	CITY OF GOODYEAR	OFFICE OF PROCUREMENT 190 North Litchfield Road P.O. Box 5100 Goodyear, Arizona 85338 Phone: 623-882-7845
	CONSTRUCTION CONTRACT (Design Bid Build) CONTRACT NO. CON-15-3204	

Solicitation Number: 15-3204

Materials and/or Service: Goodyear Boulevard Improvements – Yuma Road to Estrella Parkway

Solicitation Due Date: February 2, 2015 **Time:** 3:00 pm (Arizona Time)

Mailing Address: City of Goodyear, City Hall Front Desk
190 North Litchfield Road
P.O. Box 5100
Goodyear, AZ 85338

Procurement Specialist: Victoria Jackson, CPPB
Phone: (623) 882-7845
Email: Victoria.jackson@goodyearaz.gov

All Bidders must be received by the City of Goodyear, City Hall Front Desk, at the specified location by the date and time cited above. Late Bidders will not be considered. Bidders received by the correct date and time shall be publicly opened and read. Bidders are advised to carefully read the entire solicitation package. Bidders that do not comply with all Instructions to Bidders may be disqualified.

Solicitation packages must be obtained by downloading from the City of Goodyear's website: www.goodyearaz.gov and following these instructions: Enter City website, click on BUSINESS, click on Vendor Services/Procurement, click on Solicitations for Bids/Proposals, click on IFB 15-3204. Should you experience problems downloading the solicitation, contact Victoria Jackson, CPPB at the above email address.

Attendance at the Pre-Bidder Conference is mandatory; however, Bidders are strongly encouraged to attend.

Pre-Bidder Conference: January 26, 2015, 1:30 p.m. (Arizona Time)

Pre-Bidder Location: City of Goodyear – City Hall
190 N. Litchfield Road, Conference Room 117
Goodyear, AZ 85338

All communications concerning this solicitation must be directed to the responsible Procurement Specialist identified above, **via email only**. Communications with other city staff may disqualify you from the bidding process.

BIDDERS ARE STRONGLY ENCOURAGED TO READ THE ENTIRE SOLICITATION.

Published in the Arizona Republic Southwest Section on: January 14, 16, 21 and 23, 2015.

**CITY OF GOODYEAR****CONSTRUCTION CONTRACT**

(Design Bid Build)

CONTRACT NO. CON-15-3204**OFFICE OF PROCUREMENT**

190 North Litchfield Road

P.O. Box 5100

Goodyear, Arizona 85338

Phone: 623-882-7845

DESCRIPTION OF SERVICES: Goodyear Boulevard Improvements – Yuma Road to Estrella Parkway

OFFER

To the City of Goodyear: The undersigned Contractor hereby offers and agrees to furnish the Services and/or material(s) in compliance with this Contract, as the term Contract is defined in this document.

By signing and submitting this Offer, Contractor certifies and warrants that Contractor: has read, understands and agrees to comply with the Contract as defined here; has no known, undisclosed conflict of interest; has not made an offer of any gift(s), payment(s) or other consideration to any City employee, elected official who has or may have had a role in the procurement process for this Contract; v) pursuant to A.R.S. § 41-4401, Contractor and its subcontractors will comply with all immigration laws and regulations that relate to its employees and A.R.S. § 23-214; and the signatory is an officer or duly authorized agent of the Contractor with full power and authority to submit binding offers for the goods and/or services as specified herein.

Arizona Transaction (Sales): 07-41085848

Arizona Contractor License Number: 100380A

Privilege Tax License # 86-0744516

City of Goodyear Business Registration No.: N/A

For clarification of this offer contact:

Name: Steven S. Haws

Telephone: 602-237-4029

E-Mail Address: manad@combsaz.com

Combs Construction Company, Inc.

Company Name

P.O. Box 10789

Address

Glendale

City

AZ 85318

State

Zip Code

Sign: Steven S. Haws

Authorized Signature for Offer

Steven S. Haws

Printed Name

President 2/02/15

Title

Date

ACCEPTANCE OF OFFER AND CONTRACT AWARD (For City of Goodyear Use Only)

Contractor's Offer is hereby accepted and a Contract awarded by the City. Contractor is now bound to provide the materials and/or services as specified in Scope of Work of this Contract. Contractor shall not start any billable work or provide any material/services until the Contractor receives an executed purchase order or written notice to proceed.

City Manager, City of Goodyear (if applicable)

Attested by:

Maureen Scott, City Clerk

City Seal

Official File

City of Goodyear, Arizona.

Eff. Date: _____

Awarded on _____

Approved as to form:

Roric Massey, City Attorney

Jacque Behrens, CPPB, Procurement Manager



	CITY OF GOODYEAR	OFFICE OF PROCUREMENT 190 North Litchfield Road P.O. Box 5100 Goodyear, Arizona 85338 Phone: 623-882-7845
	CONTRACT NO. CON-15-3204	

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	CITY OF GOODYEAR	OFFICE OF PROCUREMENT 190 North Litchfield Road P.O. Box 5100 Goodyear, Arizona 85338 Phone: 623-882-7845
	INSTRUCTIONS TO BIDDERS CONTRACT NO. CON-15-3204	

1. **PREPARATION OF BIDDER**

- a. It is the responsibility of all Bidders to examine the entire solicitation package and seek clarification from the responsible Procurement Specialist of any item or requirement that may not be clear, and to check all responses for accuracy and confirm that Bid can comply with all Contract Document requirements before submitting a Bid.
- b. All Bids shall be on the forms provided in the solicitation package. It is permissible to copy these forms if required. Telegraphic (facsimile) or email bids will not be considered
- c. The Bidder and Acceptance document shall be returned with the submittal with an original blue ink signature by a person authorized to sign the Bidder. Pricing documents and other documents which require information to be filled in must be done in ink, typewritten or computer printed. No Bids will be accepted if pencil is used. Erasures, interlineations, or other modifications in the Bid shall be initialed in original blue ink by the authorized person signing the Bid.
- d. It is the Bidders responsibility to obtain a copy of any addenda relevant to this solicitation. Failure to submit addenda with the solicitation response may be grounds for deeming a bid non-responsive.
- e. Bids shall be submitted in a sealed envelope provided by the Bidder, and should include the Bidders name, address and solicitation number on outside of the sealed envelope/package.
- f. Periods of time, stated as a number of days, shall be calendar days, unless otherwise provided.
- g. It is the responsibility of the Bidder to submit the Bid at the place and by the time provided in the solicitation.
- h. Negligence in preparing an offer confers no right of withdrawal after the due date and time of the Bid. No Bidder shall be altered, amended, or withdrawn after the specified Bidder due date and time.
- i. Bidders shall include all costs as described and indicated by the specifications. The City is exempt from Federal Excise Tax, including the Federal Transportation Tax. Sales tax, if any, shall be indicated as a separate item.
- j. If price is a consideration, and in case of error in the extension of prices in the Bidder, the unit price shall govern.
- k. The City shall not reimburse the cost of developing, presenting, or providing any responses to this solicitation. Bids submitted for consideration should be prepared simply and economically, providing adequate information in a straightforward and concise manner.
1. Bidders shall submit one (1) unbound single-sided original, marked "original". Fee schedule, bonding and all solicitation amendments must be clearly tabbed.

2. SERIAL NUMBERS

Bids shall be for equipment on which the original manufacturer's serial number, if applicable, has not been altered in any way. Throughout the contract term, the City reserves the right to reject any altered equipment.

3. BRAND NAMES

Any manufacturer's names, trade names, brand names, or catalog numbers used in the specifications are for the purposes of describing and establishing the quality level, design and performance desired. Such references are not intended to limit or restrict bidding by other vendors, but are intended to establish the quality, design or performance which is desired. Any Bidder which proposes equal or greater quality, design or performance may be considered. The city has the sole authority to accept or reject any like items.

4. SUBSTITUTIONS OR EXCEPTIONS

The City reserves the option to not consider Bids for award if the Bidder: i) takes any exception to the specifications and the City does not agree or accept the proposed changes; or ii) proposes a unit which does not meet the City's specifications exactly and the Bidder does not additionally propose the specified unit prior to bid opening, and the City rejects the alternative identified.

5. DESCRIPTIVE LITERATURE

All bidders shall include complete manufacturer's descriptive literature regarding the equipment and goods they propose to furnish. Literature shall be sufficient in detail in order to allow full and fair evaluation of the Bidder submitted. Failure to include this information may result may result in the bid being rejected.

6. PREPARATION OF SPECIFICATIONS BY PERSONS OTHER THAN CITY PERSONNEL

All specifications shall seek to promote overall economy for the purposes intended and encourage competition and not be unduly restrictive in satisfying the City's needs. No person preparing specifications shall receive any direct or indirect benefit from the utilization of specifications, other than fees paid for the preparation of specifications.

7. INQUIRIES

Any questions related to the solicitation shall be directed to the responsible Procurement Specialist whose name appears on the front page **via email only**. The Bidder shall not contact or ask questions of other City staff or the City department for which the requirement is being procured. Any correspondence related to a solicitation should refer to the solicitation number, page, and paragraph number. All questions must be submitted no later than the close of business five (5) calendar days prior to the opening date.

8. BONDING

A bid bond for ten (10%) of the Bid price is required to be submitted with the Bid. A performance bond for one hundred (100%) of the Contract price is required at the time of execution of the Contract and shall meet the requirements of A.R.S., Title 34, as amended, if applicable. A payment bond for one hundred (100%) of the Contract price is required at the time of execution of this Contract and shall meet the requirements of A.R.S., Title 34, as amended, if applicable.

9. PRE-BID CONFERENCE

Attendance at scheduled Pre-Bid Conferences is mandatory. The date, time and location of the conference are indicated on the cover page of this document. The purpose of this conference will be to clarify the contents of this solicitation in order to prevent any misunderstanding of the City's

position. Any doubt as to the requirements of this solicitation or any apparent omission or discrepancy should be presented to the City at this conference. The City will then determine if any action is necessary and may issue a written amendment to the solicitation. *Oral statements or instructions will not constitute an amendment to this solicitation.*

10. LATE BIDS/MODIFICATIONS/WITHDRAWALS

Bids, modifications of Bids, and withdrawals received *after* the due date and time specified for receipt will be rejected and returned to the Bidder unopened. A Bidder (or designated representative) may withdraw their Bid via email to the responsible Procurement Specialist any time *prior* to the solicitation due date and time.

11. AMENDMENT OF SOLICITATION

The Bidder must submit a signed copy of any solicitation amendment(s) with their Bid. It is the responsibility of the Bidder to obtain the amendment from the City website.

12. PUBLIC RECORD/CONFIDENTIAL INFORMATION

All Bids submitted in response to this solicitation shall become the property of the City and shall become a matter of public record available for review, subsequent to the award. If the Bidder believes that any information provided throughout the procurement process should be withheld as confidential, it is the responsibility of the Bidder to submit to the Procurement Manager a statement when the confidential information is submitted which identifies those items the Bid believed to be confidential and the legal reason(s) why they are confidential. The Procurement Manager shall review the request for confidentiality and advise the Bidder in writing if the information will be treated as confidential by the City. If the City receives a public records request for any of the information determined to be confidential by the Procurement Manager, the City will use reasonable efforts to give notice to the Bidder prior to the release of the information. The City at all times remains subject to the requirements of Arizona Public Records laws and will release records accordingly.

13. BID ACCEPTANCE PERIOD

In order to allow for an adequate evaluation, the City requires a Bid in response to this Solicitation to be valid for one hundred twenty (120) days after the opening time and date.

14. DISCUSSIONS

The City reserves the right to conduct discussions with Bidders for the purpose of eliminating minor irregularities, informalities, or apparent clerical mistakes in the submittal in order to clarify an offer and assure full understanding of, and responsiveness to, solicitation requirements.

15. PERSONNEL

It is essential that the Bidder provide adequate experienced personnel, capable of and devoted to the successful accomplishment of the work to be performed in this Solicitation. The Bidder agrees that those persons identified in their submittal shall not be removed or replaced without a written request to and approval from the City.

16. AWARD OF CONTRACT

- a. The contract will be awarded pursuant to the provisions of the City of Goodyear Procurement Code. Unless the Bid states otherwise, or unless provided within this solicitation, the City reserves the right to award by individual line item, by group of line items, or as a total, whichever is deemed most advantageous to the City. Notwithstanding any other provision of this solicitation, the Procurement Manager further reserves the right to i) waive any immaterial defect

or informality; ii) reject any or all Bids, or portions thereof; iii) reissue the solicitation; or iv) modify or cancel this solicitation. The Procurement Manager shall have the sole discretion to determine to whether a defect is immaterial and/or an informality.

- b. A response to a solicitation is an offer to contract with the City based upon the terms, conditions and specifications contained in the City's solicitation and the written amendments thereto, if any. If City Council approval is necessary, Bids do not become contracts unless and until they are accepted by the City Council. A contract is formed when written notice of award(s) is provided to the successful Bidder(s). The Contract has its inception in the award document, eliminating a formal signing of a separate contract.
- c. In the event the City should receive two or more identical Bids, the awardee will be determined by lottery.

17. BUSINESS REGISTRATION PERMIT

All Bidders awarded contracts with the City shall be required to obtain a City of Goodyear Business Registration Permit through the Goodyear Business Registration Office. For further information call Myra Russell at (623) 882-7928 or myra.russell@goodyearaz.gov


18. PROTESTS

- a. Any interested party may protest a solicitation issued by the City or the proposed award or the award of a City Contract by submitting a request in writing with the Procurement Manager for the City of Goodyear, with a copy directed to the City Attorney for the City of Goodyear as follows:

JACQUE BEHRENS
PROCUREMENT MANAGER
CITY OF GOODYEAR
P.O. Box 5100
190 NORTH LITCHFIELD ROAD
GOODYEAR, AZ 85338

RORIC MASSEY
CITY ATTORNEY
CITY OF GOODYEAR
P.O. Box 5100
190 NORTH LITCHFIELD ROAD
GOODYEAR, AZ 85338

- b. Writing: All protests must be in writing and shall include the following information:
 - The name, address and telephone number of the protester;
 - The signature of the protester or its representative;
 - The solicitation or contract number;
 - A detailed statement of the legal or factual grounds of the protest including copies of relevant documents; and
 - The form of relief requested. R3-4-16.01
- c. Time Frame: To be considered, protests must be filed during the time frame identified in the procurement code.
 - *Protests of a solicitation* must be filed within five (5) days of the first advertising of the solicitation.
 - *Protests of an award* must be filed within ten (10) days of the issue date of the Notice of Award or Notice of Intent to Negotiate and Award.
- d. The Procurement Manager is required to notify all interested parties that a protest has been filed

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	STANDARD TERMS AND CONDITIONS CONTRACT NO. CON-15-3204	

Article 1 – Definitions

Addenda written or graphic instruments issued prior to the submittal of the Proposal(s), which clarify, correct or change the Proposal(s) requirements.

Agreement and Contract means this written document signed by the City and Contractor covering the construction of the Project, and including other documents itemized and referenced in or attached to and made part of this Contract.

ASTM means the American Society for Testing and Materials.

AWWA means American Water Works Association.

Change Order (Amendment) means a written instrument issued after execution of this Agreement signed by City and Contractor, stating their agreement upon all of the following: the scope of the change in the Work; the amount of the adjustment to the Contract Price; the extent of the adjustment to the Contract Time(s) or modifications of other contract terms.

City and Owner means the City of Goodyear, a municipal corporation, with whom Contractor has entered into this Contract and for whom the services is to be provided pursuant to said Contract.

City's Representative means the person or his/her designee authorized by the City of Goodyear to function on behalf of the City with reference to this Project.

Contract Documents means the Notice to Contractors, Solicitation, Instructions to Bidders, Standard Terms and Conditions, Scope of Work, Supplemental General Conditions, Special Provisions, Supplemental Specifications, Proposal, Proposal Acknowledgement, Contract, Payment Bond, Performance Bond, Certificates of Insurance, Construction Documents, Bid Proposal, Subcontractor Listing, Construction Drawings, Contractor's Affidavit Regarding Settlement of Claims, Plans, Addenda and Exhibits.

Contract Price means the amount or amounts set forth in Article 5 subject to adjustment in accordance with this Agreement.

Contract Time means the period of time, as set forth in Article 4, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

Contractor means the person, firm, or corporation with whom the Contract is made by the City.

Construction Documents means the approved construction plans, specifications and drawings prepared by the engineer.

Construction Drawings means the detailed drawings approved as part of the Construction Documents.

Construction Fee means the Contractor's administrative costs, home office overhead, and profit.

Cost of the Work means the direct costs necessarily incurred by the Contractor in the proper performance of the Work. The Cost of the Work shall include direct labor costs, subcontract costs, costs of materials and equipment incorporated in the completed construction, costs of other materials and equipment, temporary facilities, building permit fees (if not paid for by City), materials testing, and related items. The Cost of the Work shall not include the Contractor's Construction Fee, General Conditions Costs, or taxes.

Critical Path means the sequence of activities from the start of the Work to the Substantial Completion of the Project. Any delay in the completion of these activities will extend the Substantial Completion date.

Day(s) means calendar days unless otherwise specifically noted in the Contract Documents.

Deliverables means the Work products prepared by the Contractor in performing the scope of Work described in this Contract. Some of the major deliverables to be prepared and provided by the Contractor during the construction phase may include but are not limited to: Project Schedule, cost estimates, cash flow projections, Subcontractor procurement plan, Subcontractor agreements, Subcontractor bid packages, Supplier agreements, and others as indicated in this Contract or required by the Project Team.

Differing Site Conditions means concealed or latent physical conditions or subsurface conditions at the Site that, (i) materially differ or are not reasonably inferable from the conditions indicated in the Contract Documents or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work.

Engineer means a person, firm or corporation duly authorized by the City, to act for the City inspecting materials and construction, interpreting plans and specifications, and such other Work as provided in the Contract Documents.

Final Acceptance means the completion of the Project as provided in Article 4.

Legal Requirements means all applicable federal, state and local laws, codes, ordinances, rules, regulations, orders and decrees of any government or quasi-government entity having jurisdiction over the Project or Site, the practices involved in the Project, Site or Work.

Materials means in addition to materials incorporated in the Project, equipment and any other material used and/or consumed in the performance of the Work.

Notice to Proceed and NTP means the directive issued by the City, authorizing the Contractor to start Work.

Payment Request means the City form used by the Contractor to request payment for Work in accordance with Article 7.

Performance Period means the period of time allotted in the Contract Documents to complete the construction comprised within the Contract Documents.

Product Data means illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the construction.

Project means the Work to be completed in the execution of this Agreement and as amended and as described in the Recital above and in.

Project Schedule means a schedule as prescribed in Article 4.

Samples means physical examples which illustrate materials, equipment or workmanship and establish standards by which the construction will be judged.

Shop Drawings mean drawings, diagrams, schedules and other data specially prepared for the construction by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the construction.

Site means the land or premises on which the Project is located.

Subcontractor and Subconsultant means an individual or firm having a direct contract with the Contractor or any other individual or firm having a contract with the aforesaid contractors at any tier, who undertakes to perform a part of the construction phase Work for which the Contractor is responsible.

Substantial Completion means when the Work, or an agreed upon portion of the Work, is sufficiently complete so that City can occupy and use the Project or a portion thereof for its intended purposes. This may include, but is not limited to: (i) approval by City Fire Marshall and local authorities (Certificate of Occupancy); (ii) Elevator Permit; (iii) all systems in place, functional, and displayed to the City or its representative; (iv) all materials and equipment installed; (v) all systems reviewed and accepted by the City; (vi) draft O&M manuals and record documents reviewed and accepted by the City; (vii) City operation and maintenance training complete; (viii) HVAC test and balance completed (Provide minimum thirty (30) days prior to projected substantial completion); (ix) landscaping and site work; and (x) final cleaning.

Supplier means a manufacturer, fabricator, supplier, distributor, material man or vendor having a direct contract with Contractor or any Subcontractor to furnish materials or equipment to be incorporated in the construction phase Work by Contractor or any Subcontractor.

Work means all design, construction, and Commissioning services, including procuring and furnishing materials, equipment, services, and labor reasonably inferable from the Contract Documents.

Article 2 –Contractor’s Responsibilities

2.1 General Performance. The Contractor shall provide any and all labor, materials, equipment, transportation, utilities, services and facilities required to perform all Work required by the Contract Document, and to completely and totally construct the same and install the material therein for the city. All Work will be performed in a good, workmanlike, and substantial manner with appropriate consideration for public safety and within the care and skill of a qualified Contractor in the State of Arizona. The Work shall be to the satisfaction of the City and strictly constructed pursuant to and in conformity with the Projects’ Contract Documents. It is the responsibility of the Contractor to ensure the its subcontractor’s, agents and representatives comply with the Contract Document requirements.

2.2 Pre-Construction Conference. After completion of the Contract Documents, to include bonds, insurance and signatures, and prior to the commencement of the Work on the Project, the City Project Manager will schedule a Pre-Construction Conference. The time and place will be determined and confirmed via phone call and an e-mail calendar schedule.

The purpose of the Pre-Construction Conference is to establish a working relationship between the Contractor, utility companies, City Representative and the Engineer, and to assure all parties are familiar with the applicable requirements for federally assisted projects. The agenda will include critical elements of the construction schedule, procedures for handling Shop Drawings and other submittals , cost breakdown of major lump sum items, payment application and processing, coordination with the involved utility companies, emergency telephone numbers for all representatives involved in the course of construction, and establishment of the Notice to Proceed date.

2.3 Time of Completion. The Contractor shall commence Work under this Project on or before the tenth (10) day following receipt of the Notice to Proceed for that Project from the City of Goodyear and shall fully complete all Work under the Project within **120 consecutive calendar days from and including the date of receipt of such Notice to Proceed.** Time is of the essence in the completion of all Work required under this contract. The Contractor shall, at all times, during the continuance of the contract, prosecute the Work with such force and equipment as is sufficient to complete all Work within the time specified.

2.4 Responsibility for Damage Claims. The Contractor shall indemnify, save, and hold harmless the City and its officers, agents and representatives from all suits, actions, loss damage, expense, cost or claims of any character or nature brought on account of any injuries or damages sustained by a person or property, including any physical damage to City property and loss of use of City property, arising out of or related to the Work done in fulfillment of the construction of the improvement under the terms of this Agreement, or on account of any act or omission by the Contractor, Contractor’s agents, or subcontractors or from any claims or amounts arising or recovered under Workers’ Compensation Laws or any other applicable laws, bylaws, ordinances, orders or decrees.

2.5 Dust Prevention. The Contractor shall take whatever steps, procedures or means required to prevent abnormal dust conditions due to their construction operations in connection with this Contract. The dust control measures shall be maintained at all times during construction of the

Project, to the satisfaction of the City Representative, in accordance with the requirements of the Maricopa County Department of Public Health, Air Quality Department Air Pollution Control regulations which have been adopted pursuant to the authority granted by Title 49, Article 3, Arizona Revised Statutes. The Contractor shall be required to obtain all necessary permits from the Maricopa County Air Quality Department, including the Dust Prevention and Earth Moving permits from the Maricopa County Air Quality Department, Dust Compliance Division, and any other permits required by law.

The Contractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act of 1970 (42 U.S.C. 1857, etc. seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et. seq.) as amended on contracts in excess of \$100,000. Violations shall be reported to the Department of Housing and Urban Development and the Regional Office of the Environmental Protection Agency.

- 2.6 **Excess Material.** Excess material shall be removed from the Work site and wasted at a location approved by the City Representative. Broken concrete and asphalt are to be delivered to a sanitary landfill at contractor's expense. The prevailing regulations and fee schedule will not be waived for Work under this Project. All materials, to be disposed of at the landfill, shall be weighed and disposed of at the prevailing rate.
- 2.7 **Stockpile of Materials.** The Contractor may place or stockpile materials in the public right-of-way, with the prior written consent of the City Representative, provided they do not prevent access to adjacent properties or prevent compliance with traffic regulations. Traffic shall not be required to travel over stockpiled materials, and proper dust control shall be maintained, as required by law.
- 2.8 **Refuse Collection Access.** At any time the Project construction shall require the closure or disruption of traffic in any roadway, alley, or refuse collection easement such that it will limit refuse collection on any weekday in any City Service Area (including but not limited to residential or multi-family dwellings), the Contractor shall at least 72 hours prior to causing such closure or disruption, contact the City's Representative to provide a list of all addresses which may be affected by the closure or disruption and make arrangements to ensure that refuse collection service can be maintained and advance notice provided to all affected residents
- 2.9 **Clean-Up.** After all Work under this Contract is completed, the Contractor shall remove all loose concrete, lumber, wire, reinforcing, debris, and other materials not incorporated in the Work, from the site of the Work. Clean-up shall include the removal of all excess pointing mortar materials within pipes and removal of over-size rocks and boulders left after finish grading. The Contractor shall provide for the clean-up and legal disposal of all waste products, debris, etc., and shall make necessary arrangements for such disposal.
- 2.10 **Shop Drawings.** The Contractor shall provide the Engineer any and all shop drawings as may be necessary for the prosecution of the Work as required by the Contract Documents. The Engineer shall promptly review all shop drawings. The Engineer's approval of any shop drawing shall not release the Contractor from responsibility for deviations from the Contract Documents. The approval of any shop drawing which substantially deviates from the requirements of the Contract Documents shall be evidenced by a change order.

When submitted for the Engineer's review, Shop Drawings shall bear the Contractor's stamp and certification that he or she has reviewed, checked, and approved the Shop Drawings and that the Shop Drawings are in full compliance with the requirements of the Contract Documents.

Portions of the Work requiring a shop drawing or sample submission shall not begin until the Shop Drawing or sample submission has been approved by the Engineer. A copy of each approved Shop Drawing and each approved sample shall be kept in good order by the Contractor at the site and shall be made immediately available to the Engineer upon request.

- 2.11 Protection of Finished or Partially Finished Work.** The Contractor shall properly guard and protect all finished or partially finished Work, and shall be responsible for the same until the entire Contract is completed and accepted, in writing, by the City. The Contractor shall turn over to the City the entire Work in full accordance with the specifications and Contract Documents before final settlement shall be made.
- 2.12 Permits.** The City has obtained certain required permits which are included in the Project specifications, but it will be the duty of the Contractor to determine that all the necessary permits have been obtained. The Contractor shall, at Contractor's own expense, obtain all required permits, which have not been furnished by the City.
- 2.13 Electric Power and Water.** The Contractor shall be responsible for making all arrangements for electric power and water sufficient to meet their needs, include providing the meter(s). Subject to the convenience of the City, the Contractor may be permitted to connect to existing facilities where available, but shall meter and bear responsibility for all actual and related costs of such power and/or water. Installation and removal of meters should be scheduled at least 48 hours in advance through the Public Works & Water Resources Department. Application and installation fee(s) are required for each meter. The cost of the water is at the prevailing rate.
- 2.14 Survey Control Points and Monuments.** Existing survey monuments indicated on the plans or found during construction shall be protected by the Contractor, and in the event removal is necessary, removal and replacement shall be performed by permission of the City Representative, under direct supervision of the City Representative. The replacement of existing survey monuments shall be constructed to conform to the requirements of MAG Specifications, Section 405, and Standard Details.
- 2.15 Existing Utilities.** The Contractor is hereby advised that the location of all utilities, as shown on the plans, may not be complete nor exact and the Contractor shall satisfy himself as to the exact location of the utilities by contacting Blue Stake or the utility companies before proceeding with the Work. After the underground utilities are located by Blue Stake or the utility company, the Contractor shall excavate in a careful and prudent manner to prevent damage to the underground utilities.

Contractor will be permitted to review the "as-builts" to assist Contractor in locating the non-City owned sewer service lines. These "as-builts" were prepared, and supplied to the City, by private developers or contractors who installed the non-City owned sewer service lines. The

City does not guarantee or warranty the accuracy of such "as-builts" and the Contractor, as a condition for being allowed to review such "as-builts", hereby agrees to hold the City harmless for any and all damages or other expenses Contractor may incur as a result of any inaccuracies or incorrect information in these "as-builts".

In the event an existing underground City of Goodyear water or sewer line, that has been properly identified, is damaged by the Contractor, the Contractor shall be responsible for the repairs and associated costs at the Contractor's expense.

The exact location of all existing underground service utilities, whether or not indicated on the plans, shall be determined by the Contractor at no expense to the City. The Contractor shall conduct all Work so as to prevent interruption of service or damage to service utilities.

The Contractor shall protect existing utility services and be responsible for their replacement if damaged by the Contractor or subcontractors, or to make necessary adjustment in their location, if required, in order to complete all Work under this Contract.

- 2.16 Maintenance of Irrigation Facilities.** Where irrigation facilities interfere with construction, the Contractor shall remove and replace the affected irrigation facilities to its original condition. Final acceptance of replaced facilities will depend upon final approval of the Engineer.
- 2.17 Southwest Gas Facilities Exposed During Construction.** The Contractor, upon exposing a gas line during construction, shall immediately notify Southwest Gas and the City Representative, if the line is damaged. Southwest Gas will respond usually within the hour, to inspect the line(s) and will advise the Contractor regarding the nature of the repair and who is responsible for completing the repairs. The Contractor is responsible for all costs of repair as provided herein.
- 2.18 Rights-of-Way.** The City will provide rights-of-way and easements for all Work specified in this Contract, and the Contractor shall not enter or occupy with man, tools, equipment or materials any public or private ground not owned by the City of Goodyear, without the consent of the property owner. It is also the Contractor's responsibility to ensure that all of its subcontractors, agents and employees comply with this provision.
- 2.19 Subcontracts.** Subcontracts shall be in accordance with, and the Contractor shall be bound by, the following provisions:
- a. All subcontracts shall be subject to the prior written approval of the City;
 - b. All subcontracts shall be in writing and shall provide that all Work to be performed thereunder shall be performed in accordance with the terms of the Contract. Certified copies of any and all subcontracts shall be furnished to the City Engineering Department; however, prices may be omitted;
 - c. Subcontracts shall conform to the regulations governing employment of labor;
 - d. The subcontracting of any part of the Work will in no way relieve the Contractor of his or her responsibility under the Contract; and

- e. A list of subcontractors and major material suppliers, \$20,000 or more is a part of the Form of Bid and shall be submitted when applicable. Subcontractors and material suppliers must not be debarred from transactions with the federal government.

2.20 Character of Workmen. Only skilled foremen and workers shall be employed on Work requiring special qualifications. When required by the City's Representative, the Contractor shall promptly discharge any person who is, in the opinion of the City Representative, disorderly, dangerous, insubordinate, incompetent, or otherwise objectionable. The Contractor shall hold the City harmless from damages or claims for compensation that may occur in the enforcement of this section of the Contract.

2.21 Hindrances and Delays. Except as otherwise provided herein, no charge shall be made by the Contractor for hindrances or delays for and from any cause during the progress of the Work included in this Contract; but such delays, if due to no fault or neglect of the Contractor, shall entitle the Contractor to an extension of time allowed for completing the Work, sufficient to compensate for the delay, the amount of the delay to be determined by the City Representative, provided the Contractor shall give the City Representative immediate notice in writing of the cause of such delay.

2.21.1 Delay. In the event of a delay for which the City is solely responsible, which is unreasonable under the circumstances and which was not within the contemplation of City and Contractor at the time this Contract is executed, City and Contractor shall negotiate, in good faith, a payment by the City to Contractor for the expenses incurred by Contractor as a result of such delay. This provision shall not be construed to void any provision in the Contract which requires notice of delay or provides for liquidated damages. However, if the delay is the result of any act or neglect of a third party, including the architect, engineer or other Contractor employed by the City, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonably foreseeable, unavoidable casualties, or any causes beyond the Contractor's control, the Contractor shall not be entitled to any payments or compensation for expenses incurred as a result of such delay, but the Contract Time shall be extended by Change Order for such reasonable time as the City Representative may determine. No extension or compensation will be granted for any delay which is the result, wholly or partially, of any act or neglect of Contractor or any Subcontractor hired by Contractor.

2.22 Overtime.

2.22.1 Regular Work Hours. The Work required to be performed by the Contract Documents for the Project shall be performed only during regular working hours, unless the City has authorized overtime work in accordance with the procedures set forth below. Regular working hours shall be defined as one 8-1/2 hour shift per day, Monday through Friday, or, upon prior approval of the City, one 10-1/2 hour shift per day on a compressed four day work week during Monday through Friday. Regular working hours shall not include Saturdays, Sundays or City recognized legal holidays.

2.22.2 Authorization and Costs. If the Contractor desires to schedule work for times other than regular work hours (overtime), the Contractor shall make a written request to the City Project Manager at least two (2) business days prior to the scheduled overtime. The City

reserves the right to deny the request to work overtime based on the best interest and needs of the City. If an overtime request is denied, the City may, at its sole discretion, extend the contract time at no additional costs to the City.

In the event the Contractor does perform overtime work, with or without the prior approval of the City, the Contractor shall be responsible to the City for all additional costs that may be incurred by the City as a result of the Contractor's overtime work, including costs for engineering, inspections, testing, surveying and construction administration, all in accordance with MAG Section 108.5. The City's cost will be billed directly to the Contractor or may, at the City's option, be deducted from monies due the Contractor. However, the Contractor shall not be responsible for City's costs incurred as a result of overtime work requested by the City or overtime work resulting from an emergency which is not the responsibility of the Contractor or its employees, subcontractors or suppliers.

2.23 Liquidated Damages.

2.23.1 Should the Contractor fail to substantially complete the Work under this Contract within the time for completion stated in the paragraph "Time of Completion," in the Information for Bidders, then the Contractor shall pay the City of Goodyear, Arizona, liquidated damages, pursuant to the provisions of Section 108.9, Standard Specifications for Public Works Construction, Maricopa Association of Governments, until the Work is substantially complete.

2.23.2 Should the Contractor fail to fully and finally complete the Work under this Contract within the time for completion set forth in the paragraph "Time of Completion," in the Information for Bidders, even though the Contractor has achieved substantial completion of the Work within such time, then the Contractor shall pay the City of Goodyear, liquidated damages (pursuant to the provisions of Section 108.9, Standard Specifications for Public Works Construction, Maricopa Association of Governments), in an amount equal to 50% of the applicable liquidated damage rate set forth in MAG Section 108.9 for each and every calendar day of delay until the Work is fully and finally complete and accepted.

2.23.3 The date of substantial completion shall be the date when the Work is sufficiently complete, in accordance with the Contract Documents, so the City can fully occupy and utilize the Work or designated portion thereof for the use for which it is intended, with all the Project's parts and systems operable as required by the Contract Documents and all the Work is complete, accessible, operable, and usable by the City for its intended purpose(s), and all parts, systems and sitework are 100% complete and cleaned for the City's use. Only incidental corrective Work and final cleaning (if required), beyond cleaning needed for the City's full use, may remain for final completion.

2.23.4 Full and final completion shall be that date when all Work under the Project, including incidental corrective Work under punch list and final cleaning, has been completed and the entire Project is accepted by the City.

Article 3 – City’s Services and Responsibilities

3.1 Duty to Cooperate.

3.1.1 City shall, throughout the performance of the Work, reasonably cooperate with Contractor and perform its responsibilities, obligations and services in a timely manner to facilitate Contractor’s timely and efficient performance of the Work and so as not to unreasonably delay or unreasonably interfere with Contractor’s performance of its obligations under the Contract Documents.

3.1.2 City shall furnish at the Contractor request, and at no cost to the Contractor, the following information or services for this Project identified and requested by Contractor if applicable: (a) a copy of its maps, records, laboratory tests, survey ties and bench marks, or other Data pertinent to the Project; (b) available City Data relative to policies, regulations, standards, criteria, studies, etc. relevant to the Project; or, (c) where required, title searches, legal descriptions, detailed ALTA Surveys, and environmental assessments to the end that the City may proceed with right-of-way acquisition. Contractor shall be solely responsible for searching the records and requesting specific drawings or information and independently verifying the information. City does not warrant, expressly or impliedly, the Data supplied to Contractor.

3.2 City’s Representative.

3.2.1 City’s Representative/Project Manager shall be responsible for providing City-supplied information and approvals in a timely manner to permit Contractor to fulfill its obligations under the Contract Documents.

3.2.2 City’s Representative will provide the Contractor with notice if the City Representative observes any failure(s) on the part of Contractor to fulfill its contractual obligations, including any default or defect in the Project or non-conformance with the Contract Documents.

3.2.3 The City may utilize field inspectors to assist the City’s Representative during construction in observing performance of the Contractor. The field inspector is for the purpose of assisting the City’s Representative in ensuring compliance with Contract Documents and City Engineering Standards and is not authorized to make adjustments or modifications to the Contract Documents, Work or City Engineering standards.

3.2.4 Through onsite observation of the Work in progress and field checks of materials and equipment, the field inspector shall endeavor to provide protection against defects and deficiencies in the Work.

3.2.5 The field inspector will be authorized to inspect all Work and materials furnished. Such inspections may extend to all or part of the Work, and to the preparation, fabrication or manufacture of the materials to be used and that are being used.

3.2.6 The field inspector will not be authorized to issue instructions contrary to the Contract Documents or to act as a foreman for the Contractor.

3.2.7 The field inspector shall have the authority to reject the Work or materials until any questions at issue can be decided by the City’s Representative in a reasonable time.

3.2.8 The furnishing of such services and inspections for the City shall not make the City responsible for or give the City control over construction means, methods, techniques, sequenced or procedures, or for safety precautions or programs or responsibility for the Contractor's failure to perform the Work in accordance with the Contract Documents.

Article 4 – Contract Time

4.1 Contract Time.

4.1.1 Contract Time shall start with the commencement date established in the Notice to Proceed and ends one (1) year after final acceptance by the City.

4.1.2 The Period to achieve substantial completion shall be 180 days commencing with the Notice to Proceed.

4.1.3 Contractor agrees that it will commence performance of the Work as required and achieve the Contract Time.

4.1.4 All of the times set forth in the Contract Documents may be subject to adjustment through an approved Change Order, as set forth in herein. .

4.2 Substantial Completion.

4.2.1 Substantial Completion shall be for the entire Project unless a partial Substantial Completion is identified in the approved Progress Schedule. Substantial Completion shall be in accordance with its definition in Article 1 and with the criteria set forth in the Notice to Proceed.

4.2.2 Contractor shall notify City when it believes the Work, or to the extent permitted in the Contract Documents, a portion of the Work, is substantially complete.

4.2.3 Prior to notifying the City as required by Paragraph 4.2.2, the Contractor shall inspect the Work and prepare and submit to the City a comprehensive list of items to be completed or corrected. The Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

4.2.4 Within five (5) days of City's receipt of Contractor's Notice of Substantial Completion, City's Representative, Engineer and Contractor will inspect such Work to verify that it is substantially complete in accordance with the requirements of the Contract Documents.

4.2.5 If such Work is substantially complete, City shall prepare and issue a Certificate of Substantial Completion that will set forth: (a) the date of Substantial Completion of the Work or portion thereof; (b) the remaining items of Work that have to be completed within thirty (30) calendar days before Final Acceptance; (c) provisions (to the extent not already provided in the Contract Documents) establishing City's and Contractor's responsibility for the Project's security, maintenance, utilities and insurance pending Final Acceptance; and (d) an acknowledgment that warranties commence to run on the date of Substantial Completion, except as may otherwise be noted in the Certificate of Substantial Completion. The Contractor

shall warranty all Work for a period of one (1) calendar year from the date of final acceptance of all Work performed pursuant to this Contract.

4.2.6 City, at its option, may use a portion of the Work which has been determined to be substantially complete, provided, however, that (i) a Certificate of Substantial Completion has been issued for the portion of Work addressing the items set forth in Paragraph 4.2.5 above, (ii) Contractor and City have obtained the consent of their sureties and insurers, and to the extent applicable, the appropriate government authorities having jurisdiction over the Project, and (iii) City and Contractor agree that City's use or occupancy will not interfere with Contractor's completion of the remaining Work.

4.3 **Final Acceptance.** Upon receipt of written notice that the Work or identified portions of the Work is ready for final inspection and acceptance, City, City Representative, Engineer and Contractor will jointly inspect to verify that the remaining items of Work have been completed as set forth in Paragraph 4.2.5. After the inspection and acceptance occurs, the City will issue a Final Acceptance Letter and payment pursuant to Section 7.

4.4 **Incentive Bonuses.** There are no incentive bonuses for this Project.

4.5 **Project Schedule.**

4.5.1 **Contractor's Construction Schedule.** Concurrently, with the execution of this Contract and prior to the pre-construction conference, the Contractor shall submit a preliminary schedule for the City Representative's acceptance. The schedule shall be in sufficient detail to allow the City Representative to determine if the proposed schedule will conform to an approved program of construction operations, as determined by the City. Within ten (10) calendar days after the preliminary schedule, described above, has been approved by the City Representative, the Contractor shall submit a Progress Schedule, utilizing the Critical Path Method Scheduling Technique (CPM), showing the order in which Contractor proposes to carry out the Work, the dates on which Contractor will start each phase of the Work, and the contemplated date for completion of each phase. The Contractor shall not be permitted to commence construction until the schedule complying with this paragraph has been submitted to and approved by the City. The Contractor will not be granted any extension to the Contract time or compensation for any damages as a result of the City's refusal, or delay, in authorizing Contractor to commence construction until the CPM Progress Schedule has been submitted and approved by the City Representative.

The CPM requires a breakdown of the entire Work into individual tasks and an analysis of the number of days required to perform each task. The Progress Schedule submitted to the City should highlight and identify the critical path for the Project. After the Work is in progress, the Contractor shall submit monthly Progress Schedules, using the CPM, of the progress to date and projection for completion. The monthly Progress Schedules shall be submitted with each pay request in accordance with the paragraph, "Payments to Contractors," of these Supplemental General Conditions. The monthly Progress Schedules shall be subject to the approval of the City Representative. In the event the Contractor fails to submit a monthly Progress Schedule acceptable to the City Representative, the City may withhold further progress payments to the Contractor until the Contractor submits an acceptable Progress Schedule, which is approved by the City Representative, to the City. Schedule changes

requiring an increase in the City's engineering personnel on the Project shall not be put into effect until the City Representative has approved such increase and made arrangements for the required additional personnel.

4.5.2 The Progress Schedule as originally approved shall be updated monthly and maintained throughout the Work.

4.5.3 The Progress Schedule shall be revised as required by conditions and progress of the Work, but such revisions shall not relieve Contractor of its obligations to complete the Work within the Contract Time, as such dates may be adjusted in accordance with the Contract Documents.

4.5.4 Contractor shall provide City with a monthly status report with each Progress Schedule detailing the progress of the Work, including: (a) if the Work is proceeding according to Progress Schedule; (b) any discrepancies, conflicts, or ambiguities found to exist in the Contract Documents that require resolution; and (c) other items that require resolution so as not to jeopardize ability to complete the Work as presented in the proposal and within the Contract Time.

4.5.5 With each Progress Schedule submittal the Contractor shall include a transmittal letter including the following: (a) description of problem tasks (referenced to field instructions, requests for information (RFI's), as appropriate; (b) current and anticipated delays including the cause of the delay, corrective action and schedule adjustments to correct the delay, known or potential impact of the delay on other activities, milestones, and the date of Substantial Completion; (c) changes in construction sequence; (d) pending items and status thereof including, but not limited to, time extension requests; (e) Substantial Completion date status including the number of calendar days ahead or behind; and (f) other project or scheduling concerns.

4.5.6 City's review of and response to the Progress Schedule is only for general conformance with the scheduling requirements of the Contract Documents. The review shall not relieve the Contractor from compliance with the requirements of the Contract Documents or be construed as relieving the Contractor of its complete and exclusive control over the means, methods, sequences and techniques for executing the Work.

4.5.7 The activities making up the Progress Schedule shall be sufficient detail to assure that adequate planning has been done for proper execution of the Work and such that it provides an appropriate basis for monitoring and evaluating the progress of the Work.

4.5.8 The Progress Schedule shall show milestones, including milestones for City-furnished information, and shall include activities for City furnished equipment and furniture when those activities are interrelated with the Contractor's activities.

Article 5 - Contract Price

- 5.1 Contract Price.** The Contract Price will not exceed the Bid amount submitted of \$ _____, unless approved as set forth in Article 6. The Contractor agrees at Contractor's own cost and expense, to do all Work as required in the Construction Documents and to completely construct the same and install the material therein, as called for by this Contract free and clear of all

claims, liens, and charges whatsoever, in the manner and under the conditions specified within the time, or times, stated in the approved proposal.

Article 6 - Changes to the Contract Price and Time

6.1 Delays to the Work.

6.1.1 If Contractor is delayed in the performance of the Work that will cause a change in the date of Substantial Completion due to acts, omissions, conditions, events, or circumstances beyond its control and due to no fault of its own or those for whom Contractor is responsible, the Contract Times for performance shall be reasonably extended by Change Order, executed by City and Contractor.

6.1.2 The Contractor shall request an increase in the Contract Time by written notice to the City and City Representative, including an estimate of the probable effect of delay on progress of the Work. In the case of a continuing delay only one request is necessary. Such notice shall not be later than seven (7) calendar days after such condition or event has been identified.

6.1.3 If adverse weather conditions are the basis for a request for additional Contract Time, such requests shall be documented by data substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse and unforeseeable effect on the scheduled Substantial Completion.

6.1.4 It is understood that permitting Contractor to proceed to complete any Work, or any part of the Work, after the date to which the time of completion may have been extended, shall in no way act as a waiver on the part of the City, of any of its legal rights herein.

6.1.5 In addition to Contractor's ability to obtain a time extension for those events set forth in this Article, Contractor may also be entitled to an appropriate adjustment of the Contract Price provided, however, that the Contract Price shall not be adjusted for those events set forth in this Section that are beyond the control of both Contractor and City, including the events of war, flood, labor disputes, earthquakes, epidemics, adverse weather conditions not reasonably anticipated, and other acts of God.

6.1.6 The Contract Times (or Milestones) may only be changed by a Change Order or a Written Amendment as provided herein. Any claim for an adjustment of the Contract Times (or Milestones) shall be based on written notice delivered by the party making the claim to the other party and to City Representative promptly (but in no event later than ten (10) days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within thirty (30) days after such occurrence (unless City Representative allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. No claim for an adjustment in the Contract Times (or Milestones) will be valid if not submitted in accordance with the requirements of Article 6.

6.1.7 An extension in Contract Time will not be justified unless Contractor, through analysis of the Record Schedule, demonstrates delay in completing all or a specified part of the Work arising from unforeseeable causes beyond the control and without the fault or negligence of Contractor, and the delay is unreasonable under the circumstances. Examples of events which may justify an extension of Contract Time, subject to the requirements of the Contract

Documents, include but are not limited to: acts of God, the public enemy, or City in its sovereign capacity; acts of the U.S. Government, the State or another Political Subdivision; fires, floods, epidemics, quarantine restrictions; strikes, freight embargoes, unusual weather, including storms, tornados, etc. (unusual in the sense of expectation, frequency or severity compared with the prior five (5) year average; but ambient air temperature up to 120°F shall not be considered unusual); unusually severe shortages of construction materials, considering all feasible sources of supply; newly discovered underground utilities which could not have reasonably been discovered; objection, for City's convenience, to a subcontractor; an emergency; suspension of Work resulting from discovery of archaeological features; changes in the Work, Differing Site Conditions or variation in quantities of Unit Price Work. Delays attributable to and within the control of a Subcontractor or supplier shall be deemed to be delays within the control of Contractor.

6.1.8 If Contractor is prevented from completing any part of the Work within the Contract Times for unforeseeable causes beyond the control of both City and Contractor, an extension of the Contract Times in an amount equal to the time lost due to such delay shall be Contractor's sole and exclusive remedy for the delay. In no event shall the City be liable to Contractor, any subcontractor, any manufacturer, any supplier, any person, any firm, any corporation, or to any surety for, or employee or agent of any of them, for damages arising out of, or resulting from: (a) delays caused by or within the control of Contractor; or (b) delays beyond the control of both parties as specified in paragraph 6.1.3 and 6.1.5.

6.2 Differing Site Conditions.

6.2.1 If Contractor encounters a Differing Site Condition, Contractor may be entitled to an adjustment in the Contract Price and/or Contract Times to the extent Contractor's cost and/or time of performance are adversely impacted by the Differing Site Condition.

6.2.2 Upon encountering a Differing Site Condition, Contractor shall provide prompt written notice to City Representative of such condition, which notice shall not be later than seven (7) days after such condition has been encountered. Contractor shall, to the extent reasonably possible, provide such notice before the Differing Site Condition has been substantially disturbed or altered.

6.3 Errors, Discrepancies and Omissions.

6.3.1 If the Contractor observes errors, discrepancies or omissions in the Contract Documents, the Contractor shall promptly notify the City Representative and request clarification.

6.3.2 If the Contractor proceeds with the Work affected by such known errors, discrepancies or omissions, without receiving such clarifications, the Contractor does so at their own risk. Adjustments involving such circumstances made by the Contractor prior to clarification by the Design Professional shall be at the Contractor's risk.

6.4 City Requested Change in Work.

6.4.1 The City reserves the right to make, at any time during the progress of the Work, such alterations as may be found necessary or in the City's best interest.

6.4.2 Such alterations and changes shall not invalidate this Contract nor release the surety, and the Contractor agrees to perform the Work as altered, the same as if it has been a part of the original Contract Documents.

6.4.3 The City will request a proposal for a change in Work from Contractor, and an equitable adjustment in the Contract Price and/or Contract Times shall be made based on a mutual agreed upon cost and time.

6.5 Change Directives and Change Orders.

6.5.1 City and Contractor shall negotiate in good faith and as expeditiously as possible the appropriate adjustments for a Change Directive. Upon reaching an agreement, the parties shall prepare and execute an appropriate Change Order reflecting the terms of the adjustment.

6.5.2 All changes in Work authorized by Change Orders shall be performed under the conditions of the Contract Documents.

6.6 Minor Changes in the Work.

6.6.1 The City has authority to order minor changes in Work that do not materially and adversely affect the Work, including the design, quality, performance and workmanship required by the Contract Documents. Such changes shall be affected by written Directive and shall be binding on the City and Contractor. The Contractor shall carry out such written Directives promptly.

6.6.2 Contractor may make minor changes in Work, provided, however that Contractor shall promptly inform City in writing of any such changes and record such changes, if appropriate, on the Project Documents maintained by Contractor.

6.6.3 Minor changes in Work will not involve an adjustment in the Contract Price and/or Contract Times.

6.7 Contract Price Adjustments.

6.7.1 The increase or decrease in Contract Price resulting from a change in the Work shall be determined and shall be agreed to by the City and Contractor. If an increase or decrease cannot be agreed to, the cost of the change of the Work shall be determined by the reasonable expense and savings in the performance of the Work resulting from the change, including a reasonable overhead and profit, as may be set forth in this Contract. Contractor shall maintain a documented, itemized accounting evidencing the expenses and savings associated with such changes.

6.7.2 If City and Contractor disagree upon whether Contractor is entitled to be paid for any services required by City, or if there are any other disagreements over the Scope of Work or proposed changes to the Work, City and Contractor shall resolve the disagreement pursuant to Article 11.

6.7.3 If the parties are unable to agree and City expects the Contractor to perform the Work in accordance with City's interpretations, Contractor shall proceed to perform the disputed Work, conditioned upon City issuing a written Change Order to Contractor to include: (a)

directing Contractor to proceed; and (b) specifying City's interpretation of the services that are to be performed.

6.8 **Emergencies.** In any emergency affecting the safety of persons and/or property, Contractor shall act at its discretion, to prevent threatened damage, injury or loss. Any change in the Contract Price and/or Contract Time resulting from emergency work under this section shall be determined as provided for in this Article.

6.9 **Suspension of Work.** The City Representative reserves the right to suspend the Work wholly or in part if deemed necessary for the best interest of the City. This suspension will be without compensation to the Contractor, other than to adjust the Contract Time in accordance with Article 6.

Article 7- Procedure for Payment

7.1 **Procedure for Payment.** For and in consideration of the faithful performance of the Work herein and as set forth in the Contract Documents, which are a part hereof and in accordance with the directions of the City and to its satisfaction, the City agrees to pay the Contractor the Cost of the Work, but no more than the amount(s) as adjusted by any Change Orders. Payment for the specific Work under this Contract will be made in accordance with payment provisions detailed below.

7.2 **Payments To Contractor.** The measurements of quantities and the payments to the Contractor shall be in accordance with A.R.S. § 34-221.

Payments will be made on the basis of itemized, monthly statements prepared and signed by the Contractor. The Contractor shall submit an itemized, duly certified and approved estimate for work completed through the last day of the preceding month in accordance with MAG Specifications, as amended by these Supplemental General Conditions. Upon approval of the pay estimate, the City will make payment directly to the Contractor in the manner agreed to by the Parties.

The pay estimate shall be accompanied by an updated progress schedule as required by these Supplemental General Conditions and a cash flow report when required by the Special Provisions. Approval of progress payments shall be conditional upon submittal of progress schedules and cash flow reports, when required, which are acceptable to the City Representative.

Upon 100% completion and acceptance of the project, and with the request for final payment, the Contractor shall complete and submit the "Contractor's Affidavit Regarding Settlement of Claims" form which is included in these specifications. Before final payment and release of retention, Contractor must arrange for its Surety to provide the City with a fully executed AIA Consent of Surety form. To avoid delays in the final payment, the Surety may send the Consent of Surety directly to the City via fax at (623) 882-7588, and mail the original to the City of Goodyear Engineering Department, PO Box 5100, 190 N. Litchfield Rd, Goodyear Arizona 85338.

7.3 **Payment Request.**

7.3.1 Requests for monthly payments by the Contractor for services will be submitted to the City on an "Application and Certificate for Payment" form AIA G702 accompanied by AIA G703 and will be accompanied by an updated Progress Schedule, and detailed invoices and receipts, if applicable. Any requests for payment will include, as a minimum, a narrative description of tasks accomplished during the billing period, a listing of any Deliverables submitted, and copies of any Subcontractor's requests for payment, plus similar narrative and listings of Deliverables associated with their Work. Payment for negotiated as a lump sum shall be made in accordance with the percentage of Work completed during the preceding month. Services negotiated as a not-to-exceed fee will be paid in accordance with the work effort expended on that service in the preceding month.

7.3.1.1 To insure the proper performance of the Contract, City shall retain ten percent (10%) of the amount of each approved progress payment until the Work is fifty percent (50%) complete.

7.3.1.2 When the Work is fifty percent (50%) complete as measured by the schedule of values and approved by City, one-half of the amount retained under the ten percent (10%) retention provision, shall be paid to Contractor, provided Contractor is on schedule for project completion and is making satisfactory progress on the Work and there is no specific cause or claim requiring a greater amount to be retained. Contractor shall submit a request for retention release on an Application and Certificate for Payment. After fifty percent (50%) completion, City shall retain five percent (5%) of each approved progress payment providing Contractor is on schedule for project completion, is making satisfactory progress on the Work, except that if at any time City determines satisfactory progress is not being made, ten percent (10%) retention shall be reinstated for all progress payments made under the contract subsequent to such determination.

7.3.1.3 In lieu of retention, City will, at the option of Contractor, accept security as provided in A.R.S. § 34-221.

7.3.2 The Contractor is responsible for paying all sums due subcontractors for services and reimbursable expenses within fourteen (14) calendar days after the Contractor has received payment for those services from the City.

7.3.3 In no event will the City pay more than ninety five percent (95%) of the Contract Amount until final acceptance of the entire Project by City.

7.3.4 The Contractor agrees that no charges or claims for costs or damages of any type will be made by the Contractor for any delays or hindrances beyond the reasonable control of the City during the progress of any portion of the Work specified in this Contract. Such delays or hindrances, if any, will be solely compensated for by an extension of time for such reasonable period as may be mutually agreed between the parties. It is understood and agreed, however, that permitting the Contractor to proceed to complete any services, in whole or in part after the date to which the time of completion may been extended, will in no way act as a waiver on the part of the City of any of its legal rights herein.

7.3.5 No compensation to the Contractor will be allowed contrary to Title 34 of the Arizona Revised Statutes.

7.4 Payments to Subcontractors or Suppliers.

7.4.1 Contractor shall pay Subcontractors or suppliers promptly and in a manner that does not interfere with the completion of the Work to be performed in accordance with this Contract.

7.4.2 If the Contractor fails to make payments in accordance with these provisions, the City may take any one or more of the following actions and Contractor agrees that the City may hold the Contractor in default under this Contract; withhold future payments including retention until proper payment has been made to subcontractors or suppliers in accordance with these provisions; reject all future Bidders to perform work for the City from the Contractor for a period not to exceed one year from Substantial Completion date of this Project; or terminate this Contract.

7.4.3 Contractor shall include these prompt payment provisions in every subcontract, including procurement of materials and leases of equipment for this Contract.

7.5 Record Keeping and Finance Controls.

7.5.1 Audit of Records. Contractor shall retain and shall contractually require each and every Subcontractor that performs any Work under this Contract all books, accounts, reports, files and any and all other records relating to the contract (hereinafter referred to as "Contract Documents") for six (6) years after completion of the Contract. City, upon written request and at reasonable times, shall have the right to review, inspect, audit and copy all Contract Documents of the Contractor and any subcontractors. Contractor shall produce the original Contract Documents at City Hall, currently located at 190 N. Litchfield Road, Goodyear, Arizona, or at such other City facility within the City as designated by the City in writing. If approved by City Attorney in writing, photographs, microphotographs, or other authentic reproductions may be maintained instead of original Contract Documents.

7.5.2 The Contractor will include a provision similar to the preceding paragraph in all of its agreements with subconsultants, subcontractors, and suppliers providing services under this Contract to ensure the City, its authorized representative, and/or the appropriate federal agency, has access to the subconsultants', subcontractors' and suppliers' records to verify the accuracy of cost and pricing data. The City reserves the right to decrease Contract Amount and/or payments made on this Contract if the above provision is not included in subconsultants, subcontractor, and supplier contracts, and one or more of those parties do not allow the City to audit their records to verify the accuracy and appropriateness of pricing data.

Article 8 - Insurance

8.1 Insurance. Contractor and subcontractors shall procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Contract are satisfied, insurance against claims for injury to persons or damage to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, Contractor's agents, representatives, employees or subcontractors.

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. The City in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor from liabilities that might arise out of the performance of the Work under this Contract by the Contractor, Contractor's agents, representatives, employees or subcontractors, and Contractor is free to

purchase additional insurance as may be determined necessary.

- 8.2 Minimum Scope and Limits of Insurance.** Without limiting any of their obligations or liabilities, the Contractor, at Contractor's own expense, shall purchase and maintain the minimum insurance specified below with companies duly licensed or otherwise approved by the State of Arizona, Department of Insurance, and in form reasonably satisfactory to the City. Each insurer shall have a current A.M. Best Company, Inc. rating of not less than "A-" and a category rating of not less than "8." Use of alternative insurers requires prior approval from the City. Insurance, except Workers Compensation, Employers Liability and Professional Liability, provided by Contractor shall be primary.

8.3 General Clauses.

8.3.1 Additional Insured. The insurance coverage, except Workers' Compensation and Professional Liability, required by this contract, shall name and specifically endorse the City, its agents, representatives, directors, officials, employees, and officers, as additional insured. Any insurance coverage carried by the City or its employees is excess coverage and not contributory coverage to that provided by the Contractor.

8.3.2 Coverage Term. All insurance required herein shall be maintained in full force and effect until all Work required to be performed under the terms of the Contract are satisfactorily completed and formally accepted; failure to do so may constitute a material breach of this Contract, at the sole discretion of the City.

8.3.3 Claim Reporting. Any failure to comply with the claim reporting provisions of the policies or any breach of a policy warranty shall not affect coverage afforded under the policy to protect City.

8.3.4 Certificates of Insurance. Prior to commencing Work under this Contract, Contractor shall furnish City with Certificates of Insurance, or formal endorsements as required by the Contract, issued by Contractor's insurer(s), as evidence that policies providing the required coverage, conditions, and limits required by this Contract are in full force and effect. Such certificates shall identify this Contract number and shall provide for not less than forty-five (45) days advance Notice of Cancellation, Termination, or Material Alteration. Such certificates shall be sent directly to Risk Manager, Risk Management Department, City of Goodyear, 190 N. Litchfield Road, PO Box 5100, Goodyear, Arizona 85338.

8.3.5 Primary Coverage. The Contractor's insurance, except Worker's Compensation and Professional Liability, shall be primary insurance as respects City and any insurance or self-insurance maintained by City shall be excess of the Contractor's insurance and shall not contribute to it.

8.3.6 Waiver. The policies, except Workers' Compensation and Professional Liability, shall contain a waiver of transfer rights of recovery (subrogation) against City, its agents, representatives, directors, officers, and employees for any claims arising out of the Work of the Contractor.

8.4 Workers Compensation.

8.4.1 The Contractor shall carry Workers' Compensation insurance to cover obligations

imposed by federal and state statutes having jurisdiction over Contractor's employees engaged in the performance of the Services.

8.4.2 In case services are subcontracted, the Contractor will require the Subcontractors to provide Workers' Compensation and Employer's Liability as required by law.

- 8.5 Automobile Liability.** Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damages of not less than \$1,000,000, each occurrence regarding any owned, hired, and non-owned vehicles assigned to or used in performance of the Contractor's services. Coverage will be at least as broad as coverage Code 1 "any auto" (Insurance Service Office policy form CA 0001 1/87 or any replacement thereof).
- 8.6 Commercial General Liability.**
- 8.6.1** Commercial General Liability insurance with a limit of not less than \$1,000,000, for each occurrence and \$2,000,000 in the aggregate. The policy shall include coverage for bodily injury, property damage, personal injury, products, contractual covering and completed operations, but not limited to, the liability assumed under the indemnification provisions of this Contract which coverage will be at least as broad as Insurance Service Office policy form CG 001 1-11-88 or any replacement thereof.
- 8.6.2** A general liability insurance policy may not be written on a "claims made" basis.
- 8.7 Umbrella/Excess Liability.** Umbrella/Excess Liability insurance with an limit of not less than \$5,000,000 per occurrence combined limit Bodily Injury, Property Damage and completed operations, that "follows form" and applies in excess of the Commercial General Liability, Automobile Liability, and Employer's Liability, as required above.
- 8.8 Pollution Liability.** The Contractor shall maintain during the performance of this Contract, pollution liability insurance that provides coverage for sudden and accidental pollution damage to the environment caused by the Contractor while involved in the handling of hazardous substances. The Contractor agrees to include the City of Goodyear as additional insured on this policy. This policy shall be on an occurrence form or claims made policy issued from an insurance company with a Best Rating of A- or better or be approved by the City Risk Manager. Pollution Liability Insurance shall be secured and maintained in an amount of \$21,000,000 Combined Single Limit (CSR) each occurrence and \$2,000,000 Combined Single Limit (CSR) in aggregate.
- 8.9 Hazardous Materials.** Contractor agrees to comply with all applicable federal, state, and/or local laws, rules and regulations concerning the reporting, handling, and containment of hazardous materials located or uncovered on-site.
- 8.10 Damage to City Property.** Except for the negligence of the City of Goodyear, its officials, directors, officers, employees, attorneys, agents, and representatives, Contractor shall be liable to the city for any physical damage to City property and/or loss of use of City property arising out of any Work performed pursuant to this Contract.
- 8.11** The amount and type of insurance coverage requirements set forth herein shall in no way be construed as limiting the scope of the indemnification obligations set forth in this Contract.

Article 9 – Indemnification

9.1 **Indemnification.** To the fullest extent permitted by law, Consultant shall defend, indemnify, save and hold harmless the City of Goodyear, its elected officials, officers, employees, agents, boards and representatives (hereinafter referred to as "Indemnatee") for, from and against any and all claims, demands, actions, damages, judgments, settlements, personal injury (including sickness, disease, death and bodily harm), property damage (including loss of use), infringement, governmental action and all other losses and expenses, including attorney's fees and Litigations Expenses asserted by a third-party (i.e. a person or entity other than City or Consultant) to the extent the claim was caused by or resulted from the negligent act, error or omission or the willful misconduct of Contractor, its employees or agents or that of Contractor's subcontractors or their respective employees.

The Indemnification provided shall extend to claims arising out of, or recovered under, Arizona's Workers' Compensation Law or the failure of Consultant to conform to any applicable and appropriate federal, state, or local law, statute, ordinance, rule, regulation or court decree. It is the specific intention of the Parties that the Indemnatee shall apply to the extent the claim was caused by or resulted from the negligent act, error or omission or the willful misconduct of Contractor, its employees or agents or that of Contractor's subcontractors or their respective employees. It is agreed that the Consultant will be responsible for primary loss investigation, defense and judgment costs where this indemnification is applicable.

In consideration of the award of this contract, Consultant agrees to waive all rights of subrogation against Indemnatee for claims arising from the work performed by Consultant, its directors, officers, employees, agents, representatives, or any tier of subcontractors pursuant to this Contract. This indemnification provision shall survive the expiration or earlier termination of this Contract.

9.2 **Indemnification – Patent, Copyright and Trademark.** To the fullest extent permitted by law, Consultant shall defend, indemnify, save and hold harmless the City, its elected officials, officers, employees, agents, boards and representatives (hereinafter referred to as "Indemnatee") individually and collectively at consultant's own expense, from and against any liability, including any and all expenses, losses, royalties, profits, judgments, damages, including all legal costs and expenses, court costs and attorney fees, for infringement of any patent, copyright or trademark or other proprietary rights of any third parties arising out of, related to or resulting from this Contract or use by the City of materials furnished or Services performed under this Contract. It is expressly agreed by Consultant that these covenants are irrevocable and perpetual. The City may be represented by, and actively participate through, its own counsel in such suit or proceedings, if it is so desires.

9.3 **Confidentiality and Encryption.** All data, regardless of form, including originals, images and reproductions, prepared by, obtained by, or transmitted to Consultant in connection with this Contract are confidential, proprietary information owned by the City. Except as specifically provided in this Contract, the Consultant shall not disclose data generated in the performance of the Services to any third person without the prior written consent of the City Manager.

Personal identifying information, financial account information or restricted City information, whether electronic format or hard copy, are considered confidential information and must be secured and protected at all times to avoid unauthorized access. At a minimum Consultant shall ensure that all electronic transmissions of confidential data are encrypted and any cryptographic algorithm implementations used must have been validated by the National Institute of Standards

and Technology (NIST). The use of proprietary encryption algorithms will not be allowed for any purpose. The export of encryption technologies is restricted by the U.S. Government.

In the event that data collected or obtained by Consultant in connection with this Contract is reasonably believed to have been compromised, Consultant shall notify the City Attorney immediately. Consultant agrees to reimburse the City for any costs incurred by the City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach.

Consultant agrees that the requirements of this section shall be incorporated into all Subconsultant agreements entered into by the Consultant. Any violation of this section may result in immediate termination of this Contract by the City without further notice.

Article 10 - Notices

- 10.1 Notices.** Unless otherwise provided herein, demands under this Contract will be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

To City: Keith Brown, City Representative
PO Box 5100
190 N. Litchfield Road
Goodyear, Arizona 85338

Copy to: Roric Massey, City Attorney
City of Goodyear Legal Services
PO Box 5100
190 N. Litchfield Road
Goodyear, Arizona 85338

To Contractor:

Article 11 – General Provisions

11.1 Compliance with Manufacturer's Instructions. In all instances wherein the item and/or specifications require installation or construction in accordance with manufacturers or supplier's recommendations and/or instructions, said recommendations and/or instructions shall be submitted with the applicable portions clearly marked for approval prior to the commencement of Work on that item or portion of the contract.

11.2 Traffic Regulations.

11.2.1 All traffic affected by this construction shall be regulated in accordance with the City of Phoenix "Traffic Barricade Manual," the Uniform Standard Details and Specifications published by the Maricopa Association of Governments (MAG), the City's Standard details and these Special Provisions. The following traffic restrictions are minimum requirements throughout the construction period:

11.2.2 All traffic restrictions listed herein are to supplement the City of Phoenix "Traffic Barricade Manual," and are not intended to delete any part of the manual. All reference in the "Traffic Barricade Manual" to "arterial" and/or "collector" streets shall mean "arterial and/or major arterial" streets and are referred to as "major" streets in the following sections.

11.2.3 A minimum of two travel lanes (one for each direction) shall be maintained open to traffic at all times on all major streets. All Work that enters or crosses a major street must be done at times other than 6:00 a.m. to 8:30 a.m., and 4:00 p.m. to 7:00 p.m., weekends and city recognized holidays, unless the Contractor receives prior written consent from the City Representative.

11.2.4 A travel lane shall be defined as a minimum of ten (10) feet of clear street width with a safe motor vehicle operating speed of twenty-five (25) miles per hour.

11.2.5 A travel lane will not be considered as satisfactorily open to traffic until it has been graded reasonably smooth and is paved with a minimum of two (2) inches of asphalt. This shall be considered temporary pavement and shall be removed completely before proceeding with final surfacing.

11.2.6 The Contractor shall provide and maintain all necessary traffic controls, and must provide flashing arrow boards to protect and guide traffic for all Work in the construction area.

11.2.7 Intersection area shall be defined as all of the area within the right-of-way of intersecting streets, plus two-hundred fifty (250) feet beyond the center of the intersected streets on all legs of the intersection.

11.2.8 The Contractor shall maintain all existing traffic signs erect, clean and in full view of the intended traffic at all times. Street name signs at major street intersections shall be maintained erect at all times. If any signs interfere with construction, the Contractor shall notify the Field Inspector at least 48 hours in advance for City forces to remove said signs. The Contractor shall be responsible for having all temporary traffic control signs installed and maintained during construction. The Contractor shall re-set all traffic and street name signs to

permanent locations, according to City specifications, when notified by the City Representative that construction is complete.

11.2.9 Local access to all properties on the subject Project shall be maintained at all possible times in the form of a safe and reasonable direct route to at least one of the above defined major streets. Whenever local access cannot be maintained, the Contractor shall notify the affected property owner or user and the City Representative at least twenty-four (24) hours in advance.

11.2.10 The Contractor shall be required to provide a uniformed off-duty City of Goodyear Police Officer(s) to assist with traffic control whenever traffic control whenever traffic is restricted at signalized intersection or at other locations if necessary in the opinion of the City Representative. If the Contractor chooses to use a police officer at other locations during peak traffic hours or to assist with other traffic control operations, the cost shall be included in the lump sum for "Traffic Control" and not paid out of the hours allowed for "Off Duty Goodyear Police Officer." All requests for off-duty officers will be made through the Goodyear Police Department. The Contractor must provide evidence of workmen's compensation coverage before any officer will be permitted to work. The employment of off-duty police officers for traffic control does not change the interpretation of the Davis-Bacon Act which classifies traffic control workers as flagmen.

Measurement for payment of the uniformed off duty Goodyear Police Officer hours will be made by the actual number of man-hours used for traffic control at signalized major intersections or as approved by the Engineer. Because the quantity of hours is dependent on the Contractors schedule of activities, the unit price bid for this item will be administered as a contingency bid item and any adjustment in hours will not be subject to the 20 percent limitation.

Payment for the off-duty Goodyear Police Officer(s) will be made at the contract unit price bid per hour for an OFF-DUTY GOODYEAR POLICE OFFICER and shall include the net hourly rate for a police officer and the net hourly rate for the officer's supervisor, both with a three (3) hour minimum. A supervisor is required whenever four (4) officers are used or in the event that only a supervisor is available. The net hourly rate shall be increased to include withholding for Federal, State, FICA, Medicare, Workmen's Compensation insurance and any payroll administrative costs. An additional hourly rate will be charged for the use of any marked patrol vehicle(s).

11.2.11 The Contractor shall prepare a traffic control plan for the Project and submit it to the Engineering Department for review and approval at least seven (7) working days before the pre-construction conference. The traffic control plan shall include flashing arrow boards, barricades and signs, and shall address how local access to adjacent properties will be handled in accordance with the specifications herein. Any changes to the traffic control plan during construction shall be submitted to the Engineering Department for approval not less than seventy-two (72) hours before implementation. Payment for this item shall be made at the Contract lump sum price for traffic control.

11.2.12 It is the City's desire to maintain one lane of traffic in each direction on minor streets whenever possible. Should it become imperative for the Contractor to close off a portion of any minor street or reduce the travel way to a single lane, he must obtain approval from the City Streets Transportation Supervisor not less than twenty-four (24) hours prior to implementing a traffic control change. He must provide all the necessary signs to detour traffic and/or flagmen to control traffic for a single lane. The maximum amount of time that the street may be closed is from 9:00 a.m. until 4:00 p.m., week days (Monday - Friday).

11.3 Energized Aerial Electrical Power Lines. The utility company maintains energized aerial electrical power lines in the immediate vicinity of this project. Do not consider these lines to be insulated. Construction personnel working in proximity to these lines are exposed to an extreme hazard from electrical shock. Contractor shall be responsible for identifying and notifying all utility companies that may be impacted by the construction. The Contractor shall be responsible for ensuring that the utility companies review the construction site and provide specifications for appropriate safety clearance for all applicable lines as well as identify other safety measures. The Contractor shall be responsible for complying with all safety clearances and other safety measures specified by the applicable utility companies. The Contractor shall ensure that their employees and all other construction personnel working on this project are receiving adequate warning and safety instructions regarding the danger. (See: OSHA Standard 1926.550(a) (15).) As an additional safety precaution, Contractors should also be instructed to call the utility company to arrange, if possible, to have these lines de-energized or relocated when the Work reaches their immediate vicinity. The cost of such temporary arrangements would be borne by the Contractor.

11.4 Overhead Utility Lines and Poles. Contractor is advised that when work around overhead lines and poles is required on the Project, the Contractor shall coordinate with the City Representative and all utility companies who own, operate and/or maintain overhead lines and poles. The coordination may include, but not be limited to the following activities: pole bracing, de-energizing of lines, and temporary relocations. Contractor is responsible to contact the City Representative and applicable utility company representative and discuss the Contractor's proposed construction methods; in order to determine what actions the City and utility company must take and the costs related to those actions. The Contractor shall include these costs in the applicable bid items for this project.

11.5 Record Drawings. The Contractor shall maintain one set of contract drawings with all changes, deviations, additions and deletions clearly marked thereon. Upon completion of the Work, this set of drawings, shall be marked "RECORD DRAWINGS," dated, and delivered to the Engineer prior to approval of the Contractor's final payment request.

11.5.1 As-Builts. As-Builts will be prepared as provided in the City of Goodyear Engineering Design Standards and Policies Manual.

11.6 Construction Sign. The project type to be indicated on the sign shall be provided and installed in conformance with Project Specification.

11.7 Conflict of Interest.

11.7.1 All parties hereto acknowledge that this Contract is subject to cancellation by the City of Goodyear pursuant to the provisions of A.R.S. § 38-511, relating to conflict of interest.

11.7.2 To evaluate and avoid potential conflicts of interest, the Contractor will provide written notice to the City, as set forth in this section, of any Work or services performed by the Contractor for third parties that may involve or be associated with any real property or personal property owned or leased by the City. Such notice will be given seven (7) business days prior to commencement of the Project by the Contractor for a third party, or seven (7) business days prior to an adverse action as defined below. Written notice and disclosure will be sent to the Project Manager as set forth in Article 10.

11.7.3 Actions considered to be adverse to the City under this Contract include but are not limited to: (a) using data as defined in the Contract and acquired in connection with this Contract to assist to a third party in pursuing administrative or judicial action against the City; (b) testifying or providing evidence on behalf of any person in connection with administrative or judicial actions against the City; and (c) using data to produce income for the Contractor or its employees independently of performing the services under this Contract without the prior written consent of the City.

11.7.4 The Contractor represents that except for those persons, entities and projects previously identified in writing to the City, the services to be performed by the Contractor under this Contract are not expected to create an interest with any person, entity, or third party project that is or may be adverse to the interests of the City.

11.7.5 The Contractor's failure to provide a written notice and disclosure of the information as set forth in this section will constitute a material breach of this Contract.

11.8 **Contractor's License and Privilege License.** Prior to award of this Contract, the Contractor must provide to the City's Representative, its Contractor's License Classification and number, its City of Goodyear Privilege License number, and its Federal Tax I.D. number.

11.9 **Successors and Assigns.** The City and the Contractor will each bind itself, and their partners, successors, assigns, and legal representatives to the other party to this Contract and to the partners, successors, assigns, and legal representatives of such other party in respect to all covenants of this Contract. Neither the City nor the Contractor will assign, sublet, or transfer its interest in this Contract without the written consent of the other. In no event will any contractual relation be created or be construed to be created as between any third party and the City.

11.10 **Covenants Against Contingent Fees.** The Contractor warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the City Council, or any employee of the City of Goodyear has any interest, financially, or otherwise, in the firm. The City of Goodyear will in the event of the breach or violation of this warranty, have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Amount or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

11.11 **Conflict Audit.** Within thirty (30) days of being requested to do so, Contractor agrees to provide the City an itemized summary of any and all gifts Contractor, its directors, officers, managers, employees, agents and/or representatives have made to any City employee or employee's relative(s) during the year prior to the date of the Contract through the date of the

request. The summary shall include the date the gift was made, a description of the gift, the City employee(s) or employee's relative(s) that received the gift, and the value of the gift. The summary shall be signed and its truthfulness certified by Contractor. For purposes of this section the terms "Gift" means anything of value that is provided to the employee and includes, by way of example, but not limitation, meals, free use of vacation homes, low interest or no interest loans, tickets to sporting events, tickets to charitable events, entertainment expenses, travel expenses, drinks, and the like. The failure to comply with any request made pursuant to this section and/or the submission of a summary that contains material misrepresentations constitutes grounds for debarment and the refusal to allow Contractor to participate in any future contracts with the City.

- 11.12 Non-Waiver Provision.** The failure of either party to enforce any of the provisions of this Contract or to require performance by the other party of any of the provisions hereof will not be construed to be a waiver of such provisions, nor will it affect the validity of this Contract or any part thereof, or the right of either party to thereafter enforce each and every provision.
- 11.13 Governing Law; Choice of Venue.** This Contract will be deemed to be governed, construed and interpreted by and in accordance with the laws of the State of Arizona, without regard to the conflicts or choice of law provisions thereof. An action to enforce any provision of this Contract or to obtain any remedy with respect hereto will be brought in the Superior Court, Maricopa County, Arizona, regardless of residence or domicile, for any action at law or suit in equity arising out of or relating to the bidding, award, performance or completion of the Work; payment for Work performed; termination; or any other claim arising out of or related to the Contract Documents and/or Work. For this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such Court. Contractor consents and submits to service of process at the address specified in this Contract. If the parties agree in writing to mediation, all proceedings shall be conducted in Goodyear, Arizona. This provision shall apply to all sub-contracts and all agreements between Contractor and Contractor's sureties and insurers, altering that paragraph only to identify properly the contracting parties.
- 11.14 Survival.** All warranties, representations, indemnifications by the Contractor and governing law provisions will survive the completion or termination of this Contract.
- 11.15 Modification.** No supplement, modification, or amendment of any term of this Contract will be deemed binding or effective unless in writing and signed by the parties hereto and in conformation with provision of this Contract, except as expressly provided herein to the contrary.
- 11.16 Bonds Required.** Bonds in the following amounts will be required of the Contractor at the time of execution of this Contract and must meet the requirements of Arizona Revised Statutes, Title 34, Chapter 6, as amended: a performance bond for one hundred percent (100%) of the contract price and a payment bond for one hundred percent (100%) of the contract price.
- 11.17 Severability.** If any provision of this Contract or the application thereof to any person or circumstances is found to be invalid, illegal or unenforceable to any extent, the remainder of this Contract and the application thereof will not be affected and will be enforceable to the fullest extent permitted by law.
- 11.18 Integration.** This Contract contains the full agreement of the parties hereto. Any prior or contemporaneous written or oral agreement between the parties regarding the subject matter

hereof is merged and superseded hereby.

11.19 Time is of the Essence. Time of each of the terms, covenants, and conditions of this Contract is hereby expressly made of the essence.

11.20 Third Party Beneficiary. This Contract will not be construed to give any rights or benefits in the Contract to anyone other than the City and the Contractor. All duties and responsibilities undertaken pursuant to this Contract will be for the sole and exclusive benefit of the City and the Contractor, and not for the benefit of any other party.

11.21 Cooperation and Further Documentation. The Contractor agrees to provide the City such other duly executed documents as may be reasonably requested by the City to implement the intent of this Contract.

11.22 Disputes. In any unresolved dispute arising out of an interpretation of this Contract or the duties required therein, the final determination at the administrative level will be made by the City Representative.

11.23 Claims under this Article.

11.23.1 All claims, counterclaims, disputes and other matters in question between City and Contractor arising out of or relating to the Contract Documents or their breach shall be handled and resolved as provided in this Article 11.

11.23.2 A claim means a written demand or assertion by City or Contractor seeking an adjustment in Contract Price or Contract Time (or any other relief arising out of or relating to the Contract Documents) which may become a claim after a determination by the City Representative under the appropriate provision(s) of the Contract Documents.

11.23.3 Claims for which a provision of the Contract Documents specifically authorizes or excludes the relief sought by the claimant shall be handled and resolved in accordance with the applicable provision.

11.23.4 No claim shall be valid unless it is based on written notice (stating the nature of the claim) delivered by the party making it to the other party promptly, but in no event later than thirty (30) days after or the City's determination giving rise to the claim. The claim submittal with all supporting data shall be delivered within sixty (60) days after determination. The burden of proving a claim is on the party asserting it.

11.23.5 Notwithstanding anything to the contrary in this Article, City shall not be required to deliver notice of any claim for liquidated damages or involving retention (or securities in lieu) until sixty (60) days after final acceptance.

11.23.6 Contractor claims shall be submitted to City Representative for written decision by the City. City claims shall be submitted to Contractor for a written decision by City Representative.

11.24 Certification of Contractor Claims. For all Contractor claims alleging an increase in Contract Price or Contract Time, Contractor shall submit an affidavit executed by an officer or partner in charge at Contractor's plant or location involved, or by a responsible senior officer or

general or managing partner of Contractor, certifying that the claim is made in good faith; the amount claimed accurately reflects the adjustments in Contract Price or Contract Time for which Contractor believes City is liable; the claim covers all costs and delays to which Contractor is entitled from the Occurrence of the claimed event; and that supporting cost and pricing data are current, accurate, complete and represent Contractor's best knowledge and belief.

- 11.25 Determination on a Claim.** All claims will be handled as provided in the Maricopa Association of Governments, Uniform Standard Specifications for Public Works Construction.
- 11.26 Withholding Payment.** The City reserves the right to withhold funds from the City's progress payments up to the amount equal to the claims the City may have against the Contractor, until such time that a settlement on those claims has been reached.
- 11.27 Conflict in Language.** As set forth in this Contract, all Work or Deliverables performed will conform to all applicable City of Goodyear codes, ordinances and requirements as outlined in this Contract. If there is a conflict in interpretation between provisions in this Contract and any Exhibits, the provisions in this Contract will prevail.
- 11.28 Laws and Regulations.** This Contract shall be governed by and constructed in accordance with the laws of the State of Arizona and all applicable regulations related to federally assisted projects. The Contractor shall keep fully informed, observe and comply with all existing and future Federal, State, City and County laws, ordinances, rules, regulations and Occupational Safety and Health Standards (OSHA) in any manner affecting the Work herein specified.
- 11.29 Warranty Period.** In accordance with Section 108.8 of the Maricopa Association of Governments, Uniform Standard Specifications for Public Works Construction, all Work shall be guaranteed against defective workmanship or materials for a period of one year from the date of Substantial Completion. In the event defects develop within the warrantee period, you are required to initiate repairs within fourteen (14) days of receipt of written notice from the City Representative.

SPECIAL PROVISIONS

FOR

**GOODYEAR BOULEVARD IMPROVEMENTS - YUMA ROAD TO ESTRELLA PARKWAY
CITY OF GOODYEAR PROJECT NO. CON-15-3134**

January 13, 2014



PREPARED FOR:

**CITY OF GOODYEAR
195 N. 145TH AVENUE
P.O. BOX 5100, BUILDING D
GOODYEAR, AZ 85338**

^

**RITTOCH-POWELL
& Associates**

Civil Engineering and Surveying Consultants

PREPARED BY:

**RITTOCH-POWELL & ASSOCIATES
5727 NORTH 7TH STREET, SUITE 120
PHOENIX, AZ 85014
(602) 263-1177
(RPA PROJECT NO. 214068)**

PROFESSIONAL ENGINEER SEALS

This book of special provisions and related contract documents represents the combined efforts of the following design firms:

Ritoch-Powell & Associates

Stanley Consultants, Inc.

A representative of each firm has affixed his/her seal above to attest that portion of these specifications which relate to the drawing numbers appearing after their seal were prepared under their direction.

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PART A: SCOPE OF WORK

GENERAL

The work covered by these special provisions consists of furnishing all labor, equipment and material necessary for the construction of improvements identified with the contract documents. The Contractor should generally anticipate the following primary types of work along with related miscellaneous work to be completed in an acceptable manner for this project:

- Construction surveying and as-builts
- Clearing and grubbing (to include landscape removal)
- Demolition and disposal of existing improvements
- Roadway excavation
- Grading for Drainage
- Asphalt concrete paving and subgrade preparation
- Sawcutting & Other Removals
- Concrete curb, gutters, sidewalks, sidewalk ramps, and driveways
- Concrete scuppers and rip rap
- Raised medians
- Concrete structures
- Adjusting frames, covers and valve boxes
- Fire hydrant and water meter relocations
- Dry utility trenching and conduit placement
- Permanent pavement markings and signing
- Traffic signalization and street lights
- Traffic control
- Irrigation sleeves

The above items of work along with the construction requirements are adequately described and defined in the 1998 “Uniform Standard Specifications for Public Works Construction” with revisions through 2014 sponsored and distributed by the Maricopa Association of Governments (MAG) Arizona along with the MAG Uniform Standard Details and the City of Goodyear Supplements, Arizona Department of Transportation (ADOT) “2008 Standard Specifications for Road and Bridge Construction”, City of Phoenix Traffic Barricade Manual, or within these special provisions. The latest revisions of the above shall govern the item of work and the construction requirements.

In the event of conflicting information provided by any of the references named above, the following rank order of resolution shall be enforced:

1. These special provisions,
2. City of Goodyear standard details and City of Goodyear Engineering Design Standards and Policies Manual (2012).
3. Construction Plans,
4. Uniform Standard Specifications for Public Works Construction" with revisions through 2014 sponsored and distributed by the Maricopa Association of Governments (MAG) Arizona along with the MAG Uniform Standard Details,
5. 2008 Standard Specifications for Road and Bridge Construction,
6. Written direction from the City of Goodyear, the Engineer, or their authorized representative.

If this document and any of the documents listed above are in conflict, then the most stringent requirement shall apply.

Full and safe access shall be provided during major events.

No night work may be planned adjacent to residential areas.

Ensure no stoppage of peak hour traffic.

For hazard protection, a concrete barrier or other pre-approved device shall be used where the new trench construction or other hazard is in close proximity to the traffic flow.

Construction activity generated noise higher than existing ambient level shall be adequately mitigated to prevent public inconvenience.

Provide safe, ADAAG accessible/compliant pedestrian access where access currently exists, or where access is re-routed as necessary to accommodate construction activities. Temporary concrete barrier or other pre-approved devices shall be used to protect pedestrians from traffic or where the new construction is in close proximity.

Prior to impacting existing bus stop & shelter locations, establishing any construction zone near an existing bus stop or any activity that will otherwise impact the normal operation of the bus stop, the Contractor shall coordinate with City Transit Services to determine what temporary signing will be required by the contractor, where a temporary bus stop location will be located and how the Contractor will allow pedestrians to access the temporary bus stop location. The Contractor shall begin coordination with Transit Services at least 2 weeks in advance of any impact to a bus

stop, and shall give at least 3 working days advanced notice to Transit Services when a bus stop will be impacted, to allow the City to notify each of the bus drivers and riders of any changes to the stop location due to construction. Contractor shall provide all necessary signage, markings, temporary ADA accessible pathways with approved surface material to provide temporary bus stops.

The Contractor shall be prepared to meet with the local businesses to resolve traffic control issues on a weekly basis, either by having a separate field meeting or by inviting them to the regular weekly construction meeting.

A Storm Water Pollution Prevention Plan (SWPPP) shall be developed and the necessary permit from Arizona Department of Environmental Quality (ADEQ) shall be obtained prior to beginning of any construction activity.

CONTRACT STANDARD SPECIFICATIONS AND DRAWINGS

The following Standard Specifications and Standard Drawings referenced in the project contract documents are required for construction of this project:

1. City of Goodyear Engineering Design Standards and Policies Manual (Latest Edition).
2. City of Goodyear Standard Details (Latest Edition).
3. Maricopa Association of Governments Uniform Standard Specifications for Public Works Construction, latest edition.
4. Maricopa Association of Governments Uniform Standard Details for Public Works Construction, latest edition.
5. Manual of Uniform Traffic Control Devices, Latest Edition adopted by the Arizona Department of Transportation
6. ADOT Standard Specifications for Road and Bridge Construction current edition.
7. ADOT Traffic Signal and Lighting Standard Drawings, current edition.
8. International Municipal Signal Association (IMSA) Cable Specifications, latest edition.

LOCATION OF THE WORK

This project is located in Sections 7, 8 and 18, of Township 1N, Range 1W of the Gila and Salt River Base and Meridian, Maricopa County, Arizona. It is located along Goodyear Boulevard between just south of Yuma Road to just east of Estrella Parkway, as well as the north half of Sherman Street west of Goodyear Boulevard, within the City of Goodyear, Arizona.

PROPOSED WORK

Project scope of work includes roadway, utility, drainage, removals and storm drain installations, as well as utility and municipal coordination. The construction consists of paving and drainage improvements to Goodyear Boulevard, Estrella Parkway, Yuma Road and Sherman Street. Goodyear Boulevard shall be widened to the east from south of Yuma Road to Sherman Street. Goodyear Boulevard will be new roadway construction, with raised median from Sherman Street to Estrella Parkway. Yuma Road will be widened on the north side from Goodyear Boulevard to the east to provide a right turn lane. Sherman Street shall be widened to the north.

Generally, the project includes approximately 3,900 linear feet of roadway improvements along Goodyear Boulevard from just south of Yuma Road to just east of Estrella Parkway, 450 linear feet of roadway improvements along Yuma Road east of Goodyear Boulevard, 1,600 linear feet of roadway improvements along Sherman Road west of Goodyear Boulevard, and 325 linear feet of roadway improvements along Estrella Parkway.

Proposed 8" and 12" water main, services, valves and stubs are to be installed in Goodyear Boulevard from Sherman Street to Estrella Parkway. Proposed 8" waterline improvements shall be along the north side of Sherman Street from Goodyear Boulevard west, to just beyond the east property line of the future school.

Proposed 8", 10" and 12" sewer mains, manholes and stubs are to be installed in Goodyear Boulevard from Sherman Street to Estrella Parkway. Proposed 8" sewer improvements shall be in Sherman Street from Goodyear Boulevard to the west.

The intersection of Goodyear Boulevard and Estrella Parkway & Goodyear Boulevard and Sherman Street will include new traffic signals. The intersection of Goodyear Boulevard and Yuma Road will include the modification of traffic signals.

New streetlight, interconnect, and joint utility trench, and associated appurtenances will be installed along the north side of Goodyear Boulevard (east of Sherman Street), and along the north side of Sherman Street. Additionally, new electrical services, streetlights, and dry utility conduit will be installed.

PROJECT PHASING

Construction plans and these special provisions were prepared considering construction of both Phase I and Phase II (see phasing plan within construction plan set for phasing extents) concurrently as part of the scope of this project.

The City of Goodyear has determined that it is not prudent to construct the portion of the project that is within Phase II, as shown in the phasing plan limits. The City owned parcel along the south/east side of Goodyear Boulevard between Yuma Road and just west of Estrella Parkway is currently being utilized as a Soil Aquifer Transfer Site for reclaim water through July 2016, and is required to function as it currently does through that time.

As such, the Phasing Plan within the construction plans, as well as bid tab & quantities were modified to reflect construction of Phase I only. In consideration of this, the following items shall be considered by the Contractor:

- Phase I improvements are to be constructed per plan and as indicated in the phasing plan sheets. Improvements shown within the limits of Phase II shall not be constructed as part of this project/advertisement. Contractor shall base their bid, including civil, utility, striping/signing, signals, traffic control, temporary conditions, etc. on Phase I improvements, unless otherwise indicated in these phasing plans. The City of Goodyear reserves the right to add tasks within Phase II at their discretion only, and Contractor shall not rely on any Phase II tasks/scope of work as part of their bid, work plan or schedule.
- Striping/signing layout and design within this construction plan set is based on ultimate constructed condition of Phase I & Phase II, and will be amended prior to start of construction to accommodate Phase I improvements only. Sherman Street and Estrella Parkway striping/markings will be per plan.
- All proposed utilities, unless otherwise indicated in these phasing plans, shall be constructed as part of Phase I, including water & sewer mains, services and stubs, as well as lighting, interconnect, and joint utility trench/conduit. Contractor shall coordinate with service providers and their contractors throughout project duration. Locations of stubs and/or services that are shown to be constructed within Phase II will be terminated at, or prior to, the limit of Phase I improvements as shown on phasing plan.
- All drainage basins indicated on the construction plans shall be constructed as part of Phase I improvements.
- Future school site along north side of Sherman Street will be constructed concurrently with this project. Contractor shall coordinate improvements and schedule with school contractor to avoid delays or additional costs.

Volume quantities indicated in the construction plans were calculated assuming Phase I & Phase II would be constructed concurrently. Contractor shall develop independent volume take-offs that include construction of Phase I only, and adjust their bid accordingly.

Any discrepancies, interpretations, or assumptions by the Contractor found between the phasing plans and this section of the Special Provisions, or that may contradict or imply a change to construction of Phase I improvements shall be reviewed and interpreted by the City only. Contractor shall present any information or questions related to issues or concerns with project phasing to the City immediately, as there will be no additional compensation or time extension provided to the Contractor as a result.

CONTRACT TIME

The Contractor shall complete all project work within **120** calendar days from notice to proceed. Contractor shall be completed with all improvements, including all punch list items, by **July 17, 2015**. Contractor shall be substantially completed, sufficient to schedule punch list walk through no later than **July 3, 2015**.

PART B: GENERAL INFORMATION

The following items are non-payment items being considered included in the cost of the project, the costs of which are to be included in project overhead or within a specific bid item. No separate payment will be made for any item that is not specifically set forth in the bid proposal. All costs shall be included in the prices named in the bid proposal for the various identified items of work. Payment for construction, modification, maintenance, removal and restoration of all access and storage facilities shall be included in the price bid items of work where access facilities are required. There will be no compensation for hard dig or unsuitable subgrade conditions.

Any work shown on the plans or implied that is not included in a bid item will be included in the cost of the project.

PLANS AND SHOP DRAWINGS (SUBMITTALS)

General: MAG Section 105.2 is modified to add the following:

Materials: The Contractor shall furnish to the City of Goodyear's Contract Administrator product data, material certificates, mix designs and shop drawings in sufficient detail to show complete compliance with all specified requirements, including but not necessarily limited to the following:

Product Data:

- Water pipes and appurtenances
- Sewer pipes and appurtenances
- Storm drain pipes, irrigation pipe/sleeve and appurtenances
- Fire hydrants
- Water meters, boxes/lids, fittings
- Service Taps, Saddles, etc.
- Valves and valve boxes
- Vaults, manholes, covers and, liners
- Traffic signal and ITS components
- Light poles, luminaires and all electrical components
- Paint
- Traffic sign sheeting
- Preformed pavement markings & RPM's
- Pavement markers/adhesives
- Tapping sleeves

Product data shall include information such as the manufacturer's printed recommendations, compliance with recognized trade association standards,

application of testing agency labels and seals, product dimensioning, and notation of coordination requirements. Product testing as required by this contract shall be by City approved testing consultant.

Certificates: Piping materials and appurtenances
 Gaskets
 Valves
 All steel and iron materials
 Signing and striping materials
 Tack coat
 Asphalt Concrete Binder
 Pull boxes
 Wiring
 PVC conduits
 Fire hydrants
 Electronic ball marker
 Tapping sleeves
 Cement
 Fly Ash

Contractor cannot commence work on any scope items unless proper material certifications have been submitted, reviewed and approved by the City. All material certificates and project certificates of compliance shall be prepared by the manufacturer or testing agency thereof and shall include technical specifications, compliance with industry trade association and testing agency standards, and asphalt concrete compliance with approved mixes. Material testing as required for certificates by this contract shall be by City approved testing consultant.

Mix Designs: Asphaltic concrete pavement & Binder
 Portland cement concrete
 Subgrade – base course

The mix designs shall directly compare the proposed mix components and properties with those of the referenced standard mix or as modified within the special provisions. Design mix testing as required by this contract shall be by City approved testing consultant.

Shop Drawings: Sequence of construction
 Traffic control/haul route

Concrete and asphalt
Utility protection plans
Reinforcing steel, bending and layout
Details of structures if non-standardized
Falsework
Steel fabrication details
Shoring
All Electrical/lighting/signal components
All irrigation/landscaping components
Security cage
Stormwater Pollution Protection Plan
Trash rack
Pull boxes
Storm drain pipe, irrigation pipe, layout per MAG Section 735
Tapping sleeves
Valves
Mechanical Restraints
Wall/Fence detail

Each shop drawing submittal shall bear the approval stamp and signature of the General Contractor, and shall include a cover/transmittal cover sheet from the General Contractor. Shop drawings shall include the name of the project, project number, federal project numbers, date prepared, and name of the Preparer, Contractor, and Subcontractor, if applicable. All dimensions and identification of products and materials included, along with notation of any coordination requirements and established field dimensions/measurements/verifications shall be clearly shown or noted. English units shall be used.

Drawings of minor or incidental fabricated material and/or equipment may not be required by the City. The Contractor shall furnish the City tabulated lists of such fabrications, showing the names of the manufacturers and catalog numbers, together with samples of general data as may be required to permit determination by the City as to their acceptability for incorporation into the work.

Approved Construction Sequencing Plans shall be maintained on-site throughout the duration of the project.

Samples: Stamped Concrete
 Aggregate base course
 Riprap – spillway, trench drains

Paint and other coatings

Samples shall be representative of the materials to be incorporated into the project and submitted in sufficient quantity to permit evaluation and/or comparison.

Distribution and Review:

The Contractor shall anticipate and schedule for a two week review period by the City and/or its designee during which time will either approve, disapprove, or request modifications. The latter two will require re-submittal of the material and a subsequent additional review period. This process shall be repeated until all submitted materials have been approved, including material/product certifications.

Shop drawings shall be on sheets in standard size increments of 8-1/2" x 11", 11"x17", and 24" x 36". All drawings shall indicate the name of the job, the City's job number, date, names of the Contractor, Subcontractor and Preparer, and the date of approval by the Contractor. All other data, certificates or mix design reports shall be presented on 8-1/2" x 11" formats, or as provided by the supplier/manufacturer.

The Contractor shall first review all submitted data for compliance with specification and job requirements. Six Contractor approved copies along with a letter of transmittal shall be delivered to the City's Contract Administrator. Any Contractor comments, recommendations, etc. shall be clearly noted on the submitted data. The Contractor shall provide all submittal material far enough in advance of scheduled need to allow for the noted City review time. The City will not consider time extension requests or delay/damage/inefficiency claims/etc. resulting from the Contractor failing to properly schedule submittals.

If the submittal is acceptable, three copies will be stamped approved, dated, initialed by the Reviewer, and returned to the Contractor.

If the submittal requires corrections or is rejected, three copies along with an explanation of the outstanding concerns will be returned to the Contractor for revision and the subsequent re-submittal as described above.

Re-submittal of any required corrections shall be made within 10 working days.

Contract Documents: Approved drawings, data, mixes and certificates as they are returned to the Contractor will become a portion of the contract documents.

PRECONSTRUCTION CONFERENCE/ WEEKLY MEETINGS

Preconstruction Conference: The Contractor and all subcontractors shall attend a preconstruction conference meeting at a time and location designated by the Contract Administrator. The Contractor shall be prepared and ready to present to the Contract Administrator all required schedules, plans, etc. as described elsewhere in these special provisions and within the MAG Standard Specifications. The Contractor shall advise the owner's representative of discrepancies with drawings or special provisions.

Weekly Meetings: The Contractor shall plan for and attend weekly meetings with the City at a location and designated time determined by the Contract Administrator. The Contractor shall include in the construction schedule adequate time for weekly construction progress meetings. The Contractor shall prepare and provide at each of the weekly meetings, a three week schedule of construction activities planned for the current and subsequent two week period.

Meeting Notes: The Contractor shall take notes at the meetings. The notes shall be furnished to the Contract Administrator in the form of minutes within two working days. The minutes shall address action items and the responsible parties. The Contract Administrator shall review and approve all minutes.

SUBGRADE PREPARATION

MAG Section 301.7 is revised to read:

Measurement for grading under pavement will not be measured separately.

MAG Section 301.8 is replaced with;

Payment for subgrade preparation shall be included in the cost of the items of ABC or asphalt pavement (refer to plans and these special provisions).

There will be no separate measurement and payment for grading and surface preparation of areas outside of roadway pavement, the work being included in the cost of adjacent work items.

ROADWAY EXCAVATION

General:

Conform to MAG Section 205 except as modified herein.

Replace Section 205.1 Description with the following:

Roadway excavation shall consist of excavation or fill construction required or part of the grading and construction of roadways, sidewalks, ramps, medians, scuppers, spillways, driveways, driveway tie-ins, private drives, matching existing behind back of walks or at

edges of pavement (except for retention basins), & restoring landscape areas. Contractor is responsible for utilizing material from other excavations (from or for roadway & drainage) in the construction of roadway sub base in fill construction situations. Roadway excavation includes finished grading against all Hardscape items, such as curb, sidewalk, edge of pavement, headwalls, ramps, driveways, pull boxes, equipment, equipment pads, pole foundations, utility vaults/manholes/valves, and shall extend to any tie-in or match existing grades/locations. Work under this item shall include construction of finished grade behind back of curb (median or lane curb) and sections within landscape buffers to 2" below top of curb or sidewalk. Areas behind sidewalk shall be level with back of walk grade.

No separate Measurement or Payment for roadway excavations, the costs of which shall be considered included in the price bid for the construction or installations of the items to which such roadway excavation is incidental or appurtenant.

TRAFFIC SIGNAGE

General:

Conform to signing and marking plans, including all City of Goodyear standards and specifications. All existing signs within project limits, or those that are outside of project limits that contradict proposed signage, that are not salvaged, reused or reinstalled shall be removed and delivered to city.

No additional measurement or payment shall be considered for this task.

SECTION 105 CONTROL OF WORK

105.6 COOPERATION WITH UTILITIES, add the following:

The locations of existing underground utilities are shown on the plans to the best of the Design Engineer's knowledge from information provided by respective utilities or discovered in the field; however, it shall be the Contractor's responsibility to field verify all utility locations and to coordinate in a timely manner with the pertinent utility companies so that any obstructing utility installation shall be protected, not damaged or dislocated and may be adjusted with prior utility agency approval; without delay to the Contractor's project schedule.

The City will not consider additional compensation requests from the Contractor to perform any potholing, utility company coordination, etc. needed to locate/verify utility location, to adjust contract work items as necessary to avoid utility line conflict, to cooperate with utilities in adjusting schedule as needed to allow for utility company work, relocations, etc. The Contractor's bid shall allow for/include the above

coordination/work/adjustments based on the best available information known/provided in bid documents.

The Contractor shall coordinate unresolved conflicts with the owning utility and the City's Construction Coordinator prior to the construction of the proposed improvements.

The Contractor will investigate and pothole as necessary to verify the location of underground utility facilities ahead of construction activities. Locations of utility facilities shown on drawings furnished by the City are to be regarded as preliminary information only, subject to further investigation by the Contractor. The City does not warrant the accuracy of these locations, and the Contractor, by entering into this Contract, expressly waives and disclaims any claim or action against the City under any theory for damage resulting from location of utility facilities.

The Contractor shall be responsible for obtaining all Blue Stake utility location information, and for performing all requirements as prescribed in A.R.S. 40-360.21 through A.R.S. 40-360.29, for all underground facilities, including those that have been installed on the current project, until the project is accepted by the City.

At least two (2) working days prior to commencing any excavation, the Contractor shall call the Blue Stake Center, between the hours of 7:00 a.m. and 4:30 p.m., Monday through Friday, for information relative to the location of buried utilities. The number to be called is as follows: Maricopa County, (602) 263-1100.

Failure to contact the Blue Stake Center may result in violations of A.R.S. SS 40-360.21 and A.R.S. SS 40-360.22A.

Contacts: The following utilities are expected to be located within the limits of this project. The information below is provided for the Contractor to contact the appropriate personnel:

Entity	Name	Address	Contact Information
Arizona Public Service (APS)	Tanja Weese	PO Box 53933, Phoenix, AZ 85072-3933 M.S. 4620	Voice: (623) 975-5712 Mobile: (602) 809-3581 E-mail: tanja.weese@aps.com
Cox Communications	Duane Mitry	1550 W. Deer Valley Rd. Mail Stop DV2-01 Phoenix, AZ 85027	Voice: (623) 328-4181 Mobile (602) 694-1723 E-mail: duane.mitry@cox.com
Cox Communications	Randy Sims	1550 W. Deer Valley Rd. Mail Stop DV2-01 Phoenix, AZ 85027	Voice: (623) 328-4058 Fax: (623) 322-7500 E-mail: randy.sims@cox.com

Entity	Name	Address	Contact Information
CenturyLink	Eric Hitchcock	135 West Orion Suite 1 Tempe, AZ 85283	Voice: (602) 630-5474 Mobile: (602) 460-1233 E-mail: eric.hitchcock@centurylink.com
Southwest Gas	Valerie Gallardo- Weller	9 South 43 rd Avenue Phoenix, AZ 85009	Voice: (602) 484-5342 Email: Valerie.gallardo- weller@swgas.com
Roosevelt Irrigation District	Donovan Neese	103 W. Baseline Road Buckeye, AZ 85326	Voice: (602) 386-2046 Email: dneese@rooseveltirrigation.org

MISCELLANEOUS RELOCATIONS BY OTHERS (i.e. APS, CENTURYLINK, COX, SOUTHWEST GAS, ROOSEVELT IRRIGATION DISTRICT)

Relocations to be performed by utility companies in advance of and during proposed project improvements.

Southwest Gas is not anticipated to relocate any facilities with this project. However, should a conflict arise between their facilities and proposed construction, Contractor shall coordinate conflict resolution with Southwest Gas representatives and accommodate their contractor(s) without delay or additional compensation claims. Coordination shall be sufficient that the Contractor cannot claim delays or damages as a result of utility interferences. There are existing high pressure gas mains within the project limits. Contractor shall coordinate with Southwest Gas staff prior to and during construction and shall protect all facilities when working on or adjacent to them.

There will be curb, gutter, driveway and sidewalk removals and construction over Southwest Gas Corporation facilities in several locations. We require a minimum of 36" from final grade for gas facilities. There are also potential conflicts with the streetlights and traffic signal conduits. Actual conflicts can be avoided if your facilities are installed to provide a minimum 12" face-to-face clearance at the point of crossing. Additional conflicts can be avoided by determining the exact location and elevation of the gas pipelines. Southwest Gas does not provide depth information on our natural gas facilities. We recommend that you evaluate each gas pipeline location by potholing to determine our exact elevation. Prior to excavating, please have your construction contractor call Blue Stake at (602) 263-1 100 so existing gas facilities may be accurately located. Your contractor should hand dig carefully at these marked locations until the gas pipe has been found and exposed. Use care to avoid damaging

or breaking a small electrical tracer wire (which is used for locating purposes) that may be buried with the pipe. Any underground facility crossing our gas must have at least 12 inches face-to-face clearance at the point of crossing.

Please be aware that there may be abandoned steel gas lines within your project limits that are potentially coated or wrapped with unidentified materials. Southwest Gas treats all of its steel gas pipe with unidentified coating/wrapping materials as potentially containing asbestos. Accordingly, whenever such pipe is in direct conflict and requires removal, it must only be done so by one of Southwest Gas's NESHAP certified contractors. Please contact Southwest Gas in advance to coordinate any removal. Once mechanical trenching is in progress, do not dig within two feet of a gas pipe. This trenching shall be done by hand in order to prevent any damage to the gas pipe. In the event your contractor should "hook" or otherwise strain a gas pipe while excavating, a call should be placed to 602-271 -GASS (271-4277).

Even though there may not be any apparent damage, the strain may have damaged the wrap or a portion of the buried pipe or fittings at other locations causing a leak in the surrounding area. Also, if a steel facility is exposed and the pipe coating is found to be in need of repair, please contact our office so a crew can be dispatched to rewrap the pipe. This is a service provided by Southwest Gas at no cost to the contractor so we can monitor our steel facilities and minimize the possibility of corrosion.

When the excavations are complete, all exposed gas pipes should be protected. If the trench is more than three feet wide, the pipe must be supported in a manner where the supporting material does not damage the pipe or its protective wrapping.

Southwest Gas requires six inches of bedding, one inch on the side and six inches of shading with sand or material free of rocks and able to pass through a 3/8-inch screen. This will provide a firm support under the facility and prevent damage to the pipe or pipe coating from the backfilling operation. Do not drop backfill directly over the gas pipe. During the compaction process, use extra care when directly over the gas pipe in order to avoid any damage.

Southwest Gas will paint yellow all protective valve box lids and vault manhole covers. It will be the responsibility of the public agency's contractor to make sure these are protected during construction. The public agency's contractor will be responsible for adjustments to all valve box lids and vault manhole covers due to grading and paving per MAG Details 391.1 and 391.2. Contact Southwest Gas Construction at 43rd Operations 602-484-5350 for coordinating work and inspections. For emergencies, please call 602- 271-GASS (4277).

CenturyLink is not anticipated to relocate any facilities with this project. However, should a conflict arise between their facilities and proposed construction, Contractor shall coordinate conflict resolution with CenturyLink representatives and accommodate their contractor(s) without delay or additional compensation claims.

Coordination shall be sufficient that the Contractor cannot claim delays or damages as a result of utility interferences.

Existing communication vault/manhole covers are in conflict with proposed improvements and must be adjusted to grade by Contractor. Refer to plans and these special provisions for additional details. Contractor shall coordinate with CenturyLink staff prior to and during construction activities and will adjust structures per utility provider specifications.

CenturyLink is anticipated to participate in utilizing the joint trench, which will also include streetlight & APS primary facilities, as well as Cox conduit and conductor/wires. Contractor shall install all conduits, however, CenturyLink will install facilities within conduit, and also construct above ground facilities. Contractor shall make accommodations and coordinate with CenturyLink forces during construction sufficient that the Contractor cannot claim delays or damages as a result of utility interferences.

Cox Communication is not anticipated to relocate any facilities with this project. However, should a conflict arise between their facilities and proposed construction, Contractor shall coordinate conflict resolution with Cox representatives and accommodate their contractor(s) without delay or additional compensation claims. Coordination shall be sufficient that the Contractor cannot claim delays or damages as a result of utility interferences.

Cox is anticipated to participate in utilizing the joint trench, which will also include streetlight & APS primary facilities, as well as CenturyLink conduit and conductor/wires. Contractor shall install all conduits, however, CenturyLink will install facilities within conduit, and also construct above ground facilities. Contractor shall make accommodations and coordinate with Cox forces during construction sufficient that the Contractor cannot claim delays or damages as a result of utility interferences.

Allow a minimum of 45-days to resolve undetermined conflicts that arise as a result of the construction of this project. If additional time is required a Cox representative will communicate during the relocation process. When crossing Cox Communications facilities the contractor shall pothole to determine depth and maintain a minimum of 12 inches of vertical and horizontal separation from the proposed facility. Support and protect all Cox Communications facilities during construction. Cox Communications does not maintain installation records of customer drops that may conflict with this project. Notify Cox Communications Engineering Department of all utility

coordination meetings, pre-construction meetings and construction schedules including the anticipated construction start date.

APS - The Contractor will relocate existing streetlight junction boxes (and associated conduit), install new streetlights, junction boxes, conduit, trenching and other related appurtenances as part of the scope of this project. Contractor shall trench and install conduit, pull boxes, poles/foundations and circuits for all streetlights as specified herein and shown on the plans. Contractor shall also install joint utility trenching, including backfill and material, as shown on the construction plans and APS plans.

Contractor shall coordinate, in advance of completing installation of all lighting circuits, with APS for electrical service drops, inspections and final approval/acceptance. Contractor to maintain ½ street streetlight functionality at all times, where required. APS will pull wire and connect the lighting circuit to provide power. Existing conduit and direct bury secondary underground electric lines may be abandoned, as required or as necessary, as part of this project (Contractor to coordinate with APS to determine which facilities are to be abandoned). Removal of abandoned facilities to construct project improvements are considered incidental to existing project bid items. APS contractor will install equipment and pull wire. Contractor will provide materials, as well as services detailed in APS plans, as required to install and make complete and operational, all APS equipment. Contractor shall make accommodations of APS and their Contractor, and shall coordinate sufficiently to ensure no additional costs or interruptions to Construction schedule are incurred.

The Contractor shall consider these installations, relocations, removals and/or adjustments within the phasing of the street improvement construction so there are no unnecessary delays. Contractor shall reference APS Project No. WA208170 for additional information and direction.

Roosevelt Irrigation District (RID) facilities are located within the project limits. RID forces will relocate existing concrete canal, headwall, pipe, and provide removals within and adjacent to the Goodyear Boulevard roadway prism, to a new concrete canal, new concrete reinforced pipe, collars and headwall structures prior to or shortly after start of construction of this project. In addition to roadway improvements, Contractor will be required to construct drainage facilities, including retention basins, pipes, scupper/spillway, and headwalls adjacent to RID facilities. Contractor shall coordinate with RID staff prior to and during construction and shall protect all facilities when working on or adjacent to them.

Minimum cover over irrigation facilities is typically 24-inches, while horizontal clearances shall be 24-inches to pipe, and 48-inches to any structure. The Contractor shall brace any irrigation facility, per RID requirements, at any time that facilities are installed adjacent to or beneath the irrigation facility.

There is no separate payment to the Contractor for coordination with the utility companies or their contractor. Associated coordination costs shall be inclusive the project unit bid prices.

SECTION 107 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

107.1 COMPLIANCE WITH LAWS, add the following:

107.2 PERMITS, add the following:

The Contractor shall comply with all City of Goodyear and any applicable A.D.O.T., M.C.D.O.T. permitting requirements.

It shall be the responsibility of the Contractor to obtain and provide payment for all required permits for construction, dust control, relocation of native plants, erection of signs, etc.

Water and sewer development, resource and meter fees (excluding construction water metering) will be paid by the City.

The Contractor shall be responsible for securing and payment for any necessary hydrant meters including deposits and all fees for water usage.

The Contractor shall be responsible for payment of any City fees associated with water main shutdowns or miscellaneous charges for optional City provided services.

A special grading permit at the Contractor's expense will be required when using spoils to fill private property. No grading will be allowed until a Grading and Drainage Plan has been approved by the City.

All haul routes for removals; excavation and dirt moving must be approved by the City prior to commencement of operations.

The Contractor shall be responsible for payment of any fees associated with the City for any work within their right-of-way and for adjusting or relocating their facilities.

107.2.1 AZPDES (NPDES) Construction General Permit Requirements, add the following:

This project is subject to the Arizona Pollutant Discharge Elimination System (AZPDES) program's permit requirements for construction sites. The Contractor is responsible for obtaining applicable permits and complying with permit requirements.

The Storm Water Pollution Prevention Plan (SWPPP) must be submitted with the Notice of Intent (NOI). Within 32 business days of receipt, Arizona Department of Environmental Quality (ADEQ) will notify the operator whether:

- 1) it is acceptable to proceed under the general permit;
- 2) the SWPPP needs revisions; or
- 3) There is cause for eligibility denial. If notification is not received in this time-frame, the operator may assume coverage under this permit.

To prevent potential permitting delays, the Contractor is encouraged to prepare and submit the NOI and SWPPP to ADEQ upon receipt of notice of award from the City of Goodyear. Additional information may be obtained from the ADEQ website:

<http://www.azdeq.gov/envIRON/water/permits/stormwater.html>

107.5 SAFETY, HEALTH AND SANITATION PROVISIONS, add the following:

The Contractor shall provide and maintain portable toilet facilities in each area of work. Portable toilet facilities shall be cleaned not less than once weekly. The associated costs of this requirement shall be incidental to the project.

SECTION 108 COMMENCEMENT, PROSECUTION AND PROGRESS

108.9 FAILURE TO COMPLETE ON TIME, add the following:

The liquidated damages provisions of section 108.9 apply to this Contract. The original work assignment amount shall be used in the column labeled "Original Contract Amount" of Table 108-1 to determine the Daily Charges.

SECTION 210 BORROW EXCAVATION

210.4 MEASUREMENT, is revised to read:

Quantities of borrow excavation will NOT be measured.

210.5 PAYMENT, is revised to read:

No separate payment will be made for Borrow Excavation. Any work required under this, or any related, item shall be included in the cost of adjacent work items.

SECTION 211 FILL CONSTRUCTION

211.5 MEASUREMENT, add the following:

Quantities of fill construction will NOT be measured.

211.6 PAYMENT, add the following:

No payment will be made for Fill Construction. Any work required under this, or any related, item shall be included in the cost of adjacent work items.

SECTION 401 TRAFFIC CONTROL:

401.5 GENERAL TRAFFIC REGULATIONS:

Contractor will be required to provide permanent and temporary traffic control to accommodate project schedule, phasing, the general public, etc. throughout the length of this project, and as indicated in the Contract documents. Contractor shall coordinate, and receive written approval of, all traffic control layouts and equipment prior to start of construction or prior to making any changes. Contractor shall modify traffic control, at any time, when requested by the City, and without any additional compensation.

401.5.3 Temporary Lane Diversions, add the following:

Traffic shall be maintained on paved surfaces. All temporary lane diversions shall be paved.

PART C: BID ITEMS

The following bid items are numbered to correspond to the Schedule of Bid Items and are included to explain details of work not covered by applicable Standard Specifications & Details as outlined in PART A, and to relate work and pay quantities to the specific bid item.

Any work shown on the plans implied or specified in the special provisions but not listed in the bid item shall be included in the cost of the project.

ITEM 104.20051 OWNER'S CONTINGENCY

This item is a general contract allowance item for the purpose of providing funds to cover the costs of additional work as a result of unforeseen conditions. This item provides an estimated funding to cover unforeseen changes that may be encountered and corresponding extra work needed to complete the contract per plan. It shall be understood that this allowance is an estimate only and is based on the history of similar projects. The amount of the contingency item is determined by the Engineer and is not subject to individual bid pricing. It is further understood that work under this item, if any, may be less than the allowance item. This item shall not be utilized or drawn on unless authorized in writing by the City's Contract Administrator.

All bidders shall incorporate the amount pre-entered in the bid schedule and shall reflect the same in the total amount bid for this project.

Work under this section shall be accomplished only after receiving written authorization by the City's Contract Administrator. Unforeseen extra work, if any, shall be as approved by the Engineer, for example; negotiated price, or time and material in accordance with MAG Uniform Standard Specifications section 109.4 and 109.5.

ITEM 105.80001 CONSTRUCTION SURVEYING & LAYOUT

MAG Section 105.8, Construction Stakes, Lines and Grades is deleted and replaced by the following:

General:

The Contractor shall furnish all materials, personnel, and equipment necessary to perform all surveying, staking, laying out of control lines and verifications of the accuracy of all existing control points which are delineated in the Contract Documents. The work shall be done under the direction of a Registered Land Surveyor licensed to practice in the State of Arizona.

Staking Outline:

Prior to beginning any survey operations, the Contractor shall furnish to the City's Contract Administrator, for approval, a written outline detailing the method of staking, interval of stakes, marking of stakes, grade control for various courses of materials, referencing, structure control, and any other procedures and controls necessary for survey completion. A part of this outline shall also be a schedule showing the sequencing of the survey and layout work, throughout the course of the contract, listing a percentage of completion for each month.

Field Books:

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

Survey Control Verification:

Control Points (horizontal and vertical) - The existence and location of all survey monuments, bench marks and control points shall be verified prior to demolition or construction activity. Immediately notify the City of Goodyear when location discrepancies greater than two-hundredths (0.02) foot horizontal or one-hundredth (0.01) foot vertical are found. All datum shall be City of Goodyear.

Control Lines:

Construction control lines with grade breaks, transition points, horizontal and vertical curves, etc., shall be established and referenced prior to construction.

Temporary Benchmarks:

Temporary benchmarks shall be established and referenced.

Pre-Construction Location Survey:

All existing features which are located prior to construction shall be referenced to survey monuments along control lines by stationing in accordance with the construction documents and by offset distance from the control lines. All features shall be re-locatable after construction. Distances measured shall be within one-hundredth (0.01) foot.

Survey Staking:

Survey monuments - all survey monuments that lie within the construction area that may be disturbed shall be referenced to a specific point on at least four (4) stable objects by distance measurement. Reference objects shall be located no greater than three hundred (300) ft from the survey monument being referenced.

Water and Sewer line appurtenances:

Water and sewer line surface appurtenances such as manholes, valves and cleanouts that lie within the construction area shall be located and noted on the Contractor's approved construction documents prior to any demolition or excavation.

Match Points and Removals:

Verify the location (horizontal and vertical) of existing facilities to which the project connects. Immediately notify the Inspector when location discrepancies of connecting facilities greater than one-tenth (0.10) foot horizontal or two-hundredths (0.02) foot vertical are found.

Construction Stakes:

The Contractor shall set construction stakes and marks establishing lines and grades for road work, curbs, gutters, sidewalks, structures, centerlines for utilities and necessary appurtenances and other work as indicated in the Contract Documents and shall be responsible for their conformance with the plans and specifications. The stakes shall be established in accordance with the following guidelines which represent the minimum standard and the Contractor shall provide additional stakes and controls necessary to perform the work. The Contractor shall be held responsible for the preservation of all stakes and marks and will replace, at no additional cost to the City of Goodyear; any construction stakes or marks which have been carelessly or willfully destroyed by acts of nature or other parties.

Curbs, Curb and Gutter, Valley Gutter:

Curb and gutter shall be staked and installed prior to sidewalk, driveway and comer ramp construction. Cut/fill stakes for rough grade shall be set at one hundred (100) ft intervals with cuts to the top of curb.

Finish grade stakes shall be set to curb grade at twenty-five (25) ft intervals, at grade brakes, angle points, transitions, returns, driveways, alley entrances, sidewalk ramps and other curb control points. The stakes shall be tacked for line on a 2-foot offset to the back of curb. Face of curb forms shall be checked for grade at flow line prior to placing concrete where longitudinal grades are one-tenth percent (0.10%) or less.

Face of curb forms shall be checked for grade at gutter line prior to placing concrete for transitions at 30-foot intervals. Valley gutter stakes shall be set offset five (5) ft from the centerline of the valley gutter at twenty-five (25) ft intervals, marked with cuts to the flowline of the valley gutter.

Roadway:

Subgrade stakes shall be set to subgrade elevation at fifty (50) ft intervals on straight sections, twenty-five (25) ft intervals through vertical curves, on horizontal curves with radius of six-hundred (600) ft, or less, and/or slopes of less than four-tenths of one percent (0.4%), the beginning and end of horizontal and vertical curves and grade breaks. Stakes

shall be set at crown lines, at grade break lines and at edges of pavement which do not abut concrete curb and gutter or at the edge of pavement abutting vertical curbs or other structures whose surface grade will not be flush with the finished pavement grade. Quarter lines will be staked where the distance between the crown line stakes and the curb and gutter face exceeds twenty (20) ft.

Select shall be staked the same as sub grade.

ABC stakes shall be set to ABC elevation at thirty-three (33) ft intervals on straight sections, twenty-five (25) ft intervals through vertical curves, on horizontal curves with radius of six-hundred (600) ft, or less, and/or slopes of less than four-tenths of one percent (0.4%), the beginning and end of horizontal and vertical curves and grade breaks. Stakes shall be set at crown lines, at grade breaks and at edges of pavement which do not abut concrete curb and gutter or at the edge of pavement abutting vertical curbs or other structures whose surface grade will not be flush with the finished pavement grade. Quarter lines will be staked where the distance between the crown line stakes and the curb and gutter face exceeds twenty (20) ft.

Pavement edges shall be controlled by utilizing a wire control mechanism or screeding along a concrete gutter or other structure whose surface grade is flush with the finished pavement grade. Stakes shall be set to finished elevation at thirty-three (33) ft intervals on straight sections, twenty-five (25) ft intervals on curves with radius of six-hundred (600) ft, or less, and/or slopes of less than four-tenths of one percent (0.4%), the beginning and end of horizontal and vertical curves and grade breaks.

Sidewalks:

Stakes are not required for sidewalks five (5) ft or less in width which are adjoining existing curb and gutter.

Sidewalk stakes shall be set to grade on an offset and tacked for line at twenty-five (25) ft intervals at the beginning and end of horizontal and vertical curves and grade breaks.

Traffic Signing, Striping and Detector Loops:

The Contractor shall delineate the procedures and controls to be utilized in the Staking Outline. Landscaping: The Contractor shall delineate the procedures and controls to be utilized in the Staking Outline.

Re-establishment Survey:

Monument locations will be marked with "straddlers" (four nails with metal "shiners") driven into the pavement, placed in pairs approximately six feet apart and opposite to each other. Lines connecting opposing pairs shall form a ninety-degree cross with three foot

legs. The center of the cross will signify the exact location of the center of the monument to be set. Monuments will be drilled or punched after they have been set.

Manhole, valve box and cleanout locations shall be painted on the pavement.

Inspection and Acceptance of Work:

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

Measurement and Payment:

Construction surveying will be measured as a single complete item of work together with as-built surveying and paid at the Lump Sum price indicated on the Bid Schedule, which amount shall be considered full compensation for the work as described herein and required to provide all necessary survey stakes and control. The approved schedule showing the sequencing and percentage of the survey and layout work shall be the basis on which monthly progress payments shall be made. This schedule shall be subject to periodic review, at the request of either party, if the survey and layout work lags or accelerates. If necessary, the schedule will be revised to reflect changes in survey and layout progress. When approved, the revised schedule will become the basis for payment.

ITEM 105.80002 AS-BUILTS

General:

A full-size set of project red line drawings shall be kept on-site and updated on a weekly basis with a red pencil or red ink to reflect any field adjustments, changes, omissions, additions, etc. as they occur on the project. The City of Goodyear inspector will check site as-builts on a weekly basis to ensure all modified project elements have been properly recorded on the field plan set.

The Contractor shall provide plan sheets for use in preparing final as-builts. Information shall be shown on these plans in red opaque ink, depicting the constructed dimensions, elevations, grades and materials including locations of existing underground utilities found during construction.

The Contractor shall exercise extreme care in handling any provided originals and will return them to the City of Goodyear in like condition. In the event the originals are damaged or determined by the City of Goodyear to be unacceptable, the Contractor shall

replace the originals by contacting the Design Engineer of record and have new drawings produced. All costs incurred, as the result of replacing the originals shall be borne by the Contractor. The City of Goodyear will be the sole judge in determining whether the as-builts are acceptable in either condition or detail.

All work included in the contract documents as well as changes to the contract shall be noted as correct or modified by either checking off the information if it is correct, or by drawing a neat line through the original data and writing in the correct information in red opaque ink if the information is incorrect. Unless noted otherwise below in the minimum as-built requirement section, station/offset measurements will be from construction centerline/monument line both parallel and transverse to roadway; added items or location changes shall be physically drawn at revised or new locations on the as-builts; and all measurements and stations should be to the nearest tenth foot.

The minimum requirements for as-built acceptance is as follows:

Project Drawing Quantity Notations:

Any project drawing or quantity summary sheet that shows a quantity on it that is incorrect shall be corrected by drawing a neat line through the original quantity and writing in the correct information. When space on the drawing does not allow room to indicate the corrections, a separate table may be drawn on a separate sheet with reference on both plan sheets to the plan sheet that the table refers to or to the sheet where the table is located.

Existing/New Utilities:

All underground infrastructure utilities, whether depicted on the project plans or not, shall be verified, corrected or added to the as-builts noting the beginning and ending station/offset location and elevation of utility relative to finished roadway grade or other identifiable ground or permanent roadway/project feature. Any electrical installation work for street lighting or power connection shall be located relative to construction centerline/monument line or relative to back of curb and gutter (whichever is closer) including the depth of the facility.

Removals:

Dimensions and/or other volumetric descriptions and station/offset location of all removed items.

Curb/Gutter/Valley Gutter:

Beginning and ending station/offset location of straight curb /gutter/valley gutter runs relative to construction centerline/monument line; flow line elevation; and station/offset location of PC's and PT's.

Driveway/Alley Entrances:

Beginning and ending station/offset including driveway wings.

Sidewalk: Beginning and ending station/offset and any other modification necessary to incorporate or avoid existing facility conflicts.

Pipelines:

When pipeline parallels the construction centerline/monument line, verify or correct the perpendicular distance between the two. When pipeline angles relative to the construction centerline/monument line or is in a curved roadway section, as-built measured straight pipe run distances, angle points, changes in size, fitting/tee locations tied-in with practical known construction centerline/monument line location or other easily verifiable permanent point. Distances between fittings are from fitting centerline. Fire hydrant and catch basin branch lines are to be shown in profile including pipeline bends and collars. All project drawing pipeline cross-sections and profiles are to be corrected to reflect modified pipeline locations/alignments. Station and offset locations for sewer line laterals are from main line to ROW line with beginning/ending line location tied to a monument or to a property corner. Locations where waterlines cross curb and gutter are to be noted by station. Where waterlines run parallel to curb and gutter, note locations relative to back of curb or construction centerline/monument line (whichever is closer) including angle points and elevation.

Manhole/Catch Basin/ Valve/Cleanout/Tee:

Beginning/ending station and offset. Stationing is to commence at the downstream manhole (or as depicted on drawings) with location of tap/wye/tee/lateral locations clearly noted.

Landscaping and Irrigation:

Note beginning and ending station/offset/elevation including size of PVC, sleeve/pull-box|electrical-valve|water-service|tap|meter|bubbler|drip-line locations.

Traffic Signal:

Signal pole station/offset; electrical conduit, sleeve, controller, meter pedestal and pull box station/offset with distances of electrical conduit runs noted and tied in with known point.

Roadway Striping/Signage:

Any relocated sign shall be located by station and offset from construction centerline/monument line. Any change in roadway marking is to be noted on as-builts.

Roadway Street Lighting:

Street light poles are to be located by station and offset from construction centerline/monument line.

Linear Items:

Fences, walls, ditches, etc. should be located by station/offset and tied in with a permanent point.

The as-built drawings shall be certified by an Arizona Registered Land Surveyor. As-built drawings shall be delivered to the City of Goodyear's Contract Administrator within thirty (30) calendar days from the date of final inspection and acceptance by the City of Goodyear of the work completed under this contract. Work under this bid item includes transfer of all information noted by the contractor on the on-site as-built drawing set described above. Final payment will be made only after submitted as-builts are accepted by the City of Goodyear (see "Measurement and Payment" below).

Measurement and Payment:

Surveying As-Builts will be measured as a single complete item of work together with construction surveying and paid at the Lump Sum price complete item of work and paid at the Lump Sum price indicated on the Bid Schedule, which amount shall be considered full compensation for the work as described herein and required to clearly indicate all specific as-built information.

Final payment for survey work under this bid item will be made when the City of Goodyear accepts the final as-built. Should the contractor fail to submit acceptable as-builts within the maximum 30 calendar day period noted above, the City of Goodyear will execute a deduct change order for 10 percent of the bid item total from the contract (or \$2,500.00, whichever is greater) for every five working day period that the contractor fails to provide acceptable as-builts (not including City of Goodyear review time). If the contractor fails to submit acceptable as-builts after the 3rd submittal, the City of Goodyear will deduct 50% from the bid item total from the contract (or \$10,000.00, whichever is greater) and execute

a final change order noting the City of Goodyear's justification for penalizing the contractor for unacceptable as-built preparation.

ITEM 105.90000 SWPPP/EROSION PROTECTION

Section 107.2.1 of MAG Standard Specifications is modified as follows:

ADD:

A. General requirements:

The plans may include preliminary erosion control measures and additional information to be included in the project's Storm Water Pollution Prevention Plan (SWPPP). The contractor shall finalize the SWPPP before submitting a Notice of Intent (NOI) to ADEQ. Except for the NOI, all signatures required of the contractor by the AZPDES Construction General Permit (CGP), including those required for the NOI, 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 CGP.

The plans may include descriptions of temporary and permanent erosion control measures; a project description; 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.

B. Submittals:

The Contractor shall submit two copies of the SWPPP, including all information specified herein, to the Construction Coordinator at the pre-construction conference, if possible, for approval. The SWPPP shall contain an executed letter of delegation which delegates the responsibilities for compliance with the Arizona Construction General Permit and Site Storm Water Pollution Prevention Plan to the contractor.

Submission of the Contractor's NOI shall certify that the contractor and its subcontractors have read and will comply with all provisions of the project specific SWPPP and the (current) ADEQ Arizona Pollutant Discharge Elimination System Construction General Permit (CGP).

The Contract Administrator shall withhold the Notice to Proceed until an Authorization to Discharge from ADEQ has been issued to the Contractor, and a copy has been provided to the Contract Administrator.

C. Contractor's Responsibilities:

The Contractor shall review the preliminary information, including erosion control features and phasing, evaluate all SWPPP requirements for adequacy in addressing

pollution prevention during construction, and prepare a SWPPP for review by the Construction Coordinator.

The Contractor shall designate the erosion control coordinator as an authorized representative of the Contractor in accordance with Part VIII.J.2 of the CGP. The erosion control coordinator shall be responsible for finalization and implementation of the SWPPP as well as all other applicable requirements of the CGP.

The SWPPP shall include all information required in the CGP, 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 as stipulated in the CGP as well as other applicable state or local programs.

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 CGP 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 CGP and, if approved by the Construction Coordinator, incorporate the basins into the SWPPP as appropriate. The plans may 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 SWPPP shall identify and address erosion and pollution control at on-site fueling operations, waste piles, material storage sites, concrete washout areas, 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 CGP. The SWPPP shall accommodate all requirements for the contractor's "good housekeeping" procedures. 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.

The SWPPP shall specify the mechanism whereby revisions may be proposed throughout the project and incorporated into the plan, including review and approval procedure. The Construction Coordinator 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 may require at least 48 hours for review.

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

Within 10 calendar days from the SWPPP submittal, the Construction Coordinator will review the contractor's SWPPP; the contractor will include any additional revisions directed by the Construction Coordinator. The finalized SWPPP shall meet the terms and conditions of the CGP and be compatible with construction. Upon approval of the SWPPP, the contractor shall file an NOI.

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, copies of the NOI and Authorization to Discharge from ADEQ provided to the Contract Administrator, and the SWPPP implemented. The contractor shall post the ADEQ Authorization Number in a conspicuous location, near the construction entrance or construction yard, whichever is more visible to the public.

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 and keep all operations within the project limits as defined on the plans.

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". If existing erosion and sediment control measures (BMPs) need to be repaired, modified or increased, implementation shall be completed within 7 calendar days or before the next rain event (whichever is sooner).

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.

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 Construction Coordinator. The Contractor's erosion control coordinator shall maintain two copies of the SWPPP, in two separate binders, including amendments, inspection records, and all data used to complete the NOI and Notice of Termination (NOT) to the Construction Coordinator throughout the project. The contractor shall submit one complete copy of the SWPPP binder to the Construction Coordinator with the as-built plans and retain its own records for a period of at least three years from the filing of the contractor's NOT.

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

D. Minimum Stormwater Control Measures:

BMPs for Impaired or Unique Waters

- **Construction Entrances and Exits**

Construction entrances and exits must be built using a bottom layer of filter fabric, covered by either coarse aggregate or large rock (approximately 3" in size) or an equivalent structural track-out device adequate to shake dirt loose from vehicles leaving the site. Additional measures must be taken if necessary to prevent vehicle track-out of dirt to the street. Any track-out to the street must be swept up daily. Construction entrances and exits must be permanently stabilized at the end of construction.

- **Soil Stockpiles**

Topsoil stockpiles, excavation spoils, and any other sedimentary piles must be covered with a tarp, and contained by silt fence or other structural measure down-slope of the pile at the end of every work day. Stockpiles and spoils must be placed as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, stockpiles and spoils must also be placed above the floodplain.

- **Up-slope Areas (Soil and Slope Stabilization)**

The areas disturbed by construction that are located up-slope of the watercourse must be stabilized along contour lines at the toe of the slope by silt fence, vegetative cover, or

other slope stabilization measure. All drainage paths draining to the watercourse must be stabilized. Stabilization of these areas must be maintained throughout construction and until final stabilization is achieved.

- **Construction Material and Equipment Storage Areas**

Construction materials and equipment must be stored as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, construction materials and equipment must also be stored above the floodplain. Construction materials that contain toxic substances that may be washed away by rainfall must be covered to protect these materials from precipitation, and elevated above-ground to prevent the runoff of pollutants.

Good housekeeping procedures must be used with any chemicals stored on site. Secondary containment must be installed around any chemical storage areas. Equipment storage areas must be contained using a protective structural BMP down gradient from the storage area. All unused construction materials must be removed from the construction site upon completion of the project.

- **Waste Management**

A designated area for collection of construction wastes and trash must be identified and used. Waste collection areas must be located as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, waste collection areas must also be located above the floodplain. The waste collection areas must be contained within a protective structural BMP to capture runoff. All dumpsters on the site must be covered to minimize contact with rainfall. Secondary containment must be provided around dumpsters to capture leakage. All waste materials must be removed from the construction site upon completion of the project.

- **Vehicle and Equipment Maintenance**

Vehicle and equipment maintenance areas must be located as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, vehicle and equipment maintenance areas must also be located above the floodplain. Any on-site vehicle and equipment maintenance areas must be contained within a protective structural BMP to capture leaks and spills. On-site maintenance areas must be lined with a strong, impervious material that will contain petroleum hydrocarbons and withstand mechanical stress due to vehicle traffic.

Vehicle or equipment break-downs that require repair at other locations on the site must be performed using drip pans or absorbent material to contain liquids. Maintenance of leaking vehicles or equipment must be performed immediately.

Maintenance wastes must be promptly cleaned up, adequately contained, and properly disposed.

Vehicle or equipment washing areas must be located above the floodplain and as far as possible away from the watercourse and other drainage ways. Washing areas must be designed to contain wash water (lined) and prevent runoff (enclosed). No soap, solvents, or petroleum are allowed for washing equipment or vehicles on site. No steam cleaning of equipment or vehicles is allowed on site. All vehicle and equipment maintenance and washing areas must be removed from the construction site upon completion of the project.

- Concrete Wash-out Area(s)

A designated area for concrete truck washing must be identified and used. The concrete wash-out area must be located as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, the concrete wash-out area must also be located above the floodplain. The washout area must be contained by constructing a temporary sub-surface pit or by using impervious structural barriers to contain concrete waste while it hardens. The wash-out area must be lined with an impervious material to hold wash water while it evaporates. The wash-out area must be built with adequate capacity to hold concrete wastes and potential rainfall, and prevent overtopping and runoff.

Concrete transit mixers must be cleaned in the designated wash-out area only. Only concrete from the mixer truck chutes should be washed into the wash-out area. No other vehicles should be washed in the concrete wash-out area. Concrete wastes must be properly disposed off site upon completion of the project. All materials used to construct the temporary wash-out area must be removed from the construction site following construction. Ground disturbance at the wash-out area must be permanently stabilized at the end of construction.

- Concrete Handling

Materials and equipment used for mixing and pouring concrete must be stored as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, concrete materials and equipment must also be stored above the floodplain. Materials that may be washed away in rainfall must be covered to protect these materials from precipitation and stored above-ground to prevent the runoff of pollutants. Avoid mixing excess amounts of fresh concrete on site to minimize wastes. Excess concrete must be disposed in designated areas only. Runoff of wash water from washing and finishing concrete must be controlled by directing water to a contained area for storage and evaporation.

Apply concrete curing compounds during dry weather to prevent contaminants from washing away in stormwater runoff. Curing compounds must be applied carefully to prevent drift and runoff of toxic substances. Apply curing compounds close to the surface to minimize drift. Apply curing compounds carefully to prevent overspray. Cure water from concrete curing activities must be contained and properly handled as liquid waste.

Residue from grinding operations should be vacuumed and properly disposed. Saw cutting residue must be removed from the surface to prevent it from washing away in stormwater. Slurry residue must be contained and properly disposed as liquid waste. Minimize drift of dust and blast material from blasting operations by working close to the surface. Waste water from blasting activity must be contained and properly disposed.

- Pavement Construction/Asphalt Handling

Paving materials and equipment must be stored as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, paving materials and equipment must also be stored above the floodplain. Paving materials and equipment must be stored to prevent the runoff of pollutants in stormwater. Asphalt and sealants must be applied during dry weather to prevent contaminants from washing away in stormwater runoff. Spoils from existing roadways must be stockpiled above the floodplain and as far as possible away from the watercourse.

Use only non-toxic substances (no soaps) to coat asphalt transport trucks and asphalt spreading equipment. Drips and leaks from paving machines and equipment must be promptly cleaned up and properly disposed. Paving machines and equipment must be parked over drip pans or absorbent material to contain drips and leaks between uses.

If paving involves asphaltic concrete (AC), prevent sand or gravel placed over new asphalt from washing away in stormwater. Vacuum or sweep loose sand and gravel from the pavement and properly dispose the wastes. During seal application and sweeping operations, contain petroleum or petroleum-covered aggregate and properly dispose to prevent runoff of pollutants in stormwater.

- Sanitary Waste Facilities

Provide a sufficient number of portable toilets on the site as necessary for construction personnel. Portable toilets must be located as far as possible away from the watercourse and other drainage ways. Unless the entire project site is located within the floodplain, portable toilets must also be located above the floodplain. Portable toilets must be secured to prevent overturning if there is any risk for high winds.

Portable toilets must be maintained in good operating condition and regularly serviced to prevent overflow. Use only licensed sanitary and septic waste haulers for service.

Measurement and Payment:

Measurement and payment work performed under this Bid Item shall be measured as a single complete item of work and paid at the lump sum price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein. Contractor reimbursement shall be made in equal payment installments spanning the construction contract period. Contractor shall submit anticipated payment request table for approval in advance of first payment request submittal.

Price bid shall include all labor, material, and equipment necessary to provide approved and acceptable SWPPP and Erosion Protection, in accordance with the plans, details, special provisions and all addendums.

ITEM 106.10000 PERMITTING

General:

Refer to Part B, Section 107.2 for permitting requirements. It shall be the responsibility of the Contractor to obtain and provide payment for all required permits for construction, dust control, relocation of native plants, erection of signs, etc.

Measurement and Payment

Measurement and payment work performed under this Bid Item shall be measured as a single complete item of work and paid at the lump sum price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein. Contractor reimbursement shall be made in equal payment installments spanning the construction contract period. Contractor shall submit anticipated payment request table for approval in advance of first payment request submittal. Price bid shall include all labor, material, and equipment necessary to provide quality control, in accordance with the plans, details, special provisions and all addendums.

ITEM 106.40000 QUALITY CONTROL & QUALITY ASSURANCE

Description:

The work under this section shall include the furnishing of all materials, personnel, and equipment necessary to provide acceptable quality control in the production, handling, and placement of all materials per MAG Uniform Standard Specifications Section 106 and these special provisions. Contractor shall make arrangements to accommodate up to 3 testing

agencies for any given sample/test taken to correlate results. City will, when necessary, provide Quality Assurance and/or Independent Assurance testing agencies to supplement Contractor Quality Control testing agency.

Measurement and Payment: Contractor Quality Control shall be measured as a single complete item of work and paid at the lump sum price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein. Contractor shall be required to provide an approved Quality Control Sample Checklist outlining the required testing and percentage of the contractor quality control work, in which this checklist shall be the basis on which monthly progress payments shall be made. The Quality Control Sample Checklist shall be subject to periodic review, at the request of either party, if the actual progress lags or accelerates, the percentage may be revised to reflect changes of the overall progress of the project. When approved, the revised Checklist will become the basis for payment for subsequent monthly progress payments.

Section 106 – Control of Material:

106.2 General: the second, third, and fourth paragraphs of the MAG Uniform Standard Specifications Section 106 are revised to read:

Any laboratory performing quality control sampling and testing for the City of Goodyear project shall be open to unrestricted access for inspection and review by the Engineer. The laboratory shall provide an adequate amount of enclosed space and be supplied with the proper equipment, facilities and utilities so that the required testing procedures can be performed. It shall have adequate lighting, ventilation, and means of ingress and egress. The laboratory shall be equipped with heating and cooling equipment capable of maintaining an ambient air temperature of 68 to 78 degrees F. The laboratory and all equipment and facilities therein shall be kept clean and maintained in good working order.

Sampling and testing of materials shall be in accordance with the requirements of:

- 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.

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.

Unless otherwise specified, whenever a reference is made to a Federal, AASHTO, or ASTM specification or test designation or to a specification or test designation of other nationally recognized organizations, it shall mean the specification or test designation in effect on the bid opening date.

106.2 General: of the MAG Uniform Standard Specifications is modified to add:

106.2(B) Contractor Quality Control:

The contractor is responsible for quality control measures necessary to provide acceptable quality in the production, handling, and placement of all materials. Specific contractor quality control requirements will be described in the applicable construction items. The Contractor shall develop a Quality Control Sample Checklist to be submitted at the Pre-Construction Meeting for review by the Engineer. The Checklist shall outline the anticipated total number of tests required for each bid item and/or each material type (concrete class, asphalt pavement, aggregate type, etc), for approval by the Engineer. The Checklist shall also be coordinated with the contractor's schedule so as to outline the anticipated number of tests to be performed each month and summarized as an estimated monthly percentage of the lump sum item. The Contractor shall not commence any work until the quality control checklist has been reviewed and approved by the City.

This Checklist will form the basis of payment as described below.

106.2(C) (1) Quality Control Laboratory:

All field and laboratory sampling and testing shall be personnel for a laboratory or laboratories approved by the City. The requirements for approval of laboratories are specified in the ADOT System for the Evaluation of Testing Laboratories. Approved laboratories and the test methods for which they are approved to perform, are listed in the ADOT Directory of Approved Materials Testing Laboratories. Approved test methods listed in the ADOT Directory of Approved Materials Testing Laboratories do not include field sampling and testing procedures. When field sampling and testing procedures are performed, the appropriate valid Arizona Technical Testing Institute (ATTI) and/or American Concrete Institute (ACI) certification(s) are required. The ADOT System for the Evaluation of Testing Laboratories and the ADOT Directory of Approved Materials Testing Laboratories may be obtained from ADOT Materials Group, Quality Assurance Section, 1221 North 21st Avenue, Phoenix, Arizona 85009.

The Engineer will promptly advise the Contractor in writing of any noted deficiencies concerning the laboratory facility, equipment, supplies, or sampling and testing personnel and procedures.

106.2(C) (2) Quality Sampling and Testing Supervisor:

The contractor shall designate a Quality Sampling and Testing Supervisor(s) who is responsible to supervise the sampling and testing and who meets the requirements given in Table 106-1 for the specific material on which sampling and testing is being performed. The Quality Sampling and Testing Supervisor(s) shall be an employee of the contractor to a consultant engaged by the contractor, and may be responsible for supervising the sampling and testing on more than one project. The Quality Sampling and Testing Supervisor(s) shall be able to be at the job site within 24 hours from any point in time. Additional information regarding Quality Sampling and Testing Supervisor certification can be obtained from the ADOT Materials Group, Quality Assurance Section, 1221 North 21 st Avenue, Phoenix, Arizona 85009.

TABLE 106-1	
QUALITY SAMPLING AND TESTING SUPERVISOR REQUIREMENTS	
Soils and Aggregate	
Field	Laboratory
Arizona Technical Testing Institute (ATTI) "Field" certification plus one of (a) through (g) below.	Arizona Technical Testing Institute (ATTI) "Laboratory Soils/Aggregate" certification plus one of (a) through (g) below.
Asphaltic Concrete	
Field	Laboratory
Arizona Technical Testing Institute (ATTI) "Field" certification plus one of (a) through (g) below.	Arizona Technical Testing Institute (ATTI) "Asphalt" certification plus one of (a) through (g) below.
Concrete	
Field	Laboratory
American Concrete Institute (ACI) "Concrete Field Testing Technician Grade I" certification plus one of (a) through (g) below.	American Concrete Institute (ACI) "Concrete Strength Testing Technician" certification plus one of (a) through (g) below.
(a) Professional Engineer, registered in the State of Arizona, with one year of highway materials sampling and testing experience acceptable to the Department.	

(b) Engineer-In-Training, certified by the State of Arizona, with two years of highway materials sampling and testing experience acceptable to the Department.
(c) Obtained a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology, Construction, or related field acceptable to the Department; and with three years of highway materials sampling and testing experience acceptable to the Department.
(d) Certified by the National Institute for Certification in Engineering Technologies (NICET) in the Construction Materials Testing field as an Engineering Technician (Level III) or higher in the appropriate subfield in which sampling and testing is being performed.
(e) Certified by NICET in the Transportation Engineering Technology field as an Engineering Technician (Level III) or higher in the Highway Materials subfield.
(f) Certified by NICET as an Engineering Technician, or higher, in Civil Engineering Technology with five years of highway materials sampling and testing experience acceptable to the Department.
(g) An individual with eight years of highway materials sampling and testing and construction experience acceptable to the Department.

106.2(C) (3) Quality Sampling and Testing Technician:

Quality Sampling and Testing Technicians who perform the actual sampling and testing shall meet the requirements given in Table 106-2 for the specific material on which sampling and testing is being performed. Quality Sampling and Testing Technicians shall be employees of the Quality Control Laboratory and be supervised by a qualified Quality Sampling and Testing Supervisor for the specific material on which sampling and testing is being performed. Additional information regarding Quality Sampling and Testing Technician certification can be obtained from the ADOT Materials Group, Quality Assurance Section, 1221 North 21st Avenue, Phoenix, Arizona 85009.

TABLE 106-2	
QUALITY SAMPLING AND TESTING TECHNICIAN REQUIREMENTS	
Soils and Aggregate	
Field	Laboratory
Arizona Technical Testing Institute (ATTI) "Field" certification.	Arizona Technical Testing Institute (ATTI) "Laboratory Soils/Aggregate"

	certification.
Asphaltic Concrete	
Field	Laboratory
Arizona Technical Testing Institute (ATTI) "Field" certification.	Arizona Technical Testing Institute (ATTI) "Asphalt" Certification.
Concrete	
Field	Laboratory
American Concrete Institute (ACI) "Concrete Field Testing Technician Grade I" certification.	American Concrete Institute (ACI) "Concrete Strength Testing Technician" certification.

106.2(C) (4) Records:

The Quality Control Laboratory shall maintain all sampling and testing records and supporting documentation used in the preparation of the Weekly Quality Control Report. The Contractor shall review those records and shall make those records and supporting documentation available to the City for review and copying as desired.

106.2(C) (5) Weekly Quality Control Reports:

The Contractor shall submit Weekly Quality Control Reports to the Engineer and the Engineers Quality Assurance representatives. The weekly reports shall state the types of work, such as earthwork, subgrade 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 weekly report shall provide sample identification information for materials tested during the report period, including sample number, date sampled, sample location, 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 any other information relevant to quality control. Although hand-written documentation can be included, the quality control report narrative, sample identification information, results for tests and any retests and corrective actions shall be typed to ensure the City can make clear reproductions of the documents. 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. Reports not submitted by the above-referenced deadline shall be considered delinquent, and may result in monies deducted from the

Contractor's monthly estimate, at the discretion of the Engineer, at a rate of \$500.00 per occurrence.

Measurement and Payment

Measurement and payment work performed under this Bid Item shall be measured as a single complete item of work and paid at the lump sum price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein. Contractor reimbursement shall be made in equal payment installments spanning the construction contract period. Contractor shall submit anticipated payment request table for approval in advance of first payment request submittal. Price bid shall include all labor, material, and equipment necessary to provide quality control, in accordance with the plans, details, special provisions and all addendums.

ITEM 200.00010 EARTHWORK FOR DRAINAGE

General:

For excavation of retention basins, channels and ditches, conform to MAG Section 215 except as modified herein.

Replace Section 215.1 Description with the following:

Earthwork for retention basins, open channels, and ditches shall consist of clearing, stripping, excavation, fill, backfill, removing unsuitable material, grading and disposal of excavated and removed material. Limits shall extend from limits of roadway excavation, where adjacent to proposed roadway construction, and extend to locations where grading will match existing. Scope under this item shall also include all associated work necessary to excavate, transport, grade, and compact excess/haul material to adjacent City of Goodyear properties where directed by City staff. All associated quality control related to this item shall be included in ITEM 106.40000 QUALITY CONTROL & QUALITY ASSURANCE.

Open channels and ditches for the purpose of this section shall mean open lined or unlined channels and lined or unlined (concrete, rip rap or other material) trapezoidal, triangular or irregular channels or ditches.

Measurement and Payment:

Measurement and payment work performed under this Bid Item shall be measured as a single complete item of work and paid at the lump sum price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein. Contractor reimbursement shall be made in increments agreed to prior to start of construction, in

installments spanning the construction contract period. Contractor shall submit anticipated payment request table for approval in advance of first payment request submittal. Price bid shall include all labor, material, and equipment necessary to provide earthwork for drainage, in accordance with the plans, details, special provisions and all addendums.

ITEM 220.00091 DUMPED RIP RAP (D50=9") WITH GEOSYNTHETIC FABRIC PER MAG SEC 220

General:

Rock shall consist of D50 = 9" angular riprap at 12" of depth. Color sample shall be submitted and approved by City prior to construction. All rip rap installed or relocated shall include installation of filter fabric per MAG Section 220. The top of rip rap installed shall be level with finished grade. Excavation or fill, and any associated compaction, required to accommodate 12" depth of rip rap material and filter fabric is inclusive of this bid item.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per square yard basis.

Price bid shall include all labor, material, and equipment necessary to install the Rip Rap complete in accordance with the plans, details, and these Special Provisions.

ITEM 300.20001 RELOCATE SOLAR POWERED SPEED LIMIT SIGN AND BASE ASSEMBLY PER SPECIAL DETAIL. PROVIDE NEW FOUNDATION (IN KIND)

General:

Solar powered speed limit sign and base assembly shall be salvaged and relocated as shown on the construction plans and special details. Contractor shall evaluate existing condition, document and provide to the City. Contractor shall install new foundation as shown in the special details. Contractor shall relocate facilities and match existing functionality of facilities in kind. Relocation shall comply with all applicable building code requirements.

Measurement and Payment:

Measurement for relocation shall be made on the basis of the contract unit price bid per each basis.

Price bid shall include all labor, material, and equipment necessary to relocate the sign, base, any associated appurtenance, and install the new foundation and in accordance with the plans, details, and these Special Provisions.

**ITEM 310.0001 9" AGGREGATE BASE COURSE &
ITEM 310.0002 12" AGGREGATE BASE COURSE**

General:

Conform to MAG Section 310 except as addended herein.

Aggregate base course (ABC) shall consist of new material only, and shall be furnished from an approved supplier. No recycled base material, asphalt, concrete, organic, etc. material shall be used to haul, prepare, construct, or compact aggregate base course or native material as detailed in the construction plans and these special provisions unless previously authorized in writing by the City of Goodyear. Subgrade preparation per MAG Section 301 is inclusive of this bid item and shall not be measured or paid separately.

Measurement and payment shall be made on the basis of the contract unit price bid per square yard basis, compacted in place, based on the bid item number and finished depth of ABC.

Price bid shall include all labor, material, and equipment necessary to install the Aggregate Base Course complete in accordance with the plans, details, and these Special Provisions.

**ITEM 321.1000 9" TEMPORARY AC (3" OF 3/4" MIX ON 6" OF ABC) PAVEMENT
SECTION PER PAVEMENT STRUCTURAL SECTION #3, PER DETAIL ON SHEET
DT01**

General:

Contractor shall install temporary pavement section at location indicated on the project phasing plans. Temporary pavement is required at locations where final left turn bay median and asphalt sections will not be installed with Phase I improvements.

Construction Requirements:

Contractor shall install permanent pavement as shown on the construction plans, and as modified per phasing plans. At limits where temporary pavement is specified, Contractor shall install permanent pavement edges, straight and true, to allow a cold joint. No tack coat/binder within the joint will be required where permanent and temporary pavement is to be installed. Contractor shall seal joints at surface of pavement, as required by the City.

Measurement and payment shall be made on the basis of the contract unit price bid per square yard basis, complete in place.

Price bid shall include all labor, material, and equipment necessary to install temporary pavement section complete in accordance with the plans, details, and these Special Provisions.

ITEM 340.02001 SPILLWAY PER MAG STD DET 206

General:

Contractor shall install concrete spillway per MAG Standard Detail 206, to include raised 'curb' edges, at location and configuration indicated on the plans. Spillway shall be installed against, and doveled into, proposed headwall at invert shown on the plans, with elastic joint material.

Proposed scupper to be constructed against spillway, shall match invert of spillway, and shall be doveled.

Measurement and payment shall be made on the basis of the contract unit price bid per square foot basis, complete in place.

Price bid shall include all labor, material, and equipment necessary to install the spillway complete in accordance with the plans, details, and these Special Provisions.

ITEM 340.04170 SIDEWALK RAMP PER MAG STD DET 235-2

General:

Conform to MAG Section 340 and MAG Standard Detail 235-2, except as addended herein.

Construction Methods:

Add the following paragraph to MAG Section 340.3:

Ramp control point is located at back of curb in the center of the landing, as shown on the construction drawings.

Ramp curb is shown on plans for reference only, and shall not be installed per plan. Contractor shall set forms so that back of landing is level with sidewalk that is to be installed adjacent to curb location. Contractor shall ensure no portion of landing, including section with detectable warnings installed, will exceed 2% slope in any direction, and the wings do not exceed 10:1 (longitudinally) or 1.5% (cross slope).

Measurement:

Add the following paragraph to MAG Section 340.5:

Sidewalk ramps shall be measured and paid on the basis of the contract unit price bid per each.

ITEM 340.06571 BUS BAY PER COG STD DET G-3242-1 (NO ACCESSORY PAD)

General:

General:

Each bus bay shall be constructed as shown on the construction plans and in accordance with COG STD DET G-3242-1. The accessory pad (as per note 3 of the standard detail) shall not be installed. In place of the accessory pad, the contractor will install 8' wide concrete sidewalk along the back of the curb, or as shown in the construction plans.

Measurement and Payment:

Measurement for each bus bay shall be made on the basis of the contract unit price bid per each basis.

Price bid shall include all labor, material, and equipment necessary to install the new bus bay, including subgrade preparation, ABC, asphalt to concrete transition, concrete pavement, concrete valley gutter, concrete curb and gutter, expansion joint filler and any associated appurtenance in accordance with the plans, details, and these Special Provisions, complete in place.

ITEM 340.22121 6" CURB & GUTTER WITH DEPRESSED GUTTER PAN PER MAG STD DET 220-1 TYPE A

Description:

6" curb and gutter with depressed gutter pan shall be constructed in accordance with MAG Std Detail 220-1, Type A. The gutter pan shall be depressed so that drainage flows away from the curb face. Slope of pan shall match slope of adjacent pavement.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per linear foot basis.

Price bid shall include all labor, material, and equipment necessary to install the Curb and Gutter with depressed gutter pan complete in accordance with the plans, details, and these Special Provisions.

ITEM 340.22232 1' VERTICAL CURB AND GUTTER TERMINATION PER SPECIAL DETAIL

Description:

Curb Termination shall be constructed in accordance with MAG Section 340. Construction shall also comply with MAG Std Detail 220, as applicable, and per the appropriate special detail in the construction plans.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per each basis.

Price bid shall include all labor, material, and equipment necessary to install the Curb Transition complete in accordance with the plans, details, and these Special Provisions.

ITEM 345.00202 ADJUST COMMUNICATION MANHOLE FRAME AND COVER TO FINISHED GRADE.

General:

Adjustments shall be made at locations as shown on the construction plans. Adjustments shall generally be made per MAG Section 345. However, Contractor shall coordinate with utility provider or other owner of the structure that requires adjustment to finished grade to determine if any specific method, materials, equipment, etc shall be required. In the event that the utility providers' contractor will perform the adjustments, Contractor shall coordinate with that Contractor and provide finished grade elevations and offset measurements that conform to proposed improvements.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per each basis for complete adjustments.

Price bid shall include all labor, material, and equipment necessary to complete final adjustments complete in place in accordance with the plans, details, and these Special Provisions.

ITEM 345.00203 ADJUST MONITOR WELL MANHOLE FRAME AND COVER TO FINISHED GRADE PER SEPCIAL DETAIL.

General:

Adjustments shall be made at locations as shown on the construction plans and in accordance with the detail provided in the construction plans. Adjustments to manhole structure shall generally be made per MAG Section 345.

Existing concrete and pipe facilities within the manhole structure will need to be removed to a depth necessary to accommodate adjustment of the top of the manhole structure to finished grade. Contractor shall review as built data and review field conditions to become familiar with the actual condition prior to bid or start of construction. Contractor shall ensure any specific method, materials, equipment, etc necessary to perform work under this item will be provided at the time of construction.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per each basis for complete adjustments.

Price bid shall include all labor, material, and equipment necessary to complete final adjustments complete in place in accordance with the plans, details, and these Special Provisions.

ITEM 350.00100 REMOVE CONCRETE CURB
ITEM 350.00190 REMOVE CONCRETE SIDEWALK
ITEM 350.00201 REMOVE VALLEY GUTTER
ITEM 350.00210 REMOVE SIDEWALK RAMP
ITEM 350.00290 REMOVE HEADWALL
ITEM 350.00370 REMOVE SCUPPER

General:

Removal of existing improvements shall generally comply with MAG Section 350. Contractor shall remove and dispose of, offsite, all material, including any unsuitable subgrade or native backfill. No recycled material shall be used on this project without the written approval of the City.

Measurement and payment for removals shall be made as indicated on the bid tab, and shall include all labor, material, and equipment necessary to complete removals and dispose of all material.

ITEM 350.00410 REMOVE PIPE (ALL SIZES)

General:

Existing pipe, regardless of material, to be removed as shown on the construction plans and shall comply with MAG Section 350. Contractor shall remove and dispose of pipe and any material deemed by City staff to be unsuitable for used as backfill or subgrade. All voids resulting from removal of pipe and/or backfill material shall be filled in by clean, native material and compacted to no less than 95%. Voids located beneath structures or within the proposed roadway prism shall be backfilled full depth with aggregate base course (ABC) and compacted as required by MAG Specifications.

Measurement for removal of pipe shall be made on the basis of the contract unit price linear foot basis.

Price bid shall include all labor, material, and equipment necessary to remove and dispose of pipe and/or backfill material in accordance with the plans, details, and these Special Provisions, including replacing resultant void areas with compacted, suitable backfill or ABC.

ITEM 350.00490 REMOVE PLUG/CAP & CONNECT NEW 12" SEWER TO EXISTING WITH COUPLING.

General:

The contractor shall be responsible for verifying the size, material, and horizontal/vertical location of the existing sewer line before Starting construction. If the existing line is found to be in a substantially different location, or will adversely affect the operation of the utility, the Contractor shall notify the City construction inspector. The Contractor shall only connect new sewer main to the existing system with specific approval of the City Construction inspector.

Any temporary pavement required to be installed above this connection to accommodate roadway traffic shall be inclusive of this bid item. Pavement shall be consistent with structural sections as shown in the construction plans, and shall be constructed at the time of trench backfill, and to the limits required by the City inspector.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per each basis.

Price bid shall include all labor, material, and equipment necessary to remove sewer plug and connect new sewer main (including the first stick of pipe) complete in place in accordance with the plans, details, and these Special Provisions.

ITEM 350.00600 REMOVE AC PAVEMENT

General:

Conform to MAG Specifications except as modified herein. Remove asphalt pavement shall also include removal of base material/subgrade necessary to accommodate proposed construction. All asphalt and subgrade shall be removed from the project site and disposed of; no recycled asphalt shall be permitted for use on this project.

Measurement and payment for the relocation shall be made on the basis of the contract unit price bid per square yard basis.

Price bid shall include all labor, material, and equipment necessary to remove A/C pavement and subgrade in accordance with the plans, details, and these Special Provisions.

ITEM 350.04010 OBLITERATE STRIPING

General:

Removal of existing striping within the project limits, as shown on the construction plans or as approved by City staff, as well as any temporary striping installed with this project, shall be removed per MAG Section 350, and any applicable MCDOT Pavement Marking and Signing Manuals, Manual on Uniformed Traffic Control Devices (2003 Edition, Revision 1), the ADOT Supplement to MUTCD and the City of Goodyear Engineering Standards requirements.

Removal limits are shown in the construction bid documents. It is the responsibility of the Contractor to field verify all existing striping and adjust their bid accordingly.

Work under this bid item includes the following:

- Removal of all permanent and temporary striping/thermo before application of final striping
- Removal of any temporary striping/thermo during construction
- Removal of any striping/thermo installed to realign traffic to accommodate construction operations

Measurement and Payment:

Measurement and payment for the removal of roadway striping shall be made on the basis of the contract unit price bid per Lump Sum basis. Contractor shall submit progressive pay

requests to the City and/or Engineer to be reviewed and accepted for reimbursement of incurred costs for each payment cycle.

Price bid shall include all labor, material, and equipment necessary to remove existing roadway striping in accordance with the plans, details, and these special provisions.

ITEM 350.04011 TEMPORARY STRIPING

General:

This is a contingent allowance bid item to be used for installation of temporary striping during the course of construction. Contractor shall install temporary striping on base course asphalt only. At no time should Contractor install temporary striping on surface course.

Contractor must coordinate with City staff on proposed temporary striping layout and configuration prior to commencement. City may also request Contractor to install temporary striping at any time during course of construction if they determine traffic control set up is not functioning appropriately. In the event this happens, City and Contractor will coordinate anticipated temporary striping configuration and agree upon a final condition.

Construction Requirements:

Pavement marking for temporary lane striping shall be 4-inch wide by 10-foot length strips of either temporary pavement marking tape or paint placed at 30-foot intervals except as otherwise shown. The pavement temperature must be 60 degrees Fahrenheit or above when tape is applied.

All pavement marking, signing and construction shall conform to Maricopa county department of transportation (MCDOT) pavement marking and signing manuals, manual on uniform traffic control devices (MUTCD 2003 edition –revision 1), the ADOT supplement to MUTCD, the City of Goodyear engineering standards. Temporary traffic control shall conform to the City of Phoenix “Traffic Barricade Manual” and/or as directed by the City of Goodyear Engineering Department.

Measurement and Payment:

Measurement and payment for temporary striping shall be made on the basis of the contract unit price bid per Lump Sum basis. Contractor shall submit progressive pay requests to the City and/or Engineer to be reviewed and accepted for reimbursement of incurred costs for each payment cycle. Contractor proposed quantities must be approved by City prior to commencement of temporary striping installation.

Price bid shall include all labor, material, and equipment necessary to install temporary striping in accordance with the plans, details, and these special provisions.

ITEM 401.30010 ALLOWANCE FOR UNIFORMED, OFF-DUTY LAW ENFORCEMENT OFFICER (CONTINGENCY)

General:

This is a separate contingent allowance bid item to be used in the event the City requires the Contractor to provide the services of off-duty uniformed police officers under special circumstances as directed by the Contract Administrator.

Authorization:

The use of this bid item is only through written direction of the Contract Administrator and will include the maximum allowable hourly charge rate authorized by the Contract Administrator. Daily reports itemizing the use and number of hours worked for each officer authorized shall be submitted with each payment application along with a copy of the Contract Administrator's written authorization. All reports shall be verified and signed daily by the City Inspector.

Officers:

City of Goodyear off-duty uniformed police officers shall be used. In the event City officers are not available, law enforcement officers from other local agencies may be used in their place. The officers shall be thoroughly familiar with the requirements for which their use is intended.

Measurement and Payment:

The provisions of MAG Subsections 401.6 and 401.7 apply. This is a contingency item in which the total amount indicated on the schedule of bid items will be adjusted accordingly by the Contract Administrator to reflect the actual amount used.

Measurement and payment for off-duty law enforcement officer shall be made on the basis of the contract unit price bid per Lump Sum basis. Contractor shall submit progressive pay requests to the City and/or Engineer to be reviewed and accepted for reimbursement of incurred costs for each payment cycle.

Price bid shall include all labor, material, and equipment in accordance with the plans, details, and these special provisions.

ITEM 405.12011 SURVEY MARKER PER MAG STD DET 120-1 TYPE B

General:

Survey markers shall be installed in accordance with MAG Std Detail 120-1 Type B at locations indicated in the construction plans. Where indicated on the plans, new survey markers shall be installed using geometric data indicated in the Geometric Control Sheets.

In some locations, new survey markers will be set to replace an existing marker being removed because it no longer reflects the correct geometric location. The removal of existing survey markers is covered under a separate bid item. All new marker locations shall be recorded. All new markers shall also be adjusted to finish grade.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per each basis for complete installations, including recordation.

Price bid shall include all labor, material, and equipment necessary to install new survey markers complete in place in accordance with the plans, details, and these Special Provisions.

ITEM 440.29501 RELOCATE BACKFLOW PREVENTER PER COG STD DET G-3351 AS PER DETAIL

General:

Backflow preventer to be relocated as shown on the construction plans and per City of Goodyear Standard Detail G-3351. Contractor to salvage existing pad, vandal enclosure, pad and lock and reinstall at location indicated on the plans. Provide any necessary pipe supports and appurtenances to properly relocate and secure the assembly.

Measurement and Payment:

Measurement for relocate backflow preventer shall be made on the basis of the contract unit price bid each basis.

Price bid shall include all labor, material, and equipment necessary to relocate the backflow preventer in accordance with the plans, details, and these Special Provisions.

ITEM 440.54001 2-4" PVC IRRIGATION SLEEVE - MINIMUM 30" COVER. REFER TO SPECIAL DETAIL

General:

Contractor to provide two capped 4" pvc irrigation sleeves with minimum 30" cover to finished roadway grades, as shown in the construction plans and per the special detail in the plans. Sleeves shall be schedule 40 pvc, set 2" apart and capped at locations shown or minimum 2' beyond back curb. Ends of sleeves are to have 3/4" pvc cap markers and a square irrigation box with locking "T" style cover with stainless steel bolts as shown in the special detail. Irrigation box to be adjusted to finish grade of top of back of curb.

Measurement and Payment:

Measurement and payment shall be made on the basis of the contract unit price bid per linear foot.

Price bid shall include all labor, material, and equipment necessary to install the Irrigation Sleeving (4" PVC), markers, and irrigation boxes in accordance with the plans, details, and these Special Provisions.

ITEM 440.66001 RELOCATE ARV, BOX, AND COVER WITH NEW COPPER SERVICE LINE TO SADDLE PER COG STD DET G-3328

General:

Conform to City of Goodyear Standard Detail G-3328, except as modified herein.

Description and Construction Requirements:

The Contractor shall salvage and protect existing air release valve and meter box. Contractor shall remove existing copper service pipe from existing ARV location to saddle on water main.

Contractor shall install salvaged air release valve assembly so that the valve box is a minimum 2' behind new back of curb. The relocation work shall include the entire assembly, including but not limited to stand pipe and fittings, air/vacuum release valve, valve box and lid, installation of new thrust blocks, collar and concrete support, new crushed stone & ABC bedding, and extension of all pipe and fittings. Contractor shall coordinate any temporary dry up to accommodate relocation operations.

Contractor shall install new type "K" from the valve assembly corp stop to the existing saddle. No compression fittings or soldered joints will be used under pavement to extend the valve assembly. All joints shall be solder/sweat with rigid copper materials. Work under this item includes relocating items that can be salvaged, as well as furnishing and installing all new items that are necessary to complete the relocation as required by Detail G-3328 and applicable City Specs. Contractor is responsible for coordinating with and

obtaining concurrence from City representatives to determine which items can be salvaged, and which items must be replaced prior to commencing work.

The Contractor shall replace existing saddle if it is determined by the City of Goodyear that saddle is unusable. The Contractor shall furnish and install all new saddles as required and as shown on the water service abandonment detail in the construction plans. Contractor shall install seal repair clamp, if deemed necessary by the City.

Any removal and replacement of any concrete, asphalt, landscaping, irrigation, utility service, or other hardscape items not already indicated on the plans, but are necessary to complete relocation, shall be considered inclusive of the contract unit bid price and no separate payment for these items shall be made.

Measurement and Payment:

Measurement for relocation shall be made on the basis of the contract unit price bid per each basis.

Price bid shall include all labor, material, and equipment necessary to salvage and relocate air release valve assembly and associated appurtenances and to provide a complete in place working assembly in accordance with the plans, details, and these Special Provisions.

470 TEMPORARY TRAFFIC EQUIPMENT

ITEM 470.80001 MODIFY EXISTING SPAN WIRE TRAFFIC SIGNAL [GOODYEAR BOULEVARD AND YUMA ROAD]

General:

Remove and relocate or salvage of existing Span Wire Signal shall be done in accordance with Section 350 of MAG Standard Specifications, except as specified here in.

Description:

Existing Span Wire Signal shall be modified as shown on the project plans.

The contractor shall coordinate the removal and relocation of existing traffic signal equipment as designated on the construction plans with the City of Goodyear. Contact the Traffic Maintenance Supervisor a minimum 24 hours in advance for delivery location of equipment to be salvaged. Alignment of traffic signal vehicle heads shall be modified from their existing positions as necessary to accommodate roadway improvements as part of

Phase I, including the shifting of lanes/striping, with new conductors installed as shown on the project plans for Phase I construction.

Measurement:

This item will be measured on a lump sum basis and includes but not limited to the installation of new equipment, conductors, relocation of poles, guy wires, cabling, luminaires, signal equipment, pull boxes and salvaging of existing equipment to the City of Goodyear as specified in the plans or by the City.

Payment:

This item will be paid at the contract lump sum price associated with the completion of all work and salvaging of existing equipment as specified including all material, labor, and equipment necessary to complete the work.

ITEM 470.80002 INSTALL SPAN WIRE SIGNAL [GOODYEAR BOULEVARD AND SHERMAN STREET]

General:

Installation of a new Span Wire Signal shall be done in accordance with Section 350 of MAG Standard Specifications, the project plans and as specified here in.

Description:

New Span Wire Signal shall be installed as shown on the project plans. Span wire signal is an interim system to be installed during Phase 1 of the project.

The Contractor shall coordinate the installation of a new span wire traffic signal and providing all equipment as designated on the construction plans at the intersection of Goodyear Boulevard and Sherman Street in City of Goodyear. Contractor shall coordinate the installation of the combination UPS/Meter Pedestal and Traffic Signal Controller Cabinets with the city to prior to any work. All traffic signal equipment, including permanent equipment (to be installed with Phase II) but not including permanent signal poles/mast arms, shall be installed with the interim span wire configuration.

Work under this item includes all coordination with City of Goodyear Traffic Department and APS to provide service, as necessary to make a complete, fully function system, as required by the City.

Measurement:

This item will be measured on a LUMP SUM basis and includes but not limited to the installation of all new cabinets, wood poles, conductors, guy wires, cabling, luminaires, signal equipment and pull boxes, and removal of the configuration, as specified in the plans or by the City.

Payment:

This item will be paid at the contract lump sum price associated with the completion of all work and as specified including all material, labor, and equipment necessary to complete the work.

ITEM 470.80003 MODIFY AND REMOVE EXISTING SPAN WIRE SIGNALS
(GOODYEAR BOULEVARD AND YUMA ROAD) (GOODYEAR BOULEVARD AND
SHERMAN STREET)

*****THIS SPEC. ITEM NOT A PART OF PHASE I*****

General:

Installation of a new Span Wire Signal shall be done in accordance with Section 350 of MAG Standard Specifications, the project plans and as specified here in.

Description:

Goodyear Boulevard and Yuma Road:

The Contractor shall remove, relocate and install new Span Wire Signal vehicle heads and equipment for Phase Two as shown on the project plans. Span wire signal pole was relocated as part of Phase 1 of the project.

The contractor shall coordinate the work on the existing span wire traffic signal and provide all equipment as designated on the construction plans at the intersection of Goodyear Boulevard and Yuma Road in City of Goodyear. Contractor shall coordinate the installation of vehicle heads with the city to prior to any work.

Work under this item shall include removal and salvage, to the City of Goodyear, of all equipment and materials (at the time of coordination and installation) of the Span Wire Traffic Signal configuration during Phase 2.

Goodyear Boulevard and Sherman Street:

The Contractor shall remove all existing Span Wire Signal equipment, not including permanent cabinets, pull box and conduits installed during Phase 1 construction, after the new permanent Traffic Signal is operational.

Work under this item shall include removal and salvage, to the City of Goodyear, of all equipment and materials (at the time of coordination and installation) of the Span Wire Traffic Signal configuration during Phase 1.

Measurement:

This item will be measured on a LUMP SUM basis and includes but not limited to the relocation of signal equipment, removal of all wood poles, conductors, guy wires, cabling, luminaires and signal equipment of the Span Wire Signals, as specified in the plans or by the City.

Payment:

This item will be paid at the contract lump sum price associated with the completion of all work and as specified including all material, labor, and equipment necessary to complete the work.

471 ELECTRICAL UNDERGROUND

ITEM 471.60044 RELOCATE EXISTING STREET LIGHT PULL BOX TO MEDIAN ISLAND

ITEM 471.60046 STREET LIGHTING PULL BOX (APS PROVIDED)

ITEM 471.60047 INTERCONNECT CONDUIT SPLICE BOX (CITY OF GOODYEAR STD DETAIL G-3294 AND G-3296)

ITEM 471.60057 NO. 7 PULL BOX WITH EXTENSION

ITEM 471.60058 NO. 7 PULL BOX (ITS)

General:

Electrical Underground shall be done in accordance with ADOT Traffic Signal and Lighting Standard Details current edition, ADOT Standard Specifications for Road and Bridge Construction, current edition, Section 732, except as specified herein, and the plans.

Description:

The work under this section consists of relocating existing street light pull boxes, install, furnishing and installing traffic signal pull boxes, signal conduit, lighting conduit, traffic signal power service conduit and traffic signal conductors.

All traffic signal and Interconnect pull boxes, except APS electrical junction box, shall be provided by the contractor. All traffic signal and interconnect pull boxes shall be installed by the Contractor as specified on the plans and in accordance with APS and these specifications.

All street lighting pull boxes provided by APS shall be installed by the Contractor as specified on the plans and in accordance with APS specifications.

Traffic Signal Pull Box cover shall be marked as "TRAFFIC SIGNAL".

Interconnect Conduit Splice Box cover shall be marked as "COG COMMUNICATIONS".

APS Electrical Junction Box Cover shall be marked "ELECTRICAL".

All pull box lids shall be Fiberlyte or approved equal and have bolt down lids.

The main pull box adjacent to the control cabinet shall be a No. 7 with 12" extension and have a ground rod installed inside.

Measurement:

Pull boxes shall be measured as EACH, which includes providing and installation in accordance with the specifications identified with this document and on the plans.

Payment:

Payment for pull boxes will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and includes all materials, labor, tools, and equipment necessary to complete the work.

ITEM 471.60048 ELECTRICAL EQUIPMENT/INSTALLATIONS (APS)

General:

Construction shall be done in accordance with APS electrical service requirements. These can be downloaded at: <http://esp.apsc.com/resource/esrm.asp>. Contractor shall also refer to APS plans, including general construction notes, for additional information and requirements.

Description:

All street lighting pull boxes (non-streetlight), equipment pads, flat straps and manholes shall be provided by APS and shall be installed by the Contractor as specified on the plans and in accordance with APS standards and specifications. Contractor shall coordinate with

the APS representative to arrange pick up of materials for installation, and shall provide all labor and equipment necessary to complete installations.

Measurement & Payment:

Measurement and payment work performed under this Bid Item shall be measured as a single complete item of work and paid at the lump sum price indicated on the Bid Schedule, which price shall be full compensation for the work as described herein. Contractor reimbursement shall be made in equal payment installments spanning the construction contract period. Contractor shall submit anticipated payment request table for approval in advance of first payment request submittal. Price bid shall include all labor, material, and equipment necessary to provide quality control, in accordance with the plans, details, special provisions and all addendums.

ITEM 471.61113 PVC ELECTRICAL CONDUIT 2" (W/ 1/4" NYLON PULL ROPE)
(TRAFFIC SIGNAL)

ITEM 471.61115 PVC ELECTRICAL CONDUIT 2-2" AND 1-3" (W/ 1/4" NYLON PULL ROPE) (ITS)

ITEM 471.61116 PVC ELECTRICAL CONDUIT, APS JOINT TRENCH FPS1 (GOODYEAR BOULEVARD)

ITEM 471.61117 PVC ELECTRICAL CONDUIT, APS JOINT TRENCH FPS1 (SHERMAN STREET)

ITEM 471.61233 PVC ELECTRICAL CONDUIT 2 1/2" (W/ 1/4" NYLON PULL ROPE)
(STREET LIGHTING)

ITEM 471.61333 PVC ELECTRICAL CONDUIT 3" (W/ 1/4" NYLON PULL ROPE)
(TRAFFIC SIGNAL)

ITEM 471.61432 PVC ELECTRICAL CONDUIT 4" (W/ 1/4" NYLON PULL ROPE)
(TRAFFIC SIGNAL)

General:

The electric power company for roadway lighting and traffic signals for this project is Arizona Public Service (APS). The contractor shall contact Bobby Garza at 602-371-7989 at least thirty-days (30) prior to construction for APS service installation requirements and service point of delivery (POD). The Contractor, upon determining the POD, shall provide and install 2-1/2 inch conduit from the two POD's to the combination UPS/Meter pedestal cabinets as specified on the plans.

Joint trench items above shall be installed per APS Standards, Specifications and Trench Details shown on APS plans. Contractor shall coordinate joint trench installation with APS representative prior to performing work.

Cox shall furnish conduit to be installed with joint trench. Contractor shall coordinate with Cox for material delivery with sufficient time so as to not affect schedule or contract. Number of conduit to be installed in trench may increase; however, they shall be installed side-by-side at same elevation.

The Contractor shall pot hole conduit runs at locations where potential conflicts exist. The cost associated with this item shall be incidental to the work and shall NOT have a separate pay item. Hand digging is considered a form of potholing and is included in the cost associated with this item.

Trenching, back filling, replacing pavement, curb and gutter, sidewalk and any additional traffic control including steel plates are considered incidental to this item and not paid separately.

All material, equipment and labor costs necessary for Contractor to install any conduit/trenching installed under existing, future or any temporary roadway section that is phased in such a manner that will require removal of surface course/subgrade/trench material and reinstallation of a temporary or permanent material shall be considered inclusive of existing bid items, and shall not be measured or paid separately.

Conduit crossing the roadway and concrete driveways shall be installed by directional boring, unless otherwise specified on the plans. Directional bore shall not be paid separately, and shall be considered incidental to the associated length of that type of trench section.

Prior approval from the City is necessary to install conduit under existing pavement using an open trench. Open trench excavation shall be done in accordance with APS requirements or Section 203-5.03 of the ADOT Standard Specifications, whichever is more stringent. The Contractor shall 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.

Measurement:

Conduit shall be measured per LINEAR FOOT of trenching.

Payment:

Payment for conduit will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work as described herein and on the plans is complete in place and includes all materials, labor, tools, and equipment necessary to complete the work.

ITEM 471.61632 CONDUCTORS (TRAFFIC SIGNAL) (GOODYEAR BOULEVARD AND SHERMAN STREET)

ITEM 471.61633 CONDUCTORS (TRAFFIC SIGNAL) (GOODYEAR BOULEVARD AND ESTRELLA PARKWAY)

General:

Electrical Service Conductors from the APS Power Source Point of Delivery to the Meter Pedestal to be provided and installed by APS.

Measurement:

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. This work also includes re-wiring and tagging of existing conductors to satisfy the phasing schematic identified on the plans.

Payment:

Payment for conductors will be paid for at the contract lump sum price indicated on the Schedule of Bid items. Payment will be made when the work as described herein and on the plans is complete in place and includes all materials, labor, tools, and equipment necessary to complete the work.

472 TRAFFIC SIGNAL POLE STRUCTURAL SUPPORTS AND FOUNDATIONS

ITEM 472.62031 POLE FOUNDATION, PEDESTRIAN PUSH BUTTON POST (ADOT STD DETAIL T.S. 4-22)

ITEM 472.62032 POLE FOUNDATION, MODULAR TYPE A-1 (CITY OF TEMPE STD DETAIL T-570)

ITEM 472.62033 POLE FOUNDATION, MODULAR TYPE Q 20' MAST ARM (CITY OF TEMPE STD DETAIL T-571)

ITEM 472.62034 POLE FOUNDATION, MODULAR TYPE Q 40' MAST ARM (CITY OF TEMPE STD DETAIL T-571)

ITEM 472.62035 POLE FOUNDATION, MODULAR TYPE Q 45' MAST ARM (CITY OF TEMPE STD DETAIL T-572)

ITEM 472.62036 POLE FOUNDATION, MODULAR TYPE Q 50' MAST ARM (CITY OF TEMPE STD DETAIL T-573)

ITEM 472.62037 POLE FOUNDATION, ARCHITECTURAL POLE (APS STD DETAIL 8050S)

General:

Signal Pole Supports and Foundations shall be done in accordance with ADOT Traffic Signal and Lighting Standard Details current edition, ADOT Standard Specifications for Road and Bridge Construction, current edition, Section 731, except as specified herein, and the plans.

Description:

The work for these items consists of the installation of traffic signal pole foundations

The Contractor shall pot hole all locations where underground signal work is required and where potential conflicts exist. The cost associated with this item shall be incidental to the work associated with this item. Repair of damaged of any utility lines shall be at the expense of the Contractor.

All signal poles foundations shall be constructed in accordance with general requirements of ADOT Specifications Section 731.

Where new traffic signal poles are to be installed next to existing and new sidewalk or curb ramps, the Contractor shall construct a new ADA accessible apron (a.k.a Concrete Apron) to provide access around the base of the pole as shown on the plans and details and Section 340 specified herein. The contractor shall modify these details as necessary to accommodate any changed field conditions or variation in pole location at no additional cost to the City. Prior to pouring any concrete the Contractor shall contact the City 48 hours in advance for an inspection. See Section 340 for construction specifications, measurement and payment of the Concrete Aprons.

Contractor shall not order any material for this item until the exact locations for the new pole foundations have been identified by the Contractor and approved by the City. In addition, no equipment shall be ordered until approval of equipment submittals is provided by the City of Goodyear. Any equipment purchase/order without written approval of the submittals by the City shall be at the contractor's own risk.

Contractor shall not pour concrete foundations until foundation locations, elevations, and signal foundation bolt pattern is obtained and verified.

Measurement and Payment:

Measurement for trench drain shall be made on the basis of the contract unit price bid per each, as shown in the construction plans and bid tab.

Price bid shall include all labor, material, and equipment necessary to install each item, complete in place, in accordance with the plans, details, and these Special Provisions.

ITEM 472.62038 POLE (PEDESTRIAN PUSH BUTTON POST) (DETAIL SHOWN ON PLANS)
ITEM 472.62039 POLE, MODULAR TYPE A-1 (CITY OF TEMPE STD DETAIL T-558)
ITEM 472.62040 POLE, MODULAR TYPE A-2 (CITY OF TEMPE STD DETAIL T-559)
ITEM 472.60241 POLE, MODULAR TYPE E, 20' MAST ARM (CITY OF TEMPE STD DETAIL T-557)
ITEM 472.60242 POLE, MODULAR TYPE Q, 40' MAST ARM (CITY OF TEMPE STD DETAIL T-552)
ITEM 472.60243 POLE, MODULAR TYPE J, 45' MAST ARM (CITY OF TEMPE STD DETAIL T-551)
ITEM 472.60244 POLE, MODULAR TYPE Q, 45' MAST ARM (CITY OF TEMPE STD DETAIL T-550)
ITEM 472.60245 POLE, MODULAR TYPE Q, 50' MAST ARM (NO LUMINAIRE) (CITY OF TEMPE STD DETAIL T-548)
ITEM 472.60246 POLE, MODULAR TYPE Q, 50' MAST ARM (CITY OF TEMPE STD DETAIL T-548)
ITEM 472.60247 POLE, ARCHITECTURAL POLE (APS STD DETAIL 8050S)
ITEM 472.60248 POLE, ARCHITECTURAL POLE (APS STD DETAIL 8050S)(DUAL MAST ARMS)
ITEM 472.60249 MAST ARM, 8' X 8' HI-RISE (APS STD DETAIL 8050S)

Description:

The work for these items consists of the furnishing all the necessary materials, labor, tools, and equipment to provide and install traffic signal modular and street light poles in accordance with the plans and specifications presented here in.

The Contractor shall install poles per City of Tempe standard details.

Contractor shall not order any material for this item until the exact locations for the new poles have been identified by the Contractor and approved by the City. In addition, no equipment shall be ordered until approval of equipment submittals is provided by the City of Goodyear. Any equipment purchase/order without written approval of the submittals by the City shall be at the contractor's own risk.

Measurement and Payment:

Measurement for trench drain shall be made on the basis of the contract unit price bid per each, as shown in the construction plans and bid tab.

Price bid shall include all labor, material, and equipment necessary to install each item, complete in place, in accordance with the plans, details, and these Special Provisions.

475 TRAFFIC SIGNAL DETECTORS

ITEM 475.61101 COMBINATION METER/UPS SERVICE CABINET

General:

Traffic Signal and Meter Service Cabinets shall be provided, installed, measured and paid in accordance with ADOT Traffic Signal and Lighting Standard Details current edition, ADOT Standard Specifications for Road and Bridge Construction, current edition, Section 734, except as specified herein, City of Goodyear Specifications, and the plans.

Description:

The work for these items consists, at a minimum, of the following items:

Myers MEUG35-PB Cabinet with anchor bolts
MEUG32 Base
100 AMP, Two Pole Breaker with Test Blocks
MP2000 UPS
79AH Batteries
PEC and Lighting Contactor

Prior to construction of the Meter Pedestal Cabinet Foundation, the Contractor shall coordinate the cabinet orientation with City of Goodyear staff. The Contractor shall install a concrete maintenance pad in unpaved areas, a raised PCC pad 36" x 4" x width of cabinet shall be placed at the front of the cabinet. Pad shall be set 2" below the foundation elevation and sloped away from the cabinet for drainage (2% Min.).

Measurement:

Combination Meter/UPS Service cabinet shall be measured as EACH, which includes providing the cabinet, cabinet foundation and maintenance pad for installation in accordance with the specifications identified with this document and on the plans.

Payment:

Payment for Combination Meter/UPS Service Cabinet will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and includes the material, labor, tools, and equipment necessary to complete the work.

ITEM 475.62011 TRAFFIC SIGNAL CONTROLLER CABINET (TYPE R) (TS2-S CONTROLLER)

Description:

The work for these items consists, at a minimum, of the following items:

Siemens Eagle TS2 Size R Cabinet with anchor bolts, dual cooling fans and thermostat
EPAC M54 series TS-2, Type1 with 3.33B Protocol and Data Key
EDI MMU 16LEIP
EDI BIU 700 (3)
PS-200 NEMA TS-2 Power Supply
Detector Rack, Shelf and Work Light
Load Switches (12)
Flash Transfer Relays (4)
GTT 764 Phase Selectors, 721 Optical Detectors and M138 Cable

Prior to construction of the Traffic Signal Cabinet Foundation, the Contractor shall coordinate the cabinet orientation with City of Goodyear staff. The Contractor shall install a concrete maintenance pad in unpaved areas, a raised PCC pad 36" x 4" x width of cabinet shall be placed at the front of the cabinet. Pad shall be set 2" below the foundation elevation and sloped away from the cabinet for drainage (2% Min.).

Measurement:

Traffic Signal cabinet shall be measured as EACH, which includes providing the cabinet, cabinet foundation and maintenance pad for installation in accordance with the specifications identified with this document and on the plans.

Payment:

Payment for Traffic Signal Cabinet will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the material, labor, tools, and equipment necessary to complete the work.

ITEM 475.83012 PEDESTRIAN PUSH BUTTON (POLARA TYPE BULLDOG)
(INCLUDING SIGN)

General:

Detectors shall be provided, installed, measured and paid in accordance with ADOT Traffic Signal and Lighting Standard Details current edition, ADOT Standard Specifications for Road and Bridge Construction, current edition, Section 735, except as specified herein, City of Goodyear Specifications, and the plans.

Description:

Pedestrian push buttons shall conform to ADOT Standard Drawing T.S. 11-1. The push button shall 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 R10-3B (L) OR (R) pedestrian push button sign on housing.

Pedestrian push buttons shall be mounted in accordance with ADOT standard drawing T.S. 4-21, except the center of the push button shall be a maximum of 42 inches above the finished sidewalk.

Measurement:

Pedestrian Push Buttons shall be measured as EACH, which includes providing and installation in accordance with the specifications identified with this document and on the plans.

Payment:

Payment for Pedestrian Push Buttons will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the materials, labor, tools, and equipment necessary to complete the work.

ITEM 475.83014 EMERGENCY PRE-EMPTION - (3-RECEIVERS)

ITEM 475.83015 EMERGENCY PRE-EMPTION - (4-RECEIVERS)

Description:

Optical Detector Modules

The detector shall be mounted as shown in the plans and shall be optical devices, such as a strobe light on the approved emergency vehicle, light sensitive sensor at the traffic signal and interface card(s) in the controller cabinet. 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.

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 phase selector interface cards.

Detector Cable

Detector cable shall be installed as shown on the plans to deliver the necessary signal to the phase selector discriminator circuitry. Cables shall run un-spliced from the sensor on the signal support to the controller cabinet terminals.

Measurement:

This item will be measured on a LUMP SUM basis and includes but not limited to detectors, mountings, cables and interface card(s) as specified in the plans or by the City.

Payment:

Payment for Emergency Pre-Emption - (3-Recievers) and (4-Recievers) will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the materials, labor, tools, and equipment necessary to complete the work.

ITEM 475.83016 VIDEO DETECTION SYSTEM (3-CAMERA) (INCLUDING BRACKETS)

ITEM 475.83017 VIDEO DETECTION SYSTEM (4-CAMERA) (INCLUDING BRACKETS)

Description:

Video Detection System shall be installed on traffic signal poles as shown on the project plans including mounting bracket. Cable shall be provided unspliced from the camera to the traffic signal controller cabinet.

Measurement:

This item will be measured on a LUMP SUM basis and includes but not limited to cables and mounting brackets necessary to complete work.

Payment:

Payment for Video Detection System (3-Camera) and (4-Camera) (Including Brackets) will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the materials, labor, tools, and equipment necessary to complete the work.

ITEM 475.83018 CCTV CAMERA SYSTEM (INCLUDING BRACKET) (GOODYEAR BLVD. AND SHERMAN ST.)

ITEM 475.83019 CCTV CAMERA SYSTEM (INCLUDING BRACKET) (GOODYEAR BLVD. AND ESTRELLA PARK.)

Description:

CCTV Camera System shall be installed on the traffic signal pole as shown on the project plans including mounting bracket. Cable shall be provided un-spliced from the CCTV Camera to the traffic signal controller cabinet as designated on the plans.

Measurement:

This item will be measured on a LUMP SUM basis and includes but not limited to cables and mounting brackets necessary to complete work.

Payment:

Payment for CCTV Camera System (Including Brackets) (Goodyear Blvd. and Sherman St.) and (Goodyear Blvd. and Estrella Pkwy.), will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the materials, labor, tools, and equipment necessary to complete the work.

476 TRAFFIC SIGNAL INDICATIONS AND MOUNTING ASSEMBLIES

ITEM 476.02011 TRAFFIC SIGNAL FACE (PEDESTRIAN MAN/HAND) (COUNTDOWN NUMERIALS)

ITEM 476.02012 TRAFFIC SIGNAL FACE (TYPE E)

ITEM 476.02013 TRAFFIC SIGNAL FACE (TYPE F)

ITEM 476.02014 TRAFFIC SIGNAL FACE (TYPE Q)

ITEM 476.02015 TRAFFIC SIGNAL FACE (TYPE R)

ITEM 476.62016 TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE E) (CITY OF TEMPE) (STD DETAIL T-561)

ITEM 476.62017 TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE F) (CITY OF TEMPE) (STD DETAIL T-561)

ITEM 476.62018 TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE Q) (CITY OF TEMPE) (STD DETAIL T-561)

ITEM 476.62019 TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE R) (CITY OF TEMPE) (STD DETAIL T-561)

ITEM 476.62020 TRAFFIC SIGNAL MOUNTING ASSEMBLY (TYPE M/H) (CITY OF TEMPE) (STD DETAIL T-561)

General:

Traffic Signal Indications and Mounting Assemblies shall be provided, installed, measured and paid for in accordance with ADOT Traffic Signal and Lighting Standard Details current edition, ADOT Standard Specifications for Road and Bridge Construction, current edition, Section 733, except as specified herein, City of Goodyear Specifications, and the plans.

All traffic signal indications shall be Light Emitting Diode (LED) modules.

The LED signal heads must meet or exceed the specifications published by the Institute of Transportation Engineers: Vehicle Traffic Control Signal Heads – Part 2; Light Emitting Diode (LED) Vehicle Traffic Control Signal Modules, An Interim Purchase Specification.

All pedestrian signal indications shall be In-line Man/Hand Light Emitting Diode (LED) pedestrian countdown indications.

Measurement:

Traffic Signal Face and Traffic Signal Mounting Assemblies shall be measured as EACH, which includes providing and installation in accordance with the specifications identified with this document and on the plans.

Payment:

Payment for Traffic Signal Face and Traffic Signal Mounting Assemblies will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the materials, labor, tools, and equipment necessary to complete the work.

477 HIGHWAY SIGN LIGHTING

ITEM 477.81002 LUMINAIRE (HORIZONTAL MOUNT) (GE EVOLVE LED) (MODEL ERS30NXCX5402DKB2)

ITEM 477.81501 LUMINAIRE (HORIZONTAL MOUNT) (150 HPS) (APS DETAIL 8050S)

ITEM 477.81502 LUMINAIRE (HORIZONTAL MOUNT) (250 HPS) (APS DETAIL 8050S)

General:

Street and Sign lighting shall be provided, installed, measured and paid in accordance with ADOT Traffic Signal and Lighting Standard Details current edition, ADOT Standard Specifications for Road and Bridge Construction, current edition, Section 736, except as specified herein, City of Goodyear Specifications, and the plans.

Measurement:

Luminaires shall be measured as EACH, which includes providing and installation in accordance with the specifications identified with this document and on the plans.

Payment:

Payment for Luminaires will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the materials, labor, tools, and equipment necessary to complete the work.

ITEM 477.84001 INTERNALLY ILLUMINATED STREET NAME SIGN

Description:

Illuminated street name signs shall be installed on the traffic signal pole structures in the traffic signal mast arm by the Contractor per the plans. The signs shall be manufactured by Fluoresco Lighting-Sign Maintenance Corp., Phoenix, Arizona and shall be integral to the traffic signal mast arm structure. The Contractor shall submit street name formats for approval by the City of Goodyear prior to ordering. Signs shall be controlled with photoelectric cell mounted on the controller cabinet.

Measurement:

Internally Illuminated Street Name Signs shall be measured as EACH, which includes providing and installation in accordance with the City of Tempe standard details, these specifications and on the plans.

Payment:

Payment for Internally Illuminated Street Name Signs will be paid for at the unit price indicated on the Schedule of Bid items. Payment will be made when the work is completed as described herein and on the plans and include the materials, labor, tools, and equipment necessary to complete the work.

ITEM 505.50121 'L' TYPE HEADWALL PER MAG STD DET 501 (MODIFIED PER SPECIAL DETAIL) WITH TRASH RACK PER MAG STD DET 502, WITH HANDRAIL

General:

Conform to MAG Standard Detail 501 and 502, except as modified per special detail of the construction plans. Contractor shall install handrail on each headwall per MAG Standard Detail 145, type 1.

Headwall shall be cast-in-place concrete, 8" thick, with reinforcement per MAG Standard Detail 501. No block construction shall be permitted.

Contractor shall submit, for approval, trash rack shop drawing prior to start of headwall construction.

Top of headwall shall be no less than 6" above adjacent back of sidewalk. Any discrepancy to this measurement shall be brought to the attention of the City and Engineer prior to start of layout or construction for review.

Measurement and Payment:

Measurement for 'L' type headwall, including grading, trash rack and handrail, shall be made on the basis of the contract unit price bid per each basis as shown in the construction plans.

Price bid shall include all labor, material, and equipment necessary to construct headwall, handrail and trash rack in accordance with the plans, details, and these Special Provisions.

ITEM 600.00071 REMOVE AND SALVAGE EXISTING WATER METER BOX AND SERVICE LINE TO THE MAIN AND PLUG PER SPECIAL DETAIL

General:

Conform to MAG Section 631 and as amended as follows:

The Contractor shall remove and salvage existing water meter as identified on the project plans. Contractor shall excavate to service saddle, and expose water main for inspection by City. The Contractor shall install new saddle if it is determined by the City that the existing one is unusable or not per City specifications. The Contractor shall furnish and install all new saddles as required and as shown on the special detail of the construction plans. Contractor shall abandon existing service tap and install repair sleeve as shown on the special detail of the construction plans.

Contractor shall install new water service as indicated on the plans (paid for under separate bid item). If the existing water meter is un-usable, the City shall provide at no cost to the Contractor a new water meter.

Price bid shall include all labor, material, and equipment necessary to complete the task in accordance with the plans, details, and these Special Provisions, complete in place.

ITEM 625.90001 TRENCH DRAIN AS PER DETAIL ON SHEET DT01

General:

Work under this item shall conform to MAG Section 601 & MAG Section 220, and per Trench Drain detail on sheet DT01.

Construction Requirements:

Contractor shall excavate trench per dimension of the referenced detail. Filter fabric shall be placed within the trench and shall overlap subsequent layers by a minimum of 1'. D50 = 2" diameter and D50 = 4" diameter river rock shall be installed so as to not damage or alter the location of the filter fabric. Filter fabric shall also be installed at the beginning and terminus ends of the trench.

Depth of trench shall be no less than 8' from bottom of retention basin.

Contractor shall obtain written permission to enter the property. Contractor shall evaluate existing condition, document and provide to the City and property owner.

The installation or use of this item is contingent upon request by City, and therefore, may not otherwise be required to be installed as part of this project.

Measurement and Payment:

Measurement for trench drain shall be made on the basis of the contract unit price bid per linear foot basis as measured lengthwise along the basin bottom, as shown in the construction plans.

Price bid shall include all labor, material, and equipment necessary to construct trench drain in accordance with the plans, details, and these Special Provisions.

..... END SPECIAL PROVISIONS.....