

**MWS Stormwater As-Built Technical Review Requirements (TRR) - Version 1 - 5/23/2023**

**THE TRR IS TO BE INCLUDED WITH ALL TECHNICAL REVIEW SUBMITTALS**

<b>Project Name:</b>	<b>Permit # (NS if new):</b>	<b>Date:</b>
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**Introduction:**  
 Metro Nashville is experiencing high levels of growth and demand for permitting services. In order to provide a productive review, basic elements of the stormwater as-builts are necessary. The TRR represents the **minimum requirements** which must be met for Metro Water Development Services staff to perform a full plan review. Failure to meet one or more of these requirements will result in the submittal being deemed **incomplete** and returned to the design engineer. Design engineer must **fill out TRR completely Each Time** it is submitted with **updated page numbers**. A full development package is required with each submittal.

**Directions:**  
 Review the requirements below, and include this sheet with each submittal. In the "Design Engineer" column note if the requirement is "N/A". If requirement is applicable, note the file name and page number of where the information can be located. Example: If item is on the plans, list ' **Plans - page number of PDF** '. Once completed, fill out the certification statement and include in the submittal. **All stormwater as-builts shall be submitted through epermits as PDF files.**

<b>General Requirements:</b>	Example: Calcs - pg.1		These Columns For MWS & Contracted Reviewers Use Only			
	N/A	Plans / Calcs / Project Docs - Page #	Yes	No	N/A	MWS & Contracted Reviewer Comments
1 Provide a compliance letter that meets the following requirements:						
a. PE Stamped, Signed, and Dated ( <i>shall be up to date</i> )						
b. Note survey of constructed conditions						
c. Note deviations from the MWS-approved GP						
d. Includes all permit numbers requiring a AB approval						
2 Provide bio media mix test results.						
3 Provide installation & completion photos for all SCMs.						
4 Provide a landscape architect certification for plantings.						
5 CCTV inspections shall be performed for public storm infrastructure and the following shall be provided:						
a. Pipe Inspection Reports ( <i>included in as-built package</i> )						
b. Pipe Inspection Videos ( <i>submitted via the FTP</i> )						
6 Provide water quality unit receipts.						
7 Provide PE stamped cut and fill balance certification for floodplain/sinkhole alterations.						
8 Submit a CAD file registered to the TN State Plane Coordinate System NAD83 with data separated into labeled layers via the FTP.						

<b>Plan Requirements:</b>	Example: Calcs - pg.1		These Columns For MWS & Contracted Reviewers Use Only			
	N/A	Plans / Calcs / Project Docs - Page #	Yes	No	N/A	MWS & Contracted Reviewer Comments
9 All plan sheets and details shall be clearly labeled "As-Built" or "Record Drawing".						
10 All survey sheets shall be stamped, signed, and dated by a licensed surveyor ( <i>shall be up to date</i> ).						
11 All applicable survey sheets shall be to scale with a graphical scale bar and North arrow (vertical and horizontal).						
12 Survey sheets shall identify the following:						
a. SCMs						
b. Ditches						
c. Outfall Points						
d. Public Stormwater Infrastructure						
f. Floodplains						
13 Provide detail sheets for all SCMs with as-built and design dimensions ( <i>label SF, Tv, &amp; outlet structures</i> ).						
14 Provide LID As-Built Requirement Tables as shown in SWMM Volume 5.						
15 Provide pipe and structure tables with as-built and design dimensions for all public infrastructure ( <i>AB redline or bold</i> ).						
16 As-Built contours must be shown at 2 foot intervals (maximum).						
17 Buffers shall be shown correctly or Hydrologic Determination (HD) approved by TDEC.						

<b>As-Built Calculations:</b> (This section is N/A when AB meets or exceeds design requirements.)	Example: Calcs - pg.1		These Columns For MWS & Contracted Reviewers Use Only			
	N/A	Plans / Calcs / Project Docs - Page #	Yes	No	N/A	MWS & Contracted Reviewer Comments
18 Calculations shall be PE Stamped, Signed, and Dated ( <i>shall be up to date</i> ).						
19 Provide an accurate as-built water quality map, shall be color coded & include the following:						
a. Area Amounts						
b. Curve Numbers						
c. Surface Conditions & Soil Types						
20 Provide accurate as-built LID spread sheets (latest edition) & calculation for any LIDs not to design.						
21 Provide accurate as-built SCM calculations for any stormwater infrastructure not to design.						
22 Provide accurate as-built pre & post flow calculations for any slopes not to design.						
23 Provide accurate as-built calculations for any public stormwater infrastructure not to design.						

**Engineer's Statement:**  
 In addition to the items listed on the Transmittal Form, I hereby certify that this submittal provides all items listed on the Technical Review Requirements and the location of these items are correctly noted.

Reviewed by Engineer:	Checked by Engineer:
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<b>TO BE COMPLETED BY MWS DS:</b> A technical review of the subject project has been performed by MWS DS. This submittal has been deemed:	TR#
MWS Reviewer:	Email: