

COMMERCIAL PLAN & DESIGN STANDARDS

The following is intended as general guidelines for consultants seeking plan approval from Portage County Water Resources. This list includes some of the most common questions and comments but is not intended to be a comprehensive list of requirements. Upon plan review, additional specific requirements may be required to address the precise needs of each project.

1. Initial submittal of new project design plans shall include one drawing set sent to our office and one pdf electronic file sent to the email of: pcwr.plans@portageco.com. Plans shall include a Civil Site drawing package, Architectural Floor Plan, and Plumbing Plan.

All new project design drawing submittals require an attached and completed “Application for Sanitary Sewer or Water Permit” and a “Supplemental Commercial or Industrial Application for Sewer Permit”. These application forms are available on our website at: <https://www.portagecounty-oh.gov/water-resources/pages/permits-rates>

For Inquiries into utility availability, costs for new utility connections, and required permits shall be made to: Portage County Water Resources

Permit/Project Coordinator
8116 Infirmary Road
Ravenna, OH 44266
Phone: 330.298.2066
Email: pcwr.permits@portageco.com

2. All plan submittals shall be legible and include an overall utility plan which clearly shows the entire extent of the project in a single plan view. The drawing plan sheet size required is 24” x 36”. The plan must show all existing and proposed buildings, parking areas, driveways, streets, easements, property lines, above and below grade utilities and how they interrelate, including but not limited to, gas, telephone, water wells, watermains and services, sanitary sewer mains and services, storm sewer mains and services, power lines and services, communication or fiber optic lines and services, ditches, waterways, and stormwater basins. Existing plan features shall be with “light” line weight intensity and proposed plan features shall be acknowledged with “dark” line weight intensity.
3. All plan revisions shall be acknowledged with a numbered note, clouded, dated, and a brief reason for the revision noted in the plan title block. A Portage County project number shall be assigned for sewer and water main extensions, while a lateral or service connection do not require this. If the project is part of a utility main extension, then the Designer shall add the assigned Portage County project number to all plan sheets. Any revision submittal shall include the entire set of drawings with the revision sheets included, a pdf electronic file is acceptable.
4. A Utility Plan shall be included in each project plan submittal and shall show sanitary sewer and water service laterals with size, material, and valve box locations. A water service valve with riser box shall be added to plans and located on the easement or right of way line. Proposed valve boxes shall not be located within streets, driveways, sidewalks,

parking lots or other paved surfaces. The existing water mains and sanitary sewer shall be labeled with size and pipe material shown.

5. Sanitary sewers shall be designed to show pipe invert elevations at structures and clean outs to provide for a contractor map to ensure the system is built properly and at the pipe slopes required. Portage County has standard sanitary sewer notes and construction standard detail drawings to be included on the plans. The sanitary sewer capacity fee for connection to the existing sewer main for service is determined by the sewer units equivalent building usage table using the applicable project categories and the unit cost from the current Portage County rate.
6. When a pump station is proposed, a "Pump Station Design Summary" sheet is required that includes calculations for average daily design flow, number of buildings that are to contribute to the wet well, wet well volume design, pump choice and sizing/selection chart, proposed pump daily cycles, force main and appurtenances friction loss calculations, calculated total dynamic head, electric service for station, and any future contributing flows planned. Provide a professional engineer stamp for the pump station design.
7. The project may require a sanitary sewer trap dependent on the project category use or proposed service. A grease, oil and or sand trap shall be provided when, in the opinion of the Sanitary Engineer, they are necessary for the proper handling of wastewater containing fats, oil, grease, sand, grit, or other harmful components that shall be discharged into a Portage County owned sanitary sewer. The trap shall be located outside of the building as to be readily and easily accessible for cleaning, inspection, and sampling. Trap units shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature and shall be of substantial construction, gas tight, watertight and equipped with easily removable covers. Portage County will monitor this structure in the future as part of our maintenance and sanitary regulatory program.
 - a. A minimum capacity of 1,000 gallons is required for the trap unit.
 - b. A sampling basin control manhole is required to be installed on the discharge line of the interceptor
 - c. Domestic sanitary use flow is to be diverted out of the grease trap.
 - d. The trap may require vent piping to be connected back into the building vent system. Piping size and material to be determined by the designer.
 - e. Provide proposed sanitary sewer pipe inverts and top of structure elevations for both the trap and sampling basin for a contractor map to ensure the system is built properly.
 - f. Service area trench and floor drains shall be connected to the trap to contain grit and spills.
 - g. Portage County has a standard grease trap drawing available and shall be included on the plans.

8. Water meters shall be located within the building. The plumbing designer shall determine the water meter size. A water service entry schematic detail is required on the Plumbing plan. The entry detail shall provide for a shut off valve, water meter, and backflow prevention. Any proposed water irrigation system shall be included and if a water meter is requested for this separate system. The irrigation system shall include a separate water meter to deduct this used and measured flow from the sanitary sewer account. Portage County has standard water meter notes to be included on the plans.
9. Water site hydrants shall meet the specifications of Portage County. A water fire line to support new buildings shall require a separate tap in connection from the domestic water service to the water main. Portage County has standard water service notes and construction standard detail drawings to be included on the plans. The utility water capacity fee for connection to the existing water main for fire service and domestic service is determined by the size of the proposed lateral piping and the unit cost from the current Portage County rate.

4/25/22