

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

The Missouri Department of Natural Resources hereby issues a permit to:

City of Elsberry
201 Broadway
Elsberry, MO 63343

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department).

As the Department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the Department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the Department will be contingent on the work substantially adhering to the approved plans and specifications.

This permit applies only to the construction of water pollution control components; it does not apply to other environmentally regulated areas.

January 21, 2015
Effective Date

January 20, 2017
Expiration Date


Sara Parker Pauley, Director, Department of Natural Resources


John Madras, Director, Water Protection Program

CONSTRUCTION PERMIT

COLLECTION SYSTEM:

This rehabilitation project consists of replacing existing 6" and 8" clay pipe with the installation and construction of approximately 2120 linear feet (lf) of eight-inch (8") polyvinyl chloride (PVC) Standard Dimension Ratio (SDR)-26; 949 lf of ten-inch (10") polyvinyl chloride (PVC) Standard Dimension Ratio (SDR)-26; and 874 lf of twelve-inch (12") polyvinyl chloride (PVC) Standard Dimension Ratio (SDR)-26 sewer lines; plus 44 linear feet (lf) of 16" CL 200 PVC casing pipe. Approximately 23 new and replacement manholes will be installed with all the necessary appurtenances to make a complete and usable wastewater collection system. The project will also include relining of approximately 5000 linear feet (lf) of clay pipe, relining of 11 manholes, installation of 5 new manholes, grouting of 80 lateral lines, and general site work appropriate to the scope and purpose of the project.

The proposed wastewater collection system will also involve upgrading two duplex lift stations; abandoning and upgrading a 4" force main with approximately 1500 linear feet of eight-inch (8") CL 200 polyvinyl chloride (PVC) force main with cleanouts and air release valves; installing 174 linear feet (lf) of 14" steel casing pipe; and installing associated 6" and 8" ductile iron pipe (DIP) all which will carry raw wastewater to the receiving wastewater treatment facility. Each pump for the Second Street lift station is designed to be capable of operating at 550 gallons per minute (gpm) at 43 feet of total dynamic head (TDH) and each pump for the Legion lift station is designed to be capable of operating at 290 gallons per minute (gpm) at 98 feet of total dynamic head (TDH)

These activities will be in the vicinity of Second St., Welch St. & New Hope Rd., and Lincoln St. & David St. in Elsberry, Lincoln County and discharge to an existing sewer system to be treated at the Elsberry Wastewater Treatment Facility, Missouri State Operating Permit No. MO-0054691.

PERMIT CONDITIONS:

1. All construction shall be in accordance with the plans and specifications submitted by MECO Engineering Co., Inc. as follows:
 - Specifications received on October 28, 2014 and signed and sealed by Kenneth Woods, P.E. on October 22, 2014.
 - Plans received on October 28, 2014 and signed and sealed by Kenneth Woods, P.E. as follows: sheets 1-22 dated October 22, 2014.

2. The Department must be contacted in writing prior to making any changes to the approved plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater treatment facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(8).

3. State and Federal Law does not permit bypassing of raw wastewater, therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the Department's St. Louis Regional Office per 10 CSR 20-7.015(9)(E)2.
4. This Construction Permit is invalid for projects required to comply with the requirements contained in 10 CSR 20-4, "Grants and Loans".
5. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). "There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer manhole."
 - A. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.
 - B. Sewer mains shall be laid at least ten feet (10') horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot (10') separation, the Department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.
 - C. Manholes should be located at least ten feet (10') horizontally from any existing or proposed water main.
 - D. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one (1) of the following methods must be specified:

- 1) The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or
 - 2) Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet (10') on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the Department for use in water main construction.
6. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one (1) acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits may only be obtained by means of the Department's ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm. See www.dnr.mo.gov/env/wpp/stormwater/sw-land-disturb-permits.htm for more information.
7. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the Department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Water Protection Program at 573-751-1300 for more information. See www.dnr.mo.gov/env/wpp/401/ for more information.
8. In accordance with 10 CSR 20-6.010(6)(B), submit the enclosed form Application for Letter of Authorization – Sewer Extension to the Department following completion of construction. Submit an electronic copy of the as-built drawings with this form if the project was not constructed in accordance with previously submitted plans and specifications.
9. Upon completion of construction, the City of Elsberry will become the continuing authority for operation, maintenance, and modernization of these facilities.

40001610
AP19902

RECEIVED



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
APPLICATION FOR CONSTRUCTION PERMIT
SEWER EXTENSION

NOV-28 2014

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$300.00	CHECK NO. 39468
DATE RECEIVED 10/28/14	SRB

WATER PROTECTION PROGRAM

NOTE ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM

1.0 APPLICATION INFORMATION (Note – If any of the questions in this section are answered NO, this application may be considered incomplete and returned.)

- 1.1 Is this a Federal/State funded project? YES N/A Funding Agency: USDA Project #:
- 1.2 Has the Department of Natural Resources approved the proposed project's engineering report*? YES Date of Approval: 01/23/2012 NO N/A
- 1.3 Is a copy of the appropriate plans* and specifications* included with this application? YES NO
- 1.4 Is a summary of design* included with this application? YES NO
- 1.5 Is the appropriate fee included with this application? (See instructions for appropriate fee.) YES NO

* Must be affixed with a Missouri registered professional engineer's seal, signature and date.

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Sanitary Sewer System Improvements - City of Elsberry, Missouri

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
201 Broadway	Elsberry	MO	63343	Lincoln

2.2 Legal Description: ¼, ¼, ¼, Sec. Variou, T 51N, R 2E

2.3 Project Components (check all that apply):

- Gravity sewers Pumping stations Force mains Alternative sewer system Other (Describe below.)

2.4 PROJECT DESCRIPTION

This project involves the construction of two new lift stations to replace existing lift stations, replacement of approx. 4,000 feet of various sizes of new gravity sewer, lining of approx. 5,000 feet of existing gravity sewer, grouting of approx. 80 sewer laterals, manhole sealing of approx. 16 manholes, replacement/installation of approx. 1,800 feet of 8" force main, installation of master SCADA system for sewer system and 7 lift stations, and various other appurtenances necessary to complete the construction of the above improvements.

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: This is a rehab, no additional flow
- B. Estimated flow to be contributed by this extension: Design Average Flow: gpd Design Peak Hourly Flow: gph
- C. Industrial Wastes: Type: Flow: gpd
- D. Receiving Sewer: Size: inches Capacity: gpm

3.0 PROJECT OWNER

NAME City of Elsberry		TELEPHONE NUMBER WITH AREA CODE (573) 898-5588	E-MAIL ADDRESS cordsiemon.clerk@sbcglobal.net
ADDRESS 201 Broadway	CITY Elsberry	STATE MO	ZIP CODE 63343

4.0 CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the wastewater collection system.

NAME City of Elsberry		TELEPHONE NUMBER WITH AREA CODE (573) 898-5588	E-MAIL ADDRESS cordsiemon.clerk@sbcglobal.net
ADDRESS 201 Broadway	CITY Elsberry	STATE MO	ZIP CODE 63343

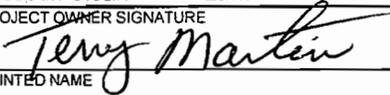
4.1 A letter from the continuing authority, if different than the owner, is included with this application. YES NO N/A

5.0 ENGINEER

ENGINEER NAME / COMPANY NAME Kenneth Woods, MECO Engineering Co.		TELEPHONE NUMBER WITH AREA CODE (573) 221-4048	E-MAIL ADDRESS kwoods@mecoengineering.com
ADDRESS 3120 Palmyra Road	CITY Hannibal	STATE MO	ZIP CODE 63401

6.0 RECEIVING WASTEWATER TREATMENT FACILITY

NAME City of Elsberry		TELEPHONE NUMBER WITH AREA CODE (573) 898-5588	E-MAIL ADDRESS cordsiemon.clerk@sbcglobal.net
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MISSOURI STATE OPERATING PERMIT # MO-0054691		REMAINING CAPACITY (GPD) No additional flow being added to this system	
6.1 Has the receiving treatment facility agreed to accept the additional wastewater flow? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
6.2 A letter from the receiving wastewater treatment facility, if different than the continuing authority, is included with this application. <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A			
7.0 PROJECT OWNER: I hereby certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete, and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders, and decisions, subject to any legitimate appeal available to applicant under Missouri Clean Water Law.			
PROJECT OWNER SIGNATURE 			
PRINTED NAME Terry Martin		DATE 10/15/2014	
TITLE OR CORPORATE POSITION Mayor		TELEPHONE NUMBER WITH AREA CODE (573) 898-5588	E-MAIL ADDRESS cordsiemon.clerk@sbcglobal.net
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176			