

**SUBMITTAL TO THE FLOOD CONTROL AND
WATER CONSERVATION DISTRICT
BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



ITEM: 11.7
(ID # 15207)

MEETING DATE:
Tuesday, June 08, 2021

FROM: FLOOD CONTROL DISTRICT:

SUBJECT: FLOOD CONTROL DISTRICT: Approve Addendum No. 1 to Plans and Specifications and Contract Documents; Accept Low Bid and Award the Contract for the Woodcrest Dam Outlet Modification, Stage 90, Project No. 1-0-00045-90, Nothing Further is Required Under CEQA, District 1. [\$1,012,731 Total Cost - District Funds 100%]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve Addendum No. 1 to Plans and Specifications and Contract Documents issued prior to the April 8, 2021 bid opening;
2. Waive any minor bid irregularities and accept the low bid submitted by the firm of Bosco Constructors, Inc. for \$983,234 for the construction of the above-referenced project;
3. Award the Contract to Bosco Constructors, Inc., and authorize the Chair of the Board of the Riverside County Flood Control and Water Conservation District (District) to execute the Construction Agreement on behalf of the District; and
4. Direct the Clerk of the Board to return three (3) copies of the executed Woodcrest Dam Outlet Modification, Stage 90 contract documents to the District.

ACTION: Policy

Jason Uhley, GENERAL MGR-CHF FLD CNTRL ENG

5/26/2021

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Washington, seconded by Supervisor Spiegel and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Spiegel, Washington, Perez, and Hewitt
Nays: None
Absent: None
Date: June 8, 2021
xc: Flood

Kecia R. Harper
Clerk of the Board
By:
Deputy

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD
OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$29,497	\$983,234	\$1,012,731	\$0
NET COUNTY COST	\$0	\$0	\$0	\$0
SOURCE OF FUNDS: 25110 947400 548200 Zone 1 Infrastructure (97%) 25110 947400 523220 Zone 1 License & Permits (3%)			Budget Adjustment: No	
			For Fiscal Year: 20/21-21/22	

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

On March 9, 2021 (Agenda Item 11.5, MT#14554), the Board for the District authorized the Clerk of the Board to advertise for construction contract bids for the Woodcrest Dam Outlet Modification, Stage 90 project (project).

The District opened bids for project on April 8, 2021. Twelve contractors submitted a bid in response to this call for bids. The lowest responsible bid was received from Bosco Constructors, Inc. (Contractor) for the sum of \$983,234. The bid documents have been reviewed by County Counsel and District staff, and it was determined that the bid is valid and binding and that any minor irregularities did not create an unfair advantage or directly affect the price of their bid. The bid was found to be responsive, and District staff recommends that the Board waive any minor irregularities found in the Contractor's bid.

On April 20, 2021, a Notice of Intent to Award the contract to Contractor was posted under Public Notices at www.rcflood.org. Pursuant to Article 3, Section 3.3 of the Instructions to Bidders, bidders are provided five days to submit any protest of the intent to award. No protests were received by the deadline.

The Contractor has executed the construction contract and provided the bonds and insurance documents which meet the requirements of the contract. County Counsel has reviewed the construction contract with exhibits and approved as to form.

The Financial Data listed includes this bid amount plus the required Western Riverside County Multiple Species Habitat Conservation Plan mitigation payment (see Additional Fiscal Information section below).

The project will improve the overall reliability, maintainability, safety, and functionality of Woodcrest Dam by replacing the existing intake structure and installing a new grated debris intake structure system, installing access stairs along the upstream embankment, and armoring both upstream and downstream embankment slopes with a combination of rock mulch and hydroseed to mitigate against erosion.

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD
OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

CEQA Compliance

On December 15, 2020, Minute Order 11.1 (MT#14141), the Board for the District approved the project and found the project to be exempt from CEQA and in compliance with the Western Riverside County Multiple Species Habitat Conservation Plan. Pursuant to CEQA, a Notice of Exemption (NOE) was adopted and filed at the CEQA State Clearinghouse (SCH#2020120322). The Addendum to the Plans and Specifications and Contract Documents being approved today is implementing what was evaluated in the NOE and is consistent with the project as approved by the Board, therefore, nothing further is required under CEQA.

**Prev. Agn. Ref.: MT#14554, 11.5 of 03/09/21 Advertise
MT#14141, 11.1 of 12/15/20 CEQA**

Impact on Residents and Businesses

This project will construct drainage infrastructure to remedy ongoing flooding problems. This project is funded by ad valorem property tax revenue and entails no new fees, taxes or bonded indebtedness.

Additional Fiscal Information

Pursuant to the Implementing Agreement for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) executed on June 22, 2004, the Financial Data listed is comprised of the bid amount of \$983,234 for Contractor, plus up to \$29,497 (3% of bid) for MSHCP mitigation, for a total of \$1,012,731 (bid plus 3% amount). The MSHCP Implementing Agreement requires the District to make a payment to the Western Riverside County Regional Conservation Authority for up to 3% of the total capital costs (bid amount described above) as required mitigation for the construction of flood control facilities. The actual mitigation payment that will be made by the District may be reduced based on acquisition of replacement habitat for the benefit of Covered Species, as defined in the Implementing Agreement and the MSHCP.

Contract History and Price Reasonableness

Pursuant to Public Contract Code 21091, invitation of sealed bids was solicited by advertising in print and digital media. The Contractor's bid was reasonable and is below the project engineer's estimate.

ATTACHMENTS:

1. Addendum No. 1
2. Bid Summary/Abstract
3. Project Location Map
4. Contract Documents (Sheets XXIII through XXXIV) and Certificate of Liability Insurance - 4 copies

DG:rlp
P8\238014

**SUBMITTAL TO THE FLOOD CONTROL AND WATER CONSERVATION DISTRICT BOARD
OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



Jason Farin, Principal Management Analyst

6/2/2021



Gregory V. Priamos, Director County Counsel

5/26/2021

JASON E. UHLEY
General Manager-Chief Engineer



1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

April 5, 2021

ADDENDUM NO. 1
TO
WOODCREST DAM OUTLET MODIFICATION, STAGE 90

RIVERSIDE COUNTY, CALIFORNIA

Bid Opening Date: Thursday, April 8, 2021 at 2:00 p.m.

PROPOSAL

REPLACE PROPOSAL in its entirety (Pages XV and XVa) to accommodate the addition of a signature line on the bottom of Page XVa for acknowledgment of this Addendum.

DRAWINGS

REPLACE Sheets 1 and 11 of Drawing No. 1-0709 in its entirety.

RESPONSE TO QUESTIONS

Attached to this Addendum is Response to Questions.

NOTE: Bidders are required to acknowledge receipt of all addenda at the bottom of **Sheet XVa** of the PROPOSAL. Failure to acknowledge all addenda on the bid form may cause the bid to be considered not responsive to the invitation, which would require rejection of the bid.


JASON E. UHLEY
General Manager-Chief Engineer

Attachment

P8\237450

BOARD OF
SUPERVISORS

SPECIFICATIONS and CONTRACT DOCUMENTS
for the CONSTRUCTION of

WOODCREST DAM
OUTLET MODIFICATION
STAGE 90

PROJECT NO. 1-0-00045-90

RIVERSIDE COUNTY, CALIFORNIA



FORM APPROVED COUNTY COUNSEL
BY: Synthia M. Gunzel DATE: 2-22-2021
SINTHIA M. GUNZEL



SPECIFICATIONS and CONTRACT DOCUMENTS
for the CONSTRUCTION of
WOODCREST DAM
OUTLET MODIFICATION
STAGE 90

PROJECT NO. I-O-00045-90

These specifications and contract documents have been prepared under the direction of the following Registered Civil Engineers:

Recommended By:

Design Engineer

Feb 4, 2021

Date



Approved By:

General Manager-Chief Engineer

Feb 5, 2021

Date



TABLE OF CONTENTS

<u>Title</u>	<u>Page</u>
Notice Inviting Bids to Contractors	II-III
Instructions to Bidders	IV-XIII
Bid Proposal	
Contractor's Proposal	XIV-XV
List of Subcontractors	XVI
Experience Statement	XVII
Statement of Licensure	XVIII
Non-Collusion Declaration	XIX
Iran Contracting Act Certification	XX
Bid Bond	XXI-XXII
Construction Agreement, Bonds and Other Forms	
Construction Agreement	XXIII-XXIV
Exhibit A	XXV
Performance Bond	XXVI-XXVIII
Payment Bond	XXIX-XXX
Workers' Compensation Contractor Certificate	XXXI
Declaration of Sufficiency of Funds	XXXII-XXXIV

GENERAL PROVISIONS

Section I - Definition of Terms	1
1.01 Terms	
1.02 Similarity of Words	
Section II - Scope of Work	2
2.01 Work to be Done	
2.02 Construction Schedule	
2.03 Drawings and Specifications on the Work	
2.04 Estimate of Quantities	
2.05 Protests	
2.06 Alterations	
2.07 Extra Work	
2.08 Payment for Extra Work	
2.09 Rights of Way	
2.10 Cleaning Up	
Section III - Control of the Work	6
3.01 Authority of the Engineer	
3.02 Detail Drawings	
3.03 Conformity with Plans and Allowable Deviations	
3.04 Interpretation of Plans and Specifications	
3.05 Superintendence	
3.06 Lines and Grades	

TABLE OF CONTENTS - CONTD.

GENERAL PROVISIONS contd.

	<u>Page</u>
3.07 Inspection of Work	
3.08 Removal of Defective and Unauthorized Work	
3.09 Equipment and Plant	
3.10 Final Inspection	
Section IV - Control of Material	9
4.01 District Furnished Materials	
4.02 Source of Supply and Quality of Materials	
4.03 Samples and Tests	
4.04 Digging Trenches or Other Excavations	
4.05 Storage of Materials	
4.06 Defective Materials	
4.07 Assignment of Claims	
Section V - Legal Relations and Responsibility	11
5.01 Laws to be Observed	
5.02 Contractor's Responsibility	
5.03 Contractor's Responsibility for Work	
5.04 Property Rights in Materials	
5.05 Permits and Licenses	
5.06 Royalties and Patents	
5.07 Sanitary Provisions	
5.08 Public Safety	
5.09 Use of Explosives	
5.10 Provisions for Emergencies	
5.11 Unforeseen Difficulties	
5.12 Access to the Work	
5.13 Guarantee of Work	
5.14 Damages by Act of God	
Section VI - Prosecution and Progress	18
6.01 Progress of the Work	
6.02 Overtime Work and Work at Night	
6.03 Subcontracting	
6.04 Character of Workmen	
6.05 Temporary Suspension of the Work	
6.06 Time of Completion and Damages	
6.07 Delays and Extension of Time	
6.08 Assignment	
6.09 Termination of Contract	

TABLE OF CONTENTS - CONTD.

GENERAL PROVISIONS contd.

	<u>Page</u>
Section VII - Payment	22
7.01 Scope of Payments	
7.02 Payment and Compensation for Altered Quantities	
7.03 Force Account Payment	
7.04 Acceptance	
7.05 Deductions from Payments	
7.06 Partial Payments	
7.07 Delayed Payments	
7.08 Final Payment	
7.09 Claims Resolution - Claims up to \$375,000	
7.10 Claims Resolution - All Claims (Public Contract Code Section 9204)	
Section VIII - General	34
8.01 Cooperation between Contractors	
8.02 Insurance - Indemnification/Hold Harmless/Defend	
8.03 Public Utilities	
8.04 Protection of Existing Street Facilities	
8.05 Diversion and Control of Water	
8.06 Dust Abatement	
8.07 Project Signs	
8.08 Examination of Plans, Specifications, Contract, and Site of Work	
Section IX - Watering	41
9.01 Description	
Section X - Public Convenience, Traffic Control and Detours	41
10.01 General	
10.02 Signs	
10.03 Materials Storage	

SPECIAL PROVISIONS

Section 1 - General	43
1.1 Summary of Work	
1.2 Standard Drawings and Specifications	
1.3 Submittals to District	
Section 2 - Time of Completion, Damages and Legal Holidays	44
2.1 General	
2.2 Notice to Proceed	
2.3 Damages	
2.4 Legal Holidays	

TABLE OF CONTENTS - CONTD.

SPECIAL PROVISIONS contd.

	<u>Page</u>
Section 3 - Force Account Payment	45
3.1 Labor Surcharge	
3.2 Equipment Rental	
Section 4 - Protection of Existing Utilities	45
4.1 General	
4.2 Cooperation with Utilities Relocated by Others	
Section 5 - Project Site Maintenance	46
5.1 General	
5.2 Cleanup and Dust Control	
5.3 Air Pollution Control	
5.4 Sanitation	
5.5 Temporary Light, Power and Water	
5.6 Water Pollution Control	
5.7 Drainage Control	
Section 6 - Special Requirements	48
6.1 National Pollutant Discharge Elimination System (NPDES)	
6.2 Sanitation	
6.3 Confined Space Compliance	
6.4 Heavy Equipment Working Hours	
6.5 Encroachment Permits	
6.6 Toxic Material Disposal	
6.7 Survey Crew	
6.8 Survey Monuments	
6.9 Job Trailer Site	
6.10 Construction Tolerances	
6.11 Surplus Excavated Material	
6.12 Sewer Line Inspection	
6.13 Dam Outlet Pipe Inspection	
6.14 Pipe Order Notification	
6.15 Project Signs	
6.16 Liability Insurance	
6.17 CDFW Compliance	
6.18 Accidental Discovery	
6.19 Burrowing Owl Pre-Construction Survey	
6.20 Burrowing Owl Avoidance Measures	
6.21 Nesting Bird Pre-Construction Survey	
Section 7 - Soils Report	55
Section 8 - Not Used	56
Section 9 - Payment	56

TABLE OF CONTENTS - CONTD.

DETAILED SPECIFICATIONS

	<u>Page</u>
Section 10 - Mobilization	57
10.1 Description	
10.2 Payment	
Section 11 - Water Control	57
11.1 Description	
11.2 Water Control	
11.3 Water Control Plan	
11.4 Measurement and Payment	
Section 12 - Not Used	58
Section 13 - Clearing and Miscellaneous Work	58
13.1 Description	
13.2 Clearing and Miscellaneous Work	
13.3 Payment	
Section 14 - Earthwork	59
14.1 Description	
14.2 Quality Assurance/Quality Control	
14.3 General Excavation Requirements	
14.4 Structure Excavation	
14.5 Over-Excavation	
14.6 Precompaction	
14.7 General Backfill Requirements	
14.8 Testing	
14.9 Structure Backfill	
14.10 Measurement	
14.11 Payment	
Section 15 - Trench Safety System	66
15.1 Description	
15.2 Trench Safety System	
15.3 Measurement and Payment	
Section 16 - Concrete Construction	67
16.1 Description	
16.2 General Requirements	
16.3 Quality Assurance/Quality Control	
16.4 Material and Methods	
16.5 General Reinforcing Steel Requirements	
16.6 Consistency	
16.7 Placing	

TABLE OF CONTENTS - CONTD.

DETAILED SPECIFICATIONS contd.

	<u>Page</u>
16.8 Form Removal and Finish	
16.9 Curing	
16.9.1 Curing Compound	
16.9.2 Sheeting	
16.10 Joints	
16.11 Class "A" Concrete, Intake Structure	
16.12 Class "A" Concrete, CIDH Pile	
16.13 Class "A" Concrete, Retaining Wall	
16.14 Class "A" Concrete, Minor Structures	
16.15 Class "B" Concrete, Miscellaneous	
16.16 Measurement	
16.17 Payment	
Section 17 - Concrete Pipe	78
17.1 Description	
17.2 General Pipe Requirement	
17.3 Pipe Joints	
17.4 30" RCP, 3000D	
17.5 Video Inspection	
17.6 Measurement	
17.7 Payment	
Section 18 and Section 19 - Not Used	81
Section 20 - Fences and Gates	81
20.1 Description	
20.2 Cable Fencing	
20.3 Measurement	
20.4 Payment	
Section 21 - Miscellaneous	82
21.1 Description	
21.2 Miscellaneous Iron and Steel	
21.3 Galvanizing	
21.4 Railing	
21.5 Stage Markers	
21.6 Extra Directed Work	
21.7 Measurement	
21.8 Payment	
Section 22 through Section 25 - Not Used	86
Section 26 - Stonework	86
26.1 Description	

TABLE OF CONTENTS - CONTD.

DETAILED SPECIFICATIONS contd.

	<u>Page</u>
26.2 General Rock Mulch Requirements	
26.3 Rock Mulch Subgrade Preparation	
26.4 Rock Mulch Placement	
26.5 Rock Mulch Placement Plan	
26.6 Rock Mulch	
26.7 Crushed Rock	
26.8 Measurement	
26.9 Payment	
Section 27 - Dust Abatement	89
27.1 Description	
27.2 Dust Abatement	
27.3 Payment	
Section 28 - Hydroseeding	89
28.1 Description	
28.2 Hydroseeding	
28.3 Equipment and Materials	
28.4 Application	
28.5 Measurement	
28.6 Payment	
Section 29 - Stormwater and Non-Stormwater Pollution Control	92
29.1 General Requirements	
29.2 WPCP Amendments	
29.3 Non-Compliance Reporting	
29.4 WPCP Implementation	
29.5 Non-Stormwater Discharge or Dewatering	
29.6 Reports	
29.7 Payment	
Section 30 and Section 31 - Not Used	102
Section 32 - Slide Gate and Appurtenances	102
32.1 Description	
32.2 General Requirements	
32.3 Submittals	
32.4 Quality Assurance	
32.5 Slide Gate	
32.5.1 Slide Gate Frame	
32.5.2 Gate Stem and Stem Guide	
32.5.3 Slide Gate (Cover)	
32.5.4 Painting	

TABLE OF CONTENTS - CONTD.

DETAILED SPECIFICATIONS contd.

	<u>Page</u>
32.6 Shop Testing	
32.7 Installation	
32.8 Field Testing	
32.9 Measurement	
32.10 Payment	
Section 33 - Waterstops	105
33.1 Description	
33.2 PVC Waterstop	
33.3 PVC Waterstop Materials	
33.4 PVC Waterstop Submittals	
33.5 PVC Waterstop Installation Requirements	
33.6 Expandable Waterstop	
33.7 Expandable Waterstop Materials	
33.8 Expandable Waterstop Submittals	
33.9 Expandable Waterstop Installation	
33.10 Measurement	
33.11 Payment	
Section 34 - Plastic Pipe	107
34.1 Description	
34.2 General Pipe Requirements	
34.3 6-Inch PVC Pipe	
34.4 Installation	
34.5 Measurement	
34.6 Payment	
Appendix "A" - South Coast Air Quality Management District Rule 403	109
Appendix "B" - Project Signs	110
Appendix "C" - Log of Soil Borings	111
Appendix "D" - Memorandum of Understanding (MOU) Activities in Improved Channels and Detention/Retention and/or Debris Basins (6-2001-195)	112

Drawing No. 1-0709

Sheets 1 through 13

NOTICE INVITING BIDS TO CONTRACTORS

Riverside County Flood Control and Water Conservation District hereinafter called "District", invites sealed proposals for construction of:

Woodcrest Dam Outlet Modification, Stage 90
Project No. 1-0-00045-90
located in the city of Riverside
Riverside County, California

On or after **March 9, 2021**, the Specifications and Contract Documents may be examined and obtained through www.ebidboard.com. The Specifications and Contract Documents may also be viewed at the District's office at 1995 Market Street, Riverside, California, and purchased from the District for **\$60.00** per set if picking up and **\$65.00** per set if requesting to be mailed. The Specifications and Contract Documents are also offered on CD-ROM for \$10.00 if picking up and \$15.00 if requesting to be mailed. No refunds.

Each proposal must be accompanied by a bid security in the form of a certified check, cashier's check or bid bond equal to ten percent (10%) of the amount bid, payable to the Riverside County Flood Control and Water Conservation District as a guarantee that the Contractor will, if awarded the contract, execute a satisfactory contract and furnish the required bonds and proof of insurance.

Bid Proposals must be placed in a sealed envelope clearly marked "Bid Proposal". Bid Proposals must be in accordance with the instructions and other Contract Documents and filed with the District by **2:00 p.m. on Thursday, April 8, 2021** at 1995 Market Street, Riverside, California, which time and place are fixed for the public opening of bids.

Any questions, requests for information and requests for clarification or interpretation of the Specifications must be submitted in writing to the District attention:

Daniel Aguirre
Email: danaguir@rivco.org
OR

Hard Copy: Riverside County Flood Control and Water Conservation District
1995 Market Street, Riverside, CA 92501
Attn: Daniel Aguirre

Questions or requests must be received **no later than 5:00 p.m. on Tuesday, March 30, 2021**.

Pursuant to Labor Code Section 1771.1, any Contractor bidding and subcontractors to be listed on a Bid Proposal are subject to Public Contract Code Section 4104 and shall not be eligible to bid unless currently registered with the Department of Industrial Relations and qualified to perform public works pursuant to Labor Code Section 1725.5. No Contractor or subcontractor may be awarded a public works project or enter into a Contract without proof of current registration to perform public works.

General prevailing rate of per diem wages and general prevailing rate of per diem wages for holiday and overtime work, including employer payments for health and welfare, pension, vacation, apprentices and similar purposes for each craft, classification or type of workman needed for execution of

contracts under the jurisdiction of District have been obtained by the Board of Supervisors of the District from the Director of Industrial Relations of the State of California for the area where the work is to be done. The said determinations are on file in the principal office of the District, and will be made available to any interested person upon request.

THIS PROJECT IS SUBJECT TO COMPLIANCE MONITORING AND ENFORCEMENT BY THE DEPARTMENT OF INDUSTRIAL RELATIONS. The awarded prime Contractor shall post job site notices, including a copy of the prevailing rate of per diem wages determinations made by the Director for the Department of Industrial Relations and other notices prescribed by regulations and comply with the provisions of the California Labor Code, including, without limitation, Sections 1771.4, 1773.1, 1773.2, 1774, 1775, 1776, and 1777.5.

Contractor shall furnish the records specified in Labor Code Section 1776, including but limited to the certified payroll records, directly to the Labor Commissioner for the Department of Industrial Relations.

Substitution of securities for any moneys withheld by District shall be permitted as provided for by Section 22300 of the California Public Contract Code.

Contractors submitting proposals for this project shall have an active and in good standing Class "A" Contractor's license from the State of California in order to be considered eligible for the contract award. The license(s) shall remain active and in good standing throughout the entire duration of the project.

With the submittal of the Bid Proposal and other Contract Documents, the Contractor shall submit for approval by the District documented evidence of satisfaction of all of the Bidder Qualifications listed above and in accordance with Articles 1 through 4 of the Instructions to Bidders.

Dated: March 9, 2021

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

KECIA HARPER
Clerk of the Board

BY 
Deputy

INSTRUCTIONS TO BIDDERS

ARTICLE 1 GENERAL CONDITIONS

1.1 DEFINITIONS

Capitalized terms used on the Contract Documents shall have the meanings assigned to them in the Construction Agreement, Bonds, other Forms, General Provisions, and Specifications and Contract Documents that are included in the Contract Documents. Capitalized terms not so defined shall have the meanings assigned to them in, or if none is assigned as reasonably interpreted according to the context of, the portion of the Contract Documents where such terms are used.

1.2 QUANTITIES

The amount of work to be done or materials to be furnished under the contract as noted in the proposal, are but estimates and are not to be taken as an expressed or implied statement that the actual amount of work or materials will correspond to the estimate.

The right is reserved to increase or decrease or to entirely eliminate certain items from the work or materials if found desirable or expedient.

The Contractor will be allowed no claims for anticipated profits, loss of profits or for any damages of any sort because of any difference between the estimated and the actual amounts of work done, or materials furnished or used in the completed project.

The Contractor is cautioned against unbalancing of his bid by prorating his overhead into one or two items only when there are a number of items on the schedule. The overhead and indirect charges should be prorated on all items in schedule.

1.3 AGREEMENT OF FIGURES

If the unit prices and the total amounts named by the bidder in the proposal do not agree, the unit prices alone will be considered as representing the bidder's intention.

1.4 "OR EQUAL"

Pursuant to Division 2, Chapter 3, Article 5, commencing at Section 3400 of the Public Contract Code, all specifications shall be deemed to include the words "or equal", provided, however, that permissible exceptions or other requirements shall be specifically noted in the specifications. Any "equal" proposed by the Contractor must be described in the Contractor's Proposal.

1.5 INSPECTION OF SITE

Bidders must examine the site and acquaint themselves with all conditions affecting the work.

Information derived from maps, plans or specifications, or from the Chief Engineer or his assistants, will not relieve the successful bidder from properly carrying out all the terms of the written contract.

By the submitting of a proposal, the bidder will be held to have personally examined the site and the drawings, to have carefully read the specifications and to have satisfied himself as to his ability to meet all the difficulties attending the execution of the proposed contract before the delivery of his proposal and agrees that if he is awarded the contract, he will make no claim against the District and the County of Riverside, (including their respective officers, districts, special districts and departments, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives) based on ignorance or misunderstanding of the contract provisions.

1.6 QUALIFICATIONS OF BIDDERS

No proposal will be accepted from a Contractor who is not licensed under laws of California, as evidenced by the submittal of the Statement of Licensure. No award will be made to any bidder who cannot give satisfactory assurance to the District as to his own ability to carry out the contract, both from his financial standing and by reason of his previous experience as a Contractor on work of the nature contemplated in the contract. The bidder is required to submit his record of work of similar nature to that proposed under these specifications, and unfamiliarity with the type of work may be sufficient cause for rejection of a proposal.

A bid shall be rejected and a bidder shall be disqualified to bid on a District project if the bidder or any officer, manager, partner or shareholder of the bidder within the eighteen month period prior to the bid date shall have been an officer or employee of the District.

1.7 CONTRACTOR REGISTRATION

In accordance with the Labor Code (especially Sections 1725.5 and 1771.1), prior to submitting a proposal to District, all Contractors and Subcontractors must register as a "Public Works Contractor" with the Department of Industrial Relations (DIR) using the online application. Contractor's and Subcontractor's DIR Registration Number must be listed in the appropriate space on Contractor's Proposal form. This project is subject to compliance monitoring and enforcement by the DIR.

1.8 BALANCE BID

The Contractor is cautioned against unbalancing of its Bid by including its overhead and profit into one or two items only when there are a number of items on the schedule. The overhead and indirect charges should be prorated on all items in the schedule.

1.9 ANTI-DISCRIMINATION

It is the policy of the District that, in connection with all work performed under the Construction Agreement, there be no discrimination against any prospective or active employee engaged in the Work because of race, color, ancestry, national origin, religious creed, sex, age, marital status, or sexual preference. The Contractor agrees to comply with applicable Federal and California laws including, but not limited to, the California Fair Employment Practice Act, beginning with Labor Code Section 1410, and Labor Code Section 1735. In addition, the Contractor agrees to require like compliance by any subcontractors employed on the Work.

1.10 REQUIRED SUBMITTALS

There are a number of forms and other documents required as submittals by the Bidder during the various stages of the project. The following table provides a checklist of submittals required by the Bidder as requested in the Contract Documents. Bidders shall be made aware that the documents listed in the following table do not guarantee a complete submittal package.

	BID DOCUMENT	SUBMITTAL TIMEFRAME
<input type="checkbox"/>	Contractor's Proposal	with Bid Proposal
<input type="checkbox"/>	List of Subcontractors	with Bid Proposal
<input type="checkbox"/>	Experience Statement (Minimum of 5 References)	with Bid Proposal
<input type="checkbox"/>	Statement of Licensure	with Bid Proposal
<input type="checkbox"/>	Non-Collusion Declaration	with Bid Proposal
<input type="checkbox"/>	Iran Contracting Act Certification	with Bid Proposal
<input type="checkbox"/>	Bid Bond (10% of Contract Price)	with Bid Proposal
<input type="checkbox"/>	Construction Agreement	within 7 days of Notice of Intent to Award
<input type="checkbox"/>	Performance Bond (100% of Contract Price)	within 7 days of Notice of Intent to Award
<input type="checkbox"/>	Payment Bond (100% of Contract Price)	within 7 days of Notice of Intent to Award
<input type="checkbox"/>	Workers' Compensation Contractor Certificate	within 7 days of Notice of Intent to Award
<input type="checkbox"/>	Declaration of Sufficiency of Funds	within 7 days of Notice of Intent to Award
<input type="checkbox"/>	Certificates of Insurance	within 7 days of Notice of Intent to Award
<input type="checkbox"/>	Construction Schedule	within 14 days of Notice of Intent to Award
<input type="checkbox"/>	Affirmative Action Compliance Program (for Contractors with 50+ Employees)	within 30 days of Award of Contract

ARTICLE 2 BIDDING PROCEDURES

2.1 PROPOSAL FORMS

Attention of all bidders is called to all bid proposal forms attached hereto. Bidders are cautioned that all bid proposals submitted must be accompanied by all forms properly executed.

2.2 SUBMISSION OF BID PROPOSALS

All copies of the Contractor's Proposal, Bid Security, and other Bid Proposal Submittals shall be enclosed by the Bidder in a sealed opaque envelope. Said envelope, as well as any other, outer envelope or packaging in which said envelope may have been placed by Bidder or the carrier for delivery, shall be addressed and delivered as provided in the Notice Inviting Bids to Contractors.

2.3 TIMELY RECEIPT

The Bidder assumes full and sole responsibility for timely receipt of its Bid Proposal, including its Bid Security and all other Bid Submittals, at the location designated in the Notice Inviting Bids to Contractors.

2.4 DELIVERY METHOD OF BID PROPOSAL

Submittal of Bid Proposals shall be by hand delivery or mail, only. Oral, telephonic, telegraphic, facsimile or other electronic transmission is not permitted.

2.5 INVALID BID PROPOSALS

Bid Proposals submitted by fax or e-mail and those which fail to reach the place fixed for opening of Bid Proposals prior to the date and hour set for opening same will not be considered.

2.6 BID SECURITY:

Bid Security. Each Bid shall be accompanied by a Bid Security in the form of 1) cash, 2) a certified or cashier's check made payable to the Riverside County Flood Control and Water Conservation District, or 3) a Bid Bond (using the form of Bid Bond included in the Bidding Documents) issued by an Admitted Surety, in an amount equal to at least ten percent (10%) of the Bid Amount, as a guarantee that the Bidder, if awarded the Construction Contract, will enter into a Construction Contract with the District and furnish the Performance Bond, Payment Bond and other Post-Award Submittals required by the Bidding Documents. Should the Bidder refuse to enter into the Construction Contract or fail to furnish the Performance Bond, Payment Bond or any other Post-Award Submittals within the required timeframes as applicable, then the Bid Security shall be forfeited to the District in an amount equal to the difference between the amount of Bidder's Bid Amount and the amount for which the District may procure the work from another Bidder plus the costs to the District of redrafting, redrawing and republishing the Bidding Documents.

Retention by District. The District will have the right to retain the Bid Security of any Bidder to whom an Award is being considered until either (1) the Construction Contract has been executed and the Performance Bond, Payment Bond and other Post-Award Submittals have been furnished, or (2) all Bids have been rejected.

Return of Proposal Guarantees. Within ten (10) days after the award of the contract, the District will return the proposal guarantees accompanying such of the proposals as are not considered in making the award. All other proposal guarantees will be held until the contract has been fully executed, after which they will be returned to the respective bidders whose proposal they accompany.

2.7 SUBLETTING AND SUBCONTRACTING

Bidders are required, pursuant to the Subletting and Subcontracting Fair Practices Act (commencing with Section 4100 of the Public Contract Code) to list in their proposal the name and location of place of business of each subcontractor who will perform work or labor or render services in or about the construction of the work or improvement or a subcontractor who specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the Plans and Specifications, in excess of one-half ($\frac{1}{2}$) of one percent (1%) of the prime Contractor's total bid. Failure to list a subcontractor for a portion of the work means that the prime Contractor will do that portion of the work. Contractor shall list only one subcontractor for each portion as is defined by the Contractor in the Contractor's Bid Proposal.

2.8 DISCREPANCIES AND OMISSIONS

Discrepancies, omissions, ambiguities, or requirements likely to cause disputes between trades and similar matters shall be promptly brought to the attention of the Engineer. When appropriate, Addenda will be issued by the District. No communication by anyone as to such matters except by an Addendum affects the meaning or requirements of the Contract Documents.

2.9 ADDENDA

Interpretations, corrections, clarifications and changes to the Contract Documents will be made by Addenda. District reserves the right to issue Addenda to the Contract Documents at any time prior to the time set to open bids. Each potential bidder shall leave with the District its name and address for the purpose of receiving Addenda. District will cause copies of Addenda to be mailed or delivered to such names at such addresses. To be considered, a Contractor's proposal must list and take into account all issued Addenda.

Addenda will be transmitted by District to all prospective Bidders who (1) attended and signed in at the Mandatory Pre-Bid Site Review meeting (if any); (2) are plan holders; or (3) have submitted a written request to District for notice of Addenda at Riverside County Flood Control, 1995 Market Street, Riverside, CA 92501, including in such request the Bidder's name and address for mailing. Each potential Bidder shall leave with the District its name, address, email, and fax number for the purpose of receiving Addenda. To be considered, a Contractor's Proposal must list and take into account all issued Addenda. Failure of the Bidder to receive any Addendum shall not relieve the Bidder from any of its obligations under its Contractor's Proposal. The costs of performance by Bidder of all items of Work and other obligations contained in all Addenda issued by the District shall be deemed included in the amount of the

Contractor's Proposal. The Bidder shall identify and list in its Contractor's Proposal all Addenda received and included by the District as a basis for determining its Bid Proposal non-responsive.

2.10 RESPONSE TO QUESTIONS

Any questions or requests for information must be submitted in writing to the District attention:

Daniel Aguirre

Email: danaguir@rivco.org

OR

Hard Copy: Riverside County Flood Control and Water Conservation District

1995 Market Street, Riverside, CA 92501

Attn: Daniel Aguirre

Questions or requests must be received **no later than 5:00 p.m. on Tuesday, March 30, 2021.**

2.11 POSTPONEMENT

The District reserves the right to postpone the time and date for the public opening of bids as specified in the Notice Inviting Bids to Contractors by issuance of an Addendum to the Contract Documents at any time prior to the specified time and date for public opening of bids.

2.12 REJECTION OF BID PROPOSALS CONTAINING ALTERATIONS, ERASURES OR IRREGULARITIES

Bid Proposals may be rejected if they show any alterations of form, additions not called for, conditional Bid Proposals, incomplete Bid Proposals, erasures, or irregularities of any kind. Erasures or interlineations in the Bid Proposal must be explained or noted over the signature of the Bidder. The District may determine as unresponsive any Bid Proposal in which any statement or representation made or incorporated by reference in the Contractor's Proposal, including any Bid submittal comprising the Bid Proposal, is false, incorrect or materially incomplete and misleading.

2.13 DISQUALIFICATION OF BIDDERS

More than one proposal from an individual, a firm or partnership, a corporation or an association under the same or different names will not be considered. Reasonable ground for believing that any bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such bidder is interested. If there is any reason for believing that collusion exists among the bidders, none of the participants in such collusion will be considered in awarding the contract. Proposals in which the prices obviously are unbalanced may be rejected.

2.14 WITHDRAWAL OF PROPOSALS

Any proposal may be withdrawn at any time prior to the hour fixed in the Notice to Contractors for the opening of proposals, provided that a request in writing, executed by the bidder or his duly authorized representative, for the withdrawal of such proposal, is filed with the Chief Engineer. The withdrawal of a proposal shall not prejudice the right of a bidder to file a new proposal.

2.15 IRAN CONTRACTING ACT

In accordance with Public Contract Code Section 2204(a), prior to bidding on, submitting a proposal or executing a contract or renewal for a District contract for goods or services of \$1,000,000 or more, a Contractor must either:

- a) Certify it is not on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code Section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or
- b) Demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code Section 2203(c) or (d).

To comply with this requirement, please insert your Contractor or financial institution name and Federal ID Number (if available) and complete one of the options on Page XXII. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code section 2205.)

2.16 PUBLIC OPENING OF PROPOSALS

Proposals will be opened and read publicly at the time and place indicated in the Notice Inviting Bids to Contractors. Bidders or their authorized agents are invited to be present.

ARTICLE 3 CONSIDERATION OF BIDS

3.1 BASIS OF AWARD

The award of the Contract, if it be awarded, will be to the lowest responsible and qualified Bidder based upon all Bid items.

3.2 NOTICE OF INTENT TO AWARD

Within thirty (30) days following public opening and reading of Bids, the District will issue a Notice of Intent to Award identifying the name of the Bidder to whom the District intends to Award the Construction Contract. Such notice will be posted under Public Notices at rcflood.org. The District may, in its sole and absolute discretion, elect to extend the time for its issuance of its Notice of Intent to Award.

3.3 BID PROTESTS

Any Bidder submitting a Bid Proposal to the District may file a protest of the District's proposed Award of the Construction Contract provided that each and all of the following are complied with:

1. The bid protest is in writing.

- X -

2. The bid protest is both: (1) filed with and received by David Garcia at the following address, 1995 Market Street, Riverside, California, not more than five (5) days following the date of issuance of the Notice of Intent to Award. Failure to timely file and serve the bid protest as afore stated shall constitute grounds for the District's denial of the bid protest without consideration of the grounds stated therein.
3. The written bid protest sets forth, in detail, all grounds for the bid protest, including without limitation all facts, supporting documentation, legal authorities and argument in support of the grounds for the bid protest. Any grounds not set forth in the bid protest shall be deemed waived. All factual contentions must be supported by competent, admissible and credible evidence. Any bid protest not conforming to the foregoing shall be rejected as invalid.
4. Provided that a bid protest is filed in conformity with the foregoing, the General Manager-Chief Engineer, or such individual(s) as may be designated by the General Manager-Chief Engineer in his/her discretion, shall review and evaluate the basis of the bid protest, and shall provide a written decision to the Bidder submitting the bid protest, either concurring with or denying the bid protest. The written decision of the General Manager-Chief Engineer or his/her designee shall be final, unless overturned by the Board of Supervisors.
5. An inadvertent error in listing the California contractor license number or DIR public works contractor registration number for a subcontractor shall not be grounds for filing a bid protest or grounds for considering the bid nonresponsive if the corrected number is submitted to the District within 24 hours after the bid opening and provided the corrected number corresponds to the submitted name and location for that subcontractor.

3.4 AWARD OF CONTRACT

The right is reserved to reject any and all proposals and to waive technical defects as the best interests of the District may require. The award of the Contract, if it be awarded, will be to the lowest responsible bidder whose proposal complies with the requirements prescribed. The award, if made, will be made within sixty (60) days after the opening of the proposals. All proposals will be compared on the basis of the Engineer's estimate of the quantities of work to be done.

ARTICLE 4 POST-NOTICE OF INTENT TO AWARD

4.1 POST-NOTICE OF INTENT TO AWARD SUBMITTALS

Within the time periods set forth below, the successful Bidder identified in the Notice of Intent to Award as the successful Bidder shall submit the following additional Post-Notice of Intent to Award submittals, completed and signed in the manner required by the Contract Documents, to the District at 1995 Market Street, Riverside, California 92501:

- 4.1.1 Within **seven (7) days** after issuance by District to Bidder of the Notice of Intent to Award and prior to contract award, such Bidder shall submit to the District the following:

- (1) Construction Agreement duly executed by the authorized delegate of the Contractor;
- (2) Performance Bond and Payment Bond (issued by Surety), as set forth in Section 4.2 below;
- (3) Evidence of Insurance, as specified by the Contract Documents;
- (4) Workers' Compensation Certificate, in the form specified by the Contract Documents; and
- (5) Declaration of Sufficiency of Funds (required only if the Bidder has not entered into a collective bargaining agreement covering the workers to be employed for performance of the Work), in the form specified by the Contract Documents.

4.1.2 Within **fourteen (14) days** after issuance by District to Bidder of the Notice of Intent to Award and prior to commencement of the Work, such Bidder shall submit to the District the following:

- (1) Construction Schedule, prepared by Bidder in the manner required by Section 2.02 of the General Provisions; and

4.2 **CONTRACT SECURITY – PERFORMANCE BOND AND PAYMENT BOND**

The Contractor shall furnish two (2) surety bonds, each in quadruplicate, one as a security for the faithful performance of the contract in the amount equal to one hundred percent (100%) of the contract price, and one as security for the payment of all persons performing labor and furnishing materials in connection with the contract in an amount equal to one hundred percent (100%) of the Contract Price. The penal sums of the Performance Bond and Payment Bond shall each be initially in the amount of one hundred percent (100%) of the Contract Price. The penal sum may be required to be increased for Contract Adjustments increasing the Contract Price that are authorized by Change Order. All bonds must be submitted on forms provided by the District. Bonds submitted in any other form will not be accepted.

Prior to the execution of the Contract, the Contractor shall furnish to the District the required, original, Performance and Payment Bonds, issued by an admitted surety and shall have a A.M. Best's Insurance Rating of A VIII (A:8) or better rated surety company, authorized to do business in the State of California. The Bonds shall be executed by an authorized attorney-in-fact for the Surety company and his/her original or certified copy Power of Attorney must be attached to the Bonds. Premiums for Bonds shall be paid by the Contractor. Notary acknowledgements of the signatures of the Contractor and Surety(ies) is required. The attorney-in-fact who executes the required Performance Bond and Payment Bond on behalf of the Surety shall affix thereto a certified and current copy of the Power of Attorney authorizing such attorney-in-fact to execute same on behalf of such Surety. Should any Surety on the Performance Bond or Payment Bond be deemed unsatisfactory by the District, Contractor shall upon notice promptly substitute new bonds satisfactory to the District.

If the Performance Bond provides for a one-year warranty, a separate Maintenance Bond is not necessary. If the warranty period specified in the contract is for longer than one year, a Maintenance Bond equal to ten percent (10%) of the contract price is required. Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California.

4.3 **FORFEITURE FOR FAILURE TO POST SECURITY AND EXECUTE AGREEMENT**

In the event the Bidder, to whom an award will be made, fails or refuses to post the required bonds and provide the required certificates of insurance and fails to return executed copies of the Construction Agreement within seven (7) days after the prescribed forms are presented to it for signature, the District may declare the Bidder's Bid deposit or bond forfeited as damages caused by the failure of the Bidder to post such security and execute such copies of the Construction Agreement and may award the Work to the next lowest responsible Bidder, or may call for new bids.

CONTRACTOR'S PROPOSAL

TO THE BOARD OF SUPERVISORS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT:

The undersigned hereby declare(s):

- (a) That the only persons or parties interested in this proposal as principals are the following:

Name of Company (and dba if applicable) ("Contractor"): Bosco Constructors, Inc.
Patrick Robinson, President, Secretary, Treasurer

(If the Contractor is a corporation, give the name of the corporation and the name of its president, secretary, treasurer, and manager. If a copartnership, give the name under which the copartnership does business, and the names and addresses of all copartners. If an individual, state the name and address under which the contract is to be drawn.)

- (b) That this proposal is made without collusion with any other person, firm or corporation.
- (c) That he has carefully examined the location of the proposed work, and has familiarized himself with all of the physical and climatic conditions, and makes his proposal solely upon his own knowledge.
- (d) That he has carefully examined the attached specifications as referred to, and the plans, and makes this proposal in accordance therewith.
- (e) That, if this proposal is accepted, he will enter into a written contract with the Riverside County Flood Control and Water Conservation District, Riverside, State of California.
- (f) That he proposes to enter into such contract and to accept in full payment for the work actually done thereunder the prices shown in the attached schedule. It is understood and agreed that the quantities set forth are but estimates, and that the unit prices will apply to the actual quantities whatever they may be, subject to such adjustments and alterations as elsewhere provided for in the Contract Documents.

As bid security, accompanying this proposal is a certified or cashier's check or bid bond payable to the order of the Riverside County Flood Control and Water Conservation District, Riverside, California, in the sum of

Ninety eight thousand three hundred twenty three

Dollars (\$ 98,323.40)
and forty cents.

THE REQUIRED REFERENCES AND OTHER REQUIRED DOCUMENTS MUST BE ATTACHED TO THIS BID PROPOSAL

It is understood and agreed that should the Contractor within seven (7) days after the prescribed forms are presented to him for signature fail to return the contract and furnish acceptable surety bond and insurance, then, at the discretion of the District, the proceeds of said check shall become the property of the District, the Contractor shall be found in default and the project may be awarded to another contractor. The bid bond or check shall be held subject to payment to the District of the difference in money between the amount of the contract with another party to perform the work, together with the cost to the District of redrafting, redrawing and publishing documents and papers necessary to obtain new bids on said work. The bid bond or check shall, in addition, be held subject to all other actual damages suffered by the District. But if the contract is entered into and said bonds and insurance are furnished, or if the proposal is not accepted, then the said check shall be returned to the undersigned.

RECEIVED

APR 08 2021
1:49pm

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

PROPOSAL

For the Construction of **Woodcrest Dam Outlet Modification, Stage 90**, located in the city of Riverside, Riverside County, consisting of the following estimated quantities:

SECT. NO.	ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
10	1.	Mobilization	L.S.	---	---	\$ 40,000
11	2.	Water Control	L.S.	---	---	\$ 12,000
13	3.	Clearing and Miscellaneous Work	L.S.	---	---	\$ 30,000
14	4.	Structure Excavation	C.Y.	177	\$200	\$ 35,400
14	5.	Over-Excavation	C.Y.	23	\$400	\$ 9,200
14	6.	Precompaction	S.Y.	34	\$529.41	\$ 18,000
14	7.	Structure Backfill	C.Y.	66	\$180	\$ 11,880
15	8.	Trench Safety System	L.S.	---	---	\$ 5,000
16	9.	Class "A" Concrete, Intake Structure	C.Y.	66	\$900	\$ 59,400
16	10.	Class "A" Concrete, CIDH Pile	C.Y.	1	\$6,500	\$ 6,500
16	11.	Class "A" Concrete, Retaining Wall	C.Y.	2	\$4,000	\$ 8,000
16	12.	Class "A" Concrete, Minor Structures	C.Y.	30	\$800	\$ 24,000
16	13.	Class "B" Concrete, Miscellaneous	C.Y.	13	\$1,000	\$ 13,000
17	14.	30" RCP, 3000D	L.F.	12	\$1,000	\$ 12,000
20	15.	Cable Fencing	L.F.	35	\$250	\$ 8,750
21	16.	Miscellaneous Iron and Steel	LBS.	26,866	\$4	\$ 107,464
21	17.	Railing	L.F.	110	\$200	\$ 22,000
21	18.	Stage Markers	L.S.	---	---	\$ 2,000
21	19.	Extra Directed Work	L.S.	---	---	100,000.00
26	20.	Rock Mulch	C.Y.	4,846	\$65	\$ 314,990
26	21.	Crushed Rock	C.Y.	482	\$55	\$ 26,510
27	22.	Dust Abatement	L.S.	---	---	\$ 15,000

PROPOSAL contd.

SECT. NO.	ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
28	23.	Hydroseeding	ACRE	5.3	\$3,800	\$20,140
29	24.	Stormwater and Non-Stormwater Pollution Control	L.S.	---	---	\$17,000
29	25.	Non-Stormwater Discharge or Dewatering	L.S.	---	---	\$25,000
32	26.	Slide Gate	L.S.	---	---	\$25,000
33	27.	PVC Waterstop	L.F.	50	\$150	\$7,500
33	28.	Expandable Waterstop	L.F.	30	\$200	\$6,000
34	29.	6-Inch PVC Pipe	L.F.	20	\$75	\$1,500

TOTAL COST

For the Total Bid Proposal of: Nine hundred eighty three thousand two hundred thirty four dollars and zero cents. (State in Figures) \$983,234

Bosco Constructors, Inc.
Name of Contractor

Patrick Robinson
Signature of Contractor's authorized representative

Name: Patrick Robinson

Title: President

21353 Mayall St.
Address

27-0553218
S.S.N. or E.I.N.

Chatsworth, CA 91311
City, State, Zip

972065, A & B
Contractor's License No. and Classification

(818) 700-0304 (818) 700-0307
Telephone Number Fax Number

10000 20320
Contractor's DIR Registration No.

rjr.bosco@gmail.com
Email

If bidder is a corporation, corporate seal and attestation shall be provided below.

Dated: 4/7/2021



ADDENDUM NO. 1 ACKNOWLEDGED

Patrick Robinson

- XVa -

LIST OF SUBCONTRACTORS

Contractor Bosco Constructors, Inc. Woodcrest Dam Outlet Modification, Stage 90
Project No. 1-0-00045-90

Give the name and the location of the place of business of each Subcontractor who will perform work or labor or render service to the General Contractor in or about the construction of the work or improvement, or a Subcontractor who specially fabricates and installs a portion of the work or improvement, in an amount in excess of one-half (1/2) of one percent (1%) of the General Contractor's total bid. List the bid item numbers of the work each subcontractor will do. If a portion of an item is to be subcontracted, show what percentage of that item is to be subcontracted.

Item No. (s) 24 , 15.6%
Name of Subcontractor CES Group
Address/City/Phone 33175 Temecula Parkway Suite A-734, Temecula, CA 92592
License No. 859757 Subcontractor's DIR Registration No. 1000031206

Item No. (s) 23 , 90.4%
Name of Subcontractor HydroSprout, Inc.
Address/City/Phone 460 Corporate Drive, Suite A, Escondido, CA 92029
License No. 582303 Subcontractor's DIR Registration No. 1000005171

Item No. (s) 15 , 17 73.6% , 78.5%
Name of Subcontractor Ace Fence Company
Address/City/Phone 727 North Glendora Ave, La Puente, CA 91744
License No. 996577 Subcontractor's DIR Registration No. 1000004092

Item No. (s) _____
Name of Subcontractor _____
Address/City/Phone _____
License No. _____ Subcontractor's DIR Registration No. _____

Item No. (s) _____
Name of Subcontractor _____
Address/City/Phone _____
License No. _____ Subcontractor's DIR Registration No. _____

EXPERIENCE STATEMENT

Bidder submits, as part of his bid, the following statements as to his experience qualifications. Bidder certifies that all statements and information set forth below are true and accurate. Bidder hereby authorizes the District to make inquiry as appropriate regarding his experience.

Bidder has been engaged in the contracting business under this present business name for 12 years.

Bidder's experience in work of a nature similar in type and magnitude to that set forth in the Specification extends over a period of 30 years.

Within the last three years, Bidder has satisfactorily completed the following contracts covering work similar in type and magnitude to that set forth in these Specifications for the following owners (name person, firms, or authorities):

Name and Address of Owner/Agency	Representative and Telephone	Type of Work, Year Completed and Dollar Amount
-------------------------------------	---------------------------------	---

Please see attached work experience for
Bosco Constructors, Inc.

Patrick Refrue

BOSCO CONSTRUCTORS INC. #972065

21353 Mayall Street
Chatsworth, California 91311

(818) 700-0304 Office
(818) 700-0307 Fax

Work Experience

①

Project: Cross-Valley Canal Extension Lining Project Phase 1B, Pool No. 7

Location: Bakersfield, CA

Description: Trap Channel lining, excavate and grade, form PIP Concrete

Owner: Kern County Water Agency – 3200 Rio Mirada Dr, Bakersfield, CA 93308,
mvarga@kcwa.com (661) 634-1400

Prime Contractor: Bosco Constructors, Inc. 21353 Mayall St. Chatsworth CA, 91311
rjr.bosco@gmail.com 818-700-0304

Architect/Engineer: Michael McGovern, mmcgovern@kcwa.com (661) 634-1400

Project Manager: Thomas Beacom, tomb.bosco@gmail.com (818) 700-0304

Scope of Work: Trap Channel lining, excavate and grade, form PIP Concrete

Initial contract price: \$4,444,200

Final contract price: \$5,559,862

Completed: 01/2018

Time extensions granted (number of days); None

Number and amount of stop notices or mechanic's liens filed; None

Amount of any liquidated damages assessed against Bidder; and

**Nature and resolution of any project-related claim, lawsuit, mediation, or
arbitration involving Bidder.:** None



BOSCO CONSTRUCTORS INC. #972065

21353 Mayall Street
Chatsworth, California 91311

(818) 700-0304 Office
(818) 700-0307 Fax



Project: Colorado River Aqueduct Iron Mtn. Reservoir & Canal Liner Repairs

Location: Blythe, CA

Description: Removing and replacing concrete panels and fiber reinforced concrete reservoir liner, repairing siphon headwalls.

Owner: Metropolitan Water District of Southern California, 700 Alameda St, Los Angeles, CA 90012 ddhall@mwdh2o.com (909) 392-5060

Prime Contractor: Bosco Constructors, Inc. 21353 Mayall St. Chatsworth CA, 91311
rjr.bosco@gmail.com 818-700-0304

Architect/Engineer: Dannie Hall, ddhall@mwdh2o.com (909) 392-5060

Project Manager: Steve Robinson, stever.bosco@gmail.com , (818) 700-0304

Scope of Work: Removing and replacing concrete panels and fiber reinforced concrete reservoir liner, repairing siphon headwalls.

Initial contract price: \$4,236,000

Final contract price: \$4,674,444

Completed: 04/2019

Time extensions granted (number of days); None

Number and amount of stop notices or mechanic's liens filed; None

Amount of any liquidated damages assessed against Bidder; and

Nature and resolution of any project-related claim, lawsuit, mediation, or arbitration involving Bidder.: None



bosco-constructors.us

BOSCO CONSTRUCTORS INC. #972065

21353 Mayall Street
Chatsworth, California 91311

(818) 700-0304 Office
(818) 700-0307 Fax



Project: 06- OT2904 Roadside Safety Improvement

Location: Lemoore, CA

Description: Pave Various Gore Areas & Place Slope Paving at Various Bridges

Owner: Department of Transportation, 1352 W Olive Ave, Fresno, CA 93728
daniel.chapa@dot.ca.gov (559) 488-4067

Prime Contractor: Bosco Constructors, Inc. 21353 Mayall St. Chatsworth CA, 91311
rjr.bosco@gmail.com 818-700-0304

Architect/Engineer: Daniel Chapa, daniel.chapa@dot.ca.gov (559) 488-4067

Project Manager: Wolfgang Delgado, wolfd.bosco@gmail.com , (818) 700-0304

Scope of Work: Pave Various Gore Areas & Place Slope Paving at Various Bridges

Initial contract price: \$4,444,517.23

Final contract price: \$4,444,517.23

Completed: 01/2020

Time extensions granted (number of days); None

Number and amount of stop notices or mechanic's liens filed; None

Amount of any liquidated damages assessed against Bidder; and

Nature and resolution of any project-related claim, lawsuit, mediation, or arbitration involving Bidder.: None



bosco-constructors.us

BOSCO CONSTRUCTORS INC. #972065

21353 Mayall Street
Chatsworth, California 91311

(818) 700-0304 Office
(818) 700-0307 Fax

④

Project: San Tomas Aquino Creek Erosion Repair

Location: San Jose, CA

Description: Traffic control, clearing & grub, control of water, spot repair concrete, grouting, install concrete bonded layer, expansion joints, misc. construction work, remove & install fencing, concrete blanket protection of beams, repair spalled concrete.

Owner: Santa Clara Valley Water District, 5750 Almaden Expy, San Jose, CA 95118
cmutschler@eid.org (408) 265-2600

Prime Contractor: Bosco Constructors, Inc. 21353 Mayall St. Chatsworth CA, 91311
rjr.bosco@gmail.com 818-700-0304

Architect/Engineer: ROBERT YAMANE, RYamane@valleywater.org (408) 630-2925

Project Manager: Steve Robinson, stever.bosco@gmail.com , (818) 700-0304

Scope of Work: Traffic control, clearing & grub, control of water, spot repair concrete, grouting, install concrete bonded layer, expansion joints, misc. construction work, remove & install fencing, concrete blanket protection of beams, repair spalled concrete.

Initial contract price: \$2,685,250

Final contract price: \$2,675,252

Completed: 10/2019

Time extensions granted (number of days); None

Number and amount of stop notices or mechanic's liens filed; None

Amount of any liquidated damages assessed against Bidder; and

Nature and resolution of any project-related claim, lawsuit, mediation, or arbitration involving Bidder.: None



bosco-constructors.us

BOSCO CONSTRUCTORS INC. #972065

21353 Mayall Street
Chatsworth, California 91311

(818) 700-0304 Office
(818) 700-0307 Fax

⑤

Project: Live Oak Dam & Reservoir Inlet/Outlet Work Rehabilitation FCC0001262

Location: Azusa, CA

Description: Construction of concrete inlet riser, trash rack, runnel spall repairs and lining, invert access ramp, fence, and a slide gate, valve removal, rehabilitation, and reinstallation and the performance of other appurtenant work.

Owner: County of Los Angeles Public Works, 900 S Fremont Ave, Alhambra, CA 91803
saraui@dpw.lacounty.gov (626) 458-5100

Prime Contractor: Bosco Constructors, Inc. 21353 Mayall St. Chatsworth CA, 91311
rjr.bosco@gmail.com 818-700-0304

Architect/Engineer: Sya Araumi, saraui@dpw.lacounty.gov (626) 458-5100

Project Manager: Thomas Beacom, tomb.bosco@gmail.com (818) 700-0304

Scope of Work: Construction of concrete inlet riser, trash rack, runnel spall repairs and lining, invert access ramp, fence, and a slide gate, valve removal, rehabilitation, and reinstallation and the performance of other appurtenant work.

Initial contract price: \$1,954,800

Final contract price: \$1,954,800

Completed: 06/2020

Time extensions granted (number of days); None

Number and amount of stop notices or mechanic's liens filed; None

Amount of any liquidated damages assessed against Bidder; and

Nature and resolution of any project-related claim, lawsuit, mediation, or arbitration involving Bidder.: None



bosco-constructors.us

BOSCO CONSTRUCTORS INC. #972065

21353 Mayall Street
Chatsworth, California 91311

(818) 700-0304 Office
(818) 700-0307 Fax

⑥

Project: Balboa Island Coping Repair

Location: Newport Beach, CA

Description: Added 2' of coping to 7400 LF of seawall

Owner: City of Newport Beach, 100 Civic Center Dr, Newport Beach, CA 92660
rstein@newportbeachca.gov (949) 644-3322

Prime Contractor: Bosco Constructors, Inc. 21353 Mayall St. Chatsworth CA, 91311
rjr.bosco@gmail.com 818-700-0304

Architect/Engineer: Robert Stein, rstein@newportbeachca.gov (949) 644-3322

Project Manager: Thomas Beacom, tomb.bosco@gmail.com (818) 700-0304

Scope of Work: Added 2' of coping to 7400 LF of seawall

Initial contract price: \$1,592,969

Final contract price: \$1,592,969

Completed: 07/2018

Time extensions granted (number of days); None

Number and amount of stop notices or mechanic's liens filed; None

Amount of any liquidated damages assessed against Bidder; and

**Nature and resolution of any project-related claim, lawsuit, mediation, or
arbitration involving Bidder.:** None



bosco-constructors.us

STATEMENT OF LICENSURE

Pursuant to California Public Contract Code §3300, the undersigned does certify as follows:

1. That the pocket license/certificate of licensure I have presented to owner as of this date is my own license, being State of California, Contractors License No. 972065; and
2. That said Contractors License is current and valid; and
3. That said Contractors License is of a classification appropriate to the work to be undertaken for owner, a Class A&B license.

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

DATED: 4/7/2021

Patrick Robinson
Signature
President
Title

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 RIVERSIDE)

On this the 7th day of April, 20 21, before me

Rafael Fonseca Jr - Notary Public

the undersigned Notary Public, personally appeared

Patrick Robinson

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 that he/she 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.

Rafael Fonseca Jr
Notary's Signature (Seal)





CONTRACTORS STATE LICENSE BOARD

Pursuant to Chapter 9 of Division 3 of the Business and Professions Code and the Rules and Regulations of the Contractors State License Board, the Registrar of Contractors does hereby issue this license to:

BOSCO CONSTRUCTORS INC

License Number 972065

to engage in the business or act in the capacity of a contractor in the following classifications:

- B - GENERAL BUILDING CONTRACTOR
- A - GENERAL ENGINEERING CONTRACTOR

Witness my hand and seal this day,

March 17, 2016

Issued April 13, 2012

Eddie Lang, Jr.

Eddie Lang, Jr., Board Chair

Cindi A. Christenson

Cindi A. Christenson, Registrar of Contractors

This license is the property of the Registrar of Contractors, is not transferable, and shall be returned to the Registrar upon demand when suspended, revoked, or invalidated for any reason. It becomes void if not renewed.

Attachment A

NON-COLLUSION DECLARATION
(Public Contract Code Section 7106)

The undersigned declares:

I am the President of Bosco Constructors, Inc., 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 4/7/2021 [date], at Chatsworth [city], CA [state].

Patrick Robinson

[Signature of Declarant]

Patrick Robinson

[Printed Name of Person Signing]

Bosco Constructors, Inc.

[Name of Bidder]

President

[Office or Title]

IRAN CONTRACTING ACT CERTIFICATION


In accordance with Public Contract Code Section 2204(a), prior to bidding on, submitting a proposal or executing a contract or renewal for a District contract for goods or services of \$1,000,000 or more, a Contractor must either:

- c) Certify it is not on the current list of persons engaged in investment activities in Iran created by the California Department of General Services ("DGS") pursuant to Public Contract Code Section 2203(b) and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that other person will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS; or
- d) Demonstrate it has been exempted from the certification requirement for that solicitation or contract pursuant to Public Contract Code Section 2203(c) or (d).

To comply with this requirement, please insert your Contractor or financial institution name and Federal ID Number (if available) and complete one of the options below. Please note: California law establishes penalties for providing false certifications, including civil penalties equal to the greater of \$250,000 or twice the amount of the contract for which the false certification was made; contract termination; and three-year ineligibility to bid on contracts. (Public Contract Code Section 2205.)

Option #1 – Certification

I, the official named below, certify I am duly authorized to execute this certification on behalf of the Contractor/financial institution identified below, and the Contractor/financial institution identified below is **not** on the current list of persons engaged in investment activities in Iran created by DGS and is not a financial institution extending twenty million dollars (\$20,000,000) or more in credit to another person/vendor, for 45 days or more, if that other person/vendor will use the credit to provide goods or services in the energy sector in Iran and is identified on the current list of persons engaged in investment activities in Iran created by DGS.

Contractor Name/Financial Institution (Printed) Bosco Constructors, Inc.		Federal ID Number (or n/a) 27-0553218
By (Authorized Signature) 		
Printed Name and Title of Person Signing Patrick Robinson, Pres.		
Date Executed 4/7/2021	Executed in Chatsworth, CA	

Option #2 – Exemption

Pursuant to Public Contract Code Sections 2203(c) and (d), a public entity may permit a Contractor/financial institution engaged in investment activities in Iran, on a case-by-case basis, to be eligible for, or to bid on, submit a proposal for, or enters into or renews, a contract for goods and services.

If you have obtained an exemption from the certification requirement under the Iran Contracting Act, please fill out the information below, and attach documentation demonstrating the exemption approval.

Contractor Name/Financial Institution (Printed)		Federal ID Number (or n/a)
By (Authorized Signature)		
Printed Name and Title of Person Signing		
Date Executed	Executed in	

BID BOND

Page 1 of 2

Recitals

1. The undersigned Bosco Constructors Inc. (Contractor), is herewith submitting to the Riverside County Flood Control and Water Conservation District (District), a Bid Proposal ("Proposal") dated April 8, 20 21, for the construction of public work for **Woodcrest Dam Outlet Modification, Stage 90** in accordance with a Notice to Contractors dated March 9, 2021.
2. Contractor is obligated as a condition of said Bid to submit security in the amount of at least ten percent (10%) of the Bid Amount, which security may be in the form of a Bid Bond issued by an admitted surety insurer pursuant to Code of Civil Procedure Section 995.120 ("Admitted Surety").
3. Hartford Fire Insurance Company a Connecticut corporation, hereafter called (Surety), is the surety on this Bid Bond.

Agreement

We, Contractor as principal and Surety as surety, jointly and severally agree and state as follows:

1. The amount of the obligation of this Bond is ten percent (10%) of the amount of the Contractor's Proposal and inures to the benefit of District.
2. This Bond is exonerated by (1) District rejecting said Proposal or, in the alternate, (2) if said Proposal is accepted, Contractor executes the Construction Agreement and furnishes the Performance Bond, Payment Bond and Insurance as agreed to in its Proposal, otherwise it remains in full force and effect for the recovery of loss, damage and expense of District resulting from failure of Contractor to act as agreed to in its Proposal. Some types of possible loss, damage and expense are specified in the Contractor's Proposal.
3. Surety for value received, stipulates and agrees that its obligations hereunder that no change, any extension of time within which District may accept the Proposal, alteration or addition to the terms of the Contract or the Bidding Documents, or to the work to be performed thereunder, nor any withdrawal of the Proposal in a manner not permitted by the requirements of the Bidding requirements shall in any way impair or affect Surety's obligation under this Bond, and Surety does hereby waive notice of any such changes, extension of time, alterations or additions.
4. This Bond is binding on our heirs, executors, administrators, successors and assigns.
5. In the event any legal proceeding or arbitration is brought upon this Bond by District and judgment or award is entered in favor of District as the prevailing party, Surety shall pay all costs and attorney's fees incurred by the District.

BID BOND

Page 2 of 2

IN WITNESS WHEREOF the undersigned parties have executed this instrument under their several seals this day of March 31, 2021, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Dated: March 31, 2021

Bosco Constructors Inc.
(Proper name of Contractor)

(Corporate Seal of Contractor,
if Corporation)

By: Patrick Robinson
Signature of Contractor's authorized representative

Patrick Robinson, Pres.
Print or type authorized representative's Name and Title

Print or type Contractor's Address

21353 Mayall Street

Chatsworth, CA 91311

(Corporate Seal of Surety)

Hartford Fire Insurance Company
Surety

By: [Signature]
Attorney-in-Fact, Maria Pena

(Attach Attorney-in-Fact
Certificate and Required
Acknowledgments)

Name and Address of California Agent of Surety

Alliant Insurance Services, Inc.

333 S Hope Street, Los Angeles, CA 90071

231-443-2476

Telephone Number of California Agent of Surety

NOTE: Notary acknowledgment of signatures of Contractor and Surety, and Surety's Power of Attorney, must be included or attached.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

Civil Code § 1189

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)
) ss
County of Los Angeles)

MAR 31 2021

On _____, before me, Lisa L. Thornton, Notary Public, personally appeared Maria Pena, 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.

(Seal)

Signature: _____

Lisa L. Thornton, Notary Public



POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-12

One Hartford Plaza

Hartford, Connecticut 06155

Bond.Claims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name: ALLIANT INSURANCE SERVICES INC

Agency Code: 72-256704

- ☒ Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☒ Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
☒ Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
☐ Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☐ Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
☐ Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, up to the amount of Unlimited :

Jessica Rosser of Dallas TX, E. S. Albrecht Jr., Patricia S. Arana, Tiffany Coronado, C.K. Nakamura, Maria Pena, Noemi Quiroz, Lisa L. Thornton, Tim M. Tomko, Natalie K. Trofimoff of LOS ANGELES, California

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



John Gray

John Gray, Assistant Secretary

M. Ross Fisher

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT

COUNTY OF HARTFORD

ss. Hartford

On this 5th day of January, 2018, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

Kathleen T. Maynard

Kathleen T. Maynard
Notary Public

My Commission Expires July 31, 2021

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of Signed and sealed at the City of Hartford.

MAR 31 2021



Kevin Heckman

Kevin Heckman, Assistant Vice President

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**CIVIL CODE § 1189**

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 Los Angeles)
On 4/7/2021 before me, Rafael Fonseca Jr - Notary Public,
Date Here Insert Name and Title of the Officer
personally appeared Patrick Robinson
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.



Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Partner — ☐ Limited ☐ General

☐ Individual ☐ Attorney in Fact

☐ Trustee ☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT ("Agreement") is made as of June 8, 2021 and is by and between RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, a body politic, (District) and BOSCO CONSTRUCTORS, INC. (Contractor).

IT IS AGREED BY THE PARTIES AS FOLLOWS:

1. The Work. Contractor shall furnish all tools, equipment, apparatus, facilities, labor, supervision, services, transportation, materials and other required items and materials and do all things necessary to perform, accomplish and complete the work for **Project No. 1-0-00045-90, Woodcrest Dam Outlet Modification, Stage 90** of District, in exact conformity with the Contract Documents (identified below) for the Project, subject to such inspection as District deems appropriate and pursuant to orders and instructions, drawings, etc., issued by District in accordance with the Contract Documents.

2. Contract Documents. The Contract Documents for **Project No. 1-0-00045-90, Woodcrest Dam Outlet Modification, Stage 90** of District are:

- (a) Notice Inviting Bids to Contractors;
- (b) Instructions To Bidders;
- (c) Contractor's Proposal, including List of Subcontractors, Statement of Licensure, Non-Collusion Declaration, Iran Contracting Act Certification;
- (d) Bid Bond
- (e) Construction Agreement, including Exhibit A, Workers' Compensation Contractor Certificate, Declaration of Sufficiency of Funds, and Evidence of Insurance;
- (f) Performance Bond;
- (g) Payment Bond;
- (h) General Provisions;
- (i) Special Provisions;
- (j) Detailed Specifications;
- (k) Plans;
- (l) Appendices and any other documents included in or incorporated into the Contract Documents;
- (m) Orders, Instructions, Drawings and Plans issued by District during the course of the work in accordance with the provisions of the Contract Documents; and
- (n) Addendum No. 1.

Each of the above-mentioned documents presently in existence are by this reference incorporated herein and each of said documents not now in existence are incorporated herein as of the time of their issuance.

The Bid Bond is exonerated upon execution and delivery to District in a form satisfactory to District, of the following, duly executed by Contractor and also by its Surety as to the Bonds, Construction Agreement, Certificate of Insurance, Performance Bond, and Payment Bond.

3. Bonds - Insurance. Contractor must deliver to District and District must approve, a fully executed Performance Bond in the amount of 100% of the estimated contract price, a fully executed Payment Bond in the amount of 100% of the estimated contract price, and fully executed certificates of insurance evidencing the existence of the insurance required by Subsection 8.02 of the General Provisions. The Payment Bond and Performance Bond must be on forms furnished by District.

Should any surety on the Performance Bond or Payment Bond be deemed unsatisfactory by the Board of Supervisors of District, Contractor shall upon notice promptly substitute new Bonds in form satisfactory to District.

4. Contract Price - Payment. The District agrees to pay and the Contractor agrees to accept in full consideration for the performance of the Agreement, the sum of the total amount provided in Exhibit A, attached hereto, marked Exhibit A and by this reference made a part hereof, is provision for the Contract Price and its payment, subject to additions and deductions as provided in the Specifications and Contract Documents.

5. Contract Time for Completion. The Work shall be commenced on a date to be specified in a written "Notice To Proceed" to be issued by the District and shall be completed within the duration specified in the Specifications and Contract Documents. It is expressly agreed that except for extensions of time duly granted in the manner and for the reasons specified in the General Provisions, time shall be of the essence.

RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

By Karen S. Spiegel
Chair of its Board of Supervisors
KAREN SPIEGEL

ATTEST:

KECIA HARPER
Clerk of the Board

By Andrea Raso
Deputy

(Seal)

Bosco Constructors, Inc
Contractor
By Patrick Robinson
Title PRESIDENT

(If corporation affix corporate seal)

- XXIV -

1 APPROVED COUNTY COUNSEL
Kristine Bell-Valdez
KRISTINE BELL-VALDEZ
DATE 7/17/2021

EXHIBIT A

(To Agreement for Riverside County Flood Control and Water Conservation District's Project No. **1-0-00045-90, Woodcrest Dam Outlet Modification, Stage 90**, located in the city of Riverside, Riverside County, California.)

Contract Price - Payment - District shall pay Contractor the following sums for the items set forth below in accordance with Contractor's Proposal as accepted by District, which sums shall be paid as provided in the General Provisions and subject to additions and deductions as provided in the Contract Documents.

It is understood that the quantities listed, except for those shown as "Final" or "Lump Sum" are but estimates only and final payment will be based on actual work performed, subject to such adjustments and alterations as elsewhere provided.

ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
1.	Mobilization	L.S.	---	---	\$40,000.00
2.	Water Control	L.S.	---	---	12,000.00
3.	Clearing and Miscellaneous Work	L.S.	---	---	30,000.00
4.	Structural Excavation	C.Y.	177	\$200.00	35,400.00
5.	Over-Excavation	C.Y.	23	\$400.00	9,200.00
6.	Precompaction	S.Y.	34	\$529.41	18,000.00
7.	Structure Backfill	C.Y.	66	\$180.00	11,880.00
8.	Trench Safety System	L.S.	---	---	5,000.00
9.	Class "A" Concrete, Intake Structure	C.Y.	66	\$900.00	59,400.00
10.	Class "A" Concrete, CIDH Pile	C.Y.	1	\$6,500.00	6,500.00
11.	Class "A" Concrete, Retaining Wall	C.Y.	2	\$4,000.00	8,000.00
12.	Class "A" Concrete, Minor Structures	C.Y.	30	\$800.00	24,000.00
13.	Class "B" Concrete, Miscellaneous	C.Y.	13	\$1,000.00	13,000.00
14.	30" RCP, 3000D	L.F.	12	\$1,000.00	12,000.00

EXHIBIT A contd.

ITEM NO.	ITEM OF WORK	UNIT	QUANTITY	UNIT COST	TOTAL COST
15.	Cable Fencing	L.F.	35	\$250.00	8,750.00
16.	Miscellaneous Iron and Steel	LBS.	26,866	\$4.00	107,464.00
17.	Railing	L.F.	110	\$200.00	22,000.00
18.	Stage Markers	L.S.	---	---	2,000.00
19.	Extra Directed Work	L.S.	---	---	100,000.00
20.	Rock Mulch	C.Y.	4,846	\$65.00	314,990.00
21.	Crushed Rock	C.Y.	482	\$55.00	26,510.00
22.	Dust Abatement	L.S.	---	---	15,000.00
23.	Hydroseeding	ACRE	5.3	\$3,800.00	20,140.00
24.	Stormwater and Non-Stormwater Pollution Control	L.S.	---	---	17,000.00
25.	Non-Stormwater Discharge or Dewatering	L.S.	---	---	25,000.00
26.	Slide Gate	L.S.	---	---	25,000.00
27.	PVC Waterstop	L.F.	50	\$150.00	7,500.00
28.	Expandable Waterstop	L.F.	30	\$200.00	6,000.00
29.	6-Inch PVC Pipe	L.F.	20	\$75.00	1,500.00
				TOTAL	\$983,234.00

PERFORMANCE BOND

Page 1 of 3

(Public Work – Public Contract Code Section 21091)

WHEREAS, the Riverside County Flood Control and Water Conservation District ("District") on June 8, 2021, has awarded Construction Contract Number: 1-0-00045-90 ("Contract") to the undersigned Bosco Constructors, Inc., as Principal ("Principal") to perform the work ("Work") for the following project; Woodcrest Dam Outlet Modification, Stage 90, which Contract is by this reference hereby incorporated herein and made a part hereof;

WHEREAS, said Principal is required by the Contract and/or by California Public Contract Code, Section 21091 to furnish a performance bond for the faithful performance of the Contract;

NOW THEREFORE, we, the Principal and Hartford Fire Insurance Company ("Surety"), an admitted surety insurer pursuant to Code of Civil Procedure, Section 995.120, are held and firmly bound unto District in the penal sum of Nine Hundred Eighty Three Thousand Two Hundred Thirty Four and No/100 Dollars (\$ 983,234.00), this amount being not less than one hundred percent (100%) of the total sum payable by District under the Contract at the time the Contract is awarded by District to the Principal, lawful money of the United States of America, for the payment of which sum well and truly to be made, we, Principal and Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents, to:

1. Perform all the work required to complete the Project; and
2. Pay to the District all damages the District incurs as a result of the Contractor's failure to perform all the Work required to complete the Project.

THE CONDITION OF THIS OBLIGATION IS SUCH that if Principal, its heirs, executors, administrators, successors or assigns approved by District, shall in all things stand to and abide by and well and truly keep and perform all the undertakings, terms, covenants, conditions and agreements in the Contract, including, without limitation, all obligations during the original term and any extensions thereof as may be granted by District, with or without notice to Surety thereof (including, without limitation, the obligation for Principal to pay liquidated damages), all obligations during the period of any warranties and guarantees required under the Contract and all other obligations otherwise arising under the terms of the Contract (such as, but not limited to, obligations of indemnification), all within the time and in the manner therein designated in all respects according to their true intent and meaning, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

As a condition precedent to the satisfactory completion of the Contract, the above obligation shall hold good for a period equal to the warranty and/or guarantee period of the Contract, during which time Surety's obligation shall continue if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the District 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 District'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.

PERFORMANCE BOND

Page 2 of 3

Whenever Principal shall be, and is declared by District to be, in default under the Contract, the Surety shall promptly either remedy the default, or, if the Contract is terminated by District or the Principal's performance of the Work is discontinued, Surety shall promptly complete the Contract through its agents or independent contractors, subject to acceptance of such agents or independent contractors by District as hereinafter set forth, in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract (including, without limitation, all obligations with respect to payment of liquidated damages) less the "Balance of the Contract Price" (as hereinafter defined); subject to the penal amount of this bond as set forth above. The term "Balance of the Contract Price", as used in this paragraph, shall mean the total amount payable to Principal by District under the Contract and any modifications thereto, less the amount previously paid by District to the Principal and less amounts that District is authorized to withhold under the terms of the Contract.

If District determines that completion of the Contract by Surety or its agents or independent contractors must be performed by a lowest responsible bidder selected pursuant to a competitive bidding process, then Surety shall comply with such processes in accordance with the requirements of District and applicable laws. Unless otherwise approved by District, in the exercise of its sole and absolute discretion, Surety shall not utilize Principal in completing performance of the Work.

No right of action shall accrue on this bond to or for the use of any person or entity other than District or its successors or assigns.

In the event any legal proceeding or arbitration is brought upon this bond by District and judgment or award is entered in favor of District as the prevailing party, Surety shall pay all costs and attorney's fees incurred by the District.

Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below.

Surety, for value received, agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder, shall in any way impair or affect Surety's obligation under this bond, and Surety does hereby waive notice of any such changes, extensions of time, alterations or additions.

Surety's obligations hereunder are independent of the obligations of any other surety for the performance of the Contract, and suit may be brought against Surety and such other sureties, joint and severally, or against any one or more of them or against less than all of them, without impairing District's rights against the others.

PERFORMANCE BOND

Page 3 of 3

(Corporate Seal of Principal,
if Corporation)

Bosco Constructors Inc.

(Proper name of Principal)

By:

Patrick Robinson

Signature of Principal's authorized representative

Patrick Robinson President

Print or type authorized representative's Name and Title

Print or type Principal's Address

21353 Mayall Street

Chatsworth, CA 91311

(Corporate Seal of Surety)

Surety

Hartford Fire Insurance Company

By:

Maria Pena

Attorney-in-Fact, Maria Pena

(Attach Attorney-in-Fact
Certificate and Required
Acknowledgments)

Alliant Insurance Services, Inc.

Name and Address of California Agent of Surety

333 S Hope Street

Los Angeles, CA 90071

213-443-2476

Telephone Number of California Agent of Surety

NOTE: Notary acknowledgment of signatures of Principal and Surety, and Surety's Power of Attorney, must be included or attached.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**CIVIL CODE § 1189**

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 Los Angeles)
On 5/6/2021 before me, Rafael Fonseca Jr - Notary Public,
Date Here Insert Name and Title of the Officer
personally appeared Patrick Robinson
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.



Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____
Document Date: _____ Number of Pages: _____
Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

Civil Code § 1189

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)
) ss
County of Los Angeles)

On APR 29 2021, before me, Patricia Arana, Notary Public, personally appeared Maria Pena, 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.



(Seal)

Signature: _____

Patricia Arana, Notary Public

POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-12

One Hartford Plaza

Hartford, Connecticut 06155

Bond.Claims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name: ALLIANT INSURANCE SERVICES INC
Agency Code: 72-256704

- ☒ Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☒ Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
☒ Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
☐ Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☐ Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
☐ Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, up to the amount of Unlimited:

Jessica Rosser of Dallas TX, E. S. Albrecht Jr., Patricia S. Arana, Tiffany Coronado, C.K. Nakamura, Maria Pena, Noemi Quiroz, Lisa L. Thornton, Tim M. Tomko, Natalie K. Trofimoff of LOS ANGELES, California

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



John Gray

John Gray, Assistant Secretary

M. Ross Fisher

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT

COUNTY OF HARTFORD

ss. Hartford

On this 5th day of January, 2018, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

Kathleen T. Maynard

Kathleen T. Maynard
Notary Public

My Commission Expires July 31, 2021

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of Signed and sealed at the City of Hartford.

APR 29 2021



Kevin Heckman

Kevin Heckman, Assistant Vice President

PAYMENT BOND

Page 1 of 2

Bond No.: 72BCSIQ0674

(Public Work - Civil Code Sections 9550 et seq.)

WHEREAS, the Riverside County Flood Control and Water Conservation District ("District") by action of the Board of Supervisors on June 8, 2021, has awarded Construction Contract Number: 1-0-00045-90 ("Contract") to the undersigned Bosco Constructors, Inc., as Principal ("Principal") to perform the work ("Work") for the following project; Woodcrest Dam Outlet Modification, Stage 90.

WHEREAS, said Principal is required by the Contract and/or by the California Civil Code Section 9550 et seq. to furnish a payment bond in connection with the Contract;

NOW THEREFORE, we, the Principal and Hartford Fire Insurance Company ("Surety"), an admitted surety insurer pursuant to Code of Civil Procedure, Section 995.120, are held and firmly bound unto District in the penal sum of Nine Hundred Eighty Three Thousand Two Hundred Thirty Four and No/100 Dollars (\$ 983,234.00), this amount being not less than one hundred percent (100%) of the total sum payable by District under the Contract at the time the Contract is awarded by District to the Principal, lawful money of the United States of America, for the payment of which sum well and truly to be made, we, Principal and Surety, 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 Principal, its heirs, executors, administrators, successors, or assigns approved by District, or its subcontractors, of any contracting tier, shall fail to pay any amounts or any person or persons named and described in California Civil Code, Section 9554, then Surety will pay for the same, in or to an amount not exceeding the penal amount hereinabove set forth, and also will pay to the prevailing party if suit is brought upon this bond, reasonable attorney's fees as provided in California Civil Code, Section 9564.

Surety, for value received, agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the Work to be performed thereunder, nor any rescission or attempted rescission of the Contract or this bond, nor any conditions precedent or subsequent in the bond or Contract attempting to limit the right of recovery of any claimant otherwise entitled to recover under the Contract or this bond shall in any way impair or affect Surety's obligation under this bond, and Surety does hereby waive notice of any such changes, extensions of time, alterations or additions.

Surety is not released from liability to those for whose benefit this bond has been given, by reason of any breach of the Contract by District or Principal.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporations entitled to file claims under Section 9100 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

PAYMENT BOND

Page 2 of 2

Surety's obligations hereunder are independent of the obligations of any other surety for the performance of the Contract, and suit may be brought against Surety and such other sureties, joint and severally, or against any one or more of them or against less than all of them, without impairing District's rights against the others.

(Corporate Seal of Principal,
if Corporation)

Bosco Constructors Inc.
(Proper name of Principal)

By: Patrick Robinson
Signature of Principal's authorized representative

PATRICK ROBINSON, PRESIDENT
Print or type authorized representative's Name and Title

Print or type Principal's Address

21353 Mayall Street

Chatsworth, CA 91311

(Corporate Seal of Surety)

Surety Hartford Fire Insurance Company

By: Maria Pena
Attorney-in-Fact, Maria Pena

(Attach Attorney-in-Fact
Certificate and Required
Acknowledgments)

Alliant Insurance Services, Inc.
Name and Address of California Agent of Surety

333 S Hope Street

Los Angeles, CA 90071

213-443-2476
Telephone Number of California Agent of Surety

NOTE: Notary acknowledgment of signatures of Principal and Surety, and Surety's Power of Attorney, must be included or attached.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**CIVIL CODE § 1189**

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 Los Angeles)
On 5/6/2021 before me, Rafael Fonseca Jr - Notary Public,
Date Here Insert Name and Title of the Officer
personally appeared Patrick Robinson
Name(s) of Signer(s)

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

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

WITNESS my hand and official seal.



Signature [Signature]
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

Description of Attached Document

Title or Type of Document: _____
Document Date: _____ Number of Pages: _____
Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

Signer's Name: _____
☐ Corporate Officer — Title(s): _____
☐ Partner — ☐ Limited ☐ General
☐ Individual ☐ Attorney in Fact
☐ Trustee ☐ Guardian or Conservator
☐ Other: _____
Signer Is Representing: _____

Civil Code § 1189

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)
) ss
County of Los Angeles)

On APR 29 2021, before me, Patricia Arana, Notary Public, personally appeared Maria Pena, 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.



(Seal)

Signature:

Patricia Arana, Notary Public

POWER OF ATTORNEY

Direct Inquiries/Claims to:

THE HARTFORD

BOND, T-12

One Hartford Plaza

Hartford, Connecticut 06155

Bond.Claims@thehartford.com

call: 888-266-3488 or fax: 860-757-5835

KNOW ALL PERSONS BY THESE PRESENTS THAT:

Agency Name: ALLIANT INSURANCE SERVICES INC
Agency Code: 72-256704

- ☒ Hartford Fire Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☒ Hartford Casualty Insurance Company, a corporation duly organized under the laws of the State of Indiana
☒ Hartford Accident and Indemnity Company, a corporation duly organized under the laws of the State of Connecticut
☐ Hartford Underwriters Insurance Company, a corporation duly organized under the laws of the State of Connecticut
☐ Twin City Fire Insurance Company, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of Illinois, a corporation duly organized under the laws of the State of Illinois
☐ Hartford Insurance Company of the Midwest, a corporation duly organized under the laws of the State of Indiana
☐ Hartford Insurance Company of the Southeast, a corporation duly organized under the laws of the State of Florida

having their home office in Hartford, Connecticut, (hereinafter collectively referred to as the "Companies") do hereby make, constitute and appoint, up to the amount of Unlimited:

Jessica Rosser of Dallas TX, E. S. Albrecht Jr., Patricia S. Arana, Tiffany Coronado, C.K. Nakamura, Maria Pena, Noemi Quiroz, Lisa L. Thornton, Tim M. Tomko, Natalie K. Trofimoff of LOS ANGELES, California

their true and lawful Attorney(s)-in-Fact, each in their separate capacity if more than one is named above, to sign its name as surety(ies) only as delineated above by ☒, and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

In Witness Whereof, and as authorized by a Resolution of the Board of Directors of the Companies on May 6, 2015 the Companies have caused these presents to be signed by its Senior Vice President and its corporate seals to be hereto affixed, duly attested by its Assistant Secretary. Further, pursuant to Resolution of the Board of Directors of the Companies, the Companies hereby unambiguously affirm that they are and will be bound by any mechanically applied signatures applied to this Power of Attorney.



John Gray

John Gray, Assistant Secretary

M. Ross Fisher

M. Ross Fisher, Senior Vice President

STATE OF CONNECTICUT

ss. Hartford

COUNTY OF HARTFORD

On this 5th day of January, 2018, before me personally came M. Ross Fisher, to me known, who being by me duly sworn, did depose and say: that he resides in the County of Hartford, State of Connecticut; that he is the Senior Vice President of the Companies, the corporations described in and which executed the above instrument; that he knows the seals of the said corporations; that the seals affixed to the said instrument are such corporate seals; that they were so affixed by authority of the Boards of Directors of said corporations and that he signed his name thereto by like authority.



CERTIFICATE

Kathleen T. Maynard

Kathleen T. Maynard
Notary Public

My Commission Expires July 31, 2021

I, the undersigned, Assistant Vice President of the Companies, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force effective as of Signed and sealed at the City of Hartford.

APR 29 2021



Kevin Heckman

Kevin Heckman, Assistant Vice President

WORKERS' COMPENSATION CONTRACTOR CERTIFICATE

(Labor Code Sections 1860, 1861 & 3700)

In accordance with the provisions of Section 3700 of the Labor Code, every Contractor shall secure compensation in one or more of the following ways:

- (a) By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this state.
- (b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or as one employer in a group of employers, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to his or her employees.
- (c) For any county, city, city and county, municipal corporation, public district, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702.

Labor Code Section 1861 requires each Contractor to whom a public works Contract is awarded shall sign and file with the District the following certification prior to performing the Work of the public works construction 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.

By signing this certification, the Contractor understands the requirements of and agrees to comply with the aforementioned requirements.

Name of Contractor: Bosco Constructors Inc.

By: Patrick Rotman

Title: PRESIDENT

DECLARATION OF SUFFICIENCY OF FUNDS

Page 1 of 3

(California Labor Code Section 2810)

I, the undersigned, an authorized representative of Bosco Construction Inc ("Bidder") with authority to make the statements contained in this Declaration on behalf of Bidder, hereby declare the following:

1. The Bidder's employer identification number for state tax purposes is:
27-0553218

2. The Bidder's workers' compensation insurance policy number is:
54309496

and the name, address, and telephone number of the insurance carrier providing said insurance is:

ALLIANT INSURANCE SERVICES, INC
333 S. HOPE STREET, SUITE 3750, LOS ANGELES, CA. 90071
(213) 443-2476

3. The following information is provided concerning any and all vehicles that are owned by the Bidder and that will be used for transportation in connection with any service provided for the performance of the Work that is the subject of the Bidder's Bid [Insert information requested. Attach additional sheets, if needed.]:

Vehicle	Vehicle ID #	Vehicle Liability Insurance Policy Number (of policy covering vehicle)	Name, Address and Telephone Number of Vehicle Liability Insurance Carrier (issuing policy covering vehicle)
SEE ATTACHMENT			

4. The following is the address of any real property that will be used to house workers in connection with the performance of the Work that is the subject of the Bidder's Bid [If no such housing will be provided, enter "none"]:
NONE

Trucks

[illegible]

Trucks

Unit #	Description	Manufacture	Model	Year & Lic. Plate	Ser. / Vin. Number
T01	FB Truck E.S.	Ford	F450	2007, 63059R1	1FDXF46P77EB19987
T02	FB. Rig. Truck	Ford	F750	2012, 19484M1	3FRPF7FL7CV321829
T03	PU Truck E.R.	Ford	F250	2016, 21718J2	1FTEX1CP3FFA16117
T04	PU Truck P.H.	Ford	F150 4X4	2011 31374A2	1FTFX1EF3BKD35558
T05	PU Truck M.U.	Ford	F250 XLT	2014, 11470Y1	1FT7X2A67EEA53734
T06	PU Truck I.P.	Ford	F250 4X4	2010, 31373A2	1FTNF2B58AEB08458
T07	PU Truck F.V.	GMC	SIERRA 1500	2011, 8X22348	1GTR2TEA6BZ162198
T08	Dump Truck	Freightliner	FL70	2001, 335963W	1FVABTAKX1HH60771
T09	Water Truck	Ford	F750	2005, 61961A2	3FRPF75N35V182305
T10	Dump Truck	International	4300SBA	2011, 27307D2	1HTMMAAM1BH283819
T11	FB Truck J.O.	Ford	F350	2011, 67546F2	1FT8W3CT7CEB36805
T12	PU Truck B.O.	Ford	F150	2015, 21718J2	1FTEX1CP3FFA16117
T13	Water Truck	International	4200	2006, 8Y92353	1HTMPAFP16H344439
T14	Ser. Truck	Ford	F550	2011, 62034A2	1FD0X5HY1BEA02862
T15	Water Truck	Ford	F750	2011, 27652D2	3FRXF75N78V687932
T16	Dump Truck	International	4300SBA	2011, 11491Y1	1HTMMAAMXBH283110
T17	PU Truck F.C	Ford	F150 4X4	2013, 69252B2	1FTNF1EF3DKD66097
T18	PU Truck G.P.	Ford	F250	2011, 59594W1	1FT7X2A64FEB26723
T19	PU Truck W.D.	Ford	F150	2018, 89994R2	1FTEX1CP0JKF94126
T20	FB. Rig. Truck	Ford	F750	2007, 24085H2	3FRNF75Y97V450388
T21					
T22					
T23					
T24					
T25					
OV01	Explorer S.R.	Ford	SUV	2017, 7ZBJ824	1FM5K7B87HGC47610

Trailers

[illegible]

DECLARATION OF SUFFICIENCY OF FUNDS

Page 2 of 3

5. The actual or estimated number of workers that will be employed to perform the Work that is the subject of the Bidder's Bid, the total amount of wages to be paid to said workers, and the dates on which said wages will be paid are as follows [Attach additional sheets, if needed.]:

<i>Total Number of Workers</i>	<i>Total Amount of Wages</i>	<i>Date(s) for Payment of Wages</i>
4	\$150,000.00	09 / 2021

6. Check only one of the following boxes, as applicable:

- ☐ The statement of number of workers declared in Paragraph 5, above, is a statement of the actual number of workers that will be employed.
- ☒ The actual number of workers requested in Paragraph 5, above, is unknown and therefore the statement of number of workers declared therein is based on the Bidder's best estimate available at the time of submitting its Bid, rather than the actual number of workers that will be employed and if and when the actual number of workers and the other information requested above is available, it will be reported to the District by Bidder in writing.

7. The actual or estimated total number of persons who will be utilized as independent Contractors to perform the Work of the Project that is the subject of the Bidder's Bid (together with their known, current local, state, and federal Contractor license identification numbers that each is required to have under local, state or federal laws or regulations) are as follows [Attach additional sheets, if needed.]:

<i>List of Independent Contractors</i>	<i>Current, local, state and federal Contractor license identification number</i>
ACE FENCE COMPANY	996577

DECLARATION OF SUFFICIENCY OF FUNDS

Page 3 of 3

8. Check only one of the following boxes, as applicable:

- ☐ The statement of number of independent Contractors declared in Paragraph 7, above, is a statement of the actual number of independent Contractors that will be utilized.
- ☒ The actual number of independent Contractors requested in Paragraph 7, above, is unknown and therefore the statement of number of independent Contractors declared therein is based on the Bidder's best estimate available at the time of submitting its Bid, rather than the actual number of independent Contractors that will be utilized, and if and when the actual number of independent Contractors and the other information requested above is available, it will be reported to the District by Bidder in writing.

I, the undersigned, declare under penalty of perjury that the foregoing statements are within my personal knowledge and are true and correct. Executed on this 3 day of MAY, in the year 2021 at CHARSWORTH, California.

Patrick Robinson

(Signature)

PATRICK ROBINSON

Type Name of Signer:

Bosco Constructors, Inc.

Type Name of Bidder:



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

5/4/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Los Angeles-Alliant Insurance Services, Inc. 333 South Hope St., Ste. 3750 Los Angeles CA 90071	CONTACT NAME: John Chung		
	PHONE (A/C, No, Ext): 213-270-0115	FAX (A/C, No):	
	E-MAIL ADDRESS: John.Chung@Alliant.com		
INSURED Bosco Constructors, Inc. 21353 Mayall St Chatsworth CA 91311	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Federal Insurance Company		20281 <i>AA</i>
	INSURER B: Executive Risk Indemnity Inc		35181 <i>AA</i>
	INSURER C: Everest National Insurance Com		10120 <i>AA</i>
	INSURER D:		
	INSURER E:		
INSURER F:			

COVERAGES**CERTIFICATE NUMBER:** 2095703442**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:	Y	Y	54309495	12/31/2020	12/31/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	Y	Y	54309494	12/31/2020	12/31/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			XC1EX00309201	12/31/2020	12/31/2021	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
A	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/> N/A	Y	54309496	12/31/2020	12/31/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The District, all Agencies, Districts, Special Districts, and Departments of the County of Riverside, together with their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives are included as Additional Insured as respects Liability arising out of work performed by the Named Insured. The insurance provided shall be primary and any other insurance maintained by the Additional Insured is excess and non-contributory. Waiver of Subrogation applies as required by contract. Thirty (30) Days Notice of Cancellation / Non-Renewal - Ten (10) Days Notice For Non-Payment of Premium.

CERTIFICATE HOLDER**CANCELLATION**

Riverside County Flood Control and Water Conservation District
1995 Market St.
Riverside CA 92501

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Vasil G. Mutsaers

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
WHERE REQUIRED BY WRITTEN CONTRACT.	ALL LOCATIONS WHERE REQUIRED BY WRITTEN CONTRACT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable Limits of Insurance shown in the Declarations;
whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
WHERE REQUIRED BY WRITTEN CONTRACT, BUT ONLY WHERE THE CONTRACT SPECIFIES COVERAGE COMPLETED OPERATIONS	ALL LOCATIONS WHERE REQUIRED BY WRITTEN CONTRACT
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY INSURANCE FOR SCHEDULED ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Additional Insured:

Location Of Covered Operations:

WHERE REQUIRED BY WRITTEN CONTRACT.

ALL LOCATIONS

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

With respect only to the Additional Insured and at the Location Of Covered Operations shown in the Schedule, the following is added to **SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS**, Paragraph 4. **Other Insurance** and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to the Additional Insured with respect to the Location Of Covered Operations shown in the Schedule under this policy provided that:

- (1) The Additional Insured is a named insured under such other insurance; and
- (2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the Additional Insured.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED CONSTRUCTION PROJECT(S) GENERAL AGGREGATE LIMIT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Construction Project(s):

ALL OF YOUR DESIGNATED CONSTRUCTION PROJECTS WHERE REQUIRED BY CONTRACT.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage **A**, and for all medical expenses caused by accidents under Section I – Coverage **C**, which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under Coverage **A**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", and for medical expenses under Coverage **C** regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
 3. Any payments made under Coverage **A** for damages or under Coverage **C** for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.
 4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.

Section IV-Commercial General Liability Conditions; 8. Transfer or Waiver of Rights of Recovery

8. Transfer Or Waiver Of Rights Of Recovery Against Others To Us We will waive the right of recovery we would otherwise have had against another person or organization, for loss to which this insurance applies, provided the insured has waived their rights of recovery against such person or organization in a contract or agreement that is executed before such loss.

To the extent that the insured's rights to recover all or part of any payment made under the Coverage Part have not been waived, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them. This condition does not apply to Coverage C.

- B.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage A, and for all medical expenses caused by accidents under Section I – Coverage C, which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. Any payments made under Coverage A for damages or under Coverage C for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-completed Operations Aggregate Limit, whichever is applicable; and
 2. Such payments shall not reduce any Designated Construction Project General Aggregate Limit.
- C.** When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.
- D.** If the applicable designated construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.
- E.** The provisions of Section III – Limits Of Insurance not otherwise modified by this endorsement shall continue to apply as stipulated.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WRAP-UP EXCLUSION WITH LIMITED EXCEPTIONS FOR CERTAIN ONGOING OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The following is added to **SECTION I – COVERAGES, COVERAGE A BODILY INJURY AND PROPERTY DAMAGE LIABILITY**, Paragraph 2. **Exclusions:**

This insurance does not apply to "bodily injury" or "property damage" arising out of either your ongoing operations or operations included within the "products-completed operations hazard" at any location where a consolidated (wrap-up) insurance program has been provided by the prime contractor/project manager or owner of the construction project in which you are involved.

1. This exclusion applies whether or not the consolidated (wrap-up) insurance program:
 - a. Provides coverage identical to that provided by this Coverage Part;
 - b. Has limits adequate to cover all claims; or
 - c. Remains in effect.

2. This exclusion does not apply to "bodily injury" or "property damage" caused by your ongoing operations:

- a. For work being performed at any location owned by or rented to you that is not within the project site or location of the consolidated (wrap up) insurance program and is not covered by such insurance program; or
- b. For work being performed on a project covered by a consolidated (wrap up) insurance program after such program has terminated or expired.

The exceptions **2.a.** and **2.b.** above do not apply to "bodily injury" or "property damage" included in the "products-completed operations hazard" even if you are required to provide such coverage for an additional insured by a written contract or agreement.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM
GARAGE COVERAGE FORM
MOTOR CARRIER COVERAGE FORM
TRUCKERS COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" under the Who Is An Insured Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Endorsement Effective: 12/31/20	Countersigned By: (Authorized Representative)
Named Insured: Bosco Constructors, Inc.	

SCHEDULE

Name of Person(s) or Organization(s): WHERE REQUIRED BY WRITTEN CONTRACT.

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to the endorsement.)

Each person or organization shown in the Schedule is an "insured" for Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in **Section II** of the Coverage Form.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NON-CONTRIBUTORY LIABILITY INSURANCE

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: Bosco Constructors, Inc.

Endorsement Effective Date: 12/31/2020

SCHEDULE

Name(s) Of Person(s) Or Organization(s):

WHERE REQUIRED BY WRITTEN CONTRACT

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Item 5. – “**Other Insurance**” of Item B. – “**General Conditions**” under Section IV – “**Business Auto Conditions**”:

e. Regardless of the provisions of Paragraph 5.a. through d. above, for any liability arising out of the ownership, maintenance, use, rental, lease, loan, hire or borrowing by an “insured” of a covered “auto” for which an “insured” is contractually obligated to provide primary insurance coverage to a client, this Coverage Form will be primary and non-contributory with respect to the Persons or Organizations in the schedule, regardless of the availability or existence of other collectible insurance under any other Coverage Form or policy that applies on a primary basis.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured: Bosco Constructors, Inc.

Endorsement Effective Date: 12/31/2020

SCHEDULE

Name(s) Of Person(s) Or Organization(s):

WHERE REQUIRED BY WRITTEN CONTRACT.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY INSURANCE POLICY

WC 99 03 04 (Ed. 7- 08)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT—CALIFORNIA

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need to be completed only when this endorsement is issued subsequent to preparation of the policy.)

This endorsement, effective 12/31/2020 at 12:01 A. M. standard time, forms a part of
(DATE)
on Policy No. 54309496 of the Federal Insurance Company
(NAME OF INSURANCE COMPANY)

issued to Bosco Constructors, Inc.

Endorsement No.

Authorized Representative

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. The additional premium for the blanket waiver offered by this endorsement shall be 0.00 % of total California premium.

Schedule

Person or Organization

Job Description

WHERE REQUIRED BY WRITTEN CONTRACT.

GENERAL PROVISIONS

GENERAL PROVISIONS

SECTION I - DEFINITION OF TERMS

1.01 TERMS. Whenever in these specifications, or in any documents or instruments where these specifications govern, the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

(a) DISTRICT: The Riverside County Flood Control and Water Conservation District of the State of California, as created by law, also sometimes referred to as the Flood Control District, or party of the first part.

(b) BOARD OF SUPERVISORS: The Board of Supervisors of the Riverside County Flood Control and Water Conservation District as created by law, also sometimes referred to as the Board.

(c) ENGINEER: The Chief Engineer of the Riverside County Flood Control and Water Conservation District, also sometimes referred to as the Flood Control Engineer, the Chief Engineer, or the General Manager-Chief Engineer, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

(d) LABORATORY: The established laboratory of the District or laboratories authorized by the District to test materials and work involved in the contract.

(e) BIDDER: Any individual, firm or corporation submitting a proposal for the work contemplated, acting directly or through a duly authorized representative.

(f) CONTRACTOR: The person or persons, co-partnership or corporation, private or municipal, who have entered into a contract with the District, as party or parties of the second part or his or their legal representatives.

(g) SUPERINTENDENT: The Executive representative of the Contractor, present on the work at all times during progress, authorized to receive and execute instruction from the Engineer.

(h) PLANS or PROJECT DRAWINGS: The official plans, profiles, typical cross sections, general cross sections, working drawings, and supplemental drawings, or exact reproductions thereof, approved by the Engineer, which show the location, character, dimensions and details of the work to be done, and which are to be considered as a part of the contract supplementary to these specifications.

(i) SPECIFICATIONS: The directions, provisions, and requirements contained herein as supplemented by such special provisions, as may be necessary, pertaining to the method and manner of performing the work or to the quantities and qualities of materials to be furnished under the contract. The Special Provisions are specific clauses setting forth conditions or requirements peculiar to the project under consideration and covering work or materials involved in the proposal and estimate but not satisfactorily covered by these General Provisions. Supplemental agreements

or contract change orders are written agreements executed by the Contractor and by the District, covering alterations, amendments or extensions to the project, as hereinafter provided.

(j) CONTRACT: The written agreement covering the performance of the work and the furnishing of labor and materials in the construction of the work. The contract shall include the Notice to Contractors, the Proposal, Plans, Specifications, Special Provisions, and Contract Bonds, also, any and all supplemental agreements or contract change orders amending or extending the work contemplated and which may be required to complete the work in a substantial and acceptable manner.

(k) CONTRACT PRICE: Shall mean either the lump sum, unit price, or unit prices to be named in the contract, or the total of all payments under the contract at the lump sum, unit price, or unit prices, as the case may be.

(l) SURETY OR SURETIES: The bondsmen or party or parties, approved by the Engineer, who may guarantee the fulfillment of the contract by bond, and whose signatures are attached to said bond.

(m) RIGHT OF WAY: The whole right of way which is reserved for and secured for use in constructing the improvement.

(n) THE WORK: All the work specified in the Specifications and Contract Documents, including the Special Provisions, proposal and contract, or indicated on the plans as the contemplated complete improvement covered by the contract.

1.02 SIMILARITY OF WORDS. Wherever in the specifications or upon the plans the words directed, required, permitted, ordered, designated, prescribed, or words of like import are used, it will be understood that the direction, requirements, permission, order, designation, or prescription of the Flood Control Engineer is intended, and similarly the words approved, acceptable, satisfactory, or words of like import, shall mean approved by, or acceptable to, or satisfactory to, the Flood Control Engineer, unless otherwise expressly stated.

SECTION II - SCOPE OF WORK

2.01 WORK TO BE DONE

It is the intent of these General Provisions, Special Provisions, Detailed Specifications, and the plans herein referred to, that the Contractor shall provide all labor, power, light, water, materials, equipment, tools, scaffolding, machinery, transportation, insurance, permits, bonds, temporary protection, watchmen, and superintendence necessary to construct and complete all work, and to furnish all materials included in the contract, except those furnished by the District and as specifically mentioned in these specifications.

The contract documents are complementary, and the work called for by any one shall be as binding as if called for by all.

2.02 CONSTRUCTION SCHEDULE

The Contractor shall submit at such times as may be requested by the Engineer, a schedule which shall show the order and dates in which the Contractor proposes to carry on the various parts of the work; including estimated completion dates. The District's receipt of such schedule(s) shall not indicate any concurrence by the District in the items or dates described in the schedule(s).

2.03 DRAWINGS AND SPECIFICATIONS ON THE WORK

The Contractor shall keep one copy of all drawings and specifications on the work, in good order, available to the Engineer and his representatives.

2.04 ESTIMATE OF QUANTITIES

The quantities of work to be done and the materials to be furnished under this contract are approximate only. The District is not to be held responsible for the accuracy of the estimate of quantities.

The Contractor shall judge for himself, after considering all circumstances and conditions, the costs and quantities of materials involved in the contract. The Contractor shall not at any time assert that there was any misunderstanding in regard to the depth or class of the excavations to be made, or the nature or kind or amount of materials to be furnished for the work.

The Contractor shall not at any time assert that there was any misunderstanding in regard to the nature of the work or the kind or amount of materials to be furnished for the work. The Contractor herewith agrees that he will not ask, demand, sue for, or seek to recover, for compensation in excess of the amounts payable for the various unit costs or lump sum charges for the work, as stipulated in the proposal, which he actually performs as specified.

2.05 PROTESTS

If the Contractor considers any work demanded of him to be outside of the requirements of the contract, or considers any record or ruling of the Engineer to be unfair, he shall immediately, upon such work being demanded or such record or ruling being made, ask, in writing, for written instructions covering protested items of work. Immediately on receipt of written instructions from the Engineer he shall proceed without delay to diligently perform the work in conformance with the written record or ruling. Immediately upon receipt of the written instructions or ruling and before the start of such work, and no later than five (5) business days, the Contractor shall file a written protest with the Engineer stating clearly and in detail the basis of his protest. Except for such protests as are made of record in the manner herein specified and within the time limit stated, the records, rulings, instructions, or decisions of the Engineer shall be final and conclusive.

2.06 ALTERATIONS

The Contractor understands and agrees that such reasonable alterations and modifications may be made by the Chief Engineer, as may be deemed desirable, and that this may be done without notices to the Sureties on the Contractor's bonds. If such changes result in increased or decreased quantities under the items specified in the Agreement, the Contractor will be paid on the

basis of actual quantities as measured by the Engineer, and such changes shall not affect the unit prices bid by the Contractor. If, however, such changes result in delay to the work, the Contractor may request an extension of time on the completion of his contract and the Chief Engineer may grant such extension as the Chief Engineer may deem equitable.

2.07 EXTRA WORK

A. General

The District reserves and shall have the right, for any reason whatsoever, or when confronted with unpredicted conditions, unforeseen events, or emergencies, to revise the details of the contemplated work, or to add work of a different character or function and have the Contractor perform such revised or added work as "Extra Work", when such extra work is considered by the Chief Engineer to be appurtenant to the satisfactory completion of the project.

"Extra Work" is defined as added work of a different character or function and for which no basis for payment is prescribed; or that involving revisions of the details of the work in such manner as to render inequitable payment under items upon which the Contractor bid; or that work which is indeterminate at the time of advertising and is specifically designated as extra work in the plans and Special Provisions.

The signing of the contract by the Contractor will be deemed to be an agreement on his part to perform extra work, as and when ordered by the Chief Engineer. Notice to the Sureties on the Contractor's bonds will not be given unless the estimated total value of the contract, as changed or supplemented, shall exceed the original total bid price by more than 25%.

If required extra work results in delay to the work, the Contractor will be given an equivalent extension of time.

Approval of extra work shall be obtained from the Board of Supervisors before such work is authorized to be done, if:

- a. For contracts with a total contract price of \$250,000 or less, a change due to extra work exceeds ten percent (10%) of the original contract amount; or
- b. For contracts with a total contract price of more than \$250,000, a change due to extra work exceeds \$25,000 plus one percent (1%) of the original contract amount in excess of \$250,000; or
- c. An individual change exceeds \$100,000; or
- d. Cumulative contract changes exceed ten percent (10%) of the original contract amount.

Extra work specially authorized by the Board of Supervisors shall not be included in the cost limitations above stated.

B. Procedure for Extra Work

1. Extra work may not be done by the Contractor without prior request and proper written approval by the District. Upon decision of the District to have extra work performed, the Chief Engineer will so inform the Contractor, acquainting him with the essential details of the new work. The Contractor shall thereupon present in writing a price for said work based upon his estimate of cost and submit said price and estimate to the Chief Engineer whose approval shall be secured before work is started; excepting that the Chief Engineer may, when in the best interest of the District, order the Contractor to proceed with the extra work in advance of the submission of such prices, provided that preliminary estimates, as made by the District, show that the cost will not exceed \$1,000.

2. Prices for extra work shall be prepared by the Contractor on one or both of the following methods, as requested by the District, and submitted to the Chief Engineer for approval:

a. For a stated unit price or lump sum amount based upon current prevailing fair prices for materials, labor, plant, overhead and profit.

b. On a cost basis (force account by the Contractor). The cost of all work done by the Contractor will be computed in the manner described in Section 7.03, and the compensation thus provided shall be accepted as payment in full by the Contractor, and no additional payment will be allowed for the use of small tools, superintendent's and foreman's services, timekeeper's services, pickup or yard trucks, except as specifically essential to the work, nor any other overhead expenses incurred in the prosecution of the force account work.

3. Upon receipt of the Contractor's price, the Chief Engineer will make an analysis thereof and adopt one of the following procedures:

a. Accept the Contractor's price for lump sum or unit price amount in the original or amended form and direct him to proceed with the work; or direct him to perform the work on a cost plus basis.

b. Have the work performed by District's forces or separate contract, without undue interference or hindrance to the Contractor and without claim or suit by the Contractor for damages on account thereof.

c. Direct the Contractor to proceed with the work and accept payment therefor in the amount as adjudicated later in a court of law.

4. The price agreed to by the Contractor for the extra work shall be full compensation to the Contractor for all labor, materials, equipment or other costs related to the extra work.

2.08 PAYMENT FOR EXTRA WORK

At the end of each month the Contractor shall make and deliver to the Chief Engineer a statement of the cost of the extra work completed during the current month, itemized and in a form

satisfactory to the Chief Engineer. Upon verification of said statement by the Chief Engineer, the Contractor's claim for the full amount, as shown on said statement, will be added to the monthly partial payment made in accordance with Paragraph 7.06 of the General Provisions.

2.09 RIGHTS OF WAY

The District shall provide the rights of way upon which the work under this contract is to be done, except that the Contractor shall provide land required for the erection of temporary construction facilities and storage of his material, together with right of access to same. The District will not be responsible for any delay in furnishing the rights of way and such delay shall not be made the basis for a claim for additional compensation by the Contractor. However, in case the failure of the District to furnish the required rights of way delays the prosecution of the work, the time allowed for completion will be extended by a period of time equal to that lost by the Contractor due to such delay.

2.10 CLEANING UP

The Contractor shall, as directed by the Engineer, remove from the District's right of way and from all public and private property, at his own expense, all temporary structures, rubbish and waste materials resulting from his operations.

SECTION III - CONTROL OF THE WORK

3.01 AUTHORITY OF THE ENGINEER

The Engineer shall have general supervision and direction of the contract under authority of the Board of Supervisors. He has the authority to stop the work whenever such stoppage may be necessary to ensure the proper execution of the contract. The Engineer shall decide all questions which may arise as to the quality or acceptability of materials furnished, work performed, and rate or progress of the work; all questions which may arise as to the interpretation of the plans and specifications; all questions as to the acceptable fulfillment of the contract on the part of the Contractor; and all questions as to compensation.

His determination and decision thereon shall be final and conclusive; and such determination and decision, in case any question shall arise, shall be a condition precedent to the right of the Contractor to receive any money hereunder.

3.02 DETAIL DRAWINGS

The approved plans shall be supplemented by such working drawings as are necessary to control the work adequately. All authorized alterations affecting the requirements and information given on the approved plans shall be in writing. No changes shall be made of any plan or drawing after the same has been approved by the Engineer, except by his direction.

It is expressly understood, however, that approval by the Engineer of the Contractor's working drawings does not relieve the Contractor of any responsibility for accuracy of dimensions and details. It is mutually agreed that the Contractor shall be responsible for agreement and conformity of his working drawings with the approved plans and specifications.

Full compensation for furnishing all working drawings shall be considered as included in the prices paid for the various contract items of work, and no additional allowance will be made therefor.

3.03 CONFORMITY WITH PLANS AND ALLOWABLE DEVIATIONS

Finished surfaces in all cases shall conform with the elevations, lines, grades, cross-sections, and dimensions shown on the approved plans or as described in the Specifications and Contract Documents. Deviations from the approved plans and working drawings, will in all cases be in the Engineer's discretion and as determined by the Engineer and preauthorized in writing.

3.04 INTERPRETATION OF PLANS AND SPECIFICATIONS

Should it appear that the work to be done or any of the matters relative thereto are not sufficiently detailed or explained in these specifications and the Special Provisions, the Contractor must bring this to District's attention in writing and shall apply to the Engineer for such further explanations as may be necessary and shall conform to the same part of the contract, so far as may be consistent with the original specifications; and in the event of any doubt or questions arising respecting the true meaning of the specifications; reference shall be made to the Engineer, whose decision thereon shall be final. The requirements in this Section 3.04 shall also apply during the bidding process and before submittal of the Contractor's Proposal.

In the event of any discrepancy between any drawings and the figures written thereon, the figures shall be taken as correct. The Contractor will not be allowed to take advantage of errors and omissions in the drawings and specifications. When errors or omissions are found, they will be corrected or supplied by the Engineer.

3.05 SUPERINTENDENCE

The Contractor shall keep on his work, continually during its progress, a competent Superintendent responsible for the construction of the work, and any necessary assistants; all satisfactory to the Engineer. All such persons shall be acceptable to the District continuously throughout the duration of the Project. The Superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor. Important directions shall be confirmed in writing to the Contractor. Other directions shall be so confirmed on written request in each case.

3.06 LINES AND GRADES

The Contractor shall provide reasonable and necessary opportunities and facilities for setting points and making measurements. He shall not proceed until he has made timely demand upon the Engineer for, and has received from him, such lines and grades as may be necessary as the work progresses. The work shall be done in strict conformity with such lines and grades.

The Contractor shall carefully preserve benchmarks, reference points and stakes, and in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

3.07 INSPECTION OF WORK

The Engineer and his representatives shall at all times have access to the work during its construction, and shall be furnished with every reasonable opportunity and facility for ascertaining that the stock and materials used and employed, and the workmanship, are in accordance with the requirements and intentions of these specifications. All work done and all materials furnished shall be subject to the Engineer's inspection and approval to ensure design objectives.

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his contracts as prescribed, and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such defective work and materials have been previously overlooked by the Engineer and accepted or estimated for payment.

3.08 REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK

All work which has been rejected shall be remedied, or removed and replaced by the Contractor in an acceptable manner and no compensation will be allowed him for such removal or replacement. Any work done beyond the lines and grades shown on the plans or established by the Engineer, or any extra work done without written authority, will be considered as unauthorized and will not be paid for. Work so done may be ordered removed at the Contractor's expense. Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to cause defective work to be remedied, or removed and replaced, and unauthorized work to be removed and to deduct the costs for this work from any monies due or to become due the Contractor.

3.09 EQUIPMENT AND PLANT

Equipment not suitable to produce the quality of work required will not be permitted to operate on the project. Plants shall be designed and constructed in accordance with general practice for such equipment and shall be of sufficient capacity and of such character to ensure the production of sufficient material to carry the work to completion within the time limit.

The Contractor shall provide adequate and suitable equipment and plants to meet the above requirements and, when ordered by the Engineer, shall remove unsuitable equipment from the work and discontinue the operation of unsatisfactory plants. No worn or obsolete equipment shall be used, and in no case shall the maker's rating of the capacity for any equipment be exceeded.

All vehicles used to haul materials over existing highways shall be equipped with pneumatic tires.

3.10 FINAL INSPECTION

The Engineer will not make the final inspection until the work provided for and contemplated by the contract has been completed and the final cleaning up performed.

SECTION IV - CONTROL OF MATERIAL

4.01 DISTRICT FURNISHED MATERIALS

The Contractor shall furnish all materials required to complete the work, except those specified in the Special Provisions to be furnished by the District. Materials furnished by the District will be delivered to the Contractor at the points specified in the Special Provisions.

The Contractor will be held responsible for all materials so delivered to him, and deductions will be made from any monies due him to make good any shortages and deficiencies, from any cause whatsoever, which may occur after such delivery, or for any demurrage charges due to delinquency in unloading.

4.02 SOURCE OF SUPPLY AND QUALITY OF MATERIALS

At the option of the Engineer the source of supply of each of the materials shall be approved by him before the delivery is started. Only materials conforming to the requirements of these specifications and approved by the Engineer shall be used in the work. All materials proposed for use may be inspected or tested at any time during their preparation and use. If, after trial, it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. No material which, after approval, subsequently becomes unfit for use shall be used in the work.

Wherever the name, or brand, or manufacturer of an item is specified, it is used as a measure of quality and utility or a standard. Except in those instances where the product is designated to match others presently in use, or as otherwise stated in the Contract Documents, specifications calling for a designated material, product, thing or service by specific brand or trade name shall be deemed to be followed by the words "or equal" so that the Contractor may propose in the Contractor's bid any equal material, product, thing or service. If the Contractor desires to use any other brand or manufacturer of equal quality or utility to that specified, he shall list definite particulars of that which it considers equivalent to the specified item in its bid. The District will then determine whether or not the proposed name brand or article is equal in quality and utility to that specified, and the District's determination in that regard shall be final and binding upon the Contractor.

4.03 SAMPLES AND TESTS

All tests of materials furnished by the Contractor shall be made by the District in accordance with commonly recognized standards of national organizations, and such special methods and tests as are in use at the District's approved laboratory and described in the Detailed Specifications.

Field tests of materials will also be made by the Engineer when deemed necessary and these tests shall be made in accordance with standard practices of the District.

The Contractor shall furnish such samples of all materials as are requested by the Engineer without charge. No material shall be used until it has been approved by the Engineer. Samples will be secured and tested whenever necessary to determine the quality of the material.

Promptly after the approval of the contract, the Contractor shall notify the Engineer of the proposed sources of supply of all materials to be furnished by him, using a form which will be supplied by the Engineer upon request.

Whenever reference is made in these specifications to standard tests or requirements of the laboratory of the District, the American Society for Testing Materials, the American Railway Engineering Association, or the American Association of State Highway Officials, the reference shall be construed to mean the standards that are in effect at the date of these specifications with subsequent amendments, changes, or additions as thereafter adopted and published by the organization referred to.

4.04 DIGGING TRENCHES OR OTHER EXCAVATIONS

Any work that involves digging trenches or other excavations extending deeper than four feet below the surface, then the following terms shall apply:

4.04.1 Contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any:

- 4.04.1.1 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.
- 4.04.1.2 Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids.
- 4.04.1.3 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.

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

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

4.04.4 Contractor shall submit to District, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. Prior to any excavation is commenced, District shall accept said plan. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

4.04.5 Nothing in this section shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the Construction Safety Orders.

4.04.6 Nothing in this section shall be construed to impose tort liability on the awarding body or any of its employees.

4.05 STORAGE OF MATERIALS

Materials shall be so stored as to ensure the preservation of their quality and fitness for the work. When considered necessary by the Engineer, they shall be placed on wooden platforms or other hard, clean surfaces and not on the ground. They shall be placed under cover when so directed. Stored materials shall be so located as to facilitate prompt inspection.

4.06 DEFECTIVE MATERIALS

All materials not conforming to the requirements of these specifications shall be considered as defective and all such materials, whether in place or not, shall be rejected and shall be removed immediately from the site of the work unless otherwise permitted by the Engineer. No rejected materials, the defects of which have been subsequently corrected, shall be used until approval in writing has been given by the Engineer. Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this article, the Engineer shall have authority to remove and replace defective material and to deduct the cost of removal and replacement from any monies due or to become due the Contractor.

4.07 ASSIGNMENT OF CLAIMS

In submitting a bid on this public works project, or any subcontractor agreeing to supply goods, services, or materials, and entering a contract pursuant thereto, the Contractor and/or subcontractor do offer and agree to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

SECTION V - LEGAL RELATIONS AND RESPONSIBILITY

5.01 LAWS TO BE OBSERVED

(a) Compliance with Applicable Law. Reference to and/or incorporation into the Contract Documents of a particular law, statute, ordinance, rule or regulation is not, nor is it

intended to be, a definitive statement of the law applicable to the Contract Documents and the accomplishment of the work. Contractor must keep informed as to all such applicable law - Federal, State, County, Municipal, District - as it affects the conduct of the work and comply with such law, including, but not limited to, having requisite licenses, obtaining necessary permits, paying necessary fees and taxes, posting notices and installing, operating and maintaining safety precautions and facilities. It is likewise Contractor's responsibility to see to it that his subcontractors also fully comply with such applicable law.

If at any time Contractor is of the opinion that there is a discrepancy or inconsistency in the plans, drawings, specifications or other Contract Documents, he shall immediately cease work involving such alleged discrepancies or inconsistencies and report the same in writing to the Chief Engineer and shall not proceed with such work until ordered so to do, and in the manner instructed by the Chief Engineer.

Contractor shall protect and defend District, its officers, agents and employees against any claim or liability arising from or based upon any alleged violation of such applicable law. See also Subsection 8.02.

(b) Labor Code - The Contractor shall comply with all applicable requirements of the California Labor Code including but not limited to Labor Code, Chapter 2, Subchapter 1, Article 10, Required Apprentices on Public Works Contracts. Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here set forth in full. The parties recognize that said Chapter 1 deals with, among other things, discrimination, penalties and forfeitures, their disposition and enforcement, wages, working hours and securing workers' compensation insurance and directly affect the method of prosecution of the work by Contractor and subject it under certain conditions to penalties and forfeitures. Execution of the Agreement by the parties constitutes their agreement to abide by said Chapter 1. Their stipulation as to all matters which they are required to stipulate as to by the provisions of said Chapter 1, constitutes Contractor's certification that it is aware of the provisions of said Chapter 1 and will comply with them and further constitutes Contractor's certification as follows: "I am aware of the provisions of Section 3700 of the California Labor Code which requires 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." Contractor and its subcontractors shall comply with the provisions of Section 1777.5 of the Labor Code regarding apprentices.

Contractor shall post at each job site during the course of the work a copy of District's "Determination of Prevailing Wage Rates", copies of said Determination are available from District for this purpose and at <http://www.dir.ca.gov/OPRL/DPreWageDetermination.htm>.

(c) Equal Employment Opportunity

General - The Contractor shall comply with all applicable non-discrimination and equal employment laws. The Contractor shall not discriminate in its recruiting, hiring, promotion, demotion or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age or physical handicap in the performance of this Contract and shall comply with the provisions of the California Fair Employment Practice Act (commencing with Section 1410 of

the Labor Code), the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, Executive Order No. 11246 (30 Federal Register 12319), as amended, and all administrative rules and regulations issued pursuant to said Acts and Order. See particularly 41 Code of Federal Regulation (CFR) Chapter 60.

Contractor shall require each of its subcontractors to comply with the preceding paragraph and shall include in each subcontract language similar to the preceding paragraph.

Contractor shall permit access to its records of employment, employment advertisement, application forms and other pertinent data and records (including but not limited to certified payroll information) by District and any state or federal agency having jurisdiction for the purpose of investigation to ascertain compliance with this Section.

District may assign an affirmative action representative to monitor Contractor and its subcontractor(s) conduct required by this Section, including the right of entry to the construction site for the purpose of obtaining information from persons performing work on the project providing such inspection does not interfere with the progress of the work.

Elsewhere in the Contract Documents specific requirements may be contained covering the same subject matter of this Section. If so, such specific requirements prevail over this Section in case of conflict.

Transactions of \$10,000 or under - Contracts and subcontracts not exceeding \$10,000 are exempt from the requirements of this Section. No Contractor or subcontractor shall procure supplies and/or services in less than usual quantities to avoid applicability of this Section. With respect to contracts and subcontracts for indefinite quantities, this Section applies unless the amount required in any one year under such contract will reasonably be expected not to exceed \$10,000.

Transactions in Excess of \$10,000 but less than \$50,000 - At District's request, Contractor shall certify that it has in effect an affirmative action plan and agrees to comply with all state and federal laws and regulations regarding Fair Employment Practices. Contractor shall maintain a written copy of its affirmative action plan and furnish District a copy of the plan upon request. District may require Contractor to complete an Affirmative Action Compliance Report, on a form furnished by District, setting forth definite goals during the term of this contract.

Transactions of \$50,000 or more - If Contractor has 50 or more employees and a contract for \$50,000 or more, it shall develop and submit to District, within 30 days after award, a written affirmative action compliance program providing in detail specific steps to guarantee equal employment opportunity. Contractor shall include in its affirmative action program a table of job classifications, which table shall include but need not be limited to job titles, duties and rates of pay.

Contractor shall in each subcontract let to do a portion of the work covered hereunder, where the subcontractor involved has 50 or more employees and the subcontract is for \$50,000 or more, impose in the subcontract the above requirements.

For the purpose of determining the number of employees, the average of the Contractor's or its subcontractor's employees for the 12 month period immediately prior to award, or the total number of employees Contractor or its subcontractor will have when performing this contract, whichever is higher, shall be used.

Federally Assisted Construction - If this project is a Federally assisted construction project, then the contract provisions contained 41 CFR § 60-1.4(b) are incorporated herein and Contractor shall likewise incorporate said provisions in each subcontract entered into by Contractor to perform the work. Federally assisted construction is identified as such in the Notice Inviting Bids.

(d) Registration of Contractors - In order to be considered a prospective bidder must be licensed in accordance with Division 3, Chapter 9 (commencing with Section 7000) of the Business and Professions Code.

(e) Accident Prevention - Particular attention shall be given to relevant Division of Industrial Safety Construction and Electrical Safety Orders. Said Orders are contained in Title 8 of the California Code of Regulations, Chapter 4, Subchapters 4 and 5. Specific attention shall be taken of the California Occupational Safety and Health Act of 1973 (commencing with Section 6300 of the Labor Code) and the Federal Occupational Safety and Health Act of 1970 (P.L. 91-596) and rules and regulations issued pursuant to said Acts. Specific reference is made to Article 6 of said Construction Safety Orders. Contractor shall submit to Engineer, who will accept in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping of the sides of trenches, or other provisions to be made for protection of personnel during earthwork operations. In event the Contractor's plan does not conform with the shoring system requirements of Article 6, the Contractor's proposed shoring design shall be prepared and signed by a civil or structural engineer registered in the State of California.

The Contractor shall also impose the foregoing requirements on all subcontractors involved and enforce compliance therewith.

The duties here set forth are nondelegable by Contractor who shall protect and defend District, its officers, agents and employees in connection therewith. See Subsection 8.02.

5.02 CONTRACTOR'S RESPONSIBILITY

Contractor is under the absolute duty in fulfilling its contractual obligations hereunder to proceed, and cause its subcontractors to proceed, in a safe, workmanlike manner, with adequate safeguards for the protection of the public, the workmen and persons from time to time inspecting the work. If at any time Contractor finds any of its subcontractors are allowing work to proceed in an unsafe manner and contrary to the intent of these Contract Documents, Contractor shall immediately cause such action to stop and immediately take all action necessary to protect workmen, inspectors and the general public and cause the work to proceed in a safe manner.

Contractor shall protect and defend District, its officers, agents and employees in reference to acts or omissions contrary to the above. See particularly Subsection 8.02.

District may withhold funds otherwise due Contractor whenever, in its judgment, this subsection is not being complied with.

5.03 CONTRACTOR'S RESPONSIBILITY FOR WORK

Until the formal acceptance of the work by the District, the Contractor shall have the charge and care thereof and shall bear the risk of injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before its completion and acceptance and shall bear the expense thereof, except for such injuries or damages as are occasioned by acts of the Federal Government and the public enemy. In case of suspension of work from any cause whatsoever, the Contractor shall be responsible for all materials and shall properly store them if necessary and shall erect temporary structures where necessary.

5.04 PROPERTY RIGHTS IN MATERIALS

Nothing in the contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil. All such materials shall become the property of the District upon being so attached or affixed.

5.05 PERMITS AND LICENSES

The Contractor shall procure all permits and licenses, (including but not limited to: National Pollution Discharge Elimination System (NPDES) and South Coast Air Quality Management District (AQMD) permit requirements), pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

5.06 ROYALTIES AND PATENTS

The Contractor shall assume all costs arising from the use of patented materials, equipment, devices, or processes used on or incorporated on the work, and agrees to indemnify and save harmless the Riverside County Flood Control and Water Conservation District, the Board of Supervisors, the Flood Control Engineer, and their duly authorized representatives, from all suits at law, or actions of every nature for, or on account of, the use of any patented materials, equipment, devices, or processes.

5.07 SANITARY PROVISIONS

Necessary conveniences, properly secluded from public observation shall be provided by the Contractor where needed for the use of laborers on the work. Their location, construction and maintenance shall be subject to the approval of the Engineer, and their use shall be strictly enforced. The Contractor shall obey and enforce such sanitary regulations as may be prescribed by the State Department of Health or other authorities having jurisdiction.

5.08 PUBLIC SAFETY

The Contractor at his own expense shall furnish, erect, and maintain such fences, barriers, lights, and signs as are necessary to give adequate warning to the public at all times that the bridges, culverts, and work along public highways are under construction; and of any dangerous conditions to be encountered as a result thereof; and he shall erect such warning and directional signs and employ such flagmen as are required and maintain same throughout the construction period.

Full compensation for the work involved in carrying out the precautionary measures 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 therefor.

5.09 USE OF EXPLOSIVES

When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property.

All explosives shall be stored in accordance with the provisions of Division II, Part I, Chapter 3, of the Health and Safety Code of the State of California.

5.10 PROVISIONS FOR EMERGENCIES

Unusual conditions may arise on the work which will require that immediate and unusual provisions be made to protect the public from danger or loss or damage to life and property, due directly or indirectly to the prosecution of the work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection.

The Contractor shall use such foresight and shall take such steps and precautions as his operations make necessary to protect the public from danger or damage, or loss of life or property, which would result from the interruption or contamination of public water supply, irrigation or other public service, or from the failure of partly completed work.

Whenever work is undertaken pursuant to the above provisions, Contractor shall promptly file with District a verified report setting forth the nature of the emergency and the action taken by the Contractor by reason of the emergency.

Whenever, in the opinion of the Engineer, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or property which may be injured by process of construction on account of such neglect; and whenever, in the opinion of the Engineer, immediate action shall be considered necessary in order to protect public or private, personal or real property interests, or prevent likely loss of human life or damage on account of the operations under the contract, then and in that event the Engineer may provide suitable protection to said interests by causing such work to be done and material to be furnished as, in the opinion of the Engineer, may seem reasonable and necessary.

The cost and expense of all such emergency work shall be borne by the Contractor, and if he shall not pay said cost and expense upon presentation of the bills therefor, duly certified by the

Engineer, then said cost and expense will be paid by the District and shall thereafter be deducted from any amounts due, or which may become due said Contractor. Failure of the District, however, to take such precautionary measures, shall not relieve the Contractor of his full responsibility for public safety.

5.11 UNFORESEEN DIFFICULTIES

All loss or damages, except as noted in Section 8.03, arising out of the nature of the work to be done under the contract, or from any unforeseen obstructions or difficulties which may be encountered during the progress of the work and in the prosecution of the same, or from the action of the elements, or from encumbrances in the line of work, shall be sustained by the Contractor.

5.12 ACCESS TO THE WORK

Access to the work from existing roads shall be provided by the Contractor at his expense and maintained in a manner so as not to create a public nuisance. The Board of Supervisors, Flood Control District and Engineer assume no responsibility for the condition or maintenance of any existing road or structure thereon that may be used by the Contractor for performing the work under these specifications and for traveling to and from the site of the work. No direct payment will be made to the Contractor for constructing temporary roads used for construction operations or for improving, repairing, or maintaining any existing road or structure thereon that may be used by the Contractor for performance of the work under these specifications. The cost of all work described in this paragraph shall be included in the prices bid in the schedule for other items of construction work.

5.13 GUARANTEE OF WORK

All work is guaranteed by Contractor for a period of one year from the recordation of the Notice of Completion against defects resulting from the use of inferior materials, equipment, or workmanship. Upon notice from District, Contractor shall promptly remedy such defects at his expense, including payment to District of its expenses in connection with remedying such defects, otherwise District shall proceed to remedy such defects and Contractor shall upon demand reimburse District for its expenses in connection therewith.

The above one year guarantee is in addition to any specific guarantee(s) provided for elsewhere in the Contract Documents.

The performance of guarantee and conditions specified in Section 5.13., shall be secured by a surety bond which shall be delivered by the Contractor to the District prior to the date on which final payment is made to the Contractor. Said bond shall be in an approved form and executed by a surety company or companies satisfactory to the District, in the amount of 10% of the final contract price. Said bond shall remain in force for the duration of the guarantee period specified in Section 5.13. Instead of providing such a bond as described above, the Contractor may, at its option, provide for the performance bond furnished under the contract to remain in force for said amount until the expiration of said guarantee period; and the amount of said performance bond may be reduced to 10% of the final contract price beginning at the time of recordation of the Notice of Completion.

5.14 DAMAGES BY ACT OF GOD

If the construction of the project herein is damaged, which damage is determined to have been proximately caused by an act of God, in excess of 5% of the contract amount, provided that the work damaged is built in accordance with applicable building standards and the plans and specifications, then the District, may, without prejudice to any other right or remedy, terminate the contract.

SECTION VI - PROSECUTION AND PROGRESS

6.01 PROGRESS OF THE WORK

The Contractor shall begin the work within ten (10) calendar days after the date of the receipt by him of notice to proceed from the Chief Engineer and shall diligently and continuously prosecute the same to completion within the time limit provided in the Special Provisions.

6.02 OVERTIME WORK AND WORK AT NIGHT

It is intended that the Contractor prosecute the work on a five (5) day, forty (40) hour work week with no work on legal holidays. If the Contractor feels it is necessary to work more than the normal forty (40) hour work week, he will make a written request for permission from the Engineer, outlining the reasons for such request. The decision of granting permission for overtime work shall be made by the Engineer and shall be final. A condition will be imposed on the granting of a request to work overtime, requiring the Contractor to pay the District the cost incurred at overtime rates for additional inspection and engineering time required in connection with the overtime work.

When any work is performed at night, only such classes of work shall be done as can be properly inspected. Adequate light must be provided for the safety of the workers and for proper inspection.

6.03 SUBCONTRACTING

Reference is made to the Subletting and Subcontracting Fair Practice Act contained in the Public Contract Code (commencing §4100). By this reference, said Act is incorporated herein with like effect as if it were here set forth in full and the parties shall abide by its terms and substitution shall be only as allowed by that Act.

Contractor shall be responsible for the acts and omissions of its subcontractors and shall make certain that at all times its subcontractors comply with the terms of the Contract Documents and applicable law insofar as such compliance relates to the work.

District reserves the right to approve all subcontractors whether or not they are required to be listed in the Contractor's Proposal. As used in this Section "subcontractor" includes any person who fabricates or manufactures any article for incorporation into the work whether or not they install or test after installation or contract to install or test after installation, but does not include suppliers of fungible goods for incorporation into the work unless such supplier also installs or tests or contracts to install or test.

The Contractor shall give his personal attention to the fulfillment of the contract and shall keep the work under his control. The Contractor shall perform with his own organization work of a value amounting to not less than 60% of the remainder obtained by subtracting from the total original contract value the sum of any item designated herein or in the Special Provisions as Specialty Items. The furnishing and placing of reinforcing steel, when placing is performed by the supplier, will be considered as a Specialty Item for this purpose; however, he shall be designated in the list of subcontractors. The value of the work subcontracted will be based on the contract item bid price. When a portion of an item is subcontracted, the value of work subcontracted will be based on the estimated percentage of the Contract Unit Price. This will be determined from information submitted by the Contractor, and subject to approval by the Engineer.

Where a portion of the work which has been subcontracted by the Contractor is not being prosecuted in a manner satisfactory to the District, the subcontractor shall be removed immediately on the requisition of the Engineer and shall not again be employed on the work.

6.04 CHARACTER OF WORKMEN

If any subcontractor or person employed by the Contractor shall fail or refuse to carry out the directions of the Engineer or shall appear to the Engineer to be incompetent or to act in a disorderly or improper manner, he shall be discharged immediately on the requisition of the Engineer, and such person shall not again be employed on this work.

6.05 TEMPORARY SUSPENSION OF THE WORK

The Engineer shall have the authority to suspend the work wholly or in part, for such period as he may deem necessary, due to unsuitable weather, or to such other conditions as are considered unfavorable for the suitable prosecution of the work, or for such time as he may deem necessary due to the failure on the part of the Contractor to carry out orders given, or to perform any provision of the contract. The Contractor shall immediately comply with the written order of the Engineer to suspend the work wholly or in part. The work shall be resumed when conditions are favorable and methods are corrected, as ordered or approved in writing by the Engineer.

6.06 TIME OF COMPLETION AND DAMAGES

The Contractor shall complete the work called for under the contract in all parts and requirements within the number of working days specified in the Special Provisions. Liquidated damages shall apply as stated in the Special Provisions and the Contract Documents.

A working day is hereby defined as any day; except Saturdays, Sundays, and legal holidays and days on which the Contractor is specifically required by the Special Provisions to suspend construction operations; on which the Contractor is not prevented by inclement weather or conditions resulting immediately therefrom adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 60% of the normal labor and equipment force engaged in such operation or operations for at least five hours toward completion of such operation or operations.

The Engineer will furnish the Contractor a weekly statement showing the number of working days charged to the contract for the preceding week, the number of working days specified for completion of the contract, and the number of working days remaining to complete the contract. The Contractor will be allowed one week in which to file a written protest setting forth in what respects said weekly statement is incorrect, otherwise the statement shall be deemed to have been accepted by the Contractor as correct.

The following holidays will be considered as legal holidays: New Year's Day; Martin Luther King Jr.'s Birthday; Lincoln's Birthday; Washington's Birthday; Memorial Day; Independence Day; Labor Day; Columbus Day; Veteran's Day; Thanksgiving Day; Christmas; and such other days as are declared holidays by ordinance passed by the Board of Supervisors of the District.

Contractor acknowledges that failure to perform in strict accordance with the Contract Documents and within the time limit specified in the Special Provisions will cause District to suffer special damages in addition to cost of completion of the work in accordance with the provisions of the Contract Documents. Such special damage could include, but is not limited to, lease and rental cost, additional salaries and overhead, interest during construction, attorney expense, additional engineering, inspection expense, cost of maintaining or constructing alternate facilities and injury to the property of the District or others. The daily cost to the District for inspection and superintendence by the District shall be the amount specified in the Special Provisions. The District may withhold from any money due or that may become due the Contractor under the contract, such amount as the District may elect to offset the damages incurred and any withholding or failure to withhold shall not in any way limit recovery for damages actually incurred.

It is further agreed that in case the work called for under the contract is not finished and completed in all parts and requirements within the time specified, the Board of Supervisors shall have the right to extend the time for completion or not, as may seem best to serve the interest of the District, and if it decides to extend the time limit for the completion of the contract, it shall further have the right to charge to the Contractor, his heirs, assigns or sureties and to deduct from the final payment for the work all or any part, as it may deem proper, of the actual cost of engineering, inspection, superintendence, and other overhead expenses which are directly chargeable to the contract, and which accrue during the period of such extension, except that cost of final surveys and preparation of final estimate shall not be included in such charges.

The Contractor shall not be assessed damages nor the cost of engineering and inspection during any delay in the completion of the work caused by acts of God or of the public enemy, acts of the District, encountering unknown utility facilities, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe weather or delays of subcontractors due to such causes, provided that the Contractor shall notify the Engineer in writing of the causes of delay within 10 days from the beginning of any such delay, and his findings of the facts thereon shall be final and conclusive. Contractor shall not be assessed damages for delay in the completion of the project, when such delay was caused by the failure of the District or the owner of the utility facilities.

The term "severe weather" shall be construed to mean only such weather as is unreasonable or extraordinary and in the opinion of the Engineer, the work could not be prosecuted by the Contractor during the period throughout which such weather prevailed.

6.07 DELAYS AND EXTENSION OF TIME

If delays are caused by unforeseen causes beyond the control of either the Contractor or the District, such as war, strikes, fire, floods, or other action of the elements, such delays will entitle the Contractor to an equivalent extension of time for the completion of the contract, but the Contractor shall not be entitled to damages or additional payments over and above the contract price due to delay caused by any of the above-mentioned causes. Furthermore, if the Contractor suffers any delay caused by the failure of the District to furnish the necessary right of way or materials agreed to be furnished by it, or by failure to supply necessary plans or instructions concerning the work to be done after written request therefor has been made, the Contractor shall be entitled to an extension of time equivalent to the time lost for any of the above-mentioned reasons, but shall not be entitled to any damages for such delay.

6.08 ASSIGNMENT

The contract may be assigned only upon written consent of the District. Such written consent to sublet, assign or otherwise dispose of any portion of the contract, shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract.

6.09 TERMINATION OF CONTRACT

Subject to all applicable provisions of these specifications and/or the contract to be entered into hereunder, the Engineer is hereby empowered to direct the time and rate of delivery of materials at the site of work and to direct the time, rate and sequence of work. If the Contractor fails to begin delivery of material and equipment or to commence work within the time specified herein, and/or in the contract, or to maintain the rates of delivery of materials, or to execute the work in the manner and at such locations as directed by the Engineer, or fails to maintain a program of work in such a manner as will, in the judgment of the Engineer inure to interests of the District, or, if in the judgment of the Engineer, the Contractor is not carrying out the provisions of the contract in their true intent and meaning, written notice by the Chief Engineer may be served upon him and the Surety on his faithful performance bond demanding a satisfactory compliance with the contract, and with these specifications. If the Contractor and/or his Surety refuses or neglects to comply with such notice within five (5) days after receiving same, or after commencing so to do, fails to continue so to do, or has assigned or sublet the contract without the consent of the District, then the District may exclude him from the premises and take possession thereof, together with all material and equipment thereon, and may complete the work itself, either by force account or by letting the unfinished portion of the work to another Contractor or by a combination of such methods. In any event, the cost of the completion of said work shall be a charge against the Contractor and his Surety and may be deducted from any money due or becoming due from the District, and if the sums due under the contract are insufficient, said Contractor and/or his Surety shall pay to the District within five (5) days after the completion of the work all of such cost in excess of the contract price.

The Surety, in the event that it assumes part of the work, shall take the Contractor's place in this contract in all respects for that part and shall be paid by the District for all work performed by it in accordance with the terms of this contract. If the Surety assumes the entire contract, all

monies remaining due the Contractor at the time of his default shall be made payable to the Surety as the work progresses, subject to the terms of the contract.

SECTION VII - PAYMENT

7.01 SCOPE OF PAYMENTS

The Contractor shall accept compensation, as herein provided, in full payment for furnishing all materials, labor, tools, and equipment necessary to the completed work and for performing all work contemplated and embraced under the contract; also for loss or damage arising from the nature of the work, or from the action of the elements, except as hereinbefore provided, or from any unforeseen difficulties which may be encountered during the prosecution of the work until the final acceptance by the Board of Supervisors; and for all risks of description connected with the prosecution of the work, also for all expenses incurred in consequence of the suspension or discontinuance of the work as herein specified; and for completing the work according to the plans and specifications. Neither the payment of any estimate nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material.

7.01A Measurement and Computation of Quantities - All items of the work to be paid for at a contract price per unit of measurement will be measured by the Engineer in accordance with United States Standard Measures. A ton shall mean 2,000 pounds, avoirdupois. Except as otherwise expressly provided in the specifications, the methods of measurement and computation of quantities of such items will be determined by the Engineer, taking into account the price of the item relative to its quantity and the costs of measurement.

The weights of metalwork, pipe, and other metal parts to be paid for by weight will be determined by the Engineer on the basis of handbook weights, scale weights, or manufacturer's catalog weights, or in the absence of any of the foregoing, on the basis of estimated weights; provided, that weights of nonmetallic coatings will be excluded.

7.01B Payment at Contract Prices - The contract price for an item of the work shall include full compensation for all costs of that item, including the costs of any work, materials and equipment incidental to the item but not specifically shown or described in the drawings and specifications, subject only to such express limitations as may be stated in the specifications defining the item or prescribing payment therefor.

The contract prices shall include full compensation for all costs of any work, materials, and equipment required by the drawings and specifications at the time of contract award, but not covered by a contract price or otherwise expressly made the subject of direct payment.

7.02 PAYMENT AND COMPENSATION FOR ALTERED QUANTITIES

When alterations in plans or quantities of work are ordered and performed, the Contractor shall accept payment in full at the contract unit price for the actual quantities of work done and no allowance will be made for anticipated profits. Increased or decreased work involving supplemental agreements will be paid for as stipulated in such agreements.

7.03 FORCE ACCOUNT PAYMENT

When extra work is to be paid for on a force account basis, compensation will be determined as follows:

7.03A Work Performed by Contractor - The Contractor will be paid for labor, materials, and equipment rental as hereinafter provided, except where agreement has been reached to pay in accordance with Section 7.03B. Only materials incorporated in the work will be paid for.

To the total computed as provided in Sections 7.03A(1), 7.03A(2) and 7.03A(3) will be added the following percentages:

Labor	-	24%
Materials	-	15%
Equipment Rental	-	15%

It is understood labor, materials, and equipment may be furnished by the Contractor or by the subcontractor or by others on behalf of the Contractor.

When extra work paid for on a force account basis is performed by forces other than the Contractor's organization, the Contractor shall reach agreement with such other forces as to the distribution of the payment made by the District for such work and no additional payment therefor will be made by the District.

7.03A(1) Labor - The Contractor will be paid the cost of labor for the workmen used in the actual and direct performance of the work. The cost of labor, whether the employer is the Contractor, subcontractor, or other forces, will be the sum of the following:

7.03A(1a) Actual Wages - The actual wages paid will be as published by the Director of Industrial Relations of the State of California for the region where work is performed and that are in effect at the time of award of the contract. The classification of workmen used shall not be in excess of the industry standard for the region where work is performed. Copies of the published labor rates are on file at the District office.

7.03A(1b) Labor Surcharge - To the actual wages as defined in Section 7.03A(1a), will be added a labor surcharge set forth in the Special Provisions, which labor surcharge shall constitute full compensation for all payments imposed by State and Federal laws and for all other payments made to, or on behalf of, the workmen, other than actual wages as defined in Section 7.03A(1a) and subsistence and travel allowance as specified in Section 7.03A(1c).

7.03A(1c) Subsistence and travel allowance paid to such workmen as required by collective bargaining agreements.

7.03A(2) Materials - The cost of materials incorporated in the work will be the cost to the purchaser, whether Contractor, subcontractor or other forces, from the supplier thereof, except as the following are applicable:

7.03A(2a) If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to the District notwithstanding the fact that such discount may not have been taken.

7.03A(2b) If the materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by the Engineer. No markup except for actual costs incurred in the handling of such materials will be permitted.

7.03A(2c) If the materials are obtained from a supply or source owned wholly or in part by the purchaser, payment therefor will not exceed the price paid by the purchaser for similar materials furnished from said source on contract items or on the current wholesale price for such materials delivered to the job site whichever price is lower.

7.03A(2d) If the cost of such materials is, in the opinion of the Engineer, excessive, then the cost of such materials shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site, less any discounts as provided in Section 7.03A(2a).

7.03A(2e) If the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, the cost shall then be determined in accordance with Section 7.03A(2d).

The District reserves the right to furnish such materials as it deems advisable, and the Contractor shall have no claims for costs and profit on such materials.

7.03A(3) Equipment Rates - The Contractor will be paid for the use of equipment at the rental rates listed for such equipment in the Special Provisions, regardless of ownership and any rental or other agreement, if such may exist, for the use of such equipment entered into by the Contractor. If it is deemed necessary by the Engineer to use equipment not listed in the Special Provisions, a suitable rental rate for such equipment will be established by the Engineer. The Contractor may furnish any cost data which might assist the Engineer in the establishment of such rental rate.

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

Operators will be paid for as provided under Section 7.03A(1).

All equipment shall, in the opinion of the Engineer, be in good working condition and suitable for the purpose for which the equipment is to be used.

Unless otherwise specified, manufacturer's ratings 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.

Individual pieces of equipment or tools having a replacement value of \$25.00 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor.

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

In computing the rental time of equipment, less than 30 minutes shall be considered ½ hour.

7.03A(3a) Equipment on the Work - The rental time to be paid for equipment on the work shall be the time the equipment is in operation on the extra work being performed, and in addition, shall include the time required to move the equipment to location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location, except that moving time will not be paid for if the equipment is used at the site of the extra work on other than such extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made if the equipment is used at the site of the extra work on other than such extra work.

7.03A(3b) Equipment not on the Work - For the use of equipment moved in on the work and used exclusively for extra work paid for on a force account basis, the Contractor will be paid the rental rates listed in the Special Provisions or as agreed to as provided in Section 7.03A(3) and for the cost of transporting the equipment to the location of the work and its return to its original location, all in accordance with the following provisions:

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

(2) The District will pay the costs of loading and unloading such equipment.

(3) The cost of transporting equipment on low bed trailers shall not exceed the hourly rates charged by established haulers.

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

(5) The rental period shall begin at the time the equipment is unloaded at the site of the extra work, shall include each day that the equipment is at the site of the extra work, excluding Saturdays, Sundays, and legal holidays unless the extra work is performed on such days, and shall terminate at the end of the day on which the Engineer directs the Contractor to discontinue the use of such equipment. The rental time to be paid per day will be in accordance with the following:

<u>Hours Equipment is in Operation</u>	<u>Hours to be Paid</u>
0.....	4
0.5.....	4.25
1.....	4.5
1.5.....	4.75
2.....	5
2.5.....	5.25
3.....	5.5
3.5.....	5.75
4.....	6
4.5.....	6.25
5.....	6.5
5.5.....	6.75
6.....	7
6.5.....	7.25
7.....	7.5
7.5.....	7.75
8.....	8
Over 8.....	hours in operation

When hourly rates are listed, less than 30 minutes of operation shall be considered to be 1/2 hour of operation.

When daily rates are listed, payment for 1/2 day will be made if the equipment is not used. If the equipment is used, payment will be made for one day.

The minimum rental time to be paid for the entire rental period on an hourly basis shall not be less than 8 hours or if on a daily basis shall not be less than one day.

(6) Should the Contractor desire the return of the equipment to a location other than its original location, the District will pay the cost of transportation in accordance with the above provisions, provided such payment shall not exceed the cost of moving the equipment to the work.

(7) Payment for transporting, loading and unloading equipment, as above provided, will not be made if the equipment is used on the work in any other way than upon extra work paid for on a force account basis.

7.03B Work Performed by Special Forces or Other Special Services - When the Engineer and the Contractor, by agreement, determine that a special service or an item of extra work cannot be performed by the forces of the Contractor or those of any of his subcontractors, such service or extra work item may be performed by a specialist. Invoices for such service or item of extra work on the basis of the current market price thereof may be accepted without complete itemization of labor, material, and equipment rental costs when it is impracticable and not in accordance with the established practice of the special service industry to provide such

complete itemization. In those instances wherein a Contractor is required to perform extra work necessitating a fabrication or machining process in a fabrication or machine shop facility away from the job site, the charges for that portion of the extra work performed in such facility may, by agreement, be accepted as a specialist billing.

To the specialist invoice price, less a credit to the District for any cash or trade discount offered or available, whether or not such discount may have been taken, will be added 15% in lieu of the percentages provided in Section 7.03A.

7.03C Records - The Contractor shall maintain his records in such a manner as to provide a clear distinction between the direct costs of extra work paid for on a force account basis and the costs of other operations.

The Contractor shall furnish the Engineer report sheets in duplicate of each day's extra work paid for on a force account basis no later than the working day following the performance of said work. The daily report sheets shall itemize the materials used, and shall cover the direct cost of labor and the charges for equipment rental, whether furnished by the Contractor, subcontractor, or other forces, except for charges described in Section 7.03B. The daily report sheets shall provide names or identifications and classifications of workmen, the hourly rate of pay and hours worked, and also the size, type and identification number of equipment, and hours operated.

Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily report sheets, or if not available, they shall be submitted with subsequent daily report sheets. Should said vendor's invoices not be submitted within 15 days after acceptance of the work, the District reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available in the quantities concerned delivered to the location of the work, less any discounts provided in Section 7.03A(2a).

Said daily report sheets shall be signed by the Contractor or his authorized agent.

The Engineer will compare his records with the daily report sheets furnished by the Contractor, make any necessary adjustments, and compile the costs of work paid for on a force account basis on daily extra work report forms furnished by the District. When these daily extra work reports are agreed upon and signed by both parties, they shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit.

The Contractor's cost records pertaining to work paid for on a force account basis shall be open to inspection or audit by representatives of the District, during the life of the contract and for a period of not less than 18 months after the date of acceptance thereof, and the Contractor shall retain such records for that period. Where payment for materials or labor is based on the cost thereof to forces other than the Contractor, the Contractor expressly guarantees that the cost records of such other forces shall be open to inspection and audit by representatives of the District on the same terms and conditions as the cost records of the Contractor. If an audit is to be commenced more than 60 days after the acceptance date of the contract, the Contractor will be given a reasonable notice of the time when such audit is to begin.

7.03D Payment as provided above in Sections 7.03A and 7.03B shall constitute full compensation to the Contractor for performance of work paid for on a force account basis and no additional compensation will be allowed therefor.

7.04 ACCEPTANCE

The work shall be inspected for acceptance by the Engineer promptly upon receipt of notice in writing from the Contractor that the work is ready for such inspection.

The structures will not be finally accepted until the completion of the entire work under the contract.

7.05 DEDUCTIONS FROM PAYMENTS

The Riverside County Flood Control and Water Conservation District, by and through the Board of Supervisors or other appropriate District officer or officers, may at its option and at any time retain out of any amounts due the Contractor sums sufficient to cover any unpaid claims, provided that sworn statements of said claims shall have been filed in the office of the District or in the office of any other District officer or officers having jurisdiction thereover.

7.06 PARTIAL PAYMENTS

On or about the last day of each month, the Engineer shall make an estimate in writing of the total amount of work done by the Contractor to the time of such estimate and the value thereof. The District shall retain 5% of such estimated value of the work done as part security for the fulfillment of the contract by the Contractor. At no time shall the amount retained by the District be less than 5% of the total value of the work completed at the time such payments are made.

After deducting all previous payments and all sums to be kept or retained under the provisions of the contract, the District shall make monthly progress payments to the Contractor. No such estimate or payment shall be required to be made when, in the judgment of the Chief Engineer, the work is not proceeding in accordance with the provisions of the contract.

In accordance with Public Contract Code Section 22300 and other applicable law, the Contractor may substitute securities for any monies withheld to ensure performance under the contract. Such substitution shall be made only upon a separate agreement between the District and the Contractor which contains terms and conditions in compliance with all laws applicable to monies withheld under the contract.

7.07 DELAYED PAYMENTS

All the monies due the Contractor under the contract will be paid by demand on the Treasurer of the District, prepared and approved as required by law, and it is understood that any delay in the preparation, approval and payment of these demands will not constitute a breach of contract on the part of the District.

7.08 FINAL PAYMENT

The Engineer, after the completion of the contract, shall make a final estimate in writing to the Board of Supervisors of the amount of work done thereunder, and the value of such work, and the District shall pay the entire sum so found to be due after deducting therefrom all previous payments and all amounts to be kept and all amounts to be retained under the provisions of the contract. All prior partial estimates and payment shall be subject to correction in the final estimate and payment. The final payment shall not be due and payable until the expiration of 45 days from the date of acceptance of the work by the Board of Supervisors.

It is mutually agreed between the parties to the contract that no certificate given or payments made under the contract, except the final payment, shall be conclusive evidence of the performance of the contract, either wholly or in part against any claim of the party of the first part, and no payment shall be construed to be an acceptance of any defective work or improper materials.

And the Contractor further agrees that the payment of the final amount due under the contract, and the adjustment and payment for any work done in accordance with any alterations of the same, shall release the Riverside County Flood Control and Water Conservation District, the Board of Supervisors, and the Engineer from any and all claims or liability on account of work performed under the contract or any alteration thereof.

7.09 CLAIMS RESOLUTION - CLAIMS UP TO \$375,000

In accordance with Public Contract Code Section 20104 - 20104.8 and other applicable law, public works claims of \$375,000 or less which arise between the Contractor and the District shall be resolved following the statutory procedure.

1. All claims shall be submitted in writing and accompanied by substantiating documentation. Claims must be filed on or before processing of the final payment unless other notice requirements are provided in the contract. "Claim" means a separate demand by the claimant for (1) a time extension, (2) payment of money or damages arising from work done by or on behalf of the claimant and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled, or (3) an amount the payment of which is disputed by the District.

(a) Claims under \$50,000. The District shall respond in writing to the claim within 45 days of receipt of the claim, or, the District may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the District may have against the claimant. If additional information is needed thereafter, it shall be requested and provided upon mutual agreement of the District and the claimant. The District's written response shall be submitted 15 days after receiving the additional documentation, or within the same period of time taken by the claimant to produce the additional information, whichever is greater.

(b) Claims over \$50,000 but less than or equal to \$375,000. The District shall respond in writing within 60 days of receipt, or, may request in writing within 30 days of receipt of the claim, any additional documents supporting the claim or relating to defenses or claims the

District may have against the claimant. If additional information is needed thereafter, it shall be requested and provided pursuant to mutual agreement between the District and the claimant. The District's response shall be submitted within 30 days after receipt of the further documents, or within the same period of time taken by the claimant to produce the additional information or documents, whichever is greater.

2. If the claimant disputes the District's response, or if the District fails to respond within the statutory time period, the claimant may so notify the District within 15 days of the receipt of the District's response or within 15 days of the District's failure to respond within the time prescribed, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon such demand, the District shall schedule a meet and confer conference within 30 days for settlement of the dispute.

3. If following the meet and confer conference, the claim or any portion thereof remains in dispute, the claimant may file a claim pursuant to Government Code § 900 et seq. and Government Code § 910 et seq. For purposes of those provisions, the time within which a claim must be filed shall be tolled from the time the claimant submits the written claim until the time the claim is denied as a result of the meet and confer process, including any time utilized for the meet and confer conference.

4. If a civil action is filed to resolve any claim, the provisions of Public Contract Code § 20104.4 shall be followed, providing for nonbinding mediation and judicial arbitration.

5. Location for Filing of Claims, Jurisdiction. Any legal action related to the performance of the work or the terms of the Contract Documents shall be filed only in the Superior Court of the State of California located in Riverside, California.

7.10 CLAIMS RESOLUTION - ALL CLAIMS (PUBLIC CONTRACT CODE SECTION 9204)

This section is intended to help resolve disputes between the parties related to this project. Such disputes shall be brought to the attention of the District at the earliest possible time, so that such disputes may be promptly resolved, if possible, or other appropriate action or investigation may be promptly undertaken. Claims must be filed on or before the date of final payment as required in Public Contract Code Section 20104.2. Public works claims which arise between the Contractor and the District shall be resolved using the following procedure:

A "claim" means a separate demand by the Contractor sent by registered mail or certified mail return receipt requested for one or more of the following: (a) a time extension including, without limitation, for relief from damages or penalties for delay assessed by the District; (b) payment by the District of money or damages arising from work done by or on behalf of the Contractor and payment for which is not otherwise expressly provided or to which the Contractor is not otherwise entitled; (c) payment of an amount that is disputed by the District. The Contractor shall furnish reasonable documentation to support the claim.

A. Form and Contents of Claim(s)

The Contractor shall furnish reasonable documentation to support the Claim, which shall be sent by registered mail or certified mail with return receipt requested to the District at the address provided herein this Section 7.10. The Contractor's written Claim must include, but not limited to, the following:

- 1) A statement to identify that it is a Claim under this Section 7.10, on a company letterhead, and a request for a decision on the Claim;
- 2) A detailed description or narrative of pertinent events, act, error, omission, unforeseen condition, event or other circumstance giving rise to the Claim;
- 3) Citation to contract provisions;
- 4) Theory of entitlement that provides a detailed justification for any remedy or relief sought by the Claim. This includes, but not limited to: a detailed cost breakdown, invoices, material tickets, staff logged time, summary of quantities, other cost records and total cost calculations;
- 5) Complete pricing of all cost impacts;
- 6) A time impact analysis of all time delays that shows actual time impact on the critical path; and
- 7) Documentation, District letters, notifications, related drawings and photos supporting items (1) through (6).

The Claim must be verified under penalty of perjury by Contractor's project superintendent as to the Claim's accuracy, and shall be priced like a Change Order, and must be updated at regular intervals as to cost and entitlement if a continuing Claim. Routine contract materials, for example, correspondence, RFI, Change Order requests, or payment requests shall not constitute a Claim. Contractor shall bear all costs incurred in the preparation and submission of a Claim.

Claims and support documentation related must be sent to:

Mr. Claudio M. Padres
Chief of Design and Construction Division
Riverside County Flood Control
and Water Conservation District
1995 Market Street
Riverside, CA 92501

B. Claims Procedure

- 1) Upon receipt of a Claim and the supporting documentation, the District shall conduct a reasonable review of the Claim and within 45 days, or an extended period as may be set by mutual agreement of the District and Contractor, provide the Contractor with a written statement identifying what portion of the Claim is still disputed and what portion is undisputed.
- 2) Notwithstanding the time period set forth in B.1) above, if the District needs approval from the Board of Supervisors to provide the Contractor with a

written statement identifying the disputed portion and the undisputed portion of the Claim, and the Board of Supervisors does not meet within the 45 days or within the mutually agreed to extension of time following receipt of the Claim, the District shall have up to three (3) days following the next duly publicly noticed meeting of the Board of Supervisors after the forty-five (45) day period, or extension, expires to provide Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim.

- 3) Any payment due on the undisputed portion of the Claim under this section shall be processed and made within 60 days after the District issues its written statement. Amounts not paid in a timely manner as required by this Section 7.10 shall bear interest at 7% per annum. If the District fails to issue a written statement, the Claim shall be deemed rejected in its entirety. Failure by the District to respond to a claim from a Contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A Claim that is denied by reason of the District's failure to have responded to the Claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the Claim or the responsibility or qualifications of the Contractor.
- 4) If the Contractor disputes the District's written response, or if the District fails to respond within the time prescribed, the Contractor may demand in writing, sent by registered mail or certified mail return receipt requested, an informal meet and confer conference for settlement of the portion of the Claim in dispute. Upon receipt of the demand, the District shall schedule a meet and confer conference within 30 days.
- 5) Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion thereof remains in dispute, the District 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 shall be processed and made within 60 days after the District 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 District and Contractor sharing the associated costs equally. The District and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. 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.

- 6) 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 with resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section. Unless otherwise agreed to by the District and the Contractor in writing, the mediation conducted pursuant to this Section 7.10 shall excuse any further obligation under Section 20104.4 of the Public Contract Code to mediate after litigation has been commenced.
- 7) If mediation is unsuccessful to resolve all issues, the parts of the Claim remaining in dispute shall be subject to applicable procedures outside of this section and the requirements of Public Contract Code § 9204. The Claim resolution procedures in this Section do not preclude the District from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this Article does not resolve the parties' dispute.
- 8) Following the procedures set forth in this Section 7.10, including the mediation, if the Claim or any portion of it remains in dispute, the Contractor may file a Claim as provided in Chapter 1 (commencing with § 900) and Chapter 2 (commencing with § 910) of Part 3 of Division 3.6 of Title 1 of the Government Code.
- 9) If the Government Code claim is denied, Contractor may file an action in court. If a civil action is filed to resolve any claim, such action shall be subject to the provisions of Public Contract Code Sections 9204 or 20104.4 and shall be followed, providing for non-binding mediation and judicial arbitration. This Section applies only to claims subject to Public Contract Code Sections 9204 or 20104. If a claim is not subject to Public Contract Code Sections 9204 or 20104, the Contractor's right to file a civil action shall be as otherwise provided by law.

C. Subcontractor Claim(s)

If a subcontractor or a lower tier subcontractor has a Claim, the Contractor may present to the District a Claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the Contractor present a Claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the Claim be presented to the District shall furnish reasonable documentation as set forth in Section 7.10 to support the Claim. Within 45 days of receipt of this written request, the Contractor shall notify the subcontractor in writing as to whether the Contractor presented the Claim to the District, and if the Contractor did not present the Claim, provide the subcontractor with a statement of the reasons for not having done so.

D. Consistency with Public Contract Code Sections 9204 and 20104

If any Claim(s) arising under this Contract is subject to the provisions of Public Contract Code Sections 9204 or 20104 et seq. (Div. 2, Part 3, Chapter 1, Article 1.5), and if provisions of those statutory sections require a procedure or procedural element different from that established in this Contract, then the provisions of those statutory sections shall apply in place of the conflicting procedure or procedural element established herein.

E. Any legal action related to the performance of the work or the terms of the Contract Documents shall be filed only in the Superior Court of the State of California located in Riverside, California.

SECTION VIII - GENERAL

8.01 COOPERATION BETWEEN CONTRACTORS

The Contractor shall be required to cooperate fully with all utility and public agency representatives engaged in construction, relocation, altering or otherwise rearranging any facilities interfering with the progress of the work.

Full compensation for any delay or inconvenience to the Contractor's operation due to such operations as described above shall be considered included in the unit price paid for other items of work and no additional allowance will be made therefor.

8.02 INSURANCE - INDEMNIFICATION/HOLD HARMLESS/DEFEND

1. Insurance.

Contractor shall not commence work under this contract until he has obtained the insurance required hereunder and satisfactory proof of said insurance has been submitted to District and has been approved as to form by Riverside County Counsel.

Without limiting or diminishing the Contractor's obligation to indemnify, defend or hold the District harmless, Contractor shall procure and maintain or cause to be maintained, at its sole cost and expense, the following insurance coverages during the term of this Contract. In respects to the requirements for the Project and as further described in this section, the District herein refers to the Riverside County Flood Control and Water Conservation District, the County of Riverside, its Agencies, Districts, Special Districts and Departments, and any municipal corporation or governmental entity in which the work is to be accomplished, their respective directors, officers, Board of Supervisors, governing boards or councils, employees, elected and appointed officials, agents, representatives as Additional Insured.

Workers' Compensation - If the Contractor has employees as defined by the State of California, the Contractor shall maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less than **\$1,000,000** per person per accident. The policy shall be endorsed to waive subrogation in favor of the District and County of Riverside.

Commercial General Liability - Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products and completed operations liability, personal and advertising injury, cross liability coverage, and covering claims which may arise from or out of Contractor's performance of its obligations hereunder. Policy shall name the District, all Agencies, Districts, Special Districts, and Departments of the County of Riverside, together with their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds. Policy's limit of liability shall not be less than **\$2,000,000** per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the occurrence limit.

Vehicle Liability - If Contractor's vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then Contractor shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an amount not less than **\$1,000,000** per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the occurrence limit. Policy shall name the District, all Agencies, Districts, Special Districts, and Departments of the County of Riverside, together with their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds.

Builder's Risk - Contractor shall obtain, at Contractor's expense, and keep in effect until final acceptance by the District, Builder's Risk Insurance (including earthquake and flood) covering the real and personal property of others in the care, custody, and control of the Contractor. Builder's Risk Insurance shall include theft and damage coverage. The minimum amount of coverage to be carried shall be equal to the full amount of the contract. Contractor shall be financially responsible for any deductible applied to loss. This insurance shall include the District, County of Riverside, the Contractor and its subcontractors as their interests may appear.

Professional Liability - Contractor shall maintain Professional Liability Insurance providing coverage for the Contractor's performance of work included within this Agreement, with a limit of liability of not less than \$2,000,000 per occurrence and \$4,000,000 annual aggregate. If Contractor's Professional Liability Insurance is written on a claims made basis rather than an occurrence basis, such insurance shall continue through the term of this Agreement and Contractor shall purchase at his sole expense either 1) an Extended Reporting Endorsement (also, known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) demonstrate through Certificates of Insurance that Contractor has Maintained continuous coverage with the same or original insurer. Coverage provided under items; 1), 2), or 3) will continue as long as the law allows.

Pollution and Asbestos Liability - If hazardous material is encountered during construction, the Project Manager must be notified immediately, and if any work is done to remove it, any Contractor performing work shall obtain and keep in effect during the term of their contract with Contractor, Pollution Liability Insurance, including Asbestos Liability Insurance, covering the subcontractor's liability for bodily injury, property damage, and environmental damage resulting from "sudden accidental" or "gradual" pollution and related cleanup costs incurred by the subcontractor, all arising out of the work or services (including the transportation risk, when applicable) to be performed under this contract. Combined single limit per occurrence shall not

be less than \$2,000,000, or the equivalent. Annual aggregate limit shall not be less than \$4,000,000.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, the District requires and shall be entitled to the broader coverage and/or higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the District.

General Insurance Provisions - All lines -

a) Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A.M. Best rating of not less than A: VIII (A:8) unless such requirements are waived, in writing, by the District Risk Manager. If the District's Risk Manager waives a requirement for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

b) The Contractor's insurance carrier(s) must declare its insurance deductibles or self-insured retentions. If such deductibles or self-insured retentions exceed \$500,000 per occurrence such deductibles and/or retentions shall have the prior written consent of the District's Risk Manager before the commencement of operations under this Agreement. Upon notification of deductibles or self-insured retentions unacceptable to the District, and at the election of the District's Risk Manager, Contractor's carriers shall either, 1) reduce or eliminate such deductibles or self-insured retentions as respects this Agreement with the District, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.

c) Contractor shall cause Contractor's insurance carrier(s) to furnish the District with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, or 2) if requested to do so orally or in writing by the District's Risk Manager, provide original certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that 30 days written notice shall be given to the District prior to any material modification, cancellation, expiration or reduction in coverage of such insurance. In the event of a material modification, cancellation, expiration, or reduction in coverage, this Agreement shall terminate forthwith, unless the District 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 coverages set forth herein and the insurance required herein is in full force and effect. Contractor ***shall not commence operations until the District 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 Section. An individual authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance.***

d) It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary insurance, and the District's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.

e) The District's Reserved Rights--Insurance. If, during the term of this Agreement or any extension thereof, there is a material change in the scope of services; or, there

is a material change in the equipment to be used in the performance of the scope of work (such as the use of aircraft or watercraft), the District reserves the right to adjust the types of insurance required under this Agreement and the monetary limits of liability for the insurance coverages currently required herein, if, in the District's Risk Manager's reasonable judgment, the amount or type of insurance carried by the Contractor has become inadequate.

f) Contractor shall pass down the insurance obligations contained herein to all tiers of subcontractors working under this Agreement.

g) The insurance requirements contained in this Agreement may be met with a program(s) of self-insurance acceptable to the District.

h) Said insurance must contain an endorsement that District, County of Riverside, and any municipal corporation or governmental entity in which the work is to be accomplished, are named as an additional insured as respects the work covered hereunder. Said insurance must not contain, as respects the work covered hereunder, any exclusions as to bodily injury or death or property damage arising out of blasting, explosion, or underground damage to wire, pipes, conduits, mains, sewers, tank tunnels or any similar property, i.e., the so-called "x c u" exclusions. The insurance certificate evidencing such insurance must affirmatively state that the insurance carrier(s) will give District 30 days written notice prior to cancellation of the insurance or a reduction in coverage; must state that the "x c u" exclusions are waived or do not exist in the policy(s); and that District, County of Riverside, and any municipal corporation in which the work is to be accomplished, are named as an additional insured as respects the work covered hereunder.

The cost of this insurance shall be included in the prices bid for the various items of work and no additional compensation will be made therefor.

2. Indemnification - Hold Harmless and Defend.

Contractor shall indemnify and hold harmless the District, County of Riverside, and any municipal corporation or governmental entity in which the work is to be accomplished, together with its Agencies, Districts, Special Districts and Departments, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents and representatives (individually and collectively hereinafter referred to as Indemnitees) from any liability whatsoever, based or asserted upon any acts, omissions or services of Contractor, its officers, employees, subcontractors, agents or representatives arising out of or in any way relating to this Contract, relating to or in any way connected with or arising from the accomplishment of the work, whether or not in furtherance of the work, including but not limited to property damage, bodily injury, or death or any other element of any kind or nature whatsoever arising from the performance of Contractor, its officers, employees, subcontractors, agents or representatives Indemnitors from this Contract. Contractor shall defend, at its sole expense, all costs and fees including, but not limited, to attorney fees, cost of investigation, defense and settlements or awards, the Indemnitees in any claim or action based upon such alleged acts or omissions.

With respect to any action or claim subject to indemnification herein by Contractor, Contractor shall, at their sole cost, have the right to use counsel of their own choice and shall have the right to adjust, settle, or compromise any such action or claim without the prior consent of the District; provided, however, that any such adjustment, settlement or compromise in no manner whatsoever limits or circumscribes Contractor's indemnification to Indemnitees as set forth herein.

Contractor's obligation hereunder shall be satisfied when Contractor has provided to District the appropriate form of dismissal relieving the Indemnitees from any liability for the action or claim involved.

The specified insurance limits required in this Agreement shall in no way limit or circumscribe Contractor's obligations to indemnify and hold harmless the Indemnitees herein from third party claims.

In the event there is conflict between this clause and California Civil Code Section 2782, this clause shall be interpreted to comply with Civil Code 2782. Such interpretation shall not relieve the Contractor from indemnifying the Indemnitees to the fullest extent allowed by law.

3. Obligations.

The obligations assumed by Contractor cover all obligations set forth in this Subsection and elsewhere in the Contract Documents, such as Subsections 5.01, 5.02, 5.05, 5.06, 5.08, 5.09, 5.10, 10.01, and 10.02.

8.03 PUBLIC UTILITIES

The locations of all pipelines, power lines, communication lines and other utility components known to District to exist within the limits of the work, are indicated on the drawings and may be the subject of a specific Special Provision(s). Size, location and characteristics of such utilities is based upon information made available to District - primarily from the owner of the utility in question. The exactness of such information is not guaranteed but may be assumed to have been accomplished with reasonable accuracy.

In addition to the drawings and any such provision regarding utilities, Contractor is under a duty to take into account the location of service laterals or other appurtenances which can be inferred from the presence of facilities such as buildings, meters and junction boxes in or about the limits of the work.

Unless otherwise directed by the Contract Documents, all existing utilities - where shown or described or not - shall be left in place and Contractor must conduct its operations so that such utilities are protected from damage at all times during the course of the work and the work must be accomplished so as to give such utilities proper protection and support upon completion of the work by Contractor.

If during the course of the work, Contractor discovers underground utility components not indicated in the drawings, the Special Provisions or elsewhere in the Contract Documents, Contractor must immediately notify, in writing, the Engineer and the utility company (public or private) involved, stating with exactness the condition found.

When Contractor encounters a utility not shown or described in the Contract Documents, Contractor shall cease all work which would disturb such utility and its support until given specific instructions as to how to proceed regarding such utility by Engineer. All work done by Contractor to protect existing utilities shown or described in the Contract Documents, or which can be

reasonably inferred from the presence of other visible facilities, is at Contractor's expense, the cost of which is deemed included in Contractor's Proposal to do the work.

Contractor's cost of locating, repairing damage not due to the failure of Contractor to exercise reasonable care, and removing or relocating utility components and facilities not indicated in the drawings, specifications or elsewhere in the Contract Documents with reasonable accuracy, shall be paid Contractor as Extra Work as provided in Subsection 2.07 and Subsection 7.03 of these General Provisions. Compensation for idle time of equipment shall be paid as provided in Section 8-1.07C, "Payment Adjustments", of the State Standard Specifications. No surcharge rates for equipment will be applied for idled equipment.

District may direct the Contractor to do such repair or relocation work as required. When such repair or relocation work is not elsewhere provided for in these Contract Documents, or reasonably inferred therefrom, a requirement of District that Contractor perform such work shall be compensated for as Extra Work pursuant to Subsections 2.07 and 7.03 of these General Provisions.

Contractor shall not be assessed liquidated damages for delay in completion of the project, if such delay is caused by failure of District, or the owner of the utility in question, to provide for removal or relocation of the utility involved.

8.04 PROTECTION OF EXISTING STREET FACILITIES

The Contractor shall be responsible for the protection of existing signs, fences, concrete curbs, gutters and other facilities which may be encountered. The replacement or repair of any facilities which the District deems necessary as a result of the Contractor's operations shall be done by the Contractor at his own expense and to the satisfaction of the Engineer.

Excavation within the street right of way shall be conducted in a manner to cause the least interruption to traffic. Where traffic must cross open trenches, the Contractor shall provide suitable bridges at street intersections and driveways. Hydrants under pressure, valve pipe covers, valve boxes, curb stop boxes, fire or police call boxes, or other utility controls shall be left unobstructed and accessible during construction.

8.05 DIVERSION AND CONTROL OF WATER

Unless otherwise provided in the Proposal, no separate payment will be made for diversion and control of surface or groundwater. All costs incidental to maintaining dry working areas shall be included in the unit prices paid for other items of work in the schedule.

8.06 DUST ABATEMENT

During the performance of all work included in the contract, the Contractor shall take the necessary precautions to save the District free and harmless from any loss or damage resulting from his operations that raise or produce dust in such amounts that will be objectionable, and/or cause damage to adjacent property or property owners.

The Contractor will be required to have a positive and continuous method of dust control which is satisfactory to the Engineer. The methods to be used for controlling dust in the construction area and along haul roads shall be approved by the Engineer prior to starting any of the work included in the contract. All costs incidental to dust control shall be included in the unit prices paid for other items of work in the schedule.

8.07 PROJECT SIGNS

The Contractor shall erect project signs at the locations designated by the Engineer.

No separate payment will be made for erecting the project signs and all costs in connection therewith will be considered a subsidiary obligation of the Contractor.

8.08 EXAMINATION OF PLANS, SPECIFICATIONS, CONTRACT, AND SITE OF WORK

The bidder shall examine carefully the site of the work contemplated, the plans and specifications, and the proposal and contract forms therefor. The submission of a bid shall be conclusive evidence that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and scope of work to be performed, the quantities of materials to be furnished, and as to the requirements of the proposal, plans, specifications, and the contract.

Where the District has made investigations of subsurface conditions in areas where work is to be performed under the contract, or in other areas, some of which may constitute possible local material sources, such investigations are made only for the purpose of study and design. Where such investigations have been made, bidders or Contractors may, upon request, inspect the records of the District as to such investigations subject to and upon the conditions hereinafter set forth. Such inspection of records may be made at the office of the District.

The records of such investigations are not a part of the contract and are shown solely for the convenience of the bidder or Contractor. It is expressly understood and agreed that the District assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the investigations thus made, the records thereof, or of the interpretations set forth therein or made by the District in its use thereof and there is no warranty or guarantee, either expressed or implied, that the conditions indicated by such investigations or records thereof are representative of those existing throughout such areas, or any part thereof, or that unlooked-for developments may not occur, or that materials other than, or in proportions different from those indicated, may not be encountered.

When a log of test borings showing a record of the data obtained by the District's investigation or subsurface conditions is included with the contract plans, it is expressly understood and agreed that said log of test borings does not constitute a part of the contract, represents only the opinion of the District as to the character of the materials encountered by it in its test borings, is included in the plans only for the convenience of bidders and its use is subject to all of the conditions and limitations set forth in this Section 8.08.

No information derived from such inspection of records of investigations or compilation thereof made by the District or from the Engineer, or his assistants, will in any way relieve the bidder or Contractor from any risk or from properly fulfilling the terms of the contract.

SECTION IX - WATERING

9.01 DESCRIPTION

This work shall consist of developing a water supply for all water required for the work. The application of the water shall be under the control of the Engineer at all times and shall be applied in the amounts and at the locations approved by the Engineer.

At least one mobile unit of at least 1,000-gallon capacity for applying water shall be available on the project at all times.

Water for compacting embankment material and for laying dust shall be applied by means of pressure-type distributors or pipelines equipped with a spray system or hoses with nozzles that will ensure a uniform application of water.

No separate payment or additional allowances will be made for this work and all costs in connection therewith will be considered as included in other items in the schedule.

SECTION X - PUBLIC CONVENIENCE, TRAFFIC CONTROL AND DETOURS

10.01 GENERAL

The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to the public and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to the rights of the public.

Unless otherwise provided in the Special Provisions, all public traffic shall be permitted to pass through the work with as little inconvenience and delay as possible.

Spillage resulting from hauling operations along or across any public traveled way shall be removed immediately at the Contractor's expense.

Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners.

Convenient access to driveways, houses and buildings along the line of work shall be maintained and temporary approaches to crossings or intersecting highways shall be provided and kept in good condition.

10.02 SIGNS

It shall be the responsibility of the Contractor to provide and maintain all lights, barricades and signs, both on and off the site of work, as required by the Engineer, and all such devices shall be of a type approved by him.

If, in any case, the Engineer finds it necessary to replace, add to or erect said barricades, signs, or lights, when the Contractor fails to do so when informed, the Contractor shall be billed for all costs thereof including a daily rental fee for signs.

No separate payment, unless otherwise provided for under the Special Provisions, will be made for traffic control and detour signing and all costs incidental to these items shall be included in the unit prices paid for other items of work.

10.03 MATERIALS STORAGE

Storing or stockpiling of excavated material, imported backfill material or construction materials on any street or highway will not be permitted except as approved in writing by the Engineer.

SPECIAL PROVISIONS
AND
DETAILED SPECIFICATIONS

SPECIAL PROVISIONS

SECTION 1 - GENERAL

1.1 Summary of Work - These documents are for the restoration of **Woodcrest Dam Outlet Modification, Stage 90**, located in the city of Riverside, Riverside County, California. Key components of the project include:

- Demolition and removal of existing concrete intake structure, gate, grates, stem, stem guides, hand crank, and concrete pedestal;
- Construction of a replacement concrete intake structure, slide gate, gate stem, and debris rack grates;
- Construction of a concrete pad at dam crest with cast in drilled hole pile foundation, concrete pedestal;
- Construction of concrete stairs with handrail; and
- Erosion control slope protection.

The project will replace the existing intake structure on the upstream side of the dam, add reinforced concrete stairs from the dam crest to the outlet structure, and provide erosion protection measures on the dam. The new intake structure will also include a slide gate operable from the dam crest by means of an actuator and manual handwheel.

1.2 Standard Drawings and Specifications - The Contractor shall be responsible to obtain referenced standard specifications.

Standard Specifications of the American Society for Testing and Materials shall be designated by ASTM and the appropriate number of the standard.

In the event that discrepancies are encountered, the option that provides the method, item or material with the greatest strength or utility shall be chosen, as directed by the Engineer.

The Department of Water Resources, Division of Safety of Dams (DSOD) will provide supplementary regulatory functions during the construction of this project. The Engineer and DSOD representatives will inspect the project during construction including, but not limited to, the following: the preparation of the foundation and abutments, placement of earth fill, preparation of concrete surfaces to receive concrete, placement of steel reinforcement and concrete placement, as well as materials incorporated into the works, test results, video inspection of the low level outlet pipe before and after construction, testing of the outlet works after construction, and documentation associated with the project.

The Contractor shall allow DSOD representatives access to all locations within the project boundaries. All communications with DSOD pertaining to this project shall be coordinated through the Engineer. The Contractor's attention is directed to Sections 11, 14, 16, 17, and 32 of the Detailed Specifications in which DSOD review, inspection, and approval shall be required prior to the Contractor's performance of any works described in said sections.

Contractor shall notify the Engineer a minimum of 96 hours prior to scheduling inspection for those items that require DSOD inspection or review.

The Contractor shall use skilled and experienced workmen for this project.

In case of conflict between the plans and the specifications, the plans shall govern; in case of conflict between the referenced specifications and these specifications, the latter shall govern.

1.3 Submittals to District - Submittals shall be sent in the form of email or postal carrier to the attention of the Engineer. The Contractor shall allow the Engineer five (5) working days from the time of receipt of the submittal (mailing time is not included) to review and respond in writing. The Contractor shall submit and obtain approvals for all required submittals identified within these specifications prior to the pre-construction meeting, unless otherwise approved by the District.

SECTION 2 - TIME OF COMPLETION, DAMAGES AND LEGAL HOLIDAYS

2.1 General - Following award of the contract, the Contractor shall comply with the following schedule:

STRICTLY ENFORCED SUBMITTALS TIMELINE POST AWARD

	Submittal	First Complete Submittal Deadline	District Review Timeline	Approval Deadline
Required Approvals for Unconditional Notice to Proceed (NTP)	Trench Safety System (Section 15)	Award date plus 10 working days	5 working days	Award date plus 20 working days
	Confined Space Procedures (Section 6.3)	Award date plus 10 working days	5 working days	
	OSHA Excavation Permit (Section 6.3)	Award date plus 10 working days	5 working days	
	Dust Control Plan (Section 27)	Award date plus 10 working days	5 working days	
	Water Pollution Control Plan (Section 29.1)	Award date plus 10 working days	5 working days	
Material Submittals	All other project material submittals, including concrete, steel, etc.	15 working days before ordering of materials	5 working days	Prior to order and delivery

The Contractor shall begin work within ten (10) calendar days after the date of receipt of Notice to Proceed from the Engineer and shall diligently prosecute the same to completion before the expiration of

SEVENTY (70) WORKING DAYS

from the date of the project's first working day identified in the Notice to Proceed and as defined in Section 2.2.

2.2 Notice to Proceed - A Notice to Proceed shall be issued no later than 20 working days after project award. The Contractor's attention is directed to Section 2.1 above. The Notice to Proceed will be issued unconditionally if all submittals are complete and accepted by the approval deadline outlined in Section 2.1. If the required submittals are not complete and accepted, the Notice to Proceed will be issued conditionally, and construction can start only for the items with accepted submittals. Work shall not start on items lacking acceptable submittals. The District will not extend the project working days due to the Contractor's failure to secure acceptable submittals for all the items in the timeframes required in Section 2.1.

2.3 Damages - The Contractor and the District expressly agree that the cost to the District for inspection and superintendence of the work for this contract is \$1,600 per working day.

2.4 Legal Holidays - The Contractor will not be permitted to work on Legal Holidays (Reference Sections 6.02 and 6.06 of the General Provisions), except in cases of emergency as directed by the Engineer.

SECTION 3 - FORCE ACCOUNT PAYMENT

3.1 Labor Surcharge - Attention is directed to the provisions of Section VII, Article 7.03A(1b) of the General Provisions. The labor surcharge percentage to be applied to the actual wages paid as defined in Paragraph 7.03A(1a) will be twenty-four percent (24%).

3.2 Equipment Rental - Attention is directed to the provisions of Section VII, Article 7.03A(3) of the General Provisions. The equipment rental rates to be applied will be the rates published by the California Department of Transportation and in effect at the time of the award of the contract. A copy of said Equipment Rental Rates is on file at the District Office.

SECTION 4 - PROTECTION OF EXISTING UTILITIES

4.1 General - All existing underground utility lines, power poles and overhead wiring shall be protected in place at all times, except as noted otherwise on the plans. Any damage to utilities caused by the Contractor's operation shall be repaired or replaced at the Contractor's expense.

Prior to the commencement of any construction activities, the Contractor shall contact all utility companies and local municipalities servicing the project area to review as-built utility drawings and determine appropriate means of protecting utilities.

At the discretion of the Engineer, the Contractor may be required to verify, by potholing, the location of potentially affected utilities.

4.2 Cooperation with Utilities Relocated by Others - Some utilities will require relocation by others prior to or during construction as shown on the drawings and as specified in these specifications and Special Provisions.

Supplement to Section 8.01 of the General Provisions. The Contractor shall coordinate and cooperate with the various utilities or their contractors to ensure the work proceeds in an orderly manner.

Should any utility relocation result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idled equipment or additional payment over and above the agreed upon contract unit prices.

SECTION 5 - PROJECT SITE MAINTENANCE

5.1 General - No separate payment will be paid for Project Site Maintenance as discussed in this section. Contractor shall include all associated costs for Project Site Maintenance in the appropriate sections of the Detailed Specifications.

Before final acceptance of the work, the Contractor shall clean the work and the site of the work of all falsework, temporary structures, other construction materials and equipment, excess materials and rubbish and shall leave the work and the site in a neat and presentable condition. Such final cleanup work shall be performed within the time specified for completion of all of the work.

Through all phases of construction, including suspension of work and until the final acceptance of the project, the Contractor shall comply with the following:

5.2 Cleanup and Dust Control - Contractor shall implement and maintain Best Management Practices (BMPs) relevant to the work in accordance with Section 29 - Stormwater and Non-Stormwater Pollution Control of the Detailed Specifications. Dust Abatement shall be implemented per Section 27 - Dust Abatement of the Detailed Specifications.

Contractor shall keep the site clean and free from rubbish and debris. Stockpiles of rubbish and debris will not be allowed. Rubbish and debris collected at the work site shall only be stored in enclosed containers prior to disposal.

Contractor shall not store construction materials, equipment, and excavated material in public streets, roads, or highways. If such storage is required for a short term, the Contractor should first obtain permission and site conditions from the Engineer.

Contractor shall take care to prevent spillage on haul routes and shall remove any such spillage and clean that area immediately.

Contractor shall remove forms and form lumber from the site as soon as practicable after stripping.

Engineer's cleanup orders shall be promptly executed by the Contractor. Failure to abide by the orders shall result in an order to suspend work until the conditions are corrected, and no additional compensation will be allowed as a result of the suspension.

Before the final inspection by the Engineer for acceptance, Contractor shall remove unused materials, equipment, and debris so as to present a satisfactorily clean and neat appearance.

5.3 Air Pollution Control - Contractor shall not discharge dust, smoke, or any other air contaminants into the atmosphere in such quantity that will violate any local, state, and federal regulations of controlling agencies.

Contractor shall abate the dust nuisance by cleaning, sweeping, and spraying water, or other means as necessary. The use of water shall conform to Section 5.6 - Water Pollution Control of these Special Provisions. Further requirements and payment related to dust control are discussed in Section 27 - Dust Abatement of the Detailed Specifications.

5.4 Sanitation - Contractor shall provide and maintain temporary enclosed toilets for use by all employees engaged in the work throughout the duration of the project. A separate private toilet shall be provided for District inspectors and personnel. These facilities shall be maintained in a neat and sanitary condition and shall comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation of dwelling and camps.

Sewage shall not be permitted to flow in the project area or be covered by backfill.

5.5 Temporary Light, Power and Water - Contractor shall furnish, install, maintain, and remove all temporary light, power, and water at his own expense. These include wiring, lamps, piping, and other necessary equipment for the work.

Contractor shall not draw water from any fire hydrant (except to extinguish a fire), without obtaining an appropriate permit from the appropriate agency. Such permit shall be made available at the Contractor's site office at all times.

5.6 Water Pollution Control - Contractor shall conform to all applicable local, state, and federal regulations and laws pertaining to water pollution control.

Contractor shall exercise every reasonable precaution to protect storm drains, channels, and bodies of water from pollution by constructing necessary facilities that will prevent, control, and abate water pollution.

Contractor shall not discharge sediments to a storm drain or receiving waters, and shall use appropriate BMPs to contain such sediments on the work site.

Contractor shall refer to Section 29 - Stormwater and Non-Stormwater Pollution Control of the Detailed Specifications for further information.

5.7 Drainage Control - Contractor shall maintain drainage within and through the work area.

Contractor shall use temporary barriers and diversion facilities using sandbags, asphaltic concrete, or other acceptable materials when necessary and remove them from the site as soon as their use is no longer necessary.

SECTION 6 - SPECIAL REQUIREMENTS

6.1 National Pollutant Discharge Elimination System (NPDES) - The Contractor shall comply with the requirements of Board Order No. R8-2010-0033 (NPDES No. CAS618033), NPDES Area-Wide Municipal Stormwater Permit, hereafter referred to in this section as the "Permit", issued by the California Regional Water Quality Control Board (RWQCB) - Santa Ana Region. This Permit regulates both stormwater and non-stormwater discharges associated with Contractor's construction activities. The Contractor shall prepare and implement a Water Pollution Control Plan (WPCP) in accordance with Section 29 "Stormwater and Non-Stormwater Pollution Control" of the Detailed Specifications.

The Contractor's attention is directed to: 1) Section 29.1 "General Requirements" which allows the Engineer to withhold progress payments if the Contractor fails to fully implement Section 29 "Stormwater and Non-Stormwater Pollution Control" or is deemed to be in non-compliance with the provisions of the Permit; 2) Section 29.4 "WPCP Implementation" which allows the Engineer to suspend construction operations if the Contractor fails to implement the approved WPCP and any amendments thereto.

6.2 Sanitation - Sewage flows shall not be interrupted. Should the Contractor disrupt existing sewer facilities, sewage shall be conveyed in closed conduits and disposed of in a sanitary sewer system. If pumping is required it shall be done at the expense of the Contractor. A backup pumping system with equal capacity shall be provided at all times. Sewage shall not be permitted to flow in trenches or be covered by backfill.

6.3 Confined Space Compliance - The Contractor shall comply with all Cal/OSHA safety regulations including regulations concerning confined space and for maintaining a safe working environment for Contractor and District employees on the site. The Contractor shall develop and maintain a confined space procedure specific to this contract that complies with the requirements contained in California Code of Regulations, Title 8, Section 5158, Other Confined Space Operations and the District Confined Space Procedure, SOM-18. A copy of SOM-18 can be obtained from the District office, 1995 Market Street, Riverside upon request.

Within ten (10) days after the award of the contract, the Contractor shall submit three (3) copies of the procedure to the Engineer for review and approval. The Contractor shall allow the number of working days specified in Section 1.3 of these Special Provisions for the Engineer to review the procedure. If revisions are required as determined by the Engineer, the Contractor shall revise and resubmit the procedure within three (3) working days of receipt of the Engineer's comments and shall allow four (4) working days for the Engineer to review the revisions. The

Contractor must submit three (3) copies of the approved procedure to the Engineer prior to the pre-construction meeting.

The procedure shall provide for recording of data to develop a history of acceptable atmosphere within the confined space. That history will include:

1. Calibration schedule of a direct reading confined space meter by trained personnel.
2. Daily monitoring and recording of the confined space atmosphere with a calibrated direct reading confined space meter.
3. Records of Items 1 and 2 shall be maintained onsite and copies given to the Engineer.
4. The records shall indicate if readings are of natural or mechanically enhanced ventilation.

In addition, the procedure shall include daily tours of the job site with the Engineer to ensure inlets to the confined space are free of obstruction or substances that might affect the atmosphere of the confined space.

The Contractor will be required to keep a direct reading confined space meter onsite for the duration of the contract. The meter shall be calibrated according to the schedule specified in the Contractor's confined space procedure and shall be made available for the Engineer's use upon request.

6.4 Heavy Equipment Working Hours - Heavy construction equipment shall be allowed to work on the site from 7:00 a.m. to 3:30 p.m. each normal working day, unless otherwise approved by the Engineer.

6.5 Encroachment Permits -

- (a) Riverside County Transportation Department - The Contractor may be required to obtain a truck/haul/route permit for importing or exporting materials on County roads. The Contractor is required to pay any fee for the truck/haul route permit. A copy of the permit shall be provided to the Engineer prior to commencement of work.

There are no planned road closures. The Contractor shall note that if a road closure is necessary during the course of work, the Contractor shall obtain a separate road closure permit from the Riverside County Transportation Department. As a part of the road closure permit application, the Contractor must submit a letter of justification and traffic control plans prepared and signed by a registered Traffic Engineer or a registered Civil Engineer for the unplanned road closure(s).

- (b) City of Riverside - The Contractor may be required to obtain a truck/haul/route permit for importing or exporting materials on City roads. The Contractor is required to pay any fee for the truck/haul/route permit. A copy of the permit shall be provided to the Engineer prior to commencement of work.
- (c) Right of Entry Agreement - The Contractor can access the project site through Golden Star Avenue. Alternatively, the Contractor can elect to access the project site through Hermosa Drive, which is a privately maintained road. However, the Contractor shall be solely responsible for obtaining the necessary Right of Entry Agreement with the appropriate owner(s) and all associated costs. A copy of the fully executed Right of Entry Agreement shall be provided to the Engineer prior to using that access.

6.6 Toxic Material Disposal - Toxic materials including oil, fuel oil, gasoline, coolant, fluid filters and other contaminants shall not be discharged within the project site. All such materials shall be transported offsite and disposed of at a County approved facility.

6.7 Survey Crew - The District will provide construction staking for the project. The Contractor shall notify the Engineer in writing at least 48 hours prior to new construction staking and shall provide safe and unobstructed access to the staking area within this period. Should the staking area be inadequately prepared, unsafe, or obstructed when the District's Survey Crew arrives onsite to perform the new construction staking, the Contractor shall be subjected to delay charges as defined below.

Survey Crews will be available Monday through Thursday from 7:00 a.m. to 3:30 p.m., with a half-hour off for lunch. If the Contractor requires the Survey Crew to work beyond the specified time mentioned above, it shall be considered as overtime and shall be paid by the Contractor at 1.5 times the Survey Crew's hourly rates.

The Contractor shall carefully preserve benchmarks, reference points, and stakes. In case of willful or careless destruction, the Contractor shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

If the District's Survey Crew incurs delays or survey re-staking is required as a result of the Contractor's operations, the Contractor shall be charged a rate of \$250/hour, with a minimum charge of two (2) hours for each re-staking request. Payment shall be deducted from the monthly progress payment.

6.8 Survey Monuments - The Contractor shall salvage and give to the District all survey monuments and wells removed during construction. The District will reset monuments after construction.

6.9 Job Trailer Site - The Contractor is required to provide a job trailer site and install an office trailer for District personnel. This trailer shall be in good condition and located in a place

acceptable to the District. The trailer shall be for the sole use of the District and shall not be used by the Contractor for any activity, including storage. The Contractor shall make provisions for the privacy and security of the office, and provide air conditioning, drinking water, electrical service, and a private portable toilet for the Engineer. The Contractor shall also provide two office chairs and a desk suitable for reviewing plans. The Contractor shall pay the monthly billings for these services. The trailer shall be fully operational and available to District personnel on the first day of work. Should the trailer or office not be available and in working condition, it is agreed by both parties at the time of entering this contract that damages in the amount of \$3,000 per month shall be assessed. It is agreed that this amount may be prorated and shall be deducted from the first contract payment and any successive payments covering any period that the facilities are unavailable.

6.10 Construction Tolerances - Variation in alignment, grade and dimensions of the structures and structural components from the established alignment, grade and dimensions shown on the plans shall be within the tolerances specified in the following:

Table A - Tolerances for Grading, Dams and Access Roads		
Departure from established alignment		2 inches on tangents 4 inches on curves
Departure from established profile grade	Dams and access road sideslopes in cut	Zero <u>above</u> and 3 inches <u>below</u> the specified grade
	Top surfaces of dams and access roads in both cut and fill, dams and access road sideslopes in fill	Zero <u>below</u> and 3 inches <u>above</u> the specified grade

Regardless of the construction tolerances specified, the excavation and grading shall be performed so that the finished surfaces are in uniform planes with no abrupt breaks in the surface.

Gradual Variation tolerance shall be measured by placing a 10-foot straightedge anywhere on the finished concrete structure within 72 hours after concrete placement. The gap at any point between the straightedge and the concrete shall not exceed the specified amount.

Table B - Tolerances for Formed, Cast-in-Place Concrete Structures		
Departure from established alignment		1 inch on tangents 2 inches on curves
Departure from established profile grade		1 inch
Inside dimensions		0.005 times specified dimension
Variation from the plumb or the specified batter in the lines and surfaces of walls, piers and in arises	Exposed, in 10 feet	½ inch
	Backfilled, in 10 feet	1 inch
Variation in cross-sectional dimensions		Minus ¼ inch Plus ½ inch
Variation in surfaces (gradual)	Invert	¼ inch in 10 feet
	Soffits, Walls, Sideslopes	½ inch in 10 feet
Variation in surfaces (abrupt)		¼ inch

Table C - Tolerances for Reinforcing Steel Placement		
Variance from indicated position	Spacing between adjacent bars and the distance between layers of bars	one bar diameter nor more than one inch
Concrete cover measured perpendicular to steel in the direction of tolerance		1/4 inch

Elements not meeting these requirements shall be removed and replaced as directed by the Engineer.

6.11 Surplus Excavated Material - Any stockpiling, grading, or disposal of material outside of the project limits is not covered under the District's permits and is the sole responsibility of the Contractor. Regulatory permits that may be required include, but are not limited to, Federal Clean Water Act (Sections 401 and 404), California Fish and Game Code (Section 1602), and Federal/State Endangered Species Acts. All costs to obtain any Regulatory Permits related to stockpiling, grading, or disposal of material outside of the project limits shall be borne by the Contractor.

6.12 Sewer Line Inspection - Prior to the commencement of construction, the Contractor is required to video record all sewer mains (8" diameter and larger) within the project limits. Copies of the videotapes shall be provided to the Engineer. All costs associated with this requirement shall be included in the contract price bid for Clearing and Miscellaneous Work. The Contractor is required to replace and/or repair at his own expense, any sewers damaged or misaligned as a result of his construction activities.

6.13 Dam Outlet Pipe Inspection - Prior to commencement of construction, and again following completion of the work and prior to final acceptance of the work, the Contractor is required to video record the 30-inch diameter outlet pipe from the intake structure to the outlet. Copies of the video shall be provided to the Engineer. All costs associated with this requirement shall be included in the contract price bid for 30-Inch Reinforced Concrete Pipe. The Contractor shall notify the Engineer three (3) business days prior to the video inspection.

6.14 Pipe Order Notification - The Contractor shall submit the pipe certificate of compliance and lay sheets to the District within ten (10) calendar days of the award of the contract. The Contractor shall submit to the District the invoice from the pipe company stating, (1) pipe order date, (2) pipe quantity, and (3) estimated date of pipe delivery within five (5) calendar days of District acceptance.

6.15 Project Signs - Supplementing Section 8.07 of the General Provisions, the Contractor shall be required to provide two new project signs. The Contractor shall install and maintain the project signs at locations specified by the Engineer, with painting and lettering as shown in Appendix "B" of these Special Provisions. The signs shall be installed as directed by the Engineer within five (5) days after District issuance of the Notice to Proceed. Upon completion of construction, the signs shall be removed.

6.16 Liability Insurance - The Contractor's attention is directed to Section 8.02, Insurance - Indemnification/Hold Harmless/Defend, of the General Provisions.

6.17 CDFW Compliance - The proposed activities are covered by the District's existing maintenance agreement with CDFW detailed in the District's Memorandum of Understanding (MOU) Activities in Improved Channels and Detention/Retention and/or Debris Basins (6-2001-195). Relevant information from this document will be provided to the Contractor prior to start of construction.

This MOU is included as Appendix "D" of these Specifications.

The Contractor shall comply with the following conditions:

1. A copy of the CDFW MOU documentation provided to the Contractor from the District shall be kept onsite at all times.
2. Project activities shall be conducted in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes, from one project site and/or waterbody to another.
3. Contractor shall actively implement Best Management Practices (BMPs) to prevent erosion and the discharge of sediment and pollutants into streams during project activities. BMPs shall be monitored and repaired if necessary to ensure maximum erosion, sediment, and pollution control.
4. Contractor shall prohibit the use of erosion control materials potentially harmful to fish and wildlife species, such as mono-filament netting (erosion control matting) or similar material, within and adjacent to CDFW jurisdictional areas. All fiber rolls, straw wattles, and/or hay bales utilized within and adjacent to the project site shall be free of non-native plant materials. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, coconut (coir) fiber, or other products without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when spread.
5. Contractor shall comply with all litter and pollution laws. All Contractors, subcontractors, and employees shall also obey these laws, and it shall be the responsibility of Contractor to ensure compliance.
6. Contractor shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter a lake, streambed, or flowing stream or be placed in locations that may be subjected to high storm flows.

7. Spoil sites shall not be located within a lake, streambed, flowing stream, or locations that may be subjected to high storm flows where spoil shall be washed back into a lake, streambed, or flowing stream where it will impact streambed habitat and aquatic or riparian vegetation.
8. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to fish and wildlife resources resulting from project related activities shall be prevented from contaminating the soil and/or entering the waters of the State. These materials placed within or where they may enter a lake, streambed, or flowing stream by Contractor or any party working under contract or with the permission of Contractor shall be removed immediately.
9. No broken concrete, cement, debris, soil, silt, sand, bark, slash, sawdust, rubbish, or washings thereof, oil or petroleum products, or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into or be placed where it may be washed by rainfall or runoff into waters of the State. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high-water mark of any lake, streambed, or flowing stream.
10. No equipment maintenance shall be done within or near any lake, streambed, or flowing stream where petroleum products or other pollutants from the equipment may enter these areas under any flow.

6.18 Accidental Discovery - In the event that any human remains, hazardous materials, historical, tribal, archaeological, or paleontological resources are accidentally discovered within project limits, the Contractor shall immediately cease all construction or ground disturbance activity in the vicinity of find and notify the Engineer. District will provide the appropriate professional to assess the significance of the discovery and, if necessary, develop appropriate management and treatment measures. **The Contractor shall not resume construction in the affected area without Engineer's approval.**

Per State Health and Safety Code 7050.5, if human remains are encountered during construction, no further disturbance shall occur within 50 feet of the find until the Riverside County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The Riverside County Coroner must be notified within 24 hours by the Engineer. If the County Coroner determines that the remains are not historic, but prehistoric, the Native American Heritage Commission (NAHC) must be contacted by the Engineer to determine the most likely descendent for this area. Once the most likely descendent is determined, treatment of the Native American human remains will proceed pursuant to Public Resources 5097.98. The NAHC may become involved with decisions concerning the disposition of the remains.

Should any of the above mentioned discoveries result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the

completion of the contract, and shall not be entitled to damages due to downtime and idle equipment or additional payments over and above the agreed upon contract prices.

6.19 Burrowing Owl Pre-Construction Survey - In compliance with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP), the District must conduct a presence/absence survey for Burrowing Owl (*Athene cunicularia*) no more than 14 days prior to construction/disturbance. The Contractor shall not commence any work, including equipment staging, clearing, grubbing, etc., until the District determines that Burrowing Owl is absent from the project site and the buffer area (up to 500 feet), or that an avoidance/relocation plan has been initiated should Burrowing Owl be detected. If the Contractor does not commence construction within 14 days of the presence/absence survey or if construction activities are halted for more than 14 days, the Contractor must notify the Engineer that another Burrowing Owl survey is needed.

6.20 Burrowing Owl Avoidance Measures - If any Burrowing Owl (*Athene cunicularia*) is found within the project site or within the buffer area (up to 500 feet), the District will coordinate with its biologist to establish an appropriate buffer of up to 500 feet around occupied burrows or nests. Encroachment will not be allowed within the established avoidance buffer until it has been determined by the biologist that the burrow/nest is no longer active or until the biologist relocates the owls outside of the nesting season or is otherwise safe to do so. **The Contractor shall not resume construction in the affected area without Engineer's approval.**

Should the presence of Burrowing Owl result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idle equipment or additional payments over and above the agreed upon contract prices.

6.21 Nesting Bird Pre-Construction Survey - The District or its biologist will conduct a pre-construction nesting bird survey(s). If active nests are identified, the District will coordinate with its biologist to establish an appropriate buffer of up to 500 feet around the active nest or other avoidance measures as deemed necessary by the District biologist. Encroachment will not be allowed within the established buffer until it has been determined by the biologist that the nest is no longer active or it is safe to resume work. **The Contractor shall not resume construction in the affected area without Engineer's approval.** This section does not apply to the Burrowing Owl.

Should the presence of nesting birds result in delays to the Contractor's work schedule, the Contractor shall be entitled only to an equivalent extension of time for the completion of the contract, and shall not be entitled to damages due to downtime and idle equipment or additional payments over and above the agreed upon contract prices.

SECTION 7 - SOILS REPORT

In conjunction with the soils investigation report prepared by Tetra Tech dated August 11, 2016, the Contractor's attention is directed to Article 8.08 of the General Provisions. The logs of the soil borings for this report are included for the convenience of the bidders, in

conformance with Section 8.08 of the General Provisions, as Appendix "C" of these specifications. The soils report is on file in the District office, 1995 Market Street, Riverside and is available for review upon request.

SECTION 8 - NOT USED

SECTION 9 - PAYMENT

The contract prices shall include full compensation for all costs incurred under these Special Provisions and Detailed Specifications.

DETAILED SPECIFICATIONS

SECTION 10 - MOBILIZATION

10.1 Description - The contract item Mobilization shall consist of expenditures for all preparatory work and operations including, but not limited to, those costs necessary for the movement of personnel, equipment, supplies and incidentals to the project site; for the establishment of all offices, buildings, construction yards and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various contract items on the project site as well as the related demobilization costs anticipated at the completion of the project.

10.2 Payment - The amount credited for Mobilization on each monthly progress payment shall be equal to the total of the amounts credited for work on all the other contract items for that monthly progress payment, up to a cumulative limit of eighty percent (80%) of the lump sum price bid for Mobilization. The remaining twenty percent (20%) of the lump sum price bid for Mobilization will be paid with the final payment.

Payment of the lump sum contract price for Mobilization shall constitute full compensation for all labor, materials, equipment, and all other items necessary and incidental to completion of this item of work.

The deletion of work or the addition of extra work as provided for herein shall not affect the price paid for Mobilization.

SECTION 11 - WATER CONTROL

11.1 Description - This section covers the contract item Water Control. Portions of the construction of this project are located within the ponding area behind a flood control dam. Surface water in varying quantities can be expected at any time of the year, and substantial runoff and resulting ponding can be expected during periods of rainfall. Groundwater was indicated at the time of the soils investigation for this project. All bidders shall make their own determination regarding what the surface and/or groundwater conditions will be at the time of construction, and their impact on the bidder's operations and construction phasing.

11.2 Water Control - The contract item Water Control includes the control and/or diversion of surface runoff as well as groundwater within the work area as required to complete the work. All work shall be carried on in areas free of water and must not be performed during periods of forecasted rainfall. Care should be exercised so that runoff, ponding, or diversion flows do not erode, undermine, or otherwise damage or degrade existing facilities, facilities which have been constructed, or adjacent private properties. The responsibility for the protection of all existing and proposed improvements lies with the Contractor.

As part of this item, prior to any work, the Contractor shall submit a Water Control and Dam Safety Plan that details, at minimum, the following:

- Work schedules that will be adhered to reduce the risk of damage to the work or the existing facilities due to runoff or ponding within the basin.
- Actions that will be taken in periods of forecasted and actual inclement weather to protect the work and existing facilities.
- Schedules that will be adhered to once work to remove the existing outlet structure begins.

11.3 Water Control Plan - Prior to the start of construction, the Contractor shall submit for review and approval by the Engineer a Water Control Plan that provides a written description of the methods that will be used to:

1. Track potential rainfall/runoff during construction.
2. Protect the intake structure and embankment from erosion between the time the existing intake structure is demolished and the new intake structure is being constructed.
3. Safely store, divert, and dispose of accumulated rainfall/runoff within the upstream basin without impacting the embankment and excavation during construction.

11.4 Measurement and Payment - The methods of controlling both surface and groundwater will be the responsibility of the Contractor. The contract lump sum price paid for Water Control shall include full compensation for all direct and indirect costs incurred under this section, and for doing all the work involved in controlling surface runoff and groundwater within the construction area, as specified in these Detailed Specifications, and as directed by the Engineer.

Payment will be made on a basis of the percentage of the work completed on the entire project.

SECTION 12 - NOT USED

SECTION 13 - CLEARING AND MISCELLANEOUS WORK

13.1 Description - This section covers the contract item Clearing and Miscellaneous Work as required for construction of the work. All objectionable materials shall be removed and legally disposed of outside of the limits of the construction easements and permanent rights of way.

13.2 Clearing and Miscellaneous Work - The contract item Clearing and Miscellaneous Work includes the removal and disposal of all vegetation, trees, roots, stumps, fences, pipes, all abandoned facilities, culverts, rocks, structures, concrete and asphalt excluding those items defined specifically as excavation in the appropriate section.

Included in this item are the following:

1. The legal disposal outside of District rights of way of loose, soft, organic or weak materials, surplus materials, asphalt, and aggregate base not suitable for backfill.

2. The legal disposal outside of District rights of way of the existing concrete structures and all associated appurtenances including, but not limited to, the following items:
 - Existing concrete intake structure, grates, and gate;
 - Existing metal grate and slide gate;
 - Existing concrete pedestal and crank mechanism;
 - Existing stem, stem guides, and stem guide anchors;
 - Specified portions of the existing 30" RCP and encasement; and
 - All other existing appurtenances associated with the above items.
3. Protecting-in-place the remainder of the existing 30" RCP dam outlet. If the RCP or foundation materials are disturbed or damaged, the Contractor shall repair or replace the disturbed or damaged materials, as directed by the Engineer, at the Contractor's sole cost
4. All tracking, grading, and earthwork required to achieve a uniform embankment surface prior to placement of erosion control measures as shown on Sheet 3 of the plans.

Finally, included in this item are those types of work as shown on the drawings not specified for pay under any other individual contract item.

13.3 Payment - The contract price paid for Clearing and Miscellaneous Work shall be full compensation for all costs incurred under this section.

This payment will be made on a basis of the percentage of work completed on the entire project.

SECTION 14 - EARTHWORK

14.1 Description - This section covers the contract items Structure Excavation; Over-Excavation; Precompaction; and Structure Backfill.

14.2 Quality Assurance/Quality Control - **Fill or concrete shall not be placed without prior approval of the excavated area by the Engineer and DSOD representatives. Prior to placing fill or concrete, the Contractor shall provide at least 96 hours advanced notice to the Engineer to schedule an inspection with DSOD.**

All backfill shall be compacted to ninety-five percent (95%) relative compaction at -1% to +3% optimum moisture content (ASTM D 1557 Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³)).

The following tests shall be performed for Quality Control/Quality Assurance:

Material	Test Type	ASTM Method	Frequency of Testing
Structural Backfill	Water Content	ASTM D 2216	1 per shift
	In-place Unit Weight	ASTM D 1556	1 per shift
	Gradation	ASTM D 422	1 per shift

14.3 General Excavation Requirements - All excavation shall comply with the following requirements:

Pursuant to Section 6500 of the Labor Code, prior to commencing the excavation of a trench five (5) feet in depth or greater and into which a person will be required to descend, the Contractor shall first obtain a permit to do so from the State of California Department of Industrial Relations, Division of Occupational Safety and Health. Excavation shall include the removal of materials of any nature which interfere with the work.

Ladders for trench access shall be provided for each fifty (50) feet of open trench or fraction thereof for trenches over four (4) feet in depth. Ladders shall project two (2) feet above the top of the trench and be so located that workers in the trench need not move more than twenty-five (25) feet to a ladder.

Stockpiled (excavated) materials should be placed no closer than four (4) feet from the top of the trench. A greater setback may be necessary when considering surcharge loads.

For the purpose of shoring or bracing, a trench is defined as an excavation in which the depth is greater than the width of the bottom of the excavation.

The manner of bracing excavations shall be as set forth in the rules, orders, and regulations of the Division of Occupational Safety and Health.

The Contractor shall be responsible for the installation and removal of all shoring and bracing materials used during trenching and excavations unless otherwise specified or directed by the Engineer. The Contractor shall be responsible for the repair of all existing damaged utilities and structures.

Excavation shall be kept to the minimum widths required for efficient placing of the pipe or structure and the construction of the various other concrete structures.

Unless approved by the Engineer, the maximum length of open trench in any one location where concrete structures are cast-in-place shall be that which is necessary to permit uninterrupted progress of the structure construction.

In excavating for surfaces against which concrete is to be placed, care shall be exercised in removing the final lift. The foundation for all concrete structures will be inspected and tested after excavation. The exposed subgrade or over excavation grade shall be compacted to a minimum of ninety-five percent (95%) relative compaction per ASTM D1557 prior to the placement of concrete. Surfaces against which concrete is to be placed shall be free of debris,

mud, or ponded water. If subgrade compaction is deficient, subgrade shall be scarified to a depth of six (6) inches, moisture conditioned to or slightly above optimum moisture content, and the surface proof rolled to a minimum ninety-five percent (95%) relative compaction per ASTM D1557. Subgrade preparation will not be measured or paid separately and no additional compensation will be allowed unless over-excavation outside the limits shown on the plans is directed by Engineer.

Material which will not provide a suitable foundation shall be removed and replaced with compacted Structure Backfill as directed by the Engineer.

Any over-excavation shall be filled with Structure Backfill material compacted to ninety-five percent (95%) relative compaction (per ASTM D1557) and meeting the material requirements for Structure Backfill.

The Contractor shall remove slides and materials eroding into the work, and the slopes and grades refinished to original grades as specified.

The Contractor shall dispose of all surplus excavated material outside of the limits of the construction easements and permanent rights of way.

14.4 Structure Excavation - The contract item Structure Excavation covers the removal of all material including loose, soft, organic or weak materials, surplus materials, asphalt, aggregate base, abandoned pipelines, and concrete from within the excavation paylines as specified and as required for the construction of all concrete structures and installation of reinforced concrete pipe as shown on the plans. All Portland Cement Concrete shall be sawcut unless otherwise specified.

Structure Excavation shall consist of the removal of material for the construction of concrete structures and reinforced concrete pipe shown on the plans or specified herein.

Structure Excavation (and Structure Backfill) shall include the furnishing of all materials and equipment; the construction or installation of all facilities which may be necessary to perform the excavations and to place and compact the backfill; and the subsequent removal of such facilities.

14.5 Over-Excavation - The contract item Over-Excavation includes all excavation required below the limits of Structure Excavation at the intake structure, concrete pad, and retaining wall as shown on the plans, specified herein, or as directed by the Engineer.

Excavate soils down to elevation two (2) feet below the base of the intake structure, intake structure concrete pad, and retaining wall foundations.

After the excavation has been completed, the Engineer and DSOD representatives will inspect the exposed surface. Any areas unsuitable for the support of the structure foundations shall be further excavated as directed by the Engineer. To evaluate the presence of satisfactory materials at design elevations, structure foundation excavations should be observed by the

Engineer, and be clean of loosened soil and debris before placing steel or concrete. Foundation needs to be firm and unyielding if soft or loose soils or other unsatisfactory materials are encountered; such materials should be removed and replaced with compacted fill prior to pouring the footing.

All additional excavation, as directed, will be paid for at the unit price bid in the schedule for Over-Excavation.

14.6 Precompaction - The contract item Precompaction consists of the compaction of the over-excavation area after excavation has been completed and before any Structure Backfill is placed. The exposed over-excavation area shall be dewatered, where required, allowed to dry to an acceptable workable moisture content, brought to a uniform grade and shall be precompacted to not less than ninety-five percent (95%) relative compaction when measured in conformance with ASTM D1557.

14.7 General Backfill Requirements - **No fill or concrete shall be placed without prior approval of the excavated area by DSOD. The Contractor shall provide a minimum of 96 hours advanced notice to the Engineer to schedule an inspection with DSOD.**

No backfill materials shall be placed against the outside walls of cast-in-place concrete structures until the concrete has developed eighty percent (80%) of its design strength. No fill or traffic will be permitted on the top of any cast-in-place concrete structure until the concrete in the structure has attained its design strength. Compressive strength will be determined by test cylinders taken by the Engineer. A maximum of six (6) test cylinders per structure will be made and paid by the District for the following day breaks: 7, 14, 21, 28, 28 days and one break to be agreed upon by the Engineer and Contractor. Any additional test cylinders requested by Contractor shall be deducted from the monthly progress payment at a rate of \$500.00/cylinder.

Regardless of the method of densification, backfill material shall not be placed against any reinforced concrete structure until the structure has been inspected and approved for backfilling by the Engineer and the DSOD Inspector.

Backfill will be accomplished by vibratory compaction.

Impact-type pavement breakers (stompers) will not be permitted. Equipment to be used for mechanical compaction shall weigh less than 6,000 pounds.

Within ten (10) days of award, the Contractor shall submit a list of all compaction equipment and the associated equipment specifications for approval and use on the project by the Engineer. At minimum, the equipment specifications shall include the make, model, and weight for each compaction equipment. The Contractor shall be prohibited from using any compaction equipment not approved by the Engineer. No compensation shall be made for any work or change orders associated with the non-approved equipment.

For fill operations within five (5) feet of structures, the Contractor shall only be permitted to use hand tools, hand powered, or small equipment approved by the Engineer. Use of heavy compaction machinery is not permitted within five (5) feet of concrete structures.

All backfill material for structures shall be placed in uniform layers parallel to the dam crest and shall be brought up uniformly on each side of the structure. The thickness of each layer of backfill shall not exceed four (4) inches before compaction unless otherwise approved by the Engineer. The Contractor shall remove and dispose of all rock and fill material larger than two (2) inches. Where smaller rocks are included in the backfill, they shall be mixed with suitable fill material to eliminate voids.

Approval to use specific methods and compaction equipment shall not be construed as guaranteeing or implying that the use of such methods and equipment will not result in damage to adjacent ground, existing improvements or improvements installed under the contract, nor shall it be construed as guaranteeing proper compaction. The Contractor shall make his own determination in this regard.

All backfill around structures and pipe shall be compacted to not less than ninety-five percent (95%) relative compaction per ASTM D1557.

Trench bottoms for structures and pipe shall be graded to provide firm and uniform bearing throughout the entire length of the structures and pipe and shall be compacted to ninety-five percent (95%) compaction.

14.8 Testing - During fill placement, District personnel shall perform record density testing for compaction using ASTM D1556, Sand Cone Test Method. The testing frequency shall be a minimum of one density test every two (2) feet from bottom to top starting with the first lift. Additional tests may be taken at the Engineer's discretion.

Additional density tests beyond the minimum number of tests required by Sand Cone Method may be performed using ASTM Test Designation D2922 (Nuclear Gauge Method).

All field density testing will be done by the Engineer or his representative. The sand cone test shall be the official test of record. The dry weight basis and English units of measurement should be used to report the results of compaction tests and density tests.

14.9 Structure Backfill - The contract item Structure Backfill shall consist of furnishing, if necessary, placing, and compacting backfill material as specified within the paylines as shown on the plans.

The backfill material shall be free of shale, sod, ash, roots, brush, debris, trash, rocks over two (2) inches in largest diameter, and other objectionable material.

No Structure Backfill material shall be placed in any section of the dam until the foundation for that section has been approved by the District and DSOD representatives.

The backfill material shall be obtained from required Structure Excavation, as directed by the Engineer.

If imported material is required for use, a sample of the proposed material shall be delivered to the Engineer not less than ten (10) days prior to its intended use. The sample shall have a minimum dry weight of 100 pounds and shall be clearly identified as to source. The Engineer will determine the material's suitability for use as backfill and the maximum dry density to be used in determining the relative compaction achieved during placement. Should the imported backfill material delivered to the project site substantially differ from the approved sample, the material shall not be used for backfill and shall be removed from the project site at the Contractor's expense. No payment shall be made for rejected import material.

Import material used for Structure Backfill shall have a sand equivalent of not less than 20 and an expansion index less than 20 and conform to the gradation requirements in the Structure Backfill Gradation table below.

Structure Backfill Gradation

Sieve Size	Percent Passing
2"	100
3/8"	100
No. 4	95-100
No. 8	90-98
No. 10	85-95
No. 16	75-90
No. 30	60-80
No. 40	55-70
No. 50	50-65
No. 80	40-60
No. 100	35-45
No. 200	0-10

Material shall be placed in horizontal layers not more than four (4) inches in thickness before compaction. If any oversized rock or other objectionable material is encountered, it shall be removed from the backfill before compacting.

Fill operations on the dam embankment outside of five (5) feet of structures shall be disked, harrowed, or manipulated by other approved methods so as to obtain the best possible mixture and gradation, and shall be free from lenses, pockets, or streaks of material differing substantially in texture and gradation from the surrounding material.

Prior to and during the compaction operations, the material in each layer within the embankment shall, if necessary, be scarified, moistened, and manipulated to attain moisture content within the range as determined by the Engineer. Disk plows towed by rubber-tired or crawler tractors shall be used to scarify surfaces of previously compacted lifts and to aerate or blend water into uncompacted lifts prior to compaction. Scarification is achieved by cutting

through the current loose lift into the previously compacted lift. The diameter of the disk (36 inches preferred) and weight of the plow should allow the disk to cut one (1) to three (3) inches into the previously compacted lift. Scarification should generally be longitudinal or parallel to the dam axis direction. Alternative scarification methods shall require approval by the Engineer prior to implementation.

The moisture content shall be uniform throughout the layer. The moisture content of the soils at the time of compaction shall fall within the range of minus one percent (-1%) to three percent (+3%) of optimum moisture content.

Fill within the embankment which contains excessive moisture shall not be compacted until the material is sufficiently dry to comply with the specified moisture content. No separate payment will be made for any additional work involved in drying fill to the required moisture content.

To obtain the specified moisture content, the Contractor will be required to perform such operations as are considered necessary by the Engineer. Application of water to the material for this purpose shall be done at the site of excavation as far in advance of excavation operations as possible to ensure uniformity of moisture content. Supplementary water, as required, shall be added to each layer and to the foundation by sprinkling the soil and by disking, harrowing, or otherwise manipulating the soil during and after the time the water is added. No layer of fill shall be compacted before the specified moisture content has been obtained.

Compaction on the embankment greater than five (5) feet from structures shall be done with a vibratory compaction equipment moving parallel to the axis of the dam and be compacted to not less than ninety-five percent (95%) relative compaction when measured in conformance with ASTM D1557. The method of compaction shall be subject to the approval of the Engineer.

It may be feasible to transport a portion of the materials, which are excavated for other parts of the work and which are suitable for embankment construction, directly to the embankment at the time of making the excavations, however, the Contractor shall be entitled to no additional compensation, above the unit prices named in the Contract Schedule for excavation and embankment, by reason of it being necessary or required by the Engineer that such excavation materials be deposited in temporary storage piles prior to being placed in the embankments or other mandatory fill areas.

14.10 Measurement - Structure Excavation; Over-Excavation; Precompaction; and Structure Backfill beyond the limits established by the drawings, unless ordered in writing by the Engineer, will not be measured for payment.

The excavated material shall be measured from the ground surface existing at the start of excavation, as determined from surveyed cross sections taken by the District, to the lines, grades and dimensions shown on the drawings. Longitudinal limits of the excavations as shown on the profile drawings terminate at a vertical plane at the limits of the structure, measured along the longitudinal axis of the various structures.

Measurement for payment for the contract item Structure Excavation will be the number of cubic yards of material excavated as shown on the drawings. Longitudinal limits of the excavations terminate at a vertical plane at the limits of pipe or structures, measured along the longitudinal axis of the pipe or structure.

Measurement for payment for the contract item Over-Excavation will be based on the number of cubic yards of material excavated. The amount of material excavated will be based on surveys using the lower ground surface or bottom of structure as the upper limit. Partial clearing may be required to facilitate cross sectioning. The lower ground surface will be based on cross sections taken after Over-Excavation and Precompaction has been completed.

Measurement for payment for the contract item Precompaction will be made to the nearest square yard in conformance with the plans as measured in the field.

Measurement for payment for the contract item Structure Backfill will be the number of cubic yards of material placed in final position as specified and within the limits of the payment lines shown on the plans. The longitudinal limits shall terminate at a vertical plane at the limits of the pipe or structure, measured along the longitudinal axis of the various pipe or structures. Volumes occupied by structures, aggregate base, and other feature for which a separate payment is made will be deducted from the gross volume.

14.11 Payment - The contract prices paid for Structure Excavation; Over-Excavation; Precompaction; and Structure Backfill shall include full compensation for all costs incurred under this section.

SECTION 15 - TRENCH SAFETY SYSTEM

15.1 Description - This section covers the contract item Trench Safety System. This item is defined as a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Trench safety systems include support systems, sloping and benching systems, shield systems and other systems that will provide necessary protection. The item includes the furnishing and implementation of the safety system as required by rules, orders, and regulations of the Division of Industrial Safety of the State of California or as directed by the Engineer.

15.2 Trench Safety System - Excavation for any trench five (5) feet or more in depth shall not begin until the Contractor has provided to the Engineer, a detailed plan for worker protection from the hazards of caving ground during the excavation of the trench. The plan shall show the details of the design of shoring, bracing, sloping or other provisions to be made for worker protection including any design calculations done in the preparation of the plan. No such plan shall allow the use of shoring, sloping or a protective system less effective than that required by the Construction Safety Orders of the California Department of Industrial Relations, Division of Occupational Safety and Health Administration (Cal-OSHA). The plan shall be prepared and signed by an engineer who is registered as a Civil Engineer in the State of California, and the plan and design calculations shall be submitted for review at least two (2) weeks before the Contractor intends to begin trenching operations.

All safety plans shall reflect surcharge loadings imparted to the side of the trench by equipment and stored materials. Surcharge loads shall be monitored to verify that such loads do not exceed the design assumptions for the system.

The Contractor should not assume that only one type of trench safety system such as a shield or "trench box" will be adequate for all trenching situations encountered on a given project. The Contractor should be prepared with alternative safety system designs (such as solid sheeting) should construction circumstances dictate the use of such.

Trench safety system designs for support systems, shield systems or other protective systems whether drawn from manufacturers' data, other tabulated data or designed for this particular project must be signed by a Civil Engineer registered in the State of California prior to submittal to the District for review. A shoring plan for the specific use of a shield shall be prepared. Catalogs or engineering data for a product should be identified in the plan as supporting data. All specific items or applicable conditions must be outlined on the submittal.

The State of California Department of Transportation "Trenching and Shoring Manual" will be used as a guide for plan review and approval.

Also included in this item is the fencing and barricading of the open trench as required for the safety of pedestrians and vehicular traffic as directed by the Engineer.

15.3 Measurement and Payment - The contract price paid for the item Trench Safety System shall include full compensation for all costs incurred under this section.

This payment will be made on a basis of the percentage of the work completed on the items related to trenching operations.

SECTION 16 - CONCRETE CONSTRUCTION

16.1 Description - This section includes the contract items related to the various classes of Concrete.

16.2 General Requirements - Concrete for all purposes shall be composed of Portland Cement, aggregates and water of the quantities and qualities herein specified, and in the required proportions. The ingredients are to be well mixed (a minimum of 85 drum revolutions and a maximum of 250 drum revolutions are required to provide sufficient agitation to the concrete mix), brought to the proper consistency, and measure no more than 90 degrees Fahrenheit at the time of placement. The concrete mix shall have a compressive strength at the age of 28 days of not less than the amount shown in the following tabulation for each type of work listed:

CONCRETE CLASS	MINIMUM SACKS CEMENT/C.Y.	TYPE OF WORK	POUNDS PER SQUARE INCH
A	6	Intake Structure, CIDH Pile, Retaining Wall, Concrete Encasement, Stem Guide Channel, Gate Pedestal, Concrete Pads	4000
B	5	Stairway, Stairway Anchors, Curb, and Miscellaneous Concrete not otherwise specified	3000

16.3 Quality Assurance/Quality Control - Concrete shall not be placed without prior approval by the Engineer and DSOD representatives. Contractor shall provide at least 96 hours prior notice to the Engineer to schedule an inspection with DSOD.

Within ten (10) days of award, the Contractor shall submit a Mill Certificate for all reinforcing steel and shall furnish a "Certificate of Compliance" with the specification of ASTM Designation: A-706/A or A-615/A. The Contractor shall also submit concrete mix designs for all types of concrete to be placed to the Engineer for approval.

The concrete mix designs shall include the gradation of the primary aggregate nominal sizes. If the aggregate source changes, submit the new gradation before using the aggregate. If a primary coarse aggregate or the fine aggregate is separated into two (2) or more sizes, submit the gradation and proposed proportions of each size combined mathematically to show one (1) proposed gradation. Show the percentage passing for each applicable sieve size.

Concrete delivered to the job site shall be accompanied by a ticket containing the weight of each of the individual ingredients in the mix.

Concrete test specimens will be made in accordance with ASTM Designation C-31 and C172. Test for concrete compressive strengths will be performed in accordance with ASTM Designation C-39.

The slump test shall be performed in accordance with the requirements of ASTM C143.

In addition to the reinforcing steel and concrete mix design submittal, the Contractor shall submit an Alternate Concrete Pouring Plan to the Engineer and DSOD for approval. The Alternate Concrete Pouring Plan shall address the Contractor's alternative means of performing concrete pours in ambient temperatures below 40 degrees Fahrenheit or above 90 degrees Fahrenheit.

16.4 Material and Methods - Combined aggregate gradation for all concrete shall be in conformance with the following tabulation for each type of work listed:

TYPE OF WORK	COMBINED AGGREGATE GRADING
The inverts of: Intake Structure	1-1/2" Maximum
Retaining Wall, Curb, and all other concrete structures	1" Maximum

Coarse aggregate shall be graded within the limits shown in the following Coarse Aggregate Gradation table for each size of coarse aggregate:

Coarse Aggregate Gradation

Sieve Size	Primary Aggregate Nominal Sizes (% Passing)			
	1-1/2 x 3/4 Inch	1 Inch x No. 4	1/2 Inch x No. 4	3/8 inch x No. 8
2 inch	100	--	--	--
1-1/2 inch	88-100	100	--	--
1 inch	19-41	88-100	--	--
3/4 inch	0-17	52-85	100	--
1/2 inch	--	--	82-100	100
3/8 inch	0-7	15-38	40-78	50-85
No. 4	--	0-16	0-15	0-25
No. 8	--	0-6	0-6	0-6

Coarse aggregate for the 1-1/2" maximum combined aggregate gradation may be separated into two sizes and stored separately, provided that the combined material complies with the gradation specifications for the 1-1/2" x 3/4" primary aggregate nominal size.

Coarse aggregate for the 1" maximum combined aggregate gradation may be separated into two sizes and stored separately, provided that the combined material complies with the gradation specifications for the 1 inch x No. 4 primary aggregate nominal size.

Fine aggregate shall be graded within the limits shown in the following Fine Aggregate Gradation table:

Fine Aggregate Gradation

Sieve Size	Operating Range (% Passing)
3/8 inch	100
No. 4	95-100
No. 8	65-95
No. 16	55-75
No. 30	34-46
No. 50	16-29
No. 100	2-12
No. 200	0-8

Fine aggregate sizes shall be distributed such that the difference between the total percentage passing the No. 16 and No. 30 sieves is from 10 to 40, and the difference between the percentage passing the No. 30 and No. 50 sieves is from 10 to 40.

Fine aggregate may be separated into two or more sizes and stored separately, provided that the combined material complies with the gradation specifications.

Use combined aggregate gradation limits only for the design of concrete mixes. Design concrete mixes such that aggregates are combined in proportions that produce a mixture within the gradation limits for the combined aggregate. The combined aggregate gradation shall be graded within the limits shown in the following Combined Aggregate Gradation table:

Combined Aggregate Gradation

Sieve Size	1-1/2" Inch Maximum (% Passing)	1" Maximum (% Passing)
2 inch	100	100
1-1/2 inch	90-100	100
1 inch	50-86	90-100
3/4 inch	45-75	55-100
1/2 inch	--	--
3/8 inch	38-55	45-75
No. 4	40-45	35-60
No. 8	23-38	27-45
No. 16	17-33	20-35
No. 30	10-22	12-25
No. 50	4-10	5-15
No. 100	1-6	1-8
No. 200	0-3	0-4

Fly Ash, Class F may be substituted for cement, up to a maximum of 15 percent by weight for all concrete. Fly Ash shall meet the standards of ASTM Designation: C-618. Water reducing agents meeting ASTM Designation: C-494 will be permitted in amounts recommended by the supplier and approved by the Engineer in writing.

No other admixture shall be used in any class of concrete without written permission from the Engineer.

16.5 General Reinforcing Steel Requirements - Reinforcing steel for all reinforced concrete structures shall be Grade 60. All splices shall conform to the requirements of A.C.I. Manual, Standard 318, latest edition. Splices requested by the Contractor for his convenience shall be subject to approval by the Engineer. Longitudinal lap shall be 20 inches minimum for #4 top bars and 15 inches minimum for other #4 bars. Longitudinal lap shall be 24 inches minimum for #5 top bars and 19 inches minimum for other #5 bars. Top bars are defined as bars that have more than 12 inches of concrete cast below the bar.

The Contractor shall not bend or straighten bars in a way that damages the material. No bends shall be made in the field. Reinforcing steel with kinks or improper bends shall not be used for construction.

Prior to concrete placement, the Contractor shall ensure all reinforcing steel are thoroughly cleaned and free of mortar, oil, dirt, excessive mill scale and scabby rust, and other coatings that would destroy or reduce the bond.

Additionally, the Contractor shall ensure all reinforcing steel is firmly and securely fastened by:

1. Wiring at intersections and splices; or
2. Using precast mortar blocks or ferrous metal chairs, spacers, metal hangars, supporting wires, or other authorized devices of sufficient strength to resist crushing under applied loads. Do not use aluminum, plastic, or wood supports.

Placement of reinforcing steel on layers of fresh concrete as the work progresses shall not be permitted.

Metal supports must have a clear cover of at least one (1) inch. Do not consider protective coatings on metal supports when determining clear cover. Where the clear cover to reinforcement shown or determined by the Engineer exceeds the minimum specified clear cover, increase the clear cover for metal supports accordingly.

The center-to-center spacing of parallel bars must be at least 2.5 times the bar diameter.

The clear distance between bundles of bars and adjacent bundles or single bars must be at least:

- 1.5 times the maximum size of the coarse aggregate
- 2 times the larger bar diameter for 2-bar bundles
- 2.5 times the larger bar diameter for 3-bar bundles

Tie bundle bars together at not more than 6-foot on center.

Unless otherwise shown, reinforcement must have a 2-inch clear cover measured from the surface of the concrete to the outside of the reinforcement. For all concrete surfaces exposed to water or backfill, a minimum 3-inch clearance from outside of reinforcement to surface of concrete shall be required.

Spiral reinforcement is utilized for the CIDH pile. Spiral reinforcement must be continuous above the bottom of the anchor bolts. The top termination must be either: 1) 1'-6" lap beyond the end of the pitch with a 90-degree hook extending to the opposite side of the cage; or 2) 1'-6" lap beyond the end of the pitch.

16.6 Consistency - The consistency of the concrete shall be such as to allow it to be worked into place without segregation. Unless otherwise specified, the slump shall be 4 inches with a tolerance of plus or minus 1 inch in accordance with ASTM C-143.

The slump test shall be performed in accordance with the requirements of ASTM C-143. Slumps greater than those specified may be cause for rejection of the concrete by the Engineer.

16.7 Placing - Concrete shall not be placed except in the presence of the Engineer or without the approval of DSOD. The Contractor shall give the Engineer at least 96 hours advance notice prior to placing concrete. The Engineer will inform DSOD at least 72 hours before concrete is poured. The Engineer and DSOD representatives shall have adequate time to inspect the subgrade, forms, steel reinforcement and other preparations for compliance with the specifications before concrete is delivered for placing.

Thoroughly moisten forms and subgrade with water immediately before placing concrete.

Place concrete while fresh and before initial set. Do not retemper partially hardened concrete with additional water. Partially hardened concrete shall not be used and shall be properly disposed of offsite.

Place and consolidate concrete using methods that 1) do not cause segregation of the aggregate; and 2) produce dense, homogenous concrete without voids or rock pockets.

Place concrete continuously in each integral part of the structure. The Contractor shall not start work unless placement can be completed uninterrupted.

Starter walls shall not be allowed.

Place concrete as close to its final position as possible. Do not use vibrators for extensive shifting of concrete.

Formed concrete shall be placed in horizontal layers in lifts of not more than 18 inches for the first lift and 12 inches for subsequent lifts. Hoppers and chutes, pipes and "elephant trunks" shall be used as necessary to prevent segregation of the concrete. Concrete placement using pumps shall be designed using drop chutes or tremies to limit concrete fall to less than five (5) feet.

Consolidate concrete using high-frequency vibrators within 15 minutes of concrete placement. The Contractor shall maintain a backup concrete vibrator onsite. Do not attach vibrators to or hold them against forms or reinforcing steel. Do not displace reinforcement during vibrating.

A 90-minute maximum time is allowed from batch time to completion of concrete placement.

Surfaces of construction joints shall be roughened to one quarter (1/4) inch amplitude.

16.8 Form Removal and Finish - Forms shall be removed only when the Engineer has given his approval. Forms shall be removed in such a way as to prevent damage to the concrete. Supports shall be removed in a manner that will permit the concrete to take stresses due to its own weight uniformly.

Forms shall not be removed sooner than the following minimum time or strength after the concrete is placed. These times represent cumulative number of days and fractions of days, not necessarily consecutive, during which the temperature of the air adjacent to the concrete is above 50 degrees Fahrenheit. If the temperature falls below 50 degrees Fahrenheit at any time after the concrete is placed in the forms, the Engineer will advise the Contractor of additional time required before forms can be removed.

Element	Strength or Time
Intake Structure, CIDH Pile, Retaining Wall, Pipe Encasement	3000 psi or 7 days
All other structures	2 days

The finish on all exposed formed surfaces shall be smooth, even surfaces of uniform texture and appearance without bulges, depressions, or other imperfections. Excessive surface working will not be permitted. The exposed concrete surfaces shall be broomed in a transverse direction with a fine textured hair push broom to produce a uniform surface and eliminate float marks. Brooming shall be done when the surface is sufficiently set to prevent deep scarring. If directed by the Engineer, a fine spray of water shall be applied to the surface immediately in advance of brooming.

Exposed corners of all concrete structures shall be finished with a 3/4" chamfer.

Concrete flatwork shall match adjacent surfaces. The concrete shall be struck off and tamped or vibrated until a layer of mortar has been brought to the surface. The top surface and face of curbs and stairs shall be finished to match adjacent surfaces.

16.9 Curing - All concrete shall be prevented from drying for a curing period of at least seven (7) days after it is placed. Surfaces exposed to air during the curing process shall be kept continuously moist for the entire period or until curing compound is applied.

Formed surfaces shall be thoroughly wetted immediately after forms are removed and shall be kept wet until patching and repairs are completed. Water or covering shall be applied in such a way that the concrete surface is not eroded or otherwise damaged. Water for curing shall be clean and free from any substances that will cause discoloration of the concrete.

16.9.1 Curing Compound - Concrete may be coated with curing compound in lieu of the continued application of moisture. The curing compound shall consist of uniformly spraying the concrete surfaces exposed to the air with a curing

compound and shall comply with the requirements of ASTM Designation C-309. The curing compound shall be No. 2 White Pigmented Curing Compound, Type 2, Class B for all concrete surfaces other than for flatwork which shall be coated with No. 6 Nonpigmented Curing Compound, Type 1-D, Class A containing a red fugitive dye.

The curing compound must be manufactured to:

1. Remain sprayable at temperatures above 40 degrees Fahrenheit;
2. Control sagging, pigment settling, leveling, and de-emulsification; and
3. Maintain the specified properties for at least one (1) year.

Pigmented curing compounds must be manufactured such that the pigment does not settle badly, cake or thicken in the container, or become granular or curdled. Settlement of pigment must be a thoroughly wetted, soft, mushy mass allowing the complete and easy vertical penetration of a paddle. Settled pigment must be easily predisposed, with minimum resistance to the sideways manual motion of the paddle across the bottom of the container, to form a smooth, uniform product of the proper consistency. Do not dilute or alter the curing compound after manufacture.

The curing compound must be packaged in clean 274-gallon totes, 55-gallon barrels, or 5-gallon pails, or must be supplied from a suitable storage tank located at the job site or casting site. The containers must comply with 49 CFR 171-180. The 274-gallon totes and 55-gallon barrels must have removable lids and airtight fasteners. The 5-gallon pails must be round and have standard full open head and bail. Do not use lids with bungholes. Containers must be filled in a way that prevents skinning. Steel containers and lids must be lined with a coating that prevents destructive action by the compound or chemical agents in the air space above the compound. The coating must not come off the container or lid as skins. Plastic containers and lids must not react with the curing compound. Label each curing compound container with:

1. Manufacturer's name;
2. ASTM C309 classification;
3. Batch number;
4. Volume;
5. Date of manufacture;
6. Volatile organic compound content;
7. Warning that curing compound containing pigment must be well stirred before using;
8. Precautions concerning the handling and application of curing compound in compliance with 8 CA Code of Regs §§ 1500-1938 and 3200-6184; and

9. Statement that the contents fully comply with State Air Pollution Control Rules and Regulations.

Before using a curing compound, completely redisperse settled or separated solids in containers, except tanks, by mixing at low speed in compliance with these specifications and the manufacturer's instructions. Mix manually using a paddle or mix using a mixing blade driven by a drill motor at low speed. Mixing blades must be the type used for mixing paint.

Keep onsite storage tanks clean and free of contaminants. Each tank must have a permanent system that completely redisperses settled material without introducing air or other foreign substances.

At the time of use, compounds containing pigments must be thoroughly mixed. Use a paddle to loosen all settled pigment from the container bottom and use a power-driven agitator to disperse the pigment uniformly throughout the vehicle. Agitation must not introduce air or other foreign substances into the curing compound.

The curing compound shall be sprayed on the moist concrete surfaces as soon as free water has disappeared, but shall not be applied to any surface until patching, repairs and finishing of that surface are completed. The curing compound shall be thoroughly mixed immediately before applying, and shall be applied at a uniform rate of not less than one gallon per 150 square feet of surface.

At any point, the application rate must be within ± 50 sq ft/gal of the nominal rate. The average application rate must be within ± 25 sq ft/gal of the nominal rate when tested under California Test 535. Apply the curing compound such that there are no runs, sags, thin areas, skips, or holidays.

Apply the curing compound using power-operated spraying equipment with an operational pressure gauge and a means of controlling the pressure. The Engineer may allow hand spraying for small and irregular areas that, in the Engineer's opinion, are not reasonably accessible to power-operated spraying equipment.

After finishing the surface, apply the curing compound to the concrete immediately before the moisture sheen disappears from the concrete surface but before drying shrinkage or craze cracks start to appear.

If the concrete surface cracks or dries, immediately and continually apply water with an atomizing nozzle until application of the curing compound is resumed or started. Do not apply the curing compound over freestanding water.

If the film of curing compound is damaged before the expiration of seven (7) days after the concrete is placed for structures, immediately repair it with additional compound.

No separate payment will be made for the curing compound or its application.

- 16.9.2 Sheeting - For curing structures, a curing medium consisting of white opaque polyethylene sheeting extruded onto burlap may be used. The polyethylene sheeting must have a minimum thickness of four (4) mils and must be extruded onto 10-ounce burlap.

Keep the concrete surface damp by applying water with an atomizing nozzle that forms a mist and not a spray until the surface is covered with the curing medium. Do not apply the water under pressure directly on the concrete or allow the water to flow over or wash the concrete surface. At the end of the curing period, remove the polyethylene sheeting.

If polyethylene sheeting or polyethylene sheeting on burlap is used as a curing medium:

1. Secure the sheeting and the sheeting joints as necessary to retain moisture;
2. Keep the sheeting within three (3) inches of the concrete at all points along the surface being cured;
3. Monitor the concrete temperature during curing; and
4. Discontinue the use of these curing media if the concrete temperature cannot be maintained below 90 degrees Fahrenheit.

16.10 Joints - Joints shall be made at the locations shown on the plans, or as approved by the Engineer.

The Contractor shall construct, in one continuous concrete placing operation, all work comprised between such joints. Joints shall be kept moist until adjacent concrete is placed.

All construction joints having a keyed, stepped, or roughened surface shall be thoroughly cleaned using mechanical abrasion, wet sandblasting, or high pressure jetting of hardened concrete prior to placement of the adjacent concrete, unless otherwise directed by the Engineer.

The cleaning operations shall be continued until all unsatisfactory concrete, laitance, coatings, stains, debris, and other foreign materials are removed. The surface of the concrete shall be washed thoroughly to remove all loose material.

Construction joints, when required, shall be located as specified on the plans. The construction joints shall be straight and finished in a workmanlike manner.

Surfaces of construction joints shall be roughened 1/4 inch amplitude and thoroughly cleaned using mechanical abrasion, wet sandblasting, or high pressure water jetting of hardened concrete. Remove and dispose of surface laitance, curing compound, and other foreign materials. Flush construction joint surfaces with water and allow the surfaces to dry to a surface-dry condition immediately before placing concrete.

Control Joints shall be placed every 20 feet on center along the length of the debris rack structure.

16.11 Class "A" Concrete, Intake Structure - The contract item Class "A" Concrete, Intake Structure covers the complete construction of the reinforced concrete intake structure, inclusive of reinforcing steel, but exclusive of earthwork and miscellaneous iron and steel for the grates and gate.

Intake structure walls shall be constructed by placing the concrete directly against timber or steel sheeting used as the outside form and shoring. Sheeting shall be closely fitted and extend a minimum of 12 inches above the ground surface. Unless otherwise directed, all sheeting shall be removed and the void created shall be immediately backfilled with a clean well graded sand and thoroughly mechanically compacted to the relative densities specified in Section 14.9 - Structure Backfill. Well graded sand used to backfill the sheeting void shall have a gradation within the limits provided in the following Well Graded Sand Gradation table below:

Well Graded Sand Gradation

Sieve Size	Percent Passing by Weight
3/8 inch	100
No. 4	95-100
No. 8	80-100
No. 16	50-85
No. 30	25-60
No. 50	10-30
No. 100	2-10

16.12 Class "A" Concrete, CIDH Pile - The contract item Class "A" Concrete, CIDH Pile includes the complete construction of the CIDH pile as shown on the plans. Included in the pay item is all reinforcing steel required for this structure, but exclusive of earthwork and miscellaneous iron and steel. Earthwork shall be in accordance with Section 14 - Earthwork.

16.13 Class "A" Concrete, Retaining Wall - The contract item Class "A" Concrete, Retaining Wall includes the complete construction of the retaining wall. Included in the pay item is all reinforcing steel required for this structure, but exclusive of earthwork. Earthwork shall be in accordance with Section 14 - Earthwork.

16.14 Class "A" Concrete, Minor Structures - The contract item Class "A" Concrete, Minor Structures includes the complete construction of concrete pipe encasement, stem guide channel, stem guide channel anchors, gate pedestal, and concrete pads. Included in the pay item is all

reinforcing steel required for these structures, but exclusive of the required miscellaneous iron and steel and earthwork. Earthwork shall be in accordance with Section 14 - Earthwork.

16.15 Class "B" Concrete, Miscellaneous - The contract item Class "B" Concrete, Miscellaneous includes the complete construction of the stairway, stairway concrete step anchors, curbs, and any other concrete not specified. Included in the pay item is all reinforcing steel required. The subgrade for these items shall be compacted to ninety-five percent (95%) relative compaction prior to the placement of concrete. Earthwork shall be in accordance with Section 14 - Earthwork.

16.16 Measurement - Measurement for payment for the contract items Class "A" Concrete, Intake Structure; Class "A" Concrete, CIDH Pile; Class "A" Concrete, Retaining Wall; Class "A" Concrete, Minor Structures; and Class "B" Concrete, Miscellaneous will be the number of cubic yards placed as specified, measured to the neat lines as shown on the plans. Measurement and payment are exclusive of structure excavation.

No measurement or payment will be made for joints, dowels, tie bars, tie wires, blocks, chairs, and other accessories.

16.17 Payment - The contract prices paid for the various Concrete items shall include full compensation for all costs incurred under this section.

SECTION 17 - CONCRETE PIPE

17.1 Description - This section covers the contract item 30" RCP, 3000D.

17.2 General Pipe Requirement - Pipe materials, manufacture and quality, shall conform to ASTM Designation: C-76 or C-655. The Engineer shall be furnished a "Certificate of Compliance" signed by the manufacturer of the pipe certifying that the pipe conforms to the ASTM requirements. All pipe and pipe material supplied by the Contractor shall be new.

The general overall outlet pipe details and specifications from the pipe manufacturer need to be reviewed by the Engineer and DSOD prior to installation. This needs to include strength testing and details about the seal and joint articulation characteristics.

The District will also require the D-load bearing strength test conforming to ASTM C497 the requirements below as a basis for acceptance of the pipe. The test shall be performed in the presence of the Engineer. The minimum D-load for the pipe shall be 3000D. An additional 1-inch of concrete cover shall be provided over the invert reinforcing steel.

Two pipes from the same lot shall be provided by the manufacturer. One pipe will be D-load tested and the other pipe shall be furnished for the work.

For the purpose of these specifications, a lot is defined as 400 feet but no more than 50 sections of pipe, or fraction thereof, of one size and class manufactured on consecutive working days. If the 400 feet, but no more than 50 sections, of pipe are not made on consecutive working

days, then only those made on consecutive working days shall be considered a lot. If an interruption in manufacturing occurs, the Engineer may permit the pipe made after the interruption to be included in the lot, provided that the interruption lasts less than seven (7) days. A new lot number will be assigned if any change occurs in size or spacing of reinforcing steel, in the concrete mix, or in the curing method.

The Contractor shall coordinate with the manufacturer and the District to schedule the testing. The manufacturer shall provide adequate equipment and facilities for conducting tests and shall bear all expense in connection therewith all tests being under the supervision of the Engineer. Testing equipment shall be calibrated at intervals not to exceed six (6) months.

Test pipe shall conform in all other respects to the applicable requirements herein. Pipe shall be tested by the 3-edge bearing test as prescribed in ASTM C497.

The required strength of the pipe specimens undergoing the bearing test will be designated in terms of D-load. Such designations indicate the actual load in pounds per linear foot of pipe, divided by the inside diameter of the pipe in feet. The pipe shall withstand the required test load before a crack having a width as indicated in the following Allowable Crack Width table, measured at close intervals, occurs throughout a length of one (1) foot or more. The crack shall be considered to be at the indicated width when the point of measuring gauge will, without forcing, penetrate it 1/16 inch at close intervals throughout the specified distance of one (1) foot.

The load shall be applied at a uniform rate not to exceed 2,000 pounds per minute per foot-length of pipe for the first 80 percent of the required load and then at a uniform rate not to exceed 500 pounds per minute per foot-length of pipe for the remainder of the test.

The test specimens shall be surface dry when tested.

The length on which the test load is computed shall be determined by measuring the inside length of the barrel of the pipe from the bottom of the socket to the end of the spigot. The length of a beveled pipe shall be the average length of the inside of the barrel of the pipe, measured from the bottom of the socket to the end of the spigot.

If the tested specimen of a designated lot passes the test, all of the pipe of that lot shall be considered as complying with the requirements.

If the tested specimen of a designated lot fails to pass the test, then five (5) additional specimens from that same lot shall be selected for testing.

If the additional five (5) specimens pass, the total number of that lot to be furnished shall be considered as complying, except the one previous failing specimen.

If any of the five additional specimens fail, the entire lot shall be rejected or may be downgraded except those additional specimens which passed.

The Contractor may test specimens of a rejected lot individually to determine whether they may comply with the requirements for acceptance.

ALLOWABLE CRACK WIDTH

Pipe Wall Thickness (Inches)	Allowable Crack Width (Inches)				
	Concrete Cover on Transverse Reinforcement (Inches)				
	0.75	1.25	1.75	2.25	2.75
2.5	0.010	0.015			
3.0	0.010	0.014			
3.5	0.010	0.013	0.018		
4.0	0.010	0.013	0.017		
4.5	0.010	0.012	0.015	0.020	
5.0	0.010	0.012	0.015	0.018	
5.5	0.010	0.012	0.014	0.017	0.021
6.0	0.010	0.012	0.013	0.016	0.019

17.3 Pipe Joints - Circular RCP with elliptical reinforcement shall be laid with the minor axis of the reinforcement cage in the vertical position. The minor axis shall be marked by the manufacturer with a 4-inch high "T". RCP shall be laid with the socket end upgrade starting at the downgrade end of the line.

Pipe joints shall comply with ASTM C1619 Standard Specification for Elastomeric Seals for Joining Concrete Structures and ASTM Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets.

Pipe ends shall be cleaned and moistened prior to making up joint.

New pipe connection to the existing pipe shall be made with an articulated joint per plan with an elastomeric seal or rubber gasket seal. Remove existing pipe and existing encasement to existing pipe joint to provide connection of existing pipe. Construct lower portion of new concrete encasement (including dowels) up to height of construction joint. Place new pipe and join to existing pipe with seal. Construct remaining portion of new concrete pipe encasement per plan.

17.4 30" RCP, 3000D - The contract item 30"RCP, 3000D includes furnishing and installing the pipe as specified, exclusive of earthwork. An additional 1-inch of concrete cover shall be provided over the invert reinforcing steel.

17.5 Video Inspection - The entire length of the existing concrete pipe shall be videotaped prior to excavation and again prior to final inspection. The Contractor shall notify the Engineer at least three (3) business days prior to video inspection. Copies of the videotapes shall be provided to the Engineer.

17.6 Measurement - Measurement for payment of the contract item 30" RCP, 3000D will be the number of lineal feet installed as specified measured along the centerline of the pipe in place. No measurement will be made for the joint sealing compound or gasket used.

17.7 Payment - The contract price paid for the 30" RCP, 3000D shall include full compensation for all costs incurred under this section. No separate payment will be paid for the joint sealing compound used in the construction.

SECTION 18 AND SECTION 19 - NOT USED

SECTION 20 - FENCES AND GATES

20.1 Description - This section covers the contract item Cable Fencing.

20.2 Cable Fencing - The contract item Cable Fencing includes furnishing and installing the material required for this portion of the work. Included in this item is all hardware, parts, posts, and fittings. Also included in this item of work will be the removal and relocation, if required, of cable fencing as noted on the plans or as directed by the Engineer.

Concrete for the post footings must comply with the specifications for Class "B" Concrete.

Pipe for posts and braces must be standard steel pipe or pipe complying with Section 21 of these specifications.

Truss rods, post tops, cable clamps, eye bolts, thimbles, and other required fittings must be commercial-quality steel, malleable iron, or wrought iron. Post tops must be watertight. The eye of the eye bolts must be either drop forged or formed with a complete penetration weld. The eye must develop 100 percent of the bolt strength.

Turnbuckles must:

- Be commercial quality;
- Have jaw or eye ends;
- Have a minimum breaking strength of 2,700 lbs.; and
- Be steel pipe type or drop-forged steel.

Crimped sleeve clamps and stop sleeve clamps must:

- Be nonferrous metal;
- Develop the strength of the cable; and
- Be the same color as the cable.

Cables must:

- Be wire strand or rope;
- Have a minimum diameter of 1/4 inch;
- Have a minimum breaking strength of 1,800 lbs.; and
- Be galvanized.

Tension the cables to provide taut railings between posts. Install a thimble at each cable loop.

20.3 Measurement - Measurement for payment for the contract item Cable Fencing will be the number of lineal feet of new or salvaged cable fencing installed along the top of the fencing parallel to the ground.

20.4 Payment - The contract price paid for Cable Fencing shall include full compensation for all costs incurred under this section.

SECTION 21 - MISCELLANEOUS

21.1 Description - This section covers the contract items Miscellaneous Iron and Steel; Railing; Stage Markers; and Extra Directed Work.

21.2 Miscellaneous Iron and Steel - The contract item Miscellaneous Iron and Steel covers furnishing, fabricating, and installing all ferrous metal products used in the project, including the following:

- Gate actuator encasement assembly anchor bolts and steel plate;
- Concrete intake structure steel grates (grate bars, end bars), anchors, and plates;
- Galvanized steel protection bars;
- Galvanized steel conduit;
- Galvanized steel ventilation pipe; and
- All other miscellaneous iron and steel not listed here or elsewhere.

Materials, parts, and fittings shall conform with the following:

- (a) Miscellaneous Metal - Per ASTM Designation: A36.
- (b) Galvanizing - Exposed ferrous metal shall be galvanized per Section 21.3.
- (c) Ventilation Pipe - Shall be 4" inside diameter (4.5" outside diameter) schedule 40 galvanized steel pipe.
- (d) Pipe and Tubing - Shall be extruded conforming to requirements of ASTM B429, plates and sheets shall be rolled conforming to ASTM B209, and rods, bars, or shapes shall be extruded conforming to ASTM B221.
- (e) Protection Bars - shall be 1" diameter galvanized steel bars.
- (f) Conduit - shall be 1" diameter galvanized Rigid Steel Conduit with threaded ends at terminal locations depicted on the plans.

21.3 Galvanizing - Galvanizing shall meet the following requirements:

Zinc used for galvanizing shall be grade Prime Western conforming to ASTM B6. Except as otherwise specified, materials shall be galvanized by the hot-dip, mechanical, or electrode positing process.

The minimum weight of coating and other requirements shall be as shown in the Minimum Weight of Coating table below. If there is a conflict between the ASTM and minimum weight columns, the minimum weight column shall apply. The weight shown is ounces per square foot of surface areas. The weight of the coating shall be determined in accordance with ASTM A90, modified to determine the coating of each surface separately. All surfaces, when tested separately, shall meet the minimum requirements.

Minimum Weight of Coating

Material	ASTM	Minimum Weight of Coating (ounce/square foot)
Steel products including structural shapes, tie rods, handrails, manhole steps, and miscellaneous items	A123	2.00
	A153	2.00
	B633	2.00
	B694	2.00
Hardware including cast, rolled, pressed, and forged articles	A153	2.00
	B633	2.00
	B695	2.00
Bolts, screws, nuts, and washers	A153	1.25
	B633	1.25
	B695	1.25
Chain link fence fabric, tie wire only	A392	1.20
Steel pipe (includes fence posts, braces, and rails)	F1083	
Class 1 (see Note 1)		1.80
Class 1A (pipe only, see Notes 2 and 3)		1.00
All other chain link fence articles	A123	1.80
Iron or steel wire fencing	A116	0.80
Steel or iron sheets	A525	1.20

Note:

1. "C" and "H" section fence posts shall be hot-dipped galvanized after forming.
2. Class 1A pipe shall, in addition to the galvanized exterior coating indicated, have coatings of chromate conversion and acrylic urethane.
3. The interior surface coating for Class 1A pipe shall have 1 ounce per square foot of hot-dipped galvanized coating or a zinc-rich organic a minimum of 0.3 mils thick. The coating shall have a minimum zinc powder loading of 87 percent by weight. The interior coated surface shall have a demonstrated ability to resist 650 hours of exposure to salt fog with a maximum of 5 percent red rust when tested in accordance with ASTM B117.

The zinc coating shall adhere tenaciously to the surface of the base material. The finished product shall be free from blisters and excess zinc, and the coating shall be even, smooth, and uniform throughout. Machine work, die work, cutting, punching, bending, welding,

drilling, thread cutting, straightening, and other fabricating shall be done as far as is practicable before galvanizing. All members, nuts, bolts, washers, etc. shall be galvanized before a structural unit is assembled.

Test coupons for determining the quantity and quality of the galvanizing shall be of such a size and shall be wired to the materials to be galvanized before immersion so as to represent the amount of coating deposited on the finished product.

Zinc coating which has been filed or shop cut, burned by welding, abraded, or otherwise damaged to such extent as to expose the base metal shall be repaired and recoated by one of the following methods approved by the Engineer.

1. Hot Dip Process - The damaged areas shall be thoroughly stripped and cleaned, and a coating of zinc shall be applied by the hot-dip process.
2. Metalizing Process - The damaged areas shall be repaired per ASTM A780, Annex A3 and the following requirements:
 - a) The damaged areas shall be thoroughly cleaned by blasting with a sharp sand or steel grit.
 - b) The blasted area shall lap the undamaged zinc coating at least 1/2 inch.
 - c) Zinc wire containing not less than 99.98 percent zinc shall be used in the metalizing operation.
 - d) A zinc coating shall be applied to the damaged area with a metalizing gun to a thickness of not less than 5 mils on the damaged area and shall taper to zero thickness at the edge of the blasted undamaged section.
3. Zinc Dust Paint - When zinc surfaces have small areas of abrasion, which occur after shop application of zinc coating, zinc dust paint may be used to repair these areas when approved by the Engineer. The damaged areas shall be thoroughly cleaned by wire brushing and traces of welding flux and loose or cracked zinc coating removed prior to painting. The cleaned areas shall be painted with a minimum of two coats of an unthinned zinc paint to provide a total minimum film thickness of 8 mils. The zinc paint shall conform to the requirements of ASTM A780, Annex A3, except that it shall have a 90 percent minimum dry film content of zinc dust by weight.
4. Zinc Based Solders - The damaged areas shall be repaired using zinc alloy solders per ASTM A780, Annex A3. Zinc solder shall be deposited until a minimum thickness of 5 mils is applied to the damaged area.

21.4 Railing - The contract item Railing includes furnishing and installing the materials required for installation of the concrete stairway pedestrian protective railing/handrail as shown on the plans and as directed by the Engineer. Included in this item is all hardware parts, fittings, slip joints, and posts, including the following:

- 1" diameter standard structural steel pipe (outside diameter = 1.315");
- 1 1/2" diameter standard structural steel pipe (outside diameter = 1.9"); and
- 2" diameter standard structural steel pipe post and railings (outside diameter of 2.375").

Materials, parts, and fittings shall conform with the following:

- (a) All Metal - Per ASTM Designation: A36.
- (b) Galvanizing - All exposed ferrous metal shall be galvanized per Section 21.3.

The fabrication, welding, and installation of metal hand railings shall be in accordance with the following requirements:

- The Contractor shall submit Shop Drawings showing the details and dimensions of all metal hand railings;
- Welding shall conform to the requirements of the "Structural Welding Code" AWS D1.1 for steel. All exposed welds shall be ground flush with adjacent surfaces;
- Railing panels shall be straight and true to dimensions. Adjacent railing panels shall align with each other with a variation not to exceed 1/16 inch. Joints shall be matchmarked;
- For structures on curves, either horizontal or vertical, the railing shall conform closely to the curvature of the structure by means of series of short chords. The lengths of the chords shall be the distance center to center of rail posts;
- Steel railing units shall be galvanized after fabrication;
- The railing shall be erected in accordance with the plans, on anchor bolts or in holes formed by inserts provided in the concrete railing base to receive the railing posts. Sheet metal inserts shall be removed before the erection of railing;
- No railing shall be erected on the structure until the concrete to which it is to be attached is completed and all falsework supporting the system is released;
- The railing shall be carefully erected true to line and grade. Posts and balusters shall be vertical with the deviation from the vertical for the full height of the panel not exceeding 1/8 inch; and
- After erecting the railing, any abrasions or exposed steel shall be repaired.

21.5 Stage Markers - The contract item Stage Markers shall be vinyl, high visibility reflective numbers with self-adhesive backing and includes furnishing and installing the stage markers on the concrete stairway at elevations shown on the plans. The stage markers shall be yellow or white numbering on a black background or black lettering on a white background. The stage markers shall have a non-skid surface finish and shall be 3 1/2" to 4 1/2" high by 2" to 4" wide with a minimum thickness of 0.0004". The numbers shall have a permanent self-adhesive backing that is compatible for use on concrete. Stage markers will be provided every foot from stage zero (elevation 1090) to stage thirty-four (34) (elevation 1124).

Within ten (10) days of project award, the Contractor shall submit the manufacturer's product data sheet, installation instructions for Stage Markers and representative Stage Marker samples to the Engineer for approval.

Surface preparation and installation shall be per manufacturer's recommendations for application to concrete. The stage markers shall be centered horizontally on the concrete stairway step and shall be placed on the outside half of the concrete step so the stage markers are visible from the top of the stairway.

21.6 Extra Directed Work - The contract item Extra Directed Work shall consist of necessary work that is not included in other contract bid items and not shown on the project drawings, as determined by the Engineer. All Extra Directed Work shall be performed only as directed by the Engineer and in accordance with all applicable standards and specifications.

21.7 Measurement - Measurement for payment for the contract item Miscellaneous Iron and Steel will be the number of pounds used in the work as specified.

Measurement for payment for the contract item Railing will be the number of lineal feet from end to end along the face of the railing, including terminal sections. There will be no separate payment for fabrication, welding, joints, and mounting.

Measurement for payment for the contract item Stage Markers will be lump sum.

21.8 Payment - The contract prices paid for Miscellaneous Iron and Steel; Railing; and Stage Markers shall include full compensation for all costs incurred under this section.

Full compensation for the contract item Extra Directed Work shall be as "Extra Work" and shall be paid pursuant to Section 2.07 of the General Provisions. The total accumulated costs for Extra Directed Work shall not exceed the amount specified in the contract bid item unless otherwise increased by change order.

SECTION 22 THROUGH SECTION 25 - NOT USED

SECTION 26 - STONEWORK

26.1 Description - This section covers the contract items Rock Mulch; and Crushed Rock.

26.2 General Rock Mulch Requirements - Rock Mulch shall be a graded material and shall be angular, free of calcareous coating, caliche, organic matter, or other foreign substances.

The percentage wear of the material to be used as rock mulch will be determined by the test procedure of ASTM Standard C-131, Grading B. The percentage wear of the material shall not exceed 40 after 500 revolutions.

The aggregates shall be well graded when tested in accordance with ASTM C-136 and ASTM C-117. The percentage composition by weight shall be within the following limits:

Rock Mulch Gradation

Sieve Size	Percentage Passing
3 inch	100
2 inch	40-60
1 inch	10-15

26.3 Rock Mulch Subgrade Preparation - Trash, weeds, and other debris that will interfere with rock mulch placement shall be removed and disposed.

Rock Mulch will be placed in either locations without hydroseed or with hydroseed as described in (1) and (2) below:

- (1) Without Hydroseed - In areas without hydroseed, the surface shall be adequately loosened by disking, ripping, or both as determined by the Engineer. On sites where equipment cannot safely operate, the area designated to receive rock mulch shall be prepared by scarifying during clearing and grubbing to provide a roughened surface so that the rock mulch will stay in place. The finished surface for both equipment-prepped and hand-tilled areas shall be left in a roughened condition as approved by the Engineer. Subgrade preparation shall be discontinued when soil moisture conditions are not suitable for preparation of a satisfactory subgrade, as determined by the Engineer. Rock mulch shall not be placed until the subgrade surfaces have been inspected and approved by the Engineer.
- (2) With Hydroseed - In areas where rock mulch will be placed on top of hydroseed, the surface shall be prepared per Section 28 - Hydroseeding. Rock mulch shall be placed onto the hydroseeded embankment slopes within 14 calendar days after Step 2 - Straw Mulch Slurry as defined in Section 28.4.

26.4 Rock Mulch Placement - The rock mulch shall be placed by equipment on the prepared surfaces. The mulch shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of the underlying materials, including hydroseed, as applicable.

The Rock Mulch shall be delivered and placed in a manner to ensure that the in-place mulch layer shall be reasonably homogeneous and the fractions uniformly distributed. Hand placing of rock mulch shall be required to the extent necessary to prevent damage to the permanent works. Rock Mulch shall be placed in an even application, tightly packed, to provide complete coverage of the area shown on the plans so that soil is not be visible between rocks.

Rock Mulch shall be placed in accordance to the approved Rock Mulch Placement Plan defined below. The Contractor shall not crack the rock during spreading. Cracked rock may be subject to rejection and shall be removed, disposed, and replaced at the Contractor's expense.

26.5 Rock Mulch Placement Plan - The Contractor shall prepare and submit a written Rock Mulch Placement Plan for approval by the Engineer prior to placing any rock mulch. Equipment used to install rock mulch may not travel on or across areas that have been hydroseeded, unless approved by the Engineer. The Rock Mulch Placement Plan shall illustrate how rock mulch placement will occur including, but not limited to, placement phasing, equipment travel routes, and rock mulch stockpile locations. Additionally, the plan shall also detail methods for repairing any associated damages to hydroseeded areas.

26.6 Rock Mulch - The contract item Rock Mulch covers the furnishing, hauling, subgrade preparations, and placement of rock mulch as shown on the plans and as specified herein, inclusive of all work associated with preparing and obtaining approval for the Rock Mulch Placement Plan. Excluded from this item is all work associated with surface preparation required for areas designated for hydroseeding, which shall be covered in Section 28 - Hydroseeding in these Detailed Specifications.

26.7 Crushed Rock - The contract item Crushed Rock covers the complete installation of crushed rock on access roads, turn arounds, and within District right of way as shown on the plans and as directed by the Engineer.

Uniform mixture of crushed rock shall be delivered and deposited in layers or windrows. The Contractor shall spread and shape crushed rock to such thickness that after compacting the crushed rock is within the tolerances specified in Section 6.10 of the Special Provisions. Avoid material segregation. Crushed Rock must be free from pockets of coarse or fine material. At locations inaccessible to spreading equipment, spread and compact crushed rock by any means that will attain the specified requirements.

Gradation for the Crushed Rock shall meet the following requirements:

Crushed Rock Gradation

Sieve Size	Percentage Passing
1 ½ inch	100
1 inch	88-100
¾ inch	52-85
3/8 inch	15-38
No. 4	0-16
No. 8	0 -6

26.8 Measurement - Measurement for payment for the contract item Rock Mulch shall be the number of cubic yards placed as specified. The thickness of the rock mulch shall be as specified on the plans, measured from the ridge of the ripped furrow or tracked surface to the finish grade of the rock mulch surface.

Measurement for payment for the contract item Crushed Rock shall be the number of cubic yards placed as specified.

26.9 Payment - The contract prices paid for Rock Mulch; and Crushed Rock shall include full compensation for all costs incurred under this section.

SECTION 27 - DUST ABATEMENT

27.1 Description - This section covers the implementation of dust control measures necessary to prevent harm and nuisance from dust. Supplementing Section 8.06 of the General Provisions, the Contractor shall comply with all the provisions of the South Coast Air Quality Management District (SCAQMD) Rule 403 as described in Appendix "A".

27.2 Dust Abatement - The contract item Dust Abatement includes the action necessary to prevent, reduce or control dust within the work area as required to complete the work. The Contractor shall carry out proper and efficient measures to prevent his operations from producing dust in amounts damaging to property or causing a nuisance, or harm to persons living nearby or occupying buildings in the vicinity of the work. The methods to be used for controlling dust in the construction area and along haul roads shall be approved by the Engineer prior to starting any work included in this contract. The Rule 403 Implementation Handbook published by the SCAQMD contains a detailed listing of reasonably available dust control measures and is available for inspection at the District office.

27.3 Payment - The contract lump sum price paid for Dust Abatement shall include full compensation for all direct and indirect costs incurred under this section.

This payment will be made on a basis of the percentage of work completed on the entire project.

SECTION 28 - HYDROSEEDING

28.1 Description - This section covers the contract item Hydroseeding as shown on the plans and as directed by the Engineer.

28.2 Hydroseeding - The contract item Hydroseeding includes the furnishing of all materials, incidentals, labor, and equipment necessary to complete the work as specified herein and as directed by the Engineer. All hydroseeding work shall be done by fully qualified and experienced personnel. Included in this item is all work associated with surface preparation prior to hydroseeding, and furnishing and placing the hydro slurry.

Seeds shall be stored by the supplier until the approximate date of delivery and/or requested delivery. Storage shall be provided in a manner that preserves seed viability, purity, and germination. The hydroseeding materials shall not be stored onsite without prior approval of the Engineer as to location, duration and method of storage. All debris and excess materials shall be removed daily, unless otherwise authorized by the Engineer. The Contractor shall leave the work area in a clean and finished appearance upon completion of hydroseeding.

28.3 Equipment and Materials - The equipment shall be a mobile mounted unit in a fully operational and well maintained condition.

Hydroseed/slurry mixes shall be applied with hydraulic spray equipment with built in continuous agitation equipment and discharge system capable of producing homogeneous mixture at a uniform application rate.

Virgin wood fiber shall be produced from natural or recycled (pulp) fiber and shall be a long-strand, whole-wood fiber thermo mechanically processed from clean whole wood chips.

Fiber must:

1. Disperse into a uniform slurry when mixed with water.
2. Contain 3/8-inch fiber strands for at least 25 percent by total volume.
3. Have at least 40 percent retained when passed through a No. 25 sieve.
4. Have an initial moisture content of no more than 15 percent of its dry weight when tested under California Test 226. The moisture content must be marked on the packaging.
5. Have a water holding capacity, by weight, of at least 1,200 percent when tested under ASTM D7367.
6. Be nontoxic to plants and animal life.
7. Be free of synthetic or plastic materials, lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, and chlorine bleach.
8. Contain less than 250 ppm of boron.

Guar gum based tackifier shall be derived from the ground endosperm of the guar plant *Cyanmopsis tetragonolobus*. It must be able to be diluted at the rate of 1 to 5 pounds per 100 gallons of water. Stabilizing binder upon drying shall allow water and air penetration, shall be non-flammable, shall have an effective life of at least one (1) year, shall be free from growth or germination inhibiting factors, and shall not be toxic to plants and animals.

Seed may be purchased from S&S Seed Company, Carpinteria, California, phone: 805.684.0436, or an approved equal.

All seed shall be delivered to the site tagged and labeled in accordance with the California Agricultural Code. Seed shall be of a quality that has a minimum pure live seed content (% of purity x % germination) as specified in the seed table (below), and weed seed shall not exceed 0.5% of the aggregate of pure live seed and other material.

A commercial Ammonium Phosphate fertilizer shall be used containing a minimum of 16% nitrogen, 20% available phosphoric acid, and 0% water soluble potash, uniform in composition, dry and free flowing, pelleted, or granular. All fertilizer shall be delivered in unbroken or unopened containers, labeled in accordance with applicable State regulations, and bearing the warranty of the producer for the grade furnished.

28.4 Application - The Engineer shall review and approve completion of all construction and grading prior to any section being approved as ready for surface preparation and hydroseeding application. Prior to hydroseed application, all areas shall be track walked to provide surface texture to the satisfaction of the Engineer. If surface compaction is excessive, the Engineer may request scarifying the compacted surface perpendicular to the slope prior to track walking. Scarification shall be to a maximum depth of 6 inches using rippers spaced 12 inches apart.

Hydroseeding shall be applied in a two-step process with a homogeneous slurry of seed, tackifier, fertilizer, water, and wood fiber mulch applied, followed by a hydrosラリー of tackifier, water, and wood fiber mulch as described in (1) and (2) below. Combining the application into a single step process is not acceptable.

- (1) Hydroseed - Hydroseeding shall be accomplished within 14 calendar days after slope grading and within 48 hours of completion of surface preparation. Seed shall be applied to soil surfaces that have not been allowed to crust over or erode.

The hydroseed mix, per acre of coverage, shall be as follows:

500 lbs./acre	Virgin Wood Cellulose Fiber Mulch
250 lbs./acre	16-20-0 Commercial Fertilizer
80 lbs./acre	100% pure guar gum Tackifier
28.5 lbs./acre	Seed Mix as follows:

Species	Lbs/ac	P/G
Amsinckia intermedia/common fiddleneck	1.5	45/65
Bromus carinatus/California brome grass	3	95/80
Deinandra faciculata/Common tarweed	3	25/65
Eschscholzia californica/California Poppy	2	98/80
Festuca microstachys/small fescue	4	70/70
Lasthenia californica/Common goldfields	1.5	50/60
Layia platyglossa/Tidy tips	1.5	80/75
Lupinus bicolor/Miniature lupine	1.5	95/85
Lupinus succulentus/Arroyo lupine	3	95/85
Nemophila menziesii/Baby blue-eyes	0.5	98/85
Poa segunda/Bluegrass	3	60/60
Plantago ovata/wooly plantain	4	98/75

- (2) Hydrosラリー - The final hydrosラリー application shall be applied within 24 hours of first step (seed/slurry) application.

The hydroslurry mix, per acre of coverage, shall be as follows:

1,500 lbs./acre	Virgin Wood Cellulose Fiber Mulch
120 lbs./acre	100% pure guar gum Tackifier

A final layer of rock mulch shall be applied to treatment areas on the embankment slopes within 14 calendar days of hydroseeding as described in Section 26 of these Detailed Specifications.

The Contractor shall provide a written per load mix tabulation, ratioed to the tank capacity of the equipment to be used on the project, for review and approval by the Engineer well in advance of anticipated start of hydroseeding.

The Contractor shall provide a sample demonstration area for application by preparing one load of hydroseed mix. The Engineer shall review and approve the sample section for compliance and workmanship. Upon approval, this area shall become the sample for all remaining application. No hydroseeding shall take place during high winds or during periods of rainfall.

Areas designated for hydroseeding shall receive materials at a uniform and continuous rate that will not concentrate the material, causing clumping or to erode the soil. Materials shall be applied in a sweeping/overlapping fan motion, using a large arc, causing the material to fall perpendicular (or very close to perpendicular) to the soil surface. Application shall be at a rate and pressure that will spread the designated rates uniformly over the coverage area. Care shall be exercised to prevent drift and placement of material into adjacent areas. Once work is started in an area, apply all materials for that area in the same shift.

At the completion of the specified work, the Contractor shall schedule a final walk through with the Engineer. The Contractor will be notified in writing by the Engineer whether the installation work is accepted as complete or if outstanding deficiencies need to be remedied for completion and acceptance.

28.5 Measurement - Measurement for the contract item Hydroseeding shall be made on the basis of the actual area treated to the nearest one hundredth (0.01) acre as measured by the Engineer.

28.6 Payment - The contract price paid for Hydroseeding shall include full compensation for all costs incurred under this section.

SECTION 29 - STORMWATER AND NON-STORMWATER POLLUTION CONTROL

29.1 General Requirements - This section covers the contract items Stormwater and Non-Stormwater Pollution Control; and Non-Stormwater Discharge or Dewatering. The contract item Stormwater and Non-Stormwater Pollution Control shall include preparing, obtaining approval of, amending and implementing the Water Pollution Control Program (WPCP).

If construction dewatering wastes are generated on the project, the contract item Non-Stormwater Discharge or Dewatering shall include compliance with Santa Ana Regional Water Quality Control Board (RWQCB) Order No. R8-2015-0004, NPDES No. CAG998001, or any amendments or permit modifications in effect at the time of construction.

The Contractor shall, at a minimum, provide and/or prepare the following:

1. WPCP
2. Name and contact information for the WPC Manager
3. Contractor name and contact information
4. Contractor site contact person and emergency contact person information
5. Verification of disturbance area due to construction
6. Construction commencement date
7. Anticipated construction completion date
8. Construction Activity Schedule/Best Management Practices (BMPs) Installation Schedule
9. Name and contact information for personnel responsible for pre-storm, post-storm and storm event BMP inspections
10. List of all subcontractors that will be working on the project
11. Review and finalize water pollution control plan sheets

The WPCP shall identify site specific BMPs to be implemented during and after construction to minimize the potential pollution of stormwater runoff and downstream receiving waters. The identified BMPs shall be practices designed to minimize or eliminate the discharge of pollutants from the construction site and Contractor's construction activities including, but not limited to:

1. Good housekeeping practices for solid and sanitary/septic waste management, and material handling and storage.
2. Construction procedures such as stabilized construction access points, scheduling/phasing to minimize areas of soil disturbance, soil stabilization and erosion/sediment control.

The WPCP shall be designed to address the following objectives:

1. All pollutants and their sources, including sources of sediment associated with construction, construction site erosion and all other activities associated with construction activity are controlled;
2. Where not otherwise required to be under a Regional Water Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated;
3. Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the Best Available Technology/Best Conventional Technology (BAT/BCT) standard;

4. Calculations and design details as well as BMP controls for site run-on are complete and correct; and
5. Stabilization BMPs, installed to reduce or eliminate pollutants after construction, are completed.

The Contractor shall make the WPCP available at the construction site during working hours while construction is occurring and shall be made available upon request by a State or Regional Board inspector. When the original WPCP is retained by a crewmember in a construction vehicle and is not currently at the construction site, current copies of the BMPs and map/drawing will be left with the field crew and the original WPCP shall be made available via a request by radio/telephone.

In the event the District incurs any Administrative Civil Liability or Mandatory Minimum (fine) imposed by the California RWQCB - Santa Ana Region as a result of Contractor's failure to fully implement the provisions of this section and permit requirements, "Stormwater and Non-Stormwater Pollution Control", the Engineer may, in the exercise of his sole judgment and discretion, withhold from payments otherwise due to Contractor a sufficient amount to cover the Civil Liability. Liability for "Negligent Violations" may be in an amount up to \$50,000 per day per deemed occurrence while "Knowing Violations" can result in fines as high as \$250,000 and imprisonment.

BMPs listed in the draft WPCP for the project utilize Caltrans Standard Construction BMP references. Stormwater and Non-Stormwater Pollution Control work shall conform to the requirements in the latest version of the Caltrans manual, entitled **"Construction Site Best Management Practices (BMP) Manual"**. A copy of the Construction Site BMP Manual, may be downloaded from the Caltrans website at: <https://dot.ca.gov/-/media/dot-media/programs/construction/documents/environmental-compliance/csbmp-may-2017-final.pdf>.

The Contractor shall be responsible for all costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section, "Stormwater and Non-Stormwater Pollution Control" including, but not limited to, compliance with the applicable provisions of the Caltrans Construction Site BMP Manual, General De Minimus NPDES Permit, federal, state and local regulations. For the purpose of this paragraph, costs and liabilities include, but are not limited to, fines, penalties and damages whether assessed against the District or the Contractor, including those levied under the Federal Clean Water Act and the State Porter-Cologne Water Quality Act.

The Contractor shall become fully informed of and comply with the applicable provisions of the WPCP, Caltrans Construction Site BMP Manual, General De Minimus NPDES Permit, federal, state, and local regulations that govern the Contractor's activities and operation pertaining to both stormwater and non-stormwater discharges from both the project site and areas of disturbance outside the project limits during construction. The Contractor shall, at all times, keep copies of the WPCP, the General De Minimus NPDES Permit (if implemented), and all WPCP amendments at the project site. The WPCP shall be made available upon request of a representative of the SWRCB, California RWQCB Santa Ana Region, United States

Environmental Protection Agency (USEPA), or local stormwater management agency. Requests by the public shall be directed to the Engineer.

The Contractor is solely and exclusively responsible for any arrangements made between the Contractor and other property owners or entities that result in disturbance of areas or construction activities being conducted outside limits of the designated rights of way and temporary construction easements as shown on the project plans.

The Contractor shall, during work hours, allow authorized agents of the RWQCB, SWRCB, USEPA, or local stormwater management agency, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the construction site and the Contractor's facilities pertinent to the work;
2. Have access to and copy any records required to be kept as specified in the WPCP; and
3. Inspect the construction site, including any offsite staging areas or material storage areas, and related soil stabilization practices and sediment control BMPs.

The Contractor shall notify the Engineer immediately upon request from regulatory agencies to enter, inspect, sample, monitor or otherwise access the project site or the Contractor's records.

In case of conflict between the Caltrans Construction BMP Manual and these Detailed Specifications, the Detailed Specifications shall govern; in case of conflict between these Detailed Specifications and the WPCP, the latter shall govern.

The WPCP shall incorporate BMPs in each of the following categories:

1. Soil stabilization practices;
2. Sediment control practices;
3. Sediment tracking control practices;
4. Wind erosion control practices; and
5. Non-stormwater management, and waste management and disposal control practices.

Specific objectives and minimum requirements for each category of the BMPs are described in the Caltrans Construction Site BMP Manual. The Contractor shall consider the objectives and minimum requirements presented in the Caltrans Construction Site BMP Manual for each of the above categories. When minimum requirements are listed for any category, the Contractor shall incorporate one or more of the listed minimum BMPs required into the WPCP and implement them on the project to meet the pollution control objectives for the category. In addition, the Contractor shall consider other BMPs presented in the Caltrans Construction Site BMP Manual to supplement the minimum BMPs required when necessary to meet the objectives of the WPCP. The Contractor shall document the selection process in accordance with the procedure specified in the Caltrans Construction Site BMP Manual.

The Contractor should not assume that the minimum BMPs required for each category presented in the Caltrans Construction Site BMP Manual are adequate to meet the pollution control objectives. The Contractor may use other effective BMPs, as approved by the Engineer, in addition to the minimum as required in the Caltrans Construction Site BMP Manual to achieve the pollution control objectives.

The WPCP shall include the following items:

Section 1 - WPCP Requirements:

- 1.1 WPCP Certification
- 1.2 Amendments
- 1.3 BMP Inspection Form (Site Inspection and Quarterly Non-Stormwater)

Section 2 - Project and Contractor Information:

- 2.1 Project Description
- 2.2 Unique Site Features
- 2.3 Contact Information for Responsible Parties

Section 3 - Pollution Sources and Control Measures:

- 3.1 Pollution Sources
- 3.2 Soil Stabilization (Erosion Control) and Sediment Control
- 3.3 Construction Site Management
- 3.4 Water Pollution Control Plans (WPCPS)
- 3.5 Water Pollution Control Schedule

Section 4 - WPCP Implementation:

- 4.1 Water Pollution Control Manager Responsibilities
- 4.2 Weather Forecast Monitoring
- 4.3 Stormwater Event Inspections
- 4.4 Site Visual Monitoring (BMP Inspection and Maintenance)

Section 5 - WPCP Reporting Requirements:

- 5.1 Record Keeping
- 5.2 Discharge Reporting
- 5.3 Illegal Connection/Illicit Discharge Reporting

To ensure that the preparation, implementation, and oversight of the WPCP is sufficient for effective pollution prevention, individuals responsible for creating, revising, overseeing, and

implementing the WPCP should participate in applicable training programs and document such training in the WPCP. A copy of the WPCP should be located at the construction site.

The following notes (or notes of substantially similar intent) that address pollution prevention to the Maximum Extent Practicable during the construction phase of a project on a year-round basis need to be placed on the Stormwater and Non-Stormwater Pollution Control Drawings:

- ◆ Erosion control BMPs shall be implemented and maintained to minimize and/or prevent the entrainment of soil in runoff from disturbed soil areas on construction sites.
- ◆ Sediment control BMPs shall be implemented and maintained to prevent and/or minimize the transport of soil from the construction site.
- ◆ Stockpiles of soil shall be properly contained to eliminate or reduce sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking or wind.
- ◆ Appropriate BMPs for construction-related materials, wastes, spills or residues shall be implemented to eliminate or reduce transport from the site to streets, drainage facilities or adjoining properties by wind or runoff.
- ◆ If applicable, runoff from equipment and vehicle washing shall be contained at construction sites and must not be discharged to receiving waters or the local storm drain system. Wash waters or rinsate from ready mix, concrete, or cement vehicles must be handled appropriately and may not be discharged to receiving waters or any storm drain system.
- ◆ All construction contractor and subcontractor personnel are to be made aware of the required BMPs and good housekeeping measures for the project site and any associated construction staging areas.
- ◆ At the end of each day of construction activity all construction debris and waste materials shall be collected and properly disposed in trash or recycle bins.
- ◆ Construction sites shall be maintained in such a condition that a storm does not carry wastes or pollutants off the site. Discharges other than stormwater (non-stormwater discharges) are prohibited, except as authorized by an individual NPDES De Minimus Permit. Potential pollutants include, but are not limited to: solid or liquid chemical spills; wastes from paints, stains, sealants, solvents, detergents, glues, lime, pesticides, herbicides, fertilizers, wood preservatives and asbestos fibers; paint flakes or stucco fragments; fuels, oils, lubricants and hydraulic, radiator or battery fluids; concrete and related cutting or curing residues; floatable wastes; wastes from engine/equipment steam cleaning or chemical degreasing; wastes from street cleaning; and super-chlorinated potable water from line flushing and testing. During construction, disposal of such materials should occur in a specified and controlled temporary area onsite physically separated from potential stormwater runoff, with ultimate disposal in accordance with local, state and federal requirements.

- ◆ Discharging contaminated groundwater produced by dewatering groundwater that has infiltrated into the construction site is prohibited. Discharging of contaminated soils via surface erosion is also prohibited.
- ◆ The Contractor is required to notify and obtain approval from the District ten (10) days prior to any non-stormwater discharge or dewatering associated with Contractor's construction activities.
- ◆ Construction sites shall be managed to minimize the exposure time of disturbed soil areas through phasing and scheduling of grading to the extent feasible and the use of temporary and permanent soil stabilization.
- ◆ BMPs shall be maintained at all times. In addition, BMPs shall be inspected prior to predicted storm events and following storm events.

29.2 WPCP Amendments - If the scope or schedule of the project changes, the Contractor shall immediately notify the Engineer. The Contractor shall also prepare amendments to the WPCP, both graphically and in narrative form, whenever there is a change in Contractor's construction activities or operations which may result in the discharge of pollutants to surface waters, groundwaters, municipal storm drain systems, or as deemed necessary by the Engineer. The Contractor shall also amend the WPCP if the Contractor is in violation of any condition of the WPCP or has not effectively achieved the objective of reducing pollutants in stormwater discharges. Amendments shall show additional BMPs, revised Contractor's construction activities, or operations, including those in areas not shown in the initially approved WPCP, which are required on the project to effectively control water pollution.

Amendments to the WPCP shall be submitted for review and approval by the Engineer in the same manner specified for the initial approval of the WPCP. The Contractor shall date and attach all approved amendments to the WPCP. Upon approval of the amendment, the Contractor shall implement the approved changes, revised construction activities, or operations.

29.3 Non-Compliance Reporting - If the project is in non-compliance at any time, the Contractor shall make a written report to the Engineer within two (2) calendar days of identification of non-compliance activities.

29.4 WPCP Implementation - Upon approval of the WPCP, the Contractor shall be responsible throughout the duration of the project for placing, installing, constructing, inspecting, and maintaining the BMPs as well as any amendments thereto and for removing and disposing of temporary BMPs. All WPCP implementation shall be performed or supervised by a WPC Manager. Requirements for installation, construction, inspection, maintenance, removal, and disposal of BMPs are specified in the Caltrans Construction Site BMP Manual and these Detailed Specifications.

The Engineer may order the suspension of construction operations if the Contractor fails to comply with the requirements of this section, "Stormwater and Non-Stormwater Pollution Control", as determined by the Engineer.

- (a) Stormwater Pollution Control - The Contractor shall implement soil stabilization practices and sediment control BMPs, including minimum

requirements as presented in the Caltrans Construction Site BMP Manual, on all disturbed areas of the project site throughout the duration of the project.

Implementation of soil stabilization practices and sediment control BMPs for soil-disturbed areas including, but not limited to, rough graded access roads, slopes, channel inverts, operational inlets and outlets of the project shall be completed prior to soil disturbance.

The Engineer may require the Contractor, on a case-by-case basis, to reduce the active, soil-disturbed area limit of the project. The Contractor shall demonstrate the ability and preparedness to fully deploy soil stabilization practices and sediment control BMPs to protect soil-disturbed areas of the project site by maintaining an adequate quantity of soil stabilization and sediment control materials onsite to protect exposed, soil-disturbed areas and a detailed plan for the mobilization of sufficient labor and equipment to fully deploy the required BMPs prior to the onset of precipitation and for the duration of the project.

Throughout the duration of the project, soil-disturbed areas of the project site shall be considered to be inactive whenever soil disturbing activities are expected to be discontinued. Areas that will become inactive shall be fully protected with soil stabilization practices such as covering with mulch, temporary seeding, fiber rolls, blankets, etc., within one (1) calendar day of the discontinuance of soil disturbing activities or immediately if the onset of precipitation is forecasted, whichever is first to occur.

Throughout the duration of the project, the project site shall be fully protected with soil stabilization practices and sediment control BMPs. The Contractor shall monitor the weather forecast on a daily basis. The National Weather Service forecast shall be used.

- (b) Non-Stormwater Pollution Control - **The Contractor shall implement, year-round and throughout the duration of the project, BMPs included in the WPCP for sediment tracking, wind erosion, non-stormwater management, and waste management and disposal.**
- (c) Inspections and Reporting - The Contractor shall ensure that a WPC Manager or designee regularly inspects the construction site for BMPs identified in the WPCP to ensure the proper implementation and functioning of BMPs. The WPC Manager shall identify corrective actions and time frames to address any damaged BMPs or reinstate any BMPs that have been discontinued. All repairs and design changes shall begin to be implemented within 72 hours of identification.

At a minimum, the Contractor shall inspect the construction site as follows:

1. Prior to a forecast storm;

2. After any precipitation which causes runoff capable of carrying sediment from the construction site;
3. At 24-hour intervals during extended precipitation events; and
4. At a regular interval of once every week using the weekly inspection template provided in the WPCP.

The construction site inspection checklist provided in the WPCP shall be used to ensure that the necessary BMPs are being properly implemented and are functioning adequately. The Contractor shall submit one copy of each site inspection record to the Engineer.

- (d) Maintenance - The Contractor's WPC Manager shall maintain construction site BMPs identified in the WPCP to ensure the proper implementation and functioning of BMPs. If the WPC Manager or the Engineer identifies a deficiency in the deployment or functioning of an identified BMP, the WPC Manager shall begin implementing repairs or design changes within 72 hours of identification and complete as soon as possible. The correction of deficiencies shall be at no additional cost to the District.

The Contractor shall also ensure that all inspection, maintenance, repair, and sampling activities shall be performed or supervised by a WPC Manager. A WPC Manager is a person responsible for non-stormwater and stormwater visual observations.

29.5 Non-Stormwater Discharge or Dewatering - Dewatering activity should only be considered after other methods have been determined to be inadequate for storm drain construction by the Engineer. If groundwater will be encountered during the project activities, the dewatering activity must be covered by the General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant Threat to Water Quality (De Minimis Permit), Santa Ana Regional Water Quality Control Board Order No. R8-2015-0004. The Contractor shall comply with this Order, and notify and obtain approval from the Engineer fifteen (15) days prior to any non-stormwater discharging of groundwater dewatering. If an emergency or unforeseen dewatering activity that will discharge to Waters of the United States occurs, the Contractor shall contact the Engineer immediately.

When discharging groundwater from dewatering activities to surface waters, the Contractor shall comply with and implement the Monitoring and Reporting Program required under Order No. R8-2015-0004. This Order can be downloaded from http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2015_orders.shtml. Under the Monitoring and Reporting Program, the Contractor shall prepare the monitoring report in accordance with Attachment E of the Order. The Contractor must submit the Monitoring Reports to the Engineer by the 15th day of each month following the monitoring period. The District will submit the Monitoring Reports to the Santa Ana Regional Water Quality Control Board. The Monitoring Reports shall cover the previous month's monitoring activities.

If there is any other form of non-stormwater discharge from the project to surface waters, the Contractor shall immediately contact the Engineer to determine appropriate actions required for coverage under the De Minimus Permit.

Failure of the Contractor to fully comply with this requirement may result in the suspension of construction operations and liability for any associated monitoring, fines, penalties and remediation activities related to the discharge.

29.6 Reports -

Weekly Report - The Contractor shall prepare and submit to the Engineer a Weekly Report included in the WPCP within five (5) working days of the end of the month including:

1. All visual site inspection, non-stormwater and discharge reports;
2. All sampling and analysis reports; and
3. Summary of WPCP amendments.

29.7 Payment - The contract lump sum price paid for Stormwater and Non-Stormwater Pollution Control work shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all the work involved in developing, preparing, obtaining approval of, revising, and amending the WPCP, and installing, constructing, maintaining, removing, and disposing of BMPs as shown in the WPCP, as specified in the Caltrans Construction Site BMP Manual and these Detailed Specifications, and as directed by the Engineer.

The contract lump sum price paid for Non-Stormwater Discharge or Dewatering De Minimus Permit shall include full compensation for compliance of Section 29.5, "Non-Stormwater Discharge or Dewatering De Minimus Permit". **Contractor shall not be paid any portion of the contract lump sum if coverage under the De Minimus Permit is not required.**

Monthly payment will be made on a basis of the percentage of work completed on the entire project and subject to the submittal of a complete Weekly Report as specified in Section 29.6. Failure to complete or report required visual inspections, monitoring, and/or other necessary follow-up actions to ensure that the project stays in compliance with the WPCP can be the basis for reducing monthly progress payments for the project. Monthly progress payments will be reduced by the amount of direct costs, overhead costs and engineering costs incurred by the Engineer to address compliance deficiencies, including costs to conduct inspections, monitoring, reporting and supplemental BMP implementation necessary to comply with the WPCP and costs incurred by the Engineer to address complaints, additional State inspections and violations and/or fines issued by the State or USEPA associated with failure to properly comply with the WPCP. Progress payment reductions can exceed the monthly percentage or total contract lump sum price for Stormwater and Non-Stormwater Pollution Control work.

Payment will be made on a basis of the percentage of work completed on the entire project.

SECTION 30 AND SECTION 31 - NOT USED

SECTION 32 - SLIDE GATE AND APPURTENANCES

32.1 Description - The contract item Slide Gate shall include furnishing and installing the following items: Slide Gate, Gate Frame, Gate Stem, Stem Guide, 30-inch Diameter Removable Manual Handwheel, and all other appurtenant items necessary for installation of the Slide Gate.

32.2 General Requirements - The equipment provided under this section shall be fabricated, assembled, erected, and placed in proper operating condition in full conformity with the plans, specifications, engineering data, instructions, and recommendations of the equipment manufacturer unless exceptions are noted by the Engineer.

Gates and operators shall be supplied with all the necessary parts and accessories indicated on the plans, specified or otherwise required for a complete and properly operating installation, and shall be the latest standard product of a manufacturer regularly engaged in the production of cast iron water control gates.

To ensure compatibility of all components directly related to the Slide Gate, supply of the Slide Gate accessories as described in this section shall be the responsibility of the Slide Gate manufacturer unless specified otherwise.

The Slide Gate and gate stem shall be fully compatible with the District supplied Watch Technologies WT-300 Gate Actuator.

32.3 Submittals - Submittals shall include the following:

1. Shop Drawings;
2. Manufacturer's operation and maintenance manuals and information;
3. Manufacturer's certificate of compliance with the shop drawings and specifications;
4. Manufacturer's equipment warranty;
5. Manufacturer's performance affidavit; and
6. Design calculations demonstrating lift loads and deflection in conformance to the application requirements listed in the Application Requirements table below. Design calculations shall be signed by a licensed engineer.

Application Requirements

Maximum Head (ft)	Unguided Stem Length (ft)	Maximum Continuous Torque (ft-lbs)	Maximum Breakaway Torque (ft-lbs)	Operating Thrust (lbs)	Breakway Thrust (lbs)
36.6	10	192.5	337	7,500	11,250

32.4 Quality Assurance - The slide gate, frame, stem, guides, and associated appurtenances shall be Waterman Heavy Duty Series Cast Iron Slide Gate or equivalent approved by the District and shall conform to the specifications outlined herein. Requests for alternates must be supplemented in a submittal with detailed drawings, specifications, and references. Any costs for engineering structure modifications or other changes associated with utilizing the proposed alternative shall be borne by the Contractor.

To ensure quality and consistency, the Slide Gate listed in this section shall be manufactured and assembled in a facility owned and operated by the slide gate manufacturer. Machining, testing, and performance verification of the slide gate shall be in a U.S. facility. The District, if desired, may elect to verify/view the manufacturing and testing process at the facility. Third-party manufacturers contracted for fabrication and assembly of the slide gates will not be permitted.

32.5 Slide Gate - The contract item Slide Gate shall be non-self-contained with gate frame, gate stem, stem guides, and operator, in accordance with the requirements of these specifications.

The Slide Gate shall be compliant with the latest version of AWWA C560. The configuration requirements are noted on the Slide Gate Schedule below:

Components and Materials

Component	Materials
Slide Gate and Gate Frame	Cast Iron ASTM A126 Class B
Gate Stem	Stainless Steel ASTM A276 AISI Type 304
Stem Guide	Stainless Steel ASTM A276 AISI Type 304 with UHMW Bushings
Assembly Hardware	Stainless Steel ASTM A276 AISI Type 304
Finish	Mill finish on all stainless steel surfaces Polyamide epoxy paint system for cast iron

Slide Gate Schedule

Gate Size (inch)	Gate Type and Mounting	Opening Direction	Minimum Design Head (feet)		Operating Type
			Seating	Unseating	
30 x 30	Square, Wall Thimble Type F, Non-self-contained	Upward	37	10	Automatic and Manual

32.5.1 Slide Gate Frame - The frame shall be one-piece cast construction.

32.5.2 Gate Stem and Stem Guide -

- A. The gate stem shall be 2-inch diameter.
- B. Stem threads shall be compatible with the District's WT-300 Gate Actuator.

- C. Nominal diameter of the stem shall not be less than the crest of the threaded portion.
- D. Two-piece stem guides shall be adjustable in two directions and shall be so constructed that, when properly spaced, they will hold the stem in alignment and still allow enough play to permit operation per AWWA C560.
- E. Stem guides shall be located at stem guide channel anchor locations as shown on the plans (10 foot maximum spacing). The unsupported stem length/radius of gyration (l/r) shall not exceed 200.

32.5.3 Slide Gate (Cover) -

- A. The slide gate cover shall be designed for the design head indicated in the Slide Gate Schedule table above with a minimum safety factor of five (5) with regard to ultimate tensile, compressive, and shear strength.
- B. The slide gate shall be of one piece cast construction.
- C. A thrust nut shall be provided to attach the slide gate to the stem. The nut shall be threaded and provided with keys and/or two set screws locked into indents in the stem to prevent rotation of the stem.

32.5.4 Painting - All cast iron parts shall be painted in accordance with the Components and Materials table.

32.6 Shop Testing -

- A. The completely assembled gate and hoist shall be separately shop-operated to ensure proper assembly and operation.
- B. All gates and equipment shall be inspected and approved by a qualified shop inspector prior to shipment. A certificate of compliance shall be submitted by the manufacturer in accordance with Section 32.3.

32.7 Installation -

- A. Installation of the Slide Gate shall be performed in accordance with manufacturer's recommendations and standard industry practices. It shall be the responsibility of the Contractor to handle, store, and install the equipment specified in this section in strict accordance with the manufacturer's recommendations.
- B. The Contractor shall review the installation shop drawings and installation instructions prior to installing the slide gate.
- C. The slide gate frame shall be installed square with no twist, convergence, or divergence between the longitudinal legs of the frame.
- D. The Contractor shall fill any void between the frames and the structure with cementitious grout.

32.8 Field Testing - After installation, the Slide Gate will be field tested in the presence of the Engineer and DSOD Inspector to ensure that all items of equipment are in full compliance with this section. If the operation of the gate is not acceptable to the Engineer or DSOD, corrections will be required at the cost of the Contractor.

32.9 Measurement - Measurement for payment for the contract item Slide Gate will be on a lump sum basis for the work as specified.

32.10 Payment - The contract price paid for Slide Gate shall include full compensation for all costs incurred under this section.

SECTION 33 - WATERSTOPS

33.1 Description - This section covers the contract items PVC Waterstop; and Expandable Waterstop.

33.2 PVC Waterstop - The contract item PVC Waterstop includes furnishing and installing such materials to be embedded in concrete as shown on the plans. PVC Waterstops shall span construction and/or expansion joints to create a continuous diaphragm to prevent water migration. PVC Waterstops shall be SIKA Greenstreak PVC Waterstop or approved equivalent conforming to Section 33.3.

Width (W) of the PVC waterstop shall be six (6) inches. Thickness of the PVC waterstop shall be one-eighth (1/8) inch. The distance from the outside edge of the closest reinforcement bar to the outside edge of the waterstop shall not be less than two (2) inches.

All waterstops shall be stored underneath a tarp to protect from oil, dirt, and sunlight.

33.3 PVC Waterstop Materials - The PVC waterstop shall be extruded from an elastomeric plastic material of which the basin resin is prime virgin polyvinyl chloride. The PVC compound shall not contain any scrapped or reclaimed material or pigment.

Performance requirements are as follows:

Property	Test Method	Required Limits
Water Absorption	ASTM D 470	0.15% max.
Tear Resistance	ASTM D 624	300 lb/in min.
Ultimate Elongation	ASTM D 638	350% min.
Tensile Strength	ASTM D 638	2000 psi min.
Low Temperature Brittleness	ASTM D 746	Passes @ -35 degrees Fahrenheit
Stiffness in Flexure	ASTM D 747	1000 psi min.
Specific Gravity	ASTM D 792	1.38 max.
Hardness (Shore A)	ASTM D2240	79 +/- 3
Tensile Strength after Accelerated Extraction	CRD-C 572	1600 PSI min.

Elongation after Accelerated Extraction	CRD-C 472	300% min.
Effect of Alkalies after seven (7) days: Weight Change Hardness Change	CRD-C 572	Between -0.10% to +0.25% +/- 5 points

Note: CRD refers to U.S. Army Corps of Engineers test method.

33.4 PVC Waterstop Submittals - Within ten (10) days of award, the Contractor shall submit the manufacturer's product data sheet, installation instructions for PVC Waterstop, and representative PVC Waterstop samples to the Engineer for approval.

33.5 PVC Waterstop Installation Requirements - PVC Waterstops shall be installed per manufacturer's installation instructions. In case of conflict between the below requirements and manufacturer's installation instructions, the manufacturer's installations instructions shall govern.

- a. Provide manufacturer supplied waterstop fabrications for all changes of direction, intersections, and transitions leaving only straight butt joint splices for the field.
- b. Provide grommets, pre-punched holes, or hog rings spaced at 12 inches on center at the outermost edges, or ribs, along the length of the waterstop.
- c. Lapping of waterstop and use of adhesives or solvents shall not be allowed.
- d. Center waterstop in joint and secure waterstop in correct position using grommets, pre-punched holes, or hog rings at 12 inches on center at the outermost edges, or ribs, along the length of the waterstop and wire tie to adjacent reinforcing steel.

33.6 Expandable Waterstop - The contract item Expandable Waterstop includes furnishing and installing such material around the proposed outlet pipe as shown on the plans. The expandable waterstop shall create a watertight seal around the outside of the proposed 30" RCP and the concrete intake structure wall. Expandable Waterstop shall be a SIKA Hydrotite hydrophilic rubber waterstop (DSS-0420) or approved equivalent conforming to Section 33.7.

Expandable waterstops shall be 0.16 inch (4mm) thick and 0.79 inch (20mm) wide.

All expandable waterstops shall be stored underneath a tarp to protect from oil, dirt, sunlight, and premature exposure to water.

33.7 Expandable Waterstop Materials - The expandable waterstop shall consist of a combination of chloroprene rubber and chloroprene rubber modified to impart hydrophilic properties. The expandable waterstop shall have a delay coating to inhibit initial expansion due to moisture present in fresh concrete. Performance requirements are as follows:

Chloroprene Rubber

Property	Test Method	Required Limits
Tensile Strength	ASTM D412	1300 PSI min.
Ultimate Elongation	ASTM D412	400% min.
Hardness (Shore A)	ASTM D2240	50 +/- 5
Tear Resistance	ASTM D624	100 lb/inch min.

Modified Chloroprene (Hydrophilic) Rubber

Property	Test Method	Required Limits
Tensile Strength	ASTM D412	350 PSI min.
Ultimate Elongation	ASTM D412	600% min.
Hardness (Shore A)	ASTM D2240	52 +/- 5
Tear Resistance	ASTM D624	50 lb/inch
Expansion Ratio	Volumetric Change - Distilled Water @ 70° F	3 to 1 min.

33.8 Expandable Waterstop Submittals - With ten (10) days of award, the Contractor shall submit the manufacturer's product data sheet, installation instructions, and representative waterstop samples to the Engineer for approval.

33.9 Expandable Waterstop Installation - Expandable Waterstops shall be installed per manufacturer's installation instructions. In case of conflict between the below requirements and manufacturer's installation instructions, the manufacturer's installations instructions shall govern.

Cut coil ends square (or at proper angle for mitered corners) with shears or sharp blade to fit splices together without overlaps. Splices shall be sealed using cyanoacrylate adhesive. Seal any exposed open ends of waterstop.

Place three (3) waterstop bands around the pipe within the intake structure back wall section spaced four (4) inches apart.

Utilize manufacturer recommended adhesives to secure the waterstop to concrete.

33.10 Measurement - Measurement for payment for the contract items PVC Waterstop; and Expandable Waterstop shall be the number of lineal feet of the material installed as specified measured along the centerline of the waterstop parallel to the ground.

33.11 Payment - The contract prices paid for PVC Waterstop; and Expandable Waterstop shall include full compensation for all costs incurred under this section.

SECTION 34 - PLASTIC PIPE

34.1 Description - This section covers the contract item 6-Inch PVC Pipe.

34.2 General Pipe Requirements - PVC pipe and fittings shall be Schedule 80. Pipe materials, manufacturer, and quality, shall conform to ASTM D 1784, ASTM D 1785, and ASTM D 2466. The Engineer shall be furnished a "Certificate of Compliance" signed by the manufacturer of the pipe certifying that the pipe conforms to the ASTM requirements. All pipe and pipe material supplied by the Contractor shall be new.

34.3 6-Inch PVC Pipe - The contract item 6-Inch PVC Pipe covers the furnishing and installation of the 6-Inch PVC Pipe, fittings, and all associated appurtenances. Materials shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 12454 as identified in ASTM D 1784.

PVC Schedule 80 pipe shall conform to ASTM D 1785. Injection molded PVC Schedule 80 fittings shall conform to ASTM D 2466. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer.

34.4 Installation - Installation shall comply with the manufacturer's installation instructions. Buried pipe shall be installed in accordance with ASTM F 1668. Solvent cement joints shall be made in a two-step process with primer manufactured for thermoplastic piping systems and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire-stopping materials, thread sealant, plastized-vinyl products, or other aggressive chemical agents not compatible with PVC compounds.

34.5 Measurement - Measurement for payment of the contract item 6-Inch PVC Pipe will be the number of lineal feet installed as specified and measured along the centerline of the pipe in place. No measurement will be made for the fittings or joint sealing compound.

34.6 Payment - The contract price paid for 6-Inch PVC Pipe shall include full compensation for all costs incurred under this section. No separate payment will be paid for fittings or joint sealing compound used in the construction.

APPENDIX "A"

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT

RULE 403

(Adopted May 7, 1976) (Amended November 6, 1992)
(Amended July 9, 1993) (Amended February 14, 1997)
(Amended December 11, 1998)(Amended April 2, 2004)
(Amended June 3, 2005)

RULE 403. FUGITIVE DUST

(a) Purpose

The purpose of this Rule is to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (man-made) fugitive dust sources by requiring actions to prevent, reduce or mitigate fugitive dust emissions.

(b) Applicability

The provisions of this Rule shall apply to any activity or man-made condition capable of generating fugitive dust.

(c) Definitions

- (1) ACTIVE OPERATIONS means any source capable of generating fugitive dust, including, but not limited to, earth-moving activities, construction/demolition activities, disturbed surface area, or heavy- and light-duty vehicular movement.
- (2) AGGREGATE-RELATED PLANTS are defined as facilities that produce and / or mix sand and gravel and crushed stone.
- (3) AGRICULTURAL HANDBOOK means the region-specific guidance document that has been approved by the Governing Board or hereafter approved by the Executive Officer and the U.S. EPA. For the South Coast Air Basin, the Board-approved region-specific guidance document is the Rule 403 Agricultural Handbook dated December 1998. For the Coachella Valley, the Board-approved region-specific guidance document is the Rule 403 Coachella Valley Agricultural Handbook dated April 2, 2004.
- (4) ANEMOMETERS are devices used to measure wind speed and direction in accordance with the performance standards, and maintenance and calibration criteria as contained in the most recent Rule 403 Implementation Handbook.
- (5) BEST AVAILABLE CONTROL MEASURES means fugitive dust control actions that are set forth in Table 1 of this Rule.

- (6) BULK MATERIAL is sand, gravel, soil, aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.
- (7) CEMENT MANUFACTURING FACILITY is any facility that has a cement kiln at the facility.
- (8) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant which must not be used if prohibited for use by the Regional Water Quality Control Boards, the California Air Resources Board, the U.S. Environmental Protection Agency (U.S. EPA), or any applicable law, rule or regulation. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local water agency. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface.
- (9) COMMERCIAL POULTRY RANCH means any building, structure, enclosure, or premises where more than 100 fowl are kept or maintained for the primary purpose of producing eggs or meat for sale or other distribution.
- (10) CONFINED ANIMAL FACILITY means a source or group of sources of air pollution at an agricultural source for the raising of 3,360 or more fowl or 50 or more animals, including but not limited to, any structure, building, installation, farm, corral, coop, feed storage area, milking parlor, or system for the collection, storage, or distribution of solid and liquid manure; if domesticated animals, including horses, sheep, goats, swine, beef cattle, rabbits, chickens, turkeys, or ducks are corralled, penned, or otherwise caused to remain in restricted areas for commercial agricultural purposes and feeding is by means other than grazing.
- (11) CONSTRUCTION/DEMOLITION ACTIVITIES means any on-site mechanical activities conducted in preparation of, or related to, the building, alteration, rehabilitation, demolition or improvement of property, including, but not limited to the following activities: grading, excavation, loading, crushing, cutting, planing, shaping or ground breaking.
- (12) CONTRACTOR means any person who has a contractual arrangement to conduct an active operation for another person.
- (13) DAIRY FARM is an operation on a property, or set of properties that are contiguous or separated only by a public right-of-way, that raises cows or

produces milk from cows for the purpose of making a profit or for a livelihood. Heifer and calf farms are dairy farms.

- (14) DISTURBED SURFACE AREA means a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for emission of fugitive dust. This definition excludes those areas which have:
 - (A) been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;
 - (B) been paved or otherwise covered by a permanent structure; or
 - (C) sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.
- (15) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.
- (16) EARTH-MOVING ACTIVITIES means the use of any equipment for any activity where soil is being moved or uncovered, and shall include, but not be limited to the following: grading, earth cutting and filling operations, loading or unloading of dirt or bulk materials, adding to or removing from open storage piles of bulk materials, landfill operations, weed abatement through disking, and soil mulching.
- (17) DUST CONTROL SUPERVISOR means a person with the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule 403 requirements at an active operation.
- (18) FUGITIVE DUST means any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of the activities of any person.
- (19) HIGH WIND CONDITIONS means that instantaneous wind speeds exceed 25 miles per hour.
- (20) INACTIVE DISTURBED SURFACE AREA means any disturbed surface area upon which active operations have not occurred or are not expected to occur for a period of 20 consecutive days.
- (21) LARGE OPERATIONS means any active operations on property which contains 50 or more acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of 3,850 cubic

meters (5,000 cubic yards) or more three times during the most recent 365-day period.

- (22) OPEN STORAGE PILE is any accumulation of bulk material, which is not fully enclosed, covered or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 or more square feet.
- (23) PARTICULATE MATTER means any material, except uncombined water, which exists in a finely divided form as a liquid or solid at standard conditions.
- (24) PAVED ROAD means a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.
- (25) PM₁₀ means particulate matter with an aerodynamic diameter smaller than or equal to 10 microns as measured by the applicable State and Federal reference test methods.
- (26) PROPERTY LINE means the boundaries of an area in which either a person causing the emission or a person allowing the emission has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.
- (27) RULE 403 IMPLEMENTATION HANDBOOK means a guidance document that has been approved by the Governing Board on April 2, 2004 or hereafter approved by the Executive Officer and the U.S. EPA.
- (28) SERVICE ROADS are paved or unpaved roads that are used by one or more public agencies for inspection or maintenance of infrastructure and which are not typically used for construction-related activity.
- (29) SIMULTANEOUS SAMPLING means the operation of two PM₁₀ samplers in such a manner that one sampler is started within five minutes of the other, and each sampler is operated for a consecutive period which must be not less than 290 minutes and not more than 310 minutes.
- (30) SOUTH COAST AIR BASIN means the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange

County as defined in California Code of Regulations, Title 17, Section 60104. The area is bounded on the west by the Pacific Ocean, on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains, and on the south by the San Diego county line.

- (31) STABILIZED SURFACE means any previously disturbed surface area or open storage pile which, through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind-driven fugitive dust and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the Rule 403 Implementation Handbook.
- (32) TRACK-OUT means any bulk material that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that have been released onto a paved road and can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
- (33) TYPICAL ROADWAY MATERIALS means concrete, asphaltic concrete, recycled asphalt, asphalt, or any other material of equivalent performance as determined by the Executive Officer, and the U.S. EPA.
- (34) UNPAVED ROADS means any unsealed or unpaved roads, equipment paths, or travel ways that are not covered by typical roadway materials. Public unpaved roads are any unpaved roadway owned by federal, state, county, municipal or other governmental or quasi-governmental agencies. Private unpaved roads are all other unpaved roadways not defined as public.
- (35) VISIBLE ROADWAY DUST means any sand, soil, dirt, or other solid particulate matter which is visible upon paved road surfaces and which can be removed by a vacuum sweeper or a broom sweeper under normal operating conditions.
- (36) WIND-DRIVEN FUGITIVE DUST means visible emissions from any disturbed surface area which is generated by wind action alone.
- (37) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.
- (d) Requirements
 - (1) No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that:

- (A) the dust remains visible in the atmosphere beyond the property line of the emission source; or
 - (B) the dust emission exceeds 20 percent opacity (as determined by the appropriate test method included in the Rule 403 Implementation Handbook), if the dust emission is the result of movement of a motorized vehicle.
- (2) No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of this Rule to minimize fugitive dust emissions from each fugitive dust source type within the active operation.
- (3) No person shall cause or allow PM₁₀ levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other U.S. EPA-approved equivalent method for PM₁₀ monitoring. If sampling is conducted, samplers shall be:
 - (A) Operated, maintained, and calibrated in accordance with 40 Code of Federal Regulations (CFR), Part 50, Appendix J, or appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM₁₀.
 - (B) Reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.
- (4) No person shall allow track-out to extend 25 feet or more in cumulative length from the point of origin from an active operation. Notwithstanding the preceding, all track-out from an active operation shall be removed at the conclusion of each workday or evening shift.
- (5) No person shall conduct an active operation with a disturbed surface area of five or more acres, or with a daily import or export of 100 cubic yards or more of bulk material without utilizing at least one of the measures listed in subparagraphs (d)(5)(A) through (d)(5)(E) at each vehicle egress from the site to a paved public road.
 - (A) Install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.

- (B) Pave the surface extending at least 100 feet and at least 20 feet wide.
 - (C) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipe, or grates) at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (D) Install and utilize a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the site.
 - (E) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the actions specified in subparagraphs (d)(5)(A) through (d)(5)(D).
- (6) Beginning January 1, 2006, any person who operates or authorizes the operation of a confined animal facility subject to this Rule shall implement the applicable conservation management practices specified in Table 4 of this Rule.
- (e) Additional Requirements for Large Operations
- (1) Any person who conducts or authorizes the conducting of a large operation subject to this Rule shall implement the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards can not be met through use of Table 2 actions; and shall:
 - (A) submit a fully executed Large Operation Notification (Form 403 N) to the Executive Officer within 7 days of qualifying as a large operation;
 - (B) include, as part of the notification, the name(s), address(es), and phone number(s) of the person(s) responsible for the submittal, and a description of the operation(s), including a map depicting the location of the site;
 - (C) maintain daily records to document the specific dust control actions taken, maintain such records for a period of not less than three years; and make such records available to the Executive Officer upon request;

- (D) install and maintain project signage with project contact signage that meets the minimum standards of the Rule 403 Implementation Handbook, prior to initiating any earthmoving activities;
 - (E) identify a dust control supervisor that:
 - (i) is employed by or contracted with the property owner or developer;
 - (ii) is on the site or available on-site within 30 minutes during working hours;
 - (iii) has the authority to expeditiously employ sufficient dust mitigation measures to ensure compliance with all Rule requirements;
 - (iv) has completed the AQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and
 - (F) notify the Executive Officer in writing within 30 days after the site no longer qualifies as a large operation as defined by paragraph (c)(18).
- (2) Any Large Operation Notification submitted to the Executive Officer or AQMD-approved dust control plan shall be valid for a period of one year from the date of written acceptance by the Executive Officer. Any Large Operation Notification accepted pursuant to paragraph (e)(1), excluding those submitted by aggregate-related plants and cement manufacturing facilities must be resubmitted annually by the person who conducts or authorizes the conducting of a large operation, at least 30 days prior to the expiration date, or the submittal shall no longer be valid as of the expiration date. If all fugitive dust sources and corresponding control measures or special circumstances remain identical to those identified in the previously accepted submittal or in an AQMD-approved dust control plan, the resubmittal may be a simple statement of no-change (Form 403NC).

(f) Compliance Schedule

The newly amended provisions of this Rule shall become effective upon adoption. Pursuant to subdivision (e), any existing site that qualifies as a large operation will have 60 days from the date of Rule adoption to comply with the notification and recordkeeping requirements for large operations. Any Large Operation

Notification or AQMD-approved dust control plan which has been accepted prior to the date of adoption of these amendments shall remain in effect and the Large Operation Notification or AQMD-approved dust control plan annual resubmittal date shall be one year from adoption of this Rule amendment.

(g) Exemptions

(1) The provisions of this Rule shall not apply to:

- (A) Dairy farms.
- (B) Confined animal facilities provided that the combined disturbed surface area within one continuous property line is one acre or less.
- (C) Agricultural vegetative crop operations provided that the combined disturbed surface area within one continuous property line and not separated by a paved public road is 10 acres or less.
- (D) Agricultural vegetative crop operations within the South Coast Air Basin, whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Agricultural Handbook;
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.
- (E) Agricultural vegetative crop operations outside the South Coast Air Basin whose combined disturbed surface area includes more than 10 acres provided that the person responsible for such operations:
 - (i) voluntarily implements the conservation management practices contained in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (ii) completes and maintains the self-monitoring form documenting sufficient conservation management practices, as described in the Rule 403 Coachella Valley Agricultural Handbook; and
 - (iii) makes the completed self-monitoring form available to the Executive Officer upon request.

- (F) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency.
- (G) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water and sewer during periods of service outages and emergency disruptions.
- (H) Any contractor subsequent to the time the contract ends, provided that such contractor implemented the required control measures during the contractual period.
- (I) Any grading contractor, for a phase of active operations, subsequent to the contractual completion of that phase of earth-moving activities, provided that the required control measures have been implemented during the entire phase of earth-moving activities, through and including five days after the final grading inspection.
- (J) Weed abatement operations ordered by a county agricultural commissioner or any state, county, or municipal fire department, provided that:
 - (i) mowing, cutting or other similar process is used which maintains weed stubble at least three inches above the soil; and
 - (ii) any discing or similar operation which cuts into and disturbs the soil, where watering is used prior to initiation of these activities, and a determination is made by the agency issuing the weed abatement order that, due to fire hazard conditions, rocks, or other physical obstructions, it is not practical to meet the conditions specified in clause (g)(1)(H)(i). The provisions this clause shall not exempt the owner of any property from stabilizing, in accordance with paragraph (d)(2), disturbed surface areas which have been created as a result of the weed abatement actions.
- (K) sandblasting operations.
- (2) The provisions of paragraphs (d)(1) and (d)(3) shall not apply:
 - (A) When wind gusts exceed 25 miles per hour, provided that:

- (i) The required Table 3 contingency measures in this Rule are implemented for each applicable fugitive dust source type, and;
 - (ii) records are maintained in accordance with subparagraph (e)(1)(C).
 - (B) To unpaved roads, provided such roads:
 - (i) are used solely for the maintenance of wind-generating equipment; or
 - (ii) are unpaved public alleys as defined in Rule 1186; or
 - (iii) are service roads that meet all of the following criteria:
 - (a) are less than 50 feet in width at all points along the road;
 - (b) are within 25 feet of the property line; and
 - (c) have a traffic volume less than 20 vehicle-trips per day.
 - (C) To any active operation, open storage pile, or disturbed surface area for which necessary fugitive dust preventive or mitigative actions are in conflict with the federal Endangered Species Act, as determined in writing by the State or federal agency responsible for making such determinations.
- (3) The provisions of (d)(2) shall not apply to any aggregate-related plant or cement manufacturing facility that implements the applicable actions specified in Table 2 of this Rule at all times and shall implement the applicable actions specified in Table 3 of this Rule when the applicable performance standards of paragraphs (d)(1) and (d)(3) can not be met through use of Table 2 actions.
 - (4) The provisions of paragraphs (d)(1), (d)(2), and (d)(3) shall not apply to:
 - (A) Blasting operations which have been permitted by the California Division of Industrial Safety; and
 - (B) Motion picture, television, and video production activities when dust emissions are required for visual effects. In order to obtain this exemption, the Executive Officer must receive notification in writing at least 72 hours in advance of any such activity and no nuisance results from such activity.
 - (5) The provisions of paragraph (d)(3) shall not apply if the dust control actions, as specified in Table 2, are implemented on a routine basis for

each applicable fugitive dust source type. To qualify for this exemption, a person must maintain records in accordance with subparagraph (e)(1)(C).

- (6) The provisions of paragraph (d)(4) shall not apply to earth coverings of public paved roadways where such coverings are approved by a local government agency for the protection of the roadway, and where such coverings are used as roadway crossings for haul vehicles provided that such roadway is closed to through traffic and visible roadway dust is removed within one day following the cessation of activities.
- (7) The provisions of subdivision (e) shall not apply to:
 - (A) officially-designated public parks and recreational areas, including national parks, national monuments, national forests, state parks, state recreational areas, and county regional parks.
 - (B) any large operation which is required to submit a dust control plan to any city or county government which has adopted a District-approved dust control ordinance.
 - (C) any large operation subject to Rule 1158, which has an approved dust control plan pursuant to Rule 1158, provided that all sources of fugitive dust are included in the Rule 1158 plan.
- (8) The provisions of subparagraph (e)(1)(A) through (e)(1)(C) shall not apply to any large operation with an AQMD-approved fugitive dust control plan provided that there is no change to the sources and controls as identified in the AQMD-approved fugitive dust control plan.

(h) Fees

Any person conducting active operations for which the Executive Officer conducts upwind/downwind monitoring for PM₁₀ pursuant to paragraph (d)(3) shall be assessed applicable Ambient Air Analysis Fees pursuant to Rule 304.1. Applicable fees shall be waived for any facility which is exempted from paragraph (d)(3) or meets the requirements of paragraph (d)(3).

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Backfilling	01-1 Stabilize backfill material when not actively handling; and	✓ Mix backfill soil with water prior to moving
	01-2 Stabilize backfill material during handling; and	✓ Dedicate water truck or high capacity hose to backfilling equipment
	01-3 Stabilize soil at completion of activity.	✓ Empty loader bucket slowly so that no dust plumes are generated ✓ Minimize drop height from loader bucket
Clearing and grubbing	02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and	✓ Maintain live perennial vegetation where possible
	02-2 Stabilize soil during clearing and grubbing activities; and	✓ Apply water in sufficient quantity to prevent generation of dust plumes
	02-3 Stabilize soil immediately after clearing and grubbing activities.	
Clearing forms	03-1 Use water spray to clear forms; or 03-2 Use sweeping and water spray to clear forms; or 03-3 Use vacuum system to clear forms.	✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements
Crushing	04-1 Stabilize surface soils prior to operation of support equipment; and 04-2 Stabilize material after crushing.	✓ Follow permit conditions for crushing equipment ✓ Pre-water material prior to loading into crusher ✓ Monitor crusher emissions opacity ✓ Apply water to crushed material to prevent dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Cut and fill	05-1 Pre-water soils prior to cut and fill activities; and	✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration
	05-2 Stabilize soil during and after cut and fill activities.	✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts
Demolition – mechanical/manual	06-1 Stabilize wind erodible surfaces to reduce dust; and	✓ Apply water in sufficient quantities to prevent the generation of visible dust plumes
	06-2 Stabilize surface soil where support equipment and vehicles will operate; and	
	06-3 Stabilize loose soil and demolition debris; and	
	06-4 Comply with AQMD Rule 1403.	
Disturbed soil	07-1 Stabilize disturbed soil throughout the construction site; and	✓ Limit vehicular traffic and disturbances on soils where possible
	07-2 Stabilize disturbed soil between structures	✓ If interior block walls are planned, install as early as possible ✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes
Earth-moving activities	08-1 Pre-apply water to depth of proposed cuts; and	✓ Grade each project phase separately, timed to coincide with construction phase
	08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and	✓ Upwind fencing can prevent material movement on site
	08-3 Stabilize soils once earth-moving activities are complete.	✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Importing/exporting of bulk materials	09-1 Stabilize material while loading to reduce fugitive dust emissions; and	✓ Use tarps or other suitable enclosures on haul trucks
	09-2 Maintain at least six inches of freeboard on haul vehicles; and	✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage
	09-3 Stabilize material while transporting to reduce fugitive dust emissions; and	✓ Comply with track-out prevention/mitigation requirements
	09-4 Stabilize material while unloading to reduce fugitive dust emissions; and	✓ Provide water while loading and unloading to reduce visible dust plumes
	09-5 Comply with Vehicle Code Section 23114.	
Landscaping	10-1 Stabilize soils, materials, slopes	✓ Apply water to materials to stabilize ✓ Maintain materials in a crusted condition ✓ Maintain effective cover over materials ✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes ✓ Hydroseed prior to rain season
Road shoulder maintenance	11-1 Apply water to unpaved shoulders prior to clearing; and	✓ Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs
	11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance.	✓ Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Screening	12-1 Pre-water material prior to screening; and 12-2 Limit fugitive dust emissions to opacity and plume length standards; and 12-3 Stabilize material immediately after screening.	✓ Dedicate water truck or high capacity hose to screening operation ✓ Drop material through the screen slowly and minimize drop height ✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point
Staging areas	13-1 Stabilize staging areas during use; and 13-2 Stabilize staging area soils at project completion.	✓ Limit size of staging area ✓ Limit vehicle speeds to 15 miles per hour ✓ Limit number and size of staging area entrances/exists
Stockpiles/ Bulk Material Handling	14-1 Stabilize stockpiled materials. 14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage.	✓ Add or remove material from the downwind portion of the storage pile ✓ Maintain storage piles to avoid steep sides or faces

TABLE 1
BEST AVAILABLE CONTROL MEASURES
(Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Traffic areas for construction activities	15-1 Stabilize all off-road traffic and parking areas; and	✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas
	15-2 Stabilize all haul routes; and	✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes
	15-3 Direct construction traffic over established haul routes.	
Trenching	16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and	✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches
	16-2 Stabilize soils at the completion of trenching activities.	soak soils via the pre-trench and resuming trenching ✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment
Truck loading	17-1 Pre-water material prior to loading; and	✓ Empty loader bucket such that no visible dust plumes are created
	17-2 Ensure that freeboard exceeds six inches (CVC 23114)	✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading
Turf Overseeding	18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and	✓ Haul waste material immediately off-site
	18-2 Cover haul vehicles prior to exiting the site.	

TABLE 1
BEST AVAILABLE CONTROL MEASURES
 (Applicable to All Construction Activity Sources)

Source Category	Control Measure	Guidance
Unpaved roads/parking lots	19-1 Stabilize soils to meet the applicable performance standards; and	✓ Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements
	19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots.	
Vacant land	20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures.	

Table 2
DUST CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving (except construction cutting and filling areas, and mining operations)	(1a) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR
	(1a-1) For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction.
Earth-moving: Construction fill areas:	(1b) Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Earth-moving: Construction cut areas and mining operations:	(1c) Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors.
Disturbed surface areas (except completed grading areas)	(2a/b) Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area.
Disturbed surface areas: Completed grading areas	(2c) Apply chemical stabilizers within five working days of grading completion; OR (2d) Take actions (3a) or (3c) specified for inactive disturbed surface areas.
Inactive disturbed surface areas	(3a) Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR (3b) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (3c) Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR (3d) Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas.

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS
Unpaved Roads	<p>(4a) Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR</p> <p>(4b) Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR</p> <p>(4c) Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.</p>
Open storage piles	<p>(5a) Apply chemical stabilizers; OR</p> <p>(5b) Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR</p> <p>(5c) Install temporary coverings; OR</p> <p>(5d) Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities.</p>
All Categories	<p>(6a) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used.</p>

TABLE 3
CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS

FUGITIVE DUST SOURCE CATEGORY	CONTROL MEASURES
Earth-moving	(1A) Cease all active operations; OR (2A) Apply water to soil not more than 15 minutes prior to moving such soil.
Disturbed surface areas	(0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR (1B) Apply chemical stabilizers prior to wind event; OR (2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR (3B) Take the actions specified in Table 2, Item (3c); OR (4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas.
Unpaved roads	(1C) Apply chemical stabilizers prior to wind event; OR (2C) Apply water twice per hour during active operation; OR (3C) Stop all vehicular traffic.
Open storage piles	(1D) Apply water twice per hour; OR (2D) Install temporary coverings.
Paved road track-out	(1E) Cover all haul vehicles; OR (2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
All Categories	(1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used.

Table 4
(Conservation Management Practices for Confined Animal Facilities)

SOURCE CATEGORY	CONSERVATION MANAGEMENT PRACTICES
Manure Handling (Only applicable to Commercial Poultry Ranches)	(1a) Cover manure prior to removing material off-site; AND (1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND (1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d). (1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material.
Feedstock Handling	(2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins.
Disturbed Surfaces	(3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR (3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR (3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface.
Unpaved Roads	(4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR (4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR (4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface.
Equipment Parking Areas	(5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR (5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches).

APPENDIX "B"

PROJECT SIGNS

8'-0"

1'-0"
1'-3"
1'-9"
2'-0"
8'-0"

RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT ①

WOODCREST DAM OUTLET MODIFICATION
STAGE 90 ②

TOTAL CONSTRUCTION COST: \$ * ③

FUNDED BY RIVERSIDE COUNTY FLOOD CONTROL AND
WATER CONSERVATION DISTRICT ④

START DATE: * ④ APPROX. COMPLETION DATE: *

ENGINEER:
JASON UHLEY ⑤
GENERAL MANAGER-CHIEF ENGINEER
RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT
RIVERSIDE, CALIFORNIA
(951) 955-1200

CONTRACTOR: *

3/4" CDX GRADE
PLYWOOD

LETTER SCHEDULE

	<u>SIZE</u>	<u>COLOR</u>
①	2"	BLACK
②	4"	ROYAL
③	3"	ROYAL
④	2"	ROYAL
⑤	2"	BLACK



NOTES:

1. MINIMUM SPACING BETWEEN LINES 1".
2. * -INFO. FURNISHED BY ENGINEER
3. ALL LETTERS FILLED AND CENTERED
4. THE STRIPES ARE GOLD AND BLACK ON WHITE BACKGROUND.

APPENDIX 'B' PROJECT SIGN

APPENDIX "C"

LOG OF SOIL BORINGS GEOTECHNICAL REPORT

NOTICE: The geotechnical report is included herein for informational purposes only. This report was not prepared for purposes of bid development. It was produced to assist the design engineer regarding overall project feasibility and to make recommendations regarding some design parameters. Contractors are encouraged to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer.