



SEWER PLAN REVIEW CHECKLIST

(Required for any development which extends or installs public sewer mains.)

Site Plan Number (if applicable):

Date: _____ **Project Name:** _____

Project Address: _____

Owner Name: _____

Owner Address: _____

Phone Number: _____ **Owner Email:** _____

Project Description: _____

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This checklist is intended as a guide to the critical items required by the State of Tennessee, and the City of Maryville Water & Sewer Department. The Engineer is responsible for being familiar with and meeting the design standards of the state and city. It is strongly suggested that a pre-design conference be scheduled with a preliminary development layout including topography and water features available for the conference. Each element presented in this list shall be checked "Yes", as applicable to the site. Checks placed under the "No" column shall be justified in a written statement attached to this checklist. Elements of the plan that are not applicable for the site shall be marked as "N/A".

1. General Plan Requirements for Each Sheet.

- Yes No N/A a. Plan sheets sized 24" x 36"
- Yes No N/A b. Engineer name, address, email address and phone number
- Yes No N/A c. Plans stamped and sealed by a licensed engineer
- Yes No N/A d. Date of plan and date of any revision(s) included
- Yes No N/A e. Revisions tabulated on re-submittals. Revision-clouds used to clearly depict revisions

2. Cover Sheet.

- Yes No N/A a. Developer and property owner name, address, email address and phone number
- Yes No N/A b. Servicing utility name, address and phone number on first sheet of plans. (City of Maryville Water & Sewer Department, 332 Home Avenue, Maryville, TN 37801, (865) 273-3300)
- Yes No N/A c. Vicinity map at not less than 1" = 2000' scale including: North arrow, adjacent roadways, site boundary lines, and latitude/longitude
- Yes No N/A d. Symbols Legend

3. Plan-Profile Sheet(s).

- Yes No N/A a. Maximum allowable plan/profile sheet scale: 1" = 50' horizontal (plan and profile must match) and 1" = 10' vertical
- Yes No N/A b. Plan and profile shall be on the same sheet and oriented in the same direction as plan view
- Yes No N/A c. Profile stationing corresponds with respective plan view stationing



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Yes No N/A d. North Arrow

All plan-profile sheets clearly show:

- Yes No N/A e. Property boundaries
 Lot lines and lot numbers
 Locations of streets and right-of-way lines
- Yes No N/A f. Existing topographic contours in GRAYSCALE line style including trees within 25' of centerline of proposed sewer
- Yes No N/A g. All existing utility poles and underground utilities with sizes shown in GRAYSCALE. All locations were determined by a field survey
- Yes No N/A h. Utility access or other easements (existing and proposed sewer easements)
- Yes No N/A i. Proposed topographic contours presented at a 2' interval in a BOLD line style within 25' of centerline of proposed sewer
- Yes No N/A j. All proposed utility poles and underground utilities with sizes shown with bold or shaded lines
- Yes No N/A k. All bodies of water including direction of flow and high-water elevations
- Yes No N/A l. Location of adjacent streams and extent of streamside vegetation
- Yes No N/A m. Locations of all special features
- Yes No N/A n. Limits of 100-year flood elevation
- Yes No N/A o. At least one benchmark is provided, with elevation included. Benchmark is to be maintained through the completion of the project.
- Yes No N/A p. Existing and proposed structures or lots to be served by gravity with existing or proposed floor elevations and locations
- Yes No N/A q. Locations of all existing or planned structures below and above ground which might interfere with proposed construction (water/sewer/gas mains, stormwater pipes, etc)
- Yes No N/A r. Following note is provided – "All existing utility structures shall be brought into conformance with finish grade in accordance with the Rules, Rates, and Policies of the City of Maryville Water and Sewer Department prior to acceptance of the project. Contact Stacy Frye (865-273-3380) for inspection of new installation or for any adjustment."
- Yes No N/A s. Following note is provided - "THESE PLANS ARE BASED ON AN ACTUAL FIELD SURVEY. THE MEASUREMENTS GIVEN AND LAYOUT SHOWN ARE SUFFICIENT FOR ORDERING OF MATERIALS AND ACTUAL FIELD LAYOUT OF THIS PROJECT. THE CONTRACTOR SHALL NOTIFY TENNESSEE ONE CALL AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION FOR UTILITY LINE LOCATES. ANY DISCREPANCIES BETWEEN THE PLAN LOCATIONS AND THE ACTUAL FIELD LOCATIONS SHALL BE IMMEDIATELY COMMUNICATED TO THE DESIGN ENGINEER AND THE CITY OF MARYVILLE, WATER AND SEWER DEPARTMENT."
- t. Proposed Sewer Mains
 - Yes No N/A i. Location, size, direction of flow
 - Yes No N/A ii. Minimum pipe diameter is 8" with a slope of 0.5%
 - Yes No N/A iii. Any sewer crossing beneath a water main shall have at least 18" of vertical separation below the bottom of the water main



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- | | |
|---|--|
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | iv. All sewer mains are located a minimum of 10' horizontally from any existing or proposed water main |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | v. C900 is indicated on plan and profile views when: |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | a. Cover in roadways is less than 4' |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | b. Cover in open areas is less than 2.5' |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | c. For any sewer line installed in fill |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | d. When slopes are greater than 13% or 9% for 10" and 12" sewer mains, respectively |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | e. Cover over pipe exceeds 16' |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | vi. Borings are indicated on the plan and profile showing the length and type of pipe and casing |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | vii. Indicate the proposed pipe size, type, direction of flow and length between manholes in plan view |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | viii. Indicate the proposed pipe size, type, length between manholes, and percent of grade in profile view |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | ix. 100' stationing is shown along centerline of sewer, including major and minor ticks |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | u. Proposed Manholes |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | i. Inlet and outlet elevations (Outlet invert should be 0.1' lower than inlet invert) |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | ii. Rim elevations |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | iii. Deflection angles (angle of flow) at each manhole |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | iv. Distance between manholes is 350' or less |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | v. Minimum diameter is 48" |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | vi. Any manhole with depth of 12' or more is installed on a 6-inch thick concrete slab with a minimum diameter of 1' larger than the outside diameter of the manhole base section (6' by 6' square or 7' diameter pad for a standard 4' manhole) |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | vii. Drop manholes are indicated on both plan and profile view and have been used where the inlet invert is greater than 2' (24") higher than outlet invert. All drop manholes shall be constructed as per the approved City of Maryville details. |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | v. Sewer Services |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | i. Location and sizes of service |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | ii. Sewer service location symbols are shown on plan where applicable |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | w. Erosion control measures |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | i. Concrete check dams are installed at each downstream manhole and at all junctions where fill and native soil meet for any trench excavation, bore pits, or other earth-disturbing activities occurring upslope of a water of the state |
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | ii. Note included - Spoil materials from trench, excavation, bore pits, and other earth disturbing activities in an upland location are stabilized within seven days |

4. Hydraulic Calculations.

- | | |
|---|--|
| <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | Hydraulic calculations are required for all lines in the project as outlined in Section 1.1.5 - Design Basis of the City of Maryville's Wastewater Rules and Regulations and Chapter 2 - Collection Systems of TDEC's Design Criteria. Calculations are to be provided as a separate attachment. |
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5. Details.

- Yes No N/A a. Inclusion of City of Maryville Detail sheets or similar relevant detail sheets. Details must match City of Maryville standards.
- Yes No N/A b. Detailed drawings of all stream crossings- reference Chapter 2 of State of Tennessee regulations for stream crossing requirements.
- Yes No N/A c. Detail drawings of special joints, appurtenances, etc.
- Yes No N/A d. Detail drawings of any boring
- Yes No N/A e. Details are clear and legible

SUBMITTED BY:

Print Name: _____

Company Name: _____

Address: _____

Phone Number: _____ Email: _____

Signature: _____