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SPECIAL PROVISIONS

FOR

BRIDGES AT 43RD AVE. AND PEORIA AVE.
FOR THE ACDC

CONTRACT NO. FCD 86-29



SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD
SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EDITION OF 1979 AND REVISIONS
AND SUPPLEMENTS THERETO.

A118.530

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SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EDITION OF 1979 AND REVISIONS AND SUPPLEMENTS THERETO.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
CONTRACT FCD 86-29

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INVITATION FOR BIDS
(Construction Contract)

Bridges at 40rd Ave. and
Peoria Ave. for the ACDC

Ref. Invitation FCD 86-29

Date: October 20, 1986

Issued by: Flood Control District
of Maricopa County

Vicinity: At the intersection of
43rd Ave. and Peoria Ave.
Phoenix, Arizona

SEALED BIDS, IN SINGLE COPY FOR THE WORK DESCRIBED HEREIN WILL BE RECEIVED UNTIL 2:00 PM, LOCAL TIME AT THE PLACE OF THE BID OPENING NOVEMBER 13, 1986 IN THE OFFICE OF THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, 3335 WEST DURANGO STREET, PHOENIX, ARIZONA, 85009, AND AT THAT TIME PUBLICLY OPENED.

A PRE-BID CONFERENCE WILL BE HELD ON OCTOBER 29, 1986, AT 10:00 AM IN THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY CONFERENCE ROOM, 3335 WEST DURANGO STREET. IT IS IN THE BEST INTEREST OF PROSPECTIVE BIDDERS TO ATTEND THE PRE-BID CONFERENCE.

BID SECURITY IN AN AMOUNT OF NOT LESS THAN FIVE PERCENT (5%) OF THE TOTAL BID PRICE MUST BE SUBMITTED WITH EACH BID. THE BID SECURITY MAY BE IN THE FORM OF A BID BOND, CASHIER'S CHECK, POSTAL MONEY ORDER, OR CASH. THE BID SECURITY WILL BE MADE PAYABLE TO THE FLOOD CONTROL DISTRICT OF MARICOPA COUNTY AS A GUARANTEE THAT IF THE WORK IS AWARDED TO THE BIDDER, HE WILL WITHIN TEN (10) DAYS FROM THE DATE OF SUCH AWARD, ENTER INTO PROPER CONTRACT AND BOND CONDITIONS FOR THE FAITHFUL PERFORMANCE OF THE WORK. OTHERWISE, SAID AMOUNT WILL BE FORFEITED TO THE FLOOD CONTROL DISTRICT. BID SECURITY WILL BE RETURNED AS PRESCRIBED BY MAG 103.

THE SUCCESSFUL BIDDER SHALL BE REQUIRED TO FURNISH PERFORMANCE AND PAYMENT BONDS IN PENAL SUMS NOT LESS THAN ONE HUNDRED PERCENT (100%) RESPECTIVELY, OF THE ORIGINAL AMOUNT OF THE CONTRACT.

DESCRIPTION OF WORK: Phased construction of two, two-span continuous pre-stressed girder bridges, detours, approach roadways, storm sewers, water line and miscellaneous related items.

INVITATION FOR BIDS
NO. FCD 86-29

THE WORK SHALL COMMENCE WITHIN SEVEN (7) CALENDAR DAYS AND BE COMPLETED
WITHIN TWO HUNDRED FORTY (240) CALENDAR DAYS AFTER RECEIPT OF THE
NOTICE TO PROCEED.

NOTICE: THE BID SCHEDULE, SPECIAL PROVISIONS, INSTRUCTIONS TO BIDDERS,
UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, EDITION OF
1979 (MAG) AND DRAWINGS LISTED UNDER THE CONTENTS WILL BE INCORPORATED IN
AND BECOME A PART OF THE RESULTANT CONTRACT.

CHERIE PENNINGTON, CLERK
BOARD OF DIRECTORS
FLOOD CONTROL DISTRICT OF
MARICOPA COUNTY

INVITATION FOR BIDS
NO. FCD 86-29

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
INVITATION FOR BIDS, FCD 86-29
INSTRUCTIONS TO BIDDERS

1. Explanation to Bidders. Any explanations desired by the bidder, questions, or items for clarification regarding the meaning or interpretation of the invitation for bids, drawings, specifications, etc., may be addressed to the Chief Engineer and General Manager, preferably in writing, prior to the pre-bid conference. Any answers, interpretations, or clarifications affecting the cost will be addressed to all bidders in an addendum to the invitation. The receipt of an addendum by the bidder must be acknowledged in the space provided on the bid form or by letter or telegram received before the time set for the bid opening. Oral explanations or instructions given before the award of the contract will not be binding.
2. Conditions Affecting the Work. It is in the best interest of the bidders to attend the pre-bid conference. Bidders should visit the site and take such other steps as may be reasonably necessary to ascertain the nature and the location of the work, the general and local conditions which can affect the work and the cost thereof. Failure to do so will not relieve bidders from responsibility for estimating properly the difficulty or cost of successfully performing the work. [See MAG 102.4]
3. Bidder's Qualifications. Before a bid is considered for award, a bidder may be requested by the Chief Engineer and General Manager of the Flood Control District to submit a statement regarding his previous experience in performing comparable work, his business and technical organization, financial resources, and plant available to be used in performing the work.
4. Bid Guarantee. Where a bid guarantee is required by the invitation for bids, failure to furnish a bid guarantee in the proper form and amount by the time set for opening of bids, may be cause for rejection of the bid.

If the successful bidder, upon acceptance of his bid by the Flood Control District within the period specified herein for acceptance (sixty days if no period is specified) fails to execute such further contractual documents, if any, and give such bond(s) as may be required by the terms of the bid as accepted within the time specified (ten days if no period is specified) after receipt of the forms by him, his contract may be terminated for default. In such event the bid guarantee shall be retained as liquidated damages.

INVITATION FOR BIDS
NO. FCD 86-29

5. Preparation of Bids. Bids shall be submitted on the forms furnished, or copies thereof, and must be manually signed. If erasures or other changes appear on the forms, each erasure or change must be initialed by the person signing the bid. Unless specifically authorized in the invitation for bids, telegraphic bids will not be considered.

No bid will be considered unless all items in the bid schedule are priced. In case of an error in the extension of price, the unit price shall govern. The quantities listed on the bid schedule on which unit prices are requested are estimates only.

Unless called for, alternate bids will not be considered.

Modifications of bids already submitted will be considered if received at the office designated in the invitation for bids by the time set for opening bids.

6. Submission of Bids. Bids must be sealed, addressed to the Chief Engineer and General Manager, Flood Control District of Maricopa County, 3335 West Durango, Phoenix, Arizona 85009, and marked to identify the bid to the referenced Contract FCD Number. Failure to appropriately identify the bid may result in a premature opening of, or a failure to open, such bid. The name of the bidder shall be on the outside of the envelope. (See MAG 102.9)
7. Withdrawal of Bids or Modifications. Bids may be withdrawn by written request received from the bidder prior to the time set for opening of bids.
8. Public Opening of Bids. Bids will be publicly opened at the time and place set for the opening in the invitation for bids. Their content will be made public for the information of bidders and others interested, who may be present either in person or by representative.
9. Award of Contract. Award and execution of a contract shall be in accordance with MAG Section 103.
10. Specifications. Specifications referred to herein shall include all revisions and amendments in effect on the date of issuance of the invitation for bids. These instructions, Special Instructions to Bidders, and the herein contained Construction Special Provisions supplement the Uniform Standard Specifications herein referred to by "MAG" section number or paragraph number; however, in case of conflict, these instructions and Special Provisions supersede the Uniform Standard Specifications (MAG).

INVITATION FOR BIDS
NO. FCD 86-29

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 INVITATION FOR BIDS, FCD 86-29
 SPECIAL INSTRUCTIONS TO BIDDER

Contract Plans, Special Provisions and Contract Documents: Plans, Special Provisions and forms for proposal, Bidding Schedule, Contract Agreement and Performance Bond may be obtained from the Flood Control District of Maricopa County, 3335 West Durango Street, Phoenix, Arizona, upon payment of \$35.00 by check payable to the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY. This payment will not be refunded. Plans sheets may be purchased separately for a fee of \$30.00, not refundable.

APPROXIMATE QUANTITIES FOR PRINCIPAL ITEMS

<u>QUANTITY</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
1 (13,200)	L.S.	Structure Excavation
1 (5,670)	L.S.	Structure Backfill
2,522	C.Y.	Class S Concrete, f'c = 3000 psi
738	C.Y.	Class S Concrete, f'c = 4000 psi
837	C.Y.	Class S Concrete, f'c = 4500 psi
700,745	Lbs.	Reinforcing Steel
22	Ea.	Precast Concrete Girders, AASHTO Type IV
22	Ea.	Precast Concrete Girders, AASHTO Type III
678	L.F.	12" M. J. D. I. P.

and such other pertinent items as are necessary for the completion of the project as shown on the plans or as called for in the Special Provisions or in the Maricopa Association of Governments Uniform Standard Specifications for Public Works Construction.

Location of Work: The proposed work is located at the intersection of 43rd Ave. and Peoria Ave., Phoenix, Arizona.

CHERIE PENNINGTON, CLERK
 BOARD OF DIRECTORS
 FLOOD CONTROL DISTRICT
 OF MARICOPA COUNTY

INVITATION FOR BIDS
 CONTRACT NO. FCD 86-29

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
(Construction Contract)

BID FORM

Project: Bridges at 43rd Ave. and
Peoria Ave. for the ACDC

Invitation FCD 86-29
Date: October 20, 1986

Location: At the intersection of 43rd Ave.
and Peoria Ave., Phoenix, Arizona

To: Chief Engineer and General Manager
Flood Control District of Maricopa County
3335 West Durango Street
Phoenix, Arizona 85009.

The following Proposal is made on behalf of _____
_____ and no others. The Total Contract amount of
this proposal is (in words) _____
_____ and _____ /100 dollars, (in figures)

_____ this amount being the sum total of the extended
amount for each pay item on the Bidding Schedule.

Evidence of authority to submit the Proposal is herewith furnished. The Proposal is in all respects fair and is made without collusion on the part of any person, firm, or corporation mentioned above, and no member or employee of the Flood Control District Board of Directors is personally or financially interested, directly or indirectly in the Proposal, or in any purchase or sale of any materials or supplies for the work in which it relates or in any portion of the profits thereof.

The Undersigned certifies that the approved Plans, Uniform Standard Specifications for Public Works Construction, 1979 Edition (MAG) and revisions and supplements thereto, together with the Special Provisions, forms of Contract and Bond authorized by the Board of Directors and constituting essential parts of this Proposal, have been carefully examined, and also that the site of the work has been personally inspected.

The Undersigned declares that the amount and nature of the work to be done is understood and that at no time will misunderstanding of the Plans, Specifications, Special Provisions, or conditions to be overcome, be pled. On the basis of the Plans, Specifications, Special Provisions, the forms of Contract, and the Bond proposed for use, the Undersigned proposes to furnish

all the necessary machinery, equipment, tools, apparatus, and other means of construction, to do all the work and to furnish all the materials in the manner specified and to finish the entire project within the time hereinafter proposed and to accept, as full compensation therefor, the sum of various products obtained by multiplying each unit price, herein bid for work or materials, by the quantity thereof actually incorporated in the completed project, as determined by the Chief Engineer and General Manager, Flood Control District of Maricopa County.

The Undersigned understands that the quantities mentioned herein are approximate and are subject to increase or decrease and hereby proposes to perform all quantities of work, as either increased or decreased, in accordance with the provisions of the Specifications, at the unit price bid in the Bidding Schedule.

PROPOSAL
CONTRACT FCD 86-29

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
206-1	1	L.S.	Structure Excavation (approx. 13,200 cy)			
206-2	1	L.S.	Structure Backfill (approx. 5,670 cy)			
215	1	L.S.	Channel Excavation (approx. 21,250 cy)			
301	4361	S.Y.	Subgrade Preparation			
310-1	740	Ton	Select Material, Type A			
310-2	1277	Ton	Aggregate Base Course			
315	3	Ton	Bituminous Prime Coat			
321-1	627	Ton	C-3/4, Asphalt Concrete			

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
321-2	146	Ton	D-1/2, Asphalt Concrete			
321-3	1	Ton	Bituminous Tack Coat SS-1h (Contingent Item)			
324	666	S.Y.	Portland Cement Concrete Pavement (10" thick)			
340-1	484	L.F.	Concrete Curb and Gutter, Det. 220, Type A (H=6")			
340-2	340	L.F.	Concrete Curb and Gutter, Det. 220, Type A Mod. (H=6")			
340-3	20	L.F.	Concrete Single Curb, Det. 222, Type B			

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
340-4	2,755	S.F.	Concrete Sidewalk, Det. P-1230			
340-5	1,373	S.F.	Concrete Driveway Entrance, Det. P-1255			
345-1	6	EA.	Adjust Manhole Frame and Cover Det. 422			
345-2	2	EA.	Adjust Exist. Type A Water Valves, Det. 391-1			
350-1	1,506	L.F.	Remove Concrete Curb & Gutter			
350-2	5,618	S.F.	Remove Concrete Sidewalk, Driveway and Slabs			

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
350-3	92	S.Y.	Remove P.C. Concrete Pavement			
350-4	2	EA.	Remove Underground Gasoline Storage Tanks			
350-5	1	L.S.	Miscellaneous Removals			
401-1	1	L.S.	Traffic Control			
401-2	1,500	Hrs.	Uniformed, Off-Duty Law Enforcement Officer		19.00	28,500
505-1	2,522	C.Y.	Class S Concrete, f'c=3000 psi			
505-2	750	C.Y.	Class S Concrete, f'c=4000 psi			

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
505-3	837	C.Y.	Class S Concrete, f'c=4500 psi			
505-4	704,980	Lbs.	Reinforcing Steel			
506-1	22	EA.	Precast Concrete Girders, AASHTO Type IV (93'-3") pretensioned or post-tens.			
506-2	22	EA.	Precast Concrete Girders, AASHTO Type III (70'-1") pretensioned or post-tens.			
520	699	L.F.	Steel Handrail (galvanized)			
610-1	914	L.F.	12" Water Pipe			

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
610-2	678	L.F.	12" Mechanical Joint Ductile Iron Pipe			
610-3	3	EA.	12" Water Valve			
610-4	1	EA.	Water Valve Box, Type A, Det. 391-1			
610-5	2	EA.	Water Valve Box, Type B, Det. 391-1			
610-6	1,000	Lbs.	Ductile Iron Fittings (in excess of fittings shown on Plans)			

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
618-1	395	L.F.	12" Storm Sewer Pipe			
618-2	109	L.F.	24" Storm Sewer Pipe			
618-3	64	L.F.	42" Storm Sewer Pipe			
618-4	1	EA.	Storm Sewer Manhole, Det. 520 and 522			
618-5	101	L.F.	15" Catch Basin Connector Pipe			
618-6	2	EA.	Concrete Catch Basin, Type M-1, L=6', Det. P-1569			
618-7	2	EA.	Concrete Catch Basin, Type M, Det. P-1569			

BIDDING SCHEDULE

Project: 43rd Avenue and Peoria Avenue Bridges
over the Arizona Canal Diversion Channel

Contract: FCD 86-29

Item No.	Approximate Quantity	Unit	Description	Unit Cost (in writing) and /100 dollars	Unit Cost	Extended Amount
618-8	2	EA.	42"x42"x15" Prefabricated Tee			
618-9	3	EA.	Concrete Pipe Collar for 24" Pipe and Larger, Det. 505			
618-10	1	EA.	Pipe Plug, Det. 427			
800-1	1	L.S.	4" PVC Conduit (approx. 825 LF)			
800-2	144	L.F.	Barricade, Det. P-1106, Type "B"			

The Bidder hereby acknowledges receipt of and agrees his proposal is based on the following Addenda

Total _____

The Undersigned further proposes to execute the Contract Agreement and furnish satisfactory Bonds within ten (10) days from the date of award, time being of the essence. The undersigned further proposes to begin the work as specified in the Contract attached hereto, and to complete the work within the time limits as specified in the Special Provisions and maintain at all times a Contract Bond, approved by the Board of Directors, in an amount equal to one hundred percent (100%) of the total bid. This bond shall serve not only to guarantee the completion of the work on the part of the Undersigned, but also to guarantee the excellence of both workmanship and material and the payment of all obligations incurred, said Bond to be in full force and effect until the work is finally accepted and the provisions of the Plans, Specifications and Special Provisions are fulfilled.

A Proposal guaranty in the amount and character named in the Invitation for Bids is enclosed amounting to not less than five percent (5%) of the total bid, which Proposal guaranty is submitted as a guaranty of the good faith of the Bidder and that the Bidder will enter into written contract, as provided, to do the work, if successful in securing the award thereof; and it is hereby agreed that if at any time other than as provided in the Proposal requirements and conditions the Undersigned should withdraw this Proposal, or if the Proposal is accepted and there should be failure on the part of the Undersigned to execute the Contract and furnish satisfactory Bond as herein provided, the Flood Control District of Maricopa County in either of such events, shall be entitled and is hereby given the right to retain the said Proposal guaranty as liquidated damages.

Date: _____, 19__.

IF BY AN INDIVIDUAL:

(Name)

(Address)

IF BY A FIRM OR PARTNERSHIP:

(Firm Name)

(Firm Address)

By: _____

*Name and Address of Each Member:

Date _____ 19__

IF BY A CORPORATION:

(Corporate Name)

(Corporation Address)

By: _____

**Incorporated under the Laws of _____

Names and Addresses of Officers:

(President)

(Address)

(Secretary)

(Address)

(Treasurer)

(Address)

*The name and post office address of each member of the firm or partnership must be shown.

**The name of the State under which the Corporation was chartered and names, title, and business address of the President, Secretary, and Treasurer must be shown.

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS:

That we _____, as Principal, (hereinafter called the Principal), and the _____, a corporation duly organized under the laws of the State of _____, as Surety, (hereinafter called the Surety), are held and firmly bound unto the Flood Control District of Maricopa County as Obligee, in the sum of ___ percent (___%) of the total amount of the bid of Principal, submitted by him to the Flood Control District of Maricopa County, for the work described below, for the payment of which sum, well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, and administrators, successors and assigns, jointly and severally, firmly by these presents, and in conformance with A.R.S.

WHEREAS the said Principal is herewith submitting its proposal for _____

NOW, THEREFORE, if the Flood Control District of Maricopa County shall accept the proposal of the Principal and the Principal shall enter into a contract with the Flood Control District of Maricopa County in accordance with the terms of such proposal and give such Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter into such contract and give such Bond and Certificates of Insurance, if the Principal shall pay to the Flood Control District of Maricopa County the sum of money set forth above as liquidated damages for failure of the Principal to enter into the contract, then this obligation shall be null and void, otherwise to remain in full force and effect.

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

Principal

Title

Witness:

Surety

Title

Witness:

CONSTRUCTION SPECIAL PROVISIONS
FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY
PEORIA AVENUE AND 43RD AVENUE BRIDGES
over
ARIZONA CANAL DIVERSION CHANNEL

LOCATION OF THE WORK: This project is located in Phoenix, Arizona near the intersection of Peoria Avenue and 43rd Avenue over the Arizona Canal Diversion Channel.

PROPOSED WORK: The work consists of constructing two two-span continuous prestressed girder bridges, temporary detours, approach roadways, underground utilities modifications, and other miscellaneous items of work required for the completion of the project.

SPECIFICATIONS: Except as otherwise required in these Construction Special Provisions, construction of this project shall be in accordance with all applicable Maricopa Association of Governments (MAG) Uniform Standard Specifications and Uniform Standard Details, latest revision, and the latest revision of the City of Phoenix Supplements to the MAG Uniform Standard Specifications and Details, together with Maricopa County Highway Department Supplements to the Uniform Standard Specifications.

PRECEDENCE OF CONTRACT DOCUMENTS: The City of Phoenix Supplements to MAG Specifications and Details will govern over the MAG Standard Specifications and Details. In case of a discrepancy or conflict, Project Plans will govern over both the City of Phoenix Supplements and MAG Standard Specifications and Details. These Construction Special Provisions will govern over the City of Phoenix Supplements and MAG Standard Specifications and Details and the Project Plans.

PAYMENT: Payment will be made for only those items listed in the proposal and will not be made in accordance with the measurement and payment provisions of the Standard Specifications where this differs from the items listed in the proposal. All materials and work necessary for completion of this project are included in proposal items. Any work or material not specifically referred to in these items is considered incidental to the item and included in the unit price.

WORK STANDARDS: The Contractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor Regulations (29 CFR Part 5).

CONTRACT TIME: The Contractor shall start work within seven (7) calendar days and complete all work on the project by August 1, 1987.

It is anticipated that a contract for construction of the Arizona Canal Diversion Channel may be awarded by July 1, 1987. The bridge contractor shall coordinate his work to permit the channel contractor to have clear access to the channel right-of-way.

INSERT NEGOTIATION CLAUSE

WATER, LIGHT, POWER, HEAT, TELEPHONE: All water for construction purposes, drinking water, lighting, temporary electric power, heat and telephone service shall be arranged for and provided for the requirements of the work by the Contractor at his expense.

PROGRESS SCHEDULE: The Contractor shall submit his proposed work progress schedule to the Chief Engineer and General Manager for approval before starting the work.

MATERIAL SOURCES: Select Material, Aggregate Base and Mineral Aggregate shall be obtained from commercial sources. The Contractor shall pay all royalties, or any other charges or expenses, incurred in connection with the securing and hauling of the material. The Contractor will be required to furnish the Engineer with a list of his proposed commercial sources prior to use, and shall present certificates stating that the material produced from any commercial sources is in accordance with the Uniform Standard Specifications and these Special Provisions.

SUBSECTION 101.2 - DEFINITIONS AND TERMS: Change the definition of Budget Project to read as follows: A project financed by funds set aside in the annual budget or otherwise approved by the Board of Directors of the Flood Control District of Maricopa County.

Change the definition of Engineer to read as follows: The Chief Engineer and General Manager of the Flood Control District of Maricopa County acting directly or through his duly authorized representative.

Change the definition of Owner to read as follows: The Flood Control District of Maricopa County, acting through its legally constituted officials, officers or employees.

SECTION 102 - ADDENDA & SUBMISSION OF BIDDING SCHEDULE: It shall be the responsibility of prospective bidders to determine, prior to submission of a bid, if any addenda have been issued. This may be accomplished by calling 602-262-1501. Any addendum issued, if not already bound into the Special Provisions, must be included as a part of the Special Provisions, and any quantities on the Bidding Schedule requiring change shall be adjusted by pen and ink to the new figure.

Bids that do not include appropriate addenda and show appropriate changes to the Bidding Schedule shall be invalid.

SECTION 102.4 - EXAMINATION OF SITE: The existing 42-inch storm drain lateral in Peoria Avenue is a closed system that drains only partially into the Arizona Canal by means of an existing 24-inch pipe on the south side of Peoria Avenue and a 21-inch pipe and open ditch on the north side of Peoria Avenue. The 42-inch storm drain is presently filled with water. To construct the modifications to the storm drain system, the Contractor shall provide necessary pumping facilities or other means to complete the storm drain system in accordance with the plans and specifications.

The Contractor shall be responsible for maintaining the new temporary 12-inch storm drain on Peoria Avenue and the existing storm drain outlet on 43rd Avenue during the construction of the project. The Contractor may provide temporary drainage culverts, dikes or ditches within the channel right-of-way to facilitate draining the project site during the construction period.

SECTION 102.5 - PREPARATION OF PROPOSAL: The bidder's Arizona State Contractor's License number and classification need not be shown on the proposal. The possession of such a license is no longer a bidding requirement; however, the Contractor may be required to provide certification of prior satisfactory completion for similar construction.

SECTION 103.6 - CONTRACTOR'S INSURANCE: Concurrently with the execution of the contract, the Contractor shall furnish a Certificate of Insurance. The types of insurance and the limits of liability shall be as indicated thereon, i.e.

\$1,000,000	bodily injury per person
5,000,000	bodily injury each occurrence
1,000,000	property damage

SECTION 104.1.2 - TRAFFIC REGULATIONS:

A. The following shall be considered major streets

43rd Avenue
Peoria Avenue

B. All traffic and/or traffic control devices on this project shall be provided, maintained and/or controlled as specified in the City of Phoenix Traffic Barricade Manual, latest revision.

C. Permission to restrict City streets, sidewalks, and alleys (street closure permits) shall be requested as specified in Section III of the Traffic Barricade Manual.

D. Unless otherwise provided for in the following "Special Traffic Regulations" all traffic on this project shall be regulated as specified in Section IV of the Traffic Barricade Manual.

SECTION 104.1.3 - SPECIAL TRAFFIC REGULATIONS:

From November 22, 1986 to January 1, 1987, relocation work in 43rd Avenue and Peoria Avenue may be performed off-peak as described below.

Work outside of City of Phoenix right-of-way may be performed when required.

A. 43rd Avenue from Peoria Avenue to Cholla Street

1. From November 22, 1986 to January 1, 1987:

43rd Avenue can be reduced as follows during relocation operations:

- 2 lanes (one each way) weeknights 6:00 p.m. to 7:00 a.m.
- 4 lanes (two each way) weekdays 8:30 a.m. to 4:00 p.m.
- 5 lanes (three north, two south) and left turn lane open weekdays 7:00 a.m. to 8:30 a.m. and 4:00 p.m. to 6:00 p.m. and 24 hours on weekends.

2. After January 1, 1987:

During bridge construction 43rd Avenue can be reduced to 3 lanes (two north, one south) when construction requires in accordance with the traffic control plans.

B. Peoria Avenue from 43rd Avenue to 39th Avenue

1. From November 22, 1986 to January 1, 1987:

Peoria Avenue can be reduced as follows during relocation operations:

- 2 lanes (one each way) weeknights from 6:00 p.m. to 7:00 a.m.
- 4 lanes (two each way) weekdays from 8:30 a.m. to 4:00 p.m.
- 4 lanes (two each way) and left and right turn lanes open weekdays 7:00 a.m. to 8:30 a.m. and 4:00 p.m. to 6:00 p.m. and 24 hours on weekends.

2. After January 1, 1987:

During bridge construction, Peoria can be reduced to 3 lanes (two west, one east) when construction requires in accordance with the traffic control plans.

C. Police Officer Requirement

Contractor shall provide one off-duty police officer at 43rd Avenue and Peoria Avenue to assist with traffic control weekdays from 7:00 a.m. to 6:00 p.m. when traffic is restricted through the intersection.

SECTION 104.2 - BORING LOGS AND SOILS REPORT: The soil boring logs are included in the project for the Contractor's information only. No guarantee is made of the accuracy of the boring logs in the soils report. The Contractor shall make his own determination as to soil and subsurface conditions and shall complete his work in whatever material and under whatever condition he may encounter or create, without extra cost (except as modified in MAG). Existing moisture conditions shall be no basis for claim for additional monies or time extensions. The Contractor shall manipulate the existing soil as required to achieve stable soil conditions and the required densities.

SECTION 104.2.2: Due to Physical Conditions: Paragraph *B). In the first sentence delete the following words:

"backfill or bedding"

SECTION 105.2 - PLANS AND SHOP DRAWINGS: The Contractor shall furnish the Engineer with shop drawings, layout diagrams, manufacturer's catalog data, and detailed information, in sufficient detail to show complete compliance with all specified requirements, covering but not limited to the following items:

1. Detailed sequence of construction
2. Concrete mix designs
3. Precast girders
4. Reinforcing steel
5. Metal handrail
6. Roadway and sidewalk expansion joints
7. Bearing pads
8. Shoring and bracing plans for structure excavation
9. False work plans and design calculations
10. Fabricated pipe and design data, including rubber gaskets
11. Precast manhole risers
12. Castings
13. Utility protection plans

The number of copies of shop drawings required for review and/or approval shall be as follows:

Initial submittal: Three (3) copies. One (1) copy will be returned to the Contractor.

Final Submittal: Six (6) copies. Two (2) copies will be returned to the Contractor.

Drawings for shoring and bracing plans for structure excavation and falsework plans shall be prepared by and bear the seal and signature of a licensed Professional Civil or Structural Engineer in the State of Arizona.

When submitted for the Engineer's review, shop drawings, line layouts, etc., shall bear the Contractor's certification that he has reviewed, checked, and approved the shop drawings, etc., and that they are in conformance with the requirements of the Contract Documents. The Engineer will not review any submittals which do not bear the Contractor's certification.

After the review has been completed, the above drawings, lists, samples, design calculations, and other data, shall become a part of the Contract Documents and the fabrications furnished shall conform to the submittal.

Review of material and layout drawings consists of review for general conformity to plans and specifications and in no way relieves the Contractor or the supplier from responsibility for the correctness of the drawings.

Deviations or changes from plans or specifications must be called out as such and will require review by the Engineer for approval or rejection.

SECTION 105.5 - JOB OFFICE: The Contractor shall provide a job office at the work site to facilitate construction management of the project. Sixty-four (64) square feet of office space, equipped with suitable desk, telephone, chair, plan rack, and filing cabinet shall be provided in the Contractor's job office for the use of the Owner's Field Representative throughout the construction of the project.

SECTION 105.6 - COOPERATION WITH UTILITIES: An attempt has been made to determine the location of all underground utilities and drainage pipes, culverts and structures; however, it shall be the Contractor's responsibility to cooperate with the pertinent utility companies so that any obstructing utility installation may be adjusted. Should the Contractor's operations result in damage to any utility, the location of which has been brought to his attention, he shall assume full responsibility for such damage.

The following phone numbers should put the Contractor in contact with the proper personnel:

Flood Control District.....	262-1501
Mountain Bell Telephone Company.....	263-3219
Salt River Project.....	273-2202
Arizona Public Service..... (LOIS WINKLER)	271-7014 371-6837
Location Staking (A.P.S., Mtn. Bell, S.R.P.).....	263-1100
City of Glendale.....	931-5673
Maricopa County Highway Department.....	262-3631
City of Phoenix Streets and Traffic.....	262-6565
City of Phoenix Water and Wastewater.....	261-8229
Southwest Gas Company.....	269-7761
Dimension Cable Services.....	866-0072 Ext. 243

SECTION 105.8 - CONSTRUCTION STAKES, LINES AND GRADES: The project control lines (roadway and detour) and benchmark elevation are shown on the drawings and will be established by the Engineer. The Contractor shall establish offset stakes and temporary benchmarks for referencing the designated construction lines and grades. The Contractor shall provide all rough grade, fine grade, and structural reference lines and shall be responsible for their conformance with the plans and specifications.

Survey work shall be performed by a qualified and experienced surveyor under the supervision of a licensed land surveyor, or licensed civil engineer.

The Contractor shall furnish field books to be used for recording survey data and field notes. These books shall be available for inspection by the Engineer at any time and shall become the property of the Engineer upon completion of the work.

The Engineer reserves the right to make inspections and random checks of any portion of the staking and layout work. If, in the Engineer's opinion, the work is not being performed in a manner that will assure proper control and accuracy of the work, he will order any or all of the staking and layout work redone at no additional cost.

No separate payment will be made for construction surveying and the cost thereof shall be included in the price bid for related items of work.

SECTION 105.10 - INSPECTION OF WORK: Work will be subject to City of Phoenix inspection and acceptance prior to final acceptance by the Engineer.

SECTION 105.12 - MAINTENANCE DURING CONSTRUCTION: The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces to the end so that the roadway or structures are kept in satisfactory conditions at all times.

In the case of placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations. All cost of maintenance work during construction and before the project is accepted shall be included in the unit bid price on the various pay items.

SECTION 105.13 - FAILURE TO MAINTAIN ROADWAY OR STRUCTURE: If the Contractor, at any time, fails to perform maintenance during construction, the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may immediately proceed to maintain the project. The entire cost of this maintenance will be deducted from monies due or to become due the Contractor on his contract.

SECTION 106.3 - PLANT INSPECTION:

Off-Site Inspection

The Contractor shall be responsible for all expenses, including but not limited to travel and per diem expenses, for required inspections by the Engineer and/or the cost of inspection and testing by an independent testing laboratory as required by and at the discretion of the Engineer for any inspection of precast concrete girders manufactured outside of a fifty-mile radius from the City limits of Phoenix, Arizona.

SECTION 106.5 - CONTRACTOR'S MARSHALING YARDS: Contractor shall obtain approval of the Engineer when using vacant property to park and service equipment and store material for use.

- A. The Contractor shall notify adjacent property owners/residents of this proposed use.
- B. Any use of vacant property adjacent to or near the project for parking or servicing equipment and/or storing material will require the Contractor to obtain written approval from the property owner. This approval shall contain any requirements which are a condition of this approval.
- C. A copy of the property owner's approval shall be submitted along with the Contractor's request to the Engineer for approval for the use of the marshaling yard in connection with the project. An appropriate distance from adjacent property will be set by the Engineer on a case by case basis based on the size and type of equipment to be used on the project.

- D. The yard shall be fenced and adequately dust-proofed in a manner such as to preclude tracking of mud onto paved City streets.
- E. Work in yard shall be scheduled so as to comply with the City Noise Ordinance.
- F. Equipment, materials, etc., shall be located so as to minimize impact on adjacent properties. A sound barrier may be required if deemed necessary by the Engineer.
- G. The Contractor shall clean up property promptly upon completion of use.
- H. Contractor's request for approval shall specify in detail how he or she proposes to comply with D through G above.

SECTION 107.2 - PERMITS: The Contractor shall be responsible for obtaining all permits and licenses, pay all charges, fees, taxes and give all notices necessary and incidental to the due and lawful prosecution of the work. Permits for earth moving may be obtained from the Bureau of Air Pollution Control, Maricopa County Department of Health Services, 1845 East Roosevelt, telephone number 258-6381.

A no charge permit is required from the City of Phoenix.

A permit is required from Salt River Valley Water Users Association for work in their right of way.

SECTION 107.10 - CONTRACTOR'S RESPONSIBILITY FOR WORK: The Contractor shall properly guard, protect, and take every precaution necessary against injury or damage to all finished or partially finished work, by the action of the elements or from any other cause until the entire project is completed and accepted by the Engineer. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work before final acceptance at no cost to the Contracting Agency. Partial payment for completed portions of the work shall not release the Contractor from such responsibility.

In case of suspension of the work for any cause whatever, the Contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project and shall erect any necessary temporary structures, signs, or other facilities at no cost to the Contracting Agency.

SECTION 108.4 - SEQUENCE OF CONSTRUCTION: Construction of this project will be phased as illustrated on the plans. Each bridge structure will be constructed in two sections concurrently in a manner that will permit traffic to be maintained at all times in accordance with Section 104.1.2 - TRAFFIC REGULATIONS.

Prior to construction of the bridge structures, the existing 12-inch water lines in 43rd Avenue and Peoria Avenue shall be relocated in the temporary location shown on the plans. Following completion of the first bridge phase, the water line will be suspended from the bridge deck between the girders. Closures of water mains shall be coordinated with the City of Phoenix Water Department by the Contractor.

The Contractor shall coordinate the water line relocation with the gas and cable utility companies that will share the temporary water line trench and subsequent installation in the completed bridge structure.

The following construction sequence is illustrative only. The Contractor shall prepare a detailed sequence of construction and determine all methods and procedures necessary to complete the project within the time allowed.

Peoria Avenue:

Phase I:

1. Construct 42-inch storm drain extension and catch basins at Sta. 14+95 and Sta. 15+15;
2. Construct 12-inch by-pass storm drain between Sta. 11+75 to Sta. 15+15;
3. Construct 12-inch temporary water line between Sta. 10+89 to Sta. 14+88 (Gas and Cable companies to install service lines in same trench);
4. Construct detour, temporary concrete barriers and traffic control facilities shown on Traffic Control Plan I;
5. Construct Phase I portion of bridge structure (north side);
6. Construct permanent water line between bridge girders (Gas company to install gas service line);
7. Construct approach roadways on north side of Peoria Avenue;

Phase II:

8. Redirect traffic to completed north side of bridge and approaches as illustrated on Traffic Control Plan II;
9. Construct Phase II portion of bridge and approach roadways.

43rd Avenue:

Phase I:

1. Construct 24-inch storm drain between Sta. 23+43 and Sta. 24+27;
2. Construct 12-inch temporary water line between Sta. 20+59 and Sta. 23+55 (Gas and Cable companies to install service lines in same trench);
3. Construct detour, temporary concrete barriers, and traffic control facilities shown on Traffic Control Plan I;
4. Construct Phase I portion of bridge structure (east side);
5. Construct permanent water line between bridge girders (Gas company to install gas service pipeline);
6. Construct approach roadways on east side of 43rd Avenue;

Phase II:

7. Redirect traffic to completed east side of bridge and approaches as illustrated on Traffic Control Plan II;
8. Construct Phase II portion of bridge and approach roadways.

SECTION 108.5 - LIMITATION OF OPERATIONS: Should the Contractor elect to perform any work after regular working hours, on weekends, or legal holidays, any charges incurred by the District for inspection of the work, surveys, or tests of materials will be deducted from monies due or to become due to the Contractor.

SECTION 108.9 - FAILURE TO COMPLETE ON TIME: The actual cost per calendar day incurred by the District for Consultant Administrative and Inspection Services on this project will be added to the daily charges as indicated by TABLE 108, LIQUIDATED DAMAGES, as shown in the MAG Uniform Standard Specifications (not in the Phoenix Supplement), and will be deducted from monies due or to become due to the Contractor for each and every calendar day that work shall remain uncompleted after the time specified for the completion of the work in the proposal, or as adjusted by the Engineer. Nothing contained in this provision shall prohibit the District from deducting from monies due or to become due to the Contractor any other costs incurred by the District directly attributable to the delay in completing this contract.

SECTION 201 - CLEARING AND GRUBBING: The work under this item consists of removal and disposal of all trees, stumps, asphaltic pavement, and structures within the limits of the roadways, canal and borrow area designated on the plans. Materials shall be disposed of off-site. Also see Section 350 in these Special Provisions.

Payment of this item will be incidental to and included in the price bid for ITEM 350-1 MISCELLANEOUS REMOVALS.

SECTION 205 - ROADWAY EXCAVATION: Roadway excavation shall conform to Section 205 of the Uniform Standard Specifications.

No separate payment will be made for this item. Payment for all work under this section, including watering and compacting, shall be included in ITEM 301 - SUBGRADE PREPARATION.

SECTION 206 - STRUCTURE EXCAVATION AND BACKFILL: Structure excavation and backfill shall conform to Section 206 of the Uniform Standard Specifications.

The Contractor shall provide sheet piling or other means of support for excavation to protect detour road, underground utilities and private property during construction. Prior to excavating for the construction of the piers and abutments, the Contractor shall submit a complete detailed shoring and bracing plan prepared by and bearing the seal and signature of a licensed Professional Civil or Structural Engineer of the State of Arizona.

Structure backfill behind the abutments and wing walls shall be compacted in accordance with Table 601-2, Type III of the Uniform Standard Specifications.

All backfill behind the bridge abutments and wing walls shall consist of free-draining granular material with not more than 5% passing a #200 sieve and a PI less than 7. Backfill shall be placed in horizontal lifts consistent with the maximum material size and type of compaction equipment in use and compacted to a minimum of 95% of the maximum density at the optimum moisture content plus or minus 3% as determined in accordance with ASTM D-2922 and D-3017. Compaction equipment should be maintained at least two (2) feet from the structure.

Structure backfill against the bridge abutments shall be completed to an elevation approximately one foot below the girder bearing level prior to placement of the bridge girders. Backfill above that elevation shall not be performed until the concrete bridge deck has been in place a minimum of 7 days.

Backfill against front face of abutment walls, wing walls and center pier may consist of selected native soils. Below the elevation of the bottom of the future channel lining, this backfill shall be placed in horizontal lifts consistent with the maximum size and type of compaction equipment in use and compacted to a minimum of 95% of the maximum density at the optimum moisture content plus or minus 3% in accordance with ASTM D-2922 and D-3017. Above that elevation no special compaction is required.

Backfill around the center pier shall be placed in lifts such that no more than a two foot difference in elevation will exist at any given time between the height of backfill on either side of the pier.

Concrete surfaces of abutments and piers that will be backfilled against temporarily, and exposed by future channel construction shall be covered with a six mil thickness of polyethelene (clear) film for protection.

Structure excavation shall be paid for at the lump sum contract price bid for ITEM 206-1 - STRUCTURE EXCAVATION. Structure backfill shall be paid for at the lump sum contract price for ITEM 206-2 - STRUCTURE BACKFILL.

SECTION 210 - BORROW EXCAVATION: Borrow shall consist of material excavated for use in the construction of the detour roadway embankment fills. Borrow material shall be excavated to the lines and grades and within the ACDC right of way limits just to the west and/or east of 43rd Avenue as designated by the Flood Control District.

No separate payment will be made for this item. Payment for all work under this section, including watering and compacting, shall be included in ITEM 301 - SUBGRADE PREPARATION.

SECTION 211 - FILL CONSTRUCTION: The work under this section consists of constructing embankments for the detour and approach roadways. The material required for the construction of the fill shall be suitable material obtained from roadway excavation on the Arizona Canal Diversion Channel excavation and shall be free of all debris and vegetation.

Prior to the placement of fill material, all loose soil, vegetation, any roadside debris, concrete pavement, and existing structures within the proposed fill areas shall be completely removed. Depressions and ditches shall be cleaned of all loose or wet soils and widened to accommodate compaction equipment. Sloping surfaces shall be benched to provide a level surface for fill placement.

All exposed subgrade surfaces shall be scarified, brought to the proper moisture content and compacted for a minimum depth of eight (8) inches.

The fill shall be compacted in horizontal lifts to subbase level. The depth of the uncompacted lifts shall not exceed eight (8) inches.

Compaction shall be to a minimum of 95% of the maximum density as determined in accordance with ASTM D-2922 and D-3017 within a moisture content range of plus or minus 3% of optimum.

No separate payment will be made for fill construction and the cost of these items shall be included in the contract price bid for related items.

SECTION 215 - EARTHWORK FOR OPEN CHANNELS: Earthwork for open channels shall consist of excavation and grading of the Arizona Canal Diversion Channel to the lines and grades as shown on the plans in accordance with Section 215 of the Uniform Standard Specifications.

Material excavated under this item may be used for roadway embankment provided that it meets the requirements of SECTION 210 - BORROW EXCAVATION. Material that is determined to be unsuitable for use in roadway embankments and dikes shall be disposed of within the Arizona Canal Diversion Channel right-of-way. Material that is disposed of in this manner shall be spread evenly to a maximum depth of not over ten (10) feet, and shall be done in the manner that will not block or divert the natural drainage.

The Contractor may increase the extent of longitudinal channel excavation for his convenience, at his option, at no additional cost to the Owner. However, the final channel width and side slopes shall be as shown on the plans.

Payment for all work under this section will be made at the lump sum bid for ITEM 215 - CHANNEL EXCAVATION, which price shall include excavation, grading, and disposal of excess material excavated from the Arizona Canal Diversion Channel as indicated on the plans.

In the event that the bridge contractor has not completed the channel excavation prior to the commencement of the construction of the Arizona Canal Diversion Channel, a portion of this item may be deleted. Payment for completed work will be determined on the basis of the percentage of work completed within limits shown on plans divided by the estimated quantity shown on the plans.

SECTION 225 - WATERING: The work under this item shall be in accordance with Section 225 of the Uniform Standard Specifications and Maricopa County Highway Department Supplement. No separate payment will be made for this item.

SECTION 301 - SUBGRADE PREPARATION: Subgrade preparation shall consist of shaping the roadway subgrades to the grades and cross-sections for the new roadways, new detour road and bridge approach slabs as shown on the plans and in accordance with Section 301 of the Uniform Standard Specifications.

This item shall also include all work necessary for the construction of ditches, any excavation, filling, grading, shaping and miscellaneous grading work between the back of curb or edge of pavement and the right-of-way or construction easement.

Width of measurement for payment along new detour roads will be to outside edge of aggregate base course as shown on the plans.

Payment for all work under this section shall be at the contract unit price per square yard bid for ITEM 301 - SUBGRADE PREPARATION.

SECTION 310 - UNTREATED BASE: Select Material and Aggregate Base shall conform to the requirements of Section 702 of the Uniform Standard Specifications. Select Material and Aggregate Base shall be crushed in accordance with Section 702.2. Select Material shall be Type "A."

The Contractor will be required to furnish the Engineer certified weight tickets covering all of the Select Material and Aggregate Base placed on the project. Final pay quantities will be based upon the scale tickets accepted by the Engineer.

SECTION 315 - BITUMINOUS PRIME COAT: The bituminous material shall be Grade MC-70 or MC-250 liquid asphalt. Prime coat shall be applied at the rate of 0.4 gallon per square yard unless otherwise specified by the Engineer. The Engineer shall determine whether prime coat will be used.

SECTION 321 - ASPHALT CONCRETE PAVEMENT: Asphalt concrete pavement shall consist of furnishing and placing a plant-mixed asphalt concrete road surfacing material to the compacted thickness shown on the plans and in accordance with Section 321 of the Uniform Standard Specifications.

The mineral aggregate shall meet the grading requirements within the range of the specified tolerances for Mix-Designation C-3/4 or D-1/2 in accordance with Section 710 of the Uniform Standard Specifications and the City of Phoenix Supplement to the Uniform Standard Specifications.

The Contractor shall furnish certified weight tickets covering all plant-mixed asphalt concrete placed on the project.

New detour pavement shall be constructed to the lines and grades as shown on the plans. Where the grades require overlay construction, the existing asphaltic or portland cement concrete pavement shall be prime coated as specified in Section 315. The leveling course shall be C-3/4 mix. D-1/2 mix shall be used to "feather-match" the surface for a smooth transition.

Payment for this item will be made at the contract unit price bid per ton for ITEM 321-1 C-3/4 - ASPHALT CONCRETE and ITEM 321-2 D-1/2 - ASPHALT CONCRETE SURFACE COURSE.

SECTION 324 - PORTLAND CEMENT CONCRETE STREET PAVEMENT: PCC street pavement shall consist of furnishing and placing portland cement concrete pavement to the thickness and details shown on the plans and in accordance with Section 324 of the City of Phoenix Supplement of the Uniform Standard Specifications.

Payment for this item will be made at the unit price bid per square yard for ITEM 324 - PORTLAND CEMENT CONCRETE PAVEMENT.

Payment for bridge approach slabs will be in accordance with the appropriate item listed in SECTION 505 - CLASS S CONCRETE.

SECTION 336 - PAVEMENT MATCHING AND SURFACE REPLACEMENT: Existing pavements which are to be matched by the new roadway pavement shall be trimmed to a neat, straight and vertical edge. The trimmed edges shall be painted with a light coat of emulsified asphalt immediately prior to constructing the new abutting pavement.

Trenches for utilities and excavations required for structures or removals shall be backfilled in accordance with the plans and Section 601 of the Uniform Standard Specifications. Where vehicular traffic will cross such trenches and excavation the Contractor shall install temporary pavement in accordance with Section 601.5.4. Temporary pavement shall be C-3/4 mix with a minimum thickness of 2 inches.

Payment for temporary pavement will be made in accordance with ITEM 321-1.

SECTION 340 - CONCRETE CURB AND GUTTER, SIDEWALK AND DRIVEWAYS: Work under this item shall conform to Section 340 of the Uniform Standard Specifications and shall include concrete curb and gutter, concrete sidewalk and concrete driveway entrance.

All concrete shall be Class B and shall conform to Section 725 of the Uniform Standard Specifications.

All concrete items shall conform to the Standard Details and the details shown on the plans.

Payment for these items will be made at the unit price bid per lineal foot for ITEM 340-1 - CONCRETE CURB & GUTTER, TYPE A, ITEM 340-2 - CONCRETE CURB AND GUTTER, TYPE A (MODIFIED), ITEM 340-3 - CONCRETE SINGLE CURB, TYPE B, and the unit price bid per square foot for ITEM 340-4 - CONCRETE SIDEWALK, and ITEM 340-5 - CONCRETE DRIVEWAY ENTRANCE.

SECTION 345 - ADJUSTING FRAMES, COVERS, AND VALVE BOXES: Work under this section shall consist of adjusting existing manhole frames, covers, and water valve boxes as indicated on the plans or as designated by the Engineer and in accordance with Section 345 of the Uniform Standard Specifications and the applicable MAG Standard Detail.

SECTION 350 - REMOVAL OF EXISTING IMPROVEMENTS: The work under this section shall consist of removing and disposing of any obstacle to construction whether it is shown on the plans or not, unless it is specifically called out on the plans to be removed or relocated by other agencies, and shall be in accordance with Section 350 of the Uniform Standard Specifications.

The removal of the existing asphalt concrete pavement necessary to construct the new pavement and the removal of the asphalt concrete surface on the detour at the end of construction shall be included in this item.

The disposal of all waste materials removed under this item shall be the responsibility of the Contractor. The disposal site shall be approved by the Engineer.

If a Maricopa County landfill is selected for disposition of road construction waste and/or debris, a Maricopa County Landfill Use Permit will be required. Application for permit can be made at the Maricopa County Landfill Office, located at 3325 West Durango Street, Phoenix, Arizona 85009 (Telephone 269-2661). Charges will be levied on a volume basis for each load delivered to the landfill in accordance with the current fee schedule.

After the traffic is returned to Peoria and 43rd Avenue, the Contractor shall remove the surfacing on the detours. The disposal of the asphaltic concrete shall be the responsibility of the Contractor.

The Contractor shall remove existing underground gasoline storage tanks. The number, size, construction material, location, and depth of the tanks is unknown. The Contractor shall obtain the Phoenix Fire Department permit for the tank's removal and pay the applicable permit fee. (Currently \$100 for the first tank and \$25 for each additional tank.) Tank removal and inertion with dry ice will be subject to inspection by the Phoenix Fire Department. The Contractor shall provide the proper notification of the tanks' removal to ADHS.

Should existing environmental contamination be noted during the removal process, the Contractor shall promptly notify the engineer and recommend appropriate clean-up action. Such clean-up action, if required, will be done by others or by change order.

Measurement and payment for removal of underground storage tanks shall be at the contract unit bid price per tank removed under ITEM 350-4.

Payment for removal of existing improvements will be made at the contract unit price bid per linear foot for ITEM 350-1 REMOVE CONCRETE CURB AND GUTTER, ITEM 350-2 - REMOVE CONCRETE SIDEWALK, DRIVEWAY AND SLABS, the contract unit price bid per square yard for ITEM 350-3 - REMOVE EXISTING P.C. CONCRETE PAVEMENT, and the lump sum bid for ITEM 350-5 - MISCELLANEOUS REMOVALS.

SECTION 401 - TRAFFIC CONTROL: Traffic control shall conform to the Traffic Control Plans included in the project plans and applicable paragraphs of Section 401 of the Uniform Standard Specifications, the City of Phoenix Barricade Manual and as specified herein.

The number and types of barricades, signs, delineators, barriers and all other traffic control devices shown on the Traffic Control Plan are considered to be a minimum. However, the traffic control plans shall not relieve the Contractor of the responsibility of protecting the work, the workmen and the traveling public.

The Contractor shall provide and maintain safe and adequate access, including pavement surfacing of the detour for two-way traffic, at all times. Detour to bypass the construction zone shall be as shown on the plans.

Contractor shall not reduce lanes on Peoria Avenue, 43rd Avenue or the detours without approval of the Engineer.

All necessary signs and barricades shall remain three working days beyond acceptance of the project by the Owner.

Upon completion of the construction of the bridges and approach roadways, the Contractor shall restore the paint striping to the original configuration.

Payment for providing and maintaining traffic control will be at the lump sum bid price in the proposal. Such prices shall include all traffic control devices and traffic control measures, such as warning and control signs, barricades, lighting devices, sand barrel crash cushion, temporary concrete barriers, paint striping of the detours, new bridges and completed roadways, delineators, flagmen and other appurtenant items related to traffic control and safety. Included in the price shall be the maintenance of the detour pavement surface and pavement striping.

SECTION 505 - CONCRETE BRIDGE STRUCTURES: The work under this section shall consist of furnishing all labor, materials and equipment for the construction of the cast-in-place concrete portions of the bridge structure, including the approach slabs and bridge sidewalks, in accordance with the plans and Section 505 of the Uniform Standard Specification, except as specified in the Construction Special Provisions.

Portland Cement concrete shall be Class "S" conforming to Section 1006 and Table 1006-1 of the Arizona Department of Transportation Standard Specifications dated 1982 and all revisions.

The following strengths of Class "S" concrete shall be furnished:

505-1	Abutments and Wingwalls and all other concrete not listed below	f'c = 3,000 psi
505-2	Piers and Approach Slab	f'c = 4,000 psi
505-3	Deck Slab & Diaphragms	f'c = 4,500 psi

The Contractor shall determine the mix proportions and shall furnish concrete which conforms to the requirements of these specifications. All concrete shall be sufficiently workable, at the slump proposed by the Contractor within the specified range, to allow proper placement of the concrete without harmful segregation, bleeding, or incomplete consolidation. It shall be the responsibility of the Contractor to proportion, mix, place, finish, and cure the concrete properly in accordance with the requirements of these specifications.

Admixtures:

The Contractor shall furnish Certificates of Compliance conforming to the requirements of MAG Subsection 106.2 for each type of admixture furnished. Admixtures containing chlorides will not be acceptable for concrete containing uncoated reinforcing steel or embedded metal items.

All concrete admixtures shall be stored in suitable containers in accordance with the manufacturer's recommendations. All liquid admixtures shall be protected from freezing.

Air-entraining admixtures shall conform to the requirements of AASHTO M 154.

Water reducing admixtures shall conform to the requirements of AASHTO M 194.

Fly ash shall conform to the requirements of ASTM C 618 for Class F, except that the pozzolanic activity index with lime shall be reduced to a minimum of 650 pounds per square inch at seven days. The Blaine fineness shall have an average value of at least 2,800 with a minimum value of 2,600 for any one sample. The average value will be determined on the last five consecutive samples. The loss on ignition shall not exceed 3.0 percent.

Design of Concrete Mix:

The weight of hydraulic cement required for Class S concrete shall be not less than 564 nor more than 752 pounds per cubic yard.

A fly ash admixture may be used at the option of the Contractor only when portland cement is used. A maximum of 15 percent of the required weight of portland cement may be replaced with a fly ash admixture. A minimum of 1.2 pounds of fly ash shall replace each 1.0 pound of portland cement removed.

Class S concrete shall have a compressive strength not less than that shown on the project plans. Unless otherwise shown on the project plans, the ($f'c$) of Class S concrete shall be the required 28-day compressive strength.

The coarse aggregate size designation for Class S concrete shall be chosen by the Contractor and approved by the Engineer and shall conform to the size designation and grading requirements of AASHTO M 43. In choosing the size designation, the maximum size of coarse aggregate shall not be larger than $1/5$ of the narrowest dimension between sides of adjacent forms, or $2/3$ of the minimum clear spacing between reinforcing bars, or $1/3$ the depth of the slab, whichever is least.

The proposed slump shall be chosen by the Contractor. Concrete at the proposed slumps shall be sufficiently workable to allow proper placement without harmful segregation, bleeding, or incomplete consolidation.

Air-entraining admixtures will be required for all classes of concrete. The amount of entrained air in the concrete mixture shall not be less than four percent nor more than seven percent by volume.

Unless specifically required, water reducing admixtures may be used at the option of the Contractor.

At least two weeks prior to the appropriate concreting operation, the Contractor shall furnish a mix design for each strength of Class S concrete for review and approval. More than one mix design for each strength of Class S concrete may be submitted for approval providing specific items and locations of intended uses accompany the mix design. The Contractor shall substantiate each mix design by furnishing test data and providing all details of the mixtures proposed for use.

The complete solid volume mix designs submitted for approval shall include all weights and volumes of all ingredients. The brand, type, and source of hydraulic cement and admixtures, the coarse aggregate size number designation, source of aggregates, the specific gravities of all ingredients, the proposed slump, a code number to identify the mix design, and the intended use of each mix design shall be an integral part of each mix design.

No changes in the approved mix designs or code numbers shall be made by the Contractor except by the approval of the Engineer. A new mix design shall be submitted for approval any time the contractor requests a change in materials or proportioning of the materials from that given in each approved mix design. In no case shall the approval of a mix design relieve the Contractor of the responsibility for the results obtained by the use of such approved mix design.

Mix designs from previous or concurrent projects may be submitted for approval. The Engineer may waive trial batches at any time.

The Contractor may obtain concrete for each strength of Class S concrete from an approved commercial source.

For each strength of Class S concrete, the Contractor shall furnish an invoice for each batch of concrete. The minimum items required of each invoice shall be the mix design code number, date, time batched, truck identification or number, and name of identification of batch plant.

Testing for consistency shall be in accordance with the requirements of AASHTO T 119 to determine the consistency in slump. The Contractor shall be responsible for furnishing concrete at the slump shown on the approved mix designs with a permissible variation of ± 1 inch for Class S concrete. Concrete that fails to conform to the consistency requirements will be rejected.

Bridge Deck:

The placing of concrete will not be permitted until the Engineer is satisfied that the rate of producing and placing concrete shall be sufficient to complete the proposed pour and finishing operations within the scheduled time, that experienced concrete finishers are available to finish the deck and that all necessary finishing tools and equipment are on hand at the site of the work and are in satisfactory condition for use.

Concrete shall be placed for the full width of the panel to be poured. After the concrete has been placed it shall be consolidated and then struck off by means of self-propelled screed equipment.

Screed equipment shall be designed to operate as close as practicable to bridge curbs.

Screed equipment shall travel on steel rails. Rails shall be substantially supported by adjustable steel supports of adequate size securely fastened in place and spaced at sufficiently close intervals to prevent any appreciable deflection in the rails. Steel supports shall be of such types and installed in such manner that when the rail and adjustable support have been removed, there will be no void in the concrete.

The steel rails for placing and finishing equipment shall be set to the correct elevation shown on the project plans or as established by the Engineer. The rails shall extend beyond both ends of the scheduled length for placement a sufficient distance that will permit the screed and finishing equipment to reach all areas of the concrete placed.

Screed beams or rollers shall be made of metal, or the bottom of the beam shall be metal clad. Roller screeds shall be so constructed and of such length that there will be no sag or deflection in the screeds.

Screed assemblies equipped with vibrators shall be so designed that the vibrating units do not contact any reinforcing steel. Vibration shall be transmitted to the concrete in such a manner that when the motion of the machine is stopped, all vibration will cease.

A slight excess of concrete shall be maintained in front of the screed at all times during the screeding operation. The screed shall make as many passes over the slab as may be necessary to obtain a uniform surface.

The Contractor shall furnish a minimum of two transverse work bridges from which floating, straightedging, and curing operations may be accomplished. The work bridges shall be reasonably rigid and free of excessive deflections. The self-propelled mechanical bridge used for texturing the bridge deck may be substituted for one of the required work bridges.

The floating operation shall follow the screeding if required. The float shall have a minimum diameter of three inches and have a minimum length of 12 feet. The float shall be constructed so that the surface will be maintained true at all times.

Prior to placing concrete, the screed shall be traversed the length of the proposed pour and the clearance from the screed to the reinforcing steel and deck thickness shall be checked. The method of determining the clearance shall be approved by the Engineer prior to making such checks. The clearance shall be as indicated on the project plans with a permissible variation of plus or minus 1/4 inch. Deflection of the screed rails as a result of the weight of the screed equipment will not be permitted. All corrections necessary as a result of this operation shall be performed prior to beginning the pour.

Construction Joints:

The transverse construction joints in the deck slab have been located as shown on the Deck Plan drawing in the construction plans to achieve the deflection characteristics illustrated in the Slab Build-up Diagram. The deck slab shall be poured in accordance with the Deck Concrete Placement Schedule shown on the plans.

At the option of the Contractor, Pours #2 and #3 may be combined into one pour provided that pouring begins at the abutment end.

Finishing Bridge Deck:

Bridge sidewalks shall be finished to a light broomed texture.

Where the surface will be exposed directly to traffic, it shall be textured transversely, after final floating in the plastic concrete or after the completion of the curing period in the hardened concrete to produce a uniformly grooved surface.

The apparatus producing the textured grooves in the plastic concrete shall be mechanically attached and operated from an independent self-propelled mechanical bridge. The bridge shall be used for texturing only and shall be supported on the same steel rails used for the screed equipment.

The timing of the texturing operation in the plastic concrete is critical. Grooves that close following the texturing will not be permitted and the texturing shall be completed before the surface is torn or unduly roughened by the texturing operation.

Hand brooms shall be provided and available at the job site at all times when texturing plastic concrete.

The finishing operation shall be completed before the water sheen disappears. Water shall not be applied to the deck surface at any time during floating or finishing except that a fog spray may be applied.

Fogging equipment shall be capable of applying water to the concrete in form of a fine fog mist in sufficient quantity to curb the effects of rapid evaporation of mixing water from the concrete on the deck resulting from wind, high temperature, or low humidity, or a combination of these factors.

The finished surface of the concrete shall be tested by means of a ten-foot straightedge placed on the deck surface. The surface plane shall not vary more than 1/8 inch, as measured from the bottom of the straightedge, on deck surfaces exposed directly to traffic.

Areas showing deviations greater than those specified shall be corrected in a manner approved by the Engineer. All corrected areas shall be textured to match the finish of the surrounding deck surface.

All areas corrected shall not show deviations in excess of that specified when tested with a ten-foot straightedge.

Tests on Finished Structures:

Surface Texture: The grooves for decks exposed directly to traffic shall be not less than 0.08 of an inch nor more than 0.13 of an inch wide and shall be not less than 0.09 of an inch nor more than 0.20 of an inch in depth. The textured groove depth will be measured in accordance with the requirements of Arizona Test Method 310. The center-to-center spacing of the grooves shall be 0.75 of an inch. The maximum allowable deviation from 0.75 of an inch shall be 0.25 of any inch.

Dimensional Tolerances:

Construction dimensional tolerances shall be in accordance with Section 601-4, Concrete Structures, Tests on Finished Structures, of the Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, Edition of 1982 (revised to date).

Reinforcing Steel:

Reinforcing steel shall be furnished in the sizes, shapes, and lengths shown on the plans and in conformance with the requirements of these Special Provisions. Certificates of Compliance conforming to the requirements of MAG Subsection 106.2 shall be submitted.

When reinforcing steel is delivered to the site of the work, the Contractor shall furnish the Engineer with three copies of all shipping documents. Each shipping document shall show the sizes, lengths and weights of the reinforcing steel separately for each structure.

Steel bars used as reinforcement in concrete shall be deformed and shall conform to the requirements of ASTM A 615.

Where shown on the plans, the bars shall be Grade 60.

Where Grade 60 is not specified on the plans, Grade 40 shall be used if it is immediately available. If Grade 40 is not immediately available, Grade 60 may be used exclusively or in combination with Grade 40 provided that the conditions under which the grades are used in combination are acceptable to the Engineer and further provided that there is no additional cost to the Owner.

Shop drawings and lists showing the bending of reinforcement bars shall be submitted by the Contractor to the Engineer for approval, but such approval shall not relieve the Contractor of responsibility for the correctness of such drawings and lists.

Any discrepancy or error found by the Contractor in checking a bending diagram shown on the project plans or in preparing shop drawings or lists shall be reported immediately to the Engineer, and the discrepancy or error shall be corrected in advance of fabrication and delivery of materials.

When bending is required, it shall be done without the use of heat, and bars having cracks or splits at the bends will be rejected.

Reinforcement shall be accurately fabricated and placed as shown on the plans and shall be firmly held in place by wire ties at all intersections and splices with 16 gauge or heavier tie wire and by using precast mortar blocks or ferrous metal chairs, spacers, metal hangars, supporting wires or other approved supports. Where reinforcement spacing is less than 12 inches in each direction alternate intersections may be tied. Tack welding or reinforcement will not be permitted unless approved in writing by the Engineer.

Distances from the forms shall be maintained so that the reinforcement does not vary from the position indicated on the plans by more than 1/4 inch. Reinforcement in any member shall be placed, inspected and approved before any concrete is placed.

All reinforcement shall be furnished in the full lengths indicated on the project plans. Splicing of bars, except as shown on the plans, will not be permitted without the Engineer's approval. Splices shall be staggered as far as possible. The type and method of splices or connections shall be approved by the Engineer.

In lapped splices, the bars shall be placed in contact with one another and wired together in such a manner as to maintain a clearance of not less than the minimum clear distance to other bars and the minimum distance to the surface of the concrete, as specified in the AASHTO Standard Specifications for Highway Bridges. Lap lengths shall be as shown on the plans.

Structural steel items imbedded in the concrete are incidental to Class "S" concrete.

Payment for all work under this section will be made at the unit price bid per cubic yard for ITEMS 505-1 through 505-3 Class "S" Concrete and unit price bid per pound for ITEM 505-4 - REINFORCING STEEL.

No separate payment will be made for reinforcing steel Grade 40 and Grade 60.

SECTION 506 - PRECAST PRESTRESSED CONCRETE GIRDERS: The work under this section shall consist of furnishing and erecting the bridge girders as shown on the plans and in accordance with AASHTO Standard Specifications for Highway Bridges dated 1983.

All materials and construction of prestressed bridge girders shall conform to Section 506 of the Uniform Standard Specifications, except as modified by these Construction Special Provisions.

Portland Cement Concrete for Prestressed Girders shall be Class S concrete and shall conform to Section 505 of the Uniform Standard Specifications and these Construction Special Provisions.

Class "S" Concrete $f'c = 5,000$ psi

The Contractor may, at his option, post-tension the girders in accordance with Section 506 of the Standard Specifications.

The elastomeric bearing pads shall meet the requirements of Section 25 - Elastomeric Bearings of the AASHTO Standard Specifications for Highway Bridges dated 1983 (revised to date).

The structural steel anchors shall conform to Section 515 of the Standard Specifications.

No separate payment will be made for the elastomeric bearing pads, structural steel, anchor bolts, prestressing or post-tensioning steel, reinforcing steel or other embedded items necessary to the furnishing of the girders complete-in-place.

Payment will be made at the unit price bid per each for:

ITEM 506-1 - PRECAST CONCRETE GIRDERS (PRETENSIONED OR POST-TENSIONED) AASHTO TYPE IV (93'-3")

ITEM 506-2 - PRECAST CONCRETE GIRDERS (PRETENSIONED OR POST-TENSIONED) AASHTO TYPE III (70'-1")

SECTION 520 - PEDESTRIAN HANDRAIL: The work under this section consists of the construction of a pedestrian rail on the bridge decks and abutments as shown on the plans and in accordance with Section 520 of the Uniform Standard Specifications. The railing shall be galvanized after fabrication in accordance with AASHTO M11 (ASTM A-123).

Payment for this item will be made at the contract unit price bid per lineal foot for ITEM 520 - PEDESTRIAN HANDRAIL.

SECTION 610 - 12" WATER LINE: The work under this section consists of the construction of the new 12" water line (temporary and permanent) as shown on the plans and in accordance with Section 610 of the Uniform Standard Specifications.

The permanent water lines suspended under the bridge decks shall be 12" mechanical joint ductile iron pipe, class 50.

Measurement shall be in accordance with Section 610.18 of the Uniform Standard Specifications.

Payment will be made at the unit price bid for:

ITEM 610-1 - 12" WATER PIPE,

ITEM 610-2 - 12" MECHANICAL JOINT DUCTILE IRON PIPE,

ITEM 610-3 - 12" VALVE,

ITEM 610-4 - VALVE BOX AND COVER, TYPE A, DETAIL 391-1,

ITEM 610-5 - VALVE BOX AND COVER, TYPE B, DETAIL 391-1, and

ITEM 610-6 - DUCTILE IRON FITTINGS (in excess of fittings shown on plans)

The cost of concrete thrust blocks shall be included in the respective bid item.

SECTION 618 - STORM DRAIN CONSTRUCTION WITH CONCRETE PIPE: The work under this section consists of the construction of storm drain pipe, as shown on the plans and in accordance with Section 618 of the Uniform Standard Specifications.

Catch basins, storm sewer manholes, pipe plugs and pipe collars shall conform to the details shown on the plans. Portland Cement Concrete for storm sewer appurtenances shall conform to Section 505 of the Uniform Standard Specifications.

Payment will be made at the unit price bid for:

- ITEM 618-1 - 12" STORM SEWER PIPE,
- ITEM 618-2 - 24" STORM SEWER PIPE,
- ITEM 618-3 - 42" STORM SEWER PIPE,
- ITEM 618-4 - STORM SEWER MANHOLE (DETAIL 520 and 522)
- ITEM 618-5 - 15" CATCH BASIN CONNECTOR PIPE
- ITEM 618-6 - CONCRETE CATCH BASIN, TYPE M-1, (L=6') (DET. P-1569)
- ITEM 618-7 - CONCRETE CATCH BASIN, TYPE M (DET. P-1569)
- ITEM 618-8 - 42"x42"x15" PREFABRICATED TEE
- ITEM 618-9 - CONCRETE PIPE COLLAR FOR 24" PIPE AND LARGER (DET. 505)
- ITEM 618-10 - PIPE PLUG (DETAIL 427)

SECTION 800 - PVC DUCTS: All conduit and fittings shall be listed by UL, and conform to NEC standards. All conduit shall be rigid polyvinyl chloride (PVC) non-metallic type conforming to the requirements of UL651 for rigid non-metallic conduit, PVC conduit and fittings shall be Schedule 40, heavy wall, manufactured from high impact material and shall be rated for use at 90 degrees Centigrade.

Conduit installed under pavement shall be at a minimum depth of 30 inches. Conduit in bridge sidewalk shall be installed in accordance with details shown on plans. Each conduit shall be equipped with a pull-wire. PVC expansion sleeves shall be installed at the abutment walls. All conduits shall be cleaned and "blown out" with compressed air. Ends of conduit shall be fitted with a PVC cap. Tracer wires and markers shall be installed for future locating.

Payment shall be made by the lump sum price bid for ITEM 800 - PVC CONDUIT.

GENERAL: It shall be the Contractor's responsibility to protect the structure and construction site from damage that may occur during the construction period and until final acceptance of the completed bridge by the Flood Control District.

Upon completion of the construction, the Contractor shall clear the work area of all debris.

No vehicular loads will be permitted on the bridges before the lapse of twenty-one (21) days from the date of the last pour of concrete for the bridge deck, unless approval is obtained in writing from the Engineer. The Contractor shall take special precautions to keep the area around the bridges properly barricaded and marked with flares to prevent automotive traffic from crossing the new bridge structures prior to the acceptance of the completed project by the Flood Control District Engineer.

The installation of any necessary conduits, brackets, or piping or any other facility or work which may be performed for the accommodation of any utility, other than as shown on the plans, shall be paid for by the utility owner. The Contractor shall make all arrangements that may be necessary for the construction and any financial agreement shall be solely between the Contractor and the utility owner.

GUARANTEE: The Contractor shall guarantee the structures for one year against faulty materials, faulty workmanship, and failure to meet the specifications requirements. Said guarantee by the Contractor shall not apply to damage caused by earthquakes or other acts of God, land subsidence or faulty operations or any abuse of the structures by others.

CONTRACT FCD 86-29

THIS AGREEMENT, made and entered into this _____ day of _____, 19____,
by and between _____

of the City of _____, County of _____, State of _____,
party of the first part, hereinafter designated the CONTRACTOR, and the FLOOD
CONTROL DISTRICT OF MARICOPA COUNTY, acting by and through its BOARD OF
DIRECTORS, a political subdivision of the State of Arizona, a body politic with
corporate power, party of the second part, hereinafter designated OWNER.

WITNESSETH: That the said CONTRACTOR, for and in consideration of the sum
to be paid him by the said OWNER, in the manner and at the time hereinafter
provided, and of the other covenants and agreements hereincontained, and under
the penalties expressed in the bonds provided, hereby agrees, for himself, his
heirs, executors, administrators, successors, and assigns to as follows:

ARTICLE I-SCOPE OF WORK: The CONTRACTOR shall furnish any and all labor,
materials, equipment, transportation, utilities, services and facilities
required to perform all work for the construction of Project No. _____

and to complete and totally construct the same and install the material therein
for the OWNER, in a good and workmanlike and substantial manner and to the
satisfaction of the OWNER through its Engineers and under the direction and
supervision of the Engineer, or his properly authorized agents and strictly
pursuant to and in conformity with the Plans and Specifications prepared by the
Engineers for the OWNER, and with such modifications of the same and other
documents that may be made by the OWNER through the Engineer or his properly
authorized agents, as provided herein.

ARTICLE II-CONTRACT DOCUMENTS: The Invitation for Bids, Plans, Standard
Specifications and Details, Special Provisions, Addenda, if any, and Proposal,
as accepted by the BOARD OF DIRECTORS, Performance Bond, Payment Bond,
Certificates of Insurance, and Change Orders, if any, are by this reference
made a part of this Contract to the same extent as if set forth herein in full.

ARTICLE III-TIME OF COMPLETION: The CONTRACTOR further covenants and agrees
at his own proper cost and expense, to do all work as aforesaid for the con-
struction of said improvements and to completely construct the same and install
the material therein, as called for by this agreement free and clear of all
claims, liens, and charges whatsoever, in the manner and under the conditions
specified within the time, or times, stated in the proposal pamphlet.

ARTICLE IV-PAYMENTS: For and in consideration of the faithful performance
of the work herein embraced as set forth in the Contract Documents, which are a
part hereof and in accordance with the directions of the OWNER, through its
Engineer and to his satisfaction, the OWNER agrees to pay the said CONTRACTOR
the amount earned, computed from actual quantities of work performed and
accepted or materials furnished at the unit bid price on the Proposal made a
part hereof, and to make such payment within forty (40) days after final
inspection and acceptance of the work.

CONTRACT NO. FCD 86-29

IN WITNESS WHEREOF: Four (4) identical counterparts of this Contract each of which shall for all purposes be deemed an original thereof, have been duly executed by the parties hereinabove named, on the date and year first above written.

The CONTRACTOR agrees that this Contract, as awarded, is for the stated work, and understands that payment for the total work will be made on the basis of the indicated amount(s), as bid in the Proposal.

PARTY OF THE FIRST PART

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PARTY OF THE SECOND PART

By: _____
Chairman, Board of Directors

Date: _____

RECOMMENDED BY:

ATTEST:

Chief Engineer and General Manager
Flood Control District
of Maricopa County

Clerk of the Board

Date: _____

LEGAL REVIEW

Approved as to form and within the powers and authority granted under the laws of the State of Arizona to the Flood Control District of Maricopa County.

By: _____

Date: _____

CONTRACT NO. FCD 86-29

STATUTORY PAYMENT BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS:

That, _____
(hereinafter called the Principal), as Principal, and

_____ a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____, (hereinafter called the Surety), as Surety, are held and firmly bound unto the Flood Control District of Maricopa County, State of Arizona (hereinafter called the Obligee) in the amount of _____ dollars (\$ _____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Obligee, dated the _____ day of _____, 19____, for _____

_____ which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall promptly pay all moneys due to all persons supplying labor or materials to him or his subcontractors in the prosecution of the work provided for in said contract, then this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, of the Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions, of said Title, Chapter, and Article, to the extent as if it were copied at length herein.

The prevailing party or any party which recovers judgment on this bond shall be entitled to such reasonable attorney's fees as may be fixed by the court or a judge thereof.

Witness our hands this _____ day of _____, 19____.

PRINCIPAL SEAL

BY: _____

AGENCY OF RECORD

SURETY SEAL

BY: _____

AGENCY ADDRESS

POWER OF ATTORNEY SEAL

BY: _____

CONTRACT NO. FCD 86-29
PAYMENT BOND

STATUTORY PERFORMANCE BOND PURSUANT TO TITLE 34
CHAPTER 2, ARTICLE 2, OF THE ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Contract amount)

KNOW ALL MEN BY THESE PRESENTS:

That, _____
(hereinafter called the Principal), as Principal, and

_____ a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ (hereinafter called the Surety), as Surety, are held and firmly bound unto the Flood Control District of Maricopa County, in the County of Maricopa, State of Arizona, in the amount of _____ dollars (\$ _____), for the payment whereof, the said Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written contract with the Flood Control District of Maricopa County, dated the _____ day of _____, 19____, for _____

_____ which contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform and fulfill all the undertakings, covenants, terms, conditions and agreements of said contract during the original term of said contract and any extension thereof, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; then the above obligation shall be void, otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, of the Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of said Title, Chapter, and Article, to the extent as if it were copied at length herein.

The prevailing party in a suit on this bond shall be entitled to such reasonable attorney's fees as may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 19____.

PRINCIPAL SEAL

AGENCY OF RECORD

BY: _____

AGENCY ADDRESS

SURETY SEAL

BY: _____

CONTRACT NO. FCD 86-29
PERFORMANCE BOND

POWER OF ATTORNEY SEAL

Page 1 of 1 BY: _____

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CERTIFICATE OF INSURANCE Bridges at 43rd Ave.

CONTRACT FCD 86-29 PROJECT TITLE and Peoria Ave. for the ACDC

NAME AND ADDRESS OF INSURANCE AGENCY	INSURANCE COMPANIES AFFORDING COVERAGES
	Company Letter A
	Company Letter B
	Company Letter C
	Company Letter D
	Company Letter E
	Company Letter F
NAME AND ADDRESS OF INSURED	Company Letter G

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE AND ARE IN FORCE AT THIS TIME.

COMPANY LETTER	TYPE OF INSURANCE	POLICY NUMBER	EXPIRATION DATE	LIMITS OF LIABILITY IN \$1,000	
				MINIMUM	each occurrence
	<input checked="" type="checkbox"/> COMPREHENSIVE GENERAL LIABILITY FORM <input checked="" type="checkbox"/> PREMISES OPERATIONS <input checked="" type="checkbox"/> CONTRACTUAL <input checked="" type="checkbox"/> BROAD FORM PROPERTY DAMAGE <input checked="" type="checkbox"/> EXPLOSION & COLLAPSE <input checked="" type="checkbox"/> PRODUCTS/COMPLETED OPERATIONS HAZARD <input checked="" type="checkbox"/> UNDERGROUND HAZARD <input checked="" type="checkbox"/> INDEPENDENT CONTRACTORS <input checked="" type="checkbox"/> PERSONAL INJURY			BODILY INJURY per person \$1,000 each occurrence \$5,000 PROPERTY DAMAGE \$1,000 OR BODILY INJURY AND PROPERTY DAMAGE Combined \$5,000	
	<input checked="" type="checkbox"/> COMPREHENSIVE AUTO LIABILITY & NON-OWNED			SAME AS ABOVE	
	<input type="checkbox"/> EXCESS LIABILITY			NECESSARY IF UNDERLYING NOT ABOVE MINIMUM	
	<input checked="" type="checkbox"/> WORKERS' COMPENSATION and EMPLOYERS' LIABILITY			STATUTORY	each accident \$100
	<input type="checkbox"/> OTHER				

The Flood Control District of Maricopa County is added as an additional insured as respects work done for the District by the named insured as required by statute, contract, purchase order or otherwise requested. It is agreed that any insurance available to the named insured shall be primary of other sources that may be available. It is further agreed that no policy shall expire, be cancelled or materially changed to effect the coverage available to the District without fifteen days written notice to the District. THIS CERTIFICATE IS NOT VALID UNLESS COUNTERSIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE INSURANCE COMPANY.

NAME AND ADDRESS OF CERTIFICATE HOLDER
 FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 3335 West Durango Street
 Phoenix, Arizona 85009

DATE ISSUED _____

 AUTHORIZED REPRESENTATIVE

It is further agreed that:

The Contractor hereby agrees to indemnify and save harmless the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, or any of its departments, agencies, officers or employees, from and against all loss, expense, damage or claim of any nature whatsoever which is caused by any activity, condition or event arising out of the performance or nonperformance of any of the provisions of this Agreement. The Flood Control District of Maricopa County shall in all instances be indemnified against all liability, losses and damages of any nature for or on account of any injuries to or death of persons or damages to or destruction of property arising out of or in any way connected with the performance or nonperformance of this Agreement, except such injury or damage as shall have been occasioned by the sole negligence of the Flood Control District of Maricopa County. The above cost of damages incurred by the Flood Control District of Maricopa County or any of its departments, agencies, officers or employees shall include in the event of an action, court costs, expenses for litigation and reasonable attorney's fees.

Date _____ Contractor _____

CERTIFICATE OF INSURANCE
CONTRACT FCD 86-29