

<p>Allen Park Belleville Brownstown Twp. Dearborn Heights Ecorse Lincoln Park</p>	<p style="text-align: center;">Downriver Utility Wastewater Authority</p> <p style="text-align: center;">25605 Northline Road • Taylor, Michigan 48180</p>	<p>River Rouge Riverview Romulus Southgate Taylor Van Buren Twp. Wyandotte</p>
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Sanitary Sewer Approval Checklist

Sewer Use Ordinance Article III – Sections 4, 8 & 9 (b)

1. **Municipal Engineer Approval** Each set of design drawings shall be approved and signed by the officially Designated Municipal Engineer who shall be a Professional Engineer, licensed in the State of Michigan. To avoid conflict of interest, the design engineer responsible for the design and drawings of the proposed wastewater facility shall not be the same as the municipality’s designated representative to approve design drawings with the basis of design calculations.
2. **Design Engineer** Each set of plans shall bear the seal of the Professional Engineer, licensed in the State of Michigan who is responsible for the plans.
3. **Sewer Listing** A quantity listing of sewer pipes by diameter, cleanouts, and manholes (regular, interior drop and exterior drop) shall be included in the plans.
4. **Location Map** A location map indicating the quarter section in which the project is located shall be shown on the plan.
5. **Overall Plan** When more than one sheet is required for plan, a smaller scale single sheet overall plan with utilities and benchmarks shall be provided.
6. **Bench Marks** Two benchmarks and the datum shall be indicated on the project site plan.
7. **Outlet** On instances where the DUWA has no record of the existing sewer to which a proposed sewer is to be connected, or where existing sewer is not shown in accordance with previously approved plans, as-built plans of the existing sewer and evidence of acceptable leakage tests shall also be submitted for approval.
8. **Inverts** Sewer pipe invert elevation of the existing manholes shall be field-measured and shall be so designated on the plan and profile.
9. **Profile** A profile including inverts, gradient, length, and drop connections shall be shown for each run of sewer, force main and stub.
10. **Utilities** Existing and proposed utilities shall be shown on plan and profile.

11. Manhole Numbering Manholes shall be numbered on plan and profile.
- 11 a. Manhole A manhole shall be constructed at the end of every run of sewer receiving two or more connections at intersections, change in direction, change in grade, and at the terminus of the sewer.
- 11 b. Manhole Spacing The maximum distance between manholes shall be 400 feet, if sewer size is less than or equal to 48 inches. [Section 4 (a)]
12. Bulkheads The locations of existing or proposed stoppers and bulkheads shall be indicated on the profile.
13. Curb Grades Proposed or existing curb or sidewalk grades of streets adjacent to the sewer shall be shown on the profile.
14. Basement Grades Basement grades shall be shown for existing and proposed buildings where the sewer is less than 10 feet deep or a note stating no basements, or the method of serving basements using grinder pump or other devices shall be included. If the building to be served is more than 100 feet from the property line where the building lead is provided, the engineer shall demonstrate that building basement or lowest level can be served by gravity or by using a grinder pump or other device.
15. Pipe Type Allowable types of pipe, joints, and stoppers for public and building sewers shall be indicated on the plans.
16. Stubs Stubs or dead end sewers shall be designated as follows: “Stub to facilitate future construction only, no building leads allowed until terminus manhole is constructed.”
17. Easements An easement shall be designated on the plan for each run of public sewer not in the public right-of-way. The minimum easement shall be 12 feet; however, the rear easement on subdivision lots may be reduced to six feet where there is no contiguous subdivision. Documentation of the recorded easements shall be made available to DUWA within 60 days of permit approval. Examples of instances where easements for the sanitary sewer are required include but are not limited to:
1. Proposed Sanitary Sewers located on, or in close proximity to, private property,
 2. Proposed Sanitary Sewers located within or crossing other utility easements, and
 3. Proposed Sanitary Sewers located within a road easement where the road is considered private (not a dedicated R.O.W.).

18. Details Details of pipe bedding, building sewers, drop connections, bulkheads, manholes, manhole covers, and other appurtenances shall be submitted with the plans.
19. Notes The following notes shall appear on the plans:
- a. No connection receiving storm water, surface water or groundwater shall be made to sanitary sewer.
 - b. Infiltration for any section of sewer between manholes shall not exceed 100 gallons/inch diameter/mile/day. (10 States Standards).
 - c. No footing drains shall be connected to the building sewer.
 - d. Differential of excavation around existing manholes shall not exceed six feet.
 - e. Contractor shall notify DUWA 48 hours prior to the start of construction [(734) 318-5634], if the construction is within a DS DS right-of-way.
20. Design Data Design data conforming to Michigan Administrative Code R 299.2935, Rule 35 (3)(a) through (j) of the General Rules of the Michigan Department of Environmental Quality, Water Resources Division shall be submitted with the plans. [Section 2 (c)] The sewage flows must be shown in cubic feet per second (cfs).
21. Testing Specify on the plans that the testing of sewer and stubs by air and infiltration or exfiltration tests are required. [Section 8.] A copy of the test report shall be made available to DUWA within 60 days of completion. If the infiltration test fails for any portion of the sewer installed under the permit, DUWA shall be notified and repairs or replacement of the deficient sewer shall be done and the sewer re-tested until the maximum infiltration criteria has been met.
22. Televised Inspection Specify on the plans that all sewers shall be video-inspected, with test results approved by the City/Township and DUWA prior to placing the sewer in service. [Section 8 (a)]
23. Sewer Connection If the proposed sewer connects directly to a County Interceptor check for whether the connection will be located at a metering site. Metering sites are depicted on the [DS DS Service Area map](#).
24. Fees There are no review fees.

25. Other Permit Requirements DUWA reserves the right to require proof that the applicant has obtained all necessary permits for the proposed sanitary sewer which may include:
- Soil Erosion and Sedimentation Control (Wayne County or Local)
 - Wetlands
 - Flood plain
 - Inland lakes and streams
 - Wayne County right-of-way