

COUNTY OF VENTURA
DEPARTMENT OF PUBLIC WORKS

SPECIFICATIONS
FOR
MATILIA DAM REMEDIAL WORKS
Ojai, California

Specification No. FC 66-4
Project No. 4150

July 16, 1965

Prepared by Bechtel Corporation
Checked by J. D. Walters
Approved by J. D. Walters
Approved by J. M. [Signature]
Chief Engineer
Approved by J. M. [Signature]
for Director of Public Works

BIDS WILL BE RECEIVED UNTIL 9:00 A.M.

August 5, 1965 IN

ROOM 308, COUNTY OFFICE BUILDING,
VENTURA, VENTURA COUNTY, CALIFORNIA

COUNTY OF VENTURA
DEPARTMENT OF PUBLIC WORKS

NOTICE OF RECEIVING BIDS

Sealed bids will be received by the undersigned in this office, Room 308, County Office Building, Ventura, California, until 9:00 A.M. on the 5th day of August, 1965, for MATILIJA DAM REMEDIAL WORKS, Ojai, California

SPECIFICATION NO. FC 66-4, which consists of removal and disposal of portions of Matilija Dam, spillway, bridge and other facilities and construction of new bridge piers and steel and timber foot bridges.

Each bid must be submitted on the Proposal and Bid Form furnished by the Department of Public Works and each bid must include all the items shown on the said Form.

The Engineer's estimate of the quantities of work includes:

1. Downstream Water Supply	Lump Sum
2. Arch Dam - Ogee Section Remove	440 c.y.
3. Arch Dam - Other than Ogee Section, Remove	2350 c.y.
4. Bridge Slab, Remove	285 l.f.
5. Bridge Side, Remove	570 L.F.
6. Bridge Piers, Remove	65 C.Y.
7. Concrete, New Piers	70 C.Y.
8. Portland cement	410 Sack
9. Pozzolan	55 Sack
10. Mechanical Work	Lump Sum
11. Structural Steel	60,000 Lbs.
12. Timber Construction	5.80 MBM
13. Outlet Valve, 36-inch Diameter	Lump Sum
14. Electrical Work	Lump Sum

The plans and specifications for this project are filed in the office of the undersigned. Prospective bidders may obtain copies of said documents, including Proposal and Bid Forms, from the Department of Public Works, 597 E. Main St., County Office Building, Ventura County, Ventura, California, upon payment of a service charge in the amount of \$5.20 each, including tax, which amount shall not be refundable. Checks shall be made payable to the County of Ventura.

Bids accompanied by a cash deposit or a certified check or a bid bond payable to Ventura County in the amount of ten percent (10%) of the total amount of said bid, must be in the hands of the Clerk of the Board of Supervisors, Room 308, County Office Building, Ventura County, Ventura, California, prior to the hour advertised for the opening of bids, and all bids will be opened at the said hour.

The Board of Supervisors reserves the right to reject any or all bids.

A tour of the job site will be conducted beginning at approximately 2:00 P.M. on August 2, 1965, for the information of all interested bidders. If transportation is desired, cars will be available leaving the office of the Department of Public Works at 597 E. Main Street, Ventura, California, at 1:30 P.M.

Notice of Receiving Bids
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All bids must be submitted in conformity with this Notice and with the instructions contained in Section 2-4 of the Standard Specifications which by this reference are made part of this Notice of Receiving Bids.

The Board of Supervisors has ascertained the prevailing rate of per diem wages in Ventura County for each craft or type of workman needed to execute the Project, and said rates are included in the specifications of this project to which reference is hereby made and the same deemed to be part of this Notice of Receiving Bids. Additional copies of the Wage Scale may be obtained from the Department of Public Works, Ventura County.

The provisions of Articles 2, 3, and 4, Division 2, Part 7, Chapter 1 of the Labor Code, State of California, are made by this reference a part of this Notice of Receiving Bids.

Dated this 16th day of
July, 1965.

ROBERT L. HAMM, County Clerk of
the County of Ventura, State of
California, and ex-Officio Clerk
of the Board of Supervisors of
Ventura County Flood Control
District.

By Lois King/df
Deputy

PREVAILING WAGE SCALES FOR THE SIX BASIC TRADES

FOR PUBLIC WORKS CONTRACTS
VENTURA COUNTY, CALIFORNIA

wage rates listed below are in accordance with terms of the Southern California Master Labor Agreement for the Construction Industry and cover the following counties: Los Angeles, Orange, Riverside, San Bernardino, Imperial, Ventura, Santa Barbara, San Luis Obispo, Kern, Inyo and Mono.

ADDITIONAL COST ITEMS: For Subsistence Allowance, Transportation and Travel Time Allowance, Apprentice Program Contributions, etc., contact the Local Union or its District Council having jurisdiction.

RIGGERS AND WELDERS FOR THE SIX BASIC TRADES: Same wage scales as crafts to which rigging and welding are incidental.

CLASSIFICATION

CARPENTERS

Health & Welfare - 18¢ per hour
 Pension - 15¢ per hour
 Vacation - 15¢ per hour
 Foreman: Receives not less than 40¢ per hour more than the hourly rate of the highest classification over which he has responsibility, except "Pneumatic Nailer."
 6/1/64
 Carpenter \$4.45
 Shingler 4.58
 Hardwood Floor Worker 4.65
 Millwright 4.65
 Saw Filer 4.53
 Table Power Saw Operator 4.55
 Pile Driver Foreman 4.98
 Pile Driver Man - Bridge or Dock Carpenter and Cable Splicer 4.58
 Pile Driver Man - Derrick Bargeman 4.58
 Head Rock Slinger 4.68
 Rock Slinger 4.48
 Rock Bargeman or Scowman 4.38
 Pneumatic Nailer 4.70

Men working from a swinging scaffold, or suspended from a rope or cable, shall receive 25¢ per hour above the applicable Journeyman or Apprentice rate.

CEMENT MASONS

Health & Welfare - 18¢ per hour
 Pension - 20¢ per hour
 Vacation - 10¢ per hour
 Foreman: When three or more Cement Masons are employed on a job, one shall be employed as a Foreman and shall receive not less than 40¢ per hour more than the highest classification over which he has leadership.
 6/1/64
 Cement Mason \$4.29
 Cement Mason chipping & patching 4.29
 Curb Form & Plank Setter, including setting of lines, stakes and grades 4.29
 Screed Setter, including screed pins 4.29
 Cement Mason (magnesite, magnesite-terrazzo and mastic composition, Epoxy, Dex-O-Tex) 4.41
 Cement Mason Floating & Troweling Machine Operator 4.54
 Curb & Gutter Machine Operator (cement only) 4.29
 Clary & Similar Type of Screed Operator 4.29
 Grinding Machine Operator 4.29
 Jackson Vibratory & Similar Type Screed Operator 4.29
 Scoring Machine Operator 4.29
 Cutting, Scoring & Sawing New Concrete 4.29
 Plugging, Filling Shear Bolt Holes 4.29
 Dry Packing Concrete, including Emcco 4.29
 Mixer-Truck Chute Man (slabs, floors and decks) 4.29
 Material Hose Man (slabs, floors and decks) 4.29
 Cement Masons on a swinging stage, bos'n's chair, or suspended scaffold, whether swinging or rigid, above or below ground, shall receive 25¢ per hour over the applicable rate.

IRON WORKERS

Health & Welfare - 15¢ per hour; 23¢ per hour 8/16/64
 Pension - 10¢ per hour; 15¢ per hour 8/16/64
 Vacation - 10¢ per hour; 15¢ per hour 8/16/64
 Foreman: Receives not less than 35¢ per hour more than the hourly rate of the highest classification over which he has supervision. When two or more Iron Workers are employed, one shall be selected by the Employer to act as Foreman.
 8/16/63 8/16/64
 Reinforcing Ironworker \$4.75 \$4.82
 Structural Ironworker 5.00 5.07
 Ornamental Ironworker 5.00 5.07
 Fence Erector 4.80 4.87

BORERS

Health & Welfare - 12½¢ per hour
 Pension - 10¢ per hour
 Foreman: Not less than 30¢ per hour more than the hourly wage rate of the classification over which he has leadership.
 5/1/64
 Laborer- General or Construction \$3.50
 Demolition Laborer, the Cleaning of Brick & Lumber 3.50
 Dry Packing of Concrete 3.50

CLASSIFICATION WAGE

Laborers , Cont'd.

Operator of Pneumatic & Electric Tools, Vibrating Machines & similar mechanical tools not separately classified herein \$3.71
 Concrete Saw Man, excluding Tractor Type Roto-Scraper 3.71
 Concrete Core Cutter 3.71
 Asphalt Raker & Ironer 3.71
 Asphalt Shovelers 3.60
 Buggymobileman 3.71
 Cement Dumper (on 1 yard or larger mixer & handling bulk cement) 3.71
 Cesspool Digger & Installer 3.68
 Chucktender 3.65
 Concrete Curer Impervious Membrane & Form Oiler 3.69
 Cribber or Shorer 3.86
 Cutting Torch Operator (Demolition) 3.55
 Driller (Core, Diamond or Wagon), Joy Driller, Model TW M-2A, Gardner-Denver Model DH 143 & similar type drills (in accordance with memorandum of understanding between Laborers and Operating Engineers dated at Miami, Florida, February 3, 1954) 3.95
 Driller, Jackhammer, 2½ foot drill steel or longer 3.79
 Pine Grader, Highway & Street Paving, Airports, Runways, & Similar type heavy construction 3.60
 Flagman 3.50
 Gas & Oil Pipeline Laborer 3.50
 Gas & Oil Pipeline Wrapper - Pot Tender & Form Man 3.71
 Gas & Oil Pipeline Wrapper - 6-inch pipe and over 3.84
 Guinea Chaser 3.58
 Laborer Packing Rod Steel & Pans 3.625
 Landscape Gardener & Nursery Man * 3.60
 Laying of all non-metallic pipe, including Sewer Pipe, Drain Pipe & Underground Tile Making & Caulking of all non-metallic Pipe Joints 3.69
 Powderman 3.86
 Riprap Stonepaver 3.69
 Rock Slinger 3.76
 Head Rock Slinger 4.02
 Sandblaster (Nozzleman) 3.95
 Sandblaster (Pot Tender) 3.69
 Scaler 3.55
 Scaler (Using Bos'n's Chair or Safety Belt or Power Tools) 3.76
 Septic Tank Digger & Installer (Lead Man) 3.65
 Steel Headerboard Man 3.925
 Tank Scaler & Cleaner 3.625
 Tarman & Mortarman 3.55
 Tree Climber, Faller, Chain Saw Operator, Pittsburgh Chipper & similar type Brush Shredder 3.71
 Underground Laborer, including Caisson Bellow Watchman 3.63
 Window Cleaner 2.84
 3.50
 *Has knowledge of plant materials and how to plant them. Lays out plant arrangements to follow landscape plan.

TUNNEL CLASSIFICATIONS (See Note)

Health & Welfare - 12½¢ per hour
 Pension - 10¢ per hour
 NOTE: Workmen on each shift receive 8 hours' pay for 7 hours' work excepting that on single shift operations (starting at 7:00, 7:30 or 8:00 a.m.) for tunnels less than 200 feet, workmen receive 8 hours' pay for 8 hours' work.
 The classification "Shifter" receives a 35¢ per hour differential over the highest Labor classification working.
 6/1/64
 Shaft and Raise miner \$4.605
 Miner - Tunnel (hand or machine) 4.355
 Timberman, Retimberman - wood or steel 4.355
 Blaster, Driller, Powderman 4.355
 Cherry Pickerman 4.355
 Nipper 4.205
 Chucktender, Cabetender 4.205
 Swamper (Brakeman and Switchman on Tunnel Work) 4.105
 Powderman - Primer House 4.355
 Bull Gang Foreman 4.355
 Bull Gang Mucker, Trackman 4.105
 Dumpman 4.105
 Steel Form Raiser & Setter 4.355
 Helper for Steel Form Raiser & Setters 4.205
 Vibratorman, Jack Hammer, Pneumatic Tools (except driller) 4.205
 Concrete Crew, includes Rodders & Spreaders 4.105
 Grout Crew 4.105
 Grout Gunman 4.305
 Kemper & other Pneumatic Concrete Placer Operator 4.355
 Watchman 5/1/64 \$2.84

CLASSIFICATION	WAGE	
TEAMSTERS (continued)	5/1/64	1/1/65
Water or Tank-Type Truck Driver - 4000 gallons and over	\$4.25	\$4.40
Fork Lift Driver	4.635	4.785
Traffic-Control Pilot Car, excluding moving heavy equipment, permit loads	3.95	4.10
Truck Greaser and Tireman	4.28	4.43
Truck Repairman	4.915	5.065
Truck Repairman Helper	4.185	4.335
Warehouseman and Teamster	3.87	4.02
Warehouseman-Clerk	4.01	4.16
A-Frame or Swedish Crane Driver	4.635	4.785
Driver of Euclid-Type Spreader Truck, less than 25 yards water level (over 25 yards water level, use Dump Truck Classification)	4.52	4.67
DW 10 and DW 20 Euclid-type Equipment, LeTourneau Pulls, Terra Cobras and similar type trucks when performing work within the Teamster jurisdiction, regardless of types of attachments	4.915	5.065
Winch Truck Driver -12½¢ per hour additional when operating power winch, or similar special attachments.		

SUB-TRADES AFFILIATED WITH VENTURA BUILDING AND CONSTRUCTION TRADES COUNCIL

Additional Cost Items: For subsistence allowances, transportation and travel time allowances, apprentice program contributions, etc., contact the local union or its district council having jurisdiction.

Riggers & Welders: Same wage scales as crafts to which they are incidental.

TRADE	HOURLY WAGE RATE(per hour)	HEALTH AND WELFARE (Per hr)	PENSION	VACATION
Asbestos mechanic	5.25	21¢	20¢	30¢
Boilermaker	5.00	10¢	10¢	10¢
Bricklayer	4.88	27¢		
Carpet & Linoleum Layer	4.35	11¢	15¢	+
Dry Wall Applicator				
Foreman	5.105	18¢	15¢	15¢
Journeyman	4.605	2-½¢ e	10¢	15¢
Electrician				
General Foreman	6.66		1%	
Foreman	6.10		1%	
Journeyman Wireman	5.55		1%	
Cable Splicer	6.10		1%	
Glazier	4.51	12¢	10¢	+
Hod Carrier, brick	3.80	12-½¢	10¢	12-½¢
Hod Carrier, plaster	4.465	12-½¢		25¢
Housemover				
Housemover Foreman	4.255	12-½¢	10¢	
Housemover Journeyman	3.995	12-½¢	10¢	
Yardmaintenance man	3.995	12-½¢	10¢	
Lather Foreman	4.995	15¢	15¢ a	25¢
Lather Journeyman	4.44	15¢	15¢ a	35¢
Marble setter	4.695	12¢		
Painter, brush	4.50	15¢	2-½¢ d	10¢
Painter, spray	5.00	15¢	2-½¢ d	10¢
Painter, steel	4.75	15¢	2-½¢ d	10¢
Pipe Trades				
Plumber & Steamfitter				
General Foreman - 20% above gross journeyman				
Plumber & Steamfitter Foreman - 10% above gross journeyman				
Plumber	5.20	5-½%	6%	8.5%
Steamfitter	5.20	5-½%	6%	8.5%
Lead Burner	5.20	5-½%	6%	8.5%
Plasterer Foreman	5.22	20¢ c		25¢
Plasterer	4.64			
Roofer				
Foreman	4.91	15¢		
Sub-foreman	4.71			
Journeyman	4.56			
Sheet Metal				
Foreman - 10% above Journeyman				
Sheet Metal Worker	4.86	16¢	13¢	25¢
Residential Heating Installer	4.86	16¢	13¢	25¢
Tilesetter	4.925	14-½¢	12-½¢	Tr.Prom-5¢
Tilesetter helper	3.97	14-½¢	5¢	(App.Train.-2¢ 8¢)

- a- Trade promotion and pension
- b- Employer contributes 8.5% of gross payroll to a trust fund to be used for paid vacations and paid holidays, apprentice training and trade promotion.
- c- Health, Welfare and Trade Promotion.
- d- Administration fund
- e- Training Fund
- f- Pension 10¢

PROPOSAL AND BID FORM
Specification No. FC 66-4

Board of Supervisors
Ventura County Flood Control District
Ventura, California

Pursuant to your advertisement for bids for MATILIJA DAM REMEDIAL WORK
Ojai, California
Specification No. FC 66-4, the undersigned proposes to furnish all labor, machinery, tools, apparatus, materials and necessary appurtenances to do the work in the manner and time prescribed and in strict accordance with the plans, specifications and contract documents on file in the office of the County Clerk for the unit or lump sum price or prices shown in this bid.

The undersigned has read and agrees to conform to the Bidding Requirements, Conditions and Instructions contained in Part I, Section 2, of the Standard Specifications for the project for which this Proposal and Bid Form is submitted. The undersigned has inspected the site of the project and examined carefully the plans, specifications and included documents and acknowledges their sufficiency.

If awarded the contract, the undersigned will complete to the satisfaction of the Engineer and the Board of Supervisors of Ventura County, (1) the complete remodeling operations and installation of the new outlet valve by November 15, 1965, and (2) all other work involved in the contract by March 30, 1966. Written Notice to Proceed will be issued as soon as practicable after award and processing of the contract. The undersigned will commence work at the project site within ten (10) days after receipt of the Notice to Proceed, unless otherwise specifically directed by the Engineer.

It is understood that liquidated damages in the amount of one thousand dollars (\$1,000.00) will be assessed for failure to complete removal operations and installation of a new 36-inch diameter outlet valve, for each and every calendar day or fraction thereof that such completion is delayed beyond November 15, 1965.

It is also understood that liquidated damages in the amount of two hundred dollars (\$200.00) will be assessed for failure to complete all work under the contract for each and every calendar day or fraction thereof that such completion is delayed beyond March 30, 1966.

If awarded the contract, the undersigned will furnish and pay for the Faithful Performance Bond and Payment Bond, and will comply with the Standard Specifications relative to obtaining said bonds.

The total amount shown on this bid form is based on the estimated quantities. It is understood and agreed that these quantities are approximate and for bidding purposes only, that payment for unit items will be based on final quantities as calculated in accordance with the specifications and that final payment for lump sum items will be in accordance with the lump sum bid price or prices.

The undersigned, as bidder, declares that the only person or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with

ITEM	APPROX. QUANT.	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL
1	Lump Sum	Downstream Water Supply, for the lump sum price of _____ Dollars and _____ Cents	L.S.	
2	440 C.Y.	Arch Dam - Ogee Section Remove, for the unit price per cubic yard of _____ Dollars and _____ Cents		
3	2350 C.Y.	Arch Dam - other than Ogee Section, remove, for the unit price per cubic yard of _____ Dollars and _____ Cents		
4	285 L.F.	Bridge Slab, remove, for the unit price per linear foot of _____ Dollars and _____ Cents		
5	570 L.F.	Bridge Side, remove, for the unit price per linear foot of _____ Dollars and _____ Cents		
		SUBTOTAL		

ITEM	APPROX. QUANT.	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL
6	65 C.Y.	Bridge Piers, remove, for the unit price per cubic yard of _____ Dollars and _____ Cents		
7	70 C.Y.	Concrete, New Piers, for the unit price per cubic yard of _____ Dollars and _____ Cents		
8	410 Sack	Portland Cement, for the unit price per sack of _____ Dollars and _____ Cents		
9	55 Sack	Pozzolan, for the unit price per sack of _____ Dollars and _____ Cents		
10	Lump Sum	Mechanical Work, for the lump sum price of _____ Dollars and _____ Cents	L.S.	

PROPOSAL AND BID FORM
 SPEC. NO. FC 66-4
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ITEM	APPROX. QUANT.	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL
11	60,000 Lbs.	Structural Steel, for the unit price per pound of _____ Dollars and _____ Cents		
12	5.80 MBM	Timber Construction for the unit price per thousand feet board measure of _____ Dollars and _____ Cents		
13	L.S.	Outlet Valve, 36-inch Diameter, for the lump sum price of _____ Dollars and _____ Cents	L.S.	
14	L.S.	Electrical Work, for the lump sum price of _____ Dollars and _____ Cents	L.S.	
		TOTAL PRICE BID		

LIST OF SUBCONTRACTORS

Listing shall comply with Part I, BIDDING REQUIREMENT, CONDITIONS AND INSTRUCTIONS, Section 2, and other applicable parts of the specifications.

<u>NAME OF SUBCONTRACTOR</u>	<u>BUSINESS ADDRESS</u>	<u>ITEMS OF WORKS</u>
1. _____ _____	_____ _____ _____	_____ _____ _____
2. _____ _____	_____ _____ _____	_____ _____ _____
3. _____ _____	_____ _____ _____	_____ _____ _____
4. _____ _____	_____ _____ _____	_____ _____ _____
5. _____ _____	_____ _____ _____	_____ _____ _____
6. _____ _____	_____ _____ _____	_____ _____ _____
7. _____ _____	_____ _____ _____	_____ _____ _____

PROPOSAL AND BID FORM
SPECIFICATION NO. FC66-4
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Enclosed is a cash deposit, certified check or bidder's bond for 10% of the total bid price, as a guarantee that the undersigned, if awarded the contract for the work bid upon, will furnish the required bonds and will enter into such contract with the Owner.

SUBMITTED FOR:

NAME OF CONTRACTOR OR FIRM

NAME AND TITLE

CLASSIFICATION OF CONTRACTOR AND
LICENCE NUMBER

BUSINESS ADDRESS

DATE:

*DOING BUSINESS AS: (Partnership)
(Corporation)
(Individual)

*If doing business other than as an individual, list all partners if a partnership; and if a corporation, list the exact full name of the corporation.

ACKNOWLEDGMENT is made of the receipt of the following Addenda:

Addendum Numbers _____, _____, _____, _____,

all of which have been signed in the space provided.

PROPOSAL AND BID FORM
Specification No. FC 66-4

Board of Supervisors
Ventura County Flood Control District
Ventura, California

Pursuant to your advertisement for bids for MATILILJA DAM REMEDIAL WORK
Ojai, California

Specification No. FC 66-4, the undersigned proposes to furnish all labor, machinery, tools, apparatus, materials and necessary appurtenances to do the work in the manner and time prescribed and in strict accordance with the plans, specifications and contract documents on file in the office of the County Clerk for the unit or lump sum price or prices shown in this bid.

The undersigned has read and agrees to conform to the Bidding Requirements, Conditions and Instructions contained in Part 1, Section 2, of the Standard Specifications for the project for which this Proposal and Bid Form is submitted. The undersigned has inspected the site of the project and examined carefully the plans, specifications and included documents and acknowledges their sufficiency.

If awarded the contract, the undersigned will complete to the satisfaction of the Engineer and the Board of Supervisors of Ventura County, (1) the complete remodeling operations and installation of the new outlet valve by November 15, 1965, and (2) all other work involved in the contract by March 30, 1966. Written Notice to Proceed will be issued as soon as practicable after award and processing of the contract. The undersigned will commence work at the project site within ten (10) days after receipt of the Notice to Proceed, unless otherwise specifically directed by the Engineer.

It is understood that liquidated damages in the amount of one thousand dollars (\$1,000.00) will be assessed for failure to complete removal operations and installation of a new 36-inch diameter outlet valve, for each and every calendar day or fraction thereof that such completion is delayed beyond November 15, 1965.

It is also understood that liquidated damages in the amount of two hundred dollars (\$200.00) will be assessed for failure to complete all work under the contract for each and every calendar day or fraction thereof that such completion is delayed beyond March 30, 1966.

If awarded the contract, the undersigned will furnish and pay for the Faithful Performance Bond and Payment Bond, and will comply with the Standard Specifications relative to obtaining said bonds.

The total amount shown on this bid form is based on the estimated quantities. It is understood and agreed that these quantities are approximate and for bidding purposes only, that payment for unit items will be based on final quantities as calculated in accordance with the specifications and that final payment for lump sum items will be in accordance with the lump sum bid price or prices.

The undersigned, as bidder, declares that the only person or parties interested in this proposal as principals are those named herein: that this proposal is made without collusion.

COUNTY OF VENTURA
DEPARTMENT OF PUBLIC WORKS
VENTURA COUNTY FLOOD CONTROL DISTRICT

SPECIFICATIONS

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GENERAL SPECIFICATIONS

AND

GENERAL PROVISIONS
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AND

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CONTRACT DEPARTMENT

Know all Men by these Presents: That

(hereinafter called the PRINCIPAL) and the _____ a corporation created and existing under the laws of the _____ and whose principal office is located _____ (hereinafter called the SURETY) are held and firmly bound unto _____

_____ (hereinafter called the OBLIGEE) in the full and just sum of _____ Dollars good and lawful money of the United States of America, to the payment of which said sum of money, well and truly to be made and done, the said PRINCIPAL binds himself, his heirs, executors, administrators, successors and assigns, and the said SURETY binds itself, its successors and assigns, jointly and severally, firmly by these presents.

Signed, sealed and dated this _____ day of _____, A. D., 19_____

The conditions of this obligation are such, that if any awards made, within sixty (60) days from the date of this instrument, by said OBLIGEE to the above bounded PRINCIPAL under a public invitation for _____

shall be accepted by said PRINCIPAL and said PRINCIPAL shall enter into a contract for the completion of said work, and give Bond with the _____ as surety, or with other surety or sureties to be approved by the OBLIGEE for the faithful performance thereof, then this obligation shall be null and void; otherwise to remain in full force and effect.

PROVIDED: First:—That the liability of the SURETY shall in no event exceed the penalty of this bond. Second:—That any suits at law or proceedings in equity brought or to be brought against said SURETY to recover any-claim hereunder, must be instituted within six (6) months from the date of this instrument.

_____[SEAL]
_____[SEAL]
_____[SEAL]
_____[SEAL]
Principal

By _____

PROPOSAL AND BID FORM
 SPEC. NO. FC 66-4
 PAGE NO. 2

ITEM	APPROX. QUANT.	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL
1	Lump Sum	Downstream Water Supply, for the lump sum price of _____ Dollars and _____ Cents	L.S.	
2	440 C.Y.	Arch Dam - Ogee Section Remove, for the unit price per cubic yard of _____ Dollars and _____ Cents		
3	2350 C.Y.	Arch Dam - other than Ogee Section, remove, for the unit price per cubic yard of _____ Dollars and _____ Cents		
4	285 L.F.	Bridge Slab, remove, for the unit price per linear foot of _____ Dollars and _____ Cents		
5	570 L.F.	Bridge Side, remove, for the unit price per linear foot of _____ Dollars and _____ Cents		
		SUBTOTAL		

ITEM	APPROX. QUANT.	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL
6	65 C.Y.	Bridge Piers, remove, for the unit price per cubic yard of _____ Dollars and _____ Cents		
7	70 C.Y.	Concrete, New Piers, for the unit price per cubic yard of _____ Dollars and _____ Cents		
8	410 Sack	Portland Cement, for the unit price per sack of _____ Dollars and _____ Cents		
9	55 Sack	Pozzolan, for the unit price per sack of _____ Dollars and _____ Cents		
10	Lump Sum	Mechanical Work, for the lump sum price of _____ Dollars and _____ Cents	L.S.	

PROPOSAL AND BID FORM
 SPEC. NO. FC 66-4
 PAGE NO. 4

ITEM	APPROX. QUANT.	ITEM WITH UNIT PRICE WRITTEN IN WORDS	UNIT PRICE	TOTAL
11	60,000 Lbs.	Structural Steel, for the unit price per pound of _____ Dollars and _____ Cents		
12	5.80 MBM	Timber Construction for the unit price per thousand feet board measure of _____ Dollars and _____ Cents		
13	L.S.	Outlet Valve, 36-inch Diameter, for the lump sum price of _____ Dollars and _____ Cents	L.S.	
14	L.S.	Electrical Work, for the lump sum price of _____ Dollars and _____ Cents	L.S.	
		TOTAL PRICE BID		

LIST OF SUBCONTRACTORS

Listing shall comply with Part I, BIDDING REQUIREMENT, CONDITIONS AND INSTRUCTIONS, Section 2, and other applicable parts of the specifications.

NAME OF SUBCONTRACTOR	BUSINESS ADDRESS	ITEMS OF WORKS
1. _____	_____	_____
_____	_____	_____
2. _____	_____	_____
_____	_____	_____
3. _____	_____	_____
_____	_____	_____
4. _____	_____	_____
_____	_____	_____
5. _____	_____	_____
_____	_____	_____
6. _____	_____	_____
_____	_____	_____
7. _____	_____	_____
_____	_____	_____

Enclosed is a cash deposit, certified check or bidder's bond for 10% of the total bid price, as a guarantee that the undersigned, if awarded the contract for the work bid upon, will furnish the required bonds and will enter into such contract with the Owner.

SUBMITTED FOR:

NAME OF CONTRACTOR OR FIRM

NAME AND TITLE

CLASSIFICATION OF CONTRACTOR AND
LICENCE NUMBER

BUSINESS ADDRESS

DATE:

*DOING BUSINESS AS: (Partnership)
(Corporation)
(Individual)

*If doing business other than as an individual, list all partners if a partnership; and if a corporation, list the exact full name of the corporation.

ACKNOWLEDGMENT is made of the receipt of the following Addenda:

Addendum Numbers _____, _____, _____, _____,

all of which have been signed in the space provided.

CONTRACT

PROJECT: _____

The names and addresses of the parties to this contract, who shall be referred to as "Owner" and "Contractor" respectively, are as follows:

OWNER: _____

CONTRACTOR: _____

The Owner and the Contractor mutually agree as follows:

1. CONTRACT DOCUMENTS

This contract consists of the following documents (referred to as contract documents):

- (a) Notice Inviting Bids, dated _____
- (b) Addenda, by number and dated _____
- (c) Instructions to Bidders, dated _____
- (d) Proposal and Bid Form, dated _____
- (e) Notice of Award, dated _____
- (f) General Provisions, dated _____
- (g) Special Provisions, dated _____
- (h) Performance and Materials Bonds, dated _____
- (i) Evidence of Insurance, dated _____
- (j) Notice to Proceed, dated _____
- (k) Plans prepared by _____

Dated: _____

2. DESCRIPTION OF WORK

The Contractor shall perform and complete in strict conformity with this contract the following work:

3. CONTRACT PRICE

The contract price, which is the amount which Contractor shall accept as full payment for the work above agreed to be done, is as follows (select alternative):

- a. The lump sum of \$ _____
to be paid in accordance with the General Provisions
- b. The amounts determined in accordance with the General Provisions for the total number of each of the following units of work completed at the unit price:

SCHEDULE NO. _____

Item	Approximate Quantity	Item with Unit Price Written in Words	Unit Price	Total
1	Lump Sum	Clearing and grubbing, the lump sum of _____ _____	Lump Sum	
2		Thousand gallons applying water at _____ _____ per thousand gallons		
3		Cubic yards structure excavation at _____ _____ per cubic yard		
4		Cubic yards ditch excavation at _____ _____ per cubic yard		
5		Cubic yards structure backfill at _____ _____ per cubic yard		
6		Square yards compacting original ground at _____ _____ per square yard		
7		Cubic yards imported borrow in place at _____ _____ per cubic yard		
8		Cubic yards roadway excavation at _____ _____ per cubic yard		
9		Station yards overhaul at _____ _____ per station yard		
10		Tons aggregate subbase in place at _____ _____ per ton		
11		Tons untreated rock base in place at _____ _____ per ton		

SCHEDULE NO. _____

Item	Approximate Quantity	Item with Unit Price Written in Words	Unit Price	Total
23				
24				
25		Cubic yards Class B Portland Cement concrete cross gutter in place at _____		
26	Lump Sum	Catch basin, complete, the lump sum of _____	Lump Sum	
27	Lump Sum	Reinforced concrete box culvert, the lump sum of _____	Lump Sum	
28		Cubic yards Class A concrete in place at _____ _____ per cubic yard		
29		Cubic yards Class B concrete in place at _____ _____ per cubic yard		
30		Linear feet chain link fence in place at _____ _____ per linear foot		
31		Timber barricade in place at _____ _____ each		
32	Lump Sum	Finishing roadway, the lump sum of _____		
33				

SCHEDULE NO. _____

Item	Approximate Quantity	Item with Unit Price Written in Words	Unit Price	Total
45				
46				
47				
48				
49				
50				
51				
52				

SAMPLE COPY

TOTAL SCHEDULE I

TOTAL SCHEDULE II

TOTAL SCHEDULE III

TOTAL SCHEDULE IV

GRAND TOTAL

=====

CONTRACT

4. The time limit for the completion of the work is _____

from the date of the Notice to Proceed.

IN WITNESS WHEREOF, the parties hereto have executed this agreement in 5 counterparts.

Type of Contractor's organization _____

If other than individual or corporation, list names of all members who have authority to bind firm.

IF OTHER THAN CORPORATION EXECUTE HERE

Firm Name _____

Signature _____

Address _____

Date _____ Contractor's License No. _____

IF CORPORATION, FILL OUT FOLLOWING AND EXECUTE

Name of President of Corporation _____

Name of Secretary of Corporation _____

Corporation is organized under the laws of state of _____

ATTEST:

ROBERT L. HAMM
County Clerk
County of Ventura

Firm Name _____

Signature _____

Title of Office _____

By _____
Deputy

Address _____

Date _____ Contractor's License No. _____
(Corporate Seal)

Approved as to form
and legal sufficiency

District Attorney

Owner

By _____
Deputy D.A.

By _____

(Official Title)

Date _____

Know All Men By These Presents,

That we

as principal....and

and

as suret.....are held firmly bound unto the.....

County of Ventura, State of California, in the sum of.....

.....Dollars,

(\$.....) lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas said principal...ha..... been awarded, and.....about to enter into a written contract with.....

.....dated the.....day of....., 19..., for

and.....required by said.....to give this bond in connection with the execution of said contract.

SAMPLE COPY

NOW THEREFORE, if the said principal...shall well and truly do and perform all of the covenants and obligations of said contract on.....part to be done and performed at the times and in the manner specified therein, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect.

The suret.. does hereby consent to any and all alterations, extensions of time, or other modifications to the contract secured by this bond.

This performance bond shall remain in effect for one year from the acceptance of the job by the owner in accordance with the guarantee required by section 7-30 of the Ventura County Public Works Department general specifications.

WITNESS our hands this.....day of....., 19.....

.....
.....
.....
.....

Know All Men By These Presents,

That we

as principal....and

and

as suret,..... are held firmly bound unto the.....

County of Ventura, State of California, in the sum of.....

.....Dollars,

(\$.....) lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas said principal....ha.... been awarded, and.....about to enter into a written contract with..... dated the.....day of.....19...,for

which is hereto attached, and to which reference is hereby made for all particulars, andrequired by said.....to give this bond in connection with the execution of said contract;

NOW THEREFORE, if said principal....as contractor....or the sub-contractor....of said principal....shall fail to pay for any materials, provisions, provender, or other supplies, or teams, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, including any amounts due under the Unemployment Insurance Act of the State of California with respect to such work or labor, said suret.....will pay for the same, in an amount not exceeding the said sum above specified and will also, in case suit is brought upon this bond, pay a reasonable attorney's fee, to be fixed by the court.

This Bond and the obligation of the suret...hereunder shall inure to the benefit of any and all persons, entitled to file claims under the provisions of Section 1192.1 of the Code of Civil Procedure and Chapter 3 of Division 5, Title 1 of the Government Code of California, and shall give a right of action to said persons or to their assigns in any suit which may be brought upon this bond.

The suret....does hereby consent to any and all alterations, extensions of time, or other modifications to the contract secured by this Bond.

This payment bond shall remain in effect for 35 days after the acceptance of the project, or until the final payment is made to the contractor.

WITNESS our hands this.....day of....., 19.....

.....
.....
.....
.....

INSURANCE BY

Insurance Company of

CERTIFICATE OF INSURANCE

This is to Certify to

that the following described policy or policies have been issued to

Name and Address
of Insured--

covering in accordance with the conditions thereof, at the following location(s):

TYPE OF POLICY	X*	POLICY NUMBER	POLICY PERIOD	LIMITS OF LIABILITY	
(a) Standard Workmen's Compensation & Employers' Liability				\$ Statutory Required	Statutory W. C. One Accident and Aggregate Disease
(b) General Liability					
Bodily Injury					
Premises-Operations				\$ 200,000.00	Each Person
Elevators					
Independent Contractors				\$ 500,000.00	Each Accident
Products					
Contractual				\$ 500,000.00	Aggregate-Products
Property Damage					
Premises-Operations				\$ 50,000.00	Each Accident
Elevators				\$ 50,000.00	Aggregate-Prem. Oper.
Independent Contractors				\$ 50,000.00	Aggregate-Protective
Products				\$ 50,000.00	Aggregate-Products
Contractual				\$ 50,000.00	Aggregate-Contractual
(c) Automobile Liability					
Bodily Injury					
Owned Automobiles				\$ 200,000.00	Each Person
Hired Automobiles					
Non-owned Automobiles				\$ 500,000.00	Each Accident
Property Damage					
Owned Automobiles					
Hired Automobiles				\$ 50,000.00	Each Accident
Non-owned Automobiles					
(d)					

*Insurance afforded only for hazards indicated by X.

It is the intention of the company that in the event of cancellation of the policy or policies by the company, ten (10) days' written notice of such cancellation will be given to you at the address stated above.

INSURANCE COMPANY OF

Authorized Representative

COUNTY OF VENTURA
DEPARTMENT OF PUBLIC WORKS

PART I
GENERAL SPECIFICATIONS AND GENERAL PROVISIONS

COUNTY OF VENTURA
DEPARTMENT OF PUBLIC WORKS

STANDARD SPECIFICATIONS *

PART I
GENERAL SPECIFICATIONS AND GENERAL PROVISIONS

SECTION I
ABBREVIATIONS, DEFINITIONS, AND TERMS

Wherever in these specifications or other contract documents the following abbreviations, terms, and definitions or pronouns in place of them, are used, the intent and meaning shall be interpreted as follows:

1-1 ABBREVIATIONS

AAN	American Association of Nurserymen
AASHO	American Association of State Highway Officials
ACI	American Concrete Institute
AIEE	American Institute of Electrical Engineers
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AREA	American Railway Engineering Association
ASA	American Standards Association
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing Materials
AWG	American Wire Gage
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Association
CPI	Clay Products Institute of California
CRA	California Redwood Association
CTM	Materials Manual, California Department of Public Works, Materials and Research Department, Division of Highways
EIA	Electronic Industries Association
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
SPA	Southern Pine Association
SSS	Standard Specifications, State of California, Department of Public Works, Division of Highways, January, 1960, as revised.
TMMB	Standard Requirements of the Truck Mixer Manufacturers Bureau
UBC	Uniform Building Code
UL	Underwriters' Laboratories, Inc.
VCS	Ventura County Standards of February 6, 1962, as revised.
WCLA	West Coast Lumberman's Association
WCLGI	West Coast Bureau of Lumber Grades and Inspection
WPA	Western Pine Association
WWM	Ventura County Water Works Manual, 1962, as revised.

1-2 ADDENDUM

An addendum may be defined as a modification of the plans and/or specifications issued to all prospective bidders during the bidding period when necessary to clarify or further define any phase of the work.

1-3 BID GUARANTY

The required security submitted with the bid to indicate the good faith of the bidder to accept award of a contract for the work.

SECTION 1

ABBREVIATIONS, DEFINITIONS AND TERMS

1-12 DUE NOTICE

A written notification of a proposed action received by the addressee at least two working days before the contemplated action. Notification may be from Engineer to Contractor or from Contractor to Engineer.

1-13 ENGINEER

.1 The Director of Public Works or any of his duly authorized representatives.

.2 The duly authorized representative of any Special District of Ventura County.

1-14 RESIDENT ENGINEER

The authorized representative of the Engineer in charge of Project Supervision and Inspection.

1-15 ENGINEER'S ESTIMATE

The estimated project cost submitted by the Department of Public Works.

1-16 ENGINEER'S QUANTITY ESTIMATE

Estimated quantities itemized on Proposal Form for bidding purposes only.

1-17 EXTRA WORK

Work pertinent to the contract, accomplished under written directive from the Engineer, for a fixed price or unit cost or by Force Account.

1-18 FIXED COSTS

Any necessary labor, material and equipment costs directly expended on the item or items under consideration which remain constant regardless of the quantity of the work done.

1-19 HIGHWAY SPECIFICATIONS

Standard Specifications of the State of California, Department of Public Works, Division of Highways. Definitions of this section govern, however. Refers to the latest edition published by the State prior to the date of advertising for bids.

1-20 EXPRESSIONS

The following expressions refer only to written approvals, etc.; approved by, waiver by, request of, notice to, notification by, direction, authorization.

SECTION 1

ABBREVIATIONS, DEFINITIONS AND TERMS

1-30 PROPOSAL AND BID FORM

The approved Ventura County, Department of Public Works, Proposal and Bid Forms, on which formal bids must be submitted.

1-31 PROMPT

The briefest interval of time required for a considered reply, including time required for approval by a governing body.

1-32 ROADBED

The area between the intersection of the upper surface of the roadway and the side slopes or curb lines.

1-33 ROADWAY

The portion of the highway within limits of construction.

1-34 SHOULDER

The portion of the roadway contiguous with the traveled way, for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

1-35 SPECIFICATIONS

General term applied to contract provisions.

1-36 SPECIAL PROVISIONS

Those special directions and requirements, identified as special provisions, that are prepared especially for the project under consideration and made a part of the contract.

1-37 STANDARD SPECIFICATIONS

The specifications without the special provisions.

1-38 SUPPLEMENTAL AGREEMENT

A written agreement between the Board and the Contractor, constituting a modification of the contract originally executed, and covering the performance of work beyond the general scope thereof, including any change in the project size of more than 25 per cent.

1-39 SUBCONTRACTOR

Any individual, partnership, or corporation to whom the Contractor sublets any part of the contract. Not a party to the contract.

1-40 DAYS OR WORKING DAYS

Every day except Saturdays, Sundays and legal holidays.

SECTION 2

BIDDING REQUIREMENTS, CONDITIONS AND INSTRUCTIONS

2-1 COMPETENCY OF BIDDERS

.1 Bidders must be capable of performing the work necessary for the project. After the opening of bids, and before the award is made, any bidder may be required to furnish the Board the following:

a. An attested statement of his organization, equipment, financial resources, and highway, bridge, pipeline, and other construction experience, with particular reference to the type of work covered by the major items in the bid schedule.

.2 The Board reserves the right to refuse any or all bids.

2-2 INTERPRETATION OF QUANTITIES IN BID SCHEDULE

.1 The quantities appearing in the prepared bid schedule are approximate and are prepared for the comparison of bids and award of contract. Payment will be made for the actual quantities of work performed or materials furnished in accordance with the contract. It is understood and agreed that the scheduled quantities of work to be done and materials to be furnished may each be increased or decreased as provided in Section 4 of these General Provisions or in the Special Provisions.

2-3 EXAMINATION OF PLANS, SPECIFICATIONS AND SITE OF WORK

.1 The bidder should examine carefully the site of the project contemplated and the prepared contract documents. All relative subsurface investigations in the possession of the Engineer are also available for examination at the Owner's office or other designated location.

.2 Investigations of subsurface conditions, both in areas in which work is to be performed and in areas where local materials may be obtained, are made for the purpose of study and design, and the Owner assumes no responsibility whatever in respect to the sufficiency or accuracy of the borings thus made, or of the log of the test borings, or of other investigations, or of the interpretations made thereof, and there is no warranty or guaranty, either express or implied, that the conditions indicated by such investigations 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 occur.

.3 It is mutually agreed that submission of a bid shall be considered prima-facie evidence that the bidder has made such examination and is familiar with the character, quality and quantities of work to be performed and material to be furnished.

SECTION 2

BIDDING REQUIREMENTS, CONDITIONS AND INSTRUCTIONS

2-7 INFORMALITIES IN BIDS

.1 The Board reserves the right to waive any informality on a bid such as failure to complete extensions, omissions, or mistakes in adding where the intention of the bidder is clear.

2-8 BID GUARANTEE

.1 Each bid must be accompanied by a bid guarantee consisting of cashier's check, certified check, or bid bond, in the amount of 10% of the total bid and payable to the Owner (refer Section 1-25) having cognizance. The bid guarantee will be forfeited should the successful bidder fail to execute the contract and submit the required surety bonds and insurance certificates for the Board's approval within ten (10) working days from the date of delivery of the contract to him. Bid guarantees accompanying proposals not to be further considered in making the award, will be returned within ten (10) days after the Board Chairman's signature on the awarded contract.

2-9 IDENTIFICATION OF SUBCONTRACTORS

.1 Where applicable each bid must be accompanied by a list of the subcontractors with whom the bidder proposes to enter into subcontract agreements, showing firm name, business address and items of work to be subcontracted. An unlisted subcontractor may be substituted or used only under conditions set forth in California Government Code Sections 4100 through 4108.

2-10 DISQUALIFICATION OF BIDDERS

.1 A bidder may be disqualified, the award cancelled and the bid guarantee declared forfeit if any individual, firm, partnership or corporation is interested in more than one proposal for the work contemplated.

.2 Collusion among the bidders may disqualify the participants in future proposals.

2-11 PATENTED OR PROPRIETARY PRODUCTS OR PROCESSING

.1 Whenever an alternate or any item of the work involves the use of any patented or proprietary product or process, the Contractor is responsible for obtaining the right to use such product or process and for payment of any costs or royalties related thereto.

2-12 UTILITIES, USE OF

.1 The Contractor shall make all arrangements for the use of water, electric power, and all other utilities and conveniences needed by him in the prosecution of the work unless otherwise provided in the Special Provisions.

SECTION 3

AWARD AND EXECUTION OF CONTRACT

3-1 AWARD OF CONTRACT

.1 The award of contract, if made, will be to the lowest responsible bidder whose bid complies with all of the requirements prescribed. The award, if any, will be made within thirty (30) days after opening of proposals, unless an extended period of time is agreed upon in writing by both the bidder and the Board, or unless otherwise indicated in the Special Provisions. After the award is made by the Board, written notification of the award will be made by the Department of Public Works enclosing contract and bond forms.

.2 If the lowest responsible bidder refuses or fails to execute the contract, the Board may award the contract to the second lowest bidder. Such an award, if made, will be made within forty-five (45) days after the opening of proposals. If the second lowest responsible bidder refuses or fails to execute the contract, the Board may award the contract to the third lowest responsible bidder within sixty (60) days after the opening of the proposals. The 45 and 60 day periods of time specified above within which the award of contract may be made shall be subject to extension for such further period as may be agreed upon in writing between the Board and the bidder concerned or extended as may be indicated in the Special Conditions.

3-2 ORIGINAL CONTRACT QUANTITIES, AMOUNTS AND LENGTHS

.1 The original contract quantities, amounts and lengths are those shown in the contract as awarded by the Board.

3-3 FORMAL CONTRACT AND CONTRACT BONDS

.1 The bidder to whom the award is made shall, within ten (10) days after receipt of the Notice of Award, execute the formal contract papers and furnish, on the prescribed forms, a performance bond in the amount of 100% of the original contract amount, and a payment bond in the amount of 100% of the original contract amount. Samples of the contract and bond forms are attached herewith for reference purposes.

.2 All alterations, extensions of time, extra and additional work, and other changes authorized by these specifications or any part of the contract may be made without securing the consent of the surety or sureties on the contract bonds. However, the payment bond must remain in effect for thirty-five (35) days after the acceptance of the project, or until the final payment is made to the Contractor, and the performance bond must be paid up and in effect for one (1) year after the acceptance of the job by the Owner in accordance with the guarantee required by Section 7-30 of these specifications.

SECTION 4

SCOPE OF WORK

4-1 INTENT OF CONTRACT, PLANS AND SPECIFICATIONS

.1 The intent of the contract is to prescribe a work or improvement which the Contractor is obligated to complete in strict accordance with the contract or modifications thereof.

.2 The intent of the plans and these specifications is to provide for the execution and completion in every detail of the work described herein, and it is understood that the Contractor for all or any part will furnish all labor, material, equipment, tools, transportation and necessary supplies, as may be reasonably required to execute the work in a satisfactory and workmanlike manner and in accordance with the plans, specifications, and terms of the contract.

.3 Should the plans and specifications describe portions of the work in general terms, and not in complete detail, it is understood that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used.

.4 Omissions from the drawings or specifications or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of work but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.

4-2 CHANGES

.1 It is mutually agreed that it is inherent in the nature of construction that some changes in the plans and specifications may be necessary during the course of construction to adjust to field conditions and that it is of the essence of the contract to recognize a normal and expected margin of change within the meaning of "Changes" as not requiring or permitting any adjustment of contract prices, provided that any change or changes do not result in: (1) an increase or decrease of more than 25% in the original contract amount, or in the quantity of any pay item, or (2) a substantial change in the character of the work to be performed under a contract pay item or items that materially increases or decreases the cost of its performance. Any adjustment in compensation because of a change or changes resulting in one or more of the conditions described in (1) and (2) above shall be made in accordance with the provisions of Article 9-4. Any adjustment in contract time because of such change or changes shall be made in accordance with the provisions of Article 8-2.

.2 No change in the design of a structure, or materials changes or substitutions, will be made without the prior written approval of the Engineer.

SECTION 4

SCOPE OF WORK

4-6 (continued)

days after the receipt of such approved contract change order. The protest shall state the points of disagreement, contract specification references, and if possible, the quantities and costs involved. If a written protest is not submitted, payment will be made as set forth in the approved contract change order and such payment shall constitute full compensation for all work included therein or required thereby.

.2 Where the protest concerning an approved contract change order relates to compensation, the compensation payable for all work specified or required by said contract change order to which such protest relates will be determined as provided in Section 9-5 of these specifications. The Contractor shall keep full and complete records of the cost of such work and shall permit the Engineer to have such access thereto as may be necessary to assist in the determination of the compensation payable for such work.

.3 Where the protest concerning an approved contract change order relates to the adjustment of contract time for the completion of the work, the time to be allowed therefor will be determined as provided in Section 8-2 of these specifications.

.4 Proposed contract change orders may be presented to the Contractor for his consideration prior to approval by the Engineer. If the Contractor signifies his acceptance of the terms and conditions of such proposed contract change order by executing such document and if such change order is approved by the Board and issued to the Contractor, payment in accordance with the provisions as to compensation therein set forth shall constitute full compensation for all work included therein or required thereby.

.5 The engineer may provide for an adjustment of compensation as to a contract item of work included in a contract change order determined as provided in Section 9-4 of these specifications if such item of work is eligible for an adjustment of compensation thereunder.

4-7 PERMANENT SURVEY MONUMENTS

.1 The Contractor shall set a suitable marker, supplied by the County, in concrete structures in the positions designated by the Engineer. The cost of setting the markers, except for the cost of the marker proper, shall be included in the price or prices bid for the work and no extra compensation shall be made therefor.

SECTION 5

CONTROL OF WORK

5-1 AUTHORITY OF THE ENGINEER

.1 The Engineer shall decide all questions that may arise as to quality and acceptability of materials furnished, work performed, rate of progress, interpretation of the plans and specifications, and acceptable fulfillment of the provisions of the contract.

5-2 SUPERINTENDENCE

.1 The Contractor shall keep on his work during its progress, a competent and responsible superintendent with necessary assistants, all satisfactory to the Engineer. The superintendent shall have contractual authority to represent the Contractor and all directions and agreements with him shall be binding as if with the Contractor. All directions and agreements shall be immediately confirmed in writing.

.2 Any superintendent or foreman employed on the work by the Contractor who fails or refuses to perform the work in the manner specified herein shall be discharged immediately upon written notification from the Engineer and such person shall not again be employed on the work.

5-3 COORDINATION OF PLANS AND SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS

.1 The standard specifications, the approved plans, any special provisions, the general provisions, all notices, addenda, supplements, change orders and directives affecting the work, duly issued by the Engineer to the Contractor, and the Notice of Receiving Bids, the Proposal and Bid Form and the body of the contract, are essential parts of the contract and are intended to be mutually complimentary, and are all included in the expression "contract documents." In case of any discrepancy, figured dimensions shall prevail over scaled dimensions, plans shall prevail over the standard specifications, special provisions shall prevail over the plans and standard specifications. In every case detailed drawings shall take precedence over general drawings. Where required dimensions are not shown in figures, the Contractor shall obtain such dimensions from the Engineer before proceeding with the construction of the work.

5-4 HIGHWAY SPECIFICATIONS

.1 Wherever so indicated in the specifications, materials and work embraced herein shall conform to the provisions of the specifications entitled "Standard Specifications, State of California, Department of Public Works, Division of Highways," in the latest edition published prior to the date of the Notice of Receiving Bids. Whenever Ventura County Specifications refer to the above specifications, the referenced requirements of the said Highway Specifications thereby become a part of these specifications.

SECTION 5

CONTROL OF WORK

5-8 (continued)

.2 The Engineer's inspection of the work will not relieve the Contractor of any of his obligations to fulfill his contract as prescribed and intended.

.3 The failure of the County in any one or more instances to insist upon strict performance of any of the terms of this contract or to exercise any option herein conferred, shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon any such terms of option on any future occasion.

.4 Inspection shall be provided with job site facilities as set forth in the Special Provisions or as requested by the Engineer.

5-9 DEFECTIVE WORK

.1 If, in the judgment of the Engineer, any work accomplished by the Contractor is defective, such work shall be corrected immediately and unsuitable materials will be removed immediately from the job and replaced, all at the expense of the Contractor, regardless of whether or not such was overlooked and accepted for payment. Failure to comply may be just cause for closing down the contract work. The Engineer's determination of what is defective work or unsuitable materials may be appealed to the Board, whose decision will be final.

5-10 DEDUCTIONS FOR UNCORRECTED WORK

.1 If the Engineer deems it inexpedient to correct work injured or done not in accordance with the contract, an equitable deduction from the contract price will be made therefor.

SECTION 6

CONTROL OF MATERIALS

6-1 FURNISHING OF MATERIALS

.1 The Contractor shall furnish all materials required to complete the work except materials that are designated in the Special Provisions or other contract documents, to be furnished by the County.

6-2 QUALITY OF MATERIALS

.1 The materials furnished by the Contractor and used in the work shall be new, except as specifically provided elsewhere in the contract documents, or in the plans. The materials shall be manufactured, handled and used in a workmanlike manner to insure completed work in accordance with the plans and specifications.

.2 Notwithstanding any prior inspection or approval, only materials conforming to the requirements of the specifications shall be incorporated in the work.

6-3 COUNTY-FURNISHED MATERIALS

.1 Materials furnished by the County will be available for pickup at designated locations as stipulated in the Special Provisions or as designated by the Engineer. The Contractor shall make provision for taking delivery, loading, transporting, unloading and handling of materials furnished by the County and it is understood and agreed that the cost of such operations shall be included in the contract bid price for the contract item involving such materials.

.2 The Contractor shall be responsible for all materials furnished him and for all demurrage and storage charges. The Contractor shall be responsible for any loss or damage of County-furnished materials accepted by him and the costs of replacement of any such lost or damaged materials may be deducted from any monies due or to become due to the Contractor.

6-4 STORAGE OF MATERIALS

.1 Materials shall be stored in a manner that insures the preservation of their quality and fitness for the work. When considered necessary by the Engineer, materials shall be placed on platforms, or other hard, clean surfaces and covered. Materials shall be stored to facilitate prompt inspection.

6-5 DEFECTIVE MATERIALS

.1 All materials not conforming to the requirements of the plans and specifications will be subject to rejection, whether in place or not. They shall be immediately removed from the site of the work, unless permission for retention is granted by the Engineer in writing. No rejected material, whose defects have been corrected, shall be used in the work without written approval of the Engineer.

SECTION 6

CONTROL OF MATERIALS

6-11 (continued)

.3 Samples of aggregate or any other material for testing shall be obtained under the supervision of the Engineer unless otherwise stated in the Special Provisions. The Contractor shall supply, when required by the Engineer, facilities including labor and equipment for the excavation and handling of designated samples. Standard accepted sampling methods shall be employed in securing truly representative samples.

6-12 LOCALLY MINED, EXCAVATED, OR QUARRIED MATERIALS

.1 Local material is rock, sand, gravel, earth, or other mineral material, other than local borrow or selected material obtained or produced from sources in the vicinity of the work specifically for use on the project. Local material does not include materials obtained from established commercial sources.

.2 Local materials shall be furnished by the Contractor from any source the Contractor may elect, except that when mandatory local material sources of certain materials are designated in the special provisions, the Contractor shall furnish material from such designated mandatory sources.

.3 The furnishing of local materials from any source is subject to the provisions in Section 2-3, "Examination of Plans, Specifications and Site of Work" and this Section 6-12.

.4 Unless described in the special provisions as a mandatory local material source, or approved in writing by the Engineer, material sources shall not be excavated at locations where the resulting scars will present an unsightly appearance from any highway. No payment will be made for material obtained in violation of this provision.

.5 The Contractor shall, at his expense, make any arrangements necessary for hauling over local public and private roads from any source.

.6 When requested by the Contractor in writing, the County will test materials from any local source, which has not been previously tested. If satisfactory material from such local source is used in the work the Contractor will not be charged for the costs of the tests. In all other cases, the cost of such testing requested by the Contractor shall be at his expense and deductions will be made from any moneys due or to become due the Contractor, sufficient to cover the costs of such tests.

SECTION 6

CONTROL OF MATERIALS

6-12 (continued)

.11 If the Contractor elects to obtain material under 6-12.10-a, the use of such site shall be subject to the terms, conditions and limitations of the arrangement made between the property owner and the County and the Contractor shall pay such charges as are provided for in the arrangement made by the County with the property owner, and deductions will be made from estimates due the Contractor sufficient to cover the charges for such material removed.

.12 If the Contractor elects to obtain material under 6-12.10-b, he shall pay such charges as are provided for in the agreement between the owner and the Contractor and deductions will not be made from estimates due the Contractor to cover such charges.

.13 Before work begins on the furnishing of materials from such source or sources, the Engineer may require the Contractor to submit written evidence that the owner of the material source is satisfied that the Contractor has satisfactorily complied with the provisions of either 6-12.10-a, the arrangement between the County and the owner, or 6-12.10-b, the agreement between the owner and the Contractor, as the case may be.

.14 Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in furnishing and producing specified materials from possible local material sources, including the construction of any access roads or fences and any clearing, grubbing and stripping of material sources, and all processing of whatever nature and extent required, shall be considered as included in the price paid for the contract item of work involving such material and no additional compensation will be allowed therefor.

SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-1 LAWS TO BE OBSERVED

.1 The Contractor is assumed to be familiar with, and at all times shall observe and comply with, all Federal, State, and local laws, bylaws, safety laws, building and construction codes, and ordinances and regulations, and utility company standards and requirements, in any manner affecting the conduct of the work. Before any storage site, detour or bypass or other encroachment is made or used, a permit shall be obtained from the persons or agency having jurisdiction.

7-2 REFERENCE INCLUSION IN SPECIFICATIONS

.1 Each reference given in these specifications, though summarized only in part, will by that reference become, in its entirety, a part of these specifications.

7-3 WORKMEN'S COMPENSATION INSURANCE

.1 The Contractor shall obtain Workmen's Compensation Insurance in accordance with the requirements of the laws of the State of California. The Contractor shall also require all subcontractors to maintain such insurance as will protect all from claims under Workmen's Compensation Acts.

7-4 LABOR

.1 Applicable provisions of the Labor Code of the State of California become a part of this specification by this reference.

7-5 WAGES

.1 In accordance with Section 1770 of the Labor Code, State of California, the Board of Supervisors has ascertained the general prevailing rates of wages applicable to Public Work in Ventura County. The current schedule of wage rates is attached to, and by this reference becomes a part of these specifications.

.2 The Contractor shall comply with Labor Code Section 1775. The Contractor shall forfeit as a penalty to the County of Ventura \$25.00 for each calendar day or portion thereof for each workman paid less than the stipulated prevailing rates for such work or craft in which such workman is employed for any work done under the contract by him or by any subcontractor under him. In addition to said penalty, the difference between such stipulated prevailing wage rates and the amount paid to each workman for each calendar day or portion thereof for which each workman was paid less than the stipulated prevailing wage rate shall be paid to each workman by the Contractor.

7-6 WORKING HOURS

.1 The Contractor shall forfeit as a penalty to the County of Ventura \$25.00 for each workman employed in the execution of the contract, by the Contractor or any subcontractor under him, for each calendar day during which such workman is required or permitted to work more than 8 hours and for each day during which such workman is required or permitted to work in excess of 40 hours in any one calendar week,

SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-11 WEIGHT LIMITATIONS

.1 The Contractor shall not operate construction equipment or vehicles of any kind which, laden or unladen, exceed the maximum weight limits posted and/or prescribed by the Road Commissioner, Ventura County, or in the absence of such weight limit regulations, the maximum weight limits allowed in Division 15 of the California Vehicle Code over completed or existing treated base, surfacing, pavement or structures in any area of the County except when expressly permitted in the Special Provisions.

.2 Such express permission shall permit the exception to be made only within the project site, subject to the control of the Engineer. In such case and subject to providing the protective measures deemed necessary by the Engineer, the Contractor may be permitted to make transverse crossings of treated bases, surfacing, pavement and structures existing or under construction or which have been completed, with equipment which exceeds the weight limitations set by the County or the Vehicle Code as stipulated above, in this section, provided that the Contractor at his own expense shall provide the said protective measures and repair any damage caused by such operation of construction equipment or vehicles.

.3 The words "protective measures" as used in this section are construed to mean all labor, materials, equipment and other costs of work including, but not limited to planking, timbering, strengthening, bracing, strutting and under-pinning and the removal and disposal thereof.

7-12 SURFACES OPENED BY PERMIT

.1 Openings in the construction area for purposes other than those required for the prosecution of the contract shall not be allowed without written permission from the Engineer and after the Contractor has obtained the necessary permits.

7-13 SANITARY PROVISIONS

.1 The Contractor shall provide such sanitary facilities for the use of his employees as may be necessary, and shall maintain same in a neat and sanitary condition; and shall conform to all rules and regulations pertaining to sanitary provisions applicable to the project or area.

7-14 PUBLIC CONVENIENCE AND SAFETY

.1 The Contractor shall take necessary care at all times, in all the operations and use of his equipment, to protect the public and to facilitate the flow of traffic.

SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-17 (continued)

.2 In the event any utility lines are injured by the Contractor, he shall promptly notify the utility company and in cooperation with the utility company he shall repair the damage at once, or cause it to be repaired, at his expense.

.3 When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof on the part of the Contractor, he shall restore or have restored, at his expense, such property to a condition similar or equal to that existing before such damage or injury was done by repairing, rebuilding, or otherwise restoring same; or he shall make good such damage or injury in some other acceptable manner.

7-18 DUST ABATEMENT

.1 During the performance of the work, the Contractor shall take all necessary steps to prevent and save the County free and harmless from any loss or damage resulting from his operations that raise or produce dust in such amounts as to cause damage to adjacent property. Full compensation for the work involved in preventing dust damage shall be included in the prices bid for the various items of the work.

7-19 TRESPASS

.1 The Contractor shall be responsible for all damage or injury which may be caused on any property by trespass by the Contractor or his employees in the course of their employment, whether said trespass was committed with or without the consent or knowledge of the Contractor. Trespass will be involved in all use of public or private property outside of the limits of the right-of-way and temporary working areas delineated on the plans.

7-20 DAMAGE

.1 The Contractor shall be responsible for all loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties encountered during the prosecution of the work, until its final acceptance by the Board. He shall replace all damaged or lost work at his own expense without additional compensation therefore.

7-21 RESPONSIBILITY FOR DAMAGE CLAIMS. SAVE HARMLESS

.1 The contractor shall save harmless the County and all its representatives from all suits, actions, or claims of any character brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding the work; or through the use of unacceptable materials in the construction of the improvement; or on account of any act or

SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-24 PUBLIC OFFICIALS NOT PERSONALLY LIABLE

.1 There shall be no personal liability upon the individual members of the Board of Supervisors, the contracting officer or the Engineer, their agents, or employees, for any act performed in the discharge of any duty imposed or the exercise of any power or authority conferred upon them by, or within the scope of the contract, it being understood that in all such matters they act solely as agents and representatives of the County.

7-25 NO WAIVER OF LEGAL RIGHTS

.1 The County shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefor from showing the true amount and character of the work performed and materials furnished by the Contractor, nor from showing that any such measurement, estimate, or certificate is untrue or is incorrectly made, nor that the work or materials do not in fact conform to the contract.

.2 The County shall not be precluded or estopped notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith from recovering from the Contractor or his sureties, or both, such damages as it may sustain by reason of the Contractor's failure to comply with the terms of the contract.

.3 Neither the acceptance by the Engineer or by his representative, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the Engineer shall operate as a waiver of any portion of the contract or of any power herein reserved, or of any right to damages.

.4 A waiver of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.

7-26 THE OWNERS RIGHT TO DO WORK

.1 If the Contractor should neglect to prosecute the work properly or fail to perform any provision of the contract, the Owner, after three days' written notice to the Contractor, may, without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor.

7-27 SAFETY AND REPORTS OF ACCIDENTS

.1 The Contractor shall furnish such safeguards and safety devices and shall take all actions, including conformance to the Industrial Safety Orders, State of California, necessary to protect employees and the public.

SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

7-31 PAYMENT OF TAXES

.1 The contract prices paid for the work shall include full compensation for all taxes which the Contractor is required to pay, whether imposed by Federal, State or local government, including, without being limited to, Federal excise tax.

SECTION 8

PROSECUTION AND PROGRESS

8-1 PROSECUTION OF WORK

- .1 The Notice to Proceed will be issued in accordance with provisions of Section 3-5. Work shall begin within ten (10) days after receipt of such Notice, or shall begin within such other period of time as may be indicated in the Special Provisions.
- .2 No funds are to be committed on the project before receipt of the Notice to Proceed.
- .3 Notification of Award shall be made in accordance with the provisions of Section 3-1.1. The Contractor shall, within ten (10) days after receipt of such Notification, file with the Engineer a bar chart or time schedule of proposed progress, a plan of construction, and the proposed detailed methods of carrying on the work, including a full statement of the items of equipment and equipment layout for the project.
- .4 If required by the Special Provisions, the Contractor shall start construction operations on that part of the project designated by the Engineer. The work shall be conducted in such a manner and with sufficient materials, equipment, and labor to insure its completion in accord with the plans and specifications within the time set forth in the contract.
- .5 Should the prosecution of the work for any reason be discontinued, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operation.
- .6 The Contractor shall be held responsible for any damage done by him to work performed by any other contractor.

8-2 CONTRACT TIME

- .1 The contract time stated in the contract for the completion of the contract work by the Contractor is predicated upon a reasonable estimate of the time required therefor, based upon the scope of the work covered by the contract as awarded. The total contract time allowed for the performance of the work shall be the number of working days shown in the contract as awarded, plus any additional working days authorized in writing as follows:
 - a. For any change or additional work ordered by the Engineer under the Changes, Changed Conditions, or Inspection clauses of the General Specifications, the contract time shall be adjusted as agreed upon and set forth in the order.
 - b. For any extension of time granted in accord with the time extension clause, the contract time shall be extended as set forth in the order.

SECTION 8

PROSECUTION AND PROGRESS

8-4 (continued)

.4 When time is of the essence and a completion date is stated in the Special Provisions in lieu of a number of working days the cause of delays enumerated in Section 8-5 shall not act or be cause for extension of contract time under any circumstances. Such a time requirement may be established because of extreme hazards caused by failure to meet the completion date.

8-5 TIME EXTENSION

.1 The Contractor may request time extension for any of the following causes for delay, if such delays are not caused by, or the continuance of which is not due to, any fault or negligence on the part of the Contractor. The Engineer shall decide on the validity of each request. The Owner, however, shall not be liable for any damages on account of any such delay. Request for time extension must be presented to the Owner in writing within ten (10) days of the close of the period of delay.

a. Unavailability of needed labor or materials, when the fact of such unavailability is established to the satisfaction of the Owner.

b. Acts or neglect of the Owner or his employees or those under the Owner by contract or otherwise.

c. Acts of God, by which the Contractor could not have reasonably foreseen and provided for.

d. Stormy and inclement weather as itemized in the weekly statement of working days used by the County.

e. Strikes or like trouble among mechanics or laborers.

.2 Permitting the Contractor to continue and finish the work, or any part of it, after the date to which the time fixed for its completion may have been extended, shall in nowise operate as a waiver on the part of the Owner of any of its rights under this contract.

8-6 SUBCONTRACTING

.1 The Contractor shall perform with his own organization work amounting to not less than 50 per cent of the original contract amount, exclusive of the anticipated cost of any work designated as special or extra work.

SECTION 8

PROSECUTION AND PROGRESS

8-8 (continued)

.5 Should the Contractor fail to comply with the Engineer's written request as to personnel replacement or fail to furnish suitable and sufficient equipment for the proper prosecution of the work, the Engineer may withhold payment of estimates which are or may become due, or may suspend the work until such equipment has been provided.

8-9 LANDSCAPE PRESERVATION

.1 The Contractor shall give special attention to the effect of his operations upon the landscape, and shall take special care to maintain natural surroundings undamaged.

.2 The Contractor shall not deface, injure, or destroy trees or shrubs, nor remove or cut them unless indicated on the plans or in the specifications without specific written authority from the owner of the tree or shrub or the Engineer. No ropes, cables or guys shall be fastened to or attached to any existing nearby trees for anchorages in lieu of placing deadmen, unless specifically authorized; if authorized, the Contractor shall first adequately wrap the trunk with a sufficient thickness of burlap or rags over which softwood cleats shall be tied before any rope, cable, or wire is placed. The Contractor shall in any event be responsible for any damage resulting from such use.

.3 Any tree or other landscape feature scarred or damaged by the Contractor's equipment or operations shall be restored as nearly as possible to its original condition at the Contractor's expense. The Engineer shall decide what method of restoration shall be used, and whether damaged trees shall be trimmed or removed and replaced in kind.

8-10 FIRE PREVENTION AND CONTROL

.1 The Contractor shall at all times strictly comply with State, County and Municipal fire regulations providing when necessary sufficient safeguards to protect the work area as well as surrounding property. The project area must be kept clean of inflammables; paint, kerosene, gasoline, etc., must be stored separately in suitable containers at a safe distance from all structures.

SECTION 9

MEASUREMENT AND PAYMENT

9-1 MEASUREMENT AND QUANTITIES

- .1 All 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 consist of 2,000 pounds avoirdupois.
- .2 Unless shipped by rail, material paid for by weight shall be weighed on scales furnished by and at the expense of the Contractor or on other sealed scales regularly inspected by the State Bureau of or the County Sealer of Weights and Measures or its designated representative. All scales shall be suitable for the purpose intended and shall conform to the tolerances and specifications of the State Bureau of or the County Sealer of Weights and Measures. All platform scales shall be of sufficient size to permit the entire vehicle or combination of vehicles to rest on the scale platform while being weighed. Combination vehicles may be weighed as separate units provided they are disconnected while being weighed. The Contractor shall have all scales inspected and sealed by the State Bureau of or the County Sealer of Weights and Measures as often as the Engineer may deem necessary to ascertain the accuracy of such scales.
- .3 A weigher, to be appointed and compensated by the owner shall weigh all material weighed on scales furnished or owned by the Contractor. When required by the Engineer, the operator of each vehicle weighed shall obtain a weigh or load slip from the weigher and deliver said slip to the Engineer at the point of delivery of the material.
- .4 If material is weighed on scales not furnished or owned by the Contractor a representative of the Owner may, at the discretion of the Engineer, be present to witness the weighing and to check and compile the daily record of such scale weights. If the weighing is not witnessed by a representative of the owner, the Contractor shall furnish a Licensed Weighmaster's certificate or certified daily summary weigh sheets. A duplicate weigh or load slip shall be furnished to each vehicle weighed and said slip shall be delivered to the Engineer at the point of delivery of the material for all material weighed on scales not furnished or owned by the Contractor.
- .5 If material is shipped by rail, the car weights will be accepted provided the actual weight of material only will be paid for and not minimum car weight used for assessing freight tariff, and provided further that car weights will not be acceptable for material to be passed through mixing plants.

SECTION 9

MEASUREMENT AND PAYMENT

9-1 (continued)

.10 The weight of all aggregate or other roadway material which is to be paid for on a weight basis, except imported borrow, imported topsoil, aggregate subbases, aggregate bases or aggregate for plant-mixed cement treated bases, will be determined by deducting from the weight of material delivered to the work, the weight of water in the material at the time of weighing in excess of 3 percent of the dry weight of the material. When imported borrow, imported topsoil, or aggregate subbase is being paid for on weight basis, the weight to be paid for will be determined by deducting from the weight of imported borrow, imported topsoil, or aggregate subbase delivered to the work, the weight of water in the imported borrow, imported topsoil, or aggregate subbase at the time of weighing in excess of 6 percent of the dry weight of the imported borrow, imported topsoil, or aggregate subbase. The percentage of water in the material shall be determined by Test Method No. Calif. 311.

.11 The weight of water deducted as provided in this Section 9-1, except for aggregate bases, will be converted to gallons and paid for at the contract price per thousand gallons for applying water, except that payment will be made only for the amount of water, as, in the opinion of the Engineer, would be required in connection with processing or placing and compacting the material in place as specified, and with the further exception that when the contract does not include a contract price for applying water, no compensation or other allowance will be allowed for the weight of such water deducted.

.12 Full compensation for all expense involved in conforming to the requirements specified in this Section 9-1 for measuring and weighing materials shall be considered as included in the unit prices paid for the materials being measured or weighed and no additional compensation will be allowed therefor.

9-2 SCOPE OF PAYMENT

.1 The quantities listed in the bid schedule do not govern final payment. Payments to the Contractor will be made only for the actual quantities of contract items performed in accordance with the plans and specifications. If, upon completion of the construction, the actual quantities show either an increase or decrease from the quantities given in the bid schedule, payments will be computed on the basis of the contract unit prices except as provided in this Section 9.

SECTION 9

MEASUREMENT AND PAYMENT

9-4 (continued)

.2 Increases of more than 25 percent

a. Should the total pay quantity of any item of work required under the contract exceed the Bid Proposal estimate therefor by more than 25 percent, the work in excess of 125 percent of such estimate and not covered by an executed contract change order specifying the compensation to be paid therefor will be paid for by adjusting the contract unit price, or, at the option of the Engineer, payment for the work involved in such excess will be made on the basis of force account as provided in Section 9-5.

b. The adjustment of the contract unit price will be the difference between the contract unit price and the actual unit cost, determined as hereinafter provided, of the total pay quantity of the item. If the costs applicable to such item of work include fixed costs, such fixed costs will be deemed to have been recovered by the Contractor by the payments made for 125 percent of the contract quantity for such item, and in computing the actual unit cost, such fixed costs will be excluded.

c. Subject to the above provisions, the actual unit cost will be determined by the Engineer in the same manner as if the work were to be paid for on a force account basis as provided in Section 9-5; or such adjustment will be as agreed to by the Contractor and the Engineer.

.3 Decreases of more than 25 percent

a. Should the total pay quantity of any item of work required under the contract be less than 75 percent of the Bid Proposal estimate therefor, the quantity of said item performed, unless covered by an executed contract change order specifying the compensation payable therefor, will be paid for by adjusting the contract unit price, or at the option of the Engineer, payment for the quantity of the work of such item performed will be made on the basis of force account as provided in Section 9-5.

b. The adjustment of the contract unit price will be the difference between the contract unit price and the actual unit cost, determined as hereinafter provided, of the total pay quantity of the item, including fixed costs. Such actual unit cost will be determined by the Engineer in the same manner as if the work were to be paid for on a force account basis as provided in Section 9-5; or such adjustment will be as agreed to by the Contractor and the Engineer.

SECTION 9

MEASUREMENT AND PAYMENT

9-5 (continued)

.4 Only materials furnished by the Contractor and necessarily used in the performance of the work will be paid for. The cost of such materials will be the cost to the purchaser, whether Contractor, subcontractor, or other forces, from the supplier thereof, except as the following are applicable:

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

b. If, in the opinion of the engineer, the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, then the cost of such materials shall be deemed to be the lowest current wholesale prices at which such materials are available in the quantities concerned delivered to the job site, less any discounts as provided above.

.5 Equipment rental cost shall be determined as follows:

a. 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 for the use of such equipment entered into by the Contractor; or if not listed, he will be paid such hourly rental rates as are agreed upon by the Contractor and the Engineer prior to use of the equipment except that in no case shall such agreed hourly rental rates exceed one-fortieth ($1/40$) of the weekly rental rates of established distributors or equipment rental agencies serving the area, plus $33\frac{1}{3}$ percent for the cost of fuel, oil, lubrication, and field repairs and maintenance.

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

c. Operators of rented equipment will be paid for as provided in Section 9-5.2 and 9-5.3.

d. Individual pieces of equipment or tools having a replacement value of \$25 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor.

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

f. In computing the rental time of equipment, less than thirty (30) minutes shall be considered one-half hour.

SECTION 9

MEASUREMENT AND PAYMENT

9-5 (continued)

.8 The Contractor's representative and the Engineer shall compare records of the work performed as ordered on a force account basis at the end of each day on which such work is performed and approved or adjusted at once. Copies of these records shall be made upon suitable forms provided for this purpose and signed by both the Engineer and the Contractor's representative, one copy being retained by each party. A monthly summary of these daily reports shall form the basis for all claims for work done on a force account basis which shall be certified and submitted to the Engineer by the Contractor. Such monthly claims shall be filed with the Engineer on the regular submission day of the month following that in which the work was actually performed.

.9 Monthly payments of all charges for force account work accomplished in any one month shall be made in full on regular payment schedule.

.10 The compensation herein provided shall be received by the Contractor as payment in full for extra work; extra work superintendence, overhead and profit; done on the "Force Account" basis.

9-6 PAYMENT ON LUMP SUM CONTRACTS

.1 The lump sum price shall be equitably adjusted to cover changes in the work ordered by the Owner but not shown on the plans or required by the specifications. Such increases or decreases in the lump sum price shall be determined by agreement between the Owner and the Contractor. If it is impractical to arrive at a pre-agreed upon amount, additional work may be done under the provisions of Section 9-5, Force Account.

.2 The Owner shall make progress payments on account of the Contract as follows:

a. On the day of the month determined by the Engineer, the Contractor may present to the Engineer an invoice covering the percentage of the total amount of the contract which has been completed from the start of the job, up to and including the day of presentation, together with such supporting evidence as may be required by the Engineer. This invoice may also include the cost of such material required in the permanent work as has been delivered to the site but not as yet incorporated in the work.

b. In order to receive credit for the amount and cost of such material the Contractor shall submit evidence satisfactory to, and in a form required by, the Engineer.

SECTION 9

MEASUREMENT AND PAYMENT

9-7 PAYMENT ON UNIT PRICE CONTRACTS

.2 (continued)

b. The County shall retain 10 per cent of the value of the materials so estimated to have been furnished and delivered and unused. The County shall also retain 10 per cent of the value of the work done.

c. On the day of the month determined by the Engineer, the Owner shall pay to the Contractor the balance not retained, as aforesaid, after deducting therefrom all previous payments and all sums to be kept or retained under the provisions of the contract.

9-8 ACCEPTANCE AND FINAL SETTLEMENT

.1 Whenever, upon inspection, the Engineer shall find that all the materials have been furnished, all the work has been performed, and all the construction required by the contract has been completed in accordance with its terms, he shall certify the work and shall establish the date of completion thereof, after which no days shall be charged against contract time, and shall so notify the Contractor. The Engineer shall notify the Board of such certification and request the Board accept the work as fully completed. Upon notification in writing, and as of the day the Board has officially accepted the work, the Contractor shall be relieved of any responsibility for further work under the contract except as may be required for correction of any latent defects or other defective work subsequently found during the twelve month period of the guarantees of materials and workmanship. Date of Approval by the County of the final voucher for payment shall constitute the date of final settlement of the contract. This action will not preclude consideration of any claim which the Contractor, by appropriate statement on the final voucher, has reserved the right to submit in connection with the contract.

.2 Final payment of all monies due on the contract will be made within thirty-five (35) days following completion of the work and the date of official acceptance by the Board of Supervisors provided the Contractor shall have furnished the following:

a. Acceptable proof of satisfactory settlement of all accounts.

b. Satisfactory proof of proper and complete release from all fees, royalties, or claims brought against him for the use of any patented invention, article or arrangement connected with the structure.

c. A release discharging the Owner, its Officers, Agents and employees from all liability, obligations and claims arising under this contract.

SECTION 10
FLOOD CONTROL

10-1 REVISIONS TO PART I GENERAL SPECIFICATIONS AND GENERAL PROVISIONS

.1 DEFINITIONS

Section 1-40 is hereby deleted and the following language substituted:

- 1-40 DAYS: Unless otherwise designated, days as used in the specifications will be understood to mean calendar days.
- 1-41 WORKING DAYS: A working day is defined as any day, except Saturdays, Sundays, legal holidays and except days suspended by the Engineer for inclement weather or other reasons.

.2 ARBITRATION

The following Contract Arbitration Clause is hereby made effective:

CONTRACT ARBITRATION CLAUSE

"Any dispute arising during the performance of this contract concerning the following specified areas, shall be submitted to arbitration as described below:

1. The true meaning of the plans, drawings, and technical requirements of all contract documents for the work contemplated by this contract and the level of compliance achieved.
2. The amount of extra payment to be made to the contractor, or the amount to be deducted, in connection with an increase or decrease in the scope of the work from what was called for by the original plans, drawings and specifications (change orders).
3. How many, if any, additional working days should be permitted to the contractor for the performance of the contract, over and above the number of working days permitted by the original contract, without liquidated damages being assessed.

Whenever the Contractor and the County fail to agree on the true meaning of the plans, drawings or technical specifications, the Contractor shall proceed in accordance with the interpretations of the County and may, within 10 days thereafter, file with the American Arbitration Association and Director of Public Works a Demand for Arbitration, together with the appropriate fee, pursuant to the rules of the Association. The County, at any time, may submit such a dispute to arbitration by serving the American Arbitration Association and the Contractor with a Demand for Arbitration.

SECTION 10

10-1 (Continued)

Whenever the Contractor and County fail to agree on the achieved level of compliance with the plans, drawings and technical requirements of the contract documents, ten days after receipt of notice from the County that full compliance has not been achieved, the Contractor may file with the American Arbitration Association and Director of Public Works a Demand for Arbitration, together with the appropriate fee, pursuant to the rules of the Association. Should the Board of Arbitration decide that the plans, drawings and technical requirements of the contract documents have been fully complied with, the County will be bound by this determination. Should the Board of Arbitration find that they were not fully complied with, the Board of Arbitration shall direct the Contractor to take corrective action to bring the work up to the requirements of the plans, drawings and other contract documents, or to pay the cost of bringing the work up to the requirements, unless the Contractor can show, by clear and convincing proof, that such would involve unreasonable economic waste (as that term is defined by the courts of the State of California in construction contract cases), in which case the Board of Arbitration shall assess damages by the use of whatever measure it deems appropriate. The County, at any time, may submit such a dispute to arbitration by serving the American Arbitration Association and the Contractor with a Demand for Arbitration.

Whenever the Contractor and County fail to agree on the amount of compensation to be added to or deducted from the contract price as a result of a change in the scope of the work, the Contractor shall proceed with the work and within 10 days thereafter may file with the American Arbitration Association and the Director of Public Works a Demand for Arbitration, together with the appropriate fee, pursuant to the rules of the Association. The County at any time, may submit such a dispute to arbitration by serving the American Arbitration Association and the Contractor with a Demand for Arbitration.

Whenever the Contractor and the County fail to agree as to whether or not additional working days should be permitted to the Contractor for the performance of the contract, over and above the number of working days permitted by the original contract, the Contractor may, within 10 days after receipt of notice from the County that the written protest referred to in Section 8-2.1 of these specifications has been denied, (or in situations not involving such written protest with 10 days after the decision of the Engineer is communicated to the Contractor), file with the American Arbitration Association and the Director of Public Works a Demand for Arbitration, together with the appropriate fee, pursuant to the rules of the Association. The

SECTION 10

10-1 (Continued)

County, at any time, may submit such a dispute to arbitration by serving the American Arbitration Association and the Contractor with a Demand for Arbitration.

In any of the foregoing cases, if a Demand for Arbitration is not served within the time mentioned, the County will be under no obligation to arbitrate the questions involved. If the Notice is served by the Contractor within the time mentioned, or by the County, such disputes shall be settled by arbitration in accordance with the Rules of the American Arbitration Association, in as expeditious a manner as is possible. Should both the Contractor and the County prefer, the point in question may be settled through a hearing before a Board of Arbitration to be composed of one member selected by the Director of Public Works and one member selected by the Contractor, these two members to select a third member and a majority of said Board of Arbitration to be empowered to make a final and binding decision on the question. The County and the Contractor hereby agree to be bound by and to abide by any and all decisions and orders made by any Board of Arbitration assembled pursuant to this contract."

.3 PERMITS

Section 7-10 is hereby deleted and the following language substituted:

"7-10 PERMITS AND LICENSES

.1 Except as hereinafter provided, the Contractor shall obtain all permits and licenses and shall pay all charges, taxes and fees and shall give all notices necessary and incident to the due and lawful prosecution of the work.

.2 The following permits will be obtained by the County: building permits (including plan check), grading permits and encroachment permits. The County will not obtain permits for working outside of the working areas shown on the plans.

.3 In the case of State Highway and Railroad encroachment permits, the County will obtain the basic permit which will include checking of plans, however the Contractor must also obtain permits from these agencies. Inspection fees charged by these agencies must be paid by the Contractor."

SECTION 10

10-1 (Continued)

.4 CONTRACT TIME

Section 3-2 is hereby deleted and the following language substituted:

"3-2 CONTRACT TIME

.1 The Contractor shall complete all or any designated portion of the work called for under the contract within the time set forth in the contract documents.

A working day is 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, and except days on which the Contractor is 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 75 per cent of the normal labor and equipment force engaged on such operation or operations for at least 60 per cent of the total daily time being currently spent on the controlling operation or operations.

Should the Contractor prepare to begin work at the regular starting time in the morning of any day on which inclement weather, or the conditions resulting from the weather, or the condition of the work, prevents the work from beginning at the usual starting time and the crew is dismissed as a result thereof and the Contractor does not proceed with at least 75 per cent of the normal labor and equipment force engaged in the current controlling operation or operations for at least 60 per cent of the total daily time being currently spent on the controlling operation or operations, the Contractor will not be charged for a working day whether or not conditions should change thereafter during said day and the major portion of the day could be considered to be suitable for such construction operations.

The current controlling operation or operations is to be construed to include any feature of the work considered at the time by the Engineer and the Contractor, which, if delayed, will delay the time of completion of the contract.

Determination of each non-working day, except Saturdays, Sundays and legal holidays and days on which the Contractor is specifically required by the special provisions to suspend construction operations, shall be made and agreed upon during such day by conference between the Engineer and the Contractor. In the event of failure to agree, the Contractor will be allowed 15 days from the issuance of the weekly statement of working days in which to file a written protest setting forth in what respects he differs from the Engineer; otherwise the decision of the Engineer shall be

SECTION 10

10-1 (Continued)

deemed to have been accepted by the Contractor as correct. The Engineer will furnish the Contractor a weekly statement showing the number of working days of time extensions being considered or approved, the number of working days originally specified for the completion of the contract and the extended date for completion thereof, with the exception that no time extensions will be granted for suspension of work covered under Section 3-3.1b of these specifications.

The total contract time allowed for the performance of the work shall therefore be the number of working days shown in the contract as awarded, plus any additional working days authorized in writing as follows:

- a. For any change or additional work ordered by the Engineer under the Changes, Changed Conditions, or Inspection clauses of the General Specifications, the contract time shall be adjusted as agreed upon and set forth in the order.
- b. For any extension of time granted in accord with the time extension clause, the contract time shall be extended as set forth in the order.
- c. For suspension of the work by order of the Engineer the contract time shall be extended, except suspensions under Section 3-3.1b of these specifications.
- d. For suspension due to weather and soil conditions considered by the Engineer to be unsuitable for prosecution of work."

.5 PROGRESS

Section 3-3.4 is hereby deleted and the following language substituted:

3-3 CHARACTER OF WORKMEN AND EQUIPMENT

.4 Should construction lag materially behind the approved progress schedule, the Engineer may call this problem to the attention of the Contractor and may require the Contractor to furnish a new progress schedule.

.6 FORCE ACCOUNT

Section 9-5.3b is hereby deleted and the following language substituted:

SECTION 10

10-1 (Continued)

"b. To the actual wages as determined immediately above shall be added a sum equal to twenty percent (20%) of the total of said actual wages, which sum shall constitute full compensation to the Contractor for the cost of Industrial Accident or Workmen's Compensation Insurance, the cost of Social Security taxes and Unemployment Compensation Insurance, and the amounts paid by the Contractor by reason of an employment contract generally applicable to his employees."

.7 RENTAL RATES

Section 9-5.5(a) is hereby deleted and the following language substituted:

"(a) The Contractor will be paid for the use of equipment at the rental rates established by the State of California, Department of Public Works, Division of Highways. Copies of these rental rates are on file with the Ventura County Department of Public Works. These rental rates will be used regardless of ownership and any rental or other agreement for the use of such equipment entered into by the Contractor; or if not listed, he will be paid such hourly rental rates as are agreed upon by the Contractor and the Engineer prior to use of the equipment except that in no case shall such agreed hourly rental rates exceed one-fourtieth (1/40) of the weekly rental rates established by distributors or equipment rental agencies serving the area, plus 33-1/3 per cent for the cost of fuel, oil, lubrication, and field repairs and maintenance."

.8 PRECEDENCE OF DOCUMENTS

Section 5-3 is hereby deleted and the following language substituted:

"5-3 COORDINATION OF PLANS AND SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS

.1 The standard specifications, the approved plans, any special provisions, the general provisions, all notices, addenda, supplements, change orders and directives affecting the work, duly issued by the Engineer to the Contractor, and the Notice of Receiving Bids, the Proposal and Bid Form and the body of the contract, are essential parts of the contract and are intended to be mutually complimentary, and are all included in the expression "contract documents."

.2 In case of any discrepancy, figured dimensions shall prevail over scaled dimensions, plans shall prevail over the standard specifications, special provisions shall prevail over the plans and standard specifications. In every case detailed drawings shall take precedence over general drawings. The order of

SECTION 10

10-1 (Continued)

prevalence of contract drawings and specifications shall therefore be as follows:

1. Special Provisions
2. Detail Drawings and Plans
3. General Specifications and General Provisions
4. State Standard Specifications
5. Standard Drawings

.3 Where required dimensions are not shown in figures, the Contractor shall obtain such dimensions from the Engineer before proceeding with the construction of the work."

.9 EMERGENCY WORK

Add a new Subsection to Section 8-1 "Prosecution of Work" as follows:

".7 In the event that the Contractor refuses, or is unable, or is unavailable to prosecute the work in an emergency situation as determined by the Engineer, the Engineer may, without prejudice to any other remedy he may have, immediately accomplish any and all work he deems necessary to correct the emergency situation. The cost of said work may, at the option of the Engineer, be deducted from the payments due then or thereafter to the Contractor. In an emergency situation, no written notice will be issued to the Contractor or his representative prior to prosecution of the work."

.10 WATERING

a. Responsibility for Furnishing Water: It will be the responsibility of the Contractor to develop, furnish and apply all water required to complete the work.

b. Application: The application of water shall be under the control of the Engineer at all times and shall be applied in the amounts and at the locations designated by the Engineer or as specified.

c. Payment: All costs incidental to the use of water will be included in the appropriate bid items and no separate payment will be made to the Contractor.

.11 Manner of Defining Areas of Work: The location of the work and the general dimensions are shown on the plans, but the exact detailed locations will be specifically defined by the Engineer in his instructions to the Contractor and by survey control markers or references on the ground.

SECTION 10

10-1 (Continued)

.12 DUST CONTROL

- a. Need and Occurrence for Control of Dust: When required by the Special Provisions the Contractor shall provide dust control by the application of water, or dust palliative, or both.

- b. Authority of the Engineer: The Engineer will determine whether water or dust palliative is to be used to alleviate or prevent dust nuisance, the amounts of each material to be used, and the application shall be under his control at all times.

- c. Payment: All costs incidental to the control of dust will be included in the appropriate bid items and no separate payment will be made to the Contractor.

SECTIONS 11 THROUGH 15

(NOT USED)

COUNTY OF VENTURA
DEPARTMENT OF PUBLIC WORKS

PART II
PROJECT REQUIREMENTS
AND
SPECIAL PROVISIONS
FOR

SPECIFICATION NO. _____

PART II - SPECIAL PROVISIONS.

SP-1 DESCRIPTION OF THE WORK

1.1 The work to be performed under this Contract is located at Matilija Dam, on Matilija Creek, near Ojai, Ventura County, California. The location is shown on Drawing No. 5214-R-1. The chlorinator house and water tank areas will be inaccessible to Contractor. The work under this Contract includes, but is not limited to, furnishing all plant, materials, articles (excepting specific items of material and equipment to be furnished by the District), supplies, equipment, labor, transportation, fuel, power and water, supervision, and performing all operations required to remove and dispose of portions of Matilija Dam, spillway bridge and other facilities and reconstruction of new bridge piers and steel and timber footbridges.

1.1.1 Dam. The existing dam is a concrete arch dam. A portion of the dam concrete shall be removed and disposed of. The section to be removed is confined by two vertical construction joints on the sides and one horizontal construction joint along the bottom. The top of the section to be removed is the present spillway crest and crest of dam. The removal shall also include finishing the exposed surfaces as specified.

1.1.2 Spillway Bridge. The existing spillway bridge is a reinforced concrete bridge supported by reinforced concrete piers. A section of the bridge and several piers shall be removed and disposed of.

1.1.3 Footbridges. Two steel and timber footbridges shall be erected to bridge over the removed portion of the dam. A reinforced concrete center pier and two end piers shall be constructed to support the footbridges.

1.1.4 Electrical Equipment. Three electrical circuits, one for operating the sluice gate operator, one for operating the sluice valve and one for lighting will be disrupted by removal of the dam concrete. The three circuits shall be re-established.

1.1.5 Mechanical Equipment. . A 48-inch diameter sluice gate is presently electrically operated from the existing bridge with a gate stem running up an existing pier. This pier shall be removed and the gate stem and all associated operating equipment and metal work shall be disassembled and stored. The mechanical equipment will then be re-installed by securing it to a new pier and the operation of the gate restored.

1.1.6 Riparian Water Supply. The Contractor shall be responsible for supplying specified quantities of riparian water downstream of the dam. This water shall be clean and be free of silt, mud or other impurities that might result from Contractor's performance of the work under this Contract.

1.1.7 Installation of New 36-Inch Diameter Outlet Valve. The Contractor shall install a 36-inch diameter outlet valve in the existing conservation outlet pipe on the downstream side of the dam. All the equipment together with connecting pipes and fabrications will be furnished by the District.

SP-2 COOPERATION WITH OTHER CONTRACTORS

The District may award contracts for other work within the project area or adjacent areas. Contractor shall fully cooperate with other persons performing work in such areas.

SP-3 PROSECUTION AND COMPLETION OF THE WORK

3.1 Contractor shall complete all work under this Contract on or before March 30, 1966.

3.2 Contractor shall schedule its construction operations so that it shall complete the work, including portions thereof, by the dates set forth below.

3.2.1 Complete removal of portion of the dam, removal of a portion of the existing bridge and several existing bridge piers and disposal of all the above and the installation of a new 36-inch diameter outlet valve on or before November 15, 1965. Contractor is specifically advised that the completion of the removal operations by the date specified is mandatory in order to comply with the requirements for safe handling of possible winter floods.

3.2.2 Complete construction of footbridges including restoring electrical circuit and reassembling sluice gate operating equipment on or before March 30, 1966.

SP-4 LIQUIDATED DAMAGES

4.1 In the event that the work under the Contract is not completed within the times prescribed for such completion in Paragraph SP-3, PROSECUTION AND COMPLETION OF THE WORK, such delay will cause substantial injury to the District, which injury is not easily reduced to monetary terms and the exact amount of which will be difficult, if not impossible to ascertain.

4.2 It is therefore agreed between the parties hereto that the amount of liquidated damages to be deducted from the Contract Price for failure to complete any portion of the Work within the time specified in Paragraph SP-3, PROSECUTION AND COMPLETION OF THE WORK, shall be as follows:

4.2.1 For failure to complete removal operations and installation of new 36-inch diameter outlet valve, liquidated damages of One Thousand Dollars (\$1000) for each and every calendar day or fraction thereof that such completion is delayed beyond November 15, 1965.

4.2.2 For failure to complete all work under this Contract, damages of Two Hundred Dollars (\$200) for each and every calendar day or fraction thereof that such completion is delayed beyond March 30, 1966.

5.1 Contractor shall, immediately upon receipt thereof, check all drawings furnished to it under the Contract and shall promptly notify the District of any omissions or discrepancies in such drawings.

5.2 All drawings initially listed in the Contract are preliminary and will be superseded and/or supplemented by such additional general and detailed drawings, known as "Construction Drawings", as may be necessary or desirable as the work progresses. These drawings will be issued by the District after the execution of the Contract to show dimensions and details not shown on the present drawings for features of the work, and for the construction of the foot-bridge not finally designed, and will not be considered to involve changes or extra work within the meaning of the Contract. The Construction Drawings will upon issuance become a part of the Contract. Such Construction Drawings will be marked "Issued for Construction", and Contractor shall perform work only in accordance with drawings bearing such "Issued for Construction" mark. Any work performed in accordance with drawings not bearing such mark shall be at the risk of rejection at Contractor's expense.

6.1 Construction Water. The District, without cost to Contractor, will furnish to Contractor an adequate supply of water for construction, Provided, that Contractor shall, at its expense, provide, operate and maintain all pumping plants, pipelines, valves, hydrants, storage tanks, and other appurtenances necessary to transport such water to points of use. Such water will be available from the Matilija reservoir.

6.2 Potable Water. Contractor shall, at its expense, provide an adequate supply of water for drinking. Such water shall conform to the requirements of the State and local authorities for potable water.

6.3 Temporary Electric Power. Contractor shall, at its expense, make arrangements with the Southern California Edison Company for temporary electric power and provide, install and maintain all materials and equipment necessary for the required distribution of such power. Contractor may, at its expense, provide its own engine-generator sets as a source of such power.

6.4 Telephone. Contractor shall, at its expense, make arrangements with the District for use of the District's telephone service existing at the site of the work.

SP-7 RIVER POLLUTION

7.1 Contractor shall not pollute any river, stream or reservoir. It shall be the responsibility of Contractor to investigate and comply with all regulations relating to pollution and contamination of the Matilija Creek.

7.2 Contractor shall, at its expense, construct settling basins of sufficient capacities or equivalent facilities to prevent the introduction of any materials into streamflow below any of its operations which will pollute the stream or would constitute substances or materials deleterious to fish life as covered by the California Fish and Game Code Laws. Contractor shall submit to the District for review, drawings showing its proposed facilities. If the facilities as constructed by Contractor prove inadequate to prevent the introduction of such materials into the streamflow, Contractor shall at its expense make such improvements as are necessary to fulfill the requirements of the laws and regulations referred to above.

SP-8 TEMPORARY FIELD OFFICE

The Dam Tender's Quarters at the site of the work will be available for Contractor's use as a temporary field office. Such quarters will be provided free of cost to Contractor, Provided, that Contractor reserve approximately 150 square feet of useable floor area for the exclusive use of the District. Contractor shall, at its expense, furnish all necessary furnishings and, before final acceptance of the work, and to the satisfaction of the District, remove

all such furnishings and repair any damage to the quarters
which, as determined by the District, results from Contractor's
use of such quarters.

PART III - SPECIFICATIONS

SECTION 1 - DOWNSTREAM WATER SUPPLY

1.1 SCOPE

This section covers supplying water downstream of the dam during construction.

1.2 GENERAL REQUIREMENTS

Contractor shall provide and maintain in a satisfactory condition all pumps, channels, flumes, drains, sumps and/or other temporary facilities necessary or required to supply water downstream of the dam during the performance of the work under this Contract. Before final acceptance of the work, Contractor, at its expense, shall remove all such facilities as required to present a satisfactory appearance and not interfere in any manner with the operation or usefulness of the reservoir.

1.3 WATER SUPPLY PLAN

Contractor shall prepare and submit to the District for review, its plan for supplying water downstream of the dam during performance of the work under this Contract. Contractor shall perform no work covered by this Section 1 until such plan has been approved by the District.

1.4 QUALITY OF WATER

The quality of the water so supplied shall, as determined by the District, be not less than equal to the quality of the water which would have been released through the existing outlet works had no work been performed.

1.5 QUANTITY OF WATER

The quantity of water to be so supplied will not be more than 5 cfs. The exact amount will be as directed by the District.

1.6

PAYMENT

1.6.1 Water supply, satisfactorily performed, will be paid for at the contract-lump-sum price stated in the Bid Form for the item listed below. Such payment will be made as follows:

1.6.1.1 Fifty percent of said contract-lump-sum price when water supply has been satisfactorily performed for 30 calendar days.

1.6.1.2 Fifty percent of said contract-lump-sum price upon completion of supplying water and the satisfactory removal and disposal of all temporary facilities and the satisfactory repair of any damage to existing structures which, as determined by the District, results from Contractor's operations.

Item 1 Downstream Water Supply

SECTION 2 - REMOVAL OF STRUCTURES

2.1 SCOPE

This section covers the removal of structures or portions thereof and the satisfactory disposal of materials resulting therefrom.

2.2 DEFINITIONS

2.2.1 Structures. Structures consist of a concrete arch dam, concrete spillway bridge, concrete piers, electrical and mechanical equipment.

2.2.2 Salvage. Salvage consists of any materials or equipment resulting from the performance of the work under this contract which are not to be re-used in such work, and which, as determined by Contractor are marketable. Such materials and equipment will become the property of Contractor without cost.

2.3 REMOVAL

The following items of material and equipment shall be removed and disposed of, Provided that such items which are to be re-used in the work shall be stored in a satisfactory manner.

2.3.1 Concrete in the dam above the horizontal construction joint located at approximately Elevation 1095 and between vertical construction joints located at axis Station 1+75 and axis Station 4+55.

2.3.2 Concrete bridge piers No. 5 through No. 10.

2.3.3 The bridge between axis Station 1+71.88 and axis Station 4+56.50.

2.3.4 Contractor's attention is invited to Section - MECHANICAL WORK and Section - ELECTRICAL WORK, for further requirements.

2.4

BLASTING

Contractor's attention is invited to Section 7-16, USE OF EXPLOSIVES, of Part I, GENERAL SPECIFICATIONS AND GENERAL PROVISIONS. Contractor may use explosives in the performance of its work under this Contract, Provided as follows:

2.4.1 Contractor shall submit with its proposal its plan and time schedule for such blasting. Any such plan, schedule or both, which, as determined by the District, is not in accordance with this Paragraph 2.4, may be grounds for rejection of that proposal.

2.4.2 Prior to performing any blasting under this Contract, Contractor shall drill and blast one test pattern to determine the intensity. Such test pattern will be located within the limits where blasting is to be done.

2.4.3 The District reserves the right to require changes in Contractor's plan, schedule or both as the District deems necessary to preserve the integrity of the structure and equipment.

2.4.4 Any portion of the structure which Contractor plans to remove by blasting shall first be isolated from vertical contact with other portions of the structure by means of an air cushion. Such cushion shall be a slot provided by any approved means other than blasting.

2.4.5 The portion of the structure to be removed by blasting shall first be divided by means of vertical slots provided at each vertical construction joint between axis Station 1+75 and axis Station 4+55.

2.4.6 Concrete within 5 feet of the horizontal construction joint located at approximately Elevation 1095 which is to be removed shall be removed by any approved means other than blasting.

2.4.7 Blasting shall be done with light charges in such pattern that the blast will fracture the concrete only to such extent that such concrete may be removed without further blasting.

2.4.8 Blasting shall be done only in the presence of an authorized representative of the District.

2.5 USE OF BARGE

Contractor, at its expense, may use a barge in connection with removal of structures. The District will, for the duration of the Contract, maintain, upstream of the dam, a pool of water of minimum surface Elevation 1025. Contractor shall take into consideration that the pool may rise to elevations substantially higher than 1025 during the duration of the work. Hydrologic and hydraulic data pertaining to historical performance of Matilija Creek and Reservoir are available for Contractor's inspection at the District's offices in Ventura. The District will not be liable for any damage to Contractor's equipment or work which results from such high water. At completion of the work, Contractor, at its expense, shall remove the barge from the site. The silt in the reservoir at the face of the dam is at approximately Elevation 1014.

2.6 SURFACE FINISH REPAIR

Contractor shall, after removal of concrete from the dam, repair damaged surfaces of exposed areas as specified below. Such repair shall be done by and at the expense of Contractor to the satisfaction of the District.

2.6.1 Areas damaged by overbreak shall be repaired to finish lines and grades by drypacking as specified in Section - CONCRETE.

2.6.2 Irregularities of surface of existing construction joints which surfaces have been exposed by removal of concrete shall be finished by drypacking or grouting as approved by the District. Such repaired surfaces shall be given a dense wood float finish. Surface irregularities shall not exceed one inch as measured with a 10-foot template.

2.6.3 Projections and depressions due to existing keys in existing construction joints shall not be removed or filled.

2.7

DISPOSAL OF MATERIALS

2.7.1 General. Wood and other combustible or non-combustible material and salvage material resulting from these operations shall be disposed of by transporting from the site of the work to approved areas, by burning, by dumping into the reservoir, or as more specifically described below.

2.7.2 Removal from Site of Work. All such materials which, as determined by the District, cannot be disposed of by burning or dumping into the reservoir, shall be removed from the site of the work. Contractor will be permitted to remove salvage material from the site of the work and be allowed to stockpile salvage materials at approved locations within the work area pending removal. The District will assume no responsibility for the protection and safe-keeping of such material. Salvage materials shall be removed from the site of the work, prior to final acceptance.

2.7.3 Burning. Material to be burned shall be burned at approved locations within the work area. Burning shall be done so as to avoid all hazards and damage to existing structures and standing trees and vegetation. Burning shall be so thorough that the material will be reduced to ashes. Contractor's attention is invited to Section 8-12, FIRE PREVENTION AND CONTROL, of Part I, GENERAL SPECIFICATION AND GENERAL PROVISIONS.

2.7.4 Dumping into Reservoir. Materials which cannot be burned and will not float in or pollute water, may be dumped into the reservoir area. Such dumping shall be not closer than 35 linear feet from the upstream face of the dam measured normal to the face of the dam at Elevation 1030. Such material shall be dumped so as to prevent its being piled higher than about 5 feet above mean silt level in the disposal area.

2.8

REPAIR OF DAMAGE

Contractor shall, at its expense, either by repair or replacement, make good any damage to existing structures or equipment which results from its performance of the work under this Contract. Such repair, replacement or both shall be to the satisfaction of the District. Contractor shall note that not all of the existing structures and equipment to be protected are shown on the Drawings.

* 2.9.1 Measurement.

2.9.1.1 Arch Dam Ogee Section. Removal of the ogee section of the arch dam will be measured for payment as the number of cubic yards of such removal satisfactorily performed, measured to the nearest cubic yard. The ogee section is as shown on the Drawings.

2.9.1.2 Arch Dam Other than Ogee Section. Removal of that portion of the arch dam shown on the Drawings to be removed other than the ogee section will be measured for payment as the number of cubic yards of concrete satisfactorily removed measured to the nearest cubic yard.

2.9.1.3 Bridge Slab. Removal of the bridge slab will be measured for payment as the number of linear feet of bridge slab satisfactorily removed measured to the nearest foot.

2.9.1.4 Bridge Sides. Removal of the bridge sides will be measured for payment as the number of linear feet of bridge sides satisfactorily removed measured to the nearest foot.

2.9.1.5 Bridge Piers. Removal of the bridge piers will be measured for payment as the number of cubic yards of concrete satisfactorily removed measured to the nearest cubic yard.

2.9.2 Payment. Removal of structures will be paid for at the contract-unit price stated in the Bid Form for the item listed below:

Item 2	Arch Dam - Ogee Section, Remove
Item 3	Arch Dam - Other than Ogee Section, Remove
Item 4	Bridge Slab, Remove
Item 5	Bridge Side, Remove
Item 6	Bridge Piers, Remove

SECTION 3 - CONCRETE

3.1 SCOPE

This section covers designing, manufacturing, forming, transporting, placing, finishing and curing concrete. Contractor may, at its option, and subject to approval of the District, furnish ready-mixed concrete or provide facilities and batch and mix the concrete at the site of the work, Provided, that **such concrete conforms to the applicable portion of this specification.**

3.2 MATERIALS

Materials shall conform to the following specifications.

3.2.1 Admixtures.

3.2.1.1 Air-Entraining Admixture. ASTM Designation C 260, of a type that can be added to the mixing water.

3.2.1.2 Water Reducing and Retarding Admixture. ASTM Designation C 494, Type D.

3.2.1.3 Other Admixtures. Other admixtures may be used **only with written approval and at the expense of Contractor.**

3.2.2 Aggregate. ASTM Designation C 33, maximum size 1-1/2 inches. Aggregate shall consist of strong, clean, sound, hard, dense, durable uncoated rock particles.

3.2.3 Cement. ASTM Designation C 150, Type II. The alkali content of the cement shall be limited to 0.60 percent. Contractor shall obtain a certificate that the cement used in the work complies with these **Specifications.** No cement shall be used until notice has been given by the District that the certificate of compliance is **satisfactory.**

3.2.4 Pozzolan. ASTM Designation C 402.

3.2.5 Water. Water shall be clear and free from injurious amounts of oil, acid, alkali, organic matter or other deleterious substances.

3.2.6 Epoxy Resin Adhesive. PR-930, the coating, Product Research Company, Burbank, California.

3.3 SAMPLING AND TESTING

Testing of materials and concrete to determine conformance with this specification will be done by and at the expense of the District, Provided that Contractor shall, at its expense, furnish samples as requested by the District. Sampling and testing will be done in accordance with the applicable ASTM Designation.

3.4 MIX DESIGN

The mix will be designed by the District. Variations from the design will not be permitted without written approval from the District. The mix will be adjusted to meet conditions encountered during performance of the work.

3.5 AIR CONTENT

The air content of the concrete after placement in the forms shall be not less than 4 percent or more than 6 percent when tested in accordance with ASTM Designation C 231.

3.6 SLUMP

Slump will be measured at the point of concrete placement and shall be between 3 and 5 inches. If the District determines that concrete of lesser slump than that being used can be properly placed and consolidated, the slump of the concrete shall be reduced as directed.

3.7 PROPORTIONING OF CONCRETE

3.7.1 General. Concrete will be proportioned to obtain workable mixes for the purpose intended. Contractor

will be required to handle and place low-slump concrete for the production of higher quality concrete. The proportions will be changed whenever, as determined by the District, such change is necessary.

3.7.2 Control. The proportions of all material entering into the concrete shall be as directed. In general, Recommended Practice for Selecting Proportions for Concrete (ACI 613) will be followed.

3.7.3 Measurement. All materials entering into the concrete shall be measured by weight on approved scales.

3.7.4 Cement and Pozzolan Content. The required cement content per cubic yard of concrete will be approximately 6.0 sacks (94 pounds each net weight). The exact amount will be determined by the District. Ten percent of such cement will be replaced with pozzolan.

3.7.5 Water Cement. The total water content for each batch of concrete will be the minimum amount necessary to produce a plastic mixture of the strength specified and the desired density, uniformity and workability.

3.8 BATCHING AND MIXING

3.8.1 Equipment. Contractor shall provide equipment capable of combining the aggregate, cement, admixture and water into a uniform mixture within the time limit specified and of discharging this mixture without segregation. The equipment shall provide adequate facilities for the accurate measurement and control of each of the materials entering the concrete. The complete plant assembly, including provisions to facilitate the inspection of all operations at all times and the adequacy and dependability of each of its parts, shall be subject to approval by the District.

3.8.2 Mixing Time. The mixing time for each batch, after all solid materials are in the mixer drum, Provided, that all the mixing water shall be introduced before 1/4 of the mixing time has elapsed, shall be as follows:

<u>Capacity of Mixer</u>	<u>Mixing Time</u>
1/2 cubic yard or smaller	1-1/4 minutes
3/4 to 1-1/2 cubic yards inclusive	1-1/2 minutes
2 and 3 cubic yards	2 minutes

The mixing periods specified are based on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. The mixing time may be increased when the charging and mixing operations fail to result in the required uniformity of composition and consistency of the concrete. The mixer shall revolve at a uniform speed for a minimum of 12 revolutions after all materials have been placed in it. Mixers shall not be charged in excess of the capacity recommended by the manufacturer, nor shall they be operated at a speed in excess of that recommended by the manufacturer. Excessive overmixing, requiring additions of water to preserve the required consistency, will not be permitted. Should any mixer at any time produce unsatisfactory results, its use shall be promptly discontinued until it is repaired.

3.9 CONVEYING

Concrete shall be conveyed from mixer to forms as rapidly as practicable, by methods which will prevent segregation, or loss of ingredients. There shall be no drop greater than 6 feet except where suitable equipment is provided to prevent segregation and where specifically authorized. Belt conveyors, chutes or other similar equipment in which the concrete is delivered to the structure in a thin continuously exposed flow, will not be permitted except for very limited or isolated sections of the work as may be approved. Flow within the mass will not exceed 5 feet in any direction from point of deposition.

3.10 PLACING

3.10.1 Approval. Approval of the District shall be obtained before starting any concrete pour. Concrete placement will not be permitted when, as determined by the District, conditions prevent proper placement and consolidation.

3.10.2 General. Concrete shall be worked readily into the corners and angles of the forms and around all reinforcement and embedded items without permitting the component concrete materials to segregate. Contractor shall provide equipment adequate for handling and placing low-slump concrete. Immediately before the concrete is placed the surface of the existing concrete shall be covered with 1/4 inch of mortar of the same cement-sand ratio as used in the concrete. All concrete placing equipment and methods shall be subject to approval. Concrete shall be deposited as close as possible to its final position. Concrete shall be placed in one lift unless otherwise specifically authorized.

3.10.3 Time Interval between Mixing and Placing. Concrete shall be placed before initial set has occurred and before it has contained its water content for more than 45 minutes.

3.10.4 Placing Temperature. When placing concrete during warm weather, the aggregate shall, if directed, be cooled by wetting to preclude temperatures of the concrete from exceeding 90 F.

3.10.5 Surface Preparation. Concrete foundation for the bridge pier shall be excavated to Elevation 1090+, about 5 feet as directed, below finish grade of the removed portion of the dam. Such removal shall be by mechanical means. Surface will require no other preparation other than placing cinch anchors for pier and clean-up before pour.

3.10.6 Consolidation of Concrete. Concrete shall be placed with the aid of mechanical vibrating equipment and supplemented by hand-spading and tamping. The vibrating equipment shall, as determined by the District, at all times be adequate in number of units and power of each unit to properly consolidate all concrete. The duration of vibration shall be limited to that necessary to produce satisfactory consolidation without causing objectionable segregation.

3.10.7 Placing Concrete through Reinforcement.

In placing concrete through reinforcement, care shall be taken that no segregation of the coarse aggregate occurs.

3.11 FORMS

3.11.1 General. Forms shall be used wherever necessary to confine the concrete and shape it to the required lines. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete and shall be maintained rigidly in correct position. Forms shall be sufficiently tight to prevent loss of mortar from the concrete.

3.11.2 Form Ties. Embedded metal rods used for holding forms shall remain embedded and shall terminate not less than 2 inches inside the formed faces of the concrete. Hollow form ties shall be filled with concrete or grout. Embedded fasteners on the ends of rods shall be such that their removal will leave holes of regular shape. Embedded wire ties for holding forms will not be permitted.

3.11.3 Cleaning and Oiling of Forms. At the time concrete is placed in the forms, the surfaces of the forms shall be free from encrustations of mortar, grout, or other foreign material that would contaminate the concrete or interfere with the fulfillment of the specification requirements relative to the finish of formed surfaces. Before concrete is placed, the surfaces of the forms shall be oiled with an approved commercial form oil that will effectively prevent sticking and will not stain the concrete surfaces. Care shall be taken that this oil does not get onto concrete that is to bond with the new pour.

3.11.4 Removal of Forms. Forms shall be removed as soon as practicable in order to avoid delay in curing and repair of surface imperfections, but in no case shall they be removed before approval. Any needed repairs or treatment shall be performed at once and followed immediately by the specified curing. Forms shall be removed with care so as not to injure the concrete, and any concrete so damaged shall be repaired by and at the expense of Contractor.

3.12 FINISHING

After removal of forms, all unsightly ridges, fins and bulges shall be removed and all minor surface voids and similar defects filled with mortar or dry-pack grout. More serious defects shall be cut out to the depth directed and filled with mortar or dry-pack grout. Grout and mortar, for use in patching in exposed areas, shall be blended with white cement as required to match the color of the adjacent concrete. All holes left by the removal of tie rods shall be reamed and filled with dry-pack grout. The dry-pack grout shall be thoroughly tamped into place. After completion of such repairs, the surfaces shall be rubbed with an abrasive stone or equivalent until the repair surfaces have approximated the appearance of the adjacent concrete, or until approved. Excessive rubbing of formed surfaces will not be permitted. Patched areas shall be cured by the same method as was used for curing the concrete being patched. Defects which, as determined by the District, are beyond the limits of accepted practice shall be cause for rejection. Surfaces shall be brought to elevation or line shown and left true and regular. Where shown or as directed, joints shall be carefully made with a jointing tool. Every precaution shall be taken to protect finished surfaces from discoloration. Surfaces or edges likely to be injured during the construction period shall be suitably protected.

3.13 SURFACE REPAIR

All projections, depressions or both that exceed the tolerance specified in Section 2.6.2 and which, as determined by the District, result from removal of existing concrete, shall be repaired to the satisfaction of the District. Projections shall be ground smooth and voids, depressions or both shall be filled with dry pack. Dry pack shall be proportioned and mixed as directed by the District. Before placing dry pack, the surfaces against which dry pack is to be placed shall be coated with epoxy resin adhesive. Surface preparation for and application of the epoxy resin adhesive shall be in accordance with the resin manufacturer's directions. Repaired areas shall be sound, free from cracks and drummy areas and the color thereof shall, insofar as is practicable, as determined by the District, match the color of the existing contiguous areas.

3.14 CURING

Unless otherwise approved by the District, concrete shall be kept continuously wet for not less than 10 consecutive days. Water for curing shall be clean and free from any elements which will cause discoloration. Where wood forms are used and left in place during curing, the wood shall also be kept wet during the curing period.

3.15 EMBEDDED ITEMS AND ITEMS BEARING ON CONCRETE

3.15.1 General. Before placing concrete, care shall be taken to determine that all embedded items are securely fastened in place as shown on the Drawings or as otherwise directed. All embedded items shall be thoroughly clean and free of oil and other foreign matter such as loose coatings of rust, paint, scale, mortar, etc. The embedding of wood in concrete will not be permitted unless specifically authorized.

3.15.2 Drypack Mortar. Drypack shall be placed under the bridge bearing plate to the thickness shown on the Drawings, and areas requiring repair. No epoxy resin compound is required for the bridge bearing plates or in tie rod holes. Drypack shall consist of a mixture (by dry volume or weight) of one part cement to 2-1/2 parts of fine aggregate, Provided that in gradation 100 percent of fine aggregate shall pass a No. 16 U. S. Standard Series Sieve. Only enough water shall be used to produce a mortar which, when used, shall stick together on being molded into a ball by a slight pressure of the hands and shall not exude water but will leave the hands damp. The proper amount of mixing water and the proper consistency shall be that which produces a filling which is at the point of becoming rubbery when the material is solidly packed. Any less water will not make a sound, solid pack; any more will result in excessive shrinkage and a loose repair. Drypack shall be placed and packed in layers. Each layer shall be solidly compacted over its entire surface by use of a hardwood stock and a hammer.

3.16 MEASUREMENT AND PAYMENT

3.16.1 Concrete.

3.16.1.1 Measurement. Concrete, excepting Portland cement and excepting pozzolan, will be measured for payment as the number of cubic yards of concrete satisfactorily used in the work measured in place to the nearest cubic yard.

3.16.1.2 Payment. Concrete, excepting Portland cement and excepting pozzolan will be paid for at the contract-unit price stated in the Bid Form for the item listed below.

Item 7 Concrete, New Piers

3.16.2 Portland Cement.

3.16.2.1 Measurement. Portland cement, excepting Portland cement used for repairs and for filling form tie holes, and excepting Portland cement used in drypack, will be measured for payment as the number of sacks (94 pounds each net weight) of Portland cement satisfactorily used in the work measured to the nearest sack by multiplying the theoretical batch weight by the number of batches of concrete satisfactorily used in the work and dividing by 94.

3.16.2.2 Payment. Portland cement, excepting Portland cement used for repairs and for filling form tie holes, and excepting Portland cement used in dry pack, will be paid for at the contract-unit price stated in the Bid Form for the item listed below. Portland cement used for repairs and for filling form tie holes and Portland cement used in drypack shall be by and at the expense of Contractor.

Item 8 Portland Cement

3.16.3 Pozzolan.

3.16.3.1 Measurement. Pozzolan will be measured for payment as the number of sacks (70 pounds each net weight) of pozzolan satisfactorily used in the work measured to the nearest sack.

3.16.3.2 Payment. Pozzolan will be paid for at the contract-unit price stated in the Bid Form for the item listed below.

Item 9 Pozzolan

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SECTION 4 - REINFORCEMENT STEEL

4.1 SCOPE

This section covers detailing, furnishing, fabricating, delivering and placing reinforcement steel.

4.2 MATERIALS

Materials shall conform to the following specifications:

4.2.1 Bars. ASTM Designation A 15, deformed, intermediate grade.

4.2.2 Spacers and Supports. Approved standard products of types best suited for the intended purpose.

4.3 DETAILING AND FABRICATION

Detailing and fabrication shall be in accordance with ACI 315. The size and spacing of reinforcement steel shall be as shown on the Drawings.

4.4 PLACEMENT

Placing of reinforcement steel shall be done in accordance with ACI 318, except as otherwise shown on the Drawings. Reinforcement steel for tying new concrete to existing concrete shall be installed as shown on the Drawings.

4.5 SUPPORTS

All reinforcement steel shall be secured in place by approved metal or concrete supports, spacers and/or ties. Such supports shall be strong enough to maintain the reinforcement steel in place throughout the concreting operation. The supports used shall not be exposed or cause discoloration or deterioration of the concrete.

4.6

MEASUREMENT AND PAYMENT

Reinforcement steel will not be measured for direct payment. All cost in connection therewith shall be included for payment with the concrete.

SECTION 5 - MECHANICAL WORK

5.1 SCOPE

This section covers the mechanical work.

5.2 GENERAL

Contractor shall perform the following mechanical work.

5.2.1 Disassemble the existing 48-inch diameter sluice gate operating equipment in its entirety, or, at Contractor's option, only that portion of such equipment above Elevation 1090. Such equipment comprises the electric operator, the operating platform, the gate stem, the gate stem guides, the streamlining shield and all other associated metalwork which is not embedded in concrete.

5.2.2 Store all such equipment in a manner which will prevent any damage thereto.

5.2.3 Furnish and install new anchor bolts and other required metalwork in the new concrete pier as shown on the Drawings. Such bolts shall conform to ASTM Designation A 307.

5.2.4 Modify such equipment so that the streamlining shield and shield wings and bracings are at the new position as shown on the Drawings, or as directed by the District, including furnishing, fabricating and welding the extensions of the shield and shield wings. Welding for the shield and for column splices will be permitted in the field.

5.2.5 If Contractor exercises its option to remove only such equipment above Elevation 1090, a gate stem connection of strength not less than equal to the strength of the gate stem itself shall be furnished and installed. This connection shall be subject to approval by the District.

5.2.6 Reinstall such equipment in its present configuration as shown on the Drawings.

5.3 REPAIR OF DAMAGED EQUIPMENT

Contractor shall, at its expense, either by repair or replacement, make good any damage to the sluice gate or the operating equipment which results from its performance of the work under this Contract. Abrated areas of removed metalwork shall be repaired and painted in accordance with Section 9 - FIELD PAINTING. Such repair, replacement or both shall be to the satisfaction of the District.

5.4 TESTING

After the reinstallation of operating equipment, including electrical work, has been completed, the equipment shall be tested. The test shall consist of opening and closing the sluice gate not less than 5 times. Such opening and closing shall be under operating conditions. All inefficiencies and defects disclosed by this test which, as determined by the District, result from Contractor's performance of the work under this Contract, shall be corrected. After such correction, the test shall be repeated and any such inefficiencies or defects disclosed thereby shall be corrected. Such test and corrections shall be repeated as many times as are required to assure that the equipment is in satisfactory condition. All testing and correcting shall be by and at the expense of Contractor.

5.5 MEASUREMENT AND PAYMENT

5.5.1 Measurement. Mechanical work will be measured for payment as the total amount of mechanical work satisfactorily performed.

5.5.2 Payment. Mechanical work will be paid for at the contract-lump sum price stated in the Bid Form for the item listed below.

Item 10 Mechanical Work

SECTION 6 - FOOTBRIDGES

6.1 SCOPE

This section covers furnishing and erecting the footbridges.

6.2 DEFINITION

Structural steel shall be as defined in the "Code of Standard Practice for Steel Buildings and Bridges" of the American Institute of Steel Construction.

6.3 MATERIALS

Materials shall conform to the following specifications:

6.3.1 Structural Steel. ASTM Designation A 36 or A 242.

6.3.2 Timber. Standard Douglas Fir, Standard Grading Rules, Western Wood Products Association, S4S.

6.3.3 Bolts, Nuts and Washers.

6.3.3.1 For Structural Steel. ASTM Designation A 325.

6.3.3.2 For Timber Construction. Standard commercial galvanized products of the sizes shown on the Drawings or as required. Cast iron washers.

6.3.4 Connectors for Timber. Split rings, grids, plates and similar items, standard commercial products, types and sizes as shown on the Drawings, galvanized.

6.3.5 Nails. Standard commercial product, galvanized.

6.4 FABRICATION AND ERECTION

6.4.1 Except as specified or shown, the fabrication and erection of structural steel shall conform to the "Specifications

for the Design, Fabrication and Erection of Structural Steel for Buildings" and the "Code of Standard Practice for Steel Buildings and Bridges" of the AISC. In case of conflict between the provisions of the AISC Specifications or Code and this specification, the latter shall govern.

6.4.2 Minor misfits which can be remedied by a moderate amount of reaming and slight cutting and chipping may be corrected by Contractor when, as determined by the District, it will not be detrimental to the strength or appearance of the structure. Exposed surfaces of "C" steel shall be sandblasted to remove matchmarks and scale.

6.5 WELDING

6.5.1 Welding shall be done by the electric-arc method using a process which excludes the atmosphere from the molten metal except where otherwise approved. Welding electrodes used for manual welding shall be an approved type. Except as modified herein, welding, welding process qualification and operator qualification shall comply with the applicable requirements of the "Code for Welding in Building Construction", AWS D 1.0, of the American Welding Society. In addition to conformance with the referenced code, manual welding shall meet the following requirements:

6.5.1.1 Each weld shall be reasonably uniform in width and size throughout its entire length. Each layer shall be smooth, free of slag, cracks, pinholes and undercut and shall be completely fused to the adjacent weld beads and base metal. The cover pass shall be free of coarse ripples, irregular surface, non-uniform bead pattern, high crown, deep ridges or valleys between beads, and shall blend smoothly and gradually into the surface of the base metal.

6.5.1.2 Butt welds shall be slightly convex, of uniform height and shall have full penetration.

6.5.1.3 Fillet welds shall be of the size indicated, with full throat and with each leg of equal length.

6.5.1.4 Repair, chipping, or grinding of welds shall not gouge, groove or reduce the base metal thickness.

6.6 CONNECTIONS FOR STRUCTURAL STEEL

Contractor may use any type of connection Provided as follows:

6.6.1 All bolted connections shall be bearing type, unless otherwise shown.

6.6.2 Shop connections shall, at Contractor's option, be made with high-strength bolts or by welding, unless otherwise shown.

6.6.3 Field connections shall be made with high-strength bolts, unless otherwise shown.

6.7 TIMBER TREATMENT

Timber shall be treated in accordance with American Wood Preservers Association, Standard C2 using an oil-borne preservative conforming to AWPA Standard P8. Such treatment shall be done after fabrication. Timber cut or damaged after treatment shall be done in accordance with AWPA Standard M4.

6.8 FABRICATION AND ERECTION OF TIMBER CONSTRUCTION

Timber construction shall be closely fitted, accurately set to required lines and levels and rigidly fastened in place. Holes for bolts shall be 1/16-inch larger than the diameter of the bolt to be contained therein and holes for drift bolts shall be 1/16-inch smaller than the drift bolt to be contained therein. Each bolt shall have a cast-iron washer under the head and nut. Nuts shall be so tightened as to provide tight joints without crushing the timber. Timber which, as determined by the District, has been damaged to the extent that its structural value is impaired shall be replaced with new timber by and at the expense of Contractor to the satisfaction of the District.

6.9 REPAIR OF DAMAGE

Contractor shall, at its expense, either by repair or replacement, make good any damage to existing structures or equipment which results from its performance of the work

under this Contract. Such repair, replacement or both shall be to the satisfaction of the District.

6.10 MEASUREMENT AND PAYMENT

6.10.1 Structural Steel.

6.10.1.1 Measurement. Structural steel will be measured for payment as the number of pounds of structural steel satisfactorily furnished, fabricated and erected measured to the nearest pound. The weight shall be calculated in accordance with the "Code of Standard Practice for Steel Buildings and Bridges" of the American Institute of Steel Construction.

6.10.1.2 Payment. Structural steel will be paid for at the contract-unit price stated in the Bid Form for the item listed below.

Item 11 Structural Steel

6.10.2 Timber Construction.

6.10.2.1 Measurement. Timber construction will be measured for payment as the number of MBM of timber satisfactorily furnished, fabricated and erected measured in place to the nearest 1/100 MBM.

6.10.2.2 Payment. Timber construction will be paid for at the contract-unit price stated in the Bid Form for the item listed below.

Item 12 Timber Construction

6.10.3 Bolts, Nuts, Washers, Nails and Connectors for Timber Construction. Bolts, nuts, washers, spikes and connectors will not be measured for direct payment. All cost in connection therewith shall be included for payment with the item to which it applies.

SECTION 7 - INSTALLATION OF THE 36-INCH DIAMETER OUTLET VALVE

7.1 SCOPE

This section covers the installation of a District-furnished, 36-inch diameter outlet valve and connecting piping and fittings on the existing conservation outlet line.

7.2 MATERIALS AND EQUIPMENT

7.2.1 District-Furnished Items. The items listed below will be furnished by the District. Such items will be delivered to the jobsite free of all costs to Contractor. Such delivery will be made not later than October 15, 1965 in accordance with a schedule mutually agreed upon between Contractor and the Supplier. The Supplier will unload such items at the direction of Contractor. Within 24 hours after delivery, Contractor shall report in writing to the District any shortage or damage to such items. Contractor shall be liable for any damage or loss to such items after delivery and prior to final acceptance of the work.

7.2.1.1 One 36-inch diameter outlet valve.

7.2.1.2 The fabricated connecting pipes.

7.2.1.3 The necessary bolts, nuts and gaskets.

7.2.2 Contractor-Furnished Items. All items not specified to be furnished by the District and which are required to install the valve shall be furnished by and at the expense of Contractor.

7.2.3 Concrete. As specified in Section - CONCRETE.

7.2.4 Reinforcement Steel. As specified in Section - REINFORCEMENT STEEL.

7.2.5 Welding. As specified in Section - FOOTBRIDGES, Provided that welding shall be full penetration, multiple pass, that the inside shall be backwelded and that corners shall be rounded off to smooth contour.

7.3 INSTALLATION

The valve and its appurtenances shall be installed as shown on the Drawings and as directed by the District.

7.4 LINING AND COATING

The interior surface of all steel pipe shall be cleaned, primed and lined with coal-tar enamel and the exterior surface shall be cleaned, primed and coated with coal-tar enamel. All such materials and application shall be in accordance with AWWA Specification C 203, using Type B primer.

7.5 MEASUREMENT AND PAYMENT

7.5.1 Measurement. Installing the 36-inch diameter outlet valve and connecting piping and fittings including lining, coating and testing will be measured for payment as one such valve satisfactorily installed.

7.5.2 Payment. Installing the 36-inch diameter outlet valve and connecting piping and fittings will be paid for at the contract-lump sum price stated in the Bid Form for the item listed below.

Item 13 Outlet Valve, 36-inch Diameter

SECTION 8 - ELECTRICAL WORK

8.1 SCOPE

This section covers the electrical work.

8.2 GENERAL

The electrical work comprises removing and reinstalling those portions of the electrical circuits which will be affected by the performance of the work under this Contract as shown on the Drawings.

8.2.1 Contractor shall remove the existing lighting circuit for the spillway bridge and furnish and install a new circuit for the footbridges.

8.2.2 Contractor shall furnish and install a portion of the circuit for the 48-inch diameter sluice gate operator.

8.2.3 Contractor shall furnish and install a portion of the circuit for the 42-inch diameter sluice valve operator. Contractor shall maintain a temporary circuit for operating the sluice valve. Such temporary circuit shall be connected not later than November 15, 1965 and shall remain connected until the permanent circuit is re-established. ←

8.3 MATERIALS

Materials shall be as shown on the Drawings, Provided, that Contractor may reinstall materials removed which, as determined by the District, are in satisfactory condition.

8.4 TESTING

After completion of the electrical work and before final acceptance thereof, such work shall be tested. The valve shall be opened and closed as specified in Section - MECHANICAL WORK. All inefficiencies which, as determined by the District, result from Contractor's performance of the work under this Contract, shall be corrected. Such correction and testing shall be repeated as many times as may be necessary to assure that the work is satisfactory. All testing and correction shall be to the satisfaction of the District and by and at the expense of Contractor.

8.5 REPAIR OF DAMAGE

Contractor shall, at its expense, either by repair or replacement, make good any damage to the structure or equipment, which results from its performance of the work under this Contract. Such repair, replacement or both shall be to the satisfaction of the District.

8.6 MEASUREMENT AND PAYMENT

8.6.1 Measurement. Electrical work will be measured for payment as the total amount of electrical work satisfactorily performed.

8.6.2 Payment. Electrical work will be paid for at the contract-lump-sum price stated in the Bid Form for the item listed below.

Item 14 Electrical Work

SECTION 9 - FIELD PAINTING

9.1 SCOPE

This section covers the field painting of structural steel in the footbridges.

9.2 MATERIAL

9.2.1 Primer Paint. Same type as was used as shop paint.

9.2.2 Finish Paint. National Lead Company 20-10 Nalco Enamel.

9.2.3 Coal-Tar Epoxy shall be one of the following:

9.2.3.1 Poxitar, as manufactured by Inertol Company, Incorporated.

9.2.3.2 Bitumastic No. 300 as manufactured by Koppers' Company, Incorporated.

9.2.3.3 Tarsset, as manufactured by Pittsburgh Coke and Chemical Company.

9.3 COLOR

The color shall be as selected by the District.

9.4 SURFACE PREPARATION

9.4.1 Bare Metal. In accordance with Steel Structures Painting Council Surface Preparation Specification No. 2.

9.4.2 Primed Metal. Abraded areas shall be touched up using the same type of material as was used for the original prime coat. Oil, grease, soil and other contaminants shall be removed by use of solvents or cleaning compound as required to produce a paintable surface.

9.4.3 Coal-Tar Epoxy. Surface of metal which is to be coated with coal-tar epoxy shall be prepared in accordance with the coal-tar epoxy manufacturer's instructions.

9.5 APPLICATION OF PAINT

9.5.1 General. Paint shall be applied only by qualified workmen. Safety regulations including the use of respirators and/or air helmets by persons engaged in, or assisting in, spray painting or when painting in close quarters, and the use of non-sparking equipment, shall be complied with at all times. Finished surfaces shall be free from runs, drops, ridges, waves, laps, brush marks and other blemishes. Edges, corners, crevices, welds, bolts and rivets shall receive special attention to insure their receiving a coating of the required thickness. Adjacent areas and installations shall be protected by drop cloths or other approved protective device or material. Cloths, cotton wastes or other material which might constitute a fire hazard shall be placed in closed metal containers or be destroyed at the end of each day's work.

9.5.2 Mixing of Paint. Paint shall be thoroughly mixed and kept at a uniform consistency during application. Where necessary to suit conditions of surface, temperature, weather and method of application, the paint may, in accordance with the manufacturer's directions, be thinned immediately prior to application.

9.5.3 Atmospheric Conditions.

9.5.3.1 Except as otherwise directed or specified by the District or paint manufacturer, paint shall be applied only to surfaces which are completely free from moisture as determined by sight or touch, and only under such combination of humidity and temperatures of the ambient atmosphere and surfaces to be painted as will cause evaporation rather than condensation.

9.5.3.2 In no case shall paint be applied to surfaces upon which there is visible frost or ice. No painting shall be done while the temperature of the surfaces to be painted, and of the atmosphere in contact therewith is 40 F or below, except as otherwise directed.

9.5.3.3 Painting may be done during periods of inclement weather provided that the area of work is sheltered from the weather and specified minimum application temperature is maintained. Approved means for supplying artificial heat to maintain the specified minimum application temperature may be employed. Such temperature shall be maintained during application of paint and for such additional time as is required for the paint to dry.

9.5.4 Methods of Application

9.5.4.1 Paint. Paint shall be applied by brush, except that when approved by the District and the paint manufacturer, application may be done by spray or roller. Whenever spraying or rolling is permitted, areas inaccessible to the spray or roller shall be coated by brushing or other suitable method. Spray equipment shall be subject to approval. Primer and intermediate coats shall be unscarred and completely integral at the time of application of each succeeding coat. Sufficient time shall be allowed between coats to assure proper drying.

9.5.4.2 Coal-Tar Epoxy. Coal-tar epoxy shall be applied in accordance with the coal-tar epoxy manufacturer's instructions.

9.6 SURFACES TO BE PAINTED

9.6.1 Bare Metal. All welds, bolts and nuts shall be painted one coat of primer paint and one coat of finish paint.

9.6.2 Primed Metal. One coat of finish paint.

9.7 MEASUREMENT AND PAYMENT

Field painting and surfaces treated with coal-tar epoxy will not be measured for direct payment. All costs in connection therewith shall be included for payment with the item to which it applies.