STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

CONSTRUCTION PERMIT

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

BEACHWOODS, LLC
Beachwoods Campground Collection System and Holding Tank
29626 Coffman Beach Rd
Rocky Mount, MO 65072

for the construction of (described facilities):

See attached.

Permit Conditions:

See attached.

Construction of such proposed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, RSMo, and regulation promulgated thereunder, or this permit may be revoked by the Department of Natural Resources (department).

As the department does not examine structural features of design or the efficiency of mechanical equipment, the issuance of this permit does not include approval of these features.

A representative of the department may inspect the work covered by this permit during construction. Issuance of a permit to operate by the department will be contingent on the work substantially adhering to the approved plans and specifications.

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

April 30, 2026
Effective Date

April 29, 2028
Expiration Date

Heather Peters, Director, Water Protection Program

CONSTRUCTION PERMIT

I. CONSTRUCTION DESCRIPTION

Installation of 2,780 lf of 6-inch SDR-35 PVC gravity sewer main with 21 manholes and a 6,368 gallon holding tank to collect wastewater from 58 RV lots with sewer hookups and a design average flow of 5,220 gallons per day. The holding tank has an alarm set to allow for 12 hours of capacity of design average flow to allow for response time for Bullock Septic Pumping, LLC to pump out the tank.

The campground intends to pump and haul wastewater collected from the RV lots until the Rocky Mount Sewer District expands its collection system to a point where the holding tank can be converted to a lift station that will connect to the district's collection system to be treated at Rocky Mount Sewer District WWTF, MO0136719.

This project will also include general site work appropriate to the scope and purpose of the project and all necessary appurtenances to make a complete and usable wastewater treatment facility.

II. COST ANALYSIS FOR COMPLIANCE

Pursuant to Section 644.145, RSMo, when issuing permits under this chapter that incorporate a new requirement for discharges from publicly owned combined or separate sanitary or storm sewer systems or publicly owned treatment works, or when enforcing provisions of this chapter or the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., pertaining to any portion of a publicly owned combined or separate sanitary or storm sewer system or [publicly owned] treatment works, the Department of Natural Resources shall make a "finding of affordability" on the costs to be incurred and the impact of any rate changes on ratepayers upon which to base such permits and decisions, to the extent allowable under this chapter and the Federal Water Pollution Control Act. This process is completed through a cost analysis for compliance. Permits that do not include new requirements may be deemed affordable.

The department is not required to complete a cost analysis for compliance because the facility is not a combined or separate sanitary sewer system for a publicly owned treatment works.

III. CONSTRUCTION PERMIT CONDITIONS

The permittee is authorized to construct subject to the following conditions:

1. This construction permit does not authorize discharge.

2. All construction shall be consistent with plans and specifications signed and sealed by Jim Jackson Jr., P.E., with Lake Professional Engineering Services, Inc. and as described in this permit.

3. The department must be contacted in writing prior to making any changes to the plans and specifications that would directly or indirectly have an impact on the capacity, flow, system layout, or reliability of the proposed wastewater holding facilities or any design parameter that is addressed by 10 CSR 20-8, in accordance with 10 CSR 20-8.110(11).

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 Southwest Regional Office per 10 CSR 20-7.015(9)(G).

5. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of 1 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 https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem. See https://dnr.mo.gov/data-e-services/water/electronic-permitting-epermitting for more information.

6. All construction must adhere to applicable 10 CSR 20-8 (Chapter 8) requirements listed below.

    - Slope. All sewers shall be designed and constructed to give mean velocities, when flowing full, of not less than two feet (2') per second. [10 CSR 20-8.120(3)(A)1.]

    - Depth. All sewers shall either be covered with at least thirty-six inches (36") of soil, or sufficiently insulated with other material to prevent freezing and to protect them from superimposed loads. [10 CSR 20-8.120(3)(A)2.]

    - Buoyancy. Buoyancy of sewers shall be considered and flotation of the pipe shall be prevented with appropriate construction where high groundwater conditions are anticipated. [10 CSR 20-8.120(3)(A)3.]

    - Deflection test. No pipe shall exceed a deflection of five percent (5%) of the inside diameter. [10 CSR 20-8.120(3)(B)]

    - Service connections. Service connections to the sewer main shall be watertight and cannot protrude into the sewer. [10 CSR 20-8.120(3)(C)1.]

- Water (hydrostatic) test. The leakage exfiltration or infiltration shall not exceed one hundred (100) gallons per inch of pipe diameter per mile per day for any section between manholes of the system. An exfiltration or infiltration test shall be performed with a minimum positive head of two feet (2'). The exfiltration or infiltration test shall conform to the test procedure described in ASTM C969 – 17 Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines, as approved and published April 1, 2017, for precast concrete pipe. This standard shall hereby be incorporated by reference into this rule, as published by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions. [10 CSR 20-8.120(3)(C)2.A.]

- Location. Manholes shall be installed—1. At the end of each line; 2. At all changes in grade, size, or alignment; 3. At all sewer pipe intersections; and 4. At distances appropriate to allow for sufficient cleaning and maintenance of sewer lines. [10 CSR 20-8.120(4)(A)]

- A drop pipe shall be provided for a sewer entering a manhole at an elevation of twenty-four inches (24") or more above the manhole invert.
[10 CSR 20-8.120(4)(B)1.]

- When using precast manholes, drop connections must not enter the manhole at a joint. [10 CSR 20-8.120(4)(B)2.]

- Diameter. The minimum diameter of manholes shall be forty-two inches (42") on eight-inch (8") diameter gravity sewer lines and forty-eight inches (48") on all sewer lines larger than eight inches (8") in diameter. A minimum access diameter of twenty-two inches (22") (56 cm) shall be provided. Cleanouts shall be a minimum of eight inches (8") for pipes eight inches (8") in diameter or larger and equal to the diameter for pipes less than eight inches (8").
[10 CSR 20-8.120(4)(C)]

- Bench. No sewer, service connection, or drop manhole pipe shall discharge onto the surface of the bench. [10 CSR 20-8.120(4)(D)]

- Watertightness. Manholes shall be watertight, constructed, and installed in accordance with the manufacturer's recommendations and procedures.
[10 CSR 20-8.120(4)(E)]

- Vacuum testing, if specified for concrete sewer manholes, shall conform to the test procedures in ASTM C1244 – 11(2017) Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill, as approved and published April 1, 2017, or the manufacturer's recommendation. This standard shall hereby be incorporated by reference into this rule, as published by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions. [10 CSR 20-8.120(4)(F)1.]

- Exfiltration testing, if specified for concrete sewer manholes, shall conform to the test procedures in ASTM C969 – 17 Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines, as approved and published April 1, 2017. This standard shall hereby be incorporated by reference into this rule, as published by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959. This rule does not incorporate any subsequent amendments or additions. [10 CSR 20-8.120(4)(F)2.]

- Cross Connections. 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. [10 CSR 20-8.120(5)(A)]

- Relation to Water Works Structures. Sewers shall be laid at least fifty feet (50') in a horizontal direction from any existing or proposed public water supply well or other water supply sources or structures. Sewers must also comply with 10 CSR 23-3.010. [10 CSR 20-8.120(5)(B)]

- The alarm for pump and haul systems shall be activated in cases of high water levels. Follow the provisions in subsection (7)(C) of this rule for alarm systems. 10 CSR 20-8.140(4)(D)

7. Upon completion of construction:

   A. The BEACHWOODS, LLC will become the continuing authority for operation and maintenance of these facilities;

   B. Submit an electronic copy of the as builts if the project was not constructed in accordance with previously submitted plans and specifications; and

   C. Submit the Statement of Work Completed form to the department in accordance with 10 CSR 20-6.010(5)(N) (https://dnr.mo.gov/document-search/wastewater-construction-statement-work-completed-mo-780-2155)

IV. REVIEW SUMMARY

1. CONSTRUCTION PURPOSE

Development of a new 58 lot RV park which will need sewer service. The campground intends to pump and haul wastewater collected from the RV lots until the Rocky Mount Sewer District expands its collection system to a point where the holding tank can be converted to a lift station that will connect to the district's collection system to be treated at Rocky Mount Sewer District WWTF, MO0136719.

2. FACILITY DESCRIPTION

This is a new RV park campground consisting of 58 RV lots. The wastewater collection system will consist of gravity sewer main that will convey domestic wastewater to an approximately 6,383 gallon holding tank which is to be pumped by a contract hauler.

Beachwoods Campground is located at 29626 Coffman Beach Rd Rocky Mount, in Morgan County, Missouri. The collection system and holding tank serves a design average flow of 5,220 gpd and serves a hydraulic population equivalent of approximately 52 people.

3. COMPLIANCE PARAMETERS

The proposed system is a no discharge, pump and haul holding tank. The system may be eligible for an operating permit exemption.

4. REVIEW of MAJOR DESIGN CRITERIA

Construction will cover the following items:

- Collection System – 2,780 lf of 6-inch SDR-35 PVC gravity sewer main with 21 manholes to collect wastewater from 58 RV lots
- Holding Tank – a 12 foot by 12 foot by 8 foot concrete tank with 4 foot tall by 4 foot wide hoppers along the bottom half of the tank. This provides a total tank volume of 6,383 gallons.
    - The high water alarm is set at 2.5 feet below the top of the tank, providing 2,693 gallons of storage once the audiovisual alarm triggers. This provides approximately 12 hours of storage at design average flow once the alarm triggers.
    - Bullock Septic Pumping, LLC provided a pump and haul agreement stating that they will pump the holding tank within 12 hours of notice. There is a campground host living at the site from April to November, when the RV park is in operation. The host will be able to notify the hauler.

5. OPERATING PERMIT

As a pump and haul facility, this site is eligible for an operating permit exemption if requested from the Operating Permit Section with documentation of a written contract with the pumper-hauler and approval from the receiving facility, as required by 10 CSR 20-6.015(3)(B)12. Contact the Operating Permits Section at CleanWaterPermits@dnr.mo.gov prior to operation to request a pump and haul operating permit exemption.

V. NOTICE OF RIGHT TO APPEAL

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250 RSMo. To appeal, you must file a petition with the AHC 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 AHC. Any appeal should be directed to:

Administrative Hearing Commission
U.S. Post Office Building, Third Floor
131 West High Street, P.O. Box 1557
Jefferson City, MO 65102-1557
Phone: 573-751-2422
Fax: 573-751-5018
Website: https://ahc.mo.gov

Katrice Williams, E.I.
Engineering Section
katrice.williams@dnr.mo.gov

Chia-Wei Young, P.E.
Engineering Section
Chia-wei.young@dnr.mo.gov

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM

APPLICATION FOR CONSTRUCTION PERMIT – SEWER EXTENSION

FOR DEPARTMENT USE ONLY	
APP NO.	CP NO.
FEE RECEIVED	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

If the project is using standard specifications, name of community:_____

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
Beachwoods Campground

ADDRESS	CITY	STATE	ZIP CODE	COUNTY
29626 Coffman Beach Road	Rocky Mount	MO	65072	Morgan

2.2 Legal Description: SE ¼, NE ¼, SE ¼, Sec. 06 , T 40 , R 16

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

2.4 PROJECT DESCRIPTION
Install 5,694 feet of 6" SDR 35 gravity sewer line with 21 manholes. The gravity sewer line will flow into a holding tank. The holding tank has been designed so that it can be converted to a lift station when the Rocky Mount Sewer District extends a pressure sewer line to the area at a later date.

2.5 DESIGN INFORMATION

A. Population or number of lots to be served by this extension: 174 PE

B. Estimated flow to be contributed by this extension: Design Average Flow: 5,220 gpd Design Peak Hourly Flow: 907.2 gph

C. Industrial Wastes: Type: Flow: 0 gpd

D. Receiving Sewer: Size: 6 inches Capacity: 97 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:

G: Estimated costs associated with piping: $ Estimated costs associated with lift station(s): $

3.0 PROJECT OWNER

NAME	TELEPHONE NUMBER WITH AREA CODE	EMAIL ADDRESS
Jodi Melssen	319-572-5311	jmelssen08@gmail.com

ADDRESS	CITY	STATE	ZIP CODE
29626 Coffman Beach Road	Rocky Mount	MO	65072

CHARTER NUMBER (SECRETARY OF STATE) or REGISTERED AGENT

MO 780-1632 (10-22)

9.0 SEWER EXTENSION CHECKLIST				
SEWER EXTENSION DESIGN CERTIFICATION: 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?	☐	☐
2.	8.110(3)(B)	Are average design flows, peak hourly flows and I&I contributions for new systems calculated?	☐	☐
3.	8.110(9)(B)	Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?	☐	☐
4.	8.120(2)	Does the sewer exclude water from roofs, streets, groundwater from foundation drains and combined wastewater?	☐	☐
5.	8.120(3)(A)	Is the pipe installation, embedment and backfill designed to prevent damage to the pipe and its joints?	☐	☐
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?	☐	☐
7.	8.120(3)(A)2	Is the pipe covered with at least 36” of soil or sufficiently insulated to prevent freezing?	☐	☐
8.	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	☐	☐
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?	☐	☐
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”?	☐	☐
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”?	☐	☐
12.	8.120(4)(E)	Are the manholes watertight, constructed and installed in accordance with the manufacturer’s recommendations and procedures?	☐	☐
13.	8.120(4)(F)	Do the specifications include a requirement for inspection and testing for manholes?	☐	☐
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?	☐	☐
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?	☐	☐
10.0 PRESSURE SEWERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST				
	REGULATION		YES	N/A
16.	8.125(5)(A)1.	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day?	☐	☐
17.	8.125(5)(A)2.	Is the diameter of the pressure sewer main pipe at least 1.5”?	☐	☐
18.	8.125(5)(B)	Are appurtenances compatible with the piping system?	☐	☐
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?	☐	☐
20.	8.125(5)(C)	Do service line pipes have a minimum diameter of 1.25”?	☐	☐
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 pumpt.	☐	☐
22.	8.125(5)(D)1.B.	Are multiple unit pump stations owned, operated and maintained by an approved continuing authority?	☐	☐
23.	8.125(5)(D)3.	Is there at least 70 gallons of storage in the grinder pump unit?	☐	☐
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?	☐	☐
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)?	☐	☐
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?	☐	☐
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 dedicatied to freeboard and ventillation?	☐	☐
28.	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or greater?	☐	☐

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"?	☐	☐
30.	8.130(2)(A) 8.140(2)(B)	Is the pump station designed to withstand the 100-year flood?	☐	☐
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?	☐	☐
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?	☐	☐
33	8.130(3)(D)	Are valves located outside wet well unless integral to a pump or its housing?	☐	☐
34.	8.130(3)(F) 8.140(8)(J)	Do wet and dry wells have separate ventilation systems?	☐	☐
35.	8.130(3)(G)	Does all potable water brought to pump stations 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?	☐	☐
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?	☐	☐
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 pumpting stations provided that include emergency procedures, maintenance schedules, special tools and spare parts that may be necessary?	☐	☐
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?	☐	☐
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?	☐	☐
43.	8.130(4)(B)	Are there dual vacuum pumps capable of removing air from the suction lift pump?	☐	☐
44.	8.130(5)(A)	Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well?	☐	☐

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.

Missouri Professional Engineer's seal, signature and date:

Name:

Address:

City:	State:	ZIP Code:

Telephone Number with Area Code:	Email:

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.