

Public Works Requirements

Applicable Standards

- [City of Oxford Code of Ordinance](#)
- [City of Oxford Land Development Code](#) (most frequent references being Sections 161, 162, 163, 212)
- [Standard Specification For State Aid Road and Bridge Construction, 2004 edition](#), as published and amended including interim specifications and specification revisions thereto, is the official standard specifications for road, street and bridge construction of the city (Section 98-39 and Section 98-40 of Code of Ordinances)
- [Water and Sewer Specifications for the City of Oxford](#) (most recent edition)
- [Stormwater Retention and Detention Ordinance](#) approved 7-1-14, or as amended (Section 98)
- City of Oxford Complete Streets Policy, adopted 5-17-11, or as amended
- [United States Department of Transportation ADA Standards for Transportation Facilities \(2006\)](#), or as amended
- [Manual of Uniform Traffic Control Devices \(MUTCD\)](#), most recent edition
- Commonly accepted design guidelines (AASHTO, ITE, etc.)
- [Field Manual for Erosion and Sediment Control on construction sites in Mississippi, MDEQ, 2005 edition](#), or as amended

Quick Reference Guide to Most Frequently Asked Questions and Omissions

- **Streets to be Dedicated to the City of Oxford:**
 - Block dimensions [Section 162.03 (10)]
 - Right-of-Way (ROW) width requirements [Section 162.04 (4)]
 - Driveway/curb cuts [Section 162.04 (7)]
 - Street lights required on all streets to be dedicated to the City
 - Typical section and plan-profiles required
 - Proposed street names to be shown on plans (names require approval by the City)
 - Addresses to be requested from and established by the Public Works Department for properties within the City limits
 - Street signs (location, style, color, etc.) shall meet requirements of MUTCD, most recent edition
 - ROW width shown on plans

- Drainage structures located off of the ROW shall be clearly labeled as under the maintenance and ownership of the private property owner, home-owner's association, or common area. They must be clearly labeled to indicate that they are **NOT** owned or maintained by the City.
- Grade requirements -- (Section 162.04 (12))
 - Arterial and Collector –Maximum of 7% vertical
 - All other streets—Maximum of 10% vertical
 - Minimum grade—0.5%
 - Crown established according to Mississippi Department of Transportation guidelines or other approved Engineering standards (2% cross-slope typical for tangent sections)
 - Dead end streets (permanently designed to be so) [Section 162.04 (14)]
 - Max length of 800 ft
 - Turnaround with minimum of 80' outside diameter required
- Roadway Structural Design (Section 163.04)
 - 6" depth of ¾" crushed stone limestone base minimum
 - 3 ½" of HMA pavement in two lifts (2" minimum on base lift)
 - Surface lift installed three years from acceptance of all other required improvements or once all construction in development is complete
 - Performance bond payable to the City required for Surface Lift (Section 161.10)
 - Curb and Gutter Required unless otherwise approved by City Engineer and Planning Commission
- Sidewalks (Section 163.06)
 - Required on both sides of City streets, including existing streets
 - To be located at the far edge of ROW unless otherwise directed
 - Minimum of 2' wide buffer between sidewalk and back of curb where available ROW prevents a larger buffer
 - 5' wide minimum width, 48" width permitted at point restrictions to avoid specific obstacles such as existing power poles
 - Meet all ADA requirements
 - 2% maximum cross-slope **INCLUDING DRIVEWAY CROSSINGS**
 - Warning tile required at all street crossings
 - Tile to be brick-red in color
 - Pedestrian easement granted from property owner to the City is required if the sidewalk must be located off of City ROW for some reason. Location off of City ROW requires approval by the City
- Expansion joints required to line up with the curb and gutter at inlets
- Block-out required at inlets to allow water to drain from roadway into inlet prior to final lift of asphalt placement (Detail required on construction plans—a 2"x4" placed in the throat/pan of the drain prior to pouring is commonly used and accepted)
- Warranty/Final Acceptance (Section 163.12)
 - Final Inspection held with Public Works Department

- All storm drain systems shall be cleaned prior to inspection (at no cost to the City)
 - All storm drain systems shall be video-inspected with a representative from the Public Works Department present prior to inspection
 - Warranty bond, certified check or letter of credit for an amount not less than 15% of the total estimated construction cost as approved by the City Engineer
 - 1 year warranty period from date Board accepts street required
 - As-built plans required before Final acceptance granted by BOA
- **Water and Sewer Service Requests**
 - Cost of extension of city's water and sewer to be borne by developer (Ordinance Section 114-86)
 - Easements required to be obtained by the developer in the name of the City, or be transferable to the City (Ordinance Section 114-86)
 - Water and Sewer mains to be a minimum of 8" or as specified by the Engineer (LDC Section 163)
 - Stub-outs for sewer to be 6" minimum
 - All water and sewer lines are to be locatable using electronic means (tracer wire required)
 - Lift station and pump houses shall be located so that they are not subject to flooding from adjacent area
 - Sewer lines shall be video-inspected with a representative from the Public Works Department present
 - Three-way valves shall be required on the water lines at all street intersections. Additional valves shall be located as needed so that water lines can be isolated in the event of repair in a way that keeps the majority of customers in service
 - All water mains shall be ductile iron and meet all requirements listed in the Water and Sewer Specifications Section D.3.a.
 - 10' minimum horizontal clearance is required between the water and sewer lines and 18 inches vertical clearance. The water line shall always be placed at a higher elevation than the sewer line
 - Water and sewer lines are to be placed in the City street
 - All water mains shall be tested in the presence of a representative from the Public Works Department
 - Requests for water and/or sewer service from the City of Oxford outside of the City limits requires approval of the Board of Alderman. The City can only provide water and/or sewer services within its certificated area. Applicants requesting City services must comply with all City requirements for development, including the Landscape Policy, Stormwater Ordinance, density requirements, etc.

- **Stormwater Detention and Retention**

- All hydrologic and hydraulic computations utilized in the design of stormwater facilities must be prepared and stamped by a registered engineer proficient in the field of hydrology and hydraulics and licensed to practice engineering in the state of Mississippi.
- Where such criteria exist, all stormwater facilities and systems, including those designed and constructed for water quality treatment, channel protection, overbank flood protection, and extreme flood protection, shall be designed and constructed in accordance with the criteria, standards, and specifications presented in the City of Oxford’s Code of Ordinances Chapter 98 Article V.-Stormwater Management, and for general guidance, the Georgia Stormwater Management Manual, as amended shall be used.
- The SCS method should be used for hydrologic modeling. The Rational Method is not acceptable. Rational Method may only be used for pipe conveyance calculations. For the SCS Method, a Type II rainfall distribution and a shape factor of 483.4 (484) will be used.
- Time of concentration (t_c) shall be calculated using the methods given in the U.S. Department of Agriculture, National Resources Conservation Service, Part 630 National Engineering Handbook, Chapter 15, Time of Concentration, 630.1502 Methods for estimating time of concentration.
- The minimum time of concentration (t_c) to be used for calculations is 5 minutes.
- For ease in comparing models, the following rainfall depths shall be used for all stormwater calculations for projects in the City of Oxford:

| | PRECIPITATION FREQUENCY ESTIMATES (Depth in inches) | | | | | | |
|--------|---|--------|--------|---------|---------|---------|----------|
| | 1-Year | 2-Year | 5-Year | 10-Year | 25-Year | 50-Year | 100-Year |
| 6-hr: | 2.57 | 2.93 | 3.54 | 4.06 | 4.80 | 5.39 | 5.99 |
| 24-hr: | 3.71 | 4.25 | 5.16 | 5.92 | 7.01 | 7.87 | 8.75 |

*The city requires a 24-hour duration. The 6-hour duration is provided for information only.

- All stormwater calculations and retention/detention designs will consider the 2-, 10, 25-, and 100-year storm events.
- Pre-development flow and volumes must be determined for “the sites in its natural, undeveloped condition” per Section 98-111 (b) as defined in Section 98-111 (j).
- Must be accompanied by a written report. The report narrative must meet the requirements listed in the City of Oxford’s Code of Ordinances Section 98-112 (a)2. The narrative should be substantial enough and be written in such a way that it contains ample information pertaining to the project and project details, clearly

describes the site and includes a location map, site specific soils, explains the design engineers thought process in developing pre- and post-development drainage areas, discussion of any differences between pre- and post-development drainage areas, how curve numbers were developed/estimated, how time of concentration was calculated, presentation and discussion of model results with summary tables, discussion of any assumption used concerning site conditions, and a discussion of the detention system design and how it functions. An appendix should include a complete set of model data and reports.

- Must be accompanied by a storm sewer plan and/or a grading plan, pre- and post-development drainage areas, and detail sheets showing the design elements of the detention system. All areas, elevations and inverts, pipe lengths, pipe diameter, pipe slopes, orifice diameter, crest length, and other information must match data used in the model and presented in the written report. The storm sewer plan and/or grading plan must include any additional information required in Section 98-112 (a) (1 and 2).
 - The grading plan must include existing and final (proposed) contours all information stated in Section 98-112 (a) (1). These contours need to be clearly distinguishable from one another and include labels for the major contours (5 ft at a minimum) and regular intervals.
 - Ownership and a maintenance plan for any detention/retention features must be addressed according to Section 98-112 (d).
 - Contour map must be provided with labeled contours and all information stated in Ordinance section 98-112 A.1. Contours must be labeled on regular intervals.
- **Traffic Impact Study (Land Development Code Sections 161.5, 161.6 and 212.03)**
 - Prepared and stamped by an engineer licensed in the State of Mississippi
 - Required when thresholds listed in LDC are met or at discretion of the City Engineer
 - Engineer commonly uses this discretion in areas with known, existing congestion or access issues or when the project nears the threshold limits in particular areas. May be used on any project.
 - Traffic counts must be taken during typical, representative traffic periods. Counts taken while the University of Mississippi is not in session or when there is a reason to expect the numbers are not typical will not be accepted.
 - All traffic count data and warrant analysis must be included in the report

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