

Section III – Directional Boring Specifications

The City of St. Charles is requesting bid proposals for directional boring work for the Electric Utility. The work involves polypipe installations for new conductors as well as for replacement of direct buried cable.

Scope of Work:

- There are no planned projects for directional boring. All work on this contract will be emergent based on cable failures or reliability/new business projects.
- The work includes installation of poly pipe, **90°** or **45°** degree galvanized rigid metallic or fiberglass bends at various locations into existing transformers, splice boxes or switchgear. Contractor also to install mule tape thru all installed pipes for future cable pulling by City and as proof of continuity.
- Installation of switchgear pad with **90°** degree concrete encased rigid galvanized steel or fiberglass elbows, and splice boxes with **45°** degree concrete encased rigid galvanized steel elbows into them.
- Rough backfill of any hand or machine dug pits.
- Proper pipe depth shall be a minimum **30”** below grade and a maximum **42”** below grade. Installations requiring a depth greater than **42”** must receive permission from St. Charles Electric Utility Personnel before installation. Any pipe installed at greater than **42”** of depth, without prior approval from St. Charles Electric Utility Personnel, shall be re-bored at the Contractor’s expense. In such case, Contractor will also bear any and all costs incurred by the City to relocate into the new pipe.
- The vast majority of the poly pipe installation will be **5”** and **3”**.

Timeframe for Completion of Work:

Due to the nature of the work, the Contractor will be required to mobilize and perform the work within two weeks of the City request. Bidder must specify factors that limit the ability to complete the work within the above timeframe.

Bid Format:

The quotations shall be on a unit cost basis as per the below units. The standard installation will include two pits, either hand dug or machine dug depending on location, directional bore of polypipe between the two pits, and installation of metallic, fiberglass, or PVC elbows into a transformer, splice box or switchgear. Within a subdivision, when sections of polypipe installations are continuous, only one pit per transformer location should be required. Elbows shall be stubbed into transformers so that the top of the bend is flush with the top of the transformer foundation. Bends stubbed into switchgear shall be installed per individual direction.

After polypipe is installed, the elbows should be stubbed into the equipment in a timely fashion (three days maximum) and then the pit should be backfilled in a timely fashion (three days maximum) unless special circumstances exist.

Certain applications may involve meeting existing pipes, bends or elbows previously stubbed out of equipment. Core drilling and installing pipe into switchgear, manholes and splice boxes may also be necessary.

Contractor is responsible for contacting J.U.L.I.E. and the unit pricing provided below shall include the excavation requirements of exposing existing utilities. Potholes, necessary to locate other utilities, **are not** to be compensated as Splice Pits, but shall be part of the “per foot” unit cost to directional bore. It is expected that potholes be excavated with as minimal disturbance as possible. Where the pothole is in a grassy area, the pothole should be restored immediately using the material taken out of the hole, and such should be included in

the standard cost per foot of boring. Potholes outside of grassy areas, where special landscape restoration is required, will fall under the complex restoration process outlined below.

Any work in energized equipment is to be done by a qualified person meeting the requirements **as stated per OSHA 1910.269**, while City of St. Charles personnel are on site. This would include elbow installations into energized equipment, some core drilling work, and some mule tape installations.

Contractor must have an IDOT Certification of Eligibility and meet The City of St. Charles Insurance Requirements as well as IDOT and KDOT requirements. A copy of certification must be included with the bid response. Consistent with Illinois Law, Certified Payroll is also required. Invoices will not be paid by the City prior to receipt of Certified Payroll reports from the Contractor.

The Contractor is responsible for removing and hauling the spoils from their excavations within two days of completion of their work. The spoils shall be hauled to a City facility under City supervision. Upon dumping, the contractor must provide the City with the address and the quantity of material dumped. No foreign spoils that are not created by work within City limits will be permitted to be dumped at the City site. Any unauthorized material dumping at the City site will be grounds for immediate termination of the contract, and potentially legal action.

We require the Contractor to take digital photos of the pre-existing conditions, prior to excavation, part of their normal process. Such becomes invaluable for cases of hitting of mis-marked utilities and landscape restoration complaints. Contractor shall provide access to all pictures related to City work upon request.

If Contractor is to provide landscaping restoration then it will be commenced after the City has completed its work on the project. Any landscape restoration must be completed within 30 days after notification by the City, weather permitting. Landscape restoration is one of the most sensitive customer contact points related to this work. If the contractor is being paid to provide landscape restoration, such shall be warranted for a reasonable time and any warranty requests handled with the property owner in a timely and professional fashion. For the unit cost bid prices with restoration, assume simple grass areas. In simple grass areas, landscape restoration shall include proper tamping to avoid settling, at least six inches of clean black dirt with seed, and blanket. Restoration with sod is not normally required and would be billed using the complex restoration process.

For complex restoration issues, defined as anything other than grass, such must be photographed in detail prior to excavation, and an estimate to restore shall be provided to the City. This includes any perennials, bushes, landscape timbers, stepping stones or pavers, fences, or mulch areas. A separate purchase order, PO, will be issued for these complex restoration projects and the City will pay the standard unit cost without the restoration for the civil work, and may reimburse the Contractor on a separate PO for the landscape restoration. The Contractor must put the correct PO on every invoice in order to get paid. The City may obtain competitive quotations for the restoration, so the restoration work is not guaranteed to the Contractor.

The City will be performing any other landscape restoration of the areas that are disturbed as part of the City work, but may choose to get a quote from the Contractor for their restoration services.

Any excessive or additional damage, as evaluated by the City inspector, will be the responsibility of the contractor to restore at Contractor expense. For example if a tracked machine is taken into a backyard in unfavorable conditions without protecting the grass, and the grass gets ripped up, such will be a Contractor responsibility to restore at Contractor expense.

Satisfying the residents on landscape restoration work is critical to Contractor success. Failure to adequately resolve restoration issues can result in termination of the entire contract.

Notice: The City of St. Charles does not locate or provide any information regarding private Electric, Sanitary Sewer, Storm Sewer (Sump lines), Water or Sprinkler systems. Sewer lines are private from the main near the road all the way to the home or business. Contractor is responsible for any and all damage to private facilities. Contractor shall respond within two hours to any private damage claim and fully resolve the situation. The City shall be involved if there is a need to inspect a repair prior to backfill. Failure to adequately handle any damage claim is grounds for immediate termination of the contract. The use of acoustic equipment by the Contractor in storm and sanitary sewers for detecting sewer hits is preferred.

The City will provide a basic drawing with basic dimensions. The contractor shall mark up the drawing as the boring is done and keep notes on the approximate location of the new pipe with respect to the existing electric line.

Unit Pricing Requested:

Hand dig pit for installation of elbows into equipment and for directional bore setup. This price shall include rough backfill of pit. Rough backfill of pit must occur within three business days after elbow installation.

\$ _____ per pit

\$ _____ per pit (includes landscape restoration)

Machine dig pit for installation of elbows into equipment and for directional bore setup – this shall include some hand dig work for actual undermining of the equipment for the elbow installation. This price shall include rough backfill of pit. Rough backfill of pit must occur within three business days after elbow installation.

\$ _____ per pit

\$ _____ per pit (includes landscape restoration)

Directional bore a 1-1/4" polypipe and install mule tape, this price shall include the material cost of the pipe and the cost of the mule tape.

\$ _____ per linear foot

Directional bore a 3" polypipe and install mule tape; this price shall include the material cost of the pipe and the cost of the mule tape (not a commonly used size).

\$ _____ per linear foot

Directional bore a 4" polypipe and install mule tape; this price shall include the material cost of the pipe and the cost of the mule tape.

\$ _____ per linear foot

Directional bore a 5” polypipe and install mule tape; this price shall include the material cost of the pipe and the cost of the mule tape (not a commonly used size).

\$ _____ per linear foot

Directional bore a 6” polypipe, and install mule tape, this price shall include the material cost of the pipe and the cost of the mule tape.

\$ _____ per linear foot

Stub 1-1/4” 90° degree PVC elbow out of the ground in proximity to the transformer or switchgear, not underneath and into the equipment, and cap the end. Elbow should extend 4” to 6” out of the ground and be coupled to the polypipe. St. Charles Electric Utility personnel will direct as to exact stub up location. This price shall include the labor cost of installation of the elbow and coupling the elbow to the polypipe. The elbow shall be provided by St. Charles. The coupling is to be provided by contractor and the material cost of the coupling included within the unit price below.

\$ _____ per elbow installation

Stub 3” galvanized rigid steel or fiberglass 90° degree elbow into existing equipment and couple elbow to polypipe. This price shall include **all** required labor costs of installation of the elbow and for connecting the 90° degree elbow to the polypipe. The elbow will be provided by St. Charles. The coupling is to be provided by contractor and the material cost of the coupling included within the unit price below. Note – potential situations where additional bends are required to facilitate installation of the elbow into the equipment shall not be given extra consideration or compensation from the City, except that the City may provide the material. Contractor should take care to include the potential for compound elbow combinations at some locations into the unit price for this item. **Note – a qualified person as per OSHA 1910.269** is required when installing into energized equipment.

\$ _____ per elbow installation

Stub 5” galvanized rigid steel or fiberglass 90° degree elbow into existing equipment and couple elbow to polypipe. This price shall include **all** required labor costs of installation of the elbow and connecting the 90° degree elbow to the polypipe. The elbow will be provided by St. Charles. The coupling is to be provided by contractor and the material cost of the coupling included within the unit price below. Contractor should take care to include the potential for compound elbow combinations at some locations into the unit price for this item. **Note – requires a qualified person as per OSHA 1910.269** when installing into energized equipment.

\$ _____ per elbow installation

The cost to provide a flagger to the City for traffic control in construction areas. **Note –** can be used to assist Contractor or City personnel. The flagger or flaggers may be requested for other City work not related to any directional boring work.

\$ _____ flagger cost per hour

Core drill a 3” to 6” diameter hole(s) into a manhole or splice box.

\$ _____ per work location

\$ _____ per work location (includes restoration)

Installation of standard switchgear box pad foundation or splice box. This unit will include the labor to dig the hole, frame the elbows, and install the box pad or splice box per the attached drawings. All material will be provided by the City. Note that a concrete fill, by Contractor, is required in the base of the switchgear box pad after it is set. Note that the City will assist in the installation of the ground wire onto the ground rods. Contractor is responsible for rough backfill around the outside of the box pad or splice box and the unit price should include standard coupling of half of the elbows to conduit and for half of the elbows to be spare stubs.

\$ _____ per switchgear box pad installation

\$ _____ per switchgear box pad installation (includes landscape restoration)

\$ _____ per splice box installation

\$ _____ per splice box installation (includes landscape restoration)

Provide and install miscellaneous backfill material when directed by St. Charles Electric Utility personnel. Price shall include all labor, taxes and handling. Use of this unit requires prior approval by St. Charles Electric Utility personnel. If contractor does not have prior approval, expense shall be on the Contractor.

Sand \$ _____ per Cu. Yd

CA-6 Stone \$ _____ per Cu. Yd

Pea Gravel \$ _____ per Cu. Yd

Removal and disposal of unsuitable backfill, such as, rocks, tree stumps, etc., when directed by St. Charles Electric Utility personnel. Price shall include all labor, taxes and handling. Use of this unit requires prior approval by St. Charles Electric Utility personnel. If Contractor does not have prior approval, expense shall be on the contractor.

Removal of debris \$ _____ per Cu. Yd

Rock excavation add on. This unit is applicable where the pipe route is within heavy rocky soil and requires rock augering. Rock excavation is defined as excavation of boulders ½ cubic yard in volume or greater and rock in ledges or bedded deposits as determined by St. Charles Electric Utility personnel. Use of this unit requires prior authorization by St. Charles Electric Utility personnel and shall be bid as a price adder to existing per linear foot installation. This cost includes all labor and equipment required. If Contractor does not have prior approval for this work unit, the expense will be on the Contractor.

Cost adder for rock augering \$ _____ per linear foot

Saw cutting of asphalt or concrete for splice pit \$ _____ each occurrence
\$ _____ each occurrence (includes asphalt or
concrete restoration)

Respect for the residents' property is paramount. Since installations will typically be in the back yards of City of St. Charles residents, please indicate if you utilize any type of notification system for property owners in the vicinity of where you will be working to let them know who you are, why you are there and what to do if they have a complaint. The contractor will be required to use a "door-hanger" card or other communication means to notify property owners of work in their area. This notification must identify the contractor name and also reference that you are doing work for the City of St. Charles Electric Utility. A contact number must be included for each. Notification to residents shall be made no earlier than 14 days prior to start of work, but must be at least three days prior to start of work.

Bid Evaluation

Bids will be evaluated on a weighted scale based on the following criteria (criteria not in any particular order):

- Ability of bidder to complete project within requested timeframe
- City experience with bidder regarding adherence to work schedules
- City experience with bidder regarding workmanship/quality
- City experience with bidder regarding responsiveness
- City experience with bidder regarding communication
- Evaluated cost

Special Terms and Conditions:

Contractor is responsible for Permit applications on any state or county roads requiring said permit.

Work issued on the future purchase order resulting from this bid will be on an "as directed" basis.

Footage approximations are estimates only and are not a guaranteed quantity.

The City of St. Charles reserves the right to terminate any future purchase order resulting from this bid for convenience with **15** (fifteen) calendar days notice.