LBVSD WWTF Jackson County MO-0101087

Jeremiah W. (Jay) Nixon. Governor . Sara Parker Pauley, Director

RECEIVED

JUN 1 3 2011

GBC

EPARTMENT OF NATURAL RESOURC

www.dur.mo.gov

JUN 1 0 2011

Mr. Mark Schaufler, Director Water Utilities Department City of Lee's Summit 220 Southeast Green Street Lee's Summit, MO 64063

STATE OF MISSOURI

Dear Mr. Schaufler:

Your application for the Chick-Fil-A, Lee's Summit sanitary sewer extension has been approved by the Department of Natural Resources as evidenced by Construction Permit Number CPSE00316.

This permit will expire one year from the date of issuance unless justification for extension is presented thirty (30) days prior to expiration. Nothing in this permit removes any obligations to comply with county or other local ordinances or restrictions.

In addition to the requirements for a construction permit, land disturbance activities of one acre or more require a Missouri State Operating Permit to discharge storm water (10 CSR 20-6.200). The permit requires best management practices sufficient to control run-off and sedimentation to protect waters of the state. To obtain this permit, submit Missouri Forms E and G to the Missouri Department of Natural Resources, Kansas City Regional Office, 500 Northeast Colbern Road, Lee's Summit, Missouri 64086.

Following completion of construction, the enclosed application shall be completed and returned to the above address.

As the City of Lee's Summit develops plans for addressing immediate wastewater infrastructure needs and long-term plans for future needs, it is recommended that the City considers the Missouri State Revolving Fund (SRF) program as a viable source for financial assistance. The Missouri SRF program provides lowinterest loans to municipalities, counties, public water and public sewer districts for wastewater and drinking water infrastructure projects. SRF projects can be new construction or the improvement or renovation of existing facilities. For more information on the SRF program and application process contact Doug Garrett of the DNR Financial Assistance Center at (816) 573-5723 or visit www.dnr.mo.gov/ENV/wpp/srf.

If you have any questions, please contact the Kansas City Regional Office at 500 Northeast Colbern Road, Lee's Summit, Missouri 64086, (816) 622-7000. Thank you.

Sincerely,

KANSAS CITY REGIONAL OFFICE

laully Erande

Dorothy E. Franklin Acting Regional Director

DEF/shv

Enclosures

c: Gary R. Rouse, P.E. GBC Design, Inc.

0.0 Recycled Paper

M:\WPC\Jackson\LBVSDWWTF\MO-0101087\110617_CPSE00316.doc

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. Mark Schaufler, Director Water Utilities Department City of Lee's Summit 220 Southeast Green Street Lee's Summit, Missouri 64063

for the construction of (described facilities):

SEE ATTACHED DESCRIPTION OF FACILITIES:

Permit Conditions:

SEE ATTACHED SEWER EXTENSION CONDITIONS:

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.

As the Department of Natural Resources 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.

June 17, 2011 Effective Date

June 17, 2012 Expiration Date

MO 780-1151 (05-00)

No filing fee required

Sara Parker Pauley, Director, Department of Natural Resources

Dorothy E. Frankin, Acting Director, Kansas City Regional Office WQP 3.34 Rev. 05-00

DESCRIPTION OF PROJECT

The installation of approximately 236 linear feet of 8 inch, SDR-26, PVC gravity sewer complete with the necessary appurtenances to make this a complete and usable sewer to serve Chick-Fil-A, Lee's Summit consisting of 1 commercial lot with an estimated daily average flow of 1,500 gallons per day.

This sewer will be in the vicinity of 690 Northwest Blue Parkway, Lee's Summit, MO 64086, Jackson County and discharge to the LBVSD wastewater treatment facility (MO-0101087).

PERMIT CONDITIONS

The owners or operators of sanitary sewer systems or extensions for which construction permits were issued shall apply for a letter of authorization for operation, in accordance with Department of Natural Resources Rule 10 CSR 20-6.010(6)(B). The system or extension shall then be considered as a part of the treatment facility to which it is tributary for permit purposes.

- 1. In accordance with 10 CSR 20-8.120(6)(G)5. deflection tests shall be performed on all flexible gravity sewer pipe.
 - A. The test shall run not less than 30 days after final backfill has been placed. No pipe shall extend a deflection of 5%. If a rigid ball or mandrel is used, it shall have a diameter equal to 95% of the inside diameter of the pipe and mechanical pulling devices shall not be used.
- 2. In accordance with 10 CSR 20-8.120(6)(H)2. leakage tests, including water or low-pressure air testing, shall be specified. In accordance with RSMo 644.026.1(12), "...manholes and polyvinyl chloride (PVC) pipe used for gravity sewers and with a diameter no greater than twenty-seven inches shall not be required to be tested for leakage." The testing method selected should take into consideration the range in groundwater elevations projected and the situation during the test.
 - A. The leakage outward or inward (exfiltration or infiltration) shall not exceed 200 gallons of water per inch of pipe diameter per mile per day or 0.19 cubic meters per centimeter of pipe diameter per kilometer per day for any section of the system. A test shall be performed with a minimum positive head of 2 feet or 0.61 meters. For the purpose of leakage tests, manholes shall be considered pipe of equivalent diameter and shall be tested by an appropriate test method.
 - B. The low-pressure air test shall conform to the testing procedures described in ASTM F1417-92, entitled *Standard Test Method for Installation Acceptance of Plastic Gravity Sewer Lines Using Low-Pressure Air.*
- 3. In accordance with 10 CSR 20-8.120(11) 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 sewage or polluted water into the potable supply. Water lines shall be identified on the drawings.
 - A. Sewers in relation to water works structures shall meet the requirements of the Design Guide for Community Water Systems with respect to minimum distances from public water supply wells or other water supply sources and structures.
 - B. Sewer mains shall be at least 10 feet or 3 meters horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In case where it is not practical to maintain a 10-foot separation, the department may allow deviation on a case-by-case basis, if supported by data from the design engineer and provided that the water main is in a separate trench or on an undisturbed earth shelf located on one side of the sewer at an elevation that the bottom of the water main is at least 18 inches or 46 centimeters above the top of the sewer.

Sanitary Sewer Permit Conditions Page 2

- C. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches or 46 centimeters 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. When a water main crosses under a sewer, adequate structural support shall be provided for the sewer to prevent damage to the water main.
- D. When it is impossible to obtain proper horizontal and vertical separation, the sewer shall be designed and constructed equal to water pipe and shall be pressure tested to assure watertightness prior to backfilling.

FAILURE TO COMPLY WITH THE ABOVE CONDITIONS WILL RESULT IN DENIAL OF THE LETTER OF AUTHORIZATION.

Sewer Extension Application for a Letter of Authorization

Department of Natural Resources Kansas City Regional Office 500 Northeast Colbern Road Lee's Summit, Missouri 64086

1.	Name of Project		
2.	Location of Project		
3.	Constructed Under Cons	struction Permit No	
4.	Authority	Tel	
5.	Brief Description		
	and and the second s		

6. <u>Certification</u>: I, the project engineer or municipal official (in charge of operating the above described facilities), hereby certify that I have inspected these facilities and find them to be constructed essentially in accordance with the permit conditions and approved plans and specifications. I recommend acceptance and approval by the Missouri Clean Water Commission.

Municipal Official or Project Engineer Signature

Date

I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief, such information is true, complete and accurate and, if granted a Letter of Authorization, I agree to abide by all rules, regulations, orders, and decisions of the Missouri Clean Water Commission.