

GENERAL NOTES FOR STORM DRAIN CONSTRUCTION

February 13, 2002

Rev 11/06/03, 7/15/13, 1/26/16

1. ALL STORM DRAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE GENERAL SPECIFICATIONS OF MARYLAND STATE HIGHWAY ADMINISTRATION AND THE TOWN OF MIDDLETOWN'S DESIGN MANUAL.
2. TYPES OF STRUCTURES REFER TO THE STANDARD STORM DRAINAGE DETAILS OF THE MARYLAND STATE HIGHWAY ADMINISTRATION, UNLESS OTHERWISE NOTED.
3. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS; HOWEVER, THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED ON THIS PLAN OR LESS THAN 12" WHEN NOT SPECIFIED, CONTACT THE CIVIL ENGINEER AND/OR THE INSPECTOR AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.
4. WHERE ANY PART OF THE STORM DRAIN SYSTEM IS LOCATED IN FILL SECTION, PROVIDE SELECT FILL MATERIAL COMPACTED TO 95% AASHTO T-180 DENSITY FROM APPROVED SUBGRADE UP TO STRUCTURE BOTTOM SLABS AND/OR PIPE BEDDING.
5. FOR LOCATIONS OF ALL UTILITIES, CALL MISS UTILITY, 1 -800-257-7777, 72 HOURS IN ADVANCE OF ANY WORK IN THIS VICINITY.
6. ALL RIPRAP TO BE UNDERLAID WITH MDSHA CLASS "C" GEOTEXTILE POLYPROPYLENE FILTER-FABRIC OR APPROVED EQUAL. ALL RIPRAP TO BE UNGROUTED STONE UNLESS OTHERWISE NOTED.
7. NOTIFY THE TOWN OF MIDDLETOWN 48 HOURS IN ADVANCE OF EXCAVATION IN VICINITY OF SEWER AND WATER MAINS UNDER WHICH THE STORM DRAINAGE IS TO BE INSTALLED.
8. GRADE ALL DISTURBED AREAS TO MAINTAIN POSITIVE DRAINAGE.
9. ALL STORM DRAINAGE PIPE TO BE REINFORCED CONCRETE PIPE (RCP) STORM DRAIN PIPE, AND PLACED AS FOLLOWS: ALL STORM DRAINAGE PIPE WITHIN THE PUBLIC RIGHT OF WAY SHALL BE RCP AND SHALL CONFORM TO ASTM C76 STANDARDS WITH O-RING JOINTS AND GASKETS IN ACCORDANCE WITH ASTM C443 STANDARDS. PIPE MATERIAL SUBSTITUTIONS MUST BE APPROVED BY THE TOWN ENGINEER.
10. PROVIDE DOMESTICALLY PRODUCED CASTINGS WITH THE TOWN OF MIDDLETOWN IDENTIFICATION. INLET CASTINGS SHALL BE IN ACCORDANCE WITH DETAIL SD-1 OF THE MIDDLETOWN STANDARDS.
11. ALL STORM DRAINAGE STRUCTURES SHALL BE MANUFACTURED WITH ALL STORM DRAINAGE CONNECTION OPENINGS PROVIDED. FUTURE PIPE CONNECTIONS SHALL BE BRICKED SHUT IN THE FIELD. ANY DEVIATION FROM THIS PROCEDURE MUST BE APPROVED BY THE TOWN ENGINEER. ALL STRUCTURES AND MANUFACTURERS MUST BE MDSHA APPROVED OR ON THE APPROVED SUBSTITUTES LIST PUBLISHED BY MDSHA.
12. ALL STANDARD STORM DRAINAGE STRUCTURES ARE SUBJECT TO MODIFICATION BY THE SITE INSPECTOR AND/OR ENGINEER TO MEET FIELD REQUIREMENTS.

13. WHERE STORM DRAIN PROFILES ARE NOT OF APPROPRIATE DEPTHS TO FACILITATE THE MINIMUM DEPTH OF THE SPECIFIED STRUCTURE, CONTACT THE DESIGN ENGINEER FOR MODIFICATION.
14. THE STORM DRAIN SYSTEM SHALL BE FLUSHED WITH WATER PRIOR TO ACCEPTANCE BY THE TOWN.
15. NO 3' DIAMETER COG AND COS BASES SHALL BE ACCEPTED BY THE TOWN.
16. ALL GRATE INLETS SHALL BE ADJUSTED TO GRADE USING MDSHA CONCRETE MIX 6.
17. ADJUSTMENTS TO COG OR COS TOPS MAY BE BY BRICK FOR NO MORE THAN 1 COURSE OR 3 INCHES. ADJUSTMENTS MORE THAN THIS SHALL BE MADE BY UTILIZING MDSHA MIX 6.
18. ALL EXISTING STORM DRAIN PIPE AND STRUCTURES NOT UTILIZED SHALL BE REMOVED AND BACK FILLED WITHIN THE LIMIT OF DISTURBANCE. ANY EXISTING SD TO BE ABONDONED THAT EXTENDS OUTSIDE THE RIGHT-OF-WAY IS TO BE BRICKED SHUT AT THE RIGHT-OF-WAY LINE.
19. PRECAST STANDARD STRUCTURES MAY BE USED IN LIEU OF STANDARD STRUCTURES.