

C-65-96-001-5

CONSTRUCTION SPECIFICATIONS

FOR

CONTRACT FCD 95-42
CACTUS ROAD STORM DRAIN, PHASE II
Cactus Road from 83rd Avenue
to East of 75th Avenue



(Engineer's Seal)

Prepared For

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

Recommended by: Edward A. Raleigh Date: 1/24/96
Edward A. Raleigh, P.E., Chief
Engineering Division

Issued for Public Bidding by: Stanley L. Smith, Jr. Date: 1-25-96
Stanley L. Smith, Jr., P.E.
Interim Chief Engineer and General Manager

SUPPLEMENTARY TO MARICOPA ASSOCIATION OF GOVERNMENTS UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION EDITION OF 1992 AND REVISIONS AND SUPPLEMENTS THERETO.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY**CACTUS ROAD STORM DRAIN****PHASE II**

Contract FCD 95-42

Addendum No. 1

February 21, 1996

FCD CONTRACT NO. 95-42**To Contract Documents:****TITLE:** Cactus Road Storm Drain**OWNER:** Flood Control District of Maricopa County

The above documents are herein modified. The provisions of said documents applicable to these modifications remain unchanged unless specifically indicated otherwise herein. This addendum forms a part of the contract documents and modifies them as follows:

TO THE CERTIFICATE OF INSURANCE:

Include the Salt River Project as an additionally insured party on pages 30 and 31.

TO THE SUPPLEMENTARY GENERAL CONDITIONS:**Subsection 105.6 - Cooperation with Utilities**

In the first paragraph on page 12 of 21 relating to Salt River Project Utilities, delete the last sentence, "This work shall be considered incidental to related bid items."

Subsection 107.2.2 - Hauling and Grading Permit

In the first paragraph, replace "...by the District for such conditions..." with "...by the City of Peoria for such conditions...."

TO THE BIDDING SCHEDULE:

Add Bid Item 601-1, Protect Utility in Place with an Approximate Quantity of 1.

TO THE SPECIAL PROVISIONS:

SECTION 505 - Concrete Structures

Add the following after the first paragraph on page 5 of 15 relating to Catch Basins:

“Catch basins shall have a minimum horizontal clearance of six (6) inches between the irrigation pipe and the nearest surface to the catch basin. If the clearance cannot be maintained, the Contractor shall install expanded polystyrene form material of a minimum of two (2) inches thickness between the pipe and the catch basin.”

SECTION 601 - Trench Excavation, Backfilling and Compaction

Add the following two paragraphs to the beginning of this Section, beginning on page 6 of 15:

“The Contractor shall protect-in-place the electrical facility as shown on the construction drawings from Station 75+01.5 to Station 80+00, and the utility vault as shown on the plans and on the attached Figures 1 and 2 (included for information only). The duct bank has been potholed at the two following locations: Station 76+50 and Station 78+50, and north edge of the duct banks were measured at 53" and 56" south of the monument line, respectively.

No penalty shall be incurred for the deletion of this item if the facilities are relocated by others from their present location to a location beyond the normal trench width prior to excavating the trench.”

Add Subsection - “Irrigation Pipe Bedding” to page 7 of 15, which includes the following paragraphs:

“The bedding requirements will depend on the pipe location. Class C bedding or better will be required for pipe subject to heavy traffic and will be specified on the plans, license or construction contract for the job. Where no bedding is specified, Class D bedding shall be used. Classes of bedding and bedding materials are shown on Figure 3 (attached) .

Bedding material that is placed or disturbed shall be mechanically compacted to the densities specified in the plans and specifications.

Bell holes shall be excavated with a minimum clearance of two inches to prevent point loading of laid pipe, and to provide full length, continuous support of the pipe barrel. Cable holes should also be excavated to prevent movement of the pipe when removing the pipe sling.”

Delete in its entirety the second to the last paragraph on page 7 of 15 that begins with the following: “Also, the Contractor may opt to excavate a trench....”

Replace the last paragraph of this Section on page 7 of 15 with the following:

“No separate measurement shall be made for excavation, falsework, backfilling, compacting of the storm drain and connector pipes, and protecting utilities in place except for the electrical

utility located south of the monument line from the beginning of the Project to Station 80+00; the cost thereof shall be included in the price bid for construction or installation of the storm drain and connector pipes to which such work is incidental or appurtenant. The cost of protecting the exception, as noted above, shall not be considered incidental to installation and shall be at the contract unit price per job for Bid Item 601-1. Such payment shall be full compensation for taking whatever means necessary to protect the facility in place including the cost of labor, coordination with the utility owner, and all other work not specifically covered that is incidental."

SECTION 618 - Storm Drain Construction

Add the following paragraphs to Subsection "RGRCP Irrigation Pipe":

"Irrigation and Low-Head Pressure Drain Pipe

Pipe is to be manufactured and installed in accordance with SRP's specifications for "Pre-cast concrete pipe" (RGRCP).

The irrigation manhole to be constructed at 79th Avenue is to be built in accordance with SRP standard manhole drawings and all applicable specifications. The alignment and manhole location shall be surveyed by the Contractor and approved by an SRP field inspector.

Rubber Gasket Reinforced Concrete Pipe (RGRCP) - (Low-head Pressure Pipe)

The pipe shall meet the requirements of ASTM C-361 and withstand a minimum internal hydrostatic head of 25 feet under the provisions of Section 10 of ASTM C-361 or meet the requirements of ASTM C-76 and withstand a hydrostatic head of 10 psi for 10 minutes under the provisions of Section 10 of ASTM C-14. The minimum strength for wheel loads and earth loads is Class III, Wall B per ASTM C-76.

Twelve (12) inches minimum clearance is to be maintained below Salt River Project's irrigation pipe. When paralleling irrigation pipe, a minimum of 24 inches horizontal clearance is to be maintained between the pipe and the open excavation.

Any storm drain connector pipe, connected to the SRP irrigation system, that is to be abandoned shall be done so with a permanent brick and mortar plug.

Rubber Gasket Joints

Rubber gaskets and joints shall meet the requirements of ASTM C-443 unless provisions for manufacture and testing are otherwise specified in the ASTM specification for the pipe.

Mastic Joint Seal - the seal shall be of preformed butyl rubber material and shall meet the requirements of AASHTO M-198. It shall be Kent Seal No. 2 Hamilton Kent of Ram Nek by K. T. Snyder Company or approved equal.

Joint Assembly

The inside of the bell and the outside of the spigot end shall be thoroughly cleaned to remove oil, grit, excess coating and other foreign matter. The gasket shall be properly installed as per the pipe Seller instructions. A generous coating of gasket lubricant shall be applied to the inside surface of the bell end of the pipe, in the groove portion of the spigot, and the gasket. Gasket lubricant shall be as supplied by the pipe Seller and approved by the Engineer. If the pipe is delivered with gaskets already installed, a weather-tight protective covering shall enclose that end of the pipe. Pipe shall be laid with bell ends facing in the direction of laying, unless directed otherwise by the Engineer. On grades exceeding 10%, the laying shall start at the lower end and shall proceed upward. The spigot end of the pipe shall be entered into the bell, with care used to keep the joint from contacting the ground. The joint shall then be completed by pushing or pulling the spigot end all the way into the bell by approved methods for the industry.

When pipe is laid on tangent, each joint shall be fitted together so that the spigot end of one pipe is as close to being in contact with the shoulder of the bell of the adjacent pipe as practicable and so that the Distance A shown on Figure 4 (attached) is not less than one-half inch.

Plugs

Installed piping systems shall be temporarily plugged at the end of each day's work, or other interruption to progress. Plugging shall be adequate to prevent entry of small animals or persons into the pipe or the entrance or insertion of any deleterious materials.

Standard plugs shall be inserted into the bell of all dead-end pipes, laterals, or fittings; spigot ends shall be capped. If there is a delay greater than overnight or over a weekend, the ends of such lines shall be equipped with a semi-permanent type plug or cap.

Plugs installed for leak testing shall be fully secured and blocked to withstand the test pressure.

Plugs installed for protection of flooding during construction shall be fully removed by the Contractor.

Field Testing

Before final acceptance, the Engineer will monitor the pressure test for leaks to be performed by the Contractor, with the pipeline under the maximum static head as determined by the SRP Water Operations Water master for the affected area. The maximum allowable leakage shall not exceed 100 gallons by the inch of nominal diameter per day per mile of pipeline. No leak having dripping or flowing water will be acceptable. Leakage shall be the measured amount of water added to maintain the water at the level specified. Leakage tests shall be performed for a minimum of 4 hours with readings at 30-minute intervals. The Contractor may fill the line with water and allow it to stand 24 hours prior to testing.

The Contractor will be required to repair any leaks or other deficiencies revealed by field test prior to final acceptance of the pipeline and during the one-year guarantee period beginning with the date of Final Acceptance."

FLOOD CONTROL DISTRICT
OF MARICOPA COUNTY

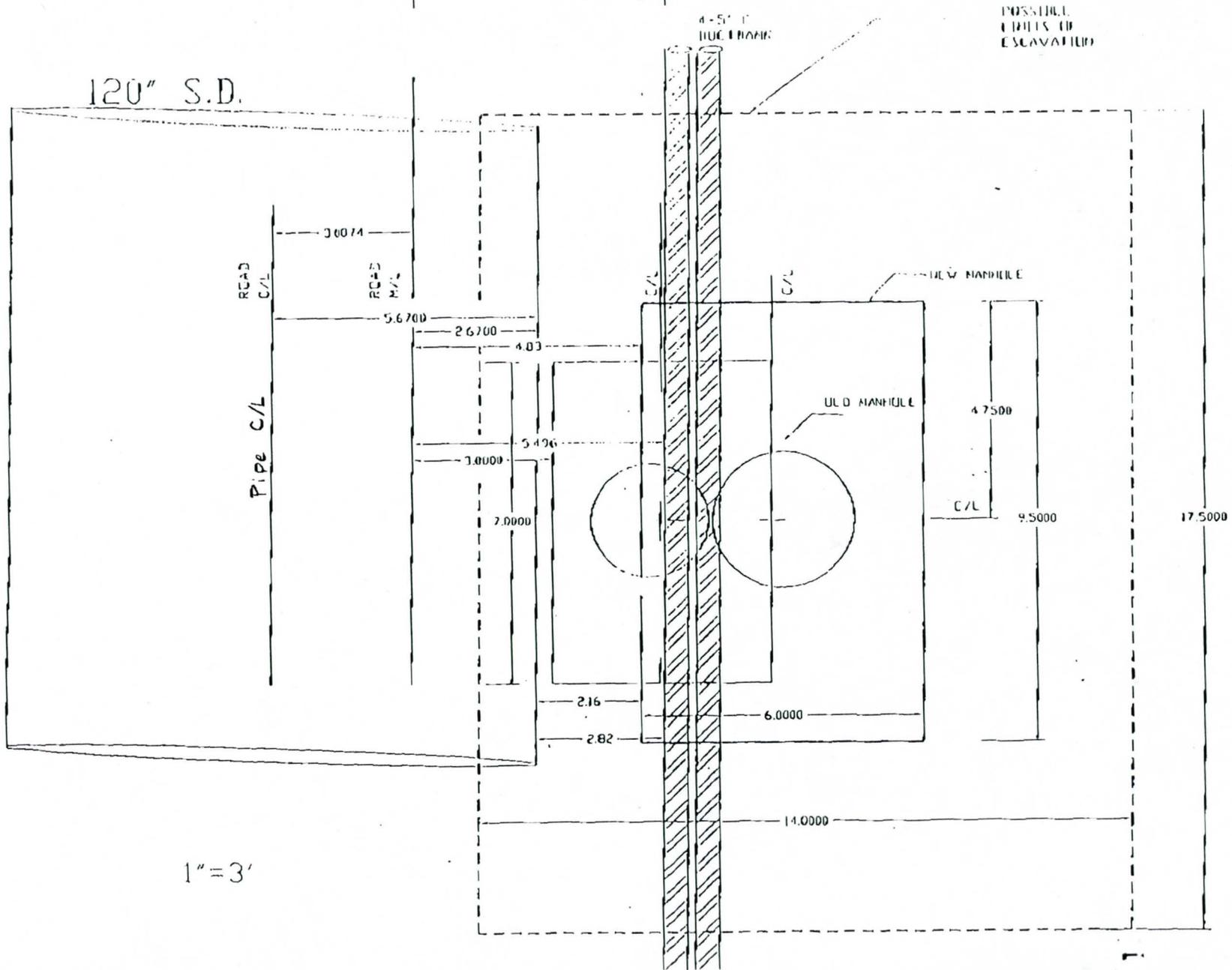

Stanley L. Smith, Jr., P.E.
Interim Chief Engineer and General Manager



Michael A. Lopez, P.E.

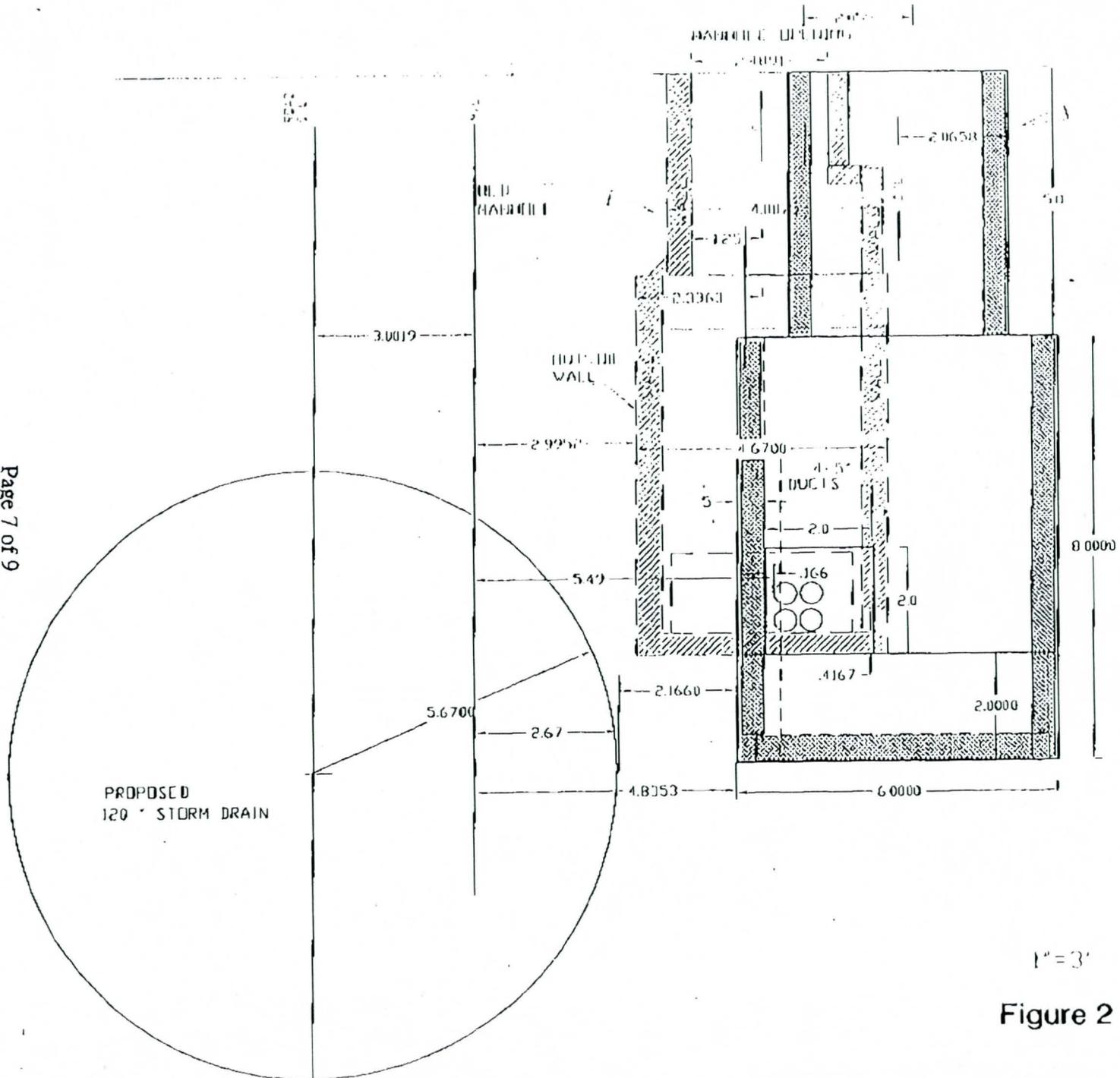
56" (4.67') AT STATION 78+50

53" (4.41') AT STATION 76+50



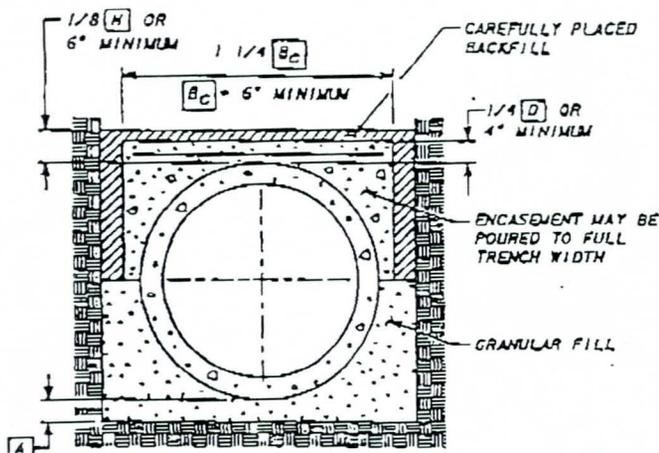
Page 6 of 9

1" = 3'



1"=3'

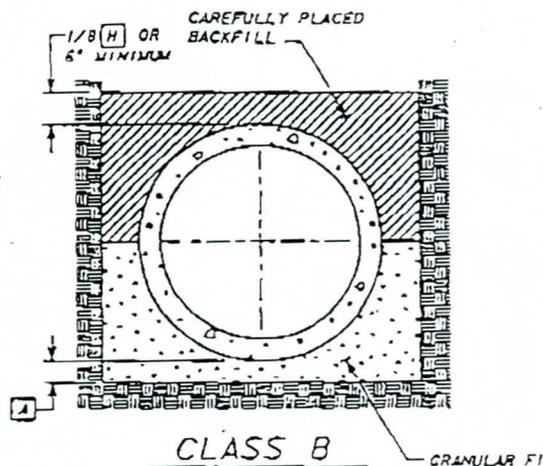
Figure 2



CLASS A
ARCH ENCASEMENT

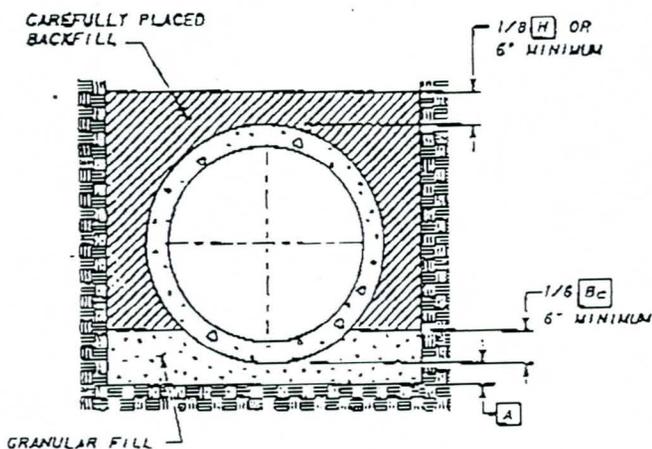
LOAD FACTOR $\left\{ \begin{array}{l} \text{REINFORCED, } A_s = 0.40\% - 3.5 \\ \text{REINFORCED, } A_s = 1.00\% - 4.8 \\ \text{PLAIN} - 2.8 \end{array} \right.$

A_s = PERCENTAGE OF AREA OF TRANSVERSE STEEL IN THE CONCRETE ABOVE CROWN OF PIPE



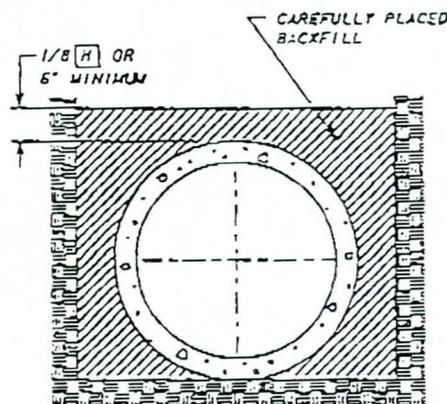
CLASS B
FIRST-CLASS BEDDING

LOAD FACTOR 1.9



CLASS C
ORDINARY BEDDING

LOAD FACTOR 1.5



CLASS D
FLAT BOTTOM BEDDING

LOAD FACTOR 1.15

TABLE OF FILL DEPTHS BELOW PIPE

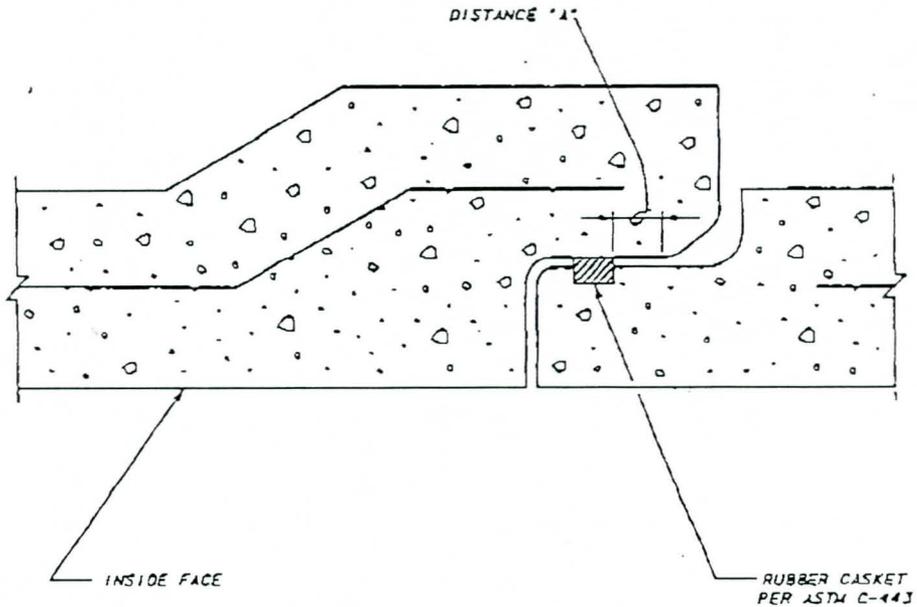
D	A
D	A
36" & SMALLER	4"
OVER 36"	1/12 OF B_c

H = DEPTH OF FILL ABOVE TOP OF PIPE

B_c = OUTSIDE DIMENSION OF PIPE

Figure 3

REFERENCES	REVISIONS	SALT RIVER PROJECT CIVIL ENGINEERING STANDARDS
PRECAST CONCRETE PIPE SPECIFICATION CE 02.614	DEV DATE DTR CHKR ENGR CHKR SUPV APPR ISSUE AUTH	PIPELINE BEDDING/BACKFILL REQUIREMENTS
	INITIAL ISSUE. 0 2/89 AX [Signature]	
		SCALE: NOT TO SCALE PAI-C129.0+0120307991.C DWG SIZE 17 X 22



DISTANCE "A" 1/2" MINIMUM FOR TANGENT - LAID PIPE
1/4" MINIMUM FOR BENDS

Figure 4

NOTE:
THIS DETAIL IS FOR
A TYPICAL RUBBER GASKET
BELL & SPIGOT ASSEMBLY.
FLUSH BELL RUBBER GASKET
JOINTS MUST MEET THE SAME
SPECIFICATIONS.

REFERENCES		REVISIONS								SALT RIVER PROJECT CIVIL ENGINEERING STANDARDS		
PRECAST CONCRETE PIPE SPECIFICATION	CE 02.614	REV NO	DATE	DETR	OWNER	ENGR CHK	SUPPLY APPRO	ISSUE AUTH	RUBBER GASKET JOINTS			
		INITIAL ISSUE.										
		0	2/89	AK								
										SCALE: NOT TO SCALE	P11-1128.2401000000	
										DWG SIZE	17 X 22	
										CES-30300-01		

ATTENTION

ALL PROSPECTIVE BIDDERS

A.R.S. Section 34-201 now requires that construction bid proposals be accompanied by a certified check, cashiers check or surety bond for ten percent (10%) of the total amount of the bid.

All bonds must be executed solely by a surety company or companies holding a Certificate of Authority to transact surety business in Arizona, issued by the Director of the (State) Department of Insurance.

Bonds (bid, payment and performance) executed by an individual surety or sureties are not in compliance with the Arizona Revised Statutes.

Bids received containing bid bonds not in compliance with the Arizona Revised Statutes will be considered as being non-responsive. The use of District-supplied bond forms is required.

Please submit your bids accordingly.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CONTRACT FCD 95-42

Cactus Road Storm Drain, Phase II

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18. Drawings: Cactus Road Drain, Phase II	Separate
(45 plan sheets)	



(Area to left reserved for Engineer's Seal)

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

INVITATION FOR BID

BID OPENING DATE: February 27, 1996

LOCATION: This project is located on Cactus Road from 83rd Avenue to east of 75th Avenue approximately one plus miles.

PROPOSED WORK: The proposed work consists of construction of a regional storm drain, excavation for pipe, backfill, paving and installation of 35 catch basins, a special concrete box structure, and utility relocations.

BIDS:

SEALED BIDS for the proposed work will be received by the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009 until 2:00 p.m. (Phoenix time) on February 27, 1996 and then publicly opened and read at 2801 West Durango Street, Phoenix, Arizona 85009. All bids are to be marked in accordance with Section 102.9 of the MAG Uniform Standard Specifications and addressed to the Chief Engineer and General Manager, Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009. No bids will be received after the time specified for bid opening. All bids must be submitted on proposal forms furnished by the Flood Control District and included in the Proposal Pamphlet. The Board of Directors reserves the right to reject any and all bids and to waive any informality in any bid received.

ELIGIBILITY OF CONTRACTOR:

It is the policy of the Flood Control District of Maricopa County to endeavor to ensure in every way possible that minority and women-owned business enterprises have every opportunity to participate in providing professional services, purchased goods, and contractual services without being discriminated against on the grounds of race, religion, sex, age, disability, or national origin.

The bidder shall be required to certify that it has the appropriate "A" Contractor's license in the State of Arizona to perform the before-mentioned type of work. Certification shall be on the form provided herein.

The bidder may be required to furnish an affidavit as evidence of previous satisfactory performance in the above-mentioned type of work.

CONTRACT TIME:

All work on this Contract is to be completed within two hundred ten (210) calendar days after date of Notice to Proceed, subject to restrictions presented in the Supplementary General Conditions.

MBE/WBE PARTICIPATION:

For this contract, a goal of ten (10%) percent MBE/WBE is established for Minority/Women-Owned Business Enterprises. Instructions and required forms are included in the Minority and Women-Owned Business Enterprise Program Contracting Requirements section. The Maricopa County minority and Women-Owned Business Enterprise Program, effective January 1, 1992, is incorporated by reference.

MANDATORY PRE-BID CONFERENCE:

A MANDATORY PRE-BID conference will be held on February 14, 1996 at 1:00 p.m. in the Flood Control District New River/Harquahala Conference Room, 2801 West Durango Street, Phoenix, Arizona. All prospective bidders are required to attend in order for their bid to be received and opened for this project.

Questions or items for clarification may be addressed to the Chief, Contracting Branch, in writing, at least ten (10) days prior to bid opening date. Where appropriate, any answers or clarifications affecting the cost may be addressed to all bidders in an addendum. Verbal interpretations, unless specifically addressed by addendum, shall not be binding nor have any legal effect.

PROJECT PLANS, SPECIAL PROVISIONS AND CONTRACT DOCUMENTS:

Plans and Construction Specifications may be obtained from the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona 85009 upon payment of \$28.00 by check, payable to the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY. This payment will not be refunded. Mail orders for project documents must include an additional \$7.50 for first class U.S. postage and handling. The total \$35.50 will not be refunded. Regardless of circumstances, we cannot guarantee mail delivery. Each bid must be accompanied by a Bid Bond, cashier's or certified check or postal money order equal to 10 percent (10%) of the bid, made payable to the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY as a guarantee that if the work is awarded to the bidder, the bidder will within ten (10) days of receipt of the Proposal Acceptance, enter into proper contract and bond condition for the faithful performance of the work, otherwise, said amount may be forfeited to the said BOARD OF DIRECTORS as liquidated damages.

PRINCIPLE ITEMS AND APPROXIMATE QUANTITIES

QUANTITY	UNIT	DESCRIPTION
1	EA	Special Box Structure
35	EA	Concrete Catch Basins
314	LF	Sanitary Sewers
452	LF	84" Diameter RCP Storm Drain Pipe
2,675	LF	108" Diameter RCP Storm Drain Pipe
2,552	LF	114" Diameter RCP Storm Drain Pipe

PROPOSAL

TO THE BOARD OF DIRECTORS
FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
PHOENIX, ARIZONA

Gentlemen:

The following Proposal is made for Cactus Road Storm Drain, Phase II, FCD 95-42, in the County of Maricopa, State of Arizona.

The following Proposal is made on behalf of
Pulice Construction, Inc.

and no others. 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 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, Supplementary General Conditions, Special Provisions, Forms of Contract, Bonds, and Sureties authorized by the Board of Directors and constituting essential parts of the Proposal, have been carefully examined and also that the work site 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, Construction Specifications, Special Provisions, Supplementary General Conditions, or conditions to be overcome, be pled. On the basis of the Plans, Construction Specifications, Special Provisions, Supplementary General Conditions, the Forms of Contract, Bonds, and Sureties 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 therefore, the sum of various products obtained by multiplying each unit price, herein bid for the work or materials, by the quantity thereof actually incorporated in the complete project, as determined by the Engineer or Architect.

The Undersigned understands that the quantities mentioned herein are approximate only 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.

The Undersigned further proposes to perform all extra work that may be required on the basis provided in the Specifications and to give such work personal attention and to secure economical performance.

The Undersigned further proposes to execute the Contract Agreement and furnish satisfactory Bonds and Sureties within ten (10) days of receipt of Notice of Proposal acceptance, **TIME BEING OF THE ESSENCE**. The Undersigned further proposes to begin work as specified in the Contract attached hereto, and to complete the work within two hundred ten (210) calendar days, subject to restrictions presented in the Supplementary General Conditions, from the effective date specified in the Notice to Proceed, and maintain at all times a Payment and Performance Bond, approved by the Board of Directors, each in an amount equal to one hundred percent of the contract amount. 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 Bonds and Sureties to be in full force and effect until the work is finally accepted and the provisions of the Plans, Specifications, and Special Provisions fulfilled.

A proposal Guaranty in the amount and character named in the Invitation to Bid is enclosed amounting to not less than ten (10) percent of the total bid, which Proposal Guaranty is submitted as a guaranty of the good faith of the Bidder and 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 its Proposal, if the Proposal is accepted and there should be failure on the part of the Undersigned to execute the Contract and furnish satisfactory Bonds and Sureties 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.

The Undersigned acknowledges receipt of the following addenda, attached these to the bid package, and has included their provisions in the proposal:

Addendum No. <u>One (1)</u>	Dated <u>02/21/96</u>
Addendum No. _____	Dated _____

The Undersigned has enclosed the required bid security to this Proposal.

BIDDING SCHEDULE

ITEM NO	DESCRIPTION	APPROX QTY.	UNIT	UNIT COST NUMBERS	EXTENDED AMOUNT
105-1	Partnering	1	EA	\$4,000.00	\$4,000.00
107-1	SWPP, NPDES, Permit Requirements	1	LS	2000 ⁰⁰	2000 ⁰⁰
107-2	Public Information and Notification Allowance	1	LS	\$20,000.00	\$20,000.00
107-3	Project Signs Allowance	1	LS	\$2,000.00	\$2,000.00
401-1	Traffic Control Devices	1	LS	20000 ⁰⁰	20000 ⁰⁰
401-2	Off Duty Police Officer	400	HR	25 ⁰⁰	10000 ⁰⁰
405-1	Remove & Replace Survey Markers, MAG Std Det 120-1-A	2	EA	350 ⁰⁰	700 ⁰⁰
405-2	Remove & Replace Survey Markers, MAG Std Det 120-1-B	4	EA	140 ⁰⁰	560 ⁰⁰
505-1	Special Box Structure	1	EA	18000 ⁰⁰	18000 ⁰⁰
505-2	Concrete Catch Basin Modified M-1, L= 10' Detail R3	2	EA	3000 ⁰⁰	6000 ⁰⁰
505-3	Concrete Catch Basin Modified Quadruple R Detail R2	2	EA	3000 ⁰⁰	6000 ⁰⁰
505-4	Concrete Catch Basin Modified R-1, L=10' Detail R1	1	EA	2500 ⁰⁰	2500 ⁰⁰
505-5	Concrete Catch Basin Modified R-2, L=17' Detail R1	1	EA	4200 ⁰⁰	4200 ⁰⁰
505-6	Concrete Catch Basin M-1, L=6' Phx. Std. Det. P-1569	1	EA	1700 ⁰⁰	1700 ⁰⁰
505-7	Concrete Catch Basin M-1, L=10' Phx. Std. Det. P-1569	8	EA	1900 ⁰⁰	15200 ⁰⁰
505-8	Concrete Catch Basin M-1, L=17' Phx. Std. Det. P-1569	2	EA	2700 ⁰⁰	5400 ⁰⁰
505-9	Concrete Catch Basin M-2, L=10' Phx. Std. Det. P-1569	2	EA	3000 ⁰⁰	6000 ⁰⁰
505-10	Concrete Catch Basin M-2, L=17' Phx. Std. Det. P-1569	5	EA	3800 ⁰⁰	19000 ⁰⁰
505-11	Concrete Catch Basin Type N Single, Phx. Std. Det. P-1570	5	EA	1600 ⁰⁰	8000 ⁰⁰
505-12	Concrete Catch Basin Type N Double, Phx. Std. Det. P-1570	4	EA.	2100 ⁰⁰	8400 ⁰⁰
505-13	Concrete Catch Basin Type N Triple, Phx. Std., Det. P-1570	1	EA	2800 ⁰⁰	2800 ⁰⁰
505-14	Concrete Catch Basin Type R Single, Phx. Std., Det. P-1573	1	EA	1900 ⁰⁰	1900 ⁰⁰
610-1	Vertical Realignment of Water Mains, MAG Std. Det. 370	1	EA	2800 ⁰⁰	2800 ⁰⁰
610-2	Waterline Replacements, 6" and 8"	6	EA	950 ⁰⁰	5700 ⁰⁰
610-3	Waterline Replacements, 12"	3	EA	1250 ⁰⁰	3750 ⁰⁰
610-4	12" Dia. Waterline Relocation (DIP)	94	LF	95 ⁰⁰	8930 ⁰⁰
610-5	Waterline Encasement	4	EA	950 ⁰⁰	3800 ⁰⁰
615-1	Sanitary Sewer Manhole, MAG Std. Det. 420 w/24" Cover	2	EA	2600 ⁰⁰	5200 ⁰⁰
615-2	18" Sanitary Sewer (PVC)	262	LF	90 ⁰⁰	23580 ⁰⁰
615-3	18" Sanitary Sewer (Lined DIP)	52	LF	120 ⁰⁰	6240 ⁰⁰
618-1	36" Diameter RCP Storm Drain Pipe	64	LF	145 ⁰⁰	9280 ⁰⁰
618-2	42" Diameter RCP Storm Drain Pipe	75	LF	170 ⁰⁰	12750 ⁰⁰
618-3	66" Diameter RCP Storm Drain Pipe	80	LF	235 ⁰⁰	18800 ⁰⁰
618-4	84" Diameter RCP Storm Drain Pipe	452	LF	245 ⁰⁰	110740 ⁰⁰
618-5	108" Diameter RCP Storm Drain Pipe	2,675	LF	338 ⁰⁰	904,150 ⁰⁰
618-6	114" Diameter RCP Storm Drain Pipe	2,552	LF	380 ⁰⁰	969,760 ⁰⁰
618-7	15" Diameter RCP Catch Basin Connector Pipe	843	LF	95 ⁰⁰	80085 ⁰⁰
618-8	24" Diameter RCP Catch Basin Connector Pipe	189	LF	100 ⁰⁰	18900 ⁰⁰
618-9	114" x 114" x 15" Prefabricated Tee	10	EA	1100 ⁰⁰	11000 ⁰⁰
618-10	114" x 114" x 36" Prefabricated Tee	1	EA	1100 ⁰⁰	1100 ⁰⁰
618-11	108" x 108" x 15" Prefabricated Tee	3	EA	1100 ⁰⁰	3300 ⁰⁰
618-12	108" x 108" x 24" Prefabricated Tee	1	EA	1100 ⁰⁰	1100 ⁰⁰
618-13	108" x 108" x 42" Prefabricated Tee	1	EA	1100 ⁰⁰	1100 ⁰⁰
618-14	84" x 84" x 15" Prefabricated Tee	4	EA	1100 ⁰⁰	4400 ⁰⁰
618-15	114" x 114" x 15" x 15" Prefabricated Cross	1	EA	1100 ⁰⁰	1100 ⁰⁰

BIDDING SCHEDULE

ITEM NO	DESCRIPTION	APPROX QTY.	UNIT	UNIT COST NUMBERS	EXTENDED AMOUNT
618-16	114" x 114" x 24" x 15" Prefabricated Cross	1	EA	1500 ⁰⁰	1500 ⁰⁰
618-17	108" x 108" x 15" x 15" Prefabricated Cross	4	EA	1500 ⁰⁰	6000 ⁰⁰
618-18	120" x 114" Prefabricated Reducer	1	EA	1 ⁰⁰	1 ⁰⁰
618-19	108" x 84" Prefabricated Reducer	1	EA	5500 ⁰⁰	5500 ⁰⁰
618-20	Pipe Plug, MAG Std. Det. 427 - 36"	1	EA	250 ⁰⁰	250 ⁰⁰
618-21	Pipe Plug, MAG Std. Det. 427 - 42"	1	EA	450 ⁰⁰	450 ⁰⁰
618-22	Pipe Plus, MAG Std. Det. 427 - 66"	1	EA	650 ⁰⁰	650 ⁰⁰
618-23	Pipe Plus, MAG Std. Det. 427 - 84"	1	EA	950 ⁰⁰	950 ⁰⁰
618-24	Permanent Pipe Support, MAG Std. Det. 403	2	EA	1250 ⁰⁰	2500 ⁰⁰
618-25	Remove Pipe Plug 120"	1	EA	1100 ⁰⁰	1100 ⁰⁰
618-26	Concrete Pipe Collar, 24" and larger, MAG Std. Det. 505	9	EA	500 ⁰⁰	4500 ⁰⁰
618-27	24" Diameter RGCP Irrigation Pipe, CL III	100	LF	75 ⁰⁰	7500 ⁰⁰
618-28	42" Diameter RGCP Irrigation Pipe, CL III	56	LF	215 ⁰⁰	12040 ⁰⁰
625-1	Storm Drain Manhole, MAG Std. Det. 522 and Detail A	7	EA	6200 ⁰⁰	43400 ⁰⁰
625-2	Storm Drain Manhole, Phx. Std. Det. P-1520 & MAG Std. Det. 522	2	EA	2300 ⁰⁰	4600 ⁰⁰
625-3	Storm Drain Manhole, Phx. Std. Det. P-1560 & MAG Std. Det. 522	1	EA	5700 ⁰⁰	5700 ⁰⁰
625-4	Special Irrigation Manhole	1	EA	3000 ⁰⁰	3000 ⁰⁰
630-1	6" Valve, Box, and Cover, MAG Std. Det. (Contingent Item)	4	EA	600 ⁰⁰	2400 ⁰⁰
630-2	8" Valve, Box, and Cover, MAG Std. Det.	1	EA	700 ⁰⁰	700 ⁰⁰
630-3	12" Valve, Box, and Cover, MAG Std. Det.	3	EA	1000 ⁰⁰	3000 ⁰⁰
601-1	Protect Utility in Place	1	EA	5500 ⁰⁰	5500 ⁰⁰
	TOTAL				2,483,166 ⁰⁰

IF BY AN INDIVIDUAL:

By: _____ (Signature - Title) _____ (Address)

(Date) Phone: _____

IF BY A FIRM OR PARTNERSHIP:

(Firm Name) _____ (Firm Address)
By: _____ (Signature - Title) Phone: _____
Date: _____

** Name and Address of Each Member:

** The Name and Post Office Address of Each Member of the Firm or Partnership Must be Shown.

IF BY A CORPORATION:

Pulice Construction, Inc. _____ 2033 W. Mountain View Road
(Corporate Name) _____ Phoenix, Arizona 85021
By: William R. Pulice William R. Pulice Phone: (602) 944-2241
(Signature)

Title: President

Date: February 27, 1996

* Incorporated under the Laws of the State of Arizona Names and Addresses of Officers:

William R. Pulice _____ 2033 W. Mountain View Road, Phx, AZ 8502
(President) _____ (Address)
Gregory J. Pulice _____ 2033 W. Mountain View Road, Phx, AZ 8502
(Secretary) _____ (Address)
Edith M. Pulice _____ 2033 W. Mountain View Road, Phx, AZ 8502
(Treasurer) _____ (Address)

* The Name of the State Under Which the Laws of the Corporation was Chartered and Names, Title, and Business Address of the President, Secretary, and Treasurer Must be Shown.

SUBCONTRACTOR LISTING

As required in Section 102.6 of the Supplementary General Conditions, the following is a listing of Subcontractors and material suppliers that are to be used in the event the undersigned should enter into contract with the Owner. No change in the subcontractors and material suppliers listed will be made without prior written approval of the Owner.

PRACH MASONRY INC.

STREET UTILITY ADJUSTERS

ARIZONA CONSTRUCTION SERVICES

ARIZONA BITUMENS CONSTRUCTION CO.

W. Pulice

(Signature)

William R. Pulice
President

SURETY BOND

KNOW ALL MEN BY THESE PRESENTS:

That we, PULICE CONSTRUCTION, INC., as Principal, (hereinafter called the Principal), and the RELIANCE INSURANCE COMPANY, a corporation duly organized under the laws of the State of PENNSYLVANIA, 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 **ten percent (10%)** 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 the Arizona Revised Statutes.

WHEREAS, the said Principal is herewith submitting its proposal for FCD 95-42 Cactus Road Storm Drain, Phase II.

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 the proposal and give the Bonds and Certificates of Insurance as specified in the Standard Specifications with good and sufficient Surety for the faithful performance of the contract and for the prompt payment of labor and material furnished in the prosecution of the contract, or in the event of the failure of the Principal to enter into the contract and give such Bond and Certificate of Insurance, if the Principal pays to the Flood Control District of Maricopa County the difference not to exceed the penalty of the bond between the amount specified in the proposal and such larger amount for which the Flood Control District of Maricopa County may in good faith contract with another party to perform the work covered by the proposal then this obligation is void. Otherwise it remains in full force and effect, provided, however, that this bond is executed pursuant to the provisions of Section 34-201, Arizona Revised Statutes, and all liabilities on this bond shall be determined in accordance with the provisions of the section to the extent as if it were copied at length herein.

Signed and sealed this 2ND day of FEBRUARY, A.D., 1996.

BUSH, COTTON, THOMPSON & SCOTT, INC.
Agency of Record, State of Arizona

1500 N.E. IRVING, SUITE 135 PORTLAND, OR 97232
Agency Address

PULICE CONSTRUCTION, INC.
Principal

By: William R. Pulice
William R. Pulice

Title: President

RELIANCE INSURANCE COMPANY
Surety

By: Bonnie Riddle
Title: BONNIE RIDDLE, ATTORNEY-IN-FACT

Bond Number: N/A

ATTACH SURETY POWER OF ATTORNEY

RELIANCE SURETY COMPANY
UNITED PACIFIC INSURANCE COMPANY

RELIANCE INSURANCE COMPANY
RELIANCE NATIONAL INDEMNITY COMPANY

ADMINISTRATIVE OFFICE, PHILADELPHIA, PENNSYLVANIA

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that RELIANCE SURETY COMPANY is a corporation duly organized under the laws of the State of Delaware, and that RELIANCE INSURANCE COMPANY and UNITED PACIFIC INSURANCE COMPANY, are corporations duly organized under the laws of the Commonwealth of Pennsylvania and that RELIANCE NATIONAL INDEMNITY COMPANY is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called "the Companies") and that the Companies by virtue of signature and seals do hereby make, constitute and appoint **Bonnie Riddle, of Portland, Oregon** their true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for and on their behalf, and as their act and deed any and all bonds and undertakings of suretyship and to bind the Companies thereby as fully and to the same extent as if such bonds and undertakings and other writings obligatory in the nature thereof were signed by an Executive Officer of the Companies and sealed and attested by one other of such officers, and hereby ratifies and confirms all that their said Attorney(s)-in-Fact may do in pursuance hereof.

This Power of Attorney is granted under and by the authority of Article VII of the By-Laws of RELIANCE SURETY COMPANY, RELIANCE INSURANCE COMPANY, UNITED PACIFIC INSURANCE COMPANY, and RELIANCE NATIONAL INDEMNITY COMPANY which provisions are now in full force and effect, reading as follows:

ARTICLE VII - EXECUTION OF BONDS AND UNDERTAKINGS

1. The Board of Directors, the President, the Chairman of the Board, any Senior Vice President, any Vice President or Assistant Vice President or other officer designated by the Board of Directors shall have power and authority to (a) appoint Attorney(s)-in-Fact and to authorize them to execute on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and (b) to remove any such Attorney(s)-in-Fact at any time and revoke the power and authority given to them.

2. Attorney(s)-in-Fact shall have power and authority, subject to the terms and limitations of the Power of Attorney issued to them, to execute deliver on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof. The corporate seal is not necessary for the validity of any bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.

3. Attorney(s)-in-Fact shall have power and authority to execute affidavits required to be attached to bonds, recognizances, contracts of indemnity or other conditional or obligatory undertakings and they shall also have power and authority to certify the financial statement of the Company and to copies of the By-Laws of the Company or any article or section thereof.

This Power of Attorney is signed and sealed by facsimile under and by authority of the following resolution adopted by the Executive and Finance Committees of the Boards of Directors of Reliance Insurance Company, United Pacific Insurance Company and Reliance National Indemnity Company by Unanimous Consent dated as of February 28, 1994 and by the Executive and Financial Committee of the Board of Directors of Reliance Surety Company by Unanimous Consent dated as of March 31, 1994.

"Resolved that the signatures of such directors and officers and the seal of the Company may be affixed to any such Power of Attorney or any certificates relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such Power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company, in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the Companies have caused these presents to be signed and their corporate seals to be hereto affixed, this **September 14, 1995**.

RELIANCE SURETY COMPANY
RELIANCE INSURANCE COMPANY
UNITED PACIFIC INSURANCE COMPANY
RELIANCE NATIONAL INDEMNITY COMPANY

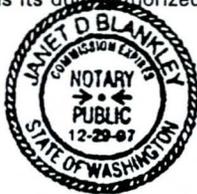


Lawrence W. Carlstrom

STATE OF Washington }
COUNTY OF King } ss.

On this, **September 14, 1995**, before me, Janet Blankley, personally appeared **Lawrence W. Carlstrom**, who acknowledged himself to be the Senior Vice President of the Reliance Surety Company, and the Vice President of Reliance Insurance Company, United Pacific Insurance Company, and Reliance National Indemnity Company and that as such, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as its duly authorized officer.

... witness whereof, I hereunto set my hand and official seal.



Janet D. Blankley
Notary Public in and for the State of Washington
Residing at Puyallup

Robyn Layng, Assistant Secretary of RELIANCE SURETY COMPANY, RELIANCE INSURANCE COMPANY, UNITED PACIFIC INSURANCE COMPANY, and RELIANCE NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 2ND day of FEBRUARY 19 96.



Robyn Layng
Assistant Secretary

**AFFIDAVIT BY CONTRACTOR
CERTIFYING THAT THERE WAS NO COLLUSION
IN BIDDING FOR CONTRACT**

STATE OF ARIZONA)
)SS
County of Maricopa)

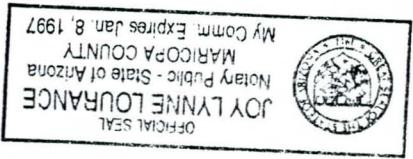
William R. Pulice being first duly sworn, deposes and says:
That he/she is President of Pulice Construction, Inc. bidding
on Contract FCD 95-42 for Cactus Road Storm Drain, Phase II, in the
County of Maricopa, State of Arizona.

That, in connection with the above-mentioned project, neither he/she,
nor anyone associated with the aforesaid business, has, directly or
indirectly, participated in any collusion, entered into any contract,
combination, conspiracy or other act in restraint of trade or commerce
in violation of the provisions of A.R.S. Section 34-251, Article 4, as
amended.

William R. Pulice William R. Pulice
(Signature of Affiant)

Subscribed and sworn to before me this 27th day of February, 1996.

Joy Lynne Lourance
(Notary Public)
1-8-97
My Commission Expires



CERTIFICATION OF LICENSE

Pursuant to A.R.S. Section 32-1169, I hereby state that I hold a current contractor's license, duly issued by the office of the Registrar of Contractors for the State of Arizona, said license has not been revoked, that the license number is: 071463-000 that my privilege license number (as required by A.R.S. Section 42-1305) is: 07 135294-E; and that, if any exemption to the above licensing requirements is claimed;

(1) The basis for the claimed exemption is: N/A and;

(2) The name(s) and license number(s) of any general, mechanical, electrical, or plumbing contractor(s) to be employed on the work are:

NONE

IT IS UNDERSTOOD THAT THE FILING OF AN APPLICATION CONTAINING FALSE OR INCORRECT INFORMATION CONCERNING AN APPLICANT'S CONTRACTOR'S LICENSE OR PRIVILEGE LICENSE WITH THE INTENT TO VOID SUCH LICENSING REQUIREMENTS IS UNSWORN FALSIFICATION PUNISHABLE ACCORDING TO A.R.S. SECTION 13-2704.

William R. Pulice William R. Pulice
Signature of Licensee President

Date: February 27, 1996

Company: Pulice Construction, Inc.

**MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISE PROGRAM
CONSTRUCTION CONTRACTING REQUIREMENTS**

A. The following conditions will apply in the calculations of the percentage attainment:

1. All M/WBE firms used in attainment of the goal must be certified with the Maricopa County Minority Business Office (MBO). The MBO is located at 2901 West Durango Street, Phoenix, Arizona 85009, telephone 506-4068. In addition, only those firms certified prior to the bid opening will be considered in the attainment of the goal.
2. Prime contractor subcontracts to MBE or WBE:
The M/WBE amount to be applied to the goal will be based on that portion (dollar value) of the contract that the M/WBE performs. For example, if a prime contractor subcontracts work amounting to \$100,000 of a contract for which the total project cost is \$1,000,000 the M/WBE participation will be credited as 10 percent.
3. Prime Minority Contractor:
An M/WBE prime contractor will be credited with the M/WBE participation for that portion of the contract which they themselves perform plus that portion subcontracted to other M/WBE firms. For example, if an M/WBE prime contractor proposes to perform 50 percent of a project quoted as \$1,000,000 and subcontracts 25 percent to an MBE firm and 25 percent to a non-M/WBE firm, M/WBE participation will be credited as 75 percent, or \$750,000.
4. Minority-Non Minority Joint Venture:
A joint venture consisting of M/WBE participation and non-M/WBE business enterprises, functioning as a prime contractor, will be credited with minority participation on the basis of the percentage of profit accruing to the M/WBE firm. For example, if a M/WBE and non-M/WBE joint venture proposes to perform 50 percent of a \$1,000,000 project and 50 percent of the joint venture profits (\$500,000) are to accrue to the M/WBE partner in the joint venture, M/WBE participation will be credited at 25 percent or \$250,000.
5. Lower Tier Non-M/WBE Participation:
M/WBE subcontractors proposing to further subcontract to non-M/WBE contractors shall not have that portion of subcontracting activity considered when determining the percentage of M/WBE participation.
6. M/WBE Suppliers:
Any M/WBE supplier that performs a commercially useful function, manufactures or substantially alters the material or product it supplies will have that portion of activity considered when determining the percentage of M/WBE participation.

7. M/WBE Trucking:

Credit for trucking by MBEs or WBEs will be the amount to be paid when the MBE or WBE trucker will perform the trucking with his/her trucks, tractors, and employees or when a MBE or WBE trucking broker has signed agreements with MBE and WBE truckers.

B. Required forms:

Two Affidavits are included as part of this section. The first form, the "M/WBE Assurances Affidavit", must be completed and submitted with the bid - **FAILURE TO DO SO SHALL BE CAUSE FOR REJECTION OF THE BID.**

A SAMPLE of the "Actual M/WBE Participation Affidavit", that must be completed and returned by the first and second bidders to the Minority Business Office by 4:00 p.m. on the seventh calendar day after bid opening, if M/WBE goals have been established, is provided for information purposes. A copy of the sample or the sample form itself may also be used. The affidavit will list the M/WBE participation by M/WBE firm name and the relative dollar value of the M/WBE contract. The information in this affidavit is binding on the contractor, to the extent that any amounts may be increased and not decreased, and that if any listed M/WBE's are unable to enter into a subcontract with contractor, the contractor **must** provide a written report to the Procurement Officer, through the Owner's representative in accordance with instructions provided elsewhere in this document.

C. Good Faith Efforts:

Bids which fail to meet MBE or WBE minimum goals at levels which equal or exceed established goals may be considered nonresponsive unless good faith efforts can be determined. Only MBE and WBE firms certified by Maricopa County prior to the bid submittal date, and which will perform a commercially useful function will be counted toward meeting the participation goals. Any portion of the work that a proposed MBE or WBE firm will subcontract to other than a certified firm, regardless of tier, will not be counted toward the applicable goals.

The apparent first and second low bidders who do not fulfill the established MBE and WBE goals must demonstrate, through detailed and comprehensive documentation, that "good faith" efforts have been made to solicit, assist and utilize MBE and WBE firms to meet participation goals.

The County minority Business Office (MBO) will assist prime contractors in identifying possible qualified and interested MBE and WBE subcontractors to meet designated MBE and WBE goals. **A M/WBE listing will be furnished with the bidding documents**, which contractors must utilize in identifying M/WBE firms. It will be the responsibility of the prime contractors to obtain the MBE and WBE firms necessary to meet the MBE and WBE goals.

FAILURE TO CONTACT THE MBO FOR ASSISTANCE IN COMPLYING WITH THESE GOALS MAY RESULT IN NOT HAVING IMPLEMENTED "GOOD FAITH" EFFORTS. Contact may be in writing, by telephone, or in person. If by phone or in person, name of MBO person spoken to should be obtained and written within the "CONTRACTOR CERTIFICATE OF GOOD FAITH" SUBMITTAL FORM (supplied if a contract has M/WBE goals).

(The Minority Business Office is located at 2901 West Durango Street, Phoenix, Arizona. Telephone number is 506-4068.

FAILURE TO IMPLEMENT "GOOD FAITH" EFFORTS IN ACCORDANCE WITH THE MARICOPA COUNTY MINORITY BUSINESS ENTERPRISE PROGRAM TO THE SATISFACTION OF MARICOPA COUNTY MAY RESULT IN THE REJECTION OF THE BID.

If information submitted by a prime contractor indicates that established MBE and WBE goals have not been met, the contractor must be required to provide sufficient documentation to demonstrate that he/she has complied with MBE and WBE requirements or good faith efforts. Good faith efforts will be determined by both quality and intensity of these efforts. Documentation provided to the MBO must include:

1. The date bidder requested assistance in writing, in person, or by telephone from the MBO. The bidder should request assistance from the MBO office in order for a determination to be made. **As Maricopa County M/WBE listings are updated frequently, bidders shall contact the MBO to ensure that they have the most recent edition.**
2. Names, addresses and telephone numbers; and dates of notification of Maricopa County certified MBEs and WBEs solicited by direct mail for this project; and dates and methods used for follow up of initial solicitations to determine with certainty whether MBEs or WBEs were interested in subcontracting. (SEE FOLLOWING NOTE).
3. Items of work for which bidder requested subbids, proposals or materials to be supplied by MBEs and WBEs; information furnished to interested MBEs and WBEs such as specifications and requirements of the work; plans; and any breakdown of items of work into economically feasible units to facilitate MBE and WBE participation.
4. Names of MBEs and WBEs who submitted bids for any of the work indicated above and were not accepted by the prime contractor. An explanation of why MBEs or WBEs contacted will not be awarded subcontracts. If price was the reason for rejection of the bid, the price bid of rejected MBEs or WBEs and price bid of the selected subcontractor shall be submitted. Since utilization of available MBEs and WBEs is the program objective, price differences will not automatically be considered as cause for a prime contractor's rejection of MBE and WBE bids.

5. Documentation of written notices or telephone calls to a reasonable number of M/WBES soliciting their participation in sufficient time to allow M/WBES to participate effectively. All M/WBES listed on the Maricopa County Certification list which provide applicable goods and services for subject procurement/project should be contacted.

NOTE: THE ABOVE GOOD FAITH EFFORTS MUST HAVE BEEN CONDUCTED DURING THE BIDDING PERIOD AND PRIOR TO THE BID OPENING WITH SUBSTANTIAL TIME IN ORDER TO ALLOW FOR A RESPONSE FROM POTENTIAL M/WBE SUBCONTRACTORS. ORIGINAL CONTACT BY A PRIME CONTRACTOR JUST PRIOR TO OR ON THE BID OPENING WILL NOT BE CONSTRUED AS HAVING PROVIDED SUFFICIENT RESPONSE TIME FOR SUBMISSION OF SUBCONTRACT BIDS.

The following efforts can also be utilized in demonstrating "Good Faith" in soliciting M/WBE participation.

1. A description of the efforts made to assist MBEs and WBES whose bids were rejected to be more competitive in their subcontracting bids. These efforts could include assistance in meeting bonding or insurance requirements.

2. Names and dates of advertisement of each newspaper, trade paper, and minority focus paper in which a request for MBE and WBE participation for this project was placed by the bidder.

Contractors are encouraged to seek M/WBES in the same geographical area in which the work is to be performed or goods provided. If the bidder cannot meet the established goals using M/WBES from the geographical area, the bidder should expand its search to a reasonable wider geographical area.

The MBO will make the final decision as to whether good faith efforts were met, based on the information submitted.

D. Appeal Process for Bid Award:

If the Owner is considering award of a contract to a bidder other than the low bidder because of failure to meet MBE and WBE participation goals or good faith efforts, the low bidder will be notified and given an opportunity to protest the decision. This protest will be made in accordance with the Maricopa County Procurement Code, Article 9, MCI-905, which is incorporated by reference.

E. Contract Compliance:

Failure of any bidder, contractor or subcontractor to comply with any of the requirements of the Maricopa County minority and Women-Owned Business Program shall be a material breach of contract. During the term of an awarded contract, the prime contractor shall:

1. Fulfill the MBE and WBE participation commitments submitted with their bid;
2. Continue to make every effort to utilize MBEs and WBEs;
3. Require that their subcontractors make every effort to utilize MBEs and WBEs;
4. Maintain records necessary for monitoring their compliance with provisions contained in the M/WBE Program.

The primary responsibility for assuring contractor's compliance with these M/WBE contract requirements after award rests with the Owner's designated representative. The Owner's designated representative should ascertain that no one other than the approved MBE or WBE contractors or subcontractors are performing the work, and that MBE and WBE subcontractor substitutes have been approved in advance. The prime contractor shall not perform any MBE or WBE contract work items without prior approval by the Owner's Procurement Officer, through the Owner's designated representative.

The Owner's Procurement Office shall advise the Minority Business Office immediately of any circumstances where a contractor appears to be in violation of the MBE and WBE contract requirements. An investigation will be held by the MBO and a recommendation for corrective action shall be forwarded to the Owner's Procurement Officer. Intentional noncompliance with the MBE and WBE requirements may result in withholding funds on the items already completed, in termination of the contract, and/or formal debarment from future contracts. The Maricopa County Minority Business Office reserves the right to inspect all records of the contractor, MBEs and WBEs concerning this project.

The MBO will conduct MBE and WBE compliance reviews on a regular basis.

F. Substitution of Subcontractors:

The prime contractor shall request approval to replace an approved MBE or WBE subcontractor that is unable or unwilling to perform successfully on a contract with another MBE or WBE. This failure does not remove the contractor's responsibility for meeting the MBE and WBE participation goals on the contract. A written request for substitution must be made to the Owner's Procurement Officer, through the designated Owner's representative, of the Procurement Agency. The substitute MBE or WBE, obtained to perform an equal or greater dollar value of work, must be approved by the Owner's Procurement Officer, through the designated Owner's representative, prior to beginning of any work by the substitute MBE or WBE. The request for substitution must include, but is not limited to the following:

1. Reason for substitution.
2. Name, address, and telephone number of the approved MBE or WBE.
3. Name, address and telephone number of the MBE or WBE substitute.
4. Item, numbers, description of work and the proposed MBE and/or WBE dollar amount.
5. Good faith effort documentation if the substitute subcontractor is not an MBE or WBE.

G. Requests for Pay:

Each Request for Pay must be accompanied by a Maricopa County Minority/Women-Owned Business Enterprise Program "MBE/WBE PARTICIPATION REPORT" in the form as provided by the Flood Control District of Maricopa County.

The final pay request shall include a listing of total contract MBE/WBE participation. Line numbers and a description of actual work performed shall also be included. If, at the time of contract completion, the MBE and WBE commitments are not actually attained, the report is to provide an explanation of failure to comply. These reports shall be submitted within thirty (30) days of contract completion, PRIOR TO RELEASE OF ANY REMAINING CONTRACT RETENTION.

CONTRACTOR CERTIFICATE OF GOOD FAITH*

The intent of this certification is to document the good faith efforts implemented by the apparent low bidder in soliciting and utilizing M/WBE firms to meet the established M/WBE goals for County contracts. This certificate will assist Maricopa County in determining whether the apparent low bidder has implemented "good faith" efforts in accordance with the Maricopa County Minority Business Program. The burden of proof rests with the apparent low bidder.

(NOTE: Prior to filling out this certificate it is important that contractors review the "good faith" efforts requirements in the M/WBE section of the project specification booklet).

Failure to implement "good faith" efforts to the satisfaction of Maricopa County will result in rejection of the proposal.

I, _____, do hereby acknowledge that I am the _____ of _____ who has been identified as the selected contractor on Flood Control District Project/Contract FCD 95-42.

Provide a brief summary of why the established M/WBE goal for this project has not been met. (Attach additional sheets if necessary).

I hereby certify that I have made comprehensive "good faith" efforts to solicit and utilize County certified M/WBEs to meet the established M/WBE goal of this project as demonstrated by my responses to the following questions:

A. IDENTIFYING SUBCONTRACTOR WORK ITEMS

Contractors are encouraged to select portions of work to be subcontracted in a manner which will increase the likelihood of meeting the established M/WBE goal for the project. In selecting work to be performed, contractors will consider, where appropriate, breaking down the project into economically feasible units to facilitate M/WBE participation. Contractors are reminded that only M/WBE certified by the County can be used as participants towards meeting the project goals. A County M/WBE Certification listing will be provided to all contractors interested in submitting bids for projects. This listing is the only authorized source from which to select M/WBEs for project participation. Current copies of this listing may be obtained by calling the Minority Business Office at (602) 506-4068.

1. Which portions of the contract proposal, in terms of the nature of the work were selected to be subcontracted to M/WBE firms?

B. NOTIFYING M/WBE FIRMS OR CONTRACTING OPPORTUNITIES

1. Solicitations by mail/fax must be made to all M/WBE firms identified on the M/WBE Certification Listing that perform the type of work which is proposed for subcontracting. Following this initial solicitation, at least one follow-up telephone call must be made to any of the M/WBE firms who have not responded to the mailing.

2. In the spaces provided below, indicate which firms received written notification of work items to be subcontracted. In the appropriate space, also indicate when the M/WBE firms received subsequent telephone solicitations. Please attach additional sheets so that all firms contacted are listed and attach photo copies of all written/fax solicitations to M/WBES to this documentation.

M/WBE Firm Contacted	Name	Tel. No.	Date

3. Were the services of the County Minority Business Office used to assist the contractor in the recruitment of M/WBES or to assist in solving other problems? Yes _____ No _____

Contact was made by _____ Telephone _____

Written correspondence _____ Date contacted _____

Staff person contacted _____

C. PROVIDING M/WBES WITH ASSISTANCE

1. Explain any efforts undertaken to provide M/WBES with information regarding project plans, specifications and requirements of the project:

2. Describe any efforts initiated to provide special assistance to M/WBE firms interested in participating in this project:

3. Describe any efforts undertaken to assist M/WBE firms in obtaining bonding, lines of credit, or insurance required by the County for this project:

4. Was solicitation for M/WBEs advertised in local papers, ethnic periodicals, or trade journals? If YES, please list the name of the periodical and dates advertised.

D. SOLICITING QUOTES FROM M/WBE FIRMS

Contractors must solicit quotes in good faith with interested M/WBE firms. Quotes and bids from interested M/WBEs must not be rejected by bidders without sound justification based upon a thorough investigation of the capabilities of the M/WBE firms.

1. Indicate in the space provided below, which M/WBE firms submitted quotes on the project proposal. Also provide a brief explanation of why any of these M/WBE quotes were rejected. If price was a determining factor, provide documentation showing the non-minority quotes. Please attach additional sheets if necessary.

Name of M/WBE Firm

Explanation for rejecting quote

* To be included in contract documents or those procurements which have M/WBE contract goals.

**FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 MINORITY/WOMEN OWNED BUSINESS ENTERPRISE PROGRAM
 ACTUAL MBE/WBE PARTICIPATION AFFIDAVIT**

(NOTE: COMPLETED AFFIDAVIT MUST BE SUBMITTED WITHIN SEVEN CALENDAR DAYS
 FOLLOWING THE BID OPENING)

Pulce Construction, Inc.

Name of Prime Consultant
Stephen A. Basila

Contact Person
2033 W. Mountain View Road

Street No.
Phoenix AZ 85021
 City State Zip

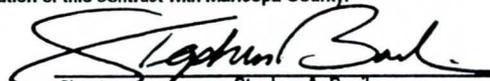
Project/Contract Number FCD 95-42 Total Contract Amount \$2,483,166.00
 Contract M/WBE Goal: 10%

The prime consultant must specify the MBE/WBE participation on this affidavit, or be able to provide documentation of their good faith efforts. If the proposal participation is "None", this affidavit must be completed with "None" so stated therein.

Minority/Women Owned Firm	Principal	Address	Type of Work	Proposed Contract %
Arizona Bitumals Construction Co.	Miguel A. Miranda	P.O. Box 48714, Phoenix, AZ 85075	Aggregate and Trucking	\$ 198,653.28 8.00%
Preach Masonry, Inc.	Phillip L. Preach	1601 W. Hatcher, Phoenix, AZ 85021	Manholes	\$ 42,213.82 1.70%
Arizona Construction Services	Terri L. Smith	740 E. Flynn Lane, #C, Phoenix, AZ 85014	Public Relations	\$ 12,415.83 0.50%

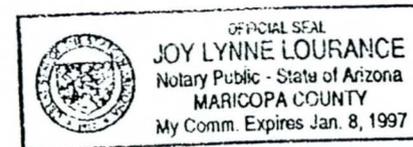
TOTALS (Dollars/Percentage) \$253,282.93 10.20%

The undersigned has entered into a formal agreement with the MBE/WBE subconsultants/subcontractors/suppliers listed above, in the execution of this contract with Maricopa County.


 Signature Stephen A. Basila
Executive Vice President
 Title
28-Feb-96
 Date

STATE OF ARIZONA)
) ss
 County of Maricopa)

Subscribed and sworn to before me this 28th day of Feb., 1996 by Joy Lynne Lourance
 My commission Expires: 1-8-97



MARICOPA COUNTY
MINORITY/WOMEN-OWNED BUSINESS ENTERPRISES PROGRAM

MBE/WBE PARTICIPATION REPORT
(To be attached with Request for Pay)

Date: _____

General Contractor: _____

Contact Person: _____

Address: _____

Telephone Number: _____

Project Description: Cactus Road Storm Drain, Phase II

Contract Number: FCD 95-42

For Pay Period of (Indicate dates): _____

D/M/WBE Subcontractor: _____

Person to Contact: _____

Address: _____

Telephone Number: _____

Type of Firm: _____

Type of work performed for this project: _____

Total D/M/WBE Subcontract Amount: \$ _____

Amount Paid to this Subcontractor
this invoice: \$ _____

Total paid to this Subcontractor \$ _____

Total D/M/WBE Contract Goal for this project = 10 %

Total D/M/WBE Participation on this contract to date = _____ %

Copy to: Maricopa County Infrastructure
Contracts and D/W.MBE Office
2901 West Durango Street
Phoenix, Arizona 85009

CONTRACT AGREEMENT

THIS AGREEMENT, made and entered into this ____ day of _____, 1996 by and between the FLOOD CONTROL DISTRICT OF MARICOPA COUNTY, hereinafter called the OWNER, acting by and through its BOARD OF DIRECTORS, and Pulice Construction, Inc. hereinafter called the CONTRACTOR.

WITNESSETH: That the said CONTRACTOR, for and in the consideration of the sum of two million, four hundred eighty-three thousand, one hundred sixty-six dollars (\$2,483,166.00) to be paid to him by the OWNER, in the manner and at the times hereinafter provided, and of the other covenants and agreements herein contained, hereby agrees for himself, heirs, executors, administrators, successors, and assigns as follows:

ARTICLE I - SCOPE OF WORK: THE CONTRACTOR shall construct, and complete in a workmanlike and substantial manner and to the satisfaction of the Chief Engineer and General Manager, a project for the Flood Control District of Maricopa County, designated as Contract FCD 95-42, and furnish at its own cost and expense all necessary machinery, equipment, tools, apparatus, materials, and labor to complete the work in the most substantial and workmanlike manner according to the Plans and Construction Specifications on file with the Flood Control District of Maricopa County, 2801 West Durango Street, Phoenix, Arizona, and such modifications of the same and other directions that may be made by the Flood Control District of Maricopa County as provided herein.

ARTICLE II - CONTRACT DOCUMENTS: The Construction Specifications (Invitation to Bid, Plans, Standard Specifications and Details, Supplementary General Conditions, Special Provisions, Addenda, if any, Proposal, Affidavits, Performance Bond, Payment Bond, Certificates of Insurance, and Change Orders, if any, are by this reference made a part of this Contract and shall have the same effect as though all of the same were fully inserted herein.

ARTICLE III - TIME OF COMPLETION: The CONTRACTOR further covenants and agrees at its own proper cost and expense, to do all work as aforesaid for the construction 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 its 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 in accordance with the requirements of A.R.S. Section 34-221, as amended. The CONTRACTOR agrees to discharge its obligations and make payments to its subcontractors and suppliers in accordance with A.R.S. Section 34-221.

ARTICLE V - TERMINATION: The OWNER hereby gives notice that pursuant to A.R.S. Section 38-511(A) this contract may be cancelled without penalty or further obligation within three years after execution if any person significantly involved in initiation, negotiation, securing, drafting or creating a contract on behalf of the OWNER is, at any time while the contract or any extension of the contract is in effect, an employer agent of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract. Cancellation under this section shall be effective when written notice from the Chief Engineer and General Manager of the OWNER is received by all of the parties to the contract. In addition, the OWNER may recoup any fee for commission paid or due to any person significantly involved in initiation, negotiation, securing, drafting or creating the contract on behalf of the OWNER from any other party to the contract arising as a result of the contract.

ARTICLE VI - NEGOTIATION CLAUSE: Recovery of damages related to expenses incurred by the CONTRACTOR for a delay for which the OWNER is responsible, which is unreasonable under the circumstances and which was not within the contemplation of the parties to the contract, shall be negotiated between the CONTRACTOR and the OWNER. This provision shall be construed so as to give full effect to any provision in the contract which requires notice of delays, provides for arbitration or other procedure for settlement or provides for liquidated damages.

ARTICLE VII - COMPLIANCE WITH LAWS: The CONTRACTOR is required to comply with all Federal, State and local ordinances and regulation. The CONTRACTOR's signature on this contract certifies compliance with the provisions of the I-9 requirements of the Immigration Reform Control Act of 1986 for all personnel that the CONTRACTOR and any subcontractors employ to complete this project. It is understood that the OWNER shall conduct itself in accordance with the provisions of the Maricopa County Procurement Code.

ARTICLE VIII - MBE/WBE PROGRAM: The Flood Control District of Maricopa County will endeavor to ensure in every way possible that minority and women-owned business enterprises shall have every opportunity to participate in providing professional services, purchased goods, and contractual services to the Flood Control District of Maricopa County without being discriminated against on the grounds of race, religion, sex, age, disability, or national origin. The Maricopa County Minority Business Program implemented January 1, 1992, is incorporated by reference.

ARTICLE IX - ANTI-DISCRIMINATION PROVISION: The contractor agrees not to discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, or disability and further agrees not to engage in any unlawful employment practices. The CONTRACTOR further agrees to insert the foregoing provision in all subcontracts hereunder.

IN WITNESS WHEREOF: Five (5) 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.

PULICE CONSTRUCTION, INC.
Party of the First Part

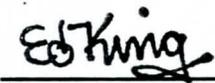
By:  William R. Pulice
Signature

Title: President

Date: March 7, 1996

86-0259553
Tax Identification Number

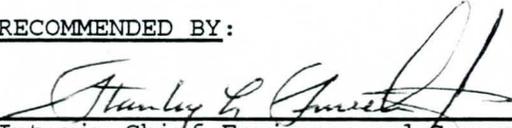
FLOOD CONTROL DISTRICT OF
MARICOPA COUNTY PARTY OF
THE SECOND PART

By:  3/20/96
Chairman, Board of Directors

ATTEST:

Clerk of the Board 121395

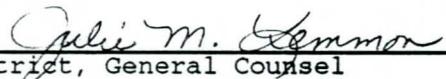
RECOMMENDED BY:


Interim Chief Engineer and General Manager
Flood Control District of Maricopa County

Date: 3-15-96

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.

By: 
District, General Counsel

Date: 3/12/96

**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, Pulice Construction, Inc. (hereinafter called the Principal), as Principal, and Reliance Insurance Company a corporation organized and existing under the laws of the State of Pennsylvania, with its principal office in the City of Philadelphia (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 (hereinafter called the Obligee), in the amount of two million, four hundred eighty-three thousand, one hundred sixty-six dollars (\$2,483,166.00), 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 _____, 1996 for Contract FCD 95-42 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 Principal promptly pays all monies due to all persons supplying labor or materials to the Principal or the Principal's Subcontractors in the prosecution of the work provided for in the contract, this obligation is void. Otherwise it remains in full force and effect.

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

The prevailing party in a suit on this bond shall recover as a part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this 5th day of March, 1996.

Bush, Cotton, Thompson & Scott, Inc.
Agency of Record, State of Arizona
1500 N.E. Irving Suite 135 Portland, OR 97232
Agency Address
BOND NUMBER: B2489283

Pulice Construction, Inc.
Principal _____ Seal
By: William R. Pulice
Title: President

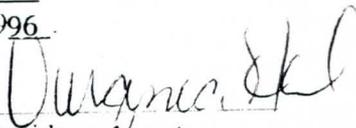
Reliance Insurance Company
Surety _____ Seal
By: Bonnie Riddle
Title: Bonnie Riddle
Attorney-in-Fact

ATTACH SURETY POWER OF ATTORNEY

COUNTERSIGNATURE ENDORSEMENT

INASMUCH as the bond to which this Endorsement is attached applies to operations in the state of Arizona,
the signature of a licensed resident agent of the RELIANCE INSURANCE COMPANY
_____ in that state is hereby appended.

ATTACHED to and forming a part of Bond No. B2489283 Date of Bond 3/5/96
ON BEHALF OF PULICE CONSTRUCTION, INC.
COUNTERSIGNED in Phoenix, Arizona this 5TH day of MARCH, 1996.


Resident Agent
Virginia Heil
3020 E. Camelback Rd.
Suite 200, Phoenix AZ, 85016

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, Pulice Construction, Inc. hereinafter called the Principal, as Principal, and Reliance Insurance Company a corporation organized and existing under the laws of the State of Pennsylvania, with its principal office in the City of Philadelphia (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 two million, four hundred eighty-three thousand, one hundred sixty-six dollars (\$2,483,166.00), 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 _____, 1996, for Contract FCD 95-42, 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 Principal faithfully performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of the contract during the original term of the contract and any extension of the contract, with or without notice to the Surety, and during the life of any guaranty required under the contract, and also performs and fulfills all of the undertakings, covenants, terms, conditions and agreements of all duly authorized modifications of the contract that may hereafter be made, notice of which modifications to the Surety being hereby waived; the above obligation is void. Otherwise it remains in full force and effect.

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

The prevailing party in a suit on this bond shall recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this 5th day of March, 1996.

Bush, Cotton, Thompson & Scott, Inc.
Agency of Record, State of Arizona
1500 N.E. Irving Suite 135 Portland, OR 97232
Agency Address

BOND NUMBER: B2489283

ATTACH SURETY POWER OF ATTORNEY

Pulice Construction, Inc.
Principal Seal

By: William R. Pulice
Title: President

Reliance Insurance Company
Surety Seal

By: Bonnie Riddle
Bonnie Riddle, Attorney-In-Fact

RELiance SURETY COMPANY
UNITED PACIFIC INSURANCE COMPANY

RELiance INSURANCE COMPANY
RELiance NATIONAL INDEMNITY COMPANY

ADMINISTRATIVE OFFICE, PHILADELPHIA, PENNSYLVANIA

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that RELIANCE SURETY COMPANY is a corporation duly organized under the laws of the State of Delaware, and that RELIANCE INSURANCE COMPANY and UNITED PACIFIC INSURANCE COMPANY, are corporations duly organized under the laws of the Commonwealth of Pennsylvania and that RELIANCE NATIONAL INDEMNITY COMPANY is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called "the Companies") and that the Companies by virtue of signature and seals do hereby make, constitute and appoint **Bonnie Riddle, of Portland, Oregon** their true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for and on their behalf, and as their act and deed **any and all bonds and undertakings of suretyship** and to bind the Companies thereby as fully and to the same extent as if such bonds and undertakings and other writings obligatory in the nature thereof were signed by an Executive Officer of the Companies and sealed and attested by one other of such officers, and hereby ratifies and confirms all that their said Attorney(s)-in-Fact may do in pursuance hereof.

This Power of Attorney is granted under and by the authority of Article VII of the By-Laws of RELIANCE SURETY COMPANY, RELIANCE INSURANCE COMPANY, UNITED PACIFIC INSURANCE COMPANY, and RELIANCE NATIONAL INDEMNITY COMPANY which provisions are now in full force and effect, reading as follows:

ARTICLE VII - EXECUTION OF BONDS AND UNDERTAKINGS

1. The Board of Directors, the President, the Chairman of the Board, any Senior Vice President, any Vice President or Assistant Vice President or other officer designated by the Board of Directors shall have power and authority to (a) appoint Attorney(s)-in-Fact and to authorize them to execute on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and (b) to remove any such Attorney(s)-in-Fact at any time and revoke the power and authority given to them.
2. Attorney(s)-in-Fact shall have power and authority, subject to the terms and limitations of the Power of Attorney issued to them, to execute deliver on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof. The corporate seal is not necessary for the validity of any bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.
3. Attorney(s)-in-Fact shall have power and authority to execute affidavits required to be attached to bonds, recognizances, contracts of indemnity or other conditional or obligatory undertakings and they shall also have power and authority to certify the financial statement of the Company and to copies of the By-Laws of the Company or any article or section thereof.

This Power of Attorney is signed and sealed by facsimile under and by authority of the following resolution adopted by the Executive and Finance Committees of the Boards of Directors of Reliance Insurance Company, United Pacific Insurance Company and Reliance National Indemnity Company by Unanimous Consent dated as of February 28, 1994 and by the Executive and Financial Committee of the Board of Directors of Reliance Surety Company by Unanimous Consent dated as of March 31, 1994.

"Resolved that the signatures of such directors and officers and the seal of the Company may be affixed to any such Power of Attorney or any certificates relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such Power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company, in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the Companies have caused these presents to be signed and their corporate seals to be hereto affixed, this **September 14, 1995**.

RELiance SURETY COMPANY
RELiance INSURANCE COMPANY
UNITED PACIFIC INSURANCE COMPANY
RELiance NATIONAL INDEMNITY COMPANY



Lawrence W. Carlstrom

STATE OF Washington }
COUNTY OF King } ss.

On this, **September 14, 1995**, before me, Janet Blankley, personally appeared **Lawrence W. Carlstrom**, who acknowledged himself to be the Senior Vice President of the Reliance Surety Company, and the Vice President of Reliance Insurance Company, United Pacific Insurance Company, and Reliance National Indemnity Company and that as such, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as its duly authorized officer.

In witness whereof, I hereunto set my hand and official seal.



Janet D. Blankley
Notary Public in and for the State of Washington
Residing at Puyallup

I, **Robyn Layng**, Assistant Secretary of RELIANCE SURETY COMPANY, RELIANCE INSURANCE COMPANY, UNITED PACIFIC INSURANCE COMPANY, and RELIANCE NATIONAL INDEMNITY COMPANY do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 5th day of March 19 96.



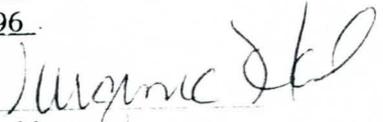
Robyn Layng
Assistant Secretary

COUNTERSIGNATURE ENDORSEMENT

INASMUCH as the bond to which this Endorsement is attached applies to operations in the state of Arizona,
the signature of a licensed resident agent of the RELIANCE INSURANCE COMPANY
_____ in that state is hereby appended.

ATTACHED to and forming a part of Bond No. B2489283 Date of Bond 3/5/96

ON BEHALF OF PULICE CONSTRUCTION, INC.
COUNTERSIGNED in Phoenix, Arizona this 5TH day of MARCH, 1996.


Resident Agent
Virginia Heil
3020 E. Camelback Rd.
Suite 200, Phoenix AZ, 85016

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
 CERTIFICATE OF INSURANCE

CONTRACT FCD 95-42

PROJECT TITLE Cactus Road Storm Drain Phase II

NAME AND ADDRESS OF INSURANCE AGENCY BUSH, COTTON, THOMPSON & SCOTT, INC. 5612 LAKE WASHINGTON BOULEVARD N. E. KIRKLAND, WASHINGTON 98033	INSURANCE COMPANIES AFFORDING COVERAGES	
	Company Letter	A MARYLAND INSURANCE GROUP
	Company Letter	B ARGONAUT - MIDWEST INSURANCE
	Company Letter	C
NAME AND ADDRESS OF INSURED PULICE CONSTRUCTION, INC. 2033 W. MOUNTAIN VIEW ROAD PHOENIX, ARIZONA 85021	Company Letter	D
	Company Letter	E
	Company Letter	F
	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	
A	COMMERCIAL GENERAL <input checked="" type="checkbox"/> 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	EPA267-03893	10/1/96	GENERAL AGG. 2,000, PROD-COMP/OP AGG 2,000, EACH OCCURR. 1,000, PERS. & ADV. 1,000, INJURY FIRE DAMAGE 300, (ANY ONE FIRE) MED. EXPENSE 10, (ANY ONE PERSON)	
A	COMPREHENSIVE AUTO <input checked="" type="checkbox"/> LIABILITY & NON-OWNED	ECA267-03919	10/1/96	SAME AS ABOVE	1,000,
A	<input type="checkbox"/> EXCESS LIABILITY	UBA68-132928	10/1/96	NECESSARY IF UNDERLYING NOT ABOVE MINIMUM	5,000,
B	<input checked="" type="checkbox"/> WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY	WC12567-541984	10/1/96	STATUTORY each accident	1,000;
POLICY	WC12567541984 DOES NOT APPLY TO ADDITIONAL INSURED. <input type="checkbox"/> ENGINEER'S PROFESSIONAL LIABILITY			EACH CLAIM AND ANNUAL AGGREGATE	
	<input checked="" type="checkbox"/> OTHER In addition to the Flood Control District, add Maricopa County and the City of Peoria as additional insured				

Except for Professional Liability Insurance and Workers' Compensation Insurance, the Flood Control District of Maricopa County is added as an additional insured on those types of policies described herein which are required to be furnished by this contract entered into between the insured and the Flood Control District. To the extent provided in this contract, insured shall hold harmless the Flood Control District of Maricopa County from liability arising out of any services provided or duty performed by insured as required by statute, law, purchase order or otherwise required, with the exception of liability for loss or damage resulting from the sole negligence of Flood Control District, its agents, employees or indemnities. 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 affect the coverage available to the District without thirty (30) days written notice to the District. THIS CERTIFICATE IS NOT VALID UNLESS COUNTERSIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE INSURANCE COMPANY.

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY 2801 West Durango Street Phoenix, Arizona 85009	DATE ISSUED <u>3/5/96</u>  AUTHORIZED REPRESENTATIVE
---	--

It is further agreed that:

The Contractor hereby agrees to indemnify and save harmless the Flood Control District of Maricopa County, Maricopa County, and the City of Peoria, or any of their 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, with the exception of liability for loss resulting from the sole negligence of the Flood Control District, its agents, employees, or indemnities.

The Flood Control District of Maricopa County, Maricopa County, and the City of Peoria 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, Maricopa County, and the City of Peoria

The above cost of damages incurred by the Flood Control District of Maricopa County, Maricopa County, and the City of Peoria or any of their departments, agencies, officers or employees, or others aforesaid shall include in the event of an action, court costs, expenses for litigation and reasonable attorney's fees.

PULICE CONSTRUCTION, INC.
Firm

March 7, 1996
Date

William R. Pulice
Principal

By: 

President
Title

FLOOD CONTROL DISTRICT OF MARICOPA COUNTY

CONTRACT FCD 95-42

SUPPLEMENTARY GENERAL CONDITIONS

SPECIFICATIONS:

Except as otherwise amended by these Supplementary General Conditions and the 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.

PRECEDENCE OF CONTRACT DOCUMENTS:

In case of a discrepancy or conflict, Project Plans will govern over the MAG Standard Specifications and Details. The Supplementary General Conditions and Construction Special Provisions will govern over the MAG Standard Specifications and Details and the Project Plans, and Change Orders will govern over the Supplementary General Conditions, Construction Special Provisions, MAG Standard Specifications and Details, and Project Plans.

SECTION 100 - General:

Add the following:

Construction contract specifications for all portions of this project shall conform to the requirements of the Uniform Standard Specifications for Public Works Construction and the City of Phoenix Supplement (1994), sponsored and distributed by the Maricopa Association of Governments (Latest Edition), except as noted, including Revisions and Corrections. In specific cases where the City of Phoenix Supplement is specified in the plans, they shall supersede the Maricopa Association of Governments Uniform Standard Specifications.

Subsection 101.2 - Definitions and Terms:

1. Change the definition of the phrase "Board of Supervisors" to being the Board of Directors acting under the authority of the laws of the State of Arizona and in their capacity of the Board of Directors of the Flood Control District of Maricopa County.
2. Change the definition of the phrase "Budget Project" to being a project financed by funds set aside in the annual budget or otherwise approved by the Flood Control District of Maricopa County Board of Directors.
3. Add to the definition of the phrase "Contract Documents", the phrase "Supplementary General Conditions".

4. Change the definition of the term "Engineer" to being the person appointed by the Flood Control District of Maricopa County Board of Directors to the office of Chief Engineer and General Manager of the Flood Control District of Maricopa County acting directly or through its authorized representative, the Chief of the Flood Control District of Maricopa County Construction and Operations Division.
5. Change the definition for the phrase "Notice of Award" to a letter from the Flood Control District of Maricopa County advising Contractor that it is the successful bidder and the Flood Control District of Maricopa County has accepted its proposal.
6. Change the definition of the term "Owner" to the Flood Control District of Maricopa County, acting through it's legally constituted officials, officers, or employees.
7. Add the definition for Maricopa County Minority Business Office (MBO); the office responsible for administering the Maricopa County Minority and Women Owned Business Enterprise Program.
8. Add the definition for the Maricopa County Minority and Women Owned Business Enterprise Program as being the Program adopted by the Board of Supervisors effective January 1, 1992.

Subsection 102.5 - Preparation of Proposal:

Add the following:

Proposals, including the Bidding Schedule, must be legibly written in ink or typed, with all prices given in numerals. In case of a conflict between the unit bid price and the extension, the unit bid price will govern.

It shall be the responsibility of prospective bidders to determine, prior to submission of a bid, if any addenda have been issued by the Flood Control District. This may be accomplished by calling 602-506-1501. Any addendum issued, if not already bound into the Special Provisions, **must be attached and included as part of the Specifications** and any quantities on the Bidding Schedule requiring change shall be adjusted to the new figure by pen and ink. **Bids which do not have appropriate addenda attached and show appropriate changes to the Bidding Schedule, and receipt of addenda acknowledged in the Proposal shall be invalid.** The bidder's Arizona State Contractor's License number and the classification under which it proposes to perform the work shall be shown on the proposal. **An A General Engineering License is required for this contract.** The two lowest bidders may be required to provide certification of prior satisfactory completion for similar construction and to furnish a copy of their license and the renewal certificate.

Subsection 102.6 - Subcontractors' List:

Add the following:

A list of subcontractors to be employed on the project shall be submitted with the bid, on the form provided in the Proposal. No change of the subcontractors named therein will be made unless first approved in writing by District.

Subsection 102.7 - Irregular Proposals:

Add the following:

(F) If bidder fails to complete and submit the Maricopa County Minority and Women-Owned Business Enterprises Assurances Affidavit, the bid will be considered nonresponsive and rejected.

(G) If bidder fails to acknowledge AND attach any addendum issued, if addendum is not already bound into the Specifications, the bid will be considered nonresponsive and rejected.

(H) If bidder fails to utilize District's bond forms, the bid will be considered nonresponsive and rejected.

(I) If bidder fails to return the entire specifications document, the bid will be considered nonresponsive and rejected.

Subsection 103.6 - Contractor's Insurance:

Add the following:

A statement from bidder's insurance carrier shall be included in the proposal certifying that it will furnish the specified kind and amounts of insurance to the bidder if it is awarded the contract. As required by law, the statement will be from an insurance carrier or carriers authorized to do business in the State of Arizona, or countersigned by an agent of the carrier authorized to do business in the State of Arizona. Concurrently with the execution of the contract, Contractor shall furnish a Certificate of Insurance using the included Certificate or one of equal wording, that names the additional insured as set out in the Certificate. The Certificate shall also name the additional insured as Certificate Holders. The types of insurance and the limits of liability shall be as indicated on the included form.

Subsection 103.6.1(D) - Contractor's Insurance:

Add the following:

Include additional insured as indicated on the included Certificate of Insurance.

Subsection 103.6.2 - Indemnification of the Contracting Agency Against Liability:

Add the following:

Additionally, Contractor shall execute the Indemnification on Page 31 of 31 of the Contract Documents.

SECTION 104 - Scope of Work:

Add the following:

This project is located on Cactus Road from 83rd Avenue to 75th Avenue as depicted on Sheet 1 of the plans. Approximately 1 mile of storm drain varying in size from 84 to 114-inch is to be installed as shown in the plans. In addition, 35 catch basins are to be installed and connected to the new storm drain. Assorted utilities will be relocated as shown on the plans and in accordance with MAG Standard Specifications.

The Contractor shall develop an "Action Plan" detailing how he will proceed with his work at the intersection of 75th Avenue and Cactus Road prior to the commencement of any work in the intersection. The "Action Plan" is to include but it not limited to the following: timing, sequence of work, methods of protection for all utilities, placement of pipe, traffic control, including emergence vehicles and bus access. The Engineer's approval shall be obtained before proceeding with the work.

Subsection 104.1 - Work to be Done:

Add the following sentence to 104.1.1:

All water for construction purposes, drinking water, lighting, temporary electric power, heat and telephone service shall be arranged and provided for as per requirements of the work by Contractor at his expense.

Subsection 104.2.6 - Construction Incentive Change Order proposals (CICOP's):

The Contracting Agency reserves the right to make alterations to the Contract, in accordance with procedures elsewhere within this Contract. Such alterations will not be eligible for inclusion in any CICOP.

CICOP's for modifying the plans, specifications, or other requirements of the Contract Documents for the sole purpose of reducing the total cost of the Construction of the Work without altering the overall scope of the Work or impairing in any manner the intended functions or characteristics of the Work,

including but not limited to service life, economy of operations, ease of maintenance, desired appearance, or design, quality and safety standards may be submitted to the Engineer. All changes must be submitted on 24" x 36" standard drawing sheets, along with supporting calculations. Each drawing sheet and at least the content sheet of the calculations shall be sealed by an Engineer registered in the State of Arizona. The CICOP shall demonstrate a net positive savings commensurate with the overall goal of the project.

CICOP's shall not cause undue interruptions to the Contracting Agency's overall schedule for completion of the entire project, nor conflict with Contract, County Procurement Code stipulations, or A.R.S. requirements regarding proprietary or restrictive specifications.

(A) First-Stage CICOP's

CICOP's that propose changes in the basic design of a structure or changes in the type of structure will not be considered. Changes to the structural sections or the structure design details may be considered. Changes to contingency items such as traffic control, dust palliative, NPDES permit requirements, will not be considered if they are part of pre-determined Lump Sum Bidding Schedule items. If they were Items specified as unit price Bid Schedule items, such as traffic control, dust palliative, NPDES permit requirements, may be considered when they are reduced as part of a CICOP which proposes to change the scope of the Work, the methods or procedures.

Proposed savings resulting solely from the elimination or reduction in the quantities of bid items will not be considered as a CICOP. Proposed savings resulting from the elimination or reduction in quantities of bid items specified as being part of a CICOP will be considered.

A CICOP may be submitted by the Contractor or the Contracting Agency only after execution of the Contract. The CICOP must be identified as a first-stage CICOP, and may include modifications to the plans or specifications, construction phasing or procedures, or other Contract requirements. The CICOP Proposal must address all components required for a second-stage CICOP, in summary form.

Costs which are estimated to be incurred over a period of time (years) shall be calculated using "present worth" costing methods. The interest/discount rate and the period of years to be used in cost evaluations will be determined by the Contracting Agency.

Once a first-stage CICOP has been submitted, a team will be assembled, generally consisting of the design professional, the construction administration professional, the Contractor, the Engineer, and other parties as deemed appropriate by the Contracting Agency. The team will review the first-stage CICOP submittal, to determine whether it is advantageous to the Contracting Agency to proceed to the second stage of the CICOP. The Contracting Agency is not required to consider all CICOP's submitted. The Contracting Agency will be the sole judge of the acceptability of a CICOP, and

of any estimated net savings in construction costs resulting from the adoption of all or any part of the CICOP.

The Contracting Agency will inform the Contractor of its estimated costs, including but not limited to the costs of investigating and evaluating the CICOP, administering and observing the Work, and any estimated costs of other impacted parties, in summary form.

The Contracting Agency and the Contractor must jointly agree in writing to the merit of any first-stage CICOP, prior to preparation of the second-stage CICOP. The Contracting Agency will not be liable for failure to accept any first-stage CICOP.

(B) Second-Stage CICOP's

If the Contracting Agency and the Contractor jointly agree in writing to the merit of a first-stage CICOP, the Contractor shall prepare the second-stage CICOP. The Contractor shall identify the CICOP as such, and it must contain, at a minimum, the following:

1. A description of both the existing Contract requirements for performing the Work; and any proposed changes.
2. All architectural/engineering drawings, specifications and computations necessary for a thorough and expeditious evaluation.
3. An itemization of the existing Contract requirements that must be altered if the second-stage CICOP is adopted, and recommendations as to the manner in which the changes might be made.
4. A detailed estimate of the cost of constructing the Work under the existing Contract and under the CICOP changes, including all costs of implementing the CICOP, including, but not limited to the following:
 - a. Material and equipment costs;
 - b. Installation costs; and
 - c. Overhead and fee percentages of the Contractor and all subs/vendors of any kind or tier.
5. A listing of all Contract items affected by the CICOP and any variations in quantities resulting from the proposed changes; also, any new items not listed in the Bid Schedule.
6. An objective estimate of any impacts the CICOP might have on collateral costs to the Contracting Agency and other impacted parties, costs of any related items, and costs of maintenance and operation.
7. A statement as to the impact that the CICOP will have on the Contract time for the completion of the Work.

8. A statement in which the Contracting Agency and Contractor jointly establish in writing an acceptable period of time for evaluation of the CICOP and execution of a subsequent Contract Change Order. Any delays or extensions to the original Contract time must be jointly approved in writing by the Contracting Agency and the Contractor, or such CICOP will be rejected.
9. A statement as to any Contract time extension or time-related costs being requested by the Contractor as a condition for implementing the CICOP.
10. A detailed statement itemizing the costs for developing the CICOP changes, along with the costs for preparing the second-stage CICOP.

If the CICOP is rejected after the formal review of the second-stage CICOP, the Contracting Agency will share equally in the Contractor's costs for developing and presenting the second-stage CICOP, and the Contractor will share equally in the Contracting Agency's costs for investigating and evaluating the second-stage CICOP. A Contract Change Order will be executed to adjust the Contract for the net increase or decrease in monies resulting from the Contractor's development costs as listed above in paragraph 104.2.6 (B).10, and the Contracting Agency's evaluation costs. The Contract Change Order will terminate the Contracting Agency's review of the second-stage CICOP. The Agency will not be liable for any delay in executing the Contract change, nor for any failure to accept the second-stage CICOP.

The Contractor will be notified in writing by the Engineer as to whether a first or second-stage CICOP has been accepted by the Contracting Agency. The decision by the Contracting Agency is final.

(C) Implementation of the CICOP

If the second-stage CICOP is accepted in whole or in part, the necessary Contract Document modifications and Contract price adjustments will be made by the execution of a Contract change order which will specifically state that it is being executed pursuant to the provisions of this subsection.

The Contractor shall continue to perform the Work in accordance with the requirements of the Contract Documents until a Contract Change Order incorporating the CICOP has been executed, or until the Contractor has been given written approval by the Engineer. If the Contract Change Order has not been executed or the Contractor has not been given written approval of the second-stage CICOP on or before the date jointly determined above in subparagraph 104.2.6(B).8, above, the CICOP shall be deemed to be rejected. The executed Contract Change Order will incorporate the changes in the plans, specifications, or other requirements of the Contract which are necessary to permit the CICOP, or such part of it which has been accepted, to be put into effect, and will include any conditions upon which the Contracting Agency's approval thereof is based. The executed Contract Change Order will also extend the time for the completion of the Work, if the extension was requested by the Contractor as a condition for implementing the CICOP and such an extension has been deemed to be warranted by the Engineer.

The executed Contract Change Order will establish the estimated net savings in the cost of constructing the work attributable to the second-stage CICOP. In determining the net savings, the Contracting Agency reserves the right to disregard the Contract bid prices if, in the Contracting Agency's judgement, such prices do not represent a fair measure of the value of the Work to be performed or to be deleted. The net savings will be established by determining the Contractor's cost of constructing the Work, taking into account the Contractor's cost of developing the second-stage CICOP and implementing the change, and reducing this amount by the Contracting Agency's costs for investigating and evaluating the proposal, including any ascertainable collateral costs or savings to the second-stage CICOP. Such collateral items may include increased or decreased costs, costs or savings for related additional or reduced Work items or elements.

The executed Contract Change Order will provide that the Contractor be paid 50 percent (50%) of the estimated net savings amount. Administrative construction administration and design professional review costs incurred by the Contracting Agency will be included in the determination of the estimated net savings. Changes in overhead costs by the Contractor resulting from the second-stage CICOP, including related time reductions or extensions, will not be allowed.

The executed Contract Change Order will also provide for any adjustment in Contract prices. Prices will be adjusted by subtracting the Contracting Agency's share of the accrued net savings.

The amount specified to be paid to the Contractor in the executed Contract Change Order will constitute full compensation to the Contractor for the second-stage CICOP and the performance of the Work thereof pursuant to the said Contract Change Order.

If the Contractor fails to notify the Contracting Agency of all required changes for the CICOP, the Contractor shall absorb all costs connected with the implementation of changes which the Contracting Agency was not made aware of. If conditions occur which could not be foreseen by a prudent Contractor, the Contracting Agency may negotiate costs or schedule adjustments to the Contract.

Upon acceptance of a second-stage CICOP, any restrictions imposed by the Contractor on its use or on disclosure of the information shall become void, and the Contracting Agency thereafter shall have the right to use all or any part of the CICOP without obligation or compensation of any kind to the Contractor.

Subsection 105.1 - Authority of Engineer:

Add the following:

105.1.1 - Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to

subsections 105.3.1 and 106.4. Engineer will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. District may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any "or-equal" or substitute. Engineer will record time required by Engineer and Engineer's Consultants in evaluating substitutes proposed or submitted by Contractor pursuant to subparagraphs 105.3.1 and 106.4(B) and in making changes in the Contract Documents (or in the provisions of any other direct contract with District for work on the project) occasioned thereby. Whether or not Engineer accepts a substitute item so proposed or submitted by Contractor, Contractor shall reimburse District for the charges of Engineer and Engineer's Consultants for evaluating each such proposed substitute item.

Subsection 105.3 - Conformity with Plans and Specifications:

Add the following:

105.3.1 - Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence or procedure of construction is shown or indicated and expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by Engineer will be similar to that provided in subparagraph 106.4(B).

Subsection 105.5 - Cooperation of Contractor:

Add the following paragraph:

105.5.1 - Partnering:

The Owner intends to encourage the foundation of a partnering relationship with the Contractor and its subcontractors. This partnering relationship will be structured to draw on the strengths of each organization to identify and achieve reciprocal goals. The objectives are effective and efficient contract performance, intended to achieve completion within budget, on schedule, and in accordance with plans and specifications.

This partnering relationship will be bilateral in makeup. Any cost associated with effectuating partnering will be covered by the Bid Item. The partnering workshop shall be scheduled after award of the contract, and prior to the Notice to Proceed, and shall be facilitated by a third party competent in the fundamentals of partnering, and mutually

acceptable to Contractor and Owner. In order to achieve the desired partnering relationships, the Contractor will need to encourage attendance by its major subcontractors on the project. Follow-up workshops will be held periodically throughout the duration of the contract as agreed to by the Contractor and Owner.

An integral aspect of partnering is the resolution of disputes in a timely, professional, and non-adversarial manner. Alternative dispute resolution (ADR) methodologies will be encouraged in place of the more formal dispute resolution procedures. ADR will assist in promoting and maintaining an amicable working relationship to preserve the partnering relationship. ADR in this context is intended to be a voluntary, non-binding procedure available for use by the parties to this contract to resolve any dispute that may arise during performance.

Payment for Partnering will be made on the basis of invoices, and will be for a total amount not to exceed the amount shown in the bid schedule for the item:

ITEM 105-1 - PARTNERING

Subsection 105.6 - Cooperation with Utilities:

Add the following:

An attempt has been made to determine the location of all utilities and drainage pipes, culverts, and structures; however, it shall be Contractor's responsibility to cooperate with the pertinent utility companies so that any obstructing utility installation(s) may be adjusted. Should Contractor's operations result in damage to any utility the location of which has been brought to its attention, he shall assume full responsibility for such damage. Contractor shall contact Arizona Blue Stake (telephone number 263-1100) a minimum of two (2) working days before beginning any underground work. In addition, Blue Stake notification(s) shall be maintained on a current basis. The Contractor is to protect in place any utilities which are not designated as "to be relocated by others."

At numerous locations utility lines will need to be supported across the storm drain trench. The contractor is to coordinate with the utility owner for the support of these lines, and shall pay to the utility owner all applicable fees for bracing or support.

basins. The contractor is to make minor deflections to the pipe as necessary to fit the proposed catch basins. This work shall be considered incidental to related bid items.

The Contractor shall provide shop drawings for protecting in place of any of SRP's irrigation lines for review and approval prior to working in the area. Special consideration should be given to supporting the reinforced concrete box at 75th Ave and the 24" RGRCP that crosses diagonally at that location also.

Southwest Gas Corporation (SWG)

SWG pipes which cross trenches more than 3 feet wide must be supported in a manner where the supporting material does not damage the pipe or its protective wrapping. All pipe support designs are to be approved by SWG.

Subsection 105.8 - Construction Stakes, Lines, and Grades:

Add the following:

Engineer will furnish the project survey control line together with a Bench Mark which the construction contractor will use to set line and grade for all construction. All other surveying required for the project shall be the contractor's responsibility. Engineer will not set any construction stakes.

Subsection 106.1 - Source of Materials and Quality:

Add the following:

Select Material, Aggregate Base, Mineral Aggregate, concrete, steel products and pipe shall be obtained from commercial sources. Contractor shall pay all royalties, or any other charges or expenses, incurred in connection with the securing and hauling of the material. Contractor will be required to furnish Engineer with a list of its 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 Supplementary General Conditions.

Subsection 106.4 - Trade Names and Substitutions:

Replace with the following:

Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quantity required. Unless the specification or description contains or is followed by words reading that no like, equivalent or "or-equal" item or no substitution

is permitted, other items of material or equipment of other Suppliers may be accepted by Engineer under the following circumstances:

A) "Or-Equal": If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for acceptance of proposed substitute items.

B) Substitute Items: If in Engineer's sole discretion an item does not qualify as an "or-equal" item under subparagraph 106.4 (A), it will be considered a proposed substitute item. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. The procedure for review by Engineer will include the following and may be supplemented in the Special Provisions and as Engineer may decide is appropriate under the circumstances. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor. If Contractor wishes to furnish or use a substitute item of material or equipment, Contractor shall first make written application to Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified and be suited to the same use as that specified. The application will state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice contractor's achievement of completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with District for work on the project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by Engineer in evaluating the proposed substitute. Engineer may require Contractor to furnish additional data about the proposed substitute.

C) Contractor's Expense: All data to be provided by Contractor in support of any proposed "or-equal" or substitute item will be at Contractor's expense.

Subsection 107.1 - Laws to be Observed:

Add the following Paragraph (G):

(G) 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). Contractor shall also comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including CFR Parts 35 and 36.

Subsection 107.2 - Permits:

Replace with the following:

Contractor shall obtain all permits and licenses, pay all charges, fees, taxes, and provide all notices necessary and incidental to the due and lawful prosecution of the work.

Subsection 107.2.1 - Permits:

Add the following:

107.2.1 - NPDES Permit Requirements

A. This project is subject to the National Pollutant Discharge Elimination System (NPDES) Storm water requirements for construction sites under the Environmental Protection Agency (EPA) General Permit for Arizona. Under provisions of that permit, the contractor shall be designated as permittee, and shall take all necessary measures to assure compliance with the NPDES General Permit for Arizona as well as all other applicable Federal, State and local laws, ordinances, statutes, rules and regulations pertaining to storm water discharge. As the permittee, the contractor is responsible for preparing, in a manner acceptable to the Environmental Protection Agency (EPA), including but not necessarily limited to:

1. Storm water Pollution Prevention Plan (SWPPP) for the project, including certification of compliance form. Contractor shall be required to develop, implement, update and revise the SWPPP, as necessary, in order to assure compliance with the EPA permit requirements. The SWPPP shall be retained on the project site at all times during construction.
2. Notice of Intent (NOI) to assure compliance with the NPDES General Permit for Arizona, including certification of signatures.
3. Notice of Termination (NOT) of coverage under NPDES General Permit for Arizona.

B. Preliminary copies of the NOI and the SWPPP shall be submitted to District during the preconstruction meeting and shall be subject to review by District prior to implementation.

C. Contractor shall submit the completed and duly signed NOI forms no later than forty-eight (48) hours prior to the initial start of construction on the project to the following agencies:

EPA Storm water Notice of Intent
P.O. Box 1215
Newington, VA 22122

A copy of the completed NOI form shall be submitted to the following:

Dan Nissen
Acting City Engineer
City of Peoria
8401 West Monroe Street
Peoria, AZ 85345

Storm water Coordinator
Arizona Department of Environmental Quality
P.O. Box 600
Phoenix, AZ 85001-0600

Failure by the contractor (or subcontractors of any tier) to submit NOI's within the mandated time frame shall result in delay of the construction start date, and no claim for extension of time will be granted for such delay. A copy of the completed NOI shall be posted at the construction site.

D. Inspections of all storm water pollution control devices on the project shall be performed by Contractor on a monthly basis and following each rainfall of 0.50 inches or more in a 24-hour period at the project site as required under provisions of the NPDES General Permit for Arizona. Contractor shall prepare reports on such inspections and retain the reports for a period of three years following the completion of the project. Inspection reports shall be submitted monthly to District along with progress payment requests. Additionally, contractor shall maintain all storm water pollution control devices on the project in proper working order, which shall include cleaning and/or repair during the duration of the project.

E. Contractor warrants that its employees and subcontractors of any tier and their employees shall at all times comply with all applicable laws, ordinances, statutes, rules and regulations set forth by all federal, state and local governments and the Environmental Protection Agency in connection with NPDES Permitting requirements and laws and regulations pertaining to air, groundwater and surface water quality.

Fines and penalties imposed by the EPA against District or the contractor, for contractor's failure to comply with any of the requirements of NPDES General Permit of Arizona, shall be borne by the contractor.

F. Upon project completion, acceptance and demobilization, contractor shall submit its completed, duly executed NOT form to the EPA, with a copy to the Arizona Department of Environmental Quality (and the appropriate municipality), at the address listed in Section (B) above, thereby terminating all NPDES permit coverage for the project. Contractor shall then surrender to District copies of the SWPPP, inspection information and all other documents prepared and maintained by the contractor in compliance of the NPDES General Permit. Contractor shall retain the originals of such documents for a period of three (3) years following the completion of the project.

G. The Lump Sum price for the SWPPP shall include all material, labor, and all other costs relating to the preparation, installation and maintenance of the SWPPP during project construction, including assuring proper operation of the pollution control devices installed, and all maintenance, cleaning, and disposal costs associated with clean-up and repair following storm events, runoff or releases on the project. The Lump Sum price for the SWPPP shall be inclusive of all costs, and no additional claims shall be made by Contractor under any other specification provision of these documents, including Change Conditions. Payment for this bid item shall be upon final completion and acceptance of the project, as per Section 109.1.

H. Copies of all required forms and guidance for preparing the SWPPP are available in the "Drainage Design Manual for Maricopa County, Volume III Erosion Control". The manual is available at the Flood Control District, 2801 West Durango Street, Phoenix, Arizona 85009.

Subsection 107.2.2 - Hauling and Grading Permit

When the quantity of fill or excavation to be hauled exceeds 10,000 cubic yards, or when the duration of the haul is for more than 20 working days (i.e., Monday through Friday, inclusive), it shall be unlawful to haul, or cause to be hauled, fill or excavation, by truck, except upon the issuance of a haul route and grading permit by the District for such conditions as may reasonably be necessary to prevent creation of a nuisance or hazard to the public. The contact person with the City of Peoria is Mr. Larry Fudurich. Such conditions may include, but not be limited to:

1. Designation of specific routes to be used.
2. Designation of specific locations and times of day access will be made to and from public right-of-way.

3. Provision for safety precautions, such as the use of barricades, warning or traffic signs, flagmen, or police officers for traffic control.
4. Payment of a cash bond in the amount of five hundred dollars (\$500) in order to secure the cost of the removal of any spillage of fill or excavation and the cleaning of the right-of-way by the City, such bond to be returned to the applicant if no spillage occurs or if any spillage is removed and the right-of-way cleaned by the applicant to the satisfaction of the City Engineer.
5. Any violation of the terms or conditions of the permit shall be sufficient grounds for the City Engineer to revise the permit.

Subsection 107.5 - Safety Health and Sanitation Provisions:

Add the following:

The entire construction site shall be considered a "Hard Hat Area" and all personnel in the area will be required to wear a hard hat.

Subsection 107.5.2 - Compliance with the Arizona Communication Standard:

Add the following:

District will provide Contractor with Material Safety Data Sheets (MSDS) for any products known to exist on the site that are deemed health hazards. Contractor will provide a copy of District-provided MSDS to all subcontractors.

Contractor will provide District and all subcontractors with MSDS for any products that have or are deemed health hazards that will be brought onto the site or created on the site by either Contractor or by any subcontractors.

Contractor will provide District with a statement certifying that all personnel (Contractor and subcontractor) employed by Contractor or by a subcontractor on the job site have received the required Hazard Communication Standard training.

Subsection 107.6.3 - Public Information and Notification:

Add the following:

The Contractor shall provide a community relations program for this project, which shall be designed to run the full length of calendar days in the contract for this project. The program will include but not be limited to the following:

1. Distributing a preconstruction information letter to all residences, businesses, schools, etc. within an area bounded by 83rd Avenue, 67th Avenue, Cholla Street, and Sweetwater Street.
2. Printing and distribution of public notices and/or newsletters.

The Contractor will use these or other means to inform the local citizens of necessary operations which create high noise levels, street closures, limited access, detour locations, haul routes and material delivery routes, hours of construction and disruption of bus, trash, school bus and other delivery/pick-up routes.

The Contractor will be required to furnish a private line telephone to be used solely for receiving incoming calls from local citizens with questions or complaints concerning construction operations or procedures. The Contractor shall publish this phone number and maintain a 24-hour answering service. The answering service shall be operated by Contractor personnel during all hours that work is being performed on the job site. The Contractor shall maintain a log of incoming calls, responses, and action taken which shall be submitted to the Engineer weekly and/or upon request.

At a date agreed upon between the Engineer and Contractor, and prior to the start of work, the Contractor shall notify, by letter, all affected businesses and residents of construction plans and schedules within the geographic area identified above. In addition, all schools and emergency services which serve the geographic area will also be notified even though they may be located outside the geographic area described above. The letter shall contain, as a minimum, the following information:

1. Name of Contractor
2. 24-hour telephone complaint number
3. Brief description of the project
4. Name of Contractor Project Superintendent
5. Name of Engineer
6. Name of Area Supervisor
7. Construction schedule including anticipated work hours
8. Traffic regulations including lane restrictions
9. City of Peoria Street Transportation 24-hour phone number.

The plan and work which is eligible for reimbursement shall include the following: meetings with impacted businesses, schools, emergency services and residents, scheduling, preparation and distribution of newsletter at least bi-weekly, and maintaining a 24-hour telephone hotline for complaints.

The Contractor shall submit a final report/evaluation of the Public Information and Notification process performed for this project. This report shall be submitted before the Contractor receives final payment.

Payment will be based on invoices, and will be for a total amount not to exceed the amount shown in the bid schedule for the item, "PUBLIC INFORMATION AND NOTIFICATION ALLOWANCE", for work performed in notifying and coordinating with the local population impacted by this project. To cover the cost for administration and supervision, the General Contractor may add an amount equal to not more than five percent (5%) of the accumulated total invoiced billing for actual public information services provided by a subcontractor. This cost for administration and supervision will be considered included in the "PUBLIC INFORMATION AND NOTIFICATION ALLOWANCE".

ITEM 107-2 - PUBLIC INFORMATION AND NOTIFICATION ALLOWANCE

Subsection 107.6.4 - Project Signs

Contractor shall provide and install two project information signs at each end of the project before beginning construction to inform the public of the forthcoming project, construction dates, and suggested alternate routes. Project signs shall include the names of all agencies participating in the project. Signs shall not be constructed or installed prior to approval by the Engineer of their designs, sizes and proposed locations. Contractor shall maintain the signs as necessary and update the information as requested by the Engineer. Payment shall be made according to the allowance in the Bidding Schedule in installments of 50% upon installation, and the remaining 50% upon final payment for the work.

ITEM 107-3 - PROJECT SIGNS ALLOWANCE

Subsection 107.10 - Contractor's Responsibility for Work:

Add the following:

Contractor is advised that the work will be subject to flows of water of varying amounts. District assumes no responsibility for notifying Contractor of any anticipated flows, nor for any damages incurred by Contractor to its equipment or to any of the Contractor's work as a result of any flows of water.

Subsection 108.1 - Notice to Proceed:

Delete Paragraph (A) and replace with the following:

(A) Contractor shall commence work within seven (7) calendar days after the date of the Notice to Proceed and complete all work within two hundred ten (210) calendar days beginning the day following the effective date specified in the Notice to Proceed. This includes the time necessary to fabricate the pipe. No time extension will be granted for pipe fabrication and delivery.

Subsection 108.2 - Subletting of Contract:

Add the following:

For this project, Contractor shall perform, with its own organization, work amounting to 50 percent or more of the total contract cost.

Subsection 108.4 - Contractor's Construction Schedule:

Delete in its entirety and replace with the following:

Contractor shall submit a proposed work schedule to Engineer for review before starting work, using the Primavera or other program that is acceptable to the Engineer. Weekly updates shall be submitted to District's Construction Coordinator at the weekly coordination meeting.

Subsection 108.5 - Limitation of Operations:

Add the following:

Should Contractor elect to perform any work after regular working hours, on weekends, or legal holidays, "with or without written approval of Engineer", any charges incurred by District for inspection of the work, surveys or tests of materials will be deducted from monies due or to become due to Contractor.

Subsection 108.9 - Failure to Complete on Time:

Add the following:

The actual cost per calendar day incurred by District for Consultant Administrative and Inspection Services on this project will be added to the daily charges as indicated by TABLE 108, LIQUIDATED DAMAGES, and will be deducted from monies due or to become due to Contractor for each and every calendar day that work shall remain incomplete after the time specified for the completion of the work in the proposal, or as adjusted by Engineer. Nothing contained in this provision shall prohibit District from deducting from monies due or to become due to Contractor

for any other costs incurred by District directly attributable to the delay in completing this contract.

Subsection 109.2 - Scope of Payment:

Add the following:

In addition to the contained provisions, the work under this section shall consist of preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies and incidentals to the project site; the establishment of all offices, buildings and other facilities necessary for work on the project, and for all other work operations that must be performed and costs incurred prior to beginning work on the various items on the project site.

Subsection 109.7 - Payment for Bond Issue and Budget Projects:

Add the following.

(A) To third paragraph, add: Payment or release of retained funds shall be made to the contractor within thirty (30) days following final payment to the contractor (reference (B) following), and contractor furnishing to Engineer satisfactory receipts for all labor and material billed and waivers of liens from any and all persons and subcontractors holding claims against the work. Additionally, Contractor shall furnish a completed Certificate of Performance to Engineer evidencing it has satisfactorily discharged all its duties in connection with the work to be performed under this Contract. The form of Certificate of Performance shall be provided to Contractor by the Engineer.

(B) Delete second and third paragraphs and replace with: The final payment will be made to Contractor by District within thirty (30) days following receipt of Engineer's final estimate and receipt by District of Consent of Contractor's Surety to said final payment.

If payment will be longer than thirty (30) days as aforesaid, District will provide Contractor specific written findings for reasons justifying the delay in payment.

(C) Contractor's pay estimates will be initially processed by Districts' Construction and Operations Division on a Tuesday, Tuesdays being the only day Contractor may submit a pay estimate.

**FLOOD CONTROL DISTRICT OF MARICOPA COUNTY
CONTRACT FCD 95-42
CACTUS ROAD STORM DRAIN
PHASE II**

SPECIAL PROVISIONS

SECTION 202 - Mobilization

Contractors Field Office

The work shall consist of providing and maintaining a furnished Field Office for the exclusive use of the Engineer and the Engineer's Staff.

The Contractor shall provide a field office for the duration of the project. The field office may be located on the project site or otherwise with the approval of the Engineer, the office may be in the same building or trailer as office space of the Contractor, provided that such office is separated from the area used by the Contractor by a wall with a locking door. The office shall also have its own door to the outside.

The office shall have a minimum of 150 square feet, The office shall be fully equipped and shall be in place and acceptable to the Engineer not later than 10 days after the issuance of the Notice to Proceed (NTP). The office shall be provided and maintained by the Contractor until seven (7) days after the project acceptance by the District.

The Contractor shall provide hookups and continuous service for electricity, telephone, air conditioning, heating and water service. All utility costs, except long distance calls made by the Engineer shall be the responsibility of the Contractor. Permits and hook up fees for the office are the responsibility of the contractor.

The room for use by County Personnel shall be equipped with the following:

- a. Lights: Electric lighting, non glare type to provide adequate illumination at desk height.
- b. Heating and cooling: Capable of maintaining an air temperature of 72 degrees.
- c. 1 - Office desk with locking drawers and padded swivel chair
- d. 4 - Folding office chairs
- e. 2 - Three by five foot tables
- f. 1 - Dry erase board
- g. 1 - Office phone
- h. 1- Paper Facsimile Machine (including paper)
- i. Maintenance: The Contractor shall maintain all the facilities and furnished equipment in good working condition.

No separate payment shall be made for the engineers field office, the cost thereof being an incidental cost to the work.

SECTION 329 - Tack Coat

Construction shall conform to MAG Standard Specifications Section 329, except as modified herein.

Tack coat shall be applied at a rate of 0.10 gallons per square yard.

No separate measurement or payment shall be made for tack coats; the cost thereof, shall be included in the price bid for the construction of the item for such work that pavement replacement is incidental or appurtenant.

SECTION 334 - Preservative Seal For Asphalt Concrete

Construction shall conform to MAG Standard Specifications Section 334, except as modified herein.

Preservative seal coat shall be applied at a rate of 0.10 gallons per square yard (maximum).

No separate measurement or payment shall be made for preservative seal coats; the cost thereof, shall be included in the price bid for the construction for such work that pavement replacement is incidental or appurtenant.

SECTION 336 - Permanent Pavement Replacement

Construction shall conform to MAG Standard Specifications Section 336, except as modified herein.

All asphaltic concrete pavement shall be placed using appropriate lay down equipment which has been specifically designed for that purpose. The temperature of the asphaltic concrete shall be a minimum of 200 degrees Fahrenheit while being rolled.

All pavement replacement within the intersection of 75th Avenue shall be completed prior to opening the intersection to traffic.

The pavement replacement shall consist of two layers of asphaltic pavement over 6" of aggregate base course. The base course of the A.C. will be 2 1/2" of C-3/4 and the surface course shall be 1-1/2" of D-1/2.

No separate measurement or payment shall be made for pavement removal or replacement; the cost thereof, shall be included in the price bid for the construction for such work that pavement replacement is incidental or appurtenant.

SECTION 340 - Concrete Curb, Gutter, Sidewalk, Driveway and Alley Entrance

Concrete curb, gutter, sidewalk, driveway and alley entrance construction shall conform to MAG Standard Specifications Section 340 except as modified herein.

No separate payment shall be made for concrete curb and gutter replacement. This item shall be included in the contract unit price for the construction for such work that concrete curb and gutter replacement is incidental or appurtenant.

No separate payment shall be made for concrete sidewalk replacement. This item shall be included in the contract unit price for the construction for such work that concrete sidewalk replacement is incidental or appurtenant.

SECTION 360 - Telecommunications Installation and Relocation

Construction shall conform to MAG Standard Specifications Section 360, except as modified herein.

No separate payment shall be made for telephone relocations shown on the plans. The cost thereof shall be at the utilities expense where the plans call for the line to be relocated by others.

SECTION 401- Traffic Control

Traffic regulations and control shall be in accordance with MAG Specifications Section 401, City of Phoenix Traffic Manual, guidelines provided in the plans and the following paragraphs.

1. The following shall be considered major streets: Cactus Road from 83rd Avenue to 75th Avenue, 83rd Avenue, 81st Avenue, 79th Avenue, 77th Avenue and 75th Avenue.
2. Permission to restrict city streets, sidewalks and alleys shall be requested from the City of Peoria (written approval required). The Contractor will be required to submit a traffic control plan for restriction or closure when requesting restriction permission.
3. The roadway shall be open to emergency vehicle traffic at all times.
4. The Contractor shall be responsible for the restoration of any traffic signals, dagmars, and appurtenances disturbed during construction. If traffic signal mast arms are removed or traffic signal lines are disturbed, the Contractor shall provide and install, and bear the full cost of the new wire. No old traffic signal wire shall be reused if disturbed. The Contractor shall provide new loops including all necessary related materials and work. No splicing of traffic signal loops will be permitted.

Special Traffic Regulations:

1. Cactus Road, 83rd Avenue to 75th Avenue. On paved surfaces, when construction requires, Cactus Road can be reduced to 2 lanes (1 each way).

2. Special Access Requirements. The Contractor shall provide and maintain clean, safe, and adequate pedestrian walkways and sidewalks, free of mud, dust, debris, equipment, maintaining access to all transit facilities and bus stops by providing temporary BUS STOP signs as needed (if any).
3. Payment for traffic control shall be made at the contract unit price per lump sum. The price shall include full compensation for furnishing labor (except off-duty police officers), materials, tools, equipment and incidentals to regulate and maintain traffic per the guidelines and these specifications.

Police Officer Requirements:

When construction restricts the intersections, the Contractor shall provide off-duty police officers to assist with traffic control at the intersections of 83rd and 75th Avenues during construction hours.

Measurement for traffic control devices shall be by lump sum for the completed bid item for the completed bid item within the limits shown on the plans.

Payment for traffic control devices shall be at contract unit price lump sum for Bid Item 401-1.

Measurement for off duty police officers shall be in accordance with section 401.6 of the MAG Standard Specifications.

Payment for off duty police officers shall be at the contract unit price per hour for Bid Item 401-2.

SECTION 405 - Monuments

Construction of survey markers shall be in accordance with MAG Specifications Section 405, except as modified herein.

Prior to removal of any existing survey marker, brass cap, the contractor shall ensure that appropriate survey ties have been made and recorded by a Registered Land Surveyor for re-establishing the survey markers after construction has been completed.

Payment for survey markers shall be at the contract unit price per each for Bid Item 405-1 and Bid Item 405-2. Such payment shall be full compensation for removal, furnishing and installing the monuments, complete in place, cost of labor, Registered Land Surveyor, and all other work not specifically covered that is incidental.

No penalty shall be incurred for the reduction of the number of each of this item described above as determined by the Engineer.

SECTION 505 - Concrete Structures

Construction of all concrete structures shall be in accordance with MAG Standard Specification 505, except as noted herein.

Special Structures

The Contractor shall construct one special structure on the storm drain in accordance with the plans at Station 100+57.

Payment for the special structure shall be made at the contract unit price for Bid Item 505-1. Such payment shall be full compensation for furnishing and installing item complete in place including all fittings, reinforcing steel, concrete, cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, pavement removal and replacement, testing, and all other work not specifically covered that is incidental.

Catch Basins

The Contractor shall construct catch basins at the stations shown on the plans to the size and dimensions shown on the plans.

Curbs, gutters and sidewalks shall be removed as necessary to construct the catch basins. The contractor has the option of sawcutting the existing curbs, gutters and sidewalks for the removal or removing them to the closest existing joint. Removal and replacement of existing curbs gutters and sidewalks is incidental to the construction of the catch basins. No separate measurement or payment shall be made to modify the catch basin dimensions in the field to avoid conflicting utilities, or for the removal and replacement of existing sidewalks.

Measurement for the catch basins shall be made at the contract unit price for each of the completed bid items in place within the limits shown on the plans.

Payment for the catch basins shall be made at the contract unit price per Bid Item 505-2 through Bid Item 505-14. Such payment shall be full compensation for removing and replacing existing curbs, gutters and sidewalks, constructing the item complete in place including all fittings, concrete aprons and grade to drain grader ditches, if applicable, reinforcing steel, concrete, cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, pavement removal and replacement, testing, and all other work not specifically covered that is incidental.

No penalty shall be incurred for the reduction of the number of each of this item described above as determined by the Engineer.

SECTION 601 - Trench Excavation, Backfilling and Compaction

Trench excavation, backfilling and compaction shall be in accordance with MAG Standard Specification 601, except as noted herein.

The Contractor shall take special note of the 18-inch sewer line and sewer manholes which are located adjacent to the new storm sewer.

Permanent pipe supports for the various type and sizes of sewer, water and utility lines shall conform to the MAG Standard Details and to the details shown on the plans. Such pipe supports shall be erected at the locations shown on the plans and at any other locations as necessary as determined by the Engineer.

Payment for permanent pipe supports shall be made at the contract unit price per each completed installation. No separate payment shall be made for temporary pipe supports; the cost thereof, shall be included in the price bid for the construction or installation of the storm drain or connector pipe to which such work is incidental or appurtenant. Such payment shall be full compensation for furnishing and installing the item, complete in place and all fittings, cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, pavement removal and replacement, testing, and all other work not specifically covered that is incidental.

The Contractor shall be responsible for designing and constructing safe and adequate falsework which provides the necessary rigidity to support the loads imposed by the irrigation concrete box culvert structure at Sta 126+77 as shown on the project plans.

The falsework shall be any system of structural elements that provides temporary support for loads from the culvert flowing full, all fill material over the structure, and any other related dead and live loads.

Live loads shall consist of the actual weight of any equipment to be supported by falsework applied as concentrated loads at the points of contact and uniform load of not less than 50 pounds per square foot applied over the area supported.

Falsework shall be designed by the working stress design method, and stresses under all loads shall not exceed the maximum allowable stresses provided for in the current edition of AASHTO Standard Specifications for Highway Bridges.

Drawings shall be prepared in accordance with the following and submitted with the Action Plan described in Section 104 of the SGC's:

The drawings shall be complete and fully detailed working drawings showing the dimensions and material for all parts, arrangement, spacing, and connections. The falsework foundations, any connections or contacts with previously built structures or other works, and the means of protecting such other works from damage shall be detailed. The above data may be presented as convenient either on the drawings or in the design summary, which shall also describe the assumptions and types of calculations used in the design and the deflections found for critical points.

Falsework design will require written approval by the Engineer prior to commencing work.

MAG Bedding: If this option is chosen, the trench width shall be as shown on sheet 71 of the project plans. The initial granular bedding shall be a minimum of 6 inch thick and shall otherwise be in accordance with MAG specifications. Bedding shall conform to Section 601 of the MAG Specifications and shall be select material type B or aggregate base, in accordance with Section 702, Table 702. Bedding is as defined in Subsection 101.2 of the MAG Standard Specifications which is in conformance with the typical trench detail shown on Sheet 71 of the plans.

The required sequence of backfill materials consists of:

- Bedding
- Native soils to within 2 feet of pavement surface.
- Imported or granular site soils with low expansive potentials to pavement subsurface level.

Compaction of the bedding material shall be in accordance with MAG 601 and the following:

Backfill compaction shall be accomplished by mechanical methods. Water jetting or flooding of loose, dumped backfills is prohibited.

The Contractor shall excavate holes in the compacted bedding and backfill material to the depths, and at the locations, designated by the Engineer. As determined by the Engineer, these holes shall be of such size as to allow the required density testing to be performed in a safe manner. This shall include shoring or any other trench wall support measures required by OSHA.

Slurry Alternate: At his option, the Contractor may utilize a cement-enriched slurry A.B.C. bedding for the precast concrete pipe. The slurry A.B.C. will consist of 1 bag of portland cement per cubic yard of A.B.C. The slurry shall be placed at a minimum from the outside bottom of the pipe to the springline of the pipe. The slurry must have a minimum of an 8-inch slump. The slurry shall meet a minimum of 40 psi compressive strength at 7 days.

Also, the Contractor may opt to excavate a trench having a cross-section with a rounded bottom rather than a flat bottom. If this option is chosen, the trench cross-section must maintain the minimum 12 inches between the outside wall of the pipe and the trench wall up to the springline.

No separate measurement or payment shall be made for excavation, falsework, backfilling, and compacting of the storm drain and connector pipes; the cost thereof, shall be included in the price bid for construction or installation of the storm drain and connector pipes to which such work is incidental or appurtenant. Excavation shall include pavement removal and replacement as described above and in accordance with MAG standard specifications and details and the details shown in the plans. Backfill shall include the cost of all materials, labor and equipment to furnish, place and compact backfill to the roadway surface.

SECTION 610 - Waterline Construction and Relocation

All waterline construction shall be in accordance with Section 610 of the MAG Standard Specifications and City of Phoenix Supplements, as directed by the Engineer.

Except where noted otherwise, the Contractor is responsible to protect all water lines in place and to maintain all water lines in service for the duration of the project. If the Contractor elects to temporarily shut down a water main for a period of time which exceeds eight hours, the Contractor shall provide a temporary by-pass-water line at no additional cost which is approved by the City of Peoria.

The City of Peoria requires a 48 hours written notice prior to shut downs on water lines.

The Contractor is responsible to maintain access to water valves within the construction area. Failure to do so may result in delays to a scheduled water shut down. Only City of Peoria Water Department personnel are permitted to operate valves.

The Contractor shall provide all materials and labor necessary to complete all water line work. The City of Peoria Water Department will not provide materials, labor, or equipment for work related to the project.

The Contractor shall be responsible for all water line testing, disinfection, and flushing including the cost of the water needed for flushing.

Waterline Realignment and Valve Removals

In the event of an unforeseen conflict between storm drain construction not detailed on the plans and an existing waterline or as directed by the plans, the Contractor shall vertically and/or horizontally realign the waterline in accordance with MAG Standard Detail 370 and Section 610 of the MAG Standard Specifications.

The waterline realignment shall include, but not be limited to, excavation, backfill, compaction, pipe, fittings, offsets, couplings, sleeves, blocking, joint restraints, and hardware. The realigned waterline shall be tested per Subsection 610.14 of the MAG Standard Specifications prior to backfilling.

The Contractor shall coordinate with the City of Peoria and obtain permission to have the line shut down in order to perform this work. The contractor shall notify the City of Peoria at least 48 hours in advance of the need for a shut-down.

All salvaged water line valves from the City of Peoria water distribution system shall be delivered to the City of Peoria.

Materials for waterline realignment shall be cast iron or ductile iron, in accordance with Section 750 of the MAG Standard Specifications.

Measurement for vertical waterline realignments shall be by each of the completed item in place within the limits shown on the plans.

Payment for waterline realignment shall be made at the unit price bid per each for Bid Item 610-1. Such payment shall be full compensation for furnishing and installing the connections to the existing water line, complete in place including all fittings, cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, pavement removal and replacement, testing, and all other work not specifically covered that is incidental. No penalty shall be incurred for the reduction of the number of each, of this item as determined by the Engineer.

Waterline Replacement

In the event of ACP or plastic waterlines crossing over the mainline storm drain construction or laterals greater than 24 inch in diameter, the Contractor shall replace the waterline with DIP in accordance with Section 610 of the MAG Standard Specifications; as modified herein.

The Contractor shall arrange to have the line shut down in order to perform this work. At no cost to the Contractor, representatives of the City of Peoria Water Department will take the line out of service and flush the line prior to placing it back in service. The Contractor shall notify the City of Peoria at least 48 hours prior to the need to shut down any water lines.

Materials for waterline replacement shall be ductile iron, in accordance with Subsection 610.3 of the MAG Standard Specifications.

The replaced waterline shall be visually inspected for leaks under line pressure prior to backfilling.

Measurement will be made per each replacement constructed for the various waterline sizes encountered.

Payment for replacement of waterlines shall be made at the unit price bid per each for Bid Item 610-2 and 610-3. Such payment shall be full compensation for furnishing and installing the waterline, connections to the existing water line, removal of pavement and obstructions, excavation, shoring, bracing, bedding, backfill, compaction, fittings, couplings, sleeves, blocking, joint restraints, hardware, ABC and pavement removal and replacement, testing, and all work not specifically covered that is incidental. No penalty shall be incurred for the reduction of the number of each, of this item as determined by the Engineer.

Waterline Relocation of 12 Inch DIP

Relocation of the 12 inch waterline in the intersection of 81st Avenue and Cactus Road shall be in accordance with Section 350 of the MAG Standard Specifications except as modified herein.

Measurement shall be by the lineal foot of the item completed in place within the limits as shown on the plans.

Payment for the relocation of the 12 inch waterline shall be at the contract unit price for Bid Item 610-4. Such payment shall be full compensation for removing the existing waterline

Payment for the relocation of the 12 inch waterline shall be at the contract unit price for Bid Item 610-4. Such payment shall be full compensation for removing the existing waterline all other appurtenant items including but not limited to fittings, valves, thrust blocks and for furnishing and installing the new 12 DIP complete in place including all fittings, cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, pavement removal and replacement, testing, and all other work not specifically covered that is incidental.

Waterline Encasements

Waterlines shall be encased in locations shown on the plans per the Plan Details.

Measurement shall be by each of the completed item in place within the limits shown on the plans.

Payment for waterline encasement shall be made per unit contract price for Bid Item 610-5. Such payment shall be full compensation for furnishing and installing the item, complete in place and all fittings, cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, pavement removal and replacement, testing, and all other work not specifically covered that is incidental. No penalty shall be incurred for the reduction of the number of each, of this item as determined by the Engineer.

SECTION 615 - Sewer Line Construction

Construction shall conform to MAG Standard Specifications Section 615 except as modified herein.

All ductile iron pipe for conveying sewerage shall be in accordance with AWWA C-150:

- 14" inside diameter and smaller shall be pressure Class 350.

Ductile iron pipe with a minimum wall thickness of Class 50 may be substituted in lieu of the above.

The lining shall cover, at a minimum, the inner surfaces of the pipe and the fitting from the plain end or beveled spigot end to the rear of the gasket socket. If flanged fittings and pipe are included in the project, the lining must not be used on the face of the flange, however full face gaskets must be used to protect the ends of the pipe. At the ends of the pipe and fittings, the lining thickness shall taper for a distance of 4 inches to a minimum thickness of 10 mils.

All ductile iron sewer pipe shall have a protective lining with a nominal thickness of 40 mils and a minimum thickness of 35 mils of **Protecto 401 (ceramic epoxy)**, **Polythane (polyurethane)**, **SewerCoat (calcium aluminate)**, or approved equal throughout the barrel area of the pipe. However, the lining in the bell area shall transition to a minimum thickness of 10 mils at the edge of the gasket socket. The 10 mil lining shall extend into the gasket

socket area to a point where the gasket would overlap the lining when it is compressed due to pipe assembly during construction. The 10 mil lining shall also continue from inside the barrel area, around the spigot end of the pipe and along the outside of the pipe to a point where the center of the gasket of the next pipe section would contact the edge of the lining on the spigot end of the previous pipe section. The thickness of the linings shall be determined by using a dry film thickness magnetic gauge at four quadrants.

Each section of pipe and each fitting shall be tested and shall have an absence of holidays when tested by a suitable holiday detector. In all cases, the barrel area of the pipe shall be tested using a voltage of 7,500 volts and a dry conductive probe.

Holiday testing shall conform to ASTM G 62-87 and NACE Standards RP0274-74 and RP0188-90 (latest revision).

The pipe manufacturer shall be solely responsible for the quality of the lining and shall supply a certification as to compliance to the specification. The certification shall state specifically the following items:

1. All ductile sewer pipe and fittings have a protective lining of 40 mils (35 mils min.) in the barrel area, 10 mils in the bell area, and 10 mils minimum on the exterior of the spigot end.
2. Each section of pipe and each fitting have been tested for holidays utilizing a test voltage of 7,500 volts with a dry conductive probe in the barrel area and a test voltage of 67.5 volts with a wet sponge in both the bell area and the exterior of the spigot end, and no holidays were found.
3. The lining material used meets the current specifications and that the material was applied as required by the specification.

If the Contractor makes a field cut of the lined ductile pipe, the contractor shall comply with the recommendations of the pipe manufacturer in applying a field coating to the end of the pipe ends. In all cases, as a minimum, a 10 mils coating shall be applied to the pipe end and shall overlap the lining by four inches and extend around the pipe end and along the outside of the pipe a minimum of ten inches. The coating shall be allowed to dry before assembly. In addition, the overlapped surface of the lining shall be roughed up to produce a 3 to 5 mil profile over the entire surface. The end result of this process is to secure proper adhesion of the field coating.

Measurement for sewer line construction shall be by the lineal foot for the completed bid item in place within the limits shown on the plans.

Payment for the sewerline construction shall be made at the contract unit price per lineal foot for Bid Item 615-2 and 615-3. Such payment shall be full compensation for furnishing and installing the sewerline complete in place including connections to the existing sewer line, fittings, cost of labor, excavation, removal of obstructions and pavement, shoring, bracing, bedding, backfilling, compaction, pavement replacement, testing, and all other work not specifically covered that is incidental.

SECTION 618 - Storm Drain Construction

Storm drain and connector pipe construction shall be in accordance with MAG Standard Specification 618, except as modified herein.

Storm Sewer Pipe Size Option

The Contractor may substitute the 120" storm sewer pipe for the 114" shown on this project at his discretion. The cost of the increase in size shall be borne by the Contractor. The 114" storm sewer pipe shall remain in the proposal as the required size. If the Contractor elects to use the 120" storm sewer pipe, the invert elevation of the 120" storm sewer pipe shall be six (6) inches below that which is shown on the plans for the 114" storm sewer pipe. The Contractor shall be responsible for any utility or any other conflict caused by the increase in the size of the pipe. There shall be no extension of time granted for any delay caused by these conflicts. The Contractor shall bare all additional costs for these conflicts which were the results of the change in pipe size.

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 any pipe manufactured outside a fifty-mile radius from the City limits of Phoenix, Arizona.

Corrections required on the shop drawings will not constitute valid reasons for delay in the project schedule.

Reinforced Concrete Pipe:

Construction shall conform to the MAG Standard Specifications Sections 618 and 735, except as modified herein.

15" though 36" pipe shall meet the requirements of ASTM C 76, Class IV.

The design for reinforced concrete pipe with a diameter greater than 108" shall be in accordance with the following:

AASHTO Standard Specification for Highway Bridges, Division I, Section 17,
Soil Reinforced Concrete Structural Interaction Systems: Said design shall be

based on the embankment installation load, using $F_{e1} = 1.20$, a unit soil weight of 140 pounds per cubic foot, and the direct design method, based on pressure distribution, in accordance with Figure 17.4F(b), with the lateral pressure equal to $0.33 \times W_E$ and a design bedding angle of 75 degrees. For a cement-enriched slurry A.B.C. bedding, the design bedding angle may be increased to 150 degrees. Live load shall be HS20-44.

All designs shall consider the effects of earth load, live load, pipe weight, and water weight.

The minimum design concrete strength F'_c shall not be less than 5000 psi, and the maximum, not greater than 6000 psi. The manufacturer shall set the wall thickness, which shall not be less than the inside diameter divided by twelve (12), and the design cover of concrete over steel shall be a minimum of 1 inch. Also, the pipe manufacturer shall set the minimum yield strength of the reinforcing steel, within the limits of the AASHTO design specifications .

All designs shall be prepared under the seal of an Arizona registered engineer and shall be submitted to the Engineer for approval. Computer printouts of the designs are acceptable, provided data also is submitted verifying that the adapted computer program complies with the specified design criteria.

Load testing of one the individual 114"(120") & 108" pipe sections will be required at Contractor's expense. Materials certification and testing will be required for the concrete and reinforcing steel, as well as an affidavit of compliance of the completed pipe sections.

Measurement for the storm drain pipes shall be by the lineal foot/pipe size for the completed item in place within the limits as shown on the plans.

Payment for the RCP storm drain and connector pipes shall be at the contract unit price for Bid Items 618-1 through 618-8. Such payment shall be full compensation for furnishing and installing the storm drain pipe and connector pipes complete in place including all fittings, cost of labor, excavation, removal of obstructions and pavement, shoring, bracing, bedding, backfilling, compaction, asphalt pavement replacement, testing, and all other work not specifically covered that is incidental.

Reducers, Crosses, Tees, Plugs, Permanent Pipe Supports, and Concrete Pipe Collars:

Measurement for Reducers, Crosses, Tees, Plugs, Permanent Pipe Supports, and Concrete Pipe Collars shall be by each for the completed item in place within the limits as shown on the plans except that there will be no separate measurement for concrete pipe collars for pipe diameters of less than 24".

Payment for the Reducers, Crosses, Tees, Plugs, Permanent Pipe Supports, and Concrete Pipe Collars shall be at the contract unit price for Bid Items 618-9 through 618-26. Such payment shall be full compensation for furnishing, installing/constructing the item complete in place including joining collars and field closures, the cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, testing, and all other work not specifically covered that is incidental.

No penalty shall be incurred for the reduction of the number of each of this item described above as determined by the Engineer.

RGRCP Irrigation Pipe

The Contractor is cautioned to use care working around SRP's existing 42" CIPP irrigation pipe. When it is necessary as deemed by the Engineer to replace the 42" CIPP with 42" RGRCP, the replacement shall extend at least three feet beyond the outside walls of catch basin being constructed or be a minimum of two pipe lengths whichever is greater. The contractor is to replace the CIPP irrigation pipe with 42" CL III RGRCP as shown on the plans and connect back to the existing CIPP with concrete pipe collars.

Measurement for the irrigation pipes shall be by the lineal foot/pipe size for the item completed in place at the locations shown on the plans.

Payment for the RGRCP irrigation pipes shall be at the contract unit price for Bid Items 618-27 and 618-28. Such payment shall be full compensation for furnishing and installing the storm drain pipe and connector pipes complete in place including the removal of curb, gutter, and pavement, the cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, asphalt pavement replacement, curb and gutter, testing, and all other work not specifically covered that is incidental.

SECTION 625 - Manhole Construction

Manholes shall be constructed as shown on the plans and in accordance with MAG Standard Specifications 625, except as noted herein. Manhole construction includes a special irrigation manhole which is to be constructed in 79th Avenue.

Measurement for manholes shall be for each bid item completed in place within the limits shown on the plans.

Payment for manhole shall be made at the contract unit price per each for Bid Item 625-1 through 625-4. Such payment shall be full compensation for furnishing and installing the item complete in place including the cost of prefabricated tees, if applicable, labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, pavement removal and replacement, testing, and all other work not specifically covered that is incidental.

SECTION 630 - Tapping Sleeves, Valves and Valve Boxes on Water Lines

All water valves shall be in accordance with Section 630 of the MAG Standard Specifications and the City of Phoenix Supplements.

All existing valves which are to be abandoned as a result of new waterline construction shall be salvaged, as directed by the Engineer.

All valve shutdown fees will be waived for work on water services and meters under these specifications. When it becomes necessary to shut down existing water mains and services to construct replacements, no main shall be left out of service for more than one (1) hour, and no individual service will be disrupted for more than five (5) continuous hours. Main valves shall be operated by representatives of the City of Peoria Water Department. Shutdowns will not begin before 8:00 a.m. and will not extend past 4:00 p.m.

When it becomes necessary to shut down an existing water line, it shall be the Contractor's responsibility to notify all customers, in advance, that the water service will be turned off. The customers shall be notified, in writing, at least 24 hours in advance and also, verbally, the day the shutdown will occur. Initial notification shall include the reason for the shutdown, the date, the time, and the duration the water service will be shut off. A copy of the notification shall be given to the Engineer.

During construction, the Contractor shall be responsible for maintaining continuous access to the valve-operating nut for all water valves within the project boundaries.

Payment shall be made at the contract unit price per each for Bid Item 630-1, 630-2 and 630-3. Such payment shall be full compensation for furnishing and installing the item complete in place including the cost of labor, excavation, removal of obstructions, shoring, bracing, bedding, backfilling, compaction, testing, and all other work not specifically covered that is incidental or appurtenant.