SCOPE OF WORK

<u>INTENT</u>

The intent of this bid is to provide drill shafts as needed/requested to the City of Arlington. Drill shafts will be within the City's right of way including but not limited to various locations within the City of Arlington, in accordance with the following standards, terms, and conditions.

The City is sensitive to the Contractor's cost of mobilization and intends to work with the Contractor, as much as possible, to assign reasonable quantities.

The City reserves the right to make a bid award to either one vendor or to multiple vendors, whichever is in the best interest of the City. If the award is made to multiple vendors, it will be either as one vendor being the primary vendor or by line item listed on the pricing section.

COMPLAINCE: This bidder shall adhere to:

- Texas Department of Transportation's (TXDOT) Standard Specifications and Special Provisions for Construction of Highways, Streets and Bridges, item 476, (2004) Edition,
- City of Arlington Storm Water Pollution Control Ordinance, Amended by Ordinance No. 10-019 for the Prohibition of Non-Storm Water Discharges to the Storm Drainage System
- City of Arlington Mobile Source Air Pollution and Ozone Reduction Policy is Administrative Policy 14
- City of Arlington Vehicle Idling Ordinance, 08-076 Motor Vehicle Idling Restrictions, and Traffic Code Section 5.15
- City of Arlington Health and Sanitation Ordinance No. 10-021, Article II,
- Federal Motor Carrier Safety Regulations known as 49 CFR Part 382,
- 29 CFR 1910 Standards; OSHA Safety and Health Standards,
- 2010 Heavy Duty Diesel Emissions Standard
- Dust control per EPA

DRILL SHAFTS

The dimensions shown on the plans for location of signal foundations, conduit, and other items shall be placed as indicated, will be provided on a job by job basis and may be varied to meet local conditions. All pole foundation locations shall be field verified, and any adjustments approved by the City Signal Inspector prior to construction.

The CONTRACTOR shall notify the City of Arlington Traffic Division at least 48 hours before placing concrete. Class "A" 3000-psi concrete shall be used as a minimum. Cylinders will be made for testing by City personnel.

Concrete cylinders shall meet or exceed a minimum compressive strength of 3000 psi at 28 days after pouring. Failure to meet this minimum will require replacement of the foundation at the CONTRACTOR's expense. All foundations shall be finished with trowel to provide a pleasing appearance.

RESPONSE TIMES

- Construction call out: For standard Notice to Proceeds requiring directional bore(s) and/or J box/pull box installations, the City will require a seventy-two (72) hour response from time of notification, this will allow for Contractor to contact utility contacts and 1-800-DIG-TESS for locates.
- Emergency response time: Emergency call outs may require as quick as four (4) hours. An emergency response taking more than twenty-four (24) hour will be considered non-acceptable.

NOTICE TO PROCEED, WORK ORDERS, AND SCHEDULING

Notice to Proceed

The Contractor will be contacted by the City via phone or by email to initiate work at the designated location

City personnel will set a meeting with the Contractor at a predetermined time at the site where the work is to be performed. This meeting should take place not later than three (3) working days after the telephone or email notice to the Contractor.

During this site meeting, the contractor and City Inspector will determine specifications and locations for the work to be performed.

After the meeting the Contractor will be required to call in all locates and shall have the boring operation and/or pull box installation completed within five (5) working days after the marking of the last utility location.

Work Order

The City will provide the Contractor a Purchase Order (PO) for the requirements to perform a drill shaft operation and/or pull box installation, and

The contractor must obtain a Purchase Order (PO) number from the City prior to the performance of the job obligating the City for payment.

Scheduling within the Entertainment District must be strictly adhered to. This area considered a high public profile and visibility area, and it will be crucial that all work is performed within the time schedules provided by the City of Arlington.

- Clean up will be required at the end of each work day,
- The Contractor's failure to maintain the set schedule within the Entertainment District will result in Liquidated Damages. The City will implement a liquidated damage of \$500 per day for each day work is not completed on schedule. Liquidated damages will compound daily until all work has been accepted by City, and

The Contractor agrees that due to events beyond the City's control, the Contractor may be required
to change locations within a twenty-four hour notice. This type of change will not reflect adversely on the
Contractor and the City may allow an additional day to the changed locations work schedule for
mobilization if necessary.

PRE AND POST DRILL SHAFT STANDARD OPERATION

Contractor will keep all disturbances of property to a minimum and will return all excavated areas to asgood-as or better condition than prior to the excavation for the bore and installation of the conduit system.

Construction Easements: The City will aid in locating easements for equipment should operation extend beyond the allowable time as specified herein due to situations which the Contractor is not responsible for such as sporting/entertainment event scheduling, weather, etc. Said easement will only be utilized for City of Arlington jobs as specified by each Notice to Proceed. Easement will not be used as Contractor's location for general storage; any evidence of such random storage will result in all equipment being removed and impounded at Contractor's expense, and award may be suspended or terminated at the City's sole discretion

Safety: The contractor shall provide for the safety of the general public, whether motorized or pedestrian, at all times.

Barricading of hazardous areas will be required, as well as covering all open excavations with steel plating or plywood of a sufficient thickness no less than 5/8" thick and providing barricade lights for hazardous areas that are left overnight. All barricades shall be correctly weighted at base so not to blow in to the traffic lanes or sidewalk area.

Safety fencing/mesh may be used, however it must be installed in a very neat, clean, and professional manner; any (fence) sagging that occurs will require Contractor to return to the job sight immediately and re-secure fencing in a taut manner.

When required, the contractor shall provide for flagmen to ensure the safe passage of traffic.

Permits and Notifications:

Permits will not be required on City streets,

Permits within Texas Department of Transportation (TxDOT) shall be obtained and the responsibility of the City of Arlington, as TxDOT issues permits to the municipality not the contractor.

Notification to TxDOT is the responsibility of the Contractor. A forty-eight hour notice must be given unless otherwise required by the State. All cost associated with a jobsite shutdown due to the Contractor's failure to properly provide notification to TxDOT will be the responsibility of the Contractor. The City will not be held responsible for such shutdowns, or any cost as a result.

Removal of Concrete: Should an existing site have existing concrete, all concrete must be saw cut full depth at each boundary line of the section of pavement to be replaced, prior to removal of pavement, resulting in a straight, structurally sound edge.

• The Contractor shall be responsible for disposal of all materials and soil from the job site.

- All excavated materials shall be removed from job site on a daily basis.
- No stockpiles shall be permitted on residential streets without prior approval from the PWT Inspector.

Excavation: All excavation necessary for the relief pits and pull boxes will be subsidiary to the unit prices bid for directional boring.

Backfill: Backfill material shall consist of the native material obtained from excavation of site unless, in the opinion of the PWT Inspector or designee, this material is unsuitable for use.

- The material shall be of a topsoil nature and shall not contain trash or other debris,
- Sand shall not be used for backfill material unless the native soil in the construction area is sandy in nature,
- Backfill shall be placed in such a manner as to eliminate voids in the backfilled area,
- The use of power equipment to place the backfill or bring it to grade shall be limited to a hand-type tamper, either manual or automatic, and
- Hand raking shall be used to bring the backfill material to proper grade.

Sod Replacement: When work requires grass to be removed, Contractor shall re-sod once construction is complete.

- Grass shall match and be level with existing sod. An approved topsoil material, four inches (4") in depth, shall be placed prior to placement of sod.
- Sod replacement is considered an incidental cost up to twenty (20) sqft., and
- Additional sod requirement by the City will be paid under the contingency line of the quotation page herein.

Clean-up: adequate cleanup shall beperformed by the Contractor at the end of each work day and prior to acceptance of the work within each Assigned Project Area(s) resulting in a payment.

Excessive spent materials such as soil, rebar, chairs, forms, spills, or personal debris are to be removed daily.

All loose debris from cleaning is to be removed from the pavement surface and City's right of way.

Clean-up in the Entertainment District shall be performed as needed, but no less than daily. There shall be mudding or excessive soil left of the sidewalks or pavement structures. Failure to remove all access dirt or mud will result in Contractor being required to clean area prior to the beginning of the next day's scheduled work.

Disposal of Excess Materials:

The excess material resulting from construction includes but is not limited to, excess soil, concrete, mud (or lubricants) shall be removed and disposed of by the Contractor on a daily basis.

It is the Contractor's responsibility to provide the appropriate vehicles to remove excessive materials.

- Dump trucks must be tarped while in transit to disposal sites. Tarps must be secured and not torn or tattered,
- All applicable State and local laws and ordinances related to the hauling, handling of such materials, and all materials must be disposed of in accordance with all city, County, State, and Federal laws,
- Suitable and acceptable disposal sites are solely the responsibility of the Contractor. The City shall in no way be responsible for the actions or any implied authority of the Contractor's actions to dispose of materials.
- All debris placed in Contractor's dump truck, vac truck, personal vehicles, or other Contractor owned equipment becomes the property and ownership of the Contractor.
- Use of a Roll Off Box shall meet City of Arlington Ordinances.

Directional drilling mud must be used in a best practice method, so to prevent any potential for an uncontrolled release ("frac out") of drilling mud into the environment or through the pavement structure.

Mud will not be discharged into storm water drains. Any violation of this will be grounds for immediate termination of contact, and Contractor will be responsible for the full amount owed for the environment remediate of City owned properties affected by such discharge. There will be no Notice to Cure regarding this requirement.

PERFORMANCE MEASURE

All work was performed in accordance to the bid specification within the allotted time provided per site.

Pricing for Materials and Labor:

The bidder is cautioned that Texas Law regarding tax exemption for City projects has been revised. It is the sole responsibility of the bidder to obtain the latest information from the State Comptroller's Office and/or other appropriate entities as needed.

Pricing per linear foot or each will include all labor, travel, fuel, freight, taxes, levies, fees, prep work and clean up, all joint fusions, power, equipment and tools, superintendence, personal protective equipment per OSHA Standards, incidentals, and traffic control complete and in place throughout the term of the Bid Specification if not already included within the assigned project areas scope of work, all mobilization costs including any incidentals, or any other charges associated with services provided.

Contractor shall conduct operations in a manner that reflects favorably on the City. Calls from citizens concerning poor performance will be verified and if deemed correct the contractor shall be notified. Continued performance issues will result in cancellation of the contract.

Construction Water:

Construction water necessary for the normal construction of this project will not be provided free to the Contractor.

All construction water will be metered by City owned meters and only these meters. The Contractor is responsible for paying the current rate for the meter at the Customer Services Office, 101 West Abram, First Floor of the City of Arlington Municipal Building, prior to picking up the meter.

There will be a fee and deposit for furnishing the meter. These meters will be furnished by the City of Arlington and will be picked up at the City of Arlington Water Utilities Field Operations Building – 200 North Cooper. The meter is to be read and billed each month in accordance with the current Customer Services Policy.

Construction water necessary for the normal construction of this project will not be provided free to the Contractor. All construction water will be metered by City owned meters and only these meters. A fee of one thousand eighty-eight (\$1,088) dollars is required for a construction meter.

The fee is to be paid at the Customer Service Office, 101 W. Abram, 1st Floor, prior to picking up the meter. Fifty (\$50) dollars will be deducted from the one thousand eighty-eight (\$1,088) dollars as a fee for furnishing the meter. The remaining one thousand thirty-eight (\$1,038) dollars is the amount of the deposit.

- a. Any damage that occurs to the meter during this time will be repaired by the City of Arlington at the expense of the Contractor. The cost of the repairs will be deducted from the deposit and the remaining deposit returned to the Contractor,
- b. This procedure will be followed wherever construction water is needed. No exceptions to the rule will be sanctioned,
- c. If the meter is set on a fire hydrant, a valve shall be provided so that the operating nut on the fire hydrant does not control the flow of the water,
- d. Where water is necessary only to settle dust on the street at the request of the property Owners, the Street Superintendent or Inspector will notify the Contractor, and
- e. The necessary application of water for dust shall be considered subsidiary to the other bid items listed herein.

Testing: All testing required by these special specifications is to be performed using Texas Department of Transportation (TXDOT) testing methods and their bulletins.

- 1. The City will be responsible for covering cost associated with the first test; however, any re-testing required will be the responsibility of the Prime Contractor.
- 2. The City will schedule testing. Test shall include, but is not limited to, compaction and concrete tests, etc.

Troubleshooting Problems: Should problems with boring occur, Contractor will be required to work with Inspector's to develop a method(s) of trouble shooting. The Contractor will be required to follow best practices, manufacturer's recommendations, and warranty guidelines in an effort to trouble shoot any problems.

EQUIPMENT

1. **General Equipment:** Includes Supervisor's pickup trucks, debris transfer vehicles, service trucks, boring rigs, dump trucks, and any other item of equipment necessary to provide services as described in these specifications. All vehicles used by the Contractor are subject to, and must be performance worthy by visual and operational inspection. All equipment must meet the most current EPA emissions standard as applicable, with any exceptions listed herein.

Truck beds must be free of contaminants and if bed slid is used, the product must be EPA approved. All loads must be tarped during transport.

- 2. **Equipment Breakdown** At no time shall the Contractor be unable to perform scheduled operations due to the lack of parts for more than a twenty-four (24) hour period, except in the Entertainment District. If equipment failure or breakdown occurs and such failure or breakdown prevents the Contractor from performing scheduled non-emergency or emergency services over a twenty-four (24) hour period.
- 1. Breakdowns which affect the Entertainment District will result in Liquidated Damages at a rate of \$500.00 per day until services are able to be re-established.
- 2. Any rental or repair costs associated with and to continue these specification schedules will wholly be the responsibility of the Contractor, and will be solely between the Contractor and its third party.

WORKING DAY

A working day is defined as a calendar day, including Saturdays and legal holidays except documented inclement weather days, Sundays and the following holidays:

January 1, Martin Luther King Day, President's Day, Good Friday, Memorial Day, July 4, Labor Day, Thanksgiving, Friday after Thanksgiving, December 24 and December 25.

Time will be charged for all calendar days. Work on Sunday and on any of the eleven (11) legal holidays listed above will not be permitted except in cases of extreme emergency; then only with the written permission of the PWT Inspector or designee. If Sunday work or work on the eleven (11) legal holidays listed above is permitted, working time will be charged on the same basis as described above.

<u>DELAYS</u>

The Contractor shall bear the burden of all costs, expenses and liabilities which he may incur in connection with suspensions or delays, and such suspensions, delays, costs, expenses and liabilities of any nature whatsoever, whether or not provided for in this contract, shall conclusively be deemed to have been within the contemplation of the parties. Including failure to obtain approval from TxDOT to start project.

Conditions may prevail which limit Contractor from performing scheduled job starts or unforeseen delays which the City makes no representation or guarantee(s) as to when the construction site or any part thereof will be available to perform work.

Whether conditions at the construction site are such to permit the Contractor to perform without interruption or by any particular sequence or method, or as to whether the performance on the Contract can be completed by the time required under this Contract or by any other time.

Wherever in connection with this Project Specification it is required, expressly or otherwise, that the City shall perform any act relating to the Contract Specification, including making available or furnishing any real property, materials or other things, no guarantee is made by the City as to the time of such performance and the delay of the City in fulfilling such requirement shall not result in liability of any kind on the part of the City except only to the extent, if any, that an extension of time may be due as expressly provided for in this Contract Specification.

LIQUIDATED DAMAGES

The Contractor will pay the City the amount(s) as specified herein, compounding each day of delay unless City Inspector provides a waiver.

Execution under these Bid/Project Specifications shall constitute a binding agreement and understanding by the City and Contractor that liquidated damages will be assessed as defined herein, and is the minimum value of the costs and actual damage(s) caused by failure of the Contractor to complete the work within the allotted time frame, and that such sum is not to be considered as a penalty, but shall be deemed, taken and treated as reasonable liquidated damages, since it would be impractical and extremely difficult to assess the actual damages caused by the Contractor's delay. It is agreed that such sum(s) may be deducted from payments due the Contractor if such delay occurs.

The nature of this Bid/Project Specification is such that the overall project may be separated into one or more smaller projects, each with its own Notice to Proceed letter being issued. Each Notice to Proceed notification and/or Purchase Order shall have a maximum number of calendar days (as agreed upon in advance by the City and the Contractor) identified to allow the completion of said project(s), if different than what is allowable within these Bid Specifications.

(+) The parties agree that damages consequent to a breach of this section are not readily ascertainable at the time of execution of this Bid/Project Specification, and agree that amount stated herein, per incident is an amount proportionate to the cost incurred by the City as a result of such breach. The parties agree that this amount is not intended as punitive damages

REMOVAL OF UNACCEPTABLE WORK

Unacceptable work may include, but are not limited to, any runs which do not perform properly during installation, collapse of bore run, defective materials, unauthorized work, sinking or failures around pull boxes.

- 1. All work which has been rejected or condemned shall be repaired or when said work cannot be repaired satisfactorily, it shall be removed and replaced at the Contractor's whole expense within five (5) working after receiving notice. Work done without proper inspection, as well as, any extra or unspecified work done without written authority by the PWT Inspector or designee and/or prior written agreement by the City as to the price shall be done at the Contractor's risk and will be considered unauthorized. All unacceptable work deemed by the PWT Inspector or designee will not be measured or paid for, and may be ordered to be removed at the Contractor's whole expense.
- 2. Upon failure of the Contractor to make repair satisfactorily or as directed to remove and replace rejected, unauthorized, or condemned work or materials within the required five (5) working days, the City

will reserve in whole the right to authorize the defective and/or unauthorized work to be removed and replaced. The total deduction of all costs associated with such remedy will be deducted from any monies due, or to become due to the Contractor.

- 3. Upon reasonable and documented attempts between the awarded Contractor and City to bring any unacceptable work to an acceptable level, make repair satisfactorily or as directed to remove and replace rejected, unauthorized, or condemned work or materials within the required five (5) working days, the City reserves the right to notify the awarded Contractor that the City has opted to hire a third party Contractor; and understands the third party may be one of the alternate awardees of this contract. The City may contact such third party contractor, at any costs, to repair any unacceptable site(s) within the Assigned Project Area(s) which are deemed unacceptable in part or whole. This may include but is not limited to, full removal and replacement of rejected, unauthorized or condemned work or materials at the Contractor's whole expense. The total deduction of all costs associated with such remedy will be deducted from any monies due, or to become due to the Contractor.
- 4. Unauthorized Work is work performed without proper inspection, as well as, any extra or unspecified work done without written authority by the Contract Coordinator or designee and/or prior written agreement by the City as to the agreed upon price shall be done at the Contractor's risk and will be considered unauthorized. All work deemed unauthorized by the Contract Coordinator or designee or designee will not be measured or paid for, and shall be at the Contractor's whole expense.

CONTRACTOR WARRANTY

Contractor shall warrant services provided for no less than twelve (12) months. Warrant must include, but is not limited to, latent defects, poor workmanship, material mishandling, or poor material quality, failure at conduit site in its entirety, joints fusion failures, settling, and fracturing concrete apron due to poor construction. Warranty must include all materials and labor to correct problem to the satisfaction of the City Inspector.

Contractor's work will be documented as a Vendor having poor performance and therefore, causing negative documentation. Any negative documentation may result in the vendor not be considered for future awards for three years.

Breakdowns which affect the Entertainment District will result in Liquidated Damages at a rate of \$500.00 per day until services are able to be re-established.

SPECIAL PROVISIONS

- Contractor shall keep the existing drainage structures open and free from all construction debris. The contractor shall protect manhole covers, valve box lids, etc. from being damaged by equipment.
- The Contractor is prohibited from discharging any liquid pollutants from equipment onto the roadsides, down storm drains via street inlets or drains accessible through manholes.

Hours of Work:

- On thoroughfares and residential collectors, work shall not begin before 9:00 a.m. and will end by 4:00 p.m.
- On residential streets, work shall not begin before 8:00 a.m. and will end by 5:00 p.m., unless otherwise specified.
- All other times and weekend work shall be approved the Contract Coordinator or designee.
- Contractor shall not place or leave any construction materials, tools or trash on citizen's lawns. In the event
 any damage occurs on private property, Contractor will repair or replace to original condition at the
 Contractor's expense.
- Contractor shall not take lunch or breaks on citizens' lawns.
- Any contact with citizens must be done in way which reflects favorably upon the city. If conflict occurs, Contractor shall immediately contact the Contract Coordinator or designee.
- The Contractor shall try, at all times, to leave private driveway and roadways open to all citizens living along the street and to provide ingress and egress to their property. It is not the intent of this provision to work a hardship on the Contractor or his forces, and it is realized that there will be times when it is impossible to provide ready access to all property; however, the Contractor will attempt to keep drives open as long as it does not, in the opinion of the PWT Inspector, interfere with the progress of the work.

Measurements for each street shall be verified by the contractor and inspector upon completion of each street.

INGRESS AND EGRESS

The Contractor shall try at all times to leave private driveway and roadways open to all citizens living along the street and to provide ingress and egress to their property. It is not the intent of this provision to work a hardship on the Contractor or his forces, and it is realized that there will be times when it is impossible to provide ready access to all property; however, the Contractor will attempt to keep drives open as long as it does not, in the opinion of the PWT Inspector interfere with the progress of the work.

SAFETY REQUIREMENTS

All equipment used in CONCRETE operations shall be equipped in accordance with existing State law, and shall be equipped with a flashing light with the following characteristics:

- Visible (during day or night) for a minimum of one (1) mile,
- Flash sixty (60) to ninety (90) times per minute,
- Mounted for three hundred sixty (360) degree visibility,
- Equipped with an amber lens,

- The safety of the public and the convenience of traffic and aircraft shall be of prime importance, and
- The Contractor shall exercise reasonable precautions, at all times, for the safety of employees and others on or near the work and shall comply with all applicable provisions of Federal, State, and Municipal Safety Laws and Building and Construction Codes.
- The Contractor must review and adhere to the Occupational Safety and Health Act (OSHA) and amendments thereto.
- 1. Contractor shall provide all personal protective equipment. Contractor shall be solely responsible for the verification that subcontractor's employees comply with personal protective equipment requirements. Contractor shall bear sole responsibility of compliance with PPE requirements.
- 2. Contractor shall wear and/or display proper warning devices (safety vest, flashers, strobe lights, warning signs, etc.) in order to ensure both employee and public safety. Contractor and his employees shall dress and remain dressed in a presentable manner due to high public visibility of these employees. Should problems occur, Contractor will be advised of the circumstances and shall take appropriate action(s). Dressing problems include but are not limited to bare chest (no shirt), shorts, tennis shoes, etc.
- 3. Unless otherwise provided in these specifications, all portions of all streets and airfield shall be kept open to traffic at all times throughout CONCRETE operations. Provisions for directing traffic will not be paid for by the City, but shall be considered as subsidiary work to the various bid items for CONCRETE services. The Contractor's equipment shall move in the same direction as traffic at all times during all CONCRETE operations.
- 4. <u>Performance measure</u>: Proper warning devices and clothing used to ensure high visibility of employees that work on roadways.

PROTECTION OF THE PUBLIC:

- 1. For protection and convenience of the public and emergencies, the successful Prime Contractor shall furnish the City with two (2) telephone numbers at which the Contractor can be contacted 24 hours a day during the entire construction period of this project. These telephone numbers shall be furnished to the City in writing prior to the beginning of construction.
- 2. The City is committed to maintaining an alcohol, drug, and firearm free workplace. Possession or use of firearms, or possession, use of or being under the influence of alcohol or controlled substances by Contractor's employees or Subcontractors' employees while in the performance of any service(s) is strictly prohibited. Violation of this requirement may constitute grounds for immediate cancellation of the Bid/Project Specifications. The City reserves the sole right to determine whether violations deem cancellation.
- 3. The City is committed to purchasing goods and services having the least adverse environmental impact within the constraints of statutory purchasing requirements, departmental need, availability, and sound economical considerations.

- 4. The Contractor shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any court or administrative bodies or tribunals in any matter affecting the performance of this Bid/Project Specification, including minimum salary and wage statutes and regulations, prompt payment and licensing laws and regulations. The Contractor shall maintain, and verify all Subcontractors maintain all required licenses, certifications, etc throughout the term of the Bid/Project Specification herein. When required or upon request, Contractor shall furnish the City with satisfactory proof of its compliance.
- 5. The Contractor shall at all times conduct the work in such manner as to ensure the least possible obstruction to public traffic and protect the safety of the public. Public safety and convenience and provisions therefore made necessary by the work, shall be the direct responsibility of the Contractor and shall be performed at his entire expense. Materials placed on the site or materials excavated and the construction materials or equipment used shall be located to cause as little obstruction to the public as possible.
- 6. The City reserves the right to remedy any neglect on the part of the Contractor regarding public convenience and safety, which may come to its attention. The cost of such work done or materials furnished by the Owner shall be deducted from monies due or to become due to the Contractor.

CONTRACTOR TWENTY-FOUR HOUR AVAILABILITY

Failure to comply with the Protection of the Public requirement which results in unsuccessful attempts to contact the Contractor will result in Contractor being accessed liquidated damages. In the event the City has to secure a jobsite or handle any issues which are the responsibility of the Contractor, liquidated damages in the amount of no less than five hundred dollars (\$500) a day plus overtime and equipment costs will be accessed. A day will be defined as a day ending at midnight.

PRIVATE PROPERTY

1. PHOTOGRAPHIC DOCUMENTATION

Prior to the beginning of any work, the Contractor shall supply the City's Contract Coordinator or designee with an electronic record of existing conditions of all adjacent work areas to protect themselves and the City against any unfounded claims of damage to personal property that may impede the work surface. All documentation is to be submitted to the City on DVD and in a universal format for easy viewing,

2. PROTECTION OF ADJACENT PROPERTY

The Contractor shall be responsible for the protection of all fences, trees, curb and gutter, and other improvements on the property adjoining the construction sites from damage by the Contractor's equipment and men. The Contractor shall be responsible for notifying the property owners in advance of any trimming to be done on trees. The Contractor will notify the Contract Coordinator or designee of any trees, shrubs, or bushes that must be removed by the construction. No trees will be removed by the Contractor until permission is granted by the Inspector or his designated representative. The Contractor will not be allowed to place excess material, forms, equipment, or any other material outside the street right-of-way without written permission of the property owner and approval of the Contract Coordinator.

3. USE OF PRIVATE PROPERTY

The Contractor shall not at any time use private property to park or turn around construction vehicles or store equipment and/or materials without the written permission of the property owner involved. The Contractor shall not at any time use water metered by meters set for the property owner's use without permission of the property owner(s). See Paragraph herein regarding Construction Water.

4. DAMAGE TO OTHER PROPERTIES

The Contractor shall be liable for all damages to City property including, but not limited to equipment, vegetation, private property and contents abutting the City's job site resulting from the Contractor's or Subcontractor's work or negligence in performance of the work by the Contractor's or Subcontractor's personnel or equipment.

The Contractor will be responsible for any and all damages either to the City's or private citizens as a result of damaged sewer and/or water lines.

This in no way limits or eliminates the indemnification as defined herein.

UTILITIES

Utility conflicts will be handled on a case by case basis meaning, minor adjustments such as valve adjustments, meter boxes, control boxes and manholes will be the responsibility of the Contractor whereas, major adjustments such as relocation of a traffic cabinet will be the responsibility of the City. These will be considered incidental and will not be compensated by the City.

1. **LOCATES:** Contractor should not assume the City of Arlington has Subsurface Utility Engineering (SUE) maps for any of the proposed locations, therefore, Contractor is required to call 1-800-DIGTESS in a timely manner so that all utility issues may be addressed and resolved within the allotted time provided within the Notice to Proceed. The City will not be responsible for obtaining locates for the Contractors. The relocation of any utilities may not alleviate Contractor from the allowable days for completion. Alternative locations must be worked simultaneous as a result of any unforeseen utility work. The only exception to this is if DIG-TESS are not able to respond due to any extraordinary circumstances such as ice, rain, etc. Any such circumstance must be documented, and verified by the City.

It is the Contractor's sole responsibility to call, locate, and coordinate any utility issues with the proper utility designee(s) not covered by 1-800 DIGTESS. This may include, but is not limited to, general utility questions or coordination of construction related to existing utilities. Any coordination efforts to relocate utility must be agreed upon by the City and/or Contract Coordinator or designee prior to exposure or movement.

Contractor must maintain a contract copy/log of confirmation numbers when ordering locates during each term of the award. The log must be readily available to the City upon request. Contractor must call the City's Contract Coordinator or designee twenty-four (24) prior to any construction which disturbs the roadbed, medians, or areas behind edge-line or back of curb to the right of way line.

The City of Arlington Water Public Works and Transportation, as well as telephone and cable may be reached at the following and must be contacted at least forty-eight (48) hours prior to bore:

City of Arlington Public Works and Information Technology	817-459-6550

- 2. **PROTECTION & CLEANING OF EXISTING SEWERS**: If the Contractor, through carelessness or negligence, obstructs the flow through any existing sanitary sewer within the limits of the project, the Utilities Department of the City of Arlington will provide the necessary equipment and labor to clean the obstruction(s) at a rate of no less than nine hundred ten dollars (\$910.00) per hour with two (2) hour minimum per location.
- 3. PROTECTION OF EXISTING STRUCTURES AND UTILITIES: The Contractor may choose either to obtain services through a third party, with City's prior approval, to protect any underground utility or may uncover and determine the elevation and location of all conflicts well ahead of the trench excavation.
- 1. Where excavation endangers adjacent structures and utilities, the Contractor shall, at his whole expense, carefully support and protect all such structures and/or utilities so that there will be no failure or settlement.
- 2. Where it is necessary to move services, poles, guy wires, pipelines, or other obstructions, the Contractor shall notify and cooperate with the utility's respective representatives AND the City's Contract Coordinator.
- 3. Incidents resulting from failure or settlement, the Contractor shall restore the structure or utility to its original condition and disposition without compensation from the City.
- 4. All costs of temporarily, or permanently relocating the conflicting utilities shall be the whole responsibility of the Contractor without extra compensation from the City.
- 5. If in the opinion of the Contract Coordinator or designee, concrete backfill is necessary for the support of the utility lines crossing trenches, the Contract Coordinator or designee may direct 1500 psi concrete backfill be used as instructed by the Inspector.
- **a.** Payment will be made from the Contingency Line (herein) to the Contractor at the unit price for the installation of such quantity of the concrete backfill as directed by the Contract Coordinator or designee.
- 4. **DAMAGE TO EXISTING UTILITIES:** In general, the City and private utility lines within construction limits will be adjusted as needed. Contractor should take every precaution to avoid contact with utility apparatuses such as, but not limited to, traffic signal cabinets, telecommunications cabinets, pedestals, or poles, fire hydrants, as well as underground utilities such as water, fiber, gas, and electricity.
- 1. Contractor must pause operations and contact the Contract Coordinator or designee immediately should an aboveground utility apparatus or overheadline(s), and/or the unearthing of a utility line or bank of utilities line(s) be uncovered, damaged or severed,
- 2. Should a hit and/or damaged occur to any existing structure or utility other than City owned utilities, including but not limited to, any residual damages done to other facilities or structures,, it will be the Contractor's sole responsibility to notify the utility company(ies) effected and the City Contract Coordinator.

City utilities that are damaged including water or sewer line will result in an hourly fee in the amount of \$910.00 per hour until utility has been fixed, with a minimum (four) 4 hour charge.

3. Gas Line Breaks: In the event of a gas line strike the operator must immediately secure the job site and notify 911,

All Underground Pipeline Damages Involving Excavation or Boring

- 1. All Contractors performing such excavation or boring must follow the Excavator Reporting Procedures outlined at the Railroad Commission of Texas website.
- 2. All underground pipeline damages must be filed by the pipeline operator and the Contractor involved with the excavation or boring operation through the Commission's online reporting system.

(https://www.rrc.texas.gov/pipeline-safety/)

- 3. It is the sole responsibility of the Contractor to execute and insure full oversight of reporting and repair should such incident occur. The City will not be responsible for executing, reporting, or oversight of such incident(s).
- 4. The Contractor shall **not** adjust, remove, or operate existing utilities unless specifically requested to do so in these specifications or authorized to do so by the Contract Coordinator or designee.
- 5. All damages and claims with the utility company(ies) or the City will wholly be the responsibility of the Contractor, and the City will not be held liable for and Contractor shall not seek any compensations from the City as a result of damage(s). Receipt of reconciliation regarding all parties involved may be required prior to the continuation of the contract or renewal of contract. The Contractor shall contact the proper utility representatives for questions or coordination of construction related to existing utilities:

REMEDIES FOR NON-PERFORMANCE

Services resulting in failure on the part of the Contractor during any part of the term of the contract in one or more Assigned Project Area(s) would be reasonable cause for the Contract Coordinator or designee to issue a Notice to Cure (NTC) warning. Failures include, but are not limited to, non-performance of service in accordance with the specifications herein; poor material quality; failure to maintain work schedule; having more than two (2) failed inspections; installing unauthorized work; failure to install materials as specified, and/or remove and replace defective or unauthorized material; failure to replace personnel; or failure to show.

It is the goal of the City to resolve disputes at the most minimal level, therefore,

- 1. Should minor failure(s) occur during the term of this specification the following will apply; minor is defined as remedy with less than 4 hours worth of work:
 - Inspector will verbally warn, and give Contractor instructions to correct minor failure(s) at the Assigned Project Area(s), as well as record the corrective action internally. Upon correction as specified, the Contractor will continue on schedule with no written warning.
 - More than two (2) verbal warnings for the same failure within the term of the contract, or a failure
 to comply with verbal warning shall be sufficient reason for the Contract Coordinator or designee
 to issue a NTC warning. Some known cures will be as follows:

- 2. If failure on the part of the Contractor to maintain the required production rate for Assigned Project Area(s), then Contractor shall respond to NTC by supplying the inspector a schedule of work identifying the required corrections and detail a work schedule to meet the cure, unless otherwise identified within the NTC.
- 3. If work is done without proper inspection, as well as, any extra or unspecified work done without written authority by the Contract Coordinator or designee and/or prior written agreement by the City as to the price, then Contractor is at risk and all work will be considered unauthorized. No work that is deemed unauthorized including materials, tools, incidentals, and mobilization of crew will be measured or paid for, and the NTC may order all work to be removed at the Contractor's whole expense.
- 4. If services fail inspection, then all rejected or condemned work will be outlined in the NTC and must be repaired, or when said work cannot be repaired satisfactorily it must be removed and replaced at the Contractor's whole expense. Contractor must correct any and all deficiencies found in Assigned Project Area(s) by the Inspector beginning the morning after each inspection, or as otherwise mutually agreed upon.
- 5. If the Contractor fails to meet the specifications within the time limits as identified in the NTC, then that portion of work may be removed from Contractor's responsibility and may be reassigned to another contractor at the Prime Contractor's whole expense, and/or the remainder of the contract may result in a material breach.
 - Failure to cure in the specified time of the NTC or forty-eight (48) hours, may result in a suspension until Assigned Project Area(s) are corrected in whole, and/or contract is terminated due to material breach.
- 6. If suspension occurs, Contractor will be required to remediate all failure(s) before continuing future work within the City.
 - Each day of suspension will count as a calendar day (work day).
 - In the event the Contractor does not correct the failures to the satisfaction of the City, or fails to remove and replace rejected, unauthorized, or condemned work or materials after receiving the NTC, and within the specified time, or such greater time as the City may permit, the City shall exercise all rights, including the right to terminate the Contract in whole or part with cause. The Contractor shall pay all costs and attorney's fees incurred by the City in the enforcement of any provision herein or within this document.

- Assigned Project Area(s) that fail inspection will be clearly stated in written communication from the Contract Coordinator or designee to the Contractor. All responses to the NTC must be in writing by the Contractor and submitted at a minimum electronically to the City's Contract Coordinator within five (5) calendar days.
- Catastrophic failures:
- 7. A frac out will result in the job site being immediately shut down and contact City Inspector if not on sight. Following shut down, the Contractor will respond and wholly be responsible for site clean-up and remediation, contacting and reporting incident to the appropriate State and local authorities as required, and job will not re-start until inspected and approval is received that site is clear to continue. A formal NTC will not be issued, however, Contractor is responsible for providing a closure report to the City within five (5) business days after all bore operations are complete.
- 8. Failure to follow procedure indicated herein, will result in termination of award and material breach.
- 9. Disrupting pavement structure/surface will result in the job site being immediately shut down and contact City Inspector if not on sight. Following shut down, the Contractor will respond and wholly be responsible for all repairs/replacements to pavement structure including, but not limited to, roadbed, curb and gutter, and storm water drains. Repairs/replacements will be in accordance with Texas Department of Transportation's (TxDOT) Standard Specifications and Special Provisions for Construction of Highways, Streets and Bridges, item 738, (2004) Edition, and under the direction of the City of Arlington Public Works Director.
- 10. Failure to follow procedure indicated herein, will result in termination of award and material breach.
 - It is fully understood by the Contractor that after reasonable and documented attempts between both, the Contractor and City, to bring any failures/unacceptable work to an acceptable level, the City reserves the right to notify Prime Contractor that the City has the intent to hire a third party Contractor. The City may hire a third party contractor, at any costs to repair any unacceptable sites(s) within the Assigned Project Area(s) deemed unacceptable in part or whole, in an effort to stay on schedule. This may include but is not limited to, full removal and replacement of rejected, unauthorized or condemned work or materials, site clean-up or remediation, roadway or right of way repair/replacement at the Contractor's whole expense.

CITY'S RESPONSIBILITIES

- 1. Issue the Notice to Proceed authorizing the vendor to commence work,
- 2. Provide Assigned Project Areas (APAs) for BORING OPERATIONS,
- 3. Provide an Inspector or designee who will report back to the Contract Coordinator of the Contractor's progress and quality,
- 4. Provide a Contract Coordinator or designee on behalf of the Department of Public Works and Transportation who may make random inspections, re-inspections, monitor Contractor activities, ensure the work performed in the assigned Project Area is done to the quality level prescribed in this Contract and in accordance with prescribed time schedules, however, the Contract Coordinator or designee has no duty or obligation to make inspections. Upon determination of any violation of the specifications and/or terms of this Contract, the Inspector shall record, process, and submit all pertinent information to the Contract Coordinator for appropriate action,
- a. Any provision of the agreement vesting in the City or Inspector the right of supervision or inspection is understood by the parties hereto for the purpose of ensuring that the plans and specifications are complied with, and that the completed work is obtained as described herein, and no such provisions shall be interpreted as vesting in the Owner or Inspector the right to control the details of the work,
- 5. Inform the Contractor in writing when applicable or verbally when necessary that an employee whom appears to be unfit, unskilled, disobedient or is disrupting the integrity of the work site, such employee shall be removed from the worksite, and
- 6. Document and record the inspections of the Assigned Project Areas.

FINAL INSPECTION

- 1. The Public Works Director, Contract Coordinator, Engineer, Inspector or designee will make final inspection of all work included in the Notice to Proceed, including on-site inspections while job is in progress either scheduled or randomly, and as soon as practical after the work is completed and ready for acceptance and final payment.
- 2. If the work is not acceptable to the Public Works Director, Contract Coordinator, Engineer, Inspector or designee at the time of such inspection, the Contractor will be informed in writing as to the particular defects to be remedied before final acceptance will be made.
- 3. Should there be a conflict between the specifications and standard construction practices, the Inspector or designee shall make the final determination.

STOCKPILING AND STORAGE

It shall be the responsibility of the contractor to transport and dispose of all waste material and debris created by the process at no cost to the City. Contractor shall be responsible for acquiring construction easements for equipment and if needed coordinate with the City's Collector roll off boxes or cans for excess materials at no additional cost to the City and only at pre-approved/determined locations, unless otherwise specified.

WORK ZONE TRAFFIC CONTROL

Work zone traffic control will be required when it has not been included in the scope of work for that project area.

- 1. Equip vehicles and equipment with amber warning strobe lights,
- 2. It shall be the responsibility of the Contractor to provide adequate traffic control measures such as fencing, barricades, flagmen, cones, etc., to protect the public from any open pits or uncured concrete surfaces. Advance warning signs and barricades will be required. This shall be in accordance with the City of Arlington Work Area Traffic Control Manual, latest edition as it may be amended from time to time. Only City approved Traffic Control Plans must be used,
- 3. No direct compensation will be made to the Contractor for furnishing, installing, and maintaining message boards, and warning signs and their subsequent removal should they be used. This is to be considered subsidiary to the several items for which unit prices are requested in the bid,
- 4. The Contractor shall submit to the City of Arlington Traffic Engineer, 1011 W. Main St. two (2) copies of site specific traffic control plans for approval two weeks prior, when feasible to closing any portion of a street or causing any obstruction to traffic on any street. The Contractor shall not proceed with the implementation of the Traffic Control Plan until notified by the inspector that the plan has been accepted,
- 5. Daytime lane closures are the only acceptable lane closures unless otherwise mutually agreed upon by the Prime Contractor and City designated representative,

CLEAN-UP

It is the intent of this Bid/Project Specification that an adequate cleanup of loose materials and debris shall be performed by the Contractor at the end of each work day and prior to acceptance of the work within each Assigned Project Area(s) resulting in a payment,

1. In highly visible areas, special attention should be given to minimize the impact of debris and trash on the right of way during all times of the day. Contract Coordinator or designee or designee will identify where, if any, special attention needs to be given in special areas. Special areas, include but are not limited to, the City of Arlington Entertainment District,

Removal of forms, backfilling, and cleaning shall be performed within two (2) working days after concrete has cured. All construction debris, safety devices, and trash from public or private property must be removed within one (1) working day once concrete has cured,

After cleanup has been completed, the Contractor shall verify and if necessary grade all drainage, and other locations back to as-good-as or better condition to provide adequate drainage and to prevent ponding/pooling of the water in the project area(s), and

Additional Specifications regarding Clean Up may be further defined herein or on a case-by-case basis.

FOUNDATIONS:

- 1. The Contractor shall install foundations, including all necessary reinforcing steel, for equipment and poles as required by the City's Foundation Details, the plans and these special provisions. Unless otherwise noted, Class "A" concrete shall be used for all foundations. Pre-cast foundations will not be allowed.
- 2. Foundations shall be monolithic with the exposed surfaces formed and finished to present a neat, smooth appearance. The Contractor shall ensure that the tops of all foundations for poles and pedestals are level and not more than 4-inches above finish grade for proper mounting of the poles. The bottom of each foundation shall rest on undisturbed earth. The concrete edges of the pier shall be chamfered.
- 3. The Contractor shall furnish and install in the foundation a copper clad steel ground rod with a diameter of at least 5/8-inch. The ground rod shall be installed, as shown in the typical drawings so that it extends into the surrounding undisturbed earth at an angle from the side of the foundation for a minimum of 8-feet. The ground rod shall be driven into place.
- 4. Unless otherwise noted, the ground rod shall extend approximately 6-inches above the foundation. The location of the ground rod shall not interfere with the entry, dressing or connection cables.
- 5. Forms for the concrete shall be rigid and securely braced in place. Templates shall be used to properly position and hold in place the necessary conduit, anchor bolts and the ground rod. Immediately prior to pouring the concrete, both the forms and the earth which will be in contact with the concrete, shall be thoroughly moistened.
- 6. After concrete is placed and the top smoothed off, the concrete shall be covered to prevent damage to the foundations finish for at least ninety-six (96) hours. All bracing for anchor bolts shall not be subjected to any applied strain during this curing process.
- 7. Drill shaft shall be protected at all times.

CONDUIT:

- 1. The Contractor shall furnish and install all conduits necessary to complete the work in accordance with the typical drawings, the plans and the other contract documents. Conduit and its installation shall conform to the NCTCOG SPECIFICATIONS unless otherwise noted. Unless otherwise noted, the type of conduit to be used shall be in conformance with the following:
 - A. Schedule 40 PVC Conduit shall generally be used underground and in other conditions unless otherwise set forth above.
- 2. Underground conduit shall be placed at a minimum depth of 36-inches measured from the top of curb.
- 3. Conduits entering concrete foundations for poles, pedestals or control equipment cabinets shall extend approximately 8-inches above the foundations.
- 4. Conduits to be installed in each foundation per City of Arlington standards and stubbed pointing toward the closest pull box. Per the city standards, a 24" X 6' foundations will receive 2" conduit,
- 36"X 12" and 48"X 22' will both receive a 3" conduit.

ANCHOR BOLTS:

- 1. Anchor bolts and templates to be provide by the City of Arlington and installed by contractor.
- 2. For proper angle of the mast arm to traffic adjust anchor bolts for proper signal head alignment.