STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION



GENERAL PERMIT for SEWER EXTENSION CONSTRUCTION

| The Wissouri Department C | of Natural Resources hereby issues a permit to. |
|--|--|
| Construction Permit ID: Title of Project: Owner: Address: | MOGC00645 West Village Apartments Lorenzo, LLC P.O. Box 410617 FESTUS, MO 63141 |
| | e general site work appropriate to the scope and purpose of the project and will include all the necessary emplete and usable collection system. The construction of this project will be in the vicinity of the county beiving Permit ID below: |
| County: Jefferson | Receiving Permit ID: MO0080632 |
| for the construction of (des | cribed construction project): |
| iron gravity sewer lines of 38,800 gpd. Project is in the vicinity to an existing City of Fes Unrein, Director of Publication | - Construction of approximately 2975 lf of 8-inch PVC SDR-35, Yelomine, and ductile with approximately 16 manholes to serve 200 apartment units with a design average flow of Highway A and Highway 67 in the City of Festus, Jefferson County and discharges stus collection system to be treated at Festus-Crystal City WWTP, MO-0080632. Matt ic Works with City of Festus provided an acceptance letter dated August 2, 2023. It is an of Festus-Crystal City Sewer Commission provided an acceptance letter dated |
| RSMo, and regulation prom As the Department does no permit does not include app | sed facilities shall be in accordance with the provisions of the Missouri Clean Water Law, Chapter 644, nulgated thereunder, or this permit may be revoked by the Department of Natural Resources (Department) t examine structural features of design or the efficiency of mechanical equipment, the issuance of this proval of these features. the construction of water pollution control components; it does not apply to other environmentally |
| September 26, 2023 Issue Date | John Hoke, Director Water Protection Program |

September 25, 2025 Expiration Date

APPLICABILITY

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

PREREQUISITES:

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

PERMIT CONDITIONS:

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

PERMIT CONDITIONS: (continued)

- 3. If construction will incorporate minor changes from previously submitted plans and specifications (i.e., changes that do not affect the capacity, flow, or system layout), submit an electronic copy of the as-built plans and specifications in accordance with 10 CSR 20-8.110(11).
- 4. State and Federal Law does not permit bypassing of raw wastewater; therefore, the applicant must take steps to ensure that raw wastewater does not discharge during construction. If a sanitary sewer overflow or bypass occurs, report the appropriate information to the Department's regional office per 10 CSR 20-7.015(9)(E) or through the Online Bypass/SSO Reporting service on the Missouri Gateway for Environmental Management (MoGEM) portal found at https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem.

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

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

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

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

PERMIT CONDITIONS: (continued)

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

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

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



MISSOURI DEPARTMENT OF NATURAL RESOURCES

WATER PROTECTION PROGRAM APPLICATION FOR CONSTRUCTION PERMIT — SEWER EXTENSION

| FOR DEPA | RTMENT USE ONLY | | | | |
|---------------|-----------------|--|--|--|--|
| APP NO. | CP NO. | | | | |
| FEE RECEIVED | CHECK NO. | | | | |
| DATE RECEIVED | 23.23 MN | | | | |

| E | | | | | BAIL RECEIVED | 23.23 | MH |
|--|--------------|--------------|--------------------------|-----------------------|--------------------------|------------------|-------|
| NOTE ► Please Read the accompanying | instructi | ons before | completing | this form | | | |
| 1.0 APPLICATION INFORMATION (Note – considered incomplete and returned.) | If any of | the question | ns in this sect | tion are ansv | wered NO, this appl | ication may be | |
| 1.1 Is this a Federal/State funded project? | ☐ YES | ☑ N/A | Funding Ag | ency: | P | roject #: | |
| 1.2 Has the Department of Natural Resource ☐ YES Date of App | | ved the prop | oosed project | i's engineerì ☑ NO | ng report*? | □ N/A | |
| 1.3 Is a copy of the appropriate plans* and | • | | 0.4 | | ☑ YES ☐ NO | | |
| If the project is using standard specifica | | | | of Festus, Mo | 0 | | |
| 1.4 Is a summary of design* included with the | | | YES N | | | | |
| 1.5 Is the appropriate fee or JetPay confirm See Section 7.0 | ation inclu | uded with th | is applicatior | n? ☑ YES | □NO | | |
| * Must be affixed with a Missouri registered | profession | nal enginee | 's seal, signa | ature and da | te. | | |
| 2.0 PROJECT INFORMATION 2.1 NAME OF PROJECT | | | | | | | |
| West Village Apartments | | | | | | | |
| ADDRESS | CITY | | | STATE | ZIP CODE | COUNTY | |
| Old Route 61 (No Physical Address) | Festus | | | МО | 63028 | Jefferson | |
| 2.2 Legal Description: ¼, | 1/4, | 1⁄4, Se | c. 12 , | T 40 | , R 6 | | |
| 2.3 Project Components (check all that apply ☑ Gravity sewers ☐ Pumping station 2.4 PROJECT DESCRIPTION | | orce mains | ☐ Alterna | ative sewer s | system | (Describe below | /.) |
| 2,975 i.f., 17 manholes and all necessary app MOGSE0566, approved June 22, 2023. The an office/clubhouse and pool. | | | wn as follows /ED | | | | |
| | Wat | er Protecti | on Pr <mark>ogram</mark> | | | | |
| 2.5 DESIGN INFORMATION A. Population or number of lots to be served | l by this ex | xtension: | 200 units | | | | |
| B. Estimated flow to be contributed by this e | xtension: | Design A | verage Flow: | 38800 gpd | Design Peak Hou | rly Flow: 1890 | gph |
| C. Industrial Wastes: Type: N/A | Flo | ow: | gpd | | | | |
| D. Receiving Sewer: Size: 8 inches | Ca | pacity: 54. | 38 gpm | | | | |
| E. Does this project (check all that apply): | | | | | | | |
| ☑ Connect to an existing treatment plant [| Resolve | e enforcem | ent issue | Eliminate o | r consolidate an ex | isting treatment | plant |
| F. Estimated number of onsite systems bein | g remove | d: 0 | | | | | |
| G: Estimated costs associated with piping: \$ | ; | Estir | nated costs a | associated w | vith lift station(s): \$ | N/A | |
| 3.0 PROJECT OWNER | | | | | | | |
| NAME Lorenzo LLC | | | NUMBER WITH A | REA CODE | EMAIL ADDRESS | | |
| ADDRESS | CITY | 314-422 | .7772 | STATE | Idebrecht@aol.c | OITI | |
| P.O. Box 410617 | St. Loui | is | | M | 63141 | | |
| CHARTER NUMBER (SECRETARY OF STATE) or REGISTERED | AGENT | | | - | | | |

MO 780-1632 (10-22)

| 4.0 CONTINUING AUTHORITY: A continuing for ensuring compliance with the permit require Continuing authority should be a relatively perwhen needed, of the permitted facility or active hired by the permittee to sample or operate an analytical laboratory. To access the regulatory Water Commission Chapter 6. A continuing an (SoS's) webpage: Missouri Secretary of State required to register with the SoS. | ements ar manent er ity. A conti nd maintai r requirem uthority's r | nd provide on tity respon- inuing authon in the syster ent regardin name must l | continuous stable sible for the ongo prity is not, howev in for a defined tin ing continuing auth be listed exactly a | oversight bing operal ver, an ent me period, hority, 10 (as it appea | of the permitted facility or activity. The ion, maintenance and modernization, ity or individual that is contractually such as a certified operator or CSR 20-6.010(2), please visit Clean irs on the Missouri Secretary of State's |
|---|--|--|--|--|---|
| NAME | | TELEPHONE N | UMBER WITH AREA CO | | EMAIL ADDRESS |
| City of Festus | | 636-937-6 | 646 | | matt.unrein@cityoffestus.org |
| ADDRESS | CITY | | STAT | | ZIP CODE |
| 711 West Main Street | Festus | | МО | | 63028 |
| 4.1 Has appropriate continuing authority acce A letter from the continuing authority acceptin | g respons | ibility for cor | ntinued maintena | ance of the | sewer (if the continuing authority is |
| different than the original owner of the constru | ıction <u>),</u> or | | | uing Autho | rity and Receiving Wastewater |
| Treatment Facility Acceptance" Form 780-258 | 34. 🗹 YI | ES NO | D LIN/A | | |
| 5.0 ENGINEER | | TELEDUONE N | IUMBER WITH AREA CO | NDE I | EMAIL ADDRESS |
| ENGINEER NAME / COMPANY NAME VonArx Engineering | | 636-797-8 | | | dvonarx@vonarxengineering.com |
| ADDRESS | CITY | | STAT | | ZIP CODE |
| 10785 Business 21 | Festus | | МО | | 63050 |
| 6.0 RECEIVING WASTEWATER TREATMENT | NT FACIL | | UNDER WITH AREA CO | DDE | EMAIL ADDRESS |
| NAME Festus/Crystal City Sewer Plant | | 636-797-7 | IUMBER WITH AREA CO '444 | | info@alliancewater.com |
| MISSOURI STATE OPERATING PERMIT # MO-0080632 | | COUNTY Jefferson | | | REMAINING CAPACITY (GPD) 1MGD |
| 6.1 If different from the owner, has a letter be | en provide | d from the | receiving treatme | ent facility of | lemonstrating that they agree to |
| accept the expanded flow or has a properly e MO 780-2584 form been provided? | xecuted C | continuing A | uthority and Rece | eiving Was | stewater Treatment Facility Acceptance |
| 6.2 A letter from the receiving wastewater tree ✓ YES □ NO □ N/A | | | | | |
| 6.3 If the receiving treatment plant or continui Certificate of Convenience and Necessity has | been rec | eived? | ed by the Public : Yes – Date: | Service Co | ommission (PSC) for sewer activities, a No N/A |
| OPTIONAL QUESTIONS REGARDING MILI | TARY SE | RVICE | | | |
| Have you or an immediate family member even U.S. Armed Forces? | er served i | in the | ☐ Yes | | ☑ No |
| If yes, would you like information about milita in Missouri? | ry-related | services | ☐ Yes | | ✓ No |
| 7.0 Application Fee | | | | | |
| ✓ Check Number | | | ☐ JetPay Confi | firmation N | umber |
| 8.0 PROJECT OWNER: I certify under penal supervision in accordance with a system desi submitted. Based on my inquiry of the persor gathering the information, the information submayare there are significant penalties for submyiolations. | gned to as or persor omitted is, | ssure qualifi s who man to the best | ied personnel pro age the system, o of my knowledge | operly gath or those pe and beliet | er and evaluate the information ersons directly responsible for f, true, accurate and complete. I am |
| PROJECT OWNER SIGNATURE | | | | | |
| hopes | | | | | DATE |
| Larry Debrecht | | | | - | 7/11/23 |
| TITLE OR CORPORATE POSITION | | TELEPHONE I | NUMBER WITH AREA CO | ODE | EMAIL ADDRESS |
| President | | 314-422-2 | 2225 | | ldebrecht@aol.com |
| Mail completed copy to: | | , | s | Submit com | pleted electronic copy to: |
| MISSOURI DEPARTMENT OF NATURA WATER PROTECTION PROC PO BOX 176 JEFFERSON CITY, MO 65102 | RCES | Missouri Department of Natural Resources at DNR.WPPEngineerSection@dnr.mo.gov | | | |

MO 780-1632 (10-22)

| 9.0 | SEWER EXTENSION | ON CHECKLIST | | |
|------|---------------------------------|--|---------|-----|
| | | DESIGN CERTIFICATION: Answer all questions yes or N/A. Answer N/A only if the question is not the proposed sewer extension. | clearly | not |
| | REGULATION | | YES | N/A |
| 1. | 8.110(3)(A) | Is the design flow based on actual flow data for an existing system? | 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? | V | |
| 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 manufacturer's recommendations and procedures? | V | |
| 13. | 8.120(4)(F) | Do the specifications include a requirement for inspection and testing for manholes? | V | |
| 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? | V | |
| 15. | 8.120(5)(B) | Are sewers and manholes located at least 50 feet horizontally from any existing or proposed water supply well, sources, structures? | V | |
| 10.0 | PRESSURE SEWE | ERS, 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? | | |
| | | The trial to to the trial to determine to it opposite that to it indicates the | | |

| 11.0 I | PUMP STATION C | HECKLIST | | | | | | |
|--------|----------------------------|--|---|--|---|-----|----------|--|
| | REGULATION | | | | | YES | N/A | |
| 29. | 8.125(7)(C) | | iameter sewer main pipe | | TEG sewer at least 4"? | | | |
| 0. | 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 locate | d outside wet well unles | s integral to a pump or | rits housing? | | | |
| 34. | 8.130(3)(F) 8.140(8)(J) | Do wet and dry w | Do wet and dry wells have separate ventilation systems? | | | | | |
| 35. | 8.130(3)(G) | Does all potable | water brought to pump s | stations comply with 8.1 | 140(7)(D)? | П | Г | |
| 36. | 8.130(6) | Is an alarm syste | m provided with uninter | rupted power? | | F | F | |
| 37. | 8.130(7)(A) | Is there 2 hours r | | rly flow for a design flo | ow > 100,000 gpd or 4 hrs | | Ē | |
| 38. | 8.130(7)(B) | Are there independ | ndent utility substations | provided for emergence | cy power capable of starting | | | |
| 39. | 8.130(8)(A) | | e pump station at its rate velocity of ≥ 2 ft/s maint | | | | Г | |
| 40. | 8.130 | Are there comple | ete operation instructions | for the pumpting static | ons provided that include and spare parts that may be | | | |
| 12.0 | SUCTION LIFT PU | MP AND SUBMER | RSIBLE PUMP STATIO | N CHECKLIST | | | 1 | |
| | REGULATION | | | | | YES | N/A | |
| 41. | 8.130(4) | Are the suction li | ft pumps of the self prim | ing or vacuum priming | type? | | | |
| 42. | 8.130(4)(A) | Is the combined to positive suction h | total of dynamic suction nead at design operating | lift at the "pump off" ele conditions less than o | evation and required net or equal to 22 feet? | | | |
| 43. | 8.130(4)(B) | Are there dual va | cuum pumps capable o | f removing air from the | suction lift pump? | | \vdash | |
| 44. | 8.130(5)(A) | | | | nout personnel entering, or | | | |
| 77. | 0.100(0)(71) | disconnecting an | y pipe in the wet well? | | | | L | |
| Miss | ouri Professional E | ngineer's seal, sigr | nature and date: | DATE NUMBER E-26647 | | | | |
| Nam | David L. Vonar | | | | | | | |
| | ress: 10785 Busine | | | | | | | |
| City: | Festus H. 1/ | SBORD | State: MO | | ZIP Code: 63050 | | | |
| Tele | phone Number with | n Area Code: 636- | 797-8425 | Email: dvonarx@voi | narxengineering.com | | | |
| | 1622 (10.22) | | | | | | | |