bids received after said time shall be returned unopened. Bids shall be valid for a period of 90 calendar days after the Bid opening date.

### **The Force Main Project includes the following:**

- **Segment 1: Remove and replace approximately 620 linear feet (LF) of 16-inch ductile iron pipe (DIP) with 16” DR-14 C-900 PVC pipe via open trench installation.**
- **Segment 2: Remove and replace approximately 480 LF of 16-inch ductile iron pipe (DIP) with 16” DR-14 C-900 PVC pipe via open trench installation.**
- **Remove and replace two 2-inch sewage combination air valve and vault assemblies.**
- **Coordinate access and space for Owner to perform CCTV inspections at project limits.**

**The contractor is responsible for providing all labor, materials, and equipment needed to dewater, remove and replace, connect, pressure test, and re-commission the 1,100 LF of identified existing force main sections.**

Bids must be submitted on the Agency’s Bid Forms. Bidders may obtain a copy of the Contract Documents from the Agency’s website at <https://www.bbarwa.org/rfps-rfqs-procurement>. To the extent required by section 20103.7 of the Public Contract Code, upon request from a contractor plan room service, the Agency shall provide an electronic copy of the Contract Documents at no charge to the contractor plan room.

It is the responsibility of each prospective bidder to download and print all Bid Documents for review and to verify the completeness of Bid Documents before submitting a bid. Any Addenda will be posted on the Agency’s website at <https://www.bbarwa.org/rfps-rfqs-procurement>. It is the responsibility of each prospective bidder to check the Agency’s website on a daily basis through the close of bids for any applicable addenda or updates. The Agency does not assume any liability or responsibility based on any defective or incomplete copying, excerpting, scanning, faxing, downloading or printing of the Bid Documents. Information on Agency’s website may change without notice to prospective bidders. The Contract Documents shall supersede any information posted or transmitted by Agency’s website.

Each Bid shall be accompanied by cash, a certified or cashier’s check, or Bid Bond secured from a surety company satisfactory to the Agency, the amount of which shall not be less than ten percent (10%) of the submitted Total Bid Price, made payable to Big Bear Area Regional Wastewater Agency as bid security. The bid security shall be provided as a guarantee that within ten (10) working days after the Agency provides the successful bidder the Notice of Award, the successful Bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful Bidder fails to comply within said time. No interest will be paid on funds deposited with Agency.

A “**MANDATORY**” Pre-Bid Conference is scheduled for **2/4/25 at 10:00 AM** at BBARWA’s Office (121 Palomino Drive, Big Bear City, CA) to review the Project’s scope followed by a site visit at the Project location (42825 Big Bear Blvd, Big Bear Lake, CA) to review existing conditions. Representatives of the Agency and consulting engineers, if any, will be present. Questions asked by Bidders at the Pre-Bid Conference not specifically addressed within the Contract Documents shall be answered in writing, and shall be sent to all Bidders present at the Pre-Bid Conference.

The successful Bidder will be required to furnish a Faithful Performance Bond and a Labor and Material Payment Bond each in an amount equal to one hundred percent (100%) of the Contract Price. Each bond shall be in the forms set forth herein, shall be secured from a surety company that meets all State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120, and that is a California admitted surety insurer.

Pursuant to Section 22300 of the Public Contract Code of the State of California, the successful Bidder may substitute certain securities for funds withheld by Agency to ensure its performance under the contract.

Pursuant to Labor Code Section 1773, Agency has obtained the prevailing rate of per diem wages and the prevailing wage rate for holiday and overtime work applicable in San Bernardino County from the Director of the Department of Industrial Relations for each craft, classification, or type of worker needed to execute this contract. A copy of these prevailing wage rates may be obtained via the internet at: [www.dir.ca.gov/dlsr/](http://www.dir.ca.gov/dlsr/)

In addition, a copy of the prevailing rate of per diem wages is available at the Agency’s Office and shall be made available to interested parties upon request. The successful bidder shall post a copy of the prevailing wage rates at each job site. It shall be mandatory upon the Bidder to whom the Contract is awarded, and upon any subcontractors, to comply with all Labor Code provisions, which include but are not limited to the payment of not less than the said specified prevailing wage 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.

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No Bid will be accepted nor any contract entered into without proof of the contractor’s and subcontractors’ current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the Bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In bidding on this Project, it shall be the Bidder’s sole responsibility to evaluate and include the cost of complying with all labor compliance requirements under this contract and applicable law in its Bid.

Unless otherwise provided in the Instructions for Bidders, each Bidder shall be a licensed contractor pursuant to sections 7000 et seq. of the Business and Professions Code in the following classification(s) throughout the time it submits its Bid and for the duration of the contract:

California State License Board Class A – General Engineering Contractor or C-34 – Pipeline Contractor

The California Air Resources Board (“CARB”) implemented amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulations (“Regulation”) which are effective on January 1, 2024 and apply broadly to all self-propelled off road diesel vehicles 25 horsepower or greater and other forms of equipment used in California. A copy of the Regulation is available at <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/off-roaddiesel/appa-1.pdf> . Bidders are required to comply with all CARB and Regulation requirements, including, without limitation, all applicable sections of the Regulation, as codified in Title 13 of the California Code of Regulations section 2449 et seq. throughout the term of the Project. Bidders must provide, with their Bid, copies of Bidder’s and all listed subcontractors the most recent, valid Certificate of Reported Compliance (“CRC”) issued by CARB. Failure to provide valid CRCs as required herein may render the Bid non-responsive.

Substitution requests shall be made within 35 calendar days after the award of the contract. Pursuant to Public Contract Code Section 3400(b), the Agency may make findings designating that certain additional materials, methods or services by specific brand or trade name other than those listed in the Standard Specifications be used for the Project. Such findings, if any, as well as the materials, methods or services and their specific brand or trade names that must be used for the Project may be found in the Special Conditions.

Agency shall award the contract for the Project to the lowest responsive, responsible Bidder as determined by the Agency from the **BASE BID ONLY PLUS ALTERNATES**. Agency reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact David Lawrence, General Manger at [dlawrence@bbarwa.org](mailto:dlawrence@bbarwa.org) or (909) 584-4018

**END OF NOTICE INVITING BIDS**

## 00 21 13 – INSTRUCTIONS TO BIDDERS

### ARTICLE 1. SECURING DOCUMENTS

Bids must be submitted to the Agency on the Bid Forms which are a part of the Bid Package for the Project. Bid and Contract Documents may be obtained from <https://www.bbarwa.org/rfps-rfqs-procurement> in the Notice Inviting Bids. Prospective bidders are encouraged to telephone in advance to determine the availability of Contract Documents. Any charge for the Contract Documents is stated in the Notice Inviting Bids.

The Agency may also make the Contract Documents available for review at one or more plan rooms, as indicated in the Notice Inviting Bids. Please Note: Prospective Bidders who choose to review the Contract Documents at a plan room must contact the Agency to obtain the required Contract Documents if they decide to submit a bid for the Project.

Any Addenda will be posted on <https://www.bbarwa.org/rfps-rfqs-procurement>. Failure to acknowledge addenda may make a bid nonresponsive and not eligible for award of the contract.

### ARTICLE 2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS

At its own expense and prior to submitting its Bid, each Bidder shall visit the site of the proposed work and fully acquaint itself with the conditions relating to the construction and labor required so that the Bidder may fully understand the work, including but not limited to difficulties and restrictions attending the execution of the work under the contract. Each Bidder shall carefully examine the Drawings, and shall read the Specifications, Contract, and all other documents referenced herein. Each Bidder shall also determine the local conditions which may in any way affect the performance of the work, including local tax structure, contractors' licensing requirements, availability of required insurance, the prevailing wages and other relevant cost factors, shall familiarize itself with all federal, state and local laws, ordinances, rules, regulations and codes affecting the performance of the work, including the cost of permits and licenses required for the work, and shall make such surveys and investigations, including investigations of subsurface or latent physical conditions at the site or where work is to be performed as may be required. Bidders are responsible for consulting the standards referenced in the Contract. The failure or omission of any Bidder to receive or examine any contract documents, forms, instruments, addenda, or other documents, or to visit the site and acquaint itself with conditions there existing shall in no way relieve any Bidder from any obligation with respect to its Bid or to the contract and no relief for error or omission will be given except as required under State law. The submission of a Bid shall be taken as conclusive evidence of compliance with this Article.

### ARTICLE 3. INTERPRETATION OF DRAWINGS AND DOCUMENTS

Prospective Bidders unclear as to the true meaning of any part of the Drawings, Specifications or other proposed contract documents may submit to the Engineer of the Agency a written request for interpretation. The prospective Bidder submitting the request is responsible for prompt delivery. Interpretation of the Drawings, Specifications or other proposed contract documents will be made only by a written addendum duly issued and a copy of such addenda will be mailed or delivered to each prospective Bidder who has purchased a set of Drawings and Specifications. The Agency will not be responsible for any other explanation or interpretations of the proposed documents. If a Prospective Bidders becomes aware of any errors or omissions in any part of the Contract Documents, it is the obligation of the Prospective Bidder to promptly bring it to the attention of the Agency.

#### **ARTICLE 4. PRE-BID CONFERENCE**

A “**MANDATORY**” Pre-Bid Conference is scheduled for **2/4/25 at 10:00 AM** at BBARWA’s Office (121 Palomino Drive, Big Bear City, CA) to review the Project’s scope followed by a site visit at the Project location (42825 Big Bear Blvd, Big Bear Lake, CA) to review existing conditions. Representatives of the Agency and consulting engineers, if any, will be present. Questions asked by Bidders at the Pre-Bid Conference not specifically addressed within the Contract Documents shall be answered in writing, and shall be sent to all Bidders present at the Pre-Bid Conference. **Bids will not be accepted from any bidder who did not attend the mandatory Pre-Bid Conference.**

#### **ARTICLE 5. ADDENDA**

The Agency reserves the right to revise the Contract Documents prior to the Bid opening date. Revisions, if any, shall be made by written Addenda. All Addenda issued by the Agency shall be included in the Bid and made part of the Contract Documents. Pursuant to Public Contract Code Section 4104.5, if the Agency issues an Addendum which includes material changes to the Project less than 72 hours prior to the deadline for submission of Bids, the Agency will extend the deadline for submission of Bids. The Agency may determine, in its sole discretion, whether an Addendum warrants postponement of the Bid submission date. Each prospective Bidder shall provide Agency a name, address, email address, and facsimile number to which Addenda may be sent, as well as a telephone number by which the Agency can contact the Bidder. Copies of Addenda will be furnished by email, facsimile, first class mail, express mail or other proper means of delivery without charge to all parties who have obtained a copy of the Contract Documents and provided such current information. Please Note: Bidders are responsible for ensuring that they have received any and all Addenda. To this end, each Bidder should contact routinely check <https://www.bbarwa.org/rfps-rfqs-procurement> to verify that it has received all Addenda issued, if any, prior to the Bid opening. The Bidder shall indicate the Addenda received prior to bidding in the space provided in the Bid Form. Failure to indicate all Addenda may be sufficient cause for rejecting the Bid.

#### **ARTICLE 6. ALTERNATE BIDS**

If alternate bid items are called for in the Contract Documents, the time required for completion of the alternate bid items has already been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. The Agency may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work. Accordingly, each bidder must ensure that each bid item contains a proportionate share of profit, overhead, and other costs or expenses which will be incurred by the bidder.

#### **ARTICLE 7. COMPLETION OF BID FORMS**

Bids shall only be prepared using copies of the Bid Forms which are included in the Contract Documents. The use of substitute Bid Forms other than clear and correct photocopies of those provided by the Agency will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting “N/A” where applicable), and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. **USE OF BLACK OR BLUE INK, INDELIBLE PENCIL, OR A TYPEWRITER IS REQUIRED.** Deviations in the Bid Forms may result in the Bid being deemed non-responsive.



## **ARTICLE 8. MODIFICATIONS OF BIDS**

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract Documents. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall not delete, modify, or supplement the printed matter on the Bid Forms, or make substitutions thereon. Oral, telephonic and electronic modifications will not be considered.

## **ARTICLE 9. SUBCONTRACTORS**

Bidder shall set forth the name, address of the place of business, and contractor license number of each subcontractor who will perform work, labor, furnish materials or render services to the bidder on said contract and each subcontractor licensed by the State of California who, under subcontract to bidder, specially fabricates and installs a portion of the Work described in the Drawings and Specifications in an amount in excess of one half of one percent (0.5%) of the total bid price, and shall indicate the portion of the work to be done by such subcontractor in accordance with Public Contract Code Section 4104.

## **ARTICLE 10. LICENSING REQUIREMENTS**

Pursuant to Business and Professions Code Section 7028.15 and Public Contract Code Section 3300, all bidders must possess proper licenses for performance of this Contract. Subcontractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Business and Professions Code Section 7028.5, the Agency shall consider any bid submitted by a contractor not currently licensed in accordance with state law and pursuant to the requirements found in the Contract Documents to be nonresponsive, and the Agency shall reject the Bid. The Agency shall have the right to request, and Bidders shall provide within ten (10) calendar days, evidence satisfactory to the Agency of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract.

Notwithstanding anything contained herein, if the Work involves federal funds, the Contractor shall be properly licensed by the time the Contract is awarded, pursuant to the provisions of Public Contract Code section 20103.5.

## **ARTICLE 11. BID GUARANTEE (BOND)**

Each bid shall be accompanied by: (a) cash; (b) a certified or cashier's check made payable to Big Bear Area Regional Wastewater Agency; or (c) a Bid Bond secured from a surety company satisfactory to the Agency, the amount of which shall not be less than ten percent (10%) of the Total Bid Price, made payable to Big Bear Area Regional Wastewater Agency as bid security. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The bid security shall be provided as a guarantee that within ten (10) working days after the Agency provides the successful bidder the Notice of Award, the successful bidder will enter into a contract and provide the necessary bonds and certificates of insurance. The bid security will be declared forfeited if the successful bidder fails to comply within said time, and Agency may enter into a contract with the next lowest responsive responsible bidder, or may call for new bids. No interest shall be paid on funds deposited with the Agency. Agency will return the security accompanying the bids of all unsuccessful bidders no later than 60 calendar days after award of the contract.



## **ARTICLE 12. IRAN CONTRACTING ACT OF 2010**

In accordance with Public Contract Code Section 2200 *et seq.*, the Agency requires that any person that submits a bid or proposal or otherwise proposes to enter into or renew a contract with the Agency with respect to goods or services of one million dollars (\$1,000,000) or more, certify at the time the bid is submitted or the contract is renewed, that the person is not identified on a list created pursuant to subdivision (b) of Public Contract Code Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code Section 2202.5, or as a person described in subdivision (b) of Public Contract Code Section 2202.5, as applicable.

The form of such Iran Contracting Certificate is included with the bid package and must be signed and dated under penalty of perjury.

## **ARTICLE 13. NONCOLLUSION DECLARATION**

Bidders on all public works contracts are required to submit a declaration of noncollusion with their bid. This form is included with the bid package and must be signed and dated under penalty of perjury.

## **ARTICLE 14. PUBLIC WORKS CONTRACTOR REGISTRATION CERTIFICATION**

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the Project. To this end, Bidder shall sign and submit with its Bid the Public Works Contractor Registration Certification on the form provided, attesting to the facts contained therein. Failure to submit this form may render the bid non-responsive. In addition, each Bidder shall provide the registration number for each listed subcontractor in the space provided in the Designation of Subcontractors form.

## **ARTICLE 15. BIDDER INFORMATION AND EXPERIENCE FORM**

Each Bidder shall complete the questionnaire provided herein and shall submit the questionnaire along with its Bid. Failure to provide all information requested within the questionnaire along with the Bid may cause the bid to be rejected as non-responsive. The Agency reserves the right to reject any Bid if an investigation of the information submitted does not satisfy the Engineer that the Bidder is qualified to properly carry out the terms of the contract.

## **ARTICLE 16. WORKERS' COMPENSATION CERTIFICATION**

In accordance with the provisions of Labor Code Section 3700, Contractor shall secure the payment of compensation to its employees. Contractor shall sign and file with the Agency the following certificate prior to performing the work under this Contract:

I am aware of the provisions of Section 3700 of the Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will

comply with such provisions before commencing the performance of the work of this contract.

The form of such Workers' Compensation Certificate is included as part of this document.

#### **ARTICLE 17. SIGNING OF BIDS**

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the capacity of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom. The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

#### **ARTICLE 18. SUBMISSION OF SEALED BIDS**

Once the Bid and supporting documents have been completed and signed as set forth herein, they shall be placed, along with the Bid Guarantee and other required materials, in a sealed envelope, addressed and delivered or mailed, postage prepaid, to the Engineering Department of the Agency before the time and day set for the receipt of bids. The envelope shall bear the title of the work and the name of the bidder. No oral or telephonic bids will be considered. No forms transmitted via the internet, e-mail, facsimile, or any other electronic means will be considered unless specifically authorized by the Agency as provided herein. Bids received after the time and day set for the receipt of bids shall be returned to the bidder unopened. The envelope shall also contain the following in the lower left-hand corner thereof:

**Bid of \_\_\_\_\_ (Bidder's Name)**  
**for the FORCE MAIN PROJECT**

Only where expressly permitted in the Notice Inviting Bids may bidders submit their bids via electronic transmission pursuant to Public Contract Code sections 1600 and 1601. Any acceptable method(s) of electronic transmission shall be stated in the Notice Inviting Bids. Agency may reject any bid not strictly complying with Agency's designated methods for delivery.

#### **ARTICLE 19. OPENING OF BIDS**

At the time and place set for the opening and reading of bids, or any time thereafter, each and every bid received prior to the time and day set for the receipt of bids will be publicly opened and read. The Agency will leave unopened any Bid received after the specified date and time, and any such unopened Bid will be returned to the bidder. It is the bidder's sole responsibility to ensure that its Bid is received as specified. Bids may be submitted earlier than the date(s) and time(s) indicated.

The public reading of each bid will include the following information:

- A. The name and business location of the bidder.
- B. The nature and amount of the bid security furnished by bidder.
- C. The bid amount.

Bidders or their representatives and other interested persons may be present at the opening of the bids. The Agency may, in its sole discretion, elect to postpone the opening of the submitted Bids. The Agency reserves the right to reject any or all Bids and to waive any informality or irregularity in any Bid.

#### **ARTICLE 20. WITHDRAWAL OF BID**

Any bid may be withdrawn either personally or by written request, incurring no penalty, at any time prior to the scheduled closing time for receipt of bids. Requests to withdraw bids shall be worded so as not to reveal the amount of the original bid. Withdrawn bids may be resubmitted until the time and day set for the receipt of bids, provided that resubmitted bids are in conformance with the instructions herein.

Bids may be withdrawn after bid opening only by providing written notice to Agency within five (5) working days of the bid opening and in compliance with Public Contract Code Section 5100 *et seq.*, or as otherwise may be allowed with the consent of the Agency.

#### **ARTICLE 21. BIDDERS INTERESTED IN MORE THAN ONE BID**

No Bidder shall be allowed to make, file or be interested in more than one bid for the same work unless alternate bids are specifically called for. A person, firm or corporation that has submitted a sub-proposal to a Bidder, or that has quoted prices of materials to a Bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders. No person, firm, corporation, or other entity may submit a sub-proposal to a Bidder, or quote prices of materials to a Bidder, when also submitting a prime Bid on the same Project.

#### **ARTICLE 22. SUBSTITUTION OF SECURITY**

The Contract Documents call for monthly progress payments based upon the percentage of the Work completed. The Agency will retain a percentage of each progress payment as provided by the Contract Documents. At the request and expense of the successful Bidder, the Agency will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

#### **ARTICLE 23. PREVAILING WAGES**

The Agency has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract. These rates are available at the BBARWA Administration Office or may be obtained online at <http://www.dir.ca.gov>. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s).

#### **ARTICLE 24. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS**

In accordance with the provisions of the Labor Code, contractors or subcontractors may not

perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code Sections 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to the Agency. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

## **ARTICLE 25. INSURANCE REQUIREMENTS**

Prior to commencing work, the successful bidder shall purchase and maintain insurance as set forth in the General Conditions.

## **ARTICLE 26. PERFORMANCE BOND AND PAYMENT BOND REQUIREMENTS**

The successful bidder will be required to furnish a Labor and Material Payment Bond and a Faithful Performance Bond each in an amount equal to one hundred percent (100%) of the contract price. Each bond shall be secured from a surety company that meets all State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120 and is admitted by the State of California. Each bond shall be accompanied, upon the request of Agency, with all documents required by California Code of Civil Procedure Section 995.660 to the extent required by law. All bonding and insurance requirements shall be completed and submitted to Agency within ten (10) working days from the date the Agency provides the successful bidder with the Notice of Award.

## **ARTICLE 27. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES**

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the Work will be located, unless otherwise expressly provided by the Contract Documents.

## **ARTICLE 28. PERMIT AND INSPECTION FEE ALLOWANCE**

Notwithstanding anything contained herein, the Bid Form contains an allowance for the Contractor's cost of acquiring traffic control permits and for construction inspection fees that may be charged to the Contractor by the Agency of Jurisdiction. The allowance is included within the Bid Form to eliminate the need by bidders to research or estimate the costs of traffic control permits and construction inspection fees prior to submitting a bid. The allowance is specifically intended to account for the costs of traffic control permits and construction inspection fees charged by the local Agency of Jurisdiction only. No other costs payable by Contractor to the Agency of Jurisdiction are included within the allowance.

## **ARTICLE 29. FILING OF BID PROTESTS**

Bidders may file a "protest" of a Bid with the Agency's General Manager. In order for a Bidder's protest to be considered valid, the protest must:

- A. Be filed in writing within five (5) calendar days after the bid opening date;

- B. Clearly identify the specific irregularity or accusation;
- C. Clearly identify the specific Agency staff determination or recommendation being protested;
- D. Specify in detail the grounds for protest and the facts supporting the protest; and
- E. Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each of these requirements, the Agency may reject the protest without further review.

If the protest is timely and complies with the above requirements, the Agency's General Manager, or other designated Agency staff member, shall review the protest, any response from the challenged Bidder(s), and all other relevant information. The General Manager will provide a written decision to the protestor.

The procedure and time limits set forth in this Article are mandatory and are the sole and exclusive remedy in the event of a Bid protest. Failure to comply with these procedures shall constitute a failure to exhaust administrative remedies and a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings.

### **ARTICLE 30. BASIS OF AWARD; BALANCED BID**

The Agency shall award the Contract to the lowest responsible Bidder submitting a responsive Bid. The lowest Bid will be determined on the basis of the Total Bid Price.

The Agency may reject any Bid which, in its opinion when compared to other Bids received or to the Agency's internal estimates, does not accurately reflect the cost to perform the Work. The Agency may reject as non-responsive any Bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

### **ARTICLE 31. AWARD PROCESS**

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the Board of Directors may award the contract. The apparent successful Bidder should begin to prepare the following documents: (1) the Performance Bond; (2) the Payment Bond; and (3) the required insurance certificates and endorsements. Once the Agency notifies the Bidder of the award, the Bidder will have **ten (10)** working days from the date of this notification to execute the Contract and supply the Agency with all of the required documents and certifications. Regardless of whether the Bidder supplies the required documents and certifications in a timely manner, the Contract time will begin to run **ten (10)** working days from the date of the notification. Once the Agency receives all of the properly drafted and executed documents and certifications from the Bidder, the Agency shall issue a Notice to Proceed to that Bidder.

### **ARTICLE 32. EXECUTION OF CONTRACT**

As required herein the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract Documents. The Agency may require appropriate evidence that the persons executing the Contract are duly empowered to do so. The Contract and bond forms to be executed by the successful Bidder are included within these Specifications and shall not be

detached.

### **ARTICLE 33. QUESTIONS**

Questions regarding this Notice Inviting Bids may be directed to Christopher Deiter, Project Manager at [cdeiter@wsc-inc.com](mailto:cdeiter@wsc-inc.com), cc: [bburton@bbarwa.org](mailto:bburton@bbarwa.org). No other members of the Agency's staff or Board of Directors should be contacted about this procurement during the bidding process. Any and all inquiries and comments regarding this Bid must be communicated in writing, unless otherwise instructed by the Agency. The Agency may, in its sole discretion, disqualify any Bidder who engages in any prohibited communications.

### **ARTICLE 34. FLEET COMPLIANCE**

The District is a Public Works Awarding Body, as defined under Title 13 California Code of Regulations section 2449(c)(46). Accordingly, Bidders must submit, with their Bids, a valid Certificate of Reported Compliance ("CRC") for the Bidder's and its listed subcontractors fleet (including any applicable leased equipment or vehicles). Bidder must complete and submit the Fleet Compliance Certification, included in the Bid Documents. Failure to provide a CRC for the Bidder, and for all listed subcontractors, or failure to complete the Fleet Compliance Certification, may render the Bid non-responsive.

### **ARTICLE 35. TIMELINE**

- 01/23/25 Bid Advertisement date in Grizzly (second advertisement 1/30/25)
- 02/04/25 **Mandatory** Pre-Bid Meeting, 10:00 AM @ BBARWA's Office
- 02/11/25 Contractor Deadline to Submit Questions
- 02/14/25 BBARWA Deadline to Provide Responses
- 02/18/25 Bid Opening, 2:00 PM @ BBARWA's Office
- 02/26/25 Board Meeting for Bid Award Consideration

**00 41 43 – BID FORMS**

1.1 Bid.

Bids will be received at the Big Bear Area Regional Wastewater Agency, 121 Palomino Drive, Big Bear City, California, until **2:00 PM on Tuesday, February 18<sup>th</sup>, 2025.**

**NAME OF BIDDER:** \_\_\_\_\_

To the Board of Directors  
of the Big Bear Area Regional Wastewater Agency  
121 Palomino Drive  
Big Bear City, California 92314

The undersigned hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any for the following Project:

**FORCE MAIN PROJECT**

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project, as described and in strict conformity with the Drawings, and these Specifications for TOTAL BID PRICE indicated herein.

The undersigned acknowledges receipt, understanding, and full consideration of the following addenda to the Contract Documents:

Addenda No. \_\_\_\_\_

1. Attached is the required Bid Guarantee in the amount of not less than 10% of the Total Bid Price.
2. Attached is the completed Designation of Subcontractors form.
3. Attached is the fully executed Noncollusion Declaration form.
4. Attached is the completed Iran Contracting Act Certification form.
5. Attached is the completed Public Works Contractor Registration Certification form.
6. Attached is the completed Contractor’s Certificate Regarding Workers’ Compensation form.
7. Attached is the completed Bidder Information and Experience form.
8. Fleet Compliance Certification

**A. BID SCHEDULE**

<b>NO.</b>	<b>ITEM DESCRIPTION</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM COST</b>
1.	Mobilization and Contract Processing Costs	LS	1		
2.	USA Coordination	LS	1		
3.	Traffic Control	LS	1		
4.	Sheeting, Shoring, and Bracing	LS	1		
5.	<u>Segment No. 1</u> Remove 16" DIP and Replace with 16" C-900 PVC DR-14	LF	620		
6.	<u>Segment No. 2</u> Remove 16" DIP and Replace with 16" C-900 PVC DR-14	LF	480		
7.	16" High Deflection Couplings	EA	18		
8.	2" Sewage Combination Air Valve and Vault Assembly	EA	2		
9.	Connection to Existing Force Main	EA	4		
10.	Permit and Inspection Fee Allowance	LS	1	\$2,500.00	\$2,500.00
11.	CCTV Access at Project Limits	LS	1		
	<b>ALTERNATE BID ITEMS</b>				
A1.	Caltrans Pavement Repair	SF	2000		

The costs for any Work shown or required in the Contract Documents, but not specifically identified as a line item are to be included in the related line items and no additional compensation shall be due to Contractor for the performance of the Work.

In case of discrepancy between the Unit Price and the Item Cost set forth for a unit basis item, the unit price shall prevail and shall be utilized as the basis for determining the lowest responsive, responsible Bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Cost" column, then the amount set forth in the "Item Cost" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the Unit Price.

For purposes of evaluating Bids, the Agency will correct any apparent errors in the extension of unit prices and any apparent errors in the addition of lump sum and extended prices.

The estimated quantities for Unit Price items are for purposes of comparing Bids only and the Agency makes no representation that the actual quantities of work performed will not vary from the estimates. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the Unit Price.



**B. TOTAL BID PRICE:**

<b>TOTAL BID PRICE BASED ON BID SCHEDULE TOTAL OF UNIT PRICES (INCLUDING ALTERNATE BID ITEMS) FOR THE FORCE MAIN PROJECT</b>	
\$ _____	Total Bid Price in Numbers
\$ _____	Total Bid Price in Written Form
In case of discrepancy between the written price and the numerical price, the written price shall prevail.	

The undersigned agrees that this Bid Form constitutes a firm offer to the Agency which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from and after the Bid opening, or until a Contract for the Work is fully executed by the Agency and a third party, whichever is earlier.

The Agency can choose to include any, all, or none of the Alternate Bid items in the Work. The Agency can award/select Alternate Bid items at any time(s).

The successful bidder hereby agrees to sign the contract and furnish the necessary bonds and certificates of insurance within ten (10) working days after the Agency provides the successful bidder with the Notice of Award.

Upon receipt of the signed contract and other required documents, the contract will be executed by the Agency, after which the Agency will prepare a letter giving Contractor Notice to Proceed. The official starting date shall be the date of the Notice to Proceed, unless otherwise specified. The undersigned agrees to begin the Work within ten (10) working days of the date of the Notice to Proceed, unless otherwise specified.

The undersigned has examined the location of the proposed work and is familiar with the Drawings and Specifications and the local conditions at the place where work is to be done.

If awarded the contract, the undersigned agrees that there shall be paid by the undersigned and by all subcontractors to all laborers, workers and mechanics employed in the execution of such contract no less than the prevailing wage rate within San Bernardino County for each craft, classification, or type of worker needed to complete the Work contemplated by this contract as established by the Director of the Department of Industrial Relations. A copy of the prevailing rate of per diem wages are on file at the Agency's Administration Office and shall be made available to interested parties upon request.

Enclosed find cash, bidder's bond, or cashier's or certified check No. \_\_\_\_\_ from the \_\_\_\_\_ Bank in the amount of \_\_\_\_\_, which is not less than ten percent (10%) of this bid, payable to Big Bear Area Regional Wastewater Agency as bid security and which is given as a guarantee that the undersigned will enter into a contract and provide the necessary bonds and certificates of insurance if awarded the Work.

The bidder furthermore agrees that in case of bidder's default in executing said contract and furnishing required bonds and certificates of insurance, the cash, bidder's bond, or cashier's or certified check accompanying this proposal and the money payable thereon shall become and shall remain the property of the Big Bear Area Regional Wastewater Agency.

Bidder is an individual \_\_\_\_\_, or corporation \_\_\_\_\_, or partnership \_\_\_\_\_, organized under the laws of the State of \_\_\_\_\_.

Bidder confirms license(s) required by California State Contractor's License Law for the performance of the subject project are in full effect and proper order. The following are the Bidder's applicable license number(s), with their expiration date(s) and class of license(s):

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If the Bidder is a joint venture, each member of the joint venture must include the required licensing information.

Sureties that will furnish the Faithful Performance Bond and the Labor and Material Payment Bond, in the form specified herein, in an amount equal to one hundred percent (100%) of the contract price within ten (10) working days from the date the Agency provides the successful bidder the Notice of Award. Sureties must meet all of the State of California bonding requirements, as defined in California Code of Civil Procedure Section 995.120 and must be authorized by the State of California.

The insurance company or companies to provide the insurance required in the contract documents must have a Financial Strength Rating of not less than "A-" and a Financial Size Category of not less than "Class VII" according to the latest Best Key Rating Guide. At the sole discretion of the Agency, the Agency may waive the Financial Strength Rating and the Financial Size Category classifications for Workers' Compensation insurance.

(signatures continued on next page)

I hereby certify under penalty of perjury under the laws of the State of California that all of the information submitted in connection with this Bid and all of the representations made herein are true and correct.

Executed at \_\_\_\_\_, on this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(Bidders Name – Print or Type)

\_\_\_\_\_  
(Name and Title)

(Corporate Seal)

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

Names of individual members of firm or names and titles of all officers of corporation and their addresses are listed below:

Name \_\_\_\_\_ Title \_\_\_\_\_

Complete Address \_\_\_\_\_

Phone \_\_\_\_\_ FAX \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Complete Address \_\_\_\_\_

Phone \_\_\_\_\_ FAX \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Complete Address \_\_\_\_\_

Phone \_\_\_\_\_ FAX \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Complete Address \_\_\_\_\_

Phone \_\_\_\_\_ FAX \_\_\_\_\_

1.2 Bid Bond

**[Note: Not required when other form of Bidder's Security, e.g. cash, certified check or cashier's check, accompanies bid.]**

The makers of this bond are, \_\_\_\_\_, as Principal, and \_\_\_\_\_, as Surety and are held and firmly bound unto the Big Bear Area Regional Wastewater Agency, hereinafter called the Agency, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to AGENCY for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, 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 the accompanying bid dated \_\_\_\_\_, 20 \_\_\_\_\_, for the **FORCE MAIN PROJECT**.

If the Principal does not withdraw its Bid within the time specified in the Contract Documents; and if the Principal is awarded the Contract and provides all documents to the Agency as required by the Contract Documents; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall in affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the Agency and judgment is recovered, the Surety shall pay all litigation expenses incurred by the Agency in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the name and corporate seal of each corporation.

(Corporate Seal)

\_\_\_\_\_  
Contractor/ Principal

By \_\_\_\_\_

Title \_\_\_\_\_

(Corporate Seal)

\_\_\_\_\_  
Surety

By \_\_\_\_\_  
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title \_\_\_\_\_

# Notary Acknowledgment

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 \_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, who proved to me on the basis of satisfactory

Name(s) of Signer(s)

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 of Notary Public

## OPTIONAL

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

### CAPACITY CLAIMED BY SIGNER

### DESCRIPTION OF ATTACHED DOCUMENT

- Individual
- Corporate Officer

\_\_\_\_\_  
Title(s)

\_\_\_\_\_  
Title or Type of Document

- Partner(s)  Limited
- General

\_\_\_\_\_  
Number of Pages

- Attorney-In-Fact
- Trustee(s)
- Guardian/Conservator
- Other:

\_\_\_\_\_  
Date of Document

Signer is representing:  
Name Of Person(s) Or Entity(ies)

\_\_\_\_\_  
Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.



1.3 List of Subcontractors

In compliance with the Subletting and Subcontracting Fair Practices Act Chapter 4 (commencing at Section 4100), Part 1, Division 2 of the Public Contract Code of the State of California and any amendments thereof, Bidder shall set forth below: (a) the name and the location of the place of business, (b) the California contractor license number, (c) the DIR public works contractor registration number unless exempt pursuant to Labor Code Sections 1725.5 and 1771.1, and (d) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the work or improvement to be performed under this Contract in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price. Notwithstanding the foregoing, if the work involves the construction of streets and highways, then the Bidder shall list each subcontractor who will perform work or labor or render service to the Bidder in or about the work in an amount in excess of one-half of one percent (0.5%) of the Bidder's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If a Bidder fails to specify a subcontractor or if a contractor specifies more than one subcontractor for the same portion of work, then the Bidder shall be deemed to have agreed that it is fully qualified to perform that portion of work and that it shall perform that portion itself.

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number	% of Work

Work to be done by Subcontractor	Name of Subcontractor	Location of Business	CSLB Contractor License No.	DIR Registration Number	% of Work

(Attach additional sheets if necessary)

Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Name and Title \_\_\_\_\_

Dated \_\_\_\_\_



1.4 Bidder Information and Experience Form

**ARTICLE 1. INFORMATION ABOUT BIDDER**

(Indicate not applicable (“N/A”) where appropriate.)

**NOTE:** Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Name of Bidder: \_\_\_\_\_

2.0 Type, if Entity: \_\_\_\_\_

3.0 Bidder Address: \_\_\_\_\_

\_\_\_\_\_

Facsimile Number

Telephone Number

\_\_\_\_\_

Email Address

4.0 How many years has Bidder’s organization been in business as a Contractor?

\_\_\_\_\_

5.0 How many years has Bidder’s organization been in business under its present name? \_\_\_\_\_

5.1 Under what other or former names has Bidder’s organization operated? \_\_\_\_\_

6.0 If Bidder’s organization is a corporation, answer the following:

6.1 Date of Incorporation: \_\_\_\_\_

6.2 State of Incorporation: \_\_\_\_\_

6.3 President’s Name: \_\_\_\_\_

6.4 Vice-President’s Name(s): \_\_\_\_\_

\_\_\_\_\_

6.5 Secretary’s Name: \_\_\_\_\_

6.6 Treasurer’s Name: \_\_\_\_\_

7.0 If an individual or a partnership, answer the following:

7.1 Date of Organization: \_\_\_\_\_

7.2 Name and address of all partners (state whether general or limited partnership):

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

8.0 If other than a corporation or partnership, describe organization and name principals:

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

9.0 List other states in which Bidder's organization is legally qualified to do business.

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

10.0 What type of work does the Bidder normally perform with its own forces?

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

11.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

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

12.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, attach a separate sheet of explanation:

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

13.0 List Trade References:

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

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14.0 List Bank References (Bank and Branch Address):

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15.0 Name of Bonding Company and Name and Address of Agent:

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**[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]**



**ARTICLE 3. LIST OF COMPLETED PROJECTS – LAST THREE YEARS**

[\*\*Duplicate Page if needed for listing additional completed projects.\*\*]

Please include only those projects which are similar enough to demonstrate Bidder’s ability to perform the required Work.

Project	Description of Bidder’s Work	Completion Date	Cost of Bidder’s Work

**ARTICLE 4. EXPERIENCE AND TECHNICAL QUALIFICATIONS QUESTIONNAIRE**

***Personnel:***

The Bidder shall identify the key personnel to be assigned to this project in a management, construction supervision or engineering capacity.

1. List each person's job title, name and percent of time to be allocated to this project:

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2. Summarize each person's specialized education:

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3. List each person's years of construction experience relevant to the project:

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4. Summarize such experience:

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Bidder agrees that personnel named in this Bid will remain on this Project until completion of all relevant Work, unless substituted by personnel of equivalent experience and qualifications approved in advance by the Agency.

***Changes Occuring Since Prequalification***

If any substantive changes have occurred since Bidder submitted its prequalification package for this Project, Bidder shall list them below. If none are listed, Bidder certifies that no substantive changes have occurred.

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**Additional Bidder's Statements:**

If the Bidder feels that there is additional information which has not been included in the questionnaire above, and which would contribute to the qualification review, it may add that information in a statement here or on an attached sheet, appropriately marked:

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**ARTICLE 5. VERIFICATION AND EXECUTION**

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

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

Name of Bidder\_\_\_\_\_

Signature\_\_\_\_\_

Name\_\_\_\_\_

Title\_\_\_\_\_

Date\_\_\_\_\_

1.5 Non-Collusion Declaration

The undersigned declares:

I am the \_\_\_\_\_ of \_\_\_\_\_, the party making the foregoing Bid.

The Bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The Bid is genuine and not collusive or sham. The Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid. The Bidder has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham bid, or to refrain from bidding. 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. All statements contained in the Bid are true. 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, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a Bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the Bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on \_\_\_\_\_ [date], at \_\_\_\_\_ [city], \_\_\_\_\_ [state].

Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_



1.6 Iran Contracting Act Certification.  
(Public Contract Code section 2200 et seq.)

As required by California Public Contract Code Section 2204, the Contractor certifies subject to penalty for perjury that the option checked below relating to the Contractor's status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

The Contractor is not:

(1) identified on the current list of person and entities engaged in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or

(2) a financial instruction that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

The Agency has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the Agency will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

The amount of the Contract payable to the Contractor for the Project does not exceed \$1,000,000.

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

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

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

Firm Name: \_\_\_\_\_

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

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the Contract amount, termination of the Contract and/or ineligibility to bid on contracts for three years.

1.7 Public Works Contractor Registration Certification

Pursuant to Labor Code sections 1725.5 and 1771.1, all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations. See <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for additional information.

No bid will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with the Department of Industrial Relations to perform public work.

Bidder hereby certifies that it is aware of the registration requirements set forth in Labor Code sections 1725.5 and 1771.1 and is currently registered as a contractor with the Department of Industrial Relations.<sup>1</sup>

Name of Bidder: \_\_\_\_\_

DIR Registration Number: \_\_\_\_\_

DIR Registration Expiration: \_\_\_\_\_

Small Project Exemption: \_\_\_\_\_ Yes or \_\_\_\_\_ No

Unless Bidder is exempt pursuant to the small project exemption, Bidder further acknowledges:

1. Bidder shall maintain a current DIR registration for the duration of the project.
2. Bidder shall include the requirements of Labor Code sections 1725.5 and 1771.1 in its contract with subcontractors and ensure that all subcontractors are registered at the time of bid opening and maintain registration status for the duration of the project.
3. Failure to submit this form or comply with any of the above requirements may result in a finding that the bid is non-responsive.

Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Name and Title \_\_\_\_\_

Dated \_\_\_\_\_

1.8 Contractor's Certificate Regarding Workers' Compensation.

<sup>1</sup> If the Project is exempt from the contractor registration requirements pursuant to the small project exemption under Labor Code Sections 1725.5 and 1771.1, please mark "Yes" in response to "Small Project Exemption."

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

Name of Bidder \_\_\_\_\_

Signature \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

Dated \_\_\_\_\_

1.9 Fleet Compliance Certification

Bidder hereby acknowledges that they have reviewed the California Air Resources Board's policies, rules and regulations and are familiar with the requirements of Title 13, California Code of Regulations, Division 3, Chapter 9, effective on January 1, 2024 (the "Regulation"). Bidder hereby certifies, subject to penalty for perjury, that the option checked below relating to the Bidder's fleet, and/or that of their subcontractor(s) ("Fleet") is true and correct:

The Fleet is subject to the requirements of the Regulation, and the appropriate Certificate(s) of Reported Compliance have been attached hereto.

The Fleet is exempt from the Regulation under section 2449.1(f)(2), and a signed description of the subject vehicles, and reasoning for exemption has been attached hereto.

Bidder and/or their subcontractor is unable to procure R99 or R100 renewable diesel fuel as defined in the Regulation pursuant to section 2449.1(f)(3). Bidder shall keep detailed records describing the normal refueling methods, their attempts to procure renewable diesel fuel and proof that shows they were not able to procure renewable diesel (i.e. third party correspondence or vendor bids).

The Fleet is exempt from the requirements of the Regulation pursuant to section 2449(i)(4) because this Project has been deemed an Emergency, as defined under section 2449(c)(18). Bidder shall only operate the exempted vehicles in the emergency situation and records of the exempted vehicles must be maintained, pursuant to section 2449(i)(4).

The Fleet does not fall under the Regulation or are otherwise exempted, and a detailed reasoning is attached hereto.

Name of Bidder: \_\_\_\_\_

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

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

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

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

**00 52 13 – CONTRACT**

This CONTRACT, No. \_\_\_\_\_ is made and entered into this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by and between Big Bear Area Regional Wastewater Agency, sometimes hereinafter called "Agency," and \_\_\_\_\_, sometimes hereinafter called "Contractor."

WITNESSETH: That the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree with each other as follows:

a. **SCOPE OF WORK.** The Contractor shall perform all Work within the time stipulated in the Contract, and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5, below, for the following Project:

**FORCE MAIN PROJECT**

The Contractor and its surety shall be liable to the Agency for any damages arising as a result of the Contractor's failure to comply with this obligation.

b. **TIME FOR COMPLETION.** Time is of the essence in the performance of the Work. The Work shall be commenced on the date stated in the Agency's Notice to Proceed. The Contractor shall complete all Work required by the Contract Documents within **90 calendar days** from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

c. **CONTRACT PRICE.** The Agency shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_). Payment shall be made as set forth in the General Conditions.

d. **LIQUIDATED DAMAGES.** In accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the Agency the sum set forth in Section 00 73 13, Article 1.11 for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the Agency may deduct that amount from any money due or that may become due the Contractor under the Contract. This Article does not exclude recovery of other damages specified in the Contract Documents.

e. **COMPONENT PARTS OF THE CONTRACT.** The "Contract Documents" include the following:

- Notice Inviting Bids
- Instructions to Bidders
- Bid Form
- Bid Bond
- Designation of Subcontractors
- Information Required of Bidders
- Non-Collusion Declaration Form

Iran Contracting Act Certification  
Public Works Contractor Registration Certification  
Performance Bond  
Payment (Labor and Materials) Bond  
General Conditions  
Special Conditions  
Technical Specifications  
Addenda  
Plans and Drawings  
Standard Specifications for Public Works Construction “Greenbook”, latest edition, Except Sections 1-9  
Applicable Local Agency Standards and Specifications, as last revised  
Approved and fully executed change orders  
Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. This Contract shall supersede any prior agreement of the parties.

f. **PROVISIONS REQUIRED BY LAW AND CONTRACTOR COMPLIANCE.** Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Work.

g. **INDEMNIFICATION.** Contractor shall provide indemnification and defense as set forth in the General Conditions.

h. **PREVAILING WAGES.** Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at the Agency’s Administrative Office or may be obtained online at <http://www.dir.ca.gov> and which must be posted at the job site.

**[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]**

IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

**BIG BEAR AREA REGIONAL  
WASTEWATER AGENCY**

\_\_\_\_\_  
Name of Contractor

By \_\_\_\_\_  
\_\_\_\_\_

Name and Title:  
\_\_\_\_\_

License No.  
\_\_\_\_\_

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

By \_\_\_\_\_  
David Lawrence,  
General Manager

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

**(CONTRACTOR'S SIGNATURE MUST BE  
NOTARIZED AND CORPORATE  
SEAL AFFIXED, IF APPLICABLE)**

Approved as to form this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_.

\_\_\_\_\_  
Bridgette Burton  
Administrative Services Manager/Board Secretary  
Big Bear Area Regional Wastewater Agency

**END OF CONTRACT**





**00 61 13 – BOND FORMS**

1.1 Performance Bond.

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, the Big Bear Area Regional Wastewater Agency, (hereinafter referred to as “Agency”) has awarded to \_\_\_\_\_, (hereinafter referred to as the “Contractor”) an agreement for **Contract No.** \_\_\_\_\_, (hereinafter referred to as the “Project”).

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated \_\_\_\_\_, (hereinafter referred to as “Contract Documents”), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, \_\_\_\_\_, the undersigned Contractor and \_\_\_\_\_ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the Agency in the sum of \_\_\_\_\_ DOLLARS, (\$ \_\_\_\_\_), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one (1) year guarantee of all materials and workmanship; and shall indemnify and save harmless the Agency, its officials, officers, employees, and authorized volunteers, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney’s fees, incurred by Agency in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by Agency, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the Agency from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the Agency’s rights or the Contractor or Surety’s obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure Section 337.15.

Whenever Contractor shall be, and is declared by the Agency to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the Agency's option:

- i. Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- ii. Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the Agency, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the Agency under the Contract and any modification thereto, less any amount previously paid by the Agency to the Contractor and any other set offs pursuant to the Contract Documents.
- iii. Permit the Agency to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the Agency under the Contract and any modification thereto, less any amount previously paid by the Agency to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the Agency may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the Agency, when declaring the Contractor in default, notifies Surety of the Agency's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]

IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

(Corporate Seal)

\_\_\_\_\_  
Contractor/ Principal

By \_\_\_\_\_

Title \_\_\_\_\_

(Corporate Seal)

\_\_\_\_\_  
Surety

By \_\_\_\_\_  
Attorney-in-Fact

Title \_\_\_\_\_

(Attach Attorney-in-Fact Certificate)

The rate of premium on this bond is \_\_\_\_\_ per thousand. The total amount of premium charges is \$\_\_\_\_\_.  
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

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

(Name and Address of Agent or Representative for service of process in California, if different from above)

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

(Telephone number of Surety and Agent or Representative for service of process in California)

\_\_\_\_\_





1.2 Payment Bond (Labor and Materials).

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the Big Bear Area Regional Wastewater Agency (hereinafter designated as the "Agency"), by action taken or a resolution passed \_\_\_\_\_, 20\_\_\_\_, has awarded to \_\_\_\_\_ hereinafter designated as the "Principal," a contract for the work described as follows: **Contract No.** \_\_\_\_\_ (the "Project"); and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and \_\_\_\_\_ as Surety, are held and firmly bound unto the Agency in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) lawful money of the United States of America, for the payment of which sum well and truly to be made, 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 if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Civil Code Section 9100, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Revenue and Taxation Code Section 18663, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the Agency in such suit, including reasonable attorneys' fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 9100 so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that

this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or Agency and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Civil Code Section 9100, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned, including but not limited to the provisions of sections 2819 and 2845 of the California Civil Code.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

(Corporate Seal)

\_\_\_\_\_  
Contractor/ Principal

By \_\_\_\_\_

Title \_\_\_\_\_

(Corporate Seal)

\_\_\_\_\_  
Surety

By \_\_\_\_\_  
Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title \_\_\_\_\_

# Notary Acknowledgment

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 \_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, 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 of Notary Public

### OPTIONAL

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

#### CAPACITY CLAIMED BY SIGNER

- Individual
- Corporate Officer

\_\_\_\_\_ Title(s)

- Partner(s)                       Limited
- General

- Attorney-In-Fact
- Trustee(s)
- Guardian/Conservator
- Other:

Signer is representing:  
 Name Of Person(s) Or Entity(ies)

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

#### DESCRIPTION OF ATTACHED DOCUMENT

\_\_\_\_\_ Title or Type of Document

\_\_\_\_\_ Number of Pages

\_\_\_\_\_ Date of Document

\_\_\_\_\_ Signer(s) Other Than Named Above

NOTE: This acknowledgment is to be completed for Contractor/Principal.



# Notary Acknowledgment

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 \_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_, Notary Public, personally appeared \_\_\_\_\_, 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 of Notary Public

### OPTIONAL

*Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.*

#### CAPACITY CLAIMED BY SIGNER

- Individual
- Corporate Officer

\_\_\_\_\_ Title(s)

- Partner(s)                       Limited
- General

- Attorney-In-Fact
- Trustee(s)
- Guardian/Conservator
- Other:

Signer is representing:  
 Name Of Person(s) Or Entity(ies)

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

#### DESCRIPTION OF ATTACHED DOCUMENT

\_\_\_\_\_ Title or Type of Document

\_\_\_\_\_ Number of Pages

\_\_\_\_\_ Date of Document

\_\_\_\_\_ Signer(s) Other Than Named Above

**NOTE:** This acknowledgment is to be completed for the Attorney-in-Fact. The Power-of-Attorney to local representatives of the bonding company must also be attached.

**END OF PAYMENT BOND**

## 00 72 13 – GENERAL CONDITIONS

### ARTICLE 1. DEFINED TERMS

Whenever used in the Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined below, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

- A. Act of God – An earthquake of magnitude of 3.5 or higher on the Richter scale or a tidal wave.
- B. Addenda -- Written or graphic instruments issued prior to the submission of Bids which clarify, correct, or change the Contract Documents.
- C. Additional Work -- New or unforeseen work will be classified as “Additional Work” when the Agency’s Representative determines that it is not covered by the Contract.
- D. Agency -- The Big Bear Area Regional Wastewater Agency.
- E. Agency’s Representative -- The individual or entity as identified in the Special Conditions to act as the Agency’s Representative.
- F. Applicable Laws -- The laws, statutes, ordinances, rules, codes, regulations, permits, and licenses of any kind, issued by local, state or federal governmental authorities or private authorities with jurisdiction (including utilities), to the extent they apply to the Work.
- G. Bid -- The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices and other terms for the Work to be performed.
- H. Bidder -- The individual or entity who submits a Bid directly to the Agency.
- I. Board of Directors, Board -- The Board of Directors of the Agency.
- J. Change Order (“CO”) -- A document that authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Contract, in accordance with the Contract Documents and in the form contained in the Contract Documents.
- K. Change Order Request (“COR”) -- A request made by the Contractor for an adjustment in the Contract Price and/or Contract Times as the result of a Contractor-claimed change to the Work. This term may also be referred to as a Change Order Proposal (“COP”), or Request for Change (“RFC”).
- L. Claim -- A demand or assertion by the Agency or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

- M. Contract -- The entire integrated written agreement between the Agency and Contractor concerning the Work. "Contract" may be used interchangeably with "Agreement" in the Contract Documents. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral, and includes all Contract Documents.
- N. Contract Documents -- The documents listed in Section 00 52 13, Article 5. Some documents provided by the Agency to the Bidders and Contractor, including but not limited to reports and drawings of subsurface and physical conditions are not Contract Documents.
- O. Contract Price -- Amount to be paid by the Agency to the Contractor as full compensation for the performance of the Contract and completion of the Work, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs.
- P. Contract Times -- The number of days or the dates stated in the Contract Documents to: achieve defined Milestones, if any; and to complete the Work so that it is ready for final payment.
- Q. Contractor -- The individual or entity with which the Agency has contracted for performance of the Work.
- R. Contractor's Designated On-Site Representative -- The Contractor's Designated On-Site Representative will be as identified in Section 00 72 13, Article 3 and shall not be changed without prior written consent of the Agency.
- S. Daily Rate -- The Daily Rate stipulated in the Contract Documents as full compensation to the Contractor due to the Agency's unreasonable delay to the Project that was not contemplated by the parties.
- T. Day -- A calendar day of 24 hours measured from midnight to the next midnight.
- U. Defective Work -- Work that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referenced in the Contract Documents.
- V. Demobilization -- The complete dismantling and removal by the Contractor of all of the Contractor's temporary facilities, equipment, and personnel at the Site.
- W. Drawings -- That part of the Contract Documents prepared by of the Engineer of Record which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- X. Effective Date of the Contract -- The date indicated in the Contract on which it becomes effective, but if no such date is indicated, it means the date on which the Contract is signed and delivered by the last of the two parties to sign and deliver.

- Y. Engineer, whenever not qualified, shall mean the District Engineer of the Agency, acting either directly or through properly authorized agents, such agents acting severally within the scope of the particular duties entrusted to them. On all questions concerning the acceptance of materials, machinery, the classifications of material, the execution of work, conflicting interest of the contractors performing related work and the determination of costs, the decision of the Engineer, duly authorized by the Board of Directors, shall be binding and final upon both parties.
- Z. Engineer of Record -- The individual, partnership, corporation, joint venture, or other legal entity named as such in Section 00 73 13, Article 1.1. or any succeeding entity designated by the Agency.
- AA. Green Book -- The current edition of the Standard Specifications for Public Works Construction promulgated by the Joint Cooperative Committee of the Southern California Chapter American Public Works Association and the Southern California Districts of the Associated General Contractors of California.
- BB. Hazardous Waste -- The term "Hazardous Waste" shall have the meaning provided in Section 104 of the Solid Waste Disposal Act (42 U.S.C. § 6903) as amended from time to time or, 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, whichever is more restrictive.
- CC. Holiday – The Holidays occur on:
- New Year's Day - January 1  
 President's Day – Third Monday in February  
 Memorial Day - Last Monday in May  
 Independence Day - July 4  
 Labor Day - First Monday in September  
 Veteran's Day - November 11  
 Thanksgiving Day - Fourth Thursday in November  
 Friday after Thanksgiving  
 Christmas Eve – December 24  
 Christmas Day - December 25  
 Day After Christmas – December 26  
 New Year's Eve – December 31
- If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both Holidays. If the Holiday should fall on a Sunday, Sunday and the following Monday are both Holidays.
- DD. Notice of Award -- The written notice by the Agency to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, the Agency will sign and deliver the Contract.
- EE. Notice of Completion -- The form which may be executed by the Agency and recorded by the county where the Project is located constituting final acceptance of the Project.

- FF. Notice to Proceed -- A written notice given by the Agency to Contractor fixing the date on which the Contractor may proceed with the Work and when Contract Times will commence to run.
- GG. Project -- The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- HH. Recyclable Waste Materials -- Materials removed from the Site which are required to be diverted to a recycling center rather than an area landfill. Recyclable Waste Materials include asphalt, concrete, brick, concrete block, and rock.
- II. Schedule of Submittals -- A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to facilitate scheduled performance of related construction activities.
- JJ. Shop Drawings -- All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- KK. Specifications -- That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
- LL. Stop Payment Notice -- A written notice as defined in Civil Code section 8044.
- MM. Subcontractor -- An individual or entity other than a Contractor having a contract with any other entity than the Agency for performance of any portion of the Work at the Site.
- NN. Submittal -- Written and graphic information and physical samples prepared and supplied by the Contractor demonstrating various portions of the Work.
- OO. Successful Bidder -- The Bidder submitting a responsive Bid to whom the Agency makes an award.
- PP. Supplier -- A manufacturer, fabricator, supplier, distributor, material man, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment used in the performance of the Work or to be incorporated in the Work.
- QQ. Underground Facilities -- All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- RR. Unit Price Work -- Work to be paid for on the basis of unit prices as provided by the Contractor in its bid or as adjusted in accordance with the Contract Documents.

SS. Warranty -- A written guarantee provided to the Agency by the Contractor that the Work will remain free of defects and suitable for its intended use for the period required by the Contract Documents or the longest period permitted by the law of this State, whichever is longer.

TT. Work -- The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

## ARTICLE 2. CONTRACT DOCUMENTS

- A. **Contract Documents.** The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.
- B. **Interpretations.** The Contract Documents are intended to be fully cooperative and complementary. If the Contractor observes that any documents are in conflict, the Contractor shall promptly notify the Engineer in writing. In case of conflicts between the Contract Documents, the order of precedence shall be as follows:
1. Change Orders
  2. Addenda
  3. Special Conditions
  4. Technical Specifications
  5. Plans (Contract Drawings)
  6. Contract
  7. General Conditions
  8. Instructions to Bidders
  9. Notice Inviting Bids
  10. Contractor's Bid Forms
  11. Standard Specifications for Public Works Construction (Sections 1-9 Excluded)
  12. Applicable Local Agency Standards and Specifications
  13. Standard Drawings
  14. Reference Documents

With reference to the Drawings, the order of precedence shall be as follows:

1. Figures govern over scaled dimensions
  2. Detail drawings govern over general drawings
  3. Addenda or Change Order drawings govern over Contract Drawings
  4. Contract Drawings govern over Standard Drawings
  5. Contract Drawings govern over Shop Drawings
- C. **Conflicts in Contract Documents.** Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard, higher quality, and most expensive shall always apply.
- D. **Organization of Contract Documents.** Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control the

Contractor in dividing Project Work among subcontractors or in establishing the extent of Work to be performed by any trade.

### **ARTICLE 3. PRECONSTRUCTION AND CONSTRUCTION COMMUNICATION**

Before any Work at the site is started, a conference attended by the Agency, Contractor, Agency's Representative, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to herein, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

At this conference the Agency and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

### **ARTICLE 4. CONTRACT DOCUMENTS: COPIES & MAINTENANCE**

Contractor will be furnished, free of charge, **two (2)** copies of the Contract Documents. Additional copies may be obtained at cost of reproduction.

Contractor shall maintain a clean, undamaged set of Contract Documents, including submittals, at the Project site.

### **ARTICLE 5. EXAMINATION OF DRAWINGS, SPECIFICATIONS AND SITE OF WORK**

- A. **Examination of Contract Documents.** Before commencing any portion of the Work, Contractor shall again carefully examine all applicable Contract Documents, the Project site, and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify the Engineer of any potential error, inconsistency, ambiguity, conflict, or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements.
- B. **Additional Instructions.** After notification of any error, inconsistency, ambiguity, conflict, or lack of detail or explanation, the Engineer will provide any required additional instructions, by means of drawings or other written direction, necessary for proper execution of Work.
- C. **Quality of Parts, Construction and Finish.** All parts of the Work shall be of the best quality of their respective kinds and the Contractor must use all diligence to inform itself fully as to the required construction and finish.
- D. **Contractor's Variation from Contract Document Requirements.** If it is found that the Contractor has varied from the requirements of the Contract Documents including the requirement to comply with all applicable laws, ordinances, rules and regulations, the Engineer may at any time, before or after completion of the Work, order the

improper Work removed, remade or replaced by the Contractor at the Contractor's expense.

## **ARTICLE 6. MOBILIZATION**

- A. When a bid item is included in the Bid Form for mobilization, the costs of Work in advance of construction operations and not directly attributable to any specific bid item will be included in the progress estimate ("Initial Mobilization"). When no bid item is provided for "Initial Mobilization," payment for such costs will be deemed to be included in the other items of the Work.
- B. Payment for Initial Mobilization based on the lump sum provided in the Bid Form, which shall constitute full compensation for all such Work. No payment for Initial Mobilization will be made until all of the listed items have been completed to the satisfaction of the Engineer. The scope of the Work included under Initial Mobilization shall include, but shall not be limited to, the following principal items:
1. Obtaining and paying for all bonds, insurance, and permits.
  2. Moving on to the Project site of all Contractor's plant and equipment required for the first month's operations.
  3. Installing temporary construction power, wiring, and lighting facilities, as applicable.
  4. Establishing fire protection system, as applicable.
  5. Developing and installing a construction water supply, if applicable.
  6. Providing and maintaining the field office trailers for the Contractor, if necessary, and the Engineer (if specified), complete, with all specified furnishings and utility services.
  7. Providing on-site sanitary facilities and potable water facilities as specified per Cal-OSHA and these Contract Documents.
  8. Furnishing, installing, and maintaining all storage buildings or sheds required for temporary storage of products, equipment, or materials that have not yet been installed in the Work. All such storage shall meet manufacturer's specified storage requirements, and the specific provisions of the specifications, including temperature and humidity control, if recommended by the manufacturer, and for all security.
  9. Arranging for and erection of Contractor's work and storage yard.
  10. Posting all OSHA required notices and establishment of safety programs per Cal-OSHA.
  11. Full-time presence of Contractor's superintendent at the job site as required herein.
  12. Submittal of Construction Schedule as required by the Contract Documents.



## ARTICLE 7. EXISTENCE OF UTILITIES AT THE WORK SITE

- A. The Agency has endeavored to determine the existence of utilities at the Project site from the records of the owners of known utilities in the vicinity of the Project. The positions of these utilities as derived from such records are shown on the Plans.
- B. Unless indicated otherwise on the Plans and Specifications, no excavations were made to verify the locations shown for underground utilities. The service connections to these utilities are not shown on the Plans. Water service connections may be shown on the Plans showing general locations of such connections. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing Work which could result in damage to such utilities. The Contractor shall immediately notify the Agency in writing of any utility discovered in a different position than shown on the Plans or which is not shown on the Plans.
- C. If applicable, all water meters, water valves, fire hydrants, electrical utility vaults, telephone vaults, gas utility valves, and other subsurface structures shall be relocated or adjusted to final grade by the Contractor. Locations of existing utilities shown on the Plans are approximate and may not be complete. The Contractor shall be responsible for coordinating its Work with all utility companies during the construction of the Work.
- D. Notwithstanding the above, pursuant to section 4215 of the Government Code, the Agency has the responsibility to identify, with reasonable accuracy, main or trunkline facilities on the plans and specifications. In the event that main or trunkline utility facilities are not identified with reasonable accuracy in the plans and specifications made a part of the invitation for Bids, the Agency shall assume the responsibility for their timely removal, relocation, or protection.
- E. Contractor, except in an emergency, shall contact the appropriate regional notification center, **Southern California Underground Service Alert** at 811 or 1-800-227-2600 or on-line at [www.digalert.org](http://www.digalert.org) at least two working days prior to commencing any excavation if the excavation will be performed in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the Agency, and obtain an inquiry identification number from that notification center. No excavation shall be commenced or carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and the Agency has been given the identification number by the Contractor.

## ARTICLE 8. SOILS INVESTIGATIONS

- A. Reports and Drawings. The Special Conditions identify:
  - 1. those reports known to the Agency of explorations and tests of subsurface conditions at or contiguous to the site; and
  - 2. those drawings known to the Agency of physical conditions relating to existing surface or subsurface structures at the site (except Underground Facilities).

- B. Limited Reliance by Contractor on Technical Data Authorized. Contractor may rely upon the accuracy of the “technical data” contained in such reports and drawings, which were expressly not created or obtained to evaluate or assist in the evaluation of constructability, and are not Contract Documents. Contractor shall make its own interpretation of the “technical data” and shall be solely responsible for any such interpretations. Except for reliance on the accuracy of such “technical data,” Contractor may not rely upon or make any claim against the Agency, Agency’s Representative, or Engineer of Record, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, with respect to:
1. the completeness of such reports and drawings for Contractor’s purposes, including without limitation any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
  2. other data, interpretations, opinions, conclusions and information contained in such reports or shown or indicated in such drawings; or
  3. any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions, or information.

#### **ARTICLE 9. CONTRACTOR’S SUPERVISION**

Contractor shall continuously keep at the Project site, a competent and experienced full-time Project superintendent acceptable to the Agency. Superintendent must be able to proficiently speak, read and write in English and shall have the authority to make decisions on behalf of the Contractor. Contractor shall continuously provide efficient supervision of the Project.

#### **ARTICLE 10. WORKERS**

- A. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Project any unfit person or any one not skilled in the Work assigned to him or her.
- B. Any person in the employ of the Contractor whom the Agency may deem incompetent or unfit shall be dismissed from the Work and shall not be employed on this Project.

#### **ARTICLE 11. INDEPENDENT CONTRACTORS**

Contractor shall be an independent contractor for the Agency and not an employee. Contractor understands and agrees that it and all of its employees shall not be considered officers, employees, or agents of Agency and are not entitled to benefits of any kind normally provided employees of Agency, including but not limited to, state unemployment compensation or workers’ compensation. Contractor assumes full responsibility for the acts and omissions of its employees or agents related to the Work.

#### **ARTICLE 12. SUBCONTRACTS**

- A. Contractor agrees to bind every subcontractor to the terms of the Contract Documents as far as such terms are applicable to subcontractor’s portion of the Work. Contractor shall be as fully responsible to the Agency for the acts and omissions of its

subcontractors and of persons either directly or indirectly employed by its subcontractors, as Contractor is for acts and omissions of persons directly employed by Contractor. Nothing contained in these Contract Documents shall create any contractual relationship between any subcontractor and the Agency.

- B. The Agency reserves the right to accept all subcontractors. The Agency's acceptance of any subcontractor under this Contract shall not in any way relieve Contractor of its obligations in the Contract Documents.
- C. Prior to substituting any subcontractor listed in the Bid Forms, Contractor must comply with the requirements of the Subletting and Subcontracting Fair Practices Act pursuant to California Public Contract Code section 4100 et seq.

### **ARTICLE 13. VERIFICATION OF EMPLOYMENT ELIGIBILITY**

By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time, and shall require all subcontractors, sub-subcontractors and consultants to comply with the same. Each person executing this Contract on behalf of Contractor verifies that he or she is a duly authorized officer of Contractor and that any of the following shall be grounds for the Agency to terminate the Contract for cause: (1) failure of the Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in this Article; (2) any misrepresentation or material omission concerning compliance with such requirements; or (3) failure to immediately remove from the Work any person found not to be in compliance with such requirements.

### **ARTICLE 14. REQUESTS FOR SUBSTITUTION**

- A. For the purposes of this provision, the term "substitution" shall mean the substitution of any material, method or service substantially equal to or better in every respect to that indicated in the Standard Specifications or otherwise referenced herein.
- B. Pursuant to Public Contract Code section 3400(b), the Agency may make a finding that is described in the Notice Inviting Bids that designates certain products, things, or services by specific brand or trade name.
- C. Unless specifically designated in the Special Conditions, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such specifications shall be deemed to be used for the purpose of facilitating the description of the material, process, or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer for substitution any material, process, or article which may be substantially equal to or better in every respect to that so indicated or specified in the Contract Documents. However, the Agency has adopted uniform standards for certain materials, processes, and articles.
- D. The Contractor shall submit substitution requests, together with substantiating data, for substitution of any "or equal" material, process, or article no later than thirty-five (35) calendar days after award of Contract. Provisions regarding submission of substitution requests shall not in any way authorize an extension of time for the

performance of this Contract. If a substitution request is rejected by the Agency, the Contractor shall provide the material, method or service specified herein. The Agency shall not be responsible for any costs incurred by the Contractor associated with substitution requests. The burden of proof as to the equality of any material, process, or article shall rest with the Contractor. The Engineer has the complete and sole discretion to determine if a material, process, or article is substantially equal to or better than that specified and to approve or reject all substitution requests.

- E. Substantiating data as described above shall include, at a minimum, the following information:
  - 1. A signed affidavit from the Contractor stating that the material, process, or article proposed as a substitution is substantially equal to or better than that specified in every way except as may be listed on the affidavit.
  - 2. Illustrations, specifications, catalog cut sheets, and any other relevant data required to prove that the material, process, or article is substantially equal to or better than that specified.
  - 3. A statement of the cost implications of the substitution being requested, indicating whether and why the proposed substitution will reduce or increase the amount of the contract.
  - 4. Information detailing the durability and lifecycle costs of the proposed substitution.
- F. Failure to submit all the required substantiating data detailed above in a timely manner so that the substitution request can be adequately reviewed may result in rejection of the substitution request. The Engineer is not obligated to review multiple submittals related the same substitution request resulting from the Contractor's failure to initially submit a complete package.
- G. Time limitations within this Article shall be strictly complied with and in no case will an extension of time for completion of the contract be granted because of Contractor's failure to provide substitution requests at the time and in the manner described herein.
- H. The Contractor shall bear the costs of all Agency work associated with the review of substitution requests.
- I. If substitution requests approved by the Engineer require that Contractor furnish materials, methods or services more expensive than that specified, the increased costs shall be borne by Contractor.

## **ARTICLE 15. SHOP DRAWINGS**

- A. Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in its own Work or in that of any other contractor, subcontractor, or worker on the Project two copies of all shop drawings, calculations, schedules, and materials list, and all other provisions required by the Contract Documents. Contractor shall sign all submittals affirming that submittals have been reviewed and approved by Contractor prior to submission to Engineer. Each signed submittal shall affirm that the submittal meets all

the requirements of the Contract Documents except as specifically and clearly noted and listed on the transmittal letter of the submittal.

- B. Contractor shall make any corrections required by the Engineer, and file with the Engineer two corrected copies each and an electronic copy, and furnish such other copies as may be needed for completion of the Work. Engineer's acceptance of shop drawings shall not relieve Contractor from responsibility for deviations from the Contract Documents unless Contractor has, in writing, called Engineer's attention to such deviations at time of submission and has secured the Engineer's written acceptance. Engineer's acceptance of shop drawings shall not relieve Contractor from responsibility for errors in shop drawings.
- C. Contractor shall submit four (4) copies of the final shop drawings as well as an electronic copy.

#### **ARTICLE 16. SUBMITTALS**

- A. Contractor shall furnish to the Engineer for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the Contract Documents. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.
- B. Contractor will provide samples and submittals, together with catalogs and supporting data required by the Engineer, to the Engineer within a reasonable time period to provide for adequate review and avoid delays in the Work.
- C. These requirements shall not authorize any extension of time for performance of this Contract. Engineer will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

#### **ARTICLE 17. MATERIALS**

- A. Except as otherwise specifically stated in the Contract Documents, Contractor shall provide and pay for all materials, labor, tools, equipment, lights, power, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.
- B. Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted and/or specified, and workmanship shall be of good quality.
- C. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of the Work and shall be stored properly and protected as required by the Contract Documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work.
- D. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier.

Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the Work and agrees upon completion of all work to deliver the Project, to the Agency free from any claims, liens, or charges.

- E. Materials shall be stored on the Project site in such manner so as not to interfere with any operations of the Agency or any independent contractor.
- F. Contractor shall verify all measurements, dimensions, elevations, and quantities before ordering any materials or performing any Work, and the Agency shall not be liable for Contractor's failure to do so. No additional compensation, over and above payment for the actual quantities at the prices set out in the Bid Form, will be allowed because of differences between actual measurements, dimension, elevations and quantities and those indicated on the Plans and in the Specifications. Any difference therein shall be submitted to the Engineer for consideration before proceeding with the Work.

## **ARTICLE 18. PERMITS AND LICENSES**

- A. Agency will apply and pay for the review of necessary encroachment permits for Work within the public rights-of-way. Contractor shall obtain all other necessary permits and licenses for the construction of the Project, including encroachment permits, and shall pay all fees required by law and shall comply with all laws, ordinances, rules and regulations relating to the Work and to the preservation of public health and safety. Before acceptance of the Project, the Contractor shall submit all licenses, permits, certificates of inspection and required approvals to the Agency.
- B. The Bid Form contains an allowance for the Contractor's cost of acquiring traffic control permits and for construction inspection fees that may be charged to the Contractor by the Agency of Jurisdiction. The allowance is included within the Bid Form to eliminate the need by bidders to research or estimate the costs of traffic control permits and construction inspection fees prior to submitting a bid. The allowance is specifically intended to account for the costs of traffic control permits and construction inspection fees charged by the local Agency of Jurisdiction only. No other costs payable by Contractor to the Agency of Jurisdiction are included within the allowance. Payment by Agency to Contractor under the Permit and Inspection Allowance Bid Item shall be made based on actual cost receipts only and in accordance with the provisions of these specifications.

## **ARTICLE 19. TRENCHES**

- A. **Trenches Five Feet or More in Depth.** Contractor shall submit to the Engineer at the preconstruction meeting, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from hazards of caving ground during the excavation of any trench or trenches five feet or more in depth. If such plan varies from shoring system standards established by the Construction Safety Orders of the California Code of Regulations, Department of Industrial Relations, the plan shall be prepared by a California registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations. The Contractor shall designate in writing the "competent person" as defined in Title 8, California Code of Regulations, who shall be present at the Work

Site each day that trenching/excavation is in progress. The “competent person” shall prepare and provide daily trenching/excavation inspection reports to the Engineer. Contractor shall also submit a copy of its annual California Occupational Safety and Health Administration (Cal/OSHA) trench/excavation permit.

- B. Excavations Deeper than Four Feet.** If the Work involves excavating trenches or other excavations that extend deeper than four feet below the surface, Contractor shall promptly, and before the excavation is further disturbed, notify the Agency in writing of any of the following conditions:
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 from those indicated.
  3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract

The Agency shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Contractor’s cost of, or the time required for, performance of any part of the Work, shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between the Agency and the Contractor as to 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. 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 parties.

## **ARTICLE 20. TRAFFIC CONTROL**

- A.** Traffic control plan(s) for the Work may be required by the Agency(s) of Jurisdiction. Traffic control plans, if required, shall be prepared at Contractor’s expense, and traffic control shall be performed at Contractor’s expense in accordance with the requirements of the Agency(s) of Jurisdiction. The Permit and Inspection Allowance included within the Bid Form includes the cost of required traffic control permit(s) and construction inspection by the Agency(s) of Jurisdiction only. The Permit and Inspection Allowance does not include costs for preparation of any required traffic control plans, implementation of any traffic control requirements or for any traffic signal services that may be required. Costs for traffic control plans, implementation of traffic control, or traffic signal services required by the Agency(s) of Jurisdiction shall be included in the Contractor’s Bid.
- B.** All warning signs and safety devices used by the Contractor to perform the Work shall conform to the requirements contained in the State of California, Department of

Transportation's current edition of "Manual of Traffic Controls for Construction and Maintenance Work Zones" or to the requirements of the local agency. The Contractor shall also be responsible for all traffic control required by the agency having jurisdiction over the project on the intersecting streets. Contractor must submit a traffic control plan to the agency having jurisdiction over the project for approval prior to starting work.

- C. The Contractor's representative on the site responsible for traffic control shall produce evidence that he/she has completed training acceptable to the California Department of Transportation for safety through construction zones. All of the streets in which the Work will occur shall remain open to traffic and one lane of traffic maintained at all times unless otherwise directed by the agency of jurisdiction. Businesses and residences adjacent to the Work shall be notified forty-eight (48) hours in advance of closing of driveways. The Contractor shall make every effort to minimize the amount of public parking temporarily eliminated due to construction in areas fronting businesses. No stockpiles of pipe or other material will be allowed in traveled right-of-ways after working hours unless otherwise approved by the Engineer.

## **ARTICLE 21. DIVERSION OF RECYCLABLE WASTE MATERIALS**

In compliance with the applicable Agency's waste reduction and recycling efforts, Contractor shall divert all Recyclable Waste Materials to appropriate recycling centers as required for compliance with the local jurisdiction's waste diversion ordinances. Contractor will be required to submit weight tickets and written proof of diversion with its monthly progress payment requests. Contractor shall complete and execute any certification forms required by Agency or other applicable agencies to document Contractor's compliance with these diversion requirements. All costs incurred for these waste diversion efforts shall be the responsibility of the Contractor.

## **ARTICLE 22. REMOVAL OF HAZARDOUS MATERIALS**

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Project site, the Contractor shall immediately stop work at the affected Project site and shall report the condition to the Agency in writing. The Agency shall contract for any services required to directly remove and/or abate PCBs and other toxic wastes and hazardous materials, if required by the Project site(s), and shall not require the Contractor to subcontract for such services. The Work in the affected area shall not thereafter be resumed except by written agreement of the Agency and Contractor.

## **ARTICLE 23. SANITARY FACILITIES**

Contractor shall provide sanitary temporary toilet buildings and hand washing facilities for the use of all workers. All toilets and hand washing facilities shall comply with local codes and ordinances. Toilets shall be kept supplied with toilet paper and shall have workable door fasteners. Toilets and hand washing facilities shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by Cal/OSHA regulations. The toilets and hand washing facilities shall be maintained in a sanitary condition at all times. Use of toilet and hand washing facilities in the Work under construction shall not be permitted. Any other Sanitary Facilities required by Cal/OSHA shall be the responsibility of the Contractor.



## **ARTICLE 24. AIR POLLUTION CONTROL**

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes, including, but not limited to, those required by the South Coast Air Quality Management Agency. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

## **ARTICLE 25. LAYOUT AND FIELD ENGINEERING**

All field engineering required for laying out the Work and establishing grades for earthwork operations shall be furnished by the Contractor at its expense.

## **ARTICLE 26. TESTS AND INSPECTIONS**

- A. If the Contract Documents, the Engineer, or any instructions, laws, ordinances, or public authority requires any part of the Work to be tested or Approved, Contractor shall provide the Engineer at least two (2) working days' notice of its readiness for observation or inspection. If inspection is by a public authority other than the Agency, Contractor shall promptly inform the Agency of the date fixed for such inspection. Required certificates of inspection (or similar) shall be secured by Contractor. Costs for Agency testing and Agency inspection shall be paid by the Agency. Costs of tests for Work found not to be in compliance shall be paid by the Contractor.
- B. If any Work is done or covered up without the required testing or approval, the Contractor shall uncover or deconstruct the Work, and the Work shall be redone after completion of the testing at the Contractor's cost in compliance with the Contract Documents.
- C. Where inspection and testing are to be conducted by an independent laboratory or agency, materials or samples of materials to be inspected or tested shall be selected by such laboratory or agency, or by the Agency, and not by Contractor. All tests or inspections of materials shall be made in accordance with the commonly recognized standards of national organizations.
- D. In advance of manufacture of materials to be supplied by Contractor which must be tested or inspected, Contractor shall notify the Agency so that the Agency may arrange for testing at the source of supply. Any materials which have not satisfactorily passed such testing and inspection shall not be incorporated into the Work.
- E. If the manufacture of materials to be inspected or tested will occur in a plant or location greater than sixty (60) miles from the Agency, the Contractor shall pay for any excessive or unusual costs associated with such testing or inspection, including but not limited to excessive travel time, standby time and required lodging.
- F. Reexamination of Work may be ordered by the Agency. If so ordered, Work must be uncovered or deconstructed by Contractor. If Work is found to be in accordance with the Contract Documents, the Agency shall pay the costs of reexamination and reconstruction. If such work is found not to be in accordance with the Contract Documents, Contractor shall pay all costs.

## **ARTICLE 27. PROTECTION OF WORK AND PROPERTY**

- A. The Contractor shall be responsible for all damages to persons or property that occurs as a result of the Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final Acceptance by the Agency. All Work shall be solely at the Contractor's risk. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the Project site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.
- B. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act to prevent such threatened loss or injury; and Contractor shall so act, without appeal, if so authorized or instructed by the Engineer or the Agency. Any compensation claimed by Contractor on account of emergency work shall be determined by and agreed upon by the Agency and the Contractor.

## **ARTICLE 28. CONTRACTOR'S MEANS AND METHODS**

- A. Contractor is solely responsible for the means and methods utilized to perform the Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

## **ARTICLE 29. AUTHORIZED REPRESENTATIVES**

- A. The Agency shall designate representatives, who shall have the right to be present at the Project site at all times. The Agency may designate an inspector who shall have the right to observe all of the Contractor's Work. The inspector shall not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. Contractor shall provide safe and proper facilities for such access.

## **ARTICLE 30. HOURS OF WORK**

- A. As provided in Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code, Contractor stipulates that eight (8) hours of labor shall constitute a legal day's work. The time of service of any worker employed at any time by the Contractor or by any subcontractor on any subcontract under this Contract upon the Work or upon any part of the Work contemplated by this Contract is limited and restricted to eight (8) hours during any one calendar day and 40 hours during any one calendar week, except as hereinafter provided. Notwithstanding the provisions herein above set forth, work performed by employees of Contractor in excess of eight (8) hours per day, and 40 hours during any one week, shall be permitted upon this public work upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half times the basic rate of pay.

- B. The Contractor and every subcontractor shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed in connection with the Work or any part of the Work contemplated by this Contract. The record shall be kept open at all reasonable hours to the inspection of the Agency and to the Division of Labor Law Enforcement, Department of Industrial Relations of the State of California.
- C. The Contractor shall pay to the Agency a penalty of twenty-five dollars (\$25.00) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and 40 hours in any one calendar week in violation of the provisions of Article 3 (commencing at section 1810), Chapter 1, Part 7, Division 2 of the Labor Code.
- D. Any work necessary to be performed after regular working hours, or on Saturdays and Sundays or other holidays, shall be performed without additional expense to the Agency.
- E. Agency will provide inspection during normal working hours from 7:00 a.m. to 3:30 p.m. Monday through Friday. Inspection before or after this time will be charged to the Contractor as reimbursable inspection time. Inspections on weekends requires two days' notice for review and approval. Upon written request and approval the 8.5 hour working day may be changed to other limits subject to city/county ordinance.
- F. It shall be unlawful for any person to operate, permit, use, or cause to operate any of the following at the Project site, other than between the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, with no Work allowed on the Agency-observed holidays, unless otherwise approved by the Agency:
  - 1. Powered Vehicles
  - 2. Construction Equipment
  - 3. Loading and Unloading Vehicles
  - 4. Domestic Power Tools

### **ARTICLE 31. PAYROLL RECORDS**

- A. Pursuant to Labor Code section 1776, Contractor and all subcontractors shall maintain weekly certified payroll records, showing the names, addresses, Social Security numbers, work classifications, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by them in connection with the Work under this Contract. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury.
- B. In accordance with Labor Code section 1771.4, the Contractor and each subcontractor shall furnish the certified payroll records directly to the Department of Industrial Relations ("DIR") on the specified interval and format prescribed by the DIR, which

may include electronic submission. Contractor shall comply with all requirements and regulations from the DIR relating to labor compliance monitoring and enforcement. The requirement to submit certified payroll records directly to the Labor Commissioner under Labor Code section 1771.4 shall not apply to work performed on a public works project that is exempt pursuant to the small project exemption specified in Labor Code Section 1771.4.

- C. Any stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor that affect Contractor's performance of Work, including any delay, shall be Contractor's sole responsibility. Any delay arising out of or resulting from such stop orders shall be considered Contractor caused delay subject to any applicable liquidated damages and shall not be compensable by the Agency. Contractor shall defend, indemnify and hold the Agency, its officials, officers, employees and agents free and harmless from any claim or liability arising out of stop orders issued by the Department of Industrial Relations against Contractor or any subcontractor.
- D. The payroll records described herein shall be certified and submitted by the Contractor at a time designated by the Agency. The Contractor shall also provide the following:
  - 1. A certified copy of the employee's payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
  - 2. A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the DIR.
- E. Unless submitted electronically, the certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement ("DLSE") of the DIR or shall contain the same information as the forms provided by the DLSE.
- F. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency, the Agency, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or performing the contract shall not be marked or obliterated.
- G. In the event of noncompliance with the requirements of this Article, the Contractor shall have ten (10) calendar days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this Article. Should noncompliance still be evident after such 10-day period, the Contractor shall pay a penalty of one hundred dollars (\$100.00) to the Agency 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, such penalties shall be withheld from progress payment then due.
- H. The responsibility for compliance with this Article shall rest upon the Contractor.

## **ARTICLE 32. PREVAILING RATES OF WAGES**

- A. The Contractor is aware of the requirements of Labor Code sections 1720 *et seq.* and 1770 *et seq.*, as well as California Code of Regulations, Title 8, Section 16000 *et seq.* (“Prevailing Wage Laws”), which require the payment of prevailing wage rates and the performance of other requirements on certain “public works” and “maintenance” projects. Since this Project involves an applicable “public works” or “maintenance” project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Contract from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at [www.dir.ca.gov](http://www.dir.ca.gov). In the alternative, the Contractor may view a copy of the prevailing rate of per diem wages which are on file at the Agency’s Administration Office and shall be made available to interested parties upon request. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification, or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor’s principal place of business and at the Project site. Contractor shall defend, indemnify and hold the Agency, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.
- B. The Contractor shall forfeit as a penalty to the Agency not more than Two Hundred Dollars (\$200.00), pursuant to Labor Code section 1775, for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate as determined by the Director of the Department of Industrial Relations for such work or craft in which such worker is employed for any public work done under the Contract by it or by any subcontractor under it. The difference between such prevailing wage rate 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.
- C. Contractor shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

## **ARTICLE 33. PUBLIC WORKS CONTRACTOR REGISTRATION**

- A. Pursuant to Labor Code sections 1725.5 and 1771.1, the Contractor and its subcontractors must be registered with the Department of Industrial Relations prior to the execution of a contract to perform public works. By entering into this Contract, Contractor represents that it is aware of the registration requirement and is currently registered with the DIR. Contractor shall maintain a current registration for the duration of the Project. Contractor shall further include the requirements of Labor Code sections 1725.5 and 1771.1 in any subcontract and ensure that all subcontractors are registered at the time this Contract is entered into and maintain registration for the duration of the Project. Notwithstanding the foregoing, the contractor registration requirements mandated by Labor Code Sections 1725.5 and 1771.1 shall not apply to work performed on a public works project that is exempt

pursuant to the small project exemption specified in Labor Code Sections 1725.5 and 1771.1.

#### **ARTICLE 34. EMPLOYMENT OF APPRENTICES**

- A. Contractor and all subcontractors shall comply with the requirements of Labor Code sections 1777.5 and 1777.6 in the employment of apprentices.
- B. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.
- C. Knowing violations of Labor Code section 1777.5 will result in forfeiture not to exceed one hundred dollars (\$100.00) for each calendar day of non-compliance pursuant to Labor Code section 1777.7.
- D. The responsibility for compliance with this Article shall rest upon the Contractor.

#### **ARTICLE 35. NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY**

- A. Pursuant to Labor Code section 1735 and other applicable provisions of law, the Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law on this Project. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, sexual orientation, or any other classifications protected by law.
- B. Employment Eligibility; Contractor. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Contractor. Contractor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Contract, and shall not violate any such law at any time during the term of the Contract. Contractor shall avoid any violation of any such law during the term of this Contract by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Contractor shall maintain records of each such verification, and shall make them available to the Agency or its representatives for inspection and copy at any time during normal business hours. The Agency shall not be responsible for any costs or expenses related to Contractor's compliance with the requirements provided for or referred to herein.

- C. Employment Eligibility; Subcontractors, Sub-subcontractors and Consultants. To the same extent and under the same conditions as Contractor, Contractor shall require all of its subcontractors, sub-subcontractors and consultants performing any part of the Work or of this Contract to make the same verifications and comply with all requirements and restrictions provided for herein.
- D. Employment Eligibility; Failure to Comply. Each person executing this Contract on behalf of Contractor verifies that he or she is a duly authorized officer of Contractor, and understands that any of the following shall be grounds for the Agency to terminate the Contract for cause: (1) failure of Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for herein; (2) any misrepresentation or material omission concerning compliance with such requirements; or (3) failure to immediately remove from the Work any person found not to be in compliance with such requirements.

### **ARTICLE 36. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS**

- A. Contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Labor Code section 1777.1 or 1777.7. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid, or may have been paid to a debarred subcontractor by a contractor on the project shall be returned to the Agency. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the project.

### **ARTICLE 37. LABOR/EMPLOYMENT SAFETY**

- A. The Contractor shall comply with all applicable laws and regulations of the federal, state, and local government, including Cal/OSHA requirements and requirements for verification of employees' legal right to work in the United States.
- B. The Contractor shall maintain emergency first aid treatment for his employees which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 *et seq.*), and California Code of Regulations, Title 8, Industrial Relations Division 1, Department of Industrial Relations, Chapter 4. The Contractor shall ensure the availability of emergency medical services for its employees in accordance with California Code of Regulations, Title 8, Section 1512.
- C. The Contractor shall submit the Illness and Injury Prevention Program and a Project site specific safety program to the Agency prior to beginning Work at the Project site. Contractor shall maintain a confined space program that meets or exceeds the Agency Standards. Contractor shall adhere to the Agency's lock out tag out program.

### **ARTICLE 38. INSURANCE**

- A. The Contractor shall obtain, and at all times during performance of the Work of Contract, maintain all of the insurance described in this Article. Contractor shall not commence Work under this Contract until it has provided evidence satisfactory to the Agency that it has secured all insurance required hereunder. Contractor shall not allow

any subcontractor to commence work on any subcontract until it has provided evidence satisfactory to the Agency that the subcontractor has secured all insurance required under this Article. Failure to provide and maintain all required insurance shall be grounds for the Agency to terminate this Contract for cause. Contractor shall furnish Agency with original certificates of insurance and endorsements effective coverage required by this Contract on forms satisfactory to the Agency. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms acceptable to the Agency. All certificates and endorsements must be received and approved by the Agency before Work commences.

- B. Additional Insureds; Waiver of Subrogation.** The Agency, its officials, officers, employees, agents and authorized volunteers shall be named as Additional Insureds on Contractor's All Risk policy and on Contractor's and its subcontractors' policies of Commercial General Liability and Automobile Liability insurance using, for Contractor's policy/ies of Commercial General Liability insurance, ISO CG forms 20 10 and 20 37 (or endorsements providing the exact same coverage, including completed operations), and, for subcontractors' policies of Commercial General Liability insurance, ISO CG form 20 38 (or endorsements providing the exact same coverage). Notwithstanding the minimum limits set forth in this Contract for any type of insurance coverage, all available insurance proceeds in excess of the specified minimum limits of coverage shall be available to the parties required to be named as Additional Insureds hereunder. Contractor and its insurance carriers shall provide a Waiver of Subrogation in favor of those parties.
- C. Workers' Compensation Insurance.** The Contractor shall provide workers' compensation insurance for all of the employees engaged in Work under this Contract, on or at the Site, and, in case of any sublet Work, the Contractor shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract, on or at the Site, is not protected under the Workers' Compensation Statutes, the Contractor shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected. The Contractor is required to secure payment of compensation to his employees in accordance with the provisions of section 3700 of the Labor Code. The Contractor shall file with the Agency certificates of his insurance protecting workers. Company or companies providing insurance coverage shall be acceptable to the Agency, if in the form and coverage as set forth in the Contract Documents.
- D. Employer's Liability Insurance.** Contractor shall provide Employer's Liability Insurance, including Occupational Disease, in the amount of at least one million dollars (\$1,000,000.00) per person per accident. Contractor shall provide Agency with a certificate of Employer's Liability Insurance. Such insurance shall comply with the provisions of the Contract Documents. The policy shall be endorsed, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement and contain a Waiver of Subrogation in favor of the Agency.
- E. Commercial General Liability Insurance.** Contractor shall provide "occurrence" form Commercial General Liability insurance coverage at least as broad as the most



current ISO CGL Form 00 01, including but not limited to, premises liability, contractual liability, products/completed operations, personal and advertising injury which may arise from or out of Contractor's operations, use, and management of the Site, or the performance of its obligations hereunder. The policy shall not contain any exclusion contrary to this Contract including but not limited to endorsements or provisions limiting coverage for (1) contractual liability (including but not limited to ISO CG 24 26 or 21 39); or (2) cross-liability for claims or suits against one insured against another. Policy limits shall not be less than \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit. Defense costs shall be paid in addition to the limits.

1. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor's indemnification obligations to the Agency, and shall not preclude the Agency from taking such other actions available to the Agency under other provisions of the Contract Documents or law.
2. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.
3. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, under-ground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions relating to liability for injury to or death of persons and damage to property.
4. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, the Agency may require additional coverage to be purchased by Contractor to restore the required limits. Contractor may combine primary, umbrella, and as broad as possible excess liability coverage to achieve the total limits indicated above. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.
5. All policies of general liability insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

**F. Automobile Liability Insurance.** Contractor shall provide "occurrence" form Automobile Liability Insurance at least as broad as ISO CA 00 01 (Any Auto) in the amount of, at least, one million dollars (\$1,000,000) per accident for bodily injury and property damage. Such insurance shall provide coverage with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned,

leased, hired or borrowed by Contractor or for which Contractor is responsible, in a form and with insurance companies acceptable to the Agency. All policies of automobile insurance shall permit and Contractor does hereby waive any right of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss.

**G. Builder's Risk ["All Risk"]**

1. It is the Contractor's responsibility to maintain or cause to be maintained Builder's Risk ["All Risk"] extended coverage insurance on all work, material, equipment, appliances, tools, and structures that are or will become part of the Work and subject to loss or damage by fire, and vandalism and malicious mischief, in an amount to cover 100% of the replacement cost. The Agency accepts no responsibility for the Work until the Work is formally accepted by the Agency. The Contractor shall provide a certificate evidencing this coverage before commencing performance of the Work.
2. The named insureds shall be Contractor, all Subcontractors of any tier (excluding those solely responsible for design work), suppliers, and Agency, its elected officials, officers, employees, agents and authorized volunteers, as their interests may appear. Contractor shall not be required to maintain property insurance for any portion of the Work following acceptance by Agency.
3. Policy shall be provided for replacement value on an "all risk" basis. There shall be no coinsurance penalty provision in any such policy. Policy must include: (1) coverage for any ensuing loss from faulty workmanship, nonconforming work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the Project; (4) transit coverage, including ocean marine coverage (unless insured by the supplier), with sub-limits sufficient to insure the full replacement value of any key equipment item; and (5) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the Site. Such insurance shall be on a form acceptable to Agency to ensure adequacy and sublimit.
4. In addition, the policy shall meet the following requirements:
  - a. Insurance policies shall be so conditioned as to cover the performance of any extra work performed under the Contract.
  - b. Coverage shall include all materials stored on site and in transit.
  - c. Coverage shall include Contractor's tools and equipment.
  - d. Insurance shall include boiler, machinery and material hoist coverage.

**H. Contractor's Pollution Liability Coverage.** Contractor shall provide pollution liability insurance in an amount not less than \$1,000,000 per occurrence and \$2,000,000 aggregate.

- I. Contractor shall require all tiers of sub-contractors working under this Contract to provide the insurance required under this Article unless otherwise agreed to in writing by Agency. Contractor shall make certain that any and all subcontractors hired by Contractor are insured in accordance with this Contract. If any subcontractor's coverage does not comply with the foregoing provisions, Contractor shall indemnify and hold the Agency harmless from any damage, loss, cost, or expense, including attorneys' fees, incurred by the Agency as a result thereof.

#### **ARTICLE 39. FORM AND PROOF OF CARRIAGE OF INSURANCE**

- A. Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California unless waived, in writing, by the Agency's Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A:VII. Insurance deductibles or self-insured retentions must be declared by the Contractor. At the election of the Agency the Contractor shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses. If umbrella or excess liability coverage is used to meet any required limit(s) specified herein, the Contractor shall provide a "follow form" endorsement satisfactory to the Agency indicating that such coverage is subject to the same terms and conditions as the underlying liability policy.
- B. Each insurance policy required by this Contract shall be endorsed to state that: (1) coverage shall not be suspended, voided, reduced or cancelled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Agency; and (2) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the Agency, its officials, officers, agents, employees, and volunteers.
- C. The Certificate(s) and policies of insurance shall contain or shall be endorsed to contain the covenant of the insurance carrier(s) that it shall provide no less than thirty (30) days written notice be given to the Agency prior to any material modification or cancellation of such insurance. In the event of a material modification or cancellation of coverage, the Agency may terminate the Contract or stop the Work in accordance with the Contract Documents, unless the Agency receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, or use the Site, or commence operations under this Contract until the Agency has been furnished original Certificate(s) of Insurance and certified original copies of endorsements or policies of insurance including all endorsements and any and all other attachments as required in this Article. The original endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.
- D. The Certificate(s) of Insurance, policies and endorsements shall so covenant and shall be construed as primary, and the Agency's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.

- E. Agency reserves the right to adjust the monetary limits of insurance coverages during the term of this Contract including any extension thereof if, in the Agency's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.
- F. Contractor shall report to the Agency, in addition to the Contractor's insurer, any and all insurance claims submitted by the Contractor in connection with the Work under this Contract.

#### **ARTICLE 40. TIME FOR COMPLETION AND LIQUIDATED DAMAGES**

- A. **Time for Completion/Liquidated Damages.** Time is of the essence in the completion of the Work. Work shall be commenced within ten (10) Days of the date stated in the Agency's Notice to Proceed and shall be completed by Contractor in the time specified in the Contract Documents. The Agency is under no obligation to consider early completion of the Project; and the Contract completion date shall not be amended by the Agency's receipt or acceptance of the Contractor's proposed earlier completion date. Furthermore, Contractor shall not, under any circumstances, receive additional compensation from the Agency (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date. If the Work is not completed as stated in the Contract Documents, it is understood that the Agency will suffer damage. In accordance with Government Code section 53069.85, being impractical and infeasible to determine the amount of actual damage, it is agreed that Contractor shall pay to the Agency as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each calendar day of delay until the Work is fully completed. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.
- B. **Inclement Weather.** Contractor shall abide by the Engineer's determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule.
- C. **Extension of Time.** Contractor shall not be charged liquidated damages because of any delays in completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (or its subcontractors or suppliers). Contractor shall within five (5) Days of identifying any such delay notify the Agency in writing of causes of delay. The Agency shall ascertain the facts and extent of delay and grant extension of time for completing the Work when, in its judgment, the facts justify such an extension. Time extensions to the Project shall be requested by the Contractor as they occur and without delay. No delay claims shall be permitted unless the event or occurrence delays the completion of the Project beyond the Contract completion date.
- D. **No Damages for Reasonable Delay.** The Agency's liability to Contractor for delays for which the Agency is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall the Agency be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs.

Damages caused by unreasonable Agency delay, including delays caused by items that are the responsibility of the Agency pursuant to Government Code section 4215, shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

#### **ARTICLE 41. COST BREAKDOWN AND PERIODIC ESTIMATES**

Contractor shall furnish on forms Approved by the Agency:

- A. Within ten (10) Days of Notice to Proceed with the Contract, a detailed estimate giving a complete breakdown of the Contract price, if the Contract amount is a lump sum.
- B. A monthly itemized estimate of Work done for the purpose of making progress payments. In order for the Agency to consider and evaluate each progress payment application, the Contractor shall submit a detailed measurement of Work performed and a progress estimate of the value thereof before the tenth (10th) Day of the following month.
- C. Contractor shall submit, with each of its payment requests, an adjusted list of actual quantities, verified by the Engineer, for unit price items listed, if any, in the Bid Form.
- D. Following the Agency's Acceptance of the Work, the Contractor shall submit to the Agency a written statement of the final quantities of unit price items for inclusion in the final payment request.
- E. The Agency shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment.

Contractor shall certify under penalty of perjury, that all cost breakdowns and periodic estimates accurately reflect the Work on the Project.

#### **ARTICLE 42. PROGRESS ESTIMATES AND PAYMENT**

- A. By the tenth (10th) Day of the following calendar month, Contractor shall submit to Engineer a payment request which shall set forth in detail the value of the Work done for the period beginning with the date work was first commenced and ending on the end of the calendar month for which the payment request is prepared. Contractor shall include any amount earned for authorized extra work. From the total thus computed, a deduction shall be made in the amount of five percent (5%) for retention, except where the Agency has adopted a finding that the Work done under the Contract is substantially complex, and then the amount withheld as retention shall be the percentage specified in the Notice Inviting Bids. From the remainder a further deduction may be made in accordance with Section B below. The amount computed, less the amount withheld for retention and any amounts withheld as set forth below, shall be the amount of the Contractor's payment request.
- B. The Agency may withhold a sufficient amount or amounts of any payment or payments otherwise due to Contractor, as in his judgment may be necessary to cover:

1. Payments which may be past due and payable for just claims against Contractor or any subcontractors for labor or materials furnished in and about the performance of work on the Project under this Contract.
  2. Defective work not remedied.
  3. Failure of Contractor to make proper payments to his subcontractor or for material or labor.
  4. Completion of the Contract if there is a reasonable doubt that the Work can be completed for balance then unpaid.
  5. Damage to another contractor or a third party.
  6. Amounts which may be due the Agency for claims against Contractor.
  7. Failure of Contractor to keep the record ("as-built") drawings up to date.
  8. Failure to provide update on construction schedule as required herein.
  9. Site cleanup.
  10. Failure to comply with Contract Documents.
  11. Liquidated damages.
  12. Legally permitted penalties.
- C. The Agency may apply such withheld amount or amounts to payment of such claims or obligations at its discretion with the exception of subsections (B)(1), (3), and (5) of this Article, which must be retained or applied in accordance with applicable law. In so doing, the Agency shall be deemed the agent of Contractor and any payment so made by the Agency shall be considered as a payment made under contract by the Agency to Contractor and the Agency shall not be liable to Contractor for such payments made in good faith. Such payments may be made without prior judicial determination of claim or obligations. The Agency will render Contractor a proper accounting of such funds disbursed on behalf of Contractor.
- D. Upon receipt, the Engineer shall review the payment request to determine whether it is undisputed and suitable for payment. If the payment request is determined to be unsuitable for payment, it shall be returned to Contractor as soon as practicable but not later than seven (7) Days after receipt, accompanied by a document setting forth in writing the reasons why the payment request is not proper. The Agency shall make the progress payment within 30 calendar days after the receipt of an undisputed and properly submitted payment request from Contractor, provided that a release of liens and claims has been received from the Contractor pursuant to Civil Code section 8132. The number of days available to the Agency to make a payment without incurring interest pursuant to this paragraph shall be reduced by the number of days by which the Engineer exceeds the seven (7) Day requirement.

- E. A payment request shall be considered properly executed if funds are available for payment of the payment request and payment is not delayed due to an audit inquiry by the financial officer of the Agency.

#### **ARTICLE 43. SECURITIES FOR MONEY WITHHELD**

Pursuant to section 22300 of the Public Contract Code of the State of California, Contractor may request the Agency to make retention payments directly to an escrow agent or may substitute securities for any money withheld by the Agency to ensure performance under the contract. At the request and expense of Contractor, securities equivalent to the amount withheld shall be deposited with the Agency or with a state or federally chartered bank as the escrow agent who shall return such securities to Contractor upon satisfactory completion of the contract. Deposit of securities with an escrow agent shall be subject to a written agreement substantially in the form provided in section 22300 of the Public Contract Code.

#### **ARTICLE 44. CHANGES AND EXTRA WORK.**

##### **A. Contract Change Orders.**

1. The Agency, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, and the Contract Price and Contract Time shall be adjusted accordingly. Except as otherwise provided herein, all such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract Price or the Contract Time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.
2. Contractor shall promptly execute changes in the Work as directed in writing by the Agency even when the parties have not reached agreement on whether the change increases the scope of Work or affects the Contract Price or Contract Time. All claims for additional compensation to the Contractor shall be presented in writing. No claim will be considered after the Work in question has been done unless a written Change Order has been issued or a timely written notice of claim has been made by Contractor.
3. Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions, and provisions of the original Contract.
4. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done.
5. No dispute, disagreement, or failure of the parties to reach agreement on the terms of the Change Order shall relieve the Contractor from the obligation to proceed with performance of the work, including Additional Work, promptly and expeditiously.

6. Contractor shall make available to the Agency any of the Contractor's documents related to the Project immediately upon request of the Agency, as set forth in Article 52.
7. Any alterations, extensions of time, Additional Work, or any other changes may be made without securing consent of the Contractor's surety or sureties.

**B. Contract Price Change.**

1. Process for Determining Adjustments in Contract Price.

- a. Owner Initiated Change. The Contractor must submit a complete cost proposal, including any change in the Contract Price or Contract Time, within seven (7) Days after receipt of a scope of a proposed change order initiated by the Agency, unless the Agency requests that proposals be submitted in less than seven (7) Days.
- b. Contractor Initiated Change. The Contractor must give written notice of a proposed change order required for compliance with the Contract Documents within seven (7) Days of discovery of the facts giving rise to the proposed change order.
- c. Whenever possible, any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and the Agency.
- d. Price quotations from the Contractor shall be accompanied by sufficiently detailed supporting documentation to permit verification by the Agency, including but not limited to estimates and quotations from subcontractors or material suppliers, as the Agency may reasonably request. Contractor shall certify the accuracy of all Change Order Requests under penalty of perjury.
- e. If the Contractor fails to submit a complete cost proposal within the seven (7) Day period (or as requested), the Agency has the right to order the Contractor in writing to commence the Work immediately on a time and materials basis and/or issue a lump sum change to the Contract Price and/or Contract Time in accordance with the Agency's estimate. If the change is issued based on the Agency's estimate, the Contractor will waive its right to dispute the action unless within fifteen (15) Days following completion of the added/deleted work, the Contractor presents written proof that the Agency's estimate was in error.

2. Unit Price Change Orders.

- a. When the actual quantity of a Unit Price item varies from the Bid Form, compensation for the change in quantity will be calculated by multiplying the actual quantity by the Unit Price. This calculation may result in either an additive or deductive Final Change Order pursuant to the Contract Documents.
- b. No Mark up for Overhead and Profit. Because the Contract Unit Prices provided in the Bid Form include Overhead and Profit as determined by Contractor at the time of Bid submission, no mark up or deduction for Overhead and Profit will be included in Unit Price Change Orders.



- c. Bid items included on the Bid Form may be deducted from the Work in their entirety without any negotiated extra costs.
  - d. Contractor acknowledges that unit quantities are estimates and agrees that the estimated unit quantities listed on the Bid Form will be adjusted to reflect the actual unit quantities which may result in an adjustment to the Contract Unit Prices. Such an adjustment will be made by execution of a final additive or deductive Change Order following Contractor's completion of the Work. Upon notification, Contractor's failure to respond within seven (7) Days will result in Agency's issuance of a unit quantity adjustment to the Contract Unit Prices and/or Contract Time in accordance with the Contract Documents.
  - e. The Agency or Contractor may make a Claim for an adjustment in the Unit Price in accordance with the Contract Documents if:
    - i. the quantity of any item of Unit Price Work performed by Contractor differs by twenty-five percent (25%) or more from the estimated quantity of such item indicated in the Contract; and
    - ii. there is no corresponding adjustment with respect to any other item of Work; and
    - iii. Contractor believes that Contractor is entitled to an increase in Unit Price as a result of having incurred additional expense or the Agency believes that the Agency is entitled to a decrease in Unit Price and the parties are unable to agree as to the amount of any such increase or decrease..
3. Lump Sum Change Orders. Compensation for Lump Sum Change Orders shall be limited to expenditures necessitated specifically by the Additional Work, and shall be segregated as follows:
- a. Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the Additional Work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the Additional Work cost will not be permitted unless the Contractor establishes the necessity for such new classifications. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.
  - b. Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight, and delivery. Materials costs shall be based upon supplier or manufacturer's invoice. If invoices or other satisfactory evidence of cost are not furnished within fifteen (15) Days of delivery, then the Agency shall determine the materials cost, at its sole discretion.
  - c. Tool and Equipment Use. Costs for the use of small tools, which are tools that have a replacement value of \$1,000 or less, shall be considered included in

the Overhead and Profit mark-ups established below. Regardless of ownership, the rates to be used in determining equipment use costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the Work is performed.

4. Time and Materials Change Orders.

a. General. The term Time and Materials means the sum of all costs reasonably and necessarily incurred and paid by Contractor for labor, materials, and equipment in the proper performance of Additional Work. Except as otherwise may be agreed to in writing by the Agency, such costs shall be in amounts no higher than those prevailing in the locality of the Project, and shall include only the following items.

b. Timely and Final Documentation.

i. T&M Daily Sheets. Contractor must submit timesheets, materials invoices, records of equipment hours, and records of rental equipment hours to the Agency's Representative for an approval signature **each day** Additional Work is performed. Failure to get the Agency's Representative's approval signature each Day shall result in a waiver of Contractor's right to claim these costs. The Agency's Representative's signature on time sheets only serves as verification that the Work was performed and is not indicative of Agency's agreement to Contractor's entitlement to the cost.

ii. T&M Daily Summary Sheets. All documentation of incurred costs ("T&M Daily Summary Sheets") shall be submitted by Contractor within **three (3) Days** of incurring the cost for labor, material, equipment, and special services as Additional Work is performed. Contractor's actual costs shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and special services. Each T&M Daily Summary Sheet shall include Contractor's actual costs incurred for the Additional Work performed that day and a cumulative total of Contractor's actual costs incurred for the Additional Work. Contractor's failure to provide a T&M Daily Summary Sheet showing a total cost summary within three (3) Days but within five (5) Days of performance of the Work will result in the Contractor's otherwise allowable overhead and profit being reduced by 50% for that portion of Additional Work which was not documented in a timely manner. Contractor's failure to submit the T&M Daily Summary Sheet within five (5) Days of performance of the Work will result in a total waiver of Contractor's right to claim these costs.

iii. T&M Total Cost Summary Sheet. Contractor shall submit a T&M Total Cost Summary Sheet, which shall include total actual costs, within **seven (7) Days** following completion of Agency approved Additional Work. Contractor's total actual cost shall be presented in a summary table in an electronic spreadsheet file by labor, material, equipment, and special services. Contractor's failure to submit the T&M Total Cost Summary Sheet within seven (7) Days of completion of the Additional Work will result in Contractor's waiver for any reimbursement of any costs associated with the T&M Summary Sheets or the performance of the Additional Work.

- c. Labor. The Contractor will be paid the cost of labor for the workers used in the actual and direct performance of the Work. The cost of labor will be the sum of the actual wages paid (which shall include any employer payments to or on behalf of the workers for health and welfare, pension, vacation, and similar purposes) substantiated by timesheets and certified payroll for wages prevailing for each craft or type of workers performing the Additional Work at the time the Additional Work is done, and the labor surcharge set forth in the 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. The labor surcharge shall constitute full compensation for all payments imposed by Federal, State, or local laws and for all other payments made to, or on behalf of, the workers, other than actual wages.
- i. Equipment Operator Exception. Labor costs for equipment operators and helpers shall be paid only when such costs are not included in the invoice for equipment rental.
- ii. Foreman Exception. The labor costs for foremen shall be proportioned to all of their assigned work and only that applicable to the Additional Work shall be paid. Indirect labor costs, including, without limitation, the superintendent, project manager, and other labor identified in the Contract Documents will be considered Overhead.
- d. Materials. The cost of materials reported shall be itemized at invoice or lowest current price at which materials are locally available and delivered to the Project site in the quantities involved, plus the cost of sales tax, freight, delivery, and storage.
- i. Trade discounts available to the purchaser shall be credited to the Agency notwithstanding the fact that such discounts may not have been taken by Contractor.
- ii. For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by the Agency's Representative.
- iii. Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on Additional Work items or the current wholesale price for such materials delivered to the Project site, whichever price is lower.
- iv. If, in the opinion of the Agency's Representative, the cost of materials is excessive, or Contractor does not furnish satisfactory evidence of the cost of such materials, then the cost shall be deemed to be the lowest current wholesale price for the total quantity concerned delivered to the Project site less trade discounts.

- v. The Agency reserves the right to furnish materials for the Additional Work and no Claim shall be allowed by Contractor for costs of such materials or Indirect Costs or profit on Agency furnished materials.

e. Equipment.

- i. Rental Time. The rental time to be paid for equipment on the Project site shall be the time the equipment is in productive operation on the Additional Work being performed and, in addition, shall include the time required to move the equipment to the location of the Additional 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 if the equipment is used on other than the Additional Work, even though located at the site of the Additional Work.
  - (a) Rental Time Not Allowed. Rental time will not be allowed while equipment is inoperative due to breakdowns.
  - (b) Computation Method. The following shall be used in computing the rental time of equipment on the Project site.
    - (i) When hourly rates are paid, any part of an hour less than 30 minutes of operation shall be considered to be 1/2-hour of operation, and any part of an hour in excess of 30 minutes will be considered one hour of operation.
    - (ii) When daily rates are paid, any part of a day less than 4 hours operation shall be considered to be 1/2-day of operation, and any part of an hour in excess of 4 hours will be considered one day of operation.
- ii. Rental Rates. Contractor will be paid for the use of equipment at the lesser of (i) the actual rental rate, or (ii) the rental rate listed for that equipment in the California Department of Transportation publication entitled *Labor Surcharge and Equipment Rental Rates*, which is in effect on the date upon which the Contract was executed. Such rental rates will be used to compute payments for equipment whether the equipment is under Contractor's control through direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment shall be the rate (i.e., daily, monthly) resulting in the least total cost to the Agency for the total period of use. If it is deemed necessary by Contractor to use equipment not listed in the publication, an equitable rental rate for the equipment will be established by the Agency's Representative. Contractor may furnish cost data which might assist the Agency's Representative in the establishment of the rental rate.
- iii. Contractor-Owned Equipment.
  - (a) For Contractor-owned equipment, the allowed equipment rental rate will be limited to the monthly equipment rental rate using a utilization rate of 173 hours per month.

- (b) For Contractor-owned equipment, the rental time to be paid for equipment on the Site shall be the time the equipment is in productive operation, unless, in the instance of standby time, the equipment could be actively used by Contractor on another project, then Agency shall pay for the entirety of the time the equipment is on Site. It shall be Contractor's burden to demonstrate to the Agency that the equipment could be actively used on another project.
- iv. All equipment shall, in the opinion of the Agency's Representative, be in good working condition and suitable for the purpose for which the equipment is to be used.
- v. Before construction equipment is used on the Additional Work, Contractor shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to the Agency's Representative, in duplicate, a description of the equipment and its identifying number and the scheduled Additional Work activities planned.
- vi. Unless otherwise specified, manufacturer's rating and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.
- f. Special Services. Special work or services are defined as that Additional Work characterized by extraordinary complexity, sophistication, or innovation or a combination of the foregoing attributes which are unique to the construction industry.
  - i. Invoices for Special Services. When the Agency's Representative and Contractor determine that a special service is required which cannot be performed by the forces of Contractor or those of any of its Subcontractors, the special service may be performed by an entity especially skilled in the Additional Work. Invoices for special services based upon the current fair market value thereof may be accepted without complete itemization of labor, material, and equipment rental costs, after validation of market values by the Agency's Representative.
  - ii. Discount and Allowance. All invoices for special services will be adjusted by deducting all trade discounts offered or available, whether the discounts were taken or not. In lieu of Overhead and Profit specified herein, a total allowance not to exceed fifteen percent (15%) for Overhead and Profit will be added to invoices for Special Services.
  - iii. When the Agency determines, in its sole discretion, that competitive bidding is necessary for certain special services, Contractor shall solicit competitive bids for those special services.
- g. Excluded Costs. The term Time and Material shall not include any of the following costs or any other home or field office overhead costs, all of which

are to be considered administrative costs covered by Contractor's allowance for Overhead and Profit.

- i. Overhead Cost. Payroll costs and other compensation of Contractor's officers, executives, principals, general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, timekeepers, clerks, and other personnel employed by Contractor whether at the Site or in Contractor's principal office or any branch office, material yard, or shop for general administration of the Additional Work;
  - ii. Office Expenses. Expenses of Contractor's principal and branch offices;
  - iii. Capital Expenses. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Additional Work and charges against Contractor for delinquent payments;
  - iv. Negligence. Costs due to the negligence of Contractor or any Subcontractor or Supplier, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including without limitation the correction of Defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property;
  - v. Other. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in the Contract Documents;
  - vi. Small Tools. Cost of small tools valued at less than \$1,000 and that remain the property of Contractor;
  - vii. Administrative Costs. Costs associated with the preparation of Change Orders (whether or not ultimately authorized), cost estimates, or the preparation or filing of Claims;
  - viii. Anticipated Lost Profits. Expenses of Contractor associated with anticipated lost profits or lost revenues, lost income or earnings, lost interest on earnings, or unpaid retention;
  - ix. Home Office Overhead. Costs derived from the computation of a "home office overhead" rate by application of the *Eichleay, Allegheny*, burden fluctuation, or other similar methods;
  - x. Special Consultants and Attorneys. Costs of special consultants or attorneys, whether or not in the direct employ of Contractor, employed for services specifically related to the resolution of a Claim, dispute, or other matter arising out of or relating to the performance of the Additional Work.
- h. Overhead, Profit and Other Charges. The mark-up for overhead (including supervision) and profit on work added to the Contract shall be according to the following:

- i. "Net Cost" is defined as consisting of costs of labor, materials, and tools and equipment only excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at cost only, without mark-up. Contractor shall provide Agency with documentation of the costs, including, but not limited to, payroll records, invoices, and such other information as Agency may reasonably request.
  - ii. For Work performed by the Contractor's forces, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the Net Cost of the Work.
  - iii. For Work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the subcontractor's Net Cost of the Work to which the Contractor may add five percent (5%) of the subcontractor's Net Cost.
  - iv. For Work performed by a sub-subcontractor, the added cost for overhead and profit shall not exceed fifteen percent (15%) of the sub-subcontractor's Net Cost for Work to which the subcontractor and general contractor may each add an additional five percent (5%) of the Net Cost of the lower tier subcontractor.
  - v. No additional mark-up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by Agency exceed twenty-five percent (25%) of the Net Cost as defined herein, of the party that performs the Work.
5. All of the following costs are included in the markups for overhead and profit described above, and Contractor shall not receive any additional compensation for: Submittals, drawings, field drawings, Shop Drawings, including submissions of drawings; field inspection; General Superintendence; General administration and preparation of cost proposals, schedule analysis, Change Orders, and other supporting documentation; computer services; reproduction services; Salaries of project engineer, superintendent, timekeeper, storekeeper, and secretaries; Janitorial services; Small tools, incidentals and consumables; Temporary On-Site facilities (Offices, Telephones, High Speed Internet Access, Plumbing, Electrical Power, Lighting; Platforms, Fencing, Water), Jobsite and Home office overhead or other expenses; vehicles and fuel used for work otherwise included in the Contract Documents; Surveying; Estimating; Protection of Work; Handling and disposal fees; Final Cleanup; Other Incidental Work; Related Warranties; insurance and bond premiums.
6. For added or deducted Work by subcontractors, the Contractor shall furnish to the Agency the subcontractor's signed detailed record of the cost of labor, material and equipment, including the subcontractor markup for overhead and profit. The same requirement shall apply to sub-subcontractors
7. For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to the Agency a detailed record of the cost to the Contractor, signed by such vendor or supplier.

8. Any change in the Work involving both additions and deletions shall indicate a net total cost, including subcontracts and materials. Allowance for overhead and profit, as specified herein, shall be applied if the net total cost is an increase in the Contract Price; overhead and profit allowances shall not be applied if the net total cost is a deduction to the Contract Price. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.
9. Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the Change Order for Work. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The Contractor may not change or modify the Agency's change order form in an attempt to reserve additional rights.
10. If the Agency disagrees with the proposal submitted by Contractor, it will notify the Contractor and the Agency will provide its opinion of the appropriate price and/or time extension. If the Contractor agrees with the Agency, a Change Order will be issued by the Agency. If no agreement can be reached, the Agency shall have the right to issue a unilateral Change Order setting forth its determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a claim in writing to the Agency within fifteen (15) Days of the issuance of the unilateral Change Order, disputing the terms of the unilateral Change Order, and providing such supporting documentation for its position as the Agency may require.

#### **C. Change of Contract Times.**

1. The Contract Times may only be changed by a Change Order.
2. All changes in the Contract Price and/or adjustments to the Contract Times related to each change shall be included in Contractor's COR pursuant to this Article. No cost or time will be allowed for cumulative effects of multiple changes. All Change Orders must state that the Contract Time is not changed or is either increased or decreased by a specific number of days. Failure to include a change to time shall waive any change to the time unless the parties mutually agree in writing to postpone a determination of the change to time resulting from the Change Order.
3. Notice of the amount of the request for adjustment in the Contract Times with supporting data shall be delivered within seven (7) Days after such start of occurrence, unless Agency's Representative allows an additional period of time to ascertain more accurate data in support of the request. No extension of time or additional compensation shall be given for a delay if the Contractor failed to give notice in the manner and within the time prescribed.
4. Agency may elect, at Agency's sole discretion, to grant an extension in Contract Times, without Contractor's request, because of delays or other factors.
5. Use of Float and Critical Path.



- a. Float is for the benefit of the Project. Float shall not be considered for the exclusive use or benefit of either the Agency or the Contractor.
  - b. Contractor shall not be entitled to compensation, and Agency will not compensate Contractor, for delays which impact early completion. Any difference in time between the Contractor's early completion and the Contract Time shall be considered a part of the Project float.
6. Contractor's entitlement to an extension of the Contract Times is limited to an Agency-caused extension of the critical path, reduced by the Contractor's concurrent delays, and established by a proper time impact analysis. No time extension shall be allowed unless, and then only to the extent that, the Agency-caused delay extends the critical path beyond the previously approved Contract Time. If approved, the increase in time required to complete the Work shall be added to the Contract Time.
- a. Contractor shall not be entitled to an adjustment in the Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.
  - b. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions (as determined by the Agency), Acts of God, acts or failures to act of utility owners not under the control of Agency, or other causes not the fault of and beyond control of Agency and Contractor, then Contractor shall be entitled to a time extension when the Work stopped is on the critical path. Such a non-compensable adjustment shall be Contractor's sole and exclusive remedy for such delays. Contractor must submit a timely request in accordance with the requirements of this Article.
  - c. Utility-Related Delays.
    - i. Contractor shall immediately notify in writing the utility owner and Agency's Representative of its construction schedule and any subsequent changes in the construction schedule which will affect the time available for protection, removal, or relocation of utilities. Requests for extensions of time arising out of utility relocation or repair delays shall be filed in accordance with this Article.
    - ii. Contractor shall not be entitled to damages or additional payment for delays attributable to utility relocations or alterations if correctly located, as noted in the Contract Documents or by the Underground Service Alert survey.
7. Content for Requests for Contract Extension. Contractor's justification for entitlement shall be clear and complete citing specific Contract Document references and reasons on which Contractor's entitlement is based. At a minimum, each request for a time extension must include:

- a. Each request for an extension of Contract Time must identify the impacting event, in narrative form, providing a description of the delay event and sufficient justification as to why the Contractor is entitled to a time extension. Contractor must demonstrate that the delay arises from unforeseeable causes beyond the control and without the fault or negligence of both Contractor and any Subcontractors or Suppliers, or any other persons or organizations employed by any of them or for whose acts any of them may be liable, and that such causes in fact lead to performance or completion of the Work, or specified part in question, beyond the corresponding Contract Times, despite Contractor's reasonable and diligent actions to guard against those effects.
  - b. Each request for an extension of Contract Time must include a time impact analysis in CPM format, using the Contemporaneous Impacted As-Planned Schedule Analysis to calculate the impact of the delay event.
8. No Damages for Reasonable Delay.
- a. Agency's liability to Contractor for delays for which Agency is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall Agency be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs.
  - b. Damages caused by unreasonable Agency delay that impact the critical path, including delays caused by items that are the responsibility of the Agency pursuant to Government Code section 4215, shall be compensated at the Daily Rate established in the Special Conditions. No other calculations, proportions or formulas shall be used to calculate any delay damages.
  - c. Agency and Agency's Representative, and the officers, members, partners, employees, agents, consultants, or subcontractors of each of them, shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
9. Contractor's failure, neglect, or refusal to comply with the requirements of the Contract Documents, or any portion thereof, shall bar Contractor's request for extensions of the Contract Times. Such failure, neglect, or refusal prejudices Agency's and Agency's Representative's ability to recognize and mitigate delay, and such failure, neglect, or refusal prevent the timely analysis of requests for extensions of Contract Times, and whether such extensions may be warranted. Contractor hereby waives all rights to extensions of Contract Times due to delays or accelerations that result from or occur during periods of time for which Contractor fails, neglects, or refuses to fully comply with the requirements of this Article.

## ARTICLE 45. FINAL ACCEPTANCE AND PAYMENT

- A. The acceptance of the Work on behalf of the Agency will be made by the Engineer. Such acceptance by the Agency shall not constitute a waiver of defects. When the Work has been accepted there shall be paid to Contractor a sum equal to the contract price less any amounts previously paid Contractor and less any amounts withheld by the Agency from Contractor under the terms of the contract. The final five percent (5%), or the percentage specified in the notice inviting bids where the Agency has adopted a finding of substantially complete, shall not become due and payable until five (5) calendar days shall have elapsed after the expiration of the period within which all claims may be filed under the provisions of Civil Code section 9356. If the Contractor has placed securities with the Agency as described herein, the Contractor shall be paid a sum equal to one hundred percent (100%) of the contract price less any amounts due the Agency under the terms of the Contract.
- B. Unless Contractor advises the Agency in writing prior to acceptance of the final five percent (5%) or the percentage specified in the notice inviting bids where the Agency has adopted a finding of substantially complete, or the return of securities held as described herein, said acceptance shall operate as a release to the Agency of all claims and all liability to Contractor for all things done or furnished in connection with this work and for every act of negligence of the Agency and for all other claims relating to or arising out of this work. If Contractor advises the Agency in writing prior to acceptance of final payment or return of the securities that there is a dispute regarding the amount due the Contractor, the Agency may pay the undisputed amount contingent upon the Contractor furnishing a release of all undisputed claims against the Agency with the disputed claims in stated amounts being specifically excluded by Contractor from the operation of the release. No payments, however, final or otherwise, shall operate to release Contractor or its sureties from the Faithful Performance Bond, Labor and Material Payment Bond, or from any other obligation under this contract.
- C. In case of suspension of the contract any unpaid balance shall be and become the sole and absolute property of the Agency to the extent necessary to repay the Agency any excess in the cost of the Work above the contract price.
- D. Final payment shall be made no later than 60 days after the date of acceptance of the Work by the Agency or the date of occupation, beneficial use and enjoyment of the Work by the Agency including any operation only for testing, start-up or commissioning accompanied by cessation of labor on the Work, provided that a release of liens and claims has been received from the Contractor pursuant to Civil Code section 8136. In the event of a dispute between the Agency and the Contractor, the Agency may withhold from the final payment an amount not to exceed 150% of the disputed amount.
- E. Within ten (10) calendar days from the time that all or any portion of the retention proceeds are received by Contractor, Contractor shall pay each of its subcontractors from whom retention has been withheld each subcontractor's share of the retention received. However, if a retention payment received by Contractor is specifically designated for a particular subcontractor, payment of the retention shall be made to the designated subcontractor if the payment is consistent with the terms of the subcontract.

## **ARTICLE 46. OCCUPANCY**

The Agency reserves the right to occupy or utilize any portion of the Work at any time before completion, and such occupancy or use shall not constitute acceptance of any part of Work covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

## **ARTICLE 47. INDEMNIFICATION**

To the fullest extent permitted by law, Contractor shall immediately defend (with counsel of the Agency's choosing), indemnify and hold harmless the Agency, officials, officers, agents, employees, and representatives, and each of them from and against:

- A. Any and all claims, demands, causes of action, costs, expenses, injuries, losses or liabilities, in law or in equity, of every kind or nature whatsoever, but not limited to, injury to or death, including wrongful death, of any person, and damages to or destruction of property of any person, arising out of, related to, or in any manner directly or indirectly connected with the Work or this Contract, including claims made by subcontractors for nonpayment, including without limitation the payment of all consequential damages and attorney's fees and other related costs and expenses, however caused, regardless of whether the allegations are false, fraudulent, or groundless, and regardless of any negligence of the Agency or its officers, employees, or authorized volunteers (including passive negligence), except the sole negligence or willful misconduct or active negligence of the Agency or its officials, officers, employees, or authorized volunteers.
- B. Contractor's defense and indemnity obligation herein includes, but is not limited to damages, fines, penalties, attorney's fees and costs arising from claims under the Americans with Disabilities Act (ADA) or other federal or state disability access or discrimination laws arising from Contractor's Work during the course of construction of the improvements or after the Work is complete, as the result of defects or negligence in Contractor's construction of the improvements.
- C. Any and all actions, proceedings, damages, costs, expenses, fines, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Contractor;
- D. Any and all losses, expenses, damages (including damages to the Work itself), attorney's fees, and other costs, including all costs of defense which any of them may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the Work and all of Contractor's obligations under the agreement. Such costs, expenses, and damages shall include all costs, including attorney's fees, incurred by the indemnified parties in any lawsuit to which they are a party.

Contractor shall immediately defend, at Contractor's own cost, expense and risk, with the Board of Directors' choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the Agency, its officials, officers, agents, employees and representatives. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against the Agency, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse

the Agency, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code section 2782.

#### **ARTICLE 48. PROCEDURE FOR RESOLVING DISPUTES**

Contractor shall timely comply with all notices and requests for changes to the Contract Time or Contract Price, including but not limited to all requirements of Article 44, Changes and Extra Work, as a prerequisite to filing any claim governed by this Article. The failure to timely submit a notice of delay or notice of change, or to timely request a change to the Contract Price or Contract Time, or to timely provide any other notice or request required herein shall constitute a waiver of the right to further pursue the claim under the Contract or at law.

- A. **Intent.** Effective January 1, 1991, Section 20104 et seq., of the California Public Contract Code prescribes a process utilizing informal conferences, non-binding judicial supervised mediation, and judicial arbitration to resolve disputes on construction claims of \$375,000 or less. Effective January 1, 2017, Section 9204 of the Public Contract Code prescribes a process for negotiation and mediation to resolve disputes on construction claims. The intent of this Article is to implement Sections 20104 et seq. and Section 9204 of the California Public Contract Code. This Article shall be construed to be consistent with said statutes.
  
- B. **Claims.** For purposes of this Article, “Claim” means a separate demand by the Contractor, after a change order duly requested in accordance with Article 44 “Changes and Extra Work” has been denied by the Agency, for (A) a time extension, (B) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract, or (C) an amount the payment of which is disputed by the Agency. Claims governed by this Article may not be filed unless and until the Contractor completes all procedures for giving notice of delay or change and for the requesting of a time extension or change order, including but not necessarily limited to the procedures contained in Article 44, Changes and Extra Work, and Contractor’s request for a change has been denied in whole or in part. Claims governed by this Article must be filed no later than the date of final payment. The claim shall be submitted in writing to the Agency and shall include on its first page the following in 16 point capital font: “THIS IS A CLAIM.” Furthermore, the claim shall include the documents necessary to substantiate the claim. Nothing herein is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims, including all requirements pertaining to compensation or payment for extra Work, disputed Work, and/or changed conditions. Failure to follow such contractual requirements shall bar any claims or subsequent lawsuits for compensation or payment thereon.
  
- C. **Supporting Documentation.** The Contractor shall submit all claims in the following format:
  - 1. Summary of claim merit and price, reference Contract Document provisions pursuant to which the claim is made
  - 2. List of documents relating to claim:

- a. Specifications
  - b. Drawings
  - c. Clarifications (Requests for Information)
  - d. Schedules
  - e. Other
3. Chronology of events and correspondence
  4. Analysis of claim merit
  5. Analysis of claim cost
  6. Time impact analysis in CPM format
  7. If Contractor's claim is based in whole or in part on an allegation of errors or omissions in the Drawings or Specifications for the Project, Contractor shall provide a summary of the percentage of the claim subject to design errors or omissions and shall obtain a certificate of merit in support of the claim of design errors and omissions.

**D. Agency's Response.** Upon receipt of a claim pursuant to this Article, Agency shall conduct a reasonable review of the claim and, within a period not to exceed 45 Days, shall provide the Contractor a written statement identifying what portion of the claim is disputed and what portion is undisputed. Any payment due on an undisputed portion of the claim will be processed and made within 60 Days after the Agency issues its written statement.

1. If the Agency needs approval from its governing body to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the claim, and the Agency's governing body does not meet within the 45 Days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the Agency shall have up to three Days following the next duly publicly noticed meeting of the Agency's governing body after the 45-Day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.
2. Within 30 Days of receipt of a claim, the Agency may request in writing additional documentation supporting the claim or relating to defenses or claims the Agency may have against the Contractor. If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of Agency and the Contractor. The Agency's written response to the claim, as further documented, shall be submitted to the Contractor within 30 Days (if the claim is less than \$15,000, 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 or requested documentation, whichever is greater.

- E. **Meet and Confer.** If the Contractor disputes the Agency's written response, or the Agency fails to respond within the time prescribed, the Contractor may so notify the Agency, in writing, either within 15 Days of receipt of the Agency's response or within 15 Days of the Agency's failure to respond within the time prescribed, respectively, and demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand, the Agency shall schedule a meet and confer conference within 30 Days for settlement of the dispute.
- F. **Mediation.** Within 10 business Days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the Agency shall provide the Contractor a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 Days after the Agency issues its written statement. Any disputed portion of the claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the Agency and the Contractor sharing the associated costs equally. The Agency and Contractor shall mutually agree to a mediator within 10 business Days after the disputed portion of the claim has been identified in writing, unless the parties agree to select a mediator at a later time.
1. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator.
  2. For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
  3. Unless otherwise agreed to by the Agency and the Contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Public Contract Code Section 20104.4 to mediate after litigation has been commenced.
  4. The mediation shall be held no earlier than the date the Contractor completes the Work or the date that the Contractor last performs Work, whichever is earlier. All unresolved claims shall be considered jointly in a single mediation, unless a new unrelated claim arises after mediation is completed.
- G. **Procedures After Mediation.** If following the mediation, the claim or any portion remains in dispute, the Contractor must 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 prior to initiating litigation. 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 his or her written claim pursuant to subdivision (a) until the time the claim is denied, including any period of time utilized by the meet and confer conference.

H. **Civil Actions.** The following procedures are established for all civil actions filed to resolve claims of \$375,000 or less:

1. Within 60 Days, but no earlier than 30 Days, following the filing or responsive pleadings, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties or unless mediation was held prior to commencement of the action in accordance with Public Contract Code section 9204 and the terms of this Contract. The mediation process shall provide for the selection within 15 Days by both parties of a disinterested third person as mediator, shall be commenced within 30 Days of the submittal, and shall be concluded within 15 Days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.
2. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1114.11 of that code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (B) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, also pay the attorney's fees on appeal of the other party.

I. **Government Code Claims.** In addition to any and all contract requirements pertaining to notices of and requests for compensation or payment for extra Work, disputed Work, construction claims and/or changed conditions, the Contractor must comply with the claim procedures set forth in Government Code Sections 900, et seq. prior to filing any lawsuit against the Agency. Such Government Code claims and any subsequent lawsuit based upon the Government Code claims shall be limited to those matters that remain unresolved after all procedures pertaining to extra Work, disputed Work, construction claims, and/or changed conditions have been followed by Contractor. If no such Government Code claim is submitted, or if the prerequisite contractual requirements are not satisfied, no action against the Agency may be filed. **A Government Code claim must be filed no earlier than the date the Work is completed or the date the Contractor last performs Work on the Project, whichever occurs first. A Government Code claim shall be inclusive of all unresolved claims unless a new unrelated claim arises after the Government Code claim is submitted.**

J. **Non-Waiver.** The Agency's failure to respond to a claim from the Contractor within the time periods described in this Article or to otherwise meet the time requirements of this Article shall result in the claim being deemed rejected in its entirety.

## **ARTICLE 49. AGENCY'S RIGHT TO TERMINATE CONTRACT**

### **A. Termination for Cause by the Agency:**



1. In the sole estimation of the Agency, if the Contractor refuses or fails to prosecute the Work or any separable part thereof with such diligence as will insure its completion within the time specified by the Contract Documents, or any extension thereof, or fails to complete such Work within such time, or if the Contractor should be adjudged a 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, or the Contractor or any of its subcontractors should violate any of the provisions of this Contract, the Agency may serve written notice upon the Contractor and its Surety of the Agency's intention to terminate this Contract. This notice of intent to terminate shall contain the reasons for such intention to terminate this Contract, and a statement to the effect that the Contractor's right to perform this Contract shall cease and terminate upon the expiration of ten (10) calendar days unless such violations have ceased and arrangements satisfactory to the Agency have been made for correction of said violations.
2. In the event that the Agency serves such written notice of termination upon the Contractor and the Surety, the Surety shall have the right to take over and perform the Contract. If the Surety does not: (1) give the Agency written notice of Surety's intention to take over and commence performance of the Contract within 15 calendar days of the Agency's service of said notice of intent to terminate upon Surety; and (2) actually commence performance of the Contract within 30 calendar days of the Agency's service of said notice upon Surety; then the Agency may take over the Work and prosecute the same to completion by separate contract or by any other method it may deem advisable for the account and at the expense of the Contractor.
3. In the event that the Agency elects to obtain an alternative performance of the Contract as specified above: (1) the Agency may, without liability for so doing, take possession of and utilize in completion of the Work such materials, appliances, plants and other property belonging to the Contractor that are on the site and reasonably necessary for such completion (A special lien to secure the claims of the Agency in the event of such suspension is hereby created against any property of Contractor taken into the possession of the Agency under the terms hereof and such lien may be enforced by sale of such property under the direction of the Board of Directors without notice to Contractor. The proceeds of the sale after deducting all expenses thereof and connected therewith shall be credited to Contractor. If the net credits shall be in excess of the claims of the Agency against Contractor, the balance will be paid to Contractor or Contractor's legal representatives.); and (2) Surety shall be liable to the Agency for any cost or other damage to the Agency necessitated by the Agency securing an alternate performance pursuant to this Article.

**B. Termination for Convenience by the Agency:**

1. The Agency may terminate performance of the Work called for by the Contract Documents in whole or, from time to time, in part, if the Agency determines that a termination is in the Agency's interest.
2. The Contractor shall terminate all or any part of the Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the

convenience of the Agency, the extent of termination, and the Effective Date of such termination.

3. After receipt of Notice of Termination, and except as directed by the Agency's Representative, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:
  - a. Stop Work as specified in the Notice.
  - b. Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.
  - c. Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Document is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
  - d. Terminate all subcontracts to the extent that they relate to the portions of the Work terminated.
  - e. Place no further subcontracts or orders, except as necessary to complete the continued portion of the Contract.
  - f. Submit to the Agency's Representative, within ten (10) calendar days from the Effective Date of the Notice of Termination, all of the usual documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Effective Date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the Agency's exercise of its right to terminate this Contract pursuant to this clause, which costs the contractor is authorized under the Contract documents to incur, shall: (1) be submitted to and received by the Engineer no later than 30 calendar days after the Effective Date of the Notice of Termination; (2) describe the costs incurred with particularity; and (3) be conspicuously identified as "Termination Costs occasioned by the Agency's Termination for Convenience."
4. Termination of the Contract shall not relieve Surety of its obligation for any just claims arising out of or relating to the Work performed.
5. In the event that the Agency exercises its right to terminate this Contract pursuant to this clause, the Agency shall pay the Contractor, upon the Contractor's submission of the documentation required by this clause and other applicable provisions of the Contract Documents, the following amounts:
  - a. All actual reimbursable costs incurred according to the provisions of this Contract.
  - b. A reasonable allowance for profit on the cost of the Work performed, provided Contractor establishes to the satisfaction of the Agency's Representative that

it is reasonably probable that Contractor would have made a profit had the Contract been completed and provided further, that the profit allowed shall in no event exceed fifteen (15%) percent of the costs.

- c. A reasonable allowance for Contractor's administrative costs in determining the amount payable due to termination of the Contract under this Article.
- C. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the Agency may immediately order Contractor to cease Work on the Project until such safety or liability issues are addressed to the satisfaction of the Agency or the Contract is terminated.

## **ARTICLE 50. WARRANTY AND GUARANTEE OF WORK**

- A. Contractor hereby warrants that materials and Work shall be completed in conformance with the Contract Documents and that the materials and Work provided will fulfill the requirements of this Warranty. Contractor hereby agrees to repair or replace, at the discretion of the Agency, any or all Work that may prove to be defective in its workmanship, materials furnished, methods of installation or fail to conform to the Contract Document requirements together with any other Work which may be damaged or displaced by such defect(s) within a period of one (1) year from the date of the Notice of Completion of the Project without any expense whatever to the Agency, ordinary wear and tear and unusual abuse and neglect excepted. Contractor shall be required to promptly repair or replace defective equipment or materials, at Contractor's option. All costs associated with such corrective actions and testing, including the removal, replacement, and reinstatement of equipment and materials necessary to gain access, shall be the sole responsibility of the Contractor.
- B. For any Work so corrected, Contractor's obligation hereunder to correct defective Work shall be reinstated for an additional one (1) year period, commencing with the date of acceptance of such corrected Work. The reinstatement of the one (1) year warranty shall apply only to that portion of work that was corrected. Contractor shall perform such tests as Agency may require to verify that any corrective actions, including, without limitation, redesign, repairs, and replacements comply with the requirements of the Contract. In the event of Contractor's failure to comply with the above-mentioned conditions within ten (10) calendar days after being notified in writing of required repairs, to the reasonable satisfaction of the Agency, the Agency shall have the right to correct and replace any defective or non-conforming Work and any work damaged by such work or the replacement or correction thereof at Contractor's sole expense. Contractor shall be obligated to fully reimburse the Agency for any expenses incurred hereunder immediately upon demand.
- C. In addition to the warranty set forth in this Article, Contractor shall obtain for Agency all warranties that would be given in normal commercial practice and assign to Agency any and all manufacturer's or installer's warranties for equipment or materials not manufactured by Contractor and provided as part of the Work, to the extent that such third-party warranties are assignable and extend beyond the warranty period set forth in this Article. Contractor shall furnish the Agency with all warranty and guarantee documents prior to final Acceptance of the Project by the Agency as required.

- D. When specifically indicated in the Contract Documents or when directed by the Engineer, the Agency may furnish materials or products to the Contractor for installation. In the event any act or failure to act by Contractor shall cause a warranty applicable to any materials or products purchased by the Agency for installation by the Contractor to be voided or reduced, Contractor shall indemnify Agency from and against any cost, expense, or other liability arising therefrom, and shall be responsible to the Agency for the cost of any repairs, replacement or other costs that would have been covered by the warranty but for such act or failure to act by Contractor.
- E. The Contractor shall remedy at its expense any damage to Agency-owned or controlled real or personal property.
- F. The Agency shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) calendar days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect, or damage; the Agency shall have the right to replace, repair or otherwise remedy the defect, or damage at the Contractor's expense.
- G. In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract requirements, the Agency may undertake at Contractor's expense, and without prior notice, all Work necessary to correct such condition.
- H. Acceptance of Defective Work.
1. If, instead of requiring correction or removal and replacement of Defective Work, the Agency prefers to accept it, Agency may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Agency's evaluation of and determination to accept such Defective Work and for the diminished value of the Work.
  2. If any acceptance of defective work occurs prior to release of the Project Retention, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Agency shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work and all costs incurred by Agency.
  3. If the Project Retention is held in an escrow account as permitted by the Contract Documents, Contractor will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to Agency.
  4. If the acceptance of Defective Work occurs after release of the Project Retention, an appropriate amount will be paid by Contractor to Agency.
- I. Agency May Correct Defective Work.
1. If Contractor fails within a reasonable time after written notice from Agency's Representative to correct Defective Work, or to remove and replace rejected Work

as required by Agency, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Agency may, after seven (7) Days' written notice to Contractor, correct, or remedy any such deficiency.

2. In connection with such corrective or remedial action, Agency may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Agency has paid Contractor but which are stored elsewhere. Contractor shall allow Agency and Agency's Representative, and the agents, employees, other contractors, and consultants of each of them, access to the Site to enable Agency to exercise the rights and remedies to correct the Defective Work.
  3. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Agency correcting the Defective Work will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions into the Contract Documents with respect to the Work; and Agency shall be entitled to an appropriate decrease in the Contract Price.
  4. Such claims, costs, losses and damages will include, but not be limited to, all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Defective Work.
  5. If the Change Order is executed after all payments under the Contract have been paid by Agency and the Project Retention is held in an escrow account as permitted by the Contract Documents, Contractor will promptly alert the escrow holder, in writing, of the amount of Retention to be paid to Agency.
  6. If the Change Order is executed after release of the Project Retention, an appropriate amount will be paid by Contractor to Agency.
  7. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to Agency correcting Defective work.
- J. Nothing in the Warranty or in the Contract Documents shall be construed to limit the rights and remedies available to Agency at law or in equity, including, but not limited to, Code of Civil Procedure section 337.15.

#### **ARTICLE 51. DOCUMENT RETENTION & EXAMINATION**

- A. In accordance with Government Code section 8546.7, records of both the Agency and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.
- B. Contractor shall make available to the Agency any of the Contractor's other documents related to the Project immediately upon request of the Agency.

- C. In addition to the State Auditor rights above, the Agency shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the Agency, for a period of four (4) years after final payment.

## **ARTICLE 52. SEPARATE CONTRACTS**

- A. The Agency reserves the right to let other contracts in connection with this Work or on the Project site. Contractor shall permit other contractors reasonable access and storage of their materials and execution of their work and shall properly connect and coordinate its Work with theirs.
- B. To ensure proper execution of its subsequent Work, Contractor shall immediately inspect work already in place and shall at once report to the Engineer any problems with the Work in place or discrepancies with the Contract Documents.
- C. Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by the Agency in prosecution of the Project to the end that Contractor may perform this Contract in the light of such other contracts, if any. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at site of the Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, the Engineer shall decide which Contractor shall cease Work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously. The Agency shall not be responsible for any damages suffered or for extra costs incurred by Contractor resulting directly or indirectly from award, performance, or attempted performance of any other contract or contracts on the Project site.

## **ARTICLE 53. NOTICE AND SERVICE THEREOF**

All notices shall be in writing and either served by personal delivery or mailed to the other party as designated in the Bid Forms. Written notice to the Contractor shall be addressed to Contractor's principal place of business unless Contractor designates another address in writing for service of notice. Notice to Agency shall be addressed to the Agency as designated in the Notice Inviting Bids unless Agency designates another address in writing for service of notice. Notice shall be effective upon receipt or five (5) calendar days after being sent by first class mail, whichever is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

## **ARTICLE 54. NOTICE OF THIRD PARTY CLAIMS**

Pursuant to Public Contract Code section 9201, the Agency shall provide the Contractor with timely notification of the receipt of any third-party claims relating to the Contract. The Agency is entitled to recover reasonable costs incurred in providing such notification.

## **ARTICLE 55. STATE LICENSE BOARD NOTICE**

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

## **ARTICLE 56. INTEGRATION**

- A. **Oral Modifications Ineffective.** No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the Contract Documents.
- B. **Contract Documents Represent Entire Contract.** The Contract Documents represent the entire agreement of the Agency and Contractor.

## **ARTICLE 57. ASSIGNMENT OF CONTRACT**

Contractor shall not assign, transfer, convey, sublet or otherwise dispose of the rights or title of interest of any or all of this contract without the prior written consent of the Agency. Any assignment or change of Contractor's name or legal entity without the written consent of the Agency shall be void. Any assignment of money due or to become due under this Contract shall be subject to a prior lien for services rendered or Material supplied for performance of Work called for under the Contract Documents in favor of all persons, firms, or corporations rendering such services or supplying such Materials to the extent that claims are filed pursuant to the Civil Code, the Code of Civil Procedure or the Government Code.

## **ARTICLE 58. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY**

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the Agency in order that proper steps may be taken to have the change reflected on the Contract and all related documents. No change of Contractor's name or nature will affect Agency's rights under the Contract, including but not limited to the bonds.

## **ARTICLE 59. ASSIGNMENT OF ANTITRUST ACTIONS**

Pursuant to Public Contract Code section 7103.5, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or subcontractor offers and agrees to assign to the Agency all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 USC, Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this contract or any subcontract. This assignment shall be made and become effective at the time the Agency tenders final payment to the Contractor, without further acknowledgment by the parties.

## **ARTICLE 60. PROHIBITED INTERESTS**

No Agency official or representative who is authorized in such capacity and on behalf of the Agency to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

## **ARTICLE 61. CONTROLLING LAW**

Notwithstanding any subcontract or other contract with any subcontractor, supplier, or other person or organization performing any part of the Work, this Contract shall be governed by the law of the State of California excluding any choice of law provisions.

## **ARTICLE 62. JURISDICTION; VENUE**

Contractor and any subcontractor, supplier, or other person or organization performing any part of the Work agrees that any action or suits at law or in equity arising out of or related to the bidding, award, or performance of the Work shall be maintained in the Superior Court of San Bernardino County, California, and expressly consent to the jurisdiction of said court, regardless of residence or domicile, and agree that said court shall be a proper venue for any such action.

## **ARTICLE 63. LAWS AND REGULATIONS**

- A. Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified. If Contractor observes that drawings and specifications are at variance therewith, it shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in work. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Engineer, it shall bear all costs arising therefrom.
- B. Contractor shall be responsible for familiarity with the Americans with Disabilities Act ("ADA") (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA regulations.

## **ARTICLE 64. PATENTS**

Contractor shall hold and save the Agency, officials, officers, employees, and authorized volunteers harmless from liability of any nature or kind of claim therefrom including costs and expenses for or on account of any patented or unpatented invention, article or appliance manufactured, furnished or used by Contractor in the performance of this contract.

## **ARTICLE 65. OWNERSHIP OF CONTRACT DOCUMENTS**

All Contract Documents furnished by the Agency are Agency property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to the Agency on request at completion of the Work.



## **ARTICLE 66. NOTICE OF TAXABLE POSSESSORY INTEREST**

In accordance with Revenue and Taxation Code section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

## **ARTICLE 67. SURVIVAL OF OBLIGATIONS**

All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

## **ARTICLE 68. FLEET COMPLIANCE**

To the extent applicable, Contractor, shall comply, and shall ensure all subcontractors comply, with all requirements of the most current version of the California Air Resources Board ("CARB") including, without limitation, all applicable terms of Title 13, California Code of Regulations Division 3, Chapter 9 and all pending amendments ("Regulation").

Throughout Project, and for three (3) years thereafter, Contractor shall make available for inspection and copying any and all documents or information associated with Contractor's and subcontractors' fleet including, without limitation, the CRCs, fuel/refueling records, maintenance records, emissions records, and any other information the Contractor is required to produce, keep or maintain pursuant to the Regulation upon two (2) calendar days' notice from the District.

Contractor shall be solely liable for any and all costs associated with complying with the Regulation as well as for any and all penalties, fines, damages, or costs associated with any and all violations, or failures to comply with the Regulation. Contractor shall defend, indemnify and hold harmless the District, its officials, officers, employees and authorized volunteers free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Regulation.

## 00 73 13 – SPECIAL CONDITIONS

### 1.1 Engineer of Record.

- A. For purposes of this Project, the Engineer of Record or Engineer shall be: Christopher Deiter, PE; Water Systems Consulting, Inc.

### 1.2 Location of the Project.

- A. The Project is shown in Appendix A.

### 1.3 Status of the Project Area and Rights-of-Way.

- A. Agency, at its expense, will provide all rights-of-way or permits, or both, covering the crossing of private property and public and private rights-of-way necessary for the permanent Work; provided, however, Contractor shall, at its expense, obtain any bonds or insurance policies or pay any fees and enter into any agreements required by a controlling authority, e.g., Caltrans or Southern Pacific Railroad Company, before Contractor enters upon any property or right-of-way under the jurisdiction of any such controlling authority for the purpose of performing Work.
- B. Agency has acquired or is negotiating to acquire any rights-of-way, or both, necessary for the permanent Work.
- C. If such permits are required, all operations of Contractor shall conform to the restrictions, regulations, and requirements set forth in said permits, copies of which will be included in the Contract Documents.
- D. Contractor may be required, as a condition for receiving final payment, to obtain, and provide Agency's Representative with copies of, executed damage releases from the owners of public and private property whose property has been damaged by the Work. The damage releases will be on a form provided by Agency.
- E. Contractor shall, also, as a condition for receiving final payment, obtain, and provide Agency's Representative with copies of, executed damage releases from the owners of certain public and private property or areas which have been crossed by the Work or otherwise affected by the Work. The damage releases will be on a form provided by Agency.

### 1.4 Site Data.

- A. The data provided herein is for the information of Contractor and is subject to all limitations and conditions set forth in the Contract Documents.
- B. Subsurface Exploration Data. The following data are included in the Project Manual:
  - 1. Not Used.
- C. Other Site Data. The following data is provided in the Appendix:

1. Appendix A – Force Main Project Drawings.  
Base used for drawings are from the 16” DIP Force main record drawings titled, “Big Bear Area Regional Wastewater Agency, North Shore Interceptor and Pump Stations (Schedule A) sheet 27.
2. Appendix B – Construction Details  
Detail 1 – Trench Detail  
Detail 2 – 2” Sewage Combination Air Valve Detail
3. Appendix C – Encroachment Permits

1.5 Pre-Purchased or Pre-Negotiated Material.

[NOT USED.]

1.6 Designation of Agency’s Representative.

- A. Unless otherwise modified by Agency, Agency’s Representative shall be the General Manager, David Lawrence and Plant Manager, John Shimmin.

1.7 Modification of Hours of Work.

[NOT USED.]

1.8 Project Retention

In accordance with Public Contract Code § 7201, Agency will withhold 5% of each progress payment as retention on the Project.

1.9 Reverse Liquidated Damages Due to Unreasonable Agency Delay.

- A. Not Used.

1.10 Liquidated Damages Due to Contractor Delay.

- A. Time is of the essence. Should Contractor fail to complete all or any part of the Work within the time specified in the Contract Documents, Agency will suffer damage, the amount of which is difficult, if not impossible, to ascertain and, pursuant to the authority of Government Code section 53069.85, Agency shall therefore be entitled to **\$1,800** per Day as liquidated damages for each Day or part thereof that actual completion extends beyond the time specified.
- B. Liquidated damages may be deducted from progress payments due Contractor, Project retention or may be collected directly from Contractor, or from Contractor's surety. These provisions for liquidated damages shall not prevent Agency, in case of Contractor's default, from terminating the Contractor.

1.11 Utility Outages – Notices to Residents.

- A. Not Used.

1.12 Schedule Constraints.

- A. See Technical Specification Section 01 10 00 Summary for work sequence requirements and schedule constraints.
- B. Agency has considered these Schedule Constraints when determining the Contract Times and no additional time or compensation will be added to the Contract due to these Constraints.

1.13 Noise Restrictions

- A. Not Used.

1.14 Safety Programs.

- A. Not Used.

1.15 Coordination with Other Contractors.

- A. Not Used.

1.16 Submittals Prior to Bidding.

- A. Not Used.

**END OF SPECIAL CONDITIONS**

## 01 00 00 – GENERAL REQUIREMENTS

### PART 1 -- GENERAL

#### 1.1 DESCRIPTION

- A. The Project will remove and replace 1,100 linear feet (LF) of 16-inch ductile iron pipe (DIP) with 16" DR-14 C-900 PVC pipe via open trench installation.
- B. Detailed contract description and project requirements are in Section 01 10 00 – Summary.

### PART 2 -- PRODUCTS (NOT USED)

### PART 3 -- EXECUTION

#### 3.1 LAYOUT OF WORK AND QUANTITY SURVEYS

- A. Not Used.

#### 3.2 SCHEDULE

- A. Estimated Schedule. Within 5 Days after the issuance of the Notice to Proceed, Contractor shall prepare a Project schedule and shall submit this to the Engineer for Approval. The receipt or Approval of any schedules by the Engineer or the Agency shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Project. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Project within the specified Contract time period. If the required schedule is not received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the Engineer.
- B. Schedule Contents. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Project within the time specified for completion. The overall Project Schedule duration shall be within the Contract time.
- C. Schedule Updates. Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Engineer monthly when requested to do so by Engineer. Contractor shall also submit schedules showing a three week detailed look-ahead at bi-weekly meetings conducted with the Agency. The Engineer may withhold progress payments or other amounts

due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

### 3.3 TEMPORARY FIELD OFFICE

NOT USED.

### 3.4 PROTECTION OF WORK AND PROPERTY

- A. All traffic detector loops, fences, walls, culverts, property line monuments, or other obstructions (except property line monuments within five (5) feet of the centerline of the mains) which are removed, damaged, or destroyed in the course of the Work, shall be replaced or repaired to the original condition. If Contractor provides the Agency with reasonable notice of the need for such repair or replacement, it shall be performed by the Agency. If the Contractor fails to provide the Agency with reasonable notice, the repair or replacement shall be performed by and at the expense of the Contractor to the satisfaction of the Agency, whether or not those obstructions have been shown on the Plans, unless otherwise stated herein. It is then the Contractor's responsibility to employ at its expense a Licensed Land Surveyor to restore all property line monuments located more than five (5) feet from the centerline of the mains, which are destroyed or obliterated. Property line monuments located within five (5) feet of the centerline of the mains will be replaced by the Agency at no expense to the Contractor, provided the Agency is notified at least 48 hours before the property line monuments are damaged.
- B. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.
- C. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Contractor shall repair any damage thereto caused by the Work operations. Contractor shall:
  - 1. Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.
  - 2. Provide substantial barricades around any shrubs or trees indicated to be preserved.
  - 3. Deliver materials to the Project site over a route designated by the Engineer.
  - 4. Provide any and all dust control required and follow the Applicable air quality regulations as appropriate. If the Contractor does not comply, the Agency shall have the immediate authority to provide dust control and deduct the cost from payments to the Contractor.
  - 5. Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Engineer. Contractor shall not unreasonably encumber the Project site with its materials.

6. Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by a civil engineer or land surveyor acceptable to the Agency, at no cost to the Agency.
  7. Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to the Agency.
  8. Preserve and protect from injury all buildings, pole lines and all direction, warning and mileage signs that have been placed within the right-of-way.
  9. At the completion of work each day, leave the Project site in a clean, safe condition.
  10. Comply with any stage construction and traffic control plans. Access to residences and businesses shall be maintained at all times, unless otherwise permitted in writing by the Agency.
- D. These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the Work involved in the preservation of life, safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefore.
- E. Should damage to persons or property occur as a result of the Work, Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The Agency shall be entitled to inspect and copy any such documentation, video, or photographs.

### 3.5 SITE CONDITIONS SURVEYS

A. Work Included.

Contractor shall conduct thorough pre-construction and post-construction site condition surveys of the entire project area. Site Conditions surveys shall include written documentation of the conditions found, as well as photographs and video recordings of the area within at least 80 feet of any construction area and staging area. The written notes, photographs, and video shall be suitable for forensic purposes to resolve any damage claims that may arise as a result of construction.

B. Submittals.

1. Written documentation of site condition survey at pre-construction and post-construction.
2. Photographs as described herein of pre-construction and post-construction conditions.
3. Video recordings as described herein of pre-construction and post-construction conditions.

4. Submittals shall be made within three days of the surveys. All post-construction data shall be submitted prior to the final project inspection.

C. Site Condition Written Documentation.

Written documentation shall include the time, date, and conditions under which the site survey was made. The documentation shall note the condition of structures, pavement, sidewalks, utilities, fences, and etc. within the work areas.

D. Photographs.

1. General – Contractor shall take enough photographs during each site survey to provide a record of conditions existing prior to construction and conditions after construction. Pre-construction photographs shall be taken prior to any construction or mobilization of equipment, but not more than one week prior to actual start of work. The pre-construction photographs may be staged at different times to match the progression of the Work.
2. The photographs shall document existing damage to public and private facilities, both prior to and after construction. Conditions to be documented include, but are not limited to: sidewalk cracks, broken curbs, separated property walls, improvements within public right-of-ways, access roads used, utility covers and markings, signs, pavement striping, pavement, unique or unusual conditions, adjacent driveways, landscaping, survey markers, and any feature directed by the Engineer. Private property that is adjacent to the public right-of-way shall be documented to the extent visible from the public right-of-way.
3. Photographs shall include items to indicate scale, as needed. In particular, scales or other items shall be laid next to close ups of structural cracks and other damaged areas being recorded. Scaling shall also be used to document elevation differences, as needed.
4. One set of color prints shall be submitted. Additional sets shall be available for reviewing in settling any construction disputes. A set of photos shall also be furnished in electronic format. The resolution shall be at least equal to 7 megapixels. All photos shall be documented as to time and date taken, photographer, project number, location, and orientation. Documentation shall include a brief description of objects photographed.

E. Video Recording.

1. Video recordings shall document the conditions of the entire area affected by construction, as well as nearby structures and facilities. The general documentation requirements for videos are the same as for photographs. Video recorders shall accurately and continuously record the time and date.
2. Video recordings shall include an audio portion made simultaneously during the videoing. The audio recording shall describe the location, time, orientation, and objects being recorded. Special commentary shall be provided for unusual conditions or damage noted.



3. Video equipment shall be capable of producing high resolution images and shall have zoom capabilities.
4. Video recordings shall provide an overall picture of the sites and shall provide detailed images of damaged areas. Video shall extend to the maximum height of structures.
5. The Engineer shall have the right to reject any audio video recordings submitted with unintelligible audio, uncontrolled pan or zoom, or of poor quality. Video recordings shall be repeated when rejected.
6. Video recordings shall be submitted with labels indicating the project, date, recorder, and other pertinent information. Recordings shall be submitted on standard DVDs in a standard format.

F. Timing.

Contractor shall provide written notice of the time scheduled for the site conditions survey and the place it is to begin. Contractor shall obtain the Engineer's concurrence prior to beginning the condition survey. The Engineer reserves the right to cancel the survey due to weather conditions or other problems. Videoing shall be done during times of good visibility and no videoing or photography shall be done during periods of visible precipitation or when standing water obscures pavement. Contractor shall provide the Engineer with an opportunity to have a representative present when taking the photos and provide guidance during photographing.

G. Site Surveyor.

The site condition surveyor(s) shall be experienced in construction and potential damage concerns. The site condition surveyor(s) shall be familiar with the photography and video equipment being used.

H. Field Quality Control.

Prior to submitting videos and photographs, the Contractor shall spot check the photos and videos in the field to insure they accurately reflect the actual conditions and to insure they are correctly labeled.

I. Soils Compaction Testing.

1. All soils compaction testing will be done by a licensed geotechnical engineer furnished by the Agency. Soils compaction testing will be done for all footings and foundations prior to placement of rebar or concrete.
2. For pipeline construction, soil compaction testing will be done at 100-foot intervals at the bottom of the trench prior to placement of pipe bedding; at the top of the pipe bedding above the pipe; every two vertical feet of trench backfill; at the top of the trench backfill, which should be the bottom of the pavement section; and at the top of the aggregate base prior to pavement construction.

### 3.6 SUBMITTAL REQUIREMENTS FOR MANUALS AND RECORD DRAWINGS

- A. General. The Contractor shall furnish all materials and perform all Work required for furnishing submittals to Agency in accordance with Contract Documents.
- B. Technical Manuals.
  - 1. The Contractor shall submit technical operation and maintenance information for each item of mechanical, electrical and instrumentation equipment in an organized manner in the Technical Manual. It shall be written so that it can be used and understood by Agency's operation and maintenance staff.
  - 2. The Technical Manual shall be subdivided first by specification section number; second, by equipment item; and last, by "Category." "Categories" shall conform to the following (as applicable):
    - (a) Category 1 - Equipment Summary:
      - (1) Summary: A summary table shall indicate the equipment name, equipment number, and process area in which the equipment is installed.
    - (b) Category 2 - Operational Procedures:
      - (1) Procedures: Manufacturer-recommended procedures on the following shall be included in Part 2:
        - a. Installation
        - b. Adjustment
        - c. Startup
        - d. Location of controls, special tools, equipment required, or related instrumentation needed for operation
        - e. Operation procedures
        - f. Load changes
        - g. Calibration
        - h. Shutdown
        - i. Troubleshooting
        - j. Disassembly
        - k. Reassembly
        - l. Realignment
        - m. Testing to determine performance efficiency

- n. Tabulation of proper settings for all pressure relief valves, low and high pressure switches, and other protection devices
- o. List of all electrical relay settings including alarm and contact settings

(c) Category 3 - Preventive Maintenance Procedures:

- (1) Procedures: Preventive maintenance procedures shall include all manufacturer-recommended procedures to be performed on a periodic basis, both by removing and replacing the equipment or component, and by leaving the equipment in place.
- (2) Schedules: Recommended frequency of preventive maintenance procedures shall be included. Lubrication schedules, including lubricant SAE grade, type, and temperature ranges, shall be covered.

(d) Category 4 - Parts List:

- (1) Parts List: A complete parts list shall be furnished, including a generic description and manufacturer's identification number for each part. Addresses and telephone numbers of the nearest supplier and parts warehouse shall be included.
- (2) Drawings: Cross-sectional or exploded view drawings shall accompany the parts list.

(e) Category 5 - Wiring Diagrams:

- (1) Diagrams: Part 5 shall include complete internal and connection wiring diagrams for electrical equipment items.

(f) Category 6 - Shop Drawings:

- (1) Drawings: This part shall include approved shop or fabrication drawings, complete with dimensions.

(g) Category 7 - Safety:

- (1) Procedures: This part describes the safety precautions to be taken when operating and maintaining the equipment or working near it.

(h) Category 8 - Documentation:

- (1) All equipment warranties, affidavits, and certifications required by the Technical Specifications shall be placed in this part.

- 3. The Contractor shall furnish to Agency six (6) identical Technical Manuals. Each set shall consist of one or more volumes, each of which shall be bound in a standard binder.

- C. Spare Parts List - The Contractor shall furnish to Agency six (6) identical sets of spare parts information for all mechanical, electrical, and instrumentation equipment. The

spare parts list shall include the current list price of each spare part. The spare parts list shall include those spare parts which each manufacturer recommends be maintained by Agency in inventory. Each manufacturer or supplier shall indicate the name, address, and telephone number of its nearest outlet of spare parts to assist Agency in ordering. The Contractor shall cross-reference all spare parts lists to the equipment numbers designated in the Contract Documents. The spare parts lists shall be bound in standard size, 3-ring binder.

D. Record Drawings

1. The Contractor shall maintain one record set of Drawings at the Site. On these, it shall mark all Project conditions, locations, configurations, and any other changes or deviations which may vary from the information represented in the original Contract Documents, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all buried utilities that differ from the locations indicated, or which were not indicated on the Contract Drawings. Said record drawings shall be supplemented by any detailed sketches as necessary or directed to fully indicate the Work as actually constructed. These master record drawings of the as-built conditions, including all revisions made necessary by Addenda and Change Orders shall be maintained up-to-date during the progress of the Project. Red ink shall be used for alterations and notes. Notes shall identify relevant Change Orders by number and date.
2. For all Projects involving the installation of any pipeline, Contractor shall survey and record the top of the pipe at a minimum of every 100 linear feet, and at each bend, recording both the horizontal and vertical locations.
3. Record drawings shall be accessible to Agency's Representative at all times during the construction period. Failure on the Contractor's part to keep record drawings current could result in withholding partial payment.
4. Upon Completion of the Project and as a condition of final acceptance, the Contractor shall finalize and deliver a complete set of Record Drawings to Agency's Representative. The information submitted by the Contractor will be assumed to be correct, and the Contractor shall be responsible for, and liable to Agency, for the accuracy of such information, and for any errors or omissions which may or may not appear on the Record Drawings.

- E. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete the Manuals and Record Drawings shall be included in Contractor's bid and distributed in the Schedule of Pay. No additional compensation shall be made to the Contractor for this Work.

3.7 MATERIALS

A. Materials to be Furnished by the Contractor

1. Inspection of Materials. Materials furnished by the Contractor which will become a part of the Project shall be subject to inspection at any one or more of the following locations, as determined by Agency's Representative: at the place of production

or manufacture, at the shipping point, or at the site of the Work. To allow sufficient time to provide for inspection, the Contractor shall submit to Agency's Representative, at the time of issuance, copies of purchase orders or other written instrument confirming procurement of the materials, including drawings and other pertinent information, covering materials on which inspection will be made.

2. No later than fourteen (14) Days prior to manufacture of material, Contractor shall inform Agency's Representative, in writing, the date the material is to be manufactured.
3. Contractors Obligations. The inspection of materials at any of the locations specified above or the waiving of the inspection thereof shall not impact whether the materials and equipment conform to the Contract Documents. Contractor will not be relieved from furnishing materials meeting the requirements of the Contract Documents due to Agency's inspection or lack of inspection of the equipment or materials. Acceptance of any materials will be made only after materials are installed in the Project.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to accommodate Agency's testing efforts, including any travel required by Contractor's forces, shall be included in Contractor's bid and distributed in the Schedule of Pay Items related to the materials requiring testing. No additional compensation shall be made to the Contractor for this Work.

### 3.8 LOCAL CONDITIONS AND REQUIREMENTS

#### A. Access to Work and Haul Routes

1. General. All work on the rights-of-way necessary for access to the Site shall be performed by the Contractor.
2. Access, Damage, Restoration. The Contractor shall make his own investigation of the condition of available public or private roads and of clearances, restrictions, bridge-load limits, permit or bond requirements, and other limitations that affect or may affect transportation and ingress or egress at the Site. Claims for changes in Contract Price or Contract Times arising out of the unavailability of transportation facilities or limitations thereon shall not be considered by Agency.
3. The Contractor shall maintain and repair any damage arising out of Contractor's operations to all roads used during construction of the Project, and upon completion of all Work, but prior to final acceptance, the roads shall be restored to their original condition. Prior to using any road for access to the Site, the Contractor shall conduct a photograph and/or video survey of the roadway with a copy submitted to Agency's Representative.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

- B. Power. Contractor shall provide at its own expense all necessary power required for operations under the contract. The Contractor shall provide and maintain in good order such modern equipment and installations as shall be adequate in the opinion of the Engineer to perform in a safe and satisfactory manner the Work required by the contract.
- C. Construction Water.
1. Construction water shall not be used for purposes other than those required to satisfactorily complete the contract.
  2. All connections to the Big Bear Lake Department of Water and Power water system used for the purposes of obtaining construction water shall utilize a temporary construction meter and backflow prevention device supplied by the Agency. The Agency-furnished backflow prevention device shall be tested immediately after installation and the construction meter and backflow prevention device shall not be placed into service until the backflow prevention device passes such tests. Backflow prevention device testing shall be performed in accordance with the most recent edition of the Manual of Cross-Connection Control as published by the University of Southern California by a person selected from Big Bear Area Regional Wastewater Agency "Agency-Approved Certified Backflow Assembly Testers" list, and test results shall be provided to the Engineer. If the temporary construction meter and backflow prevention device are moved to alternate location(s) during construction, the backflow prevention device shall again be tested as described above immediately after re-installation.
  3. For each temporary construction meter requested by the Contractor for the performance of work under this contract, an amount equivalent to the deposit requirement for temporary construction meters listed in the current approved version of the Agency's Policies and Procedures Manual shall be withheld from the final contract payment until the temporary construction meters are returned.
- D. Operation of Existing Water Facilities
1. The Contractor shall not operate any of the existing water systems, including pumps, motors, and hydrants, but shall contact the Agency two (2) working days in advance with a list and location of the water system facilities that will require operating, opening, stopping, or closure by the Agency.
  2. At the option of the Engineer, the Contractor may be permitted to operate valves for the purpose of making connections to existing mains. The Agency will perform all notification to existing customers regarding temporary loss of service.
  3. Contractor shall submit a request on Agency's standard form for any shut-down of existing water facilities.
- E. Construction at Existing Utilities
1. General. Where the Work to be performed crosses or otherwise interferes with water, sewer, gas, or oil pipelines; buried cable; or other public or private utilities, the Contractor shall perform construction in such a manner so that no damage will

result to either public or private utilities. It shall be the responsibility of the Contractor to determine the actual locations of, and make accommodations to maintain, all utilities.

2. Permission, Notice and Liability. Before any utility is taken out of service, permission shall be obtained by the Contractor from the owner. The owner, any impacted resident or business owner and the Agency Representative will be advised of the nature and duration of the utility outage as well as the Contractor's plan for providing temporary utilities if required by the owner. The Contractor shall be liable for all damage which may result from its failure to maintain utilities during the progress of the Work, and the Contractor shall indemnify Agency as required by the Contract Documents from all claims arising out of or connected with damage to utilities encountered during construction; damages resulting from disruption of service; and injury to persons or damage to property resulting from the negligent, accidental, or intentional breaching of utilities.
3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

#### F. Traffic Control

1. General. Contractor shall abide by traffic control plans approved by the appropriate jurisdiction.
2. Protections. Roads subject to interference by the Work shall be kept open or suitable temporary passages through the Work shall be provided and maintained by the Contractor. The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient flasher lights, flag persons, danger signals, and signs, and shall take all necessary precautions for the protection of the Work and the safety of the public. No construction work along public or private roads may proceed until the Contractor has proper barricades, flasher lights, flag persons, signals, and signs in place at the construction site.
3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

#### G. Cleaning Up

1. Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Contractor shall also clean all asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by Contractor operations or equipment. The use of water, resulting in mud on streets, will not be permitted as substitute for sweeping or other methods. Dust control may require having a water truck onsite for the duration of the project, and/or use of temporary hoses and pipelines to convey water.

2. Contractor shall fully clean up the site at the completion of the Work. If the Contractor fails to immediately clean up at the completion of the Work, the Agency may do so and the cost of such clean up shall be charged back to the Contractor.

### 3.9 ENVIRONMENTAL QUALITY PROTECTION

#### A. Environmental Conditions

Not Used.

#### B. Landscape and Vegetation Preservation

1. General. The Contractor shall exercise care to preserve the natural landscape and vegetation and shall conduct operations so as to prevent unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the Work.
2. Damage and Restoration. Movement of crews and equipment within the rights-of-way and over routes provided for access to the Work shall be performed in a manner to prevent damage to property. When no longer required, construction roads shall be restored to original contours.
3. Upon completion of the Work, and following removal of construction facilities and required cleanup, land used for construction purposes and not required for the completed installation shall be scarified and regraded, as required, so that all surfaces are left in a condition that will facilitate natural revegetation, provide for proper drainage, and prevent erosion.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to complete this Work, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

#### C. Protected Species

1. General. If, in the performance of the Work, evidence of the possible occurrence of any Federally listed threatened or endangered plant or animal is discovered, the Contractor shall notify the Agency Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to Agency within 2 Days.
2. Procedures. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the endangered plant or animal.

If directed by the Agency Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Any Agency directed changes to the Work as a result of a siting will be pursuant to the Contract Documents.



3. False Siting. Any costs or delays incurred by Agency or the Contractor due to unreasonable or false notification of an endangered plant or animal will be borne by the Contractor.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

D. Preservation of Historical and Archeological Resources

1. General. If, in the performance of the Work, Contractor should unearth cultural resources (for example, human remains, animal bones, stone tools, artifacts and/or midden deposits) through excavation, grading, watering or other means, the Contractor notify the Construction/Archeological Monitor and/or the Agency Representative immediately, giving the location and nature of the findings. Written confirmation of the evidence, location and nature of the findings shall be forwarded to the Construction/Archeological Monitor and/or Agency within 2 Days.
2. Procedures. The Contractor shall immediately cease all construction activities in the immediate area of the discovery to the extent necessary to protect the cultural resource.

If directed by the Agency Representative, Contractor will refrain from working in the immediate area, suspend the Work in its entirety, or re-sequence and/or alter its performance to ensure full compliance with all applicable permits, laws and regulations. Should the presence of cultural resources be confirmed, the Contractor will assist the Agency Representative and the Construction/Archeological Monitor in the preparation and implementation of a data recovery plan. The Contractor shall provide such cooperation and assistance as may be necessary to preserve the cultural resources for removal or other disposition. Any Agency directed changes to the Work as a result of the cultural resource will be pursuant to the Contract Documents.

3. Contractor's Liability. Should Contractor, without permission, injure, destroy, excavate, appropriate, or remove any cultural resource on or adjacent to the Site, it will be subject to disciplinary action, arrest and penalty under applicable law. The Contractor shall be principally responsible for all costs of mitigation and/or restoration of cultural resources related to the unauthorized actions identified above. Contractor shall be required to pay for unauthorized damage and mitigation costs to cultural resources (historical and archeological resources) as a result of unauthorized activities that damage cultural resources and shall indemnify Agency pursuant to the Contract Documents.
4. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

E. Dust and Pollution Control

1. Contractor shall provide all necessary material, equipment and labor to prevent and control the emission of dust and any other potential pollutant on site.
2. Contractor shall not discharge into the atmosphere from any source smoke, dust or other air contaminants in violation of the law, rules, and regulations of the governing agency.
3. Cost. Unless otherwise called for by the Contract Documents, the cost of all material, equipment, and labor required to comply with this paragraph, shall be included in Contractor's bid and distributed in the Schedule of Pay Items. No additional compensation shall be made to the Contractor for this Work.

F. Fugitive Dust

1. In addition to all other environmental and air quality requirements of the Contract Documents, Contractor must also comply with the most recent version of South Coast Air Quality Management Agency's (SCAQMD) Rule 403 – Fugitive Dust, to reduce the amount of particulate matter entrained in the ambient air as a result of the Project. All equipment shall be SCAQMD compliant and permitted, as needed.
2. Agency has considered these other requirements when determining the Contract Times and no additional time or compensation will be added to the Contract due to these requirements.

G. Management of Storm, Surface and Other Waters

1. Storm water, surface water, groundwater, and nuisance, or other waters may be encountered at various times during construction of the Project. Federal and State laws require the Agency and its contractors to manage such waters pursuant to the requirements of California State Water Resources Control Board Order Number 2009-0009-DWQ, the Federal Clean Water Act, and the California Porter Cologne Water Quality Control Act. Contractor acknowledges that it has investigated the risk arising from such waters in conjunction with the Project, and assumes any and all risks and liabilities arising therefrom.
2. The Contractor shall perform all construction operations in such a manner as to comply, and ensure all subcontractors to comply, with all applicable Federal, State, and local laws, orders, and regulations concerning the control and abatement of water pollution; and all terms and conditions of any applicable permits issued for the Project. In the event there is a conflict between Federal, State, and local laws, regulations, and requirements, the most stringent shall apply.
3. Contractor violations. If noncompliance should occur, the Contractor shall report this to the Agency Representative immediately, with the specific information submitted in writing within 2 Days. Consistent violations of applicable Federal, State, or local laws, orders, regulations, or Water Quality Standards may result in Agency stopping all site activity until compliance is ensured. The Contractor shall not be entitled to any change in Contract Price or Contract Times, claim for damage, or additional compensation by reason of such a work stoppage. Corrective measures required to bring activities into compliance shall be at the Contractor's expense.

4. Compliance with Construction General Storm water Permit. Contractor shall be required to comply with all aspects of the State Water Resources Control Board (State Board) Water Quality Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity (Permit) for all projects that involve construction on or disturbance of one acre or more of land or which are part of a larger common area of development.
  - (a) Contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) for the Project site based on the appropriate Risk Level requirements, and draft and coordinate submittal of all Permit related documents with Agency's Legally Responsible Person and/or Authorized Signatory as those terms are defined in the Permit. The Contractor shall submit the SWPPP to the Agency Representative for review not less than fifteen (15) Days prior to the start of on- site construction work. Agency will file the Notice of Intent and pay the filing fee.
  - (b) The SWPPP shall be developed by a Qualified SWPPP Developer and implemented by a Qualified SWPPP Practitioner as those terms are defined in the Permit and shall include industry standard requirements for water quality control including but not be limited to the following:
    - (1) Sediment and erosion control measures to manage sediment and erosion including vegetative practices, structural control, silt fences, straw dikes, sediment controls or operator controls as appropriate. Storm water management measures shall be instituted as required, including velocity dissipaters, and solid waste controls shall address controls for building materials and offsite tracking of sediment.
    - (2) Wastewater and storm water management controls to divert offsite surface flows around the Project site and to divert surface flows within the Project area away from areas of open earth or stockpiles of building and other materials. Wastewater from general construction activities, such as drain water collection, aggregate processing, concrete batching, drilling, grouting, or other construction operations, shall not enter flowing or dry watercourses without having met the authorized non-storm water discharge requirements listed in State Board Water Quality Order No. 2009-0009-DWQ, Section III.C., including proper notification to the Regional Water Board.
    - (3) Pollution prevention measures including methods of dewatering, unwatering, excavating, or stockpiling earth and rock materials which include prevention measures to control silting and erosion, and which will intercept and settle any runoff of sediment-laden waters.
    - (4) Turbidity prevention measures for prevention of excess turbidity including, but are not restricted to, intercepting ditches, settling ponds, gravel filter entrapment dikes, flocculating processes, recirculation, combinations thereof, or other approved methods that are not harmful to aquatic life. All such wastewaters discharged into surface waters, shall contain the least concentration of settleable material possible, and shall meet all conditions of section 402, the National Pollutant Discharge Elimination System (NPDES) permit.

- (5) Overall construction site management measures to address changes at the Project site as the Project moves through different phases and changes that account for rainy and dry season management practices.
  - (6) Pollution control measures and construction activity methods that will prevent entrance, or accidental spillage, of solid matter, contaminants, debris, or other pollutants or wastes, into streams, flowing or dry watercourses, lakes, wetlands, reservoirs, or underground water sources. Such pollutants and wastes include, but are not restricted to: refuse, garbage, cement, sanitary waste, industrial waste, hazardous materials, radioactive substances, oil and other petroleum products, aggregate processing, tailings, mineral salts, and thermal pollution.
  - (7) Control measures for stockpiled or deposited materials prohibiting the stockpile or deposit of excavated materials, or other construction materials, near or on stream banks, lake shorelines, or other watercourse perimeters where they can be washed away by high water or storm runoff, or can, in any way, encroach upon the watercourse.
  - (8) Develop and implement a Rain Event Action Plan (REAP), if required, that must be designed and implemented to protect all exposed portions of the site 48 hours prior to any likely precipitation event.
  - (9) Monitoring, reporting and record keeping, as necessary to achieve compliance with applicable Permit requirements, including but not limited to annual reports and rain event reports.
- (c) Before any Permit related documents, including the SWPPP, rain event reports, or annual reports may be submitted to the State Board or implemented on the Project site, they must first be reviewed and approved by Agency.
  - (d) Agency retains the right to procure and maintain coverage under the Permit for the Project site if the Contractor fails to draft a SWPPP or other Permit related document, or fails to proceed in a manner that is satisfactory to Agency. Agency reserves the right to implement its own SWPPP at the Project site, and hire additional contractors to maintain compliance. Whether Contractor has adequately maintained compliance with the Permit shall be Agency's sole determination. In the event that Contractor has failed or is unable to maintain compliance with the Permit, any costs or fines incurred by Agency in implementing a SWPPP, or otherwise maintaining compliance with the Construction General Permit shall be paid by the Contractor.
  - (e) Failure to implement the SWPPP or otherwise comply with the Permit is a violation of federal and state law. Contractor hereby agrees to indemnify Agency as required by the Contract Documents for any noncompliance or alleged noncompliance with the Permit arising out of or in connection with the Project, except for liability resulting from the sole established negligence, willful misconduct or active negligence of Agency. Agency may seek damages from Contractor for delay in completing the Contract in accordance with the Contract Documents, caused by Contractor's failure to comply with the Permit.

5. In addition to compliance with the Permit, Contractor shall comply with the lawful requirements of any applicable municipality, district, drainage district, flood control district, and other local agencies regarding discharges of storm water, surface water, groundwater or other nuisance waters off of the Project site.
6. Oil storage tanks management.
  - (a) Storage tank placement. All oil or other petroleum product (hereinafter referred to collectively as oil) storage tanks shall be placed at least 20 feet from streams, flowing or dry watercourses, lakes, wetlands, reservoirs, and any other water source.
  - (b) Storage area dikes. Storage areas shall be diked at least 12 inches high or graded and sloped to permit safe containment of leaks and spills equal to the capacity of all tanks and/or containers located within each area, plus a sufficient amount of freeboard to contain the 25-year rainstorm.
  - (c) Diked area barriers. Diked areas shall have an impermeable barrier at least 10 mils thick. Areas used for refueling operations shall have an impermeable liner at least 10 mils thick buried under 2 to 4 inches of soil.
  - (d) Spill Prevention Control and Countermeasure Plan (SPCC). Where the location of a construction site is such that oil from an accidental spillage could reasonably be expected to enter into or upon the navigable waters of the United States or adjoining shorelines, and the aggregate storage of oil at the site is over 1,320 gallons or a single container has a capacity in excess of 660 gallons, the Contractor shall prepare an SPCC Plan. The Contractor shall submit the SPCC Plan to the Engineer at least 30 days prior to delivery or storage of oil at the site. The Plan must have been reviewed and certified by a registered professional engineer in accordance with 40 C.F.R., part 112
7. Underground tank prohibition. The Contractor shall not use underground storage tanks.
8. Construction safety standards. The Contractor shall comply with the sanitation and potable water requirements of Section 7 of United States Bureau of Reclamation's publication "Reclamation Safety And Health Standards."
9. Other Permits.
  - (a) Other permits applicable to the Project are listed in the Special Conditions. The Contractor shall obtain all other necessary licenses and permits.
  - (b) Monitoring. The Contractor is required to conduct monitoring in order to meet the requirements of the permits, which may include sampling, testing and inspections.
  - (c) Recordkeeping. The Contractor shall retain all records and data required by the permits for the time specified in the contract.
10. Cost. Except as specified herein, the cost of complying with this section shall be included in the Schedule of Pay Items for work which necessitate the water pollution prevention measures required by this paragraph.

**END OF GENERAL REQUIREMENTS**

**EXHIBIT "A"  
CHANGE ORDER FORM**

**Big Bear Area Regional Wastewater Agency**

*121 Palomino Drive  
Big Bear City, CA 92314*

**Contract Change Order #**

<b>Project:</b>	<b>Change Order No.:</b>		
	<b>Orig. Contract Amt.:</b> \$		Days
<b>Contract No.:</b>			
<b>Contractor:</b>	<b>Prev. Appvd. Changes:</b> \$		Days
<b>Owner:</b> Big Bear Area Regional Wastewater Agency	<b>This Change:</b> \$		Days
	<b>Revised Contract Amt.:</b> \$		Days

This Change Order covers changes to the subject contract as described herein. The Contractor shall construct, furnish equipment and materials, and perform all work as necessary or required to complete the Change Order items for a lump sum price agreed upon between the Contractor and Big Bear Area Regional Wastewater Agency, otherwise referred to as Owner.

Item No.	Description of Changes	Increase/ (Decrease) in Contract Amount	Contract Time Extension, Days
1			
2			
	<b>Totals</b>	<b>\$</b>	

This Contract Change Order consists of **2 pages** and any exhibits attached to this Contract Change Order shall not be part of the Contract Change Order unless specifically initiated by or on behalf of both the Contractor and the Big Bear Area Regional Wastewater Agency.

Contract Change Order # \_\_\_\_\_ Page 1 of 2

The amount of the contract will be increased by the sum of \$\_\_\_\_\_ and the contract time shall be extended by working days. The undersigned Contractor approves the foregoing Change Order # as to the changes, if any, in the contract price specified for each item including any and all supervision costs and other miscellaneous costs relating to the change in work, and as to the extension of time allowed, if any, for completion of the entire work on account of said Change Order #. The Contractor agrees to furnish all labor and materials and perform all other necessary work, inclusive of the directly or indirectly related to the approved time extension, required to complete the Change order items. This document will become a supplement of the contract and all provisions will apply hereto. It is understood that the Change Order shall be effective when approved by the Owner.

Contractor accepts the terms and conditions stated above as full and final settlement of any and all claims arising out of or related to the subject of this Change Order and acknowledges that the compensation (time and cost) set forth herein comprises the total compensation due for the work or change defined in the Change Order, including all impact on any unchanged work. By signing this Change Order, the Contractor acknowledges and agrees that the stipulated compensation includes payment for all Work contained in the Change Order, plus all payment for any acceleration or interruption of schedules, extended overhead costs, delay, and all impact or cumulative impact on all Work under this Contract. The signing of this Change Order acknowledges full mutual accord and satisfaction for the change and that the stated time and/or cost constitute the total equitable adjustment owed the Contractor as a result of the change. The Contractor hereby releases and agrees to waive all rights, without exception or reservation of any kind whatsoever, to file any further claim or request for equitable adjustment of any type, for any reasonably foreseeable cause that shall arise out of, or as a result of, this Change Order and/or its impact on the remainder of the Work under the Contract.

Accepted:

\_\_\_\_\_  
(Signature) Contractor's Authorized Representative

\_\_\_\_\_  
Date

Recommended:

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

\_\_\_\_\_  
Date

Approved:

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

\_\_\_\_\_  
Date

Item No.	Justification for Change(s)
1	
2	

This Contract Change Order consists of **2 pages** and any exhibits attached to this Contract Change Order shall not be part of the Contract Change Order unless specifically initiated by or on behalf of both the Contractor and the Big Bear Area Regional Wastewater Agency.

Contract Change Order #

Page 2 of 2



# TECHNICAL SPECIFICATIONS

FOR

## FORCE MAIN PROJECT

Prepared For  
Big Bear Area Regional Wastewater Agency



**BID SET**  
**January 2025**

Prepared By



Water Systems Consulting, Inc.  
3602 Inland Empire Blvd, Suite C 230  
Ontario, CA 91764

**TECHNICAL SPECIFICATIONS**

**TABLE OF CONTENTS**

**DIVISION 01 – GENERAL REQUIREMENTS**

- 01 10 00 SUMMARY
- 01 20 00 PRICE AND PAYMENT PROCEDURES
- 01 25 00 SUBSTITUTION PROCEDURES
- 01 30 00 ADMINISTRATIVE REQUIREMENTS
- 01 33 00 SUBMITTAL PROCEDURES
- 01 40 00 QUALITY REQUIREMENTS
- 01 50 00 TEMPORARY FACILITIES AND CONTROLS
- 01 60 00 PRODUCT REQUIREMENTS
- 01 70 00 EXECUTION AND CLOSEOUT REQUIREMENTS

**DIVISION 02 – EXISTING CONDITIONS**

- 02 01 20 PROTECTING EXISTING UNDERGROUND UTILITIES
- 02 41 00 DEMOLITION

**DIVISION 31 – EARTHWORK**

- 31 05 13 SOILS FOR EARTHWORK
- 31 05 16 AGGREGATES FOR EARTHWORK
- 31 10 00 SITE CLEARING
- 31 22 13 ROUGH GRADING
- 31 23 17 TRENCHING

**DIVISION 33 – UTILITIES**

- 33 34 00 SANITARY UTILITY SEWAGE FORCE MAINS

END OF TABLE OF CONTENTS

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## SECTION 011000 SUMMARY

### PART 1 GENERAL

#### 1.01 SUMMARY

- A. Section Includes:
  - 1. Contract Description
  - 2. Contract Requirements
  - 3. Work Sequence
  - 4. Air Quality
  - 5. Noise
  - 6. Traffic Control Requirements
  - 7. Safety Requirements
- B. Definitions
  - 1. 'Owner', refers to Big Bear Area Regional Wastewater Agency.
  - 2. 'Engineer', refers to the individual, entity, or firm appointed by the Owner to oversee and inspect work being performed by the Contractor. The Engineer may be the primary point of contact and is responsible for the day-to-day management of the Contract and is the representative of the Owner.
  - 3. 'Inspector', refers to the individual(s), entity(s), or firm(s) authorized by the Owner to inspect work being performed by the Contractor.
  - 4. 'Contractor', means the individual, partnership, entity or corporation who is awarded a contract by the Owner to provide goods and/or services as prescribed in the Contract Documents.

#### 1.02 CONTRACT DESCRIPTION

- A. Perform Contract work and coordinate with the Owner according to the Contract Documents.
- B. **The Force Main Project includes the following:**
  - 1. **Segment 1: Remove and replace approximately 620 linear feet (LF) of 16-inch ductile iron pipe (DIP) with 16" DR-14 C-900 PVC pipe via open trench installation.**
  - 2. **Segment 2: Remove and replace approximately 480 LF of 16-inch ductile iron pipe (DIP) with 16" DR-14 C-900 PVC pipe via open trench installation.**
  - 3. **Remove and replace two 2-inch sewage combination air valve and vault assemblies.**
  - 4. **Coordinate access and space for Owner to perform CCTV inspections at project limits.**
- C. The Contractor shall furnish all labor, materials, and equipment required to construct the facilities described within the Contract Documents. The Contractor shall furnish and install all equipment and facilities unless otherwise noted.

#### 1.03 CONTRACTOR REQUIREMENTS

- A. Construction Plan:
  - 1. Before the start of construction, submit a Construction Plan for Owner review and acceptance.
  - 2. Construction Plan shall outline Contractor's sequence of work and schedule for each segment. Plan shall include subsurface investigation findings (DigAlert), construction water hydrant locations, force main shutdowns, segment construction, CCTV access for Owner, pressure testing, tie-ins, Lake Pump Station pond pump down events, and all other necessary work required. Construction Plan shall identify schedule risks and mitigation measures. Construction plan shall also outline protocols for pipeline dewatering and include emergency spill response measures.
  - 3. Construction Plan sequencing shall comply with the Work Sequence Article 1.04 within this Specification Section.

4. Construction operations may not begin until the Construction Plan is accepted by Owner. All operations shall comply with the accepted plan unless deviations are accepted by the Owner in writing.
- B. Appendix A - Force Main Drawings
1. Force Main Drawings in Appendix A show the proposed segments for the project. The Contractor shall install the new pipeline to match the existing alignment as closely as possible and at the direction of the Owner.
  2. Contractor shall perform a subsurface investigation (DigAlert) before submitting the Construction Plan. Subsurface investigation findings shall be incorporated within the Construction Plan and any potential conflicts brought to the immediate attention of the Owner.
- C. Time Restrictions for Work Execution:
1. Refer to Agency Front Ends – General Conditions Section 00 72 13, Article 30 for Agency inspection hours and Agency Front Ends – Special Conditions 00 73 13 for allowable hours of Work.
  2. Work shall not be performed between June 27, 2024, to September 1, 2024.
  3. All paving activities shall be completed prior to October 15, 2024.
  4. Contractor is alerted that a Farmers Market takes place on Tuesdays, April through September, at the northwest corner of Big Bear Blvd and Division Drive. Contractor shall coordinate with Owner to limit disruptions to Farmers Market Activity.
  5. As stated in Agency Front Ends Section 00 73 13 – Special Conditions, work may be limited due to wet weather conditions. The Owner may limit Work on days precipitation is in the forecast, for a week following a precipitation event, and at the Agency's discretion.
  6. All Work under this Contract shall be completed and ready for Final Acceptance in accordance with the Time for Completion requirement specified in the Agency Front Ends Section 00 52 13 – Contract.
- D. Construction Water:
1. The Contractor shall coordinate with the City of Big Bear Lake Department of Water and Power (BBLDWP) to gain access to construction water.
    - a. Information regarding BBLDWP's construct water rates and requirements can be found at <https://forms.bbldwp.com/Forms/hydrantmtr>
    - b. Appendix A - Force Main Project Drawings identify nearby fire hydrants owned and operated by BBLDWP that may be available for construction water access. Contractor shall coordination access location with BBLDWP.
    - c. Contractor shall not damage the existing highway paving for construction water access.
- E. Waste Disposal:
1. Pipeline Dewatering
    - a. The Contractor shall coordinate with the Owner regarding the disposal of water from force main dewatering, cleaning, and hydrostatic testing.
    - b. Disposal location can be at the emergency storage ponds location (2 miles from project site) or in nearby sewer manholes, in coordination with Owner.
    - c. Appendix A, "Force Main Project Drawings," identifies nearby sewer manholes owned and operated by the Big Bear City Community Services District. The Contractor must specify in the Construction Plan if and which sewer manholes will be utilized for each segment. The disposal rate into the sewage manholes shall be a maximum of 250 gallons per minute (gpm). Contractor shall not damage the existing manholes or highway paving for water disposal.
  2. Contaminated Soil
    - a. Soil within all access pits and open trenches exposed to sewage shall be excavated to a minimum depth of 6 inches below the bottom of the trench. In the event of a spill, the excavation depth may be increased based on the Owner's directive.

- b. This contaminated soil shall be disposed of at the Owner's wastewater treatment facility (3.4 miles from project site). The Contractor must coordinate with the Owner regarding the disposal of contaminated soil before hauling to their facility. Hazardous waste shall be transported with an accompanying waste manifest and be transported in accordance with local and state requirements.

F. Emergency Spill Response:

1. Contractor shall include provision for an Emergency Spill Response Plan (ESRP) within the Construction Plan.
2. The ESRP shall be site-specific and shall include as a minimum, storm drain catch basin and storm drain inlet (SDI) protection; procedures and locations of spill containment, including procedures in the event that sewage reaches a watercourse or storm drain system; spill control, including isolating the spill from the public and returning the wastewater to the sewer; notifications; cleanup; and spill damage reporting.
3. The Contractor shall identify in the ESRP the specific location of all storm drains and SDI in the vicinity of the project and low manholes and include measures to contain or prevent any spill from entering them. SDI shall be sealed by the use of plastic sheeting and sandbags. Plastic sheeting shall cover the entire inlet structure of an SDI and extend a minimum of one foot beyond all edges, when feasible. Sand bags shall be arranged a minimum of two (2) bags high and two (2) bags wide around the full perimeter of the inlet structure. These measures shall be in place prior to operating the bypass pumping system. The Contractor shall check sand bags and plastic sheeting at SDI and containment areas at the beginning and end of each workday, and if damaged they shall be repaired immediately. Plastic sheeting and sand bag containment shall be watertight and shall be subject to testing with potable water as directed by the Engineer.
4. As part of the ESRP, the Contractor shall maintain, at a minimum, two (2) 2-inch trash pumps with discharge hose and/or Vactor truck(s) onsite for immediate response to any spill. The discharge hose for each pump shall be long enough to reach an appropriate manhole or desilting tank. The Contractor shall prevent all dirt, soil, and debris from being discharged into the sewer when recovering spilled wastewater, and the method to accomplish this shall be included as part of the ESRP.
5. Provide unimpeded access for emergency vehicles at all times
6. Contractor shall notify the Owner immediately if a spill occurs.
7. Sewage Bypassing: Bypassing of untreated sewage to surface waters or drainage courses is prohibited. In the event accidental bypassing is caused by the Contractor's operations, the Agency shall immediately be entitled to employ others to stop the bypassing without giving written notice to the Contractor. If a Contractor-initiated bypass to a surface water or drainage course occurs, the Contractor will pay the Agency a penalty of \$10,000 per bypass/day and per permit violation, in addition to all expenses incurred by the Agency and any fines imposed by State and Federal agencies, courts, and third-party suits.

G. Groundwater:

1. The Contractor shall assume groundwater is present within the remove and replacement area. Contractor shall provide all labor and equipment required for maintaining a dry and safe working environment within access pits and open trenches during construction. Groundwater mitigation during construction shall be described in the construction plan including locations and sizes of sumps and pumps, along with discharges. A detailed dewatering plan for groundwater is not required.
2. The disposal location of groundwater shall be coordinated with the Owner.

#### 1.04 WORK SEQUENCE

A. Lake Pump Station Storage Ponds

1. The Lake Pump Station feeds the Lake Force Main and has on-site emergency pond storage. Lake Pump Station influent flows will be diverted by the Owner to the emergency ponds during shutdown periods.

- B. Force Main Shutdowns
  - 1. Shutdowns are limited to 5-day (Monday - Friday) periods, which will be immediately followed by a pond pump-down period of 2 days (Saturday and Sunday). Owner will pump down ponds through the Lake Pump Station and the Lake Force Main.
  - 2. If the contractor cannot complete a particular phase of work within the 5 days outlined above, they must specify the number of days required for the construction of said phase, which shall not exceed 10 calendar days.
  - 3. If the contractor exceeds 5 days, Contractor shall allow the Owner to pump down the ponds for 4 consecutive calendar days through the Lake Force Main prior to the next shutdown event.
  - 4. Additional project details must be provided in the Construction Plan and Schedule for segments extending beyond 5 days.
- C. Contractor may prepare or stage the next sequences of work during pond pump downs at the site, but cannot work near the active force main.
- D. The Contractor shall note that only certain structures, tie-ins, and constraints are addressed in this Specification Section. All work, whether or not addressed herein, shall be governed by applicable parts of this Specification Section and schedules and procedures further submitted for approval. All work described in this Specification Section shall be included in the Construction Plan. The work sequence and constraints identified in this Specification Section shall be followed for the performance of the Work; however, alternatives to these sequences and constraints may be submitted by the Contractor for review by the Owner.
- E. In addition to the requirements specified elsewhere in these Contract Documents, the Contractor is advised of the constraints to the work sequence and schedule specified in this Specification Section.

#### **1.05 AIR QUALITY**

- A. All engines shall be properly operated and maintained.
- B. All diesel-powered vehicles will be turned off when not in use for more than five minutes and all gasoline-powered equipment will be turned off when not in use for more than five minutes.

#### **1.06 NOISE**

- A. The Contractor shall implement adequate measures to reduce noise levels to the greatest extent feasible, including portable noise barriers or scheduling specific construction activities to avoid conflict with adjacent sensitive receptors.
  - 1. The Contractor shall operate all construction equipment with mandated noise control equipment (i.e. mufflers or silencers).

#### **1.07 TRAFFIC REQUIREMENTS**

- A. Traffic Control Plan in Caltrans Right-of-Way: Contractor shall submit a Traffic Control Plan (TCP) in accordance with Caltrans Standards and the Owner's Caltrans Emergency Maintenance Permit for work within Highway 18.
- B. Traffic Control Plan in County of San Bernardino Right-of-Way (Division Drive): Contractor shall submit a TCP in accordance with County of San Bernardino Standards.

#### **1.08 SAFETY REQUIREMENTS**

- A. Contractor is responsible for preparing and executing a Health and Safety Plan in accordance with the Contract Documents. The Contractor's Health and Safety Plan shall be submitted at least one (1) weeks prior to the start of Work on-site for approval by the Agency. The Health and Safety Plan shall include a description of all materials, methods, practices, and remedial measures necessary to comply with the health and safety requirements stated in the Contract Documents and referenced standards.
- B. The Health and Safety Plan shall include safety plans for confined space entry and monitoring of environmental conditions, as required to comply with the Safety Requirements stated in this Specification Section and referenced standards.

- C. The Health and Safety Plan shall comply with the Agency's Safety Programs listed in Agency Front Ends Section 00 73 13 – Special Conditions.
- D. Contractor is responsible for complying with all applicable CAL/OSHA standards including but not limited to Confined Space Entry, Respiratory Protection, Continuous Atmospheric Monitoring, and Fall Prevention.
- E. Contractor is responsible for obtaining Hot Work Permits, if necessary, from the Local Fire Department and following all relevant requirements of the Fire Department's Hot Work guidelines.
- F. Contractor is solely responsible for complying with all confined space entry requirements to satisfy CAL/OSHA regulations, as required, including but not limited to the following:
  - 1. Identification and evaluation of hazards.
  - 2. Determination of permit requirements and obtaining permits.
  - 3. Development and implementation of a written confined space entry program.
  - 4. Staff certifications.
  - 5. Continuous testing, monitoring, logging, and reporting of atmospheric conditions.
  - 6. Designation of specific personnel as the rescue team, to be readily available during the duration of the Work.
  - 7. Installation of barriers and shields to eliminate unauthorized entry, hazards and accidents in the Work area.
  - 8. Providing the necessary equipment for confined space entry, including, but not limited to:
    - a. Continuous atmospheric monitors and equipment
    - b. Communications equipment
    - c. Ventilation equipment
    - d. Lighting
    - e. Rescue and emergency equipment
    - f. Harnesses
    - g. Retrieval systems
  - 9. Operation and maintenance of forced air ventilation confined space entry requirements as required to eliminate atmospheric hazards from the Work area.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**



**SECTION 012000  
PRICE AND PAYMENT PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Schedule of Values
- B. Unit Prices
- C. Bid Items

**1.02 SCHEDULE OF VALUES**

- A. Submit a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of work.
- B. Lump sum work items shall be broken down into reasonable component parts coordinating with the project schedule and activities; restating the lump sum bid value will not be accepted.
- C. Format: Align with line items in the Bid Schedule in Agency Front End Section 00 41 43 - Bid Forms. Coordinate the work items in the schedule of values with the Contractor's schedule.
- D. Submit Schedule of Values as electronic file via email within ten (10) days after date of Agency-Contractor Agreement in accordance with Article 42 of the General Conditions.
- E. Revise schedule to list approved Change Orders with each Application for Payment.

**1.03 APPLICATION FOR PAYMENT**

- A. Application for payment shall be in accordance with Agency Front End Section 00 72 13 - General Conditions, Article 42.
- B. Content and Format: Use Schedule of Values for listing items in Application for Payment.
- C. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that the Agency has received the materials and equipment free and clear of all Liens, and evidence that the materials and equipment are covered by appropriate property insurance, a warehouse bond, or other arrangements to protect the Agency's interest therein, all of which must be satisfactory to the Agency.
- D. Submit updated construction schedule with each Application for Payment.

**1.04 UNIT PRICES**

- A. Take measurements and compute quantities. Agency will verify measurements and quantities.
- B. Unit Quantities: Quantities and measurements indicated on Bid Form are for Contract purposes only. Actual quantities provided shall determine payment.
  - 1. When actual Work requires more or fewer quantities than those quantities indicated, provide required quantities at contracted unit sum/prices.
  - 2. When actual Work requires 25 percent or greater change in quantity than those quantities indicated, Agency or Contractor may claim a Contract Price adjustment.
- C. Payment Includes: Full compensation for required labor, products, tools, equipment, plant and facilities, transportation, services and incidentals; erection, application, or installation of item of the Work; overhead and profit.
- D. Final payment for Work governed by unit prices will be made on basis of actual measurements and quantities accepted by Engineer multiplied by unit sum/price for Work incorporated in or made necessary by the Work.
- E. Measurement of Quantities:

1. Weigh Scales: Inspected, tested, and certified by County weights and measures department within past year.
2. Platform Scales: Of sufficient size and capacity to accommodate conveying vehicle.
3. Metering Devices: Inspected, tested, and certified by applicable State department.
4. Measurement by Weight: Concrete reinforcing steel, rolled or formed steel, or other metal shapes will be measured by handbook weights. Welded assemblies will be measured by handbook or scale weight.
5. Measurement by Volume: Measured by cubic dimension using mean length, width, and height or thickness.
6. Measurement by Area: Measured by square dimension using mean length and width or radius.
7. Linear Measurement: Measured by linear dimension, at item centerline or mean chord.
8. Stipulated Sum/Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as completed item or unit of the Work.

### 1.05 ALTERNATES/ALTERNATIVES

- A. Alternatives/Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Agency's option. Accepted Alternates will be identified in Agency-Contractor Agreement. The Agency-Contractor Agreement may identify certain Alternates to remain an Agency option for a stipulated period of time.
- B. Coordinate related Work and modify surrounding Work. Description for each Alternate is recognized to be abbreviated but requires that each change shall be complete for scope of Work affected.
  1. Coordinate related requirements among Specification Sections as required.
  2. Include as part of each Alternate: Miscellaneous devices, appurtenances, and similar items incidental to or necessary for complete installation.
  3. Coordinate Alternate with adjacent Work and modify or adjust as necessary to ensure integration.

### 1.06 BID ITEMS

#### A. Bid Item No. 1 – Mobilization

1. The Work includes but is not limited to the following:
  - a. Bonds, insurance, required permits and fees, shop drawings, project phasing, supervision, coordination of concurrent work with other contractors, meetings, “as-built” plans or record drawings, movement of personnel, equipment, supplies, and incidentals to and from the project site.
  - b. Preparation of a Water Pollution Control Plan (WPCP). Implement BMPs that effectively prevent stormwater and non-stormwater discharges from occurring as a result of construction activities per San Bernardino County requirements.
  - c. Other work and operations which must be performed, or costs incurred prior to beginning work on the various contract items of work on the project site;
  - d. Work and improvements called for or implied by the Contract Documents, which are not included in the other bid items but are required to complete the Work;
  - e. Furnishing all labor, materials, tools, equipment and incidentals for implementation, and maintaining engines and mufflers of other equipment.
2. Measurement
  - a. Measurement for the bid item shall be based on the completion of such work as a lump sum. This is a non-proratable pay item.
3. Payment
  - a. Payment for Mobilization shall be made at the time of the first progress payment after the Contractor has completed all items under Article 6- Mobilization of the General Conditions and established a presence on the job site.

#### B. Bid Item No. 2 - USA Coordination

1. The work includes but is not limited to the following:

- a. Coordination with local utilities through DigAlert at all project locations that require excavation. All utilities shall be marked prior to any excavation work.
    - b. Potholing: Pothole all utilities crossing and connection points.
    - c. Removal of USA markings at project completion.
  - 2. Measurement
    - a. Measurement for bid item shall be based upon completion of this work as a lump sum basis.
  - 3. Payment
    - a. Payment shall be based on the overall project percent completion for this item and include all necessary labor, materials, and equipment required to complete the bid item in accordance with the Contract Documents.
- C. Bid Item No. 3 – Traffic Control**
- 1. The Work includes but is not limited to the following:
    - a. Traffic Control Plan: Create traffic control plan per the encroachment permit found in Appendix C.
    - b. Traffic Control Management: Deployment, operation, and removal of traffic control during the entire duration of the project.
  - 2. Measurement
    - a. Measurement for bid item shall be based on completion of the work on a lump sum basis.
  - 3. Payment
    - a. Payment shall be made on a percent complete basis of the Work activities involving Traffic Control, based on a lump sum amount for this item, and shall include full compensation for furnishing the labor, materials, tools, and equipment and doing all the work involved to implement traffic regulation/control throughout the project duration in accordance with the Contract Documents, along with all County and State encroachment and grading permit conditions. Full payment for this bid item shall be made upon ceasing all required Traffic Control, whether or not the overall project is complete.
- D. Bid Item No. 4 – Sheeting, Shoring, and Bracing**
- 1. This Work includes but is not limited to the following:
    - a. Contractor shall supply detailed sheeting, shoring, and bracing plans, prepared by and stamped by a licensed Civil or Structural Engineer, as required. These plans must comply with the specifications and requirements set forth in California Labor Codes 6705 and 6707.
    - b. Installation: Installation of sheeting, shoring, and bracing systems as necessary to safely support and stabilize all excavations associated with the project, according to the guidelines specified in the sheeting, shoring, and bracing plans.
    - c. Monitoring and Maintenance: Continuous monitoring and maintenance of the installed systems throughout the project to ensure ongoing safety and stability.
    - d. Adjustments and Modifications: Making necessary adjustments and modifications to the systems as project conditions change and in accordance with the Geotechnical Report.
    - e. Removal: Removal of all systems upon completion of excavation activities, ensuring the site is left in a safe and stable condition.
  - 2. Measurement
    - a. Measurement for Bid Item shall be based on completion of the work on a lump sum basis.
  - 3. Payment
    - a. Payment will be based on the overall project percent completion and include providing all labor, materials, and equipment necessary to provide sheeting, shoring and bracing for all excavations in accordance with California Labor Codes 6705 and 6707. Contractor shall supply detailed sheeting, shoring, and bracing plans, prepared

by and stamped by a licensed Civil or Structural Engineer, as required.

**E. Bid Item No. 5 – Segment No.1, Remove 16" DIP and Replace with 16" C-900 PVC DR-14**

1. This Work includes but is not limited to the following:
  - a. Force Main Dewatering and Sewage Disposal: Sewage dewatering and sewage disposal from the segment to be removed and replaced.
  - b. Remove and Disposal: Remove and dispose of 16" DIP, and contaminated soil, if any.
  - c. Pipe Installation: Installation of approximately 620 LF of 16" C-900 PVC DR-14 force main including PVC pipe, fittings, high deflection couplings, joint restraints, locating wire, marking tape, pipe bedding, pipe zone, intermediate zone, and structural zone per Trench Detail 1 in Appendix B.
  - d. Utility Protection: Protecting existing parallel gas line, and CLSM installation.
  - e. Dewatering: Dewatering trench.
  - f. Pipe Testing: Hydrostatic pressure testing per Specification.
  - g. Site Clean-up: Comprehensive cleaning of the work site, including the removal of all installation debris, equipment, and any temporary materials used during the project.
2. Measurement
  - a. Measurement for this bid item will be made on a linear foot basis. Measurement shall be taken horizontally along the installed pipe centerline, pipe end to pipe end, including the total length of all fittings installed.
3. Payment
  - a. Payment shall be based on the measured linear footage installed. This item includes all necessary labor, materials, and equipment required to complete the bid item in accordance with the Contract Documents.

**F. Bid Item No. 6 – Segment No. 2, Remove and Replace 16" DIP with 16" C-900 PVC DR-14**

1. The Work includes but is not limited to the following:
  - a. Force Main Dewatering and Sewage Disposal: Sewage dewatering and sewage disposal from the segment to be removed and replaced.
  - b. Remove and Disposal: Remove and dispose of 16" DIP, and contaminated soil, if any.
  - c. Pipe Installation: Installation of approximately 480 LF of 16" C-900 PVC DR-14 force main including PVC pipe, fittings, joint restraints, locating wire, marking tape, pipe bedding, pipe zone, intermediate zone, and structural zone per Trench Detail 1 in Appendix B.
  - d. Utility Protection: Protecting existing parallel gas line, and CLSM installation.
  - e. Dewatering: Dewatering trench.
  - f. Pipe Testing: Hydrostatic pressure testing per Specification.
  - g. Site Clean-up: Comprehensive cleaning of the work site, including the removal of all installation debris, equipment, and any temporary materials used during the project.
2. Measurement
  - a. Measurement for this bid item will be made on a linear foot basis. Measurement shall be taken horizontally along the installed pipe centerline, pipe end to pipe end, including the total length of all fittings installed.
3. Payment
  - a. Payment shall be based on the measured linear footage installed. This item includes all necessary labor, materials, and equipment required to complete the bid item in accordance with the Contract Documents.

**G. Bid Item No. 7 – 16" High Deflection Couplings**

1. The Work includes but is not limited to the following:
  - a. Procure and Installation of a 16" high-deflection coupling between two PVC pipe spools.
2. Measurement

- a. Measurement for bid item shall be based upon a unit cost basis for the bid item's complete installation.
  - 3. Payment
    - a. Payment shall be based on the complete installation of a unit, include all necessary labor, materials, and equipment required to complete the bid item in accordance with the Contract Documents.
- H. **Bid Item No. 8 – 2" Sewage Combination Air Valve and Vault Assembly**
  - 1. The Work includes but is not limited to the following:
    - a. Remove and Dispose: Demolish existing 2" sewage combination air valve vault, air valve piping, bollards, and dispose of in accordance with local regulations and environmental guidelines.
    - b. Vault Installation: Install a new HS-20 rated vault, with a frost lid and lid as specified in Detail 2 of Appendix B and aggregates per Trench Detail 1.
    - c. Air Valve and Piping: Install a 2" sewage combination air valve, air valve flood prevention check valve, Type 316 stainless steel pipe, concrete, insulating foam, and air valve jacket per Detail 2 in Appendix B.
    - d. Bollards: replacing existing bollards in kind.
  - 2. Measurement
    - a. Measurement for bid item shall be based upon a unit cost basis for the bid item's complete installation.
  - 3. Payment
    - a. Payment shall be based on the complete installation of one unit, include all necessary labor, materials, and equipment required to complete the bid item in accordance with the Contract Documents.
- I. **Bid Item No. 9 - Connect to Existing Force Main**
  - 1. The Work includes but is not limited to the following:
    - a. Installation: Restrained joint coupling installation or restrained high deflection coupling between existing 16" DIP and new 16" C-900 PVC DR-14 and backfill per Trench Detail 1 in Appendix B.
  - 2. Measurement
    - a. Measurement for bid item shall be based upon a unit cost basis for the bid item's complete installation.
  - 3. Payment
    - a. Payment shall be based on the complete installation of one unit, include all necessary labor, materials, and equipment required to complete the bid item in accordance with the Contract Documents.
- J. **Bid Item No. 10 - Permit and Inspection Fee Allowance**
  - 1. The Work includes but is not limited to the following:
    - a. Contractor's cost of acquiring traffic control permits and for construction inspection fees that may be charged to the Contractor by the Agency of Jurisdiction.
  - 2. Measurement
    - a. Measurement for bid time shall be based on fees charged to Contractor for permits and/or inspections
  - 3. Payment
    - a. Payment shall be based on actual fees paid to encroachment jurisdiction. Contractor shall submit receipts to receive payment. Payment is based on actual fees paid without any mark-ups.
- K. **Bid Item No. 11 – CCTV Access at Project Limits**
  - 1. The Work includes but is not limited to the following:
    - a. Contractors cost to provide Owner access and time to perform CCTV inspection activities at project limits identified on the drawings and listed below.
      - 1) Highway 18 starting at STA 103+36 inspecting in the westerly direction.

- 2) Highway 18 at the creek crossing at STA 109+41.50 in the easterly direction.
  - 3) Highway 18 at the creek crossing at STA 109+91.50 in the westerly direction.
  - 4) Highway 18 starting at STA 114+65 inspecting in the easterly and northerly direction.
- b. Owner shall be provided a minimum of four separate full working day's time to perform CCTV inspections at each project limits location in coordination with the Contractors progression of work.
  - c. Owner shall be provided access to the forcemain at each access location. Access shall be a minimum of 10 linear feet of open trench that is free of water, wastewater, debris, and contaminated soil.
  - d. Owner shall be provided adequate access and parking space for vector truck, pumping equipment, and CCTV van for each access location.
- 2. Measurement
    - a. Measurement for bid item shall be based upon a unit cost basis.
  - 3. Payment
    - a. Payment shall be based on the complete installation of a unit, include all necessary labor, materials, and equipment required to complete the bid item in accordance with the Contract Documents.
- L. Alternate Bid Item No. A1 - Caltrans Pavement Repair**
- 1. The Work includes but is not limited to the following:
    - a. If pavement damage is unavoidable to complete the work then Contractor shall repair affected areas. The Contractor shall obtain written permission prior to conducting any work which may damage the pavement. All pavement damaged without prior written approval will not be eligible for payment under this bid item.
    - b. Repair all damaged paving and striping in accordance to Caltrans requirements and the encroachment permit found in Appendix C
  - 2. Measurement
    - a. Measurement for bid item shall be based on a unit cost basis for the item's complete installation.
  - 3. Payment
    - a. Payment shall be based on the square footage of paving provided to Caltrans Standard with required striping included.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 012500  
SUBSTITUTION PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Quality assurance.
- B. Product options.
- C. Product substitution procedures.

**1.02 QUALITY ASSURANCE**

- A. Contract is based on products and standards established in Contract Documents without consideration of proposed substitutions.
- B. Products specified define standard of quality, type, function, dimension, appearance, and performance required.
- C. Substitution Proposals: Permitted for specified products except where specified otherwise. Do not substitute products unless substitution has been accepted and approved in writing by Agency.

**1.03 PRODUCT OPTIONS**

- A. Agency Front End Section 00 72 13 - General Conditions, Article 14.
- B. Section 01 10 00 - Summary
- C. Section 01 60 00 - Product Requirements.

**1.04 PRODUCT SUBSTITUTION PROCEDURES**

- A. Refer to Article 14 of the General Conditions for additional substitution procedure requirements.
- B. Contractor shall submit substitution requests, together with substantiating data, for substitution of any "or equal" material, process, or article no later than thirty (35) calendar days after award of Contract. Provisions regarding submission of substitution requests shall not in any way authorize an extension of time for the performance of this Contract. If a substitution request is rejected by the Agency, the Contractor shall provide the material, method or service specified herein. The Agency shall not be responsible for any costs incurred by the Contractor associated with substitution requests. The burden of proof as to the equality of any material, process, or article shall rest with the Contractor. The Agency has the complete and sole discretion to determine if a material, process, or article is substantially equal to or better than that specified and to approve or reject all substitution requests.
- C. Substitutions may be considered when a product becomes unavailable through no fault of Contractor.
- D. Document each request with complete data, substantiating compliance of proposed substitution with Contract Documents, including:
  - 1. Manufacturer's name and address, product, trade name, model, or catalog number, performance and test data, and reference standards.
  - 2. Itemized point-by-point comparison of proposed substitution with specified product, listing variations in quality, performance, and other pertinent characteristics.
  - 3. Reference to Article and Paragraph numbers in Specification Section.
  - 4. Cost data comparing proposed substitution with specified product and amount of net change to Contract Sum.
  - 5. Changes required in other Work.
  - 6. Availability of maintenance service and source of replacement parts as applicable.
  - 7. Certified test data to show compliance with performance characteristics specified.
  - 8. Samples when applicable or requested.
  - 9. Other information as necessary to assist Agency's evaluation.

- E. A request constitutes a representation that Bidder:
  - 1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
  - 2. Will provide same warranty for substitution as for specified product.
  - 3. Will coordinate installation of the accepted substitute and make such changes to other Work as may be required for the Work to be complete in all respects with no additional cost to Agency.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Will reimburse Agency for review or redesign services associated with reapproval by authorities having jurisdiction.
- F. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals without separate written request or when acceptance will require revision to Contract Documents.
- G. Substitution Submittal Procedure:
  - 1. Include the following Subparagraphs only when substitution is permitted after Contract award.
  - 2. Submit requests for substitutions on CSI Form 13.1A Substitution Request-After the Bidding/Negotiating Stage.
  - 3. Submit electronic file of Request for Substitution for consideration. Limit each request to one proposed substitution.
  - 4. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
  - 5. Agency will notify Contractor in writing of decision to accept or reject request.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**



**SECTION 013000  
ADMINISTRATIVE REQUIREMENTS**

**PART 1 GENERAL**

**1.01 COORDINATION AND PROJECT CONDITIONS**

- A. Coordinate scheduling, submittals, and Work of various Sections of Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Coordination Meetings: In addition to other meetings specified in this Section, hold coordination meetings once every week with Agency, Engineer, Contractor, and Subcontractors to ensure coordination of Work.
- C. Coordinate access to Site for correction of defective Work and Work not complying with Contract Documents, to minimize disruption of Agency's activities.

**1.02 PRECONSTRUCTION CONFERENCE**

- A. Coordinate with Agency Front End Section 00 72 13 - General Conditions.
- B. Agency will schedule and preside over meeting after Notice of Award.
- C. Attendance Required: Engineer, Agency, appropriate governmental agency representatives, Contractor, and major Subcontractors.
- D. Minimum Agenda:
  - 1. Submission of executed bonds and insurance certificates.
  - 2. Distribution of Contract Documents.
  - 3. Submission of list of Subcontractors, list of products, schedule of values, and Progress Schedule.
  - 4. Designation of personnel representing parties in Contract.
  - 5. Communication procedures.
  - 6. Procedures and processing of requests for interpretations, field decisions, submittals, substitutions, Applications for Payments, proposal request, Change Orders, and Contract closeout procedures.
  - 7. Scheduling.
  - 8. Critical work sequencing.
  - 9. Safety Training, Tailgate Meetings, etc.
  - 10. Agency: Record minutes and distribute copies to participants within four (4) days after meeting, and those affected by decisions made

**1.03 PROGRESS MEETINGS**

- A. Coordinate with Agency Front End Section 01 00 00 - General Requirements.
- B. Prepare for and attend meetings throughout progress of the Work once every two (2) weeks, up to once a week as needed. Administer meeting agenda items pertaining to Contractor scope and schedule.
- C. Agency will provide meeting space, prepare agenda with copies for participants, and preside over meetings.
- D. Attendance Required: Job superintendent, major Subcontractors and suppliers, and Engineer, as appropriate to agenda topics for each meeting.
- E. Minimum Agenda:
  - 1. Review minutes of previous meetings.
  - 2. Review of Work progress.
  - 3. Field observations, problems, and decisions.
  - 4. Identification of problems impeding planned progress.
  - 5. Review of submittal schedule and status of submittals.
  - 6. Review of off-Site fabrication and delivery schedules.

7. Maintenance of Progress Schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on Progress Schedule and coordination.
13. Other business relating to Work.
14. Agency: Record minutes and distribute copies to participants within four days after meeting.

#### **1.04 PREINSTALLATION MEETINGS**

- A. When required in individual Specification Sections, convene preinstallation meetings at Project Site before starting Work of specific Section.
- B. Require attendance of parties directly affecting, or affected by, Work of specific Section.
- C. Notify Agency one (1) week in advance of meeting date.
- D. Contractor Prepare agenda and preside over meeting:
  1. Review conditions of installation, preparation, and installation procedures.
  2. Review coordination with related Work.
- E. Contractor Record minutes and distribute copies to participants within four days after meeting, with copies each to Engineer, Agency, and those affected by decisions made.

#### **1.05 CLOSEOUT MEETING**

- A. Schedule Project closeout meeting with sufficient time to prepare for requesting Substantial Completion. Contractor Preside over meeting and be responsible for minutes.
- B. Attendance Required: Contractor, Engineer, Agency, and others appropriate to agenda.
  1. Notify Agency five (5) days in advance of meeting date.
- C. Minimum Agenda:
  1. Start-up of facilities and systems.
  2. Operations and maintenance manuals.
  3. Testing, adjusting, and balancing.
  4. System demonstration and observation.
  5. Operation and maintenance instructions for Agency's personnel.
  6. Contractor's inspection of Work.
  7. Preparation of an initial "punch list."
  8. Procedure to request Engineer inspection to determine date of Substantial Completion.
  9. Completion time for correcting deficiencies.
  10. Inspections by authorities having jurisdiction.
  11. Certificate of Occupancy and transfer of insurance responsibilities.
  12. Partial release of retainage.
  13. Final cleaning.
  14. Preparation for final inspection.
  15. Closeout Submittals:
    - a. Project record documents.
    - b. Operating and maintenance documents.
    - c. Operating and maintenance materials.
    - d. Affidavits.
  16. Final Application for Payment.
  17. Contractor's demobilization of Site.
  18. Maintenance.
  19. Contractor: Record minutes and distribute copies to participants within four days after meeting, with copies each to Engineer, Agency, and those affected by decisions made.

**PART 2 PRODUCTS - NOT USED**  
**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 013300  
SUBMITTAL PROCEDURES**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Definitions.
- B. Submittal procedures.
- C. Construction progress schedules.
- D. Proposed product list.
- E. Product data.
- F. Use of electronic CAD files of Project Drawings.
- G. Shop Drawings.
- H. Samples.
- I. Other submittals.
- J. Design data.
- K. Test reports.
- L. Certificates.
- M. Manufacturer's instructions.
- N. Construction photographs.
- O. Contractor review.
- P. Engineer review.

**1.02 DEFINITIONS**

- A. Action Submittals: Written and graphic information and physical samples that require Owner's or Engineer's responsive action.
- B. Informational Submittals: Written and graphic information and physical Samples that do not require responsive action. Submittals may be rejected for not complying with requirements.

**1.03 SUBMITTAL PROCEDURES**

- A. Coordinate with Agency Front End Section 00 72 13 - General Conditions, Article 16.
- B. Transmit each submittal with CSI Form 12.1A - Submittal Transmittal or approved equivalent.
- C. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.
- D. Identify: Project, Contractor, Subcontractor and supplier, pertinent Drawing and detail number, and Specification Section number appropriate to submittal.
- E. Apply Contractor's stamp, signed or initialed, certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is according to requirements of the Work and Contract Documents.
- F. Schedule submittals to expedite Project, and deliver to Owner at business address or preferably submit electronic submittals via email as PDF electronic files. Coordinate submission of related items.
- G. For each submittal for review, allow 10 days excluding delivery time to and from Contractor.
- H. Identify variations in Contract Documents and product or system limitations that may be detrimental to successful performance of completed Work.
- I. Allow space on submittals for Contractor and Engineer review stamps.
- J. When revised for resubmission, identify changes made since previous submission.

- K. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.
- L. Submittals not requested will not be recognized nor processed.
- M. Incomplete Submittals: Engineer will not review. Complete submittals for each item are required. Delays resulting from incomplete submittals are not the responsibility of Engineer.

#### **1.04 CONSTRUCTION PROGRESS SCHEDULES**

- A. Format: Bar chart Schedule, to include at least:
  - 1. Identification and listing in chronological order of those activities reasonably required to complete the Work, including:
    - a. Subcontract Work.
    - b. Major equipment design, fabrication, factory testing, and delivery dates including required lead times.
    - c. Move-in and other preliminary activities.
    - d. Equipment and equipment system test and startup activities.
    - e. Project closeout and cleanup.
    - f. Work sequences, constraints, and milestones.
    - g. Driveway closures.
  - 2. Listings identified by Specification Section number.
  - 3. Identification of the following:
    - a. Horizontal time frame by year, month, and week.
    - b. Duration, early start, and completion for each activity and subactivity.
    - c. Critical activities and Project float.
    - d. Subschedules to further define critical portions of Work.
- B. Schedule Updates:
  - 1. Overall percent complete, projected and actual.
  - 2. Completion progress by listed activity and subactivity.
  - 3. Changes in Work scope and activities modified since submittal.
  - 4. Delays in submittals or resubmittals, deliveries, or Work.
  - 5. Adjusted or modified sequences of Work.
  - 6. Other identifiable changes.
  - 7. Revised projections of progress and completion.
- C. Narrative Progress Report:
  - 1. Submit with each monthly submission of Progress Schedule.
  - 2. Summary of Work completed during the past period between reports.
  - 3. Work planned during the next period.
  - 4. Explanation of differences between summary of Work completed and Work planned in previously submitted report.
  - 5. Current and anticipated delaying factors and estimated impact on other activities and completion milestones.
  - 6. Corrective action taken or proposed.

#### **1.05 PROPOSED PRODUCT LIST**

- A. Within 15 days after date of Owner-Contractor Agreement, submit list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.
- B. For products specified only by reference standards, indicate manufacturer, trade name, model or catalog designation, and reference standards.

#### **1.06 PRODUCT DATA**

- A. Product Data: Action Submittal: Submit to Engineer for review for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Submit electronic submittals via email as PDF electronic files.

- C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

#### **1.07 ELECTRONIC CAD FILES OF PROJECT DRAWINGS**

- A. Electronic CAD Files of Project Drawings: May only be used to expedite production of Shop Drawings for the Project. Use for other Projects or purposes is not allowed.
- B. Electronic CAD Files of Project Drawings: Distributed only under the following conditions:
  - 1. Use of files is solely at receiver's risk. Engineer does not warrant accuracy of files. Receiving files in electronic form does not relieve receiver of responsibilities for measurements, dimensions, and quantities set forth in Contract Documents. In the event of ambiguity, discrepancy, or conflict between information on electronic media and that in Contract Documents, notify Engineer of discrepancy and use information in hard-copy Drawings and Specifications.
  - 2. CAD files do not necessarily represent the latest Contract Documents, existing conditions, and as-built conditions. Receiver is responsible for determining and complying with these conditions and for incorporating addenda and modifications.
  - 3. User is responsible for removing information not normally provided on Shop Drawings and removing references to Contract Documents. Shop Drawings submitted with information associated with other trades or with references to Contract Documents will not be reviewed and will be immediately returned.
  - 4. Receiver shall not hold Engineer responsible for data or file clean-up required to make files usable, nor for error or malfunction in translation, interpretation, or use of this electronic information.
  - 5. Receiver shall understand that even though Engineer has computer virus scanning software to detect presence of computer viruses, there is no guarantee that computer viruses are not present in files or in electronic media.
  - 6. Receiver shall not hold Engineer responsible for such viruses or their consequences, and shall hold Engineer harmless against costs, losses, or damage caused by presence of computer virus in files or media.

#### **1.08 SHOP DRAWINGS**

- A. Shop Drawings: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.
- B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. When required by individual Specification Sections, provide Shop Drawings signed and sealed by a professional Engineer responsible for designing components shown on Shop Drawings.
  - 1. Include signed and sealed calculations to support design.
  - 2. Submit Shop Drawings and calculations in form suitable for submission to and approval by authorities having jurisdiction.
  - 3. Make revisions and provide additional information when required by authorities having jurisdiction.
- D. Submit electronic submittals via email as PDF electronic files.
- E. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

#### **1.09 SAMPLES**

- A. Samples: Action Submittal: Submit to Engineer for assessing conformance with information given and design concept expressed in Contract Documents.

- B. Samples for Selection as Specified in Product Sections:
  1. Submit to Engineer for aesthetic, color, and finish selection.
  2. Submit Samples of finishes, textures, and patterns for Engineer selection.
- C. Submit Samples to illustrate functional and aesthetic characteristics of products, with integral parts and attachment devices. Coordinate Sample submittals for interfacing work.
- D. Include identification on each Sample, with full Project information.
- E. Submit number of Samples specified in individual Specification Sections; Engineer will retain one Sample.
- F. Reviewed Samples that may be used in the Work are indicated in individual Specification Sections.
- G. Samples will not be used for testing purposes unless specifically stated in Specification Section.
- H. After review, produce copies and distribute according to "Submittal Procedures" Article and for record documents described in Section 01 70 00 - Execution and Closeout Requirements.

#### **1.10 OTHER SUBMITTALS**

- A. Closeout Submittals: Comply with Section 01 70 00 - Execution and Closeout Requirements.
- B. Informational Submittal: Submit data for Engineer's knowledge as Contract administrator or for Owner.
- C. Submit information for assessing conformance with information given and design concept expressed in Contract Documents.

#### **1.11 TEST REPORTS**

- A. Informational Submittal: Submit reports for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit test reports for information for assessing conformance with information given and design concept expressed in Contract Documents.

#### **1.12 CERTIFICATES**

- A. Informational Submittal: Submit certification by manufacturer, installation/application Subcontractor, or Contractor to Engineer, in quantities specified for Product Data.
- B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
- C. Certificates may be recent or previous test results on material or product but must be acceptable to Engineer.

#### **1.13 MANUFACTURER'S INSTRUCTIONS**

- A. Informational Submittal: Submit manufacturer's installation instructions for Engineer's knowledge as Contract administrator or for Owner.
- B. Submit printed instructions for delivery, storage, assembly, installation, and finishing, to Engineer in quantities specified for Product Data.
- C. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

#### **1.14 CONSTRUCTION PHOTOGRAPHS**

- A. Provide photographs of Site and construction throughout progress of Work produced by an experienced photographer acceptable to Engineer. Submit with Narrative Progress Report.

#### **1.15 CONTRACTOR REVIEW**

- A. Review for compliance with Contract Documents and approve submittals before transmitting to Owner.

- B. Contractor: Responsible for:
  - 1. Determination and verification of materials including manufacturer's catalog numbers.
  - 2. Determination and verification of field measurements and field construction criteria.
  - 3. Checking and coordinating information in submittal with requirements of Work and of Contract Documents.
  - 4. Determination of accuracy and completeness of dimensions and quantities.
  - 5. Confirmation and coordination of dimensions and field conditions at Site.
  - 6. Construction means, techniques, sequences, and procedures.
  - 7. Safety precautions.
  - 8. Coordination and performance of Work of all trades.
- C. Stamp, sign or initial, and date each submittal to certify compliance with requirements of Contract Documents.
- D. Do not fabricate products or begin Work for which submittals are required until approved submittals have been received from Engineer.

#### **1.16 ENGINEER REVIEW**

- A. Informational submittals and other similar data are for Engineer's information, do not require Engineer's responsive action, and will not be reviewed or returned with comment.
- B. Submittals made by Contractor that are not required by Contract Documents may be returned without action.
- C. Submittal approval does not authorize changes to Contract requirements unless accompanied by a Change Order.
- D. Owner may withhold monies due to Contractor to cover additional costs beyond the second submittal review.

#### **1.17 DESIGNATION OF APPROVAL**

- A. Copies of submittals returned to the Contractor that are subject to approval will be marked with the following:
  - 1. No Exceptions Taken – Accepted, no resubmittal required. The acceptance of the submittal is subject to compatibility with future submissions and additional partial submissions for portion of the work not covered in this submission.
  - 2. Make Corrections Noted – Minor corrections are noted in the review comments, which shall be made by the Contractor. No resubmittal required.
  - 3. Revise and Resubmit – Resubmit: Minor corrections are noted in the review comments, which shall be made by the Contractor. Resubmittal is required.
  - 4. Rejected/Revise and Resubmit – Rejected because of major inconsistencies or errors which shall be resolved or corrected by the Contractor prior to resubmission.
  - 5. Accepted for Information Only – Applies to submittals which are required but not reviewed or are for information only.
- B. Returned copies of submittals marked “No Exceptions Taken” or “Make Corrections Noted” authorize the Contractor to proceed with the fabrication, installation or construction of material covered by returned submittal, provided that fabrication, installation or construction incorporates comments received.
- C. Returned copies of drawings marked “Revise and Resubmit” or “Rejected” shall be corrected as necessary and revised submittal shall be submitted in the same manner as before.

#### **PART 2 PRODUCTS - NOT USED**

#### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**



**SECTION 014000  
QUALITY REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Quality Control
- B. Tolerances
- C. References
- D. Labeling
- E. Mockup Requirements
- F. Testing and Inspection Services

**1.02 QUALITY CONTROL**

- A. Monitor quality control over suppliers, manufacturers, products, services, Site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with specified standards as the minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- C. Perform Work using persons qualified to produce required and specified quality.
- D. Products, materials, and equipment may be subject to inspection by Engineer and Owner at place of manufacture or fabrication. Such inspections shall not relieve Contractor of complying with requirements of Contract Documents.
- E. Supervise performance of Work in such manner and by such means to ensure that Work, whether completed or in progress, will not be subjected to harmful, dangerous, damaging, or otherwise deleterious exposure during construction period.

**1.03 TOLERANCES**

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.
- B. Comply with manufacturers' recommended tolerances and tolerance requirements in reference standards. When such tolerances conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

**1.04 REFERENCES**

- A. For products or workmanship specified by association, trade, or other consensus standards, comply with requirements of standard except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard by date of issue current as of date of Contract Documents except where specific date is established by code.
- C. Obtain copies of standards and maintain on Site when required by product Specification Sections.
- D. When requirements of indicated reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.
- E. Neither contractual relationships, duties, or responsibilities of parties in Contract nor those of Engineer shall be altered from Contract Documents by mention or inference in reference documents.

## 1.05 LABELING

- A. Attach label from agency approved by authorities having jurisdiction for products, assemblies, and systems required to be labeled by applicable code.
- B. Label Information: Include manufacturer's or fabricator's identification, approved agency identification, and the following information, as applicable, on each label:
  - 1. Model number.
  - 2. Serial number.
  - 3. Performance characteristics.
- C. Manufacturer's Nameplates, Trademarks, Logos, and Other Identifying Marks on Products: Not allowed on surfaces exposed to view in public areas, interior or exterior.

## 1.06 TESTING AND INSPECTION SERVICES

- A. Owner will employ and pay for the below specified services of an independent firm to perform testing and inspection.
  - 1. Compaction Testing
  - 2. Materials Testing for Concrete and Asphalt Paving
- B. Independent firms will perform tests, inspections, and other services specified in individual Specification Sections and as required by the Owner.
  - 1. Laboratory: Authorized to operate in the State of California.
  - 2. Laboratory Staff: Maintain full-time specialists on staff to review services.
  - 3. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to the National Bureau of Standards or accepted values of natural physical constants.
- C. Testing, inspections, and source quality control may occur on or off the Project Site. Perform off-site testing as required by the Engineer or Owner.
- D. Reports shall be submitted by independent firm to Owner, Contractor, and authorities having jurisdiction, indicating observations and results of tests and compliance or noncompliance with Contract Documents.
  - 1. Submit final report indicating correction of Work previously reported as noncompliant.
- E. Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.
  - 1. Notify Owner and independent firm 48 hours before expected time for operations requiring services.
  - 2. Make arrangements with independent firm and pay for additional Samples and tests required for Contractor's use.
- F. Employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work according to requirements of Contract Documents.
- G. Retesting or re-inspection required because of nonconformance with specified or indicated requirements shall be performed by same independent firm on instructions from Engineer. Payment for retesting or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.
- H. Independent Testing Agency Responsibilities:
  - 1. Test Samples of mixes submitted by Contractor.
  - 2. Provide qualified personnel at Site. Cooperate with Engineer and Contractor in performance of services.
  - 3. Perform indicated sampling and testing of products according to specified standards.
  - 4. Ascertain compliance of materials and mixes with requirements of Contract Documents.
  - 5. Promptly notify Engineer and Contractor of observed irregularities or nonconformance of Work or products.
  - 6. Perform additional tests required by Engineer.
  - 7. Attend preconstruction meetings and progress meetings.

- I. Agency Reports: After each test, promptly submit copies of report to Owner, Engineer, Contractor, and authorities having jurisdiction. When requested by Engineer, provide interpretation of test results. Include the following:
  - 1. Date issued.
  - 2. Project title and number.
  - 3. Name of inspector.
  - 4. Date and time of sampling or inspection.
  - 5. Identification of product and Specification Section.
  - 6. Location in Project.
  - 7. Type of inspection or test.
  - 8. Date of test.
  - 9. Results of tests.
  - 10. Conformance with Contract Documents.
- J. Limits on Testing Authority:
  - 1. Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.
  - 2. Agency or laboratory may not approve or accept any portion of the Work.
  - 3. Agency or laboratory may not assume duties of Contractor.
  - 4. Agency or laboratory has no authority to stop the Work.

#### **1.07 MANUFACTURER'S FIELD SERVICES**

- A. When specified in individual Specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, quality of workmanship, startup of equipment, testing, adjusting and balancing of equipment, commissioning and as applicable, and to initiate instructions when necessary.
- B. Submit qualifications of observer to Agency thirty (30) days in advance of required observations. Observer is subject to approval of Agency.
- C. Report observations and Site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.
- D. Refer to Section 01 33 00 - Submittal Procedures.

### **PART 2 PRODUCTS**

#### **2.01 PRODUCT TESTING**

- A. Testing is intended to verify the quality of the finished work and compliance with the Contract Documents. Contractor shall pay for any testing required to verify quality of products for submittal and submittal approval purposes.
- B. Agency shall not be liable for standard testing performed by Manufacturers, Suppliers, or Vendors in verifying the quality of their products and compliance with the Contract Documents.

### **PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 015000  
TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Construction Facilities
- B. Temporary Controls
- C. Temporary Electricity
- D. Temporary Water Service
- E. Vehicular Access
- F. Temporary Lighting for Construction Purposes
- G. Temporary Ventilation
- H. Temporary Sanitary Facilities

**1.02 CONSTRUCTION FACILITIES:**

- A. Progress Cleaning and Waste Removal
- B. Fire-Prevention Facilities

**1.03 TEMPORARY CONTROLS:**

- A. Barriers
- B. Security
- C. Dust Control
- D. Staging Area
- E. Removal of Utilities, Facilities, and Controls
- F. Steel Plate Bridging, With a Nonskid Surface

**1.04 TEMPORARY ELECTRICITY**

- A. Provide and pay for power service required for construction operation.
- B. Agency will not pay the cost of Contractor's standby, temporary, or backup power.
- C. Exercise measures to conserve energy.

**1.05 TEMPORARY WATER SERVICE**

- A. Contractor shall provide construction water in accordance with Agency Front Ends Section 01 00 00 - General Requirements, Section 1.03C.
- B. Contractor shall coordinate with City of Big Bear Lake Department of Water and Power for construction water access. See Construction Drawings for Fire Hydrant locations.

**1.06 VEHICULAR ACCESS**

- A. Extend and relocate vehicular access as Work progress requires and provide detours as necessary for unimpeded traffic flow.
- B. Provide unimpeded access for emergency vehicles.
- C. Provide means of removing mud from vehicle wheels before entering streets.

**1.07 TEMPORARY LIGHTING FOR CONSTRUCTION PURPOSES**

- A. Provide and maintain lighting for construction operations as necessary for performing the Work under this contract.
- B. Maintain all temporary lighting during inspections performed by the Agency or Engineer.

### **1.08 TEMPORARY VENTILATION**

- A. Ventilate hazardous areas and permit required confined space areas to achieve curing of materials, to dissipate humidity, to prevent accumulation of dust, fumes, vapors, or gases and to eliminate atmospheric hazards from all areas of Work.
- B. Operate and maintain forced air ventilation system of permit required confined spaces while personnel are within confined spaces in accordance with CAL/OSHA regulations and in accordance with the Contract Documents.

### **1.09 TEMPORARY SANITARY FACILITIES**

- A. Contractor shall provide temporary sanitary facilities in accordance with Agency Front Ends Section 00 72 13 - General Conditions Article 23.

### **1.10 PROGRESS CLEANING AND WASTE REMOVAL**

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from Site periodically and dispose of off-Site.
- C. Maintain Work area in accordance with Agency Front End Section 01 00 00 - General Requirements, Article 3.8.

### **1.11 FIRE-PREVENTION FACILITIES**

- A. Portable Fire Extinguishers: NFPA 10; 10-pound capacity, 4A-60B: C UL rating.
- B. Provide minimum of one fire extinguisher in every construction trailer and storage shed.
- C. Provide minimum of one fire extinguisher during operations using heat-producing equipment.
- D. The interior air quality shall be tested and monitored during Work performed in the Headworks Facility.
- E. At a minimum, Contractor shall monitor hydrogen sulfide, oxygen, low explosive limit gases and carbon monoxide.
- F. Contractor is responsible for providing all equipment and controls to perform these monitoring requirements.
- G. Mechanical work performed within the Headworks Facility or hazardous area that could create an ignition source shall be permitted through a Hot Work Permit prior to performing the work.
- H. Establish fire watch for cutting, welding, and other hazardous operations capable of starting fires. Maintain fire watch before, during, and after hazardous operations until threat of fire does not exist.
- I. Contractor shall take all precautions, actions and corrections necessary to avoid fire and explosion hazards.

### **1.12 BARRIERS**

- A. Provide and maintain barriers in accordance with Agency Front End Section 00 72 13 - General Conditions, Article 27.
- B. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- C. Establish barriers to protect non-owned vehicular traffic, stored materials, Site, and structures from damage.

### **1.13 SECURITY**

- A. Security Program:
  - 1. Protect Work from theft, vandalism, and unauthorized entry.
  - 2. Initiate program at Project mobilization.
  - 3. Maintain program throughout construction period.

**1.14 DUST CONTROL**

- A. Contractor shall control dust from Work area and Contractor activities in accordance with Agency Front End Section 01 00 00 - General Requirements.
- B. Execute Work by methods that minimize raising dust from construction operations.
- C. Provide positive means to prevent airborne dust from dispersing into atmosphere.

**1.15 STAGING AREA**

- A. The Contractor is responsible for securing their own Staging Area. All associated fees shall be borne by the Contractor.
- B. Contractor is responsible for preparing Staging Area if Agency’s level of preparation is not adequate for Contractor’s use. Staging Area will be comprised of level asphalt and gravel.
- C. Contractor is responsible for providing weathertight and adequately controlled spaces to protect stored equipment and materials from damage or deterioration.

**1.16 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities, and materials before Final Application for Payment inspection.
- B. Clean and repair damage caused by installation or use of temporary Work.
- C. Restore existing and permanent facilities used during construction to original condition.

**1.17 STEEL PLATE BRIDGING, WITH A NONSKID SURFACE**

- A. When backfilling operations of an excavation in the traveled way, whether transverse or longitudinal, cannot be properly completed within a workday, provide steel plate bridging with a nonskid surface and shoring to preserve unobstructed traffic flow. In such cases, the following conditions shall apply:
- B. Install steel plate bridging and shoring using Method 1 or 2:
  - 1. Method 1 (For Speeds More Than 45 mph or in all plates in Caltrans right-of-way): The pavement shall be cold planed to a depth equal to the thickness of the plate and to a width and length equal to the dimensions of the plate.
  - 2. Method 2 (For Speeds 45 mph or Less): Attach approach plate(s) and ending plate (if longitudinal placement) to the roadway by a minimum of two dowels predrilled into the corners of the plate and drilled 2 inches into the pavement. Butt subsequent plates to each other. Compact fine graded asphalt concrete to form ramps, maximum slope 8.5% with a minimum 12-inch taper to cover all edges of the steel plates. When steel plates are removed, backfill the dowel holes in the pavement with either graded fines of asphalt concrete mix or concrete slurry.
- C. Steel plates used for bridging shall extend a minimum of 12 inches beyond the edges of the trench.
  - 1. Install steel plate bridging to operate with minimum noise.
  - 2. Shore the trench to support the bridging and traffic loads.
  - 3. Use temporary paving with cold asphalt concrete to feather the edges of the plates if plate installation by Method 2 is used.
  - 4. Secure bridging against displacement by using adjustable cleats, shims, or other devices.
- D. Maintain the steel plates, shoring, and asphalt concrete ramps.
- E. Project shall be scheduled to minimize the duration that steel plate bridging is installed.
- F. Backfilling of excavation shall be covered with a minimum of 3 inches of temporary layer of cold asphalt concrete.
- G. The following table shows the required minimal thickness of steel plate bridging required for a given trench width:

Trench Width (feet):	Minimum Plate Thickness (inches):
----------------------	-----------------------------------

1	1/2
1-1/2	3/4
2	7/8
3	1
4	1-1/4

- H. For spans greater than 4 feet, prepare a structural design by a registered civil engineer and submit it to the Owner for review.
- I. Design steel plate bridging for HS20-44 truck loading per Caltrans Bridge Design Specifications Manual. Maintain on the steel plate a nonskid surface having a minimum coefficient of friction equivalent to 0.35 as determined by California Test Method No. 342. The Contractor may use a standard steel plate with a known coefficient of friction equal or exceeding 0.35.
- J. Use a "Rough Road" sign (W8-8) with black lettering on an orange background in advance of steel plate bridging. This is to be used along with any other required construction signing.

**PART 2 PRODUCTS - NOT USED**

**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 016000  
PRODUCT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Products
- B. Product Delivery Requirements
- C. Product Storage and Handling Requirements
- D. Product Options

**1.02 PRODUCTS**

- A. At a minimum, comply with specified requirements and reference standards.
- B. Specified products define standard of quality, type, function, dimension, appearance, and performance required.
- C. Furnish products of qualified manufacturers that are suitable for intended use. Furnish products of each type by a single manufacturer unless specified otherwise. Confirm that the manufacturer's production capacity can provide sufficient product, on time, to meet Project requirements.

**1.03 PRODUCT DELIVERY REQUIREMENTS**

- A. Transport and handle products according to the manufacturer's instructions.
- B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.
- C. Provide equipment and personnel to handle products; use methods to prevent soiling, disfigurement, or damage.

**1.04 PRODUCT STORAGE AND HANDLING REQUIREMENTS**

- A. Store and protect products according to manufacturer's instructions.
- B. Store products with seals and labels intact and legible.
- C. Store sensitive products in weathertight, climate-controlled enclosures in an environment suitable to the product.
- D. For exterior storage of fabricated products, place products on sloped supports aboveground.
- E. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- F. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- G. Provide equipment and personnel to store products; use methods to prevent soiling, disfigurement, or damage.
- H. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

**1.05 PRODUCT OPTIONS**

- A. Products Specified by Reference Standards or by Description Only: Products complying with specified reference standards or description.
- B. Products Specified by Naming One or More Manufacturers: Products of one of the manufacturers named and complying with Specifications; no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with Provision for Substitutions: Submit a Request for Substitution for any manufacturer not named, according to Section 01 25 00 - Substitution Procedures and Article 14 of the General Conditions.



**PART 2 PRODUCTS - NOT USED**  
**PART 3 EXECUTION - NOT USED**

**END OF SECTION**

**SECTION 017000  
EXECUTION AND CLOSEOUT REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Field Engineering
- B. Closeout Procedures
- C. Project Record Documents
- D. Examination
- E. Preparation
- F. Execution
- G. Cutting and Patching
- H. Protecting Installed Construction
- I. Final Cleaning

**1.02 FIELD ENGINEERING**

- A. Contractor will employ land surveyor registered in State of California.
- B. Contractor will locate and protect survey control and reference points.
- C. Control datum for survey is established by Contractor-provided survey.
- D. Verify setbacks and easements; confirm Drawing dimensions and elevations.
- E. Provide field engineering services. Establish elevations, lines, and levels using recognized engineering survey practices.
- F. Protect survey control points prior to starting Site Work; preserve permanent reference points during construction.
- G. Promptly report to Owner loss or destruction of reference point or relocation required because of changes in grades or other reasons.
- H. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Owner.

**1.03 CLOSEOUT PROCEDURES**

- A. For closeout procedures, refer to Article 14 of the General Conditions

**1.04 PROJECT RECORD DOCUMENTS**

- A. Maintain on Site one set of the following record documents; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other modifications to the Contract.
  - 5. Reviewed Shop Drawings, product data, and Samples.
  - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record, at each product Section, description of actual products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Product substitutions or alternates used.
  - 3. Changes made by Addenda and modifications.

- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction as follows:
  - 1. Include Contract modifications such as Addenda, supplementary instructions, change directives, field orders, minor changes in the Work, and change orders.
  - 2. Include locations of concealed elements of the Work.
  - 3. Identify depth of buried utility lines and provide dimensions showing distances from permanent facility components that are parallel to utilities.
  - 4. Dimension ends, corners, and junctions of buried utilities to permanent facility components using triangulation.
  - 5. Identify and locate existing buried or concealed items encountered during Project.
  - 6. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 7. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 8. Field changes of dimension and detail.
  - 9. Details not on original Drawings.
- G. Submit marked-up paper copy documents and PDF electronic files of marked-up documents to Engineer with claim for final Application for Payment.

## **PART 2 PRODUCTS - NOT USED**

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify that existing Site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.
- D. Verify that utility services are available with correct characteristics and in correct locations.

#### **3.02 PREPARATION**

- A. Clean substrate surfaces prior to applying next material or substance according to manufacturer's instructions.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer-required or -recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

#### **3.03 EXECUTION**

- A. Comply with manufacturer's installation instructions, performing each step in sequence. Maintain one set of manufacturer's installation instructions at Project Site during installation and until completion of construction.
- B. When manufacturer's installation instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Verify that field measurements are as indicated on approved Shop Drawings or as instructed by manufacturer.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
  - 1. Secure Work true to line and level and within specified tolerances, or if not specified, industry-recognized tolerances.
  - 2. Physically separate products in place, provide electrical insulation, or provide protective coatings to prevent galvanic action or corrosion between dissimilar metals.

3. Exposed Joints: Provide uniform joint width and arrange to obtain best visual effect. Refer questionable visual-effect choices to Engineer for final decision.
- E. Climatic Conditions and Project Status: Install each unit of Work under conditions to ensure best possible results in coordination with entire Project.
  1. Isolate each unit of Work from incompatible Work as necessary to prevent deterioration.
  2. Coordinate enclosure of Work with required inspections and tests to minimize necessity of uncovering Work for those purposes.
- F. Mounting Heights: Where not indicated, mount individual units of Work at industry recognized standard mounting heights for particular application indicated.
  1. Refer questionable mounting heights choices to Engineer for final decision.
  2. Elements Identified as Accessible to Handicapped: Comply with applicable codes and regulations.
- G. Adjust operating products and equipment to ensure smooth and unhindered operation.
- H. Clean and perform maintenance on installed Work as frequently as necessary through remainder of construction period. Lubricate operable components as recommended by manufacturer.

### **3.04 CUTTING AND PATCHING**

- A. Employ skilled and experienced installers to perform cutting and patching.
- B. Submit a written request in advance of cutting or altering elements affecting:
  1. Structural integrity of element.
  2. Integrity of weather-exposed or moisture-resistant elements.
  3. Efficiency, maintenance, or safety of element.
  4. Visual qualities of sight-exposed elements.
  5. Work of Owner or separate contractor.
- C. Execute cutting, fitting, and patching including excavation and fill to complete Work and to:
  1. Fit the several parts together, to integrate with other Work.
  2. Uncover Work to install or correct ill-timed Work.
  3. Remove and replace defective and nonconforming Work.
  4. Remove samples of installed Work for testing.
  5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.
- D. Execute Work by methods to avoid damage to other Work and to provide proper surfaces to receive patching and finishing.
- E. Cut masonry and concrete materials using a masonry saw or core drill.
- F. Restore Work with new products according to requirements of Contract Documents.
- G. Fit Work tight to pipes, sleeves, ducts, conduits, and other penetrations through surfaces.
- H. Maintain integrity of wall, ceiling, or floor construction; completely seal voids.
- I. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.
- J. Identify hazardous substances or conditions exposed during the Work to Engineer for decision or remedy.

### **3.05 PROTECTING INSTALLED CONSTRUCTION**

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Protect existing access road aggregate base installed prior to this Contract.
- C. Provide temporary and removable protection for installed products. Control activity in the immediate Work area to prevent damage.
- D. Prohibit traffic from landscaped areas.

**3.06 FINAL CLEANING**

- A. Execute final cleaning prior to final Project assessment.
  - 1. Employ experienced personnel or a professional cleaning firm.
- B. Remove waste and surplus materials, rubbish, and construction facilities from the Site.

**END OF SECTION**

**SECTION 020120  
PROTECTING EXISTING UNDERGROUND UTILITIES**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. This section includes materials and procedures for protecting existing underground utilities.

**1.02 REFERENCE STANDARDS**

- A. Wherever reference is made to the SSPWC, such reference shall mean the Standard Specifications for Public Works Construction ("Greenbook"), Latest Edition.

**PART 2 PRODUCTS**

**2.01 REPLACEMENT IN KIND**

- A. Except as specifically authorized by the Owner, reconstruct utilities with new material of the same size, type, and quality as that removed.

**PART 3 EXECUTION**

**3.01 GENERAL**

- A. Replace in kind street improvements, such as curbs and gutters, berms, barricades, traffic islands, signalization, fences, signs, etc., that are cut, removed, damaged, or otherwise disturbed by the construction to the satisfaction of the Owner.
- B. Where utilities are parallel to or cross the construction but do not conflict with the permanent work to be constructed, follow the procedures given below. Notify the utility owner at least 48 hours in advance of the crossing construction and coordinate the construction schedule with the utility owner's requirements. For utility crossings not shown in the Drawings, refer to the General Conditions and the instructions of the Engineer for guidance.
- C. Determine the true location and depth of utilities and service connections which may be affected by or affect the work. Determine the type, material, and condition of these utilities. To provide sufficient lead-time to resolve unforeseen conflicts, order materials and take appropriate measures to ensure that there is no delay in work.
- D. Expose utilities a minimum of 500 feet in advance of the pipeline construction.

**3.02 PROCEDURES**

- A. Protect in Place: Protect utilities in place, unless abandoned, and maintain the utility in service, unless otherwise specified in the Drawings or in the Specifications.
1. Special Construction: At locations indicated in the Drawings or as determined by the Engineer, provide support of existing conduits across trench by means of Special Construction as defined in Paragraph 3.05, below.
- B. Abandon in Place: Where so indicated in the Drawings or as determined by the Engineer, cut abandoned utility lines and plug the ends per the Drawings.
- C. Abandon in Place with Pressure Grout: Where so indicated on the Drawings or as determined by the Engineer, cut abandoned utility lines and plug each end per the Drawings using 1-sack slurry pressure grout.
- D. Remove and Reconstruct: Where so indicated in the Drawings or as required by the Engineer, remove the utility per Section 02 41 00 and, after passage, reconstruct it with new materials to the satisfaction of the Owner. Provide temporary service for the disconnected utility and to the satisfaction of the Owner.

**3.03 POTHOLE UTILITIES**

- A. Verify existing utility locations (i.e., "Potholing"):
1. Contact all affected utility owners and request them to locate their respective utilities prior to the start of "potholing."

2. The utility owner shall be given 7 days written notice prior to commencing potholing. If a utility owner is not able or equipped to locate its utility, the Contractor shall locate it at no additional cost to the Owner.
  3. Clearly paint the location of all affected utility underground pipes, conduits, and other utilities on the pavement or identify the location with suitable markers if not on pavement. In addition to the location of metallic pipes and conduits, non-metallic pipe, ducts and conduits shall also be similarly located using surface indicators and other means of detection such as tape or wire (if present).
  4. After the utility survey is completed, commence "potholing" to determine the actual location and elevation of all utilities where crossings, interferences, or connections to the new pipelines are shown on the Drawings, marked by utility companies, or indicated by surface signs.
  5. Prior to the preparation of piping shop drawings, or the excavating for any new pipelines or structures, the Contractor shall locate and uncover these existing utilities including services and laterals until the utility can clearly be identified. Any variation between actual conditions and those indicated on the Drawings shall be brought to the Engineer's attention.
  6. Excavations around underground electrical ducts and conduits shall be performed using caution to prevent injury to workmen or damage to electrical ducts or conduits. Similar precautions shall be exercised around gas lines, telephone and television cables.
  7. Backfill after completing potholing in accordance with Section 3.4 of this specification and with local standards or permits. In existing streets, pave in accordance with local standards or permits.
  8. Potholing shall take place a minimum of two (2) weeks in advance of the Work to provide Engineer sufficient time to address discrepancies between the locations of utilities as shown on the Drawings and as located at the Site.
- B. Potholing cultural test holes, if required, shall be in accordance with the Drawings. Contractor shall expect the following activities at the cultural monitoring locations:
1. Cultural monitor will be onsite to observe excavation and will sieve all excavated materials during excavation.
  2. Vacuum pothole equipment shall not be permitted at cultural test hole locations.
  3. Potholes shall be completed prior to any other construction activities.

### **3.04 BACKFILL**

- A. Sand-Cement Slurry: Sand-cement slurry shall consist of 1-sack (94 pounds) of Portland cement per cubic yard of sand and sufficient moisture for workability. The Contractor is responsible for the protection of the utility during construction.

### **3.05 SPECIAL CONSTRUCTION FOR CONDUITS ACROSS TRENCH**

- A. At locations determined by the Engineer, provide support of existing conduits and culverts across trench by constructing the indicated support measure. Support measures include construction of one of the following at each identified location: reinforced concrete beam, concrete support wall, concrete blanket protection, or sand-cement slurry backfill as indicated on the utility support details in the drawings. The Contractor is responsible for the protection of the utility during construction.
- B. Where required by the Engineer, SSPWC "Greenbook" Standard Plans 224-1 (Supports for Conduits Across Trenches) and 225-1 (Blanket Protection for Pipes) shall be used to support crossing pipes.

### **3.06 EXISTING THRUST BLOCKS ON WATERLINES**

- A. The Contractor's attention is called to existing thrust blocks for waterlines throughout the project whose thrust is in the direction of the new excavation and, therefore, may be affected by the construction. Protect thrust blocks in place or shore to resist the thrust by a means approved by the Engineer and reconstruct. If the thrust blocks are exposed or rendered to be ineffective in the opinion of the Engineer, reconstruct them to bear against firm unexcavated or backfill

material. Contact the Engineer prior to thrust block reconstruction to confirm minimum required thrust block bearing areas.

- B. Provide firm support by backfilling that portion of the trench for a distance of 2 feet on each side of the thrust block to be reconstructed from the pipe bedding to the pavement subgrade, with Sand-cement slurry (94 pounds (1 sacks) of cement per cubic yard).
- C. Then excavate the backfill material for construction of the thrust block.
- D. Test compaction of the backfill material before pouring any concrete thrust block. Use thrust block concrete mix design as specified in Specification Section 33 11 13 Public Water Utility Distribution Piping.

### **3.07 ADJACENT UNDERGROUND UTILITIES**

- A. Multiple underground utilities exist in the area near the planned construction. Protect these utilities from any disturbances and repair the utilities and associated vaults and appurtenances if they are damaged in any way. All costs incurred for protection, repair, replacement, and resulting disruption of these utilities or any costs incurred due to their presence, whether or not they lie within the new construction, shall be borne in full by the Contractor. See Drawings for approximate locations of known utilities. Note, service laterals and connections are not all shown on the Drawings. The Contractor is responsible for locating and protecting all service laterals.

**END OF SECTION**



**SECTION 024100  
DEMOLITION**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Demolition of the existing segment 1 and 2 16" Ductile Iron Pipe (DIP) force main (salvage 16" repair spool, couplings, and inspection tee return to Owner).
  - 2. Demolition of the existing 2" combination air valve vault and associated piping at STA 103+56 and STA 114+36.

**1.02 REFERENCES**

- A. Reference Standards:
  - 1. Wherever reference is made to the SSPWC, such reference shall mean the Standard Specifications for Public Works Construction ("Greenbook"), latest edition.

**1.03 SUBMITTALS**

- A. Informational Submittals
  - 1. Certificates of Acceptance: The Contractor shall provide a certificate of acceptance or letter of acceptance of disposal of materials from any landfill or disposal site.

**1.04 QUALITY ASSURANCE**

- A. Conform to applicable code for environmental requirements, disposal of debris, and use of herbicides.
- B. Applicable safety requirements:
  - 1. Contractor shall be responsible for the safety of all personnel and the nearby local community.
  - 2. Comply with federal, state, and local hauling and disposal regulations.

**1.05 ENVIRONMENTAL REQUIREMENTS**

- A. Dust Control
  - 1. The Contractor shall implement dust control measures during site disturbance activity.
  - 2. The Contractor shall protect the neighboring properties from dust and debris during Demolition Work.
- B. Air Quality
  - 1. The Headworks Building is a Class 1, Division 1 hazardous area. Contractor shall furnish all necessary equipment and materials to ensure a safe working space and comply with all applicable safety codes.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION**

**3.01 PERFORMANCE REQUIREMENTS**

- A. Contractor shall consult Agency when structures or utilities located within demolition extents are not specifically addressed on the Drawings or herein.
- B. No facilities shall be abandoned-in-place unless specifically indicated on the Drawings.
- C. Contractor's Demolition Work shall comply with requirements specified in Specification Section 01 10 00 and Agency Front Ends.
- D. Contractor's Demolition Work shall not impede Agency personnel from access to equipment remaining in operation during demolition.

**3.02 PROCEDURES**

- A. Abandon in Place: Where indicated on the Drawings or as determined by the Engineer, cut abandoned utility lines and plug the ends per the Drawings.

- B. Demolish: Where indicated on the Drawings, specified herein, or as determined by the Engineer, excavate, cut utilities, demolish, remove, transport, and dispose in accordance with federal, state, and local requirements.
- C. Protect in Place: Where indicated on the Drawings, specified herein or as determine by the Engineer, protect in place materials, equipment and structural components from damage, deterioration and demolition to preserve their functionality and integrity through the duration of the Work.
- D. Remove and Reconstruct: Where so indicated in the Drawings or as required by the Engineer, remove and reconstruct equipment or materials with new equipment or materials as approved by the Engineer. Provide temporary service for the disconnected utility to the satisfaction of the utility Agency.

### **3.03 EXAMINATION**

- A. Perform a pre-demolition walk through with the Agency before the submission and approval of the Demolition Plan.
- B. Identify waste area for placing removed materials. Where applicable identify use of best management practices to properly protect human health and the environment.

### **3.04 DUST AND DEBRIS CONTROL**

- A. Prevent the spread of dust and debris to nearby residential properties and avoid the creation of a nuisance or hazard in the surrounding area.
- B. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, ice, flooding, or runoff pollution. If used, water shall not enter wastewater process stream.
- C. Sweep pavements as often as necessary to control the spread of debris that may result in foreign object damage potential to onsite traffic, and as necessary for sediment control.

### **3.05 EXISTING WORK**

- A. Survey the Work site and examine Drawings and Specifications to determine the extent of the Work before beginning any demolition.
- B. Take necessary precautions to avoid damage to existing items scheduled to remain in place, to be reused, or to remain the property of Agency; any Contractor-damaged items shall be repaired or replaced as directed by the Agency at the sole cost of the Contractor.

### **3.06 PROTECTION**

- A. During demolition, continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the demolition site.
- B. Provide temporary barricades and other forms of protection to protect Agency's personnel from injury due to Demolition Work.

### **3.07 DISPOSAL OF DEMOLISHED MATERIALS**

- A. Site debris, rubbish, and other materials resulting from demolition operations shall be removed and disposed of in compliance with all laws and regulations.
- B. Contractor shall comply with County of San Bernardino recycling and disposal requirements.

### **3.08 CLEARING, REMOVAL, AND CLEANUP**

- A. Coordinate with Agency prior to demolition to clear areas required for access.
- B. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.
- C. Do not burn or bury materials on site. Leave site in clean condition.
- D. Concrete, masonry, and other noncombustible material, except concrete allowed to remain in place, shall be disposed of offsite.

- E. Debris and rubbish shall be removed and transported in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply.

**END OF SECTION**

**SECTION 310513  
SOILS FOR EARTHWORK**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Subsoil Materials
  - 2. Topsoil Materials

**1.02 REFERENCES**

- A. ASTM International:
  - 1. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  - 2. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
- B. Wherever reference is made to the SSPWC, such reference shall mean the Standard Specifications for Public Works Construction ("Greenbook"), Latest Edition.

**1.03 SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Submit samples and testing results of imported soils materials.

**1.04 QUALITY ASSURANCE**

- A. Furnish each material from single source throughout the Work.
- B. Perform Work in accordance with SSPWC.

**PART 2 PRODUCTS**

**2.01 SUBSOIL MATERIALS**

- A. Subsoil Type S1 (Select Import): Should be predominantly granular and meet the following criteria:
  - 1. Expansion Index of less than 20.
  - 2. Free of all deleterious material.
  - 3. Contain no particles larger than 3 inches in the largest dimension.
  - 4. Contain less than 30 percent by weight retained on ¾-inch sieve.
  - 5. Contain at least 15 percent fines (passing #200 sieve).
  - 6. Have a Plasticity Index of 10 or less.
  - 7. Any import fill should be tested and approved by the Owner prior to delivery to the site.
- B. Subsoil Type S2 (Native Material):
  - 1. Excavated and re-used material.
  - 2. Screened and graded.
  - 3. Free of lumps and rocks larger than 2 inches.
  - 4. Free of all deleterious material.

**2.02 TOPSOIL MATERIALS**

- A. Topsoil Type S4 :
  - 1. Excavated and reused material.
  - 2. Graded.
  - 3. Free of roots, rocks larger than 1 inch, subsoil, debris, large weeds and foreign matter.
    - a. Screening: Single screened.
- B. Topsoil Type S5 :
  - 1. Imported borrow.
  - 2. Friable loam.

3. Reasonably free of roots, rocks larger than 1/2 inch, subsoil, debris, large weeds, and foreign matter.
  - a. Screening: Single screened.
4. Acidity range (pH) of 5.5 to 7.5.
5. Containing a minimum of 4 percent and a maximum of 25 percent inorganic matter.
6. Conforming to ASTM D2487 Group Symbol OH.

### **2.03 SOURCE QUALITY CONTROL**

- A. Section 01 40 00 - Quality Requirements: Testing and Inspection Services Testing and analysis of soil material.
- B. Testing and Analysis of Subsoil Material: Perform in accordance with ASTM D1557.
- C. Testing and Analysis of Topsoil Material: Perform in accordance with ASTM D1557.
- D. When tests indicate materials do not meet specified requirements, change material and retest.
- E. Furnish materials of each type from same source throughout the Work.

## **PART 3 EXECUTION**

### **3.01 STOCKPILING**

- A. Stockpile materials on site locations approved by Owner.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.
- C. Separate differing materials with dividers or stockpile apart to prevent mixing.
- D. Stockpile topsoil 8 feet high maximum.
- E. Prevent intermixing of soil types or contamination.
- F. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

### **3.02 STOCKPILE CLEANUP**

- A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

**END OF SECTION**

**SECTION 310516  
AGGREGATES FOR EARTHWORK**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Coarse aggregate materials.
  - 2. Fine aggregate materials.

**1.02 REFERENCES**

- A. American Association of State Highway and Transportation Officials:
  - 1. AASHTO M147 - Standard Specification for Materials for Aggregate and Soil-Aggregate Subbase, Base and Surface Courses.
  - 2. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.
- B. ASTM International:
  - 1. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
  - 2. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  - 3. ASTM D2487 - Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
  - 4. ASTM D4318 - Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- C. Wherever reference is made to the SSPWC, such reference shall mean the Standard Specifications for Public Works Construction ("Greenbook"), Latest Edition.

**1.03 SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Submit gradation and source of aggregate material.
- C. Submit certification that aggregate material complies with specifications.

**1.04 QUALITY ASSURANCE**

- A. Furnish each aggregate material from single source throughout the Work.
- B. Perform Work in accordance with SSPWC.

**PART 2 PRODUCTS**

**2.01 COARSE AGGREGATE MATERIALS**

- A. Coarse Aggregate Type A1 3/4 in Crushed Rock: Conforming to Greenbook standard 200-1.2.
- B. Coarse Aggregate Type A3 (Gravel): Pit run stone; free of shale, clay, friable material and debris; graded in accordance with ASTM D2487 Group Symbol GW ; within the following limits:

Sieve Size	Percent Passing
1-1/2 inches	100
1 inch	90 to 100
3/4 inch	55 to 85
3/8 inches	8 to 20
No. 4	0 to 5
No. 8	0 to 5
No. 200	0 to 2

- C. Aggregate Type A4 (Pea Gravel): Natural stone; washed, free of clay, shale, organic matter; graded in accordance with ASTM D2487 Group Symbol GM; to the following limits:
  - 1. Minimum Size: 1/4 inch.

- 2. Maximum Size: 1/2 inch.

**2.02 FINE AGGREGATE MATERIALS**

- A. Fine Aggregate Type A6 (Bedding Sand): Natural river or bank sand; washed; free of silt, clay, loam, friable or soluble materials, and organic matter; graded in accordance with ASTM D2487 Group Symbol SW; with a minimum sand equivalence (SE) of 60 per ASTM D2419; within the following limits:

Sieve Size	Percent Passing
No. 4	90 to 100
No. 200	0 to 5

**2.03 SOURCE QUALITY CONTROL**

- A. Section 01 40 00 - Quality Requirements: Testing and inspection services.
- B. Coarse Aggregate Material - Testing and Analysis: Perform in accordance with ASTM D1557 and ASTM C136.
- C. Fine Aggregate Material - Testing and Analysis: Perform in accordance with ASTM D1557 and ASTM C136.
- D. When tests indicate materials do not meet specified requirements, change material and retest.

**PART 3 EXECUTION**

**3.01 STOCKPILING**

- A. Stockpile materials on site at locations approved by the Owner.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.
- C. Separate different aggregate materials with dividers or stockpile individually to prevent mixing.
- D. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

**3.02 STOCKPILE CLEANUP**

- A. Remove stockpile, leave area in clean and neat condition. Grade site surface to prevent free standing surface water.

**END OF SECTION**

**SECTION 311000  
SITE CLEARING**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Materials
  - 2. Examination
  - 3. Preparation
  - 4. Protection
  - 5. Clearing
  - 6. Removal

**1.02 REFERENCE STANDARDS**

- A. Wherever reference is made to the SSPWC, such reference shall mean the Standard Specifications for Public Works Construction ("Greenbook"), Latest Edition.

**1.03 SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit data for herbicide. Indicate compliance with applicable codes for environmental protection.

**1.04 QUALITY ASSURANCE**

- A. Conform to applicable code for environmental requirements, disposal of debris, burning debris on site, and use of herbicides.
- B. Perform Work in accordance with SSPWC.

**PART 2 PRODUCTS**

**2.01 MATERIALS**

- A. Herbicide – Limit use of herbicides to areas to be paved. Do not use herbicides unless required by Owner. When required, only use herbicides approved by authority having jurisdiction. Herbicides shall also be approved for use on BLM lands in the State of California.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

- A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify existing plant life designated to remain is tagged or identified.
- C. Identify waste area for placing removed materials. Where applicable use removed vegetative material as source of mulch for slope stabilization.

**3.02 PREPARATION**

- A. Call Underground Service Alert service at 811 not less than two working days before performing Work.
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
  - 2. Contractor is responsible for locating and marking Caltrans' facilities.

**3.03 PROTECTION**

- A. Locate, identify, and protect all utilities from damage, unless the utility has been identified for removal, and is ready to be removed.
- B. Protect all trees, plant growth, and features, unless designated for removal on the Drawings.



- C. Protect benchmarks, survey control points, and existing structures from damage or displacement.

**3.04 CLEARING**

- A. Clear areas required for access to site and execution of Work to minimum depth of 12 inches.
- B. Remove tree stumps and deleterious materials within work areas.
- C. Remove stumps, main root ball, surface rock, topsoil, and roots greater than 2-in diameter.
- D. Clear undergrowth and deadwood, without disturbing subsoil.

**3.05 REMOVAL**

- A. Remove debris, rock, and extracted plant life from site.
- B. Remove paving, curbs, and road surface.
- C. Remove abandoned utilities and facilities. Indicated removal termination point for underground utilities on Record Documents.
- D. Continuously clean-up and remove waste materials from site. Do not allow materials to accumulate on site.
- E. Do not burn or bury materials on site. Leave site in clean condition daily.

**END OF SECTION**

## **SECTION 312213 ROUGH GRADING**

### **PART 1 GENERAL**

#### **1.01 SUMMARY**

- A. Section Includes:
  - 1. Excavating subsoil.
  - 2. Cutting, grading, filling, rough contouring, and compacting site for a reservoir foundation and site paving.

#### **1.02 REFERENCES**

- A. ASTM International:
  - 1. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  - 2. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
  - 3. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

#### **1.03 SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit data and certificate of compliance for RECP, RECP fasteners, seed mixture, and mulch.

#### **1.04 CLOSEOUT SUBMITTALS**

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.
- B. Project Record Documents: Accurately record actual locations of utilities remaining by horizontal dimensions, elevations or inverts, and slope gradients.

#### **1.05 DEFINITIONS**

- A. Rock: Solid mineral material of size that cannot be removed with 1.0 cu yd bucket capacity excavator.
- B. Wherever reference is made to the State Specifications, such reference shall mean the State of California, Department of Transportation Standard Specifications, latest edition.
- C. Wherever reference is made to the SSPWC, such reference shall mean the Standard Specifications for Public Works Construction ("Greenbook"), latest edition.

#### **1.06 QUALITY ASSURANCE**

- A. Perform Work in accordance with SSPWC and State Specifications, as stated.

### **PART 2 PRODUCTS**

#### **2.01 MATERIALS**

- A. Topsoil: Type S4 or S5 as specified in Section 31 05 13.
- B. Subsoil Fill: Type S1 or S2 as specified in Section 31 05 13.
- C. Structural Fill: Type A1 as specified in Section 31 05 16.
- D. Granular Fill: Type A3 as specified in Section 31 05 16.
- E. Rolled Erosion Controlled Product (RECP): Type B Netting per State Specifications Section 21-2.02O(1) AND 21-2.02O(3)
- F. Fasteners: RECP Fasteners shall comply with 21-2.02R of the State Specifications.
- G. Seed: Erosion control seed shall comply with Section 21 of the State Specifications. Coordinate with Owner for seed mix.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify site conditions under provisions of Section 00 52 00 - Agreement.
- C. Verify survey bench mark and intended elevations for the Work are as indicated on Drawings.

### **3.02 PREPARATION**

- A. Call Underground Service Alert service at 811 not less than two working days before performing Work.
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Identify required lines, levels, contours, and datum.
- C. Protect utilities indicated to remain from damage.
- D. Protect plant life and other features remaining as portion of final landscaping.
- E. Protect bench marks, survey control points, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

### **3.03 SUBSOIL EXCAVATION**

- A. Excavate subsoil as required to meet final contours and elevations shown on Drawings.
- B. Do not excavate wet subsoil or excavate and process wet material to obtain optimum moisture content.
- C. When excavating through roots, perform Work by hand and cut roots with sharp axe.
- D. Remove excess subsoil not intended for reuse, from site.
- E. Stockpile excavated material in area approved by Owner, in accordance with Section 31 05 13.
- F. Benching Slopes: Horizontally bench existing slopes greater than 1: 4 to key placed fill material to slope to provide firm bearing. Bench in conformance with Section 300-4.4 if the SSPWC.
- G. Stability: Replace damaged or displaced subsoil as specified for fill.

### **3.04 FILLING**

- A. Fill areas to contours and elevations shown on Drawings with unfrozen materials.
- B. Place material in continuous layers as follows:
  - 1. Subsoil Fill: Maximum 8 inches compacted depth.
  - 2. Structural Fill: Maximum 8 inches compacted depth.
  - 3. Granular Fill: Maximum 8 inches compacted depth.
- C. Maintain optimum moisture content of fill materials to attain required compaction density.
- D. Make grade changes gradual. Blend slope into level areas.
- E. Repair or replace items indicated to remain which are damaged by excavation or filling.
- F. Install Work in accordance with County of San Bernardino standards.

### **3.05 TOPSOIL**

- 1. Cover disturbed areas not receiving pavement or equivalent finish, with a minimum of 2-in of top soil as previously removed and stockpiled in accordance with Section 31 10 00 - Site Clearing.
- 2. Place topsoil in conformance with Section 21 of the State Specifications.

### **3.06 ROCK REMOVAL BY MECHANICAL METHOD**

- A. Excavate and remove rock by mechanical method.
  - 1. Drill holes and use expansive tools or wedges to fracture rock. Blasting is not permitted.

- B. Cut away rock at bottom of excavation to form level bearing.
- C. Remove shaled layers to provide sound and unshattered base for pipelines and reservoir subbase.
- D. In utility trenches, excavate to 8 inches below invert elevation of pipe and 16 inches wider than pipe bell outside diameter.
- E. Remove excavated materials from site.
- F. Additional payment will not be made for removal of cobbles.

**3.07 EROSION CONTROL**

- A. Install erosion control netting in compliance with Section 21 of the State Specifications and Drawing H52 of the State Specifications.
- B. Plant seed in conformance with Section 21 of the State Specifications.

**3.08 TOLERANCES**

- A. Section 01 40 00 - Quality Requirements: Tolerances.
- B. Top Surface of Subgrade: Plus or minus 0.10 foot from required elevation.

**3.09 FIELD QUALITY CONTROL**

- A. Section 01 40 00 - Quality Requirements: Testing and Inspection Services.
- B. Owner will perform laboratory material tests.
- C. Owner will perform in place compaction tests
- D. When tests indicate Work does not meet specified requirements, remove Work, replace and retest.
- E. Cost of retesting will be borne by the Contractor.

**END OF SECTION**

## **SECTION 312317 TRENCHING**

### **PART 1 GENERAL**

#### **1.01 SUMMARY**

- A. Section Includes:
  - 1. Excavating trenches for utilities.
  - 2. Compacted fill from top of utility bedding to top of trench zone.
  - 3. Backfilling and compaction.

#### **1.02 REFERENCES**

- A. ASTM International:
  - 1. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.
  - 2. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  - 3. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
  - 4. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
  - 5. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

#### **1.03 DEFINITIONS**

- A. Utility: Any buried pipe, duct, conduit, or cable.

#### **1.04 SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Excavation Protection Plan: Describe sheeting, shoring, and bracing materials and installation required to protect excavations and adjacent structures and property; include structural calculations to support plan.
- C. Product Data: Submit data for geotextile fabric indicating fabric and construction.

#### **1.05 QUALITY ASSURANCE**

- A. Perform Work in accordance with AWWA Water Standards.

#### **1.06 QUALIFICATIONS**

- A. Prepare excavation protection plan in accordance with California OSHA requirements.

#### **1.07 FIELD MEASUREMENTS**

- A. Verify field measurements prior to fabrication.

#### **1.08 COORDINATION**

- A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.
- B. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.

### **PART 2 PRODUCTS**

#### **2.01 FILL MATERIALS**

- A. Pipe Zone: (pipe bedding and cover, also called pipe blanket) Fill Type A6 Sand, as specified in Section 31 05 16 - Aggregates for Earthwork or as shown on the Construction Drawings.
- B. Trench Zone: (soil backfill from above Pipe Zone to Street Zone)
  - 1. Soil Type S2 Native Material, as specified in Section 31 05 13 - Soils for Earthwork
  - 2. Soil Type S1 Select Import, as specified in Section 31 05 13 - Soils for Earthwork

- 3. Or as shown on the Construction Drawings
- C. Structural Zone:
  - 1. Per jurisdictional requirements

## **2.02 ACCESSORIES**

- A. Geotextile Fabric: AASHTO M288; non-woven, polypropylene.
  - 1. Mirafi 140N or equivalent.

## **PART 3 EXECUTION**

### **3.01 LINES AND GRADES**

- A. Lay pipes to lines and grades indicated on Drawings.
  - 1. Owner reserves right to make changes in lines, grades, and depths of utilities when changes are required for Project conditions.
- B. Use laser-beam instrument with qualified operator to establish lines and grades.

### **3.02 PREPARATION**

- A. Call Underground Service Alert service at 811 not less than two working days before performing Work.
  - 1. Request underground utilities to be located and marked within and surrounding construction areas.
- B. Identify required lines, levels, contours, and datum locations.
- C. Protect plant life and other features remaining as portion of final landscaping.
- D. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.
- E. Maintain and protect above and below grade utilities indicated to remain.
- F. Establish temporary traffic control and detours when trenching is performed in public right-of-way. Relocate controls and reroute traffic as required during progress of Work.

### **3.03 TRENCHING**

- A. Excavate subsoil required for utilities.
- B. Remove lumped subsoil, boulders, and rock up to 1 cubic yard, measured by volume. Remove larger material as specified in Section 31 22 13 – Rough Grading.
  - 1. If rock is removed from the trench in the pipe zone, double wrap the ductile iron pipe with polyethylene wrap per Section 33 11 13.
- C. Perform excavation within 24 inches of existing utility service in accordance with utility's requirements.
- D. Do not advance open trench more than 200 feet ahead of installed pipe.
- E. Cut trenches to width indicated on Drawings. Remove water or materials that interfere with Work.
- F. Excavate bottom of trenches maximum 2 feet wider than outside diameter of pipe.
- G. Excavate trenches to depth indicated on Drawings. Provide uniform and continuous bearing and support for bedding material and pipe.
- H. Do not interfere with 45 degree bearing splay of foundations.
- I. When Project conditions require it, provide sheeting and shoring to protect excavation as required by this section.
- J. When subsurface materials at bottom of trench are loose or soft, notify Engineer, and request instructions.
- K. Trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.

- L. Correct areas over excavated areas with compacted backfill as specified for authorized excavation or replace with fill concrete as directed by Engineer.
- M. Remove excess subsoil not intended for reuse, from site.
- N. Stockpile excavated material in area designated on site in accordance with Section 31 05 13.

#### **3.04 SHEETING AND SHORING**

- A. Sheet, shore, and brace excavations to prevent danger to persons, structures and adjacent properties and to prevent caving, erosion, and loss of surrounding subsoil.
- B. Support trenches more than 5 feet deep excavated through unstable, loose, or soft material. Provide sheeting, shoring, bracing, or other protection to maintain stability of excavation.
- C. Design sheeting and shoring to be removed at completion of excavation work.
- D. Repair damage caused by failure of the sheeting, shoring, or bracing and for settlement of filled excavations or adjacent soil.
- E. Repair damage caused by settlement, water or earth pressure or other causes resulting from inadequate sheeting, shoring, or bracing.

#### **3.05 BACKFILLING**

- A. Backfill trenches to contours and elevations with unfrozen fill materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.
- C. Wrap geotextile fabric around Fill Type A1 prior to placing subsequent fill materials.
- D. Place fill material in continuous layers and compact in accordance with Section 33 22 13 – Rough Grading.
- E. Employ placement method that does not disturb or damage, utilities in trench.
- F. Maintain optimum moisture content of fill materials to attain required compaction density.
- G. Do not leave more than 20 feet of trench open at end of working day.
- H. Protect open trench to prevent danger to the public.

#### **3.06 TOLERANCES**

- A. Section 01 40 00 - Quality Requirements: Tolerances.
- B. Top Surface of Backfilling Under Paved Areas: Plus or minus 1/4 inch from required elevations.
- C. Top Surface of General Backfilling (unpaved areas): Plus or minus 0.08 feet from required elevations.

#### **3.07 FIELD QUALITY CONTROL**

- A. Section 01 40 00 - Quality Requirements: Testing and Inspection Services.
- B. Owner will perform laboratory material tests.
- C. Owner will perform in place compaction tests.
- D. When tests indicate Work does not meet specified requirements, remove Work, replace, compact, and retest.
- E. Cost of retesting will be borne by the Contractor.

#### **3.08 PROTECTION OF FINISHED WORK**

- A. Section 01 70 00 - Execution and Closeout Requirements: Protecting finished work.
- B. Reshape and re-compact fills subjected to vehicular traffic during construction.

**END OF SECTION**

**SECTION 333400  
SANITARY UTILITY SEWAGE FORCE MAINS**

**PART 1 GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
1. Polyvinyl Chloride Pipe
  2. Ductile Iron Pipe
  3. Stainless Steel Pipe
  4. Mechanical and Push-on Restrained Joints
  5. Flanged Joints
  6. High Deflection Coupling
  7. Restrained Joint Coupling
  8. Combination Air Release and Vacuum Valve
  9. Polyethylene Encasements
  10. Underground Pipe Markers
  11. Bedding and Cover Materials

**1.02 REFERENCE STANDARDS**

- A. ASTM International:
1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)).
  2. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting
  3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  4. ASTM F1668 - Standard Guide for Construction Procedures for Buried Plastic Pipe
- B. American Water Works Association:
1. AWWA C104 - American National Standard for Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
  2. AWWA C105 - American National Standard for Polyethylene Encasement for Ductile- Iron Pipe and Fittings
  3. AWWA C110 - American National Standard for Ductile-Iron and Grey-Iron Fittings, 3 in. through 48 in. (75 mm through 1200 mm), for Water and Other Liquids.
  4. AWWA C111 - American National Standard for Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
  5. AWWA C115 - American National Standard for Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
  6. AWWA C151 - American National Standard for Ductile-Iron Pipe, Centrifugally Cast, for Water.
  7. AWWA C153 - American National Standard for Ductile-Iron Compact Fittings for Water Service.
  8. AWWA C605 - American National Standard for Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water
  9. AWWA C217 – American National Standard for Petrolatum and Petroleum Wax Tape Coating for the Exteriors of Connections and Fittings for Steel Water Pipelines.
  10. AWWA C900 - American National Standard for Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In., for Water Transmission and Distribution
- C. Ductile Iron Pipe Research Association:
1. DIPRA, Thrust Restraint Design for Ductile Iron Pipe, Seventh Edition.

**1.03 SUBMITTALS**

- A. Section 01 33 00 - Submittal Procedures: Submittal Procedures.



- B. Product Data: Submit data indicating pipe material used, pipe accessories, and restrained joint details and materials.

#### **1.04 QUALITY ASSURANCE**

- A. Perform Work in accordance with Section 01 40 00.

#### **1.05 CLOSEOUT SUBMITTALS**

- A. Section 01 70 00 - Execution and Closeout Requirements: Closeout Procedures.
- B. Project Record Documents: Record location of pipe runs, connections, and invert elevations.

#### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Do not place materials on private property without written permission of property owner.
- B. During loading, transporting and unloading, exercise care to prevent damage to materials.
- C. Do not drop pipe or fittings.
- D. Avoid shock or damage to pipe.
- E. Take measures to prevent damage to exterior surface or internal lining of pipe.
- F. Do not stack pipe higher than recommended by pipe manufacturer.
- G. Store gaskets for mechanical and push-on joints in cool, dry location out of direct sunlight and not in contact with petroleum products.

#### **1.07 EXISTING CONDITIONS**

- A. Verify field measurements prior to fabrication. Indicate field measurements on shop drawings.

### **PART 2 - PRODUCTS**

#### **2.01 POLYVINYL CHLORIDE (PVC) PIPE**

- A. General
  - 1. PVC pipe furnished and installed under these Specifications shall conform to applicable AWWA Standards (latest), as modified herein, by the Drawings, or the Owner.
- B. Pipe
  - 1. PVC pipe shall meet AWWA C900, minimum Pressure Class 305 (DR-18) unless specified or shown on the Drawings.
  - 2. PVC barrel dimensions shall be cast-iron outside diameter (CIOD).
  - 3. Standard lengths of pipe shall have a nominal length of 20 feet, or 18 feet plus or minus 1 inch. Standard lengths of pipe shall be furnished with integral bells and spigots and with rubber gaskets.
  - 4. PVC pipe for sewer force mains shall be green in color.
  - 5. Manufacturers shall be:
    - a. JM Eagle
    - b. Diamond Plastics
    - c. Or equal
- C. Fittings
  - 1. All Fittings shall be constructed of ductile iron (DI). Fittings shall conform to AWWA C153 (compact) or AWWA C110 (full body). Pressure class of fittings shall be pressure class 350 for 4 -24 inches unless specified or shown on the Drawings.
  - 2. Linings - See section 2.02A.2 linings herein.
  - 3. Coatings - See section 2.02A.3 coatings herein.
  - 4. Encasements - See section 2.09 coatings herein.
  - 5. Manufacturers shall be:
    - a. Tyler Union
    - b. McWane
    - c. US Pipe
    - d. Or equal

## 2.02 DUCTILE IRON PIPE (DIP)

- A. Pipe
  - 1. Ductile Iron Pipe – 3-inch through 24-inch: AWWA C151. Pressure rating: 350 psi (3 inches through 12 inches) and 250 psi (14 inches through 24 inches).
  - 2. Linings - All ductile iron force main piping, valves, and fittings shall be **U.S. Pipe Protecto 401 Ceramic Epoxy lining**, or approved equal. Ductile iron pipe lining shall be shop-applied in accordance with the manufacturer's recommendations.
  - 3. Coatings - Unless otherwise specified, buried ductile iron pipe shall be coated with a bituminous coating in accordance with AWWA C151 and encased in polyethylene encasement as specified herein. buried ductile iron fittings shall be coated with bituminous coating per AWWA C110 and encased in polyethylene encasement as specified herein.
  - 4. Gaskets - Rubber gasket joints for ductile iron pipe and fittings shall be styrene butadiene rubber, ethylene propylene rubber, or chloroprene, in accordance with AWWA C111.
  - 5. Manufacturers shall be:
    - a. McWane
    - b. US Pipe
    - c. Or Equal
- B. Fittings
  - 1. All Fittings shall be constructed of ductile iron (DI). Fittings shall conform to AWWA C153 (compact) or AWWA C110 (full body). Pressure class of fittings shall be pressure class 350 for 4 -24 inches unless specified or shown on the Drawings.
  - 2. Lining, coating, encasements, and gaskets shall be as specified for Ductile Iron Pipe herein.
  - 3. Manufacturers shall be:
    - a. Tyler Union
    - b. McWane
    - c. US Pipe
    - d. Or Equal

## 2.03 STAINLESS STEEL PIPE

- A. Stainless Steel Pipe
  - 1. Stainless steel pipe shall be seamless and conform to ASTM A312, with dimensions per ASME B36.19.
  - 2. Stainless steel pipe 3 inches and smaller shall have threads conforming to ASME B1.20.1.
  - 3. Stainless steel pipe shall be Type 304 or Type 316 as specified.
  - 4. Pipe thickness shall be Schedule 40S.
- B. Stainless Steel Fittings
  - 1. Threaded stainless steel fittings shall be forged or rolled alloy in accordance with ASTM A182.
  - 2. Threads shall be per ASME B1.20.1 pipe threads.
  - 3. Joining material between pipe and fittings shall be installed with Teflon tape (PTFE).

## 2.04 MECHANICAL AND PUSH-ON RESTRAINED JOINTS

- A. Mechanical and Push-On Joints (restrained and unrestrained) shall conform to AWWA C111.
- B. All restrained mechanical joints shall be restrained with the appropriate restraint series and accessories as manufactured by EBBA Iron, Inc. or Romac Industries, Inc. or approved equal.

## 2.05 FLANGED JOINTS

- A. Flanged Joints shall conform to AWWA C115.
- B. All flanged joints shall be furnished with a 1/8-inch, thick red rubber or styrene-butadiene rubber gasket.

- C. Bolts shall have American Standard heavy unfinished hexagonal head and nut dimensions as specified in ANSI B18.2.
- D. All flanged joints shall be wrapped with wax tape coating system in accordance with AWWA C127. Primer thickness shall no less than 3 mils and wax tape thickness shall be no less than 40 mils.

## **2.06 HIGH DEFLECTION COUPLING**

- A. High-deflection coupling shall be capable of restraining plastic, metal, and HDPE pipe.
- B. High-deflection coupling shall allow dynamic deflection of the pipe for up to 2° per side, reducing future pipe cracks and breaks.
- C. Body Material: Ductile iron casting ASTM A536 Grade 65-45-12.
- D. Gaskets: EPDM compounded for water and sewage in accordance with ASTM D2000, meets international standards for contact with drinking water.
- E. Coating: Fusion-bonded epoxy with an average thickness of 14 mm and meets AWWA C116.
- F. Bolts, Nuts, and Washers: AISI 304 stainless steel. Rolled thread and anti galling coating. ASTM F593, ASTM F594, ASTM A240 respectively.
- G. Working pressure: 250 psi minimum.
- H. High Deflection Coupling shall be Romac Alpha XL or Hymax Grip large diameter meeting AWWA C219, or approved equal.

## **2.07 RESTRAINED JOINT COUPLING**

- A. Joint Restraint to prevent axial separation shall be incorporated into the design of the sleeve or coupling used to connect two plain pipe ends. The restraint mechanism shall consist of a plurality of individual actuated gripping surfaces to maximize restraint capabilities. The restrained joining system shall meet the applicable requirements of AWWA C219, ANSI/AWWA C111/A21.11, and ASTM D2000. The restrained joining system shall be the EBAA Iron Series 3800 or approved equal.
- B. Material: Ductile Iron components shall be of a minimum of 65-45-12 ductile iron meeting the requirements of ASTM A536 of the latest revision and shall be tested in accordance with the stated standard.
- C. Coating: devices shall be coated using MEGABOND or equal.

## **2.08 COMBINATION AIR RELEASE AND VACUUM VALVE**

- A. The Sewage Air Release & Vacuum Break Valve shall consist of a single chamber stainless steel body, stainless steel direct acting float, solid small orifice top float and "Anti-Surge" float in H.D.P.E. - A stainless steel nozzle, stainless steel top cap and E.P.D.M. rubber seals and seat (stainless steel trim).
- B. The valve shall have an integral "Anti-Surge" Orifice mechanism which shall limit transient pressure rise or shock induced by closure to less than 1.5 x valve-rated working pressure, however, must open to the full diameter of the valve size during a negative pressure.
- C. The intake orifice area shall be equal to the nominal size of the valve i.e., a 150mm (6") valve shall have a 150mm (6") intake orifice. Large orifice sealing shall be effected by the flat face of the anti-surge control float seating against an E.P.D.M. rubber 'O' ring housed in a dovetail groove circumferentially surrounding the orifice. Discharge of pressurized air shall be controlled by the seating & unseating of a small orifice nozzle on an E.P.D.M. rubber seal affixed into the float. The nozzle shall have a flat seating land surrounding the orifice so that damage to the rubber seal is prevented.
- D. The valve construction shall be proportioned with regard to material strength characteristics, so that deformation, leaking or damage of any kind does not occur by submission to 1.5 times the designed working pressure. Connection to the valve inlet shall be facilitated by flanged ends conforming to ANSI B16.5 Class 150 and Screwed NPT. Flanged ends shall be supplied drilled

to the Specified Standard.

- E. Air release and vacuum valve shall be Vent-O-Mat Model 050-RGXII-10-2-1-S6 or Approved Equal
- F. See Drawings for sizes and connection types.
- G. Nuts and Bolts:
  - 1. All fittings and joints shall utilize 316 stainless steel bolts and nuts, and shall have anti-seize applied to the threads during installation.

## **2.09 POLYETHYLENE ENCASEMENTS**

- A. Unless specified otherwise, all below-grade fittings, restraints, and valves shall be encased with 8 mils (minimum) polyethylene per AWWA C105.

## **2.10 UNDERGROUND PIPE MARKERS**

- A. Plastic Ribbon Tape:
  - 1. Manufacturer List:
    - a. Pipemarker.com; Brimar Industries
    - b. Kolbi Pipe Marker Co.
    - c. Substitutions: Section 01 60 00 - Product Requirements.
  - 2. Brightly colored, continuously printed with "sewer" and colored green for sewer service.
  - 3. Minimum 6 inches wide by 4 mil thick.
  - 4. Manufactured for direct burial service.
- B. Trace Wire:
  - 1. Electronic detection materials for all piping products.
  - 2. 12 awg insulated solid copper clad steel core tracer wire with minimum 30 mil HDPE insulation coating.
    - a. Color shall be green for sewer service.
    - b. Break strength shall exceed 450-lbs.
    - c. Copperhead 1230-HS or equal.
    - d. Tape trace wire to pipe.

## **2.11 BEDDING AND COVER MATERIALS**

- A. Refer to Section 31 23 17 for trench backfill requirements

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A. Section 01 70 00 - Execution and Closeout Requirements: Examination.
- B. Verify existing sanitary utility sewage force main size, location, and inverts are as indicated on Drawings.

### **3.02 PREPARATION**

- A. Section 01 70 00 - Execution and Closeout Requirements: Preparation.
- B. Preconstruction Site Photos:
  - 1. Take photographs along centerline of the proposed pipe trench along each segment. Photographs of each pipeline spool removed and
  - 2. Show existing Site features including but not limited to vaults and concrete pads.
  - 3. Include Project description, date taken, and sequential number on back of each photograph.
- C. Cut pipe ends square, ream pipe and tube ends to full pipe diameter, remove burrs. Use only equipment specifically designed for pipe cutting. The use of chisels or hand saws is not
  - 1. permitted. Grind edges smooth with beveled end for push-on connections.
- D. Remove scale and dirt on inside and outside before assembly.
- E. Prepare pipe connections to equipment with flanges or unions.

### **3.03 BEDDING**

- A. Excavate pipe trench as specified in Section 31 23 17 for Work of this Section. Hand trim excavation for accurate placement of pipe to elevations indicated on Drawings.
- B. Provide sheeting and shoring as specified in Section 31 23 17.
- C. Dewater excavations to maintain dry conditions and preserve final grades at bottom of excavation.

### **3.04 INSTALLATION - PIPE**

- A. Pipe
  - 1. Install buried ductile iron according to AWWA C600 and PVC pipe according to AWWA C605.
  - 2. Handle and assemble pipe according to manufacturer's instructions and as indicated on Drawings.
  - 3. Contractor to obtain the desired horizontal and vertical alignment by use of fittings or bending the pipe per the manufacturers' recommendations for maximum deflection. Do not bend the pipe with machinery. Protect the joint from offset while bending the pipe. If bending the pipe within the manufacturers' recommendation is inadequate to meet the required alignment Contractor shall use fittings or high deflection couplings, as applicable.
  - 4. Pipe shall only be bent in conformance with City standards and limitations on minimum allowable radius.
  - 5. Maintain 10 feet horizontal separation of water main from sewer piping according to Division of Drinking Water requirements. Sewer main piping must be a minimum of 1 foot vertically below water main according to Division of Drinking Water requirements. Where these separation requirements cannot be reasonably met, consult with Engineer.
  - 6. Install pipe to match existing force main invert to within tolerance of 5/8 inches.
  - 7. Install pipe with no high points, unless shown on the drawings. If unforeseen field conditions arise that necessitate high points, install air release valves as directed by Engineer.
  - 8. Install pipe to have bearing along entire length of pipe. Excavate bell holes to permit proper joint installation. Do not lay pipe in wet or frozen trench.
  - 9. Prevent foreign material from entering pipe during placement.
  - 10. Install pipe to allow for expansion and contraction without stressing pipe or joints.
  - 11. Close pipe openings with watertight plugs during Work stoppages.
  - 12. Install plastic ribbon tape continuous buried 12 inches above pipe line; as specified in Section 31 23 17 - Trenching.
  - 13. Install detectable warning tape 12 inches below finish grade, or between aggregate base course and subgrade in paved areas.

### **3.05 COMBINATION AIR RELEASE AND VACUUM VALVE**

- A. The Sewage Air Release & Vacuum Break Valve shall be installed plumb and in accordance with the manufacturer's recommendation.

### **3.06 POLYETHYLENE ENCASEMENT**

- A. All buried Ductile Iron pipe, fittings, and buried valves shall be encased with loose polyethylene film, unless otherwise stated on the plans.
- B. Install according to AWWA C105.
- C. Terminate encasement 3 to 6 inches aboveground where pipe is exposed.
- D. Polyethylene encasement shall be colored green for sanitary sewer force mains.

### **3.07 INSTALLATION - THRUST RESTRAINT**

- A. Joint restraint shall be provided at all bends, valves, tees, caps and plugs in the sewer force main. For buried force main pipe, mechanical joint restraint shall be used unless the drawings show thrust blocks or collars, or as allowed otherwise by the Engineer.

- B. Concrete thrust blocks shall be sized according to the details on the plans.
- C. Pour concrete thrust blocks against undisturbed earth.
- D. Restrained Joint Adapter shall be in accordance with the manufacturer's instructions.

**3.08 BACKFILLING**

- A. Backfill around sides and to top of pipe as specified in Section 31 23 17.
- B. Maintain optimum moisture content of bedding material to attain required compaction density.

**3.09 UNDERGROUND PIPE MARKERS**

- A. Warning tape shall be placed in the trench with force main pipe. Depth shall be per paragraph 3.04.
- B. Tracer wire shall be pulled into each valve box and cleanout/manhole vault and terminated with wire nuts.

**3.10 FIELD QUALITY CONTROL**

- A. Pressure Test System according to AWWA C600 or AWWA C605.
  - 1. Hydrostatic test pressure: 120 psig
  - 2. Test all piping and valves.
  - 3. Slowly fill pipe segments to be tested with water at a flow rate of approximately 1 fps to slowly expel air from piping at high points and segment ends.
  - 4. Owner representative shall be onsite to witness hydrostatic testing.
- B. Contractor shall compaction test for bedding and backfill in accordance with ASTM D1557.
- C. When tests indicate Work does not meet specified requirements, remove Work, replace, and retest at the Contractor's cost.

**END OF SECTION**

**APPENDIX A  
FORCE MAIN PROJECT  
DRAWINGS**

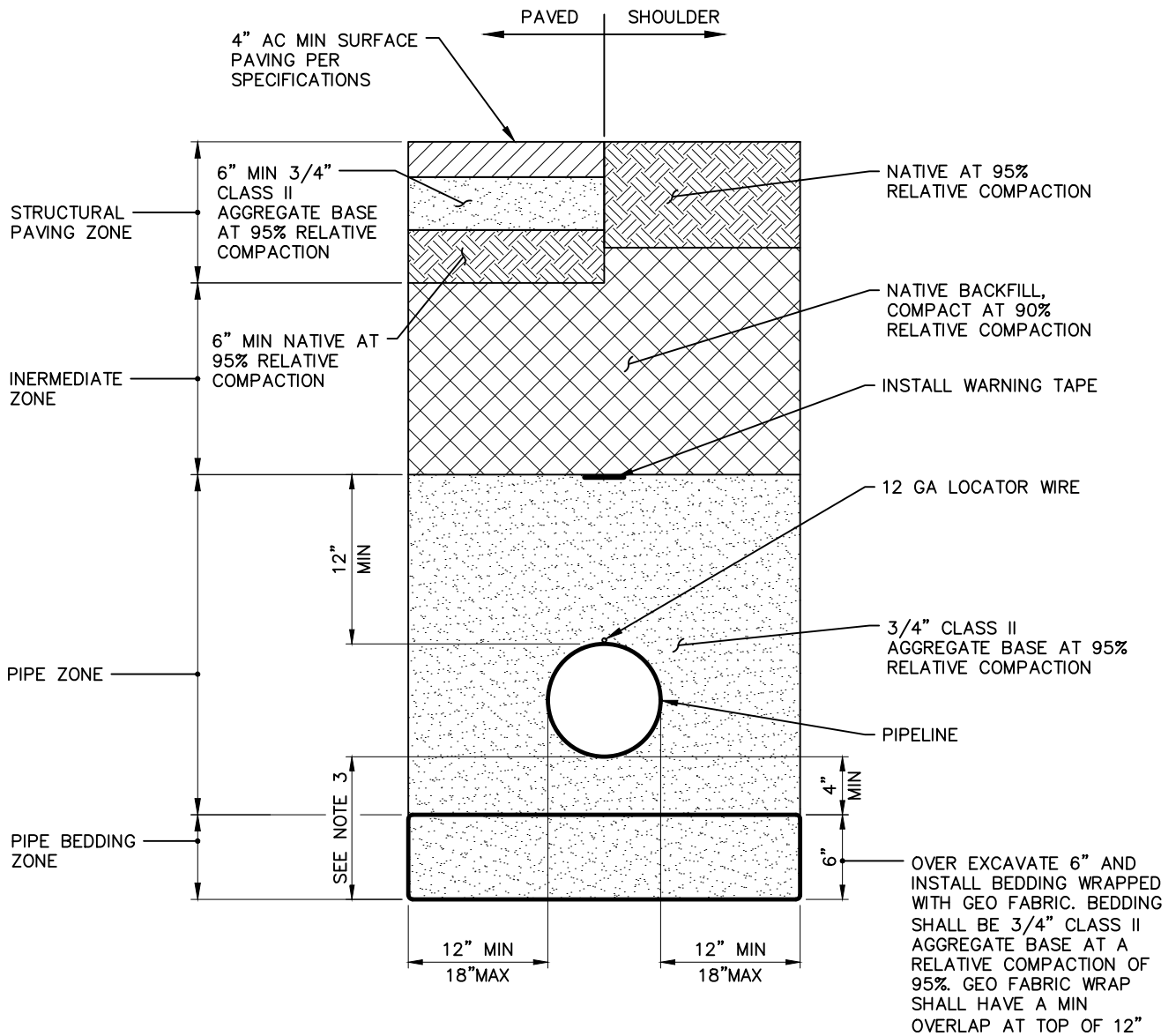






**APPENDIX B  
CONSTRUCTION  
DETAILS**

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**NOTES:**

1. IF UNSUITABLE NATIVE MATERIAL IS ENCOUNTERED BY THE INSPECTOR, BACKFILL WITH IMPORTED SAND WITH A SE OF 30 OR GREATER.
2. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING DISPOSAL OF CONTAMINATED SOIL BEFORE HAULING TO THEIR FACILITY.
3. OVER EXCAVATE 10" BELOW EXISTING 16" DIP FORCE MAIN. SOIL CONTAMINATED WITH SEWAGE SHALL BE DISPOSED OF AT THE OWNER'S WASTEWATER TREATMENT FACILITY.

Designed:	PLM
Drawn:	MAH
Checked:	CGD
Date:	10/24/24

Prepared for:



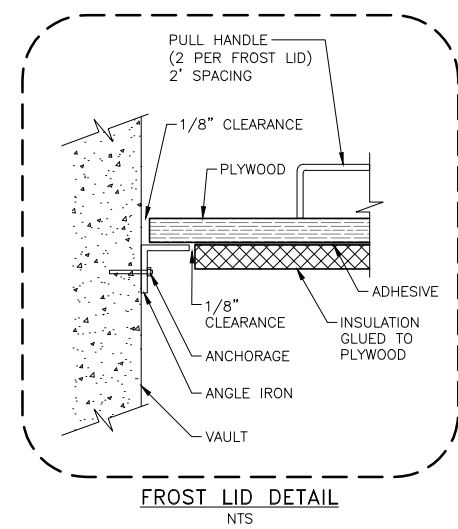
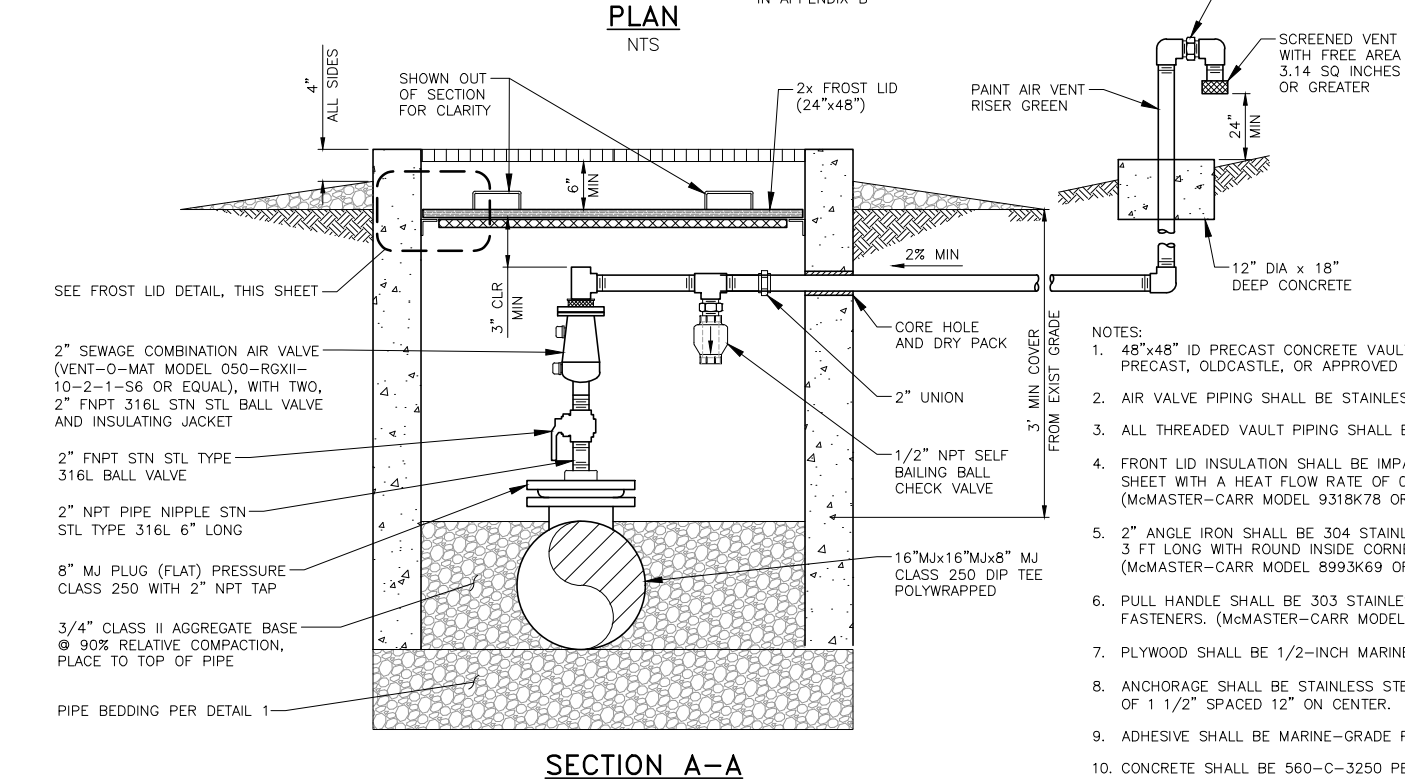
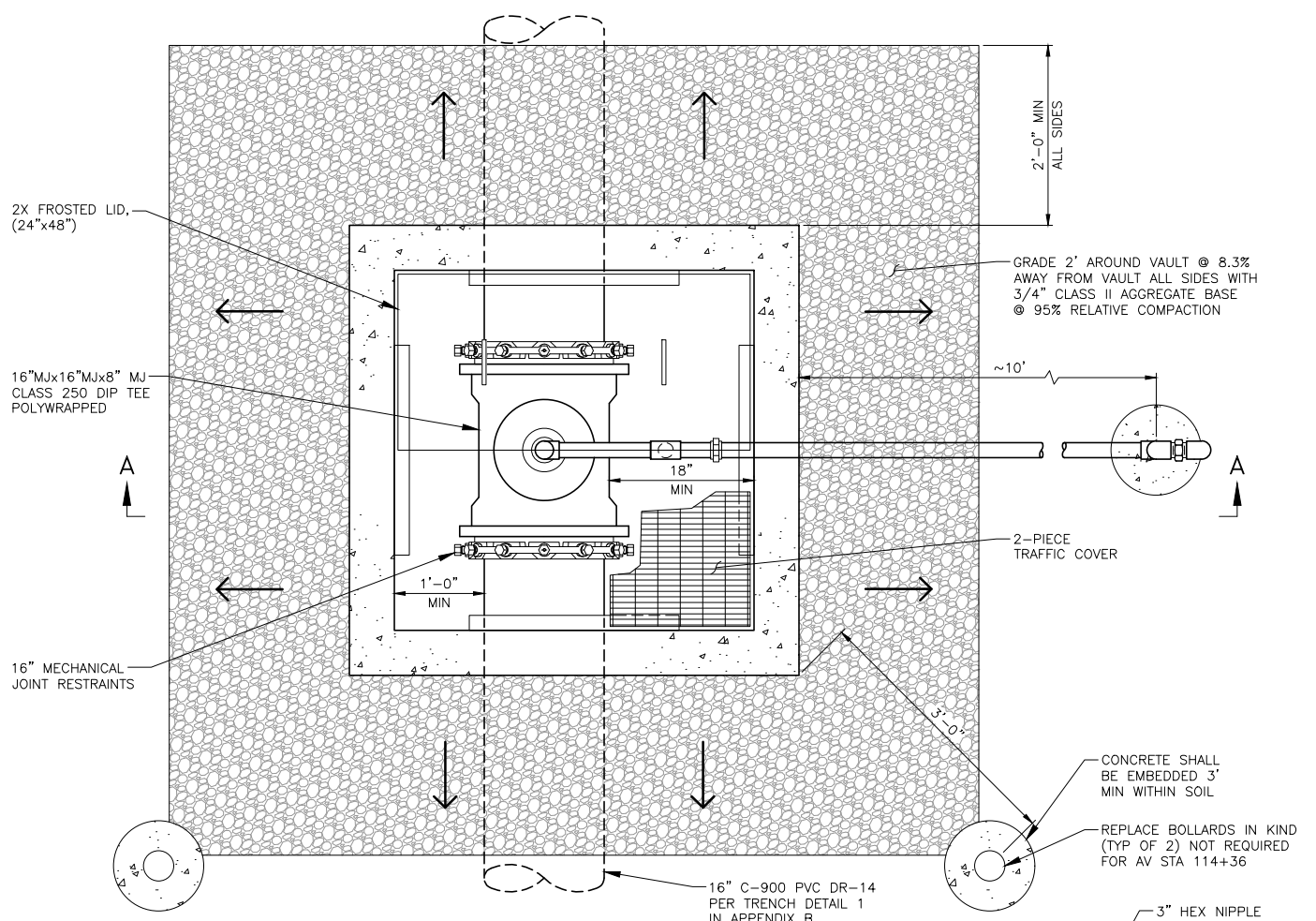
**APPENDIX B**  
**PIPE TRENCH DETAIL**



DETAIL: **1**



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- NOTES:
- 48"x48" ID PRECAST CONCRETE VAULT WITH 2-PIECE HS-20 RATED TRAFFIC COVER. JENSEN PRECAST, OLDCASTLE, OR APPROVED EQUAL.
  - AIR VALVE PIPING SHALL BE STAINLESS STEEL TYPE 316.
  - ALL THREADED VAULT PIPING SHALL BE WRAPPED WITH INSULATING FOAM.
  - FRONT LID INSULATION SHALL BE IMPACT RESISTANT RIGID PVC FOAM (CLOSED CELL) INSULATION SHEET WITH A HEAT FLOW RATE OF 0.22 BTU @ 75° F AND DENSITY OF 3 LBS/CU FT, (McMASTER-CARR MODEL 9318K78 OR EQUAL).
  - 2" ANGLE IRON SHALL BE 304 STAINLESS STEEL PER ASTM A276, 2" HIGH x 2" WIDE x 1/4" THICK, 3 FT LONG WITH ROUND INSIDE CORNERS. ANGLE SHALL BE INSTALLED ON ALL FOUR SIDES. (McMASTER-CARR MODEL 8993K69 OR EQUAL)
  - PULL HANDLE SHALL BE 303 STAINLESS STEEL-DULL, 6" WITH THREADED STUD PULL HANDLES AND FASTENERS. (McMASTER-CARR MODEL 11665A32 OR EQUAL)
  - PLYWOOD SHALL BE 1/2-INCH MARINE GRADE PER BS 1088.
  - ANCHORAGE SHALL BE STAINLESS STEEL WEDGE TYPE 1/4" DIAMETER WITH A MINIMUM EMBEDMENT OF 1 1/2" SPACED 12" ON CENTER.
  - ADHESIVE SHALL BE MARINE-GRADE POLYURETHANE 3M MARINE ADHESIVE SEALANT 5200 OR EQUAL.
  - CONCRETE SHALL BE 560-C-3250 PER GREENBOOK STANDARD SPECIFICATIONS FOR PUBLIC WORKS.



STA 103+56 - 2" SEWAGE COMBINATION VALVE LOCATION  
PHOTO 1



STA 114+36 - 2" SEWAGE COMBINATION VALVE LOCATION  
PHOTO 2



Designed: PLM  
 Drawn: MAH  
 Checked: CGD  
 Date: 1/10/25

Prepared for:



APPENDIX B  
 2" SEWER COMBINATION  
 AIR VALVE

SCALE:  
 NTS  
 DETAIL:  
 2



**APPENDIX C  
ENCROACHMENT  
PERMIT**

**ENCROACHMENT PERMIT**

DOT TR-0120 (REV 05/2023)

Permit No.  
08-24-N-UE-0926In compliance with your application of July 29, 2024Dist/Co/Rte/PM  
08/SBD/18/PM 52.5-Var

## Reference Documents:

- Utility Notice No. \_\_\_\_\_ of \_\_\_\_\_
- Agreement No. \_\_\_\_\_ of \_\_\_\_\_
- R/W Contract No. \_\_\_\_\_ of \_\_\_\_\_
- Project code (ID): \_\_\_\_\_ CFC #: \_\_\_\_\_
- Applicant's Reference/ Utility Work Order No. N/A

Permit Approval Date  
July 30, 2024

Performance Bond Amount (1)	Payment Bond Amount (2)
\$0	\$0

Bond Company  
\$ N/A

Bond Number (1)	Bond Number (2)
\$ N/A	\$ N/A

TO: Big Bear Area Regional Wastewater Agency  
Attn: David Lawrence  
121 Palomino Dr., P.O. Box 517  
Big Bear, CA 92314  
(909)584-4521

, PERMITEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:

Enter onto various conventional state highways right-of-way in the County of San Bernardino for the purpose of performing routine maintenance and emergency repairs on existing Wastewater Facilities within the City of Big Bear as per permit application date stamped July 15, 2024, by California Department of Transportation, Caltrans, District 8 Encroachment Permits Office.

WORK IS PROHIBITED ON FREEWAYS AND EXPRESSWAYS UNDER THIS PERMIT.

All work and traffic control shall be in conformance with the Caltrans 2023 Standard Plans, Standard Specifications, and the 2014 California MUTCD; and/or to the satisfaction of the Caltrans' Representative.

A pre-job meeting with the assigned Caltrans Representative, Alireza Amirazodi (213) 317-0227, is required at least 7 days prior to start of any work under this permit. Failure to do so may result in permit revocation with no prejudice.

**THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.**

The following attachments are also included as part of this permit (check applicable):

- YES  NO General Provisions
- YES  NO Utility Maintenance Provisions
- YES  NO Storm Water Special Provisions
- YES  NO Special Provisions
- YES  NO A Cal-OSHA Permit, if required: Permit No. \_\_\_\_\_
- YES  NO As-Built Plans Submittal Route Slip for Locally Advertised Projects
- YES  NO Storm Water Pollution Protection Plan

In addition to fee, the permittee will be billed actual costs for:

- YES  NO Review
- YES  NO Inspection
- YES Field Work  
(if any Caltrans effort expended)

**As-built Plans are Required**

- YES  NO

- YES  NO The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before July 28, 2025

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.


No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

CC:  
#1: George Mikaeil  
#2: ALIREZA AMIRAZODI  
#3: SOY GALLEGOS  
#4:

APPROVED:

Catalino A. Pining III, District Director

BY

  
Jiaqian Li (Jul 30, 2024 17:00 PDT)

JIAQIAN LI, District Permit Engineer

**ADA Notice**

This document is available in alternative accessible formats. For more information, please contact the Forms Management Unit at (279) 234-2284, TTY 711, in writing at Forms Management Unit, 1120 N Street, MS-89, Sacramento, CA 95814, or by email at Forms.Management.Unit@dot.ca.gov.

In addition to the attached General Provisions, the following checked special provisions are applicable:

A PRE-JOB MEETING WITH THE ASSIGNED CALTRANS REPRESENTATIVE,  AT LEAST 7 DAYS IS REQUIRED PRIOR TO START OF ANY WORK UNDER THIS PERMIT. FAILURE TO DO SO WILL RESULT IN PERMIT CANCELLATION AND RESUBMITTAL MAY BE REQUIRED.

You are required to submit an approved Storm Water Pollution Prevention Plan (SWPPP) for projects with a cumulative disturbed soil area equal or greater than 1 acre, and an approved Water Pollution Control Program (WPCP) for projects with a disturbed soil area less than 1 acre, unless otherwise required by other agencies (RWQCBs, U.S. Army Corps of Engineers, Department of Fish and Game, etc.).

Upon the expiration of this permit, the Permittee is required to apply for the countywide annual maintenance permit for this new facilities installed under the Permit No.: .

The Permittee is required to apply for a separate permit to maintain and/or replace in kind of these facilities on each occurrence upon the expiration of this permit.

The Permittee shall provide the stage construction traffic handling plans, work schedule and a list of all sub-contractors to the Department's Representative at the time of the pre-construction meeting or prior to start construction.

All traffic control, signing and striping shall comply with California MUTCD 2014. It is available at: [http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca\\_mutcd.htm](http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca_mutcd.htm)

Permittee and his/her contractors shall comply with Department  Standard Specifications, Department  Standard Plans, and all the latest revisions implemented as of this permit issued date, and the project specific special provisions for Oversight Projects and Streamlined Oversight Projects. It is the responsibility of the permittee and his/her contractors to verify with the Department Standard Plans, Standard Specifications, and all the latest revisions as of this permit issued date before ordering any materials for the project within the Department Right-Of-Way. The Department Standard Plans, Standard Specifications, and the Revisions are available at: <http://www.dot.ca.gov/hq/esc/oe/standards.php>

Permittee and/or permittee's authorized contractor/agent are required and responsible to identify the Department's underground electrical systems before performing any excavation work within the right of way.

All personnel shall wear hard hats and ANSI class II / III garments as appropriate while on State property.

The Permittee's work shall be subordinated to any operations which the Department may conduct and shall not delay, nor interfere with the Department's Forces or Department's Contractors.

Attention is directed to Standard Specifications Section 7-1.11, Preservation of Property, and Business and

Professions Code, Section 8771. The Permittee shall physically inspect the work site and locate survey monuments prior to work commencement. Monuments shall be referenced or reset in accordance with the Business and Professions Code.

Except for installing, maintaining and removing traffic control devices, any work encroaching within 3 feet of the edge of a traffic lane for areas with a posted speed limit below 45mph, or 6 feet of the edge of a traffic lane, for areas with a speed limit posted at 45mph or higher, shall require closing of the adjacent traffic lane.

Permittee shall notify the Department's Representative, and obtain approval of, all traffic control, lane closures or detours, at least seven (7) WORKING DAYS prior to setting up of any traffic control.

No lane may be closed or obstructed at any time unless specifically allowed per the encroachment permit, shown in approved traffic control plans, and/or as directed by the Department's Representative.

Traffic control is generally authorized between 9:00 AM and 3:00 PM only on Monday through Thursday and until 1:00 PM on Fridays, excluding holidays except specified in the Permit. Lane closure is not allowed on Saturdays, Sundays and designated holidays. The designated holidays are: January 1st, the third Monday in January, the second and third Mondays in February, March 31, the last Monday in May, July 4th, the first Monday in September, the second Monday in October, November 11th, Thanksgiving Day, the day after Thanksgiving Day, and December 25th. When a fixed holiday falls on Saturday, the preceding Friday shall be designated as holiday.

Should any deviation from these procedures or conditions be observed, all work shall be suspended until satisfactory steps have been taken to ensure compliance.

If time extension is necessary, a request for time extension and the accompanying attachments must be made a minimum of two (2) weeks prior to completion date stated on face of permit. If work has not been started before completion date, the permit will be voided. Failure to comply with rules and regulations stated on permit will jeopardize future permit privileges.

"AS-BUILT" PLANS ARE REQUIRED UPON COMPLETION OF ALL WORK. PLEASE REFER TO THE GENERAL PROVISION TR-0045, ITEM 22 FOR THE "AS-BUILT" REQUIREMENTS. NO FINAL INSPECTION WILL BE PERFORMED UNTIL THE DEPARTMENT IS IN RECEIPT OF "AS-BUILT" PLANS.

No vehicle or equipment shall be stored overnight within the right of way; it shall be removed immediately at the completion of the day's work. Refueling of vehicle or equipment within the right of way is strictly prohibited.

Required traffic control devices shall be installed around fixed objects to warn the motoring public for safety. Personal vehicles of the contractor shall not be parked within freeway right of way.

No materials or waste shall be stockpiled within State right of way.

Except as specifically provided herein, all requirements of the Vehicle Code and other applicable laws must be complied with in all particulars.

When traffic cones or delineators are used to delineate a temporary edge of traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane. The permittee shall not reduce the width of the existing lane to less than 10 feet without written approval from the Department's Representative.

Excavations made within the limits of the right of way shall be backfilled and resurfaced to original condition

before leaving the work area unless otherwise authorized by the Department's Representative.

All trenches repair shall comply with ENCROACHMENT PERMIT TRENCH DETAIL, TR-0153 or to the satisfaction of the Department's Representative.

Permittee shall be responsible for arranging the services of a qualified traffic control contractor to provide any needed traffic control.

The permittee shall arrange a meeting between his field representative, traffic control contractor, Department's Representative and/or CHP at least two (2) weeks prior to start of any work covered under this permit to arrange date and time of starting work and determine appropriate methods of handling traffic. At least 3 working days notice shall be given to the Caltrans representative and/or the CHP, prior to the meeting to allow time to arrange for attendance.

A copy of this permit, complete with all attachments, shall be kept by permittee/contractor working under this permit and must be shown to the Department Permit Inspector, Department's Representatives, or Law Enforcement Officer, on demand.

The permittee shall be responsible for notifying the appropriate utility companies or underground service alert prior to any excavation work.

The permittee shall notify the California Highway Patrol Area Commander at least 72 hours prior to implementing traffic control.

When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined and shown on the approved permit plan.

Pedestrian walkways and canopies within State Right of Way shall comply with the requirements of the applicable local agency or of the latest edition of the Uniform Building Code whichever contains the higher standards.

[For City or County projects with utility relocations:]

If existing public or private utilities conflict with the construction PROJECT, PERMITTEE will make necessary arrangements with the owners of such utilities for their protection, relocation, or removal. PERMITTEE shall inspect the protection, relocation, or removal of such facilities. Total costs of such protection, relocation, or removal which STATE or PERMITTEE must legally pay, will be borne by PERMITTEE. If any protection, relocation, or removal of utilities is required, including determination of liability for cost, such work shall be performed in accordance with STATE policy and procedure. PERMITTEE shall require any utility company performing relocation work in the STATE's right-of-way to obtain a State Encroachment Permit before the performance of said relocation work. Any relocated utilities shall be correctly located and identified on the as-built plans.

[For other projects with utility relocations:]

If existing public or private utilities conflict with the construction PROJECT, PERMITTEE will make necessary arrangements with the owners of such utilities for their protection, relocation, or removal. PERMITTEE shall inspect the protection, relocation, or removal of such facilities. Total costs of such protection, relocation, or



removal shall be borne by PERMITTEE in compliance with the terms of the Highway Encroachment Permits, Case Law, Public Utility Regulations, and Property Rights. PERMITTEE shall require any utility company performing relocation work in the STATE's right-of-way to obtain a State Encroachment Permit before the performance of said relocation work. Any relocated utilities shall be correctly located and identified on the as-built plans.

- Submit Contractor(s) Authorization form, TR-0429 prior to any construction activity.
- Submit contractor's copy of bonds with the local agency prior to any construction activity.
- Submit contractor's certificate of liability insurance prior to any construction activity. The certificate shall name Caltrans as additional insured with the statement: "The State of California, the California Department of Transportation, the directors, officers, employees, and/or agents of the State of California and/or the California Department of Transportation" are named additional insureds for purposes of an Encroachment Permit.
- Permittee must reuse the soil within the work limits in the immediate area from which it was excavated. If any excess soil is generated, it becomes the property of the permittee. Permittee must transport all excess soil outside of Caltrans' right-of-way, and dispose of it in accordance with all applicable environmental laws and regulations (Refer to Form, TR-0408).
- Work includes replacement of signal loop detectors (not additional signal work)**  
Loop detector sensor units for inductive detector loop installation will be State-furnished in conformance with the provisions in "Materials" of these special provisions. Loop wire shall be Type 2. Loop detector lead-in cable shall be Type B. Slots shall be filled with hot-melt rubberized asphalt sealant. At the Contractor's option, where a Type A or a Type B loop is designated on the plans, a Type E loop may be substituted. For Type E detector loops, sides of the slot shall be vertical and the minimum radius of the slot entering and leaving the circular part of the loop shall be 40 mm. Slot width shall be a maximum of 20 mm. Loop wire for circular loops shall be Type 2. Slots of circular loops shall be filled with hot melt rubberized asphalt sealant. Splices shall be insulated by "Method B" or, at the Contractor's option, splices of conductors shall be insulated with heat-shrink tubing of the appropriate size after thoroughly painting the spliced conductors with electrical insulating coating. The minimum insulation thickness, at any point, for Type USE, RHH or RHW wire shall be 1.0 mm for conductor sizes No. 14 to No. 10, inclusive, and 1.3 mm for No. 8 to No. 2, inclusive. The minimum insulation thickness, at any point, for Type THW and TW wires shall be 0.69 mm for conductor sizes No. 14 to No. 10, inclusive, 1.02 mm for No. 8, and 1.37 mm for No. 6 to No. 2, inclusive.

PERMIT NO.: 08-24-N-UE-0926

CO/RTE/PM: SBD-18/various-PM (52.5/various)

PRECONSTRUCTION MEETING AGREEMENT

I, \_\_\_\_\_, acting as an authorized agent for the permittee, \_\_\_\_\_, do hereby agree to personally accomplish or have another designated person arrange for all involved company representatives to attend a pre-construction meeting with the authorized Department's Representative at \_\_\_\_\_, as specified on this permit. Such meeting must be held two (2) days or more prior to the planned start of the work on this project. The Authorized Department's Representative shall have complete authority to determine whether the permit conditions, either implied or written, have been complied with. The Department's Representative may then allow the permit work to proceed as appropriate. The Pre-construction Meeting Record below must be signed by both the Department's Representative and the permittee before the permit work may start.

I have read and understand the attached General Provisions TR-0045 and other attached provisions of this permit.

This agreement or a copy thereof, must be mailed back to the **Department's District 8 Encroachment Permit Office at 464 W. 4th. Street, MS 619, San Bernardino, CA 92401-1400**, within three (3) working days prior to the pre-construction meeting. Failure to return this form could delay the release of your bonds. A copy of this document shall be at the job site at all times when work is in progress and failure to do so may result in the suspension of work, as directed by the Department's Representative.

It is the permittee's responsibility to ensure that the Department's Representative is notified of work completion and that the attached Completion Notice is mailed to the Department's Permit office.

Signature Date \_\_\_\_\_

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

Position or Title \_\_\_\_\_

**PRECONSTRUCTION MEETING RECORD**

\_\_\_\_\_  
Department's Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Permittee's Representative

\_\_\_\_\_  
Date

Date Work May Begin: \_\_\_\_\_

PERMIT NO.: 08-24-N-UE-0926  
CO/RTE/PM: SBD-18/various-PM (52.5/varic

DEPARTMENT OF TRANSPORTATION-DISTRICT 8  
ENCROACHMENT PERMITS OFFICE  
464 W. 4th. Street, MS 619  
San Bernardino, CA 92401-1400

**100% COMPLETION NOTICE**

Work on Permit No.: 08-24-N-UE-0926 has been completed. A final inspection meeting was held on

\_\_\_\_\_  
Permittee's Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Department's Representative

\_\_\_\_\_  
Date

FAILURE TO COMPLETE AND RETURN THIS TO THE DISTRICT PERMITS OFFICE MAY CAUSE A DELAY  
IN THE RELEASE OF YOUR BONDS.

## ENCROACHMENT PERMIT GENERAL PROVISIONS

TR-0045 (REV. 12/2022)

1. **AUTHORITY:** The California Department of Transportation (“Department”) has authority to issue encroachment permits under Division 1, Chapter 3, Article 1, Sections 660 through 734 of the Streets and Highways Code.
2. **REVOCACTION:** Encroachment permits are revocable on five (5) business days’ notice unless otherwise stated on the permit or otherwise provided by law, and except as provided by law for public corporations, franchise holders, and utilities. Notwithstanding the foregoing, in an emergency situation as determined by the Department, an encroachment permit may be revoked immediately. These General Provisions and any applicable Special Provisions are subject to modification or abrogation by the Department at any time. Permittees’ joint use agreements, franchise rights, reserved rights or any other agreements for operating purposes in State of California (“State”) highway right-of-way may be exceptions to this revocation.
3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay encroachment permit fees when due may result in rejection of future applications, denial of encroachment permits, and revocation of the encroachment permit if already issued.
4. **PERMITTEE AUTHORIZATION FOR OTHERS TO PERFORM WORK:** This encroachment permit allows only the Permittee and/or Permittee’s authorized contractor or agent to work within or encroach upon the State highway right-of-way, and the Permittee may not assign or transfer this encroachment permit. Any attempt to assign or transfer this encroachment permit shall be null and void. Permittee shall provide to the Department a list of Permittee’s authorized contractors/agents, in the form and at the time specified by the Department but if no time is specified then no later than the pre-construction meeting. Permittee shall keep the list current and shall provide updates to the Department immediately upon any change to the list of authorized contractors/agents, including but not limited the addition, removal, or substitution of an authorized contractor/agent, or a new address or contact information for an existing authorized contractor/agent. Permittee is responsible for the acts and/or omissions of any person or entity acting on behalf of the Permittee, even if such person or entity is not included on Permittee’s list of authorized contractors and/or agents.
5. **ACCEPTANCE OF PROVISIONS:** Permittee, and the Permittee’s authorized contractors and/or agents, understand and agree to accept and comply with these General Provisions, the Special Provisions, any and all terms and/or conditions contained in or incorporated into the encroachment permit, and all attachments to the encroachment permit (collectively “the Permit Conditions”), for any encroachment, work, and/or activity to be performed under this encroachment permit and/or under color of authority of this encroachment permit. Permittee understands and agrees the Permit Conditions are applicable to and enforceable against Permittee as long as the encroachment remains in, under, or over any part of the State highway right-of-way. The Permittee’s authorized contractors and/or agents, are also bound by the Permit Conditions. Non-compliance with the Permit Conditions by the Permittee’s authorized contractor and/or agent will be deemed non-compliance by the Permittee.
6. **BEGINNING OF WORK:** When traffic is not impacted (see General Provision Number 35), the Permittee must notify the Department’s representative two (2) business days before starting permitted work. Permittee must notify the Department’s representative if the work is to be interrupted for a period of five (5) business days or more, unless otherwise agreed upon. All work must be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this encroachment permit.
7. **STANDARDS OF CONSTRUCTION:** All work performed within State highway right-of-way must conform to all applicable Departmental construction standards including but not limited to: Standard Specifications, Standard Plans, Project Development Procedures Manual, Highway Design Manual and Special Provisions.  
Other than as expressly provided by these General Provisions, the Special Provisions, the Standard Specifications, Standard Plans, and other applicable Departmental standards, nothing in these General Provisions is intended to give any third party any legal or equitable right, remedy, or claim with respect to the encroachment permit and/or to these General Provisions or any provision herein. These General Provisions are for the sole and exclusive benefit of the Permittee and the Department.  
Where reference is made in such standards to “Contractor” and “Engineer,” these are amended to be read as “Permittee” and “Department’s representative,” respectively, for purposes of this encroachment permit.
8. **PLAN CHANGES:** Deviations from plans, specifications, and/or the Permit Conditions as defined in General Provision Number 5 are not allowed without prior approval from the Department’s representative and the Federal Highway Administration (“FHWA”) representative if applicable.
9. **RIGHT OF ENTRY, INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. The United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, and other state, and federal agencies, and the FHWA, through their agents or representatives, must have full access to highway

**ENCROACHMENT PERMIT GENERAL PROVISIONS**

facilities/encroachment area, at any and all times for the purpose of inspection, maintenance, activities needed for construction/reconstruction, and operation of the State highway right-of-way.

Upon completion of work, Permittee must request a final inspection for acceptance and approval by the Department. The local public agency Permittee must not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.

10. **PERMIT AT WORKSITE:** Permittee and Permittee's authorized contractors/agents must keep the permit package and current list of authorized contractors/agents, or copies thereof, at the work site at all times and must show such documents upon request to any Department representative or law enforcement officer. If the permit package or current list of authorized contractors/agents, or copies thereof, are not kept and made available at the work site at all times, then all work must be suspended.
11. **CONFLICTING ENCROACHMENTS:** Permittee must yield start of work to ongoing, prior authorized work adjacent to or within the limits of the Permittee's project site. When existing encroachments conflict with Permittee's work, the Permittee must bear all cost for rearrangements (e.g., relocation, alteration, removal, etc.).
12. **PERMITS, APPROVALS, AND CONCURRENCES FROM OTHER AGENCIES AND/OR ENTITIES:** This encroachment permit is invalidated if the Permittee has not obtained all permits, approvals, and concurrences necessary and required by law, including but not limited to those from the California Public Utilities Commission ("CPUC"), California Occupational Safety and Health Administration ("Cal-OSHA"), local and state and federal environmental agencies, the California Coastal Commission, and any other public agency and/or entity having jurisdiction. Permittee is responsible for providing notice of the encroachment to, and obtaining concurrence from, any person or entity (whether public or private) affected by the scope of work described in the encroachment permit, regardless of whether such notice or concurrence is required by law; the Department is not responsible to provide such notice or obtain such concurrence. Permittee warrants all such permits, approvals, and concurrences have been obtained before beginning work under this encroachment permit. The Department may, at the Department's discretion, require the Permittee to demonstrate that Permittee has obtained all such permits, approvals, and concurrences, and Permittee shall demonstrate this at the time and in the manner specified by the Department.
13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe continuous passageway must be maintained through the work area at existing pedestrian or bicycle facilities. At no time must pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades must be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour

pedestrians to facilities across the street. Attention is directed to Section 7-1.04 "Public Safety," and to Section 12-4.04 "Temporary Pedestrian Access Routes," and to Section 16-2.02 "Temporary Pedestrian Facility," of the Department's Standard Specifications, and to California Vehicle Code section 21760, subdivision (c).

14. **PUBLIC TRAFFIC CONTROL:** The Permittee must provide traffic control protection, warning signs, lights, safety devices, etc., and take all other measures necessary for the traveling public's safety as required by law and/or the Department. While providing traffic control, the needs of all road users, including but not limited to motorists, bicyclists and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act, must be an essential part of the work activity.  
Lane, Bike Lane, Sidewalk, Crosswalk, and/or shoulder closures must comply with the Department's Standard Specifications and Standard Plans for Temporary Traffic Control Systems & Temporary Pedestrian Access Routes, and with the applicable Special Provisions. Where issues are not addressed in the Standard Specifications, Standard Plans, and/or Special Provisions, the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control) must be followed.
15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee must plan and conduct work so as to create the least possible inconvenience to the traveling public (motorized vehicles, unmotorized vehicles such as bicycles, pedestrians, person(s) with disabilities, etc.), such that traffic is not unreasonably delayed.
16. **STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this encroachment permit. If encroachment permit Special Provisions allow for the storage of equipment or materials within the State highway right-of-way, the equipment and material storage must also comply with Section 7-1.04, Public Safety, of the Department's Standard Specifications.
17. **CARE OF DRAINAGE:** Permittee must provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Department's Standard Specifications, Standard Plans, and/or as directed by the Department's representative.
18. **RESTORATION AND REPAIRS IN STATE HIGHWAY RIGHT-OF-WAY:** Permittee is responsible for restoration and repair of State highway right-of-way resulting from permitted work (Streets and Highways Code, section 670 et seq.).
19. **STATE HIGHWAY RIGHT-OF-WAY CLEAN UP:** Upon completion of work, Permittee must remove and dispose of all scraps, refuse, brush, timber, materials, etc. off the State highway right-of-way. The aesthetics of the highway must be as it was before work started or better.
20. **COST OF WORK:** Unless stated otherwise in the encroachment permit or a separate written agreement with the Department, the Permittee must bear all costs

**ENCROACHMENT PERMIT GENERAL PROVISIONS**

- incurred for work within the State highway right-of-way and waives all claims for indemnification or contribution from the United States, the State, the Department, and from the Directors, officers, and employees of the State and/or the Department. Removal of Permittee's personal property and improvements shall be at no cost to the United States, the State, and the Department.
21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the Permittee actual costs at the currently set Standard Hourly Rate for encroachment permits.
22. **AS-BUILT PLANS:** When required, Permittee must submit one (1) set of folded as-built plans within thirty (30) calendar days after completion and acceptance of work in compliance with requirements listed as follows:
- a) Upon completion of the work provided herein, the Permittee must submit a paper set of As-Built plans to the Department's representative.
  - b) All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
  - c) The plans are to be prominently stamped or otherwise noted "AS-BUILT" by the Permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a Department stamp, or by signature of the Department's representative, must be used for producing the As-Built plans.
  - d) If construction plans include signing or striping, the dates of signing or striping removal, relocation, or installation must be shown on the As-Built plans when required as a condition of the encroachment permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage must show the removal, relocation, and installation dates of the appropriate staged striping and signing.
  - e) As-Built plans must contain the Encroachment Permit Number, County, Route, and Post Mile on each sheet.
  - f) The As-Built Plans must not include a disclaimer statement of any kind that differs from the obligations and protections provided by sections 6735 through 6735.6 of the California Business and Professions Code. Such statements constitute non-compliance with Encroachment Permit requirements and may result in the Department retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future encroachment permits or a provision requiring a public agency to supply additional bonding.
23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the State highway right-of-way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt encroachment permit is issued to the Permittee for the purpose of providing a notice and record of work. The Permittee's prior rights must be preserved without the intention of creating new or different rights or obligations.
- "Notice and Record Purposes Only" must be stamped across the face of the encroachment permit.
24. **BONDING:** The Permittee must file bond(s), in advance, in the amount(s) set by the Department and using forms acceptable to the Department. The bonds must name the Department as obligee. Failure to maintain bond(s) in full force and effect will result in the Department stopping all work under this encroachment permit and possibly revoking other encroachment permit(s). Bonds are not required of public corporations or privately-owned utilities unless Permittee failed to comply with the provisions and/or conditions of a prior encroachment permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedure section 337.15. A local public agency Permittee also must comply with the following requirements:
- a) In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local public agency Permittee agrees to require the construction contractor to furnish both a payment and performance bond in the local public agency's name with both bonds complying with the requirements set forth in Section 3-1.05 Contract Bonds of the Department's Standard Specifications before performing any project construction work.
  - b) The local public agency Permittee must defend, indemnify, and hold harmless the United States, the State and the Department, and the Directors, officers, and employees of the State and/or Department, from all project construction related claims by contractors, subcontractors, and suppliers, and from all stop notice and/or mechanic's lien claimants. The local public agency also agrees to remedy, in a timely manner and to the Department's satisfaction, any latent defects occurring as a result of the project construction work.
25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to relocate a permitted installation upon notice by the Department. Unless under prior property right or agreement, the Permittee must comply with said notice at the Permittee's sole expense.
26. **ENVIRONMENTAL:**
- a) **ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified archaeologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
  - b) **HAZARDOUS MATERIALS:** If any hazardous waste or materials (such as underground storage tanks, asbestos pipes, contaminated soil, etc.) are identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified hazardous

**ENCROACHMENT PERMIT GENERAL PROVISIONS**

waste/material specialist who must evaluate the site at the Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.

Attention is directed to potential aerially deposited lead (ADL) presence in unpaved areas along highways. It is the Permittee's responsibility to take all appropriate measures to protect workers in conformance with California Code of Regulations Title 8, Section 1532.1, "Lead," and with Cal-OSHA Construction Safety Orders, and to ensure roadway soil management is in compliance with Department of Toxic Substances Control (DTSC) requirements.

- c) **BIOLOGICAL:** If any regional, state, or federally listed biological resource is identified or encountered in the work vicinity, the Permittee must immediately stop work, notify the Department's representative, retain a qualified biologist who must evaluate the site at Permittee's sole expense, and make recommendations to the Department's representative regarding the continuance of work.
27. **PREVAILING WAGES:** Work performed by or under an encroachment permit may require Permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the California Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements must be directed to the California Department of Industrial Relations.
28. **LIABILITY, DEFENSE, AND INDEMNITY:** The Permittee agrees to indemnify and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind, and description, including but not limited to those brought for or on account of property damage, invasion of privacy, violation or deprivation of a right under a state or federal law, environmental damage or penalty, or injury to or death of any person including but not limited to members of the public, the Permittee, persons employed by the Permittee, and/or persons acting on behalf of the Permittee, arising out of or in connection with: (a) the issuance and/or use of this encroachment permit; and/or (b) the encroachment, work, and/or activity conducted pursuant to this encroachment permit, or under color of authority of this encroachment permit but not in full compliance with the Permit Conditions as defined in General Provision Number 5 ("Unauthorized Work or Activity"); and/or (c) the installation, placement, design, existence, operation, and/or maintenance of the encroachment, work, and/or activity; and/or (d) the failure by the Permittee, or by anyone acting for or on behalf of the Permittee, to perform the Permittee's obligations under any part of the Permit Conditions as defined in General Provision Number 5, in respect to maintenance or any other obligation; and/or (e) any change to the Department's property or adjacent

property, including but not limited to the features or conditions of either of them, made by the Permittee or anyone acting on behalf of the Permittee; and/or (f) a defect or obstruction related to or caused by the encroachment, work, and/or activity whether conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constituting Unauthorized Work or Activity, or from any cause whatsoever. The duty of the Permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code.

It is the intent of the Department and the Permittee that except as prohibited by law, the Permittee will defend, indemnify, and hold harmless as set forth in this General Provision Number 28 regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of: the United States, the State; the Department; the Directors, officers, employees, agents and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors; the Permittee; persons employed by the Permittee; and/or persons acting on behalf of the Permittee.

The Permittee waives any and all rights to any type of expressed or implied indemnity from or against the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors.

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the encroachment, work, and/or activity whether conducted pursuant to this encroachment permit or constituting Unauthorized Work or Activity, and further agrees to defend, indemnify, and save harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, penalties, liability, suits, or actions of every name, kind, and description arising out of or by virtue of the Americans with Disabilities Act.

The Permittee understands and agrees the Directors, officers, employees, agents, and/or contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, are not personally responsible for any liability arising from or by virtue of this encroachment permit.

For the purpose of this General Provision Number 28 and all paragraphs herein, "contractors of the State and/or of the Department" includes contractors, and their subcontractors, under contract to the State and/or the Department.

This General Provision Number 28 and all paragraphs herein take effect immediately upon issuance of this encroachment permit, and apply before, during, and after the encroachment, work, and/or activity



**ENCROACHMENT PERMIT GENERAL PROVISIONS**

contemplated under this encroachment permit, whether such work is in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, except as otherwise provided by California law. The Permittee's obligations to defend, indemnify, and save harmless under this General Provision Number 28 take effect immediately upon issuance of this encroachment permit and have no expiration date, including but not limited to situations in which this encroachment permit expires or is revoked, the work or activity performed under this encroachment permit is accepted or not accepted by the Department, the encroachment, work, and/or activity is conducted in compliance with the Permit Conditions as defined in General Provision Number 5 or constitutes Unauthorized Work or Activity, and/or no work or activity is undertaken by the Permittee or by others on the Permittee's behalf.

If the United States or an agency, department, or board of the United States is the Permittee, the first two paragraphs of this General Provision Number 28 (beginning "The Permittee agrees to indemnify..." and "It is the intent of the parties...") are replaced by the following paragraph:

Claims for personal injury, death, or property damage allegedly caused by the negligent or wrongful act or omission of any employee of the United States acting within the scope of their official duties are subject to the Federal Tort Claims Act, as amended, 28 U.S.C. § 1346 and § 2671 et seq. (Chapter 171).

29. **NO PRECEDENT ESTABLISHED:** This encroachment permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**

a) As part of the consideration for being issued this encroachment permit, the Permittee, on behalf of Permittee and on behalf of Permittee's personal representatives, successors in interest, and assigns, does hereby covenant and agree that:

i) No person on the grounds of race, color, or national origin may be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

ii) That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination must be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.

iii) That such discrimination must not be practiced against the public in their access to and use of the facilities and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the State highway right-of-way.

iv) That the Permittee must use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal

Regulations, Commerce and Foreign Trade, Subtitle A. Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.

b) That in the event of breach of any of the above nondiscrimination covenants, the State and the Department have the right to terminate this encroachment permit and to re-enter and repossess said land and the facilities thereon and hold the same as if said permit had never been made or issued.

31. **MAINTENANCE:** The Permittee is responsible at Permittee's sole expense for the encroachment, and the inspection, maintenance, repair, and condition thereof, and is responsible to ensure the encroachment does not negatively impact State highway safety, maintenance, operations, construction, State facilities, activities related to construction/reconstruction, or other encroachments. The Permittee's obligations in the preceding sentence take effect immediately upon issuance of this encroachment permit and continue until the encroachment is entirely and permanently removed. Additional encroachment permits or approval documents may be required authorizing work related to inspection, repair, and/or maintenance activities. Contact the Department for information.

32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code section 682.5 and 682.7, the Department is not responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the United States, the State, the Department, and the Directors, officers, employees, agents, and contractors of the State and/or of the Department, including but not limited to the Director of Transportation and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of any activity for which this encroachment permit is issued.

The Permittee is required, as a condition of this encroachment permit, for any event that awards prize compensation to competitors in gendered categories, for any participant level that receives prize compensation, to ensure the prize compensation for each gendered category is identical at each participant level. (Streets and Highways Code, section 682.7.)

The Permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act in the conduct of the event, and further agrees to defend, indemnify, and save harmless the United State, the State and the Department, and the Directors, officers, and employees of the State and/or Department, including but not limited to the Director of the Department and the Deputy Directors, from any and all claims, demands, damages, costs, liability, suits, or actions of every name, kind and description arising out of or by virtue of the Americans with Disabilities Act.

33. **PRIVATE USE OF STATE HIGHWAY RIGHT-OF-WAY:** State highway right-of-way must not be used for private purposes without compensation to the State. The gifting

**ENCROACHMENT PERMIT GENERAL PROVISIONS**

of public property uses and therefore public funds is prohibited under the California Constitution, Article XVI, Section 6.

**34. FIELD WORK REIMBURSEMENT:** Permittee must reimburse the Department for field work performed by or on behalf of the Department to correct or remedy issues created by the Permittee or by others acting on behalf of the Permittee, including but not limited to hazards or damaged facilities, or to clear refuse, debris, etc. not attended to by the Permittee or by others acting on behalf of the Permittee.

**35. LANE CLOSURE REQUEST SUBMITTALS AND NOTIFICATION OF CLOSURES TO THE DEPARTMENT:** Lane closure request submittals and notifications must be in accordance with Section 12-4.02, and Section 12.4-04, of the Department's Standard Specifications or as directed by the Department's representative. The Permittee must notify the Department's representative and the Traffic Management Center ("TMC") before initiating a lane closure or conducting an activity that may cause a traffic impact. In emergency situations when the corrective work or the emergency itself may affect traffic, the Department's representative and the TMC must be notified as soon as possible.

**36. SUSPENSION OF TRAFFIC CONTROL OPERATION:** The Permittee, upon notification by the Department's representative, must immediately suspend all traffic lane, bike lane, sidewalk, crosswalk, and/or shoulder closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension must be borne by the Permittee.

**37. UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code section 4216 et seq., including but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The Permittee must provide notification to the Department representative at least five (5) business days before, and the regional notification center at least forty-eight (48) hours before, performing any excavation work within the State highway right-of-way.

**38. COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA):** All work within the State highway right-of-way to construct and/or maintain any public facility must be designed, maintained, and constructed strictly in accordance with all applicable Federal Access laws and regulations (including but not limited to Section 504 of the Rehabilitation Act of 1973, codified at 29 U.S.C. § 794), California Access laws and regulations relating to ADA, along with its implementing regulations, Title 28 of the Code of Federal Regulations Parts 35 and 36 (28 C.F.R., Ch. I, Part 35, § 35.101 et seq., and Part 36, § 36.101 et seq.), Title 36 of the Code of Federal Regulations Part 1191 (36 C.F.R., Ch. XI, Part 1191, § 1119.1 et seq.), Title 49 of the Code of Federal Regulations Part 37 (49 C.F.R., Ch. A, Part 37, § 37.1 et seq.), the United States Department of Justice Title II and Title III for the ADA, and California Government Code

section 4450 et seq., which require public facilities be made accessible to persons with disabilities.

Notwithstanding the requirements of the previous paragraph, all construction, design, and maintenance of public facilities must also comply with the Department's Design Information Bulletin 82, "Pedestrian Accessibility Guidelines for Highway Projects" and Standard Plans & Specifications on "Temporary Pedestrian Access Routes."

**39. STORMWATER:** The Permittee is responsible for full compliance with the following:

- a) For all projects, the Department's Storm Water Program and the Department's National Pollutant Discharge Elimination System (NPDES) Permit requirements under Order No. 2012-0011-DWQ, NPDES No CAS000003; and
- b) In addition, for projects disturbing one acre or more of soil, with the California Construction General Permit Order No. 2009-0009-DWQ, NPDES No CAS000002; and
- c) In addition, for projects disturbing one acre or more of soil in the Lahontan Region with Order No. R6T-2016-0010, NPDES No CAG616002.
- d) For all projects, it is the Permittee's responsibility to install, inspect, repair, and maintain all facilities and devices used for water pollution control practices (Best Management Practices/BMPs) before performing daily work activities.

## UTILITY ANNUAL PROVISIONS

TR – 0160 (Rev. 7/2022)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

Annual utility permits UE are issued to utilities who maintain their facilities within State highway right-of-way. Any utility or public corporation, who lawfully maintains a utility encroachment, or their agent, may perform routine or emergency maintenance on such facility in accordance with the following provisions:

**UE1. EXCLUSIONS:** These provisions do not authorize any work on freeways and expressways, tree trimming, aerial capacity increases on designated "Scenic Highways", pole replacement / relocation work, or other activities not specifically provided for in this permit.

**UE2. EMERGENCY REPAIRS:** The permittee may make emergency repairs, alter traffic flow, and excavate through improved surfaces only when breaks in the conduit, cable, or pipeline over or under the pavement presents a definite public hazard or serious interruption of essential services. An *emergency* is defined in the Public Resources Code as "[...] a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public service. 'Emergency' includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage." In such cases, the Department's representative shall be notified immediately.

Replace poles knocked down by vehicles, accidental causes or natural disasters. The entire length of poles and stubs must be removed from the ground and replacement pole must be placed at the exact location. Planned pole replacements/installations are not allowed under this permit.

**UE3. OPEN EXCAVATIONS:** Excavation must not be left open after daylight hours unless specifically authorized and adequate protection for traffic is provided in accordance with the Encroachment Permit General Provisions, "Public Traffic Control" And "Minimum Interference with Traffic". Backfill and pavement replacement must be performed in

accordance with General Provisions, "Restoration and Repairs in State Highway right-of-way."

**UE4. TRAFFIC CONTROL:** Work requiring traffic control shall be conducted between Monday-Friday 9:00 a.m. and 3:00 p.m. or as otherwise authorized by the Permit Engineer. Adequate traffic control must be provided in accordance with the Encroachment Permit General Provisions, "Public Traffic Control", "Minimum Interference with Traffic" and "Suspension of Traffic Control Operation."

Only those maintenance activities that can be performed using a Caltrans Standard Plans for Temporary Traffic Control Systems and Temporary Pedestrian Access Routes are authorized under the annual maintenance permit. Otherwise a separate permit application for the work, along with a traffic control plan designed and signed by a California Registered Civil or Traffic Engineer must be submitted for review and approval.

Advanced notification must be provided to Caltrans Traffic Management Center for any activities that may cause a traffic impact including all lane closures. Adequate notice must be provided in accordance with the Encroachment Permit General Provisions, "Notification of Closure to Department and Traffic Management Center (TMC)."

**UE5. WORK PERMITTED - AERIAL:** All permitted activity must not be over the traveled way or within the limits of officially designated scenic highways and/or on Caltrans structures.

1. Maintain, inspect, remove, repair or replace (in the same location) all aerial facilities. Work over the traveled way requires a separate permit and the placement of "H" poles and netting as per form TR-0108, located in Appendix "E" of the Encroachment Permits Manual.

**ENCROACHMENT PERMIT SPECIAL PROVISIONS**

Replace broken pins and/or insulators, repair broken wires, pull slack wires, and replace or pull broken or slack guys.

Replace aerial wires and cross arms on existing poles except where wires cross the highway. Unless otherwise specifically required by the Department, protected cable, tree wire or plastic tree wire guard used for communication lines may be used through trees where necessary, provided the appearance of the tree or the tree itself will not be damaged.

Perform insulator washing and interconnect splicing of cables.

Install additional capacity (in the same location), install, maintain, remove, repair or replace aerial service connections with potential to ground of 300 volts or less.

2. Installations and clearances must be equal to those required by either the California Public Utilities Commission orders or the Division of Occupational Safety and Health (Cal/OSHA) regulations promulgated in the California Code of Regulations, Title 8, Chapter 4, whichever is more restrictive.

**UE6. WORK PERMITTED - UNDERGROUND:**

1. Maintain, inspect, remove, repair or replace (in the same location) all underground facilities except those requiring trenching in the traveled way or require uncovering more than 50 feet of line at any one time. The permittee may open existing manholes to repair underground cables. Where the manhole lies within the improved surface of the highway, the permittee will provide adequate protection for traffic in accordance with the Encroachment Permit General Provisions "Public Traffic Control" and "Minimum Interference with Traffic".
2. Install additional capacity in existing ducts except for facilities not in compliance with the Department's High priority utility policies or on Structures.
3. Install air flow monitoring transducers and piping in existing ducts.
4. Barholing, potholing, cleaning, rodding and placing float ropes.

5. Adjust access cover to grade and replace in kind or with larger size pull boxes.
6. Interconnect splicing of cables.
7. Install service connections (laterals) perpendicular to the highway for the following:
  - i. Natural gas service lines less than 2 inches in pipe diameter that have normal operating pressures of 60 psig or less
  - ii. Subsurface electrical service connections with a potential to ground of 50 volts or less
  - iii. Service connections for water, sewer, telephone, telecommunication, and cable service
8. Permanent pavement patching for work authorized by this permit. The patching must be made within thirty (30) days of completion of backfill unless otherwise specified by the Permit Engineer. See Underground Utility Provision UG 9 (form TR-0163).

**UE7. POLE MAINTENANCE & CHEMICAL TREATMENT:**

1. Utility Companies are to provide a list of the pole identification, locations, type of chemicals and quantities used for their pole treatment maintenance operations. This information must be provided upon expiration of their annual permit or upon request of the Department as needed.
2. Utility Companies must submit copies of the Safety Data Sheets (SDS) for all chemical compounds to be used in their pole treatment maintenance operations, in conjunction with the permit application submittal.
3. Utility Companies are to notify the District Landscape Specialist or their designee and the District Encroachment Permits Office when there is any change or modification in the type(s) of chemical used in their pole treatment maintenance operations.
4. Prior to any application of Tree Growth Regulators (TGR) approval shall be obtained from the District Landscape Specialist or their designee.

**UE8. MISCELLANEOUS:**

1. Install new and replace existing transformers on existing poles.
2. Clear grass from around base of poles and excavate around poles for inspection, including tamping and straightening. The use of herbicides or other chemicals is not authorized by this permit. A separate encroachment permit is required for that purpose.

**ENCROACHMENT PERMIT SPECIAL PROVISIONS****STORMWATER SPECIAL PROVISIONS FOR MINIMAL OR NO IMPACT (SWSP)**

TR-0400 (Rev 05/2018)

1. **GENERAL:** The purpose of these Special Provisions is to provide the Permittee with specifications for water pollution control to minimize, prevent, or control the discharge of material into the air, surface waters, groundwater, and storm sewers owned by the State or local agencies. These provisions are not intended to take the place of the Caltrans Water Pollution Control Program (WPCP) for projects where soil disturbance from work activities less than one acre, or work activities of one acre or more subject to the preparation of the Caltrans Storm Water Pollution Prevention Plan (SWPPP). The Permittee must comply with the following Special Provisions and the direction of the State Representative. All Stormwater Best Management Practices (BMPs) must conform to Section 13 Water Pollution Control of Caltrans' Standard Specifications.

2. **NPDES REQUIREMENTS:** The Permittee must be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans National Pollutant Discharge Elimination System (NPDES) Permit requirements (*Order No. 2012-0011-DWQ, NPDES No CAS000003*) and for and projects disturbing one acre or more of soil, full compliance with the California Construction General Permit (*Order No. 2009-0009-DWQ, NPDES No CAS000002*) or for projects for projects that have one acre or more of soil disturbance in the Lahontan Region (*Order No. R6T-2016-0010, NPDES No CAG616002*). It is the Permittee's responsibility to install, inspect, and repair or maintain facilities and devices used for water pollution control practices (BMPs) before performing daily work activities. Installation, inspection and maintenance responsibilities on the job site include: 1) soil stabilization materials in work areas that are inactive or prior to storm events, 2) water pollution control devices to control sediment and erosion, 3) implementation of spill and leak prevention procedures for chemical and hazardous substances stored on the job site, 4) material storage, 5) stockpile management, 6) waste management, 7) non-stormwater management, 8) water conservation, 9) tracking controls and 10) illicit connection, illegal discharge detection and reporting. The Permittee must report to the State representative when discharges enter into receiving waters, adjacent property, drainage systems or when discharges could be a cause or a threat for water pollution. The Permittee must also control illicit discharges or illegal dumping prior to start of daily work schedule. Copies of written notices or orders from the Regional

Water Quality Control Board or other regulatory agency must be provided to the State representative within 48 hours of reported activity. For additional information on stormwater compliance, visit the State Water Resources Control Boards storm water Website at:

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater](http://www.waterboards.ca.gov/water_issues/programs/stormwater)

3. **RESPONSIBILITY FOR DEBRIS REMOVAL:** The Permittee must be responsible for preventing sediment, trash, debris, and other construction waste from entering the street, the storm drains, local creeks, or any other bodies of water.
4. **SPOILS AND RESIDUE:** The Permittee must vacuum any saw-cut concrete waste material, debris, residue, etc. No spoils, debris, residue, etc. must be washed into a drainage system.
5. **SWEEPING:** Sweep paved roads at construction entrance and exit locations and surrounding paved areas daily within the job site during: 1) clearing and grubbing, 2) earthwork, 3) trenching, 4) soil disturbance, 5) pavement grinding and/or cutting, and 6) after observing tracking of material onto or off the State property. Keep dust to a minimum during sweeping activities. Use vacuum whenever dust generation is excessive or sediment pickup is ineffective. Roadways or work areas must not be washed down with water. Street sweeping operations must conform to Section 13 Water Pollution Control of Caltrans' Standard Specifications.
6. **VEHICLES AND EQUIPMENT:** Permittee must prevent all vehicles, equipment, etc. from leakage or mud tracking onto roadways. If leaks cannot be repaired immediately, remove the vehicle or equipment from the job site.
7. **MAINTENANCE AND FUELING OF VEHICLES AND EQUIPMENT:** Maintenance and fueling of equipment must not result in any pollution at the job site. The Permittee must immediately clean up spills/leaks, and properly dispose of contaminated soil and materials.
8. **CLEANING VEHICLES AND EQUIPMENT:** Limit vehicle and equipment cleaning or washing at the job site except what is necessary to control vehicle tracking or hazardous waste. The Permittee must clean all equipment within a bermed area or over a drip pan large enough to prevent run-off. No soaps, solvents, degreasers, etc. must be used in State right-of-way. Any water from this operation must be collected and disposed of at an appropriate site. Containment berms or dikes must be used for fueling, washing, maintaining and washing vehicles or equipment in outside areas. Containment must be performed at least 100 feet from concentrated flows of

**ENCROACHMENT PERMIT SPECIAL PROVISIONS**

- storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least 50 feet if outside the floodplain. Keep adequate quantities of absorbent spill- cleanup material and spill kits in the fueling or maintenance area and on fueling trucks.
9. **DIESEL FUELS:** The use of diesel fuel from petroleum or other fossil fuel as a form-oil or solvent is not allowed.
  10. **WEATHER CONDITIONS AT WORKSITE:** Any activity that would generate fine particles or dust that could be transported off site by stormwater must be performed during dry weather.
  11. **WIND EROSION PROTECTION:** The use of Wind Erosion BMPs must be deployed year-round in instances where dust or fine particles could be transported off site.
  12. **HOT MIX ASPHALT:** Runoff from washing hot mix asphalt must not enter into any drainage conveyances.
  13. **PROTECTION OF DRAINAGE FACILITIES:** The Permittee must protect/cover gutters, ditches, drainage courses, and inlets with gravel bags, fiber rolls, State approved fabric filters, etc., to the satisfaction of the State representative during grading, paving, saw-cutting, etc. and materials must conform to Section 13-4.02 Materials for Water Pollution Control of Caltrans' Standard Specifications. No such protection measures must cause an obstruction to the traveling public. The Permittee must implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site (including secondary containment requirements) in accordance with section 13-4.03B Spill Prevention and Control, and 14-11 Hazardous Waste and Contamination, Water Pollution Control of Caltrans' Standard Specifications.
  14. **PAINT:** Rinsing of painting equipment and materials is not permitted in State right-of-way. When thoroughly dry, dispose of the following as solid waste: dry latex paint, paint cans, used brushes, rags, gloves, absorbent materials, and drop cloths. Oil based paint sludge and unusable thinner must be disposed of at an approved hazardous waste site.
  15. **CONSTRUCTION MATERIALS:** Stockpile of all construction materials, including, but not limited to; pressure treated wood, asphalt concrete, cold mix asphalt concrete, concrete, grout, cement containing premixes, and mortar, must conform to section 13-4.03C (2) Material Storage & 13-4.03C (3) Stockpile Management of Caltrans' Standard Specifications.
  16. **CONCRETE EQUIPMENT:** Concrete equipment must be washed in a designated washing area in a way that does not contaminate soil, receiving waters, or storm drain systems.
  17. **EXISTING VEGETATION:** Established existing vegetation is the best form of erosion control. Minimize disturbance to existing vegetation. Damaged or removed vegetation must be replaced as directed by the State Representative.
  18. **SOIL DISTURBANCE:** Soil disturbing activities must be avoided during the wet weather season. If construction activities during wet weather are allowed in your permit, all necessary erosion control and soil stabilization measures must be implemented in advance of soil disturbing activity.
  19. **SLOPE STABILIZATION AND SEDIMENT CONTROL:** Consider a certified expert in Erosion and Sediment control in cases where slopes are disturbed during construction. The Permittee is directed to comply with Section 13.5 Temporary Soil Stabilization and Section 21 Erosion Control of Caltrans' Standard Specifications during application of temporary soil stabilization measures to the soil surface. Fiber rolls or silt fences may be required down slope until permanent soil stabilization is established. Remove the accumulated sediment whenever the sediment accumulates to 1/3 of the linear sediment barrier height. The Permittee must limit the use of plastic materials when more sustainable, environmentally friendly alternatives exist or when environmental regulations prohibit their use within the project.
  20. **STOCKPILES:** Stockpiles containing aggregate and/or soil must be stored at least 100 feet from concentrated flows of storm water, drainage courses, and storm drain inlets if within a flood plain, otherwise at least 50 feet if outside the floodplain, and must be covered and protected with a temporary perimeter sediment barrier. Cold mix stockpiles must be stored on an impermeable surface and covered with 9 mil plastic to prevent contact with water. Minimize stockpiling of materials on the job site. Manage stockpiles by implementing the water pollution control practices in Section 13-4.03C (3) Stockpile Management of the State of California standard specifications for construction.
  21. **DISCOVERY OF CONTAMINATION:** The State Representative must be notified in case any unusual discoloration, odor, or texture of ground water, is found in excavated material or if abandoned, underground tanks, pipes, or buried debris are encountered.
  22. **SANITARY AND SEPTIC WASTE:** Do not bury or discharge wastewater from a sanitary or septic system within the highway. Properly connected sewer facilities are free from leaks. With State Representative approval place portable sanitary facility at least 50 feet away from storm drains, receiving waters, and flow lines. Permittee must comply with local health agency provisions when using an on-site disposal system.
  23. **LIQUID WASTE:** Prevent job site liquid waste from entering storm drain systems and receiving waters. Drilling slurries, grease or oil-free waste water or rinse water, dredging, wash water or rinse water running off a surface or other non-storm water liquids not covered

**ENCROACHMENT PERMIT SPECIAL PROVISIONS**

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under separate waste water permits must be held in structurally sound, leak-proof containers, such as portable bins or portable tanks. Store containers at least 50 feet away from moving vehicles and equipment. Liquid waste may require testing to determine hazardous material content prior to disposal. All measures must conform to section 13-4.03D (5) Liquid Waste, Water Pollution Control of Caltrans' Standard Specifications.

**24. WATER CONTROL AND CONSERVATION:**

Manage water use in a way that will prevent erosion and the discharge of pollutants into storm drain systems and receiving waters. Direct runoff, including water from water line repair from the job site to areas where it can infiltrate into the ground. Direct water from off-site sources around the job site or from contact with jobsite runoff.

**25. PILE DRIVING:** Keep spill kits and cleanup materials at pile driving locations. Park pile driving equipment over drip pans, absorbent pads, or plastic sheeting with absorbent material, and away from stormwater run-on when not in use.**26. DEWATERING:** Dewatering consists of discharging accumulated storm water, groundwater, or surface water from excavations or temporary containment facilities. All dewatering operations must comply with the latest Caltrans guidelines including the Field Guide for Construction Site Dewatering. Contact State representative for approval of dewatering discharge by infiltration or evaporation, otherwise, any effluent discharged into a permitted storm water system requires approval from the Regional Water Quality Control Board. Prior to the start of dewatering, the Permittee must provide the State Representative with a dewatering and discharge work plan that complies with section 13-4.03G Dewatering, Water Pollution Control of Caltrans' Standard Specifications. A copy of the Waste Discharge Permit and a copy of a valid WDID number issued by the Regional Board must be provided to the State representative.

## **ROLLING TRAFFIC BREAKS**

TR-0407 (Rev 07/21)

In addition to the attached Encroachment Permit General Provisions (TR-0045), the following special provisions are also applicable:

1. Permittee must arrange a meeting with the California Highway Patrol (CHP) and the Caltrans permit inspector, at least two (2) weeks prior to the start of work in order to determine the appropriate number of CHP vehicles required for planned traffic breaks. A minimum of two (2) CHP vehicles in each direction are required. One CHP vehicle will be conducting the planned traffic break and the second CHP vehicle will be stationed on the shoulder with its rear emergency lights on to caution motorists at the end of the queue. Additional CHP vehicles may be required if determined to be necessary by the CHP. It is the responsibility of the permittee to make arrangements with CHP for providing planned traffic breaks to facilitate the approved work.
2. The duration of a planned traffic break must be in accordance with Standard Specifications 12-4.02C(7)(d) Traffic Breaks. If additional traffic breaks are required, traffic backup must be cleared before performing another break.
3. The permittee must provide a minimum of one (1) Portable Changeable Message Sign (PCMS). Additional PCMSs must be provided if required by Caltrans permit inspector or CHP. PCMS(s) must be placed at the locations directed by the CHP and be moved or relocated as needed. Each PCMS must comply with section 12-3.32 of the Caltrans Standard Specifications. PCMS(s) must be removed promptly after the planned traffic break is completed.
4. Message to be displayed on the PCMSs must be coordinated with Caltrans permit inspector/representative and CHP.
5. All aerial crossings should be scheduled on Sunday mornings (excluding holidays), from daylight to 10:00 a.m., unless otherwise authorized by the District Permit Engineer or authorized Caltrans' representative.
6. No aerial crossings must be performed in rainy, foggy or other inclement weather.