

City of Morristown Land Disturbance Permit Review Packet

Land Disturbance Site Plan Submittal Checklist

Introduction

This packet and all listed applicable items are required as part of the Land Disturbance Permit Approval process. The checklist will be used by the City plans reviewer. Therefore, fully completing this checklist will help reduce delays in plan approval.

The City has adopted several BMP Manuals which provide details regarding design and construction of Stormwater Control Measures (SCMs). In particular, the designer should refer to the City's *Stormwater Design Guidance Manual*. These manuals, all referenced documents, and additional information regarding the City's submittal requirements may be found at http://www.mymorristown.com/departments/public_works/stormwater/index.php or by calling (423) 585-4658.

Note that the Stormwater Program reserves the right to modify this checklist at any time. This checklist does not supersede any requirements of the Stormwater Program Ordinance, the Stormwater Program Standard Operating Procedures, or any other City Planning, Zoning, Subdivision, or other regulations and ordinances.

Instructions

Provide the requested project information below. Mark each item on the checklist to indicate that it is adequately addressed in your submittal. Please include "N/A" and/or provide additional information as necessary.

Project Name	
Total Disturbed Area (SF if < 1 ac) acres or SF	Proposed New Net Impervious Area¹ acres & ERU's
Receiving Water	Is Site a Hot Spot?² Yes / No
Date	Will an offsite borrow / spoil site be required? Yes / No
Checklist Completed By	
Printed Name	Signature
Phone Number	E-mail Address

^{1,2} Refer to the *Stormwater Design Guidance Manual*.

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1. Submittal Items

- Completed Land Disturbance Site Plan Submittal Checklist (this document)
- Four hard copies of plans, signed and sealed by an Engineer
- Digital copy of all submittal items in PDF format, identical to the hard copy
- Site layout plan in DWG format, tied to Tennessee state plane coordinate system, including buildings, parking lots, driveways, fire hydrants, sidewalks, parcel lines
- Bond cost estimate
- Copy of the SWPPP and Notice of Intent (NOI) as submitted to TDEC (if applicable)
- Copy of TDEC Notice of Coverage (if applicable)
- Copy of approved TDEC Notice of Coverage and/or City Land Disturbance Permit for all borrow / spoil sites (if applicable)
 - Alternatively, include a note on the plans that the contractor is responsible for providing this information
- Stormwater Management Plan (SWMP) provided, if any of the following are included at the site: peak flow control, post-construction pollutant treatment, Water Quality Buffer Zone (WQBZ)
- Supporting documentation (design calculations, geotechnical reports, etc.) signed and sealed by an Engineer (if applicable)
- Flood zone determination, with FEMA Map identified
- Copy of all federal and state permit applications as submitted other than those listed above, and copy of all approvals (ARAP, TVA, US Army Corps, etc.)
- Copy of application for WQBZ Variance (if applicable)

2. Grading / Erosion Protection & Sediment Control Plans

- Bond cost estimate includes quantities and unit prices, quantities match plans, and prices match approved references
- Vicinity map
- Limits of disturbance delineated, including areas necessary for installation of all utilities
- Total disturbed area

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- ❑ Topographic map with contour intervals of 2 feet or less, showing present and proposed contours
- ❑ Work contained on property, or temporary or permanent easements obtained
- ❑ TDEC Erosion Protection & Sediment Control (EPSC) Handbook, latest edition, referenced
- ❑ Phased EPSC plans as required by TDEC General Construction Permit (if applicable)
 - At least 2 sheets for under 5 acres disturbed area, or at least 3 sheets for greater than 5 acres
 - No more than 50 acres of disturbed area at any time during construction
- ❑ Stormwater volume and velocity controlled
 - Within the site during construction to minimize erosion within the site
 - At discharge points
- ❑ Slopes adequately protected
 - Slopes steeper than 3H:1V stabilized with erosion control matting, with manufacturer and model noted and installation detail provided
 - Slope drains provided, if necessary
- ❑ Sediment basin provided
 - Note: Required if total drainage area exceeds 10 acres, or 5 acres for a receiving water which is designated as impaired or exceptional
 - Drainage area map for each basin
 - Designed per requirements of TDEC EPSC Handbook
 - Lower orifices sealed during construction, unsealed after site is stabilized
- ❑ Silt fence installed parallel to contours and not used in areas of concentrated flows
- ❑ Construction entrance / exit provided
- ❑ Concrete washout area location and detail provided
- ❑ Sediment traps used only where drainage area is less than 5 acres
- ❑ Inlet protection provided at all existing inlets that receive flows from the disturbed areas
- ❑ Inlets and outlets stabilized with appropriately sized riprap apron or other energy dissipators

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- ❑ Diversions provided as appropriate
 - Utilized to divert concentrated stormwater flows from running onto and within the disturbed area
 - Channels stabilized
 - Rock check dams provided
- ❑ Adjacent property protected from damage
 - Additional outlet protection provided for outfalls within 10' of a property line
 - No ponding or other negative impacts created
- ❑ Dimensions and armor provided for swales
- ❑ Additional requirements if discharging into an impaired or Exceptional TN water (drainage area greater than or equal to 5 acres)
 - Controls accommodate 5 year, 24 hour storm
- ❑ TDOT ROW only
 - TDOT review may be required for work proposed on TDOT ROW
 - Access for proposed driveway and/or public road
 - Stormwater infrastructure (proposed or modification to existing)
 - Traffic signal (Contact City of Morristown for submittal requirements)
 - TDOT lane closure permit note, if applicable (“Contact TDOT Morristown Office at (423) 587-7026 to obtain a lane closure permit.”)
- ❑ Easements for stormwater conveyance systems provided (if applicable)
 - Required if flow originates from an off-site parcel
- ❑ ERUs (Equivalent Residential Units) provided

3. Stormwater Pollution Prevention Plan (SWPPP)

- ❑ TDEC Erosion Protection & Sediment Control (EPSC) Handbook, latest edition, referenced
- ❑ Disturbed area in acres if proposed land disturbance is over one acre and in square feet if proposed land disturbance is under one acre

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- ❑ Project narrative describing the land disturbance activity, proposed project, and a schedule for the starting and estimated completion dates of each phase of the land disturbing activity
- ❑ General description of existing land covers
- ❑ General description of existing soil types and characteristics and any anticipated soil erosion and sedimentation problems resulting from existing characteristics
- ❑ Description of construction and waste materials expected to be stored on site, and description of controls to prevent contamination from these items
- ❑ Control measures for waste such as discarded building materials, concrete truck washout, petroleum products and petroleum related products, chemicals, litter, and sanitary waste
- ❑ Description of stormwater sources from areas other than construction, and a description of controls and measures that will be implemented at those sites.
- ❑ Listing of any known legally protected state or federally listed threatened or endangered species and/or critical habitat located in the area
 - Description of the measures that will be used to protect them during and after grading and construction
 - United States Fish and Wildlife Service approval for all protection measures

4. Water Resources

- ❑ All water resources within 100' of project site or disturbed area, including wetlands, shown and labeled
- ❑ Hydrologic Determination performed by a Qualified Hydrologic Professional (QHP) if a "blue line" stream on a USGS quad map is not being identified as a Water Resource
- ❑ Flood zones shown, and FIRM referenced
 - Note: Please contact the City if the proposed project includes work within a regulated floodplain or floodway.
 - Water resources to be impacted and any impacted areas with a description of the activity(s), whether it is permanent or temporary, and any other relevant information.
 - Copy of all submittals to FEMA, and all approvals received

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- ❑ Construction buffers as required by the TDEC General Construction Permit provided
 - Proper width (30', or 60' for impaired streams)
 - Areas to remain undisturbed noted on plans
 - Areas flagged to prevent disturbance during construction
- ❑ Water Quality Buffer Zone (WQBZ)
 - Water Quality Buffer Zones shown on plans, with dimensions
 - Discharges into a WQBZ are non-channelized and non-concentrated to prevent erosion, and first treated by the construction site's sediment and erosion controls
 - A detailed description of easements, restrictive covenants, prohibited activities, and allowed maintenance within these areas
 - Signage
 - Note: the City may provide the required signage.
 - Posted at the coincidence of the water quality buffer zone edge, each lot line, and at a maximum spacing of one hundred fifty feet (150').
 - Contains the following message: "Water Quality Buffer Zone: This area is reserved for the protection of water quality by limiting pollution, offering shade and bank stabilization, and providing wildlife habitat."
 - Copy of Board of Zoning Appeals (BZA) application for WQBZ variance (if applicable)

5. Discharge to Sinkholes

- ❑ All stormwater systems designed for the 100-year storm
- ❑ Geologic investigation provided
- ❑ Approval from TDEC provided

6. Stormwater Peak Flow Control (Detention / Retention)

- Note: required for sites where impervious area increases by more than 0.5 acre
- ❑ As-built drawing of existing detention basin if it will be utilized in the proposed plan
 - Contact the City for guidance if relying on an off-site pond
- ❑ Protection to prevent small orifices from clogging

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- ❑ Detention / retention basins meet all requirements of adopted BMP Manuals
- ❑ Calculations
 - Sealed by a Tennessee licensed engineer
 - Drainage area maps for on-site and off-site
 - Pre-development area = post-development area, or explanation provided
 - Soils map, with Hydrologic Soil Group (HSG) classification
 - Inputs for hydrographs: rainfall, time of concentration, area, curve number, routing
 - Outlet structure and stage-storage in plans match calculations
 - Hydrographs for each design storm
 - Summary table of the peak inflows, peak outflows, and maximum water surface elevations for the 2, 5, 10, and 25-year storm events
 - Peak flow control provided for 2, 5, 10, and 25-year storms
 - 100-year storm passed, with 1' of freeboard
 - Drawdown occurs within 72 hours
 - Each phase of multi-phase projects included (if applicable)
 - Minimum 12' wide drivable access to each peak flow control area for maintenance

7. Stormwater Post-Construction Pollutant Treatment

- Note: Required for sites which disturb 1 acre or more, or sites which are part of a larger common plan of development or sale which disturb 1 acre or more
- ❑ BMP design meets requirements of adopted BMP Manuals
 - Note: Infiltration from hot spots requires prior approval
- ❑ Geotechnical report if operation of Stormwater Control Measure (SCMs) depends upon soil properties
- ❑ Description of maintenance plan to be used for each SCM
 - At a minimum, include the inspection checklist from the BMP Manual and/or manufacturer

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- ❑ Proprietary BMPs
 - Sized appropriately for treatment and bypass
 - Meet City requirements
- ❑ Catch basin inserts meet City requirements
- ❑ Calculations
 - 80% TSS removal (calculations required if multiple devices are used)
 - Treatment flow rate for all SCMs
 - Downstream channel protection
 - Channel protection volume (CPv)
 - Drawdown time from the end of the storm event between 24 and 72 hours
 - Water Quality Volume (WQv)
 - Required if needed for design of SCM per BMP Manual
- ❑ Additional storage volume accommodated
 - Note that only the larger of the two volumes listed below need be accommodated.
 - Channel protection volume (CPv)
 - Water Quality volume (WQv) (if applicable)
- ❑ Minimum 12' wide drivable access to each SCM for maintenance

8. Special Pollution Abatement Plan (Hot Spots only)

- ❑ Special Pollution Abatement Plan form from Appendix C2 of the *Northeast Tennessee BMP Manual*
 - See City's *Stormwater Design Guidance Manual* for information regarding hot spots

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9. Additional Information (for work inside City and/or TDOT ROW only)

- Gasketed concrete pipe
 - Also required from last structure off City ROW to first structure on City ROW
 - Minimum inside diameter 18"
- Calculations for all stormwater infrastructure
 - Meets specified design storms for capacity and HGL
 - HGLs shown graphically in calculations or on plans
 - Catch basin labels on plans match labels in calculations
- Note requiring all work to be performed to TDOT standards or manufacturer's recommendations, whichever are more stringent
- TDOT standard drawings provided or referenced for pipes, manholes, catch basins, end walls, and other items

Notes
