STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

The Missouri Department of Nat	ural Resources hereby issues a permit to:
	MOGC00768 The Falls at Winterset Valley 1601-1613 Winterset 6 LLC 400 SW Longview Blvd, Suite 105 Lee'S Summit, MO 64081 eral site work appropriate to the scope and purpose of the project and will include all the necessary te and usable collection system. The construction of this project will be in the vicinity of the county g Permit ID below:
County: Jackson	Receiving Permit ID: MO0101087
for the construction of (described	d construction project):
	Construction of approximately 1,070 lf of 8-inch PVC SDR 26 gravity sewer line with a design average flow of 4,810 gpd.
to an existing system to be tre	ew High Dr. and E. 109th St. Avenue in Lees Summit, Jackson County and discharges ated at LBVSD, Atherton WWTF, MO-0101087. David Lilly, P.E, District Engineer, eptance letter dated June 6, 2024. Amanda Bagwell, P.E., of Lees Summit provided the letter dated June 4, 2024.
RSMo, and regulation promulga As the Department does not exampermit does not include approva	acilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, ted thereunder, or this permit may be revoked by the Department of Natural Resources (Department) mine structural features of design or the efficiency of mechanical equipment, the issuance of this of these features. In the instruction of water pollution control components; it does not apply to other environmentally
August 08, 2024 Issue Date	John Hoke, Director Water Protection Program
August 07, 2026	

Expiration Date

APPLICABILITY

- 1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Non-earthen flow equalization storage basins at lift stations and inline storage, which flows back into the lift station or collection system, are also included.
- 2. The Missouri Department of Natural Resources may require a site-specific sewer extension construction permit due to compliance and enforcement actions in accordance with 10 CSR 20-6.010(13)(C).
- 3. This permit does not apply to:
 - A. Earthen storage basins;
 - B. Exempt projects in accordance with 10 CSR 20-6.010(1)(B), 10 CSR 20-6.010(5)(B), and RSMo 644.051 unless requested by the applicant or required by enforcement.

PREREQUISITES:

- 1. The Sewer Extension Construction Permit application, appropriate fee, and documentation in accordance with 10 CSR 20-6.010(5)(G).
- 2. Submit the Sewer Extension Construction Permit application at least sixty (60) days in advance of the start of construction in accordance with 10 CSR 20-6.010(5)(F).
- 3. Submit an electronic copy of the construction permit application and documents to DNR.WPPEngineerSection@dnr.mo.gov in accordance with 10 CSR 20-6.010(5)(G)3.
- 4. The plans and specifications, each signed, sealed, and dated by a professional engineer registered in the State of Missouri in accordance with 10 CSR 20-8 and 10 CSR 20-6.010.
- 5. The Design Certification form, Engineering Report, or Summary of Design, signed, sealed, and dated by a professional engineer registered in the State of Missouri, certifying the design of the system is in accordance with 10 CSR 20-6 and 10 CSR 20-8.
- 6. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting the wastewater for treatment and indicating the permitted treatment facility has the available capacity.
- 7. A statement from the continuing authority, as defined in 10 CSR 20-6.010, accepting responsibility for the operation and maintenance of these facilities.

PERMIT CONDITIONS:

- 1. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.
- 2. The construction must be in accordance with the final plans and specifications received by the Department. Revisions that affect capacity, flow, or system layout must be approved by the Department prior to construction.

PERMIT CONDITIONS: (continued)

- 3. If construction will incorporate minor changes from previously submitted plans and specifications (i.e., changes that do not affect the capacity, flow, or system layout), submit an electronic copy of the as-built plans and specifications in accordance with 10 CSR 20-8.110(11).
- 4. State and Federal Law does not permit bypassing of raw wastewater; therefore, the applicant must take steps 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) or through the Online Bypass/SSO Reporting service on the Missouri Gateway for Environmental Management (MoGEM) portal found at https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem.

See https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988 for more information.

- 5. Protection of drinking water supplies must meet the requirements of 10 CSR 20-8.120(5).
 - A. There shall be no physical connections between a public or private potable water supply system and a sewer or appurtenance that would permit the passage of any wastewater or polluted water into the potable supply.
 - B. Lay sewers at least 50 feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures.
- 6. Position manholes so that the top access is at or above grade level.
- 7. In addition to the requirements for a construction permit, see 10 CSR 20-6.200 for land disturbance requirements 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. Applicants shall obtain land disturbance permits through the Department's ePermitting system, available online at <a href="https://dnr.mo.gov/data-e-services/water/electronic-permitting-ep

See https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance for more information.

8. Entities applying for funding under 10 CSR 20-4, "Grants and Loans" will need to comply with those requirements in addition to the requirements of 10 CSR 20-8.

PERMIT CONDITIONS: (continued)

9. The Department may require a United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) or a permit waiver for the activities described in this permit. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S., then a 404/401 is required. Fulfillment of these requirements is necessary before the permit is considered valid. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the Department's Operating Permits Section at 573-522-4502 for more information.

See https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality for more information.

- 10. If this project eliminates a wastewater treatment facility under the jurisdiction of the Department, then the applicant shall submit a full closure plan with a Facility Closure Request Form, Form MO 780-2512, to the Department's appropriate regional office for review and approval. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III of the Missouri State Operating Permit. Closure shall not commence until the Department approves the submitted closure plan.
- 11. If this project is part of a project to resolve an enforcement action or is receiving funding from the Department, submit a <u>statement of work complete</u> following the completion of construction.
- 12. Applicants may submit, prior to the expiration date of this permit, a written request that additional time is needed in accordance with 10 CSR 20-6.010(5)(H)3.



MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM

APPLICATION FOR CONSTRUCTION PERMIT – SEWER EXTENSION

FOR DEP	ARTMENT USE ONLY
APP NO.	CP NO.
FEE RECEIVED	CHECK NO.
DATE RECEIVED	

NOTE ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM								
considered incomplete and returned.)	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 Fund	ng 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 the	nis application?	☑ NO						
1.5 Is the appropriate fee or JetPay confirm See Section 7.0	ation included with this appli	cation?	□NO					
* Must be affixed with a Missouri registered	professional engineer's seal,	signature and date	9.					
2.0 PROJECT INFORMATION 2.1 NAME OF PROJECT								
The Falls at Winterset Valley Lots 1601 - 161	3 (Residential Subdivision)							
ADDRESS	Lee's Summit	STATE	ZIP CODE COUNTY Jackson					
2.2 Legal Description: 1/4,	1/4, 1/4, Sec. 3	, T _{47 N} , R ₃						
Z.Z Logal Dosonphon. 74,	74, 500. 3	, '4/N , '\ 3	2 VV					
2.3 Project Components (check all that appl ☑ Gravity sewers ☐ Pumping station		lternative sewer sy	stem					
2.4 PROJECT DESCRIPTION								
Sanitary Sewer Extension of an eight inch gra 1,069.30 LF of 8" SDR-26 PVC Main with 6 M 829 LF of 4" SDR-26 PVC Service Line		13 single family res	idential lots to include the following:					
2.5 DESIGN INFORMATION A. Population or number of lots to be served			gal/res * 3.7 res/lot					
B. Estimated flow to be contributed by this e		Flow: 3,608 gpd	Design Peak Hourly Flow: 649 gph					
C. Industrial Wastes: Type:	Flow: gpd		8+SQRT(Pop/1000) / 4+SQRT(Pop/1000)					
D. Receiving Sewer: Size: 8 inches	D. Receiving Sewer: Size: 8 inches Capacity:2,342 gpm PF = 4.32							
3.0 PROJECT OWNER								
NAME Winterset 6 LLC	TELEPHONE NUMBER 816-761-9292	WITH AREA CODE	EMAIL ADDRESS					
ADDRESS 400 SW Longview Blvd, Suite 105	сіту Lee's Summit	STATE MO	ZIP CODE 64081					
4.0 CONTINUING AUTHORITY: A continuing authority is a company, business, entity or person(s) that will be operating the facility 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 EMAIL ADDRESS amanda.bagwell@cityofls.net								
ADDRESS 1200 SE Hamblen Road	спу Lee's Summit	MO	ZIP CODE 64081					
4.1 A letter from the continuing authority or the different than the owner, is included with the owner.		Receiving Wastew NO	ater Treatment Facility Acceptance form,					

5.0 ENGINEER			574111111111				
ENGINEER NAME / COMPANY NAME			TELEPHONE NUMBER WITH AREA CODE		REA CODE	EMAIL ADDRESS	
Matthew Schlicht / Engineering Solutions			816-623-9888			mschlicht@es-kc.com	
ADDRESS CITY		CITY	-		STATE	ZIP CODE	
50 SE 30th Street	50 SE 30th Street Lee's S		mmit		MO	64082	
6.0 RECEIVING WASTEWA	TER TREATME	NT FACIL	.ITY				
NAME			TELEPHONE NU	JMBER WITH AF	REA CODE	EMAIL ADDRESS	
Little Blue Valley Sewer Distric	ct		816-796-9191			lilly@lbvsd.org	
MISSOURI STATE OPERATING PERMIT #			REMAINING CAR	PACITY (GPD)			
MO 0101087			22 MGD				
6.1 Has the receiving treatme	ent facility agree	ed to accep	ot the addition	nal wastewa	ater flow?	☑ YES □ NO	
6.2 A letter from the receiving VES NO NO		eatment fac	cility, if differe	ent than the	continuing	g authority, is included with this application.	
7.0 Application Fee							
				□JetP	ay Confirm	nation Number	
supervision in accordance wit submitted. Based on my inqui gathering the information, the aware that there are significant knowing violations. PROJECT OWNER SIGNATURE	h a system des ry of the person information sul	signed to as n or persor bmitted is,	ssure that quans s who manag to the best of	alified perso ge the syste f my knowle	onnel prope em, or thos edge and be	ents were prepared under my direction or erly gather and evaluate the information se persons directly responsible for elief, true, accurate, and complete. I am ssibility of fine and imprisonment for	
Jaeur						1	
G. David Gale						There	
TITLE OR COPORATE POSITION			TELEPHONE NUI	MBER WITH AR	EA CODE	EMAIL ADDRESS	
Manager							
Mail completed copy to:	WATER PE P.O. BOX	ROTECTIO	MENT OF NA ON PROGRAM MO 65102-01	М	SOURCES		
MO 780-1632 (10-19)						Page 2 of 2	

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)	Are detailed plans showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities provided?	V						
2	8.110(3)(A)	Is the design flow based on actual flow data for an existing system?			✓				
3	8.110(3)(B)	Are average design flows, peak hourly flows, and I&I contributions for new systems calculated.			V				
4	8.120(2)	Does the sewer exclude water from roofs, streets, groundwater from foundation drains, and combined wastewater?	V						
5	8.120(3)(C)	Is ASTM C969-17 leakage test specified to ensure water tight joint seals and appropriate exfiltration and infiltration rates?	V						
6	8.120(4)(A)	Are manholes located at all changes in grade, size or alignment, and all intersections?	V						
7	8.120(3)(A)1	Are all sewer pipes constructed with a slope to obtain mean velocities of not less than 2 feet per second?	V						
8	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?	√						
9	8.120(3)(A)	Is the pipe installation, embedment, and backfill designed to prevent damage to the pipe and its joints?	V						
10	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	V						
11	8.120(4)(C)	Are manholes at least 42 inches in diameter with a clear opening of 22 inches on sewer line larger than 8"?	√						
12	8.120(4)(C)	Where cleanouts are used at the end of a lateral instead of a manhole, are they a minimum diameter of 8 inches or larger and equal to the diameter for pipes < 8"?			V				
13	8.120(4)(E)	Are the manholes specified to be watertight, constructed, installed in accordance with the manufacturer's recommendations and procedures?	\checkmark						
14	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	V						
15	8.120(5)(B)	Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures?	V						
16	8.120(5)(A)	Is the sewer free from physical connections to a potable water supply system with no water pipes coming in contact with a sewer manhole?	V						

10.0	PRESSURE SE	EWERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST			
	REGULATION		YES	NO	N/A
17	8.125(5)(A)1.	Does the cleaning velocity of ≥ 2 ft/s happen at least once per day?			V
18	8.125(5)(A)2.	Is the diameter of the pressure sewer main pipe at least 1.5"?			V
19	8.125(5)B	Are appurtenances compatible with the piping system?			V
20	8.125(5)(C)	Do service line pipes have a minimum diameter of 1.25 in.?			V
21	8.125(5)(D)1. A	Do simplex grinder pump stations service only a single equivalent dwelling unit (EDU)? i.e. 1 residence – 1 grinder pump station.			V
22	8.125(5)(D)1. B	Are multiple unit pump stations owned, operated, maintained by an approved continuing authority?			V
23	8.125(5)(D)3	Is there at least 70 gallons of storage in the grinder pump unit?			V
24	8.125(5)(D)4	Do grinder pump stations have shutoff valves, check valves, and anti- siphon valves (where siphoning could occur) that are accessible from the ground surface?			7
25	8.125(5)(D)7 8.130(3)(B)2	Are units serviceable and replaceable under wet conditions without electrical hazard and electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location)?			V
26	8.125(5)(D)8 8.125(6)(F)6	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?			V
27	8.125(6)(D) 8.180(2)	Does each EDU have at least one septic tank with a minimum of 1,000 gallon capacity with 20% of tank volume dedicated to freeboard and ventilation?			V
28	8.125(6)(F)	Are pump vaults designed with duplex pumps for STEP sewer systems with design flow of 1,500 gallons per day or greater?			V
29	8.125(7)(A) 8.125(7)(C)	Is the minimum STEG sewerservice line at least 4" in diameter?			V
11.0	PUMP STATION	CHECKLIST			
	REGULATION		YES	NO	N/A
30	8.130(2)(A) 8.140(2)(B)	Is the pump station designed to withstand the 100-year flood?			V
31	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?			V
32	8.130(3)(B)	If the design flow is 1,500 gpd or more, are at least 2 pumps or pneumatic ejectors provided?			V
33	8.130(3)(D)	Are valves located outside wet well unless integral to a pump or its housing?			V
34	8.130(3)(F) 8.140(8)(J)	Do wet and dry wells have separate ventilation systems?			\checkmark
35	8.130(3)(G)	Does all potable water brought to the pump station comply with 8.140 (7) D?			✓
36	8.130(6)	Is an alarm system provided with uninterrupted power?			✓
37	8.130(7)(A)	Is there 2 hours 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?			\checkmark
38	8.130(7)(B)	Is there an independent utility substation provided for emergency power that is capable of starting and operating the pump station at its rated capacity?			V
39	8.130(8)(A)	Is the force main velocity of ≥ 2 ft/s maintained?			√
40	8.130	Are there complete operation instructions for the pumping stations provided that include emergency procedures, maintenance schedules, special tools and spare parts that may be necessary?			7

12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST										
	REGULATION					YE\$	NO	N/A		
41	8.130(4)	Are the suction lift pump	s of the self priming of	r vacuum pri	ming type?			1		
42	8.130(4)(A)	s the combined total of dynamic suction lift at the "pump off" elevation and required net positive suction head at design operating conditions less than or equal to twenty-two feet (22')? Are there dual vacuum pumps capable of removing air from the suction						V		
43	8.130(4)(B)	lift pump?		apable of removing air from the suction						
44	8.130(5)(A)	Are submersible pumps personel entering, or dis-						V		
13.0	CERTIFICATION	N STATEMENT								
For a	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. For any question answered "NO" provide explanation. Provide any useful comments on design for review engineer:									
STATE OF MISSOLIT										
Missouri Professional Engineer's Sea: MITHEW J. SHLICHT SHLICHT PE-00601										
Stree City:	E: Matthew Schlicht t Address: 50 SE: Lee's Summit	30th Street St	ate: Missouri	ZIP Code:	64082					
Phone	e Number: 816-62	3-9888	Email: mschlicht@e	s-kc.com				1		