## STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



#### GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

The Missouri Department of	f Natural Resources hereby issues a permit to:
Construction Permit ID: Title of Project: Owner: Address:	MOGC00760 Nevada WWTP City of Nevada 110 S. Ash Nevada, MO 64772
	e general site work appropriate to the scope and purpose of the project and will include all the necessary implete and usable collection system. The construction of this project will be in the vicinity of the county eiving Permit ID below:
County: Vernon	Receiving Permit ID: MO0089109
for the construction of (desc	ribed construction project):
	truction of approximately 1598 lf of 12-inch PVC SDR-35 and SDR-26 gravity sewer lines pholes to serve a senior housing development and future development with a total flow of 40,160 gpd.
an existing collection syst	f Barrett Street and Overland Road in City of Nevada, Vernon County and discharges to tem to be treated at Nevada Municipal WWTP, MO-0089109. Application for signed by Larry Stevens, Interim City Manager, City of Nevada, dated July 1, 2024.
RSMo, and regulation prom As the Department does not permit does not include appr	need facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, ulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department) examine structural features of design or the efficiency of mechanical equipment, the issuance of this roval of these features. The construction of water pollution control components; it does not apply to other environmentally
July 30, 2024 Issue Date	John Hoke, Director Water Protection Program
July 29, 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 <a href="mailto:DNR.WPPEngineerSection@dnr.mo.gov">DNR.WPPEngineerSection@dnr.mo.gov</a> 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 <a href="https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem">https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem</a>.

See <a href="https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988">https://dnr.mo.gov/document-search/missouri-gateway-environmental-management-mogem-frequently-asked-questions-pub2988/pub2988</a> 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 <a href="https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance">https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/stormwater/construction-land-disturbance</a> 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 <a href="https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality">https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/section-401-water-quality</a> 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 DEPARTMENT USE ONLY				
APP NO.	CP NO.			
FEE RECEIVED	CHECK NO.			
DATE RECEIVED				

			DATE RECEIVED			
NOTE ► Please Read the accompanying i	nstructions before completing t	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 Age	ency:	Proj	ect #:		
1.2 Has the Department of Natural Resource  Type Page 1.2 Yes Date of Approximately 1.2 Has the Department of Natural Resource		s engineering NO	report*?	<b>☑</b> N/A		
1.3 Is a copy of the appropriate plans* and s	pecifications* included with this ap	oplication?	☑ YES ☐ NO			
If the project is using standard specificati	ions, name of community:					
1.4 Is a summary of design* included with th	is application? 🗹 YES 🗌 No	0				
1.5 Is the appropriate fee or JetPay confirmation See Section 7.0	ation included with this application	? ☑ YES	□NO			
* Must be affixed with a Missouri registered p	rofessional engineer's seal, signa	ture and date	•			
2.0 PROJECT INFORMATION 2.1 NAME OF PROJECT						
East View Heights Sewer Extension						
ADDRESS	CITY	STATE	ZIP CODE	COUNTY		
S Barrett St	Nevada	MO	64772	Vernon		
2.2 Legal Description: ¼, SW ½	4, <sub>NW</sub> ¼, Sec. 11 ,	T 35N ,	R 31W			
2.3 Project Components (check all that apply  ☑ Gravity sewers ☐ Pumping station	•	tive sewer sys	stem	escribe below.)		
2.4 PROJECT DESCRIPTION						
Extending approximately 1,650 LF of 12" dian development.	neter gravity sewer line and 7 mar	nholes to prov	ride sewer for a prop	posed senior housing		
dovolopino						
2.5 DESIGN INFORMATION						
A. Population or number of lots to be served	by this extension: 402 people (se	e design sum	nmary)			
B. Estimated flow to be contributed by this extension: Design Average Flow: 32,560 gpd Design Peak Hourly Flow: 6,693 gph						
C. Industrial Wastes: Type: N/A	Flow: 0 gpd					
D. Receiving Sewer: Size: 12 inches	D. Receiving Sewer: Size: 12 inches Capacity: 750 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: N/A						
G: Estimated costs associated with piping: \$ Estimated costs associated with lift station(s): \$						
3.0 PROJECT OWNER						
NAME City of Nevada	TELEPHONE NUMBER WITH AI 417-448-5115	REA CODE	EMAIL ADDRESS  Istevens@nevada	mo.gov		
ADDRESS 110 S Ash St	CITY Nevada	MO STATE	ZIP CODE 64772			
CHARTER NUMBER (SECRETARY OF STATE) or REGISTERED A	AGENT		1			

4.0 CONTINUING AUTHORITY: A continuing for ensuring compliance with the permit required continuing authority should be a relatively permit when needed, of the permitted facility or active hired by the permittee to sample or operate a analytical laboratory. To access the regulator water Commission Chapter 6. A continuing a (SoS's) webpage: Missouri Secretary of State required to register with the SoS.	ermanents a ermanent e vity. A cont and mainta ry requirent authority's	nd provide entity respo tinuing auth in the systenent regard name must	continuous ansible for the nority is not, em for a defiling continuir the listed ex	stable overse ongoing on the common of the c	peration, maintenance and modernization, nentity or individual that is contractually priod, such as a certified operator or 10 CSR 20-6.010(2), please visit Clean prease on the Missouri Secretary of State's
NAME City of Novedo			NUMBER WITH A	REA CODE	EMAIL ADDRESS
City of Nevada  ADDRESS	CITY	417-448-5	5115   STATE		Istevens@nevadamo.gov
110 S Ash St	Nevada			MO	64772
CHARTER NUMBER (SECRETARY OF STATE)  City of Nevada				2	
4.1 Has appropriate continuing authority acceded the Aletter from the continuing authority accepting different than the original owner of the construction than the acceptance. Form 780-256 5.0 ENGINEER	ng respons uction), or	ibility for co a properly	ontinued mai	ntenance o	f the sewer (if the continuing authority is uthority and Receiving Wastewater
ENGINEER NAME / COMPANY NAME			NUMBER WITH A	REA CODE	EMAIL ADDRESS
John Briggs, PE - Allgeier, Martin and Associa  ADDRESS	city	417-680-7	200	STATE	john.briggs@amce.com
7231 East 24th Street	Joplin			MO	64804
6.0 RECEIVING WASTEWATER TREATME	NT FACIL			district the second	
Nevada Municipal WWTF		417-448-5	NUMBER WITH A 509	REA CODE	EMAIL ADDRESS Istevens@nevadamo.gov
MISSOURI STATE OPERATING PERMIT # MO-0089109		COUNTY			REMAINING CAPACITY (GPD) 220,000
6.1 If different from the owner, has a letter be accept the expanded flow or has a properly e MO 780-2584 form been provided? YES 6.2 A letter from the receiving wastewater treating YES N/A	executed C S NC atment fac	ontinuing A  N/A  ility, if diffe	Authority and rent than the	Receiving	Wastewater Treatment Facility Acceptance authority, is included with this application.
6.3 If the receiving treatment plant or continui Certificate of Convenience and Necessity has	been rec	eived? _	ted by the P ] Yes – Date	ublic Servic	e Commission (PSC) for sewer activities, a  ☐ No  ☑ N/A
OPTIONAL QUESTIONS REGARDING MILI					
Have you or an immediate family member even U.S. Armed Forces?			□Y	'es	<b>☑</b> No
If yes, would you like information about militar in Missouri?	ry-related s	services	□ Y	'es	<b>☑</b> No
7.0 Application Fee					
☐ Check Number				Confirmatio	
8.0 PROJECT OWNER: I certify under penalt supervision in accordance with a system desi submitted. Based on my inquiry of the person gathering the information, the information sub aware there are significant penalties for submiviolations.	gned to as or person mitted is, t	sure qualif s who man to the best	ied personne age the syst of my knowle	el properly of em, or thosedge and be	gather and evaluate the information e persons directly responsible for elief true, accurate and complete Lam
PROJECT OWNERS IGNATURE PRINTED NAME	-				DATE
TITLE OR CORPORATE POSITION			NUMBER WITH A	_	EMAIL ADDRESS
Mail completed copy to:		71/~	748-5	509	Is TEVENS a NEVADAMO. GO
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 DNR.WPPEngineerSection@dnr.mo.gov		

9.0 SEWER EXTENSION CHECKLIST							
		<b>ESIGN CERTIFICATION:</b> Answer all questions yes or N/A. Answer N/A only if the question is of the proposed sewer extension.	clearly i	not			
	REGULATION		YES	N/A			
1.	8.110(3)(A)	Is the design flow based on actual flow data for an existing system?	П	V			
2.	8.110(3)(B)	Are average design flows, peak hourly flows and I&I contributions for new systems calculated?	V				
3.	8.110(9)(B)	Is there a detailed plan showing tributary area, boundaries, pertinent elevations, topography, existing and proposed facilities?	V				
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?	V				
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?	V				
7.	8.120(3)(A)2	Is the pipe covered with at least 36" of soil or sufficiently insulated to prevent freezing?	V				
8.	8.120(3)(B)	Is deflection testing specified to ensure no pipe exceeds a deflection of 5% of the inside diameter?	V				
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?	V				
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"?	V				
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"?		V			
12.	8.120(4)(E)	Are the manholes watertight, constructed and installed in accordance with the	~				
13.	8.120(4)(F)	manufacturer's recommendations and procedures?  Do the specifications include a requirement for inspection and testing for manholes?	<b>V</b>				
14.	8.120(5)(A)	Is the sewer free from physical connections to a potable water supply system and no water	V				
15.	8.120(5)(B)	pipes come in contact with a sewer manhole?  Are sewers and manholes located at least 50 feet horizontally from any existing or					
10 0 F	RESSURE SEWE	proposed water supply well, sources, structures?  ERS, GRINDER PUMP, STEP AND STEG SEWER CHECKLIST					
10.01	REGULATION	inco, oranger i omi , orei mas oreo certer orieoreior	YES	N/A			
16.	8.125(5)(A)1.	Does the cleaning velocity of ≥ 2 ft/s happen more than once per day?		<b>V</b>			
17.	8.125(5)(A)2.	Is the diameter of the pressure sewer main pipe at least 1.5"?		V			
18.	8.125(5)(B)	Are appurtenances compatible with the piping system?		V			
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?		V			
20.	8.125(5)(C)	Do service line pipes have a minimum diameter of 1.25"?		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 pumpt.		V			
22.	8.125(5)(D)1.B	Are multiple unit pump stations owned, operated and 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?		~			
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?		V			
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)?		V			
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?		V			
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?		V			
28.	8.125(6)(F)	Are duplex pumps provided for the design flow of 1,500 gallons or greater?		V			

MO 780-1632 (10-22)

11.0 P	PUMP STATION C	HECKLIST				Ι		
	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?					V	
31.	8.130(3)(A)	access provided to	ne dry well completely separate from the wet well and is a suitable and safe means of ess provided to each?				V	
32.	8.130(3)(B)	If the design flow i provided?	s 1,500 gpd or more, a	are there at least 2 pum	nps or pneumatic ejectors		~	
33	8.130(3)(D)	Are valves located	d outside wet well unles	ss integral to a pump o	r its housing?		V	
34.	8.130(3)(F) 8.140(8)(J)	Do wet and dry we	ells have separate vent	tilation systems?			V	
35.	8.130(3)(G)	Does all potable w	vater brought to pump	stations comply with 8.	140(7)(D)?		V	
36.	8.130(6)	ls an alarm syster	n provided with uninter	rupted power?			V	
37.	8.130(7)(A)			urly flow for a design flosign flow < 100,000 gp	ow > 100,000 gpd or 4 hrs d?		V	
38.	8.130(7)(B)	Are there indepen		provided for emergend	cy power capable of starting		V	
39.	8.130(8)(A)		elocity of ≥ 2 ft/s main				V	
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				V	
12.0 S	UCTION LIFT PU		SIBLE PUMP STATIO	N CHECKLIST				
	REGULATION					YES	N/A	
41.	8.130(4)	Are the suction lift	pumps of the self prim	ning or vacuum priming	type?		V	
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?					V	
43.	8.130(4)(B)	Are there dual vac	cuum pumps capable o	f removing air from the	suction lift pump?	П	V	
44.	8.130(5)(A)	Are submersible pumps readily removable and replaceable without personnel entering, or disconnecting any pipe in the wet well?					V	
13.0 S	EWER EXTENSION		CERTIFICATION STA	TEMENT				
For an engine		ered "N/A" provide a	n explanation. Also pro	ovide any useful gener	al comments regarding desig	n for rev	iew	
8.110(3)(A) The proposed design flow rates are based on estimates, see attached Design Summary 8.120(4)(C) Manholes are included at the end of the proposed line.								
				OF MI	W. 1928			
				JOHN T	_ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
Misso	uri Professional Er	ngineer's seal, signa	ature and date:	BRIGG	24			
				NUMBE PE-201001	9510 E			
WELL COVAL EXCENT								
Name: John Briggs PE								
Address: 7231 East 24th Street								
City: Joplin State: MO ZIP Code: 64804								
Telephone Number with Area Code: 417-680-7200				Email:john.briggs@amce.com				
L								