

91st Avenue and Olive Avenue
Intersection Improvements

Special Provisions



City of Peoria

MAR 31 2010

	Initials	Date
ED	BN	3/19/10
PM	BCW	3/19/10

ARIZONA DEPARTMENT OF TRANSPORTATION

ADVERTISEMENT FOR BIDS

BID OPENING: FRIDAY, JANUARY 29, 2010, AT 11:00 A.M. (M.S.T.)

TRACS NO 0000 MA PEO SS60301C
PROJ NO CM-PEO-0(009)A
TERMINI CITY OF PEORIA
LOCATION (91st Avenue and Olive Avenue)

ROUTE NO.	MILEPOST	DISTRICT	ITEM NO.
N/A	N/A	PHOENIX	LOCAL

The amount programmed for this contract is \$2,200,000. The location and description of the proposed work and the representative items and approximate quantities are as follows:

The proposed work is located in Maricopa County, at the intersection of 91st Avenue and Olive Avenue, within the City of Peoria. The work consists of improving the existing intersection by widening the existing roadway, adding raised median islands and placing new curb and gutters, sidewalks, driveways, bus bays, traffic markings, signing, lighting, storm drainage, landscaping, signal modifications and other related work.

REPRESENTATIVE ITEMS	UNIT	QUANTITY
Removal of Concrete Sidewalks, Driveways, Slabs	S.F.	22,740
Grading Roadway for Pavement	S.Y.	7,400
Pavement Milling, 1"	S.Y.	20,704
A C Pavement, Various	Ton	3,510
Pavement Markings	L.F.	20,519
Signal & Lighting Poles	Ea.	31
Concrete Curb and Curb and Gutter	L.F.	5,635

The time allowed for the completion of the work included in this project will be **180** calendar days.

The Arizona Department of Transportation hereby notifies all bidders that pursuant to this advertisement for bids, Disadvantaged Business Enterprises will be afforded full opportunity to submit bids in response to this solicitation and will not be discriminated against on the grounds of race, color, sex, or national origin in consideration for an award.

Project plans, special provisions, and proposal pamphlets may be purchased from Contracts and Specifications Section, 1651 W. Jackson, Room 121F, Phoenix, AZ 85007-3217, (602) 712-7221. Plans and bidding documents should be available for sale to bidders within one week following the advertisement for bids. The cost is \$ 62, payable at time of order by cash, check or money order. Please indicate whether a bid proposal package or a subcontractor/supplier set is desired. An additional fee of \$5.00 will be charged for each set of Special Provisions requested which is not accompanied by the purchase of a related set of project plans. Checks should be made payable to the Arizona Department of Transportation. No refund will be made for plans and specifications returned. We cannot guarantee mail delivery.

This project is eligible for electronic bidding.

Cross sections and/or earthwork quantity sheets, if available, may be ordered from the Control Desk of Roadway Design Section at (602) 712-8667. Orders must be placed at least five days prior to bid opening to insure availability. Documents may be picked up and paid for at Contracts & Specifications Section.

No contracting firm will be issued a proposal pamphlet until it has become prequalified. The Application for Contractor Prequalification shall be filed at least 15 calendar days prior to the bid opening date. The Application may be obtained from Contracts and Specifications Section.

No award will be made to any contractor who is not a duly licensed contractor in accordance with Arizona Revised Statutes 32-1101 through 32-1170.03.

All labor employed on this project shall be paid in accordance with the minimum wage rates shown in the General Wage Decision. These rates have been determined in accordance with the requirements of the law and issued by the Secretary of Labor for this project. The wage scale is on file in Contracts and Specifications Section and copies may be obtained at all reasonable times.

A proposal guaranty in the form of either a certified or a cashier's check made payable to the State Treasurer of Arizona for not less than ten percent of the amount of the bid or in the form of a surety (bid) bond for ten percent of the amount of the bid shall accompany the proposal.

Surety (bid) bonds will be accepted only on the form provided by the Department and only from corporate sureties authorized to do business in Arizona.

Proposal pamphlets shall be submitted only in the envelope provided by the Department to:

Arizona Department of Transportation
Intermodal Transportation Division
Contracts and Specifications Section
1651 West Jackson Street, Room 121F
Phoenix, Arizona 85007-3217

Sealed bids will be received until the hour indicated and then publicly opened and read. No bids will be received after the time specified.

Engineering Specialist:	Richard Murphy	(602) 712-8267
Construction Supervisor:	Julie Kliewer	(602) 712-7091

BARRY CROCKETT,
Engineer-Manager
Contracts & Specifications Section

SPECIAL PROVISIONS

FOR

ARIZONA PROJECT

0000 MA PEO SS60301C

CM-PEO-0(009)A

CITY OF PEORIA

(91st Avenue and Olive Avenue)

INTERSECTION IMPROVEMENTS

PROPOSED WORK:

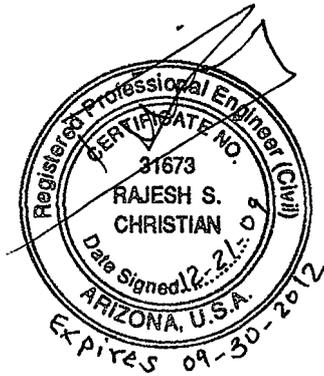
The proposed work is located in Maricopa County, at the intersection of 91st Avenue and Olive Avenue, within the City of Peoria. The work consists of improving the existing intersection by widening the existing roadway, adding raised median islands and placing new curb and gutters, sidewalks, driveways, bus bays, traffic markings, signing, lighting, storm drainage, landscaping, signal modifications and other related work.

PROFESSIONAL ENGINEER SEALS:

This book of specifications and related contract documents represents the efforts of the following firms:

- (1) Kimley-Horn and Associates, Inc. (Roadway, Drainage)
- (2) Kimley-Horn and Associates, Inc. (Traffic)
- (3) Corral Dybas (Landscape and Irrigation)

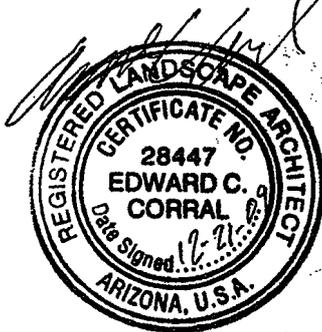
A representative of each firm has affixed his/her professional seal below, which attests that those portions of these specifications related to the drawings prepared by each firm, were prepared under his/her direction.



Kimley-Horn and Associates, Inc
(Roadway, Drainage)



Kimley-Horn and Associates, Inc
(Traffic)



Corral & Dybas
(Landscape and Irrigation)

(SPC00FA, 6/26/09)

SPECIFICATIONS:

The work embraced herein shall be performed in accordance with the requirements of the following separate documents:

Arizona Department of Transportation, Standard Specifications for Road and Bridge Construction, Edition of 2008 (Pub. # 31-066),

Arizona Department of Transportation, Intermodal Transportation Division, Standard Drawings, listed in the project plans and defined hereinafter,

Arizona Department of Transportation, Traffic Group, Manual of Approved Signs, available on the Department's website, through the Traffic Group,

Arizona Department of Transportation, Traffic Group, Traffic Control Design Guidelines (Pub. # 31-088),

Manual on Uniform Traffic Control Devices for Streets and Highways, 2003 edition and Arizona Supplement to the 2003 edition, September 1, 2004 (Pub. # 31-010),

The Proposal Pamphlet and Non-bid Pamphlet which include the following documents:

These Special Provisions,

Appendix A – Subgrade Acceptance Chart,

Appendix B – City of Peoria Forms

List of Subcontractors, Suppliers, Service Providers and Manufacturers Bidding ADOT Contracts,

Required Contract Provisions All Federal-Aid Construction Contracts (Form FHWA 1273 Revised March, 1994) with cover sheet revision,

Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246), July 1, 1978, Revised November 3, 1980 and Revised April 15, 1981,

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246), July 1, 1978, Revised November 3, 1980 and Revised April 15, 1981,

Equal Employment Opportunity Compliance Reports, Federal-Aid Projects, February 1, 1977, Revised July 1, 1978, Revised November 3, 1980, Revised April 15, 1981, Revised September 7, 1983, Revised October 15, 1998, Revised January 1, 2005, and Revised August 2005,

Federal-Aid Proposal (Notices to Prospective Federal-Aid Construction Contractors), September 29, 1975,

Wage Determination Decision,

Bidding Schedule,

Included in the Proposal Pamphlet only:

Proposal,

Surety (Bid) Bond, 12-1303,

Certification With Regard to the Performance of Previous Contracts or Subcontracts Subject to the Equal Opportunity Clause and the Filing of Required Reports, Federal Aid Projects, April, 1969, Rev. July, 2003,

Certification With Respect to the Receipt of Addenda,

Affidavit by contractor certifying that there was no collusion in bidding for contract,

BID SUBMISSION:

In submitting a bid, the holder of a Bid Proposal Pamphlet shall completely execute the following documents:

Proposal,

Bidding Schedule,

Surety (Bid) Bond, 12-1303,

Certification With Regard to the Performance of Previous Contracts or Subcontracts Subject to the Equal Opportunity Clause and the Filing of Required Reports, Federal Aid Projects, April, 1969, Rev. July, 2003,

Certification With Respect to the Receipt of Addenda, and

Affidavit by contractor certifying that there was no collusion in bidding for contract.

PROPOSAL GUARANTY:

Each bidder is advised to satisfy itself as to the character and the amount of the proposal guaranty required in the Advertisement for Bids.

CONTRACT DOCUMENTS:

The bidder to whom an award is made will be required to execute a Performance Bond and a Payment Bond, each in 100 percent of the amount of the bid, an Insurance Certificate and the Contract Agreement.

A copy of these documents is not included in the Proposal Pamphlet which is furnished to prospective bidders; however, each bidder shall satisfy itself as to the requirements of each document.

The documents, approved by the Department of Transportation, Highways Division, are identified as follows:

Statutory Performance Bond, 12-1301, September, 1992

Statutory Payment Bond, 12-1302, September, 1992

Contract Agreement, 12-0912, August, 2000

Certificate of Insurance, 12-0100, June, 1998

A copy of each document may be obtained by making a request to Contracts and Specifications Services.

COPIES OF PROJECT DOCUMENTS:

Distribution of a limited number of plans and Special Provisions will be made to the successful low bidder, at no charge, following confirmation of bid prices and DBE submittal, if applicable. The distribution will be made on the following basis:

Contract Size (Dollars)	Full Size Plans	1/2 Size Plans	Bound Bid Books	Unbound Bid Books
\$0 - \$10,000,000	2	25	5	25
over \$10,000,000	5	50	5	50

These plans and Special Provisions will be set aside and designated for use by the low bidder along with an equal number held in reserve for the responsible District Office. In the event that excess documents remain following bid opening, the additional documents will be evenly split between the low bidder and the A.D.O.T. District Office.

Any additional plans or Special Provisions that the low bidder may require beyond the above distribution will be available at the invoice cost of printing by ordering through the Engineer.

MATERIAL AND SITE INFORMATION:

Projects requiring materials, excavation, or site investigation may have additional information available concerning the material investigations of the project site and adjacent projects. This information, when available and applicable, may be examined in the Office of the Materials Engineer, ADOT Materials Group, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740. This information will not be attached to the contract documents. Copies of available information may be purchased by prospective bidders.

(EPRISE, 05/30/08)

DISADVANTAGED BUSINESS ENTERPRISES:

Policy:

The Arizona Department of Transportation has established a Disadvantaged Business Enterprise (DBE) program in accordance with the regulations of the U.S. Department of Transportation (DOT), 49 CFR Part 26. The Arizona Department of Transportation has received Federal financial assistance from the Department of Transportation and as a condition of receiving this assistance, the Arizona Department of Transportation has signed an assurance that it will comply with 49 CFR Part 26.

It is the policy of the Arizona Department of Transportation to ensure that DBEs, as defined in Part 26, have an equal opportunity to receive and participate in DOT-assisted contracts. It is also the policy of the Department:

1. To ensure nondiscrimination in the award and administration of DOT assisted contracts;
2. To create a level playing field on which DBEs can compete fairly for DOT assisted contracts;
3. To ensure that the DBE program is narrowly tailored in accordance with applicable law;
4. To ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are counted as DBEs;
5. To help remove barriers to the participation of DBEs in DOT assisted contracts; and
6. To assist in the development of firms that can compete successfully in the market place outside the DBE program.

Assurances of Non-Discrimination:

The contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, sex or national origin in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the state deems appropriate.

Race Neutral DBE Participation:

The Arizona Department of Transportation has an annual DBE goal of 10.5 percent. The Department is using a race neutral program to work towards meeting this goal. Race neutral participation occurs where (1) a firm's DBE status is not considered when awarding subcontracts, or (2) a DBE is the prime contractor.

The Department has a DBE Supportive Services Program that works with both DBEs and prime contractors to facilitate DBE participation. Ralph "Gonz" Gonzales is the manager of the program. He can be reached at (602) 712-7761 or rgonzales@azdot.gov.

Reporting:

The Department is required to collect data on DBE participation to report to FHWA. Therefore, accurate reporting is needed to track DBE participation. The contractor shall submit a report electronically on a monthly basis indicating the amounts earned by and paid to all DBEs working on the project.

The DBE compliance report shall be submitted through the Department's web-based system, which can be accessed at <https://adot.dbesystem.com>.

Definitions:

- (A) **Disadvantaged Business Enterprise DBE:** a for-profit small business concern which meets both of the following requirements:
- (1) Is at least 51 percent owned by one or more socially and economically disadvantaged individuals or, in the case of any publicly owned business, at least 51 percent of the stock is owned by one or more such individuals; and,
 - (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.
- (B) **Socially and Economically Disadvantaged Individuals:** any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who is:

- (1) Any individual who is found to be a socially and economically disadvantaged individual on a case-by-case basis.
- (2) Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
 - (i) "Black Americans," which includes persons having origins in any of the Black racial groups of Africa;
 - (ii) "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 - (iii) "Native Americans," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
 - (iv) "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong;
 - (v) "Subcontinent Asian Americans," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
 - (vi) "Women;"
 - (vii) Any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration (SBA), at such time as the SBA designation becomes effective.
- (C) **Joint Venture:** an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

Working with DBEs:

The Department works with DBEs and assists them in their efforts to participate in the highway construction program. All bidders should contact the Civil Rights Office at the

address shown below for assistance in their efforts to use DBEs in the construction program of the Department:

Arizona Department of Transportation
Civil Rights Office
1135 N. 22nd Avenue (second floor), Mail Drop 154A
Phoenix, AZ 85009
Phone (602) 712-7761
FAX (602) 712-8429

Applicability:

The provisions are applicable to all bidders including DBE bidders. As a prime contractor, a DBE shall perform a significant portion of the contract work with its own work force in accordance with normal industry practices and Subsection 108.01 - Subletting of Contract of the Standard Specifications.

Certification:

Certification as a DBE shall be predicated on:

- (1) The completion and execution of an application for certification as a "Disadvantaged Business Enterprise".
- (2) The submission of documents pertaining to the firm(s) as stated in the application(s), including but not limited to a statement of social disadvantage and a personal financial statement.
- (3) The submission of any additional information which the Department may require to determine the firm's eligibility to participate in the DBE program.

Applications for certification may be filed with the Department at any time.

Applications for certification are available at the Department's Civil Rights Office, 1135 N. 22nd Avenue (second floor), mail drop 154A, Phoenix, Arizona 85009, phone (602) 712-7761, or from the internet at www.azdbe.org.

DBE firms and firms seeking DBE certification shall cooperate fully with requests for information relevant to the certification process. Failure or refusal to provide such information is a ground for denial or removal of certification.

Arizona is a member of the AZ Unified Certification Program (AZUCP). Only DBE firms that are certified by the AZUCP are eligible for credit on ADOT projects. A list of DBE firms certified by AZUCP is available on the internet at www.azdbe.org. The list will indicate contact information and specialty for each DBE firm, and may be sorted in a variety of ways. However, ADOT does not guarantee the accuracy and/or completeness of this information,

nor does ADOT represent that any licenses or registrations are appropriate for the work to be done.

The contractor bears the responsibility to determine whether the DBE possesses the proper contractor's license(s) to perform the work. If a DBE cannot complete its work due to failure to obtain or maintain its licensing, the contractor bears the responsibility to immediately replace the DBE with another DBE and notify the Department.

The Department's certification is not a representation of qualifications and/or abilities. The contractor bears all risks that the DBE may not be able to perform its work for any reason.

General:

Each contractor shall establish a program that will ensure nondiscrimination in the award and administration of contracts and subcontracts. Each contractor shall also designate a full time employee who shall be responsible for the administration of the contractor's DBE program.

Agreements between the bidder and a DBE in which the DBE promises not to provide subcontracting quotations to other bidders are prohibited.

DBE Participation:

A DBE may participate as a prime contractor, subcontractor, joint venture partner with either a prime contractor or a subcontractor, or as a vendor of materials or supplies. A DBE joint venture partner shall be responsible for a clearly defined portion of the work to be performed, in addition to meeting the requirements for ownership and control.

The contractor may not credit second-tier subcontracts issued to DBEs by non-DBE subcontractors.

Crediting DBE Participation:

General:

Once a firm is determined to be an eligible DBE in accordance with 49 CFR Part 26, only the value of the work actually performed by the DBE can be credited toward DBE participation. Credit is given only after the DBE has been paid for the work performed.

The dollar amount of work to be accomplished by DBEs, including partial amount of a lump sum or other similar item, shall be on the basis of subcontract, purchase order, hourly rate, rate per ton, etc., as agreed to between parties.

DBE credit may be obtained only for specific work done for the project, supply of equipment specifically for physical work on the project, or supply of materials to be incorporated in the work. DBE credit will not be allowed for costs such as overhead items, capital expenditures (for example, purchase of equipment), and office items.

When a DBE performs as a partner in a joint venture, only that portion of the total dollar value of the contract which is clearly and distinctly performed by the DBE's own forces can be credited.

The contractor may not credit second-tier subcontracts issued to DBEs by non-DBE subcontractors.

A prime contractor may credit the entire amount of that portion of a construction contract that is performed by the DBE's own forces. The cost of supplies and materials obtained by the DBE for the work of the contract can be included so long as that cost is reasonable. Leased equipment may also be included. No credit is permitted for supplies purchased or equipment leased from the prime contractor or its affiliate(s).

When a DBE subcontracts a part of the work of its contract to another firm, the value of the subcontract may be credited towards DBE participation only if the DBE's subcontractor is itself a DBE and performs the work with its own forces. Work that a DBE subcontracts to a non-DBE firm does not count towards DBE participation.

A prime contractor may credit the entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees are reasonable and not excessive as compared with fees customarily allowed for similar services.

Police Officers:

DBE credit will not be permitted for procuring DPS officers. For projects on which officers from other agencies are supplied, DBE credit will be given only for the broker fees charged, and will not include amounts paid to the officers.

Commercially Useful Function:

A prime contractor can credit expenditures to a DBE subcontractor only if the DBE performs a commercially useful function on the contract. A DBE performs a commercially useful function when it is responsible for execution of the work of a contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

A DBE will not be considered to perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, the Department will examine similar transactions, particularly those in which DBEs do not participate.

If a DBE does not perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the Department will presume that the DBE is not performing a commercially useful function.

When a DBE is presumed not to be performing a commercially useful function as provided above, the DBE may present evidence to rebut this presumption. Decisions on commercially useful function matters are subject to review by FHWA, but are not administratively appealable to U.S. DOT.

Trucking:

The Department will use the following factors in determining whether a DBE trucking company is performing a commercially useful function: the DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.

The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract on every day that credit is to be given for trucking.

The contractor will receive credit for the total value of transportation services provided by the DBE using trucks it owns, insures and operates, and using drivers it employs.

The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services.

The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE lessees results in credit only for the fee or commission paid to the DBE as a result of the lease agreement.

Example: DBE Firm X uses two of its own trucks on contract. It leases two trucks from DBE Firm Y and six trucks from non-DBE firm Z. DBE credit would only be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by

Firm Z. In all, full credit would be allowed for the participation of eight trucks. With respect to the other two trucks provided by Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks Firm X receives as a result of the lease with Firm Z.

Materials and Supplies:

The Department will credit expenditures with DBEs for material and supplies as follows. If the materials or supplies are obtained from a DBE manufacturer, 100 percent of the cost of the materials or supplies is credited. A manufacturer is defined as a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract, and of the general character described by the specifications.

If the materials or supplies are purchased from a DBE regular dealer, 60 percent of the cost of the materials or supplies is credited. A DBE regular dealer is defined as a firm that owns, operates, or maintains a store or warehouse or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A firm may be a DBE regular dealer in such bulk items as petroleum products, steel, cement, stone or asphalt without owning, operating, or maintaining a place of business, as provided above, if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement, and not on an ad-hoc or contract-by-contract basis. Packers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph and the paragraph above.

With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor a regular dealer, the Department will credit the entire amount of the fees or commissions charged by the DBE for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, toward DBE goals, provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services. The cost of the materials and supplies themselves may not be counted toward the DBE goal.

DBE credit for supplying paving grade asphalt and other asphalt products will only be permitted for reasonable hauling costs, and only if the DBE is owner or lessee of the equipment and trucks. Leases for trucks must be long term (extending for a fixed time period and not related to time for contract performance) and must include all attendant responsibilities such as insurance, titling, hazardous waste requirements, and payment of drivers.

(MENTOR, 02/23/06)

MENTOR-PROTEGE PROGRAM

Description:

Purpose:

The Mentor-Protege program is an initiative to encourage and develop disadvantaged businesses in the highway construction industry. The program will permit contractors to provide certain types of assistance to certified Disadvantaged Business Enterprise (DBE) subcontractors on highway construction projects.

The program is intended to increase legitimate DBE activities and is not intended to diminish nor circumvent existing DBE rules or regulations. Abuse of this program may be used as the basis for actions against both categories of firms including suspension or debarment.

Policy:

It is the policy of ADOT that contractors and certified DBE subcontractors may engage in a Mentor-Protege agreement under certain conditions. Such an agreement must be mutually beneficial to both parties and ADOT in fulfilling requirements of 49 Code of Federal Regulations Part 23.

Definitions:

DBE: The definition, status, and requirements of DBE firms are defined by 49 CFR Part 23. Please also refer to the special provision entitled "Disadvantaged Business Enterprises".

Mentor: A designated contractor who oversees the development of a designated DBE subcontractor by training, counseling, assisting, and sponsoring the DBE firm in an ADOT approved Mentor-Protege Program.

Protege: An ADOT-certified DBE subcontractor who is guided by a mentor through training and specialized assistance to gain experience, develop expertise in highway construction, and attain general business growth in an approved Mentor-Protege program.

Mentor-Protege Development Plan: A detailed plan outlining a management agreement between a contractor (who agrees to serve as a mentor) and a DBE subcontractor (who agrees to serve as a protege).

Implementation:

Approval Process:

- (1) When a contractor and DBE agree to engage in a Mentor-Protege Development Plan Agreement, ADOT Civil Rights Office will be notified by either party for the purpose of (a) reviewing requirements of STAA, 49 CFR part 23, and Mentor-Protege program; (b) establishing timeline for processing Agreement; (c) preliminary review of Agreement objective(s) and duration; and (d) reporting requirements. (A copy of the suggested form of agreement is included in these special provisions).
- (2) A completed Mentor-Protege Development Plan will be submitted to ADOT within 30 days following the initial review. Approval of the Agreement by ADOT will be in two stages:
 - a) General approval of Agreement by ADOT within 15 working days following submission of Agreement.
 - b) Approval of working plan for the designated project where a Mentor-Protege Development Plan will be implemented.
- (3) Duration of a Mentor-Protege Development Plan may exceed that of a single project, not to exceed three years. Duration of a working plan may exceed that of a single project. However, the continued use of an existing working plan must be approved by the ADOT Civil Rights Office prior to beginning work on a new project.
- (4) The Mentor-Protege program is not intended to provide DBE firms with a means to avoid management and operational responsibilities. Mentors cannot be responsible for the management of DBE proteges. Under the program, all administrative functions must be performed by personnel responsible to or employed by protege. The protege must retain final decision making responsibilities.
- (5) Mentor and protege shall agree to an interview by ADOT Civil Rights Office during the development of the Mentor-Protege Development Plan.
- (6) Mentor and protege shall agree to evaluations by ADOT. The frequency and method will depend on the project.

Content of Mentor-Protege Development Plan:

A Mentor-Protege Development Plan Agreement shall address the following:

- (1) **Areas of Assistance:** Identify the specific areas in which the protege requires assistance.
- (2) **Schedule of Assistance:** Develop an Action Plan which defines the types and scope of assistance the mentor will provide to meet the protege's needs.
- (3) **Responsibilities:** Define the responsibilities of the mentor and the protege in each of the activities.
- (4) **Benchmarks:** Include measurable benchmarks to be reached by the protege at successive stages of the plan.
- (5) **Evaluation:** Provide formal evaluations of the protege's attainment of benchmarks. Evaluations must be made by both the mentor and the protege and reviewed by ADOT.
- (6) **Duration:** Specify the maximum time frame the development plan agreement can remain in effect not to exceed three years.
- (7) **Assurances:** Provide assurances that all agreements, oral and written, pertaining to the Mentor-Protege program do not improperly obtain the benefits of the DBE program.
- (8) **Key Personnel:** Identify mentor's representative(s) responsible for training and/or coordinating the assistance provided to the protege.
- (9) **Fees:** Identify any fees paid as a condition of the agreement.
- (10) **Copies of agreements:** Attach copies of all bonding, security, lease agreements, notes, contracts, etc., made for the duration of the Mentor-Protege Plan.

Type of Assistance:

The type of assistance provided by contractors may include, but not be limited to:

- (1) **Financial:**
 - a) **Working Capital Secured by Time Demand Notes or Stocks.** Proteges acquiring working capital through the issuance of stocks must maintain no less than 51 percent ownership to maintain DBE certification. Time demand notes may be used to secure working capital. However, any abusive use of recall features will be cause for terminating program. Where working capital is secured by stocks or demand notes, a third party such as a bank could

receive progress payments for work accomplished by the protege, made out jointly to the agent and the protege and make payments, on behalf of the protege, to material suppliers or for Federal and State payroll taxes, etc. In no case can the day-to-day control of the firm be relinquished by the disadvantaged owner as a requirement of the loan.

- b) Bonding. Mentors may bond the entire job and charge a pro-rata share of the cost to the protege. Mentors may bond the entire job and carry the protege by absorbing the cost of the bond. Arrangements of the bonding must be included in the Schedule of Assistance.

(2) Management Technical Assistance:

- a) Assist in conducting a Protege Self-Assessment by areas to be strengthened for long-range planning of the protege firm.
- b) Assist in developing business plan, loan packaging, and financial counseling.
- c) Assist the protege in setting up a cost accounting system and train the protege's personnel to assume full control.
- d) Provide training in plan interpretation, estimating, and materials supply function.
- e) Provide guidance in general project management and related areas to make the protege aware of techniques to improve productivity and competitiveness and broaden knowledge of industry practices.

(3) Operation:

- a) Equipment/Facilities Use. Equipment and facilities may be furnished by mentor, provided that separate lease agreements are made and control over the equipment and facilities are under the supervision of protege.
- b) Training of managers and specialists of the protege in state-of-the-art methods in the contracting industry.
- c) Mentors may provide personnel with specialized expertise for a specific purpose and duration as outlined in the Action Plan. Such personnel must be on the protege's payroll and under direct supervision of the protege. Long term, continual, or repetitive use

by a protege of personnel primarily employed by the mentor will be construed as an attempt to artificially inflate DBE participation and may be cause for termination of the Mentor-Protege agreement and decertification of the DBE.

General Practice:

- (1) Agreements may not include exclusive arrangements which limit competition.
- (2) DBE firms shall have the latitude to quote bids to other contractors.
- (3) The contractor and the DBE involved in a Mentor Protege agreement must remain separate and independent business entities.
- (4) Middlemen or passive conduits which serve no commercially useful function, or subcontractors acting essentially as brokers are unacceptable.
- (5) Formal or informal agreements which limit control and management by DBE firms are unacceptable.
- (6) Part ownership in a DBE firm by a non-disadvantaged entity, including a mentor, is permitted by the regulations (49 CFR 23) and may be necessary to ensure adequate capital and technical guidance of the DBE participant. However, any financial investment by the mentor must not create a situation wherein the mentor may assume control over the DBE firm.

Modifications:

Modifications to the Mentor-Protege Development Plan shall be subject to the approval of ADOT.

Termination:

The Mentor-Protege Development Plan may be terminated by mutual consent by both parties with notice to ADOT. ADOT may terminate approval of the Plan upon determination that:

- (1) The protege firm no longer meets the eligibility standards for certification as a DBE.
- (2) Either party has failed or is unable to meet its obligations under the Development Plan.
- (3) The DBE is not progressing or is not likely to progress in accordance with the Development Plan.

- (4) The DBE has reached a satisfactory level of self-sufficiency to compete without special treatment provided in the Development Plan.

In the event a Mentor Protege Development Plan is terminated, the contractor will remain responsible for the DBE goals established in the project Special Provisions.

ARIZONA DEPARTMENT OF TRANSPORTATION

Mentor-Protege Development Plan Agreement

PART ONE: General Agreement

This agreement entered into this _____ day of _____, 20____, in the city of _____, Arizona, by and between _____ (hereafter known as Mentor), and _____ (hereafter known as Protege), in accordance with rules and regulations of the Arizona Department of Transportation (ADOT) Mentor-Protege program, and in accordance with the requirements for increased Disadvantaged Business Enterprises (DBE) participation in the Surface Transportation Act of 1982 (STAA) and Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA).

This agreement is intended to cover the general relationship between the parties to insure compliance with STAA, STURAA, and ADOT guidelines, and to implement all provisions set forth in the Mentor-Protege Development Plan.

PART TWO: Assurances

- 2.1 Both mentor and protege will remain separate and independent business entities. Protege shall have the latitude to quote bids to other contractors.
- 2.2 Protege is an ADOT-certified DBE firm.
- 2.3 The Mentor-Protege program is not intended to provide DBEs with means to avoid management and operational responsibilities.
- 2.4 All agreements, oral and written, pertaining to this Mentor-Protege Plan Agreement do not cause the protege to improperly obtain the benefits of the DBE program.

PART THREE: Content of Plan

Both parties will agree to content of the plan which will include but not be limited to:

- 3.1 Exhibit A: Areas of Assistance--(Areas identified by both parties as the basis for providing assistance by mentor to protege.)
- 3.2 Exhibit B: Schedule of Assistance-- An Action Plan developed by both parties defining the types and scope of assistance; responsibilities of mentor and protege in each activity; resources to be utilized; and measurable benchmarks to be reached by protege.
- 3.3 Exhibit C: Key Personnel-- A list of mentor and protege representatives responsible for training and/or coordinating the Plan.

3.4 Exhibit D: Lease/Agreement(s)--Full copies of all lease agreements for equipment and facilities; financial agreements; and other agreements between the two parties and/or by third parties.

PART FOUR: Monitoring

4.1 Both parties hereby specifically consent to the monitoring of this contract by the appropriate federal and state officials or their agents, and to agree to cooperate with such agencies.

4.2 Both mentor and protege agree to evaluate the progress of the Plan at scheduled intervals with the results reviewed by ADOT.

PART FIVE: Duration

The duration of the Plan will coincide with the length of the project for which the plan was intended. Extended agreement plans shall not exceed a period of three years.

PART SIX: Modifications

None of these agreements may be modified except in writing signed by both parties and approved by ADOT.

PART SEVEN: Termination

The mentor or protege retains the right to terminate this agreement by showing cause in a written notice to all parties and ADOT. ADOT may terminate the approval of this agreement by showing cause in a written notice to mentor and protege. In the event of termination of agreement or termination of ADOT approval, the contractor will remain responsible for the DBE goals established in the project Special Provisions.

PART EIGHT: Privacy Act Provision

The information contained herein and on attachments is used for the ADOT Mentor-Protege Program only, and may not be disclosed without the express permission of all parties involved in this agreement.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed by their duly authorized officers on the day and year first above written.

Date Mentor Firm (Authorized Official Name) Signature

Date Protege Firm (Authorized Official Name) Signature

April 1987

(LSCAPE, 10/12/01)

Construction and Landscape Establishment Phases:

The work on this project will be considered as being divided into two phases: the Construction Phase and the Landscape Establishment Phase. The Construction Phase shall be defined as all work not included in Landscape Establishment Phase. The Landscape Establishment Phase shall be as described and specified under Section 807.

When the terms "Phase I" and "Phase II" appear in Sections 806 or 808 of the Standard Specifications, the term "Phase I" shall refer to the Construction Phase, and "Phase II" shall refer to the Landscape Establishment Phase, both as specified above.

Prior to the beginning of the Landscape Establishment Phase, the contractor shall be responsible for maintaining and protecting all planting areas, as specified in Subsections 806-3.06 and 807-3.02. No measurement or payment will be made for such work during the Construction Phase, the costs being considered as included in the cost of contract items.

The provisions of Subsection 108.09, Failure to Complete the Work on Time, will apply only to the work under the Construction Phase. The original contract amount, as used in Subsection 108.09 of the Standard Specifications, will mean the original contract amount of all items of work.

At the satisfactory completion of work under the Construction Phase, and when all quantities have been checked and verified, the monies which have been retained by the Department each month will be paid the contractor in accordance with the provisions of Subsection 109.06, Partial Payments and Retention.

GENERAL REQUIREMENTS:

Bidders List Requirement:

Bidders shall submit a list of the names of all subcontractors, service providers, manufacturers and suppliers submitting bids, proposals or quotes for this project on the "List of Subcontractors, Suppliers, Service Providers and Manufacturers Bidding ADOT Contracts" form. The form is appended to the Special Provisions.

All bidders must submit the required form, whether or not the bid is the low bid.

Bidders must submit this form with all requested information to the ADOT Civil Rights Office no later than 4:00 p.m. on the fifth working day after bids are opened. Faxed copies are acceptable. The fax number is (602) 712-8429.

FAILURE TO SUBMIT THE REQUIRED INFORMATION BY THE STATED TIME AND IN THE MANNER HEREIN SPECIFIED SHALL BE CAUSE FOR THE BIDDER TO BE DEEMED INELIGIBLE FOR AWARD OF THE CONTRACT.

The form must be complete and must include all the names and contact information for all subcontractors, service providers, manufacturers and suppliers that submitted bids, proposals, or quotes on this project regardless of the bidder's intentions to use the sub bid. Information on second tier bids is not required.

Title 49 of the Code of Federal Regulations, Part 26.11, required ADOT to create and maintain a bidders list. The purpose of this list is to develop the list of the DBE and non-DBE firms seeking to work on Federal-aid highway construction contracts. This information is then used to set ADOT's overall DBE goal. The regulation requires the following information be collected: the firm's name; the firm's address; the firm's status as a DBE or non-DBE; the age of the firm; and the annual gross receipts of the firm.

The Civil Rights Office will contact listed firms to obtain information from them that will be used in the agency's annual DBE goal setting process. This information will be maintained as confidential to the extent allowed by federal and state law.

Electronic Bidding:

This project is eligible for electronic bidding. Electronic bidding is a process which will allow the bidder to prepare and submit its complete proposal electronically, using a computer-generated bidding schedule and versions of all the required forms listed under "Bid Submission" in these special provisions. The requirements for submitting an electronic bid are included in Subsection 102.08 of the Standard Specifications.

Checking Electronic Bids:

Contractors interested in submitting bids electronically are reminded to check their bids prior to final submission. Some computer systems using a scrolling mouse allow the operator to scroll through options presented in a "drop down menu" until the option is finally selected by some affirmative act of the operator (such as by clicking outside the window). The use of the scrolling mouse may therefore cause the operator to inadvertently change the selected option after the operator believes the selection has been finalized. An example of "drop down menu" choices used in the electronic bids is where the bidder must certify that it either "Has" or "Has Not" participated in a previous contract or subcontract subject to the equal opportunity clause. Before submission of the bid, bidders shall confirm that the option selected is the option intended in submission of the bid.

Bidders are further advised that the Department will not allow an adjustment, amendment, or change of any kind to an electronic bid after opening; even if the bidder claims an error or mistake was caused by a defect in the bidding software.

Permits:

A Right of Way permit will be required for all work to be completed within the City of Peoria right of way. A sample permit can be found in Appendix B, or at the City Development and Community Services Building located at: 9875 N. 85th Avenue, Peoria, AZ 85345. Permit applications forms and associated permit fees can also be found on the City of Peoria's website. This permit will be non-fee.

A permit(s) may be required for hauling materials over City of Peoria streets. See grading & drainage notes included within the project plans to determine if a permit is required. Permits may be obtained from the City of Peoria. In applying for a permit, the contractor may be required to submit a:

- Haul Plan addressing the following issues.
 - Preferred haul routes and alternative
 - A detailed plan for traffic control along the haul route
 - Method of dust control along the haul route
 - Number of trucks and hours of operation
 - Anticipated duration of the hauling activities
 - Method of cleaning up haul routes (may require street-legal sweeper)

Anticipated Developments:

A new development for Jiffy Lube was recently completed along the east side of 91st Avenue, north of the intersection. The contractor shall verify that the work was completed, as it may require a re-survey of that area.

ADOT is currently designing a project to widen Olive Avenue under I-10 (ADOT Project Number 101L MA 009 H6939 01 C). No construction schedule has been determined for this project. The ADOT project will connect with this project on the west end of Olive Avenue. If that project begins prior to completion of this project, the contractors shall coordinate with each other on the transition.

Salvaged Items:

Salvaged items shall be hauled by the contractor to the site as directed by the Engineer. The Contractor shall notify the City and coordinate the work a minimum of 10 working days prior to this activity. The City of Peoria contact is Ben Wilson (623) 773-7619 at the City of Peoria Development and Community Services Building.

The contractor shall deliver salvaged materials to the City Yard located at the Peoria Municipal Operations Center at 8850 N 79th Ave. Upon delivery, the contractor shall off-load and neatly stockpile/stack salvaged materials as directed by the Engineer. No measurement or direct payment will be made for this work, as it will be considered included in the cost of salvaging the materials.

Traffic Signals:

The contractor shall provide and install MYERS MEUG16-TS meter pedestals where shown on the Plans.

The electrical service provider for the service located at 91st Avenue & Olive Avenue (9108 W. Olive) is SRP. The contractor shall contact Sharon Benson with SRP Electric at (602) 236-0806, a minimum of thirty-days (30) prior to a need for service. The contractor shall coordinate the required service and installation requirements with SRP.

The contractor is responsible for installing the service conduit run from the SRP's originating point of service shown on the plans to the new meter pedestal servicing the traffic signals. SRP will be responsible for pulling service wire from their originating point of service to the new meter pedestal servicing the traffic signals.

Conduit crossing the paved roadways or concrete driveways shall be installed by directional boring, unless otherwise specified in the plans.

If existing irrigation and landscaping is disturbed, it shall be the contractor's responsibility to repair all disturbed improvements, in kind. The cost associated with this item shall be considered as included in contract items and will not be measured or paid separately.

Electrical and Material Submittals shall be submitted to the Engineer for review and approval prior to ordering or manufacturing of any equipment. The contractor shall anticipate and schedule for a two week review period by the City of Peoria and/or its designee which will approve, disapprove, or request modification of the submittal. The latter two will require re-submittal of the electrical and material submittals and a subsequent additional review period. This process shall be repeated until all submitted materials have been approved.

The contractor shall schedule a Pre-Signal Turn-on Meeting with representatives from the City of Peoria Engineering and Public works Departments one (1) day prior to signal turn-on to inspect the items listed below. This meeting shall be requested three (3) working days in advance of the meeting date. Signal turn-on will not be done on Fridays to allow monitoring of the signal for the first 24 hours of operation.

The Single Line Diagram for SRP service is shown on Sheet TS-04 of the traffic signal plans.

Testing of the controller shall be performed by the contractor, including a representative

from the traffic signal controller manufacturing company, and in the presence of the City of Peoria Traffic Signal Technician Staff at the construction site. The contractor shall provide control of traffic at the intersection with a uniformed, off-duty, police officer during testing of the controller and during turn-on of traffic signal when all work is completed.

Contractor Environmental Mitigation Measures:

- To prevent the introduction of invasive species, all earth-moving and hauling equipment shall be washed at the contractor's storage facility prior to entering the construction site.
- To prevent the spread of invasive species to uncontaminated areas, all earth-moving and hauling equipment shall be washed at a designated location prior to leaving the construction site.
- All disturbed soils that will not be landscaped or otherwise permanently stabilized by construction shall be seeded using species native to the project vicinity.
- If suspected hazardous materials are encountered during construction, work shall cease at that location and the City of Peoria Engineer shall be contacted to arrange for proper assessment, treatment, or disposal of those materials.
- The contractor shall submit the Arizona Pollutant Discharge Elimination System Notice of Intent and the Notice of Termination to the Arizona Department of Environmental Quality.
- If previously unidentified cultural resources are encountered during activity related to the construction of the project, the contractor shall stop work immediately at that location and shall take all reasonable steps to secure the preservation of those resources. The City of Peoria Engineer will immediately make arrangements for proper treatment of those resources.
- At least one sidewalk for north-south and east-west travel shall remain open during construction. The contractor shall post signs directing pedestrians through the project area.

Working Hours:

Work on this project shall be performed between the hours of eight o'clock (8:00) a.m. and four-thirty (4:30) p.m., unless otherwise approved in writing by the Engineer. Work at times other than those specified will be considered by the Engineer. Hours for hauling operations may be subject to approval by the Engineer, in accordance with local ordinances.

Should the contractor be permitted to work at times other than those specified above, the Engineer will determine what measures will be required to inform the affected public.

HOLIDAY PERIODS:

No contract work will be allowed on and during the following weekend holiday periods, unless otherwise approved by the Engineer.

HOLIDAY	START DAY & TIME (6:00 PM)	FINISH DATE & TIME (6:00 AM)
Christmas / New Years	December 22, 2009	January 4, 2010
Civil Rights Day	January 15, 2010	January 19, 2010
President's Day	February 12, 2010	February 16, 2010
Memorial Day	May 28, 2010	June 1, 2010
Independence Day	July 1, 2010	July 7, 2010
Labor Day	September 3, 2010	September 7, 2010
Thanksgiving	November 23, 2010	November 29, 2010
Christmas / New Years	December 21, 2010	January 3, 2011

Water Test:

Gutters and pavement shall be water tested in the presence of the Engineer to insure proper drainage prior to final approval. All labor, material, tools and equipment costs associated with water testing shall be incidental to PCCP, asphaltic concrete pavement

and curb and gutter items. Water testing shall include spraying down the entire roadway with a water truck and checking depths of remaining water after one hour.

In the event water is found ponded in the gutter or on the adjacent pavement to a depth greater than ¼ inch, the defects shall be corrected as specified in these Special Provisions or in a manner acceptable to the Engineer. Locations that do not meet these specifications will be corrected by removing and replacing 25 feet of pavement and/or curb and gutter on either side of the ponded area or as specified by the Engineer. The pavement width to be removed and replaced will be as determined by the Engineer.

No direct measurement or payment will be made for water testing or for correcting defects, the cost being considered as included in the price bid for contract items.

Temporary 6" AC curb shall be constructed in the west leg of the 91st Ave/Olive Ave intersection on both sides of Olive Avenue as shown in the plans. The curb shall be constructed after all other improvements have been constructed as directed by the Engineer. No measurement or direct payment will be made for constructing this curb as it shall be considered incidental to other contract items.

Temporary Pavement:

The contractor shall install temporary asphaltic concrete pavement immediately following backfill and compaction of trenches within traffic lanes. Temporary pavement shall conform to the requirements of Section 409 of the Standard Specifications. It shall be maintained in a safe and reasonably smooth condition until required backfill compaction is obtained and final pavement replacement is ordered by the Engineer.

A minimum thickness of 2 inches of asphaltic concrete pavement on 6 inches of compacted AB-2 shall be used. The surface of the temporary pavement shall be finished off flush with the adjacent pavement. Temporary pavement surfaces shall not vary more than $\frac{1}{4}$ inch from the lower edge of a 10-foot straightedge when the straightedge is placed parallel to the centerline of the trench.

Temporary 6" AC curb shall be constructed in the west leg of the 91st Ave/Olive Ave intersection on both sides of Olive Avenue as shown in the plans. The curb shall be constructed after all other improvements have been constructed as directed by the Engineer.

No direct measurement or payment will be made for furnishing, installing, removing, hauling and disposing of temporary pavement materials, the cost being considered as included in the price bid for contract items.

Electrical Inventory:

The contractor shall verify the condition of the existing electrical infrastructure including conduit, pull boxes, and inventory the condition of these items for structural and functional integrity. The inventory, including traffic control, will not be separately measured or paid. Traffic control plans shall be submitted to the Engineer for approval. The contractor shall allow a minimum of 14 days for the Engineer to review and approve the traffic control plans for the inventory. The contractor shall notify the Engineer in writing of the time and place of the inventory. The written notification shall be a minimum of two days prior to beginning the inventory. The Engineer may elect to accompany the contractor during the inventory.

The contractor shall prepare a list of the results of the inventory detailing needed repairs or modification, location of the damage and provide the list to the Engineer for review prior to any excavation. Any existing damage, required repairs or modifications not indicated by the contractor as a result of the inventory and subsequently brought to the attention of the Engineer shall be repaired by the contractor and compensated by the Department at the contractor's actual cost with no mark up. All required work to repair damage found during the inventory and listed by the contractor shall be completed prior to beginning any other work on the project.

The contractor shall Blue Stake all utilities prior to any construction activities. All marked utility locations and depths shall be verified by pot holing prior to the start of construction activities. The contractor shall provide the Engineer an annotated plan to indicate how utility

conflicts will be addressed. The contractor shall allow the Engineer ten days to review the annotated plan.

In the event the contractor believes a change of condition has been encountered, the contractor shall bring it to the attention of the Engineer in writing at the time encountered, providing the Department adequate time to review the request. If the Department determines that the contractor should have been able to identify the condition changes prior to proposing on this project (such as a review of the information and records available from the Department and As-Builts at the City Engineering Records Office, no further consideration will be given.

Protection of Commercial Signs and Equipment:

The contractor shall protect all commercial signage and equipment in the temporary construction easements and on private property. Any damage to commercial signage and equipment shall be repaired by the contractor to the satisfaction of the owner at no cost to the Department.

Quick Trip (QT) will be relocating their commercial business sign which is currently at Olive Avenue approximate Station 63+65 left. The sign will be in conflict with the proposed improvements. The Contractor will need to coordinate with the Engineer and QT for the relocation of this sign. The Contractor shall give at least a 30-day notice prior to do any work near the sign.

Landscape Coordination:

The landscaping in the right of way of this project is maintained by local businesses. The contractor shall contact the businesses in the project area, prior to start of work, to coordinate construction activities. The City of Peoria will use ACS-Conaid to assist with public involvement on this project. The contractor shall be required to coordinate with the City of Peoria and ACS-Conaid to arrange meetings and request contact information for the landscape representatives for all the businesses. Coordination shall be with the assistance of ACS-Conaid at 602-264-4611.

For meter removals, relocations and questions, contact John Martinez 623-773-7802 or Brian Seisinger 623-773-7866.

Watering Services:

Water provided through the existing irrigation water meters shall be used for planting, plant establishment, flushing, and testing of the irrigation lines. There will be no cost to the contractor for water used on the Landscape installation and establishment portions of the project. Water provided through the water meters shall not be used for office, equipment/construction yard, water settling trenches, watering in pre-emergent herbicides, rock mulch, granite mulch, or other construction related uses. No separate payment will be made for these water items, the cost being considered as included in the cost of the

designated contract items. The contractor shall be responsible for securing, installing and paying for a construction related water source that will be used for items identified within this paragraph that require water, the cost being considered included in the cost of contract items.

Tree and Shrub Removals:

Prior to the removal of any trees or shrubs, the contractor shall review and verify each plant removal with the Engineer, prior to beginning. Trees and shrubs outside the right-of-way shall not be removed unless otherwise directed by the Engineer. Plants shall be completely removed, including major roots and stumps a minimum of three feet below finished subgrade. Plants, stumps and roots removed outside the pavement, curb, gutter and sidewalk and not in conflict with the proposed work, shall be removed a minimum of one foot below finished subgrade. Cavities resulting from the removal of stumps, roots or other materials, except in areas to be excavated shall be backfilled and compacted in accordance with the requirements of Subsection 201-3.01 of the Standard Specifications.

The contractor shall remove trees and shrubs and dispose of them off the project.

Payment for this work shall be included in Item 2020001 – REMOVAL OF STRUCTURES AND OBSTRUCTIONS.

Pipe Construction:

No measurement or direct payment will be made for installation or removal of pipe plugs, timber caps or collars. The cost shall be considered included in pipe construction. No substitutions will be allowed for the pipe materials shown in the project plans.

No measurement or direct payment will be made for constructing pipe collars and connecting new storm drain pipes to existing reinforced concrete box culver (RCBC) or existing storm drain pipes. The connections shall be made as per the details provided in the plans. The cost shall be considered included in pipe construction.

(101ABRV, 10/08/08)

SECTION 101 DEFINITIONS AND TERMS:

101.01 Abbreviations: of the Standard Specifications is modified to add:

- ARPA Arizona Rock Products Association
- IFI International Fasteners Institute
- ISO International Organization for Standardization

- NICET National Institute for Certification in Engineering Technologies
- NEC National Electrical Code
- NRMCA National Ready Mixed Concrete Association
- NSPS National Society of Professional Surveyors
- PPI Plastic Pipe Institute

(102NOBID, 07/31/90)

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS:

102.03 Suspension from Bidding: of the Standard Specifications is modified to add:

The signature of the bid proposal by a bidder constitutes the bidder's certification, under penalty of perjury under the laws of the United States, that the bidder, or any person associated therewith in the capacity of owner, partner, director, officer, principal investor, project director, manager, auditor, or any position involving the administration of federal funds, has not been, or is not currently, under suspension, debarment, voluntary exclusion or been determined ineligible by any federal agency within the past three years. Signature of the bid proposal also certifies, under penalty of perjury under the laws of the United States, that the bidder does not have a proposed debarment pending. In addition, signature of the bid proposal certifies that the bidder has not been indicted, convicted, or had a civil judgment rendered against (it) by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

Any exceptions to the above paragraph shall be noted and fully described on a separate sheet and attached to the bid proposal.

(102LOBY, 10/01/90)

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS:

102.09 Non-Collusion Certification: of the Standard Specifications is modified to add:

(A) Lobbying:

The bidder certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federally appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract grant, loan, or cooperative agreement.
- (2) If any funds other than Federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions. Copies of Form-LLL, "Disclosure Form to Report Lobbying", are available at ADOT Contracts and Specifications Services, 1651 W. Jackson, Room 121F, Phoenix, AZ 85007.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The bidder also agrees, by submitting his or her bid or proposal, that he or she shall require that the language of this certification be included in all subcontracts and lower tier subcontracts which exceed \$100,000 and that all such subcontractors and lower tier subcontractors shall certify and disclose accordingly.

The Department will keep the prime contractors' certifications on file as part of their original bid proposals. Each prime contractor shall keep individual certifications from all subcontractors and lower tier subcontractors on file. Certifications shall be retained for three years following completion and acceptance of any given project.

Disclosure forms for the prime contractor shall be submitted to the Engineer at the pre-construction conference. Disclosure forms for subcontractors and lower tier subcontractors shall be submitted to the Engineer by the prime contractor along with the submittal of each subcontract or lower tier subcontract, as required under Subsection

108.01, when said subcontracts exceed \$100,000.00. During the performance of the contract the prime contractor and any affected subcontractors shall file revised disclosure forms at the end of each calendar year quarter in which events occur that materially affect the accuracy of any previously filed disclosure form. Disclosure forms will be submitted by the Engineer to the Federal Highway Administration for further processing.

(103AWARD, 07/31/90)

SECTION 103 - AWARD AND EXECUTION OF CONTRACT:

103.04 **Award of Contract:** the first paragraph of the Standard Specifications is modified to add:

When a contract is funded, either wholly or in part, by federal funds, an award of contract may be made contingent upon the successful bidder obtaining an appropriate license from the State Registrar of Contractors, in accordance with Arizona Revised Statutes 32-1101 through 32-1170.03. The license must be obtained within 60 calendar days following opening of bid proposals. No adjustment in proposed bid prices or damages for delay will be allowed as a result of any delay caused by the lack of an appropriate license.

Failure to acquire the necessary licensing within the specified period of time shall result in either award to the next lowest responsible bidder, or re-advertisement of the contract, as may be in the best interests of the Department.

Licensing information is available from:

Registrar of Contractors
800 W. Washington
6th Floor
Phoenix, AZ 85007
Phone: (602) 542-1502

SECTION 104 SCOPE OF WORK:

104.04 **Maintenance of Traffic:** of the Standard Specifications is modified to add:

(D) Traffic Through Construction:

During Construction Hours:

Unless otherwise approved by the Engineer, Olive Avenue shall have two lanes eastbound and westbound open when the contractor is not working in the street.

The contractors bid shall be based upon maintaining a minimum of two lanes eastbound and one lane westbound for the AM peak hours of 6:30 AM to 9:00 AM; and a minimum of two lanes for westbound and one lane eastbound in the PM peak hours of 3:30 PM to 6:00 PM. For off-peak hours, one lane in each direction shall be maintained. One lane in each direction shall be maintained at all times on 91st Avenue. Left turns shall be maintained at all times. If the contractor anticipates using additional lane closures or restrictions, it shall bid that work to be done at night, which may require construction sequencing to mitigate traffic restrictions.

The contractor shall monitor back-ups on the Loop 101 and make adjustments to the traffic control as necessary such as signal control by officers or timing adjustments. Back-ups onto the Loop 101 are to be avoided and treated as a high priority to mitigate if and when they occur.

During Non-Construction Hours:

Unless approved by the Engineer, Olive Avenue shall have two lanes eastbound and westbound open when the contractor is not working in the street.

(E) Traffic Control:

A separate Traffic Control Plan (TCP) shall be provided by the contractor for the intersection. The purpose of the TCP is to: 1) enable the City to monitor street restrictions and spot check barricading and safety precautions and their impacts on street operations and 2) enables the City to provide advance notice to those who may be adversely affected by the temporary restrictions.

The contractor must fill out the TCP Application form which can be found at www.peoriaaz.com, Engineering Department, Development, Development Engineering Download Documents. A fully executed TCP Submittal Form shall accompany each TCP submitted to the Engineering Department for review. The TCP must be site/work specific and shall be submitted 72 hours in advance. Uniformed officer(s) are required.

The contractor shall provide traffic control during construction per the MUTCD and the City of Phoenix Traffic Barricade Manual. A City of Peoria off-duty police officer shall be provided by the contractor for the intersection anytime the construction occurs 300' from the intersection.

The contractor and/or subcontractor shall provide and maintain all necessary temporary traffic control devices as indicted on the approved TCP. The City of Peoria will not allow devices that, in their judgment fall into the "unacceptable" category. Should the City determine that the traffic control devices fall into the "unacceptable" category the contractor shall be informed by the City and shall take immediate steps to bring the traffic control devices into compliance with the approved TCP. Failure of the contractor to take such action will result in the Engineer issuing a Stop Work Order. In that event, in addition to the

Department's actions, the contractor may subject to penalty per the City of Peoria Code Section 23-8, Ordinance #01-181 Dangerous Construction Practices.

The Traffic control devices shall be set in place in accordance with the approved traffic control plan and maintained by a traffic control technician certified by a recognized organization such as ATTSA or IMSA or other.

City of Peoria uniformed off-duty law enforcement officers shall be provided when construction activities occur within 300 feet of a signalized intersection in accordance with the City of Peoria Engineering Development Guidelines. In the event that City of Peoria officers are not available, alternative arrangements shall be made by the contractor to provide a replacement off-duty officer, as approved by the Engineer.

Off-duty uniformed police officers are required at all major intersections when restrictions are present and may be required at additional locations and stages of the traffic control as requested by the Engineer.

Requests for City of Peoria Police Officers must be received at least seven (7) working days prior to when they will be needed. All work associated with providing and payment for Off-Duty Police Officers shall be in accordance with the City of Peoria Police Department Off-Duty Officers Guidelines. Contact Theresa Skeivik at (623-773-7062) to obtain copies of these requirements.

Requests for officers shall be made by email (offduty@peoriaaz.gov). An Off-Duty Request Form will then be provided to the contractor. This form should be completed and submitted back to the City.

The contractor shall provide complete and accurate 24 hour emergency contact information to the City.

The contractor is responsible for providing a biweekly updated construction schedule for the City of Peoria's use.

(F) Temporary Sidewalks:

The contractor shall maintain at least one sidewalk for pedestrian use along Olive Avenue and 91st Avenue during construction. If the contractor cannot maintain at least one sidewalk along each street, it shall install temporary asphaltic concrete sidewalks.

Temporary sidewalks shall conform to the requirements of Section 409 of the Standard Specifications. A minimum thickness of 2 inches of asphaltic concrete on prepared subgrade shall be used. Temporary sidewalk surfaces shall not vary more than ¼ inch from the lower edge of a 10-foot straightedge when the straightedge is placed parallel to the centerline of the sidewalk. Temporary sidewalk surfaces shall not have a cross-slope exceeding 0.15 feet per foot.

When temporary sidewalks are no longer needed, the contractor shall remove and dispose of the sidewalk material.

No direct measurement or payment will be made for furnishing, installing, removing, hauling and disposing of temporary sidewalk materials, the cost being considered as included in the price bid for contract items.

(104APA, 02/26/99)

SECTION 104 - SCOPE OF WORK:

104.04 Maintenance of traffic: of the Standard Specifications is modified to add:

In order to eliminate the possibility of causing or exacerbating air quality violations resulting from construction activities, any traffic control plans which include temporary traffic detours involving local adjacent streets or alternate routes must be approved by the Engineer.

104.08 Prevention to Air and Noise Pollution: of the Standard Specifications is modified to add:

In the event that the Governor declares an air pollution emergency, pursuant to ARS § 49-465.B., which restricts work schedules for all employees of the state and its political subdivisions, the Engineer will direct the contractor suspend all work activities until further notice. The contractor shall discontinue all current work activities as soon as possible, but not later than four hours after notification by the Engineer. The contractor will be compensated for labor costs incurred through the end of the work shift in which the notification occurs. No payment adjustments will be made for equipment or overhead costs resulting from the suspension of work. An extension of the time allowable under the contract will be granted in accordance with Subsection 108.08 of these specifications. In the event that any local air quality authority declares an air pollution advisory, the cooperation of the contractor is requested in complying with the actions recommended by the local authority to the maximum extent possible.

(104DUST, 11/01/95)

SECTION 104 - SCOPE OF WORK:

104.08 Prevention of Air and Noise Pollution: of the Standard Specifications is modified to add:

For work performed within Maricopa County, the contractor will be required to prepare a comprehensive fugitive dust control plan, in accordance with the guidelines established in Rule 310 of Maricopa County Regulation III, Control of Air Contaminants. The contractor

may contact Maricopa County, Division of Air Pollution Control, to purchase a copy of the guidelines. The contractor shall complete and submit the control plan with the permit application, and obtain approval prior to construction or any other activities which may produce dust pollutants.

Some of the measures which the contractor may use to control or minimize fugitive dust include: increased use of water or chemical dust suppressants, cease work temporarily during high winds, reducing vehicle speeds and number of trips, maintaining freeboard of three inches or more in hauling, and covering or stabilizing stockpiles. The contractor shall be required to cover haul trucks with tarps or other suitable enclosures.

No separate payment will be made for preparation and implementation of the fugitive dust control plan, the costs being considered as included in the price of contract items.

(104MTBRN, 06/04/96)

SECTION 104 - SCOPE OF WORK:

104.08 Prevention of Air and Noise Pollution: the first paragraph of the Standard Specifications is modified to add:

Burning of trash, debris, plant material, wood, or any other waste materials will not be allowed. The contractor shall dispose of such materials in accordance with the requirements of Subsection 107.11.

(104SWDEQ, 3/02/09)

SECTION 104 - SCOPE OF WORK:

104.09 Prevention of Landscape Defacement; Protection of Streams, Lakes and Reservoirs: of the Standard Specifications is revised to read:

(A) General:

The contractor shall give attention to the effect of the contractor's operations upon the landscape, and shall take care to maintain natural surroundings undamaged.

The contractor shall be responsible to implement the requirements of the Arizona Pollutant Discharge Elimination System (AZPDES) for erosion and sediment control as specified in the "General Permit For Discharge From Construction Activities To the Waters Of The United States" as issued by the Arizona Department of Environmental Quality (ADEQ). That document is hereinafter referred to as the AZPDES general permit.

Useful information related to stormwater controls and erosion and sediment control

measures is presented in the "Fact Sheet For The Issuance Of An AZPDES Construction General Permit," available from ADEQ, and ADOT's "Erosion and Pollution Control Manual," available from Engineering Records, 1655 West Jackson, Room 112F, Phoenix, AZ 85007; Phone (602) 712-7498.

The work shall include providing, installing, maintaining, removing and disposing of erosion and sediment control measures such as gravel filter berms, dikes, catch basin inlet protection, end-of-pipe filtering devices, silt fences, dams, sediment basins, earth berms, netting, geotextile fabrics, slope drains, seeding, stream stabilization, and other erosion and sediment control devices or methods. Erosion control, as hereinafter referenced, shall be deemed to include control of erosion and the mitigation of any resulting sediment. Erosion control measures may be temporary or permanent. The contractor shall also be responsible for the preparation and processing of all documents required in the AZPDES general permit.

The plans will include preliminary erosion control measures and additional information to be included in the project's Storm Water Pollution Prevention Plan (SWPPP), as specified in Subsection 104.09(B). The contractor, with input from the Engineer, shall finalize the SWPPP, file a Notice of Intent (NOI), implement the SWPPP, and file a Notice of Termination (NOT), all as described herein.

Except for the NOI, all signatures required of the contractor by the AZPDES general permit, including those required for the NOT, SWPPP, and inspection reports, shall be provided by a duly authorized representative of the contractor, as defined in Part VIII.J.2 of said permit. Signature of the NOI shall be by a responsible corporate officer, as defined in Part VIII.J.1 of the AZPDES general permit.

No clearing, grubbing, earthwork, or other work elements affected by the erosion control requirements in the SWPPP, shall be started until the SWPPP has been approved, the NOI completed and filed in accordance with Subsection 104.09(C), and the SWPPP implemented.

Submission of the contractor's NOI shall certify that the contractor and its subcontractors have read and will comply with all provisions of the AZPDES general permit.

(B) Stormwater Pollution Prevention Plan (SWPPP):

The plans will include descriptions of temporary and permanent erosion control measures; a project description; percent impervious area, including paved areas, rooftops, and other similar surfaces, for both pre-construction and post-construction conditions; inspection schedule; and site-specific diagrams indicating proposed locations where erosion and sediment control devices or pollution control measures may be required during successive construction stages. The plans may also include an initial schedule detailing the proposed sequence of construction and related erosion control measures.

The contractor shall review the preliminary information, including the erosion control features and phasing, evaluate all SWPPP requirements for adequacy in addressing pollution prevention during construction, and prepare a draft SWPPP for review by the Engineer.

The contractor shall designate an erosion control coordinator, in accordance with Subsection 104.09(D), to be responsible for finalization and implementation of the SWPPP, as well as all other applicable requirements of the AZPDES general permit. The contractor's erosion control coordinator shall be approved as specified in Subsection 104.09(D) before the draft SWPPP can be finalized and submitted to the Engineer. After approval, the contractor shall designate the erosion control coordinator as an authorized representative of the contractor in accordance with Part VIII.J.2 of the AZPDES General Permit.

The draft SWPPP shall include all information required in the AZPDES general permit, including a site map; identification of receiving waters and wetlands impacted by the project; a list of potential pollutant sources; inspection schedule; any onsite or off-site material storage sites; additional or modified stormwater, erosion, and sediment controls; procedures for maintaining temporary and permanent erosion control measures; a list of the contractor's "good housekeeping practices"; and other permit requirements stipulated in the AZPDES program as well as other applicable state or local programs. The contractor shall coordinate with the Engineer on all such additional information.

The draft SWPPP shall also identify any potential for discharge into a municipal separate storm sewer system, including the name of the owner/operator of the system.

Unless otherwise approved by the Engineer, the contractor shall not expose a surface area of greater than 750,000 square feet to erosion through clearing and grubbing, or excavation and filling operations within the project limits until temporary or permanent erosion control devices for that portion of the project have been installed and accepted by the Engineer.

As an example, installation of temporary silt fence concurrently with construction of an embankment area, along the toe of slope, may be appropriate to meet the above requirement until permanent erosion control measures are constructed.

The contractor shall indicate each 750,000 square-foot sub-area in the draft SWPPP, along with proposed erosion control measures for each sub-area. The draft SWPPP shall also include the sequence of construction for each sub-area, and installation of the required temporary or permanent erosion control measures.

The contractor shall give installation of permanent erosion control measures priority over reliance on temporary measures. Permanent erosion control measures and drainage structures shall be installed as soon as possible in the construction sequencing of the project, preferably concurrent with construction of the related sub-area or drainage device. However, except as specified in Part IV, Section B.2 of the AZPDES general permit and approved by the Engineer, erosion control measures shall be installed no later than 14

calendar days after construction activity has temporarily or permanently ceased for the affected sub-area.

Temporary or permanent sedimentation basins may be required for reducing or eliminating sediment from stormwater runoff. When required, such basins shall be completed before any clearing and grubbing of the site is initiated. The contractor shall evaluate the need and attainability of installing sediment basins as described in the AZPDES permit and, if approved by the Engineer, include the basins into the SWPPP as appropriate. When sedimentation basins are determined to be necessary and feasible, such work will be paid in accordance with Subsection 109.04(D). The plans may also include sediment basins as part of the preliminary information. No additional payment will be made for such basins, the cost being considered as included in contract items.

The draft SWPPP shall also identify and address erosion control at on-site fueling operations, waste piles, material storage sites, and off-site dedicated asphalt and concrete plants, contractor-use areas, storage areas, and support activity locations which are used solely for the project and are covered by the AZPDES general permit. The draft SWPPP shall also accommodate all requirements for the contractor's "good housekeeping" procedures specified in Subsection 104.09(E). In addition, the SWPPP shall specifically identify the erosion control measures proposed by the contractor during any vegetation removal and salvaging phases of the project (such as during timber harvesting or native plant salvaging).

The draft SWPPP shall specify the mechanism whereby revisions may be proposed by the contractor or the Engineer throughout the project and incorporated into the plan, including review and approval procedure. The Engineer and contractor shall jointly approve and sign each revision to the SWPPP before implementation. Any subsequent submittals required by the contractor to revise or update the SWPPP will require at least 48 hours for review.

Contractors and subcontractors responsible for implementing all or portions of the SWPPP shall be listed in the draft SWPPP, along with the measures for which they are responsible.

The contractor shall submit two copies of the draft SWPPP, including all information specified herein, to the Engineer at the preconstruction conference if possible, but not later than 14 calendar days from the Department's approval of the contractor's Erosion Control Coordinator.

The Engineer will provide the contractor with the following forms at the preconstruction conference:

- Maintenance, inspection, and site-monitoring report forms;
- Other record keeping forms and procedures, as needed; and
- Notice of Intent (NOI) and Notice of Termination (NOT) forms.

Notice of Intent and Notice of Termination blank forms are also available on the internet at <http://azdeq.gov/function/forms/appswater.html#cgp>.

Within 10 calendar days from the SWPPP submittal, the Engineer and contractor will jointly review the contractor's draft SWPPP, and include any additional revisions directed by the Engineer. The finalized SWPPP shall meet the terms and conditions of the AZDPES general permit, and be compatible with construction sequencing and maintenance of traffic plans.

When agreement has been reached, the Engineer and contractor's authorized representative will sign the finalized SWPPP. The Engineer's signature will constitute approval of the SWPPP. Upon approval of the SWPPP, the contractor shall file a Notice of Intent (NOI) as specified in Subsection 104.09(C).

After the time period specified in Subsection 104.09(C), the contractor shall implement the requirements of the SWPPP. No clearing, grubbing, earthwork, or other work elements affected by the erosion control requirements in the SWPPP, shall be started until the SWPPP has been approved, the NOIs completed and filed in accordance with Subsection 104.09(C), and the SWPPP implemented.

The contractor shall maintain all related erosion control elements in proper working order throughout the project. Work under this section also includes inspections, record-keeping, and implementation of "good housekeeping" practices as described in Subsection 104.09(E).

The approved SWPPP shall be updated whenever a change in design, construction method, operation, maintenance procedure, or other activity may cause a significant effect on the discharge of pollutants to surface waters, or when a change is proposed to the personnel responsible for implementing any portion of the SWPPP. The SWPPP shall also be amended if inspections indicate that the SWPPP is ineffective in eliminating or significantly reducing pollutants in the discharges from the construction site. All necessary modifications to the SWPPP shall be made within seven calendar days following the inspection that revealed the deficiency.

ADEQ may notify the contractor at any time that the SWPPP does not comply with the permit requirements. The notification will identify the provisions of the permit that are not being met and parts of the SWPPP that require modification. Within 15 business days of receipt of the notification from ADEQ the contractor shall make the required changes to the SWPPP and submit a written certification to ADEQ that the requested changes have been made.

The contractor's erosion control coordinator shall maintain the SWPPP along with completed inspection forms and other AZPDES records in a three-ring binder. The erosion control coordinator shall maintain a current copy of the SWPPP, including all associated records and forms, at the job site from the time construction begins until completion of the project. The SWPPP shall be available for public inspection and for use by the Engineer. The erosion control coordinator shall provide copies of any or all of such documents to the

Engineer upon request. When requested, such copies shall be provided within three working days of the request.

The SWPPP (including inspection forms) and all data used to complete the NOI and NOT shall be provided to the Department at the completion of the project. The contractor shall retain its own records for a period of at least three years from the filing of the contractor's NOT.

No condition of the AZPDES general permit or the SWPPP shall release the contractor from any responsibilities or requirements under other environmental statutes or regulations.

(C) Notice of Intent (NOI):

After the project Storm Water Pollution Prevention Plan (SWPPP) has been approved, the contractor will complete a Notice-of-Intent (NOI) form for the project. The NOI includes a certification statement which must be signed and dated by a responsible corporate officer of the contractor, as defined in Part VIII.J.1 of the AZPDES General Permit, and include the name and title of that officer.

The NOIs shall be submitted to the Arizona Department of Environmental Quality (ADEQ) at the following address:

Arizona Department of Environmental Quality
Surface Water Section/Permits Unit/Stormwater NOIs (5415A-1)
1110 W. Washington Street
Phoenix, Arizona 85007
or fax to (602) 771-4528

The submittals shall be made to allow for the seven calendar-day review period required by ADEQ before the anticipated start of construction. The contractor shall also allow sufficient time, depending on the manner of submittal, for the NOIs to be received by ADEQ before commencement of the seven-day review period. An Authorization Certificate will be issued by ADEQ and, unless otherwise notified, the construction activities that are covered by the terms and conditions of the AZPDES permit may begin after the submittal period plus the seven calendar-day review period, or upon receipt of the Authorization Certificate, whichever occurs first. The contractor shall provide a copy of the authorization certificate to the Engineer, and keep a copy with the NOI.

The NOI may also be submitted electronically, through ADEQ's Smart NOI website at <http://az.gov/webapp/noi/main.do>. Regardless of the method of submittal, the contractor shall provide a copy to the Engineer.

At any time after authorization, ADEQ may determine that the contractor's stormwater discharges may cause or contribute to non-attainment of any applicable water quality standards. If ADEQ makes that determination, the contractor will be notified in writing. The contractor shall develop a supplemental erosion control action plan describing SWPPP

modifications to address the identified water quality concerns. If the written notice from ADEQ requires a response, failure to respond in a timely manner constitutes a permit violation. All responses shall be in accordance with the AZPDES general permit.

If there is a potential to discharge into a municipal separate storm sewer system (MS4), a copy of the Authorization Certificate shall be submitted to the owner/operator of the system. Also, contractor's operating under an approved local sediment and erosion plan, grading plan, or stormwater management plan shall submit a copy of the Authorization Certificate to the local authority upon their request.

The contractor shall post its NOI and the information required in the AZPDES general permit on the construction-site bulletin board throughout the duration of the project. A copy of the AZPDES general permit shall also be kept at the construction site at all times.

(D) Contractor's Erosion and Pollution Control Coordinator:

(1) General Requirements:

The contractor shall designate a competent person as the contractor's erosion and pollution control coordinator (referred to elsewhere herein as erosion control coordinator) responsible for finalizing the draft SWPPP from the preliminary information included with the plans. The erosion control coordinator shall also be responsible for implementing, monitoring, and revising the approved SWPPP throughout the project, for making the required inspections, and for implementing any other permit requirements stipulated in the AZPDES general permit. The person shall be knowledgeable in the principles and practice of erosion and sediment controls, and possess the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the contractor's erosion control measures used to control the quality of the stormwater discharges.

Stormwater runoff from construction activities may contaminate adjacent bodies of water, or otherwise exceed water quality standards, and result in possible major civil and/or criminal penalties. Therefore the Engineer will closely consider the qualifications of the contractor's erosion control coordinator. The contractor shall not assume that the person proposed as erosion control coordinator will be acceptable to the Department merely because the experience and education requirements listed herein have been met.

The contractor bears all risks and liabilities for the failure of its erosion control coordinator to properly implement the requirements of the AZPDES general permit.

The person shall be capable of identifying existing and predictable effects of the contractor's operations, and shall have complete authority to direct the contractor's personnel and equipment to implement the requirements described herein, including prompt placement of corrective measures to minimize or eliminate pollution and damage to downstream watercourses. The erosion control coordinator shall also be familiar with procedures and practices identified in the SWPPP, and shall ensure that emergency procedures are up to date and available at project sites.

The erosion control coordinator shall at all times be aware of the contractor's work activities, schedule, and effect of the work on the environment, and shall, at any time, be accessible to direct the contractor's personnel to replace or repair erosion control measures as necessary. Should the erosion control coordinator not be present at the project site on a full-time basis, the contractor shall establish procedures to ensure that its erosion control coordinator is promptly notified of any damage or displacement of the required erosion control measures, whether from construction, vandalism, or other causes. In addition, the contractor shall provide the Engineer with a phone number through which the erosion control coordinator can be contacted at any time, 24 hours a day, seven days a week, including holidays. The erosion control coordinator must be present at the jobsite within 24 hours of such call being placed.

The erosion control coordinator shall also be aware of and comply with all requirements of the AZPDES general permit to address discharges at the site associated with the contractor's activities other than construction, including contractor staging areas, and other potential pollutant and off-site material storage and borrow areas.

Failure of the contractor to properly maintain the erosion control measures required in the approved SWPPP will be cause for the Engineer to reject the erosion control coordinator and issue a stop work order, as specified in Subsection 104.09(G).

(2) Certification Requirements:

The proposed erosion control coordinator shall have successfully completed the two-day (16 hour) "Erosion Control Coordinator" training class provided by the Associated General Contractors (Arizona Chapter), phone (602) 252-3926. In addition, the proposed erosion control coordinator shall have documented experience equal to a minimum of one year from either of the following two categories:

- (a) Experience in the development and implementation of Stormwater Pollution Prevention Plans (SWPPP's), as specified in the AZPDES general permit referenced herein, or the National Pollutant Discharge Elimination System (NPDES) for highway construction projects. The proposed erosion control coordinator's experience shall demonstrate full-time responsibility for directly supervising construction personnel in the installation, monitoring, and maintenance of erosion control items.
- (b) Experience in re-vegetation or restoration of disturbed areas in environments similar to those on the project. Experience in temporary or permanent stabilization of disturbed areas will also be considered. The proposed erosion control coordinator's experience shall demonstrate full-time responsibility for directly supervising personnel in temporary or permanent re-vegetation or restoration of disturbed areas.

The contractor's documentation shall provide details indicating the types of relevant experience, and shall provide the number of months of each type of experience to be considered for approval. Documentation shall also indicate that the proposed erosion control coordinator has completed the "Erosion Control Coordinator" training class prior to consideration for approval.

(3) Acceptance:

The contractor shall submit documentation indicating the qualifications of the proposed erosion control coordinator to the Engineer for approval within seven calendar days of the notice of award of the contract. The Engineer will review the proposed candidate's information within seven calendar days. The contractor may begin development of the draft SWPPP from the preliminary information included with the plans prior to approval of the erosion control coordinator. However no clearing, grubbing, earthwork, or other work elements that, in the opinion of the Engineer, may be subject to the requirements of the AZPDES general permit shall be started until the erosion control coordinator has been approved, the SWPPP finalized and implemented, and the NOI completed and filed, all as specified herein.

(E) "Good Housekeeping" Practices and Requirements:

The SWPPP shall also specify the contractor's "good housekeeping" practices and requirements, including vehicle wash-down areas, onsite and off-site tracking control, protection of equipment storage and maintenance areas, methods to minimize generation of dust, and sweeping of highways and roadways related to hauling activities. The contractor shall show each planned location of service and refueling areas on the SWPPP's site map. Changes to the contractor's "good housekeeping" practices that are related to construction phasing shall also be shown on the SWPPP.

The contractor shall take aggressive actions, considering all conditions, to prevent pollution of streams, lakes, and reservoirs with fuels, oil, bitumens, calcium chloride, fresh Portland cement, fresh Portland cement concrete, raw sewage, muddy water, chemicals or other harmful materials. None of these materials shall be discharged into any channels leading to streams, lakes or reservoirs. The SWPPP shall include the implementation of spill prevention and material management controls and practices to prevent the release of pollutants into stormwater. The SWPPP shall also provide storage procedures for chemicals and construction materials; disposal procedures; cleanup procedures; the contractor's plans for handling such pollutants; and other pollution prevention measures as required.

Machinery service and refueling areas shall be located away from streambeds or washes, and in a manner which prevents discharges into streams or washes.

Waste materials from blasting, including explosives containers, shall be disposed of off-site in accordance with applicable federal regulations. Other waste materials, such as used cans, oils, machine and equipment parts, paint, hazardous materials, plastic and rubber

parts, discarded metals, and building materials, shall be removed from the construction site and disposed of according to applicable state and federal regulations.

Where the contractor's working area encroaches on a running or intermittent stream, barriers shall be constructed and maintained between the working areas and the stream bed adequate to prevent the discharge of any contaminants. The SWPPP shall identify the location of streams that may be affected and the specific types of barriers proposed for protecting these resources.

Unless otherwise approved in writing by the Engineer, fording of running streams with construction equipment will not be permitted; therefore, temporary bridges or other structures shall be used whenever an appreciable number of crossings is necessary.

Temporary bridges or other structures proposed by the contractor shall be designed to accommodate the ten-year storm event if to remain in place for up to a one-year period. If a structure is planned to remain in place for longer than one year, the hydraulic conveyance may be subject to more stringent requirements. The contractor shall be responsible for all permits, authorizations, and environmental clearances that may be necessary to approve the use of such structures. The contractor shall submit the design and all required documentation to the Engineer for approval. The contractor is advised that the review and approval process for such structures could be lengthy. Unless otherwise provided for in the contract, the contractor shall be responsible for all costs associated with the design and construction of such structures. Also, no extension of contract time will be allowed for any review and approval periods, or for the time required to construct temporary bridges proposed by the contractor.

Mechanical equipment shall not be operated in running streams.

Material which is to be stockpiled or disposed of off-site shall be in accordance with Subsection 107.11.

Streams, lakes and reservoirs shall be cleared of all falsework, piling, debris or other obstructions resulting from the contractor's activities, inadvertently placed thereby or resulting from construction operations, within 24 hours from the time the obstruction was observed.

Spill prevention, containment and counter-measures shall be included in the SWPPP if the volume of project-site fuel in a single container exceeds 660 gallons, or if the total fuel storage volume at any one site exceeds 1,320 gallons.

In the event of a spill of a hazardous material, the contractor shall follow the provisions of Subsection 107.07. In addition, the erosion control coordinator shall modify the SWPPP as necessary within 14 calendar days of the discharge. The SWPPP shall be modified to include a description of the release, the circumstances leading to the release, and the date of the release.

The contractor shall assist in any efforts to clean up hazardous material spills, as directed by the Engineer or other authorities. Soil contaminated from spills shall be disposed of according to applicable state and federal regulations.

(F) Inspections:

(1) General:

The Engineer and the erosion control coordinator shall inspect the project at least every 14 calendar days, and also within 24 hours after any storm event of 0.50 inches or more. The inspections shall include disturbed areas that have been temporarily stabilized, areas used for storage of materials, locations where vehicles enter or exit the site, and all of the erosion and sediment controls included in the SWPPP. The contractor shall monitor rainfall on the site with a commercially manufactured rain gauge accurate to within 0.10 inches of rain. Rainfall records shall be submitted to the Engineer on a weekly basis.

For each inspection, the contractor's erosion control coordinator shall complete and sign a Compliance Evaluation Report as described in the permit. Copies of the completed reports shall be retained on-site in the SWPPP file throughout the construction period. The erosion control coordinator shall also provide a copy of the report to the Engineer following each inspection.

(2) Adjustments:

When deficiencies are noted during scheduled inspections, the contractor shall take immediate steps to make the required corrections as soon as practical. Deficiencies shall be fully corrected, to the satisfaction of the Engineer, within four calendar days or by the next anticipated storm event, whichever is sooner. Deficiencies noted between designated inspections shall be corrected within the time period directed by the Engineer, but not later than four calendar days after observation.

Direct inflows of sediment into a watercourse shall be corrected by the end of the same day or work shift in which the inflow was observed.

In accordance with Subsection 104.09(G), failure to implement adjustments within the specified time periods may be cause for the Engineer to reject the contractor's erosion control coordinator and issue a stop work order for the affected portions of the project.

(G) Non-Compliance:

The Engineer may reject the contractor's erosion control coordinator if, in the opinion of the Engineer, the conditions of the AZPDES general permit or the approved SWPPP are not being fulfilled. Rejection of the contractor's erosion control coordinator shall be for failure to complete any of the following:

- (1) Should the Engineer determine that the SWPPP is not being properly implemented, the contractor will be notified in writing of such deficiencies. The contractor's erosion control coordinator shall fully implement, to the satisfaction of the Engineer, the requirements of the approved SWPPP within three working days.
- (2) Should any corrective measures required in Subsection 104.09(F)(2) not be completed within the time periods specified therein, the Engineer will notify the contractor in writing. The contractor's erosion control coordinator shall complete all required corrective measures within two calendar days of such notification, except that direct inflows of sediment into a watercourse shall be corrected within 24 hours.
- (3) Should the Engineer determine that routine maintenance of the project's erosion control measures is not being adequately performed, the contractor will be notified in writing. Within three working days, the contractor's erosion control coordinator shall demonstrate, to the satisfaction of the Engineer, that such steps have been taken to correct the problem.

In the event of the erosion control coordinator's failure to comply with any of the above requirements, the Engineer will direct the contractor to stop all affected work and propose a new erosion control coordinator as soon as possible. However, all erosion and pollution control items specified in the SWPPP shall be maintained at all times. No additional work on construction items affected by the SWPPP will be allowed until a new erosion control coordinator has been approved by the Engineer. The contractor will not be allowed compensation or an extension of contract time for any delays to the work because of the failure of the contractor's erosion control coordinator to properly fulfill the requirements of the approved SWPPP.

(H) Record of Major Construction And Erosion Control Measures:

In addition to the compliance evaluation report, the contractor shall keep records of the major construction activities, including the erosion control measures associated with these activities. In particular, the contractor shall keep a record of the following activities:

- The dates when major grading activities (including clearing and grubbing, excavation and embankment construction) occur in a particular area or portion of the site.
- The dates when construction activities cease in an area, temporarily or permanently.
- The dates when an area is stabilized, temporarily or permanently.

Such information shall be noted within two working days of the occurrence of any of the listed activities, and a copy of the report shall be included in the SWPPP. The contractor shall also provide one copy of such records, and any subsequent up-dated information, to the Engineer within three working days of completion or amendment of the report.

(I) Notice of Termination (NOT):

Upon final acceptance by the Engineer in accordance with Subsection 105.20, and as specified herein, the contractor shall complete and mail a Notice-of-Termination (NOT) for the project to the address shown below. The NOT submitted by the contractor includes a certification statement which must be signed and dated by an authorized representative of the contractor, as defined in Part VIII.J.2 of the AZPDES General Permit, and include the name and title of that authorized representative.

Arizona Department of Environmental Quality
Surface Water Section/Stormwater & General Permits (5415A-1)
1110 W. Washington Street
Phoenix, Arizona 85007
or fax to 602 771-4528

The NOT may also be submitted electronically, through ADEQ's Smart NOI website at <http://az.gov/webapp/noi/main.do>. Regardless of the method of submittal, the contractor shall provide a copy to the Engineer.

When the approved SWPPP includes the use of Class II seeding as an erosion control measure, seeded areas shall be maintained for 45 calendar days, as specified in the special provisions, and approved by the Engineer before the contractor's NOT can be submitted. Seeding, when used in the SWPPP as an erosion control measure, will not be considered as part of any Landscape Establishment Phase that may be included with the project.

(J) Measurement and Payment:

Measurement and payment for work specified in the SWPPP will be made in accordance with the requirements of Section 810. Erosion control and pollution prevention work specified in the contract which is to be accomplished under any of the other various contract items will be paid for as specified under those items.

If a force account pay item for erosion control is included in the bidding schedule, the contractor may be reimbursed for such additional erosion control items proposed by the contractor but not included with the plans or specifications. Such additional erosion control items must be approved in writing by the Engineer before use. Erosion control items approved by the Engineer will be paid in accordance with Subsection 109.04(D). No measurement or payment will be made for such additional items not approved by the Engineer.

No measurement or payment will be made to the contractor for time spent in preparing, reviewing, and revising the Storm Water Pollution Prevention Plan (SWPPP), or providing other required documentation, the cost being considered as included in the price of contract items. No measurement or payment will be made for inspections, the contractor's erosion

control coordinator, or the contractor's "good housekeeping" practices and requirements, the costs being considered as included in contract items.

Unless otherwise specified, no measurement or payment will be made for maintenance of temporary and permanent erosion control measures, the cost being considered as included in contract items.

104.10 Contractor's Responsibility for Work: of the Standard Specifications is revised to read:

The contractor shall implement the requirements of the Arizona Pollutant Discharge Elimination System (AZPDES) for erosion control due to storm water runoff during construction, as specified above in Subsection 104.09, Prevention of Landscape Defacement; Protection of Streams, Lakes, and Reservoirs.

Until final written acceptance of the project by the Engineer, the contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements, or from any other cause, whether arising from the execution or from the nonexecution of the work. The contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance. No reimbursement shall be made for work necessary due to the contractor's failure to comply with the requirements of the SWPPP.

Except as specifically provided under Subsection 104.04, in case of suspension of work from any cause whatever, the contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project and provide for normal drainage. The contractor shall also erect any necessary temporary structures, signs or other facilities. During such period of suspension of work, the contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedings and soddings, furnished under its contract and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

(104STORM, 11/01/95)

SECTION 104 - SCOPE OF WORK:

104.11 Damage by Storm, Flood or Earthquake: Item (D), Idled Equipment and Remobilization, of the Standard Specifications is hereby deleted.

104.11 Damage by Storm, Flood or Earthquake: Items (E) and (F) of the Standard Specifications are revised to read:

(D) Payment for Repair Work:

The State will pay the cost of the repair work as determined in Subsection 109.04.

(E) Termination of Contract:

If the Department elects to terminate the contract, the termination and the determination of the total compensation payable to the contractor shall be governed by the provisions of Subsection 108.11, Termination of Contract for Convenience of the Department.

(104ENVIR, 03/17/08)

SECTION 104 - SCOPE OF WORK:

104.12 Environmental Analysis: of the Standard Specifications is revised to read:

The contractor shall prepare an environmental analysis for approval by the Engineer, under any of the following conditions:

- (A) If the contractor elects to provide material, in accordance with Section 1001, from a source that involves excavation.
- (B) If the contractor elects to use any site to set up a plant for the crushing or processing of base, surfacing, or concrete materials. The contractor may request an exemption from this requirement to provide an environmental analysis if all of the following conditions apply:
 - (1) the site is exclusively used for the processing of materials,
 - (2) the site will not be used for excavation of borrow material,
 - (3) the site was developed as a processing area on or before January 1, 1999,
 - (4) the site is currently operating as a processing area, and
 - (5) the plant is located within that portion of the site that was disturbed prior to January 1, 1999.
- (C) If the contractor requests that the Engineer approve access to controlled access highway at points other than legally established access points.

The contractor may incorporate an existing environmental analysis approved after January 1, 1999, provided that the analysis is updated as necessary to be in compliance with current regulations and with the contractor's planned activities.

Regulatory changes, specification changes, or other reasons may preclude the approval of a materials source. The contractor acknowledges that the Department may refuse to approve a material source even if the Department had approved the source for other projects.

The environmental analysis shall include all areas of proposed excavation, crushing, processing, and haul roads. For the purposes of Subsection 104.12, a haul road is defined as any road on material excavation, processing, or crushing sites, and any road between the respective site and a public highway that may be used by the contractor.

The contractor shall promptly advise the Engineer that it is preparing the environmental analysis and shall submit it upon completion. The contractor should anticipate needing a minimum of 30 calendar days to prepare the environmental analysis. The contractor shall allow a minimum of 45 calendar days after submittal, or subsequent resubmittal, to the Department for the Department to review the environmental analysis and to consult with the appropriate jurisdictions and/or agencies. At the end of the review period, the Engineer will notify the contractor whether or not the environmental analysis is acceptable.

If the approval of the environmental analysis causes a delay to a controlling activity of the project, the contractor may seek, and the Engineer may grant, an extension of time in accordance with the terms of Subsection 108.08. The time extension shall not exceed 30 working days for a working-day contract, or 45 calendar days for a calendar-day project. The time extension will not be considered unless the contractor can show evidence of due diligence in pursuing the environmental analysis. No time extension will be granted for a fixed completion date contract.

The Environmental analysis shall address all environmental effects, including, but not limited to, the following:

- (1) The location of the proposed source and haul road, and the distance from the source to either an existing highway or an established alignment of a proposed Federal, State or County highway along with vicinity maps, sketches or aerial photographs.
- (2) The ownership of the land.
- (3) The identity and location of nearby lakes, streams, parks, wildlife refuges or other similar protected areas.
- (4) The former use, if known, of the source, and haul road and their existing condition.
- (5) The identification of present and planned future land use, zoning, etc., and an analysis of the compatibility of the removal of materials with such use.
- (6) The anticipated volume of material to be removed; the width, length and depth of the excavation; the length and width of the haul road, and other pertinent features and the final condition in which the excavated area and haul road will be left, such as sloped sides, topsoil replaced, the area seeded, etc.

- (7) The archaeological survey of the proposed source prepared by a person who meets the Secretary of the Interior's Professional Qualification Standards (48 FR 44716) and possesses a current permit for archaeological survey issued by the Arizona State Museum (ASM). The survey shall be prepared in a State Historic Preservation Office standardized format. The survey shall identify all historic properties within the area of potential effect (APE), as defined by the National Historic Preservation Act (36 CFR 800.4). This includes the materials source, processing area, and the haul road. Additionally, the survey report shall identify the effects of the proposed source on any historic properties within the APE, and recommend measures to avoid, minimize, or mitigate those effects.
- (8) If the proposed source, or haul road will utilize Prime and Unique Farm land or farm land of statewide importance, a description of such remaining land in the vicinity and an evaluation whether such use will precipitate a land use change.
- (9) A description of the visual surroundings and the impact of the removal of materials on the visual setting.
- (10) The effect on access, public facilities and adjacent properties, and mitigation of such effects.
- (11) The relocation of business or residences.
- (12) Procedures to minimize dust in pits and on haul roads and to mitigate the effects of such dust.
- (13) A description of noise receptors and procedures to minimize impacts on these receptors.
- (14) A description of the impact on the quality and quantity of water resulting from the materials operation shall be provided. The potential to introduce pollutants or turbidity to live streams and/or nearby water bodies shall be addressed. Measures to mitigate potential water quality impacts shall be coordinated through the Environmental Protection Agency (EPA) for sites located on tribal land, and the Arizona Department of Environmental Quality (ADEQ) for sites located on non-tribal land.
- (15) A description of the impact on endangered or threatened wildlife and plants and their habitat. The analysis of potential impact to plants and wildlife shall be coordinated through the Arizona Game and Fish Department and U.S. Fish and Wildlife Service. Compliance with the

Arizona Native Plant Law shall be coordinated through the Arizona Commission of Agriculture and Horticulture.

- (16) A discussion of the effects of hauling activities upon local traffic and mitigating measures planned where problems are expected.
- (17) A description of the permits required, such as zoning, health, mining, land use, flood plains (see Section 404 of the Clean Water Act), etc.
- (18) The effect of removing material and/or stockpiling material on stream flow conditions and the potential for adverse impacts on existing or proposed improvements within the flood plain which could result from these activities. Measures to mitigate potential water quality impacts shall be coordinated through the Environmental Protection Agency (EPA) for sites located on tribal land, and the Arizona Department of Environmental Quality (ADEQ) for sites located on non-tribal land.

Guidance in preparing the environmental analysis is available on the Department's Internet Website through the Environmental Planning Group, or by calling Environmental Planning Group at 602-712-7767.

SECTION 105 - CONTROL OF WORK:

105.04 **Conformity with Plans and Specifications:** of the Standard Specifications is modified to add:

(A) Intelligent Transportation System General Requirements

1. Description:

It is the purpose of this section to provide general information necessary for completion of the installation of Intelligent Transportation System (ITS) field devices, such as fiber optic cable and infrastructure and closed circuit television cameras (CCTV).

All field devices, appurtenances, and associated communication and electrical systems shall be complete, functional and in operating condition at the time of acceptance.

2. Material and Equipment Requirements:

Environmental:

Except when otherwise stated, all electronic equipment installed in the field shall meet the minimum environmental requirements of NEMA Standards Publication No. TS-2, Section 2, Environmental Standards and Test Procedures, including, but not limited to:

- Power Interruption;
- Temperature and Humidity;
- Transients, Power Service and Input Terminals;
- Nondestruct Transient Immunity;
- Vibration; and
- Shock.

All equipment exposed to the environment shall be corrosion resistant and designed to withstand 80 mph winds with a 30% gust factor, and withstand the effects of sand, dust, and hose-directed water per the hose down test described in the latest edition of the NEMA Standards Publication 250. All connections shall be watertight.

Grounding:

Grounding Electrodes shall meet the requirements of Section 732-3.03 except as modified herein.

Electrolytic grounding may be used in lieu of ground electrodes for the cabinet grounding system. Electrolytic grounding systems shall be 480% self-activating, sealed and maintenance free. Electrolytic ground systems shall hydroscopically extract moisture from the air to activate the electrolytic process without addition of chemicals or water. Hazardous material shall not be used to improve the performance of the electrolytic ground. Electrolytic systems shall be UL listed and have a minimum life expectancy of 30 years.

Following installation, the contractor shall verify the resistance to ground of the cabinet grounding system as less than 5 ohms using the 3 terminal fall of potential method. If the tested resistance is greater than 5 ohms, install additional ground electrodes as necessary to meet the requirement.

Power:

Electronic equipment shall meet the minimum requirements of NEMA Standards Publications No. TS-2, Section 2 Environmental Standards and Test Procedures.

Provide step-up/step-down transformers and AC to DC power conversion as needed to match the power requirements of each component.

3. Control of Material and Equipment

Source of Supply:

The contractor shall furnish all material and equipment required to complete the work.

Quality Requirements:

Only materials and equipment conforming to the requirements of the specifications shall be incorporated into the work. Material and equipment shall be new except as may be provided in the special provisions.

Regulations and Codes:

All electrical equipment shall conform to the current standards of the National Electrical Manufacturers Association (NEMA), National Electric Safety Code (NEC), Underwriters' Laboratory Inc. (UL), when applicable. All material and workmanship shall conform to the requirements of the National Electric Code (NEC), Illumination Engineers Society (IES), Standards of the American Society for Testing and Materials (ASTM), American Association of State Highway and Transportation Officials (AASHTO), requirements of the Traffic Signal Plan, these specifications, the special provisions, and to any other codes, standards, or ordinances which may apply. Whenever references are made to any of the standards mentioned, the reference shall be interpreted to mean the code, ordinance, or standard that is in effect at the time of the bid advertisement.

Approval of Material and Equipment:

All materials and equipment shall be approved by the Engineer prior to incorporation in the work. Any work in which materials or equipment not previously approved are used shall be performed at the contractor's risk and may be considered as unauthorized and unacceptable and not subject to the payment provisions of the contract. Such materials or equipment and warranty/information may be subject to removal at the discretion of the Engineer.

Before ordering or installing any material or equipment, the contractor shall submit four (4) copies of each proposed material and/or equipment list, including material and electrical shop drawings to the pre-construction conference for approval by the Engineer. The list shall be complete and contain all items supplied on the project by the contractor, including pre-approved items. The Engineer reserves the right to reject an incomplete or unclear material submittal. Items on the list shall be identified by manufacturer's part number, model, specification or other pertinent catalogue information. Materials from any catalog cuts shall be clearly indicated by the contractor. One (1) copy will be returned to the contractor for further action.

Equipment or material specified by brand name, part number, or model number is intended to be descriptive of the type and quality of material or equipment desired. Another equal brand name, part number, or model number may be substituted so long as it is in accordance with the specifications and is equal in form, fit, function, performance, reliability, and is approved by the Engineer.

The contractor shall provide complete wiring diagrams for controller assemblies and auxiliary controller cabinets at the time of delivery for testing. A Mylar original and four sets of prints shall be provided with each controller assembly. The wiring diagram shall illustrate

all circuits and components in detail. All components shall be identified by name or number so as to be clearly noted in the drawings.

Certificate of Compliance:

When required by the Specifications, submit an original or copy of a Certificate of Compliance along with required equipment lists and supporting material. With equipment submittal, include warranty information for the Engineer's approval.

If requested by the Engineer, furnish laboratory results or independent certifications that substantiate compliance with the stated requirements. Materials or equipment covered by the certificate may be sampled and tested at any time, and, if not in conformity with the requirements of the plans or specifications, will be subject to rejection.

Certificates of Compliance shall contain the following information:

- A description of the material or equipment supplied;
- Means of material identification, such as label, lot number, or marking;
- Statement that the material complies in all respects with the requirements of these Specifications. When identified in the Specifications, Certificates shall state compliance to specific cited standards, such as RUS 1755.900, NEMA TS-2, etc. and specific required tests, such as burn-through testing for fiber optic conduit;
- Clearly state any exceptions to the requirements of the Specifications; and
- The name, title, and signature of a person having legal authority to bind the manufacturer or the supplier of the material. The date of the signature shall also be given. The name and address of the manufacturer or supplier of the material shall be shown on the certificate. A copy or facsimile reproduction (FAX) will be acceptable. However, the original certificate shall be made available upon request. The person signing the certificate shall be in one of the following categories:
 1. An officer of a corporation.
 2. A partner in a business partnership or an owner.
 3. A general manager
 4. Any person having been given the authority in writing by one of the three listed above.

4. Method of Construction:

Cable Management and Labeling:

Provide labeling for all contractor installed cables. Labeling shall be done in a neat, professional manner using permanent methods and products specifically designed and

approved by the Engineer for each label scenario. At a minimum, provide the following labeling:

- Label trunkline and branch cables at pull boxes, cabinets, racks, and other points of entry with the appropriate cable identification number. Use permanently marked, removable cable sleeves;
- Label both ends of jumper cables and pigtails; and
- Sequentially label the jumper cable (front) side of patch panels in a consistent manner throughout the project.

Provide cable routing and management in a neat and professional manner. Group and neatly tie cables to the sides of racks when applicable. Slack or excess cables shall be neatly coiled, tied, and stowed. Strain relief shall be provided for fiber optic cable, jumpers, and pigtails.

Labor and Supervision:

The contractor shall furnish labor and supervision with experience in the construction of the ITS field devices and communications encompassed by the project, all materials, equipment, tools, transportation and supplies required to complete the work in an acceptable manner; and in full compliance with the Specifications, terms of the contract, the Plans and Special Provisions.

The contractor shall have on the work site, at all times, a competent supervisor capable of reading and thoroughly understanding the plans and specifications and experienced in the construction of ITS field devices and communications encompassed by the project. When construction involves traffic signals, the contractor's supervisor shall possess an International Municipal Signal Association (IMSA) Level II Traffic Signal Electrician Certification.

Plans:

The Plans graphically describe the location of signal component parts, the equipment and materials to be used, and the way the traffic signal is to be constructed. The plans shall be supplemented by Standard Drawings or other drawing(s) deemed necessary for the completion and control of the work.

Where dimensions on the plans are given or can be computed from other given dimensions, they shall govern over scaled dimension.

After completion of the project the contractor shall provide the Engineer with a set of as-built drawings on clean prints of the original drawings. The as-built drawing shall indicate in a neat and accurate manner all changes and revisions in the original design. As-built drawings shall be submitted before final payment for completed work will be made. Payment of developing electrical as-builts shall be under bid item 7370455 - MISCELLANEOUS ELECTRICAL (AS-BUILTS).

5. Testing:

The contractor shall demonstrate that the equipment and systems furnished and installed under the contract are in full compliance with the requirements of the contract documents and shall furnish and maintain all required test equipment. The contractor shall conduct tests in the presence of the Engineer using approved test procedures and submit the test results to the Engineer using approved test data forms. The Engineer will review the test results for conformance with the requirements of the contract documents. If the equipment or systems fail any part of the test, make necessary corrections and repeat the entire test.

Notify the Engineer of the time, date and place of all tests at least 14 calendar days prior to the date on which a test is planned. If requested by the Engineer, postpone any test up to seven calendar days in order to accommodate the schedules of the Engineer and his representatives. Postponement of tests is not grounds for extension of the contract, or for additional compensation.

The Engineer may waive the right to witness certain tests. Neither the witnessing of tests by the Engineer or his representatives, nor the waiving of the right to do so, will relieve the contractor of the responsibility to furnish and install the work in accordance with the contract documents. Such actions by the Engineer or his representative or approval of any test results by them will not be deemed as acceptance of the equipment or systems tested until successful completion of the System Acceptance Test (SAT).

The contractor shall ensure that all equipment to be tested is ready for testing prior to the performance of, and Engineer's witnessing of the tests. Costs for transportation, meals, and lodging for the Engineer and his representatives that are associated with delays in the testing will be deducted from monies due, or to become due, or owed to the contractor.

All test data forms shall be signed by the contractor or authorized representative. When tests are witnessed by the Engineer, obtain the witnessing Engineer's signature on the test data form.

The contract period will not be extended for time loss or delays related to testing.

Failure of any item to meet the requirements for any test will be counted as a defect and the equipment under test will be subject to rejection by the Engineer. Rejected equipment may be re-tested provided all areas of non-compliance have been corrected and evidence thereof is submitted to the Engineer by the contractor.

For equipment that has failed and subsequently been repaired or modified, the contractor shall prepare and deliver a report to the Engineer that describes the nature of the failure and the corrective action taken. Re-design and modification of failed equipment shall be done at no additional cost.

Conduct or support tests in the following stages of implementation:

- Design Approval Test (DAT);
- Factory Demonstration Test (FDT) (when required);
- Factory Acceptance Test (FAT);
- Stand-Alone Test;
- Subsystem Test (SST);
- Systems Integration Test (SIT) (when required); and
- System Acceptance Test (SAT).

DAT verify that certain design parameters are satisfied prior to going to production. FDT are performed on a production unit and verify that the equipment meets the functional requirements. FAT verify that each unit of equipment as it comes off the production line operates as specified. Stand-alone tests verify that after installation but prior to interconnection, the equipment operates as specified. SSTs verify that units forming a subsystem continue to operate as specified when they are interconnected. The SIT is performed when previously untested hardware or software is developed and/or added to an existing system to verify that all system interfaces perform properly prior to final acceptance. The duration of the SIT shall be based on the complexity of the design. The SAT verifies that all the interconnected subsystems operate together as one system. Upon successful completion and acceptance of the SAT, the project will advance to the warranty and operational support period.

Design Approval Tests (DAT):

A DAT shall be conducted when required by the Specifications. The contractor shall provide certification from the manufacturer for the following:

- Certify that the equipment has been laboratory tested and meets or exceeds the environmental requirements of the Specifications. Specifically list test results and passing criteria for each required test.
- Certify the equipment meets the functional requirements stated in the Specifications, and is suitable for the intended application.

State any requirements that are not met or have not been laboratory tested. Test procedures and results, or independent laboratory certification shall be made available upon request.

DAT certification shall meet the requirements stated in Section 106.05 for Certificates of Compliance. If a DAT and a Certificate of Compliance is required for the same equipment, both requirements may be satisfied by a single Certificate of Compliance.

Submit DAT certification with the equipment submittal data for Engineer's approval.

The Engineer may waive the DAT requirement for equipment that has been previously tested by The City of Peoria or certified for use in prior projects where the application is consistent and results deemed favorable.

Factory Demonstration Tests (FDT):

A FDT shall be conducted when required by the Specifications. A FDT test shall be conducted on a prototype model before going to production. The FDT requirement for models of equipment previously tested and/or certified by the City of Peoria for the types of applications required in the project may be waived by the Engineer.

To request a waiver, the contractor shall submit certification from the manufacturer that states that the equipment has been tested and meets all the project requirements. The request shall state any exceptions or requirements not covered by testing and shall contain supporting information such as test procedures, data, and results.

Factory Acceptance Tests (FAT):

A FAT shall be conducted on each unit of equipment. The FAT shall verify proper operation of all required functions. Submit FAT results for approval. Do not deliver equipment until FAT results have been received and approved by the City of Peoria.

Stand-Alone Tests:

Conduct approved stand-alone tests (non-network) on each unit of equipment after installation on-site. Furnish all necessary test equipment and test software.

Subsystem Tests (SST):

A subsystem is defined as a logical grouping of field devices and/or central equipment that when interconnected and communicating, is capable of performing the function for which it was designed (i.e. – CCTV cameras, communications to/from the cameras, central control and display of the video images). The contractor shall conduct approved SST for the field equipment and related equipment at the hubs and the Traffic Operations Center once the Subsystem is completed. After the equipment has been installed and interconnected, conduct SST on the groups of equipment as identified in the project Special Provisions.

Subsystem tests shall not be considered successful until all equipment being tested is operational without failure for 72 consecutive hours.

System Integration Test (SIT):

Begin the SIT upon completion of all the SSTs. The contractor is responsible for keeping installed equipment operational during the system final integration, as determined by the Engineer. The contractor shall identify the SIT in the project schedule. The contractor shall

work with the Engineer to troubleshoot all problems related to non-specification compliant equipment and interfaces.

System Acceptance Test (SAT):

The SAT may commence upon completion of the SIT. The SAT consists of a 30-day test period demonstrating that the total system (hardware, software, materials and construction) is properly installed, free from identified problems, exhibits stable and reliable performance, and complies with the contract documents.

Demonstrate all system functions using live control equipment. Test all normal and backup functions of redundant system equipment. In the SAT, include any emergency conditions for which the equipment is designed to respond.

Troubleshoot, diagnose, identify, and isolate hardware and software problems and inconsistencies. Formulate possible solutions and implement all corrections needed for contractor installed equipment.

Make available, on-site, key technical personnel familiar with the design and construction of each major system component within 48 hours of notification of a problem.

Correct all system documentation errors, omissions, and changes discovered and resulting from the SAT and previous testing. System acceptance will not be complete until corrected documentation is submitted.

In the event of a failure of a single piece of equipment during the SAT, replace or repair the equipment and restart the 30-day test only for that piece of equipment. If the failure of the single piece of equipment prevents the proper operation of other equipment (i.e. – failure of the CCTV terminal server prevents CCTV control for several cameras), all devices affected by the failure will have the test period extended by the number of days they were out of service.

The following conditions constitute a minor system failure and will result in a suspension of time during the 30-day SAT. After satisfactory remedial action, the 30-day test will be resumed and extended one additional day:

- Interference with project operations due to vandalism, traffic accident, power failure, or lightning for which lightning protection devices as specified are not sufficient protection;
- Failure to complete the objective of any test scenario due to lack of adequate documentation for equipment supplied by the Contractor. Re-test using revised documentation; and
- Intermittent hardware, software, communication, or operation control malfunctions.

The following constitutes a major system failure. Any one of the following conditions shall result in re-initialization of the SAT from day zero:

- Failure of 5% of any hardware or performance item within a 14-day period; and
- Failure to correct any problem that adversely impacts the safety of the traveling public within four hours of notification.

Test Procedures, Software, and Data Forms:

Prepare test procedures, software (when needed) and data forms for all required DAT, FDT, FAT, stand-alone, SST, and SAT procedures.

Submit test procedures, software, and data forms to the Engineer for approval at least 45 calendar days before the scheduled testing. The Engineer will review the submitted procedures, software, and data forms and return them within 14 calendar days after receipt. If approved, tests may be conducted as scheduled. If rejected, reschedule the test, revise the submittal accordingly and resubmit for another review. Highlight the portions of the submittal that have changed to aid the Engineer's re-review of the material. Extension of the schedule will not be granted for rejected test procedures, software, and data forms.

As a minimum, prepare test procedures and data forms that include the following:

- A step-by-step outline of the test sequence to be followed, showing a test of every function of the equipment or system to be tested;
- A description of the expected operation, pass/fail criteria, and test results;
- A data form to be used to record all data and quantitative results obtained during the test; and
- A description of any special equipment, setup, manpower, or conditions required for the test.

Except as modified in this section, the requirements and process for submittal data identified in Section 106.05 shall also apply for test procedures, software, and data forms.

6. Warranties and Guaranties:

Meet the requirements of Section 106.13, unless modified herein:

Specific warranty requirements, if any, are listed under specific equipment requirements of the Specifications. The cost of warranties and repairs are included as an included in the cost of the item.

Include warranty information with equipment submittal information under Section 106.13.

Within 60 days following approval of material and equipment, submit a preliminary Warranty Administration Plan (WAP) to the Engineer for approval. In the WAP, address how the warranty period shall be administered, including the following requirements:

- Provide a 24 hour, seven day a week telephone number for City of Peoria initiated warranty requests;
- Repair or replace failed items that prevent normal operation of the system or any of the subsystems within 5 calendar days after notification. Respond to all other warranty requests within 14 calendar days;
- Track each repair performed during the warranty period by serial number. Account for removals, replacements, and repaired items put back in service or into the spare inventory. Reset the warranty period for all repaired or replaced items. Establish a new warranty period for all new items;
- Perform routine maintenance during the warranty period per vendor recommendations.
- Provide a summary of all routine maintenance activities required, whether or not they fall within the warranty period;
- When used, replenish spare equipment inventory within 2 weeks, or stated vendor lead-time, whichever is greater;
- Provide a complete list of equipment and vendor warranty periods, including spare equipment. Use Figure 480.1 or similar approved form; and
- Provide copies of all warranty paperwork.

Submit a final WAP to the Engineer for approval at least 45 days prior to final acceptance. An approved WAP is required prior to final acceptance.

Within 90 days of the end of the one-year warranty period, submit the following to the Engineer for approval:

- A complete list of all equipment (by serial number) that have warranties extending beyond the one year warranty period, including spare equipment. Utilize Figure 1 in the Appendix, Exhibit H or similar approved form; and
- All warranty paperwork extending beyond the one-year period, transferring ownership of the warranties to the City of Peoria.

Prior to final acceptance, furnish an inventory of spare parts.

7. Documentation:

Deliver a minimum of ten sets of maintenance manuals to the Engineer for all furnished equipment. The manuals shall be supplied in durable, loose-leaf, three ring binders or appropriate size. All volumes shall be permanently titled and have pages numbered and

indexed for easy and efficient removal and replacement. In addition, an electronic copy of all manuals shall be provided for all equipment and software.

Format maintenance manuals in two volumes that include the following material for all furnished equipment and components:

Volume 1

- Description for each type of equipment and its components.
- Description of operation.
- Troubleshooting procedures at system and device levels.
- Preventative maintenance and adjustment procedures.
- "As-built" drawings including block diagrams, signal path, and detailed device and system connection diagrams.
- Equipment source reference including manufacturer and nearest authorized service centers along with associated addresses and telephone numbers.
- Final warranty administration plan.

Volume 2

- Manufacture's operation and installation.
- Manufacture's service and repair guides.

8. Training:

Training shall be provided in two sessions.

The first training session shall be for maintenance and troubleshooting. This session shall be a minimum of four hours in length for each type of field device installed, including communications. This session shall be oriented for the City maintenance staff.

The second training session shall be for operations. This session shall be a minimum of four hours in length for each type of field device installed. This session shall be oriented for the City Traffic Operations Center staff.

Training facilities shall be provided for up to five persons for each session.

(106SRP, 05/29/08)

SECTION 106 - CONTROL OF MATERIALS:

106.01 Source of Supply and Quality Requirements: of the Standard Specifications is revised to read:

Unless otherwise specified, the contractor shall be responsible for furnishing all water required for construction. Water obtained from sources within the Salt River or Verde River watersheds and administered by Salt River Project, or obtained from Salt River Valley Water Users Association (S.R.V.W.U.A.) delivery canals within the Phoenix metropolitan areas, shall be subject to the following conditions:

For water obtained from rivers, streams, lakes, or other sources within the watershed, the contractor shall execute a Construction Water Exchange Permit. Water obtained from surface water sources or wells in close proximity to a river, stream, or lake located within the watershed may also require a Construction Water Exchange Permit.

For water obtained from S.R.V.W.U.A. canals, the contractor shall contact Salt River Project to determine the most appropriate delivery method and associated permits and costs. As an example, a Permit for Operation of Mobile Tank Trucks shall be required for water pumped into mobile water trucks.

The contractor shall contact Salt River Project at the address shown below to determine whether its anticipated water sources will be subject to Salt River Project regulations and, if necessary, the appropriate requirements, permits, and fees.

Salt River Project
Water Contract Accounting & Data Services SSW302
PO Box 52149
Phoenix, Arizona 85072-2149
(602) 236-2255
(602) 236-3313
Fax (602) 236-5082

No water shall be obtained from sources as specified herein until the contractor has furnished the Engineer with a completely executed copy of the appropriate permits.

(106QCMAT, 3/02/09)

SECTION 106 CONTROL OF MATERIAL:

106.04(A) General: the fourth and fifth paragraphs of the Standard Specifications are revised to read:

The sampling, testing, and acceptance of materials shall be in accordance with the requirements of the specifications, in conjunction with the following:

- The ADOT Materials Testing Manual.
- The ADOT Materials Policy and Procedure Directives Manual.
- Applicable Federal, AASHTO, or ASTM specifications or test designations.
- Applicable specifications or test designations of other nationally recognized organizations.

Unless otherwise specified, whenever a reference is made to an Arizona Test Method or an ADOT Materials Policy and Procedure Directive, it shall mean the test method or policy and procedure directive in effect on the bid opening date.

106.04(C)(6) Weekly Quality Control Reports: of the Standard Specifications is revised to read:

The contractor shall submit Weekly Quality Control Reports to the Engineer. The weekly reports shall be complete and accurate, shall state the types of work, such as earthwork, Portland cement concrete, or asphaltic concrete, which have been performed during the report period, and shall also include the process control measures taken to assure quality. The report shall provide sample identification information for materials tested during the report period, including sample number, date sampled, sample location, first and last name of person obtaining sample, and original source of material. The report shall also provide the results for all required tests and any retests, corrective actions, and other information relevant to quality control. The report shall include daily diaries for each day of testing, a weekly summary, and the ADOT TRACS number and testing laboratory's project identification number.

The weekly quality control report shall be prepared using standard forms provided by the Department. The forms are available on the Department's website by accessing the Highways page, business areas, Construction Group, contractors information, forms, then weekly quality control reports. Except for the daily diaries, all documentation and information required on the forms shall be typed. Daily diaries may be hand-written if acceptable to the Engineer. The weekly report shall be submitted to the Engineer in paper form with a transmittal letter signed by the contractor's quality control manager.

The contractor or testing laboratory may prepare the report using proprietary or other software, if acceptable to the Engineer, provided that all required information is included, the format is comparable to the Department's standard format, and the report is submitted in paper form with the required transmittal letter.

The report period shall end at midnight of each Friday, and the report shall be submitted to the Engineer no later than 5:00 p.m. of the following Wednesday. The Engineer will verify that the report is timely, complete and accurate.

Reports that are not submitted by the above-referenced deadline shall be considered delinquent. Reports that are submitted by the above-referenced deadline, but are not complete and accurate, shall also be considered delinquent. In either case monies shall be deducted from the contractor's monthly estimate in accordance with the requirements for Contractor Quality Control, as specified in these special provisions.

(106DMAT, 3/13/02)

SECTION 106 - CONTROL OF MATERIALS: of the Standard Specifications is modified to add:

106.15 Domestic Materials:

Cement used on this project may be foreign or domestic. Certificates of Compliance and Certificates of Analysis for cement shall conform to the requirements of Subsection 106.05, and shall additionally identify whether the cement is foreign or domestic.

All manufacturing processes to produce steel products used on this project shall occur in the United States. Raw materials used in manufacturing the steel products may be foreign or domestic. Steel not meeting these requirements may be used in products on this project provided that the invoiced cost to the contractor for such steel products incorporated into the work does not exceed either one-tenth of one percent of the total (final) contract cost or \$2,500, whichever is greater.

Convict-produced materials may not be used unless the materials were produced prior to July 1, 1991 at a prison facility specifically producing convict-made materials for Federal-aid construction projects.

Any process which involves the application of a coating to iron or steel shall occur in the United States. These processes include epoxy coating, galvanizing, painting, or any other coating which protects or enhances the value of covered material.

The contractor shall furnish the Engineer with Certificates of Compliance, conforming to the requirements of Subsection 106.05, which state that steel products utilized on the project meet the requirements specified. The Certificates of Compliance shall also certify that all

manufacturing processes to produce steel products, and any application of a coating to iron or steel, occurred in the United States.

(107SRPCL, 09/04/98)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC:

107.02 Permits, Licenses and Taxes: of the Standard Specifications is modified to add:

For work performed on Salt River Valley Water User's Association facilities or within S.R.V.W.U.A. Right-of-Way, the contractor will be required to execute a Temporary Irrigation Outage Agreement with Salt River Project. The agreement includes stringent specifications for timing of construction, equipment and safety requirements, and legal obligations. The contractor shall contact the S.R.P. Watermaster at the appropriate operations office, as indicated on the Salt River Project plan sheets, and arrange for a preconstruction conference to be held at least 72 hours prior to any construction within S.R.V.W.U.A. Right-of-Way. The Watermaster will furnish the contractor with an original agreement form, which shall be executed at the S.R.P. preconstruction conference. A copy of the Temporary Irrigation Outage Agreement is included with the contract documents for reference.

SECTION 107 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC:

107.08 Public Convenience and Safety: of the Standard Specifications is modified to add:

Community Relations:

All Community Relations will be provided by ACS Conaid under a separate contract with the City of Peoria which will include, but not limited to:

- a. Personal contact with residents and businesses prior to major project events
- b. Printing and mailing of public notices
- c. Providing to the Engineer media news releases
- d. Providing telephone "Hot Line" 24-hour service
- e. Preparing and installing project signs
- f. Removing project signs
- g. Provide monthly updates to businesses of the project status
- h. Videotaping of project site prior to construction

The Contractor shall provide the following services:

- a. Attend public meetings as required by the Engineer
- b. Document existing property conditions prior to starting construction

ACS Conaid shall furnish and install advance information signs and project signs before beginning construction to inform the public of the forthcoming project, construction dates and suggested alternate routes. The Contractor shall maintain the signs as necessary and update the information as directed by the Engineer.

No measurement or direct payment will be made for this work, the cost being considered as included in the cost of contract items.

(107SWRSP, 01/28/03)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.15 Contractor's Responsibility for Utility Property and Services: of the Standard Specifications is revised to read:

(A) General:

The contractor's attention is directed to the requirements of Arizona Revised Statutes Section 40-360.21 through .29 requiring all parties excavating in public streets, alleys or utility easements to first secure the location of all underground facilities in the vicinity of the excavation.

The contractor shall review copies of existing ADOT permits, subject to availability, prior to start of construction, to assist the contractor in determining the location of any utilities, which the Department may have record of and which are not otherwise shown in the contract documents. Utility locations obtained from the Department are for information only and shall not relieve the contractor of responsibility for identifying, locating and protecting any existing utility lines. Copies of permits may be obtained from the ADOT Area Permit Supervisor in the District in which a project is located.

The contractor shall contact the owners of the various utilities prior to the start of construction and shall obtain from them any information pertaining to existing utilities that will either supplement information shown on the project plans or will correct any such information that may be incorrect. The contractor shall furnish the Engineer with evidence that the contractor has contacted the utility companies. Such evidence shall be submitted at the preconstruction conference, and shall include a copy of the information received from each utility as a result of such contacts.

If the contractor learns from either the owner of the utility or from any other source of the existence and location of properties of railway, telegraph, telephone, fiber optics cable,

water, sewer, septic tanks or systems, electric, gas and cable television companies either omitted from or shown incorrectly on the project plans, the contractor shall immediately notify the Engineer and shall not disturb the utilities. Relocation or adjustment of such utilities, if deemed necessary, will be either performed by others or shall be performed by the contractor in accordance with the provisions of Subsection 104.02.

The contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum and that services rendered by these parties will not be unnecessarily interrupted.

Temporary or permanent relocation or adjustment of any utility line or service connection desired by the contractor for its convenience shall be its responsibility. The contractor shall obtain the approval of both the Engineer and the utility company and upon approval shall make all necessary arrangements with the utility company and shall bear all costs in connection with such relocation or adjustment. The contractor shall also submit a Sewer Discharge Prevention Plan, as specified in Subsection 107.15(C)(1), describing each anticipated relocation or adjustment involving existing sanitary sewer lines. No work on a particular facility shall begin until all approvals for that facility have been received.

(B) Contractor Qualifications for Water and Sewer Lines:

Breakage of active sanitary sewer lines may result in the potential spread of disease, contamination of the site and any adjacent bodies of water, and other hazards to the public. Substantial cleanup costs may be associated with such breakage, as well as possible major civil and/or criminal penalties. Therefore, the Engineer will closely consider the qualifications of any personnel proposed by the contractor to oversee or perform work involving active sanitary sewer lines. The contractor shall not assume that the personnel assigned to perform such work will be acceptable to the Department merely because they meet the experience requirements listed herein.

The contractor, or the subcontracting firm assigned to perform the water and sewer work, shall have a minimum of five years of experience in the installation and construction of underground large diameter (18-inch or above) water and sewer improvements.

In addition, the key personnel assigned by the contractor to perform any work on water or sewer lines, whether from the prime contractor or a subcontracting firm, shall also have at least five years of experience in the installation and construction of underground large diameter (18-inch or above) water and sewer improvements. A minimum of two such people shall be designated by the contractor. The designated personnel may have the title of foreman or superintendent; however, at least one of these people shall be present at all times at the location of any work being performed at or near an active sanitary sewer line.

For both the firm and the key personnel, the experience shall include working with and around water and sewer utility lines that are in service. The contractor shall submit the following documentation to the Engineer for review and approval:

- (1) A list indicating that the designated key project personnel have at least five years of applicable experience, as specified above. The list shall be accompanied with resumes for each of the key people. The resumes shall include the following information, and demonstrate compliance with the specified requirements:
 - (a) Detailed relevant experience for a minimum of two projects, including project description, date of work, actual work performed by the individual, and references (a minimum of one for each project).
 - (b) Level of applicable formal training.
 - (c) Number of years of relevant experience in performing like construction.
- (2) A list of water and sewer construction projects completed by the firm performing the water or sewer work, as specified above, indicating a minimum of five years of applicable experience. Include the dates of work, type of work, description of the project, amount of work performed by the contractor/subcontractor, and the name and phone number of a contact with the owning company or agency for which the work was completed.
- (3) List of equipment that will be used for this project. The list shall include, as a minimum, equipment type, date of manufacture, and if contractor-owned or rented.
- (4) A list of all violations and citations in the past five years of applicable water and wastewater laws and statutes for both the prime contractor and the subcontractor responsible for the utility work.

The contractor shall submit this documentation to the Engineer for approval at least 21 calendar days prior to any anticipated work involving active sanitary sewer lines, whether new or existing.

(C) Protection of Existing Utility Lines:

At points where the contractor's operations are adjacent to right-of-way properties or easements for railway, telegraph, telephone, water, sewer, electric, gas and cable television companies, hereinafter referred to as utilities, or are adjacent to other facilities and property, damage to which might result in considerable expense, loss, inconvenience, injury or death, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

The exact locations and depths of all utilities that are underground or the location of those on or near the surface of the ground which are not readily visible shall be determined. Such locations shall be marked in such a manner so that all workmen or equipment operators will

be thoroughly apprised of their existence and location. It will be the contractor's responsibility to see that every effort possible has been made to acquaint those actually involved in working near utilities not only with the type, size, location and depth, but with the consequences that might follow any disturbance. No trenching or similar operation shall be commenced until the Engineer is satisfied that every possible effort has been taken by the contractor to protect utilities.

The contractor shall coordinate with others working near new or existing sewer lines or other utilities on the procedures to be followed to prevent damaging of these utilities.

(1) Sewage Discharge Prevention Plan (SDPP):

For any work which may impact active sanitary sewer pipes, whether new or existing, the contractor shall prepare a Sewage Discharge Prevention Plan (SDPP) which shall describe the contractor's procedures and work plan for such lines. The Sewage Discharge Prevention Plan shall also describe the precautions that the contractor shall take to prevent unplanned breakage or spills, and the procedure which the contractor shall follow if breakage or a spill occurs.

The contractor's method of work described in the SDPP shall ensure that any work done in or near any active sewer line is performed in a safe and controlled manner resulting in no accidental discharges. As a minimum, the contractor's equipment and procedures shall be appropriate for the intended work, and shall conform to standard industry practices.

The SDPP shall include information, as specified below, for all portions of the project which involve the following work activities, and for any other element of work which may involve contact with an active sanitary sewer line:

- Interrupt, divert, relocate, plug, or abandon a sewer line or service connection, or
- Brace, or tie into a sewer line or service connection.

Construction activities in the vicinity of active sanitary sewer lines or service connections shall also be included in the SDPP if any of the following conditions exist:

- (1) Any work crossing beneath the pipe, at any angle, regardless of vertical separation.
- (2) Any work crossing over the pipe, at any angle, within two feet of the top of pipe.
- (3) Work located parallel to the pipe within the following areas:
 - (a) For the area from the bottom of the pipe to two feet above the top of the pipe, any work within two feet horizontally of the pipe wall.

- (b) For the area below the bottom of the pipe, any work located below an imaginary line beginning at the pipe springline and progressing downward at a slope of 1.5 feet vertically to 1.0 feet horizontally.

The contractor's Sewage Discharge Prevention Plan shall address each of the items tabulated below, as applicable, for every location where construction activity will involve an active sanitary sewer line.

(2) Required Elements of the Sewage Discharge Prevention Plan:

The following elements shall be addressed in the SDPP:

- (a) Describe the proposed work in general, including the reasons for the work, scope, objectives, locations, dates, and estimated times the work will be conducted. Include project plan sheets detailing the proposed work, and indicating the peak flowrates of active sewer lines, determined as specified.
- (b) For all existing sanitary sewer pipes, determine whether the lines are active or abandoned, and the peak flowrates of lines in service, as provided by the owner of the utility.
- (c) List the key personnel (crew foreman, superintendent, and manager) and field office that are proposed to perform the work (include phone numbers).
- (d) Describe the work in step-by-step detail for each location, including excavation plans and how both the new and existing structures and utilities will be identified and protected.
- (e) Provide a detailed listing of any hardware, fittings, pipe plugs, flex couplings, tools, and materials needed to accomplish the work, and note the status of these items (on-hand, to-be-fabricated, on-order with expected delivery date, etc.). Include any manufacturer's specifications or recommendations, especially for any pipe plugs, sewer line fittings, and patching materials.
- (f) List all major equipment to be used to perform the work. Include in this item any pumps that will be used to perform the work and the rated capacity of the pumps at the anticipated suction head.
- (g) List all equipment to be used in the event of an unplanned release and specify how the equipment will be used. The locations of standby pumps shall be specified in this item. The plan shall indicate that all standby equipment to be used in the event of an unplanned discharge can be delivered to the site and put into service within two hours of identification of any unplanned flow.
- (h) List the safety equipment to be used, and describe any unique safety procedures. Cite the applicable OSHA standards covering the work.

- (i) Describe any contingency plans the contractor will implement in the event of unplanned releases and/or damage to existing facilities. List all personnel and subcontractors that will be responsible for responding to unplanned releases or damaged lines. Provide qualifications for all such personnel and subcontractors, including education, formal training, and relevant experience.
- (j) Describe how the public will be protected during the work, and include or cite any applicable traffic control plans.
- (k) Describe the quality control procedures that will be used in the field.
- (l) Discuss how temporary plugs or flow control devices will be secured, monitored, and removed.

The SDPP shall be in written form, and shall include any diagrams or sketches necessary for clarity. When possible, diagrams and sketches should be shown using the applicable project plan sheets.

The contractor shall modify the SDPP as necessary throughout the project to include any new or revised information relevant to the items listed above. The contractor shall resubmit the revised SDPP to the Engineer for approval in each case.

(3) Sewage Discharge Prevention Plan Approval:

The SDPP shall be submitted to the Engineer at least 21 calendar days before any work involving an active sewer line is to be done. The Engineer will review the plan, solicit comments from the owner/operator of the sewer line, and return the plan to the contractor within 14 calendar days from original submittal.

No work involving active sanitary sewer lines shall be done until a final SDPP meeting all the requirements specified in Subsection 107.15(C)(2) has been approved by the Engineer.

Approval of the contractor's Sewage Discharge Prevention Plans, personnel, or construction methods and operation shall not relieve the contractor from its responsibility to safely perform the work included in this contract, nor from its liability for damage resulting, either directly or indirectly, from its work performed under this contract.

(D) Service Connections:

(1) General:

In the event of interruption to water, sewer, or utility services as a result of accidental breakage or as a result of lines being exposed or unsupported, the contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. When service is interrupted, repair work shall be continuous until the service is

restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

(2) Unidentified Water and Sewer Connections:

The contractor shall protect unidentified, undamaged water or sewer service connections encountered during excavation. The contractor shall immediately notify the Engineer when an unidentified service connection is encountered.

The contractor shall immediately repair unidentified water or sewer service connections that are damaged during excavation. Any damaged service connections shall be reported to the Engineer, including all remedial actions taken.

(E) Repairing Damaged Lines:

When the operations of the contractor result in damage to any utility line or service connection, the location of which has been brought to the contractor's attention, the contractor shall assume full responsibility for such damage.

Should an unplanned breakage occur in an active sewer line as a result of the contractor's operations, the contractor shall immediately notify the Engineer, and begin repairs to halt any flows and restore normal service, in accordance with the procedures described in the approved Sewage Discharge Prevention Plan. The contractor shall also immediately notify the affected utility company and the appropriate regulatory agencies. The contractor shall be responsible for repairing the damaged pipe, restoring any interruptions in service, and cleaning up the affected areas within 24 hours of the beginning of the spill. Sewage discharge damage assessments, as specified in Subsection 107.15(F), will be charged to the contractor for any unplanned breakage which results in a discharge.

The contractor shall be responsible to repair any breakage, in accordance with requirements of the broken line's owner/operator, and clean up the site per applicable codes and regulations of the Environmental Protection Agency, OSHA, Arizona Department of Environmental Quality (ADEQ), and all other agencies' specifications, at no additional cost to the Department.

(F) Sewage Discharge Damage Assessments:

The Department will assess liquidated damages in accordance with the Table 1 below for each 24-hour period, or portion thereof, for each unplanned breakage that occurs in an active sanitary sewer line as a result of the contractor's operation. The rate of liquidated damages assessed is based on the type and quantity of effluent discharged as determined by the Engineer.

These liquidated damages do not relieve the contractor from any of its responsibilities under the contract, including any liquidated damages that may be assessed under Subsection 108.09 for late completion of the project.

Liquidated damages assessed by the Department will be independent of any penalties imposed by others.

The contractor acknowledges that Regulatory agencies may assess or impose civil or criminal penalties on the contractor resulting from sewer discharges.

The Department will not be responsible for any civil or criminal penalties, fines, damages, or other charges imposed on the contractor by any regulatory agency or court for sewage discharges that are a result, directly or indirectly, of the contractor's work performed under this contract.

Table 1		
Liquidated Damages (each 24 hour period, or portion thereof)		
Volume of Discharge	Raw Sewage or Industrial Wastewater	Treated Effluent
Less than 10,000 gallons	\$5,000.00	\$1,000.00
10,000-99,999 gallons	\$10,000.00	\$2,000.00
100,000-1 million gallons	\$25,000.00	\$3,000.00
Greater than 1 million gallons	\$40,000.00	\$5,000.00

Liquidated damages shall be assessed for each 24 hour period, or portion thereof, until the contractor has completed all of the following tasks:

- (A) Stopped the discharge.
- (B) Repaired the damaged pipe.
- (C) Restored normal service.
- (D) Fully cleaned and disinfected the site to the satisfaction of the Engineer.

REDUCTION OF LIQUIDATED DAMAGES: Upon completion of tasks A, B, and C above, and prior to completion of Task D, the liquidated damages assessed for the current 24-hour period shall be at the rate shown in Table 1. However, for each subsequent 24-hour period, the assessment will be one half of the rate shown in Table 1.

Damages will continue at the reduced rate until the site has been fully cleaned and disinfected to the satisfaction of the Engineer.

The following Utility Companies have facilities within the limits of the project but are not anticipated to have conflicts with the scope of work:

Arizona Public Service (APS)

Ron Gandara (602)371-7546

APS currently has a 12 KV underground power line running along the north side of Olive Avenue. This power line does not present a conflict with this project. This power line currently feeds the Jack-in-the-Box and Chevron on the northwest quadrant together.

An existing switching cabinet on Olive Avenue at approximate station 69+79 left was recently relocated behind the proposed sidewalk and bus shelter pad. No other apparent conflicts exist within the proposed construction limits.

Any delay to the overall schedule due to the coordination with APS is the responsibility of the contractor and will not be grounds for time extensions or additional costs.

Cox Communications

John O'Connell (623)328-3535

Cox Communications has two facilities within the project area. There is a cable television line running east-west along the south side of Olive Avenue and a cable TV line running west from the northwest corner. The line along the south side of Olive Avenue is currently inactive with 2-2" conduits. The line has been adjusted to remove the above ground splice/pull points and will remain as "protect in place" for future use.

The underground cable on north side of Olive Avenue, west of 91st Avenue has been deactivated and abandoned in place.

Salt River Project (SRP) Electric (69 KV)

Ryan Adams (602)236-3703

SRP Electric has both a 69 KV and a 12 KV overhead power line running north-south along 91st Avenue on the west side of the roadway. Both power lines are located on the same poles. SRP recently replaced these existing poles with new steel poles. Coordination will be required with SRP in locating new traffic signal pole and street lighting.

Southwest Gas

Yvonne Aguirre (602)484-5338

There is an existing four inch gas line running east-west along the south side of Olive Avenue, east of the intersection. It will be in conflict with SRP irrigation relocations. A new gas line was recently installed on the north side of Olive Avenue to replace this existing line. The existing line will be abandoned in place and will be removed if in conflict.

Peoria Unified School District (PUSD)

Kevin Molino (623)486-6294

PUSD recently installed a new fiber optic line on the North side of Olive Avenue. They also constructed a pull box in the north-west corner of the intersections. The newly constructed line is several feet underground and no conflict is anticipated with this line.

The following Utility companies have facilities in conflict with the proposed construction, and anticipate certain adjustments and relocations to be completed prior to the start of construction:

Salt River Project (SRP) Irrigation

Kyle Tilghman (602)236-4884

SRP relocated the irrigation junction structure in the southwest corner and several pipes during the January 2009 dry-up period.

There is also a 36" line along east side of 91st Ave, north of the intersection. This line was lowered during relocation to achieve adequate clearance due to the widening of the roadway and the thicker pavement section.

Salt River Project (SRP) Electric (12 KV)

Sharon Benson (602)236-0806

SRP Power (SRPP) has 12 kV and Street Light underground (UG) lines and equipment which were relocated to avoid conflict with the project improvements.

KJ6-248 SRP 12Kv Underground Electric Relocation Job:

SRPP provided and installed trench, conduit, conductor, ground wire in primary trench, set new equipment and energized equipment at new locations to eliminate the conflicts with the proposed street and utility improvements. New facilities were installed per SRP, Municipal and Governmental specifications indicated on the SRP design plans.

SRP removed and relocated 4 pieces of equipment and several conduits in conflict on the north side of Olive Ave from approximately 64+15 to 64+40, 60' Lt.

A new traffic signal point of delivery was constructed at the NW corner to accommodate the service and new meter pedestal for the proposed Traffic Signal Controller. The City of Peoria will call SRP (602) 236-8833 to activate a request for the inspections and clearances for this meter and service, which has an address of 9108 W. Olive Ave. Peoria, AZ.

At approximately Sta 55+48, 88' of trench and conduit were constructed across 91st Ave to splice into the existing conduit at approximately 30' Rt to redirect the existing conduit run for the new conductors to energize the SRVWUA well site transformer. Outages for this well site will be coordinated as needed to maintain ground water pumping through SRVWUA Groundwater division Steve Delaney (602) 550-3995.

The existing SRP conduit duct bank paralleling the west side 91st Ave from Sta.51+00 to 53+50 45' Lt. is in conflict with the proposed 60" SRVWUA Irrigation pipe being installed from the SW corner east across 91st Ave. Trench and excavations from 51+89 to Sta 52+33, 45' Lt will be performed to construct and connect new conduit at a lower elevation to maintain the duct bank spares required for SRP's future growth. It has been communicated

that any excavations and horizontal locations for the proposed traffic signals and facilities in this area are to be performed with caution as to not damage or restrict the access of this conduit.

Coordination will be needed to locate the 12KV line so that minimum clearance to traffic signals, luminaires and street lighting is maintained. SRP Electric also has a power vault/manhole located on the east side of 91st Avenue, just south of the intersection. This structure will be just behind the proposed curb and is anticipated to remain in place and will not present a conflict with this project.

Any delay to the overall schedule due to the coordination with SRP is the responsibility of the contractor and will not be grounds for time extensions or additional costs to the City of Peoria.

Qwest Communications

Ron Floyd (602)630-3457

Qwest Communications has telephone lines within the project limits. One line runs north-south along the west side of 91st Avenue, north of Greulich's driveway. A conflict is not anticipated with this line.

Qwest has an existing pedestal and underground lines along south side of Olive Avenue, station 72+50 right.

Qwest has another line running north-south, east of 91st Avenue, from Chevron to north. This line was recently relocated to eliminate conflict with recently constructed Jiffy Lube improvements.

The following utility companies have adjustments or other work that are part of the project. The contractor shall perform the work in accordance with the specifications on the plans and the Special Provisions:

Salt River Project (SRP) Electric (12 KV)

Sharon Benson (602)236-0806

KJL-146 SRP Power- Street light Underground Line

This work will be performed during the proposed road construction and in coordination with the contractor. SRP estimates that this work will take 25 working days to bid and mobilize and 5 working days to complete the construction activities upon the completion of the contractor's trench and conduit installation. SRP's actual start and durations are subject to the contractor's schedule.

SRP partially serves the streetlights in this intersection and will provide new feed to the lights in the following areas.

- Along the west side of 91" Ave. north and south of Olive Ave.
- Along the north side of Olive Ave. west of 91st Ave.

- Along the south side of Olive Ave. east and west of 91st Ave.
- The contractor shall provide survey and install 16 new streetlights, trench, conduit, SRP provided j boxes, and ground rods.

SRP will provide and install the conductor and the connections for the new streetlights. Existing streetlights in conflict will be disconnected and conductors in conduit removed in coordination with the contractor's road construction schedule by SRP Power.

An early disconnect of streetlights and wire along the south side of Olive east of 91st Ave is anticipated and will be coordinated with the SRVWUA proposed irrigation pipe early construction installations in this area as needed.

SRP Power (SRPP) General Requirements

1. SRPP will not proceed with any work until all City right of way in the work area has been acquired, the work area for SRPP's construction is clear and level, prior rights have been resolved, relocation alignments approved by the City design consultant, the necessary agreements have been executed, all affected SRP easements and prior rights transferred to the new relocated locations, all long lead materials (Steel Poles etc.) are available and all the required permits approved by the various municipalities, the railroad and City including any required State Land permits.
2. Any damage to existing, new or partially completed SRPP facilities, including survey markers and staking, by the contractor's forces or equipment will be the responsibility of the contractor. No excavation shall take place without Blue Stake.
3. City, the design consultant, or the contractor must review and approve any proposed shoofly locations. Shooflies required for construction convenience will be paid for by others. SRPP will design the most cost-effective shoofly that meets NESC and other required codes. Any expenses for modification or relocation of a shoofly after initial installation will be at the expense of others.
4. All shooflies, disconnects, reconnects and temporary power requirements will be at the expense of the requestor and paid in advance based on the estimate and reconciled to the actual after the work is completed.
5. All sub-grades and final grades must be identified on the City design drawings at the locations of all SRPP facilities such as; trench line, pad mounted equipment, pole location, etc. Horizontal and vertical controls must be established by City in the immediate vicinity of the work for all grades and survey ties. SRPP will require that SRPP's field survey for trench center line and elevation and pole locations be confirmed by City prior to start of work to insure correct survey data/datum. SRPP also requires a final legal description of City's right of way in areas where City has not installed right of way monuments.
6. All 69kV and 12kV work is contingent on obtaining outages. All 69 kV line outages must be requested at least 20 working days in advance of planned construction activities. Outages for 12kV should be requested at least 10 working days before planned construction activity. All outages are subject to loading conditions, weather

and critical customer load. The sooner an outage can be scheduled the better. 69 kV OUTAGES BETWEEN MAY 1st AND OCTOBER 1st ARE EXTREMELY DIFFICULT TO OBTAIN. All outage are subject to availability.

7. In order to operate and maintain its 12 kV equipment SRPP requires a ten foot wide linear corridor for its relocated facilities. Where ground level equipment is located a total of 12 feet of clearance is required in the front of equipment.
8. Cost savings can be achieved if locations and electrical loading information for streetlights, traffic signals and landscaping associated with the project are provided prior to completion of relocation design work.
9. STREETLIGHTS SIGNAL LIGHTS OTHER CITY SERVICES. For situations where the conduits for streetlights, signal lights, FMS or any City service are not in a common trench with SRPP the designer will issue the job to City and five copies to SRPP's inspection group. When City has installed the conduits, the SRPP provided J-box and the conduit and lead from the streetlight or the signal light control cabinet to the J-box SRPP inspection (see item 15 below) must be contacted (the last two items must be done by City for any situation). Per SRPP's Customer Policy and Procedures the commercial customer is responsible for providing the trench and conduit. Any inspection by SRPP does not constitute acceptance of the trench and conduit until SRPP has installed the cable, terminated and energized the service. SRPP's inspector must be present to observe mandrelling of the conduit and pass the work completed before SRPP will schedule the installation of cable to energize the lights or signals. NO STREETLIGHT, SIGNAL LIGHT OR OTHER CITY SERVICE WIRE WILL BE INSTALLED OR CONNECTED UNTIL ALL THE REQUIRED INSPECTIONS HAVE BEEN PASSED. A MINIMUM OF FIVE DAYS NOTICE IS REQUIRED TO SCHEDULE A CREW. IF A CREW SHOWS UP TO DO WORK THAT HAS NOT PASSED INSPECTION A MINIMUM OF FIVE DAYS NOTICE MUST BE GIVEN FOR THE CREW TO RETURN.
10. SRP REQUIRES AN EXECUTED SERVICE AGREEMENT BEFORE ANY ELECTRICAL WORK WILL PROCEED.
11. Any streetlights that are to be disconnected for removal and or construction purposes require a disconnect letter from the owner, and a minimum of 10 working days notice for a disconnect and/or reconnect. If the streetlights are to be removed, SRPP will only remove its cable from any conduit to the point of delivery and abandon the conduit and any direct buried cable. The contractor should confirm ownership of lights before any removal and disposal. The party requesting the disconnect or reconnect will be responsible for the cost. Streetlights and the interconnections are not the property of SRPP.
12. A MINIMUM OF TWENTY DAYS (20) NOTICE IS REQUIRED TO SCHEDULE AN SRPP CREW FOR NON SCHEDULED WORK.
13. A DISCONNECT IS ONLY THE REMOVAL OF THE METER. If total removal of electrical equipment is required, a written request to remove or abandon equipment is required from the owner of the facilities. All removals are at the expense of the owner and/or requestor.
14. For all bridge lighting, SRPP will provide service to J-boxes adjacent to but off of the bridge. All bridge conduits, wire fixtures, etc, shall be the responsibility of others.

15. Any design performed by others for and on behalf of SRPP must be to SRPP standards and specification and reviewed and approved by SRPP. All design and construction by others, including trench and conduit, must be done per SRPP specifications (contact SRPP for information).
16. An SRPP inspector must inspect any construction performed by others for and on behalf of SRPP. Any conduit installation or other work that is performed by others for and on behalf of SRPP including street lights that is covered or closed before being inspected by SRPP will be exposed for inspection at the contractor's expense. Also, after covering the conduit, final approval of any conduit installation requires that the contractor "blow" a mandrel through the conduit in the presence of the SRPP inspector to demonstrate there is no blockage or deformity. A pre construction meeting shall take place prior to construction. Pre-scheduling of inspection may be available after construction starts. The present phone number for scheduling inspection is 602-236-8684 (Project Services Department). This number may change and will be appropriately updated.
17. Do not excavate within a 25-foot radius of any power pole. Power poles have not been designed for adjacent excavation. Contractors must submit plans to SRPP for approval at least ten (10) working days prior to start of work if construction requires any excavation within a 25-foot radius of a power pole. Review by SRPP does not relieve the Contractor of his responsibilities for protecting structures from impacts of adjacent excavations. Any bracing, guying or other special provision required to allow contractors to excavate next to SRPP structures will be prepaid by the contractor.
18. After existing facilities are relocated and energized SRPP will: 1) remove overhead (OH) lines that are in conflict and 2) for underground (UG) lines, SRPP will remove the above ground equipment and cable from existing conduits. Others must remove abandoned direct buried cable, pads and conduit that may be in conflict.
19. All construction durations are subject to change depending upon final design approval, construction sequencing, final locations, access, permits, City right of way and archeological release for construction, etc.
20. SRPP at its own discretion will determine if SRPP will provide the Contractor(s) with paper copies or reproducible copies of any SRPP drawings required by the Contractor(s).

The contractor may contact SRPP safety department at 236-8120 prior to the start of construction to discuss safety issues related to working near energized overhead lines. One group meeting will be conducted prior to construction. The contractor will pay for individual contractor or subcontractor meetings.

Arizona Public Service (APS)

Ron Gandara (602)371-7546

APS is designing and installing the power for street lighting, including pull boxes, conduit and conductor(s), to each pole installation within the APS service area. The contractor shall be responsible for coordinating with APS prior to each pole foundation installation within the

APS service area for scheduling and to avoid impacting APS installed pull boxes, conduits, conductors, and any incidentals.

APS will furnish all J boxes, install conductors and make connections to new streetlights as shown on the project plans. The contractor will provide conduit infrastructure for new street lighting and install all conduit and perform all trench work. The contractor shall notify APS 10 calendar days prior to pole installation.

City of Peoria

Ben Wilson (623) 773-7185

The City of Peoria has several existing utilities within the project limits including water lines, sewer lines, storm drains, traffic signal conduits and equipment and a recently installed fiber optic line. No major relocations are anticipated. Minor adjustment and relocations would be performed during the construction of the project.

Existing valves, boxes, fire hydrants and air release valves will be adjusted or relocated during the construction. Existing catch basins will be removed, the storm drain pipes will be extended and new catch basins will be installed during the construction. Realignment of a water main will be needed on 91st Avenue to avoid conflict with the proposed catch basin and will be performed during the construction.

It shall be the Contractor's responsibility to determine the exact location of the utilities prior to any construction operations and to notify the above mentioned utility companies a minimum of five (5) working days prior to commencing any work on the project.

(107FINA, 1/16/09)

SECTION 107 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC:

107.19 Federal Immigration and Nationality Act: of the Standard Specifications is revised to read:

(A) General:

The contractor, including all subcontractors, shall comply with all federal, state and local immigration laws and regulations, as set forth in Arizona Executive Order 2005-30, relating to the immigration status of their employees who perform services on the contract during the duration of the contract. The State shall retain the right to perform random audits of contractor and subcontractor records or to inspect papers of any employee thereof to ensure compliance.

The contractor shall include the provisions of Subsection 107.19 in all its subcontracts.

In addition, the contractor shall require that all subcontractors comply with the provisions of Subsection 107.19, monitor such subcontractor compliance, and assist the Department in any compliance verification regarding any subcontractor.

(B) Compliance Requirements for A.R.S. § 41-4401, Government Procurement, E-Verify Requirement; Sanctions:

By submission of a bid, the contractor warrants that the contractor and all proposed subcontractors are and shall remain in compliance with:

- (1) All federal, state and local immigration laws and regulations relating to the immigration status of their employees who perform services on the contract, and
- (2) A.R.S. Section 23-214, Subsection A (That subsection reads: "After December 31, 2007, every employer, after hiring an employee, shall verify the employment eligibility of the employee through the E-Verify program.").

A breach of a warranty regarding compliance with immigration laws and regulations shall be deemed a material breach of the contract, and the contractor and subcontractors are subject to sanctions specified in Subsection 107.19(D).

Failure to comply with a State audit process to randomly verify the employment records of contractors and subcontractors shall be deemed a material breach of the contract, and the contractor and subcontractors are subject to sanctions specified in Subsection 107.19(D).

(C) Compliance Verification:

The State may, at its sole discretion, require evidence of compliance from the contractor or subcontractor.

Should the State request evidence of compliance, the contractor shall complete and return the State Contractor Employment Record Verification Form and Employee Verification Worksheet, provided by the Department, no later than 21 days from receipt of the request for such information.

Listing of the compliance verification procedure specified above does not preclude the Department from utilizing other means to determine compliance.

The State retains the legal right to inspect the papers of any employee who works on the contract to ensure that the contractor or subcontractor is complying with the warranty specified in Subsection 107.09(B).

(D) Sanctions for Non-Compliance:

For purposes of this paragraph, non-compliance refers to either the contractor's or subcontractor's failure to follow immigration laws or to the contractor's failure to provide

records when requested. Failure to comply with the immigration laws or to submit proof of compliance constitutes a material breach of contract. At a minimum, the Department will reduce the contractor's compensation by \$10,000 for the initial instance of non-compliance by the contractor or a subcontractor. If the same contractor or subcontractor is in non-compliance within two years from the initial non-compliance, the contractor's compensation will be reduced by a minimum of \$50,000 for each instance of non-compliance. The third instance by the same contractor or subcontractor within a two-year period may result, in addition to the minimum \$50,000 reduction in compensation, in removal of the offending contractor or subcontractor, suspension of work in whole or in part or, in the case of a third violation by the contractor, termination of the contract for default.

In addition, the Department may debar a contractor or subcontractor who is in non-compliance three times within a two-year period for up to one year. For purposes of considering debarment: (1) non-compliance by a subcontractor does not count as a violation by the contractor, and (2) the Department will count instances of non-compliance on other Department contracts.

The sanctions described herein are the minimum sanctions; in case of major violations the Department reserves the right to impose any sanctions up to and including termination and debarment, regardless of the number of instances of non-compliance.

Any delay resulting from a compliance verification or a sanction under this subsection is a non-excusable delay. The contractor is not entitled to any compensation or extension of time for any delays or additional costs resulting from a compliance verification or a sanction under subsection 107.19.

An example of the minimum sanctions under this subsection is presented in the following table:

Offense by:			Minimum Reduction in Compensation
Contractor	Subcontractor A	Subcontractor B	
First			\$10,000
	First		\$10,000
	Second		\$50,000
		First	\$10,000
	Third		\$50,000 *

* May, in addition, result in removal and debarment of the subcontractor.

(108TIME, 10/12/01)

SECTION 108 - PROSECUTION AND PROGRESS:

108.08 Determination and Extension of Contract Time: the first paragraph of the Standard Specifications is revised to read:

Construction Phase:

The time allowed for the completion of the work included in the Construction Phase of the contract will be 180 calendar days.

Landscape Establishment Phase:

The time allowed for the completion of the work included in the Landscape Establishment Phase of the contract will be 90 calendar days.

The total of the time allowed for the Construction Phase plus the Landscape Establishment Phase will be known as the "Contract Time."

(109FORCE, 02/20/08)

SECTION 109 - MEASUREMENT AND PAYMENT:

109.04(D)(3)(a) Rental Rates (Without Operators): of the Standard Specifications is modified to add:

The Rental Rate Blue Book adjustment factor (F) will be 0.933.

(109RET, 6/20/08)

SECTION 109 - MEASUREMENT AND PAYMENT:

109.06(C) Payroll Submittals: of the Standard Specifications is revised to read:

The contractor shall submit payrolls electronically through the internet to the Department's web-based certified payroll tracking system. This requirement shall also apply to every lower-tier subcontractor that is required to provide certified payroll reports.

If, by the 15th of the month, the contractor has not submitted its payrolls for all work performed during the preceding month, the Engineer will provide written notification of the discrepancies to the contractor. For each payroll document that the contractor fails to submit within 10 days after the written notification, the Department will retain \$2,500.00 from the progress payment for the current month. The contractor shall submit each

complete and correct payroll within 90 days of the date of written notification. If the payroll is complete and correct within the 90-day time frame, the Department will release the \$2,500.00 on the next monthly estimate. For each payroll that is not acceptable until after the 90-day time frame, the Department will only release \$2,000.00 of the \$2,500.00 retained. The Department will retain \$500.00 as liquidated damages. These liquidated damages shall be in addition to all other retention or liquidated damages provided for elsewhere in the contract.

109.07 **Partial Payment for Material on Hand:** the fifth paragraph of the Standard Specifications is hereby deleted.

(109FUEL, 10/11/06)

SECTION 109 - MEASUREMENT AND PAYMENT: of the Standard Specifications is modified to add:

109.12 **Fuel Cost Adjustment:**

(A) General:

The Department will adjust monthly progress payments up or down as appropriate for cost fluctuations in diesel fuel as determined in accordance with these special provisions.

A fuel cost adjustment will be made when fluctuations in the price of diesel fuel, in excess of 15 percent, occur throughout this contract. The Department will not provide such adjustments for fluctuations in the price of diesel fuel of 15 percent or less.

No adjustments will be made for fluctuations in the price of fuels other than diesel.

(B) Measurement:

The base index price of fuel will be determined by the Department from the selling prices of diesel fuel published by OPIS (Oil Price Information Service). The base index price to be used will be the price for Diesel fuel No. 2, Ultra Low Sulfur, PAD 5, City of Phoenix Rack. The reported average value for the Phoenix area will be used.

The base index price for each month will be the arithmetic average of the selling price for diesel fuel, as specified above, shown in the last four reports received prior to the last Wednesday of the month.

This price will be made known by means of a memorandum issued on the last Wednesday of each month and mailed to those currently receiving copies of the Advertisements for Bids. This price may also be obtained from Contracts and Specifications Services at (602) 712-7221.

This price will be deemed to be the "initial cost" for diesel fuel on projects for which bids are opened during the following month.

The current index price for diesel fuel in subsequent months will be the base index price, determined as specified above, for the current month. The amount of adjustment per gallon will be the net difference between the "initial cost," adjusted by 15 percent, and the current index price. The monthly adjustment will be determined by the Engineer and included in the payment estimate as a fuel adjustment. For fluctuations in excess of 15 percent, fuel cost adjustments will only be made for current price index increases greater than 1.15 times the "initial cost" or for decreases less than 0.85 times the "initial cost." No calculation will be made for fluctuations in the current index price of 15 percent or less when compared to the "initial cost."

The number of gallons of diesel fuel used per month will be considered to equal 1.5 percent of the dollar amount of work reported by the contractor for each month. Such dollar amount will not include any incentives earned by the contractor, including those for pavement smoothness, thickness, or strength. A monthly adjustment, if applicable, will be made on this quantity, as shown below:

$$S = 0.015(Q) \times (CP-AC)$$

Where; S = Monetary amount of the adjustment (plus or minus) in dollars
Q = Dollar amount of work completed for the month
CP = Current index price in dollars per gallon
AC = Adjusted "initial cost" (1.15 or 0.85 times IC) in dollars per gallon
IC = "Initial cost" as determined above, dollars per gallon

If adjustments are made in the contract quantities, the contractor shall accept any fuel adjustment as full compensation for increases or decreases in the price of fuel regardless of the amounts of overrun or underrun.

No additional compensation will be made for any additional charges, costs, expenses, etc., which the contractor may have incurred since the time of bidding and which may be the result of any fluctuation in the base index price of diesel fuel.

No adjustments will be made for work performed after Substantial Completion, as defined in Subsection 105.19, has been achieved.

The need for application of the adjustments herein to extra work will be determined by the Engineer on an individual basis and, if appropriate, will be specified on the work order.

(C) Payment:

Price adjustments will be shown on the monthly progress estimate, but will not be included in the total cost of work for determination of progress or for extension of contract time.

(201MTBRN, 06/04/96)

SECTION 201 - CLEARING AND GRUBBING:

201-3.02 **Removal and Disposal of Materials:** the third paragraph of the Standard Specifications is revised to read:

Burning of trash, debris, plant material, wood, or any other waste materials will not be allowed.

SECTION 202 REMOVAL OF STRUCTURES AND OBSTRUCTIONS:

202-1 **Description:** of the Standard Specifications is modified to add:

The work under this section shall include, but not be limited to, the removal and lawful disposal of the following:

Scuppers, spillways, raised median pavement, commercial sign foundations, private lighting foundations, structures, cactus, mailboxes, unsuitable materials and other removal items for which there is no bid item on the bidding schedule.

Removal of traffic signs and foundations, and of traffic signal foundations will be paid under other pay items.

(202RMVL, 5/15/08)

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS:

202-3.07 **Removal of Embankment Curb:** the second paragraph is revised to read:

Asphaltic concrete obtained from sources approved by the Engineer shall be used to fill and repair voids on the existing pavement surface that result from the removals.

202-3.09 **Removal of Guardrail:** the first paragraph of the Standard Specifications is revised to read:

All guardrail to be removed shall become the property of the contractor unless otherwise specified on the project plans. Guardrail removal shall include complete removal of posts, concrete foundations, and foundation tubes, and subsequent backfill of the remaining holes with moist soil in compacted lifts, as approved by the Engineer.

ITEM 2020031 REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT:

Description:

The work consists of furnishing all necessary equipment, materials, and labor for the removal of existing Portland Cement Concrete Pavement (PCCP) in accordance with the project plans and these special provisions. The work shall include removing the material from the site and proper disposal as per the requirements of Section 202-3.03 of the Standard Specifications.

Construction Requirements:

The pavement shall be removed. During construction, the Contractor shall remove and dispose of the remnants properly, according to all applicable codes and requirements, as directed by the Engineer.

Method of Measurement:

ITEM 2020031 REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT will be measured by the square yard.

Basis of Payment:

Payment for ITEM 2020031 REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, measured as described above, will be paid for at the contract unit price which shall include all materials, equipment and labor required to perform the work as shown on the Contract Plans and as specified herein.

ITEM 2020053 REMOVE (CATCH BASIN):

Description:

This work consists of furnishing all necessary equipment, materials, and labor for the removal of existing catch basins in accordance with the project plans and these Special Provisions.

Construction Requirements:

During construction, the Contractor shall neatly cut the pipe remove the catch basins and properly dispose of the remnants off the project according to the project plans, applicable codes and other requirements. The pipe shall be plugged with a concrete plug as per standard C-13.76.

In locations where catch basins have been removed and the area is otherwise undisturbed by this project, the removal area shall be backfilled and compacted per Subsection 202-

3.01 of the Standard Specifications to match the surrounding surfaces as a component of this bid item.

Method of Measurement:

ITEM 2020053 – Remove (Catch Basin) will be measured as a unit each for a catch basin acceptably removed.

Basis of Payment:

ITEM 2020053 – Remove (Catch Basin), as measured above, will be paid at the contract unit price including cutting of the pipe, installing a plug, removing the catch basin and disposal of all debris.

ITEM 2020054 REMOVE (PULL BOX):

Description:

This work consist of furnishing all necessary equipment, materials, and labor for the removal of existing pull boxes in accordance with the project plans and these Special Provisions.

Construction Requirements:

During construction, the Contractor shall remove completely the pull boxes and dispose of the remnants properly, according to the project plans, all applicable codes and requirements, off the project site.

In locations where pull boxes have been removed and the area is otherwise undisturbed by this project, the removal area shall be backfilled and compacted per Subsection 202-3.01 of the Standard Specifications to match the surrounding surfaces as a component of this bid item.

Method of Measurement:

ITEM 2020054 – Remove (Pull Box) will be measured as a unit each for a pull box satisfactorily removed.

Basis of Payment:

ITEM 2020054 – Remove (Pull Box), as measured above, will be paid at the contract unit price.

ITEM 2020153

REMOVE (VIDEO DETECTION SYSTEM):

Description:

This work shall consist of furnishing all necessary equipment, materials and labor for the removal and salvage of the existing Econolite Autoscope Tera video detection equipment in accordance with the project plans and these special provisions. When removing and salvaging video detection equipment, care shall be taken to not damage salvaged equipment. If the equipment is damaged during the removal or reinstallation the contractor shall replace the damaged equipment at no cost to the Department.

Construction Requirements:

During construction, the contractor shall remove and salvage the video detection equipment from the existing traffic signal mast arms and store the equipment off-site until such time that it can be installed on the new traffic signal mast arms.

Method of Measurement:

Item 2020153 - REMOVE (VIDEO DETECTION SYSTEM) will be measured as a single, lump sum, unit of work.

Basis of Payment:

Item 2020153 - REMOVE (VIDEO DETECTION SYSTEM), as measured above will be paid at the contract unit price.

SECTION 203 EARTHWORK:

203-3.03 Construction Requirements: of the Standard Specifications is modified to add:

203-3.03 (F) Subgrade Acceptance Chart:

The attached Subgrade Acceptance Chart (Appendix A) shall be used during construction for determining whether subgrade materials are suitable as outlined in Section 203-3.03(D) of the ADOT Construction Manual.

(203ERWK, 02/20/08)

SECTION 203 - EARTHWORK:

203-9.02 **Materials:** the last sentence of the Standard Specifications is revised to read:

Borrow placed within three feet of the finished subgrade elevation shall conform to the following requirement:

PC + (2.83 x PI) shall not exceed 104,

where:

PC = Percent of material passing the No. 200 sieve (determined in accordance with Arizona Test Method 201), and

PI = Plasticity Index (determined in accordance with AASHTO T 90).

ITEM 2050001 GRADING ROADWAY FOR PAVEMENT:

1. Description:

This work shall consist of constructing the pavement subgrade to the lines and grades shown in accordance with the project plans, standard specifications and these Special Provisions. The work includes any removals or borrow required to construct a subgrade that meets the required grade and conditioning.

2 Materials:

If there is insufficient embankment material generated by other construction operations, the contractor shall supply borrow material to make up the difference. Material located within three feet of finished subgrade, when existing on the project, shall conform to the requirements of the Subgrade Acceptance Chart found in Appendix A of the Special Provisions.

If material is hauled-in from off-site and placed within 3 feet of subgrade, it shall meet the requirements of Subsection 203-9.02 of the Specifications.

3 Construction Requirements:

Construction of this work under this item shall be in accordance with the requirements of these special provisions and Subsection 205-3 of the Standard Specifications.

The contractor shall furnish all necessary equipment, materials, and labor for the sawcutting and removal of existing asphaltic concrete pavements and concrete not included in other bid items; excavating, removing and disposing of excess material; and re-compacting; furnishing and placing embankment and any grading, shaping and compacting of materials necessary to construct the subgrade to the required condition as shown in the project plans and standard specifications.

Exposed subgrade shall be scarified to a depth of six inches; moisture conditioned and compacted as defined in Section 203 of the Standard Specifications. Work associated with excavation and re-grading of retention basins shall be considered included in this item.

4 Method of Measurement:

ITEM 2050001 – GRADING ROADWAY FOR PAVEMENT will be measured by the square yard in accordance with Subsection 205-4.

5 Basis of Payment:

The accepted quantity of ITEM 2050001 – GRADING ROADWAY FOR PAVEMENT will be paid for at the contract unit price per square yard, which shall be full compensation for the work, complete in place, including any required sawcutting, removals, grading, borrow material, disposal, watering and compacting.

(207DSP, 02/20/08)

SECTION 209 FURNISH WATER: of the Standard Specifications is hereby deleted:

SECTION 207 BLANK of the Standard Specifications is revised to read:

SECTION 207 DUST PALLIATIVE:

207-1 Description:

The work under this section shall consist of applying all water required for the control of dust as considered necessary for the safety and convenience of the traveling public, and for the reduction of the dust nuisance to adjacent property.

207-2 Blank

207-3 Construction Requirements:

The use of pressure pumps and spray bars on all sprinkling equipment used for the application of dust palliative will be required. The use of gravity flow spray bars and splash plates will not be permitted.

Water applied for dust control shall be as approved or directed by the Engineer. The contractor shall provide appropriate equipment for effective control of dust.

207-4 Method of Measurement and Basis of Payment:

No measurement will be made for application of dust palliative, including furnishing water and all necessary equipment and labor, the cost being considered as included in contract items.

(303QCAB, 07/15/05)

SECTION 303 AGGREGATE SUBBASES AND AGGREGATE BASES: of the Standard Specifications is modified to add:

303-3.04 Contractor Quality Control:

The contractor shall perform the quality control measures described in Subsection 106.04(C). At the weekly meeting, the contractor shall be prepared to explain and discuss how the following processes will be employed:

- (a) Aggregate production, including crusher methods, pit extraction, and washing.
- (b) Stockpile management, including stacking methods, separation technique, stockpile pad thickness, and segregation prevention.
- (c) Transporting and placing, including transport technique, lift thickness, processing and mixing technique, and compaction methods.

The contractor shall obtain samples and perform the tests specified in the following table:

CONTRACTOR QUALITY CONTROL TESTING REQUIREMENTS			
TYPE OF TEST	TEST METHOD	SAMPLING POINT	MINIMUM TESTING FREQUENCY
Aggregate Base Class 1, 2, or 3			
Fractured Coarse Aggregate Particles	ARIZ 212	Crusher belt or Stockpile	1 per 1,200 CY
Gradation	ARIZ 201	Crusher belt or Stockpile	1 per 600 CY
PI	AASHTO T 89 AASHTO T 90		
Proctor Density	ARIZ 225 ARIZ 226 ARIZ 245	Crusher belt or Stockpile	1 per Source and as needed
Field Density	ARIZ 227 ARIZ 230 ARIZ 232 ARIZ 235 ARIZ 246	Roadway	1 per 600 CY
Aggregate Subbase Class 4, 5, or 6			
Fractured Coarse Aggregate Particles (Class 4)	ARIZ 212	Crusher Belt or Stockpile	1 per 1,200 CY
Gradation	ARIZ 201	Crusher Belt or Stockpile	1 per 600 CY
PI	AASHTO T89 AASHTO T90		
Proctor Density	ARIZ 225 ARIZ 226 ARIZ 245	Crusher belt or Stockpile	1 per Source and as needed
Field Density	ARIZ 227 ARIZ 230 ARIZ 232 ARIZ 235 ARIZ 246	Roadway	1 per 600 CY

(404BITUM, 03/17/08)

SECTION 404 BITUMINOUS TREATMENTS:

404-2.02(A) General: the first paragraph of the Standard Specifications is revised to read:

The contractor shall provide a source of aggregate material in accordance with the requirements of Section 1001.

404-3.12 Tack Coat: of the Standard Specifications is revised to read:

Tack coat shall be applied prior to placing a bituminous mixture on a primed surface, an existing bituminous surface, or an existing Portland cement concrete pavement surface. Tack coat shall also be applied between layers of bituminous mixtures. A light coat of bituminous material shall also be applied to edges or vertical surfaces against which a bituminous mixture is to be placed.

The contractor shall choose the bituminous material to be used for tack coat. The Engineer must approve the contractor's choice of bituminous material prior to its use.

The bituminous material used for tack coat shall conform to the requirements of Section 1005.

The rate of application for the specific usage will be specified by the Engineer. The following table shows approximate tack coat application rates:

Type of Bituminous Material	Approximate Tack Coat Application Rates: Gallons / Square Yard	Payment Factor
Emulsified Asphalt (Special Type) - See Note Below.	0.12	0.7
Emulsified Asphalt (Other than Special Type)	0.08	1.0
Asphalt Cement	0.06 to 0.08	1.0
Note: Emulsified Asphalt (Special Type) shall consist of Type SS-1 or CSS-1 emulsified asphalt diluted with water to provide an asphalt content of not less than 26 percent.		

If emulsified asphalt of any type is used, it shall have broken before the bituminous mixture is placed.

If emulsified asphalt of any type is held over night, it shall be reheated and agitated prior to further application.

The Engineer may either adjust the application rate or, except as specified below, eliminate the use of tack coat in any part of the work if, in the Engineer's judgment, the bituminous mixture to be placed will be effectively bonded to the underlying surface. For asphaltic concrete friction course, asphaltic concrete friction course (asphalt-rubber), or asphaltic concrete (asphalt-rubber), application of the tack coat immediately prior to placing such pavements shall not be eliminated, although the Engineer may adjust the application rate.

Tack coat shall be applied only as far in advance of the placement of the bituminous mixture as is necessary to obtain the proper condition of tackiness. In no event shall more tack coat be applied in one day than will be covered by the bituminous mixture during that same day.

(404BIMAT, 6/15/09)

SECTION 404 BITUMINOUS TREATMENTS:

404-5 Basis of Payment: of the Standard Specifications is modified to add:

The term "bituminous material" as used herein shall include asphalt cement, liquid asphalt, and emulsified asphalt.

The contract unit price for each item of bituminous material will be considered to include all costs for furnishing, hauling, handling, spreading, and mixing of the material as required, including the "initial cost" of bituminous material, but excluding any difference in the cost of bituminous material that occurs between the date of bid opening and the date that the material is used on the project.

A cost for bituminous material will be determined monthly by the Department based on the selling prices of asphalt cement published by the Asphalt Weekly Monitor, a publication of Poten & Partners, Inc. The cost will be the arithmetic average of the high and low selling prices for asphalt cement shown in the previous four reports for the Arizona/Utah and Southern California regions.

This cost will be deemed the "initial cost" (IC) for bituminous material for projects on which bids are opened during the following month. This cost will also be deemed the "current price" (CP) for bituminous material for the following month for projects in construction.

This value will be made known by means of a memorandum issued on the last Wednesday of each month and mailed to those currently receiving copies of the Advertisements for Bids.

This information may also be obtained from Contracts and Specifications Services, (602) 712-7221.

For each item of bituminous material for which there is a specific pay item, and for the bituminous material used in Asphaltic Concrete (Miscellaneous Structural), an adjustment will be made as follows for each month that a quantity of bituminous material was used on the project.

The "initial cost" (IC) for the month in which the project was bid will be compared with the "current price" (CP) as specified above for the appropriate current month. The "current price" (CP) will be as shown in the memorandum issued on the last Wednesday of each month, and will be used to adjust costs for bituminous material incorporated into the job during the following month (for example; bituminous material used in May will be adjusted, as specified herein, based on the "current price" (CP) for May as shown in the memorandum issued on the last Wednesday of April). Any difference in price between these two values will be applied to the quantity of eligible bituminous material incorporated into the work.

Determination of the eligible quantities of bituminous material will be based on contractor-furnished invoices, except as modified below.

The tons of emulsified products to which the adjustment will be applicable will be the tons of the emulsified bituminous asphalt prior to dilution.

Adjustments in compensation for emulsified asphalts will be made at 60 percent of either the increase or decrease.

The tons of Bituminous Material (Asphalt Rubber) to which the adjustment will be applicable will be 0.80 multiplied times the total quantity of the item used. The adjustment will not apply to the 20 percent of the material which constitutes the rubber additive.

The tons of bituminous material incorporated in Asphaltic Concrete (Miscellaneous Structural) to which an adjustment will be applicable will be considered to equal five percent of the quantity, measured in tons, of Asphaltic Concrete (Miscellaneous Structural) placed, regardless of the actual percentage of bituminous material incorporated into the mix. If the quantity of Asphaltic Concrete (Miscellaneous Structural) is measured by volume, the supplemental agreement establishing the method of measurement will specify the manner in which the tons of asphalt cement eligible for the adjustment are determined.

The tons of bituminous materials which are paid for on the basis of testing by nuclear asphalt content gauge, ignition furnace, or other approved methods to which the adjustment will be applicable, are the tons which have been incorporated into the mixture.

When reclaimed asphalt pavement (RAP) is used in asphaltic concrete, only the virgin asphalt cement will be subject to a bituminous material price adjustment. RAP binder is not subject to a price adjustment.

No additional compensation will be made for any additional or increased charges, costs, expenses, taxes, etc., which the contractor may have incurred since the time of bidding and which may be the result of any increase in the "initial cost" of bituminous material.

Adjustment in unit prices of items governed by this provision will be made in the next regular monthly progress payment following actual use or application of the bituminous material.

Any adjustment in compensation made for bituminous material incorporated into the work after the expiration of the specified completion time set forth in the contract, or as may be extended in accordance with the provisions of Subsection 108.08, will be on the basis of the price of bituminous material shown in the memorandum applicable on the date of the expiration of the specified completion time, as hereinbefore specified.

ITEM 4060018 ASPHALTIC CONCRETE (CITY OF PEORIA MIX C 3/4"):

Description:

This work under this item consists of furnishing necessary equipment, materials, and labor for constructing new asphaltic concrete pavement at the locations shown in the plans and per the requirements of these special provisions.

Materials:

Materials and manufacture shall conform to the latest City of Phoenix Supplement to MAG Uniform Standard Details, MAG Uniform Standard Specifications and Details for Public Works Construction, as per latest City of Peoria Development Guide. Pre-approved asphalt mix product codes can be obtained through the City of Peoria Engineering website. The City of Peoria uses mix designs as contained in the City of Phoenix Supplement to the MAG Specifications.

Pavement structural sections are as shown on the plans. AC pavement mix shall meet the requirements of C-3/4, designed for high volume traffic loading. The AC material shall be laid down in lifts of a thickness as shown on the plans. Submit asphalt cement, aggregate materials testing data and mix design for approval by the Engineer. Pre-approved asphalt mix product codes may be obtained through the City of Peoria Engineering website.

The percentage of bitumen for the Peoria 3/4" Mix is 5.0% for estimating purposes. Materials and manufacture shall conform with the City of Phoenix Supplement to MAG Specifications for the asphalt mix design and Section 710 for the type of material specified. (<http://phoenix.gov/ftpalias/payf/mag2005.pdf>).

Construction Requirements:

The construction of asphaltic concrete mix shall conform to the latest City of Peoria Supplement to MAG Uniform Standard Details, MAG Uniform Standard Specifications and Details for Public Works Construction, as per the latest City of Peoria Development Guide.

Method of Measurement:

ITEM 4060018 - ASPHALTIC CONCRETE (CITY OF PEORIA MIX C 3/4"), will be measured by the ton of mixture acceptably placed. Measurement will include the weight of mineral aggregate, bituminous material, and mineral admixture. Measurement will include any materials used in construction of intersections, turnouts, curbs, spillways and spillway inlets, ditches, catch basin entrances, median strips, sidewalks, and other miscellaneous items or surfaces as indicated on the plans or as directed by the engineer.

Basis of Payment:

ITEM 4060018 - ASPHALTIC CONCRETE (CITY OF PEORIA MIX C 3/4"), measured as provided above, will be paid for at the contract unit price per ton for the bituminous mixture complete in place.

(414ACFAR, 10/31/08)

SECTION 414 ASPHALTIC CONCRETE FRICTION COURSE (ASPHALT-RUBBER):

414-1 Description: the first paragraph of the Standard Specifications is revised to read:

The work under this section shall consist of constructing Asphaltic Concrete Friction Course (Asphalt-Rubber), hereinafter asphaltic concrete, by furnishing all materials, mixing at a plant, hauling and placing a mixture of aggregate materials, mineral admixture, and bituminous material (asphalt-rubber) to form a pavement course or to be used for other specified purposes, in accordance with the details shown on the project plans and the requirements of the specifications, and as directed by the Engineer.

414-3 Materials: of the Standard Specifications is modified to add:

For comparative purposes, quantities shown in the bidding schedule have been calculated based on the following data:

Spread Rate (lb./sq. yd.)	118
Asphalt-Rubber, %	9.5
Mineral Admixture, %	1.0

The spread rate specified includes 25 percent for leveling to provide a minimum 1-inch thickness above the leveling thickness. The exact spread rate will be determined by the Engineer.

414-3.01 Mineral Aggregate: the first paragraph of the Standard Specifications is revised to read:

The contractor shall provide a source of mineral aggregate in accordance with the requirements of Section 1001 of the specifications.

414-3.03 Bituminous Material: the first paragraph of the Standard Specifications is revised to read:

Bituminous material shall be asphalt-rubber conforming to the requirements of Section 1009 of the specifications. The asphalt-rubber shall be CRA Type 1. The crumb rubber gradation shall be Type B conforming to the requirements of Section 1009.

414-4 Mix Design: of the Standard Specifications is modified to add:

The contractor may propose the use of a mix design that has been developed for a previous project. The proposed mix design shall meet the requirements of these specifications. The contractor shall provide evidence that the type and source of bituminous material, the type of mineral admixture, and the source and methods of producing mineral aggregate have not changed since the formulation of the previous mix design. The contractor shall also provide current test results for all specified characteristics of the mineral aggregate proposed for use. The Engineer will determine if the previously used mix design is suitable for the intended use and if the previous use of the mix design was satisfactory to the Department. The Engineer will either approve or disapprove the proposed mix design. Should the Engineer disapprove the use of the previously used mix design, the contractor shall prepare and submit a new mix design proposal in accordance with the requirements of these specifications.

A previously used mix design older than two years from the date it was formulated, sealed, signed, and dated shall not be allowed for use. Once approved for use on a project, a mix design may be used for the duration of the project.

414-5 Mix Design Revisions: the third paragraph of the Standard Specifications is revised to read:

If the contractor elects to change its source or type of bituminous material, the type of mineral admixture, or the source(s) of mineral aggregate, or if the contractor adds or deletes the use of a mineral aggregate stockpile(s) regardless of source, testing to the extent deemed necessary by the Engineer will be performed in order that the Engineer may be satisfied that the mix design criteria will be met.

414-7.03 Proportioning, Drying, Heating, and Mixing: the third paragraph of the Standard Specifications is hereby deleted:

414-7.04(A) General Requirements: the third paragraph of the Standard Specifications is revised to read:

Before asphaltic concrete is placed, the surface to be paved shall be cleaned of all objectionable material and tacked with bituminous material in accordance with the requirements of Section 404.

414-7.04(A)(1) Placement Dates and Weather Requirements: the table of the Standard Specifications is revised to read:

Average Elevation of Project, Feet	Beginning and Ending Dates
0 – 3499	March 15 – May 31
0 – 3499	September 1 – October 31
3500 – 4999	April 15 – October 15
5000 – 5999	June 1 – September 15
6000 and over	June 1 – August 15

414-7.04(A)(1) Placement Dates and Weather Requirements: the second paragraph of the Standard Specifications is revised to read:

At any time, the Engineer may require that the work cease or that the work day be reduced in the event that weather conditions, either existing or expected, are anticipated to have an adverse effect upon the asphaltic concrete.

414-7.04(C) Placing and Finishing Asphaltic Concrete by Means of Self-Propelled Paving Machines: the third paragraph of the Standard Specifications is revised to read:

Self-propelled paving machines shall spread the mixture within the specified tolerances, without segregation or tearing, true to the line, grade, and crown indicated on the project plans. Pavers shall be equipped with hoppers and augers which will distribute the mixture uniformly in front of adjustable screeds.

414-8 Method of Measurement: the fourth paragraph of the Standard Specifications is revised to read:

Mineral admixture will be measured by the ton for the mineral admixture actually used in accordance with Subsection 403-2.

ITEM 5012518 STORM DRAIN PIPE, 18”:

Description:

The work under this item shall consist of furnishing all material, equipment and labor necessary to construct the storm drain pipes as described and specified herein, Section 501 of the Standard Specifications, and as shown on the project plans.

Construction Requirements:

The construction of the storm drain pipes will be as described in Section 501 of the Standard Specifications.

When constructing under the roadway, the contractor shall neatly sawcut the full depth of pavement, install the pipe as described above and replace the pavement with full depth pavement structural section utilized for the widening of roadway pavement as shown in the plans.

Method of Measurement:

STORM DRAIN PIPE, 18” shall be measured by the linear foot as per Section 501 of the Standard Specifications.

Basis of Payment:

The accepted quantity of STORM DRAIN PIPE, 18”, measured as provided above, will be paid at the contract unit price, which price shall be full compensation for the work, complete in place as per Section 501 of the Standard Specifications.

No separate measurement or payment will be made for sawcutting pavement and pavement replacement, as the cost is considered included in the contract unit price of the pipe.

- | | |
|---------------------|---|
| ITEM 5030273 | CATCH BASIN, TYPE M-1 (L=10') (PHOENIX DET. P-1569): |
| ITEM 5030274 | CATCH BASIN, TYPE M-1 (L=17') (PHOENIX DET. P-1569): |
| ITEM 5030337 | CATCH BASIN, TYPE B, (MAG DET. 531): |
| ITEM 5030371 | CATCH BASIN, TYPE F, (MAG DET. 535): |

Description:

The work under this item shall consist of furnishing all material, equipment and labor necessary to construct the catch basins as described and specified herein, Section 505 of the MAG Uniform Standard Specifications, and as shown on the project plans.

Construction Requirements:

The construction of the catch basin will be as described in Section 505 of the MAG Uniform Standard Specifications.

Construct concrete encasement per MAG Det 507 when clearance to exiting utilities is less than two feet. A new storm drain inlet marker shall be installed on all new catch basins as per Peoria Standard Detail PE-559.

Method of Measurement:

The various Catch Basins will be measured by the unit each for a catch basin acceptably constructed in accordance with the project requirements.

Basis of Payment:

The accepted quantities of the various Catch Basins, measured as provided above, will be paid at the contract unit price, which price shall be full compensation for the work, complete in place, including any required concrete encasement or inlet markers.

(601PRCST, 03/31/05)

SECTION 601 - CONCRETE STRUCTURES:

601-1 Description: of the Standard Specifications is modified to add:

Pre-cast minor structures shown on the Department's Approved Products List (APL) may be used as alternatives to cast-in-place minor structures. The current list of such pre-cast structures is available on the internet from the Arizona Transportation Research Center (ATRC), through its PRIDE program.

The "H" dimension for catch basins shall be determined in the field prior to casting. The contractor is advised to acquaint itself with conditions peculiar to the project, which might limit the use of precast items.

The use of precast cattle guards for either H-10 or H-20 loading shall be limited to roadway locations with maximum longitudinal grades of six percent.

Pre-cast minor structures not appearing on the APL may be considered for use in accordance with the requirements of Subsection 106.14.

ITEM 6080101 MISCELLANEOUS WORK (SIGNS):

Description:

The work under this section shall include, but is not limited to, the removal of all traffic signs, sign posts, foundations, delineators, object markers, and milepost markers within the project limits, except as identified on the project plans or in these special provisions. The work shall also include relocating sign panels as shown on the project plans.

Construction Requirements:

The contractor shall remove all traffic signs with their sign supports currently in place along the existing roadway alignments at such time as the Engineer determines the signs are no longer necessary for traffic. The contractor shall utilize the existing stop signs and other signing items as much as possible until the existing signing is determined to be no longer necessary.

All items to be removed and which will not be incorporated into the new work shall be removed in a manner which will not produce unnecessary damage or disturbance. The contractor shall not disturb any other signs, sign posts, foundations, delineators, or object markers not specifically indicated on the project plans or in these special provisions to be removed unless otherwise directed by the Engineer. Any items, which are not identified to be removed, which are damaged, as a result of the construction, shall be replaced at the contractor's expense. The signs, sign posts, foundations, delineators, and object markers which are removed shall become the property of the contractor. They shall be disposed of at an acceptable location off the project limits.

Removed and relocated sign panels shall be as shown on the project plans.

Method of Measurement:

Miscellaneous Work (Signs) will be measured as a single, lump sum unit of work.

Sign posts, slip bases and foundations will be measured under their respective bid items.

Basis of Payment:

The accepted quantity of Miscellaneous Work (Signs) measured as provided above, will be paid at the contract lump sum price, which price shall be full compensation for any materials, equipment, and labor necessary to relocate or remove and dispose of highway signs, sign posts, foundations, delineators, object markers, and milepost markers identified on the project plans.

(701PDMPT, 5/05/08)

SECTION 701 - MAINTENANCE AND PROTECTION OF TRAFFIC:

701-5.01 Temporary Concrete Barrier (Installation and Removal): of the Standard Specifications is revised to read:

Temporary concrete barrier, measured as provided above, will be paid for at the contract unit price, which price shall be full compensation for the work, complete in place, as specified herein and as shown on the plans, including furnishing, placing, dismantling, and removal. The price bid shall also include any required connection devices, barrier markers, and glare screen.

Fifty percent of the contract unit price for temporary concrete barrier will be paid upon satisfactory installation.

Should it be necessary to dismantle, pick up and relocate a portion of the barrier installation during construction, whether laterally or vertically, that portion of the removed and relocated barrier will be considered a new installation and paid for at 100 percent of the contract unit price.

Fifty percent of the contract unit price will be paid upon final removal.

No payment will be made for portions of the barrier which the contractor can adjust or realign without dismantling and picking up, such cost being considered as included in the bid price for Temporary Concrete Barrier "Installation and Removal." The Engineer will be the sole judge as to whether devices are to be dismantled, picked up and reinstalled, or are to be adjusted or realigned.

701-5.02 Temporary Impact Attenuators (Installation and Removal): of the Standard Specifications is revised to read:

Temporary Impact Attenuation Devices shall include Sand Barrels and Energy Absorbing Terminals. Temporary Impact Attenuation Devices, measured as provided above, will be paid for at the contract unit price, which price shall be full compensation for the work, complete in place, as specified herein and as shown on the plans, including furnishing the devices with replacement parts, installing, removing and stockpiling the devices.

Fifty percent of the contract unit price for temporary impact attenuators will be paid upon satisfactory installation.

Should it be necessary to dismantle, pick up and reinstall attenuation devices during construction, the work of removing and reinstalling the devices will be considered a new installation and paid for at 100 percent of the contract unit bid price.

Fifty percent of the contract unit price will be paid upon final removal.

The Engineer will be the sole judge as to whether devices are to be dismantled, picked up and reinstalled or are to be adjusted or realigned. No additional payment will be made for devices which are adjusted or realigned, the cost being considered as included in the contract unit price paid for Temporary Impact Attenuator "Installation and Removal."

Measurement and payment for furnishing materials, equipment and labor and repairing attenuation devices that are damaged by the traveling public will be made in accordance with the requirements of Subsection 109.04 of the specifications.

No measurement or direct payment will be made for furnishing replacement parts and repairing devices damaged by other than the traveling public.

(704THRMO, 9/06/07)

SECTION 704 - THERMOPLASTIC PAVEMENT MARKINGS:

704-2.02 **Composition:** the first paragraph of the Standard Specifications is revised to read:

The thermoplastic composition shall conform to the following requirements:

	Percent by Weight	
	White	Yellow
Binder (hydrocarbon or alkyd)	18 - 26	18 - 26
Titanium dioxide	10 - 15	-----
Yellow Lead-Free Pigment	-----	4 - 10
Reflective glass inter-mix beads	30 - 40	30 - 40
Calcium carbonate or equivalent filler	20 - 40	25 - 45

704-2.02(D) **Lead Chromate Pigment:** the title and text of the Standard Specifications are revised to read:

704-2.02(D) **Yellow Pigment:**

The yellow pigment shall be heat resistant and lead free. The type of yellow pigment shall be at the option of the manufacturer provided that the material conforms to all color requirements in a stable and durable fashion as specified herein.

(708PPM, 6/15/09)

SECTION 708 - PERMANENT PAVEMENT MARKINGS:

708-2.02(B) Physical Requirements: of the Standard Specifications is modified to add:

(6) Heavy Metal Concentration:

Heavy metal concentration in glass beads shall be as specified in the following table, when tested by an independent laboratory, approved by the Engineer, using EPA Method 3052 and EPA Method 6010B. A Certificate of Analysis conforming to Subsection 106.05 shall be furnished to the Engineer prior to use.

Heavy Metal	Concentration
Arsenic	< 75 ppm
Antimony	< 75 ppm
Lead	< 100 ppm

708-3.02 Application: the last paragraph of the Standard Specifications is revised to read:

Tolerances for Placing Paint, Beads, and Primer:

The length of painted segment and gap shall not vary more than six inches in a 40-foot cycle.

The finished line shall be smooth, aesthetically acceptable and free from undue waviness.

Painted lines shall be four, eight, or 12 inches wide as shown on the plans with a tolerance of $\pm 1/8$ inch and shall be placed at a minimum rate of 16 gallons per mile for a solid four-inch line and four gallons per mile for a broken four-inch line, based on a 10-foot stripe and a 30-foot gap (40-foot cycle aggregate).

Glass reflectorizing beads shall be applied on the wet paint at a minimum rate of eight pounds per gallon of paint.

Wet thickness shall not be less than 15 mils, unless otherwise shown on the plans.

SECTION 730 GENERAL REQUIREMENTS FOR TRAFFIC SIGNAL AND HIGHWAY LIGHTING SYSTEMS:

730-4 Equipment List and Drawings: the third paragraph of the Standard Specifications is revised to read:

The materials on the submittal shall be identified by the contract project number, bid item numbers, catalog part numbers, trade names, schedules or other pertinent information. The materials from any catalog cuts shall be clearly noted on the materials list. If requested by the Engineer, the Contractor shall submit manufacturer shop drawing for a review and approval and shall furnish Certificates of Compliance conforming to the requirements of Subsection 106.05. The Contractor shall submit the pole schedule shown on the plans to the pole manufacturer, who shall perform and submit to the Engineer structural calculations verifying the poles' and mast arms' structural integrity under loading shown on the plans. These manufacturer's calculations shall include detailed drawing of installation layout of each pole.

730-5 Location of Utilities: the third paragraph of the Standard Specifications is revised to read:

The contractor is responsible for any additional excavation work for new control cabinet foundations as a result of mismarked utilities. The contractor is required to Bluestake all utilities and to coordinate with the Engineer at the construction site after new pole foundation locations have been determined, but before the start of any excavation. Work requiring any form of excavation work shall be potholed by the contractor for potential conflicts. The cost associated with this item shall be considered as included in contract items and will not be paid separately.

ITEM 7310141 POLE (TYPE R) (MODIFIED):
ITEM 7310371 POLE FOUNDATION (TYPE R) (MODIFIED):
ITEM 7310652 MAST ARM (60 FT.) (TAPERED):

Description:

The contractor shall furnish all materials and shall construct pole foundations including anchor bolts, furnish and install modified Type R pole and 60 foot mast arm at location indicated on plans.

Materials:

(A) Tapered Steel Poles:

(1) General:

Material standards for modified Type R poles shall be in conformance with the current edition of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals. Poles with all equipment mounted shall be designed to withstand a basic wind speed of 80 mph with 100 mph gusts.

All support structures shall conform to the requirements of Sections 604 and 731 of the Standard Specifications and the City of Peoria Standard Details PE-038-1 and PE-038-2.

All support structure foundations shall conform to the requirements of Section 731 and the City of Peoria Standard Details PE-038-1 and PE-038-2.

(2) Pole Shafts:

Pole shafts shall conform to Section 731-2.02 (B) and City of Peoria Standard Details PE-038-1 and PE-038-2.

Pole shaft shall be circular in cross section.

Prior to pole fabrication, the contractor shall submit four sets of detailed drawings in accordance with the requirements of Subsection 105.03 for each type of support structure and foundation that include material specifications and structural calculations that show stresses and deflection, in accordance with Sections 604 and 731 of the Standard Specifications, these Special Provisions, and the ADOT Standard Details. Submit drawings and design calculations that are stamped, sealed and signed by a civil or structural engineer registered in the State of Arizona.

(3) Standard Bases:

Pole shafts shall conform to Section 731-2.02 (D) and City of Peoria Standard Details PE-038-1 and PE-038-2.

(4) Mast Arms:

Mast arms for Type R Modified Poles shall conform to Section 731-2.04 and City of Peoria Details PE-038-01 and PE-038-02.

Mast arms shall be circular in cross section.

Construction Requirements:

(A) Foundations:

Pole foundations shall conform to Section 731-3.01 and City of Peoria Standard Details PE-037-1 and PE-037-2.

If the soil is not stable and a hole cannot be augured, the contractor shall auger/excavate, fill with bentonite slurry, and redrill the foundation through the slurry at the contractor's expense. The redrilled foundation shall be of the proper size and dimension and shall be rigid and securely braced. The forms and the bottoms of the holes shall be thoroughly moistened prior to placing the concrete.

Anchor bolts and conduit stubs shall be placed and held in proper alignment, position, and height during the placing and vibrating of concrete. All pole foundations shall set for seven days prior to pole installation.

(B) Base Plates and Poles:

High strength bolts, nuts, and washers shall be assembled and the complete assembly shall be torqued as required by pole manufacturer/shop drawings. The anchor plate detailed on the PE-037-01 shall be used.

All steel poles shall be plumbed to the vertical with all mast arms, signal heads and luminaires installed.

Holes shall be drilled and nipped at each site per the Plans and Standard Drawings. Touch-up shall be by hot stick method.

(C) Removing and Replacing Improvements:

Any damage caused by accident or contractor activity shall be repaired according to section 107.11 of the Standard Specifications and as modified by these Special Provisions.

Method of Measurement:

Pole (Type R) (Modified) will be measured as a unit for each pole installed, which includes but is not limited to, hardware, wire, labor, and incidentals necessary to complete the work. Pole Foundation (Type R) (Modified) will be measured as a unit for each unit furnished and installed, which includes but is not limited to, anchor bolts, reinforcing steel, ground rods, grounding wire, excavation, conduit, backfill, and incidentals necessary to complete the work.

Mast Arm (60 Ft.) (Tapered) will be measured as a unit for each unit furnished and installed, which includes but is not limited to, all hardware, and incidentals necessary to complete the work.

Basis of Payment:

Pole (Type R) (Modified) will be paid under Bid Item 7310141 as measured. Contract unit price shall be full compensation for work described in these Special Provisions and as shown on the Plans, complete and in place.

Pole Foundation (Type R) (Modified) will be paid under Bid Item 7310371 as measured. Contract unit price shall be full compensation for work described in these Special Provisions and as shown on the Plans, complete and in place.

Mast Arm (60 Ft.) (Tapered) will be paid under Bid Item 7310652 as measured. Contract unit price shall be full compensation for work described in these Special Provisions and as shown on the Plans, complete and in place.

ITEM 7310187 POLE (SPECIAL) (PER UTILITY COMPANY STD DWGS):

Description:

The work under this item shall consist of furnishing and installing street light poles including grounding, jacking, drilling, excavating, placing and compacting backfill material in accordance with the locations shown on the Street Lighting Plan, requirements of these specifications, MAG Specifications, City of Peoria Street Lighting Policy, and utility company requirements.

SRP and APS will install power and conduit to their individual pole installations, depending upon the service area in which each pole is installed. The contractor shall be responsible for coordinating with the respective utility company (APS or SRP) for each pole installation.

Materials:

Type I:

Streetlight poles within the Arizona Public Service Company (APS) service area shall be per APS Transmission & Distribution (T&D) Construction Standard 8040 for the project's streetlight system in accordance with the project plans.

Type II:

Streetlight poles within the Salt River Project (SRP) service area shall be per SRP Standard detail 10-101 for the project's streetlight system in accordance with the project plans.

Type III:

Streetlight poles within the Salt River Project (SRP) service area shall be per SRP Standard detail 10-106 for the project's streetlight system in accordance with the project plans.

Construction Requirements:

The contractor shall install the streetlight poles at the locations shown on the project plans. Poles and installations shall be in accordance the requirements of the individual locations as designated by the owning utility.

APS

Installation of streetlight poles with grounding within APS service area shall be in accordance with the project plans and APS requirements. The contractor shall arrange for APS inspection prior project acceptance. Contact Ronnie Gandara (602) 371-7546 with APS to coordinate.

SRP

Installation of streetlight poles with grounding within SPR service area shall be in accordance with the project plans and SRP Requirements. The contractor shall arrange for SRP inspection prior project acceptance. Contact Sharon Benson (602) 236-0806 with SRP to coordinate.

The contractor shall obtain the required City of Peoria permits prior to beginning installation of the streetlights.

Method of Measurement:

ITEM 7310187 - POLE (SPECIAL) (PER UTILITY COMPANY STD DWGS) will be measured as a unit each for a streetlight pole acceptably installed, regardless of type, height or utility ownership.

Basis of Payment:

The accepted quantity of ITEM 7310187 - POLE (SPECIAL) (PER UTILITY COMPANY STD DWGS), as measured above, will be paid at the contract unit price, which will be compensation for the work, complete in place, including coordination with the owning utility. as shown on the project plans and as defined and described above.

ITEM 7310650 MAST ARM (PER UTILITY COMPANY STD DWGS):

Description:

The work under this item shall consist of furnishing all materials, equipment, tools and labor and installing street light mast arms in accordance with the Street Lighting Plan, requirements of these specifications, MAG Specifications, City of Peoria Street Lighting Policy, and utility company requirements.

Materials:

Type I:

Streetlight mast arms within the Arizona Public Service Company (APS) service area shall be per APS T&D Construction Standard 8040 (8'-0") for the project's streetlight system in accordance with the project plans.

Type II:

Streetlight mast arms within the Salt River Project (SRP) service area shall be per SRP Standard detail 10-101(8'-0") in accordance with the project plans.

Type III:

Streetlight mast arms within the Salt River Project (SRP) service area shall be per SRP Standard detail 10-106(8'-0") in accordance with the project plans.

Construction Requirements:

The contractor shall install the streetlight mast arms as shown on the project plans.

Installation shall be in accordance with the requirements of the utility company supplying power to the individual streetlight installation as specified above. Mast arms shall be 8'-0" per the project plans, unless otherwise directed by the engineer. The contractor shall arrange for inspection from the corresponding utility company prior to project acceptance.

Method of Measurement:

ITEM 7310650 - MAST ARM (PER UTILITY COMPANY STD DWGS) will be measured by the unit each for a streetlight mast arm acceptably installed regardless of size, type or utility ownership.

Basis of Payment:

The accepted quantity of ITEM 7310650 - MAST ARM (PER UTILITY COMPANY STD DWGS), measured as provided above, will be paid at the contract unit price, which shall be compensation for the work, complete in place, including coordination with the owning utility.

ITEM 7310812 REMOVE AND SALVAGE EXISTING LIGHTING POLES:

Description:

The work under this item shall consist of furnishing any labor, equipment and material necessary to remove and salvage existing lighting poles and attachments where shown on the Project Plans. The work shall be done in accordance with Section 737 of the ADOT Standard Specifications, the project plans, requirements of these specifications, City of Peoria Street Lighting Policy, utility company requirements and as directed by the engineer.

Construction Requirements

The contractor shall coordinate de-energization of existing street lights with the utility providing power.

Any items which are damaged as a result of the construction but which are outside the project limits or are otherwise not indicated on the plans or in these Special Provisions to be disturbed by the contractor shall be replaced at no additional cost.

All street light poles, mast arms, and luminaires removed as indicated in the street lighting plans shall be salvaged, delivered, and stockpiled at a location in the City of Peoria in accordance with the requirements in the General Requirements of these Special Provisions. The contractor shall contact the City of Peoria at least 72 hours in advance of delivery.

The contractor shall provide all labor and equipment necessary to load, handle and transport all salvaged materials. All contractor personnel shall wear appropriate personal protective safety equipment, and shall be licensed and qualified to run the hoisting/transport equipment used to load or move the materials. The contractor shall provide appropriate vehicles and trailers to safely transport the salvaged materials.

Holes, cavities, and depressions resulting from the removals shall be backfilled and compacted per ADOT Specifications.

Method of Measurement:

ITEM 7310812 - REMOVE AND SALVAGE EXISTING LIGHTING POLES will be measured as a unit each for each location from which an existing lighting pole is acceptably salvaged.

Basis of Payment:

The accepted quantities of ITEM 7310812 - REMOVE AND SALVAGE EXISTING LIGHTING POLES, measured as provided will be paid at the contract list price, complete in place, including backfill, salvaging of pole attachments and restoring the removal area to an acceptable condition.

ITEM 7310821 REMOVE EXISTING FOUNDATIONS:

Description:

The work under this item shall consist of furnishing any labor, equipment and material necessary to remove existing traffic signal foundations and backfilling the cavity as shown on the Project Plans.

Construction Requirements:

The work shall be done in accordance with Section 737 of the Specifications, project plans, requirements of these specifications, City of Peoria Engineering Development Guidelines and utility company requirements.

The contractor shall remove the existing foundations and backfill the resulting cavity with suitable material which shall be compacted to a density of not less than 95 percent of the maximum density as determined in accordance with the requirements of the applicable test method of the ADOT Materials Test Manual, as directed and approved by the Engineer.

Method of Measurement:

ITEM 7310821 - REMOVE EXISTING FOUNDATIONS will be measured as a unit each for a foundation that is acceptably removed and backfilled.

Basis of Payment:

The accepted quantities of ITEM 7310821 - REMOVE EXISTING FOUNDATIONS, as measured above, will be paid at the contract list price complete in place, including backfill and restoring the area to a suitable condition..

Removal of sign foundations shall be paid under another pay item.

SECTION 732 ELECTRICAL UNDERGROUND MATERIAL:

732-2.03 Pull Boxes: the fourth paragraph of the Standard Specifications is revised to read:

Covers shall be marked as "TRAFFIC SIGNAL".

The main pull box adjacent to the controller and cabinet shall be a No. 7 with extension.

732-2.04 Metal Junction Boxes: of the Standard Specifications is revised to read:

Metal junction boxes and covers shall not be used.

732-3.01 Installation of Electrical Conduit and Pull Boxes: of the Standard Specifications is modified to add:

Permission from the City of Peoria is required before conduit may be installed beneath existing pavement using an open trench. Permission is given at the sole discretion of the City. Open trench excavation shall be done in accordance with Peoria Standard Detail PE-033. The Contractor shall use a ½ sack slurry backfill under all existing and future pavement and replace all pavement layers removed during excavation, within the limits of the excavation and using methods and materials, which will not in any way diminish the pavement performance.

732-5.02 Conductors (for signals and lighting): of the ADOT Standard Specifications is revised to read:

Conductors (for signals and lighting), measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work related to wiring as specified in the plans and for ancillary cabinet items, such as additional load switches, flashers, etc., complete in place, to provide a complete, functioning cabinet assembly for control of the traffic signals as shown on the plans.

ITEM 7320291 ELECTRICAL CONDUIT (4-1 1/4" HDPE) (DIRECTIONAL DRILL):

1.0 Description:

This work shall consist of furnishing and installing a run composed of multiple conduits as shown on the Plans, detailed herein and as directed by the Engineer. Installation shall be by a directional drilling method approved by the Engineer.

2.0 Materials:

The contractor shall use a HDPE conduit with a Standard Dimensional Ratio (SDR) of SDR 11 or better. The HDPE formulations used by the manufacturer shall be specifically for

conduit applications in accordance with ASTM F 2160: *Solid Wall High Density Polyethylene (HDPE) Conduit Based on Controlled Outside Diameter (OD)* and ASTM 3035 *Polyethylene (PE) Plastic Pipe (SDR) Based on Controlled Outside Diameter*. It shall have a cell classification of PE334470C (for black conduit) and PE334470E (for colored conduit) per ASTM 3350: *Standard Specification for Polyethylene Pipe and Fittings Materials*.

The polyethylene base resin shall meet the density requirement and melt index properties described herein. The density shall not be less than 0.940 and not more than 0.955 g/CM³ in accordance with ASTM D 1505: *Standard Test Method for Density of Plastics by the Density-Gradient Technique*. The range for the melt index shall be between 0.05 to 0.5g/10 minutes in accordance with ASTM D 1238: *Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer*. The HDPE conduit shall have a minimum Flexural Modulus, MPa (PSI) of 80,000 per ASTM D 790 and a minimum tensile strength at yield (PSI) of 3,000 per ASTM D-638.

Additives to the base resin shall be included to provide heat stabilization, oxidation prevention and ultraviolet (UV) protection. It shall also utilize carbon black in the range of 2-3% for long term protection against UV degradation. The minimum protection period shall be one year from date of manufacture in unprotected, outdoor storage in accordance with ASTM D 1603: *Standard Test Method for Carbon Black in Olefin Plastics*.

3.0 Construction Requirements:

For the Directional Drill (DD) conduit installation the contractor shall use HDPE conduits along the prescribed bore path from the surface with minimal impact to the surrounding area. The pulling tension for installing the HDPE conduit shall not exceed 75% of the manufacturer's tensile strength rating for each size and configuration of conduit(s) to prevent the conduit(s) from elongation or "necking down" during installation.

The proposed DD profile shall be submitted to the Engineer after the contractor has completed the necessary potholing and approved prior to beginning the DD operation at each location.

The contractor's DD operations shall utilize the "walkover" locating system or other Engineer approved equivalent for determining the location of the bore head. A sonde, behind the bore head shall register the depth, angle, rotation and directional data. At the surface, a receiver compatible with the sonde shall be used to gather the data and relay the information to the DD equipment operator.

When joining segments of HDPE conduit, the contractor shall utilize non-corrosive, sit-tight, water-tight couplings. Heat fusion, electrofusion fittings and mechanical connections shall be permitted if the HDPE conduit and joining device manufacturer's recommendations are observed and the internal diameter of the HDPE conduit is not reduced. Extrusion welding and hot gas welding to join HDPE conduits is not permitted.

Upon completion of joining HDPE conduit sections and setting the pull boxes, the contractor shall clean the HDPE conduit with compressed air. The contractor shall demonstrate by pulling a cleaning mandrel or ball mandrel, correctly sized for the conduit, that the conduit was not deformed during installation. If the mandrel passes through the HDPE the contractor shall install the pull tape in accordance with Section 732 of these Special Provisions. If the mandrel encounters a deformity in the HDPE conduit, the contractor shall replace the entire segment of HDPE between pull boxes with new HDPE at no cost to ADOT.

Detectable pull tape shall be installed in each individual conduit of the run.

No more than one week prior to installation of cable, all new and existing conduit runs in which cable is to be installed shall be cleared/cleaned by pulling through a metal-disc mandrel with a diameter of 90% of the conduit diameter, or a ball mandrel with a diameter of 80% of the conduit diameter. Prior to pulling the mandrel through the conduit, the conduit shall be brushed or swabbed, if deemed necessary by the Engineer.

4.0 Method of Measurement:

Measurement of ITEM 7320291 - ELECTRICAL CONDUIT (4-1 1/4" HDPE) (DIRECTIONAL DRILL) shall be in a straight line from center of pull box to center of pull box, center of pull box to center of foundation, center of foundation to center of pull box, etc., for each foot of conduit run that is acceptably installed.

Vertical conduits, conduit sweeps, conduit in pull boxes and conduit in foundations will not be measured.

5.0 Basis of Payment:

The accepted quantity of ITEM 7320291 - ELECTRICAL CONDUIT (4-1 1/4" HDPE) (DIRECTIONAL DRILL), as measured above will be paid at the contract unit price which shall be full compensation for the multiple conduit run complete in place, including restoration of landscaping vegetation and irrigation systems, excavating, hand digging, backfilling, directional drilling, pull tapes, marking tape, cleaning and mandreling/swabbing of conduit, or ABC slurry when required to meet utility company requirements.

ITEM 7320456
ITEM 7320460

PULL BOX (UTILITY COMPANY SUPPLIED):
PULL BOX (STANDARD DETAIL PE-034) (CITY OF PEORIA):

Description:

The work under these items consists of furnishing all equipment, tools and labor required to install utility company supplied pull boxes and to furnish and install precast interconnect communication pull boxes with the locations shown on the Street Lighting Plan,

requirements of these specifications, MAG specifications, City of Peoria Street Lighting Policy, City of Peoria Standard Details and utility company requirements.

Materials:

The contractor shall arrange for the pick-up of utility company supplied pull boxes from APS or SRP, depending on the location of the individual pull box installation.

The interconnect precast communication pull box and cover shall be in accordance to City of Peoria Standard Detail PE-034.

The City of Peoria pull box cover markings shall be clearly defined and uniform in depth. Markings shall be placed parallel to the long side of the cover and shall read as follows:

“CITY OF PEORIA TRAFFIC SIGNAL COMMUNICATIONS”

Construction Requirements:

The contractor shall install the utility company supplied pull boxes at the locations shown on the project plans.

APS service area

Installation of APS supplied pull boxes within APS service area shall be in accordance with the project plans and APS requirements.

The contractor shall arrange for APS inspection prior to project acceptance.

SRP service area

Installation of SRP supplied pull boxes within SRP service area shall be in accordance with the project plans and SRP requirements.

The contractor shall arrange for SRP inspection prior to project acceptance.

Installation of the interconnect precast communication pull box shall be in accordance of the City of Peoria Standard Detail PE-034 and section 732-3.01 of the Standard Specifications.

Method of Measurement:

ITEM 7320456 - PULL BOX (UTILITY COMPANY SUPPLIED) and ITEM 7320460 - PULL BOX (STANDARD DETAIL PE-034) (CITY OF PEORIA) will be measured as a unit for each pull box installed.

Basis of Payment:

The accepted quantity of ITEM 7320456 - PULL BOX (UTILITY COMPANY SUPPLIED) and ITEM 7320460 - PULL BOX (STANDARD DETAIL PE-034) (CITY OF PEORIA) measured as provided above, will be paid for at the contract unit price per each, which shall be compensation for the work, complete in place, as shown on the project plans and as defined and described above.

Coordination with utility company shall be considered as incidental to the street light contract price.

ITEM 7320789 SINGLE MODE FIBER OPTIC CABLE (12 FIBER):
ITEM 7320794 FIBER OPTIC SPLICE CLOSURE (:

1.0 Description:

The contractor shall furnish, install, and test Single Mode Fiber Optic (SMFO) communication cables in conduit as required to extend the communications subsystem from the City of Peoria Traffic Operations Center to contractor installed field devices.

The SMFO communication subsystem shall be completed with the use of 12-fiber branch cables for connecting the Peoria Unified School District's (PUSD) main trunk line to the field devices, as shown on the Plans.

2.0 Materials:

(A) Single Mode Fiber Optic Cable:

The contractor shall provide SMFO cable that meets the following specifications:

(1) Documentation:

The contractor shall provide certification that the cables furnished and installed are in conformance with the appropriate specifications. This certification shall be in two parts:

- The contractor shall secure a certification from the cable manufacturer that the cable is in conformance with the Rural Electrification Administration (REA) Bulletin PE-90 (where applicable) and these Special Provisions.
- The contractor shall certify that the installation of the communication cable subsystem is in accordance with the cable and splice manufacturer's recommendations and these Special Provisions.

(2) Technical Requirements:

All fiber optic cable shall be SMFO cable that is of loose tube construction, filled with a water-blocking material, and constructed by a certified ISO 9001 or 9002 manufacturer. Fiber optic cable shall be dielectric and comply with the requirements of REA PE-90 unless modified by the following requirements:

Cladding diameter:	125 ± 1.0 μm
Core-to-cladding offset:	≤ 0.8 μm
Cladding non-circularity:	≤ 1.0%
Maximum attenuation:	≤0.4 dB/km at 1310 nm; ≤0.3 dB/km at 1550 nm
Microbend attenuation (1 turn, 32 mm diameter):	≤ 0.5 dB at 1550 nm
Microbend attenuation (480 turns, 75 mm diameter):	≤ 0.05 dB at 1310 nm
Attenuation uniformity:	No point discontinuity greater than 0.1 dB at either 1310 nm or 1550 nm.
Mode-field diameter (matched cladding):	9.3 ± 0.5 μm at 1310 nm; 10.5 ± 1.0 μm at 1550 nm
Maximum chromatic dispersion:	≤ 3.2 ps/(nm x km) from 1285 nm to 1330 nm and < 18 ps/(nm x km) at 1550 nm
Fiber polarization mode dispersion:	≤ 0.5 ps/(km) ^{1/2}
Fiber coating:	Dual layered, UV cured acrylate applied by the fiber manufacturer
Coating diameter:	245 μm ± 10 μm
Minimum storage temperature range:	-40°C to +70°C (-40°F to 158°F)
Minimum operating temperature range:	-20°C to +70°C (-4°F to 158°F)
Rated life:	Certify a 20 year life expectancy when installed to manufacturer's specifications
Ensure the change in attenuation for single-mode from -20°C to +70°C (-4°F to 158°F) does not exceed 0.2 dB/km at 1550 nm, with 80% of the measured values no greater than 0.1 dB/km at 1550 nm.	

Buffer Tubes: Each buffer tube shall be filled with a non-hygroscopic, non-nutritive to fungus, electrically non-conductive, homogenous gel that is free from dirt and foreign matter. The gel shall allow free movement of the fibers, without loss of performance, during installation and normal operation including expansion and contraction of the buffer tubes. The gel shall be readily removable with conventional nontoxic solvents.

Buffer tubes shall be stranded around a central member using the reverse oscillation or "S-Z", stranding process. Use filler rods in trunkline cable to lend symmetry to the cable section.

Central Strength Member: The fiber optic cable shall have a central strength member designed to prevent buckling of the cable.

Cable Core: The fiber optic cable shall utilize a dry water-blocking material to block the migration of moisture in the cable interstices.

Tensile Strength Members: The fiber optic cable shall have tensile strength members designed to minimize cable elongation due to installation forces and temperature variation.

Underground fiber optic cable shall withstand a 600 lbf tensile load applied per EIA-455-33 where the change in attenuation does not exceed 0.2 dB during loading and 0.1 dB after loading. Use cable rated for an installed tensile service load of 200 lbf or more.

Cable Jacket: The fiber optic cable jacket shall be constructed of HDPE or medium density polyethylene (MDPE) jacket that has been applied directly over the tensile strength members and water-blocking material. The jacket shall have at least one ripcord designed for easy sheath removal.

Cable Markings: Provide cable with markings that include cable length markings (in feet) and the year of manufacture. In addition, provide cable with two color stripes, or similar marking approved by The City, to distinguish between trunkline (between communication hubs) and branch cables (spliced to trunkline cables).

Environmental: Provide cable that is capable of withstanding the following conditions without damage or decrease in function:

- Cable operating temperature per EIA/TIA-455-03;
- Total immersion in water with natural mineral and salt contents;
- Salt spray or salt water immersion for extended periods; and
- Wasp and hornet spray.

(B) Fiber Optic Splice Closure:

Fiber optic splice closures shall be either shell design or cylindrical, butt-end style corrosion resistant, watertight, and meet the requirements of CR-771-CORE. Underground splice closures shall seal, bond, anchor, and provide efficient routing, storage, organization, and protection for fiber optic cable and splices. The splice closure shall provide an internal configuration and end cap with a minimum of two express ports for entry and exit of trunkline cable and a minimum of three additional ports for distribution and branch cables.

Splice closures shall be designed to accommodate heat-shrink fusion splice trays in sufficient quantities to perform the required number of splices. At a minimum, the splice closure shall accommodate 96 splices. Each splice closure shall be supplied with at least one spare heat shrink fusion splice tray and the hardware to terminate at least one additional branch cable.

Splice closures shall have a reliable dual seal design with both the cable jackets and core tubes sealed, without the use of water-blocking material. The splice closures shall be capable of being opened and completely resealed without loss of performance.

The splice closure maximum dimensions shall not exceed 32-inches L x 9-inches W.

3.0 Construction Requirements:

Installation of fiber optic cable shall be continuous and without splices between allowable splice points as identified on the Plans and Specifications. The contractor shall perform all final length measurements and order cable accordingly.

Cables shall be pulled in the conduit with a device designed to provide a firm hold on the exterior covering and the central strength member of the cable. Cable shall not drag on the ground or pavement during installation. The contractor shall ensure that the tensile load on the cable does not exceed the allowed maximum by using a break-away tension limiter set below the recommended tensile limit of the cable being pulled and/or a system that provides a means of alerting the installer when the pulling tension approaches the limit.

During pulling, the cable shall be lubricated at the pull box. The contractor shall use a pre-lubrication or continuous lubrication method. The lubricant used shall be compatible with the cable jacket as recommended by the cable manufacturer. Liquid detergent shall not be used.

The contractor shall supply documentation identifying either the manufacturer's recommendation or a published standard recommending the maximum pulling tension and speeds and these values shall not be exceeded. The contractor shall have this documentation on site during each pull. If the contractor fails to lubricate the cable adequately, the work shall be stopped until a meeting is held between the contractor and the Engineer to discuss why the terms of this specification are not being met. No compensation for the work stoppage shall be given.

In all locations where fiber enters a pull box, cable slack shall be loosely looped using the rack and hook system. When splice closures are required at No. 9 pull boxes, 50-feet of cable slack for all cables entering the pull box shall be provided between the splice closure and each point where the cable enters the pull box allowing the attached splice closure to be removed up to 50 ft from the pull box, unless a greater distance is noted on the Plans.

Each cable should be labeled and attached to the rack and hook system with industry standard cable ties immediately upon entering the box. Cables should be looped independently of one another. Cable ties shall contain the cable loops of one cable. Cable ties should be tightened so that they prevent cable slippage but do not deform or damage the cable sheath.

At the locations shown in the Plans, the contractor shall perform the required fusion splicing. The contractor shall reinstall the existing splice closure such that the two trunk cable entries are on the same side of the end cap so if additional branch fiber cables are

installed at a later date, the two existing seals remain undisturbed. Any splices that are damaged shall be repaired by the contractor immediately, at no cost to the City.

Splicing of the SMFO cable shall be done only at the pull boxes, and connector housing units as shown on the Plans. All splices and connectors shall be prepared in accordance with the manufacturer's recommendations. Each fusion splice shall introduce less than 0.1 dB attenuation.

The 12-fiber branch cable shall be connectorized with male ST-type connectors as required. The contractor is only required to install as many connectors as is necessary to meet the communications requirement shown on the Plans. Where connectors are required, the contractor shall first install a spider type fan-out kit to strengthen and protect all 12 fibers of the branch cable (regardless of how many connectors are required for that branch). The spider fan-out kit shall protect each fiber of the branch cable with one meter long (minimum) protective PVC jackets of at least 3mm in diameter. The jacket shall contain a Teflon inner tube into which the fiber is inserted and a dielectric strength member. Each ST connector shall introduce less than 0.5 dB attenuation. Connectors found to exceed 0.5 dB attenuation shall be re-made at no additional cost, until this requirement is met. In addition, the 12 fibers shall be provided with bend radius protection and enclosed in a fiber wall mount enclosure. The fiber wall mount enclosure shall have the following features:

- A minimum of two doors (one for service and the other for users with optional keyed locks for added security)
- Accepts up to (2) FAP or FMP panels, (1) splice tray holder and (2) splice trays.
- Minimum dimensions of 10" X 12" x 2"

The contractor shall submit permanent identification tags or labels, and the method of attachment, for approval by the Engineer. The cables shall be labeled at all pull boxes where cable is exposed. As a minimum, the labels shall state what fiber cable (SMFO-12/SMFO-96), and the To/From direction. A complete labeling record in the form of an as-built cable schedule shall be provided to the Engineer with the final documentation. The cabling record shall include the distance markings on all fiber optic cables at the ingress and egress points of the pull boxes, at the splice closures, entry to cabinets and termination points.

After cables are installed, the contractor shall seal all pathway entrances with an approved, material plug (such as duct putty, however, foam is not allowed) to prevent ingress of water, dust or other foreign materials.

(A) Test Requirements:

Fiber optic cable shall meet the following test requirements.

(1) Pre-Installation Testing:

The contractor shall inspect all cable upon delivery and again prior to installation. Any cable that is found to have visual damage shall be tested using an OTDR per the following section prior to installation.

(2) Post-Installation Testing:

After installation and splicing of cable the contractor shall perform the following tests:

- **Power Meter Tests:** Install feed through connectors at all locations where an OTR/SHC is to be connected. Conduct power meter tests for each fiber to demonstrate connectivity and attenuation from origin to destination. Demonstrate that the attenuation for each fiber path including connectors, and splices as a whole, comply with the loss budgets required by these Specifications. Submit a test result summary sheet of each fiber to the Engineer for review and approval.
- **OTDR Tests:** Conduct bi-directional tests using an OTDR for each fiber. Demonstrate that the attenuation for each fiber and splice, individually and as a whole, comply with the loss budgets required by these Specifications. Test fibers at 1310 nm and 1550 nm using a launch cable no less than three times the pulse width used to shoot the cable. Submit OTDR traces to the Engineer for review and approval. Clearly annotate each splice and identify the measured loss.

The contractor shall identify any unacceptable losses, and make corrective actions at no additional cost. Failed splices may be remade and re-tested for compliance. The contractor shall replace any cable in its entirety that is not compliant with these Specifications at no additional cost.

Following completion of all testing, and approval by the City, the contractor shall compile and submit two organized test notebooks. These notebooks shall include a test summary sheet that includes, as a minimum, the parameters shown in the example in Appendix B, the OTDR traces of each fiber strand, and the power meter test results.

4.0 Method of Measurement:

SMFO cable will be measured by the linear foot. Each cable that is furnished and installed; it will be measured horizontally from center of pull box to center of pull box, or center of pull box to center of foundation.

Measurement will not be made for cable that is below ground in vertical conduit stub-ups or for slack cable in pull boxes.

New fiber optic splice closures will be measured as a unit for each splice closure unit furnished, and installed, complete in place.

Existing splice closures that are re-used as part of the installation will not be measured for payment.

5.0 Basis of Payment:

SMFO cables measured as provided above, will be paid at the contract unit price, which price shall be full compensation for the work, complete in place, including splicing and terminating cables, lubricant, labels, conduit cleaning and sealing, or testing.

The accepted quantities of fiber optic splice closures, measured as provided above, will be paid for at the contract unit price each, which shall be full compensation for the work, complete in place.

SECTION 733 SIGNAL INDICATIONS AND MOUNTING ASSEMBLIES:

733-2.01(A) Standard Signal Faces: of the Standard Specifications is modified to add:

All traffic signal indications shall be either Dialight, GE, or Ecolux Light Emitting Diode (LED) modules. This will include red, yellow, and green ball indications, red, yellow, and green arrow indications.

733-2.02 Pedestrian Signals: the first paragraph of the Standard Specifications is revised to read:

All pedestrian signal indications shall be either Dialight, GE, or Ecolux Light Emitting Diode (LED) modules.

ITEM 7330550 REMOVE AND SALVAGE TRAFFIC SIGNALS AND LOAD CENTER CABINETS:

Description:

The work under this section shall include, but is not limited to, the removal of all traffic signal poles, mast arms, vehicle and pedestrian indicators, internally illuminated street name signs, remove hardware from vehicle and pedestrian signal heads, pull boxes, conduit, luminaires, push buttons, traffic signal controller cabinet, and traffic signal conductors at the locations indicated in the traffic signal plans and/or in these Special Provisions. The work shall also include the removal and disposal of foundations. Traffic signal poles, mast arms, vehicle and pedestrian indicators, internally illuminated street name signs, push buttons, traffic signal controller cabinet, and luminaires removed as indicated in the traffic signal plans and/or in these Special Provisions shall be salvaged.

Construction Requirements:

Items to be removed or salvaged and which will not be incorporated into the new work shall be removed in a manner which will not produce unnecessary damage or disturbance. Any

items which are damaged as a result of the construction, but which are outside the project limits or are otherwise not indicated on the plans or in these Special Provisions to be disturbed by the contractor shall be replaced at no additional cost. If the Engineer determines that any of the traffic signal equipment is not salvageable, that material shall become the property of the contractor for disposal at an acceptable location off the project limits. All traffic signal poles, mast arms, vehicle and pedestrian indicators, push buttons, traffic signal controller cabinet, and luminaires removed as indicated in the traffic signal plans shall be salvaged.

The contractor shall not remove the existing traffic signal equipment until the new traffic signal equipment becomes operational or as otherwise directed by the Engineer.

Existing conduit to be abandoned shall have existing conductors removed. The contractor shall properly dispose of existing conductors off the project.

The contractor shall provide all labor and equipment necessary to load, handle and transport all salvaged materials to the City of Peoria Municipal Operations Center, 8850 N. 79th Avenue, Peoria, AZ. The Traffic Maintenance Supervisor shall be contacted a minimum of 48 hours in advance of delivery at (623) 773-7458. All contractor personnel shall wear appropriate personal protective safety equipment, and shall be licensed and qualified to run the hoisting/transport equipment used to load or move the materials. City of Peoria personnel will not unload the salvaged materials from the contractor's transport vehicles. The contractor shall provide appropriate vehicles and trailers to safely transport the salvaged materials.

Method of Measurement:

Item 7330550 - Remove and Salvage Traffic Signals and Load Center Cabinets will be measured as a single, lump sum, unit of work.

Basis of Payment:

The accepted quantity of Item 7330550 - Remove and Salvage Traffic Signals and Load Center Cabinets, measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work as specified herein and as shown on the project plans.

Installation of department furnished traffic signal equipment shall be paid for under their respective contract items.

SECTION 734 TRAFFIC CONTROLLER ASSEMBLY:

734-2.01 General Requirements: of the ADOT Standard Specifications is modified to add:

The general requirements of Section 734-2.01 shall apply to this project except that the testing of the controller shall be accomplished by the contractor, including a representative from the traffic signal controller manufacturing company, and in the presence of the City of Peoria Traffic Signal Technician Staff at the construction site. Contractor shall be required to provide control of traffic at the intersection with a uniformed police officer during testing of controller and during turn-on of traffic signal when all work is completed.

734-2.02 Traffic Signal Controllers: of the ADOT Standard Specifications is modified to add:

The traffic signal controller shall be ECONOLITE ASC/3S-1000. Manufacturer shall provide controller operation, trouble shooting and maintenance training for the City of Peoria employees by certified TS-2 controller technician. The traffic signal controller manufacturer shall be present at the job site during turn-on of the traffic signal.

734-2.03(A) Control Cabinets: of the ADOT Standard Specifications is modified to add:

The traffic signal controller cabinet shall be NEMA TS-2, Econolite Type I, size 6 for 8-phase operation.

Prior to construction of the cabinet foundation, the contractor shall coordinate the cabinet orientation with City traffic signal staff.

The contractor shall install a concrete pad around the cabinet base foundation as shown in ADOT Standard Drawing T.S. 2-4. No separate payment will be made for the concrete pad, the cost considered incidental to the controller cabinet foundation item.

734-2.03(C)(2) Switches: of the ADOT Standard Specifications is modified to add:

Illuminated street name sign on-off switch – the contractor shall install a separate on/off switch for the internally illuminated street name signs. This switch shall be separate and shall operate independently from the circuit controlling the on/off operation of the luminaires. The contractor shall install the switch on the inside technician switch panel of the traffic signal cabinet door.

SECTION 735 DETECTORS:

735-2.02 Pedestrian Push-Button Detectors: of the Standard Specifications is modified to add:

Pedestrian push buttons shall conform to ADOT Standard Drawing T.S. 11-1. The button shall be a minimum of 2 inches in diameter and be raised from, or flush with, the push button housing. The force required to activate the control shall be no greater than 5 LBS of force. Provide and Install R10-4b pedestrian pushbutton sign on housing.

Pedestrian push buttons shall be mounted in accordance with ADOT standard drawing T.S. 4-21. The center of the push button shall be a maximum of 42 inches above the finished sidewalk.

735-2 Materials: of the Standard Specifications Is modified to add:

735-2.05 Opticom Pre-Emption Unit:

(A) Optical Detector Modules:

The detectors shall be mounted as shown in the plans and shall be of the models indicated. They shall be field adjusted at the approximate mounting location in order to provide an unobstructed line-of-site view along the route of the approaching priority vehicle. The detector shall be a 3M "711" detector.

(B) Phase Selector and System Chassis:

A phase selector shall be installed and wired to provide a complete priority system as shown in the plans. A system chassis shall be used to install the 3M "754" phase, selector interface card.

(C) Detector Cable:

Detector cable shall be provided and installed as shown on the plans to deliver the necessary signal to the phase selector discriminator circuitry. The model number for the detector cable shall be 138.

ITEM 7350208 VIDEO DETECTION SYSTEM (5-CAMERA):

Description:

The Video Detection system shall be Econolite Autoscope Terra that the contractor shall provide. The video detection system shall include system hardware, software, and inspection. The contractor shall install the video detection system, provide the cable from

the pull boxes to the controller, and all equipment necessary for installing the video detection system as identified in the following specification:

System Performance:

The detection of vehicles passing through the field of view on and image sensor shall be made available to a large variety of end used applications as simple contact closure outputs that reflect the current real time detector or alarm states (on/off) or as summary traffic statistics that are reported locally or remotely. The contact closure outputs shall be provided to traffic signal controller and comply with the NEMA (National Electrical Manufacturers Association) type C or D detector rack.

The system architecture shall fully support networking of system components through a variety of industry standard and commercially available infrastructure that are used in the traffic industry. The serial data communications shall support direct connect, [modem] and multi-drop interconnects. Simple twisted pair wiring shall be supported to minimize overall system cost, improve reliability, utilizing existing infrastructure and ease of system installation and maintenance. Both video communications and serial data communications shall optionally be interconnected over long distances through repeat and daisy chain configurations. A single serial data communications multi-drop link on twisted pair shall extend up to 2 miles and include up to 24 units on a drop before the signal(s) must be repeated.

On the system application side of the network, the system shall be integrated through a client-server relationship. A communications server application shall provide at the data communications interface between as few as one to as many as hundreds of machine vision processor (MVP) sensors and a number of client applications. The client applications shall either be hosted on the same PC as the communications server or may be distributed over a local area network of PC's using the industry standard TCP/IP network protocol. Multiple client applications shall execute simultaneously on the same host or multiple hosts, depending on the network configuration.

Materials:

The machine vision system hardware, to be provided and installed by the contractor, shall consist of four components: 1. A color zoom, Machine Vision Processor (MVP sensor); 2. A modular cabinet interface unit; 3. A communication interface panel; 4. A personal computer. (PC).

The PC shall host the server and client applications that are used to program and monitor the other system components. The real-time performance shall be observed by viewing the video output from the sensor with overlaid flashing detectors to indicate the current detection stat (on/off). The MVP sensor shall optionally store cumulative traffic statistics, internally in non-volatile memory, for later retrieval and analysis.

The MVP sensor shall communicate with the modular cabinet interface unit, communications panel and the software applications using the industry standard TCP/IP network protocol. The MVP shall have a built in Internet Protocol (IP) address and shall be addressable without plug in devices or converters required.

The modular cabinet interface input shall communicate directly with up to eight (8) MVP sensors and shall comply with the form factor and electrical characteristics to plug directly into a NEMA type C or D detector rack providing up to eight (8) contact closure inputs and sixteen (16) contact closure outputs to a traffic signal controller.

The communication interface panel shall provide the electrical termination of wiring for video data and power to the MVP that is mounted on a pole or mast arm with a traffic signal cabinet or junction box. The communication interface panel shall provide high-energy transient protection to electrically protect the modular cabinet interface unit and connected MVP sensors. The communications interface panel shall be available in two models: a four-sensor model or a single-sensor model.

The contractor shall provide a MVP sensor embedded software suite that will incorporate multiple applications to perform a variety of diagnostic, installation, fault tolerant operations and vehicle detection processing. The detection shall be reliable, consistent, and perform under all weather, lighting and traffic congestion levels.

There shall be a suite of client applications that reside on the host client / server PC. The applications shall execute under Microsoft Windows XP. Available client applications shall include a Network Browser to learn a network of connected modular cabinet interface units and MVP's then show the topology in a logical hierarchical relationship; a Detector Editor to create and modify detector configurations to be executed on the MVP sensor; a Operation Log to extract the MVP run-time operation log of special events that have occurred; A Software Installer to reconfigure one or more MVP sensors with a newer release of embedded system software; and an MVP Image Sensor.

The MVP image sensor, to be provided and installed by the contractor, shall be an integrated imaging color CCD array with optics, high-speed, image processing hardware and general purpose CPU bundled into a sealed enclosure. The CCD array shall be directly controlled by the general purpose CPU, thus providing high video quality for detection that has virtually no noise to degrade detection performance. It shall be possible for the user to zoom the lens, as required for operation. It shall provide software JPEG video compression. The MVP shall provide direct real-time iris and shutter speed control. The MVP sensor shall be equipped with integrated zoom lens that can be changed using either configuration computer software or a hand-held controller. The MVP sensor shall output full motion color video through the means of a differential video port in NTSC format. The differential video is transmitted over a single twisted pair. The MVP sensor shall operate on 24 VAC, 50/60Hz at a maximum of 25 watts. The camera and processor electronics shall consume a maximum of 10 watts and the remaining 15 watts shall support an enclosure heater.

Construction Requirements:

Placement of detection zones shall be by means of a supervisor computer (PC) operating the Windows XP graphical environments, a keyboard, and a mouse. The VGA monitor shall be able to show the detection zones superimposed on images of traffic scenes.

The detection zones shall be created by using a mouse to draw detection zones on the supervisor computer's VGA monitor. Using a mouse and the keyboard it shall be possible to download detector configurations from the supervisor computer to the MVP, to retrieve the detector configuration that is currently running in the MVP, and to back up detector configurations by saving them to the supervision computer's removable or fixed disks.

The supervisor computer's mouse and keyboard shall be used to edit previously defined detector configurations to permit adjustment of the size and placement of the detection zone, to add detectors for additional traffic applications, or to reprogram the sensor for different traffic applications or changes in installation site geometry or traffic rerouting.

The video detection system shall optimally detect vehicle passage and presence when the MVP sensor is mounted 30 feet (10m) or higher above the roadway, when the image sensor is adjacent to the desired coverage area, and when the distance to the farthest detection zone locations are not greater than ten (10) times the mounting height of the MVP. The recommended deployment geometry for optimal detection also requires that there be an unobstructed view of each traveled lane where detection is required. Although optimal detection may be obtained when the MVP is mounted directly above the traveled lanes, the MVP shall not be required to be directly over the roadway. The MVP shall be able to view either approaching or receding traffic or both in the same field of view. The preferred image sensor orientation shall be to view approaching traffic since there are more high contrast features on vehicles as viewed from the front rather than the rear. The MVP sensor placed at a mounting height that minimizes vehicle image occlusion shall be able to monitor a maximum of six (6) to eight (8) traffic lanes simultaneously.

The modular cabinet interface unit, to be provided and installed by the contractor, shall provide the hardware and software means for up to eight (8) MVP sensors to communicate real-time detection states and alarms to a local traffic signal controller. It shall comply with the electrical and protocol specifications of the detector rack standards. The card shall have 1500 Vrms isolation between rack logic ground and street wiring.

The modular cabinet interface unit shall be a simple interface card that plugs directly into a NEMA type C or D detector rack. The modular cabinet interface unit shall occupy only 2 slots of the detector rack. The modular cabinet interface unit shall provide 8 phase inputs and 16 detector outputs.

The communications interface panel, to be provided and installed by the contractor, supports one to four MVPs. The communications interface panel consists of predefined wire termination block for MVP power, data and video connection, a power transformer for

the MVP, electrical surge protectors to isolate the modular cabinet interface unit and MVP, and an interface connector cable directly to the modular cabinet interface unit.

The interface panel shall provide power for one (1) MVP through a step-down transformer, taking local line voltage and producing 28 VAC, 50/60 Hz, at about 30 watts. A ½ amp slow-blow fuse shall individually protect the step-down transformers.

The contractor shall provide and install cable for power and transfer data from the video detection sensor to the control cabinet.

The supplier of the video detection system shall supervise the installation and testing of the video detection system and computer equipment. A factory certified representative from the supplier shall be on-site during installation. A four-hour session of training shall be provided to personnel of the City of Peoria in the operation, setup and maintenance of the video detection system, instruction and materials shall be provided for a maximum of 10 persons and shall be conducted at a location selected by the City of Peoria.

The MVP sensor and its support hardware/software is a sophisticated leading-edge technology system. Proper instruction from certified instructors is required to ensure that the end-user has complete competency in system operation. The User's Guide is not an adequate substitute for practical classroom training and formal certification by an approved agency.

The video detection system shall have a supplier warranty for a minimum of two (2) years. A copy of the written warranty shall be submitted for Department review and approval with the equipment submittals at the start of the project. Ongoing software support by the supplier shall include software updates of the MVP sensor, modular cabinet interface unit and supervisor computer applications. These updates shall be provided free of charge during the warranty period.

The warranty period shall commence upon the date of final project acceptance. During the warranty period, technical support shall be available from the supplier, at no cost to the agency, via telephone within 4 hours of the time a call is made by the agency, from factory-certified personnel or factory-certified installers.

Prior to activation of the signal, the video detection system shall be fully functional and operating in accordance with the specifications identified above.

Method of Measurement:

ITEM 7350208 - VIDEO DETECTION SYSTEM (5-CAMERA), will be measured as a single, lump sum unit of work.

Basis of Payment:

ITEM 7350208 - VIDEO DETECTION SYSTEM (5-CAMERA) will be paid at the contract lump sum price which shall be full compensation for the item complete in place, including testing, training, warranty, connectors, hook-ups and other equipment and software necessary to function as a part of the existing system.

SECTION 736 HIGHWAY AND SIGN LIGHTING:

736-2.02 Sign Lighting Materials: of the Standard Specifications is modified to add:

The contractor shall coordinate with the City of Peoria on the design and layout of the illuminated street name sign blanks during the electrical submittal process. The contractor shall obtain approval from the City on the design and layout of the sign prior to ordering or fabrication.

New, illuminated street name sign assemblies and brackets shall be installed on the traffic signal poles above the mast arm connections per the plans. The signs shall be manufactured by either Fluoresco Lighting & Signs, Carmanah Signs or Phoenix Sign Systems with the City of Peoria logo in blue and white. The street name legends shall be as noted on the plans and street numbers shall be shown on the signs. The sign panel background shall be typical street name sign green with white legend. Signs shall be controlled by a photoelectric cell mounted on the controller cabinet.

ITEM 7360030 LUMINAIRE (HORIZONTAL MOUNT) (HPS 250 WATT):

Description:

The work under this item consists of furnishing all equipment, tools and labor and installing cobra-head style High-Pressure Sodium (HPS) 250 Watt streetlight luminaires for the project's streetlight system in accordance with the project plans, requirements of these specifications, MAG specifications, City of Peoria Street Lighting Policy, and utility company requirements.

Materials:

Streetlight luminaires shall be 250 watt, 30,000 lumens HPS cobra-head style fixtures with type III IES distribution with full cutoff optics.

Construction Requirements:

Installation and type of luminaire shall meet APS or SRP standards, depending on which service area each streetlight is to be installed. Luminaire voltage shall be coordinated with the utility company supplying power.

Contractor shall affix a street light number on each pole according to the city of Peoria street lighting policy.

All luminaires shall be marked with their lamp wattage ("25" for 250 Watts). These markings shall be clearly visible from the ground.

Method of Measurement:

ITEM 7360030 - LUMINAIRE (HORIZONTAL MOUNT)(HPS 250 WATT) will be measured as a unit for each streetlight luminaire installed.

Basis of Payment:

The accepted quantity of ITEM 7360030 LUMINAIRE (HORIZONTAL MOUNT)(HPS 250 WATT), measured as provided above, will be paid for at the contract unit price per each, which shall be compensation for the work, complete in place, as shown on the project plans and as defined and described above.

ITEM 7370450 MISCELLANEOUS ELECTRICAL:

Description:

The work under this item shall consist of furnishing all materials, labor, and equipment to relocate existing internally illuminated street name signs (ISNS), to replace the ISNS sign blanks and install a new ISNS on-off switch. All four ISNS shall be relocated from the existing traffic signal poles to the new traffic signal poles. The work shall conform to all aspects of the plans, these specifications, the Standard Specifications and the Standard Drawings.

Materials:

Materials used for the work shall be determined by the Engineer to be serviceable and in good working order. All materials used must be inspected by the City of Peoria inspector prior to installation. This would include any replacement materials required throughout the course of the project.

ISNS Brackets:

ISNS brackets shall of sufficient size and strength to ensure load carrying qualities required.

Construction Requirements:

The contractor is responsible for coordination of the relocation and installation of the traffic signal equipment as it relates to any other work being done as part of this project. Any

delay to the overall schedule due to the relocation or installation of the relocated traffic signal equipment is the responsibility of the contractor and will not be grounds for time extensions or additional costs to the City of Peoria.

The contractor shall install a separate on/off switch for the internally illuminated street name signs. This switch shall be separate and shall operate independently from the circuit controlling the on/off operation of the luminaires. The contractor shall install the switch on the inside technician switch panel of the traffic signal cabinet door.

The City of Peoria Public Works Superintendent shall be notified a minimum of 2 working days prior to any work at the intersection. The miscellaneous electrical work shall be conducted at a date and time approved by the Engineer. The miscellaneous electrical work shall not be performed on a Monday or Friday. The contractor shall have one (1) off duty Police Officer present for traffic control during the work. The contractor and a cabinet representative will perform all cabinet and camera installations and detection with two Peoria off-duty uniformed police officer(s). The contractor is responsible for coordinating directly with City of Peoria traffic signal supervisor for assistance as it relates to the work in the control cabinet.

The contractor shall provide a qualified journeyman who is IMSA level II certified, to oversee the work. If at any time it is determined that a qualified electrician is not present, the Engineer may issue a stop work order to the contractor.

Any conduits that are abandoned shall have all existing conductors removed and shall become the property of the contractor.

The installation of all signal equipment shall conform to these specifications and approved drawings, the Standard Specifications and Standard Drawings, MUTCD, and NEC, in that order.

Method of Measurement:

Item 7370450 -Miscellaneous Electrical shall be measured as a single, lump sum unit of work.

Basis of Payment:

The Item 7370450 - Miscellaneous Electrical will be paid at the contract lump sum price which shall be full compensation for the item complete in place, including brackets, connectors, wiring and repositioning of signal equipment.

ITEM 7370455 MISCELLANEOUS ELECTRICAL (AS-BUILTS):

Description:

The work under this item shall consist of furnishing all material, equipment, tools and labor and preparing as-built drawings of all installed electrical equipment and shall conform to the requirements of these special provisions.

Construction Requirements:

The contractor shall provide "red line" drawings of all installed electrical equipment on project plan sheets. All measurements made for dimensioning shall be to the nearest 0.1 feet. All as-built drawings shall be 34" x 22" in size with red ink used to indicate dimensions of electrical items that are not shown on the original plan sheets. As-builts shall be made in such a manner that clear and legible copies can be made.

Underground conduit shall be dimensioned from the edge of roadway and shall show the starting and ending station numbers.

Pull boxes and foundations shall indicate their station number and offset from the edge of roadway. Distances from pull box to pull box and pull box to foundation shall be shown.

Home run conduits shall be dimensioned from the pull box and shall show the length and direction.

Conductor and pole schedules shall reflect any changes made such as phase number, number of conductors, size of conductors, circuit numbers, type of signal head, mounting assembly, poles and mast arms.

Four sets of as-built electrical plan sheets shall be submitted to the Engineer prior to final acceptance of electrical work. Distribution of as-built plans shall be the following: Field Office, Traffic Design, Electrical Inspection and Electrical Blue Stake.

Method of Measurement:

ITEM 7370455 - MISCELLANEOUS ELECTRICAL (AS-BUILTS) will be measured as a single, lump sum unit of work.

Basis of Payment:

ITEM 7370455 - MISCELLANEOUS ELECTRICAL (AS-BUILTS), measured as provided above, will be paid for at the contract lump sum price upon complete submittal to and approval by the Engineer and shall be full compensation for the item, completed as defined and described above.

ITEM 7370705 CCTV FIELD EQUIPMENT:

1.0 Description:

The work under this item consists of furnishing and installing a Closed Circuit Television traffic monitoring system, composed of a Closed Circuit Television Camera (CCTV) and its components on a traffic signal pole. The CCTV Field Equipment work shall conform to all aspects of the plans, these specifications, and the Standard Specifications.

2.0 Materials:

(A) CCTV Camera:

The camera assembly shall either be a Vicon Surveyor, Panasonic or Bosch brand.

(B) Camera Mount:

The CCTV cameras shall be mounted on the traffic signal poles as shown on the project plans. Mounting brackets, pole mount adapters, and associated hardware shall be provided by the contractor.

(C) Cables:

CCTV cables (video, power, and data) shall be provided by the contractor.

(D) Surge Protection:

Surge protectors (video, power, and data) shall be supplied by the contractor.

3.0 Construction Requirements:

The contractor shall mount the CCTV assembly which includes the camera mount, camera housing, camera, zoom lens, tilt/pan drive, receiver/driver and air terminal onto the traffic signal pole per the requirements of the CCTV camera supplier.

No wire, cables, or conductors shall be exposed from the base of the tilt/pan drive to the ground. All conductors shall be routed inside the traffic signal pole.

The surge protector shall be installed in the traffic signal cabinet and connected per the supplier/manufacture's instructions. Surge protector leads shall be as straight and short as possible. The mounting bolts for the chassis and terminal strips shall not protrude from the outside of the enclosure. All cabling, connectors, and hardware required to interconnect the CCTV field and fiber optic communications equipment shall be furnished and installed by the contractor. The remote data port shall be installed in the traffic signal cabinet.

The contractor shall configure the CCTV camera per the manufacturer's instructions. The configuration shall be performed in coordination with the City's designated representative, who will verify proper operation of the cameras pan, tilt, zoom, and preset functions. The

contractor shall establish camera presets at the direction of the City representative. Perform all configurations with a laptop provided by the contractor.

Once the CCTV camera is installed and configured, the contractor will perform a test of the CCTV camera to verify that the pan, tilt, zoom, and preset functions are performing properly.

(A) Test Requirements

(1) General:

All CCTV components shall be subject to testing and monitoring to determine conformance with all applicable specifications and to ensure proper operation of the equipment and system.

For purposes of completing the tests, "bright sunlight" conditions shall be defined as occurring between 10:00 a.m. local time and 2:00 p.m. local time on a cloudless day. "Night" conditions shall be defined as occurring between one hour after local sundown and one hour before local sunrise. The moon shall be no more than one-quarter full.

(2) Stand-Alone Tests:

The test shall exercise all stand-alone (non-network) functional operations of the CCTV. The tests shall verify the following:

- Control of focus, zoom, digital zoom, white balance, iris, tilt/pan, and power on/off
- Color and Black/White modes of operation
- Response to automatic preset positioning commands
- Display of Camera ID information and directional indicators
- Video "blacked out" when in a privacy zone
- Presence and quality of video signal during bright sunlight and night conditions
- Retention of non-volatile RAM data (i.e., sector text, preset positions)

(3) Subsystem Test (SST):

The CCTV SST will be performed as part of the Single Node Assembly subsystem testing. The CCTV portion of the test shall verify the following:

- All items in the stand-alone test
- Transmission of high quality video images
- Transmission of control signals
- Positioning of each camera from the control panels
- Response to automatic preset positioning commands
- Priority and partitioning of commands
- Generation of text, date, and time on monitors

The Engineer shall be the sole judge of video quality acceptability. If in the Engineer's opinion the video quality has degraded substantially from the video quality witnessed during the stand-alone test, the contractor shall be required to perform video resolution and signal to noise ratio testing on however many cameras the Engineer requires, in which case the contractor shall submit a test procedure for approval, prior to the testing.

(B) Warranty, Service and Support

Provide a minimum of two (2) years warranty for the CCTV camera. Ongoing software support by the supplier shall include software updates of the CCTV software. These updates shall be provided free of charge as long as the products are being manufactured and then on, as long as the software is being updated.

4.0 Method of Measurement:

ITEM 7370705 - CCTV FIELD EQUIPMENT will be measured as a unit each for a CCTV field equipment system installed complete in place. A system will be considered to include a video camera, zoom lens, tilt/pan drive, camera housing, wall mount with pole adapter, surge protection devices, and all incidental cables, connections, and hardware.

5.0 Basis of Payment:

The accepted quantity of ITEM 7370705 - CCTV FIELD EQUIPMENT, measured as provided, will be paid at the contract unit price, complete in place.

SECTION 803 - LANDSCAPING PLATING MATERIALS:

802-2.02 Decomposed Granite and Granite Mulch: of the Standard Specifications is modified to add:

Decomposed granite shall be placed at the designated locations shown on the project plans shall be approved for color(s) and gradation requirements prior to placement. The colors shall match that of the existing adjacent granite mulch at the specified locations as required.

For color(s) verification and/or for approval of the proposed color(s) the contractor shall provide material sample(s) for each color(s) required on the project for review and approval by the Engineer.

Each granite mulch and decomposed granite color(s) approved for construction shall be acquired from a single source.

For decomposed granite (3/4" Minus), the grading requirements shall be as follows:

<u>Passing Sieve</u>	<u>Percent</u>
3/4 inch	100
1/2 inch	60-80
1/4 inch	45-65

803-3.02 Decomposed Granite and Granite Mulch: of the Standard Specifications is modified to add:

Decomposed granite samples shall be provided and delivered to the project site by the contractor. Minimum decomposed granite sample quantities shall be one ton. The contractor shall deliver to a location as directed by the Engineer and spread the sample out to the required depths as shown on the project plans. These samples are required for color approval only. If color is rejected by the Engineer, the contractor will provide additional samples for approval. Upon approval by the Engineer, future granite stockpiles will be sampled for gradation testing by the Engineer.

Slope conditions to be encountered by the contractor may require fine grading and compaction as directed by the Engineer prior to placement of decomposed granite. The contractor shall provide all required equipment, materials and labor for fine grading of the slopes as directed by the Engineer.

Decomposed granite shall be placed to a minimum depth of two inches except in planting pits. The finish grade of the decomposed granite shall be a maximum of one inch below the top of pavement concrete aprons, sidewalks, and top of curb.

The pre-emergent herbicide application rate shall be as recommended by the manufacturer.

The water settling operation shall be completed at the minimum rate of one-half inch of water.

The contractor shall rid and maintain all areas designated to receive decomposed granite from all weeds and non-planted vegetation (by chemical or mechanical means) for a minimum period of 40 working days or as specified by the Engineer, prior to placing the granite. Prior to placing decomposed granite, the areas shall be totally free of all weeds and non-planted vegetation. When using herbicides, the work shall be in accordance with Subsection 803-3.02 of the Standard Specifications. All dead weeds and non-planted vegetation shall be removed and disposed of by the contractor as approved by the Engineer. The contractor shall repair eroded areas and compact soil as approved by the Engineer.

803-5 Basis of Payment: of the Standard Specifications is modified to add:

Decomposed Granite as shown on the plans, will be paid for under ITEM 9240010 - Force Account Work (Repair Landscaping and Irrigation Systems) in accordance with the requirements of Subsection 109.04 (D) of the Standard Specifications.

SECTION 806 TREES, SHRUBS, AND PLANTS:

806-1 Description: of the Standard Specifications is modified to add:

The work for all landscape items shall be completed within the number of contract days identified for the project.

Phase I shall consist of the work to be done under all contract items except that under the item of Landscape Establishment. Phase II shall consist exclusively of the work to be done under the item of Landscaping Establishment.

806-2 Materials: of the Standard Specifications is modified to add:

Amendments for prepared soil shall consist of 25 pounds of agricultural gypsum, 1 pound of water soluble soil sulfur and 9 pounds of slow release Isobutylidene diurea fertilizer 25-4-8 with each cubic yard of soil conditioner. Soil sulfur shall be Dispersul with Iron Manganese, or approved equal.

Amendments shall be inspected separately before adding to soil conditioner to ensure quality control. PRE-PACKAGING OF AMENDMENTS IS PROHIBITED.

The contractor shall furnish a complete "Plant Availability List" of all the plantings needed for this project at the pre-construction conference. The list shall include the confirmed nursery source for the planting stock, assuring the availability of each plant material and the size specified herein. The list shall include the species name, size and quantity of the plant material, the confirmed source for the plant material as evidenced by an invoice or contract with the confirmed source and the approximate date the plant material will be delivered to the job site. The "Plant Availability List" shall be submitted in triplicate to the Engineer.

Approval of the "Plant Availability List" by the Engineer does not relieve the contractor of the responsibility for providing plantings that will pass the inspection required elsewhere in the Standard Specifications or these Special Provisions.

The plant species shown on the plans may be changed to meet this requirement as approved by the Engineer.

Tree selections are to be approved at the nursery site prior to planting, by the Engineer.

No substitution of plant material shall be considered unless approved by the Engineer.

Water used during landscape construction to properly plant, maintain and care for the plant material will be furnished by City of Peoria at the water meter source from within the project limits at no charge to the contractor.

806-3 Construction Requirements: of the Standard Specifications is modified to add:

It shall be the contractor's responsibility to determine the exact location of the utilities prior to any construction operations and to notify the above mentioned utility companies at least two working days prior to commencing any work on the project.

There are no restrictions on planting during certain times of the year or within certain temperature ranges. All trees, shrubs, and plants shall be of the specified container size and/or height, and shall be adequately supported.

All applicators of pesticides and herbicides shall have a current and valid applicator's card from the State of Arizona Structural Pest Control Commission.

Prior to plant layout, all grasses and weeds shall be removed from the planting areas.

The contractor shall lay out the planting pits in accordance with the project plans and control stationing along the curb edge using a starting location, methods, and markings approved by the Engineer. The planting layout shall be according to the project plans.

The contractor shall flag for the approval of the Engineer all plant locations prior to the excavation of plant pits and installation of soil conditioner. Flag colors shall be consistent with the requirements of the Arizona Corporation Commission rules for landscape flagging.

Location and positioning of all plant materials need prior approval from the Engineer before planting commences. A minimum of 1-week notice is required for inspection of flagging, prior to planting. The flagging shall remain in the center of the planting pit until the plant is planted.

The soil for back-filling the planting pits shall consist of a mixture of 70 percent soil excavated from the pits and 30 percent soil conditioner and amendments. Clods or stones exceeding 2 inches in diameter and foreign matter deemed objectionable by the Engineer will not be allowed. All excess soil excavated from the plant pits that has stones objectionable to the Engineer shall be disposed of off the project site, in a manner acceptable to the Engineer.

When excavation of any planting pit is difficult and it appears that poor drainage may result, as determined by the Engineer, the pit shall be filled with water two times in order to check the drainage of the planting pits. Any pit that has not fully drained twice within a 12-hour period (after the second filling) shall be deepened until proper drainage is achieved.

All trees shall be planted at the same depth as originally grown.

After the planting pits are refilled with amended soil and the irrigation system has been installed, automatically programmed from the controller, and accepted, the planting pits shall be pre-watered by the irrigation system for a minimum duration of 12 hours. Planting shall be accomplished during a 3-day period starting 2 days following the pre-wetting as specified. Areas not planted during the 3-day period shall be re-watered and allowed to dry as heretofore specified.

Trees shall be maintained in a straight vertical position during both Phase I and Phase II of the project. The contractor shall be responsible for the care of the trees and any damage caused by improper support of the trees. Any staking and bracing of trees shall be completed as detailed on the project plans.

The contractor shall adequately water plants to maintain a healthy and vigorous growing condition during the planting period, as determined by the Engineer.

The contractor shall be responsible for maintaining and protecting all planting areas and all trees, shrubs and plants in accordance with Subsection 806-3.06 of the Standard Specifications. All existing undesirable grasses and weeds shall be eradicated with herbicides or by the manual method during Phase 1 of the project, and shall be disposed of by the contractor in a legal manner, as approved by the Engineer.

Plants shall be staked and/or guyed as detailed on the project plans, as approved by the Engineer. All wire ties used on the plant staking shall be stapled to stakes in a manner acceptable to the Engineer. Stakes shall be driven into undisturbed soil below the bottom of the planting pit, and tree ties shall be as detailed on the project plans.

The contractor shall pay special attention to the infestation of any weeds and grasses. Either of these items found in the planting pits shall be grounds for immediate removal and disposal. The planting pit shall be excavated and inspected to assure complete eradication of any roots or rhizomes that may have grown into the area. This work and any materials associated shall be the responsibility of the contractor, and shall be completed by the contractor, at no additional cost to the Department.

All planting areas shall be graded as specified and required to facilitate proper watering of the plant materials and the planting areas shall be graded so as to leave a generally smooth appearance after the completion of planting, as approved by the Engineer.

806-5 **Basis of Payment:** of the Standard Specifications is modified to add:

Trees, shrubs and plants as shown on the plans, will be paid for under ITEM 9240010 - Force Account Work (Repair Landscaping and Irrigation Systems) in accordance with the requirements of Subsection 109.04 (D) of the Standard Specifications.

SECTION 807 LANDSCAPING ESTABLISHMENT:

807-1 Description: of the Standard Specifications is modified to add:

This work shall be restricted to the care of landscape areas that have been planted by the contractor and paid as part of item 9240010 - Force Account Work (Repair Landscaping and Irrigation Systems).

807-2 Materials: of the Standard Specifications is modified to add:

Phase I of the contract shall consist of all items under this contract other than - Landscaping Establishment. When all work under Phase I of the contract has been completed, as approved by the Engineer, Phase II of the contract shall begin. No work or contract time under Phase II of the project shall begin until all work under Phase I is considered complete.

The water used during Landscaping Establishment to properly maintain the plant material will be furnished by the City of Peoria, at designated source from within the project limits, at no charge to the contractor. The contractor shall be responsible for all equipment, materials and labor necessary to load, transport and apply water.

The contractor shall notify the Engineer and obtain prior approval for the use of any chemicals for unwanted plant eradication or control.

During the Landscaping Establishment period, the contractor shall provide plant material replacements as follows:

<u>Original Size</u>	<u>Replacement Size</u>
1 gallon	1 gallon
5 gallon	5 gallon
36" box	36" box

807-3.01 General: of the Standard Specifications is modified to add:

The prime contractor shall be in direct control of the work performed under Phase II. If any work is subcontracted, a representative of the prime contractor knowledgeable of the landscape and irrigation system work performed during Phase I of this contract shall be present at the site of the work for all hours that the subcontractor works. Subcontracting of Phase II work shall be permitted for removal of unwanted plants and weed eradication with herbicides, because of the special licensing required as covered under Subsection 807-3.02 of the Standard Specifications. The prime contractor shall submit the required subcontract documentation as per the Standard Specifications.

The number of calendar days for Landscaping Establishment (Phase II) will be **90**.

807-3.02 **Planted Stock and Seeding Establishment:** of the Standard Specifications is modified to add:

Duckbill brand tree guys, or an approved equal, shall be utilized when tree staking is no longer capable of supporting the tree. Materials and labor required for tree guying shall be considered as included in the cost of Item 8070011 - Landscaping Establishment.

The contractor shall apply one application of an approved pre-emergent herbicide on all unpaved areas of the median, as directed by the Engineer. The application shall be completed 30 days prior to completion of Phase II of the project. Watering shall be completed in accordance with the manufacturer's recommendations.

The pre-emergent herbicide shall be applied in accordance with the requirements of Section 803-3.02 of these Special Provisions and the recommendations of the pre-emergent herbicide manufacturer.

The control of unwanted plant growth (weeds) shall be accomplished by the use of herbicides. In Phase II, manual removal of unwanted plant growth in seeded areas shall be required on a monthly basis.

All project areas shall be kept cleared of all unwanted plant growth.

807-4 **Method of Measurement:** of the Standard Specifications: is revised to read:

Landscaping Establishment will be measured on a per month basis.

807-5 **Basis of Payment:** of the Standard Specifications: is revised to read:

Landscaping Establishment, measured as provided above, will be paid for at the contract unit price per month for the work complete and will be made only when the following work is completed prior to submittal of the monthly estimate.

- (1) The Engineers list of necessary work from the prior month's inspection.
- (2) The contractors list of proposed operations from its monthly work schedule.

No measurement or direct payment will be made for traffic control required during the Landscaping Establishment period, or maintenance outside of the growing season as hereinbefore specified, the cost shall be considered as included in the cost for this contract item.

SECTION 808 WATER DISTRIBUTION:

808-3.08 Landscape Irrigation System: of the Standard Specifications is revised to read:

All plant layout and locations shall be completed and approved by the Engineer prior to the installation of all irrigations system mainlines and laterals.

Lateral pipes shall meander through tree and shrub areas as shown on the plans. No short lateral sections or branches shall extend from the general course direction of the lateral pipe unless the branch includes a flushing end cap.

All materials and fittings shall be new and the manufacturer's most current design. Plastic pipe and fittings shall be installed in accordance with the requirements specified herein, and each manufacturer's recommendations.

All piping and 24-volt wire shall be installed as detailed on the project plans and shall have a minimum cover as shown.

At the completion of the landscaping establishment period, the contractor shall deliver two pressure gauges with tire chucks to the Engineer.

Plastic pipe and fittings or nipples showing application of any device other than a strap wrench for tightening shall be removed and replaced with a new component. Any system(s) tested prior to replacement shall be re-tested as specified herein.

Except as otherwise indicated in the plans and details no emitter laterals or piping shall be installed through or beneath plant pits. Minimum distance between plant pit perimeter and piping shall be 18 inches. The maximum distance between the plant pit and piping shall be governed by maximum emitter supply tubing lengths as specified on the project plans.

A pull box shall be provided at each end of the sleeve, where control wires cross roadways and where wire splices are required. The exact location shall be field approved by the Engineer.

All trenches excavated for the irrigation systems shall be backfilled within five working days from the day they are excavated. Barricades shall be placed by excavated trenches located within 30 feet of the traveled way in a manner acceptable to the Engineer. Open trenches beyond 30 feet from the traveled way shall be delineated and protected in a manner acceptable to the Engineer.

Additional flushing of the irrigation system in addition to those specified may be required by the Engineer to assure proper operation of system components.

Valve boxes shall be installed as detailed on the project plans and as directed by the Engineer. All valve boxes shall be equipped with bolt down or locking lids and all lids shall be in place and locked when work is not in progress on the respective unit.

All wire connections for No. 10 gauge or larger and for voltages greater than 30 volts, shall be wrapped in accordance with the requirements of Subsection 732-3.02(B) of the Standard Specifications.

All wire shall be tagged in accordance with the requirements of Subsection 732-3.02(C) of the Standard Specifications.

Flush end caps shall be installed as shown on the project plans or as directed by the Engineer to promote good flushing of the entire irrigation system.

808-5 Basis of Payment: of the Standard Specifications is modified to add:

All irrigation system repairs and modifications as shown on the plans will be paid for under ITEM 9240010 - Force Account Work (Repair Landscaping and Irrigation Systems) in accordance with the requirements of Subsection 109.04 (D) of the Standard Specifications.

ITEM 8080190 RELOCATE AIR RELEASE VALVE:

Description:

The work consists of furnishing all necessary equipment, materials, and labor for the relocation of existing air release valve in accordance with City of Peoria Std. detail 395 and these special provisions. Work shall include but not be limited to relocation of existing air release valve; installation of new ductile iron pipe, fittings and all other work needed for a complete installation as per City of Peoria Std. detail 395.

Materials:

All new material shall be in accordance with City of Peoria Std. detail 395 and MAG Standard Specification Section 756.

Construction Requirements:

Work shall be completed in accordance with City of Peoria Std. detail 395 and MAG Section 756. An unknown length of ductile iron pipe will be required for each installation and shall be field verified prior to construction.

The contractor shall salvage the existing fittings, valve cage and air release valve to be reused at the new location. If material is not specified to be salvaged, the contractor shall remove and dispose of the existing material according to all applicable codes and requirements, as directed by the Engineer.

Method of Measurement:

ITEM 8080190 – RELOCATE AIR RELEASE VALVE will be measured as a single, lump sum unit of work and shall include the location shown on the project plans.

Basis of Payment:

ITEM 8080190 – RELOCATE AIR RELEASE VALVE as measured above will be paid at the contract lump sum price, complete in place, including additional fittings and ductile iron pipe required to complete the relocation.

ITEM 8080646 - RESET FRAME AND COVER FOR VALVE BOX:

Description:

The work under this item consist of furnishing all equipment, materials, labor and resetting existing frame and cover for valve box to the finished line and grades shown on the project plans (Peoria Standard Detail PE-270) and in accordance with these special provisions.

Materials:

Concrete shall be Class AA Portland cement concrete conforming to the requirements of the MAG Specifications.

Construction Requirements:

Construction requirements for resetting frame and cover shall be in accordance with the project plans (Peoria Standard Detail PE-270).

Frame and Cover Grade Adjustments:

The contractor may elect to remove old frame and covers and install new frames, covers and/or boxes in accordance with the details and plans. Any additional costs associated with this work shall be considered included in the contract pay items.

All frames and covers, in paved or unpaved areas, shall be adjusted to finished grade after final placement of asphalt concrete or PCC in paved areas, or finished grade in unpaved areas.

The contractor will be required to sawcut all pavement removals for the frame and cover grade adjustments in paved areas at no additional cost.

1. Within 48 hours after installation of asphaltic concrete surface course, the contractor shall begin making frame and cover adjustments unless otherwise approved in writing by the Engineer.

2. The contractor shall complete all frame and cover adjustments in one traffic lane at a time before beginning frame and cover adjustments in other lanes.
3. The tolerance limit of all frame and cover adjustments shall not exceed 1/8 inch above or below the asphaltic concrete surface course immediately adjacent to the frame. If the frame and cover adjustment is not within the tolerance limits, the contractor shall readjust the frame and cover to within the specified tolerance limits at no additional cost.
4. Prior to burying and frame and cover, the contractor shall provide temporary markings of all frames and covers, and shall prepare and submit to the Engineer, five copies of two swing ties to all frames and covers in an acceptable format. These markings are for the benefit of emergency crews to be used in emergency situations. At certain times, the Engineer may require a manhole or valve housing to be adjusted to the surface of the asphalt concrete base course. If so required by the Engineer, the contractor will be compensated for the adjustment based on the unit bid price for the appropriate item.

Method of measurement:

Reset Frame and Cover for Valve Box will be measured by the unit each.

Basis of Payment:

Reset Frame and Cover for Valve Box, measured as provided above, will be paid at the contract unit price each, complete in place.

ITEM 8080655 RELOCATE FIRE HYDRANT:

Description:

The work under this item consist of furnishing all equipment, materials, labor and relocating existing fire hydrant to the locations shown on the project plans and in accordance with City of Peoria Std. detail 360. Work shall include but not be limited to relocation of existing fire hydrant; installation of new ductile iron pipe and fittings and all other work needed for a complete installation as per City of Peoria Std. detail 360.

Materials:

All new material shall be in accordance with City of Peoria Std. detail 360 and MAG Specifications Section 756.

Construction Requirements:

Work shall be completed in accordance with City of Peoria Std. detail 360 and MAG Section 756.

The contractor shall salvage the existing fittings, valves and hydrant to be reused at the new location. The contractor shall supply new ductile iron pipe and fittings as required to extend service to the new hydrant location.

The Contractor shall remove and dispose of the existing material not to be reused, according to all applicable codes and requirements, as directed by the Engineer.

A new fire hydrant marker shall be installed as per Peoria Standard Detail PE-362.

Method of Measurement:

ITEM 8080655 – RELOCATE FIRE HYDRANT will be measured by the unit for a fire hydrant acceptably relocated.

Basis of Payment:

ITEM 8080655 – RELOCATE FIRE HYDRANT, as measured above, will be paid at the contract unit price per each complete in place, including additional fittings and ductile iron pipe needed to complete the relocation, removing the existing hydrant, fire hydrant marker, thrust blocks and other miscellaneous required work.

ITEM 8081003 WATER MAIN (REALIGNMENT):

Description:

The work consists of furnishing all necessary equipment, materials, and labor for the horizontal realignment of a 12" water line in 91st Avenue Station 56+25 right as shown on sheet SD-05 of the plans and per these special provisions. Work shall include but not be limited to re-alignment of 12" water main; installation of new ductile iron pipe, fittings and all other work, including chlorination and testing, for a complete installation as per City of Peoria Engineering Development Guidelines.

An unknown length of ductile iron pipe shall be furnished for each installation and shall be field verified prior to construction.

Materials:

All new material shall be in accordance with City of Peoria Engineering Development Guidelines and MAG Specifications Section 756.

Construction Requirements:

Work shall be completed in accordance with City of Peoria Engineering Development Guidelines and MAG Specifications Section 756.

During construction, the contractor shall remove and dispose of the existing material not to be reused, according to all applicable codes and requirements, as directed by the Engineer.

All joints shall be mechanically restrained for the re-aligned water main. Concrete encasement shall be constructed as shown in the plans.

Method of Measurement:

ITEM 8081003 – WATER MAIN (REALIGNMENT) will be measured by the unit each for the water main re-aligned, complete in place.

Basis of Payment:

ITEM 8081003 – WATER MAIN (REALIGNMENT) as measured above will be paid at the contract unit price, complete in place, including additional fittings, concrete encasement, thrust blocks and sufficient mechanical joint restraint ductile iron pipe needed to complete the relocation.

ITEM 9080101	CONCRETE CURB AND GUTTER, TYPE A (MAG DET. 220):
ITEM 9080104	CONCRETE CURB AND GUTTER, TYPE D (MAG DET. 220):
ITEM 9080108	CONCRETE SINGLE CURB (MAG DET. 222) (TYPE A) (H=7"):
ITEM 9080241	CONCRETE SIDEWALK (MAG DET. 230 & 231):
ITEM 9080296	CONCRETE SIDEWALK RAMP (MAG DET. 231):
ITEM 9080305	CONCRETE DRIVEWAY (CITY OF PEORIA DET. 251):
ITEM 9080350	CONCRETE DRIVEWAY (MAG DET. 250):

Description:

The work under this item shall consist of furnishing all material, equipment and labor necessary to construct the concrete curb, gutter, sidewalk, sidewalk ramps, and driveways as described and specified herein, Section 340 of the MAG Uniform Standard Specifications, and as shown on the project plans.

Materials:

All new material shall be in accordance to Section 725 and Section 729 of the MAG Uniform Standard Specifications and City of Peoria Engineering Development Guidelines.

Construction Requirements:

The construction of the above mentioned items will be in accordance to Section 340 of the MAG Uniform Standard Specifications and City of Peoria Engineering Development Guidelines.

Detectable strips with truncated domes shall be installed at all sidewalk ramps and concrete driveways per latest Peoria and MAG standard details and as per the manufacturer's recommendations.

Method of Measurement:

Concrete curbs and gutters of the various types shown on the plans will be measured by the lineal foot along the gutter flow line through inlets, catch basins, driveways, sidewalk ramps, etc. Measurement will be to the nearest whole lineal foot.

Concrete sidewalks and driveways shall be measured to the nearest whole square foot of surface area.

Concrete sidewalk ramps will be measured by the unit each for a ramp that is acceptably constructed.

Basis of Payment:

The accepted quantities of curb, gutter, sidewalk and driveway, measured as provided above, will be paid at the contract unit price, which shall be full compensation for the work, complete in place.

Concrete sidewalk ramps, as measured above will be paid at the contract unit price, complete in place, including detectable strips and ramp curb.

ITEM 9080602 CONCRETE BUS SHELTER PAD (PHOENIX DET P1256-1):

Description:

The work under this item shall consist of furnishing all material, equipment and labor necessary to construct the concrete bus shelter pad per City of Phoenix Std Detail P1256-1, P1261, Section 340 and 342 of the MAG Uniform Standard Specifications, and as shown on the project plans.

Materials:

All new material shall be in accordance to Section 725 and Section 729 of the MAG Uniform Standard Specifications.

Construction Requirements:

The construction of the above mentioned items will be in accordance to City of Phoenix Std Detail P1256-1, P1261, and Section 340 and 342 of the MAG Uniform Standard Specifications.

The work shall include constructing concrete bus shelter pad per detail and dimensions shown in the plans, including decorative concrete pavers, Modified MAG Std Detail 222-B concrete single curb as per plans and detail P1261, and all conduits, junction boxes, ground rod etc. per detail P1261.

Method of Measurement:

Concrete Bus Shelter Pad will be measured to the nearest square foot of surface area of decorative pavement. Separate measurements will not be made for modified MAG Std Detail 222-B single curb, conduits, junction boxes and ground rod.

Basis of Payment:

The accepted quantities of Concrete Bus Shelter Pad, measured as provided above, will be paid at the contract unit price, which shall be full compensation for the work, complete in place, including decorative concrete pavers, modified MAG Std Detail 222-B single curb, conduits, junction boxes and ground rod as shown in City of Phoenix Std Detail P1256-1. These various items are considered in payment for Concrete Bus Shelter Pad.

ITEM 9140113 WALL (BLOCK):

Description:

The work under this item shall consist of furnishing all material, equipment and labor necessary to construct the wall as described and specified herein, Section 914 of the ADOT Standard Specifications, and as shown on the project plans.

New metal railing shall be constructed as per City of Peoria Detail PE-119 and shall be incorporated into the construction of walls at the locations shown in the plans.

Construction Requirements:

The construction of the wall will be as described in Section 914 of the ADOT Standard Specifications and to match the existing wall in place per agreement with the property owner.

The new masonry block type should match the existing blocks in size, shape and color.

The handrail shall be painted per MAG Specifications Section 530. The color shall be per the discretion of the Engineer.

Method of Measurement:

Measurement of ITEM 9140113 - WALL (BLOCK) will be made to the nearest full square foot of wall constructed and will be measured along the front face of the wall from the top of footing to the top of wall cap.

No separate measurement will be made of the new metal railing, as it will be considered as included in the unit price bid for walls.

Basis of Payment:

Payment for ITEM 9140113 - WALL (BLOCK) will be made at the contract price per square foot, which price shall be full compensation for the item complete in place, including excavation, footings, backfilling, rustication, color coating and metal railing.

ITEM 9210016 MEDIAN PAVING (DECORATIVE PAVEMENT):

Description:

The work under this item consists of constructing the median paving with decorative stamped portland cement concrete at the locations and in accordance with the details shown on the project plans and these special provisions. Decorative pavement under this specification is not intended for use in areas subject to vehicular traffic.

Materials:

All new material shall be in accordance to Section 725 and Section 729 of the MAG Uniform Standard Specifications.

Construction Requirements:

The color of the decorative stamped concrete shall be as designated by the Engineer. The Contractor shall submit two samples to the Engineer for approval prior to any work.

The surfaces upon which the base material is to be placed shall be fine graded and compacted to a density of not less than 95 percent of the maximum density as determined in accordance with the requirements of the applicable test methods of the ADOT Materials Testing Manual, as directed and approved by the Engineer.

Aggregate base shall conform to the requirements of Section 303 of the Specifications for Class 1, 2 or 3. Aggregate base shall be compacted to a density of not less than 95 percent of the maximum density in accordance with the requirements of the applicable test methods of the ADOT Materials Testing Manual, as directed and approved by the Engineer. The final surface need not be finished with a leveling device.

The concrete shall be scored for a depth of one inch transversely to match the joints in concrete curb and longitudinally when the width of the concrete exceeds 15 feet.

Finish on the slab shall be a transverse coarse broom finish.

Method of Measurement:

Measurement of ITEM 9210016 - MEDIAN PAVING (DECORATIVE PAVEMENT) will be made by the square yard of concrete acceptably placed.

Basis of Payment:

Payment for ITEM 9210016 - MEDIAN PAVING (DECORATIVE PAVEMENT) will be made at the contract price per square yard, which shall be full compensation for the item complete, in place, including the furnishing and placing of aggregate base.

ITEM 9240010 FORCE ACCOUNT WORK (REPAIR LANDSCAPING AND IRRIGATION SYSTEMS):

Description:

The work under this item shall consist of the repair of damage to landscape features, including replacement of existing trees, shrubs, and decomposed granite, that have been damaged by construction, as directed by the Engineer. This work also includes the planting of new trees and shrubs when directed by the Engineer.

The work under this item shall also consist of the repair of all damaged irrigation system components, including irrigation pipe of various sizes, remote control valves, pressure regulators, emitters, gate valves, and control wire, within the project limits that have been damaged by construction, as directed by the Engineer. This work also includes the installation of new irrigation components to ensure a complete and functioning automatic system as existed prior to construction.

Existing Landscaping:

The Engineer and the contractor shall inventory the existing landscaping prior to the start of any work and review the existing landscape areas that are to be protected within the project limits. This base condition will be used to establish the responsibility of replacement if any plants perish during this contract period and to assist in determining if the plant loss was caused by the contractor's negligence. The contractor shall maintain the viability of the existing landscaping within the project limits for the length of this contract. Plants and shrubs that die during this contract that were inventoried by the Engineer and the contractor and considered to be healthy at the beginning of the project shall be replaced in-kind and size as directed by the Engineer, at no cost to the Department. The contractor shall be responsible for assuring adequate amounts of water are delivered to all existing plants. Plants that are considered unhealthy at the beginning of construction shall be removed.

The Engineer and the contractor, along with the landscape maintenance firms representing the surrounding businesses that maintain the irrigation systems, shall visually inspect and determine the health of all existing plant material affected by this project prior to construction activities. At the preconstruction conference, the Engineer and contractor shall schedule a date and time for them to meet and perform this field inspection. The Engineer and contractor shall record the health of all existing plant material within the project limits. The recorded results of this inspection shall serve as written documentation as to the health of all existing plant material affected by this project at the beginning of construction.

The contractor shall keep and maintain separate record drawings ("field redlined as-builts"), corrected shop drawings, schematic circuit drawing or other drawings necessary for the Engineer to show the landscape and irrigation work as constructed. These field redlined as-builts shall be kept at the worksite and maintained as a clear, accurate and current record of actual construction and shall record changes that may occur during construction. All landscape and irrigation related elements that are to be buried or backfilled shall be recorded in the "field redlined as-builts" prior to burial and backfilling. The contractor shall submit the field redlined as-built plans, up-dated with monthly pay estimates, to the Engineer. Complete field red-lined as-built plans that the contractor maintains shall be submitted to the Engineer in a format that will allow the Engineer to create formal as-built plans. Field red-lined as-built plans from the contractor shall be submitted to the Engineer prior to the end of Phase I. No separate measurement or payment will be made for this work, the work as it will be considered included in contract items.

Materials:

All plant species and material sizes shall be as specified on the plans and in Section 806 of these special provisions. The contractor shall submit to the Engineer for approval, all material submittals/certificates of compliance as required in subsection 806-2 of the standard specifications to be used, prior to beginning removal and/or installation of new materials.

All irrigation materials shall match the type, size, and quality of the existing materials, and shall be in accordance with Section 808 of the standard specifications and these special provisions. The contractor shall submit to the Engineer for approval, material submittals as required in subsection 808-3.01 of the standard specifications to be used for replacement, prior to beginning removal and/or installation of new materials.

Construction Requirements:

Prior to starting removal or installation activities, the contractor shall make arrangement with the Engineer to perform a preconstruction inspection to determine if construction will require special construction considerations and to inventory the specific locations where removals or installations will be completed. During the inspection the contractor shall videotape and take digital pictures of all of the existing features to provide a visual log of the preconstruction condition of the existing features. The contractor shall provide the Engineer with a copy of the videotapes, digital pictures and the inventory of locations prior to beginning removal and installation work.

Replacement plants and decomposed granite shall be installed in conformance with

Sections 803 and 806 of the Standard Specifications and these special provisions and as directed by the Engineer.

All new installations and repairs of the irrigation system shall be in conformance with Section 808 of the Standard Specifications or with the City of Peoria Standards, whichever governs and these special provisions, as directed by the Engineer.

The contractor shall be required to repair and or replace all disturbed or damaged irrigation components that occur to private and public irrigation systems that may be disturbed by this construction returning them to full operation within 48 hours following initial disturbance. The contractor shall be liable for all plant materials served by the irrigation controllers and water meters that reside within these project limits. The contractor shall arrange this work with all of the surrounding businesses to coordinate system downtime and limit adverse effects to any existing landscape. The contractor shall ensure that all reconnections (water and power) have been tested and approved by the Engineer prior to backfilling. This work shall be paid under Force account Work item (Repair Landscaping and Irrigation Systems).

Prior to commencement of excavation by the roadway contractor, the landscape contractor shall isolate the existing irrigation piping that is designated to be extended or connected to or from piping that will be abandoned. The landscape contractor shall make the necessary cuts and install caps on existing piping that will be reconnected. Upon completion and acceptance of the excavation, the landscape contractor shall reconnect the piping, as required, to reestablish a working irrigation system.

The landscape contractor working closely with the local businesses must clearly mark the route of live piping that must be maintained or extended beyond the planned excavated areas and kept protected throughout construction.

Water provided through the construction water meters shall be used for flushing, and testing of the irrigation lines, at no cost to the contractor during the entire length of this project. Water provided through the construction water meters shall not be used for office, equipment/construction yard, water settling trenches, watering in pre-emergent, herbicide, rock mulch, granite mulch, or other construction related tasks the cost being considered as included in the cost of the contract items. The contractor shall be responsible for securing, installing and paying for a construction related water source that will be used for items identified within this paragraph that require water, the cost being considered included in the cost of contract items.

Method of Measurement and Basis of Payment:

Measurement and payment for 'Repair Landscaping and Irrigation Systems' will be made in accordance with the requirements of Subsection 109.04 of the Standard Specifications.

ITEM 9240012 FORCE ACCOUNT WORK (GEOTEXTILE FABRIC)

Description:

The work under this item shall consist of furnishing all material, equipment and labor for applying tack coat and incorporating pavement fabric into the pavement section, If cracks larger than ¼-inch wide are observed at the surface of the existing AC after the milling operation is completed.

Materials:

Material shall be as per Section 1014 of the Standard Specifications.

Construction Requirements:

If cracks larger than ¼-inch wide are observed at the surface of the existing AC after the milling operation is completed, a paving fabric or geotextile be incorporated into the pavement section. The paving fabric or geotextile should generally be centered on the crack, and should extend 6 or more inches laterally beyond the crack. Tack coat should be applied to the milled surface before placing paving fabric or geotextile, to enable the fabric to adhere to the milled surface. The milled surface should be clean and free of debris prior to the application of tack coat. The remainder of the pavement overlay can be constructed after the application of pavement fabric.

Method of Measurement and Basis of Payment:

Measurement and Payment for Geotextile Fabric will be made basis in accordance with the requirements of Subsection 109.04 of the Standard Specifications.

ITEM 9240015 FORCE ACCOUNT WORK (PROVIDE ELECTRICAL SERVICE):

Description:

This item is included in the Bid Schedule for the purpose of establishing an account from which the contractor will be reimbursed for establishing electrical service(s) as required for the project.

The contractor shall contact the entity that will furnish the electrical service immediately following award of the contract, request the electrical service and make all arrangements for the provision of electrical service.

Prior to acceptance of the arrangements for the electrical service request, the contractor shall obtain the Engineer's approval.

Upon billing, the contractor shall pay the utility for establishing the electrical service. Electricity used in construction related activities shall be considered as included in the cost of contract items and will not qualify for compensation under this item.

Measurement:

ITEM 9240015 - FORCE ACCOUNT WORK (PROVIDE ELECTRICAL SERVICE) will be measured for each electrical service provided as shown on the plans or specified herein.

Payment:

Payment for ITEM 9240015 - FORCE ACCOUNT WORK (PROVIDE ELECTRICAL SERVICE) will be the actual cost as shown on the invoice submitted by the contractor, plus a five percent mark-up, as follows:

$$\text{Sub-total} = \text{Invoice} \times 1.05$$

Also, an amount equal to 65 percent of the Sub-total, as determined above, multiplied by the applicable sales tax rate will be added to the Sub-total. Finally, an amount equal to 0.50 percent of the Sub-total will be added for the Performance and Payment Bond. The total contractor payment (TCP) will be as follows:

$$\text{TCP} = (\text{Sub-total}) + (0.65 \times \text{Sub-total} \times \text{sales tax rate}) + (0.005 \times \text{Sub-total}).$$

Such payment shall be full compensation for each electrical service, complete in place, as specified herein.

ITEM 9240047 MISCELLANEOUS WORK (ABANDON PIPE AND BACKFILL WITH SLURRY):

Description:

The work under this item consists of abandoning an existing SRP irrigation pipe by backfilling it with ½ sack slurry mix and installing tracer wire in accordance with these special provisions, project plans or as directed by the Engineer.

Materials:

The material for ½ sack slurry mix shall meet the requirements of MAG Specifications Section 28.

Tracer wire shall be a minimum 12 American Wire Gauge (AWG), solid copper. Tracer wire shall be coated with a minimum 30 mil polyethylene jacket designed specifically for buried use. Tracer wire shall conform to the specifications of the NEC, UL, and other applicable industry standards. Splices as required to promote continuity shall utilize sealed water tight connections.

Construction Requirements:

Through the limits of the abandoned pipe, the contractor shall fill the pipe with ½ sack slurry mixture. At a spacing satisfactory to the Engineer and as required to fill the pipe and minimize voids, the pipe shall be exposed and crushed to allow slurry material to freely enter the abandoned pipe. The ends of the pipe are to be properly capped and plugged to confine the slurry.

A tracer wire shall be installed in accordance with Section 104.15 of the Specifications and these special provisions.

Contractor's Option:

The contractor may choose to remove the abandoned SRP Irrigation pipe and backfill the trench. If the contractor chooses that option, any part of the empty trench that are within the roadway shall be backfilled with ½ sack slurry mix to the subgrade elevation. Areas outside the roadway shall be compacted in a manner that is consistent with the intended final use of those areas.

Method of Measurement:

The measurement for ITEM 9240047 – MISCELLANEOUS WORK (ABANDON PIPE AND BACKFILL WITH SLURRY) shall be by the cubic yards of ½ sack slurry mix calculated to fill the abandoned pipe. The volume measurement of slurry shall be made by measuring the length of the backfilled pipe and computing the volume of its interior. If the contractor chooses to remove the pipe and backfill the trench with slurry, the measurement shall be calculated in the same manner.

No measurement shall be made for providing and installing a tracer wire according to these special provisions. It shall be included in the unit cost for this bid item.

Basis of Payment:

Payment for MISCELLANEOUS WORK - (ABANDON PIPE AND BACKFILL WITH SLURRY), as measured above, will be made at the contract unit price, which price shall be full compensation for the work, complete in-place, including any excavation, breaking pipe, removals of pipe and tracer wire.

ITEM 9240050 MISCELLANEOUS WORK (RELOCATE METERS, VALVES, BOXES AND BACKFLOW PREVENTER ASSEMBLIES):

Description:

The work consists of furnishing the necessary equipment, materials, and labor for the relocation of existing water meters, valves, valve boxes and covers, and complete backflow assembly at the locations shown on the plans as per appropriate City of Peoria, MAG details and these special provisions.

The locations are:

- 91st Ave Station 55+73 Right
- Olive Ave Station 69+07 Left

Materials:

All new materials shall match the existing materials or shall be in accordance with City of Peoria standards and MAG Section 756.

Construction Requirements:

Work shall be completed in accordance with City of Peoria standards and MAG Section 756.

During construction, the Contractor shall remove and dispose of the existing material not to be reused, according to all applicable codes and requirements, as directed by the Engineer. The contractor shall salvage the existing fittings, meters, valves, valve boxes and backflow assemblies to be reused at the new location.

Work shall include but not be limited to relocation of existing meters; valves; valve boxes and covers; installation of new pipe, fittings and other work needed for a complete installation to make a complete functioning system. An unknown length of new pipe, shall be furnished for each installation and shall be field verified prior to construction.

Method of Measurement:

ITEM 9240050 – MISCELLANEOUS WORK (RELOCATE METERS, VALVES, BOXES AND BACKFLOW PREVENTER ASSEMBLIES) will be measured as a single lump sum unit of work and shall include all locations shown on the project plans. Measurement will be made for the relocated assemblies complete in place, including removing existing valves, adding new pipe as necessary to reach the new locations, and reinstalling the assemblies to make working systems.

Basis of Payment:

ITEM 9240050 – MISCELLANEOUS WORK (RELOCATE METERS, VALVES, BOXES AND BACKFLOW PREVENTER ASSEMBLIES), as measured above, will be paid at the contract lump sum price, complete in place, including additional fittings, new pipe required to complete the relocations, removals, blocking and other work to complete the installations.

ITEM 9240051 MISCELLANEOUS WORK (FIRE DEPARTMENT CONNECTION PIPE):

Description:

The work under this item consist of furnishing all equipment, materials, labor and relocating existing fire connections to the locations directed by the Engineer and in accordance with City of Peoria Std. detail 360 and 361. Work shall include but not be limited to relocation of existing fire connections; installation of new ductile iron pipe and fittings and other work needed for a complete installation as per City of Peoria Std. detail 360 and 361. Work shall be completed in accordance with City of Peoria Std. detail 360 and 361 and MAG Specification Section 756.

Materials:

All new material shall match the existing materials or shall be in accordance with City of Peoria Std. detail 360 and 361 and MAG Specification Section 756.

Construction Requirements:

Work shall be completed in accordance with City of Peoria Std. detail 360 and 361 and MAG Section 756.

During construction, the Contractor shall remove and dispose of the existing material not to be reused, according to all applicable codes and requirements, as directed by the Engineer. The contractor shall salvage the existing fittings, valves and hydrant to be reused at the new location.

An undetermined length of ductile iron pipe shall be furnished for each installation and its length shall be field verified prior to construction.

Method of Measurement:

ITEM 9240051 - MISCELLANEOUS WORK (FIRE DEPARTMENT CONNECTION PIPE) will be measured as a single, lump sum unit of work and shall include all work at all locations shown on the plans. Measurement will include all connections specified to be relocated.

Basis of Payment:

ITEM 9240051 - MISCELLANEOUS WORK (FIRE DEPARTMENT CONNECTION PIPE), as measured above, will be paid at the contract lump sum price, complete in place, including removals, additional fittings and ductile iron pipe needed to complete the relocations, hydrant markers, and other work.

ITEM 9240058 MISCELLANEOUS WORK (WALL ENCLOSURE):

Description:

The work under this item shall consist of furnishing all labor, materials, equipment, tools and incidentals necessary to construct the Wall Enclosure, including excavation, embankment and compaction of materials under and outside of the walls of the control cabinet and meter pedestal wall enclosure, including all connections, complete and ready for its intended use, at the locations shown and in accordance with the project plans and the requirements of these Special Provisions.

Materials and Construction Requirements:

Construction of the Wall Enclosure shall be in accordance with the materials and construction requirements indicated on the project plans, Peoria Standards Detail PE-146-4 and these Special Provisions.

Method of Measurement:

Miscellaneous Work (Wall Enclosure) will be measured on a lump sum basis.

Basis of Payment:

The accepted quantities of Miscellaneous Work (Wall Enclosure), measured as provided above, will be paid for at the contract lump sum price, which price shall be full compensation for the work, complete-in-place, as described and specified herein and as shown on the project plans.

Concrete pad and foundations for controller cabinet and meter pedestal shall be paid under bid items 7340300 – CONTROL CABINET FOUNDATION and 7340306 – METER PEDESTAL FOUNDATION respectively.

ITEM 9240060 MISCELLANEOUS WORK (RELOCATE FRY'S PARKING LOT LIGHT ASSEMBLY):

Description:

The work under this section shall include, but is not limited to, dismantling the existing Fry's parking lot light assembly (Olive Ave Station 72±08, 57' Right), removal of existing foundation, conduit and conductors. The work shall also include the construction of a new foundation, installing new conduit and conductors, refurbishing and relocating the existing Fry's parking lot light assembly, and all other necessary labor, materials and equipment to have a fully functional parking lot light assembly.

Construction Requirements:

The contractor shall visually inspect the existing parking lot light assembly for physical and operational deficiencies prior to removal and submit written documentation for all physical and operational deficiencies to the Engineer. The contractor shall be responsible for the assembly after submitting the documentation and any damages to the assembly afterwards shall be borne on the contractor as directed by the Engineer.

The contractor shall carefully dismantle the existing parking lot light assembly at such time as the Engineer determines the assembly is in conflict with the roadway widening work.

The contractor shall store the existing parking lot light assembly and all components necessary for its relocation in an acceptable location off the project limits not to interfere with Fry's operations or as determined by the Engineer or property owner. The contractor shall ensure that the assembly will not be damaged during transport.

The contractor shall remove and dispose of the existing conduit, cables, and conductors. All items to be removed and which will not be incorporated into the new work shall be removed in a manner which will not produce unnecessary damage or disturbance. The items removed shall become the property of the contractor. They shall be disposed of at an acceptable location off the project limits.

Hole, cavities, trenches and depressions resulting from the removal of the foundation and assembly, except in areas to be excavated, shall be backfilled with suitable material which shall be compacted to a density of not less than 95 percent of the maximum density as determined with the requirements of the applicable test methods of the ADOT Materials Testing Manual, as directed and approved by the Engineer.

The contractor shall construct a new foundation, and shall furnish and install new anchors, mounting assemblies and miscellaneous hardware in accordance to the Sections 732. Prior to construction of the new foundation, the contractor shall submit, for approval by the engineer, shop drawings of the proposed new foundation signed by a State of Arizona registered structural engineer.

Existing conduit may not be reused and new conduit will be considered incidental to the relocation of the parking lot light assembly unless otherwise directed by the Engineer.

Prior to reinstallation, the parking lot light assembly shall be disassembled and cleaned internally and externally so that it is free of dust and debris. Bolts, bushings, and mounting equipment shall be refurbished and new light bulbs installed.

The contractor shall obtain and provide maximum demand (measure of the average power demand over a 15 minute period) continuously recorded over a minimum 30-day period for the existing load center, using a recording ammeter connected to the highest loaded phase of the feeder or service, based on the initial loading at the start of the recording. In the same manner as described above, obtain and provide maximum demand for the individual circuit to which the relocated light is anticipated to be connected. The contractor shall obtain approval from the city and property owner before proceeding with any modification to or connection to the existing load center previously connected to the Fry's parking lot light in question.

Material and equipment shall be installed in accordance with the current standards and recommendations of the National Electrical Code, the National Electrical Safety Code and with local codes which apply. Where discrepancies arise between codes, the most restrictive regulation shall apply.

The contractor shall wire the parking lot light assembly in order to provide a complete and functional parking lot light assembly.

Method of Measurement:

Miscellaneous Work (Relocate Fry's Parking Lot Light Assembly) work will be measured as a single, lump sum unit of work.

Basis of Payment:

Miscellaneous Work (Relocate Fry's Parking Lot Light Assembly) will be paid at the contract unit price for the work complete in place, including removals, refurbishing, modifying the conduit system, foundation, removing and replacing conductors, excavation and backfill, transport and handling of the existing light assembly equipment and other related items of work required to provide a complete relating to the parking lot light assembly as identified in these Special Provisions and as shown on the Plans.

ITEM 9240062 MISCELLANEOUS WORK (AS-BUILT DRAWINGS):

Description:

This work consists of producing an accurate set of as-built drawings recording the final location of all work, that has been constructed as part of the project, including any changes

made during construction.

Construction Requirements:

The contractor shall maintain a full size set of drawings on-site, which shall be updated a minimum of once a week, to reflect any field adjustments, changes, additions, deletions etc. as they occur during the course of constructing the project. As-built drawings shall, at all times, be available for the inspection of the Engineer. As part of each monthly partial payment request, the contractor shall certify that the as-built drawings are current.

Underground utilities shall be referenced to semi-permanent or permanent physical objects.

Changes to information shown on the original construction drawings shall be made by striking through the original information with a single line. As-built information shall be shown legibly, using a red pencil or red ink.

As-built information shall be shown in both plan and profile as appropriate.

The contractor shall make every effort to make horizontal ties using the construction centerline or monument line stationing with offset dimensions.

Any portions of the work not constructed shall be clearly labeled "Deleted" and marked with an "X" through the deleted work.

The word "AS-BUILT" with the as-built date shall appear in the lower right area of each sheet. If applicable, the phase name or number shall be included.

When space on the drawings does not allow room to adequately show the as-built information, a separate sheet shall be used and referenced to the original drawing.

The required as-built information may include, but is not necessarily limited to the following items:

1. Quantity Notations – All actual quantities, lengths and dimensions shall be indicated.
2. Existing Utilities – The location of all underground infrastructures and utilities shall be noted, using the beginning and ending station with offset dimensions or where practical, dimension to the back of curb. Tie the depth of the utilities to the finished roadway surface or other easily identifiable permanent surface feature.
3. Removals – All structures or materials removed shall be located using the beginning and ending station with offset dimensions with area or volumetric descriptions as necessary.
4. Curb, Gutter, Valley Gutter – All structures relocated or removed and replaced shall be located using the beginning and ending station with offset dimensions with area or volumetric descriptions as necessary.

5. Driveway and Alley Entrances - All structures relocated or removed and replaced shall be located using the beginning and ending station with offset dimensions with area or volumetric descriptions as necessary.
6. Sidewalk - All structures relocated or removed and replaced shall be located using the beginning and ending station with offset dimensions with area or volumetric descriptions as necessary.
7. Sidewalk Handicap Ramps - All structures relocated or removed and replaced shall be located using the beginning and ending station with offset dimensions with area or volumetric descriptions as necessary.
8. Median Island - All structures relocated or removed and replaced shall be located using the beginning and ending station with offset dimensions with area or volumetric descriptions as necessary.
9. Roadway Pavement - All materials removed and replaced shall be located and quantified using the beginning and ending station with offset dimensions with area or volumetric descriptions as necessary.
10. Pipelines - All pipeline, laterals, valves, fittings and appurtenances installed shall be located using stationing with offset dimensions relative to a street centerline, project construction centerline, monument line or property line. Pipeline cross sections and profiles shall be corrected to reflect the as-built condition.
11. Manholes, Wyes, Tees, Cleanouts - All such items shall be located using the beginning and ending station with offset dimensions.
12. Landscaping and Irrigation - All pipe, laterals, valves, fittings and appurtenances installed shall be located using stationing with offset dimensions relative to a street centerline, project construction centerline, monument line, property line, back of curb or other easily identifiable surface feature.
13. Traffic Signal - All poles, boxes, controllers and related structures relocated or removed and replaced shall be located using the stationing with offset dimensions.
14. Roadway Striping and Signage - All signage or striping relocated or removed and replaced shall be located using the beginning and ending station with offset dimensions. Any change in existing roadway marking shall be noted on the as-builts.
15. Roadway Street Lighting - All poles, boxes, controllers and related structures relocated or removed and replaced shall be located using the stationing with offset dimensions.
16. Linear Items - Fences, walls, ditches, etc. shall be located using the beginning and ending station with offset dimensions.

The contractor shall deliver a complete and accurate set of as-built drawings to the City within thirty (30) calendar days of the date of the final acceptance of the work completed under this contract.

Method of Measurement:

ITEM 9240062 - MISCELLANEOUS WORK (AS-BUILT DRAWINGS) will be measured as a single, lump sum unit of work.

Basis of Payment:

ITEM 9240062 - MISCELLANEOUS WORK (AS-BUILT DRAWINGS), measured as provide above, will be paid for at the contract lump sum price, which price shall be full compensation for the work as described herein. An amount of \$20,000 will be withheld from the contractor's payments for the contract until the work included in this item is complete, as determined by the Engineer.

ITEM 9240120 MISCELLANEOUS WORK (RUGGEDCOM RS900G):

Description:

This work consists of furnishing and installing Ruggedcom Rugged Switch RS900G Ethernet Switchs as shown on the Plans and as detailed in these Special Provisions, or directed by the Engineer.

Materials:

All equipment shall be new and in strict accordance with the details shown on the plans and in the specifications.

The contractor shall provide a Ruggedcom RuggedSwitch RS900G, 10-Port Managed Ethernet Switch with Gigabit Uplink Ports (Ethernet Switch).

Ensure that all external screws, nuts and locking washers are stainless steel. Self-tapping screws shall not be used without written approval of the Engineer.

Include all equipment licenses, where required, for any software or hardware in the system.

Warranty:

The Ethernet Switch shall be warranted by the contractor against all defects in material and workmanship in accordance with Subsection 106.13 as amended by these Special Provisions with the following additional requirement:

The warranty for the Ethernet Switch shall provide that in the event of a malfunction during the warranty period, the defective unit, card, module, subassembly, or auxiliary device shall be replaced with a working unit within three (3) working days for use while the warranted unit is being repaired.

Construction Requirements:

Minimum requirements for the contractor or designated subcontractor involved in the installation and testing of the Ethernet equipment are:

- Three (3) years experience in the installation, testing and maintenance of Ethernet equipment.
- Two (2) installations where Ethernet switches were deployed and the network has remained in continuously satisfactory operation for at least two (2) years. The contractor shall submit as proof, photographs or other support documents, and the names and contact information of the operating personnel who can be contacted regarding the networks operation.

Necessary documentation of subcontractor qualifications shall be approved by the Engineer prior to purchasing the Ethernet Switch.

Installations of equipment shall be for ease of maintenance, with all component parts being readily accessible for inspection and maintenance.

The contractor shall meet all applicable codes and standards requirements for external wiring to the Ethernet Switch. Wires and cables shall be neatly installed and secured per common practices and standards. The contractor shall provide service loop at all connection points.

The contractor shall provide and install one (1) duplex single mode ST to ST Fiber patch cable for each Fast Ethernet fiber port installed in the Ethernet Switch.

The contractor shall provide and install one (1) category 5e patch cord for each Fast Ethernet copper port install in the Ethernet Switch.

The contractor shall coordinate with the Engineer all switch configuration information, (i.e. IP addresses, VLANs etc.) forty five (45) days prior to installing Ethernet Switches.

(A) Testing Requirements:

The Ethernet Switch shall meet the following tests:

- Pre-Installation Testing:

The contractor shall inspect the Ethernet Switch upon delivery for any visual damage, inventory contents, and ensure proper functionality.

- Subsystem Testing:

The contractor shall ensure the Ethernet Switch is correctly installed, configured, and is properly functioning as networked subsystem.

- System Acceptance Testing (SAT):

As part of the SAT the contractor shall demonstrate that the Ethernet Switch is functioning and is operational for the duration of the SAT.

Method of Measurement:

ITEM 9240120 - MISCELLANEOUS WORK (RUGGEDCOM RS900G) will be measured by the unit, each, for a switch that is acceptably installed.

Basis of Payment:

ITEM 9240120 - MISCELLANEOUS WORK (RUGGEDCOM RS900G), as measured above, will be paid at the contract unit price, complete in place, including mounting brackets, mounting hardware (i.e., screws, nuts, bolts), power cords, power transformer, fiber patch cables and adapters, copper patch cords, documentation, testing, and other work necessary to provide a complete and acceptable installation as specified.

ITEM 9240121 MISCELLANEOUS WORK (IMPATH ENCODER):

Description:

The work under this item consists of furnishing all materials, equipment, tools and labor for the encoder. The video codec allows for the transmission of live video, data, and audio over an existing Ethernet network, requiring an Internet Protocol (IP) address or Internet Explorer 5.5 or higher, or shall work as an analog-to-Ethernet "bridge" controlling matrices, multiplexers, and pan/tilt/zoom cameras. The video codec shall operate in a box-to-box configuration allowing for the encoded video to be decoded and displayed on an analog monitor. The video codec shall include a port for an owner-supplied CompactFlash® card for storage of on-board recording.

Materials:

The contractor shall furnish either an Impath Networks, Optelecom or Tellest encoder.

Make all parts out of corrosion resistant material, such as plastic, stainless steel, anodized aluminum or brass.

Protect all materials used in construction from fungus growth and moisture deterioration.

Separate dissimilar metals by an inert dielectric material.

Ensure that all external screws, nuts, and locking washers are stainless steel. Do not use self-tapping screws unless approved in writing by the Engineer

Construction Requirements:

Utilize the latest available techniques with a minimum number of parts, subassemblies, circuits, cards, and modules to maximize standardization and commonality in the equipment design.

Method of Measurement:

ITEM 9240121 - MISCELLANEOUS WORK (IMPATH ENCODER) will be measured as a unit, each, for a switch that is installed, made fully functional and tested in accordance with these special provisions or as directed by the Engineer.

Basis of Payment:

The accepted quantities of ITEM 9240121 - MISCELLANEOUS WORK (IMPATH ENCODER), measured as provided above, will be paid at the contract unit price, which shall be full compensation for the item, complete in place, including all cables and connectors, documentation and testing, software, warranty, training, and equipment necessary to complete the work.

(924CQC, 3/02/09)

ITEM 9240170 - CONTRACTOR QUALITY CONTROL:

1.0 Description:

The work under this section shall consist of furnishing all personnel, materials, supplies, facilities and equipment necessary to perform all certification of test equipment, sampling, testing, and other control actions. The work shall also include the preparation of linear control charts, Weekly Quality Control Reports, and other reports and records as described in Subsection 106.04(C) of the Specifications.

2.0 Method of Measurement:

Contractor quality control will be measured for payment on a lump sum basis as a single unit of work.

3.0 Basis of Payment:

3.1 General:

The accepted quantities of contractor quality control, measured as provided above, will be paid at the contract lump sum price, which price shall be full compensation for the work, complete, as described and specified herein.

Partial payments under this item will be made in accordance with the following provisions:

(a) The first partial payment price will be the lesser of twenty five percent of the contract lump sum price for contractor quality control, or one percent of the original total contract bid amount.

(b) The remaining portion of the lump sum price will be prorated over the duration of the original contract on a monthly basis, and monthly progress payments will be made.

If adjustments to pay items covered under Contractor Quality Control are approved by supplemental agreement, an equitable adjustment to the lump sum amount for Contractor Quality Control may be made. Any adjustment to Contractor Quality Control shall be included in the supplemental agreement and the adjusted amount, less previous payments, will be prorated equally over the remaining contract period, including any related time extensions.

3.2 Delinquent Reports:

Failure of the contractor to submit complete and accurate Weekly Quality Control Reports, current to the most recent Wednesday submittal date, will be grounds for the Engineer to deduct monies from the contractor's progress payment.

For each Weekly Quality Control Report that is not complete and accurate, and not submitted to the Engineer by the Wednesday submittal date specified in Subsection 106.04(C)(6), the Department will deduct \$2,500.00 from the progress payment for the current month.

For each delinquent Weekly Quality Control Report submitted to the Engineer within 10 business days of the original Wednesday due date, \$2,000.00 will be returned on the next regular estimate, provided all of the requirements specified herein and in Subsection 106.04(C)(6) have been met, and the report is complete and accurate. No deducted monies will be returned for reports submitted more than 10 business days beyond the original Wednesday due date.

All deducted monies which are retained by the Department, as specified above, are liquidated damages.

(925SRVY, 02/20/08)

SECTION 925 - CONSTRUCTION SURVEYING AND LAYOUT:

925-5 **Basis of Payment:** the first two sentences of the second paragraph of the Standard Specifications are revised to read:

If additional staking and layout are required as a result of additional work ordered by the Engineer, such work will be paid under ITEM 9250101 - ONE-PERSON SURVEY PARTY at the predetermined rate of \$65 per hour, ITEM 9250102 - TWO-PERSON SURVEY PARTY at the predetermined rate of \$100 per hour, ITEM 9250103 - THREE-PERSON SURVEY PARTY at the predetermined rate of \$135 per hour, ITEM 9250106 – SURVEY MANAGER at the predetermined rate of \$100 per hour, and ITEM 9250105 - OFFICE SURVEY TECHNICIAN at the predetermined rate of \$70 per hour.

(1001MATL, 03/17/08)

SECTION 1001 MATERIAL SOURCES: of the Standard Specifications is revised to read:

1001-1 **Description:**

The work under this section shall consist of the procuring of borrow, topsoil, subbase and base materials, mineral aggregates for concrete structures, surfacing, and landscape plating, from sources either designated on the project plans or in the Special Provisions or from other sources.

1001-2 **General:**

The contractor shall determine for itself the type of equipment and work required to produce a material meeting the specifications.

Sites from which material has been removed shall, upon completion of the work, be left in a neat and presentable condition. Where practicable, borrow pits, gravel pits, and quarry sites shall be located so that they will not be visible from the highway.

The contractor shall provide a new Environmental Analysis, as specified in Subsection 104.12, for any source proposed for use regardless of whether an approved Environmental Analysis exists for the site.

In accordance with Subsection 104.12, the contractor may incorporate an existing Environmental Analysis approved after January 1, 1999, provided that the analysis is updated as necessary to be in compliance with current regulations and with the contractor's planned activities.

It shall be the responsibility of the contractor to conduct any necessary investigations, explorations, and research, on-site and otherwise, before and after submitting the bid proposal, to satisfy itself that the specified quantity and/or quality of material exists in any proposed material source.

The Department makes no representation regarding quality or quantity of materials in any source.

1001-2.01 Material Sources in Flood Plains:

Any material source located in a flood plain and proposed for use on the project shall be reviewed by the appropriate agency having flood plain management jurisdiction for the area in which the proposed source is located. The contractor shall obtain a letter from the governing flood plain agency addressed to the Engineer, certifying that the location of the proposed source conforms to the requirements of the floodplain management agency.

Contractors seeking a flood plain material source are cautioned that Section 404 of the Clean Water Act may prevent use of the source unless an appropriate permit is first obtained from the U.S. Army Corps of Engineers.

Except for surplus material from agency-administered flood control management projects, borrow material shall not be obtained from any area situated in the 100-year flood plain of any stream or watercourse, and located within one mile upstream and two miles downstream of any highway structure or surfaced roadway crossing. Surplus material from agency-administered flood control management projects may be used as borrow material only if the contractor submits written evidence to the Engineer that the flood control agency project was fully designed and funded prior to the date of advertisement for bids on the Department project.

Material sources in flood plains located on Native American Indian Reservations will be considered for use based on an individual analysis. The analysis shall include a review of applicable land use plans, flood plain management plans, environmental plans, applicable laws and regulations pertaining to Indian Reservations, and an engineering analysis of the effects on any highway facility or structure. The contractor shall obtain from the Native American Tribal Council all permits, licenses, and approvals and present to the Department for review. The Department will review each request on a case by case basis.

1001-2.02 Information Available:

The Department's Materials Group maintains a listing of materials sources for which a completed Environmental Analysis is available and the landowner has allowed the source to be placed on the list. In addition, Materials Group maintains files for those sites for which the Department holds an easement, license, permit, lease, or other right, as well as a General Plan of Operation and Restoration. The contractor may contact the Materials Group at (602) 712-7231 for information and may review the files located at 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740.

Contractors are advised that an agency having jurisdiction over the source, such as the Forest Service, Bureau of Land Management, Bureau of Reclamation, the State Land Department, etc., or the owner, as a condition to the use of the source, may have imposed certain obligations. The contractor who uses such a source shall assume full contractual responsibility for any and all of these obligations imposed either by the agency having jurisdiction or by the owner. Contractors considering such a source shall make themselves fully aware of any and all requirements imposed by the Department and the landowners.

The contractor may propose the use of these or other sources, provided that all requirements of the specifications have been met.

It shall be the responsibility of the contractor to comply with the provisions of the Environmental Analysis and with current laws, rules, and regulations.

The Department makes no representation regarding quality or quantity of materials in any source.

It shall be the responsibility of the contractor to conduct any necessary investigations, explorations and research, on-site and otherwise, to satisfy itself that the specified quantity and/or quality of material exists in any material source.

1001-2.03 Usage of Materials:

Approval of the use of any source shall be limited to the specific contract and purpose for which the use of the source was obtained.

1001-2.04 Royalty Charges:

If the Engineer approves a source for which the Department holds an easement, license, permit, lease, or other right with the landowner or controlling agency that includes requirements for the payment of royalties, the amount of the royalty charges and the name and address of the party to whom royalties are to be paid will be available from the Materials Group, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740.

Prior to the time of final payment, the contractor shall furnish the Engineer with evidence that all royalty charges have been paid. Such evidence shall consist of a waiver, release, or other written acknowledgement from the owner that all of the contractor's obligations to the owner have been met. In the event that royalty charges have not been paid, the Department reserves the right to make such payment and to deduct the amount of such payment from monies due the contractor.

The final billing and payment for material extracted from sources under the jurisdiction of the State Land Department will include a small administrative charge based on the total amount of royalties due for materials removed.

Upon receipt of the final billing from the Department of Transportation, the contractor shall mail a check, payable to the State Land Department, addressed as follows:

Arizona Department of Transportation
Field Reports Section
206 South 17th Avenue
Phoenix, Arizona 85007

1001-2.05 Performance Bonds:

If sources are under the jurisdiction of either the State Land Department or the Bureau of Land Management, the contractor shall secure a performance bond. A fully executed copy of the bond shall be furnished to the Engineer along with evidence that a fully executed copy has been sent to the State Land Department or the Bureau of Land Management.

The form of the Performance Bond will be available from the Materials Group, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740. For pits under the jurisdiction of the Bureau of Land Management, the surety shall be a company listed under "Surety Companies Acceptable on Federal Bonds." This list is published annually as of July 1 in the Federal Register.

Performance bonds shall be conditioned upon the compliance with the requirements of the State Land Department and the Bureau of Land Management and the requirements of the specifications for the clearing of pit sites, the removal of material and the cleaning up of pit sites.

Copies of fully executed performance bonds shall be mailed as follows:

State Land Commission
State Land Department
1624 West Adams Street
Phoenix, Arizona 85007

Bureau of Land Management
Manager, Land Office
222 North Central Avenue
Phoenix, Arizona 85004

1001-2.06 Sampling and Testing:

The results of any sampling and testing accomplished by the Department will be available from the Materials Group, 1221 N. 21st Avenue, Phoenix, Arizona 85009-3740.

1001- 2.07 Plan of Operation and Restoration:

The contractor shall determine whether the Department holds an easement, license, permit, lease or other right, for any proposed material source. For such sites, a project-specific Plan of Operation and Restoration will be required. The contractor shall obtain a copy of the related document and the Department's General Plan of Operation and Restoration for the proposed site from the Materials Group. The contractor shall prepare and submit to the Engineer a project-specific Plan of Operation and Restoration which shall follow the format

of the Department's General Plan of Operation and Restoration, and shall take into account the requirements of the Environmental Analysis, as well as any restrictions placed on the use of the source by the landowner or agency.

The proposed source will not be approved without an approved project-specific Plan of Operation and Restoration. Approval of the contractor's project-specific plan does not constitute approval of the use of the source.

The contractor shall identify and provide a person in charge of the operation. That person shall maintain copies onsite of the Department's General Plan of Operation and Restoration, the contractor's approved project-specific Plan of Operation and Restoration, the current Environmental Analysis, and the license and permits issued to the Department by the landowner or agency.

1001-3 Proposed Source:

1001-3.01 Approval Requirements:

(A) General:

The contractor shall promptly advise the Engineer as to the source that it proposes to use.

The contractor acknowledges that all the conditions set forth in this subsection shall be met prior to the source being approved for use.

Other than sampling and testing, the requirements of this subsection shall be completed prior to initiation of any activities that disturb the existing conditions at the proposed source.

The contractor further acknowledges that no additional compensation will be made on account of any delays in preparing or modifying the Environmental Analysis, obtaining approval for the use of a source, or the failure to obtain approval of a source. An extension of contract time may be granted only in accordance with Subsections 104.12 or 1001-3.01(B)(4).

Regulatory changes, specification changes, or other reasons may preclude the approval of a materials source. The contractor acknowledges that the Department may refuse to approve a material source even if the Department had approved the source for other projects.

If all of the requirements for approval of a materials source have been accomplished for the project, and the Engineer has approved the source for use on the project and, subsequent to that approval, the Environmental Analysis is rescinded, the contractor may request a revision to the contract in accordance with Subsection 104.02 and 108.08. In reviewing the contractor's request, the Department will take into account the following factors. Additional factors may be considered.

- (1) Whether the contractor was in compliance with the requirements of the Environmental Analysis and, if applicable, the site-specific Plan of Operations and Restoration.
- (2) Whether the reasons for rescinding the approval were reasonably foreseeable.
- (3) Whether the action taken was the result of regulatory changes.
- (4) Whether deficiencies unrelated to the Environmental Analysis may have rendered the source unacceptable.
- (5) Whether rescinding the approval was the sole cause of any impact to controlling activities on the project.

(B) Specific Conditions For Approval:

The use of a source will require written approval by the Engineer. No approval will be given until the contractor has complied with the following conditions:

- (1) The contractor has submitted an Environmental Analysis, as specified in Subsection 104.12, of the source proposed for use and the Department has reviewed the analysis and satisfied itself that the use of such source will not have an adverse social, economic or environmental impact. The requirements of Subsection 1001-3.01 shall be completed prior to initiation of any activities that disturb the existing conditions at the proposed source, except for exploring test areas as specified in Subsection 1001-3.02.
- (2) The contractor has furnished the Engineer with evidence that he has secured the rights to the source, including ingress and egress.
- (3) The Department has determined that the material from the proposed source not only meets the requirements, but is also compatible with the established project design criteria developed by the ADOT Materials Group and based on the soil support value of the embankment; and the sampling and testing as herein specified has been satisfactorily completed.
- (4) The contractor has furnished a fully executed copy of the Performance Bond as specified in Subsection 1001-2.05.
- (5) When required, the contractor has submitted, and the Department has approved, the site-specific plan of operations and restoration as specified in Subsection 1001-2.07.

The contractor shall also notify the Arizona Department of Agriculture, in accordance with the Arizona Native Plant Law, at least 30 days prior to any clearing operations of less than 40 acres on private land, 60 days prior to clearing operations of 40 or more acres on private

land, and 60 days prior to any clearing of state land, regardless of size. If the Engineer is convinced that the contractor has made every effort to comply with the provisions of the Arizona Native Plant Law in contacting the Department of Agriculture, the Engineer will increase the number of contract days by the amount of time required for action by the Department of Agriculture. The increase will not exceed 45 calendar days and will be concurrent with any increase allowed for the preparation of the Environmental Analysis.

(C) Historical and Cultural Resources:

If the Department determines that the proposed use will have major adverse impact on cultural or historic resources, the Department will not allow the use the source.

(D) Permit from Navajo Nation:

For projects located on the Navajo Reservation, the Navajo Nation has adopted a permitting system for any sources, regardless of whether on or off the Navajo reservation, which are to supply material for projects located within its boundaries. No material source will be approved until the contractor submits a copy of the permit from the Navajo Nation allowing materials from the proposed source to be used on the project. For information concerning the permit, the contractor shall contact the Navajo Nation Historic Preservation Office.

1001-3.02 Testing Requirements:

The contractor shall furnish equipment and personnel and shall obtain representative samples of the material under the supervision of the Engineer. At the option of the contractor, the material shall be tested by either the Department or by a testing laboratory approved by the Department. The cost of all sampling and testing done for the purpose of attaining approval of any source, including the cost of supervision by the Engineer, shall be borne by the contractor.

If testing is performed by a testing laboratory, the contractor shall arrange for the samples to be delivered to the testing laboratory. Tests shall be performed using appropriate test procedures referred to in the sections of the specifications in which the specific material requirements are described.

The contractor shall make the arrangements necessary to see that the testing laboratory submits the results of the tests to ADOT Materials Group. The contractor shall submit to ADOT Materials Group sufficient quantity of material from the samples taken so that ADOT Materials Group may test the materials, at the Department's expense, and verify the results.

Exploratory sampling and testing activities conducted prior to the Department's approval shall be limited so as to cause the minimum amount of vegetation removal and surface disturbance required to obtain representative samples. The contractor shall not produce material, mobilize crushing equipment or clear a worksite prior to approval of the Environmental Analysis.

The contractor may request an exemption from the testing requirements specified in this subsection upon presentation of evidence to the satisfaction of the Engineer that the material that will be produced on the project is sufficiently similar to material that has been previously acceptable to the Department on projects with similar materials specifications.

No approval of the source shall be assumed, nor will it be made, until the Department has determined that the material meets the specified requirements.

The contract time will not be adjusted because of any time required by either the contractor or the Department to sample and test the material and to determine the quality of the material.

1001-4 Special Access:

The contractor may make a request to the Engineer to approve special access to a controlled access highway if special access is not shown on the project plans.

The request by the contractor shall be accompanied by an Environmental Analysis and by documents which specify the point(s) of access, the acquisition of right-of-way, the manner in which access will be attained, the traffic control plan, and crossovers, along with all other appropriate data which will allow the Engineer to evaluate its request. If the request is approved, a supplemental agreement shall be entered into.

All costs associated with the special access requested by the contractor shall be borne by the contractor, including, but not limited to, cattle guards, fences, gates and restoration work.

When access is not being utilized, gates shall be closed and locked. Upon completion of all operations, the area within the right-of-way that has been disturbed shall be restored to the condition existing prior to the contractor's operations.

The decision by the Engineer to deny a request by the contractor will be considered to be final.

1001-5 Operations at Source:

1001-5.01 General Requirements:

The contractor shall conduct its operations in such a manner as to preserve available materials in excess of project requirements.

The contractor shall notify the Engineer in advance of operations at the source. Notice shall be given before and after clearing and grubbing, and before and after cleaning up.

1001-5.02 Clearing and Grubbing:

Before beginning stripping, the contractor shall clear and grub the source as necessary to prevent the contamination of materials to be used in the work. Clearing and grubbing shall be in accordance with the requirements of Section 201, except that the resulting surface need not be leveled and vegetable matter need not be separated from any overburden which the Engineer determines to be unsuitable for any future use and which is to be wasted. Clearing and grubbing shall be limited to the area expected to be excavated and areas used for processing and stockpiling.

In the disposal of all tree trunks, stumps, brush, limbs, roots, vegetation and other debris removed, the contractor shall comply with the requirements of the Arizona Revised Statutes Title 49 Chapter 3 – Air Quality; and with the Arizona Administrative Code Title 18 Chapter 2 – Department of Environmental Quality – Air Pollution Control.

Burning will be permitted only after the contractor has obtained a permit from the Arizona Department of Environmental Quality, and from any other Federal, State, County or City Agency that may be involved.

When stripping is required, overburden shall be removed to the extent necessary to remove all undesirable materials and shall, at all times, be kept stripped at least five feet beyond the working face of the area being excavated.

The contractor shall comply with the requirements of the landowner or agency having jurisdiction over the land.

1001-5.03 Extraction of Materials:

Materials shall be removed from the source in a workmanlike manner and, when required, in accordance with the contractor's project-specific Plan of Operation and Restoration. In order to produce acceptable material in the amount and gradation required, it may be necessary for the contractor to do any or all of the following, along with any other similar operations usually associated with the extraction, processing and production of the particular material being produced:

- Move materials from one area to another.
- Perform additional screening.
- Remove, wash and waste material.
- Blend materials.
- Revise crushing methods.
- Remove deleterious materials such as clay balls, roots and sticks.

If the Engineer determines that the material in a source is stratified, all material except borrow shall be removed for the full depth in such a manner as to produce a uniform blend of the material. Placing the material from different areas and depths into a surge pile and

removing material from the surge pile by cutting through the pile will be acceptable provided that a uniformly blended material is obtained.

Material sources located in drainage channels such as washes, riverbeds, etc., may experience seasonal variations in the depth of ground water. In order to produce the quantity of material estimated to be available, the contractor may be required to work below the water table.

1001-6 Fences and Cattle Guards:

Where the haul roads to material sources cross existing fence lines in areas where there is livestock of any kind, temporary cattle guards shall be installed by the contractor at each crossing.

The livestock operator or owner shall be contacted prior to the beginning of any operations and effective measures shall be taken and means provided by the contractor to prevent livestock from straying.

In operations where conditions will exist that are dangerous to livestock of any kind, temporary cattle guards and fence shall be installed around the pit area by the contractor to protect livestock.

Temporary cattle guards and fence installed by the contractor shall be removed and existing fence disturbed shall be replaced or reconstructed and all fence shall be left in as good condition as it was prior to the beginning of work.

1001-7 Cleaning Up:

All overburden and other undesirable materials removed and all piles of waste materials resulting from operations in the source shall be handled in accordance with the requirements of the landowner or agency having jurisdiction over the land, the Environmental Analysis, the project-specific Plan of Operation and Restoration, if applicable, and all laws, rules and regulations. All debris shall be removed and disposed of and, if directed, all open test holes shall be filled. Unless otherwise required, the sides of sources shall be sloped and smoothed so that livestock can enter and leave the excavated area safely. Unless otherwise required, all haul roads shall be obliterated and, as far as practicable, the ground left in as good condition as it was prior to hauling.

1001-8 Method of Measurement and Basis of Payment:

Except as may be otherwise specifically provided for in this section or elsewhere, no measurement or direct payment will be made for any costs involved in the procuring of materials. Such costs shall be considered as included in the cost of contract items.

(1006PCC, 10/31/08)

SECTION 1006 PORTLAND CEMENT CONCRETE:

1006-2.01 Hydraulic Cement: the third paragraph of the Standard Specifications is revised to read:

Portland-pozzolan cement shall conform to the requirements of ASTM C 595 for Type IP (MS).

Cementitious material is defined as an inorganic material or a mixture of inorganic materials that sets and develops strength by chemical reaction with water by formation of hydrates and is capable of doing so under water. In this specification, cementitious materials are defined as: hydraulic cement (Portland cement or Portland-pozzolan cement) and supplementary cementitious material (Fly Ash, Natural Pozzolan, or Silica Fume).

1006-2.03(A) General Requirements: "Lightweight particles" in the table of the ninth paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (See Note)
--	-------------------------

1006-2.03(B) Fine Aggregate: "Lightweight particles" in the table of the second paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (Except that the percent of lightweight particles shall be reported to the nearest 0.01%.)	1.25% (0.25% Max. Coal and Lignite*)
--	--	--

1006-2.03(B) Fine Aggregate: the last paragraph of the Standard Specifications is revised to read:

Fine aggregate shall be made into mortar and subjected to testing under AASHTO T 71, except that the mortar shall develop a compressive strength at seven and 28 days of not less than 90 percent of that developed by a mortar prepared in the same manner with the same Type II cement and graded sand conforming to the requirements of ASTM C 778.

1006-2.03(C) Coarse Aggregate: "Lightweight particles" in the table of the second paragraph of the Standard Specifications is revised to read:

Lightweight particles (Specific gravity less than 2.0)	AASHTO T 113 (Except that the percent of lightweight particles shall be reported to the nearest 0.01%.)	1.25% (0.25% Max. Coal and Lignite*)
--	--	---

1006-2.04(D) Supplementary Cementitious Material (Fly Ash, Natural Pozzolan, and Silica Fume): the first paragraph of the Standard Specifications is revised to read:

Supplementary cementitious materials may be used in addition to hydraulic cement. Supplementary cementitious materials shall be approved prior to their use in accordance with Materials Policy and Procedure Directive "Certification and Acceptance of Hydraulic Cement, Fly Ash, Natural Pozzolan, and Silica Fume".

1006-2.04(D) Supplementary Cementitious Material (Fly Ash, Natural Pozzolan, and Silica Fume): the last two paragraphs of the Standard Specifications are revised to read:

When a supplementary cementitious material with a calcium oxide content greater than 15 percent is proposed, the hydraulic cement/supplementary cementitious material blend shall be tested for sulfate expansion in accordance with ASTM C 1012. The maximum expansion shall be 0.10 percent at six months.

When either moderate or high sulfate resistant concrete is specified in the Special Provisions, the proposed hydraulic cement/supplementary cementitious material blend shall be tested for sulfate expansion in accordance with ASTM C 1012. When moderate sulfate resistance is specified, the maximum expansion shall be 0.10 percent at six months. When high sulfate resistance is specified, the maximum expansion shall be 0.05 percent at six months or 0.10 percent at one year.

1006-3.01 Design Criteria: Table 1006-A of the Standard Specifications is revised to read:

TABLE 1006-A				
Class of Concrete	Minimum 28-Day Compressive Strength Required: psi (See Note 1)	Cementitious Material Content: Lbs per Cu Yd Minimum - Maximum (See Notes 2 and 3)	Maximum Water/Cementitious Material Ratio (w/cm): Lb./Lb.	Slump Range: Inches
B	2,500	470 – 658	None	(See Note 5)
S or E	2,500	520 – 752	0.55	
	3,000 (See Note 4)			
	3,500			
	4,000			
	4,500 and greater	564 – 752	0.50	
P	4,000	564 – 658	None	0 – 4.5
H	High performance concrete as specified in project special provisions.			

Note 1: Testing for compressive strength of cylinders for all classes of concrete shall be in accordance with the requirements of Arizona Test Method 314.

Note 2: (a) A supplementary cementitious material (fly ash, natural pozzolan, or silica fume) conforming to the requirements of Subsection 1006-2.04(D) may be used, as specified in paragraphs (b) through (g) below.

(b) When Portland cement is used, at the option of the contractor a maximum of 25 percent, by weight of the cementitious material, may be an approved fly ash or natural pozzolan, except as specified in paragraphs (e), (f), and (g) below.

(c) When Portland-pozzolan cement [Type IP (MS)] is used, fly ash or natural pozzolan is not allowed, except as specified in paragraphs (e), (f), and (g) below.

(d) When silica fume is used, a maximum of 10 percent, by weight of either Portland cement or Portland-pozzolan cement, may be used.

(e) When a compressive strength greater than 4,500 psi is required, supplementary cementitious material may be added in excess of the maximum cementitious material content. Fly ash or natural pozzolan may exceed 25 percent, by weight of the cementitious material, if approved by the Engineer.

(f) When increased sulfate resistance is specified, the required amount of fly ash or natural pozzolan shall be incorporated into the concrete and may exceed 25 percent, by weight of the cementitious material.

(g) When mitigation of an alkali silica reaction is necessary, fly ash or natural pozzolan may be incorporated into the concrete and may exceed 25 percent, by weight of the cementitious material, if approved by the Engineer.

Note 3: Unless otherwise specified, the cementitious material content shall be as shown.

Note 4: Unless otherwise shown on the plans.

Note 5: The proposed slump shall be chosen by the contractor. Concrete at the proposed slump shall be sufficiently workable to allow proper placement without harmful segregation, bleeding, or incomplete consolidation.

1006-3.01 Design Criteria: the second and third paragraphs of the Standard Specifications are revised to read:

Air-entraining admixtures will be required for all classes of concrete placed at an elevation of 3,000 feet or above. The air content of the concrete mixture shall not be less than four percent nor more than seven percent by volume. However, no air-entrainment will be required for minor precast structures, precast pipe, and precast, prestressed structural members supporting a concrete deck slab or impervious overlay. Also, no air-entrainment will be required for any precast items constructed using the dry pack or no-slump method.

For elevations below 3,000 feet, air-entraining admixtures may be used at the option of the contractor. If air-entraining admixtures are used, the air content of the concrete mixture shall not exceed seven percent by volume.

1006-3.02 Design Procedures: the last two sentences in the first paragraph of the Standard Specifications are revised to read:

Mix designs, for other than precast or prestressed concrete, shall be prepared by or under the direction of, and signed by, a registered professional engineer, a NICET Level III or higher certified technician in the concrete subfield, a NRMCA Level 3 Certified Concrete Technologist, or an ACI certified Concrete Laboratory Testing Technician Level 2 or Grade II. Mix designs for precast or prestressed concrete shall be prepared by or under the direct supervision of, and signed by, either one of the individuals listed above or a PCI Quality Control Technician/Inspector Level II or higher. Individuals preparing and submitting mix designs shall have experience in the development of mix designs and mix design testing for the respective type of concrete.

1006-3.02 Design Procedures: the second paragraph of the Standard Specifications is revised to read:

The complete solid volume mix designs submitted for approval shall include all weights and volumes of all ingredients. The brand, type, and source of hydraulic cement and

admixtures, the coarse aggregate size number designation, source of aggregates, the specific gravities of all ingredients, the proposed slump, the water/cementitious material ratio, a product code to identify the mix design, and the intended use of each mix design shall be an integral part of each mix design.

1006-4.01 General Requirements: the second sentence of the second paragraph of the Standard Specifications is revised to read:

The minimum information to be shown on each delivery ticket shall be the date, time batched, truck identification number, name or identification of batch plant, name of contractor, name and location of project, the quantity of concrete, the batch weights or mix design product code, the amount of permissible additional water to meet the design water/cementitious material ratio, and the number of revolutions that the concrete has been mixed at mixing speed in a truck mixer.

1006-4.03(C) Mixing in Truck Mixers: the first sentence of the last paragraph of the Standard Specifications is revised to read:

If additional mixing water is required to maintain the mix design water/cementitious material ratio, the concrete shall be mixed by a minimum of 30 revolutions of the drum at mixing speed after the water has been added, prior to discharge of any concrete for placement.

1006-5 Weather Limitations: the title of the Standard Specifications is revised to read:

1006-5 Concrete Temperature and Weather Limitations:

1006-5.01 General Requirements: the first paragraph of the Standard Specifications is revised to read:

The temperature of the concrete mixture immediately before placement shall not be less than 50 degrees F nor greater than 90 degrees F. Concrete that fails to conform to this temperature requirement shall be rejected prior to placement.

Under rainy conditions, placing of concrete shall be stopped before the quantity of surface water is sufficient to cause a flow or wash of the concrete surface or have a detrimental effect on the finished concrete and acceptance parameters.

1006-5.02 Hot Weather Concreting: of the Standard Specifications is revised to read:

Forms, subgrade, and reinforcing steel shall be sprinkled with cool water just prior to the placement of concrete.

Mix water may be cooled by refrigeration, liquid nitrogen, or well-crushed ice of a size that will melt completely during the mixing operation. If crushed ice is used, it shall be substituted for part of the mix water on a pound for pound basis.

1006-5.03 Cold Weather Concreting: of the Standard Specifications is revised to read:

Concrete shall not be placed on or against ice-coated forms, reinforcing steel, structural steel, conduits or construction joints, nor on or against snow, ice, or frozen earth materials.

Concrete operations shall be discontinued when a descending ambient temperature in the shade and away from artificial heat falls below 40 degrees F nor shall concrete operations be resumed until an ascending ambient temperature in the shade and away from artificial heat reaches 35 degrees F unless otherwise approved by the Engineer.

Mixing and placing concrete shall continue no later in any day than that time which will allow sufficient time to place and protect the concrete already poured before the ambient temperature drops to 35 degrees F.

Concrete shall be protected in a manner to maintain all concrete surface temperatures at not less than 50 degrees F for a period of 72 hours after placement and at not less than 40 degrees F for an additional 96 hours.

The contractor may use equipment to heat the aggregates or water, or both, prior to mixing. If aggregates are heated, the minimum temperature of the heated aggregate shall be 60 degrees F and the aggregates shall have no chunks of ice or frozen aggregate present. Equipment used to heat the aggregates shall be such that consistent temperatures are obtained throughout the aggregate within each batch and from one batch to another. Water shall not be heated in excess of 150 degrees F unless the water is mixed with the aggregate prior to the addition of cement to the batch. During the heating or mixing process, cement shall not be added to water and aggregate combinations which exceed 100 degrees F.

When weather forecasts indicate a probability that ambient temperatures will fall below 35 degrees F during the placement or curing periods, the contractor shall submit a cold weather concreting plan to the Engineer for approval prior to concrete placement. The cold weather concreting plan shall detail methods and equipment which will be used to ensure that the required concrete temperatures are maintained. The contractor shall provide adequate cold weather protection in the form of insulation and/or heated enclosures to protect the concrete after placement. For bridge decks and suspended structures, the cold weather concreting plan shall include protection measures for both the top and bottom surfaces of the concrete. This protection shall maintain concrete surface temperatures as specified above at all locations in the structure. When artificial heating is required, the heating units shall not locally heat or dry the surface of the concrete.

When a cold weather concreting plan is required, the Engineer may require concrete temperatures to be measured and continuously recorded by the use of temperature sensing devices during the entire curing period. The contractor shall provide the temperature sensing devices and recording instruments. The contractor shall install temperature sensing devices near the surface of the concrete at locations and depths designated by the Engineer. When concrete is placed on a bridge deck or suspended structure, both the bottom surface and the top surface shall be monitored with temperature sensing devices. Temperature sensing devices and recording instruments shall be approved by the Engineer. The contractor shall continuously monitor the concrete temperature and provide the recorded data to the Engineer at any time upon request.

If the surface concrete temperature at any location in the structure falls below 35 degrees F during the curing period, the Engineer may direct the contractor to core the areas in question at the locations indicated by the Engineer. The contractor shall submit the cores to a petrographer for examination in accordance with ASTM C 856. Concrete damaged by frost, as determined by the petrographer, shall be removed and replaced at no additional cost to the Department. All costs associated with coring, transmittal of cores, and petrographic examination shall be born by the contractor regardless of the outcome of the petrographic examination.

The placing of concrete will not be permitted until the Engineer is satisfied that all the necessary protection equipment and materials are on hand at the site and in satisfactory working condition.

Concrete requiring cold weather protection shall have such protection removed at the end of the required curing period in such a manner that will permit a gradual drop in the concrete temperatures.

1006-7.03(A) Class S and Class B Concrete: of the Standard Specifications is revised to read:

For Class S concrete with a compressive strength requirement less than 4000 psi, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken on a daily basis for each 100 cubic yards, or fraction thereof, of continuously placed concrete from each batch plant. For Class S concrete with a compressive strength requirement equal to or greater than 4000 psi, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken on a daily basis for each 50 cubic yards, or fraction thereof, of continuously placed concrete from each batch plant. For Class B concrete, a sample of concrete for the required tests, as specified in Subsection 1006-7.02, will be taken for each 100 cubic yards placed from each batch plant. For Class S or Class B concrete placed at elevations of 3,000 feet or above, air content testing shall be performed for each 50 cubic yards placed, regardless of the compressive strength requirement. An additional sample or samples for any of the required tests may be taken at an interval of less than the sampling frequency specified above, at the discretion of the Engineer, on any batch or load of concrete. A sample for the required tests on daily placements of 10 cubic yards or less may be taken at the discretion of the Engineer.

1006-7.06(A) Class P Concrete: the fourth sentence of the second paragraph of the Standard Specifications is revised to read:

Cores must be obtained under the observation of an ADOT representative and delivered to the Engineer in time to allow complete testing within 48 days of placement. Testing shall be performed by the Department.

1006-7.06(B) Class S and Class B Concrete: the third sentence of the last paragraph of the Standard Specifications is revised to read:

All cores shall be obtained and tested in accordance with the requirements of Arizona Test Method 317. Testing shall be performed by the Department.

1006-7.06(C) Class E Concrete: the fourth sentence of the second paragraph of the Standard Specifications is revised to read:

Cores must be obtained under the observation of an ADOT representative and delivered to the Engineer in time to allow complete testing within 48 days of placement. Testing shall be performed by the Department.

(1007REFS, 07/30/07)

SECTION 1007 - RETROREFLECTIVE SHEETING:

1007-2 Material Types: of the Standard Specifications is revised to read:

Sheeting material types for warning signs, regulatory signs, and guide sign backgrounds will be as shown on the plans.

The type of sheeting material to be used in other applications will be as specified herein.

For barricades, channelizers and other work zone devices, ASTM sheeting Types IV, VIII, IX, or X shall be used.

ASTM sheeting Types VIII, IX, or X shall be used for route marker signs and auxiliaries (stand alone), and for milepost markers.

Sheeting for orange work zone signs (fluorescent) shall be ASTM Types VI, VIII, IX, or X. Roll-up orange work zone signs shall use ASTM Type VI sheeting.

For direct-applied characters, demountable characters and shields on guide signs, ASTM sheeting Types VIII, IX, or X shall be used.

ASTM sheeting Types V, VIII, IX, or X shall be used for object markers, guardrail markers, and delineators. Object markers for guardrail end treatments, and impact attenuators (fluorescent) shall use ASTM Types VIII, IX, or X.

Sheeting for Adopt-A-Highway signs and logo signs shall be ASTM Type I.

When more than one sheeting type is allowed, the contractor may use any of the types listed, provided that materials used for a particular application shall be of the same ASTM type, manufacturer, and product for all signs of the same type in the project.

Opaque films used with sheeting shall be acrylic type films.

Direct-applied and demountable black characters shall be non-reflective.

(1011JMAT, 10/20/08)

SECTION 1011 JOINT MATERIALS:

1011-3 Joint Sealant (Hot-Poured): the title and text of the Standard Specifications is revised to read:

1011-3 Joint Sealant (Hot-Applied):

Joint sealant material, other than asphalt-rubber sealant, shall be a hot-applied type, conforming to the requirements of ASTM D 3406 or ASTM D 7116, as appropriate. Joint sealant shall not contain any coal-tar materials.

Asphalt-rubber joint sealant material shall be a hot-applied type, conforming to the requirements of ASTM D 6690, Type I or Type II.

The following requirement shall be added to the "Packaging and Package Marking" requirements of ASTM D 3406, ASTM D 7116, and ASTM D 6690:

The minimum ambient temperature during application and ambient temperatures under various storage conditions shall be clearly marked on the container.

Certificates of Compliance conforming to the requirements of Subsection 106.05 shall be submitted.

INDEX OF APPENDICES

1. **Appendix A** **SUBGRADE ACCEPTANCE CHART**
2. **Appendix B** **CITY OF PEORIA FORMS**

RIM:U:PROJECT
603Spec.DOC
12/18/2009

Special Provisions
0000 MA PEO SS60301C
CM-PEO-0(009)A

APPENDIX A

Subgrade Acceptance Chart

 CAPITAL IMPROVEMENT PROGRAM PROJECT SUBMITTAL APPLICATION ENGINEERING DEPARTMENT				
ASSIGNED CITY OF PEORIA PROJECT MANAGER:				
DEPARTMENT:				
PROJECT NUMBER(s):				
SOLICITATION NO./CONTRACT NO.:				
PROJECT NAME:				
ADDRESS/LOCATION:				
CONTRACTOR INFORMATION - REQUIRED				
CONTRACTOR:				
CONTACT NAME:		E-MAIL:		
ADDRESS:				
CITY:		STATE:	ZIP:	
TELEPHONE NUMBER (s):				
SUBMITTAL INFORMATION - REQUIRED				
TYPE OF PROJECT	No.	SUBMITTED DOCUMENTS	ROUTE TO:	CONTACT
<input type="checkbox"/> Streets <input type="checkbox"/> Storm Drain <input type="checkbox"/> Traffic Control <input type="checkbox"/> Facilities <input type="checkbox"/> Water <input type="checkbox"/> Wastewater <input type="checkbox"/> Parks <input type="checkbox"/> Other			<input type="checkbox"/> Traffic <input type="checkbox"/> Utilities <input type="checkbox"/> Public Works <input type="checkbox"/> Community Services <input type="checkbox"/> Materials Management <input type="checkbox"/> Public Information Officer <input type="checkbox"/> Other	
			OUTSIDE AGENCIES	CONTACT
AS-BUILTS: <input type="checkbox"/> Redlines <input type="checkbox"/> 4 Mill Mylar <input type="checkbox"/> CD <input type="checkbox"/> Cover Sheet For Signature				
Applicant's Signature:			Date:	



ENGINEERING DEPARTMENT

9875 N. 85th Avenue, Peoria, Arizona 85345
Phone: 623-773-7210
Fax: 623-825-0325

Traffic Control Plan Submittal Form

All line items on this form must be completed; this form is to be submitted with the TCP.

Project Name/Number: _____ Permit Number: _____

Project Location: _____

Description/Phase of Construction: _____

Project Inspector: _____

Start Date: _____ Expiration Date: _____

Contractor: _____ Contact Person: _____

Office Number: () _____ Fax Number: () _____

Cell Number: () _____ 24 hr Number: () _____

Barricade Company: _____ Contact Person: _____

Office Number: () _____ Fax Number: () _____

Peoria General Notes:

1. A \$100.00 review fee is required prior to approval of traffic control plan.
2. Traffic/Pedestrian control shall comply with the (Latest Editions) to MUTCD part 6, City of Phoenix Barricade Manual, MAG Section 401, City of Peoria Infrastructure Guide, or any special conditions required by the City of Peoria.
3. A copy of the accepted Traffic Control Plans (TCP) shall be on-site at all times during construction and available for review by the City of Peoria.
4. Traffic diversions onto any unimproved shoulder shall be maintained for dust control and shall maintain a safe drivable surface at all times.
5. All traffic control flaggers shall be properly trained, equipped and competent.
6. Trench plating shall be required and installed per the City of Peoria standard detail # 149.
7. VMS boards are required per the City of Peoria Infrastructure Guide.
8. Law enforcement officers shall be required when any part of the TCP extends to within 300' ft of a signalized intersection. Officers may be required for non-signalized construction areas at the discretion of the City of Peoria.
9. Three (3) working days (72) hours notice is required for TCP review.
10. The submitter/designer of this TCP shall be IMSA or ATSSA certified.
11. The Project Superintendent is responsible for ensuring that all TCP setups and removals meet designated time restrictions.
12. A TCP may be required for shoulder work at the discretion of the City of Peoria.
13. Failure to maintain TCP setup / 24 hour emergency contact person could result in penalty per City of Peoria Code section 23-8, Ordinance # 01-181 Dangerous Construction Practices.

ACCEPTED

AS NOTED

DENIED

Reviewed By _____

Date _____



City of Peoria
Engineering Department
8401 W. Monroe Street
Peoria, AZ 85345
(623) 773-7210 Fax: (623) 773-7211

APPLICATION FOR EXTENDED CONSTRUCTION WORK HOURS

City Ordinance #98-11 authorizes issuances of extended hours noise permits for construction work hours if there is an emergency condition or if the public peace and quiet will not be unreasonably disturbed. An extended hours permit is required if construction work hours are other than the following:

Construction Type:		April 2 – September 29	September 30 – April 1
A	Concrete Work	5:00 a.m. to 7:00 p.m.	6:00 a.m. to 7:00 p.m.
B	Construction other than Concrete (within 500 feet of residential area)	6:00 a.m. to 7:00 p.m.	7:00 a.m. to 7:00 p.m.
C	Construction other than Concrete (outside 500 feet of residential area)	5:00 a.m. to 7:00 p.m.	5:00 a.m. to 7:00 p.m.

PROJECT INFORMATION:

APPLICANT INFORMATION:

Permit #: _____

Name: _____

Name: _____

Firm/Organization: _____

Address: _____

Address: _____

EXTENSION REQUEST FOR:

Address: _____

Day(s): _____

Phone: _____

Fax: _____

Start/End Time(s): _____

E-Mail: _____

Date(s): _____

Rationale for request: *Please attach a written rationale for requesting an extended hours permit.*

CONDITIONS OF APPROVAL: If application is approved, the following conditions must be met:

1. Construction traffic is limited to major streets. Use of residential neighborhoods by construction traffic is prohibited.
2. Maximum practical distance shall be maintained between residences and work sites.
3. This permit may be immediately revoked if unresolved complaints are brought to the attention of the City.

APPROVED BY: _____ DATE: _____

DENIED BY: _____ DATE: _____

CONDITIONAL: _____



Right-of-Way/Offsite

CAPITAL IMPROVEMENT PROGRAM PROJECT

Permit Application

PERMIT NO. _____

CITY DEPARTMENT: _____

PROJECT NAME: _____

PROJECT LOCATION/ADDRESS: _____

PROJECT NUMBER: _____

SOLICITATION NO: _____

NOTICE TO PROCEED: START DATE: _____ COMPLETION DATE: _____

PROJECT MANAGER INFORMATION

NAME: _____

CITY OF PEORIA DEPARTMENT: _____

TELEPHONE NUMBER (s) _____ EMAIL: _____

CONTRACTOR INFORMATION

COMPANY NAME: _____

ADDRESS: _____

CITY: _____ ST: _____ ZIP: _____ PHONE: _____

CONTACT NAME: _____ E-MAIL: _____

STATE LICENSE NO: _____ CITY TAX NO: _____

EMERGENCY CONTACT INFORMATION

COMPANY NAME: _____

ADDRESS: _____

CITY: _____ ST: _____ ZIP: _____ PHONE: _____

CONTACT NAME: _____ E-MAIL: _____

STATE LICENSE NO: _____ CITY TAX NO: _____

PERMIT(S) BEING APPLIED FOR:

- | | | |
|--|---|---|
| <input type="checkbox"/> Paving | <input type="checkbox"/> Water | <input type="checkbox"/> Utility Trenching |
| <input type="checkbox"/> Concrete | <input type="checkbox"/> Sewer | <input type="checkbox"/> Drywell |
| <input type="checkbox"/> Storm Drain | <input type="checkbox"/> Grading | <input type="checkbox"/> Signing / Striping |
| <input type="checkbox"/> Traffic Signal | <input type="checkbox"/> Interconnect Conduit | |
| <input type="checkbox"/> Retaining Wall - Total Square Footage of Wall Area: _____ | | |
| <input type="checkbox"/> Other _____ | | |

Applicant certifies that above contractor is licensed by the State of Arizona Registrar of Contractors, as required by A.R.S. 32-1151 for work described above. Applicant understands that providing false information can result in criminal prosecution per A.R.S. 13-2704.

APPLICANT PRINTED NAME _____

DATE _____

APPLICANT SIGNATURE _____

NOTICE TO CONTRACTORS:

Required Contract Provisions All Federal-Aid Construction Contracts (Form FHWA 1273, Revised March 1994);

Revision pursuant to Section V, paragraph 2b.

Contractors shall not show employees' social security numbers and home addresses on payroll submittals to the Department. Payroll submittals shall contain an individually identifying number for each employee. Contractors and subcontractors shall maintain the full social security number and current home address of each employee. Contractors may require that subcontractors provide the full social security number and current home address of the subcontractor's employees for their own records without weekly submission to the Arizona Department of Transportation.

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

	Page
I. General	1
II. Nondiscrimination	1
III. Nonsegregated Facilities	3
IV. Payment of Predetermined Minimum Wage.....	3
V. Statements and Payrolls	6
VI. Record of Materials, Supplies, and Labor	7
VII. Subletting or Assigning the Contract	7
VIII. Safety: Accident Prevention	7
IX. False Statements Concerning Highway Project.....	7
X. Implementation of Clean Air Act and Federal Water Pollution Control Act	8
XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion	8
XII. Certification Regarding Use of Contract Funds for Lobbying	10

ATTACHMENTS

A. Employment Preference for Appalachian Contracts
(included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2:
- Section IV, paragraphs 1, 2, 3, 4, and 7:
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. **Selection of Labor:** During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed

and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of the avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and

shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project:

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women:

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract

work. This information is to be reported on Form PR-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications on its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c) the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For

the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3 and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers as defined in Section IV.4c. when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30 day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification

and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL. Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate)

specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyman shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory). Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40

hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee: his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof of the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially possible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees

(including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and

engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

**Notice to All Personnel Engaged on
Federal-Aid Highway Projects**

Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more--49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress

in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid for or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS
EXECUTIVE ORDER 11246, July 1, 1978**

(Revised November 3, 1980)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted.
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority.
 - c. "Employer Identification Number" means the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership or participation or community identification).
 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown plan. Each Contractor or Subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area.
 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications. Executive Order 11246, or the regulations promulgated pursuant thereto.
 6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
 7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such site or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or women sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on the job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources complied under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations: by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Direct its recruitment efforts, both oral and written to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and

female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative actions obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is under utilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any Subcontract with any person or firm

debarred from Government Contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as an imitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION
TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246)

JULY 1, 1978 (Revised November 3, 1980)

(Revised April 15, 1981)

1. The bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

	Minority	Female
Tucson and balance of Pima County	24.1	6.9
Cochise, Graham, Greenlee and Santa Cruz Counties	27.0	6.9
Phoenix and balance of Maricopa County	15.8	6.9
Apache, Coconino, Gila, Mohave, Navajo, Pinal, Yavapai and Yuma Counties	19.6	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in all areas where he has Federal or federally assisted work.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

EQUAL EMPLOYMENT OPPORTUNITY
COMPLIANCE REPORTS

(Project, Training and Annual)

Federal-Aid Projects

February 1, 1977; Revised July 1, 1978; Revised November 3, 1980;
Revised April 15, 1981; Revised September 7, 1983
Revised October 15, 1998 Revised August 1, 2005

MONTHLY REPORTS:

Monthly Highway Project Report (Revised Aug 2005):

On each contract in the amount of \$10,000 or more, and on each subcontract in the amount of \$10,000 or more, the contractor shall submit and each subcontractor shall submit the report on Monthly Highway Project Report.

The information required covers the first pay period in one month to the first pay period of the next month of craft employees (carpenters, ironworkers, etc.)

If the percentages shown are less than the required minimum percentages for crafts, an explanation shall be given on the report.

Negative reports shall be furnished when the contractor or subcontractor has started but has not completed contract work, and has not worked on the project during the reporting period.

All subcontractors will forward their report to the prime contractor with whom they have a contract. The Prime contractor shall collect all reports for that month and summarize date to submit one copy to the ADOT Civil Rights Office.

These reports shall be received at both offices no later than the first day of the month following the reporting period.

ANNUAL REPORT:

On each contract in the amount of \$10,000 or more, and on each subcontract, not including material suppliers, in the amount of \$10,000 or more, the contractor and each subcontractor shall submit the report on Form PR-1391.

The staffing figures to be reported should represent the project workforce on board in all or any part of the last payroll period preceding the end of July.

These reports shall be sent directly to the ADOT Civil Rights Office no later than September 1.

FEDERAL-AID PROPOSAL NOTICES

NOTICES TO PROSPECTIVE FEDERAL-AID CONSTRUCTION CONTRACTORS

1. CERTIFICATION OF NONSEGREGATED FACILITIES

- a. A certification of Nonsegregated Facilities, as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities (is included in the proposal and must be submitted prior to the award of a Federal-aid highway construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause).
- b. Bidders are cautioned as follows: By signing this bid, the bidder will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in this proposal. This certification provides that the bidder does not maintain or provide for his employees facilities which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the bidder will not maintain such segregated facilities.
- c. Bidders receiving Federal-aid highway construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, will be required to provide for the forwarding of the following notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

2. NOTICE TO PROSPECTIVE SUBCONTRACTORS AND MATERIAL SUPPLIERS OF REQUIREMENT FOR CERTIFICATION OF NONSEGREGATED FACILITIES

- a. A Certification of Nonsegregated Facilities as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, which is included in the proposal, or attached hereto, must be submitted by each subcontractor and material supplier prior to the award of the subcontract or consummation of a material supply agreement if such subcontract or agreement exceeds \$10,000 and is not exempt from the provisions of the Equal Opportunity clause.

- b. Subcontractors and material suppliers are cautioned as follows: By signing the subcontract or entering into a material supply agreement, the subcontractor or material supplier will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in the subcontract or material supply agreement. This certification provides that the subcontractor or material supplier does not maintain or provide for his employees facilities which are segregated on the basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the subcontractor or material supplier will not maintain such segregated facilities.
- c. Subcontractors or material suppliers receiving subcontract awards or material supply agreements exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for construction contracts and materials suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

3. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

By signing this bid, the bidder will be deemed to have stipulated as follows:

- a. That any facility to be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub. L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub. L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR, Part 15), is not listed on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- b. That the State highway department shall be promptly notified prior to contract award of the receipt by the bidder of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility to be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

General Decision Number: AZ080013 08/07/2009 AZ13

State: Arizona

Construction Type: Highway

Counties: Coconino, Maricopa, Mohave, Pima, Pinal, Yavapai
and Yuma Counties in Arizona.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	05/15/2009
1	05/22/2009
2	06/26/2009
3	07/03/2009
4	08/07/2009

CARP0408-005 07/01/2009

	Rates	Fringes
CARPENTER (Including Cement Form Work).....	\$ 23.58	7.24

ENGI0428-001 06/01/2009

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
Group 1.....	\$ 20.89	9.31
Group 2.....	\$ 24.16	9.31
Group 3.....	\$ 25.24	9.31
Group 4.....	\$ 26.27	9.31

POWER EQUIPMENT OPERATORS CLASSIFICATIONS:

GROUP 1: A-frame boom truck, air compressor, Beltcrete, boring bridge and texture, brakeman, concrete mixer (skip type), conductor, conveyor, cross timing and pipe float, curing machine, dinky (under 20 tons), elevator hoist (Husky and similar), firemen, forklift, generator (all), handler, highline cableway signalman, hydrographic mulcher, joint inserter, jumbo finishing machine, Kolman belt loader, machine conveyor, multiple power concrete saw, pavement breaker, power grizzly, pressure grout machine, pump, self-propelled chip spreading machine, slurry seal machine (Moto paver driver), small self-propelled compactor (with blade-backfill, ditch operation), straw blower, tractor (wheel type), tripper, tugger (single drum), welding machine, winch truck

GROUP 2:

ALL COUNTIES INCLUDING MARICOPA: Aggregate Plant, Asphalt plant Mixer, Bee Gee, Boring Machine, Concrete Pump, Concrete Mechanical Tamping-Spreading Finishing Machine, Concrete Batch Plant, Concrete Mixer (paving & mobile), Elevating Grader (except as otherwise classified), Field Equipment Serviceman, Locomotive Engineer (including Dinky 20 tons & over), Moto-Paver, Oiler-Driver, Operating Engineer Rigger, Power Jumbo Form Setter, Road Oil Mixing Machine, Self-Propelled Compactor (with blade-grade operation), Slip Form (power driven lifting device for concrete forms), Soil Cement Road Mixing Machine, Pipe-Wrapping & Cleaning Machine (stationary or traveling), Surface Heater & Planer, Trenching Machine, Tugger (2 or more drums).

MARICOPA COUNTY ONLY: Backhoe < 1 cu yd, Motor Grader (rough), Scraper (pneumatic tired), Roller (all types asphalt), Screed, Skip Loader (all types 3<6 cu yd), Tractor (dozer, pusher-all).

GROUP 3:

ALL COUNTIES INCLUDING MARICOPA: Auto Grade Machine, Barge, Boring Machine (including Mole, Badger & similar type directional/horizontal), Crane (crawler & pneumatic 15>100 tons), Crawler type Tractor with boom attachment & slope bar, Derrick, Gradall, Heavy Duty Mechanic-Welder, Helicopter Hoist or Pilot, Highline Cableway, Mechanical Hoist, Mucking Machine, Overhead Crane, Pile Driver Engineer (portable, stationary or skid), Power Driven Ditch Lining or Ditch Trimming Machine, Remote Control Earth Moving Machine, Slip Form Paving Machine (including Gunnert, Zimmerman & similar types), Tower Crane or similar type.

MARICOPA COUNTY ONLY: Backhoe<10 cu yd, Clamshell < 10 cu yd, Concrete Pump (truck mounted with boom only), Dragline <10 cu yd, Grade Checker, Motor Grader (finish-any type power blade), Shovel < 10 cu yd.

GROUP 4: Backhoe 10 cu yd and over, Clamshell 10 cu yd and over, Crane (pneumatic or crawler 100 tons & over), Dragline 10 cu yd and over, Shovel 10 cu yd and over.

All Operators, Oilers, and Motor Crane Drivers on equipment with Booms, except concrete pumping truck booms, including Jibs, shall receive \$0.01 per hour per foot over 80 ft in addition to regular rate of pay

Premium pay for performing hazardous waste removal \$0.50 per hour over base rate.

* IRON0075-004 08/01/2009

COCONINO, MARICOPA, MOHAVE, YAVAPAI & YUMA COUNTIES

	Rates	Fringes
Ironworker, Rebar		
Zone 1.....	\$ 26.52	17.59

Zone 1: 0 to 50 miles from City Hall in Phoenix or Tucson
 Zone 2: 050 to 100 miles - Add \$4.00
 Zone 3: 100 to 150 miles - Add \$5.00
 Zone 4: 150 miles & over - Add \$6.50

LABO0383-002 06/01/2009

	Rates	Fringes
Laborers:		
Group 1.....	\$ 16.72	4.35
Group 2.....	\$ 17.70	4.35
Group 3.....	\$ 18.46	4.35
Group 4.....	\$ 19.50	4.35
Group 5.....	\$ 20.44	4.35

LABORERS CLASSIFICATIONS:

GROUP 1: All Counties: Chipper, Rip Rap Stoneman. Pinal County Only: General/Cleanup Laborer. Maricopa County Only: Flagger.

GROUP 2: Asphalt Laborer (Shoveling-excluding Asphalt Raker or Ironer), Bander, Cement Mason Tender, Concrete Mucker, Cutting Torch Operator, Fine Grader, Guinea Chaser, Power Type Concrete Buggy

GROUP 3: Chain Saw, Concrete Small Tools, Concrete Vibrating Machine, Cribber & Shorer (except tunnel), Hydraulic Jacks and similar tools, Operator and Tender of Pneumatic and Electric Tools (not herein separately classified), Pipe Caulker and Back-Up Man-Pipeline, Pipe Wrapper, Pneumatic Gopher, Pre-Cast Manhole Erector, Rigger and Signal Man-Pipeline

GROUP 4: Air and Water Washout Nozzleman; Bio-Filter, Pressman, Installer, Operator; Scaffold Laborer; Chuck Tender; Concrete Cutting Torch; Gunite; Hand-Guided Trencher; Jackhammer and/or Pavement Breaker; Scaler (using boson's chair or safety belt); Tamper (mechanical all types).

GROUP 5: AC Dumpman, Asbestos Abatement, Asphalt Raker II, Drill Doctor/Air Tool Repairman, Hazardous Waste Removal, Lead Abatement, Lead Pipeman, Process Piping Installer, Scaler (Driller), Pest Technician/Weed Control, Scissor Lift, Hydro Mobile Scaffold Builder.

PAIN0086-001 04/01/2009

	Rates	Fringes
PAINTER		
PAINTER (Yavapai County only), SAND BLASTER/WATER BLASTER (all Counties).....	\$ 19.35	4.70

ZONE PAY: More than 100 miles from Old Phoenix Courthouse \$3.50 additional per hour.

SUAZ2009-001 04/20/2009

	Rates	Fringes
CEMENT MASON.....	\$ 19.28	3.99
ELECTRICIAN.....	\$ 22.84	6.48
IRONWORKER (Rebar) Pima & Pinal Counties.....	\$ 21.73	12.07

LABORER

Asphalt Raker.....	\$ 15.49	3.49
Compaction Tool Operator....	\$ 14.59	2.91
Concrete Worker.....	\$ 13.55	3.20
Concrete/Asphalt Saw.....	\$ 13.95	2.58
Driller-Core, diamond, wagon, air track.....	\$ 16.94	3.12
Dumpman Spotter.....	\$ 14.99	3.16
Fence Builder.....	\$ 13.28	2.99
Flagger		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 12.35	1.59
Formsetter.....	\$ 16.09	3.97
General/Cleanup Laborer		
Coconino, Maricopa, Mohave, Pima, Yavapai & Yuma.....	\$ 14.54	3.49
Grade Setter (Pipeline).....	\$ 17.83	5.45
Guard Rail Installer.....	\$ 13.28	2.99
Landscape Laborer.....	\$ 11.39	
Landscape Sprinkler Installer.....	\$ 15.27	
Pipelayer.....	\$ 14.81	2.96
Powderman, Hydrasonic.....	\$ 16.39	2.58

PAINTER

Coconino, Maricopa, Mohave, Pima, Pinal & Yuma..	\$ 15.57	3.92
---	----------	------

POWER EQUIPMENT OPERATOR

Asphalt Laydown Machine.....	\$ 21.19	6.05
Backhoe < 1 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 17.37	3.85
Backhoe < 10 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Clamshell < 10 cu yd		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Concrete Pump (Truck Mounted with boom only)		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 19.92	7.10
Crane (under 15 tons).....	\$ 21.35	7.36
Dragline (up to 10 cu yd)		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 18.72	3.59
Drilling Machine (including Water Wells).....	\$ 20.58	5.65
Grade Checker		
Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....	\$ 16.04	3.68
Hydrographic Seeder.....	\$ 15.88	7.67
Mass Excavator.....	\$ 20.97	4.28
Milling Machine/Rotomill....	\$ 21.42	7.45

Motor Grader (Finish-any type power blade) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 21.92	4.66
Motor Grader (Rough) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 20.07	4.13
Oiler.....\$ 18.15	8.24
Power Sweeper.....\$ 16.76	4.44
Roller (all types Asphalt) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 18.27	3.99
Roller (excluding asphalt)..\$ 15.65	3.32
Scraper (pneumatic tired) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 17.69	3.45
Screed Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 17.54	3.72
Shovel < 10 cu yd Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 18.72	3.59
Skip Loader (all types <3 cu yd).....\$ 18.28	5.30
Skip Loader (all types 3 < 6 cu yd) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 18.64	4.86
Skip Loader (all types 6 < 10 cu yd).....\$ 20.15	4.52
Tractor (dozer, pusher - all) Coconino, Mohave, Pima, Pinal, Yavapai & Yuma.....\$ 17.26	2.65
TRUCK DRIVER	
2 or 3 Axle Dump or Flatrack.....\$ 16.27	3.30
5 Axle Dump or Flatrack.....\$ 13.97	2.89
6 Axle Dump or Flatrack (< 16 cu yd).....\$ 17.79	6.42
Belly Dump.....\$ 14.67	
Oil Tanker Bootman.....\$ 22.03	
Self-Propelled Street Sweeper.....\$ 13.11	5.48
Water Truck 2500 < 3900 gallons.....\$ 18.14	4.55
Water Truck 3900 gallons and over.....\$ 15.92	3.33
Water Truck under 2500 gallons.....\$ 15.94	4.16

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

--

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

--

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
2010020	REMOVAL OF TREES	EACH	25		
2020001	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.SUM	1		
2020020	REMOVAL OF CONCRETE CURB	L.FT.	470		
2020021	REMOVAL OF CONCRETE CURB AND GUTTER	L.FT.	3,639		
2020025	REMOVAL OF CONCRETE SIDEWALKS, DRIVEWAYS AND SLABS	SQ.FT.	22,740		
2020031	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	SQ.YD.	559		
2020034	REMOVAL OF SIGNS	L.SUM	1		
2020042	REMOVAL OF PIPE (SLOTTED DRAIN)	L.FT.	80		
2020052	REMOVE (BLOCK WALL)	L.FT.	170		
2020053	REMOVE (CATCH BASIN)	EACH	4		
2020054	REMOVE (PULL BOX)	EACH	14		
2020081	REMOVE BITUMINOUS PAVEMENT (MILLING) (1")	SQ.YD.	20,704		
2020153	REMOVE (VIDEO DETECTION SYSTEM)	L.SUM	1		
2050001	GRADING ROADWAY FOR PAVEMENT	SQ.YD.	7,400		
3030022	AGGREGATE BASE, CLASS 2	CU.YD.	2,320		

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
3060001	GEOGRID BASE REINFORCEMENT	SQ.YD.	7,000		
4010008	PORTLAND CEMENT CONCRETE PAVEMENT (8")	SQ.YD.	400		
4040111	BITUMINOUS TACK COAT	TON	12		
4040116	APPLY BITUMINOUS TACK COAT	HOUR	32		
4060018	ASPHALTIC CONCRETE (CITY OF PEORIA MIX C 3/4")	TON	1,510		
4140040	ASPHALTIC CONCRETE FRICTION COURSE (ASPHALT-RUBBER)	TON	2,000		
4140042	ASPHALT RUBBER MATERIAL (FOR AR-ACFC)	TON	190		
4140044	MINERAL ADMIXTURE (FOR AR-ACFC)	TON	18	\$90.00	\$1,620.00
5012515	STORM DRAIN PIPE, 15"	L.FT.	18		
5012518	STORM DRAIN PIPE, 18"	L.FT.	204		
5030273	CATCH BASIN,TYPE M-1 (L=10')(PHOENIX DET. P-1569)	EACH	1		
5030274	CATCH BASIN,TYPE M-1 (L=17')(PHOENIX DET. P-1569)	EACH	4		
5030337	CATCH BASIN,TYPE B, B=10' (MAG DET. 531)	EACH	3		
5030371	CATCH BASIN, TYPE F, (MAG DET. 535)	EACH	1		
6070046	FOUNDATION FOR SIGN POST (P-1)(PERFORATED)	EACH	26		

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
9080296	CONCRETE SIDEWALK RAMP (MAG DET. 231)	EACH	7		
9080305	CONCRETE DRIVEWAY (CITY OF PEORIA DET. 251)	SQ.FT.	9,979		
9080350	CONCRETE DRIVEWAY (MAG DET. 250)	SQ.FT.	366		
9080602	CONCRETE BUS SHELTER PAD (PHOENIX DET. P1256-1)	SQ.FT.	855		
9140113	WALL (BLOCK)	SQ.FT.	1,674		
9210016	MEDIAN PAVING (DECORATIVE PAVEMENT)	SQ.YD.	404		
9240010	FORCE ACCOUNT WORK (REPAIR LANDSCAPING AND IRRIGATION SYSTEMS)	L.SUM	1	\$40,000.00	\$40,000.00
9240012	FORCE ACCOUNT WORK (GEOTEXTILE FABRIC)	L.SUM	1	\$5,000.00	\$5,000.00
9240015	FORCE ACCOUNT WORK (PROVIDE ELECTRICAL SERVICE)	L.SUM	1	\$5,000.00	\$5,000.00
9240047	MISCELLANEOUS WORK (ABANDON PIPE AND BACKFILL WITH SLURRY)	CU.YD.	262		
9240050	MISCELLANEOUS WORK (RELOCATE METERS, VALVES, BOXES AND BACKFLOW PREVENTER ASSEMBLIES)	L.SUM	1		
9240051	MISCELLANEOUS WORK (FIRE DEPARTMENT CONNECTION PIPE)	L.SUM	1		
9240058	MISCELLANEOUS WORK (WALL ENCLOSURE)	L.SUM	1		

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
9240060	MISCELLANEOUS WORK (RELOCATE FRY'S PARKING LOT LIGHT ASSEMBLY)	L.SUM	1		
9240062	MISCELLANEOUS WORK (AS-BUILT DRAWINGS)	L.SUM	1		
9240120	MISCELLANEOUS WORK (RUGGEDCOM RS900G)	EACH	1		
9240121	MISCELLANEOUS WORK (IMPATH ENCODER)	EACH	1		
9240170	CONTRACTOR QUALITY CONTROL	L.SUM	1		
9250001	CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1		

BID TOTAL :



Arizona Department of Transportation

Intermodal Transportation Division

Contracts & Specifications Section
1651 W Jackson St. Room 121F Phoenix, Arizona 85007-3217
Phone (602) 712-7221 Fax (602) 712-6956

Janice K. Brewer
Governor

John S. Halikowski
Director

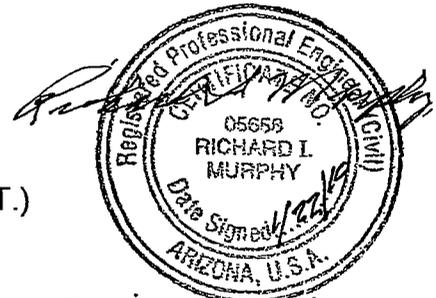
Floyd Roehrich Jr.
State Engineer

January 22, 2010

ADDENDUM (1)

TO ALL CONTRACTORS AND OTHERS INTERESTED IN PROJECT
0000 MA PEO SS60301C
CM-PEO-0(009)A
CITY OF PEORIA
(91st Avenue and Olive Avenue)

SCHEDULED FOR BID OPENING ON
FRIDAY, JANUARY 29, 2010, AT 11:00 A.M. (M.S.T.)



REVISIONS AND ADDITIONS TO SPECIAL PROVISIONS:

Expires: 9/30/12

1. On Sheets 89 and 90 of 197, Subsection 109.12 - Fuel Cost Adjustment is revised to read:

109.12 Fuel Cost Adjustment:

(A) General:

The Department will adjust monthly progress payments up or down as appropriate for cost fluctuations in diesel fuel as determined in accordance with these special provisions.

A fuel cost adjustment will be made when fluctuations in the price of diesel fuel, in excess of 15 percent, occur throughout this contract. The Department will not provide such adjustments for fluctuations in the price of diesel fuel of 15 percent or less.

No adjustments will be made for fluctuations in the price of fuels other than diesel.

(B) Measurement:

The base index price of fuel will be determined by the Department from the selling prices of diesel fuel published by OPIS (Oil Price Information Service). The base index price to be used will be the price for Diesel fuel No. 2, Ultra Low Sulfur, PAD 5, City of Phoenix Rack. The reported average value for the Phoenix area will be used.

The base index price for each month will be the arithmetic average of the selling price for diesel fuel, as specified above, shown in the last four reports received prior to the last Wednesday of the month.

This price will be made known by means of a memorandum issued on the last Wednesday of each month and mailed to those currently receiving copies of the Advertisements for Bids. This price may also be obtained from Contracts and Specifications Services at (602) 712-7221.

This price will be deemed to be the "initial cost" for diesel fuel on projects for which bids are opened during the following month.

The current index price for diesel fuel in subsequent months will be the base index price, determined as specified above, for the current month. The amount of adjustment per gallon will be the net difference between the "initial cost," adjusted by 15 percent, and the current index price. The monthly adjustment will be determined by the Engineer and included in the payment estimate as a fuel adjustment. For fluctuations in excess of 15 percent, fuel cost adjustments will only be made for current price index increases greater than 1.15 times the "initial cost" or for decreases less than 0.85 times the "initial cost." No calculation will be made for fluctuations in the current index price of 15 percent or less when compared to the "initial cost."

The number of gallons of diesel fuel used per month will be considered to equal 1.5 percent of the dollar amount of work reported by the contractor for each month. Such dollar amount will not include incentives earned by the contractor for pavement smoothness, thickness, or strength for Portland cement concrete pavements; for pavement smoothness or quality lots for asphaltic concrete pavements; for any other revenue derived from quality incentives; or for revenue accrued in the previous month for bituminous material cost fluctuations or diesel fuel price adjustments.

A monthly adjustment, if applicable, will be made on this quantity, as shown below:

$$S = \frac{0.015(Q)}{IC} \times (CP - AC)$$

Where; S = Monetary amount of the adjustment (plus or minus) in dollars

Q = Dollar amount of work completed for the month
CP = Current index price in dollars per gallon
AC = Adjusted "initial cost" (1.15 or 0.85 times IC) in dollars per gallon
IC = "Initial cost" as determined above, dollars per gallon

If adjustments are made in the contract quantities, the contractor shall accept any fuel adjustment as full compensation for increases or decreases in the price of fuel regardless of the amounts of overrun or underrun.

The value calculated above (plus or minus) will be adjusted to include sales tax and other taxes as applicable.

No additional compensation will be made for any additional charges, costs, expenses, etc., which the contractor may have incurred since the time of bidding and which may be the result of any fluctuation in the base index price of diesel fuel.

No adjustments will be made for work performed after Substantial Completion, as defined in Subsection 105.19, has been achieved.

(C) Payment:

Price adjustments will be shown on the monthly progress estimate, but will not be included in the total cost of work for determination of progress or for extension of contract time.

2. On Sheet 94 of 197, Construction Requirements are revised to read:

During construction, the contractor shall not begin operations to remove and salvage the existing video detection equipment until the new video installation has been completed and is fully operational.

The existing video detection equipment shall be removed as indicated in the traffic signal plans. The removed equipment shall be salvaged, delivered, and unloaded at the City of Peoria Municipal Operations Center, 8850 N. 79th Avenue in Peoria. The contractor shall provide any labor or equipment necessary to load, handle and transport the salvaged materials. The Traffic Maintenance Supervisor shall be contacted a minimum of 48 hours in advance of delivery at (623) 773-7458. All contractor personnel shall wear appropriate personal protective safety equipment, and shall be licensed and qualified to run the hoisting/transporting equipment used to load or move the materials. Upon delivery to the City yard, the contractor shall unload the salvaged materials from the contractor's transport vehicles and place them in the storage area as directed by the Traffic Maintenance Supervisor. The contractor shall provide any timbers, blocking or other supports deemed necessary for the safe storage/stacking of the salvaged items.

3. The following provisions are added:

SECTION 810 – EROSION CONTROL AND POLLUTION PREVENTION:

810-2 – Materials: of the Standard Specifications is modified to add:

810-2.08 – Inlet Protection:

Inlet protection shall consist of placing sediment wattles around the full opening of the inlet as shown on the plans. If inlet protection is installed on hard materials not suitable for staking, such as pavement or rock, wattles shall be fixed in place using sand bags. The contractor shall place sufficient sand bags so as to satisfactorily secure the wattles in place and prevent the passage of storm water around or beneath the inlet protection.

REVISIONS TO BID SCHEDULE:

Attached is revised Page 8 of 10 of the Bid Schedule. Revisions have been given a distinctive mark. This revised sheet will be used in the determination of the low bidder on this project.



BARRY CROCKETT
Engineer-Manager
Contracts & Specifications Section

BC:RIM:rim:603Addm1

Attachment: Revised Sheet 8 of Bid Schedule – 1 Sheet

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
7370455	MISCELLANEOUS ELECTRICAL (AS-BUILTS)	L.SUM	1		
7370705	CCTV FIELD EQUIPMENT	EACH	1		
8070011	LANDSCAPING ESTABLISHMENT (	MONTH	3		
8080190	RELOCATE AIR RELEASE VALVE	L.SUM	1		
8080646	RESET FRAME AND COVER FOR VALVE BOX	EACH	4		
8080655	RELOCATE FIRE HYDRANT	EACH	5		
8081003	WATER MAIN (REALIGNMENT) (	EACH	1		
8101012	EROSION CONTROL (SILT FENCE)	L.FT.	3,250		
8101017	EROSION CONTROL (INLET PROTECTION)(WATTLES W/GRAVEL BAGS)	EACH	5		
9010001	MOBILIZATION	L.SUM	1		
9080101	CONCRETE CURB AND GUTTER, TYPE A (MAG DET. 220)	L.FT.	3,565		
9080104	CONCRETE CURB AND GUTTER, TYPE D (MAG DET. 220)	L.FT.	46		
9080108	CONCRETE SINGLE CURB (MAG DET. 222)(TYPE A) (H=7")	L.FT.	2,024		
9080241	CONCRETE SIDEWALK (MAG DET. 230 & 231)	SQ.FT.	17,749		





Arizona Department of Transportation
Intermodal Transportation Division

Contracts & Specifications Section
1651 W Jackson St. Room 121F Phoenix, Arizona 85007-3217
Phone (602) 712-7221 Fax (602) 712-6956

Janice K. Brewer
Governor

Floyd Roehrich Jr.
State Engineer

John S. Halikowski
Director

January 26, 2010

ADDENDUM
(2)

TO ALL CONTRACTORS AND OTHERS INTERESTED IN PROJECT
0000 MA PEO SS60301C
CM-PEO-0(009)A
CITY OF PEORIA
(91st Avenue and Olive Avenue)

SCHEDULED FOR BID OPENING ON
FRIDAY, JANUARY 29, 2010, AT 11:00 A.M. (M.S.T.)

REVISIONS AND ADDITIONS TO SPECIAL PROVISIONS:

1. The following provisions are added:

ITEM 7310655

LUMINATED SIGN FIXTURE:

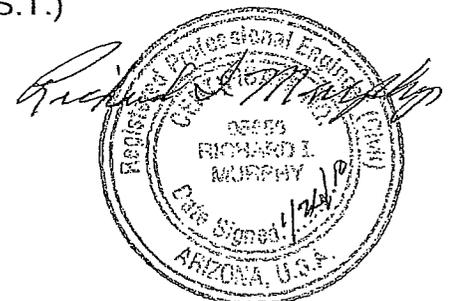
Description:

The work under this item shall consist of furnishing all materials, equipment, tools and labor for developing shop drawings and mounting details as well as installing internally illuminated street name signs as shown on the plans.

Materials:

Luminated sign fixtures shall be double face illuminated street sign cabinets. Cabinets shall be aluminum extrusion with mill finish. Cabinets shall have a top-hinged retainer system with prop rod for access and service. To prevent vertical sag of cabinet, 3/8-inch support rods shall be installed in a double "X" pattern on each of the two display sides.

Faces shall be white polycarbonate with vinyl graphics. City of Peoria logos shall be printed vinyl graphics.



Expires: 9/30/12

Each face shall consist of the street name, the block numbers and direction as shown in the Illuminated Street Name Sign Detail in the plans. The City of Peoria logo shall be placed on the right side.

Illumination shall be LED lamps.

All steel bracket and mounting hardware components shall be hot-dipped galvanized (ASTM #A123). Steel brackets shall be attached to top and bottom of cabinet for pole mount attachment.

Construction Requirements:

The contractor shall submit illuminated street name sign (I.S.N.S.) details and mounting details to the City of Peoria for approval a minimum of 3 weeks prior to the estimated installation date and prior to fabrication.

Sign cabinets shall be mounted on traffic signal poles as shown on the plans and in conformance with the following mounting height requirements:

- Base of cabinet shall be 4.25 to 4.50 feet above top of traffic signal mast arm mount,
- Base of cabinet shall clear traffic signal mast arm by a minimum of 8 inches at cabinet's outer edge, and
- Top of cabinet shall be a minimum of 90 inches below base of luminaire mast arm.

The contractor shall drill a 1/2-inch hole in the traffic signal pole for the primary on the side of the pole that will display the front side of the sign cabinet. The hole shall be tapped for threaded fitting. The final tapped fitting shall be fitted with a watertight seal when the sign cabinet is installed.

All screws and bolts used for mounting sign cabinets shall have a threaded locking compound applied prior to installation.

Method of Measurement:

ITEM 7310655 Luminated Sign Fixture will be measured as a unit for each luminated sign fixture furnished and installed.

Basis of Payment:

The accepted quantity of ITEM 7310655 - Luminated Sign Fixture, measured as provided above, will be paid for at the contract unit price per each, which shall be full compensation for the item complete in place, as shown on the plans and described above.

No payment will be made for developing and delivering to the City of Peoria the shop drawings and mounting details for illuminated street name signs, the cost being considered as included in the price of the luminated sign fixture.

2. On Sheet 131 of 197, the telephone number in the fourth paragraph is revised to read:

(623) 773-7456

3. On Sheets 139 and 140 of 197, **ITEM 7370450 – MISCELLANEOUS ELECTRICAL**, is deleted in its entirety:

4. On Sheet 159 of 197, **Construction Requirements of ITEM 9210016 – MEDIAN PAVING (DECORATIVE PAVEMENT)** are modified to add:

Median paving shall be constructed in accordance with Standard Detail C-05.40.

REVISIONS TO PLANS:

1. On Sheet 85 of 104, in the Remarks section of the POLE LAYOUT SCHEDULE, remarks that begin "Relocate ISNS..." shall be revised to read:

Install new ISNS...

REVISIONS TO BID SCHEDULE:

Attached are revised Pages 6 to 10 of 10 of the Bid Schedule. Revisions have been given a distinctive mark. These revised sheets will be used in the determination of the low bidder on this project.



BARRY CROCKETT
Engineer-Manager
Contracts & Specifications Section

BC:RIM:rim:603Addm2

Attachment: Revised Sheets 6 to 10 of Bid Schedule – 5 Sheets

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
7320060	ELECTRICAL CONDUIT (2 1/2") (PVC)	L.FT.	3,905		
7320070	ELECTRICAL CONDUIT (3") (PVC)	L.FT.	1,330		
7320291	ELECTRICAL CONDUIT (4 - 1 1/4" HDPE)(DIRECTIONAL DRILL)	L.FT.	155		
7320420	PULL BOX (NO. 7)	EACH	3		
7320421	PULL BOX (NO. 7) (WITH EXTENSION)	EACH	1		
7320456	PULL BOX (UTILITY COMPANY SUPPLIED)	EACH	27		
7320460	PULL BOX (STANDARD DETAIL PE-034)(CITY OF PEORIA)	EACH	1		
7320650	CONDUCTORS	L.SUM	1		
7320789	SINGLE MODE FIBER OPTIC CABLE (12 FIBER)	L.FT.	65		
7320794	FIBER OPTIC SPLICE CLOSURE (	EACH	1		
7330060	TRAFFIC SIGNAL FACE (TYPE F)	EACH	8		
7330130	TRAFFIC SIGNAL FACE (TYPE Q)	EACH	4		
7330135	TRAFFIC SIGNAL FACE (TYPE R)	EACH	8		
7330210	TRAFFIC SIGNAL FACE (PEDESTRIAN) (MAN/HAND)	EACH	8		
7330220	PEDESTRIAN PUSH BUTTON	EACH	8		

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
7330310	TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE II)	EACH	12		
7330340	TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE V)	EACH	4		
7330360	TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE VII)	EACH	2		
7330400	TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE XI)	EACH	8		
7330550	REMOVE AND SALVAGE TRAFFIC SIGNALS AND LOAD CENTER CABINETS	L.SUM	1		
7340098	CONTROL CABINET	EACH	1		
7340120	METER PEDESTAL CABINET	EACH	1		
7340300	CONTROL CABINET FOUNDATION	EACH	1		
7340306	METER PEDESTAL FOUNDATION	EACH	1		
7350208	VIDEO DETECTION SYSTEM (5 CAMERA)	L.SUM	1		
7350551	OPTICOM PRE-EMPTION UNIT	EACH	4		
7360030	LUMINAIRE (HORIZONTAL MOUNT) (HPS 250 WATT)	EACH	27		
7370455	MISCELLANEOUS ELECTRICAL (AS-BUILTS)	L.SUM	1		
7370705	CCTV FIELD EQUIPMENT	EACH	1		
8070011	LANDSCAPING ESTABLISHMENT (	MONTH	3		

2

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
8080190	RELOCATE AIR RELEASE VALVE	L.SUM	1		
8080646	RESET FRAME AND COVER FOR VALVE BOX	EACH	4		
8080655	RELOCATE FIRE HYDRANT	EACH	5		
8081003	WATER MAIN (REALIGNMENT) (	EACH	1		
8101012	EROSION CONTROL (SILT FENCE)	L.FT.	3,250		
8101017	EROSION CONTROL (INLET PROTECTION)(WATTLES W/GRAVEL BAGS)	EACH	5		
9010001	MOBILIZATION	L.SUM	1		
9080101	CONCRETE CURB AND GUTTER, TYPE A (MAG DET. 220)	L.FT.	3,565		
9080104	CONCRETE CURB AND GUTTER, TYPE D (MAG DET. 220)	L.FT.	46		
9080108	CONCRETE SINGLE CURB (MAG DET. 222)(TYPE A) (H=7")	L.FT.	2,024		
9080241	CONCRETE SIDEWALK (MAG DET. 230 & 231)	SQ.FT.	17,749		
9080296	CONCRETE SIDEWALK RAMP (MAG DET. 231)	EACH	7		
9080305	CONCRETE DRIVEWAY (CITY OF PEORIA DET. 251)	SQ.FT.	9,979		
9080350	CONCRETE DRIVEWAY (MAG DET. 250)	SQ.FT.	366		

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
9080602	CONCRETE BUS SHELTER PAD (PHOENIX DET. P1256-1)	SQ.FT.	855		
9140113	WALL (BLOCK)	SQ.FT.	1,674		
9210016	MEDIAN PAVING (DECORATIVE PAVEMENT)	SQ.YD.	404		
9240010	FORCE ACCOUNT WORK (REPAIR LANDSCAPING AND IRRIGATION SYSTEMS)	L.SUM	1	\$40,000.00	\$40,000.00
9240012	FORCE ACCOUNT WORK (GEOTEXTILE FABRIC)	L.SUM	1	\$5,000.00	\$5,000.00
9240015	FORCE ACCOUNT WORK (PROVIDE ELECTRICAL SERVICE)	L.SUM	1	\$5,000.00	\$5,000.00
9240047	MISCELLANEOUS WORK (ABANDON PIPE AND BACKFILL WITH SLURRY)	CU.YD.	262		
9240050	MISCELLANEOUS WORK (RELOCATE METERS, VALVES, BOXES AND BACKFLOW PREVENTER ASSEMBLIES)	L.SUM	1		
9240051	MISCELLANEOUS WORK (FIRE DEPARTMENT CONNECTION PIPE)	L.SUM	1		
9240058	MISCELLANEOUS WORK (WALL ENCLOSURE)	L.SUM	1		
9240060	MISCELLANEOUS WORK (RELOCATE FRY'S PARKING LOT LIGHT ASSEMBLY)	L.SUM	1		
9240062	MISCELLANEOUS WORK (AS-BUILT DRAWINGS)	L.SUM	1		

BID SCHEDULE

0000 MA PEO SS60301C

Item No.	Item Description	Unit	Quantity	Unit Price	Extended Amount
9240120	MISCELLANEOUS WORK (RUGGEDCOM RS900G)	EACH	1		
9240121	MISCELLANEOUS WORK (IMPATH ENCODER)	EACH	1		
9240170	CONTRACTOR QUALITY CONTROL	L.SUM	1		
9250001	CONSTRUCTION SURVEYING AND LAYOUT	L.SUM	1		

BID TOTAL :