



Missouri Department of dnr.mo.gov
NATURAL RESOURCES
Michael L. Parson, Governor Carol S. Comer, Director

May 22, 2019

Streets of West Pryor LLC
7200 West 132nd Street
Overland Park, KS 66213

Dear Streets of West Pryor LLC:

Pursuant to the Missouri Clean Water Law, we have issued and are enclosing a General Permit for Sewer Extension Construction to Streets of West Pryor. Please review the requirements of your permit.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to 10 CSR 20-1.020 and Sections 644.051.6 and 621.250, RSMo. To appeal, you must file a petition with the Administrative Hearing Commission within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the Administrative Hearing Commission. Contact information for the AHC is as follows: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102, Phone: 573-751-2422, Fax: 573-751-5018, Website: www.oa.mo.gov/ahc.

Nothing in this permit removes any obligations to comply with county or other local ordinances or restrictions.

If you have any questions concerning this permit, please do not hesitate to contact the Water Protection Program at P.O. Box 176, Jefferson City, MO 65102, 573-751-1300.

Sincerely,

WATER PROTECTION PROGRAM

Refaat Mefrakis, P.E., Chief
Engineering Section

RM:lht

Enclosure

c: Mr. David N. Olson, Streets of West Pryor
Mr. David Lohe, P.E., City of Lee's Summit
Mr. David Lilly, P.E., Little Blue Valley Sewer District
Mr. Leon Osbourne, Kaw Valley Engineering



STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

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

Construction Permit ID:	MOGC00518
Title of Project:	Streets of West Pryor
Owner:	Streets of West Pryor LLC
Address:	7200 West 132nd Street Overland Park, KS 66213

The project will also include general site work appropriate to the scope and purpose of the project and will include all the necessary appurtenances to make a complete and usable collection system. The construction of this project will be in the vicinity of the county below and discharge to Receiving Permit ID below:

County: Jackson	Receiving Permit ID: MO0101087
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for the construction of (described construction project):

Streets of West Pryor-Construction of approximately 4118 lf of 8-inch PVC SDR-35 gravity sewer lines with approximately 22 manholes to serve a 2,000 PE and a design average flow of 214,000 gpd. Project is in the vicinity of 840 NW Pryor Road in Lees Summit, Jackson County and discharges to an existing system to be treated at Little Blue Valley Sewer District WWTF, MO-0101087. David Lohe, PE, supervisory engineer, with the City of Lees Summit provided an acceptance letter dated April 25, 2019 and David Lilly, PE, district engineer, with the Little Blue Valley Sewer District provided an acceptance letter dated May 9, 2019.

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.

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

May 22, 2019

Issue Date

Edward B. Galbraith, Director
Division of Environmental Quality

April 19, 2020

Expiration Date

Chris Wieberg, Director
Water Protection Program

APPLICABILITY

1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Storage basins, considered part of the collection system, are also included. Earthen basins are not included under this General Sewer Extension Construction permit.
2. A Sewer Extension Construction Permit may be required by the department due to compliance and enforcement actions.
3. This permit does not apply to:
 - A. Earthen storage basins;
 - B. Projects located within an Approved Sewer Program. These include the City of Blue Springs, City of Columbia, City of Kansas City, City of Jefferson City, City of Joplin, City of Lebanon, City of Springfield, City of St. Peters, Duckett Creek Sewer District, and Metropolitan St. Louis Sewer District;
 - C. Projects funded by the Department of Natural Resources;
 - D. Projects that substantially deviate from the Design Guides in 10 CSR 20-8; and
 - E. Exempt projects unless requested by the applicant or required by enforcement.

PREREQUISITES:

1. The General Sewer Extension Construction Permit application, appropriate fee, and a schedule for construction with the date on which construction will begin and anticipated completion date.
2. The engineering report, as required, plans and specifications each signed and sealed by a professional engineer registered in the State of Missouri. A Summary of Design is an acceptable substitute for the engineering report required by this permit prerequisite.
3. The Design Certification form signed and sealed by a professional engineer registered in the State of Missouri certifying the design of the system was done in accordance with 10 CSR 20-6 and 10 CSR 20-8.
4. A statement from the continuing authority was received accepting the wastewater for treatment.
5. A statement from the continuing authority was received accepting the responsibility for operation, maintenance, and modernization of these facilities

PERMIT CONDITIONS:

1. Contact the department's appropriate regional office 48 hours prior to starting construction. Contact information can be found at <http://dnr.mo.gov/regions/regions.htm>.
2. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.
3. The construction must be in accordance with the design certification stating the plans and specifications comply with 10 CSR 20-6 and 10 CSR 20-8.

PERMIT CONDITIONS: (continued)

4. 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 regional office per 10 CSR 20-7.015(9)(E)2.
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 shall be located with the top access at or above grade level.
 - D. Manholes should be located at least ten feet (10') horizontally from any existing or proposed water main.
 - E. 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 (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.

PERMIT CONDITIONS: (continued)

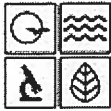
6. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will 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. If this project eliminates a wastewater treatment facility, then a full closure plan shall be submitted to the department's appropriate regional office for review and approval of any permitted wastewater treatment system being replaced. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, Section I, of the Missouri State Operating Permit. Closure shall not commence until the submitted closure plan is approved by the department. Form J – Request for Termination of a State Operating Permit, shall be submitted to the department's appropriate Regional Office for termination of any existing Missouri State Operating Permit, once closure is completed in accordance with the approved closure plan.
9. Submit a Statement of Work Completed Form to the department following completion of construction. Submit an electronic copy of the as built plans if the project was not constructed in accordance with previously submitted plans and specifications.



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

FOR DEPARTMENT USE ONLY

APP NO.	CP NO.
FEE RECEIVED	CHECK NO.
DATE RECEIVED	

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 or JetPay confirmation included with this application? ☒ YES ☐ NO
See Section 7.0

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

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT

Streets of West Pryor

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
840 NW Pryor Road (and vicinity)	Lee's Summit	MO	64081	Jackson

2.2 Legal Description: $\frac{1}{4}$, $\frac{1}{4}$, SE/SW $\frac{1}{4}$, Sec. 35, T 48, R 32

2.3 Project Components (check all that apply):

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

2.4 PROJECT DESCRIPTION

Installation of 4118 LF of 8" public sanitary sewer and 22 manholes to serve a mixed use commercial/residential development via two extensions, a north extension and south extension. The total combined flow is 214,000 gpd base flow and 607,495 gpd with estimated I&I. See attached letter for additional details.

2.5 DESIGN INFORMATION

- A. Population or number of lots to be served by this extension: 2,000 persons eqv.
- B. Estimated flow to be contributed by this extension: Design Average Flow: 214 k gpd Design Peak Hourly Flow: 25312 gph
- C. Industrial Wastes: Type: _____ Flow: _____ gpd
- D. Receiving Sewer: Size: 12 & 8 inches Capacity: 1582 gpm

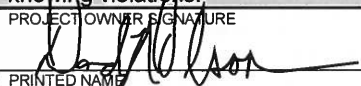
3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
Streets of West Pryor, LLC, Matt Pennington		matt@drakekc.com	
ADDRESS	CITY	STATE	ZIP CODE
7200 West 132nd Street	Overland Park	KS	66213

4.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) that will be operating the facility and/or ensuring compliance with the permit requirements. A continuing authority is not, however, an entity or individual that is contractually hired by the permittee to sample or operate and maintain the system for a defined time period, such as a certified operator or analytical laboratory. To access the regulatory requirement regarding continuing authority, 10 CSR 20-6.010(2), please visit <https://s1.sos.mo.gov/cmsimages/adrules/csr/current/10csr/10c20-6.pdf>. A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of State's (SoS's) webpage: <https://bsd.sos.mo.gov/BusinessEntity/BESearch.aspx?SearchType=0>, unless the continuing authority is an individual(s), government, or otherwise not required to register with the SoS.

NAME	TELEPHONE NUMBER WITH AREA CODE	E-MAIL ADDRESS	
City of Lee's Summit, Utilities, David Lohe	816-969-1800	david.lohe@cityofls.net	
ADDRESS	CITY	STATE	ZIP CODE
1200 SE Hamblen Road	Lee's Summit	MO	64081

4.1 A letter from the continuing authority or the Continuing Authority and Receiving Wastewater Treatment Facility Acceptance form, if different than the owner, is included with this application. ☒ YES ☐ NO ☐ N/A

5.0 ENGINEER			
ENGINEER NAME / COMPANY NAME Leon Osbourne, Kaw Valley Engineering		TELEPHONE NUMBER WITH AREA CODE 785-762-5040	E-MAIL ADDRESS ldo@kveng.com
ADDRESS 2319 N Jackson	CITY Junction City	STATE KS	ZIP CODE 66441
6.0 RECEIVING WASTEWATER TREATMENT FACILITY			
NAME Little Blue Valley Sewer District, Dave Lilly		TELEPHONE NUMBER WITH AREA CODE 816-299-4616	E-MAIL ADDRESS lilly@lbvdsd.org
MISSOURI STATE OPERATING PERMIT # MO0101087		REMAINING CAPACITY (GPD) 22 MGD	
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 Application Fee			
<input checked="" type="checkbox"/> Check Number <u>60022</u> <input type="checkbox"/> JetPay Confirmation Number			
8.0 PROJECT OWNER: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			
PROJECT OWNER SIGNATURE 			
PRINTED NAME David N. Olson		DATE May 9, 2019	
TITLE OR COPORATE POSITION Member, Streets of West Pryor LLC		TELEPHONE NUMBER WITH AREA CODE 314-413-3598	E-MAIL ADDRESS daveolson@monarchprojectllc.com
Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176			

SEWER EXTENSION DESIGN CERTIFICATION

Answer all questions yes, no, or N/A. Answer N/A only if the question is clearly not applicable to the design of the proposed sewer extension OR if a deviation was previously allowed by the Department in the approval of Standard specifications or Standard Detail Sheets.

9.0 SEWER EXTENSION CHECKLIST					
	REGULATION		YES	NO	N/A
1.	8.110(9)(B)	Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	8.110(3)(A)(B)	Is the design flow based on actual flow data for an existing system? Is the design flow based on the design peak hourly flow for a new collection system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	8.120(2)	Does the sewer receive only sewage and not combined sewage?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	8.120(3)(C)	Are the joints sealed to prevent infiltration or exfiltration > 100 gal/inch of pipe dia/mile/day for receiving WWTF with a design flow > 22,500 gpd, and >200 gal/inch of pipe dia/mile/day for any section between manholes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	8.120(4)(A)	Are manholes located at all changes in grade, size or alignment, at all intersections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	8.120(3) (A)1	Is all sewer pipe constructed with a slope to obtain mean velocities of not less than 2 feet per second?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	8.120(3)(A)	Is the pipe installation, embedment, and backfill designed to prevent damage to the pipe and its joints?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	8.120(3)(B)	Is pipe being tested to ensure it does not exceed a deflection of 5% of the inside diameter?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	8.120(4)(C)	Are manholes at least 48 inches in diameter with a clear opening of 22 inches on sewer line larger than 8"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	8.120(4)(C)	Where cleanouts are used at the end of a lateral instead of a manhole, they are a minimum diameter of 8 inches or larger and equal to the diameter for pipes < 8"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	8.120(4)(E)	Are the manholes watertight, constructed, installed in accordance with the manufacturer's recommendations and procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	8.120(5)(B)	Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	8.120(5)(A)	Is the sewer free from physical connections to a potable water supply system and no water pipes come in contact with a sewer manhole?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.0 PRESSURE SEWERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST					
	REGULATION		YES	NO	N/A
16	8.125(5)(A)	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day when the minimum diameter sewer main pipe is at least 1.5"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17	8.125(5)B	Are appurtenances compatible with the piping system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	8.125(5)(C)	Is the minimum diameter service line pipe at least 1.25"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	8.125(5)(D)1A	Are no multiple equivalent dwelling units (EDUs) or commercial facilities served by simplex grinder pump stations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	8.125(5)(D)1B	Are multiple unit pump stations owned, operated, maintained by an approved continuing authority.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	8.125(5)(D)3	Is there at least 70 gallons of storage in the grinder pump unit ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22.	8.125(5)(D)4	is shutoff valve accessible from the ground? Is there a check valve? Is there an anti-siphon valve where siphoning could occur ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	8.125(5)(D)7 8.130(3)(B)2	Are units serviceable and replaceable under wet conditions without electrical hazard to repair personnel and electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

24	8.125(6)(D) 8.180(2)	Does at least 1 septic tank (1,000 gallons or more) provide to each EDU?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or more STEP sewer?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	8.125(7)(A) 8.125(7)(C)	Is the minimum diameter sewer main pipe and service line of STEG sewer at least 4"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	8.125(5)(D)8 8.125(8)	Are provisions in place to avoid interruption of service due to mechanical or power failure by providing standby power, storage capacity or interconnection with another disposal system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

11.0 PUMP STATION CHECKLIST

	REGULATION		YES	NO	N/A
28.	8.130(2)(A) 8.140(2)(B)	Is the pump station designed to withstand the 100-year flood?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29.	8.130(3)(A)	Is the dry well completely separate from the wet well and is a suitable and safe means of access provided to each?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30.	8.130(3)(B)	If the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	8.130(3)(D)	Are valves outside wet well unless integral to a pump or its housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
32.	8.130(3)(F) 8.140 (8)(J)	Is interconnection between wet and dry well ventilation system?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
33	8.130(3)(G)	Does all potable water at station comply with 8.140 (7) D?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
34	8.130(6)	Is an alarm system provided an uninterrupted power?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
35.	8.130(7) (A)	is there 2 hrs retention of the peak hourly flow for a design flow > 100,000 gpd or 4 hrs retention of the peak hourly flow for a design flow < 100,000 gpd?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
36	8.130(7)(B)	Is there independent utility substations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
37	8.130(8)(A)	Is the force main velocity of ≥ 2 ft/s maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
38.	8.130	Instructions and Equipment. Sewage pumping stations and their operators should have a complete set of operational instructions, including emergency procedures, maintenance schedules, special tools and spare parts as may be necessary.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST

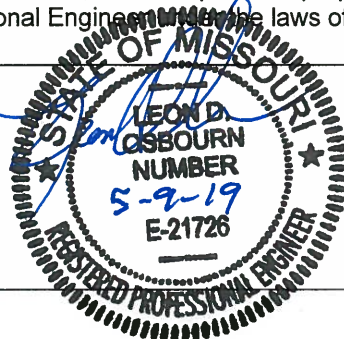
	REGULATION		YES	NO	N/A
39.	8.130(4)	Are the suction lift pumps of the self priming or vacuum priming type?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
40.	8.130(4)(A)	The combined total of dynamic suction lift at the "pump off" elevation and required net positive suction head at design operating conditions shall not exceed twenty-two feet (22').	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
41	8.130(4)(B)	Is there dual vacuum pumps capable of removing air from the suction lift pump.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
42	8.130(5)(A)	Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

12.0 CERTIFICATION STATEMENT

I hereby certify that the design plans and specifications for this project, to the best of my knowledge, conform to the requirements listed above. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

I hereby certify that this plan, specification, and/or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Missouri.

Missouri Professional Engineer's Seal:



Name: Leon Osbourn, Kaw Valley Engineering

Street Address: 2319 N. Jackson

City: Junction City

State: KS

Zip Code: 66441

Phone Number: 785-762-5040

Email: ldo@kveng.com



KAW VALLEY ENGINEERING, INC.

Office: 785.762.5040
Fax: 785.762.7744
Web: www.kveng.com
Address: 2319 N. Jackson
P.O. Box 1304
Junction City, KS 66441

May 8, 2019
A14D7067-1

Permits and Engineering Section
Missouri Department of Natural Resources
Water Protection Program
PO Box 176
Jefferson City, Missouri 65102-0176

**RE: Sanitary Sewer Extension
Streets of West Pryor, Lee's Summit
SE/SW Quarters, Section 35, T 48, R32, Jackson County**

Enclosed are plans for the extension of sanitary sewer service to the Streets of West Pryor Subdivision. The project includes 14 lots of retail, commercial, apartment and hotel usage.

The services are routed through two extensions, the East extension which handles about 23% of the area flow and the South extensions which will handle 77%. In the long-term, a separate residential area will be platted to the West to be served by an extensions to a third system, but that is not part of this construction or permitting effort.

The attached plans show the two areas of extensions. They also show the 3rd west location for information only.

The attached study was prepared for the City of Lee's Summit for approval of the project.

The plans and study conform to the City of Lee's Summit standards and to the State of Missouri requirements. A special issue was considered with the estimation of inflow and infiltration. Based on City of Lee's Summit criteria and experience with downstream flow monitoring, reduced I&I estimates were utilized as detailed in the attached report. These estimates are reasonable and were approved by the City of Lee's Summit.

The permit listing gives total flows combined for both systems. To provide more detail of the individual flows, they are summarized as follows and are calculated in more detail in Appendix B of the attached study.

South Extension:

Peak Base Flow = 163,018 gpd = 6,792 gph = 0.23 cfs
Cumulative Peak Flow (with I&I) = 394,226 gpd = 16,426 gph = 0.61 cfs
Peaking Factor = 2.6 (variance from 4.0 factor, based on study)
Capacity of Downstream 8" System = 1.06 cfs at the limit.

May 8, 2019

Page 2 of 2

East Extension:

Peak Base Flow = 50,925 gpd = 2,122 gph = .078 cfs

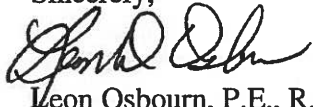
Cumulative Peak Flow (with I&I) = 213,269 gpd = 8,886 gph = 0.33 cfs

Peaking Factor = 4.2

Capacity of Downstream 8" System = 1.81 cfs at the limit.

If you have any questions or need additional information, please feel free to contact me at LDO@kveng.com or (785) 762-5040.

Sincerely,



Leon Osbourn, P.E., R.L.S.
President

WJH/LDO:bt

\\VMJC-FILE\Projects\A14_7067-1\Design\Permits\Sanitary\Supplemental Ltr MDNR For Streets Of West Pryor 05-07-2019.Docx



LEE'S SUMMIT MISSOURI

Apr. 25, 2019

Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

RE: Application for Construction Permit – Sanitary Sewer Extension
PL2019007 Streets of West Pryor – Sanitary Sewer Extension

To Whom It May Concern:

The City of Lee's Summit has received a development proposal dated April 18, 2019 for the above-referenced project. This project requires the extension of public sanitary sewer mains. The enclosed Application for Construction Permit requests this extension.

The following information is provided in support of this application:

1. Justification: The extension is required to serve the proposed project. The site is within the Lee's Summit corporate boundaries and is, therefore, eligible for sanitary sewer service.
2. Certification of Compliance: The proposed system has been designed in accordance with the City of Lee's Summit's current design criteria. The design engineer and contractor will comply with all applicable laws, regulations, ordinances, and codes bearing on the sanitary sewer extension.
3. Continuing Authority: The City of Lee's Summit – Water Utilities Department shall serve as the continuing authority for the operation, maintenance, and modernization of the facility for which this application is made.

If you have any questions, please contact me at (816) 969-1800 or by email at david.lohe@cityofls.net. If you have technical questions relating to the engineering plans, please contact Mr. Bill Heatherman, P.E., of Kaw Valley Engineering at (785) 762-5040. Thank you for your assistance in processing this application.

Sincerely,

David Lohe, P.E.
Supervisory Engineer





LITTLE BLUE VALLEY SEWER DISTRICT

Atherton Wastewater Treatment Plant
21208 East Old Atherton Road
Independence, MO 64058
(816) 796-9191
FAX: (816) 796-3500

May 9, 2019

Bill Heatherman, PhD, P.E.
Kaw Valley Engineering, Inc.
2319 N Jackson
Junction City, KS 66441

Re: Streets of West Pryor, Lee's Summit, Jackson County, MO

Dear Mr. Heatherman,

This letter is to inform you that the Little Blue Valley Sewer District has reviewed the drawings for the above referenced project. The new sewer lines associated with this work will connect to an existing City of Lee's Summit sanitary sewer which feeds into the District's interceptor sewer to be treated at the District's Atherton Wastewater Treatment Plant. The District agrees to receive and treat the domestic wastewater from the proposed sewer. Any new industrial users must contact Lisa O'Dell at (816) 299-4614 prior to discharge of industrial wastewater.

The Little Blue Valley Sewer District Atherton Wastewater Treatment Plant permit number is MO 0101087. The plant is rated for 52 million gallons per day (MGD). The average dry weather flow is 30 MGD, which gives an average excess capacity of 22 MGD.

If you have any further questions, please give me a call at (816) 796-9191 Ext. 2216.

Sincerely,

David Lilly, PE
District Engineer

Cc, Lisa O'Dell, LBVSD
file

MISSION:

"Our mission is to provide excellent wastewater services which protect the public health and improve the environment of our region."

VISION:

"The Little Blue Valley Sewer District will be a strong partner in regional planning and resource sharing, anticipating and Responding to both environmental and economic needs"