

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

Mr. Robert Scott Matthews, Jr.
Four Corners Development
717 Tanner Street
Sikeston, MO 63801

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.

March 3, 2015
Effective Date

March 2, 2017
Expiration Date

Sara Parker Pauley, Director, Department of Natural Resources

John Madros, Director, Water Protection Program

CONSTRUCTION PERMIT

COLLECTION SYSTEM:

This project consists of the installation and construction of approximately 1,431 linear feet (lf) of 8-inch polyvinyl chloride (PVC) Standard Dimension Ratio (SDR)-35 gravity sewer lines with approximately six manholes and all the necessary appurtenances to make a complete and usable wastewater collection system to serve an estimated population equivalent of 77 and an estimated design average flow of 7,700 gallons per day. The project will also include general site work appropriate to the scope and purpose of the project.

These activities will be in the vicinity of the intersection of Brunt Boulevard and Rushmore Land in the City of Sikeston, New Madrid County and discharge to an existing sewer system to be treated at the Sikeston Southeast Wastewater Treatment Facility, Missouri State Operating Permit No. MO-0035009. Jeffrey L. Winders, PE, operation manager, with Sikeston Board of Municipal Utilities provided an acceptance letter dated January 28, 2015.

PERMIT CONDITIONS:

1. All construction shall be in accordance with the plans and specifications submitted by Lambert Engineering & Surveying as follows:
 - Specifications received on January 30, 2015 and signed and sealed by Christopher W. Lambert, P.E. on December 13, 2014.
 - Plans received on January 30, 2015 and signed and sealed by Christopher W. Lambert, P.E. on January 11, 2015.
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 Southeast 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 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 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 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 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 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 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 Sikeston Board of Municipal Utilities will become the continuing authority for operation, maintenance, and modernization of these facilities.

Lei Hou, PE
Engineering Section
lei.hou@dnr.mo.gov



MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
CONSTRUCTION PERMIT APPLICATION

JAN 30 2015

FOR OFFICE USE ONLY

DATE RECEIVED _____
DATE APPROVED _____

INSTRUCTIONS

- A. Please type or print in ink
- B. A completed and signed application form must accompany each set of plans and specifications submitted to the department for review and approval.
- C. No fee is required for a construction permit.
- D. If you have any questions contact the Missouri Department of Natural Resources at P.O. Box 176, Jefferson City, MO 65102-0176 or call 800-361-4827 or 573-751-5331.

NAME OF PROJECT (TYPE OF CONSTRUCTION, FOLLOWED BY EITHER THE NAME OF THE DEVELOPMENT, CITY, WATER DISTRICT OR OTHER)

LIST OF DOCUMENTS SUBMITTED. TWO COPIES ARE REQUIRED FOR EACH DOCUMENT

- Engineering Report* or Review # _____
- Detailed Plans*
- Technical Specifications*
- Layout Map*
- Standard Specifications Review # _____
- Supervised Program Specifications Review # _____
- Hydraulic Analysis*
- Product or Equipment Literature
- Letter of Acceptance from Supply Source
- Other (Specify) _____

*Must be affixed with the professional engineer's seal.

PROJECT IS FOR

- Development of new water supply system
 - TMF checklist
 - TMF owner's acknowledgement form
- Modification of existing water supply system
 - Name of system: BOARD OF MUNICIPAL UTILITIES
 - Identification number: MO 4010743 (New systems will not have this number)

SCOPE OF THE PROJECT (DESCRIBE THE PROJECT COMPLETELY, ATTACH ADDITIONAL SHEETS OF PAPER IF NECESSARY)

CONSTRUCTION OF 1,032 LF OF 6" WATER MAIN,
5-6" GATE VALVES + BOXES, 6 FIRE HYDRANTS
W/ VALVES & APPURTENANCES TO SERVE
22 RESIDENTIAL LOTS.

LOCATION OF THE PROJECT

U.S. Geological Survey location U.S.P.S. 643 1/4, Section _____, T 26N, R 14E
County NEW MADRID

LOCATION OF PROJECT

Latitude 30° 51' 39.9953" Longitude 89° 34' 10.87749"
375 MO. STATE PLANE EAST ZONE (2401)
375,467.507N
1,091,980.571E

PROPOSED WATER SUPPLY SOURCE

- Well or Wells
- Stream, river, lake or reservoir (two-state treatment is required)
- Purchase - Name of supplier _____

WATER LINES

- Complete distribution system
- Water line extension
 - Line size at point of connection 12"
 - Available flow and pressure: Flow 150 gpm Pressure 20 psi
- Water line relocation
- Other (specify) _____

STORAGE

- Dimension _____ Capacity _____
- Ground-level storage tank
 - Elevated storage tank
 - Standpipe
 - Pressure tank
 - Others (specify) _____

FEB 2015

<p>PROPOSED TREATMENT PROVIDED</p> <input type="checkbox"/> Clarification <ul style="list-style-type: none"> <input type="checkbox"/> Pre-sedimentation <input type="checkbox"/> Chemical Rapid Mixing <input type="checkbox"/> Flocculation <input type="checkbox"/> Sedimentation <input type="checkbox"/> Filtration <input type="checkbox"/> Others (specify) _____ <input type="checkbox"/> Softening <ul style="list-style-type: none"> <input type="checkbox"/> Lime or lime-soda process <input type="checkbox"/> Ion exchange process <input type="checkbox"/> Iron and Manganese removal <ul style="list-style-type: none"> <input type="checkbox"/> Oxidation-detention-filtration <input type="checkbox"/> Lime or lime-soda softening process <input type="checkbox"/> Ion exchange process <input type="checkbox"/> Manganese greensand filtration <input type="checkbox"/> Sequestration by chemicals <input type="checkbox"/> Others (specify) _____ 	<input type="checkbox"/> Radionuclide removal <ul style="list-style-type: none"> <input type="checkbox"/> THM control <input type="checkbox"/> VOC removal <input type="checkbox"/> Tastes and odor control <input type="checkbox"/> Stabilization <input type="checkbox"/> Disinfection Chemicals used _____ Contact time _____ <input type="checkbox"/> Fluoridation <input type="checkbox"/> Others (specify) _____
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<p>PUMPING</p> Number of Pumps _____ <input type="checkbox"/> Low service pumping <input type="checkbox"/> Booster pumping	Capacity / pump _____ <input type="checkbox"/> High service pumping <input type="checkbox"/> Others (specify) _____
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<p>WASTE DISPOSAL FACILITIES</p> Number of units _____ <input type="checkbox"/> Pumps and piping <input type="checkbox"/> Treatment unit Final disposal of sludge _____	Capacity / unit _____ <input type="checkbox"/> Holding structures <input type="checkbox"/> Other (specify) _____
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OTHER WATER WORKS (SPECIFY)

Note for owner or official custodian:
For a sole proprietorship - the name of the proprietor.
For a corporation - the name of an officer of at least the level of a plant manager.
For a partnership - the name of a principal partner.
For a city, state, federal or other public facility - the name of either a principal executive officer or a ranking public official.

OWNER OR OFFICIAL CUSTODIAN		TELEPHONE NUMBER WITH AREA CODE	
FOUR CORNERS DEVELOPMENT		573-471-1960	
ADDRESS	CITY	STATE	ZIP CODE
717 RANNEY ST.	STICKLETON	MO.	63801
SIGNATURE OF OWNER OR OFFICIAL CUSTODIAN		DATE	
<i>[Signature]</i>		1/15/15	
PRINT NAME OF OWNER OR OFFICIAL CUSTODIAN		OWNER OR OFFICIAL CUSTODIAN TITLE	
ROBERT SCOTT MATTHEWS, JR.		OWNER	

Mail completed copy to:

Missouri Department of Natural Resources
Water Protection Program
Public Drinking Water Branch
P.O. Box 176
Jefferson City, MO 65102-0176
Phone: 800-361-4827 or 573-751-5331
FAX: 573-751-3110