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

- **Construction Permit ID:** MOGSE0087
- **Title of Project:** Highlands at Hopper Crossing Ph 2 and 3
- **Owner:** SEMO Development, LLC
- **Address:** 2480 Benton Hill Road
  Cape Girardeau, MO 63701

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:** Cape Girardeau
- **Receiving Permit ID:** MO0136328

for the construction of (described construction project):

Highlands at Hopper Crossing Phase 2 and 3 - Construction of approximately 1,116 lf of 8-inch PVC SDR-35 gravity sewer lines with approximately 6 manholes to serve a 96 PE and a design average flow of 9,620 gpd.

Project is in the vicinity of Hopper Road and North Mount Auburn Road in Cape Girardeau, Cape Girardeau County and discharges to an existing system to be treated at Cape Girardeau Municipal WWTF, MO-0136328. Thomas Wiesner, Project Manager, with the City of Cape Girardeau provided an acceptance letter dated August 20, 2020.

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.

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**Signatures**

- **Issue Date:** September 03, 2020
  - Edward B. Galbraith, Director
  - Division of Environmental Quality

- **Expiration Date:** September 02, 2022
  - Chris Wieberg, Director
  - Water Protection Program
APPLICABILITY

1. This permit authorizes the construction of gravity sewer extensions, force mains, and lift stations. Storage basins, considered part of the collection system, are also included. Earthen basins are not included under this General Sewer Extension Construction permit.

2. A Sewer Extension Construction Permit may be required by the department due to compliance and enforcement actions.

3. This permit does not apply to:
   A. Earthen storage basins;
   B. Projects located within an Approved Sewer Program. These include the City of Blue Springs, City of Columbia, City of Kansas City, City of Jefferson City, City of Joplin, City of Lebanon, City of Springfield, City of St. Peters, Duckett Creek Sewer District, and Metropolitan St. Louis Sewer District;
   C. Projects funded by the Department of Natural Resources;
   D. Projects that substantially deviate from the Design Guides in 10 CSR 20-8; and
   E. Exempt projects unless requested by the applicant or required by enforcement.

PREREQUISITES:

1. The General Sewer Extension Construction Permit application, appropriate fee, and a schedule for construction with the date on which construction will begin and anticipated completion date.

2. The engineering report, as required, plans and specifications each signed and sealed by a professional engineer registered in the State of Missouri. A Summary of Design is an acceptable substitute for the engineering report required by this permit prerequisite.

3. The Design Certification form signed and sealed by a professional engineer registered in the State of Missouri certifying the design of the system was done in accordance with 10 CSR 20-6 and 10 CSR 20-8.

4. A statement from the continuing authority was received accepting the wastewater for treatment.

5. A statement from the continuing authority was received accepting the responsibility for operation, maintenance, and modernization of these facilities.

PERMIT CONDITIONS:

1. Contact the department's appropriate regional office 48 hours prior to starting construction. Contact information can be found at http://dnr.mo.gov/regions/regions.htm.

2. This permit authorizes the activities and scope of work detailed in the plans and specifications submitted with the request.

3. The construction must be in accordance with the design certification stating the plans and specifications comply with 10 CSR 20-6 and 10 CSR 20-8.
PERMIT CONDITIONS: (continued)

4. State and Federal Law does not permit bypassing of raw wastewater, therefore steps must be taken to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the department’s regional office per 10 CSR 20-7.015(9)(E)2.

5. Protection of drinking water supplies shall be in accordance with 10 CSR 20-8.120(10). “There shall be no physical connections between a public or private potable water supply system and a sewer, or appurtenance thereto which would permit the passage of any wastewater or polluted water into the potable supply. No water pipe shall pass through or come in contact with any part of a sewer manhole.”

A. Sewers in relation to water works structures shall meet the requirements of 10 CSR 23-3.010 with respect to minimum distances from public water supply wells or other water supply sources and structures.

B. Sewer mains shall be laid at least ten feet (10’’) horizontally from any existing or proposed water main. The distances shall be measured edge-to-edge. In cases where it is not practical to maintain a ten foot (10’’) separation, the department may allow a deviation on a case-by-case basis, if supported by data from the design engineer. Such a deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on either side of the sewer and at an elevation so the bottom of the water main is at least 18 inches above the top of the sewer. If it is impossible to obtain proper horizontal and vertical separation as described above for sewers, the sewer must be constructed of slip-on or mechanical joint pipe or continuously encased and be pressure tested to 150 pounds per square inch to assure water tightness.

C. Manholes shall be located with the top access at or above grade level.

D. Manholes should be located at least ten feet (10’’) horizontally from any existing or proposed water main.

E. Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade. When it is impossible to obtain proper vertical separation as stipulated above, one of the following methods must be specified:

1) The sewer shall be designed and constructed equal to the water pipe and shall be pressure tested to assure water tightness prior to backfilling; or

2) Either the water main or sewer line may be continuously encased or enclosed in a watertight carrier pipe which extends ten feet (10’’) on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the department for use in water main construction.
PERMIT CONDITIONS: (continued)

6. In addition to the requirements for a construction permit, 10 CSR 20-6.200 requires land disturbance activities of one acre or more to obtain a Missouri State Operating Permit to discharge stormwater. The permit requires Best Management Practices sufficient to control runoff and sedimentation to protect waters of the state. Land disturbance permits will only be obtained by means of the department’s ePermitting system available online at www.dnr.mo.gov/env/wpp/epermit/help.htm.


7. A United States (U.S.) Army Corps of Engineers (COE) permit (404) and a Water Quality Certification (401) issued by the department or permit waiver may be required for the activities described in this permit. This permit is not valid until these requirements are satisfied. If construction activity will disturb any land below the ordinary high water mark of Jurisdictional Waters of the U.S. then a 404/401 will be required. Since the COE makes determinations on what is jurisdictional, you must contact the COE to determine permitting requirements. You may call the department’s Water Protection Program at (573) 751-1300 for more information.

See www.dnr.mo.gov/env/wpp/401/ for more information.

8. If this project eliminates a wastewater treatment facility, then a full closure plan shall be submitted to the department’s appropriate regional office for review and approval of any permitted wastewater treatment system being replaced. In accordance with 10 CSR 20-6.010(12), the closure plan must meet the requirements outlined in Standard Conditions Part III, Section I, of the Missouri State Operating Permit. Closure shall not commence until the submitted closure plan is approved by the department. Form J – Request for Termination of a State Operating Permit, shall be submitted to the department’s appropriate Regional Office for termination of any existing Missouri State Operating Permit, once closure is completed in accordance with the approved closure plan.

9. Submit a Statement of Work Completed Form to the department following completion of construction. Submit an electronic copy of the as built plans if the project was not constructed in accordance with previously submitted plans and specifications.
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

1.2 Has the Department of Natural Resources approved the proposed project's engineering report*?
   ☐ YES Date of Approval: ☑ NO ☐ N/A

1.3 Is a copy of the appropriate plans* and specifications* included with this application? ☑ YES ☐ NO

1.4 Is a summary of design* included with this application? ☑ YES ☐ NO

1.5 Is the appropriate fee included with this application? (See instructions for appropriate fee.) ☑ YES ☐ NO

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

2.0 PROJECT INFORMATION

2.1 NAME OF PROJECT
Highlands at Hopper Crossing - Phase 2 & 3

ADDRESS
Hopper Road

CITY Cape Girardeau

STATE MO

ZIP CODE 63701

COUNTY Cape Girardeau

2.2 Legal Description: ¼, SW ¼, NW ¼, Sec. 35, T 31 N, R 13 E

2.3 Project Components (check all that apply):

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

2.4 PROJECT DESCRIPTION
This is the second phase of a residential subdivision consisting of 26 single-family residential lots. Phase 2 & 3 will consist of 1,116 linear feet of new 8-inch SDR-35 PVC sewer mains and 6 new sewer manholes.

2.5 DESIGN INFORMATION

A. Population or number of lots to be served by this extension: 26 Lots (Phase 2 & 3), Population Equivalent = 96

B. Estimated flow to be contributed by this extension: Design Average Flow: 9620 gpd Design Peak Hourly Flow: 1704 gph

C. Industrial Wastes: Type: Domestic Flow: 4085 gpd

D. Receiving Sewer: Size: 8 inches Capacity: >900 gpm

3.0 PROJECT OWNER

NAME
SEMO Development, LLC

TELEPHONE NUMBER WITH AREA CODE (573) 204-1000

E-MAIL ADDRESS mkpetersenterprises@gmail.com

ADDRESS
2480 Benton Hill Road

CITY Cape Girardeau

STATE MO

ZIP CODE 63701

4.0 CONTINUING AUTHORITY: Permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the wastewater collection system.

NAME
City of Cape Girardeau, MO

TELEPHONE NUMBER WITH AREA CODE (573) 339-6327

E-MAIL ADDRESS

ADDRESS
401 Independence

CITY Cape Girardeau

STATE MO

ZIP CODE 63703

4.1 A letter from the continuing authority, if different than the owner, is included with this application. ☑ YES ☐ NO ☐ N/A

5.0 ENGINEER

ENGINEER NAME / COMPANY NAME
Mark Guess, Koehler Engineering & Land Surveying, Inc.

TELEPHONE NUMBER WITH AREA CODE (573) 335-3026

E-MAIL ADDRESS mguess@koehlerengineering.com

ADDRESS
194 Coker Lane

CITY Cape Girardeau

STATE MO

ZIP CODE 63701

6.0 RECEIVING WASTEWATER TREATMENT FACILITY

NAME
Cape Girardeau Municipal WW Treatment Facility

TELEPHONE NUMBER WITH AREA CODE

E-MAIL ADDRESS

MO 780-1832 (10-12)
<table>
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<td>5 MGD</td>
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6.1 Has the receiving treatment facility agreed to accept the additional wastewater flow?  ☑ YES  ☐ NO

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

7.0 PROJECT OWNER: I hereby certify that I am familiar with the information contained in this application and to the best of my knowledge and belief such information is true, complete, and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders, and decisions, subject to any legitimate appeal available to applicant under Missouri Clean Water Law.

**PROJECT OWNER SIGNATURE**

[Signature]

**PRINTED NAME**

Kelly Green, P.E.

**DATE**

2-19-20

**TITLE OR CORPORATE POSITION**

City Engineer

**TELEPHONE NUMBER WITH AREA CODE**

(573) 339-6327

**E-MAIL ADDRESS**


Mail completed copy to: MISSOURI DEPARTMENT OF NATURAL RESOURCES WATER PROTECTION PROGRAM P.O. BOX 176 JEFFERSON CITY, MO 65102-0176