

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: MOGC00756  
Title of Project: MDNR, Lake of the Ozarks State Park  
Owner: MDNR, Division of State Parks  
Address: PO Box 176  
Jefferson City, MO 65102

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: Miller                      Receiving Permit ID: MO0103241

for the construction of (described construction project):

Lake of the Ozarks State Park Campsite Section 4 - Construction of approximately 1,592 lf of 8-inch SCH 35 PVC gravity sewer with 9 manholes and one duplex submersible grinder pump station with 467 lf of 2-inch SDR-26 PVC force main to serve 25 full-service RV spots with a design average flow of 2,250 gpd. Pumps rated for 50 GPM at 61 TDH and 3.5 HP. The receiving sewer is 8-inch with a capacity of 28.2 gpm.

Project is in project is in the vicinity of MO-134 and Ridgecrest Rd in Camden County and discharges to an existing system to be treated at Lake of the Ozarks Regional Wastewater Treatment Plant No. 1, MO-010324. Mike Welty, Osage Beach Assistant City Administrator, provided a WWTF acceptance and continuing authority letter for the lift station and force main dated June 18, 2024.

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.

July 15, 2024  
Issue Date

  
John Hoke, Director  
Water Protection Program

July 14, 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](mailto: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 <https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting>.

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

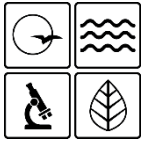
8. Entities applying for funding under 10 CSR 20-4, "Grants and Loans" will need to comply with those requirements in addition to the requirements of 10 CSR 20-8.

**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 [statement of work complete](#) 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 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: DNR/Div. State Park Project #: X2316-01

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  
 If the project is using standard specifications, name of community: City of Osage Beach

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  
 Replace 29 Basic Campsites with 25 Premium Campsites in Sec. 4 of Lake of the Ozarks State Campground

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
Mo. Route 134	Kaiser	MO	65047	Camden

2.2 Legal Description:  $\frac{1}{4}$ , SW  $\frac{1}{4}$ , SW  $\frac{1}{4}$ , Sec. 33, T 39N, R 15W

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

2.4 PROJECT DESCRIPTION  
 The proposed project replaces 29 basic campsites with 25 premium campsites with full water, sewer, and electrical hookups at Lake of the Ozarks State Parks, campsite section 4. The proposed sanitary sewer extension does not increase the amount of waste water to the system, the current system is a single dump site for the current 29 sites within the campsite. The project will provide dedicated waste water connection at each camp site. The project is actually reducing the amount of waste water discharge by reducing the available campsites in the area by 4 sites.

2.5 DESIGN INFORMATION

A. Population or number of lots to be served by this extension: 25 camper sites, population equivalent = 75

B. Estimated flow to be contributed by this extension: Design Average Flow: 2250 gpd Design Peak Hourly Flow: 375 gph

C. Industrial Wastes: Type: Flow: gpd

D. Receiving Sewer: Size: 8 inches Capacity: 28.2 gpm

E. Does this project (check all that apply):  
 Connect to an existing treatment plant  Resolve enforcement issue  Eliminate or consolidate an existing treatment plant

F. Estimated number of onsite systems being removed: 0

G: Estimated costs associated with piping: \$ 135,646.84 Estimated costs associated with lift station(s): \$ 162,488.96

**3.0 PROJECT OWNER**

NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS	
DNR-Division of State Parks	800-334-6946	Moparks@dnr.mo.gov	
ADDRESS	CITY	STATE	ZIP CODE
1659 East Elm St.	Jefferson City	MO	65102
CHARTER NUMBER (SECRETARY OF STATE) or REGISTERED AGENT			

**4.0 CONTINUING AUTHORITY:** A continuing authority is a company, business, entity, or person(s) that will be legally responsible for ensuring compliance with the permit requirements and provide continuous stable oversight of the permitted facility or activity. The Continuing authority should be a relatively permanent entity responsible for the ongoing operation, maintenance and modernization, when needed, of the permitted facility or activity. 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 [Clean Water Commission Chapter 6](#). A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of State's (SoS's) webpage: [Missouri Secretary of State](#), unless the continuing authority is an individual(s), government entity, or otherwise not required to register with the SoS.

NAME DNR-Division of State Parks		TELEPHONE NUMBER WITH AREA CODE 800-334-6946	EMAIL ADDRESS Moparks@dnr.mo.gov
ADDRESS 1659 East Elm Street	CITY Jefferson City	STATE Mo	ZIP CODE 65102
CHARTER NUMBER (SECRETARY OF STATE)			

4.1 Has appropriate continuing authority acceptance been provided as follows:  
A letter from the continuing authority accepting responsibility for continued maintenance of the sewer (if the continuing authority is different than the original owner of the construction), or a properly executed "Continuing Authority and Receiving Wastewater Treatment Facility Acceptance" Form 780-2584.  YES  NO  N/A

**5.0 ENGINEER**

ENGINEER NAME / COMPANY NAME Chris Yarnell/Engineerng Surveys & Services		TELEPHONE NUMBER WITH AREA CODE 573-636-3303	EMAIL ADDRESS CYarnell@ess-inc.com
ADDRESS 802 El Dorado Drive	CITY Jefferson City	STATE Mo	ZIP CODE 65102

**6.0 RECEIVING WASTEWATER TREATMENT FACILITY**

NAME City of Osage Beach		TELEPHONE NUMBER WITH AREA CODE 573-302-2020	EMAIL ADDRESS nearp@osagebeach.org
MISSOURI STATE OPERATING PERMIT # MO-0103241	COUNTY Camden	REMAINING CAPACITY (GPD) 1,250,000	

6.1 If different from the owner, has a letter been provided from the receiving treatment facility demonstrating that they agree to accept the expanded flow or has a properly executed Continuing Authority and Receiving Wastewater Treatment Facility Acceptance MO 780-2584 form been provided?  YES  NO  N/A

6.2 A letter from the receiving wastewater treatment facility, if different than the continuing authority, is included with this application.  YES  NO  N/A

6.3 If the receiving treatment plant or continuing authority is regulated by the Public Service Commission (PSC) for sewer activities, a Certificate of Convenience and Necessity has been received?  Yes – Date:  No  N/A


**OPTIONAL QUESTIONS REGARDING MILITARY SERVICE**

Have you or an immediate family member ever served in the U.S. Armed Forces?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If yes, would you like information about military-related services in Missouri?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

**7.0 Application Fee**

<input type="checkbox"/> Check Number	<input checked="" type="checkbox"/> JetPay Confirmation Number 20054991
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**8.0 PROJECT OWNER:** I certify under penalty of law this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PROJECT OWNER SIGNATURE 		DATE 06/18/2024
PRINTED NAME Aaron J. Libbert		
TITLE OR CORPORATE POSITION Project Manager	TELEPHONE NUMBER WITH AREA CODE 573-645-9718	EMAIL ADDRESS aaron.libbert@dnr.mo.gov

Mail completed copy to:  MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM PO BOX 176 JEFFERSON CITY, MO 65102-0176	Submit completed electronic copy to:  Missouri Department of Natural Resources at <a href="mailto:DNR.WPPEngineerSection@dnr.mo.gov">DNR.WPPEngineerSection@dnr.mo.gov</a>
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<b>9.0 SEWER EXTENSION CHECKLIST</b>				
<b>SEWER EXTENSION DESIGN CERTIFICATION:</b> Answer all questions yes or N/A. Answer N/A only if the question is clearly not applicable to the design of the proposed sewer extension.				
	REGULATION		YES	N/A
1.	8.110(3)(A)	Is the design flow based on actual flow data for an existing system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.	8.110(3)(B)	Are average design flows, peak hourly flows and I&I contributions for new systems calculated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.	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"/>
4.	8.120(2)	Does the sewer exclude water from roofs, streets, groundwater from foundation drains and combined wastewater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.	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"/>
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 type="checkbox"/>	<input checked="" type="checkbox"/>
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8.	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9.	8.120(4)(A)	Are manholes located at the end of each line, at all changes in grade, size or alignment and at all intersections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10.	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"?	<input checked="" 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"/>
12.	8.120(4)(E)	Are the manholes watertight, constructed and installed in accordance with the manufacturer's recommendations and procedures?	<input checked="" 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"/>
14.	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"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>10.0 PRESSURE SEWERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST</b>				
	REGULATION		YES	N/A
16.	8.125(5)(A)1.	Does the cleaning velocity of $\geq 2$ ft/s happen more than once per day?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17.	8.125(5)(A)2.	Is the diameter of the pressure sewer main pipe at least 1.5"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18.	8.125(5)(B)	Are appurtenances compatible with the piping system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19.	8.125(5)(B)2.	Are isolation valves located: upstream of major pipe intersections; both sides of stream, bridge and RR crossings; at terminal end of system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20.	8.125(5)(C)	Do service line pipes have a minimum diameter of 1.25"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22.	8.125(5)(D)1.B .	Are multiple unit pump stations owned, operated and maintained by an approved continuing authority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
23.	8.125(5)(D)3.	Is there at least 70 gallons of storage in the grinder pump unit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
25.	8.125(5)(D)7., 8.130(3)(B)2.	Are units serviceable and replaceable under wet conditions without electrical hazard and is electrical equipment suitable for hazardous locations (National Electrical Code, Class I, Group D, Division 1 location)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
26.	8.125(5)(D)8., 8.125(2)(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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
27.	8.125(6)(D)	In a STEP system is at least one septic tank (1,000 gallons or more) provided for each EDU with 20% of tank volume dedicated to freeboard and ventilation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28.	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or greater?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

11.0 PUMP STATION CHECKLIST				
	REGULATION		YES	N/A
29.	8.125(7)(C)	Is the minimum diameter sewer main pipe and service line of STEG sewer at least 4"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
30.	8.130(2)(A) 8.140(2)(B)	Is the pump station designed to withstand the 100-year flood?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
32.	8.130(3)(B)	If the design flow is 1,500 gpd or more, are there at least 2 pumps or pneumatic ejectors provided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
33.	8.130(3)(D)	Are valves located outside wet well unless integral to a pump or its housing?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
34.	8.130(3)(F) 8.140(8)(J)	Do wet and dry wells have separate ventilation systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
35.	8.130(3)(G)	Does all potable water brought to pump stations comply with 8.140(7)(D)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
36.	8.130(6)	Is an alarm system provided with uninterrupted power?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
38.	8.130(7)(B)	Are there independent utility substations provided for emergency power capable of starting and operating the pump station at its rated capacity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
39.	8.130(8)(A)	Is the force main velocity of $\geq 2$ ft/s maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>


12.0 SUCTION LIFT PUMP AND SUBMERSIBLE PUMP STATION CHECKLIST				
	REGULATION		YES	N/A
41.	8.130(4)	Are the suction lift pumps of the self priming or vacuum priming type?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
42.	8.130(4)(A)	Is 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 22 feet?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
43.	8.130(4)(B)	Are there dual vacuum pumps capable of removing air from the suction lift pump?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
44.	8.130(5)(A)	Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**13.0 SEWER EXTENSION CHECKLIST -- CERTIFICATION STATEMENT**

For any questions answered "N/A" provide an explanation. Also provide any useful general comments regarding design for review engineer.

1. This is a new sewer system. Design flow is based on City of Osage Beach guidelines.  
6. 2 ft/s velocity is not feasible with anticipated flows. Pipe has been sized per City of Osage Beach requirements. Slope is sufficient to obtain 2 ft/s mean velocity at full pipe capacity.  
7. Seasonal site usage will prevent usage of the system during freezing weather. Pipe cover meets City of Osage Beach standards.  
19. Locations requiring isolation valves do not apply to this pressure main.  
21. Grinder pump station is a duplex pump and does not serve separate privately-owned dwelling units.  
27. Pressure sewer is not a STEP system.  
31, 34. No dry well is included.  
33. Pump station has been designed per City of Osage Beach standards.  
35. No potable water supply is provided to pump station.  
38. Independent substations are not provided for emergency power.  
41, 42, 43. A suction lift pump will not be used for this lift station.

Missouri Professional Engineer's seal, signature and date:



06/24/2024

Name: Chris Yarnell

Address: 802 El Dorado Dr.

City: Jefferson City      State: MO      ZIP Code: 65102

Telephone Number with Area Code: 573-636-3303      Email: CYarnell@ess-inc.com



**INSTRUCTIONS FOR COMPLETING  
APPLICATION FOR CONSTRUCTION PERMIT – SEWER EXTENSION**

All blanks must be filled in when the application is submitted to the Missouri Department of Natural Resources. This includes the **required signature**. The fee for a sewer extension construction permit is \$300.

In accordance with Missouri State law RSMo 644.051.3.(2), sewer extension projects installing up to a total of 1,000 linear feet of gravity sewer or force main with less than two pump stations are exempt from obtaining a construction permit. Since these projects are exempt, a construction permit will not be issued for this activity and completion of this form is not required.

**Note:** Use the form **Application for Construction Permit – Wastewater Treatment Facility Application for Construction Permit – Sewer Extension MO 780-1632**, if any wastewater treatment component(s) are to be constructed.

A land disturbance permit is required if construction will result in the disturbance of one or more acres of land. A land disturbance permit (MO-RA00000) is available through the department's ePermitting system at [ePermitting Splash Page](#). A permit fee in accordance with 10 CSR 20-6.011(2)(E) is required.

After receiving a complete application, the department enters the application information into the Missouri Clean Water Information System. You may search for the status of a construction permit online at [MoCWIS Application Search](#).

- 1.1 Check appropriate box. If the project is funded with federal or state monies, supply the funding agency name and project number.
  - 1.2 Check appropriate box and provide the date of department approval.  
The department has developed a fact sheet to aid in the development of an approvable engineering report, [Engineering Report Guidance for Collection Systems, Fact Sheet--PUB2415](#). This document is available online at [Engineering Report Guidance for Collection Systems With a Design Flow of 22,500 Gpd or Greater](#). Engineering report exemptions are listed in 10 CSR 20-6.010(4)(B). Per 10 CSR 20-8.110(2), engineering reports must be approved by the department prior to the submittal of plans and specifications and a construction permit application.
  - 1.3 Check appropriate box. Provide a copy of the appropriate plans and specifications for department review when applying for a construction permit per 10 CSR 20-8.110 and 10 CSR 20-6.010. A Missouri registered professional engineering seal, signature and date is required on each sheet of the plans and the cover of the technical specifications. An electronic copy of the construction permit application and the information listed below in Portable Document Format (PDF) searchable format or department approved equivalent per 10 CSR 20-6.010(5)(G), along with one paper copy for projects not seeking department funding or two paper copies for projects seeking department funding under 10 CSR 20-4. If the project is relying on approved standard specifications from a particular municipality, provide the name of the community. The communities with department-approved standard specifications is available online at [Wastewater Construction Permits and Engineering Regulations](#)
  - 1.4 Check appropriate box. A summary of design shall accompany the plans and specifications when applying for a construction permit per 10 CSR 20-8.110. The department has developed a fact sheet to aid in the development of an acceptable summary of design, [Summary of Design Guidance, Fact Sheet--PUB2417](#). This document is available online at [Summary of Design Guidance for Wastewater Treatment Facilities - PUB2417](#).
  - 1.5 Check the appropriate box. Include fee with application per 10 CSR 20-6.011(2) and [Wastewater Treatment Facility Permit Fees -- PUB2564](#).
- Note:** The department returns incomplete construction permit applications and related engineering documents and the application forfeits the fees. See 10 CSR 20-6.011(5)(A). The applicant forfeits the fees when the applicant withdraws construction applications. See 10 CSR 20-6.011(5)(B).2.1. Provide the project name and location by street name or address.
- 2.1. Provide the project name and location by street name or address.
  - 2.2 Provide the project legal description. The department's mapping system is available online at [MAPit ARCGIS](#).
  - 2.3 Check all of the applicable boxes.  
The department considers anything other than a gravity sewer system to be an alternative sewer system. Examples of these systems are grinder pump pressure sewers, septic tank effluent pump, or STEP, sewers, septic tank effluent gravity, or STEG, sewers or small diameter gravity sewers.
  - 2.4 Briefly describe the project by providing the following information:
    - A. Total number of manholes.
    - B. Size of sewers and the total linear feet of each size.
    - C. Number of lift stations and design average flow and peak hourly flow capacities of each lift station.
    - D. Size and length of force mains.
    - E. Alternative sewer size and length, plus the number of components (e.g. septic tanks, grinder pumps, etc.)
  - 2.5 Provide the project design information and when required in the units specified:
    - A. Provide the population or number of lots to be served by the proposed sewer extension.
    - B. Provide the estimated design flow information in accordance with 10 CSR 20-8.110(4)(C)4.A.
      - **Design average flow** – The design average flow is the average of the daily volumes to be received for a continuous 12 month period expressed as a volume per unit time. However, the design average flow for facilities having critical seasonal high hydraulic loading periods (e.g., recreational areas, campuses and industrial facilities) shall be based on the daily average flow during the seasonal period.
      - **Design peak hourly flow** – The design peak hourly flow is the largest volume of flow to be received during a one hour period expressed as a volume per unit time.
    - C. Provide the type and flow in gallons per day of industrial wastes received by the propose sewer extension.

- D. Provide the receiving sewer size in inches and capacity in gallons per minute.
- E. Check all of the applicable boxes.
- F. Provide an estimate of the number of onsite systems decommissioned as a result of the project.
- G. Provide estimated cost (design, materials, land, and labor) for installation of piping and pump station(s).

- 3.0 Project Owner – Provide the legal name, mailing address, phone number and email address of the owner of the regulated activity or discharge. The owner identified in this section and subsequently reflected on the certificate page of the operating permit should be the owner of the regulated activity/discharge being applied for and is not necessarily the owner of the real property on which the activity or discharge is occurring. Also provide Charter Number of Project Owner from Secretary of State or name of Registered agent to comply with 10 CSR 20-6.010(2)(E) which states: “Private corporations which are not incorporated under the laws of Missouri shall be represented by a registered agent in the state of Missouri before a construction permit or an operating permit will be issued by the department.”
- 4.0 Continuing Authority – A continuing authority is a company, business, entity, or person(s) that will be legally responsible for ensuring compliance with the permit requirements and provide continuous stable oversight of the permitted facility or activity. The Continuing authority should be a relatively permanent entity responsible for the ongoing operation, maintenance and modernization, when needed, of the permitted facility or activity. 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 view the regulatory requirement regarding continuing authority, 10 CSR 20-6.010(2), please visit [Department of Natural Resources Division 20-Clean Water Commission Chapter 6-Permits](#). A continuing authority's name must be listed exactly as it appears on the Missouri Secretary of State's (SoS's) webpage: [Missouri Secretary of State Business Entity Search](#), unless the continuing authority is an individual(s), government entity, or otherwise not required to register with the SoS. Provide charter number listed on SoS's webpage, if applicable. If the Continuing Authority is the same as the Project Owner, write “Same as above”.
- 4.1 Check appropriate box. Include a letter signed by the continuing authority (if not the same as the project owner) stating they will “accept, operate, and maintain” the sewer extension. The continuing authority may complete the “Continuing Authority and Receiving Wastewater Treatment Facility Acceptance” form in lieu of a letter. Download the department's form [Continuing Authority Receiving Wastewater Treatment Facility Acceptance-Mo 780-2584](#). If the continuing authority will not accept and agree to operate and maintain the sewer extension, this application will be considered incomplete.
- 5.0 Complete Engineer contact information.
- 6.0 Complete Receiving Wastewater Treatment Facility information. Include the Missouri State Operating Permit number and the available remaining capacity in gallons per day, or gpd.
- 6.1 Check appropriate box. The receiving wastewater treatment facility must be notified and agree to the proposed sewer extension and additional flow, prior to submitting a construction permit to the department. If the receiving wastewater treatment facility will not accept the wastewater, this application will be considered incomplete.
- 6.2 Check appropriate box. Include a letter from the receiving wastewater treatment facility (if not same as the continuing authority) acknowledging and accepting the additional flow from the proposed sewer extension.
- 6.3 Check appropriate box. The Certificate of Convenience and Necessity (CCN) is granted by the Public Service Commission to for-profit companies to provide sewer services. 10 CSR 20-6.010(2)(B)3 requires the CCN be granted prior to applying for a permit from the department.
- 7.0 Check the appropriate box and include check or confirmation number. Applicants can pay fees online by credit card or eCheck through a system called JetPay. See [Water Permit Fees](#). Clicking on the JetPay link you can make a one-time payment by selecting the “Water Protection Program” as the Payment Category and WP 04 Construction Permits as the Payment Type. The system then asks for Wastewater Permit Number (which is “construction”) and Facility/Project name (which is the name of this project given in question 2.0). The fee for sewer extension review is \$300.
- Per Section 37.001, RSMo, a transaction fee will be included. The transaction fee is paid to the third party vendor JetPay, not the Department of Natural Resources.
  - Be sure to select the correct fee type and corresponding URL to ensure your payment is applied appropriately. If you are unsure what type of fee to pay, contact the Water Protection Program's Budget, Fees and Grants Management Unit by phone at 573-522-1485 for assistance.
  - Upon successful completion of your payment, JetPay provides a payment confirmation. Submit this form with a copy of the payment confirmation if requesting a new permit or a permit modification.
  - If you are unable to make your payment online, but want to pay with credit card, you may email your name, phone number, and invoice number, if applicable, to [WPPFEES@dnr.mo.gov](mailto:WPPFEES@dnr.mo.gov). The Budget, Fees and Grants Management Unit will contact you to assist with the credit card payment. **Please do not include your credit card information in the email.**
  - Applicants can find fee rates for various activities in 10 CSR 20-6.011 and [Wastewater Treatment Facility Permit Fees-- PUB2564](#).
- 8.0 The owner of the construction project must sign the application per 10 CSR 20-6.010(5)(G). Mail the completed form, related construction documents and applicable fee (or JetPay receipt) to the department. Also provide the application, plans and specifications in PDF searchable format via external media drive or email if size allows. Email information to [DNR.WPPEngineerSection@dnr.mo.gov](mailto:DNR.WPPEngineerSection@dnr.mo.gov).

#### 9.0–13.0 Sewer Extension Checklist

This portion of the application is optional, but completing it is recommended because it can speed review. If designed properly, the engineer preparing the application should be able to answer “Yes” or “Not Applicable” (N/A) for each of the items. If an answer of “N/A” is necessary, section 13.0 provides a place to provide any explanation or useful comments. Section 13.0 also requires those completing the Sewer Extension Checklist (9.0 – 13.0) to properly sign, seal and date the checklist. If there are any questions concerning this form, contact the Department of Natural Resources, Water Protection Program at 800-361-4827 or 573-751-1300, or visit [Wastewater Construction Permits and Engineering](#).