

Route 100
St. Louis County
Pipe Replacement
Exhibit A

SCOPE OF WORK

St. Louis District,
Pipe Replacement
Job Number #WRSL100H

Miscellaneous Contract Requirements and Specification

A. Work Location

Eastbound Route 100 (11780 Manchester Road) at Tallie Drive.
St. Louis County

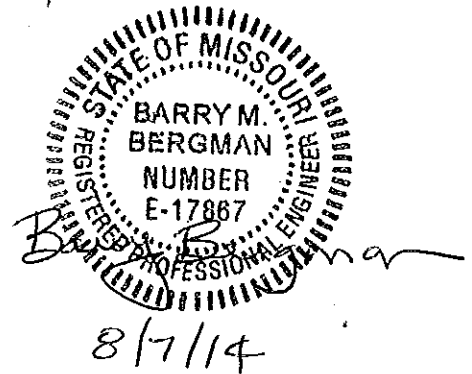
B. Work Description

The purpose of this project is to replace a rusted 18" corrugated metal pipe under the existing commercial entrance at 11780 Manchester Road. All work shall be completed as shown on the construction plans, or as directed by the Commission's representative.

1.0 In addition, the contractor shall contact designated MoDOT personnel at least 10 working days prior to beginning work.

C. Tabulation of Quantities

Removal of Improvements 1 Lump Sum
(Full Depth Saw Cut – 110 Linear Feet)
(Concrete Pavement – 9.2 Square Yard)
(Asphalt Pavement – 17.6 Square Yard)
(Concrete Curb – 12 Linear Feet)
(18" CMP – 50 Linear Feet)
(Concrete Median Strip – 0.3 Square Yard)
Class 3 Excavation – 46 Cubic Yard
Bituminous Pavement Mixture PG70-22, (BP-1) – 1.0 Ton
6 inch Concrete Median Strip – 0.3 Square Yard
Paved Approach, 8 inch – 28.5 Square Yard
Integral Curb (6 inch height and under) Type A – 12 Linear Feet
Construction Signs – 148 Square Feet
Advanced Warning Rail System – 1 Each
Flag Assembly – 8 Each
Channelizer (trim line) – 40 Each
Directional Indicator Barricade – 8 Each
Flashing Arrow Panel – 1 Each
Changeable Message Sign- Commission Furnished/Retained
Work Zone Lighting – 1 Lump Sum



Mobilization – 1 Lump Sum
Contractor Furnished Surveying and Staking – 1 Lump Sum
18 inch Pipe Group B – 50 Linear Feet

D. Work Zone Traffic Management Plan

1.0 Description. Work zone traffic management shall be in accordance with applicable portions of Division 100 and Division 600 of the Standard Specifications, and specifically as follows.

2.0 Traffic Management Schedule.

2.1 Traffic management schedules and any revisions shall be submitted to the engineer for review and approval prior to the start of work affected. The traffic management schedule shall include the proposed traffic control measures, hours traffic control will be in place, and work hours.

2.2 The contractor shall notify the engineer a minimum of 10 working days prior to lane closures.

2.3 The engineer shall be notified as soon as practical of any postponement due to weather, material or other circumstances.

2.4 To ensure minimal traffic disruption, the contractor shall schedule lane closures for the absolute minimum amount of time required to complete the work. Lanes shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

2.5 Traffic Congestion. The contractor shall, upon approval of the engineer, take proactive measures to reduce traffic congestion in the work zone.

2.5.1 Traffic Delay. The contractor shall be responsible for maintaining the existing traffic flow through the job site during construction. If disruption of the traffic flow occurs and traffic is backed up in queues of 10 minute delays or longer, then the contractor shall review the construction operations which contributed directly to disruption of the traffic flow and make adjustments to the operations to prevent the queues from occurring again.

2.5.2 Traffic Safety.

2.5.2.1 Where traffic queues routinely extend to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway, the contractor shall extend the advance warning area, as approved by the engineer.

2.5.2.2 When a traffic queue extends to within 1000 feet (300 m) of the ROAD WORK AHEAD, or similar, sign on a divided highway due to non-recurring congestion, the contractor shall deploy a means of providing advance warning of the traffic congestion, as approved by the engineer. The warning location shall be no less than 1000 feet (300 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on divided highways and no less than 500 feet (150 m) and no more than 0.5 mile (0.8 km) in advance of the end of the traffic queue on undivided highways.

3.0 Work Hour Restrictions.

3.1 There are six major holiday periods per year: Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and New Years Day. All lanes shall be scheduled to be open to traffic during these holiday periods, from 12:00 noon on the last working day proceeding the holiday until 9:00 a.m. on the first working day subsequent to the holiday.

3.2 Lane closure times will be restricted to the following except as approved by the engineer. The contractor shall not perform any work except in compliance with the following work hour restrictions.

3.3 Route 100 Working Hours

Week Days - Eastbound Single lane closure allowed – (9:00 PM to 5:00 AM)

Weekends and Holidays – Eastbound Single lane closures allowed – (9:00PM to 5:00AM)

4.0 Lane Closures.

4.1 The contractor shall provide changeable message signs notifying motorists of future traffic disruptions and possible traffic delays one week prior to lane closures. All changeable message signs shall be compliant with the guidelines outlined in the "Changeable Message Sign Requirements" JSP. The changeable message sign shall be installed at a location as approved or directed by the engineer.

The contractor shall provide the engineer notice 10 working days prior to lane closures. MoDOT will issue a press release to the local news media, newspaper, radio and television prior to lane closure. The press release will advise motorists to take alternate routing to avoid traffic congestion at the construction site and to anticipate a slowdown in traffic flow.

In the event of any weather, material, or related postponement, notification shall be made to the engineer of the postponement and the re-scheduling of the roadway lane closure to a new date.

The contractor shall note that on a weekly basis, MoDOT's Maintenance of Traffic (MOT) Team reviews all work zones scheduled for the following week and month for the entire St. Louis District. A maximum of two work zones may be used at one time, however, if they negatively impact each other's flow of traffic and traffic mitigation is not feasible or practical, MoDOT's MOT reserves the right to reject or alter those work zones. Quantities for traffic control items are based on a maximum of two work zones at a time.

5.0 Coordination with other Projects. The contractor shall coordinate traffic management between this project and any other projects on Rte. 100. We are not aware of any active MoDOT projects in this area.

6.0 This list of projects is not all inclusive. The contractor shall be aware that there may be other projects including, but not limited to, utility, City of Des Peres, St. Louis County, private, MoDOT maintenance, permit, or other projects that may impact project construction or traffic control in the vicinity of this project. It shall be the responsibility of the contractor to determine what, if any projects other than the ones listed above may impact this project and work to coordinate construction and traffic management efforts between this project and any other project involved.

6.0 Traffic Control Plan Revisions.

6.1 The plans provide a traffic control plan with quantities of traffic control devices. The contractor is allowed to propose changes to the traffic control plan if the construction time frame can be shortened, and/or the number of days traffic lanes are restricted can be reduced. If the contractor proposes modifying the traffic control plans, there will be no additional payment for additional traffic control items.

6.2 Any modification to the Traffic Control Plans or alternate traffic control plan must meet the minimum requirements of this provision. The Modified Traffic Control Plan must be signed and sealed by a Professional Engineer registered in the State of Missouri and must comply to the current edition of the MUTCD and MoDOT standards, whichever is more conservative.

6.3 Any Modified Traffic Control Plan Sheets must be submitted 10 days prior to implementation to allow ample time for review and approval.

7.0 Basis of Payment. No direct payment shall be made for additional expenses incurred by the contractor for the cost of equipment, labor, materials, incidentals, or time required to fulfill the above provisions.

E. Time for Completion of the Work

1.0 Description. Completion of this contract shall be in accordance with Sec 108.7 and will be administered on both a calendar date completion basis and by calendar days completion basis.

1.1 Regardless of when the work is begun on this contract, all work shall be completed on or before the date specified below. Completion on this date shall be in accordance with the requirements of Sec 108.7.

Completion Date: November 15, 2014.

1.2 In addition, calendar days for the completion of this contract have been established. The count of calendar days will start on the date the contractor starts any construction operations. All work shall be completed within the calendar days specified below. Completion of the work by calendar days shall be in accordance with the requirements of Sec 108.7.

Calendar Days: 5 consecutive nights (9:00PM to 5:00AM)

1.3 Should the contractor, or in case of default, the surety, fail to complete the work within the above specified calendar days or the completion date, whichever occurs first, a deduction of the amount shown below will be made for each day that the contract remains uncompleted in accordance with the requirements of Sec 108.8. These damages are in addition to any other damages as specified elsewhere in this contract.

Liquidated Damages Per Day: \$1,800.00

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1.4 If all Work is not complete prior to the specified overall contract completion date, the contractor will be charged with an overall liquidated damage specified in the amount of **\$1,800.00** per day for each full day that the Work is not fully completed. This damage will be assessed independently of the liquidated damages (per project) as specified above.

F. Utilities

1.0 For informational purposes only the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

Utility Name	Known Required Adjustment	Type
Mr. Bob Schnell Ameren-Missouri 12121 Dorsett Road, Bldg. W Maryland Heights, MO 63043 Telephone: (314) 344-9504 Email: rschnell@ameren.com	See Below	Power-Distribution
Ms. Tanesha Lay AT&T - Distribution 13075 Manchester Road, Room 306 Des Peres, Missouri 63131 Phone: 314-957-3740 Email: tl2613@att.com	See Below	Communication
Mr. Don Torbett MCI/Verizon 6829 North Lakewood MD 2.2-408A Tulsa, OK 74117 Phone: 918-269-4698 Email: donald.torbett@verizonbusiness.com	See Below	Communication
Mr. Steve Gerrein Charter Communications 815 Charter Commons Chesterfield, MO 63017 Telephone: (636) 387-6641 Email: Steve.Gerrein@chartercom.com	No	Communication
Mr. Randy Carpenter Missouri American Water Company	No	Water

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727 Craig Road St. Louis, MO 63141 Telephone: (314) 991-3404 ext 2338 Email: Randall.Carpenter@amwater.com		
Mr. Brian Langenbacher Laclede Gas Company 4118 Shrewsbury Ave. Shrewsbury, MO 63119 Telephone: (314) 768-7767 Email: blangenbacher@thelacledegroupp.com	No	Gas

1.1 The existence and approximate location of utility facilities known to exist, as shown on the plans, are based upon the best information available to the Commission at this time. This information is provided by the Commission "as-is" and the Commission expressly disclaims any representation or warranty as to the completeness, accuracy, or suitability of the information for any use. Reliance upon this information is done at the risk and peril of the user, and the Commission shall not be liable for any damages that may arise from any error in the information. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

1.2 The contractor agrees that any effects of the presence of the utilities, their relocation, contractor's coordination of work with the utilities and any delay in utility relocation shall not be compensable as a suspension of work, extra work, a change in the work, as a differing site condition or otherwise including but, without limitation, delay, impact, incidental or consequential damages. The contractor's sole remedy for the effects of the presence of utilities, delay in their relocation or any other effects shall be an excusable delay as provided in Section 105.7.3. The contractor waives, for itself, its subcontractors and suppliers the compensability of the presence of utilities, delay in their relocation and any cost to the contractor, it's subcontractors and suppliers in any claim or action arising out of or in relation to the work under the contract.

1.3 The contractor shall be solely responsible and liable for incidental and consequential damage to any utility facilities or interruption of the service caused by it or its subcontractors operation. The contractor shall hold and save harmless the Commission from damages to any utility facilities interruption of service by it or it's subcontractor's operation.

1.4 AMEREN-DISTRIBUTION

Ameren-distribution has a guy pole and anchor that is in close proximity to the proposed drainage pipe replacement and manhole work. Ameren will need to hold the pole while the excavation work is taking place in front of the pole. The contractor shall contact Ameren a minimum of 2 weeks prior to needing the pole stabilized and shall coordinate with them on the method and placement of the equipment necessary for Ameren to hold the pole.

1.5 AT&T-DISTRIBUTION AND MCI

AT&T-distribution and MCI have facilities in close proximity to the proposed pipe work. The contractor shall protect these facilities and shall not disturb them. Extreme care shall be used during the excavation,

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removal of the existing pipe and placement of the new pipe. This work may include the need to temporarily support these facilities by a method meeting approval of the respective utility.

2.0 It shall be noted by the contractor that MoDOT is a member of Missouri One Call (800 Dig Rite). Some work on this project may be in the vicinity of MoDOT utility facilities, which includes but is not limited to traffic signal cables, highway lighting circuits, ITS cables, cathodic protection cables, etc. Prior to beginning work, the contractor shall request locates from Missouri One Call.

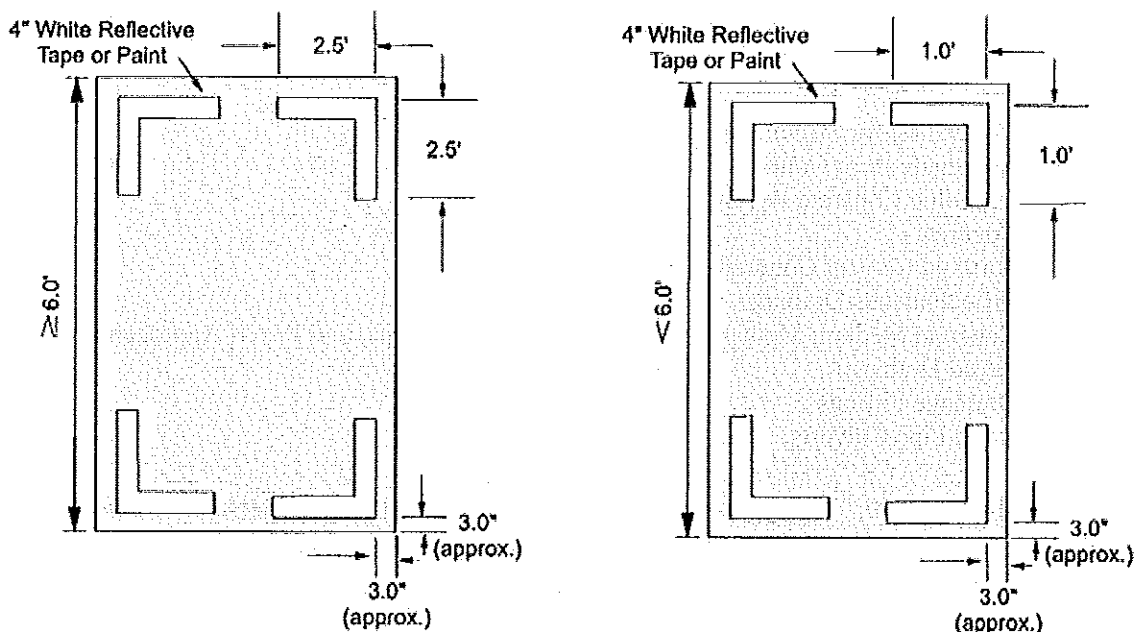
G. Trenching for Pipe Excavation

1.0 Trenching for the pipe placement shall be backfilled when workers are not present, but may also be covered with steel plates. Steel plates can be used on the entrance (speed under 45 mph) in this work zone.

When plating is used, WO8-24 is deployed as part of Typical Applications 616.8.47a and 616.8.47b.

In any case, the plate must be appropriately sized to adequately conduct the vehicular loading and must be delineated according to the diagram below. Only 3/4 in. of the plate's overall thickness may protrude above the roadway surface and the height differential must be transitioned at a rate no steeper than 3H:1V around the entire perimeter. This may be accomplished by beveling the plate, wedging asphalt or mechanically fastening, as approved by the engineer. Care must be taken to ensure that a mechanical fastener is appropriate for the operating speed of the work zone. The surface of the plate must be treated for skid resistance, either by surface deformation or direct application of a friction course.

2.0 No direct payment will be made for temporary backfilling or the use of steel plates.



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Steel plates with any
side $\geq 6'$ long

Steel plates with any
side $< 6'$ long

Steel Plate Delineation

H. Temporary Construction Easement

A temporary construction easement has been acquired from the property owner for the contractor's use. The normal business hours for the building are Monday through Friday from 7:00AM to 7:00PM and Saturday from 9:00AM to 6:00PM.

The contractor shall remove all vehicles and equipment from the easement during normal business hours.

The entrance on Manchester Road shall be open each day during normal business hours.

The Contractor shall notify the property owner, Mr. Jim Guidry at 314 965-2200 ext. 406 or 314 960-1188 at least 7 days prior to starting construction operations within the property.

The Contractor shall repair any damage within the easement area resulting from construction operations such as pavement, curbs, signs, planting beds, etc..

The Contractor shall also replace the mulch in the disturbed area of the island adjacent to the manhole after the pipe has been installed. The Contractor may temporarily store and reuse the existing mulch.

I. Standard Specifications

All items and materials used for this contract shall be in accordance with the applicable portions of the Missouri Standard Specification Book for Highway Construction, and specifically as follows;

Section 206	Excavation for Structures
Section 304	Aggregate Base Course
Section 403	Asphaltic Concrete Pavement
Section 501	Concrete
Section 502	Portland Cement Concrete Base and Pavement
Section 604	Miscellaneous Drainage
Section 608	Concrete Median, Median Strip, Sidewalk, Curb Ramps, and Paved Approaches
Section 609	Paved Drainage
Section 614	Drainage Fittings
Section 726	Rigid Pipe Culverts

This list is not all-inclusive. It shall be the Contractor's responsibility to perform all work in accordance with the prevailing Standard Specifications on the letting date of this contract.

J. Standard Plans

All material, equipment and construction requirements for items specified in this project shall be in accordance with the Missouri Standard Plans for Highway Construction.

It shall be the Contractor's responsibility to perform all work in accordance with the prevailing Standard Plans for Highway Construction on the letting date of this contract.

K. Paved Approach

The use of high early strength concrete will be required to meet the schedule for the entrance to be open to traffic. No direct payment will be made for the use of high early strength concrete.

