

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



CONSTRUCTION PERMIT

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

McBride Brook Ridge, LLC
ATTN: Jeremy Roth
16091 Swingly Ridge Road, Suite 300
Chesterfield, MO 63017

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.

September 18, 2014
Effective Date

September 17, 2016
Expiration Date

Sara Parker Pauley, Director, Department of Natural Resources

Director, Water Protection Program

CONSTRUCTION PERMIT

COLLECTION SYSTEM:

This project consists of the installation and construction of approximately 6,159 linear feet (lf) of eight-inch (8") polyvinyl chloride (PVC) Standard Dimension Ratio (SDR)-35 gravity sewer lines with approximately 43 manholes and all the necessary appurtenances to make a complete and usable wastewater collection system to serve 105 lots in Brook Ridge Estates with an estimated population equivalent of 388.5 and an estimated design average flow of 38,850 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 Mexico Road and Pleasant Breeze Lane in Wentzville, St. Charles County and discharge to an existing sewer system to be treated at the Wentzville Water Reclamation Center, Missouri State Operating Permit No. MO-0093599. Devon Dezort, E.I., Civil Engineer with City of Wentzville – Public Works Department provided an acceptance letter dated September 3, 2014.

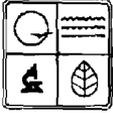
PERMIT CONDITIONS:

1. All construction shall be in accordance with the plans and specifications submitted by The Sterling Company as follows:
 - City of Wentzville Standard Specification and Construction Details, Current Edition shall be conformed with for this project.
 - Plans received on August 25, 2014 and signed and sealed by Rodney Arnold, P.E. on August 13, 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 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 with this form.
9. Upon completion of construction, the City of Wentzville will become the continuing authority for operation, maintenance, and modernization of these facilities.

Keith Forck
Engineering Section
keith.forck@dnr.mo.gov



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

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED \$300.00	CHECK NO. 1102
DATE RECEIVED 5/25/14 SB	

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: _____ Project #: _____
- 1.2 Has the Department of Natural Resources approved the proposed project's engineering report*?
 YES Date of Approval: _____ 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
 Brook Ridge Estates

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
Mexico Rd. @ Westwind Park Dr.	Wentzville	Mo	63366	St. Charles

2.2 Legal Description: US ¼, Survey ¼, ¼, Sec. 27, T 47N, R 2E

2.3 Project Components (check all that apply):
 Gravity sewers Pumping stations Force mains Alternative sewer system Other (Describe below: _____)

RECEIVED

2.4 PROJECT DESCRIPTION
 43 Manholes & 6,159 ft. of 8" PVC.

AUG 25 2014

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: 105 lots (ADF 39,350 GPD; PHF 0,605 GPH)
- 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: 8 inches Capacity: 631 gpm

WATER PROTECTION PROGRAM

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
McBride Brook Ridge, LLC	(636) 537-2000	jroth@mcbridehomes.com

ADDRESS	CITY	STATE	ZIP CODE
16091 Swingly Ridge Road, Ste. 300	Chesterfield	MO	63017

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	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
City of Wentzville, MO	(636) 639-2037	

ADDRESS	CITY	STATE	ZIP CODE
200 E. Fourth Street	Wentzville	MO	63385

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

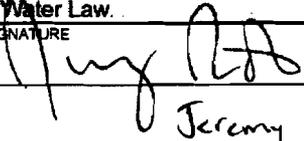
5.0 ENGINEER

ENGINEER NAME / COMPANY NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
The Sterling Company	(314) 487-0440	Dmadej@sterling-eng-sur.com

ADDRESS	CITY	STATE	ZIP CODE
5055 New Baumgartner Rd.	St. Louis	MO	63129

6.0 RECEIVING WASTEWATER TREATMENT FACILITY

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS
City of Wentzville, MO	(636) 639-2037	

MISSOURI STATE OPERATING PERMIT # MO-0093599		REMAINING CAPACITY (GPD) 887,543 gpd	
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 checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input 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 Jeremy Roth		DATE 8/22/14	
TITLE OR CORPORATE POSITION General Manager		TELEPHONE NUMBER WITH AREA CODE (636) 537-2000	E-MAIL ADDRESS jroth@mcbriehomes.com
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176			

THE **STERLING** co.
ENGINEERS & SURVEYORS

RECEIVED

August 22, 2014

AUG 25 2014

Mr. Byron Shaw
Missouri Dept. of Nat'l Resources
Water Pollution Protection / Permitting
P.O. Box 176, 1101 Adams St.
Jefferson City, MO 65102

WATER POLLUTION CONTROL

RE: Project: Brook Ridge Estates
The Sterling Co. Job # 13-06-185

Attn: Dear Mr. Shaw

This letter is submitted to you on behalf of Lombardo Homes of St. Louis, LLC. Enclosed with this letter please find the DNR permit application, two (2) sets of improvement plans for Brook Ridge Estates, approval/capacity letter from City of Wentzville Mo. and a check (\$300) to DNR. This site is located along Mexico Road @ Westwind Park Dr. in Wentzville Missouri and is under the jurisdiction of the City of Wentzville Mo.

This project consists of the sewers and other utilities necessary to serve this development. The sanitary sewer construction consists of 43 manholes and 6,159 ft of 8" pipe.

Your expedience in this permit request would be greatly appreciated. Thank you for your assistance and cooperation. If you have any questions or comments, please do not hesitate to call.

Sincerely,
THE STERLING COMPANY


Derrick Madej
Civil Engineer

cc: Michael G. Boering
George Gower
Rodney Arnold
McBride Brook Ridge, LLC
16091 Swingly Ridge Road, Suite 300, Chesterfield, MO 63017

The Sterling Company

5055 New Baumgartner Road, St. Louis Missouri 63129
314-487-0440 Fax 314-487-8944



CITY OF WENTZVILLE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
200 E. FOURTH STREET
WENTZVILLE, MO 63385

August 15, 2014

McBride Brook Ridge, LLC
Attention: Jennifer Balsley, P.E.
16901 Swingley Ridge Road, STE 300.
Chesterfield, MO 63017

Project: **Brook Ridge Estates (Improvement)**
Project Number: **ENG- 2014 – 022B**

Dear Ms. Balsley,

The City of Wentzville has approved the improvement plans for the above referenced project. A set of plans, marked approved, are being returned to your Consultant, for their further use.

The wastewater plans at the above referenced location have been reviewed and meet city standards. Wastewater capacities are available from the City of Wentzville. The City of Wentzville will act as the continuing authority for acceptance and treatment of the sanitary sewage and maintenance of the public mains.

The available treatment capacity at the Wentzville Water Reclamation Center is 887,543 gallons per day of a total treatment capacity of 6.1 MGD (MO-0093599). This project has an estimated daily flow of 28,120 gallons per day, reducing the available treatment capacity to 859,423 gallons per day. The numbers for available capacity are a planning tool used by the City of Wentzville and the Missouri Department of Natural Resources. The value does not represent actual capacity at this time, but is the amount of actual available capacity of the Wentzville Water Reclamation Center less the committed lateral connections. The City of Wentzville continues to track treatment capacity versus committed lateral connections, in cooperation with the Missouri Department of Natural Resources, to insure that adequate measures are in place to allow for planned growth in the Community. However, regardless as to the available capacity indicated above, the City cannot guarantee that there will be capacity should actual conditions significantly differ from our projections and estimates.

The water plans at the above referenced location have been reviewed and meet city standards. Water capacities are available from the City of Wentzville and the City of Wentzville will own, operate and maintain the public mains installed under this permit.

This letter is to notify you that this approval, the issuance of a Construction Permit, and the start of any construction, is contingent upon the following:

- Obtain a MoDNR Construction permit for the water main extension and sanitary sewer extension.
- The Engineer's Cost Estimate for improvements has been approved. An escrow agreement of **\$962,970.75** is required to guarantee the installation of the proposed improvements and must be submitted prior to being issued a construction permit. This escrow consists of 100% of public improvements and erosion control measures as well as 5% of all other items contained in the cost estimate received from The Sterling Company received July 29, 2014.
- A construction permit fee of \$14,444.56 will be required prior to receiving the Construction Permit. This fee is based on 1½% of the public infrastructure as estimated in the Engineer's Cost Estimate.
- A pre-construction meeting must be scheduled prior to beginning construction. To request a pre-construction meeting please contact the Engineering Division at 636-639-2037.

If you have any additional comments or questions, please contact me at 636-639-2054 or at devon.dezort@wentzvillemo.org.

Sincerely,



Devon Dezort, E.I.
Civil Engineer

cc: File

The Sterling Company
Attention: Rodney Arnold, P.E.
5505 New Baumgartner Road
St. Louis, MO 63129

Scott Shipman
St. Charles County Assessor
201 N. Second Street
St. Charles, Mo 63301