# **CONTRACT DOCUMENTS**

# AND

# SPECIFICATIONS

# FOR

PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36<sup>TH</sup> ST. NORTH FROM MLK JR. BLVD TO PEORIA

# ATTENDANCE AT PRE-BID CONFERENCE IS MANDATORY

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PAUL D. ZACHARY, P.E., DIRECTOR ENGINEERING SERVICES DEPARTMENT

Account Numbers: 144200.ArchEngr.5451101.42713122-541101; 144200.Streets.ArtRhb.4274.42743122-541106; 148130.AssetPlan.5451501.405.4055422-541101

> Engineering Services Department 2317 South Jackson Avenue Tulsa, Oklahoma 74107 (918) 596-9565

#### CONTRACT DOCUMENTS

#### PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

#### ENGINEERING SERVICES DEPARTMENT

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#### NOTICE TO BIDDERS SEALED BIDS FOR PROJECT NO. 144200, TMUA-W 15-04, SWD 10669

Notice is hereby given that pursuant to an order by the Mayor of the City of Tulsa, Oklahoma, sealed bids will be received in Room 260 of the Office of the City Clerk, City of Tulsa, 175 E. 2<sup>nd</sup> Street, Tulsa, Oklahoma 74103 until **8:30 a.m. the 29<sup>th</sup> day of January, 2021** for furnishing all tools, materials and labor and performing the work necessary to be done in the construction of the following:

#### PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

The entire cost of the improvement shall be paid from Account No. 144200.ArchEngr.5451101.42713122-541101; 144200. Streets.ArtRhb.4274.42743122-541106; 148130.AssetPlan.5451501.405.4055422-541101

A **MANDATORY** Pre-Bid Conference is scheduled for **Tuesday, January 5, 2021 at 9:30 a.m**. and will be held through video conferencing with Microsoft Teams, invitation presented on the City of Tulsa's website at this link:

https://www.cityoftulsa.org/government/departments/engin eering-services/construction-bids/

144200 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36<sup>TH</sup> ST. NORTH FROM MLK JR. BLVD TO PEORIA

Attendance at the Pre-Bid Conference is MANDATORY. Bids will not be received from contractors who did not attend the Pre-Bid Conference.

Bids will be accepted by the City Clerk from the holders of valid pre-qualifications certificates from the City of Tulsa in one or more of the following classifications: **A**, **C**, **or D** 

Drawings, specifications and contract documents for construction of said public improvements of the said project have been adopted by the Mayor of said City. Copies of same may be obtained at the Office of the Director of Engineering Services at the City of Tulsa Engineering Services, 2317 South Jackson, Room 103, North Building, for a non-refundable fee in the amount of **\$50.00** made payable to the City of Tulsa by check or money order. Contract requirements shall include compliance as required by law pertaining to the practice of non-discrimination in employment.

The overall aspirational Small Business Enterprise utilization goal for this project is **ten (10)** percent.

Attention is called to Resolution No. 18145 of August 23, 1988, requiring bidders to commit to the goal of employing on the project at least fifty percent bona fide residents of the City of Tulsa and/or MSA in each employment classification.

Attention is called to Resolution 7404 of November 8, 2006, requiring bidders, their subcontractors and their lower-tier subcontractors to hire only citizens of the United States.

The City of Tulsa itself is exempt from the payment of any sales or use taxes, and pursuant to Title 68 O.S. Section 1356(10), direct vendors to the City are also exempt from those taxes. A bidder may exclude from his bid appropriate sales taxes, which he will not have to pay while acting for and on behalf of the City of Tulsa.

A Certified or Cashier's Check or Bidders Surety Bond, in the sum of 5% of the amount of the bid will be required from each bidder to be retained as liquidated damages in the event the successful bidder fails, neglects or refuses to enter into said contract for the construction of said public improvements for said project and furnish the necessary bonds within thirty days from and after the date the award is made.

The bidder to whom a contract is awarded will be required to furnish public liability and workmen's compensation insurance; Performance, Statutory, and Maintenance bonds acceptable to the City of Tulsa, in conformity with the requirements of the proposed contract documents. The Performance, Statutory, and Maintenance bonds shall be for one hundred percent (100%) of the contract price.

All bids will be opened and considered by the Bid Committee of said City at a meeting of said Committee to be held in the City Council Room of City Hall in said City at **9:00 a.m. on the 29<sup>th</sup> day of January 2021**.

Dated at Tulsa, Oklahoma, this 11<sup>th</sup> day of December 2020.

(SEAL)

#### Christina Chappell City Clerk

#### INSTRUCTIONS TO BIDDERS

## B-1. <u>BIDS</u>

Each bid Proposal shall be completed electronically on the electronic media provided, then printed, signed and submitted along with the electronic media and the complete bound copy of the contract documents. In the event of a discrepancy between the pricing on the electronic media and hard copy of a Proposal, the hard copy pricing will govern. If electronic media is not provided and the bid Proposal is manual, the bid Proposal shall be submitted in ink. The written words shall govern over the figures if there is a difference between the two. No alterations, additions, or erasures shall be made on the Proposal. Erroneous entries shall be lined out, initialed by the bidder, and the correct entry inserted. The unit price bid must cover all expense for furnishing the labor, materials, tools, equipment, and apparatus of every description to construct, erect, and furnish all work required by and in conformance with the Drawings and Specifications.

Each bid shall be enclosed in a sealed envelope addressed to the City of Tulsa, 175 E. 2<sup>nd</sup> Street, Room 260, City Hall, Tulsa, Oklahoma, identified on the outside with the words:

#### PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

Pre-qualification Certificate Number \_\_\_\_\_\_

And shall be filed with the City Clerk in Room 260, City Hall.

All addenda to the contract documents, properly signed by the bidder, shall accompany the bid when submitted.

#### B-2. BID SECURITY

Each bid shall be accompanied by a cashier's check, a certified check, or bidder's bond, in the amount of five percent (5%) of the total amount bid.

The bid security shall be made payable, without condition, to the City of Tulsa, Oklahoma. The bid security may be retained by and shall be forfeited to the City as liquidated damages if the bid is accepted, a contract based thereon is awarded, and the bidder fails to enter into a contract in the form prescribed, with legally responsible sureties, within thirty (30) days after such award is made by the City.

# B-3 RETURN OF BID SECURITY

The bid security of each unsuccessful bidder will be returned when his bid is rejected. The bid security of the bidder to whom the contract is awarded will be returned when he executes a contract and files satisfactory bonds. The bid security of the second lowest responsible bidder may be retained for a period of time not to exceed sixty (60) days pending the execution of the contract and bonds by the successful bidder.

#### B-4 WITHDRAWAL OF BIDS

No bidder may withdraw his bid for sixty (60) days after the date and hour set for the opening. A bidder may withdraw his bid any time prior to expiration of the period during which bids may be submitted by making a written request signed in the same manner and by the same person who signed the Proposal.

#### B-5 <u>REJECTION OF BIDS</u>

Bids received more than ninety-six (96) hours before the time set for opening bids, excluding Saturdays, Sundays, and holidays, as well as bids received after the time set for opening bids, will not be considered and will be returned unopened.

The City of Tulsa reserves the right to reject any and all bids when such rejection is in the best interest of the City of Tulsa. All bids are received subject to this stipulation and the City reserves the right to decide which bidder shall be deemed lowest responsible bidder.

A violation of any of the following provisions by the bidder shall be sufficient reason for rejecting his bid, or shall make any contract between the City of Tulsa and the Contractor that is based on his bid, null and void: divulging the information in said bid before the bids have been opened; submission of a bid which is incomplete, unbalanced, obscure, incorrect, or which has conditional clauses, additions, or irregularities of any kind not in the original proposal form, or which is not in compliance with the Instruction to Bidders and published Notice to Bidders, or which is made in collusion with another bidder. The City shall have the right to waive any immaterial defects or irregularities in any bid received.

#### B-6 DISQUALIFICATION OF BIDDERS

No contract will be awarded to any person or persons, firm, partnership, company, or corporation which is in arrears to the City upon any debt of contract, or in default as surety or otherwise upon any obligation to the City.

#### B-7 SIGNATURE OF BIDDERS

Each bid shall be properly signed with the full name of the company or individual submitting the bid, the bidder's address, and the name and title of all persons signing printed below their signature lines. Bids by partnerships shall be signed with the partnership name followed by the signature and title of one of the

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partners. Bids by corporations shall be signed with the name of the corporation followed by the signature and title of the president, vice president, chairman, or vice chairman of the Board of Directors with attestation by the corporate secretary or assistant corporate secretary. **Resolution must be dated no more than 30 days prior to date of signature of the contract/ bond etc.** Bids by joint ventures shall be signed by each participant in the joint venture. Bids by limited liability companies shall be signed with the name of the limited liability company followed by the signature and title of the Manager or Managing Member. Bid by limited partnerships shall be signed with the name of the limited partnerships shall be signed with the name of the limited partnership followed by the signature of

the general partner. Note: The signature requirements listed above are for Oklahoma entities; entities organized in other states must follow the law of the state in which they are organized.

A bid by a person who affixes to his signature the word "President", "Manager", "General Partner", "Agent", or other title, without disclosing the name of the company for which he is signing, may be held to be the bid of the individual signing.

## B-8 INTERPRETATION OF CONTRACT DOCUMENTS

If any person who contemplates submitting a bid is in doubt as to the true meaning of any part of the drawing, specifications, or other proposed contract documents, he may submit to the Engineer a written request for interpretation thereof. The person submitting the request shall be responsible for its prompt delivery. Interpretation of the proposed contract documents will be made only by addendum. A copy of each addendum will be mailed or delivered to each person obtaining a set of contract documents from the Engineer. The City will not be responsible for any other explanations or interpretations of the proposed contract documents.

## B-9 LOCAL CONDITIONS AFFECTING WORK

Each bidder shall visit the site of the work and shall completely inform himself relative to construction hazards and procedure, labor, and all other conditions and factors, local and otherwise, which would affect prosecution and completion of the work and its cost. Such considerations shall include the arrangement and condition of existing structures and facilities, the procedure necessary for maintenance of uninterrupted operation of existing structures and facilities for transportation, handling, and storage of materials and equipment. All such factors shall be properly investigated and considered in the preparation of the bid. There will be no subsequent financial adjustment for lack of such prior information.

## B-10 TIME OF COMPLETION

The time of completion is an essential part of the contract and it will be necessary for each bidder to satisfy the City of his ability to complete the work within the allowable time set forth in the Bid Form. In this connection, attention is directed 05/24/14

to the provisions of the General Conditions and Special Conditions relative to delays, extension of time, and liquidated damages.

## B-11 QUALIFICATION OF BIDDERS

No bid will be received and filed by the City Clerk of the City of Tulsa unless the person submitting the bid has been pre-qualified as provided by ordinance, and is the holder of a current certificate of Pre-qualification in force and effect on the date such bid is to be submitted and filed.

#### B-12 TAXES AND PERMITS

Attention is directed to the requirements of the General Conditions regarding payment of taxes and obtaining permits. Contractor shall comply with all zoning ordinances of the City, as provided in the Tulsa Zoning Code, Title 42 Tulsa Revised Ordinances and conform with all zoning requirements established by the Tulsa Metropolitan Area Planning Commission and the Board of Adjustment. Contractor can call the Indian Nations Council of Governments (INCOG) at (918) 584-7526, to determine if any zoning requirements must be met.

#### B-13 OKLAHOMA LEGAL REQUIREMENTS

The Contractor must comply with the Oklahoma Scaffolding Law, 40 Oklahoma Statues, Sections 174 - 177, which cover erection and use of scaffolds, hoists, cranes, stays, ladders, supports, or other mechanical contrivances.

In accordance with Oklahoma Statutes, Title 68, Section 1701-1707, before commencing any work pursuant to this contract, any nonresident contractor shall give written notice by certified mail, return receipt requested, to the Oklahoma Tax Commission, the Oklahoma Employment Security Commission, the Workers Compensation Court, and the county assessor of each county in which work will be performed. The notices shall comply with the requirements set forth in said statute.

#### B-14 BONDS

The bidder to whom a contract is awarded will be required to furnish bonds as follows:

- a. <u>Performance Bond</u> A Performance Bond to the City in an amount equal to one hundred percent (100%) of the Contract price.
- b. <u>Statutory Bond</u> A Statutory Bond to the State of Oklahoma in an amount equal to one hundred percent (100%) of the contract price.
- c. <u>Maintenance Bond</u> A Maintenance Bond to the City in an amount equal to one hundred percent (100%) of the contract price.

The bonds shall be executed on the forms included in the contract documents by a surety company authorized to do business in the State of Oklahoma and acceptable as Surety to the City of Tulsa. Accompanying the bonds shall be a "Power-of-Attorney" authorizing the attorneyin-fact to bind the Surety Company and certified to include the dates of the bonds.

## B-15 BOUND COPY OF CONTRACT DOCUMENTS

The Bid Form or other pages shall <u>not</u> be removed from the bound copy of contract documents. The copy of contract documents filed with each bid shall be complete and shall include all items in the Table of Contents and all addenda.

## B-16 EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS

Each bidder agrees to comply with the terms of Title 5, Chapter 1, Section 111, of the Tulsa Revised Ordinances relating to Non-Discrimination.

## B-17 BASIS FOR AWARD OF CONTRACT

The basis for award of a contract shall be the total base bid submitted by the lowest responsible bidder unless otherwise directed in the form of proposal. The City of Tulsa reserves the right to withhold the awarding of a contract for a reasonable period of time from the date of opening of bids. The awarding of a contract upon a successful bid shall give the bidder no right or action or claim against the City of Tulsa upon such contract until the same shall have been reduced to writing and duly signed by the contracting parties. The award of a contract will not be completed until the contract is duly executed and the necessary bonds and insurance approved.

## B-18 TIME FOR AWARDING OF CONTRACT

The awarding of a contract to the lowest responsible bidder will be made within thirty (30) days after the opening of bids únless the City of Tulsa by formal recorded action and for good cause shown, provides for a reasonable extension to that period, which extension period shall not in any event exceed fifteen (15) days where only state or local funds are involved, or not to exceed ninety (90) days on any award of contract for the construction of public improvements where funds are utilized which are furnished by an agency of the federal government.

## B-19 SAFETY AND HEALTH REGULATIONS

Bidders should note that they are subject to "Safety and Health Regulations for Construction", Chapter XVII of Title 29, CFR, Part 1926 and that compliance, review and enforcement are the responsibility of the U.S. Department of Labor.

The Contractor is fully responsible for the safety of the work site and is expected to train their employees in all applicable safety issues. This should include but

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not be limited to: trench safety, confined space entry, head protection, etc. In accordance with construction contracts with the City, Authority, Board, or Commission, all applicable Labor and OSHA safety regulations must be followed.

Work sites must be monitored by the Contractor and safety provisions enforced. Contractors are asked to ensure that all employees are properly informed and trained in construction, work site safety.

#### B-20 VENDORS AND SUBCONTRACTOR IDENTIFICATION

Where Vendor and Subcontractor Identification Questionnaires are included in the bid documents, each bidder shall submit the Questionnaire directly to the Engineer no later than 5:00 p.m. on the first working day following the bid opening. Failure to submit the questionnaire may render the bid unresponsive and not eligible for award. The award of the Contract will be subject to the acceptability of the vendors and subcontractors listed. If an award is made, the vendors and subcontractors listed on the questionnaire shall be used on the project. No changes in the vendor and subcontractor list will be permitted unless prior consent is obtained from the Engineer.

#### B-21 U.S. ENVIRONMENTAL PROTECTION AGENCY NPDES REQUIREMENTS FOR STORMWATER DISCHARGES

The bidder's attention is directed to U.S. Environmental Protection Agency (EPA) NPDES requirements for stormwater discharges. The Contractor shall be responsible for filing a Notice of Intent and development and implementation of a Stormwater Pollution Prevention Plan (PPP).

#### B-22 AMERICANS WITH DISABILITIES ACT

The Contractor shall take the necessary actions to ensure its facilities are in compliance with the requirements of the Americans with Disabilities Act (ADA). It is understood that the program of the Contractor is not a program or activity of the City of Tulsa. The Contractor agrees that its program or activity will comply with the requirements of the ADA. Any costs of such compliance will be the responsibility of the Contractor. Under no circumstances will the Contractor conduct any activity, which it deems non-compliant with the ADA.

#### **RESOLUTION NO. 18145**

A RESOLUTION REQUIRING THE INCLUSION IN PLANS AND SPECIFICATIONS FOR PUBLIC IMPROVEMENT CONTRACTS OF PROVISIONS PROVIDING FOR THE EMPLOYMENT OF BONA FIDE RESIDENTS OF THE CITY OF TULSA; AND/OR THE MSA; ALSO PROVIDING THAT AT LEAST OF FIFTY PERCENT (50%) OF EACH CLASS OF EMPLOYEES USED ON A PROJECT BE BONA FIDE RESIDENTS OF THE CITY OF TULSA AND/OR THE MSA; THAT THE DIRECTOR OF THE DEPARTMENT OF HUMAN RIGHTS IS CHARGED WITH ENSURING THAT ALL BIDS FOR PUBLIC CONSTRUCTION CONTRACTS COMPLY WITH THIS RESOLUTION; AND DECLARING AN EMERGENCY.

WHEREAS, City of Tulsa, Oklahoma, desires to achieve a goal of full employment.

WHEREAS, it is necessary for the protection of the health, safety and welfare of all residents of the City of Tulsa, Oklahoma, to accomplish this goal.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COMMISSIONERS OF THE CITY OF TULSA, OKLAHOMA:

SECTION 1. The City of Tulsa is committed to the policy of achieving full employment of its citizens by encouraging the employment of bona fide Tulsa and MSA residents in public improvement contracts.

SECTION 2. Definitions. The definitions of certain terms used in this resolution are as follows:

a. "Bidding Documents" or "Bid" means the bid notice, plans and specifications, bidding form, bidding instructions, special provisions and all other written instruments prepared by or on behalf of an awarding public agency for use by prospective bidders on a public construction contract.

b. (i) "Bona Fide Residents" shall include only those persons who are either registered to vote in the City of Tulsa or who have resided within the city limits for at least six months, or who have purchased a permanent residence within the city limits or who have leased a residence for at least a six month term. Residency may be further determined by a valid Oklahoma driver's license, a current Oklahoma license tag, and a valid Oklahoma automobile inspection sticker. (ii) Bona fide residents of MSA shall include only those persons who are registered to vote in outlying MSA areas or who have resided within the outlying MSA area for at least six months, or who have purchased a permanent residence within the outlying MSA areas or who have leased a residence for at least a six month term. Residency may be further determined by a valid Oklahoma driver's license, a current Oklahoma license tag, and a valid oklahoma areas or who have leased a residence within the outlying MSA areas or who have leased a residence for at least a six month term. Residency may be further determined by a valid Oklahoma driver's license, a current Oklahoma license tag, and a valid Oklahoma automobile inspection sticker.

c. "Public Construction Contract" or "Contract" means any contract exceeding Seven Thousand Five Hundred Dollars (\$7,500.00) in amount, awarded by the City of Tulsa for the purpose of making any public improvements or constructing any public building or making repairs to the same.

d. "Public Improvement" means any beneficial or valuable change or addition, betterment, enhancement or amelioration of or upon any real property, or interest therein, belonging to the City of Tulsa, intended to enhance its value, beauty or utility or to adapt it to new or further purposes. The term does not include the direct purchase of materials, equipment or supplies by the City of Tulsa.

LITY OF THEA FILED AUG 2 3 1988 e. "MSA". All of the land areas composed of Creek County, Osage County, Rogers County, Tulsa County and Wagoner County.

SECTION 3. Residency Requirements of Contractor's Employees. Every employee and/or agent of the City of Tulsa, Oklahoma, charged or involved with the preparation of plans and specifications for any public impvement funded in whole or in part with funds of the City of Tulsa, is hereby charged to include in said plans and specifications the following provisions which shall be binding upon the successful bidders:

a. Each bid shall be accompanied by a sworn statement that the bidder is committed to the goal of employing at least 50% bona fide residents of the City of Tulsa and/or the MSA in each classification as determined by the Oklahoma Commissioner of Labor.

b. The successful bidder will be responsible for having like requirements placed upon any subcontractor.

c. The successful bidder will submit to the Director or his designated representative of the Department of Human Rights any compliance reports involving the bidder and its subcontractors required by Title 31, Chapter 1, Section 9, of the Tulsa Revised Ordinances. The reports shall include information about the residence of each employee in each laboring and trade class applicable to any City project.

SECTION 4. Unresponsive Bids. The failure to submit the documents required by Section 3 shall render a bid unresponsive. Said documents must be submitted prior to the opening of the bids. The Director of the Department of Human Rights Section of City Development is charged with ensuring that all bids comply with Section 3 prior to the bid opening date.

SECTION 5. Duty of Employees and/or Agents of the City of Tulsa. Any employee and/or agent of the City of Tulsa who fails to include the goals for residency requirements found in Section 3 in the plans and specifications for any public improvement may be subject to disciplinary action, including dismissal.

SECTION 6. Severability. The invalidity of any section, subsection, provision or clause or portion of this chapter, or the invalidity of the application thereof to any person or circumstance shall not affect the validity of the remainder of this chapter or the validity of its application to other persons or circumstances.

SECTION 7. Effect Date. This resolution shall take effect as of July 1, 1988.

SECTION 8. Emergency Clause. That an emergency exists for the preservation of the public peace, health and safety, by reason whereof this resolution shall take effect immediately upon its passage, approval and publication.

PASSED, with the emergency clause ruled upon separately and approved this 23rd day of August, 1988.

APPROVED, this <u>23<sup>rd</sup></u> day of <u>August</u>, 1988.

Rodger Randle Mayor

ATTEST: Philip W. Wood

AUGE to I

APPROVED: Neal E. McNeil

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PASSED, with the emergency clause ruled upon separately and approved this <u>23</u> day of <u>Muguat</u>, 1988. - APPROVED, this 23 day of ana 1988. Mayor

ATTEST:

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APPROVED:

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#### 01.23.18 POLICY STATEMENT

The City of Tulsa (hereinafter City) is committed to implementing the City of Tulsa Small Business Enterprise (SBE) Program of the City of Tulsa, hereinafter referred to as SBE Program. The stated objectives of the programs are:

- To ensure the employment of SBE(s) in the award and administration of City agreements and contracts;
- To create a level playing field on which SBE firms can compete fairly for City contracts;
- To ensure that only firms that fully meet the eligibility standards are permitted to participate as SBE participants;
- To help remove barriers to participation in City contracts;
- To assist in the development of SBE firms so that they may graduate from the SBE Program and ultimately compete successfully in the marketplace.

#### **GOALS BY BUSINESS CATEGORY – SBE**

There are seven (7) Business Categories for the City of Tulsa: Construction Contractors (Prime and Subcontractor), Architecture / Engineering (Consultant and Subconsultant), Professional Services, Other Services, and Goods and Supplies. A general description of each category follows:

#### **Construction**

- General building contractors engaged primarily in the construction of commercial buildings.
- Heavy construction such as airport runways, bridges, plants, grading and drainage, roadways, and other municipal infrastructure.
- Light maintenance construction services such as carpentry work; electrical work; installation of carpeting; air-conditioning repair, maintenance, and installation; plumbing; and renovation.
- Other related services such as water and sewer lines and maintenance, asbestos abatement, drainage, dredging, grading, hauling, landscaping (for large construction projects such as boulevards and highways), paving, roofing, and toxic waste clean-up.

#### Architecture and Engineering

- Licensed Architect
- Landscape Architect
- Professional Engineer
- Professional Land Surveyor
- Construction observation
- Other professional design / construction related services

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#### Professional Services

- Financial Services
- Legal services
- Medical services
- Educational services
- Real Estate services Planning services.
- Other professional services

#### Other Services

- Janitorial and maintenance services
- Uniformed guard services
- Computer services
- Certain job shop services
- Graphics, photographic services
- Landscaping
- Other non-technical professional services

#### Good and Supplies

- Office goods
- Medical supplies
- Miscellaneous building materials
- Computers

The goals are to reflect resource availability and capability. The City of Tulsa's goal is to mitigate and close the disparity between the availability/capability versus actual utilization of SBE firms in Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa, and Wagoner counties in Oklahoma.

The City enters various agreements and contracts with the private sector for services, goods and supplies, and construction activities. The agreements or contracts may have a specific or primary deliverable associated with one of the Business Categories. However, supplementary efforts may exist to fulfill the agreement or contract. Therefore, the table below is provided to show goals for all Business Categories. Good faith efforts shall first be focused on the Business Category or Categories that relate directly to the deliverables. Additional good faith efforts shall be in supplementary efforts from other categories to assist in meeting the overall project goal.

The project goals will be monitored and periodically adjusted to address the disparity between the available / capable / willing SBE firms versus actual utilization of SBE firms. The <u>overall project goal</u> <u>is 10%.</u>

SBE firms identified for utilization in an agreement or contract must be paid from the proceeds from that agreement or contract.

Business Category	SBE Goal (%)
Construction (Prime Contractors)	10
Construction (Subcontractors)	10
Architecture / Engineering (Consultant)	10
Architecture / Engineering	10
(Subconsultant)	
Professional Services	10
Other Services	10
Goods and Supplies	10

#### BIDDER'S ACTIONS

When the City has established SBE contract goals (hereinafter referred to as "goals"), the City will award a contract only to a bidder who makes good faith efforts to meet the goals. The following summary outlines the procedures

#### Summary:

1. RECORD OF SOLICITATION FOR SBE form:

These forms MUST be submitted with the bid documents. These documents establish the initial good faith, outreach efforts. In the event the bidder submitted the lowest bid, the SBE firms identified on these forms submitted with the bid are the only SBE firms that will be considered for establishing the bidder's projected utilization percentages for consideration of the award of bid.

2. LETTER OF INTENT TO CONTRACT WITH SBE form:

The bidder that submits the apparent lowest bid will be notified by City staff no later than the Monday following bid opening. The apparent low bidder MUST submit these forms and the associated attachments by close of business on Thursday following bid opening. Only SBE firms documented on the RECORD(s) OF SOLICITATION FOR SBE forms submitted with the bid will be considered for establishing the bidder's projected utilization percentages for consideration of the award of bid. If Letters of Intent are not submitted, the projected utilization will be 0% and the apparent lowest bidder is subject to being deemed non-responsive.

3. ADMINISTRATIVE RECONSIDERATION:

If the City determines that a bidder failed to meet the requirements above, City staff will contact the bidder by phone to define the issue and clarify any miscommunications and/or inadvertent actions. If issue was not due to miscommunication and/or inadvertent actions, the bidder will be notified per the Administrative Reconsideration process defined below. If the apparent low bidder is deemed non-responsive, City staff will notify the next lowest bidder to submit their LETTERS OF INTENT TO CONTRACT WITH SBE by close of business of the 6<sup>th</sup> day following notification or may exercise its right to reject any and all bids.

#### 4. CITY OF TULSA SBE UTILIZATION form:

This form is completed by the contractor (successful bidder) and submitted as part of the contract to perform the project. This form documents the "projected" utilization for the project. At the end of the project, this form is submitted with the final pay request documenting the "actual" utilization. The "actual" utilization must meet or exceed the "projected" utilization. Any change in the "projected" utilization must be documented, submitted to the City on the CHANGE REQUEST FOR SBE PARTICIPATION form, and approved by the City. Approval of the change must occur at the time of the change. If the change is a reduction and not submitted and approved per the instructions, the amount will be deducted from the contractor's final pay request.

#### 5. CHANGE REQUEST FOR SBE PARTICIPATION form:

This form documents any change to the "projected" utilization for the project. Change in utilization includes reduction, substitution, and/or increase. Utilization shall be checked with the submission of partial pay requests, but not longer than 30 day intervals throughout the project. The contractor's acknowledgement that they have verified changes in his/her utilization is required as part of partial pay request documents. Reductions in utilization not approved prior to the final pay request will result in pay reduction to the contractor. If, at the completion of the project, the contractor has failed to meet the SBE contract goals, does not have an approved change request, and has not demonstrated good faith efforts to meet the contract goal, the contractor will be assessed liquidated damages for the difference between the contract goal and the actual SBE participation achieved.

#### Record of Solicitation

All bidders shall, <u>with the submissions of their bids</u>, show their RECORD(s) OF SOLICITATION FOR SBE that demonstrates the good faith outreach effort to meet or exceed the SBE goals established for the project.

If bidders cannot meet the established SBE goals, the bidders shall document and submit with their bid proposal, justification stating why they could not meet the established SBE goals. To demonstrate good faith efforts to meet the SBE goals, the bidders shall document their efforts to obtain SBE participation. City will review and determine that the information is complete, accurate and adequately documents the bidder's good faith efforts before committing to the award of the contract to the bidder. In the event that the City awards a contract to a bidder who cannot meet the established SBE goals, the findings of the City's review shall be in written form and shall be incorporated into and become part of the contract documents.

If the bidder to whom City proposes to award the contract is able to demonstrate good faith efforts, City may accept the bidder's proposed goal. Acceptance by the City of the bidder's proposed goal does not release the bidder from its contractual obligation to continue to make efforts throughout the duration of the project to utilize SBE firms on the project.

All bidders shall submit with their bid the completed and signed RECORD OF SOLICITATION FOR SBE form.

#### Letter of Intent

The bidder must submit to the Engineering Contract Coordinator written confirmation from the SBE firms on the form LETTER OF INTENT TO CONTRACT WITH SBE that it is participating in the contract as provided in the contractor's bid commitment. <u>This may be submitted with the bid, but not later than the City's close of business of the Thursday following the bid opening.</u> The signed forms will define the contractor's final proposed utilization and will be the basis of a final evaluation. If inadequate utilization is proposed, the bid shall be considered non-responsive.

The SBE firms submitted on the LETTER OF INTENT TO CONTRACT WITH SBE forms shall be considered binding and changes of committed SBE firms may only be made after the contract is fully executed, and may only be changed through the submission, review and approval of form CHANGE REQUEST FOR SBE PARTICIPATION.

Failure to make the written assurance (City form LETTER OF INTENT TO CONTRACT WITH SBE), which includes the names of the SBE firms to be used, the work they will perform, and the price for the work, or failure to demonstrate good faith efforts that is deemed acceptable to the City to meet or exceed the SBE goals, shall render a bid non-responsive.

It is the contractor's responsibility to submit the information necessary for the City to ascertain compliance with the good faith efforts requirement. Extra cost involved in finding and utilizing SBE firms shall not be deemed adequate reason for the bidder's failure to meet the project SBE goals unless such costs are grossly excessive.

In instances where a successful bidder's SBE commitment exceeds the actual SBE contract goals, the submitted goals of the bidder become the contractual obligation.

In instances where a successful bidder's SBE commitment is below the SBE contract goals, the submitted utilization goals become the contractual obligation.

#### Good Faith Efforts

The steps taken by the bidder to obtain SBE participation shall be documented in writing and shall include, but are not limited to, the following good faith efforts:

A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) in the interest of all certified SBE firms capable to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the SBE firms to respond to the solicitation. The bidder must determine with certainty if the SBE firms are interested by taking appropriate steps to follow-up on the initial solicitation.

B. Selecting portions of the work to be performed by SBE firms in order to increase the likelihood that the SBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate SBE participation, even when the contractor might otherwise prefer to perform these work items with its own forces.

C. Providing interested SBE firms with adequate information about the plans, specifications and requirements of the contract in a timely manner to assist them in responding to a solicitation.

D. Negotiating in good faith with interested SBE firms:

(1) It is the bidder's responsibility to make a portion of the work available to SBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available SBE subcontractors and suppliers, to facilitate SBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of SBE firms that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for SBE firms to perform the work. RECORD OF SOLICITATION FOR SBE form will be submitted.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including available SBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using SBE firms is not sufficient justification for a bidder's failure to meet the contract SBE goals, as long as such costs are reasonable. Also, the ability or desire of a contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Contractors are not, however, required to accept higher quotes from SBE firms to fulfill the SBE contract requirements if the price difference is excessive or unreasonable. Documentation of quotes shall be submitted to the City with the bid as part of the bidder's record of solicitation.

E. Thoroughly analyzing the capabilities of SBE firms before determining a firm's qualification for a project. The following shall not be legitimate causes for the rejection or non-solicitation of SBE quotes in the efforts of the contractor to meet the project goal: (1) the subcontractor's standing, unrelated to job performance, within the industry; (2) membership in specific groups or organizations; or, (3) association with certain political and/or social organizations.

#### Administrative Reconsideration

If City determines that a bidder fails to meet the requirements stated above, the bidder will be provided an opportunity for administrative reconsideration. City staff will contact the bidder by phone to define the issue and clarify any miscommunications or inadvertent actions. If issue was not due to miscommunication and/or inadvertent actions, the following process will be followed:

- 1. The bidder will be notified by fax/email within ten working days following the bid opening.
- 2. The bidder will have 2 working days from time of notification to schedule a meeting for the purpose of administrative reconsideration with a City of Tulsa Attorney. Reconsideration meetings will generally be held within 7 days of notification of a bidder being determined non-responsive.

As part of this administrative reconsideration, the bidder will have the opportunity to meet in person with a City of Tulsa Attorney to present arguments concerning whether it met the goal or made adequate good faith efforts to do so. Submittal of additional information documenting solicitation, which was due with the original bid submission, will not be accepted or considered.

- 3. The decision on reconsideration will be made by a City of Tulsa Attorney who did not take part in the original determination that the bidder failed to meet the goal or make adequate good faith efforts to do so.
- 4. No awards will be made until all administrative reconsiderations as outlined herein are complete. A City of Tulsa Attorney will provide a written decision on reconsideration to the bidder. This decision will explain the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. The determination is copied to the Contract Administrator, City Engineer, and the Director of Human Rights.

#### CONTRACTOR ACTIONS AFTER AWARD OF THE CONTRACT:

#### Counting SBE Participation Toward the Goal

When a SBE participates in a contract, only the value of the work actually performed by the SBE is counted toward the contract goal.

The entire amount of that portion of a contract that is performed by the SBE firm's own forces is counted, including the cost of supplies and materials obtained by the SBE for the work on the contract, including supplies purchased or equipment leased by the SBE (except supplies and equipment the SBE purchases or leases from their Prime Contractor).

When a SBE performs as a participant in a joint venture, the portion of the total dollar value of the contract equal to the clearly defined portion of the work that the SBE performs with its own forces may be counted toward the goal.

Only expenditures to a SBE contractor who performs a commercially useful function may be counted toward a SBE goal.

#### Commercially Useful Function

A SBE performs a commercially useful function when it is responsible for the execution of the work of its contract and is carrying out its responsibilities by actually performing, managing and supervising the work involved. The SBE must be responsible, with respect to materials and supplies used on the

contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

To determine whether a SBE is performing a commercially useful function, City will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid is commensurate with the work it is actually performing and the SBE credit claimed, and other relevant factors.

A SBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction through which funds are passed in order to obtain the appearance of SBE participation. In determining whether a SBE is acting as a pass-through, City will examine similar transactions, particularly those in which SBE firms do not participate.

#### Manufacturers and Material Suppliers

If the materials or supplies are obtained from a certified SBE manufacturer, <u>100 percent</u> of the cost of the materials or supplies will be counted toward the SBE goals. A manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials required under the contract as described by the specifications.

If the materials or supplies are purchased from a certified SBE regular dealer, <u>100 percent</u> of the cost of the materials or supplies will be counted toward the SBE goals. A regular dealer is a firm that owns, operates or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment described by the specification and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question. A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating or maintaining a place of business as provided for in the above paragraph if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad-hoc or contract-by-contract basis.

In order for a firm to qualify as a SBE supplier of metal and/or concrete pipe, the firm must also fabricate the pipe. Metal or concrete pipe is specialty pipe which is project specific and is inspected during the manufacturing process. This arrangement provides for no warehousing of metal or concrete pipe and essentially requires the manufacturer to be the supplier. Merely ordering pipe from the fabricator and in turn selling it to contractors is not consistent with normal industry practice. Contractors normally purchase pipe directly from the manufacturer, thus eliminating the middleman. Supplying metal or concrete pipe is viewed as brokering and is considered inconsistent with SBE program requirements.

#### Change Request for SBE Participation

Substitution or replacement of a SBE firms will only be permitted or allowed after award and execution of the City contract.

A contractor may not terminate for convenience a SBE listed in their contract (or an approved substitute SBE firm) and then perform the work of the terminated subcontract with its own forces or those of an affiliate, without City's prior written consent.

When a SBE is terminated, or fails to complete the work of the contract for any reason, the contractor must make good faith efforts to find another SBE to substitute for the original SBE. These good faith efforts shall be directed at finding another SBE to perform at least the same amount of work (not necessarily the same work) under the contract as the SBE that was terminated, to the extent needed to meet the SBE goals established in the contract.

When the contractor obtains a substitute SBE, the contractor shall provide the Engineering Contract Coordinator with copies of the CHANGE REQUEST FOR SBE PARTICIPATION form and supporting documentation.

If the contractor is unable to replace the SBE with another SBE, then the contractor must provide City with evidence in writing that they have made a good faith effort. The contractor must submit to the Engineering Contract Coordinator a CHANGE REQUEST FOR SBE PARTICIPATION form along with documentation to support they have made a good faith effort. City may adjust the goal as appropriate.

In the case where a contractor cannot meet the SBE goals of a contract, he or she should request a change of that portion of the SBE goal, which cannot be met. The request will be subject to the following:

- A written request for change will be initiated by the contractor at the time he or she reasonably knows that despite good faith efforts the contract goal cannot be achieved. The request will be included on the CHANGE REQUEST FOR SBE PARTICIPATION form and will contain written document all good faith efforts made to meet the goal as well as the reason for the change.
- The request for change, CHANGE REQUEST FOR SBE PARTICIPATION form, will be submitted for review to the Engineering Contract Coordinator. The City will make the decision on the approval or denial of the change request and inform the contractor.
- If, at the completion of the project, the contractor has failed to meet the SBE contract goals, does not have an approved change request, and has not demonstrated good faith efforts to meet the contract goal, the contractor will be assessed liquidated damages for the difference between the contract goal and the actual SBE participation achieved. The City shall deduct the liquidated damages from the final payment. In the event insufficient earnings remain for the reduction of liquidated damages, the City may claim against the contractor's bond, suspend the contractor under performance suspension, withhold further proposals, suspend prequalification and/or other remedies available under the law.

In those instances when the goal is not met due to a change in quantity, which occurs through no
fault of the contractor, but due to City and/or changed site conditions, a change request will be
recommended by Field Engineering at the time the change becomes known, but not later than the
next progressive payment application from the contractor which covers the work identified for the
SBE firm. The change request will include the statement of quantity change(s). The contractor
shall endeavor, with good faith efforts, to mitigate underruns by utilizing other SBE firms.

Change in utilization includes reduction, substitution, and/or increase. Utilization shall be checked with the submission of each partial pay request, but not longer than 30 day intervals throughout the project. The contractor's acknowledgement that they have verified changes in his/her utilization is required as part of partial pay request documents. Reductions in utilization not approved prior to the final pay request, will result in pay reduction to the contractor.

If a contractor fails to comply with this section, appropriate administrative remedies may be taken including, but not limited to:

- No additional progressive payments may be processed
- Refusal to issue proposals
- Liquidated damages
- Suspension of work on the project
- Suspension of prequalification
- Termination of the contract

#### Prompt Payments

To ensure that contractors' obligations under City contracts are met, the contractor shall endeavor to pay all subcontractors for satisfactory performance of their contracts no later than fifteen (15) calendar days after receipt of each progressive payment from City. The contractor must further endeavor to make prompt release of retainage held to the SBE within thirty days after the work is satisfactorily completed, whether the contractor's work is complete or not. The term "satisfactorily completed" is defined as when; 1) City finds the work completed in accordance with the Plans and Specifications; 2) any required paperwork, including material certification, payrolls, etc., have been received and approved by City; 3) Field Engineering has determined the final quantities on the subcontractor's subcontractor's work.

In an effort to accelerate payments to subcontractors, the City may pay the Contractor for acceptable material stockpiled or delivered to the project, at other approved or designated locations, or at a plant site required for Contractor's operations as approved by the City. This is governed by Oklahoma Department of Transportation Standard Specifications for Highway Construction 2009 or latest edition.

Contractor shall endeavor to include invoices from SBE for materials on hand, partially completed work, or complete work on the earliest partial payment request submitted to the City. It is incumbent on the SBE to submit invoices to the Contractor in a timely manner.

Failure to comply with the prompt payment and return of retainage provisions of the contract may result in sanctions under the contract, as listed below:

- Refusal to issue proposals
- Liquidated damages
- Suspension of work on the project
- No additional progressive payments may be processed
- Suspension of prequalification

Any delay or postponement of payment among the parties may take place only for good cause, with City written approval. The explanation from the contractor must be made in writing to the City.

#### **Record Keeping Requirements**

The contractor shall keep such records as are necessary to determine compliance with the SBE contract obligations. The records kept by the contractor will indicate:

- 1. The name(s) of SBE firms or other subcontractors, the type of work being performed, and payment for work, services and business.
- 2. Documentation of correspondence, verbal contracts, telephone calls, etc., to obtain services of SBE firms on the project.

Upon request, the contractor shall submit all subcontracts, purchase orders, contracts, agreements, and financial transactions, including canceled checks, executed with SBE firms with the reference to records referred to in this provision, in such form, manner, content prescribed by City.

The contractor should list all SBE firms in the contract and summarize total amounts paid to SBE firms and the project goal amount for each SBE firm.

#### Reciprocity

The City will grant reciprocity of membership in the SBE program to certified Oklahoma Department of Transportation Disadvantaged Business Enterprises which are located in the Tulsa Metropolitan Statistical Area.

#### (Must be submitted with Bid)

#### CITY OF TULSA BIDDER'S AFFIDAVIT FOR SMALL BUSINESS ENTERPRISE (SBE) UTILIZATION GOALS

STATE OF

COUNTY OF

) ) ss: )

\_\_\_\_\_\_, of lawful age, being first duly sworn, says that s(he) is the agent authorized by the bidder to submit the attached bid. Affiant further states that the bidder agrees to fully comply with the City of Tulsa's Resolution requiring that a good faith effort be made to utilize small business enterprises as subcontractors.

Affiant further states that s(he) will document on pages SBE-2BID, -3BID, -4BID, and -5BID for public record, his/her good faith efforts in solicitation.

Affiant further states that s(he) is responsible for having like requirements placed upon any subcontractor of said bidder.

Affiant further states that s(he) has read and agrees to the current CITY OF TULSA, OKLAHOMA SMALL BUSINESS ENTERPRISE (SBE) UTILIZATION INSTRUCTIONS FOR BID OPENING AND AWARD SYSTEMS.

BIDDER (Company Name)

SIGNED

TITLE

SUBSCRIBED and SWORN to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

SBE-1BID



## RECORD OF SOLICITATION FOR SMALL BUSINESS ENTERPRISE (SBE) (MUST BE SUBMITTED WITH BID)

-	Project Name:
1	Project Number:
-	Prime Contractor:
-	Prime Contractor Representative:
C	onsultants, Subcontractors, Service, Regular Dealers, Material Suppliers, & Fabricators:
-	Contact Date(s):
	Name of Company:
-	Address (Street, City, County, State):
-	City of Tulsa SBE: 🗆 Yes 🗆 No
-	City of Tulsa SBE Certificate Number:
-	Other SBE Certificate Number(s):
-	Company Contact Person:
-	Phone No.: Email:
-	Description of Work:
-	Contract Documents provided to and/or reviewed by Company:  Yes No
-	Will City of Tulsa SBE be utilized?  Yes  No
-	If Yes, Estimated Agreement Amount: \$
-	It No description of reasons why agreement could not be reached for City of Tules SPE to norform
	If No, description of reasons why agreement could not be reached for City of Tulsa SBE to perform work:



# LETTER OF INTENT TO CONTRACT WITH SMALL BUSINESS ENTERPRISE (SBE)

(Must be submitted by close of business on Thursday following bid opening)

Engineering Services Department, Attn: C CITY OF TULSA 2317 South Jackson, N-103 Tulsa, Oklahoma 74107 Ph.: 918.596.9637 Fax: 918.596.1299	Contract Administration
Project Name:	
Project Number:	
Submittal Date:	
	Prime Contractor
HEREBY, intends to subo	contract items of work generally described as
	to:
SMAL	LL BUSINESS ENTERPRISE
Total amount of participation by City of Tu	ulsa SBE: \$
City of Tulsa SBE: □ Yes □ No City of Tulsa SBE Certificate Number: Other SBE Certificate Number(s):	(Chy of Tuisa SDL, quote must be anachea)
SMALL BUSINESS ENTERPRISE	PRIME CONTRACTOR
Signature:	5
Title:	
Date:	Date:

Signatures of Authorized representatives of the Prime Contractor and the City of Tulsa SBE firm above represent the written commitment by the Prime Contractor to subcontract with the City of Tulsa SBE firm and a written commitment by the City of Tulsa SBE firm to subcontract for work as described in the attached quote.

This form, along with the City of Tulsa SBE firm's quote must be submitted to the City with the executed Contract documents. If this form is not received, the proposed utilization will NOT be counted as part of the Prime Contractor's agreement. This may cause the agreement to be considered non-compliant and be rejected by the City of Tulsa.

SBE-3BID



## <u>CHANGE REQUEST</u> FOR SMALL BUSINESS ENTERPRISE (SBE) PARTICIPATION

Project Name:	
Project Number:	
Prime Contractor:	
CHANGE: From / To (fill in both sides)ORFROM:	<b>ADD:</b> To (fill in this side only) <b>TO:</b>
Name:	Name:
City of Tulsa SBE:  Yes No City of Tulsa SBE Certificate Number: Other SBE Certificate Number(s):	City of Tulsa SBE:  Yes No City of Tulsa SBE Certificate Number: Other SBE Certificate Number(s):
	I City of Tulsa SBE and a new Letter of Intent for the proposed
PRIME CONTRACTOR	SBE SUBCONTRACTOR
Signature:	Signature:
Date:	Date:
Title:	Title:
Approved / Disapproved: Engineering Services, Mana (Planning, Design, or Field)	ger Date:
Approved / Disapproved: Engineering Services / Cont	
Distribution: Mayor's Office of Economic Developmer Engineering Services Department Division	



# SMALL BUSINESS ENTERPRISE (SBE) UTILIZATION CITY OF TULSA

Contractor		Business Category	
Project No.	Project Name	Name	

Name	Business Category	<b>Projected Dollars</b>	Actual Dollars
			-
Projected Contract %	Actual Contract %	Total	

ACTUAL (Update and Submit with Final Payment):

Contractor Representative

PROJECTED:

Contractor Representative

Date

SBE - 5BID

NOTE: REFER TO UTILIZATION INSTRUCTIONS

Date

12 Utilization Table SBE BID 20180123.docx

#### (Must be submitted at time of Bid) CITY OF TULSA RESOLUTION NO. 7404 AFFIDAVIT OF COMPLIANCE

 $\underline{}$ , of lawful age, being first duly sworn, states that s(he) is the authorized agent of the Company set forth below.

Affiant further states that the Company, in compliance with City of Tulsa Resolution No. 7404, shall not hire or knowingly allow any of its subcontractors or lower tier subcontractors to hire anyone who is not a United States citizen or legal immigrant or anyone who does not have legal status as a temporary worker to perform work on any project which is the subject of a contract between the Company and the City of Tulsa.

Affiant further states that the Company shall not fail to comply with and shall not knowingly allow any of its subcontractors or lower tier subcontractors to fail to comply with all applicable laws including, but not limited to, labor, employment and taxation laws, in the performance of any work on any project which is the subject of a contract between the Company and the City of Tulsa.

Affiant further states that the Company shall make available to the City of Tulsa, at the City's request, sufficient information and/or affirmations to allow the City to confirm Company's compliance with Resolution No. 7404 relating to the performance of any contract between the Company and the City of Tulsa.

Company: \_\_\_\_\_

Signed:

Title

SUBSCRIBED and SWORN to before me, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

COMMISSION NO.:

Resolution No. 7404 RAC-1

#### (Must be submitted at time of Bid) CITY OF TULSA 50% RESIDENT RESOLUTION AFFIDAVIT FOR BID

STATE OF ) ) ss: COUNTY OF )

, of lawful age, being first duly sworn, states that s(he) is the agent authorized by the bidder to submit the attached bid. Affiant further states that the bidder, in compliance with City of Tulsa Resolution No. 18145, is committed to the goal of employing at least 50% bona fide residents of the City of Tulsa and/or the Metropolitan Statistical Area (composed of Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa, and Wagoner counties).

Affiant further states that bidder is responsible for having like requirements placed upon any of its subcontractors.

COMMISSION NO .:

RRA-1

02/01/19

#### (Must be submitted at time of bid) NON-COLLUSION AFFIDAVIT

) ) ss:

STATE OF

COUNTY OF

, of lawful age, being first duly sworn, says that:

- I am the duly authorized agent of the bidder submitting the competitive bid associated with this sworn statement for the purpose of certifying facts pertaining to the existence of collusion among bidders and between bidders and municipal officers or employees, as well as facts pertaining to the giving or offering of things of value to governmental personnel in return for special consideration in the letting of any contract pursuant to the bid;
- 2. I am fully aware of the facts and circumstances surrounding the making of the bid and have been personally and directly involved in the proceedings leading to the submission of such bid;
- 3. Neither the bidder nor anyone subject to the bidder's direction or control has been a party:
  - a. to any collusion among bidders in restraint of freedom of competition by agreement to bid at a fixed price or to refrain from bidding;
  - b. to any collusion with any municipal official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such prospective contract; nor
  - c. in any discussions between bidders and any municipal official concerning exchange of money or other things of value for special consideration in the letting of a contract.
- 4. If awarded the contract, neither the bidder nor anyone subject to the bidder's direction or control has paid, given or donated or agreed to pay, give or donate to any officer or employee of the City of Tulsa or of any public trust where the City of Tulsa is a beneficiary, any money or other thing of value, either directly or indirectly, in procuring the contract for which the bid is submitted.

BIDDER (Company Name)	Signed
	Title
SUBSCRIBED and SWORN to before me th	is, 20
MY COMMISSION EXPIRES:	NOTARY PUBLIC
COMMISSION NO.:	

#### (Must be submitted at time of bid) **BUSINESS RELATIONSHIP AFFIDAVIT**

STATE OF	)
	) ss:
COUNTY OF	)

, of lawful age, being first duly sworn, says that s(he) is the agent authorized by the bidder to submit the attached bid. Affiant further states that the nature of any partnership, joint venture or other business relationship presently in effect or which existed within one (1) year prior to the date of this statement with the architect, engineer, or other party to the project is as follows:

Affiant further states that any such business relationship presently in effect or which existed within one (1) year prior to the date of this statement between any officer or director of the bidding company and any officer or director of the architectural or engineering firm or other party to the project is as follows:

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

(If none of the business relationships herein above mentioned exist, affiant should so state.) Ciamadu

	Signed:	
BIDDER (Company Name)	Title:	
SUBSCRIBED and SWORN to before me this	day of	, 20

. \_\_\_\_\_

MY COMMISSION EXPIRES:

NOTARY PUBLIC

COMMISSION N	10.:
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\_ , \_

#### **INTEREST AFFIDAVIT**

STATE OF \_\_\_\_\_) SS. COUNTY OF \_\_\_\_\_)

I, \_\_\_\_\_\_, of lawful age, being first duly sworn, state that I am the agent authorized by Contractor, Engineer, Architect or provider of professional service ["Services Provider"] to submit the attached Agreement. Affiant further states that no officer or employee of the City of Tulsa either directly or indirectly owns a five percent (5%) interest or more in the Services Provider's business or such a percentage that constitutes a controlling interest. Affiant further states that the following officers and/or employees of the City of Tulsa own an interest in the Services Provider's business which is less than a controlling interest, either direct or indirect.

	By		
	Signature		
	Title		
Subscribed and sworn to before me this	day of	, 20	
Notary Public			
My Commission Expires:			
Notary Commission Number:			
County & State Where Notarized:			

The Affidavit must be signed by an authorized agent and notarized.

#### ELECTRONIC BID PROPOSAL INSTRUCTIONS - EXCEL SPREADSHEET PROJECT NO. 144200, TMUA-W 15-04, SWD 10669

#### Please read the following instructions carefully.

- 1. After opening this file re-save it as your company's name.
- 2. Open the BID FORM Sheet from the tabs below.
- 3. Input the unit price of the appropriate pay item in the cells highlighted in blue.
- 4. Review all data input and check calculations to ensure accuracy of Bid.
- 5. Print 1hardcopy of the "PROPOSAL" tab, BID FORM and the "SIGNATURE PAGE" tab.
- 6. Complete and sign the "Signature Page" document.
- 6. Submit hardcopy and electronic disk with Contract Documents and Specifications for Bid opening date.

#### AGREEMENT FOR USING ELECTRONIC BID PROPOSAL

By and Between: Professional Engineering Consultants, PA, (ENGINEER) and RECIPIENT. The enclosed electronic media is provided pursuant to your request and is for your limited use in connection with your submittal of Bid Proposal for Project No. 144200. In no event shall the information be used for any other purpose or be released to third parties without the written consent of the ENGINEER. In the event of a discrepancy between the hard copy and this electronic media at delivery or in the future, the hard copy shall govern. ENGINEER hereby disclaims any and all liability for the consequences from use of the electronic media and makes no warranty or guarantee of accuracy. RECIPIENT shall assume full responsibility for the uses and consequences of the electronic media. It is agreed that ENGINEER has and retains ownership of the electronic media. ENGINEER does not warrant or guarantee that the electronic data is compatible with RECIPIENT'S computer hardware or software, and ENGINEER's responsibility for the electronic media is limited to replacement of defective media for a period of thirty (30) days after delivery to RECIPIENT. !!! By opening and using this FILE, You AGREE to these TERMS AND CONDITIONS!!!

#### PROPOSAL PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATERLINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR BLVD. TO PEORIA AVE.

#### TO: HONORABLE MAYOR CITY OF TULSA, OKLAHOMA

THE UNDERSIGNED BIDDER, having carefully examined the drawings, specifications, and other Contract Documents of the above project presently on file in the City Clerk, City of Tulsa Oklahoma:

CERTIFIES THAT he has inspected the site of the proposed work and has full knowledge of the extent and character of the work involved, construction difficulties that may be encountered, and materials necessary for construction, class and type of excavation, and all other factors affecting or which may be affected by the specified work; and

CERTIFIES THAT he has not entered into collusion with any other bidder or prospective bidder relative to the project and/or bid: and

HEREBY PROPOSES: to enter into a contract to provide all necessary labor, materials, equipment and tools to completely construct and finish all the work required by the Contract Documents referred to therein; to complete said work within <u>450</u> calendar days after the work order is issued; and to accept in full payment therefore the amount set forth below for all work actually performed as computed by the Engineers as set forth in the Contract.

#### **Basis of Award**

THE BID PROPOSAL INCLUDES A TOTAL ROADWAY, TRAFFIC, LANDSCAPING AND WATERLINE BASE BID. IT SHOULD BE NOTED THAT THE LOWEST RESPONSIBLE TOTAL BID SHALL BE DETERMINED BY THE BASE BID ROADWAY, TRAFFIC, LANDSCAPING AND WATERLINE. ANY PROPOSAL SUBMITTED WITH THE ROADWAY, TRAFFIC, LANDSCAPING OR WATERLINE ITEMS INCOMPLETE SHALL BE CONSIDERED NON-RESPONSIVE.

Note: - Item numbers omitted are not a part of the Contract.

PROPOSAL
PROJECT NO. 144200, TMUA-W 15-04, SWD 10669
CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND
WATERLINE REPLACEMENT FOR 36TH ST. NORTH
FROM MLK JR BLVD. TO PEORIA AVE.

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ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	DATA INPUT UNIT PRICE	AMOUNT
BASE BID - RO			į Okri	- Contraction		ANCONT
1	201(D)	SELECTIVE CLEARING	ACRE	0.22		\$0.00
2	202(A)	UNCLASSIFIED EXCAVATION	CY	13,757		\$0.00
3 4	221(C) 221(D)	TEMPORARY SILT FENCE TEMPORARY SEDIMENT FILTER	EA	4,425		\$0.00
5	303(A)	AGGREGATE BASE TYPE A	CY EA	8,967		\$0.00
6	310(B)	SUBGRADE METHOD B	SY	20,971		\$0.00
7	325	SEPARATOR FABRIC	SY	25,958		\$0.00
8	414(B)	DOWEL JOINTED P.C.C. PAVEMENT (PLACEMENT)(9")	SY	12,587.0		\$0.00
9 10	414(G) NOT USED	P.C. CONCRETE FOR PAVEMENT	CY NOT USED	3,147		\$0.00
10	510(A)	RETAINING WALL	SY	153		\$0.00
12	601(A)	TYPE I PLAIN RIPRAP	TON	7		\$0.00
12A	609(A)	CONCRETE CURB (6" MOUNTABLE-INTEGRAL)	LF	902		\$0.00
13	609(A)		LF	6,662		\$0.00
14	609(B) 609(B)	COMBINED CURB & GUTTER (6" BARRIER) COMBINED CURB & GUTTER (6" BARRIER)	<u>LF</u>	3,034 2,105		\$0.00
16	610(A)	4" CONCRETE SIDEWALK	SY	7,173		\$0.00
17	610(A)	6" CONCRETE SIDEWALK	SY	541		\$0.00
18	610(B)	6" CONCRETE DRIVEWAY (H.E.S.)	SY	3,842		\$0.00
19	610(I)	TACTILE WARNING DEVICE	SF	520		\$0.00
20 21	611(G) 611(G)	INLET, DESIGN NO. 2 (B), COMPLETE IN PLACE INLET, DESIGN NO. 2 (C), COMPLETE IN PLACE	EA EA	6		\$0.00 \$0.00
22	611(G)	INLET, DESIGN NO. 2 (C), COMPLETE IN PLACE	EA EA	6		\$0.00
23	611(G)	INLET, DESIGN NO. 4 (STD), COMPLETE IN PLACE	EA	1		\$0.00
24	611(G)	INLET, DESIGN NO. 4 (2A), COMPLETE IN PLACE	EA	1		\$0.00
25	611(G)	INLET, DESIGN NO. 4 (C), COMPLETE IN PLACE	EA	1		\$0.00
26 27	611(G) 611(G)	INLET, DESIGN NO. 4 (D), COMPLETE IN PLACE	EA EA	4		\$0.00 \$0.00
27	611(G)	INLET, DESIGN NO. 4 (D+A), COMPLETE IN PLACE INLET, DESIGN NO. 5 (D), COMPLETE IN PLACE	EA	2		\$0.00
29	611(H)	ADDITIONAL DEPTH IN INLET, DES. 2	VF	9		\$0.00
30	611(H)	ADDITIONAL DEPTH IN INLET, DES. 4	VF	3		\$0.00
31	612(A)	MANHOLE(4' DIA.)	EA	2		\$0.00
32 33	612(A)	MANHOLE(6' DIA.)	EA	3		\$0.00
33	612(A) 612(A)	MANHOLE(8' DIA.) MANHOLE ADJUSTED TO GRADE (PUBLIC)	EA EA	3		\$0.00
35	612(E)	VALVE BOXES ADJUSTED TO GRADE	EA	15		\$0.00
36	612(F)	METER BOXES ADJUSTED TO GRADE	EA	5		\$0.00
37	613(A)	RCP,15 INCH ROUND, COMPLETE IN PLACE	LF	1		\$0.00
38	613(A)	RCP,18 INCH ROUND, COMPLETE IN PLACE		272		\$0.00
39 40	613(A) 613(A)	RCP,21 INCH ROUND, COMPLETE IN PLACE	LF LF	318		\$0.00 \$0.00
40	613(A)	RCP,30 INCH ROUND, COMPLETE IN PLACE		262		\$0.00
42	613(A)	RCP,36 INCH ROUND, COMPLETE IN PLACE	LF	568		\$0.00
43	613(A)	RCP,42 INCH ROUND, COMPLETE IN PLACE	LF	140		\$0.00
44	613(L)	42" PREFAB. CULVERT END SEC., ROUND	EA	1		\$0.00
45 46	619(A) 619(B)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS REMOVAL OF CURB AND GUTTER	LSUM	1 5,030		\$0.00
40	619(B)	REMOVAL OF EXISTING DRIVEWAYS	SY	4,893		\$0.00
48	619(B)	REMOVAL OF CONCRETE PAVEMENT	SY	15,302		\$0.00
49	619(B)	REMOVAL OF SIDEWALK	SY	2,445		\$0.00
50	625(B)	REMOVE AND RECONSTRUCT FENCE	LF	91		\$0.00
51 52	SPECIAL SPECIAL	COORDINATION WITH LANDSCAPING CONTRACTOR TYPE A CURB RAMP	EA EA	1		\$0.00
53	SPECIAL	TYPE B CURB RAMP	EA	25		\$0.00
54	SPECIAL	TYPE C CURB RAMP	EA	2		\$0.00
55	SPECIAL	OWNER ALLOWANCE	ALLOW		\$ 25,000.00	\$25,000.00
56	SPECIAL	TYPE   PCC PATCH	CY	932		\$0.00
57	SPECIAL	URBAN RIGHT-OF-WAY RESTORATION	EA	1		\$0.00
58 59	220 640(A)	SWPPP DOCUMENTATION AND MANAGEMENT	LSUM EA	1		\$0.00 \$0.00
60	640(A) 641	MOBILIZATION	EA EA	1		\$0.00
61	642(B)	CONSTRUCTION STAKING LEVEL II	EA	1		\$0.00
62	857(E)	CONSTRUCTION ZONE PAVEMENT MARKERS	EA	5,270		\$0.00
63	880(A)		SD	720		\$0.00
64	880(B)	SIGNS 0.00 TO 6.25 SF SIGNS 6.26 TO 15.99 SF	SD SD	9,180 100		\$0.00
65 66	880(B) 880(B)	SIGNS 6.26 TO 15.39 SF SIGNS 16.00 AND UP	SD SD	3,330		\$0.00
67	880(C)	BARRICADES (TYPE III)	SD	10,080		\$0.00
68	880(E)	TYPE "A" WARNING LIGHT	SD	17,280		\$0.00
69	880(E)	TYPE "C" WARNING LIGHT	SD	86,220		\$0.00
70	880(F)	DRUMS TUBE CHANNELIZERS	SD SD	86,220		\$0.00
71 72	880(G) 880(I)	FLAGGER	SD FD	8,622 30		\$0.00
73	882(B)	REMOTE CONTROLLED CHANGEABLE MESSAGE SIGN	SD	720		\$0.00
74	SPECIAL	CONTRACTORS QUALITY CONTROL	EA	1		\$0.00
75	SPECIAL	PROJECT SIGN (CITY OF TULSA) SIGNAGE FOR BUSINESS ACCESS (BAS-1)	EA	2		\$0.00
76	SPECIAL		EA	22		\$0.00

ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	DATA INPUT UNIT PRICE	AMOUNT
BASE BID -	LANDSCAPING					
77	02950	(PL) PLANTING (GROUNDCOVER) - MONKEY GRASS Liriope muscari 'Big Blue'	EA	712		\$0.0
78	02950	(PL) PLANTING (MATERIALS) - METAL BED EDGING	LF	100		\$0.0
79	02950	(PL) PLANTING (MATERIALS) - CYPRESS MULCH (3 CF BAG)	BAG	121		\$0.0
80	02950	(PL) PLANTING (MATERIALS) - BACK TO NATURE (3 CF BAG)	BAG	4,921		\$0.0
81	02950	(PL) PLANTING (MATERIALS) - SANDY LOAM TOPSOIL	CY	2,409		\$0.0
82	202(A) & 02950	UNCLASSIFIED EXCAVATION	CY	1,732		\$0.0
83	230(A) & 02930	SOLID SLAB SODDING ('CODY' BUFFALO)	SY	11,561		\$0.00
84	230(A) & 02930	SOLID SLAB SODDING (U3 BERMUDA)	SY	5,585		\$0.00
84A	02950	(PL) PLANTING (TREE) - CREPE MYRTLE	EA	8		\$0.00
84B	02931	LAWN AND GROUNDCOVER MAINTENANCE	YR	3		\$0.00
		BASE BID - LANDSCAPING SUBTOTAL				\$0.00

ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	DATA INPUT UNIT PRICE	AMOUNT		
ADD ALTER	ADD ALTERNATE #1 - SITE FURNISHINGS							
85		72" BENCH	EA	10		\$0.00		
86	610(A)	4" CONCRETE SIDEWALK / SLAB AT BENCH LOCATIONS	SY	40		\$0.00		
		ADD ALTERNATE #1 - SITE FÜRNISHINGS SUBTOTAL				\$0.00		

ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	DATA INPUT UNIT PRICE	AMOUNT		
ADD ALTER	ADD ALTERNATE #2 - "NO MOW ZONE" SIGNS							
87		12" x 12" "NO-MOW ZONE" SIGN	EÁ	33		\$0.00		
		ADD ALTERNATE #2 - "NO MOW ZONE" SIGNS SUBTOTAL				\$0.00		

ITEM NUMBER	SPEC NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	DATA INPUT UNIT PRIČE	AMOUNT			
ADD ALTER	ADD ALTERNATE #3 - LIGHTING CONDUIT FOR FUTURE PEDESTRIAN LIGHTING								
88	802(B)	2" PVC SCHED 80 PLASTIC CONDUIT TRENCHED	LF	10348		\$0.00			
89	803(A)	PULL BOX SIZE III or "GREEN ROUND IRRIGATION VALVE BOX"	EA	22		\$0.00			
	AD	D ALTERNATE #3 - LIGHTING CONDUIT FOR FUTURE PEDESTRIAN LIGHTING SUBTO	TAL			\$0.00			

ITEM	SPEC					
NUMBER	NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
BASE BID -						
90	COT 601	PULL BOX SIZE II	EA	3		\$0.
91	COT 601	PULL BOX SIZE III	EA	1		\$0.
92	COT 602	2" PVC SCH 40 PLASTIC CONDUIT (TRENCHED)	LF	476		\$0.
93	COT 602	3" PVC SCH 40 PLASTIC CONDUIT (TRENCHED)	LF	63		\$0
94	COT 602	2-3" HDPE SCH 40 CONDUIT (BORE)	LF	266		\$0.
95	COT 603	36" SIGNAL FOOTING S-18/24	EA	2		\$0
96	COT 603	36" SIGNAL FOOTING S-30/36	EA	3		\$0
97	COT 603	24" PEDESTAL FOOTING F-1	EA	13		\$0
98	COT 606	PRE-EMPTION CABLE	LF	640		\$0
99	COT 606	INFRARED PRE-EMPTION DETECTOR - SINGLE	EA	4		\$0
100	COT 606	PRE-EMPTION PHASE SELECTOR	EA	1		\$0
101	COT 607	SERVICE TO SIGNAL STANDARD	EA	1		\$0
102	COT 608	GROUND MOUNT SIGN	SF	18		\$0
103	COT 608	OVERHEAD SIGN	SF	86		\$0
104	COT 608	1-1/2" SIGN POST	LF	14		\$0
105	COT 608	1-3/4" SIGN POST	LF	700		\$0
106	COT 608	2" SIGN POST	LF	90		\$0
107	COT 610	TRAFFIC SIGNAL CONTROLER CABINET ASSEMBLY	EA	1		\$0
108	COT 611	2C #14 TRAFFIC SIGNAL ELECTRICAL CABLE	LF	460		\$0
109	COT 611	4C #14 TRAFFIC SIGNAL ELECTRICAL CABLE	LF	540		\$0
110	COT 611	7C #14 TRAFFIC SIGNAL ELECTRICAL CABLE	LF	910		\$0
111	COT 611	20C #14 TRAFFIC SIGNAL ELECTRICAL CABLE	LF	485		\$0
112	COT 611	GREEN #6 THHN ELECTRICAL CONDUCTOR	LF	1,290		\$0
113	COT 611	GREEN #12 THHN ELECTRICAL CONDUCTOR	LF	975		\$0
114	COT 612	CABINET BASE, APRON AND GUARD	EA	1		\$0
115	COT 613	AUDIBLE PEDESTRIAN PUSHBUTTON AND SIGN	EA	22		\$0
116	COT 614	LED 3 SECTION TRAFFIC SIGNAL HEAD (#36)	EA	6		\$0
117	COT 614	LED ICC PEDESTRAIN HEAD (#33)	EA	6		\$0
117A	COT 614	LED 5 SECTION TRAFFIC SIGNAL HEAD (#64L)	EA	2		\$0
118	COT 617	24' MODULAR TRAFFIC SIGNAL MAST ARM & POLE W/O LUMINAIRE EXTENSION	EA	2		\$0
119	COT 617	36' MODULAR TRAFFIC SIGNAL MAST ARM & POLE W/O LUMINAIRE EXTENSION	EA	3		\$0
120	COT 617	10' PEDESTAL POLE	EA	14		\$0
121	COT 619	TEMP SIGNAL SPAN	EA	1		\$0
122	COT 619	TEMP SIGNAL POLE	EA	1		\$0
123	COT 619	TEMP SIGNAL CABINET	EA	. 1		\$0
124	COT 619	TEMP SIGNAL SERVICE	EA	1		\$0
125	COT 622	WIRELESS TRAFFIC SIGNAL COMMUNICATIONS SYSTEM	EA	1		\$0
126	COT 623	BATTERY BACKUP SYSTEM	EA	1		\$0
127	COT 625	REMOVAL OF TRAFFIC ITEMS	EA	1		\$0

128	SPECIAL	RECTANGULAR RAPID FLASH BEACON (RRFB) INSTALLATION	EA	4	\$0.00
129	855(A)	TRAFFIC STRIPE (PLASTIC) (4" WIDE)	LF	9,335	\$0.00
130	855(A)	TRAFFIC STRIPE (PLASTIC) (6" WIDE)	LF	10,167	\$0.00
131	855(A)	TRAFFIC STRIPE (PLASTIC) (8" WIDE)	LF	52	\$0.00
132	855(A)	TRAFFIC STRIPE (PLASTIC) (24" WIDE)	LF	1,702	\$0.00
133	855(B)	TRAFFIC STRIPE (PLASTIC) (ARROWS)	EA	25	\$0.00
134	855(B)	TRAFFIC STRIPE (PLASTIC)("BIKE LANE")(ARROW)	EA	2	\$0.00
135	855(B)	TRAFFIC STRIPE (PLASTIC)(BIKE SYMBOL)	EA	47	\$0.00
136	857(F)	PAVEMENT MARKING REMOVAL	LF	10,700	\$0.00
136A	SPECIAL	TEMPORARY TRAFFIC SIGNAL COORDINATION	EA	1	\$0.00
		BASE BID - TRAFFIC SUBTOTAL			\$0.00

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ITEM	SPEC		-		DATA INPUT	
NUMBER	NUMBER	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
BASE BID -	WATERLINE					
137	SPECIAL	OWNER ALLOWANCE	ALLOW	1	\$ 10,000.00	\$10,000.00
138	SPECIAL	CONSTRUCTION AS-BUILT	EA	1		\$0.00
139	COT 301	RIGHT-OF-WAY CLEARING AND RESTORATION, COMPLETE IN PLACE	SY	2,100		\$0.00
140	COT 302	EXCAVATION AND BACKFILL, UNCLASSIFIED	CY	390		\$0.00
141	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED	LF	33		\$0.00
142	COT 307	6 INCH DIP, CL51 POLYETHYLENE WRAPPED (RJ)	LF	411		\$0.00
143	COT 307	12 INCH DIP, CL50 POLYETHYLENE WRAPPED	LF	700		\$0.00
144	COT 307	12 INCH DIP, CL50 POLYETHYLENE WRAPPED (RJ)	LF	959		\$0.00
145	COT 312	12 INCH DUCTILE IRON 11-1/4 DEGREE BEND (RJ)	EA	10		\$0.00
146	COT 312	6 INCH DUCTILE IRON 22-1/2 DEGREE BEND (RJ)	EA	1		\$0.00
147	COT 312	6 INCH DUCTILE IRON 45 DEGREE BEND (RJ)	EA	18		\$0.00
148	COT 312	12 INCH DUCTILE IRON 45 DEGREE BEND (RJ)	EA	11		\$0.00
149	COT 312	6 INCH X 6 INCH DUCTILE IRON TEE (RJ)	EA	4		\$0.00
150	COT 312	12 INCH X 12 INCH DUCTILE IRON TEE (RJ)	EA	5		\$0.00
151	COT 312	12 INCH X 6 INCH DUCTILE IRON TEE (RJ)	EA	6		\$0.00
152	COT 312	12 INCH X 6 INCH DUCTILE IRON CROSS (RJ)	EA	1		\$0.00
153	COT 312	12 INCH DUCTILE IRON SLEEVE (RJ)	EA	1 1		\$0.00
154	COT 315	3/4 INCH WATER SERVICE CONNECTION (LONG)	EA	1	T I	\$0.00
155	COT 315	3/4 INCH WATER SERVICE CONNECTION (SHORT)	EA	1		\$0.00
156	COT 316	1 INCH WATER SERVICE CONNECTION (LONG)	EA	1		\$0.00
157	COT 317	1.5 INCH WATER SERVICE CONNECTION (LONG)	EA	1		\$0.00
158	COT 317	6" GATE VALVE (RJ)	EA	9		\$0.00
159	COT 317	12" GATE VALVE (RJ)	EA	9		\$0.00
160	COT 317	2" AIR RELIEF VALVE	EA	3		\$0.00
161	COT 312	2" X 12" TAPPING SLEEVE (RJ)	EA	3		\$0.00
162	COT 317	3-WAY FIRE HYDRANT, IN PLACE	EA	4		\$0.00
163	COT 318	VALVE BOX	EA	18		\$0.00
164	COT 404	ABANDON-IN-PLACE 6" WATERLINE	LF	274		\$0.00
165	COT 404	ABANDON-IN-PLACE 12" WATERLINE	LF	1,575		\$0.00
		BASE BID - WATERLINE SUBTOTAL		• • • •		\$10,000.00

P-5.

#### SUMMARY SHEET CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATERLINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR BLVD. TO PEORIA AVE.

BASE BID ROADWAY	\$25,000.00
BASE BID TRAFFIC	\$0.00
BASE BID LANDSCAPING	\$0.00
BASE BID WATERLINE	\$10,000.00
TOTAL BASE BID (ROADWAY + TRAFFIC + LANDSCAPING + WATERLINE)	<b>\$35,000.00</b>
ADD ALTERNATE #1 - SITE FURNISHINGS	\$0.00
ADD ALTERNATE #2 - "NO MOW ZONE" SIGNS	\$0.00
ADD ALTERNATE #3 - LIGHTING CONDUIT FOR FUTURE PED. LIGHTING.	\$0.00
TOTAL ADD ALTERNATES (#1 + #2 + #3)	<b>\$0.00</b>

#### TOTAL BASE BID

TOTAL ADD ALTERNATES

\$0.00

				Dollars	( <b>e</b>
				Dollars	(\$ Figures
contract for the work days, or within ninet fails to execute said	covered by this p y (90) days if Fed Contract and furr	proposal., provided t eral funds are utilize	he Contract is av d, from the date ids and other rec	event that the undersigned fa varded to the undersigned with fixed for opening of bids and ti uirements as called for in thes	nin thirty (30) he undersigned
Dated at Tulsa, Okla	homa, this	day of		, 20	
	Respectfull	y submitted,			
	(Complete le	gal name of compan	у)		
	(SI	tate of Organization)		_	
By:				ATTEST:	
Title:				•	ate Secretary
Printed Name:				Printed Name:	(SEAL)
			Address:		
					_
Telephone Number:				Fax Number:	_

This form is made available for example purposes only and is not intended to be legal advice nor intended to be relied upon in lieu of consultation with an attorney.

Certificate of Secretary

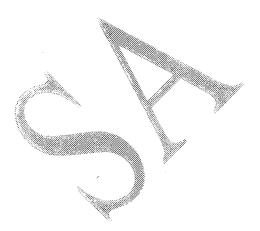
The	undersigned			(Assistant)	S	lecretary	of
	_	, a		corporation,	(the	"Corporat	ion")
hereby	certifies that the	following is a	true and corr	rect copy of a Res	solutio	on duly ad	opted
by the ]	Board of Director	rs of the Corpo	oration on the	day of		, 20	-

RESOLVED, that is authorized to execute and enter into bids, contracts, bonds, affidavits and any ancillary documents, on behalf of the Corporation.

The undersigned further certifies that this Resolution is in full force and effect as of the date of this Certificate and has not been amended, modified, revoked or rescinded.

IN WITNESS WHEREOF, I have executed th	nis Certificate this	day of	,
20 .			
—		×	

Printed Name	



#### [SAMPLE CONSENT OF MEMBERS]

#### [NAME OF COMPANY], LLC

#### Consent of Members

The undersigned, being all of the Members of [Name of Company], LLC, an Oklahoma Limited Liability Company, hereby authorize, consent to, approve and ratify the execution by \_\_\_\_\_\_ on behalf of [Name of Company], LLC of bid proposals, contracts, affidavits and related documents in connection with [Name of Project] of the City of Tulsa.

DATED, this dav Name printed

Name Printed:

[ADD ADDITIONAL LINES FOR ADDITIONAL MEMBERS]

,

Disclaimer Statement: This form is made available for example purposes only and is not intended to be legal advice nor intended to be relied upon in lieu of consultation with an attorney."

Date

Contractor

#### RE: City of Tulsa Project No. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

TO WHOM IT MAY CONCERN:

Please be advised that the City of Tulsa, Oklahoma, a municipal corporation, has contracted for the construction of a public improvement project as referenced above, and that pursuant to Title 68 § Section 1356 (10), sales on tangible personal property or services to be wholly consumed in the performance of such projects are exempt from Oklahoma and City of Tulsa Sales Tax when:

"...Any person making purchases on behalf of such subdivision or agency of the state shall certify, in writing, on the copy of the invoice or sales ticket to be retained by the vendor that the purchases are made for and on behalf of such subdivision or agency of this state and set out the name of such public subdivision or agency."

This letter of authorization expires.

A photostatic copy of this letter may be considered as the original.

#### CITY OF TULSA

Paul D. Zachary, P.E. City Engineer

cc: Ryan McKaskle

HAS:AT:

STED-1

(t	EXTENSION OF TIME REQUEST o be submitted with eack partial payment application)
,-	
DATE:	
CONTRACTOR:	
ADDRESS:	
CONTRACT NO.:	
ARE THERE ANY CHANGES TO YOUR S	BE UTILIZATION?YESNO
IF YES, GIVE REASON AND ATTACH CH	ANGE REQUEST FORM (SBE-4):
EXTENSION OF CONTRACT TIME REC	QUIRED:YESNO
TOTAL OF EXTENSION TIME REQU	ESTED:
IF YES GIVE REASON:	
	SIGNATURE - CONTRACTOR
CONSULTING ENGINEER	OR DEPARTMENT OF PUBLIC WORKS STAFF RECOMMENDATIONS
APPROVED:	REJECTED:
REASON:	
	SIGNATURE
	DATE
ACTION WILL E	BE TAKEN WITHIN 30 DAYS FROM RECEIPT OF REQUEST

### EXTENSION OF TIME PEOLIEST

ETR-1

#### CONTRACT FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS TULSA, OKLAHOMA

THIS CONTRACT made and entered into the \_\_\_\_ day of \_\_\_\_\_, 2020, by and between \_\_\_an (list state) \_\_\_\_\_ (Corporation or Limited Liability Company) of \_\_\_\_\_, Oklahoma, hereinafter called the "CONTRACTOR", and the CITY OF TULSA - TULSA, OKLAHOMA, a Municipal Corporation, herein called the "CITY."

#### WITNESSETH:

<u>WHEREAS</u>, the City has caused to be prepared the necessary Drawings, Specifications, and other Contract Documents for the public improvements herein described, and has invited bids for the construction thereof in accordance with the terms of this Contract, all of which is hereby designated as:

#### PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

<u>WHEREAS</u>, the Contractor, in response to the Advertisement, has submitted to the City, in the manner and at the time specified, a sealed bid in accordance with the terms of this Contract; and,

<u>WHEREAS</u>, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the bids submitted, and has determined the above named Contractor to be the lowest responsible bidder for the work and has duly awarded to the said Contractor therefore, for the sum or sums named in the Contractor's bid, a copy of the Bid Form being attached to and made a part of this Contract;

<u>NOW</u>, <u>THEREFORE</u>, in consideration of the compensation to be paid to the Contractor and of the mutual agreements and covenants herein contained, the parties to this Contract have agreed and hereby agree, as follows:

<u>ARTICLE I.</u> That the Contractor shall (a) furnish all tools, equipment, supplies, superintendent, transportation, and other construction accessories, services, and facilities; (b) furnish all materials, supplies, and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good, substantial, and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the Contract as defined in the attached General Provisions, sometimes referred to as General Conditions in the Contract Documents, said documents forming the Contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct, and complete all work included in and covered by the City's official award of this Contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid, or part thereof, as follows:

10/23/20

#### PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

<u>ARTICLE II</u>. That the City shall pay to the Contractor for performance of the work embraced in this Contract, and the Contractor will accept as full compensation therefor, the sum (subject to adjustment as provided by the Contract) of \_\_\_\_\_\_ AND /100 Dollars (\$\_\_\_\_\_) for all work covered by and included in the Contract award and designated in the foregoing Article I; payments therefore to be made in cash or its equivalent, in the manner provided in the General Provisions.

<u>ARTICLE III</u>. That the Contractor shall start work within ten (10) days following the date stipulated in a written order from the City to proceed with the work to be performed hereunder, and shall complete the work within the number of consecutive calendar days after the authorized starting date, as stipulated below:

#### All Work Completed: <u>450</u> calendar days

<u>ARTICLE IV</u>. The sworn, notarized statement below shall be signed and notarized before this Contract will become effective.

<u>ARTICLE V</u>. Prior to submitting a final payment request, the Contractor shall furnish a lien waiver certifying that all subcontractors and suppliers have been paid.

IN WITNESS WHEREOF, the parties have hereto set their hands and seals,

this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

Dve		ΔΤ	TEST: (S
Ву:		AI	1201. (0
Mayor	Date:	City Clerk	Date:
Mayor		Oly Olerk	
APPROVED:	×.	APPROVED:	
City Attorney	Date:	City Engineer	Date:
		_	
CONTRACTOR By:			
			Date:
Ву:			Date:
By: Printed Name			Date:

**AFFIDAVIT** 

 STATE OF \_\_\_\_\_)

 )ss

 COUNTY OF \_\_\_\_\_)

\_\_\_\_\_, of lawful age, being first duly sworn, on oath says that (s)he is the agent authorized by the Contractor to submit the above Contract to the CITY OF TULSA, Tulsa, Oklahoma.

Signature

\_\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2020

NOTARY PUBLIC

My Commission Expires:

C-4

#### PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned,

\_, (hereinafter called the Contractor").

duly authorized by law to do business as a construction contractor in the State of Oklahoma, and

(hereinafter called the "Surety"), a corporation organized under the laws of the State of \_\_\_\_\_\_, and authorized to transact business in the State of Oklahoma, as Surety, are hereby held and firmly bound unto the City of Tulsa, Tulsa, Oklahoma (hereinafter called the "City"), in the penal sum of

Dollars (full amount of the Contract), (\$\_\_\_\_\_\_) lawful money of the United States, for the payment of which, well and truly to be made unto the said City, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents, as follows:

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH THAT, WHEREAS, the Contractor has on the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_, entered into a written contract with the City of Tulsa, Tulsa, Oklahoma, for furnishing all materials, labor, tools, equipment, and transportation necessary for:

#### PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

NOW, THEREFORE, if said Contractor shall well and truly perform and complete said project in accordance with said Contract, Advertisement for Bids, General Conditions, Instructions to Bidders, Bid Form, Plans and Specifications, and related documents, shall comply with all the requirements of the laws of the State of Oklahoma; shall pay as they become due all just claims for work or labor performed and materials furnished in connection with said contract, and shall defend, indemnify and save harmless said City against any and all liens, encumbrances, damages, claims, demands, expenses, costs and charges of every kind, including patent infringement claims except as otherwise provided in said specifications and other contract documents, arising out of or in relation to the performance of said work and the provisions of said Contract, then these presents shall be void; otherwise, they shall remain in full force and effect.

This obligation is made for the use of said City and also for the use and benefit of all persons who may perform work or labor, or furnish any material in the execution of said Contract, and may be sued on thereby in the name of the City.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract, or to the work to be performed thereunder, or the specifications accompanying same, shall in any way affect its obligation on this bond; and it does hereby waive notice of any such change, extension of time, alteration or addition of the terms of the Contract, or to the specifications.

06/13/06

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

CO	NTRACTOR (Princ	ipal)	
BY:		ATTEST:	(SEAL)
	Date:		Date:
Title:		Title:	
	Date:	Q	Date:
Attorney In Fact	~~	Surety	(SEAL)
**This date shall ma	tch the notarized ce	ertificate on the	Power-of-Attorney

(Accompany this Bond with Power Of Attorney)

#### APPROVED AS TO FORM:

è

	Date:
City Attorney	
	Date:
City Clerk	

#### STATUTORY BOND

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NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS: That , as Principal, and \_\_\_\_\_\_

\_\_\_\_\_, a Corporation organized under the laws of the State of \_\_\_\_\_\_, and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto the State of Oklahoma in the penal sum of \_\_\_\_\_\_

Dollars (Full Amount of Contract) (\$\_\_\_\_\_), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our successors, and assigns, jointly and severally firmly by these presents.

NOW, THEREFORE, if the said Principal shall fail or neglect to pay all indebtedness incurred by Principal or sub-contractors of said principal who perform work in the performance of such contract, for labor and materials and repairs to and parts for equipment used and consumed in the performance of said contract within thirty (30) days after the same becomes due and payable, the person, firm or corporation entitled thereto may sue and recover on this bond the amount so due and unpaid.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder, or the specifications accompanying the same, shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the specifications.

5/30/06

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

	CON	TRACTOR (Principa	l)
BY:		ATTEST:	( <b>S</b> E A L )
Title:	Date:	Title:	Date:
Attorney-In-Fact	Date: **	Surety (SEA	Date: L )
**This date shall ma	atch the date of th	ne notarized certificat	e on the Power-of- Attorney.
	(Accompany thi	s Bond with Power-C	Of-Attorney)
	APPR	OVED AS TO FORM	<u>M</u> :
City Attorney		Date:	
		Date:	

City Clerk

06/13/06

#### MAINTENANCE BOND

#### KNOW ALL MEN BY THESE PRESENTS:

That \_\_\_\_\_\_, as Principal, and

, a

, a corporation organized under the laws of the State \_\_\_\_\_\_\_ of and authorized to transact business in the State of Oklahoma, as Surety, are held and firmly bound unto the City of Tulsa in the Penal sum of \_\_\_\_\_\_

Dollars (full amount of Contract) (\$\_\_\_\_\_) in lawful money of the United States of America for the payment of which, well and truly to be made, we bind ourselves and each of us, our heirs executors, administrators, trustees, successors, and assigns, jointly and severally, firmly by these presents.

The condition of this obligation is such that:

WHEREAS, said Principal entered into a written contract with the City of Tulsa, Oklahoma dated , , for

#### Project No. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

all in compliance with the drawings and specifications therefore, made a part of said Contract and on file in the office of the City Clerk, Tulsa, Oklahoma.

NOW, THEREFORE, if said Principal shall pay or cause to be paid to the City of Tulsa, Oklahoma, all damage, loss, and expense which may result by reason of defective materials and/or workmanship in connection with said work, occurring within a period of one (1) year for all projects, from and after acceptance of said project by the City of Tulsa, Oklahoma; and if Principal shall pay or cause to be paid all labor and materials, including the prime contractor and all subcontractors; and if principal shall save and hold the City of Tulsa, Oklahoma, harmless from all damages, loss, and expense occasioned by or resulting from any failure whatsoever of said Principal, then this obligation shall be null and void, otherwise to be and remain in full force and effect.

It is further expressly agreed and understood by the parties hereto that no changes or alterations in said Contract and no deviations from the plan or mode of procedure herein fixed shall have the effect of releasing the sureties, or any of them, from the obligation of this Bond.

#### 06/13/06

IN WITNESS WHEREOF, the said Principal has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its duly authorized officers, and the said Surety has caused these presents to be executed in its name and its corporate seal to be hereunto affixed by its attorney-in-fact, duly authorized so to do, the day and year first above written.

CONTRACTOR (Principal)			ipal)	
BY:			ATTEST:	(SEAL)
Title:	Date:		Title:	Date:
Attorney-In-Fact	Date:	 **	Surety (	Date: SEAL)
** This date shall ma				te on the Power of Attorney er-Of-Attorney)
	Al	PPROV	ED AS TO FO	DRM:
City Attorney		I	Date:	
City Clerk		I	Date:	

#### **AFFIDAVIT OF CLAIMANT**

STATE OF \_\_\_\_\_\_

COUNTY OF \_\_\_\_\_

The undersigned, of lawful age, being first duly sworn, on oath says that this contract is true and correct. Affiant further states that the work, services or materials will be completed or supplied in accordance with the contract, plans, specifications, orders or requests furnished the affiant. Affiant further states that (s)he has made no payment directly or indirectly of money or any other thing of value to any elected official, officer or employee of the City of Tulsa or any public trust of which the City is a beneficiary to obtain or procure the contract or purchase order.

	Ву:		
		Signature	
	Name:		
	Company:		
	Title:		
Subscribed and sworn to before me this	_ day of		, 20
Notary Public			
My Commission Expires:			
Notary Commission Number:			

# GENERAL PROVISIONS AND SPECIFICATIONS

(Published in the Tulsa World, Mary Ordinance No.

AN ORDINANCE AMENDING TITLE 11, TULSA REVISED ORDINANCES ENTITLED "PUBLIC WORKS DEPARTMENT" BY AMENDING CHAPTER 10 ENTITLED "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION," AMENDING SECTION 1001, TO REVISE STANDARD SPECIFICATIONS SET FORTH IN PARTS 411.04.N AND 414.04.R; AND PROVIDING FOR SEVERABILITY; AND PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES.

BE IT ORDAINED BY THE CITY OF TULSA:

Section I. That Title 11, Chapter 10, Tulsa Revised Ordinances, be and the same is hereby amended and shall read as follows:

#### **"CHAPTER 10. STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION**

Section 1000. Adoption of State Standard Specifications. Section 1001. Additions, Revisions, Deletions and Exceptions

#### SECTION 1000. ADOPTION OF STATE STANDARD SPECIFICATIONS.

Those certain documents, three (3) copies of which have been filed in the Office of the City Clerk of the City of Tulsa, being marked and designated as <u>Standard Specifications for Highway</u> <u>Construction</u>, 2009 Edition, as published by the Oklahoma Department of Transportation, are hereby adopted as the standard specifications for public improvement projects for the City with the exceptions given in SECTION 1001.

#### SECTION 1001. ADDITIONS, REVISIONS, DELETIONS AND EXCEPTIONS.

**1001.A.** The following terms, listed as numbered in the 2009 Edition of the <u>Standard</u> <u>Specifications for Highway Construction</u>, are hereby revised for all sections of this chapter:

#### 101.05. Definitions.

#### 101.05.A. Acceptance Date. Delete

101.05.P. Bond. All references to the "Department" shall mean "City of Tulsa," a municipal corporation.



**101.05.V.** Commission. All references to the "Commission" shall mean "The City of Tulsa, Oklahoma, a municipal corporation acting by and through its duly authorized officers and agents."

101.05.Y. Contract. Replace definition with the following: "The written agreement between the City and the Contractor setting forth obligations of the parties thereunder, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment."

The Contract includes the Notice to Bidders, Proposal, Contract Form, all Contract Bonds, Specifications, Special Specifications, Special Provisions, all Plans, Work Orders and Change Orders that are required to complete the construction of the work in an acceptable manner, including authorized extensions.

101.05.AG. Department. Replace definition with the following: "Engineering Services Department of the City of Tulsa, Oklahoma."

**101.05.AI.** Director. Replace definition with the following: "The Director of the Engineering Services Department of the City of Tulsa."

101.05.AL. Engineer. Replace definition with the following: "The City Engineer of the City of Tulsa or his designee."

101.05.AT. Holiday. Replace definition with the following: "Those days declared to be holidays for regular Civil Service employees of the City of Tulsa."

**101.05.AV.** Inspector. Replace definition with the following: "The City of Tulsa's Engineering Services Department authorized representative assigned to make inspections of the work."

101.05.AX. Letter of Credit. All references to the "State" shall mean "The City of Tulsa, Oklahoma, a municipal corporation acting by and through its duly authorized officers and agents."

101.05.BF. Materials Division. Replace definition with the following: "The Director of the Engineering Services Department of the City of Tulsa."

101.05.BG. Materials Engineer. Replace definition with the following: "The City Engineer of the City of Tulsa or his designee".

**101.05.BZ.** Resident Engineer. Replace definition with "The direct representative of the Engineering Services Department of the City of Tulsa for the oversight of construction projects with authority for oversight of all aspects of the construction project."

101.05.CC. Right-of-Way. Replace definition with the following: "Right-of-Way or ROW shall mean the surface, the airspace above ground, and the area below the surface of any public street, highway, parkway, lane, path, alley, sidewalk, boulevard, drive, bridge, tunnel,

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stormwater drainage system, easement, park, or similar property in which the City now or hereafter holds a property interest and/or a maintenance responsibility which, consistent with the purposes for which it was granted or dedicated, may be used to install, operate and maintain Facilities.

101.05.CH. State. All references to the "State" shall mean the "The City of Tulsa, Oklahoma, a municipal corporation acting by and through its duly authorized officers and agents."

#### 101.05.CP. Supplemental Agreement. Delete

1001.B. City of Tulsa exceptions to the following provisions, listed as numbered in the 2009 Edition of the Standard Specifications for Highway Construction, are hereby described as follows:

102.01. Pre-Qualification. Replace section with "The City of Tulsa requires General / Prime Contractors to be Prequalified according to Title 11 Chapter 11 of the City of Tulsa Ordinances."

102.06. Examination of Plans, Specifications, Special Provisions, and the Work Site. Replace the fourth paragraph with, "If the City has boring logs and subsurface investigation results, bidders may contact the Contract Administrator at the following address during normal business hours:

City of Tulsa Engineering Services Department 2317 S. Jackson Ave. Tulsa, OK 74107"

**102.10.** Delivery of Proposal. Replace section with the following: "Each bid Proposal shall be completed electronically on the electronic media provided, then printed, signed and submitted along with the electronic media and the complete bound copy of the contract documents or as instructed in the Notice to Bidders. In the event of a discrepancy between the pricing on the electronic media and the hard copy of a Proposal, the hard copy pricing will govern. If an electronic media is not provided and the bid Proposal is manual, the bid Proposal shall be submitted in ink. The written words shall govern over the figures. Erroneous entries shall be lined out, initialed by the bidder, and the correct entry inserted. The unit price bid must cover all expense for furnishing the labor, materials, tools, equipment, and apparatus of every description to construct, erect, and furnish all work required by and in conformance with the Plans and Specifications.

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Each bid shall be enclosed in a sealed envelope addressed to the:

City Clerk's Office The City of Tulsa One Technology Center 175 E. 2<sup>nd</sup> Street, Suite 260 Tulsa, Oklahoma 74103 or as otherwise instructed in the Notice to Bidders, and identified on the outside with the words:

#### PROJECT NO.

Pre-qualification Certificate Number \_\_\_\_\_,

All addenda to the contract documents shall accompany the bid when submitted. Any bid turned in prior to 96 hours before opening is non-responsive."

**102.13.** Public Opening of Proposals. Replace section with the following: "Proposals shall be publicly opened and read on the date and at the hour and place set forth in the advertisement and Notice to Bidders in the manner established by the City."

**102.16.** Non-Collusive Bidding Certification. Replace ODOT form and replace with the form provided in the Bid Documents.

103.08. Approval of Contract. Replace section with the following: "The Contract shall not be binding upon the City until it has been executed and approved in the manner set forth in the Tulsa City Charter."

**105.17.C.** Final Acceptance. Replace definition with the following: "The date on which the Request for Action (RFA) for final payment has been signed by the Mayor of the City of Tulsa."

105.18. Claims for Adjustment. Delete section.

106.03. Samples, Tests and Cited Specifications. Insert the following after the second sentence: "FAST Guide shall mean current City of Tulsa testing guidance as shown in the Special Provisions."

**106.04.D.** Distribution of Certifications. Replace section with the following: "The Contractor shall submit certifications to the Engineer with another copy mailed to:

Construction Engineer City of Tulsa Engineering Services Department 2317 S. Jackson Ave. Tulsa, OK 74107"

106.05. Plant Inspections. In this section, "Oklahoma City" shall mean "Tulsa."

106.11. Guarantees and Warranties. In this paragraph replace "six month" with "twelve month."

107.14. No Waiver of Legal Rights. Delete section.

107.19. Regulated Floodways. Add the sentence, "The Contractors shall also follow the requirements of Title 11A of the City ordinances."

**107.20.** Stormwater Management. Insert after the first sentence, "The Contractors shall also follow the requirements of Title 11A of the City ordinances."

**108.02.** Notice to Proceed and Preconstruction Conference. Modify the second paragraph to read: "After the Contractor and Resident Engineer hold a preconstruction conference, the Contractor shall receive a Notice to Proceed, before the start of construction."

**108.07.B.** Calendar Day Contract. Delete the second paragraph and replace with the following: "There are fifteen (15) working days in every month of the year."

108.08. Incentive/Disincentive for Early/Late Completion. Delete section.

108.09. Failure to Complete on Time. Delete Table 108:1.

**109.04.B.** Submitting a Claim. Delete Sections 1 through 4. Insert the following after the first paragraph: "Change Orders to be processed according to City policy."

**109.06.** Progress Payments. In the second paragraph delete language regarding "semi-monthly progressive estimates."

109.08. Final Payment. Delete last paragraph of the section and replace with the following: "Contractor shall submit final payment within 90 days of completion of job unless otherwise approved by the City."

109.10.A. Recoverable Costs. Delete section.

109.11. Payment to Subcontractors. Delete last paragraph of the section.

**220.04.C.** Contractor Responsibilities for SWPPP. Delete the first sentence of the second paragraph and replace with the following: "A Contractor Certification statement for subcontractors is "required."

**401.04.A. Tolerances.** Delete entire section and replace with the City of Tulsa Special Provision for Pavement and Bridge Deck Smoothness provided in the contract documents.

**411.04.N.** (2) Acceptance. Replace this section with the following: "ODOT pay factors for average lot density, asphalt cement content, and air voids shall not be used for this project. Failure to reach average lot density of 92% to 97%, asphalt cement content of +/- 0.40 of job mix formula, or air voids greater than 1.5 deviation from target will result in rejection of the work. In addition the thickness of the asphalt must be equal to or greater than what is specified."

414.02 Materials. Delete Fly Ash. Fly Ash is not allowed in any concrete mixture unless specifically specified in the Special Provisions / Plans.

414.03.B. Placing and Finishing Equipment. In the first paragraph add the sentence, "If paving is not performed by a slip form paver a hand vibrator shall be required."

**414.04.R.** Acceptance of Pavement. Replace this section with the following: "ODOT pay factors for strength and thickness shall not be used on this project. Failure to reach less than 300 psi of the target strength from the mix design will result in rejection of the work. In addition, the thickness of the Portland Cement Concrete Pavement must be equal to or greater than what is specified."

509.06. Basis of Payment. Delete pay factors for air content.

516.06. Basis of Payment. Delete the Obstructions pay item.

701.01.B. Cement Substitution. Delete Fly Ash. Fly Ash is not allowed in any concrete mixture unless specifically specified in the Special Provisions / Plans.

702.01. Fly Ash. Delete Fly Ash. Fly Ash is not allowed in any concrete mixture unless specifically specified in the Special Provisions / Plans.

**801.02.** Materials. Replace Department's Traffic Engineering Division Qualified Products List (QPL) with the City of Tulsa Traffic Engineering's Approved Products List (APL).

801.04.B. Bonding and Diagram. Delete and replace section with the following:

"Provide mechanically and electrically secure conduit, poles, and highway lighting cabinets to form a continuous system.

Provide No. 8 AWG copper wire for grounding traffic signal cabinet.

Provide at least No. 6 AWG THHN green stranded copper wire for bond and ground jumpers for all other equipment.

Provide at least No. 6 AWG THHN green stranded copper wire for ground poles, securely attached to the pole and the ground rod, as shown on Plans.

All identified neutrals shall be white."

**802.** Electrical Conduit. Delete section and refer to City of Tulsa Specification 602, Electrical Conduit.

**803.** Pull Boxes and Ground Boxes. Delete section and refer to City of Tulsa Specification 601, Pull Boxes.

**804.** Concrete Footings. Delete section and refer to City of Tulsa Specification 603, Signal Pole Footings.

**805.01.** Description. Delete section and replace with the following: "This work consists of the removal and delivery of traffic signal and highway lighting items, to the City of Tulsa Operations facility, which equipment shall remain the property of the City of Tulsa: Traffic signal poles, signal heads, pedestrian heads, backplates, controller cabinet assembly, cabinet guard, mast arm signs, astro-brackets, span wire equipment and any other traffic signal equipment removed except for the pull boxes, conduit and wire which shall become the property of the contractor. Work to include the removal of all footings below ground or a directed by the engineer. Footings shall become the property of the contractor."

**805.04.** Construction Methods. Replace the second paragraph with the following: "Do not damage traffic signal equipment during removal and storage. Remove all footings to below ground level or as directed by the engineer. Footings, pull boxes, conduit and wire shall become property of the contractor."

**806.** Poles and Mast Arms. Delete section and refer to City of Tulsa Specification 617, Poles and Mast Arms.

**810.** Power Supplies. Delete section and refer to City of Tulsa Specification 607, Power Supplies.

**811. Electrical Conductors Highway Lighting.** Delete section and refer to City of Tulsa specification 621, Electrical Conductors Highway Lighting.

**825.** Traffic Signal Controller Assembly. Delete section and refer to City of Tulsa specification 610, Traffic Signal Controller Assembly.

**828.** Vehicle Loop Detector and Loop Detector Wire. Delete section and refer to City of Tulsa specification 604, Detector Wire.

**830.** Pedestrian Push Button. Delete section and refer to City of Tulsa specification 613, Pedestrian Push Button.

**831. Traffic Signal Heads.** Delete section and refer to City of Tulsa specification 614, Traffic Signal Heads.

#### 832. Optically Programmed Adjustable Traffic Signal Heads.

Delete section.

833. Traffic Signal Backplanes. Delete section.

**834.** Electrical Conductors for Traffic Signals. Delete section and refer to City of Tulsa specification 611, Electrical Conductors for Traffic Signals.

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Section 2. SEVERABILITY. If any section, subsection, paragraph, subparagraph, sentence, clause or phrase of this Ordinance shall be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this Ordinance, which shall remain in full force and effect, and to this end the provisions of this Ordinance are hereby declared to be severable.

	· · ·	
ADOPTED by the Council	: JAN 1 4 2016	
	Date	
	Burg Ch	
		of the Council
	Chairman	of the Council
	OFFICE OF THE MAYO	DR
Received by the Mayor:		at
	Date	Time
	De	wey F. Bartlett, Jr.
	By:	
	Secretary	
APPROVED by the Mayor	of the City of Tulsa, Oklaho	oma: JAN 2 2 2016
-		Date
at Time		
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	Ma	lyor
	•	- <i>V</i>
ATTEST:		
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The Clerk		
APPROVED.		
1 Marine	Λ.	
Deda Vai	las	
City Attorney	▼	

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## **SPECIFICATIONS**

- A. Oklahoma Department of Transportation Standard Specifications for Highway Construction, 2009 Edition, shall be used on this project including Section 100-General Provisions, as modified by Ordinance No. 23427
- B. City of Tulsa, Engineering Services Department Construction Specifications – October 2013 are incorporated herein as if fully set forth and are on file, including all revisions posted on internet prior to bid opening, with the Engineering Services Department, Engineering Design Division, 2317 S. Jackson Ave. Tulsa, Oklahoma or access on the internet at: <u>http://www.cityoftulsa.org/government/departments/engineering g-servicess/specification-checklists-and-details</u>

# SPECIAL PROVISIONS

SPECIAL PROVISION SUPPLEMENTAL CONTRACT REQUIREMENTS PROJECT NO. 144200, TMUA-W 15-04, SWD 10669 CONSTRUCTION PLANS FOR ARTERIAL STREET REHABILITATION AND WATER LINE REPLACEMENT FOR 36TH ST. NORTH FROM MLK JR. BLVD TO PEORIA

- Successful Contractor shall return fully executed contract documents (including bonds and insurance) to the City of Tulsa, Contract Administration Section, Room N-103, 2317 South Jackson Avenue within two (2) weeks after bid opening.
- 2. If the successful Contractor can provide proper bonds and insurance and the contract is executed, the Pre-Construction Conference for this project will be held within eight (8) weeks after bid opening.

#### SPECIAL PROVISIONS

#### INSURANCE REQUIREMENTS

In reference to Ordinance No. 23427 Adoption of State Specification for Highway Construction, Section 107.12 shall be modified as follows:

The CONTRACTOR (and any subcontractors) shall carry and keep in force during this Contract, policies of insurance issued by an insurer authorized to transact business in Oklahoma in minimum amounts as set forth below or as required by the laws of the State of Oklahoma. The CONTRACTOR shall also furnish an Owner's Protective Policy in the same amounts naming the City of Tulsa as the assured, issued by the same insurance company as the CONTRACTOR'S liability coverage and indemnifying the City of Tulsa against any and all actions, claims, judgments or demands arising from injuries of any kind and character sustained by any person or persons because of work performed by the CONTRACTOR.

General Liability Insurance with a bodily injury and property damage combined single limit of not less than \$1,000,000.00 for each occurrence.

Employer's Liability and Workmen's Compensation in the amounts as required by law.

The CONTRACTOR shall provide proof of such coverage:

(a) By providing Certificate(s) of Insurance prior to the execution of this contract; and

(b) By submitting updated Certificate(s) of Insurance with each and every subsequent request for payment. The Certificate(s) should show that the policies are current and should be dated within 30 days of payment request.

The CONTRACTOR shall not cause any required insurance policy to be cancelled or permit it to lapse. If the CONTRACTOR cancels, allows to lapse, fails to renew or in any way fails to keep any required insurance policy in effect, the City will suspend all progress and/or final payments for the project until the required insurance is obtained. Further, a CONTRACTOR who fails to keep required insurance policies in effect may be deemed by the City to be in breach of contract, ineligible to bid on future projects, and/or ineligible to engage in any new contracts.

The Contractor shall execute and furnish a Statutory Bond for the protection of laborers, mechanics, and material men in a sum equal to one hundred percent (100%) of the contract price.

The Contractor shall execute and furnish a Performance Bond in a sum equal to one hundred percent (100%) of the contract price.

The Contractor shall execute and furnish a Maintenance Bond in a sum equal to one hundred percent (100%) of the contract price.

Prior to doing blasting, the Contractor shall furnish a Certificate of Insurance, which shall certify that any damage caused by blasting is within the coverage of the Contractor's liability insurance to the full limits thereof.

All bonds and insurance must be executed by a company licensed to do business in the State of Oklahoma and must be acceptable to the City.

#### 02/08/16

#### SPECIAL PROVISIONS GENERAL

- 1. Work Days: All work to be completed within **450 calendar days** for the Base Bid.
- 2. No work shall be done between the hours of 7:00 p.m. and 7:00 a.m., nor on Saturday, Sunday, or legal holidays without the prior written approval or permission of the Engineer in each case, except such work as may be necessary for the proper care, maintenance, and protection or work already done, or of equipment, or in the case of an emergency.
- 3. Traffic Control: All work shall be done in cooperation with the City to establish, install, maintain and operate complete, adequate and safe traffic control during the entire construction period. Barricades, signs, lights, flags and all other traffic control devices shall meet the requirements and specifications of the Standard Drawings entitled "Typical Applications of Traffic Control Devices", and shall be approved by the Traffic Engineer of the City of Tulsa. Two-way traffic shall be maintained at all times, unless otherwise approved by the Engineer. All contractors shall contact the City of Tulsa Traffic Engineering Section before removing or replacing traffic devices, detector loops and street signs. A traffic plan must be submitted for any temporary street closure at least 2 working days prior to planned closing.
- 4. Contractor shall provide an acceptable 10' straightedge for this Project. All transverse joints shall be straight edged and approved by the Engineer. Surface elevations will meet ODOT 401.04 and all other contract requirements.
- 5. The Engineer may do quality assurance testing in addition to that performed by the Contractor. The Engineer or a testing laboratory designated by the Engineer will do any testing for quality assurance. The City will pay all costs of quality assurance.
- 6. Full depth sawing of patches is required. This area to be removed shall be marked by the Contractor under the direction of the Engineer. The Contractor will provide personnel and equipment for marking of the patches as directed by the Engineer. Cost of full depth sawing shall be included in bid item for patching areas.
- 7. Areas to be patched shall be delineated in a straight-line geometric pattern. When completed, the patch shall be level and provide a smooth riding surface. Portland Cement Concrete patches will be protected from all traffic for a minimum period of 24 hours before removal of protective devices. No open excavations will be left overnight.
- 8. All asphalt patch work will require that asphalt rollers and an asphalt laydown machine be available for use on the job as directed by the Engineer.

#### 02/08/16

- 9. Contractor will be required to employ the use of an Automatic Grade Referencing System. The equipment shall be capable of accurately and automatically establishing grades along each edge of the machine by referencing the existing pavement by means of a ski or joint matching shoe, or from an independent grade control. Minimum length of ski shall be 40'.
- 10. Prior to application of tack coat, the street shall be blown clean with compressed air to the satisfaction of the Engineer.
- 11. The tack coat must be uniformly distributed and adequately cured prior to beginning the overlay.
- 12. Contractor shall be responsible for cleanup and/or removal of any excessive over spray of any tack coat material to the satisfaction of the Engineer.
- 13. Debris from routing of cracks and cold milling shall be swept and vacuumed from the street to the satisfaction of the Engineer.
- 14. Contractor will be responsible for preparation and distribution of a written notice to residents within 48 hours of beginning milling and overlay operations. Costs associated with this requirement will be included in other items of work.
- 15. Contractor shall provide a continuous work effort towards total completion of the work in an area prior to moving to a different location.
- 16. All full depth asphalt patches will be made only after milling is complete, if milling is required, and prior to overlay.
- 17. No masonry structures shall be used in street right of way. Either precast or cast-in-place structures shall be used.
- 18. No lifting holes will be allowed in any reinforced concrete pipes or reinforced concrete boxes.
- 19. No fly ash is allowed to be used on this project.
- 20. The Contractor certifies that it and all of its Subcontractors to be used in the performance of the Contract are in compliance with 25 O.S. Sec. 1313 and participate in the Status Verification System. The Status Verification System is defined in 25 O. S. Sec. 1312 and includes but is not limited to the free Employee Verification Program (E-Verify) available at <u>www.dhs.gov/E-Verify</u>.
- 21. **Driveways**. Access to properties and businesses adjacent to the right of way must be provided and maintained at all times unless otherwise directed/approved by the Engineer. The Contractor will contact the business or property owner at least 5 days in advance of any driveway closure. Driveways and patches in front

of driveways, which are removed, shall not be left unusable overnight. If concrete cannot be placed the same day as removal, the Contractor shall furnish screening or other suitable aggregate material to maintain temporary access until concrete can be placed. The cost of placing and removing the material for temporary access shall be included in the pay item for Concrete Driveway (High Early Strength). Failure to leave any driveway usable will subject the Contractor to a \$1000.00 per day fine for each and every calendar day that the driveway remains non-useable. The only exception for a driveway to be non-useable is to allow for curing time for concrete. Cure time will not exceed 48 hours.

- 22. Driveways in excess of 18-feet in width shall be constructed in half-sections and access shall be maintained at all times.
- 23. Contractor shall prepare and present a schedule and plan for lane and driveway closures throughout the project. The Contractor shall include in the plan, driveway signage for local business access. Payment for signs will be included under the pay item "Signage for Local Business Access" and will be paid for by the square foot. Coordination with the City of Tulsa and local business operators shall be required before a driveway schedule and plan is approved.
- 24. Contractor shall coordinate with the City of Tulsa and local business operators to identify opportunities to perform weekend or "after business hours" construction on driveways to minimize impacts to the area.
- 25. Local and through traffic shall be maintained at all times through the project unless otherwise permitted by the Engineer. All public and private streets shall be accessible at all times. All detours, horizontal traffic movements, etc. are directly related to the sequence of work; therefore, the Contractor shall proceed with his construction operation in conformity with the details shown on the plans and as required by this special provision.
- 26. Traffic must be handled appropriately through the entire project during construction and it shall be the responsibility of the Contractor to provide for the safety and comfort of the traveling public at all times. The Contractor shall be required to give the traveling public at least **48 hours** advance notice of any lane and/or street closures.
- 27. The Contractor may propose/recommend modifications to the sequence of work for consideration by the Engineer. Any major recommended modification by the contractor shall include any changes to the various pay items, impact to traffic, and effect of overall project in time and cost, etc. The Contractor shall not

proceed with any construction operations based on a revised phase/sequence until the Contractor obtains written approval from the Engineer.

28. Two lanes shall remain open to traffic, one in each direction, throughout all phases of construction, unless otherwise approved/directed by the Engineer. Left turn lanes shall remain open to traffic throughout all phases of construction, unless otherwise approved/directed by the Engineer. Transitions from pavement elevations through construction areas to access driveways or intersections shall be the Contractor's responsibility. Contractor shall maintain signs and markings on a continuous basis.

# SPECIAL PROVISIONS

- 1. The work shall commence within ten days from and after the date of a written work order from the City. The Contractor agrees that the work shall be prosecuted regularly, diligently and uninterruptedly at a uniform rate of progress so as to ensure completion within the number of days after the day on which the work order is issued. If the Contractor shall fail to complete all work within the time specified, then the Contractor agrees to pay the City, not as a penalty, but as liquidated damages for Breach of Contract, the Sum of **Two Thousand Five Hundred Dollars (\$2,500.00)** for each and every calendar day for failure to complete all work within the time specified. The said amount is fixed and agreed upon because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain. It is expressly understood and agreed that the said time for completion of the work described herein is a reasonable time for the completion of same.
- 2. If the Contractor shall fail to complete reconstruction of a segment of roadway within thirty (30) days of beginning the reconstruction operation, then the Contractor agrees to pay the City, not as a penalty, but as liquidated damages for such breach of contract, the sum of Two Thousand Five Hundred Dollars (\$2,500.00) for each and every calendar day of failure to complete the work after the specified time. The said amount is fixed and agreed upon because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain. This time constraint applies only to roadways to be reconstructed and includes all subsidiary work items required to complete the reconstruction. Subsidiary items not required to complete the reconstruction are not subject to this time constraint.
- 3. If the Contractor shall fail to complete overlaying of any separately milled segment of roadway within **twenty (20)** days of beginning the milling operation, then the Contractor agrees to pay the City, not as a penalty, but as liquidated damages for such breach of contract, the sum of **Two Thousand Five Hundred Dollars (\$2,500.00)** for each and every calendar day of failure to complete the work after the specified time. The said amount is fixed and agreed upon because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain. The City will authorize when milling is to be done based on weather conditions. This time constraint applies only to segments to be milled and includes all subsidiary work items required to complete the overlay. Subsidiary items not required to complete the overlay are not subject to this time constraint.
- 4. The Contractor shall commence work within 24 hours of traffic control devices being established at the project location. If the Contractor shall fail to commence work within 24 hours of traffic control devices being established at the project

location, then the Contractor agrees to pay the City, not as a penalty, but as liquidated damages for such breach of contract, the sum of **One Thousand Dollars (\$1,000.00)** per lane for each day of failure to commence work after the specified time set forth. The amount is fixed and agreed upon because of the impracticability and extreme difficulty of fixing and ascertaining the actual damage the City would in such event sustain.

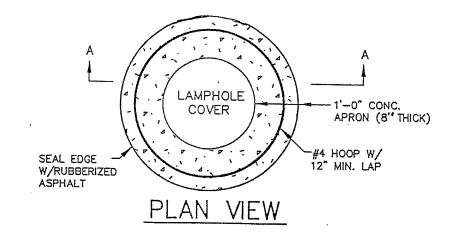
- 5. **Within 14 days** after Bid Opening and prior to Award of Bid the successful Contractor will be required to furnish the Engineer with a progress schedule, in a format approved by the Engineer, setting forth in detail the procedure he proposes to follow, and giving the dates on which he expects to start and to complete separate portions of the work. If at any time, in the opinion of the Engineer, proper progress is not being maintained, such changes shall be made in the schedule of operations, which will satisfy the Engineer that the work will be completed within the period stated in the Proposal. Monthly progress meetings will be conducted to maintain coordination between all project entities.
- 6. The Contractor will be required to provide a full-time, onsite English speaking superintendent for this Project for direct contact with City and coordination of subcontractors. A working foreman is not acceptable as a project superintendent. The superintendent shall be required to be present at the work site whenever the Contractor or subcontractors are performing work. The superintendent shall be a representative of the Contractor with the authority to make decision. If the Contractor shall fail to provide a non-working superintendent on a day when work is being performed, then the Contractor agrees to pay the City, not as a penalty, but as liquidated damages for such breach of contract, the sum of **One Thousand Dollars (\$1,000.00)** for each and every calendar day of failure to provide a non-working superintendent at the work site. The said amount is fixed and agreed upon because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the City would in such event sustain.
- 7. It is further agreed that time is of the essence of each and every portion of this Contract and the specifications wherein a definite and certain time is fixed for the performance of any act whatsoever; and where under the contract an allowance of additional time for completion of any work is made, the new time fixed by such extension shall be of the essence of this Contract.
- 8. Should the Contractor be delayed in the final completion of the work by any act or neglect of the City of Tulsa, or of any employees of either, or by strikes, injunctions, fire or other cause or causes outside of and beyond the control of the Contractor and which, in the opinion of the Engineer, could have been neither anticipated or avoided, then an extension of time sufficient to compensate for the delay as determined by the Engineer, shall be granted by the City, provided however, that the Contractor shall give the City and the Engineer notice in writing of the cause of the delay in each case on the Extension of Time Request Form enclosed in these documents, and agrees that any such claim shall be fully

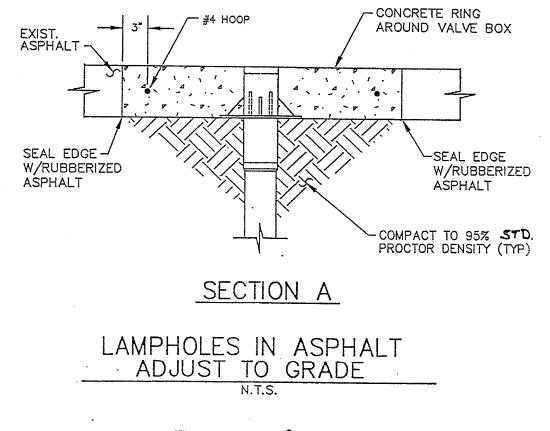
compensated for by an extension of time to complete performance of the work included herein.

- 9. The Contractor shall submit the Extension of Time Request Form with each partial payment application. Failure to submit the Extension of Time Request with a partial payment application shall constitute a complete waiver of any claim for time extension for the period covered by the partial payment.
- 10. Extension of time may be granted for delays caused by unsuitable weather. Extension of time will not be granted for delays caused by ground condition, inadequate construction force, or the failure of the Contractor to place orders for equipment or materials a sufficient time in advance to ensure delivery when needed. Any extension of time by the City shall not release the Contractor and surety herein from the payment of liquidated damages for a period of time not included in the original contract or the time extension as herein provided.
- 11. Failure to complete project within specified time, as set forth in the Contract, may be grounds for disqualification for future consideration for contracts with the City of Tulsa.
- 12. Final Acceptance of the Project will be in strict accordance with ODOT Specification 105.17– Project Completion and Acceptance and ODOT Specification 104.10– Final Cleaning Up and defined as "The date on which the Request for Action (RFA) for final payment has been signed by the Mayor of the City of Tulsa."
- 13. Contract Evaluation forms will be compiled by City staff upon completion of this Project to provide a record of the Contractor's performance for use in subsequent projects.

# SPECIAL PROVISIONS FOR ADJUSTMENT OF ROADWAY UTILITIES

- 1. Contractor is to remove the rings and covers of manholes and water valves and the frames and grates of single grate drop inlets and double grate drop inlets. If these items are to be reused, the Contractor is to mark, store and protect these materials for later placement in the exact orientation existing at the beginning of the Project. After removal of these obstructions, the Contractor shall place over each hole 5/8" thick steel plate cut to the proper size as directed by the Engineer. After placement of steel plate, the hole shall be filled with compacted asphalt to the established street grade. It shall be the Contractor's responsibility to make the necessary measurements to ensure that all utilities can be easily located after overlay. After the overlay the Contractor shall raise the utilities to the new grade.
- 2. Manholes and inlet basins shall be raised or lowered as required by using a solid, continuous layer of bricks and mortar. The upper portion of manhole or basin shall be removed as required for correct raising or lowering adjustment. If existing basin or manhole walls are concrete, the Contractor may dowel apron into wall in lieu of removing the upper portion of wall. Dowels shall be #4, at 1' 0" O.C. grade 60 steel.
- 3. All existing I-beams on double or triple grate frames shall be re-established under grates.
- 4. Where basins or manholes are covered for construction or other purposes, curbs shall be marked with green paint.
- 5. Silicone construction joint material per Public Works Standards shall be used where concrete aprons meet existing or new concrete pavement. Bituminous construction joint material per Public Works Standards shall be used where concrete aprons meet existing or new asphalt pavement.
- 6. The Contractor shall place a minimum ½" thick flexible gasket bitumastic sealant material in two concentric rings, along the inside and outside edge of the top of the manhole prior to reinstalling the frame. The gasket shall be E-Z STIK Butyl Rubber Sealant, PRO-STIK Performed Joint Sealant or equal. The material shall be able to withstand hydrogen sulfide and other corrosive gasses. After the frame has been set, a normal ½ coat of trowelable bitumastic joint sealant shall be applied to the entire outside circumference of the manhole. The sealant shall be applied from the top of the lower flange down a minimum of 6" below the frame connection. It shall then be wrapped with a 6 mil plastic to protect against damage from backfill. The trowelable material shall be Joint Mastic Sewer Joint Compound or equal. The cost of the material and labor associated with installing it shall be included in the price bid for manholes, adjust to grade.

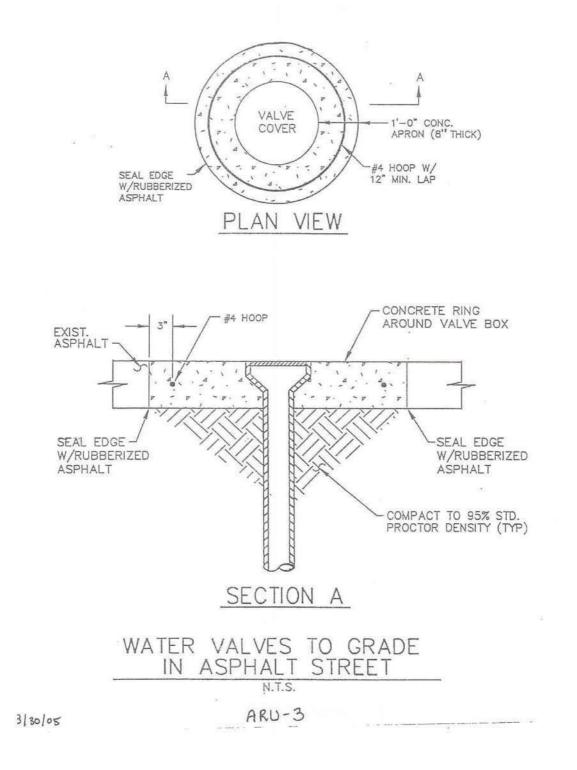




- ARU-2

8/30/05

# ARU-2



# SPECIAL PROVISION FOR SPECIAL SPECIFICATIONS OF ASPHALT SPEED HUMPS

#### 1. GENERAL

- **1.1.** <u>Intent and Scope</u>. Furnish all labor, materials, equipment, tools, transportation and supplies necessary to install a speed hump (singular) or a series of speed humps (multiple) (herein referred to as an Installation) for the City of Tulsa (herein referred to as City), complete and in accordance with these specifications.
- **1.2.** <u>Description of Work</u>. The work is as specified by the Engineer in writing on the "Work Order." Construction traffic control is required.
- **1.3.** <u>Quantities</u>. The City does not guarantee any specific quantities. All listed quantities are estimates only. Claims will be processed to cover work as it is completed during the contract period. Bids are to establish unit prices only.

# 2. WORK PERFORMANCE

- 2.1. Use personnel with appropriate experience for placement of construction traffic control, construction layout, forming, spreading and finishing of asphalt mixture, application of pavement marking and sign installation. Contractor is responsible to:
  - **2.1.1.** Place construction traffic control in accordance with the latest edition of the *Manual on Uniform Traffic Control Devices (MUTCD)* handbook.
  - 2.1.2. Install materials as-specified on City of Tulsa standards,
  - 12' Asphalt Speed Hump,
  - 22' Asphalt Speed Hump, and

Oklahoma Department of Transportation standards,

- Square Sign Post Details (SSP-1-1),
- Typical Installation of Ground Mounted Signs (GMS1-1),
- Sheet Sign Assembly Details (SSA1-1), and
- Sign Blank and Bracket Details (SBS1-1), and
- Oklahoma Department of Transportation 1999 Standard Specifications for Highway Construction and the *Manual on Uniform Traffic Control Devices (MUTCD)* handbook, at the location as shown on the "Work Order" and that which is specified herein.
- **2.1.3.** Exercise precaution to minimize damage to existing pavement, sidewalk, landscaping, curb, utilities, guardrail, vegetation, signs, lawn sprinklers, and other appurtenances in the right-of-way. The contractor is responsible for damages in the right-of-way incurred while performing speed hump and traffic calming device installation.
- **2.1.4.** Contractor shall install permanent warning signs no later than five days after the last speed hump is installed in a multiple installation, and shall upon completing sign installation, remove all warning signs, immediately.

# 2.2. Work Sequence and Construction Traffic Control

**2.2.1.** At the discretion of the Engineer and depending on the magnitude of the scope, Contractor may be required to submit a written work sequence and construction traffic control plan (CTCP). The plan will be required before commencing work.

# 2.3. Quality Assurance

- **2.3.1.** Horizontal Alignment
  - 2.3.1.1. Horizontal asphalt hump layout and pavement marking layout shall not deviate more than 3" from centerlines shown on standard drawings and in "Work Order".

- 2.3.2. Vertical Alignment
  - **2.3.2.1.** Vertical asphalt hump profile alignment shall not deviate more than  $\frac{1}{4}$ "± from thickness shown on standard drawings.
- 2.3.3. Compaction
  - 2.3.3.1. Compaction acceptance will be based on the Contractor performing compaction as approved by the Engineer to obtain optimum compaction. The 2009 Oklahoma Department of Transportation Specification for Highway Construction, percent of maximum theoretical density requirements are waived. Other parts of the specification remain in effect.

# 3. PAYMENT

- **3.1.** <u>Method of Measurement</u>. Accepted speed hump quantity shall be measured by the cross sectional linear foot for a 12 or 22-foot hump which includes asphalt concrete, and pavement markings. Sign quantity shall be measured per each by the combination(s) defined per speed hump Installation.
- 3.2. <u>Basis of Payment</u>. Accepted quantities shall be paid as:

SPECIAL	12' Asphalt Speed Hump w/ Pavement Markings	L.F.	
SPECIAL	22' Asphalt Speed Hump w/ Pavement Markings	L.F.	
SPECIAL	Speed Hump (W17-1) Sign & Post1	EA	
SPECIAL	Speed Hump (W17-1) Sign & Post1 w/ Optional Sign (W16-4)	EA	
SPECIAL	Roadside Delineator (OM2-2V) & Post2	EA	
1Square tube size: 2 ¼" (Single)(14 Ga.) 2Manufacture post in accordance with 1999 Oklahoma Department of Transportation Standard Specifications for Highway Construction, Section 710.02. Install roadside delineator so that top of object marker panel is 4.0 ft. above the near roadway edge.			

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# SPECIAL PROVISIONS FOR BIKE PATH MARKINGS

This work shall consist of the construction of bike path symbols in reasonably close conformity with the Plan Details for "Bike Path Symbol", "Bike Path Callout", or as established by the Engineer.

Materials shall be 3M, Series 380 High Performance Tape and Epoxy, Stamark Contact Cement E-44-T. Methods of Construction shall meet ODOT specifications 711.05, 711.07, and 858.04 of the standard specifications.

Construction of bike path symbols will be measured by each complete symbol and shall be paid at the Contract unit price for:

# BIKE PATH MARKINGS EA

Which will be full compensation for performing the work specified and the furnishing of all materials, labor, tools, equipment, and incidentals necessary to complete the work as specified.

# SPECIAL PROVISIONS FOR COLD MILLING BITUMINOUS PAVEMENT

- 1. Contractor will perform milling operation in accordance with ODOT Specifications as stated in Section 417.
- 2. Contractor will be required to perform the following as a minimum:
  - A. Milling of Asphalt Pavement per Specifications and Special Provision.
  - B. Provide all Traffic Control per Specifications and Special Provision.
  - C. Clean-up Milling Operation as directed by Engineer. This will include removal of unbonded asphalt overlays and sweeping.
- 3. All streets designated for milling shall be milled as shown on typical sections. If street is full depth Asphalt the depth of cut shall be as specified for each segment. If street is concrete with an Asphalt Overlay then all existing asphalt shall be removed. Boring logs are included as Appendix A. No payment will be made for any additional passes necessary to remove asphalt to the required cross section. Care should be exercised not to mill into the underlying concrete pavement. The Contractor will be responsible for damage to concrete caused by excessive milling.
- 4. The Contractor shall provide a power operated milling machine capable of planing a minimum depth of three inches in a single pass. The equipment shall be self-propelled with sufficient power, traction and stability to maintain accurate depth of cut and slope. The equipment shall be capable of accurately and automatically establishing profile grades along each edge of the machine by referencing the existing pavement by means of a ski, or matching shoe or from an independent grade control, and shall have an automatic system for controlling cross slope at a given rate. The machine shall be equipped with an integral loading means to remove the material being cut from the pavement surface and to discharge the cuttings into a truck, all in a single operation.
- 5. Milled material to remain the property of the contractor.
- 6. The Contractor shall provide butt joints as directed by the Engineer. Wherever the planned overlay of an asphalt street meets existing pavement, or at the end of a paving run, butt joints shall be provided to a depth matching the planned overlay thickness. The transition shall extend a minimum of 10 feet longitudinally from the joint for residential streets and a sufficient length to provide a smooth riding surface for arterial streets. Butt joints will not be paid for directly, but the cost shall be included in the price bid for milling.

7. Entrance and Exit Areas to projects:

After an entrance or exit area has been milled, the Contractor shall construct access ramps. These ramps shall be a minimum of 20' in length and shall be placed across full width of street. These ramps shall be maintained by Contractor and shall remain in place until lanes are closed for overlay. Ramps will be provided at driveways and non-arterial streets as needed to maintain a smooth transition for abutting properties during construction. Ramps will not be paid for directly, but the cost shall be included in the price bid for milling.

8. The existing pavement shall be uniformly milled to provide a uniform texture, true to line, grade and cross section; it shall have no deviations in excess of 3/16 inch in ten feet. Any portion of the planed surface not meeting this requirement shall be corrected in a manner approved by the Engineer.

#### SPECIAL PROVISIONS FOR CONTRACTOR'S QUALITY CONTROL

The units for this project will be those specified in the project plans.

#### 643.01. DESCRIPTION.

Furnish Quality Control of materials and construction in accordance with the Standard Specifications, Plans and Special Provisions. This includes, but is not limited to preparing and following a Quality Control Plan (See Part 643 Tables 1–7).. Obtain samples and perform tests for Quality Control, provide inspection, and exercise management control to produce materials and workmanship that conforms to contract requirements. Unless otherwise noted in the plans, all pavements and bridges (except culverts) will be subject to requirements of any or all of the Special Provisions which are included in this contract. City of Tulsa will provide Quality Assurance testing at their discretion.

#### 643.02. MATERIALS.

Meet materials quality requirements.

#### 643.03. EQUIPMENT.

Provide equipment at own expense, unless otherwise specified. All equipment and supplies shall conform with Standards and applicable Specifications. Certify the calibration of all equipment.

#### 643.04. CONSTRUCTION.

- a) <u>General</u>. Provide quality of all construction covered in the contract.
- b) <u>Quality Control Personnel Qualifications</u>. All personnel directly involved in sampling and/or testing materials for either control or acceptance purposes shall be certified in the appropriate area(s) by the Oklahoma Highway Construction Materials Technician Certification Board. Manager certification for material sampling and testing is not required unless he or she is directly involved in sampling and/or testing materials.
- c) <u>Contractor's Quality Control Plan</u>. Submit a written Quality Control Plan at least one week prior to the pre-work conference. Include the following in the plan:
  - 1. Sources of principal materials including names of suppliers and locations.
  - 2. Names and resumes of key Quality Control personnel.
  - 3. Duties, responsibilities, and authorities (to suspend production, alter mixtures, etc.) granted to key Quality Control personnel.
  - 4. Description of testing laboratories, including qualifications, key equipment and locations.
  - 5. Description of start-up operations, including but not limited to:
    - a. Review of submittal requirements and all other Contract requirements with the performance of the work.
    - b. Examine the work area to ascertain that all preliminary work has been completed.
    - c. Verify all field dimensions and advise the Engineer of any discrepancies.
  - 6. Detailed testing schedule based on production.
  - 7. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification requiring the test, feature of work to be tested, and person responsible for each test.
  - 8. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected.

- d) <u>Sampling and Testing</u>. Perform sampling and testing according to the accepted Quality Control plan using personnel certified in appropriate areas and laboratories approved by the Engineer. Keep laboratory facilities clean and maintain all equipment in proper working condition.
- e) <u>Inspection</u>. Provide inspection necessary to ensure compliance with applicable standards and specifications.
- f) <u>Records</u>. Maintain complete testing and inspection records and make them accessible to the Engineer.
  - 1. <u>Test Results</u>. Maintain control charts that identify the project number, contract item, test number, each test parameter, the upper and/or lower specification limit applicable to each test parameter, and the test results. Use the control charts as part of the Quality Control system to document process variability, to identify production and equipment problems, to make necessary corrections, and to identify potential pay factor adjustments.
    - i. Post control charts in an accessible location, keep them up to date, and make them available to the Engineer upon request. Make corrections to the process when problems are evident, including ceasing production if necessary.
  - 2. <u>Inspection Results</u>. For each day of work, prepare an "Inspector's Daily Record of Construction Operations" on an approved form. Include the following certification signed by the person with overall responsibility for the inspection system:
    - i. "It is hereby certified that the information contained in this record is accurate, and that all work documented herein complies with the requirements of the contract. Any exceptions to this certification are documented as a part of this record."
  - 3. Submit the record and certification to the Engineer within two working days of the work being performed. If the record is incomplete, in error, or otherwise misleading, a copy of the record will be returned with corrections noted. When chronic errors or omissions occur, correct the procedures by which the records are produced.
- g) <u>Use of Contractor Test Results for Acceptance Purposes</u>. Abbreviated test procedures are allowed for Contractor use. The Quality Control Plan shall list all abbreviated test procedures, describe all deviations from standard procedures for each, and note their intended purpose. Test results from abbreviated procedures will not be used for any purpose by the City of Tulsa. It is the Engineer's discretion to use or not use any of the Contractor's test results for acceptance purposes.
- h) <u>Changes</u>. Submit, in writing, all proposed changes in key Quality Control personnel, equipment or procedures from those previously approved by the Engineer. Submit written changes at least one week prior to the proposed action.

# 643.05. METHOD OF MEASUREMENT.

Payment for Contractor's Quality Control will be measured on a lump sum basis.

#### 643.06. BASIS OF PAYMENT.

Accepted Contractor's Quality Control measured for payment as prescribed above will be paid for at the Contract unit price for:

CONTRACTOR'S QUALITY CONTROL .....LUMP SUM

This payment will be full compensation for furnishing all materials, facilities, equipment, labor and incidentals to complete the work.

Subject to acceptable performance, payment for Contractor's Quality Control will be made in accordance with the following schedule:

- 25% on the next estimate after the Engineer's approval of the Contractor's Quality Control Plan and other required initial documentation
- plus 25% when 50% of the work subject to Quality Control requirements is complete
- plus 25% when 75% of the work subject to Quality Control requirements is complete
- plus 25% when all test results and records related to Quality Control work have been furnished to and accepted in writing by the Engineer

As stated above, this payment is based upon acceptable performance. Payment will be reduced for unacceptable portions of the Quality Control work. Serious deficiencies in Quality Control work may result in the project being shut down.

PART 643 TABLE 1 BITUMINOUS MIXTURES						
ODOT/COT SUPPLEMENTS	MATERIAL	TYPE OF TEST(S) REQUIRED	SAMPLING POINT	MINIMUM SAMPLING/TESTING FREQUENCY		
411, 708	Asphalt Concrete Pavement	Volumetrics, Marshall, Rice & Air Voids	Hot Plant or Roadway	One Per Day's Production.		
		Oil Content (Nuclear/Ignition)	Hot Plant or Roadway	One Per 350 Tons or Fraction Thereof. Minimum One Sample Per Day.		
		Compaction (Core)	Roadway	One Per 300 Linear Feet For Each Lift And Lane Pass Or Fraction Thereof.		
	Cold Feed	Gradation	Hot Plant	When Days Production Exceeds 300 Tons: One Prior to First Day of Production and One Per 500 Tons Thereafter.		

Asphalt deficient in oil content and/or density shall be cored 50' maximum on both sides of failed section when deemed necessary by the City of Tulsa. The results of the 2 cores shall be averaged with the previous test results.

Minimum sampling and testing is required for each mix and supplier.

PART 643 TABLE 2 CEMENTITIOUS MIXTURES					
ODOT/COT SUPPLEMENTS	MATERIAL	TYPE OF TEST(S) REQUIRED	SAMPLING POINT	MINIMUM SAMPLING/TESTING FREQUENCY	
414 701	Portland Cement	Compressive Strength	At Discharge	One Set Of Six Cylinders Per 50 Cubic Yards Or Fraction Thereof.	
414, 701	Concrete (Flatwork)	Slump, Time & Temperature	At Discharge	One Per Set Of Cylinders.	
509, 701	Portland Cement Concrete (Structures)	Compressive Strength	At Discharge	One Set Of Six Cylinders Per Type of Structure, Per 50 Cubic Yards, or Days Production	
		Slump, Time & Temperature	At Discharge	One Per Set Of Cylinders.	
501, 701, 703	Controlled Low Strength Material	Compressive Strength	At Discharge	One Set of Two Cylinders Per Shift.	
425 (22 701 722	Crowt	Compressive Strength	At Discharge	One Set of Four Prisms When Required By Engineer or Their Representative.	
425, 623, 701, 733	Grout	Slump, Time & Temperature	At Discharge	One Per Set of Prisms.	
521, 701 733, 737	Mortar	Compressive Strength	At Batch Site	One Set of Four Cylinders When Required by Engineer or Their Representative.	
Project Plans & Specifications	Shotcrete	Compressive Strength	At Discharge	One Panel Per 50 Cubic Yards or One Per Mixture, Nozzleman and Shift (Whichever is Greater).	

Concrete specifications: Time is 90 minutes max; Temperature is 90 degrees Fahrenheit max.

If in the opinion of the Engineer or his/her representative, there is sufficient cause to question the quality of the mortar or grout being utilized, random field sampling and testing may be required.

Shotcrete test panel forms should be wood or steal and a minimum of 24" x 24" x 4", generally shot in a vertical position. Minimum sampling and testing is required for each mix design and supplier.

PART 643 TABLE 3 SOIL						
ODOT/COT SUPPLEMENTS	MATERIAL	TYPE OF TEST(S) REQUIRED	SAMPLING POINT	MINIMUM SAMPLING FREQUENCY		
202, 613	Trench Backfill (including lateral	Proctor Density, Gradation & P.I.	In-Place	One Per Soil Type.		
202, 015	trenches)	Compaction & Moisture Content	In-Place	One Per 8" Lift For Every 100 Linear Feet, Pe Pipe Run, or Day's Production.		
310	310 Subgrade	Proctor Density, Gradation & P.I.	In-Place	One Per Soil Type.		
	U U	Compaction & Moisture Content	In-Place	Every 100 Linear Feet Or Day's Production.		
202, 501	Structure Backfill	Proctor Density, Gradation & P.I.	In-Place	One Per Soil Type.		
		Compaction & Moisture Content	In-Place	One Per 8" Lift Per Structure		
202	Roadway Fill &	Proctor Density, Gradation & P.I.	In-Place	One Per Soil Type.		
Embankmer	Embankments	Compaction & Moisture Content	In-Place	One Per 8" Lift For Every 100 Linear Feet Or Day's Production.		
202	Import	Proctor Density, Gradation & P.I.	Import Site or On-Site Stockpile	One Per Soil Type.		
	Import .	Compaction & Moisture Content	In-Place	One Per 8" Lift For Every 100 Linear Feet Or Day's Production.		

For Infrastructure Development Projects (IDP) only. Testing Frequencies as follows:

Sewer & Water Services (30%) Driveways, Aprons and ADA ramps (50%) Valley Gutters (100%)

Dry Utility, Fire Hydrant, Fire Line and Storm Drain (100%)

Import material shall be Select Borrow in accordance with Section 202 and 705. All fill materials shall be placed at +/- 2% of the optimum moisture content.

# The nuclear density gauge is to be correlated with a sand cone for every 10 tests taken, or 1 per day, whichever is greater.

PART 643 TABLE 4 AGGREGATE BASE						
ODOT/COT SUPPLEMENTS	MATERIAL	TYPE OF TEST(S) REQUIRED	SAMPLING POINT	MINIMUM SAMPLING FREQUENCY		
303, 703, 708 <b>Aggregate E</b>		Proctor Density	Stockpile, Windrow, Roadway	At Start of Production and as Material Changes per Supplier and/or Plant		
	Aggregate Base (AB)	Compaction & Moisture Content	Roadway, Pipe Bedding, Initial Backfill	One per 100' per Lift or One per Lane Pass or Days Production		
		Gradation, PI (Wet Prep)	Stockpile, Windrow, Roadway	One per Project, or One per 1000 Tons or Fraction Thereof		
		Specific Gravity	Stockpile, Windrow, Roadway	At Start of Production and as Material Changes per Supplier and/or Plant		

If asphalt millings are used for bedding, they shall meet the requirements of virgin Aggregate Base per ODOT.

Millings must meet all ASTM C-33 requirements.

Millings cannot be placed until the material has been certified by ODOT/COT approved testing lab.

City of Tulsa reserves the right to modify sampling and testing requirements as needed to ensure quality of materials.

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ODOT/COT SUPPLEMENTS	MATERIAL TYPE OF TEST(S) REQUIRED SAMPLING POINT		MINIMUM SAMPLING FREQUENCY	
724	Steel Reinforcement	Certificate and/or Tests	Project	One Sample For Each Size, Grade & Heat Number Per Shipment & Manufacturer. Certificate Required.
517, Project Plans & Specifications	Post-Tensioned Steel	Certificate and/or Tests	Project	One Sample For Each Size, Grade & Heat Number Per Shipment & Manufacturer. Certificate Required.
503, Project Plans & Specifications	Pre-Stressed Steel	Certificate and/or Tests	Project Or Fabrication Plant	One Sample For Each Size, Grade & Heat Number Per Shipment & Manufacturer. Certificate Required.

#### Remarks:

All steel and iron incorporated into Federal-Aid projects must conform to requirements of "Buy America" per 23 CFR 635.410.

			B TABLE 6 BEARING PAC	)S
ODOT/COT SUPPLEMENTS	MATERIAL	TYPE OF TEST(S) REQUIRED	SAMPLING POINT	MINIMUM SAMPLING FREQUENCY
733.06	Elastomeric Bearing Pad (Grade 2)	AASHTO M 251	Project	Two Sample Bearing Pads Selected at Random by Engineer from every 100 Bearing Pads or Portion Thereof. Minimum of One Sample per Lot

Two sample bearing pads may be needed to complete the specified testing for smaller bearing pads.

Bearing pads will be selected at random by the Engineer at the project site for testing.

Bearing pads marked or otherwise presented as test bearing pads will not be tested.

Bearing pads must be made available for testing at least four weeks in advance of intended use.

Each bearing pad is to be marked in indelible ink or flexible paint. The marking shall consist of the order number, lot number, bearing identification number, and elastomer type and grade number. The marking shall be on the face that is visible after erection of the bridge.

# PART 643 TABLE 7A MINIMUM TEST SCHEDULE & FINAL REPORT

#### Minimum Testing Schedule:

A Minimum Testing Schedule is to be created and submitted to the City of Tulsa Field Engineering within 10 business days of project assignment. Testing frequencies are to be calculated using an approved set of plans in conjunction with the bid tab items to create an accurate representation of the minimum testing needed for the project. Any notes, comments, special circumstances and/or assumptions made for quantity calculations should be listed at the bottom of the page.

#### Final Report Should Include the Following:

All laboratories must submit a Final Report after the completion of each project. Laboratories will be notified by the City of Tulsa Field Engineering, via email, that the project is complete and all lab results for soils, concrete & asphalt will be attached. A CD and a hard copy of the Final Report must be delivered to the City of Tulsa Field Engineering within 5 business days from the date of this email.

Final Reports are to include all field and lab tests/results, daily reports and samples taken for the entire project.

All Final Reports must be stamped and signed by a registered professional engineer and shall verify that all materials, sampled and tested, were found to be in compliance with the latest City of Tulsa Standards and Specifications.

Construction materials that fail to meet specification requirements, but were incorporated in the project, must be summarized in the final report with a detailed explanation listing corrective actions or justification for acceptance.

# PART 643 TABLE 78 INFRASTRUCTURE DEVELOPMENT PROJECTS (IDP) ONLY MINIMUM TEST SCHEDULE & FINAL REPORT

#### Minimum Testing Schedule:

A Minimum Testing Schedule shall be created and submitted to the City of Tulsa IPD Inspector, during the pre-construction meeting. Testing frequencies are to be calculated using an approved set of plans, in conjunction with the bid tab items, to create an accurate representation of the minimum testing needed for the project. Any notes, comments, special circumstances and/or assumptions made for quantity calculations, should be listed at the bottom of the page.

#### Final Report:

All laboratories must submit a Final Report at the completion of each project. A spiral bound copy of the Final Report must be delivered to the City of Tulsa IDP Inspector along with final record drawings of the project.

Final Reports shall include all field and lab tests/results (including any acceptance/deficiency test results), daily reports and samples taken for the entire project.

All Final Reports must be stamped and signed by a registered professional engineer and shall verify that all materials, sampled and tested, were found to be in compliance with the latest City of Tulsa Standards and Specifications. Construction materials that fail to meet specification requirements, but were incorporated in the project, must be summarized in the final report with a detailed explanation listing corrective actions or justification for acceptance.

# **INSPECTION/TESTING SCHEDULE**

Service Minimum Notice (Hours)		Notes
Aggregate Base:	48	Density testing must be complete prior to stringline. Obtain samples for proctor/acceptance testing prior to scheduling density
Aggregate Base Thickness:	48	Per Plans & Specifications
Aggregate Base Sampling:	48	Material must be from a City of Tulsa approved plant.
Asphalt:	48	Contractor/Inspector must call the City of Tulsa Field Engineering for scheduling. Material must be from an ODOT approved plant.
Backfill:	48	Obtain samples for proctor/acceptance prior to scheduling density testing.
Concrete:	48	Material must be from an ODOT approved plant.
Coring:	48	Allow time to schedule and set up traffic control if required.
Crack Seal:	48	
Footing Inspection:	24	
Grout:	24	
Import:	24	Material must be approved by the City of Field Engineering prior to placement.
Mortar:	24	
Post Tension Pre-Pour Inspection:	48	
Post Tension Stressing Inspection:	48	
Post Tension Sampling:	48	
Reinforcing Steel (Inspection):	48	
Reinforcing Steel (Sampling):	48	
Shotcrete:	48	Contractor shall provide 16" x 16" x 4" sampling panel.
Sidewalk Slope Inspection:	24	
Slurry (CLSM):	24	
Slurry Seal:	48	
Soil Sampling:	24	
Stringline:	24	
Subgrade:	24	Density testing must be complete prior to stringline. Obtain samples for proctor/acceptance testing prior to scheduling density
Weld Inspection:	48	

Inspection/Testing schedule time listed above has been considered in contract time. No additional time will be given.

# SECTION END

# SPECIAL PROVISIONS FOR COLD WEATHER CONCRETE CURING

Placement of asphalt on street cut repair sections of cold weather concrete or opening of street cut repair sections of cold weather concrete to traffic shall be allowed when the concrete achieves a compressive strength of 3,000 pounds per square inch (psi). Construction equipment loads shall not be applied to the concrete repair section until the 3,000 psi compressive strength is achieved.

# SPECIAL PROVISIONS FOR COLD WEATHER CONCRETE PLACEMENT

- 1. When early traffic placement on a repair is required, the following guidelines are provided as a minimum to assure required strength during cold weather. The Contractor is responsible for the protection and quality of concrete placed during all weather conditions. If circumstances occur which preclude following these guidelines, lower early strength may result in delays in opening areas to traffic as desired.
- 2. Ice, snow, and frost must be removed from the cut prior to placement of concrete. Concrete should not be placed on frozen subgrade. Removal of frozen subgrade will be paid as unclassified excavation.
- 3. Fresh concrete temperatures shall be a minimum of 65°F and a maximum of 90°F at time of placement. Hot mix water and preheated aggregate may be necessary to accomplish the minimum temperature during extremely cold weather. The minimum ambient temperature at time of placement should be at least 30°F.
- 4. Insulated blankets should be placed immediately when average daily temperatures are below 50°F or when minimum ambient temperatures are anticipated below 40°F during the curing period and left in place until opening to traffic. Insulated blankets shall be MA KA closed cell insulated blankets or approved equal. The insulated blankets shall have a minimum R-value of 2. Cost of insulated blankets shall be included in the price bid for the concrete where they are used.
- 5. Strict compliance with mix design slumps must be achieved to reach early strengths. "Drying out" of excessive slump mixes will not be allowed to reduce the slump.
- 6. All cold weather practices also apply to cementitious backfill material, except that blankets will not be required.

# SPECIAL PROVISIONS FOR CRACK SEALING OF AC STREETS WITH RUBBERIZED ASPHALT

All cracks from  $\frac{1}{4}$ " wide to 1" wide shall be routed, blown and filled with rubberized asphalt by use of a melter-applicator as described in ASTM D3405 XI.I. If the manufacturer of the sealant has specifications that exceed those of ASTM D3405, then the manufacturer's specifications will be used.

Fill cracks to within 1/8 inch below pavement surface and blot any excess with approved material (no ridges).

Sealant material shall meet the requirements of ODOT 701.08 "Joint Fillers and Sealers" and meet or exceed ASTM D3405-78.

Asphalt crack seal will be measured by the linear feet of cracks that are sealed, excluding the areas that are patched.

The accepted quantities measured as provided above will be paid for at the Contract unit price as asphalt crack seal by the linear feet of cracks that are sealed, excluding the areas that are patched, which shall be full compensation for furnishing all materials, equipment, labor and incidentals to complete the work specified.

Approval of Joints: At the City of Tulsa's request, a representative of the sealant supplier will be on site at the beginning of the final cleaning and sealing of the joint to demonstrate to the Contractor and to Inspection the acceptable standard for installation of the sealant. No sealing shall commence until the manufacturer's representative has approved the joints. Failure of the sealant to bond to the joint/crack surfaces will be cause for rejection and repair shall be at the Contractor's expense.

Submittals: No work shall begin until the Contractor has submitted the following to the City as a minimum:

- A. Manufacturer's Material Specifications
- B. Manufacturer's Installation Specifications
- C. Manufacturer's Joint/Crack Dimension Specifications.

Concrete curb: Concrete curb and combined curb and gutter to be removed and replaced shall receive joints per ODOT Specification 609.04(e) and be sealed with silicone. Costs for joints and sealer to be included in the unit price bid for either concrete curb or combined curb and gutter.

All sawing necessary for sealing shall be included in the cost of the sealant where used.

# SPECIAL PROVISIONS FOR SPECIAL SPECIFICATION OF HANDICAP RAMP

This work shall consist of the construction of concrete handicap ramps in reasonable close conformity with the location, lines and grades shown on the Standard Drawing for "Typical Curb Ramp" or established by the Engineer.

Materials and Methods of Construction shall meet ODOT specification 610.02 and 610.04 of the standard specifications.

The subgrade for ramps shall be compacted to a density of 90% standard density for depth of 6".

The minimum thickness of concrete on any portion of the ramp shall be 6" except in that portion of the ramp which extends over the pavement, which shall be 8".

The handicap ramp shall be flush where it meets the street. This will supersede the standard drawing.

The handicap ramps shall be installed according to City of Tulsa Standard Drawing No. 790–Standard Sidewalk Ramp.

Construction of handicap ramps will be measured by each ramp and shall be paid for at the contract unit price for:

HANDICAP RAMP

EA.

Which shall be full compensation for performing the work specified and the furnishing of all materials, labor, tools, equipment and incidental necessary to complete the work as specified. Aggregate base, truncated domes and pipe railing, if necessary, shall be paid for separately.

# SPECIAL PROVISIONS FOR SPECIAL SPECIFICATION OF HIGH EARLY STRENGTH CONCRETE

# DESCRIPTION

This work shall consist of furnishing and placing, High Early Strength Concrete.

# MATERIALS

High Early Strength Concrete shall conform to Section 701, Portland Cement Concrete, of the Oklahoma Department of Transportation (ODOT) Standard Specification for Highway Construction, Current Edition, with the following modifications:

Air Content	-	5-7 percent
Maximum Water - Cement Ratio	-	0.41
Slump	-	1-3 inches

Batching shall measure the weights of each material required within a tolerance of one percent for cement and two percent for aggregates (account for moisture content). The quantity of water used shall be within plus or minus one percent of that required by the design. Water may be measured either by volume or by weight. All materials shall be used in strict accordance with the manufacturer's recommendations.

Submittals shall be delivered to the City of Tulsa at a date set by the Engineer. Submittals shall include the items outlined in ODOT Specification 701.03.

# CONSTRUCTION METHODS

The concrete shall be mixed between 70 to 100 revolutions of the ready-mix truck. Mixing shall be in a mechanical mixer capable of combining the aggregates, cement, and water into a thoroughly mixed and uniform mass within the manufacturer's specified mixing period. There shall be no water in the mixing drum prior to adding the aggregates.

#### 02/08/16 TESTING

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Following are the testing requirements for the High Early Strength Concrete mix:

Compressive Strength: <sup>1</sup>	2,500 pounds per square inch (psi) – 12 hours 3,000 psi – 24 hours
Slump:	1 inch minimum 3 inches maximum
Air Content:	5-7 percent

During cool weather (less than 50 degrees Fahrenheit), specimens shall be cured in a fully insulated closed box.

During moderate weather (between 50°F and 80°F), specimens shall be cured in both open and fully insulated closed boxes with compressive strength tests performed on specimens from each curing box.

During warm weather (greater than 80°F), specimens shall be cured in a closed box placed in a shaded area.

# SPECIAL PROVISIONS FOR HOT MIX ASPHALT

# DESCRIPTION

This work shall consist of furnishing and placing Hot Mix Asphalt.

# MATERIALS

Hot Mix Asphalt shall conform to Section 708, Plant Mix Bituminous Bases and Surfaces, of the Oklahoma Department of Transportation (ODOT) Standard Specification for Highway Construction, Current Edition, with the following modifications to Table 708:6

	S3	S4	S5
Asphalt Cement	5.0	6.0	6.0
% of mix mass			
(greater than or equal to )			

Submittals shall be delivered to the City of Tulsa at a date set by the Engineer. Submittals shall include the test results of the physical properties of the aggregate and asphalt cement as outlined in ODOT Specification 708.

# SPECIAL PROVISIONS FOR JOINT / CRACK SEAL OF PCC STREETS WITH SILICONE

All joints from  $\frac{1}{4}$ " wide to 1" wide shall be sawed, blown and filled with silicone in accordance with ODOT Specifications 419. All random cracks shall be cleaned by suitable tools (no routing), blown and filled with silicone that meets ODOT specification 701.08G.

- Sealing Instructions: All aspects of the material application shall as a minimum meet the specifications of ODOT 701.08G. When material covered by that specification is used for maintenance or resealing of joints that have previously contained either similar or dissimilar sealing material, it is required that the joint be dry, cleaned thoroughly with a plow, wire brush, concrete saw, or other suitable tool or tools that are designed for the purpose of neatly cleaning pavement joints. Loose material shall be blown out. The sidewalls of the joint space to be sealed shall be thoroughly sandblasted, blown free of loose sand with high-pressure air and then sealed with sealant. If the manufacturer of the sealant has specifications that exceed those of ODOT 701.08G, then the manufacturer's specifications will be used. Joint Shape Requirements: Specifications for the dimensions of joints and cracks shall be the same as those recommended by the sealant manufacturer.
- Sealant Material: The construction of concrete joint rehabilitation shall meet the requirements of ODOT 701.08. "Joint Fillers and Sealers", except that the sealant material for concrete joint/crack rehabilitation shall meet or exceed the requirements of ODOT 701.08G.

Method of

- Measurement: Concrete joint rehabilitation and concrete crack seal will be measured by the linear feet of joints/cracks that are sealed, excluding the areas that are patched.
- Basis of Payment: The accepted quantities measured as provided above will be paid for at the Contract unit price for Crack and Joint Sealer by the linear feet of joints/cracks that are sealed, excluding the areas that are patched, which shall be full compensation for furnishing all materials, equipment, labor and incidentals to complete the work specified. All sawing necessary for sealing shall be included in the cost of the sealant where used.

# JCSPC-1

- Approval of Joints: At the City of Tulsa's request, a representative of the sealant supplier will be on site at the beginning of the final cleaning and sealing of the joint to demonstrate to the Contractor and to Inspection the acceptable standard for installation of the sealant. No sealing shall commence until the manufacturer's representative has approved the joints. Failure of the sealant to bond to the joint/crack surfaces will be cause for rejection and repair shall be at the Contractor's expense.
- Concrete Curb: Concrete curb and combined curb and gutter to be removed and replaced shall receive joints per ODOT specification 609.04(e) and be sealed with silicone. Costs for joints and sealer to be included in the unit price bid for concrete curb and gutter. The sealant for the curbs shall meet the requirements of ODOT 701.08F.

# Submittals: No work shall begin until the Contractor has submitted the following to the City as a minimum:

- A. Manufacturer's Material Specifications
- B. Manufacturer's Installation Specifications
- C. Manufacturer's Joint/Crack Dimension Specifications
- D. A 3 Year History of Sealing Projects

# SPECIAL PROVISION MINIMUM ASPHALT RETAINED STRENGTH

This Special Provision revises, amends, and where in conflict, supersedes applicable sections of the 2009 <u>Oklahoma Department of Transportation Standard Specifications</u> for Highway Construction, (ODOT).

The "% Retained Strength, min." for asphalt as listed in ODOT Section 708 TABLE 6A "PROPERTIES OF LABORATORY MOLDED SPECIMENS" shall be 80%.

# SPECIAL PROVISIONS OWNER ALLOWANCE

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The "Owner Allowance" may be used for various work and miscellaneous items not specifically identified in the Contract Documents with the following provisions:

- A. The allowance shall be used for cost of design and construction, including all materials, labor, equipment, profit and overhead, of work items not specifically identified in the Construction Documents, or included in original pay items bid for the contract.
- B. The allowance shall be utilized only at the discretion of the City of Tulsa. Any balance remaining at the completion of the Project will be retained by the City of Tulsa.
- C. The Contractor shall provide, to the City of Tulsa, a written request for the use of any allowance, including a schedule of values and associated backup information, including validity of need, materials, labor, equipment, and time required to perform the associated work.

Contractor shall proceed with the allowance work only after receiving written permission from the City of Tulsa. Proceeding with associated allowance work without written permission from the City of Tulsa will be at the Contractor's sole expense.

# SPECIAL PROVISIONS FOR PATCHING OF CONCRETE AND ASPHALT STREETS

The City of Tulsa Standards for street cut and repair shall be followed for materials and procedures except as modified here.

#### Patching

Instructions: Portland Cement concrete patches will be protected from all traffic for a period of 24 hours before removal of protective devices. Sawing of the patches is required. The area to be removed shall be marked by the Contractor under the direction of the Resident Inspector. The Contractor will provide personnel and equipment for making of patches as directed by Resident Inspector. When completed, the patch shall be level and provide a smooth riding surface. All asphalt patch work will require that asphalt rollers and an asphalt laydown machine be available for use on the job as directed by the engineer. The minimum size of any patch shall be 3' x 3'.

Testing of

Materials: The frequency of testing shall be as follows:

Subgrade Compaction: A minimum of one (1) density test of the subgrade shall be done per patch.

Concrete: Three cylinders shall be taken from every 50 cubic yards of concrete and tested for compressive strength.

Asphalt: Compaction and extraction tests shall be taken a minimum of every 50 tons of asphalt.

#### Weather

Limitations: The minimum temperature of the foundation course on which asphalt concrete may be laid shall be as shown in the following table:

Compacted Lift Thickness (inches) Surface Temperature (minimum)

3 or more	40° F
1 ½ to 3	45° F
less than 1 ½	50° F

Asphalt

Materials: All asphaltic concrete used for this Project shall meet the specifications of ODOT Section 708. Under the paragraph, "Course Aggregates", the

following sentence shall be added: When tested for soundness, the number of cycles shall be five (5), the solution shall be Na2 SO, the maximum loss shall be 10%.

# Type I Patch Subgrade

Replacement: Shall consist of the removal of subgrade material as measured from the bottom of the existing pavement. The removed subgrade material shall be replaced with separator fabric meeting the requirement of ODOT Section 325 and aggregate material meeting the requirement of ODOT Section 703.01 Type "A". The existing subgrade shall be compacted to 95% standard proctor density per AASHTO T-99 and the aggregate material shall be compacted to 98% modified proctor density per AASHTO T-180-86 Method as measured by the Nuclear Density Method. Compaction shall be done with a roller or vibratory hand tamper. Certain situations may require substitution of Quick-set Fill Concrete for aggregate material. Fill concrete specifications are shown on the Standards for Pavement Cut Separator fabric shall be used at all full depth pavement and Repair. patches where aggregate base is required, as directed by the Engineer. The fabric shall be cut or overlapped to fit the size of the patch. These items will be paid separately from the bid item for patching.

# Type A Aggregate

Base: This material shall have the following gradation, which is ODOT Section

703-01 Type "A".

<u>Sieve (mm)</u>	<u>% Passing</u>
1 ½ in. (37.5) ¾ in. (19.0) 3/8 in. (9.5) No. 4 (4.75) No. 10 (2.00) No. 40 (0.425) No. 200 (0.075)	$100 \\ 40 - 100 \\ 30 - 75 \\ 25 - 60 \\ 20 - 43 \\ 8 - 26 \\ 4 - 12$

Type I Patch

in PCC

Pavement: When the patch is made in PCC, the pavement shall be cut with a concrete saw full depth before removal of existing pavement. The area to be patched shall be delineated in a straight-line geometric pattern. Placement of the subgrade stabilization material shall be in accordance with the paragraph; "Type I Patch Subgrade Replacement". After

placement of the subgrade stabilization, the pavement shall be replaced with Class A High Early Strength concrete containing 4 to 6 percent air entrainment. The concrete shall have a maximum 3" slump. The concrete shall be placed in accordance with the detail in the drawings titled "Type I PCC Patch". The new concrete shall have a flat finish and match the grade of the adjacent pavement.

Existing joint patterns shall be reestablished and sealed as specified. The concrete shall be sprayed with curing compound and protected from traffic a minimum of 24 hours. Cold Joints around the perimeter of the patch shall be sawed and sealed with silicone in accordance with ODOT specification 701.08(E). All sawing, pavement removal, and sealing costs shall be included in the bid item for patching, H.E.S. concrete.

### Type I Patch

in Asphalt

Pavement:

When the patch is made in asphalt, the pavement shall be cut with a concrete saw full depth before removal of existing pavement. The area to be patched shall be delineated in a straight-line geometric pattern. Placement of the subgrade stabilization material shall be in accordance with the paragraph; "Type I Patch Subgrade Replacement". After placement of the subgrade stabilization material, the pavement shall be replaced in accordance with the detail in the drawings titled "Type I AC Patch", a minimum of 8" or existing paving thickness, whichever is greater. All asphalt materials shall meet the specifications of ODOT 708 Plant Mix Bituminous Bases and Surface. The asphalt shall be placed and compacted in maximum 3" lifts. The edges of the patch shall be tacked prior to the placement of asphalt. The asphalt shall be compacted to 92% minimum density as determined by AASHTO T-209 Method. The patch shall be stringlined as required and all areas not matching the adjacent grade shall be immediately corrected. Cold joints around the perimeter of the patch shall be sawed and sealed with rubberized asphalt. All sawing, pavement removal, replacement, and sealing costs shall be included in the bid item for patching, AC.

Type I

Patch in APC

Pavements: Patching of PCC pavements with an asphalt overlay shall be performed as follows: Placement of the asphalt portion of the patch shall be in accordance with the paragraph "Type I Patch in Asphalt Pavements". Placement of the PCC portion of the patch shall be in accordance with the paragraph "Type I Patch in PCC Pavements". Placement of the subgrade stabilization material shall be in accordance with the paragraph "Type I Patch Subgrade Replacement". After placement of the subgrade stabilization material, the pavement shall be replaced in accordance with

the detail in the drawings titled "Type I APC Patch". Payment will be made separately for each of the three materials: Type "S4" AC, H.E.S. PCC and Aggregate Base. Initial sawing, pavement removal and sealing costs shall be included in the bid items for patching as listed above. Additional sawing required to go from a Type "III" to a Type "I" patch shall be included in the bid items for H.E.S. PCC.

# Type II Patch

### In APC

Pavement:

t: The asphalt overlay shall be removed prior to sawing through the PCC Pavement to determine if only the asphalt needs to be patched. Sawing of The asphalt is required, but should not penetrate the PCC pavement. If the PCC pavement needs to be replaced, a Type "I" APC patch shall be made.

Payment will be made for Type "S4" or Type "S5" AC only. If only the asphalt is removed, initial sawing, pavement removal, and sealing costs shall be included in the bid items for asphalt concrete.

# SPECIAL PROVISION FOR PAVEMENT AND BRIDGE DECK SMOOTHNESS (ENGLISH)

These Special Provisions amend and where in conflict, supersede applicable sections of ODOT's 2009 <u>Standard Specifications for Highway Construction</u>, <u>English and Metric</u>. Units of measurement are provided in the subsections in both English and Metric equivalents. The units for this provision will be those English equivalents.

These Special Provisions apply to all types of Portland cement and asphalt concrete pavements as well as bridge decks constructed as part of this contract or as specified on the Plans.

# 430.01. DESCRIPTION.

This section establishes procedures for determining acceptability as it relates to smoothness requirements of pavements and bridge decks. The equipment and testing applicable to this Section shall be provided and/or operated by the party or parties designated by the City.

# 430.03. EQUIPMENT AND PERSONNEL.

Smoothness measurement equipment to be used for control and for acceptance testing shall include either The California Profilograph or The Lightweight Profilometer as described below. Such equipment shall be certified by the Department.

 a) Profilograph. A California type profilograph produces a smoothness profilogram (or profile trace) of the surface tested. The equipment used shall be supported on multiple wheels having no common axle. The wheels shall be arranged in a staggered pattern such that no two wheels cross the same bump simultaneously. The profile is recorded from the vertical movement of a sensing wheel attached to the frame at the midpoint and is in reference to the mean elevation of the twelve points of contact with the road surface established by the support wheels.

The strip chart recorder shall be mounted on a lightweight frame 25 feet long. The relative smoothness/roughness of the pavement or bridge deck shall be measured by recording the vertical movement of a 6-inch or a larger diameter-sensing wheel attached to the midpoint of the frame.

The recorded graphical traces of the profile (termed the "profilogram") shall be on a scale of 1-inch equals 1 inch for the vertical motion of the sensing wheel. The profilogram shall be driven by the chart drive on a scale of 1 inch of chart paper equal to 25 feet of longitudinal movement of the profilograph.

b) Lightweight Profilometer. The profilometer equipment shall be mounted on a lightweight, motorized vehicle such as an All-Terrain Vehicle (ATV), Golf Cart, or

other approved vehicle. The vehicle profilometer equipment, and operator shall be capable of running on "green" concrete without causing damage. The profilometer equipment shall include an onboard, precision accelerometer which measures movement of the light weight and a non-contact vertical distance sensor mounted on the vehicle. The vertical distance sensor may be either infrared or laser type. The profilometer shall be capable of making all of the measurements and providing the information required in 430.04(b) "Evaluation" of this special provision. Additionally, the profilometer shall measure the road profile in accordance with ASTM E950-98, Class I.

- c) Calibration. The profilograph or profilometer shall be calibrated within the following limits. Horizontal measurements shall be within ±5 feet per 1,000 feet of distance tested. Vertical measurements shall be the same as those of the calibration blocks measured. A profilograph and profilometer Calibration Report shall be submitted to the Engineer each time the calibration is performed. The calibration shall be performed no more than one week prior to collection of smoothness data and repeated at the Engineer's direction at any time during the Project.
- d) Profilograph or profilometer Operator. The City shall provide a profilograph or profilometer operator, certified by the Oklahoma Highway Construction Materials Technical Certification Board to perform all profilograph or profilometer measurements as well as interpreting and analyzing produced profilograms at no cost to the Contractor.

# 430.04. CONSTRUCTION.

a) Surface Testing. The Contractor shall provide traffic control as necessary for all smoothness measurements regardless of who provides and/or operates the equipment. The surface will be tested as soon as possible after completion of the work. For overlay projects when milling is not required, the surface will be tested immediately before construction and as soon as possible after completion of the work in order to determine the percent reduction in the profile index. Profilometer readings or profilograph traces are to be collected from 25 feet prior to the beginning point of a project, including any exception areas, and run continuously through all bridges and changes in the pavement types to a point 25 feet beyond the ending point of a project, including any exception areas.

Testing shall include all mainline paving and bridge decks. Smoothness deviations occurring at construction and expansion joints will be considered in calculations of profile index and in identification of bumps.

All objects and foreign material on the surface shall be removed by the Contractor prior to testing. Protective covers, if used, shall be removed prior to testing and will be properly replaced by the Contractor after testing. Testing for smoothness shall produce a final trace; a second trace shall be made on segments on which allowable surface corrections have been made.

The profilograph shall be propelled at a speed not to exceed 3 miles per hour. Data shall be gathered at lower speeds if the pavement or bridge deck is rough or profilograms are not being produced clearly.

The profilometer shall be operated at a constant speed as recommended by the manufacturer. The sequence of position of the pavement or bridge deck to be tested will be one pass per driving lane in the wheel path farthest from the edge of a pavement or bridge deck.

Additional profiles will be taken only to define the limits of an out-of-tolerance surface variation. The evaluations shall include graphical traces of the profiles and the disks from which they were derived. The testing and evaluation will be done by a trained and certified operator and the evaluation will be so certified. The City reserves the right to verify the testing and/or evaluation. In case of differences the City's results shall be considered final. If the Contractor's results are found to be significantly in error, the City may assess the cost of the verification efforts.

- b) Evaluation.
  - 1. *Profile Index.* Unless otherwise specified in Special Provision 431-3QA, a profile index shall be calculated from the profilogram for a pavement or bridge deck on 528 feet extents or entire lengths of bridges (including approach slabs) whichever is less. The index shall be calculated using a computerized profilogram reduction system. It is understood that stations reflected by automated profilogram interpretation systems are approximate and a further survey in the field may be required to establish bump locations. The index is calculated by summing the vertical deviations outside a 0.2-inch blanking band as indicated on the profile trace. The units of this measure (inches) will be converted into inches per mile. An extent is defined as the amount of pavement or bridge deck in a 528 feet or the entire bridge deck plus both approaches in length, whichever is less. When the quantity represented is less than a full extent in length, it will be combined with an adjacent extent or treated as a separate extent, at the option of the Contractor.
  - 2. *Bumps.* Bumps will appear as high points on the profile trace and correspond to high points on the pavement or bridge deck surfaces. Unacceptable bumps are defined as those with vertical deviations in excess of 0.60 inch (without using a blanking band) in a 25-foot span.
  - The following will not be excluded from the smoothness requirements:
     (a) Shoulders
    - (b) Ramps
    - (c) Turn Lanes

- (d) Acceleration, deceleration and climbing lanes less than 528 feet full width.
- (e) Pavement with horizontal centerline curves with radii of less than 1000 feet and the super elevation transitions of such curves.
- (f) In overlays only, areas in roadway within a 10 foot radius of existing inlets and utility covers. (This exception does not apply to full depth pavements.)
- (g) Short isolated pavement areas, which by normal industry practice would require handwork.

Examples include driveway blockouts, phased intersection work with variable cross slope, etc.

For the above exceptions, the profile index and adjustments calculations corrections specified in this Special Provision, will not apply. However, the requirements for mandatory correction of bumps as defined in this Special Provision and tolerances defined in subsection 401.04 of the Standard Specification for Highway construction will remain in effect.

- 4. Special Evaluation Requirements. Bridge approach slabs will be evaluated in accordance with bridge deck smoothness requirements. New pavements and overlays within 25 feet of bridges or their approach slabs, 25 feet of beginning and ending stations of the Project, or 25 feet of changes from portland cement concrete to asphalt concrete or vice versa will not be excluded from profile index calculation. However, the requirements for mandatory correction of bumps as defined in this Special Provision and tolerances defined in subsection 401.04 of the Standard Specification for Highway Construction will remain in effect.
- (c) Surface Correction. Unless otherwise permitted by the Engineer, in writing, all new pavements, overlaid pavements (with or without prior cold milling) and bridge deck surfaces having profile indices in excess of the acceptable limits of 13.0 in/mile for all streets and 27.0 in/mile for all bridges or having individual bumps with deviations in excess of 0.60 inch in a 25 foot span shall be corrected by the Contractor at no additional cost to the City. Such corrective actions shall NOT include any grinding of metal expansion joints, themselves, but may include grinding of concrete in the vicinity of the joints.

All corrective action, including the identification and correction of bumps, shall be in accordance with the requirements of the Standard Specifications and shall be subject to the approval of the Engineer. The surfaces of ground asphalt pavements shall be fog sealed. The surfaces of corrected areas shall be retextured to be similar to that of the adjacent sections of pavement or bridge deck and shall exhibit good workmanship and be neat in appearance. Cores for thickness determinations and measurement of cover of reinforcement steel will be taken subsequently to all corrective work.

# SPECIAL PROVISIONS FOR PAVING OPERATIONS

- 1. If the width of a street is such that it exceeds the paver's ability to pave one-half the street width another paver will be required and shall be operated so as to lay asphalt on at least one-half of the street width at a time.
- 2. The longitudinal joint shall run parallel to the approximate center of the street. Transverse joints shall be kept to a minimum. If it becomes necessary to stop the paving operation short of the end of the job then the two transverse joints shall be no farther apart than 6'.
- 3. If for any reason the Contractor is unable to pave one-half the width of the street with one paver, paving operations shall cease.
- 4. A paving plan, indicting sequence of paving passes, pass widths, pass thickness, and requested temporary street closures, will be submitted prior to paving.
- 5. Once paving begins the Contractor should have sufficient trucks available to deliver asphalt materials in a continuous operation.
- 6. Adequate transitions to side streets and driveways must be provided. In general, paving shall extend to the returns of all side streets. Special consideration should be given to preventing ponding in side street intersections.
- 7. The contractor shall provide butt joints as directed by the Engineer. Wherever the planned overlay of an existing street meets existing pavement, or at the end of a paving run, butt joints shall be provided to a depth matching the planned overlay thickness. The transition shall extend a minimum of 10 feet longitudinally from the joint to provide a smooth riding surface. Butt joints will not be paid for directly but the cost shall be included in the cost of the paving operations where they are used.
- 8. Contractor shall not drive empty or loaded trucks or equipment across newly paved areas for the construction period.
- 9. A leveling or "wedge" course may be required to establish the required to crossslope for the finished overlay. This item of work will be paid for separately under the bid item designated as Asphalt Concrete Type "S5" in tons.

# SPECIAL PROVISIONS PERMANENT TRAFFIC SIGNS

# PART 608 - TRAFFIC SIGNS

# 608.1 GENERAL

- 608.1.1 This work shall consist of furnishing materials and installing traffic signs in accordance with these specifications and in reasonably close conformity with the location and dimensions shown on the Standards, Plans or established by the Engineer.
- 608.1.2 Signs shall be designed in accordance with the 2009 Manual on Uniform Traffic Control Devices (MUTCD) with revisions and the 2004 FHWA Standard Highway Signs (2012 Supplement to the 2009 MUTCD).
- 608.1.3 Street name sign proofs shall be submitted to the Traffic Engineer for review and approval prior to fabrication.
  - 608.2 MATERIALS
- 608.2.1 General

Signs shall be composed of aluminum metal sheeting overlaid with cutout film and a reflective sheeting material. Mounting shall be with posts, hardware and brackets as specified.

608.2.2 Sheet Aluminum

Provide 0.080-ga sheet aluminum signs in accordance with ASTM B 209, alloy 6061-T6 or alloy 5052-H38 with mill finish. Use the dimensions, filleted corners, and hole sizes and locations as shown on the sign standards. Ensure panels are flat and straight within commercial tolerances. Treat sheet aluminum signs with a chromate type chemical conversion coating in accordance with ASTM B 449, Class II.

608.2.3 Reflective Sheeting

Post-Mounted Signs: Sheeting shall be High Intensity Prismatic meeting ASTM D4956 Type III / IV (3M 3930 or approved equal).

Mast-Arm Mounted Signs: Sheeting shall be Diamond Grade meeting ASTM D4956 Type XI (3M DG<sup>3</sup> or approved equal).

All sheeting shall have a Class I adhesive backing.

# 608.2.4 Overlay

Electronic cuttable sign film designed for use with electronic sign plotters (3M ElectroCut Series 1170 Film, or approved equal).

608.2.5 Mounting Hardware

Bolts, nuts, washers, brackets, and all other hardware needed for mounting shall be suitable for long-term outdoor use

- A) Bolts: 5/16" x 3", hex head
- B) Nuts: flanged, self-locking, size as needed
- C) Washers: 3/4" O.D., maximum
- D) Brackets: for mast-arm mounting, use a prefabricated mounting system (Pelco Structural Astro-Brac<sup>®</sup> or approved equal). See COT Standard 616.

# 608.2.6 Posts

Sign posts shall be perforated square tube (Telespar® or approved equal). Signs shall be composed of new hot-rolled carbon sheet steel, structural quality, ASTM A 1101. Provide a finish that is in-line, hot-dip galvanized zinc coating in accordance with AASHTO M120, followed by a chromate conversion coating, and a clear organic exterior coating. Provide posts with ½-in. ( $\pm$  1/16-in.) diameter holes spaced 1-in. on center along the center of each of the four sides.

# 608.3 CONSTRUCTION METHODS

608.3.1 General

Construction methods shall involve fabrication and mounting of the sign to the appropriate type mount.

- 608.4 METHOD OF MEASUREMENT
- 608.4.1 Signs of the size and type specified will be measured by the square foot of area of the vertical front face with no deduction for rounded corners or bolt holes.
- 608.4.2 Posts of the size specified will be measured by the linear foot between the ends of the installed post.

# 608.5 BASIS OF PAYMENT

608.5.1 Accepted signs, measured as provided above, will be paid for at the contract unit price as follows:

608.5.2 SIGNS

GROUND SIGN ...... SF OVERHEAD SIGN ...... SF

Such payment shall be full compensation for furnishing all materials, equipment, labor and incidentals required to complete the work as specified.

# 608.5.3 POSTS

1-1/2" SIGN POST	LF
1-3/4" SIGN POST	LF
2" SIGN POST	LF

Such payment shall be full compensation for furnishing all materials, equipment, labor and incidentals required to complete the work as specified.

# SPECIAL PROVISIONS FOR PRICE ADJUSTMENT FOR ASPHALT BINDER

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 2009 Oklahoma Department of Transportation Standard Specifications for Highway Construction. Units of measurements are provided in the subsections in both English and metric equivalents. The units for this project shall be those specified in the project plans.

#### (add the following:)

### **109.12 PRICE ADJUSTMENT FOR ASPHALT BINDER.**

A price adjustment clause is included in this contract to provide additional compensation to the Contractor or a credit to the City of Tulsa for fluctuations in asphalt binder process. This price adjustment is dependent upon a change in the average price of asphalt binder which results in an increase or decrease in the price of products utilized on this project.

- a) Payment will be made to the contractor for monthly fluctuation in the cost of asphalt binder used in performing the applicable items of Asphalt Concrete work as listed in the table below when the asphalt binder cost fluctuates by more then 3% from the base price defined below. Payments may be positive, negative, or nonexistent depending on the circumstances. Payments or deductions will only be calculated on that portion of the asphalt binder cost fluctuation that exceeds the 3% specified above. Payments or deductions for the asphalt binder cost adjustment will be included in the contractor's progressive estimates; and the payments or deduction authorized for each estimate will be based upon the algebraic difference between the quantities for applicable items of work.
- b) The Asphalt Binder Cost Adjustment (ACA) for the current estimate will be computed according to the following formula:

#### $ACA = Q \times F \times D$

Where			
	ACA	=	Asphalt binder cost adjustment, in dollars;
	Q	=	The algebraic difference between the quantities for the
			applicable items on the current estimate and the quantities shown on the previous estimate, in tons of mix;
	F	=	The Asphalt Binder Use Factor for the applicable items of work subject to this price adjustment, as listed in the following table,
			are:

ITEM OF WORK	SPECIFICATION NUMBER	ASPHALT BINDER USE FACTOR PER UNIT (metric and U.S. Customary units)
Aspalt Concrete, Type S5	411	0.060 ton of binder per ton of mix
Aspalt Concrete, Type S4	411	0.060 ton of binder per ton of mix
Aspalt Concrete, Type S3	411	0.050 ton of binder per ton of mix

Note: When the units of measure in the contract for the Items of Work listed in the table do not correspond with the units shown in the table (i.e. Asphalt Concrete paid by the square yard, etc.), those Items will not be subject to the terms of this special provision or any asphalt binder price adjustment.

D = Allowable price differential, in dollars;

The allowable price differential, "D" for the current estimate will be computed according to the following formulas:

When the current price, P, is greater than the base price, P<sub>(b)</sub>.

 $D = P - [1.03 \times P_{(b)}]$ , but not less than zero.

When the current price, P, is less than the base price, P<sub>(b)</sub>.

 $D = P - [0.97 \times P_{(b)}]$ , but not greater than zero.

In either case, P<sub>(b)</sub> shall be the base asphalt binder price, in dollars per ton (mton), defined as the average of the minimum and maximum prices for performance-graded binder using the Selling Price of PG64-22 paving grade, F.O.B. manufacturer's terminal, as listed under "Midwest/Mid-Continent Market – Tulsa, Oklahoma/Southern Kansas area" as published in the last issue of <u>Asphalt Weekly Monitor®</u> furnished be Poten & Partners, Inc. for the month prior to the month in which the bids for the work were received.

In either case, P, shall be the current asphalt binder price, in dollars per ton (mton), as defined above for the base asphalt binder price. The publication used will be the last issue published in the month prior to the month in which the progressive estimate is generated.

c) Items included in the contract that are listed in the table above are subject to the adjustment in accordance with this provision, regardless of any amount of overrun to the plan quantity. Any new items of work added to the contract by supplemental agreement that are listed in the table above, will be subject to the asphalt binder price adjustments in accordance with this provision. The base asphalt binder price, P<sub>(b)</sub>, for any newly added eligible items will be the same P<sub>(b)</sub> as the eligible items in the contract and the new unit price established by supplemental agreement shall be determined accordingly.

# SPECIAL PROVISIONS REMOVAL OF CASTINGS

All water, sanitary sewer, and storm sewer manhole castings, lids, frames, curb hoods, grates, hydrants, valves, and other fittings removed as part of any construction project are property of the City of Tulsa. Contractor will not take ownership.

All storm sewer and sanitary sewer castings shall be salvaged and delivered by the contractor to the Underground Collections North Sewer Base Stockyard at 9319 East 42<sup>nd</sup> Street North. Contractor will coordinate the return of such items with the Stockyard personnel at 918-669-6130.

All hydrants, valves, and other fittings from abandoned water mains shall be salvaged and delivered by the contractor to the South Yard at 2317 South Jackson Avenue. Contractor will coordinate the return of such items with the South Yard personnel at 918-596-9401.

# SPECIAL PROVISIONS TACTILE MARKERS TRUNCATED DOMES

**DESCRIPTION.** This work shall consist of installing Truncated Domes.

**MATERIAL.** The Truncated Domes shall be pre-case concrete pavers with a nominal thickness of 7/8 inch to 2 inches. They shall be constructed with a minimum of 4000 psi concrete. They shall be yellow in color and meet all ADA requirements for color contrast and dimensions.

**CONSTRUCTION METHODS.** The panels shall be installed according to the manufacturer's recommendations and in accordance with City of Tulsa Standard Drawing No. 790–Standard Sidewalk Ramp.

**METHOD OF MEASUREMENT.** The Truncated Domes will be measured by the square foot of panel area.

**BASIS OF PAYMENT.** Accepted panels, measured as provided above, will be paid for at the contract unit price as follows:

TRUNCATED DOMES

SQUARE FOOT

Such payment shall be full compensation for furnishing all materials, equipment, labor and incidentals to complete the work as specified.

# SPECIAL PROVISIONS

**DESCRIPTION.** This work shall consist of removing trees where called for on the Plans and shall include cutting such trees, removing their stumps and roots, and properly disposing of the material.

**CONSTRUCTION METHODS.** Trees shall be removed and disposed of in a manner approved by the Engineer. All stumps and roots shall be removed to a depth of not less than 12 inches below the finished subgrade elevation.

**METHOD OF MEASUREMENT.** The size of trees will be determined by the average diameter of the tree trunk taken at a point measured four feet above the base of the tree at the ground line. The diameter will be measured to the nearest full inch.

**BASIS OF PAYMENT.** Trees to be removed under this item will be measured as provided above and will be paid for at the contract unit price per each tree in accordance with the following schedule of size:

(A)	REMOVING TREES 6-12 INCH IN DIAMETER	EA.
(B)	REMOVING TREES 13-18 INCH IN DIAMETER	EA.
(Ċ)	REMOVING TREES 19-24 INCH IN DIAMETER	EA.
(D)	REMOVING TREES 25 INCH AND MORE IN DIAMETER	EA.

which shall be full compensation for furnishing all materials, equipment, labor and incidentals to complete the work as specified.

Removing trees less than 6 inches in diameter will be considered as incidental work and will not be paid for directly but the cost will be included in other items.

# SPECIAL PROVISIONS FOR SPECIAL SPECIFICATION OF TYPE I MONUMENT PAYMENTS

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Under this item, the Contractor shall furnish and place for the payment requested for each monument, all materials, labor, equipment, and incidentals necessary to complete the work as shown on the sketch on the following page. The brass marker shall be provided by the City. The 5/8 inch rebar shall be a minimum of 36 inches in length. The locations will be as ordered by the Engineer.

Materials will be in accordance with Section 626.02 of ODOT's Standard Specifications for Highway Construction, current addition, with Accelerated High Early Strength Concrete substituted for Portland Cement Concrete.

### SPECIAL PROVISIONS

### **URBAN RIGHT OF WAY RESTORATION**

# **DESCRIPTION:**

The work under this item shall consist of restoring Rights-of-Way. Contractor shall be responsible for the removal and replacement of mailboxes, drains, traffic signs, and curb street address number, sprinkler system or any other improvement within the right of way that is not paid for in other items of work.

# **CONSTRUCTION REQUIREMENTS:**

All existing improvements as called for in this special provision to be replaced or reconstructed shall be restored to substantially the same condition as existed prior to the construction. Contractor shall document by photographing all obstructions and improvements prior to the start of construction.

As the work progresses, all streets shall be thoroughly cleaned of all rubbish, excess earth, rock, and other debris resulting from such work. All clean-up operations at the location of such work shall be accomplished at the expense of the contractor and shall be completed to the satisfaction of the engineer.

# **IRRIGATION SYSTEMS**

# **DESCRIPTION:**

The work shall consist of repairing any irrigation systems inside or outside the street Right of Ways as a result of damages or adjustments needed during the course of the construction to the satisfaction of the engineer.

# **CONSTRUCTION REQUIREMENT:**

Contractor shall repair irrigation systems using like materials and shall include all materials necessary for the proper installation and function of the system. Materials such as valves, controllers, pop up spray and rotary heads, risers, seals, backflow preventer and main line pipe damaged during the course of the construction shall be re installed to its original condition. Excavation, placement, testing, back filling and compacting shall be done as required by the city of Tulsa standard specifications.

# STREET ADDRESS AT CURB

### **DESCRIPTION:**

The street address of the building, structure or lot served by the reconstructed driveway shall be painted on the curb of the driveway. Location to be approved by the Engineer. The street address shall face traffic flow.

# **CONSTRUCTION REQUIREMENTS:**

The Street Address to be painted shall conform to city specifications as to size and form, and the

quality of paint to be used, as determined by the City of Tulsa Public Works Department.

Street Address placed on the curb shall be done using a vinyl numbers stencils; letters shall be in black paint in figures of the size of three inches in height, and impressed upon a white background of the size of five by eleven inches. Standard stencil lettering with height, color and style shall be as approved by the engineer or in accordance with the most current City of Tulsa Standards.

# MAILBOX REMOVAL AND RELOCATION

# **DESCRIPTION:**

Contractor shall remove, reset and/or reconstruct any and all mailboxes within the street right of way.

# **CONSTRUCTION REQUIREMENTS:**

The removal, resetting and/or reconstruction of mail boxes in street right of way shall be coordinated with the local postmaster as required. Mailboxes shall be located no closer than l' behind the face of curb to face of box.

Where Special mailboxes such as Stone, masonry brick, or non standard mail boxes exist, contractor shall replace all mailboxes in like kind. The kind and quality of materials in which mailboxes shall be reconstructed shall be to the satisfaction of the property owner and approved by the engineer.

The replaced mailbox shall be capable of withstanding wind loading and lateral load associated with the delivery of the mail.

# DRAINS

# **DESCRIPTION:**

Contractor shall reestablish drains, roof drains, and other drainage through the curb.

# **CONSTRUCTION REQUIREMENTS:**

Removal, replacement, salvage of drains in street right of way shall be done during road construction phase.

Contractor shall replace all drains in like kind. The kind and quality of materials in which drains shall be reconstructed shall be to the satisfaction of the property owner and approved by the engineer.

All re-established drains shall include a storm water curb opening as described in City of Tulsa Standard Drawing 758.

### **TRAFFIC SIGNS**

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# **DESCRIPTION:**

Unless otherwise directed by the plans and specifications, this item shall consist of removing, storing, and resetting all existing traffic signs. Contractor shall remove, store, and reset all traffic signage as required for construction of this project.

# **CONSTRUCTION REQUIREMENTS:**

Roadside signs shall be placed at locations shown on the plans or at existing locations and shall be installed in compliance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).

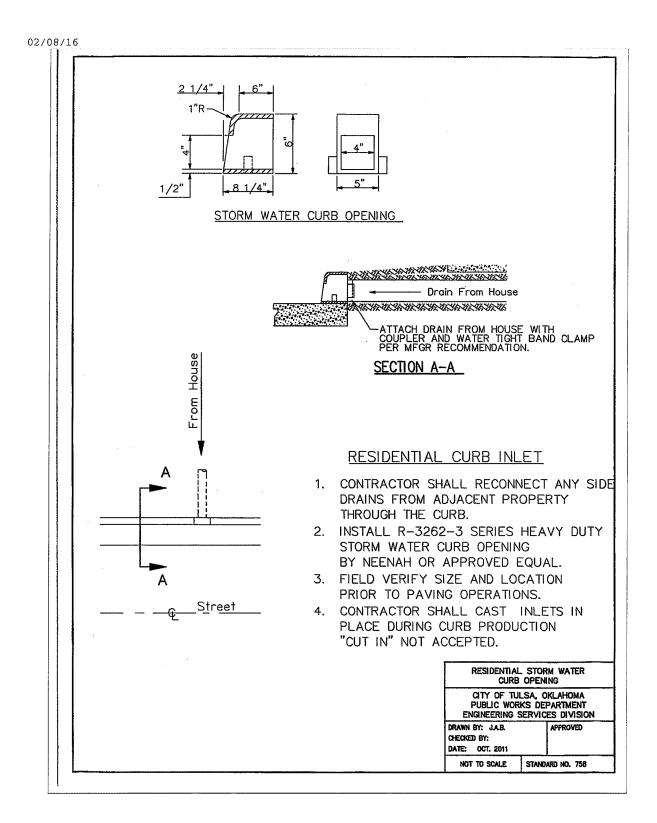
### **METHOD OF MEASUREMENT:**

Irrigation Systems, Street Address at the Curb, Mailbox Removal and Relocation, Drains, and Traffic Signs will be measured by EACH for the project.

### **PAYMENT:**

Special (C) Urban Right-Of Way Restoration (measured as provided above) will be paid for at the contract unit price by EACH. Such payment shall be full compensation for all equipment, tools, labor, and incidentals necessary to complete the work as specified.

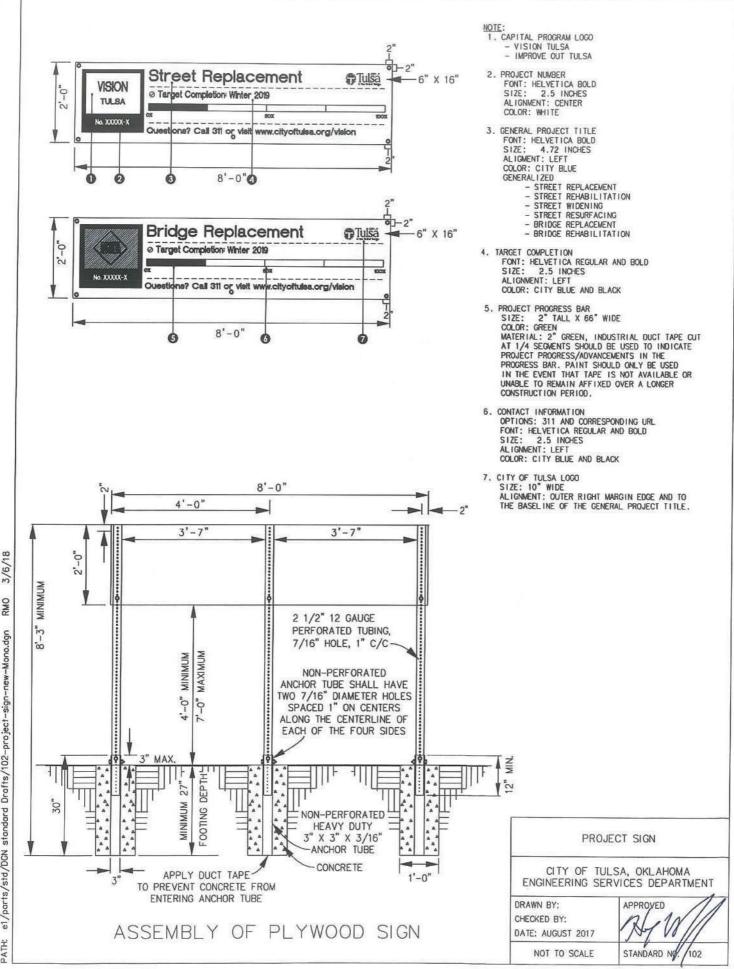
Special (C) Urban Right-Of-Way Restoration ......EACH



# SPECIAL PROVISION FOR UTILITY RELOCATIONS AND DESIGN ISSUES

It is the intent of this specification to provide no more than seventy-five (75) calendar days due to delays caused by required utility relocations and required design clarifications. Should the Contractor be delayed in the final completion of work by any utility relocation or design issue, additional days as determined by the Engineer shall be granted by the City. However, the Contractor shall give the Engineer notice in writing of the cause of the delay in each case on the Extension of Time Request Form enclosed in these documents, and agrees that any claim shall be fully compensated for by the provisions of this specification to complete performance of the work. An adjustment will not be made to the contract time bid for incentive purposes.

Any time granted for utility relocations or design issues up to (<u>75</u>) calendar days will be in addition to the number of days shown in the proposal for computation of disincentive and liquidated damages.



e1/parts/std/DGN standard Drafts/102-project-sign-new-Mono.dgn PATH:

# PROJECT NO. 144200, TMUA-W 15-04, & SWD 10669 ARTERIAL STREET REHABILITATION AND WATERLINE REPLACEMENT 36<sup>TH</sup> ST. N. – MLK JR BLVD. TO PEORIA AVE.

# Lawns and Fine Grading Section 02930

# Part 1--General

**1.01 Scope:** As called for in the drawings. Provide all labor, materials, and equipment to properly install sod and ground cover plants, including bed preparation, and warranty for one year.

# 1.02 Related work:

- A. Section 02950--Trees, Shrubs, and Ground Covers
- **1.03 References:** <u>State of Oklahoma Highway Commission Standard Specification for</u> <u>Highway Construction</u>, Edition of 2009.

# 1.04 Inspections:

- A. Turf materials may be inspected by the Landscape Architect at the growing site and approved for delivery. Such inspection does not preclude rejection at the project site due to damage in transit or storage.
- B. Topsoil: The source of topsoil may be inspected by the Landscape Architect after test report submittal to determine the acceptability of the topsoil.
- C. Contractor shall inspect rough grading to insure proper drainage. The contractor shall notify the Landscape Architect immediately of any areas where inadequate drainage is observed.

# 1.05 Testing:

A. Representative random topsoil samples shall be taken from several locations on the planting area and/or borrow area. These samples shall be mixed and tested as a composite of the sampled area in accordance with standard County Extension Office practices for pH, total soluble salts, porosity, organic content, and salinity.

- B. Testing shall be processed through the County Extension Office, and test reports submitted to the Landscape Architect, a minimum of fourteen (14) calendar days prior to sod planting.
- C. Amendments shall be determined and made according to test results, with resultant expense to be paid by the Contractor.

### 1.06 Delivery, Handling, and Storage

- A. Delivery: <u>Notify the Landscape Architect of the delivery schedule two (2)</u> <u>working days in advance</u> to allow sod to be inspected upon arrival at the job site. Unacceptable sod shall be removed from the site <u>immediately</u>. Fertilizer, lime, and peat shall be delivered to the site in the original, unopened containers bearing the manufacturer's guaranteed chemical analysis, name, trade name or trademark.
- B. Handling: Sod shall be loaded into the transportation vehicle immediately upon harvesting. Sod shall be wet thoroughly with water and covered with heavy canvas or other approved cover to minimize moisture loss. Sod shall not be transported in a vehicle with open sides.
- C. Storage: Sod shall be kept moist and covered from the time it is harvested until planted. Sod shall be planted within forty-eight (48) hours of harvesting.
  - 1. Fertilizer, lime, and peat shall be kept in a dry storage area away from contaminants.
  - 2. Storage of materials shall be in areas designated or approved by the Landscape Architect.
- **1.07** Environmental Protection: All work and contractor operations shall comply with the requirements of the local, state, or federal Environmental Protection Agencies.

### Part 2--Products

### 2.01 Materials

A. Additional topsoil required shall be furnished by the Contractor obtained from a sandy loam topsoil borrow area, and shall be a natural, friable soil representative of productive soils in the vicinity. It shall be obtained from well-drained areas and shall be free of admixture of subsoil and foreign matter or objects larger than one inch (1") in any dimension, toxic substances, and any

material or substances that may be harmful to plant growth. The pH range shall be 6.5 to 7.5 and have organic content of not less than two percent (2%).

- B. Lime: This material shall consist of either "agricultural limestone" or "agricultural hydrated lime" as determined by the soil test results. Material shall comply with Section 234 of the State of Oklahoma Highway Commission <u>Standard</u> <u>Specification for Highway Construction</u>, Edition of 1988.
- C. Fertilizer
  - 1. Fertilizer shall be a commercial fertilizer composed of the standard materials and conforming to the grade as determined by soil test results. The term "grade" shall mean the percentages of "total nitrogen", "available phosphoric acid", and "soluble potash".
  - 2. The fertilizer shall be furnished in standard, factory sealed containers. All labeling of containers required by law at the time of selling shall be intact and legible when the fertilizer is delivered to the project site and shall remain on the containers until the product is used.

# Part 3-- Execution

# 3.01 Sod Bed Preparation

- A. Finish grade shall be such that all mature grass installed as a part of this work shall be level with the top of all adjoining sidewalks, driveways, curbs, and ground level planting areas. The addition or removal of topsoil shall be accomplished, if necessary, to achieve finish grade.
- B. Prior to planting, test topsoil in areas to be planted in accordance with Section 1.05 Testing.
- C. The necessary soil amendments shall be applied within seven days before planting and worked into the upper six inches (6") of topsoil. If fertilizer is applied dry, it shall be immediately incorporated into the soil with water.
- D. All areas to be sodded shall be treated with a pre-emergent designated or approved by the Landscape Architect and applied at the manufacturer's recommended rate.
- E. Prepared surface shall be floated smooth and free of bumps and depressions. Remove stones and foreign matter over one inch (1") in diameter from top two inches (2") of sod bed. Planting shall be done immediately thereafter, provided the bed had remained in a friable condition and has not become muddy or hard. If it has become hard, it shall be cultivated to a friable condition again.

# 3.02 Sodding Operations

- A. Sod shall be placed on all areas within the cut and fill catch lines. All disturbed areas outside the cut and fill catch lines shall be returned to its previous condition and sod placed at the contractor's expense.
- B. The sod shall be moist when excavated; and kept moist until planted. Sod shall be planted within forty-eight (48) hours of harvesting.
- C. Sod shall be laid perpendicular to the direction of the slope with alternate joints.
- D. Sod pieces shall be fitted together tightly. No joints shall be visible, and sod shall be rolled firmly and evenly by hand.
- E. All finished sodding shall be smooth and free of lumps and depressions.
- F. All sodded areas shall be watered immediately after final rolling with a fine spray or as needed to prevent wilting during installation.
- **3.03** Completion of Work: Work shall be considered complete and eligible for final acceptance only after fulfillment of the following requirements and any applicable requirements as stated elsewhere in the specifications.
  - A. All lawn areas shall have no bare areas or unacceptable cover larger than one (1) square foot.
  - B. All grass must be vigorous, thick, and deep-rooted. Weeds shall not exist in sufficient number to damage appearance.
  - C. The Owner will be responsible for all maintenance from the time the entire installation is complete and approved. The contractor shall be responsible for all maintenance to ensure livability until the complete installation is approved.
  - D. After one (1) mowing and when all above conditions are met, the Contractor and Landscape Architect, and Owner will inspect the lawn areas for final acceptance.

# PROJECT NO. 144200, TMUA-W 15-04, & SWD 10669 ARTERIAL STREET REHABILITATION AND WATERLINE REPLACEMENT 36<sup>TH</sup> ST. N. – MLK JR BLVD. TO PEORIA AVE.

# Lawns and Groundcover Annual Maintenance Section 02931

### Part 1--General

**1.01 Scope:** Provide all labor, materials, and equipment to properly maintain sod and ground cover plants for a period of one year.

### 1.02 Related work:

- A. Section 02930—Lawns and Fine Grading
- B. Section 02950--Trees, Shrubs, and Ground Covers
- **1.03 References:** <u>State of Oklahoma Highway Commission Standard Specification for</u> Highway Construction, Edition of 2009.

### Part 2--Extended Warranty Conditions

**2.01** Beginning Of the Warranty Period: The Warranty period shall begin on the date that an inspection by the Landscape Architect shows that all plants are acceptable, in place, and have been installed in accordance with the specifications and plans.

### 2.02 During the Warranty Period:

- A. If any plants require removal and replacement, that cost shall be additional based on an agreed upon unit cost and not part of the annual maintenance cost.
- B. During the annual maintenance, the Contractor shall be responsible for the following work:

1. If plants require replacing, notify City of cost impact. If approved, remove dead plants and plants not in a vigorous condition and replace as soon as weather conditions permit. Match with adjacent plants of the same species in size and form. Each replacement shall be covered with a one-year warranty commencing at time of planting.

C. During the Warranty Period, the Contractor shall be responsible for the following work:

- 1. Immediately remove dead plants and plants not in a vigorous condition and replace as soon as weather conditions permit. Match with adjacent plants of the same species in size and form. Each replacement shall be covered with a one-year warranty commencing at time of planting.
- 2. Weeding of plant beds

a. Groundcover beds and lawn to be maintained substantially weed free.

b. Weeds may be manually or chemically removed and/or controlled. Submit type and frequency of chemical control to City for approval prior to application.

3. Watering sufficient to maintain optimum moisture level:

Groundcover plants and lawn shall be hand watered during the growing season (March through October), adjust for amount of rainfall to provide approximately 1-1/2" - 2" of moisture every ten days. During the winter months (November through February) water plants in times of drought to keep plants viable.

- 4. Pruning:
  - a. Deadhead all perennials after bloom period each year.

b. Cleanup: Remove all debris created by pruning as work proceeds.

5. Disease and insect control:

If insect outbreak occurs chemically remove and/or control. Submit type and frequency of chemical control to City for approval prior to application.

- 6. Maintaining plants in an upright, plumb position, and repair of settling.
- 7. Fertilization
  - a. apply evenly within planting bed
  - b. Time of application to be April or May.
  - c. Groundcover plants: 3 pound/1000 SF of bed area of 14/14/14 Osmocote slow release.
  - d. Lawns: apply 0.5 pounds of nitrogen for every 1000 sf every 4-6 weeks throughout the year.
- 8. Trash Removal:

a. All litter and trash in groundcover beds and lawn areas shall be removed.

9. Remulching:

Groundcover beds shall be mulched as necessary to maintain a 3" mulch depth. This item shall be performed at least every six (6) months if replenishment is necessary

10. Mowing:

The buffalo sod will reach a mature of height of 4 to 6 inches (10 to 15 cm). The recommended mowing height is approximately 3-4 inches. Buffalo sod can be mowed 1-2 times a year. Bermuda sod should be mowed to a height of 1"-2" in height and mowed as needed.

# 2.03 Termination of the Extended Warranty Period

- A. A preliminary inspection by the Contractor and the City representative will be held eleven (11) months from the date of the beginning of the Warranty Period to determine plant acceptability and the number of replacements, if required. Any replacements required shall be made within two (2) weeks of the preliminary inspection, unless other arrangements are made at said inspection. Alternate or substituted varieties will not be allowed.
- B. A final inspection of all plants will be held after the replacement planting has been completed. No additional warranty period will be required for replacement plants.
- C. The Warranty Period will end on the date of this inspection and said inspection will be considered final acceptance provided the Contractor has complied with the following requirements:
  - 1. Dead, missing, and defective plant material shall have been replaced as directed by the Owner. Otherwise, final acceptance will be delayed until such replacements have been satisfactorily accomplished.
  - 2. All requirements were met above in section 2.03

# End of Document

# PROJECT NO. 144200, TMUA-W 15-04, & SWD 10669 ARTERIAL STREET REHABILITIATION AND WATERLINE REPLACEMENT 36<sup>TH</sup> ST. N. – MLK JR BLVD. TO PEORIA AVE.

# Trees, Shrubs and Ground Covers Section 02950

# Part 1--General

**1.01 Scope:** As called for in the drawings. Provide all labor, materials, and equipment to properly install sod and ground cover plants, including bed preparation, and warranty for one year. Trees will be provided, installed, and maintained by Owner. Timing and coordination of tree planting shall be the responsibility of the Contractor.

# 1.02 Related work:

- A. Section 02930 Lawns and Fine Grading
- **1.03 References:** The following publications listed below, but referred to hereafter by basic designation only, form a part of this specification to the extent indicated by the references thereto:
  - A. American National Standards Institute (ANSI) Publications: Z60.1--2014. Nursery Stock
  - B. Hortus Third, Staff of L. H. Bailey Hortorium, Cornell University: First Edition--1970, Third Printing.

# 1.04 Inspections:

A. Topsoil: The source of topsoil may be inspected by the Landscape Architect after test report submittal to determine the acceptability of the topsoil.

# 1.05 Testing

A. Topsoil: Representative random samples shall be taken from the topsoil source area. These samples shall be mixed and tested as a composite in accordance with standard County Extension Office practices for pH, total soluble salts, porosity, organic content and salinity. Amendments shall be determined and made according to test results. Resultant expenses to be paid by the Contractor.

# 1.06 Delivery, Handling, and Storage

- A. Delivery
  - 1. <u>Notify the Landscape Architect of the delivery schedule 48 hours in advance</u> so the plant material may be inspected upon arrival at the job site. Unacceptable plant material shall be removed from the job site <u>immediately</u>.

- 2. Fertilizer and 'Back to Nature' shall be delivered to the site in the original, unopened containers bearing the manufacturer's guaranteed chemical analysis, name, trade name, or trademark.
- 3. Pesticide material, including soil fumigants, shall be delivered to the site in original unopened containers. Containers that do not have a legible label that identifies the Environmental Protection Agency registration number and the manufacturer's registered uses will be rejected and immediately removed from the site.
- B. Storage: Plants not installed on the day of arrival at the site shall be stored and protected as follows:
  - 1. Outside storage shall be protected from adverse climatic conditions by the use of an on-site area which provides this protection. If no such area exists, the Contractor shall be required to construct a suitable structure which provides protection for the plants.
  - 2. All plants stored on the project shall be protected from drying out at all times by covering the balls or roots with moist sawdust, wood chips, shredded bark, peat moss or other similar mulching material.
  - 3. Plants, including those in containers, shall be kept moist until planted.
- C. Handling
  - 1. Care shall be taken to avoid damaging plants being moved from the nursery or other storage areas to the planting site.
  - 2. Plants shall not be handled by the trunk or stems.
  - 3. Cracked or mushroomed plant balls will be rejected. A suitable method of handling shall be employed to preclude cracked or mushroomed plant balls at the point of delivery.
  - 4. Plants shall be protected from freezing or drying out by a covering of burlap, tarpaulin, or mulching material during transportation from the heeling-in bed to the planting site.
  - 5. Damaged / diseased plants will be rejected and shall be removed from the site <u>immediately.</u>
- **1.07** Environmental Protection: All work and Contractor operations shall comply with the requirements of the local, state, or federal Environmental Protection Agencies.
- 1.08 WARRANTY: All sod and groundcover shall be warranted for one (1) year, with one replacement per plant (or area of sod) after the beginning of the Warranty Period.
- 1.09 INSURANCE: Contractor shall have Workman's Compensation and General Liability Insurance.

# Part 2--Products

# 2.01 Plants

- A. Plants shall conform to the varieties specified in the plant list and be true to the botanical name. Where the drawings or specifications are in conflict with ANSI Z60.1, the drawings and specifications shall prevail.
- B. Planting stock shall be well-branched and well-formed, sound, vigorous, healthy, and free from disease, sun scald, windburn, abrasion, and harmful insects or insect eggs, and shall have healthy, normal, and unbroken root systems.
- C. Ground covers and vines shall be vigorous, have the number and length or runners and clump size specified, and be the proper age for the grade of plants specified. Only vines and ground cover plants well established in removable containers, integral containers, or formed homogenous soil sections shall be used.
- D. Plants of the same species shall be matching in height, spread and branching habit unless otherwise indicated.
- E. Plants shall have been grown, or acclimatized under climatic conditions similar to the locality of the project.
- F. The minimum acceptable sizes of all plants, measured before pruning and with branches in normal position, shall conform to the measurements indicated in the plant material list. Plants larger in size than specified may be used with the approval of the Landscape Architect with no change in the contract price. If larger plants are used, the ball of earth or spread of roots shall be increased in accordance with ANSI Z60.1.
- G. The Contractor shall facilitate inspection and identification by labeling trees and bundles or containers of the same shrub, ground cover, or vine with a durable, waterproof label and weather-resistant ink. Labels shall state the correct plant name and size as specified in the list of required plants. Labels shall be securely attached to plants, bundles, and containers of plants, and shall be legible for 60 days after delivery to the planting site.
- H. Plant material shall be nursery grown unless otherwise indicated and shall conform to the requirements and recommendations of ANSI Z60.1.
- I. Plants shall be dug and prepared for shipment in a manner that will not cause damage to branches, shape, and future development after planting.
  - 1. Container grown plants shall have sufficient root growth to hold the earth intact when removed from containers but shall not be root bound.

# 2.02 Topsoil:

A. Additional topsoil required shall be furnished by Contractor, obtained from a sandy loam topsoil borrow area, and shall be a natural, friable soil, representative of productive soils in the vicinity.

- B. Topsoil shall be obtained from well-drained areas, and shall be free of admixture of subsoil and foreign matter or objects larger than one (1) inch in any dimension, toxic substances, and any material or substances that might be harmful to plant growth.
- C. The pH range shall be 6.5 to 7.5 and have an organic content of not less than 2%. Additional topsoil shall be tested in accordance with Article 1.05 Testing.

# 2.03 Soil Conditioners:

A. Organic soil conditioner shall be "Back to Nature" Cotton Burr Compost by South Plains Compost, Inc., or pre-approved substitute.

# 2.04 Fertilizer:

- A. Shall be a commercial grade and uniform in composition and shall conform to applicable federal regulations.
- B. Granular fertilizer shall be Ozmocote 18-6-12 or pre-approved substitute.

# 2.05 Mulch:

- A. Shall be free from deleterious materials and shall be stored as to prevent inclusion of foreign materials.
- B. Organic mulch materials shall be shredded cypress mulch free of any reproducing plant parts or deleterious materials.
- **2.06** Water: Shall not contain elements toxic to plant life. Water shall be provided to the site by watering truck for the installation of the planting and the cost of this shall be included in the cost of the landscaping.

# 2.07 Metal Bed Edging:

A. Shall be commercial grade model 1007-6, three sixteenth by six inch (3/16"x6") steel, with tapered stakes, sixteen (16") long and 4 stakes per 10' length, as manufactured by Col-met or approved equal (www.colmet.com). Color shall be black.

# Part 3-- Execution

# 3.01 Planting Seasons and Conditions

- A. Planting shall be done between the dates of 15 September through 15 June.
- B. Planting shall be done with the approval of the Landscape Architect only when the ground is not frozen, snow covered or in an unsuitable condition for planting.
- C. If special conditions exist that may warrant a variance in the above planting dates or conditions, a written request shall be submitted to the Landscape Architect stating the special conditions and proposed variance.

# 3.02 Layout

- A. Shrubs shall be staked on the project site by the Contractor and approved by the Landscape Architect before any plant pits or beds are dug. The Landscape Architect may adjust plant material locations to meet field conditions.
- B. After layout is approved, all weeds shall be removed from beds as directed by Landscape Architect.

# 3.03 Excavation for Planting

- A. Prior to preparing plant beds (in this case the entire back-of-curb area of the medians), the area shall conform to the lines and grades shown on the plans and the location of any underground utilities shall be verified on site by the Contractor.
- B. Damage to utility lines shall be repaired at the Contractor's expense.
- C. Rocks and other underground obstructions shall be removed to a depth necessary to permit proper planting according to plans and specifications.
- D. If underground utilities, construction, or solid rock ledges are encountered, other locations may be selected by the Landscape Architect.
- E. All standard planting beds (the entire back-of-curb area of the medians) shall have 24" depth of planting mix. Planting mix shall consist of 25% "Back to Nature" and 75% sandy loam topsoil and be well blended forming a consistent mix.
- **3.04 Excess Topsoil:** Shall be removed from the project site, or as directed by the Landscape Architect.

# 3.05 Setting Plants

- A. Balled and burlapped and container grown plants shall be handled and moved only by the ball or container.
- B. Plants shall be set plumb and be held in position until sufficient soil has been firmly placed around roots or ball.
- C. Plants shall be set in relation to surrounding grade so that they will be the same depth at which they were grown in the nursery or container.
- D. Container grown stock shall be removed from containers in such a way as to prevent damage to plant or root system. Planting shall be completed as specified herein under balled and burlapped plants.
- **3.06** Fertilization: All bed areas shall be top-dressed with 18-6-12 Ozmocote at a rate of two pounds (2#) per 100 square feet for beds. If any fertilizer adheres to plants, it shall be carefully flushed off.

# 3.07 Mulching

- A. Placing organic material: Mulch shall be spread to a uniform thickness of three inches (3") or as shown on plans.
- B. Mulch shall be kept out of the crowns of shrubs and off buildings, sidewalks, light standards, and other structures.
- 3.08 **Pruning:** New Plant Material Shall Be Pruned In The Following Manner:
  - A. Typical growth habit of individual plants shall be retained with as much height and spread as is practical.
  - B. Cuts shall be made with sharp instruments.
  - C. Trimmings shall be removed from the site.
  - D. Do not remove any top growth to compensate for diminished root ball size.

# 3.09 Restoration and Clean-Up:

- A. Excess and waste material shall be removed daily.
- B. When planting in an area has been completed, the area shall be cleaned of all debris, spoil piles, and containers.
- C. Paving shall be cleaned when work in adjacent areas is completed.

# 3.10 Maintenance During Installation:

- A. Maintenance operations shall begin immediately after each plant is planted and shall continue as required until acceptance.
- B. Plants shall be kept in a healthy, growing condition by watering, pruning, spraying, weeding, and any other necessary operations of maintenance.
- C. Plant water basins and beds shall be kept free of weeds, grass, and other undesired vegetation.
- D. Plants shall be inspected at least once per week by Contractor, and needed maintenance performed promptly.
- E. Plants shall be hand watered by watering truck to provide a 1 ½" per week when there has been insufficient rain to sustain the plants. This shall be done until final acceptance.

# **End of Document**

