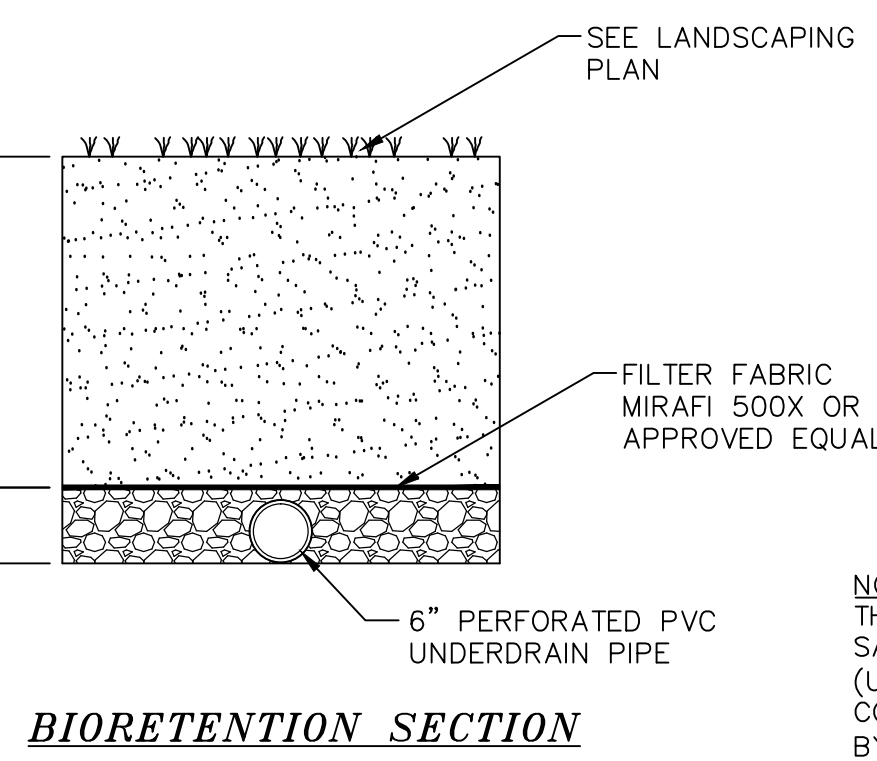


BIO-RETENTION AREA DETAIL
NOT TO SCALE

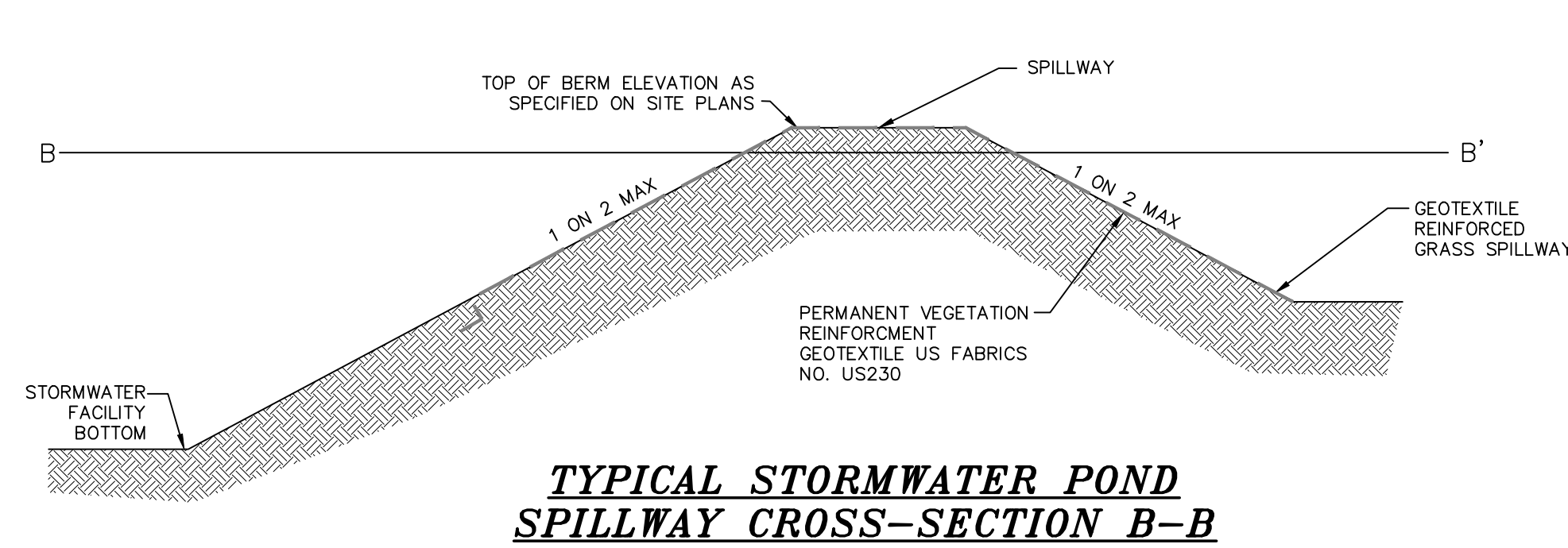
- BIORETENTION AREA MAINTENANCE REQUIREMENTS:**
INSPECTION SHALL BE MADE WEEKLY BY A LICENSED PROFESSIONAL AND AFTER EVERY 1/2" RAINFALL EVENT BY THE OWNER OR CONTRACTOR DURING CONSTRUCTION. DURING THE FIRST GROWING SEASON INSPECTIONS SHALL BE CONDUCTED MONTHLY AND BI-ANNUALLY THEREAFTER. THE FOLLOWING TASKS SHALL BE PERFORMED AS NEEDED:
- REMOVAL OF ACCUMULATED SEDIMENT AND CLEANING AND/OR RESTORATION OF THE FILTER BED AREAS WHENEVER ACCUMULATED SEDIMENT REACHES A DEPTH OF 1 INCH.
 - RESTORATION OF ANY DISTURBED PLANT MATERIAL AND ANY ERODED EMBANKMENTS. REPLACEMENT OF PROPOSED PLANTS SHALL OCCUR IF MORE THAN 50% OF THE COVERAGE OF THE FACILITY IS NOT ACHIEVED.
 - REMOVAL OF ACCUMULATED DEBRIS WITHIN THE FILTER BED AREAS AND AT ALL INLET AND OUTFALL STRUCTURES.
 - ANNUAL MOWING (EARLY WINTER) OF THE BASINS. TRIMMING AND PRUNING OF BUSHES. REMOVAL OF ANY FALLEN TREES OR LIMBS.
 - WHEN THE FILTERING CAPACITY OF THE FILTER DIMINISHES SUBSTANTIALLY (I.E., WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH MATERIAL. THE REMOVED SEDIMENTS SHALL BE DISPOSED IN AN ACCEPTABLE MANNER (I.E., LANDFILL).
 - REFER TO LANDSCAPING PLANS FOR PLANTING REQUIREMENTS. IF FOR ANY REASON A CONFLICT OF PLANT MATERIAL OR PLANT MAINTENANCE SHOULD OCCUR, THE LANDSCAPE PLANS ARE TO TAKE PRECEDENCE.

BIO-RETENTION AREA DATA	
BIO-RETENTION AREA OUTLET STRUCTURE	A
A OUTLET STRUCTURE DIMENSIONS (OUTSIDE)	48"x48"
B TOP OF STRUCTURE ELEVATION	-
C FILTER SURFACE ELEVATION	-
D FIBERGLASS GRATE DIMENSION	42"x42"
E UNDERDRAIN INVERT ELEVATION	-
F UNDERDRAIN SYSTEM LENGTH	-
G TOP OF PERIMETER BERM	-

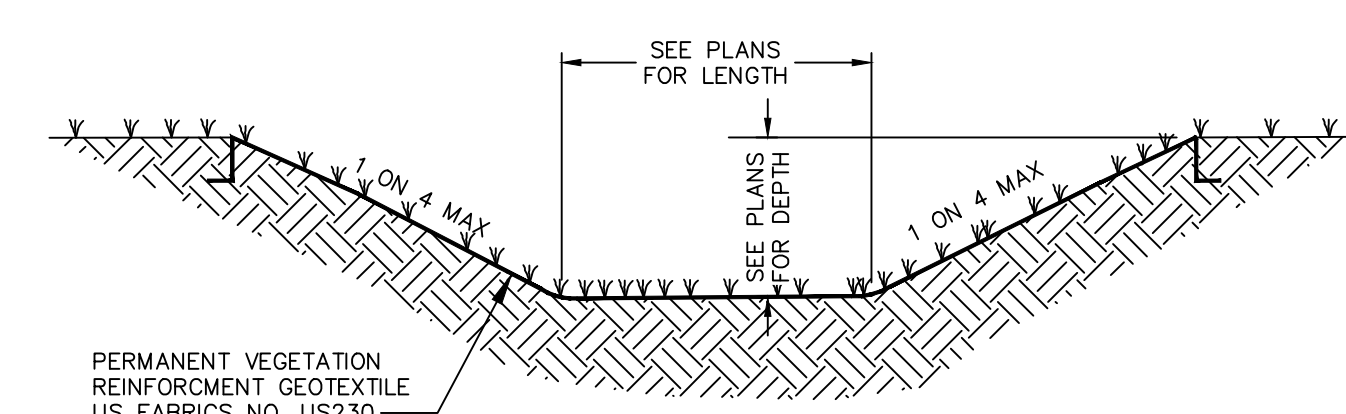


BIORETENTION SECTION

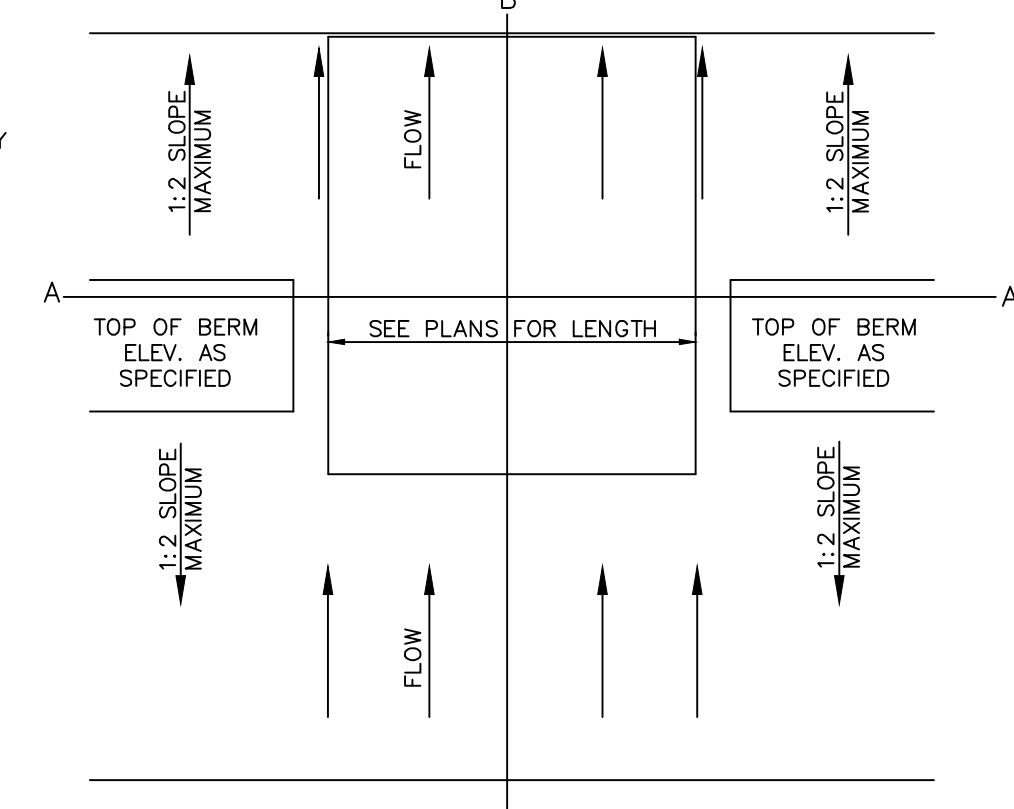
NOTES:
THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 25% BY VOLUME. SOILS SHOULD FALL WITHIN THE SM, OR ML CLASSIFICATIONS OF THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"PH) IS REQUIRED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY IS USED FOR DESIGN). THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER, BRUSH OR SEEDS FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN LIFTS OF 12 TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET).



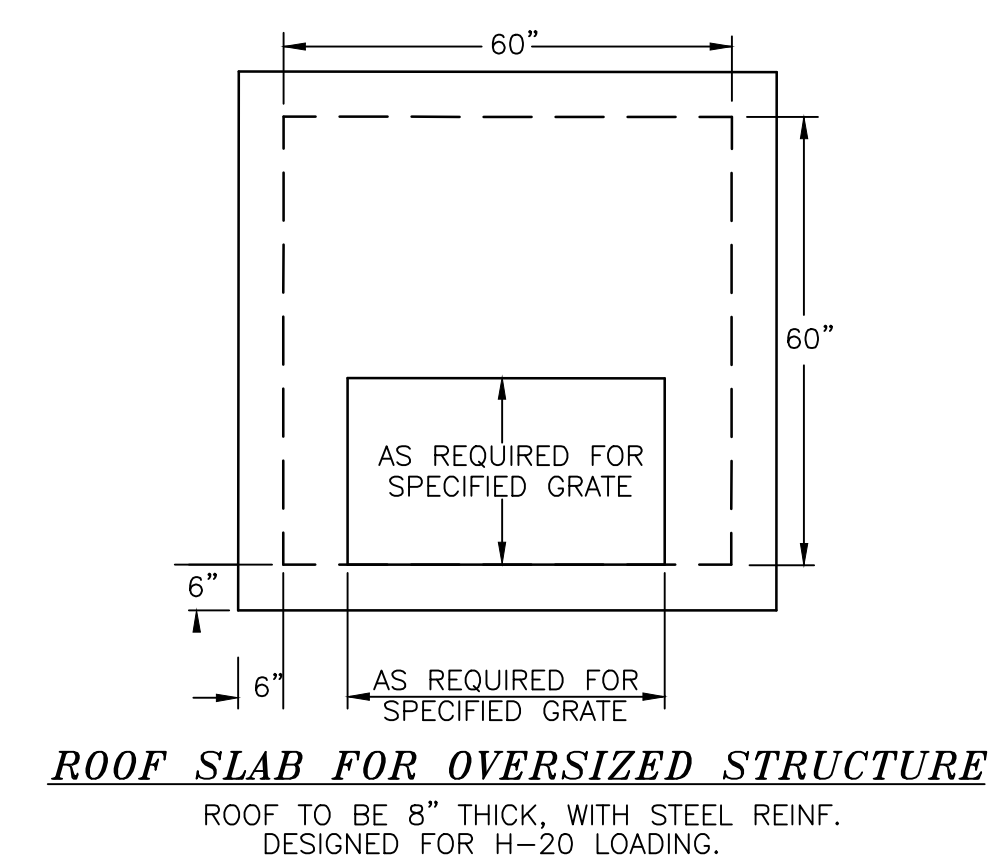
TYPICAL STORMWATER POND SPILLWAY CROSS-SECTION B-B
NOT TO SCALE



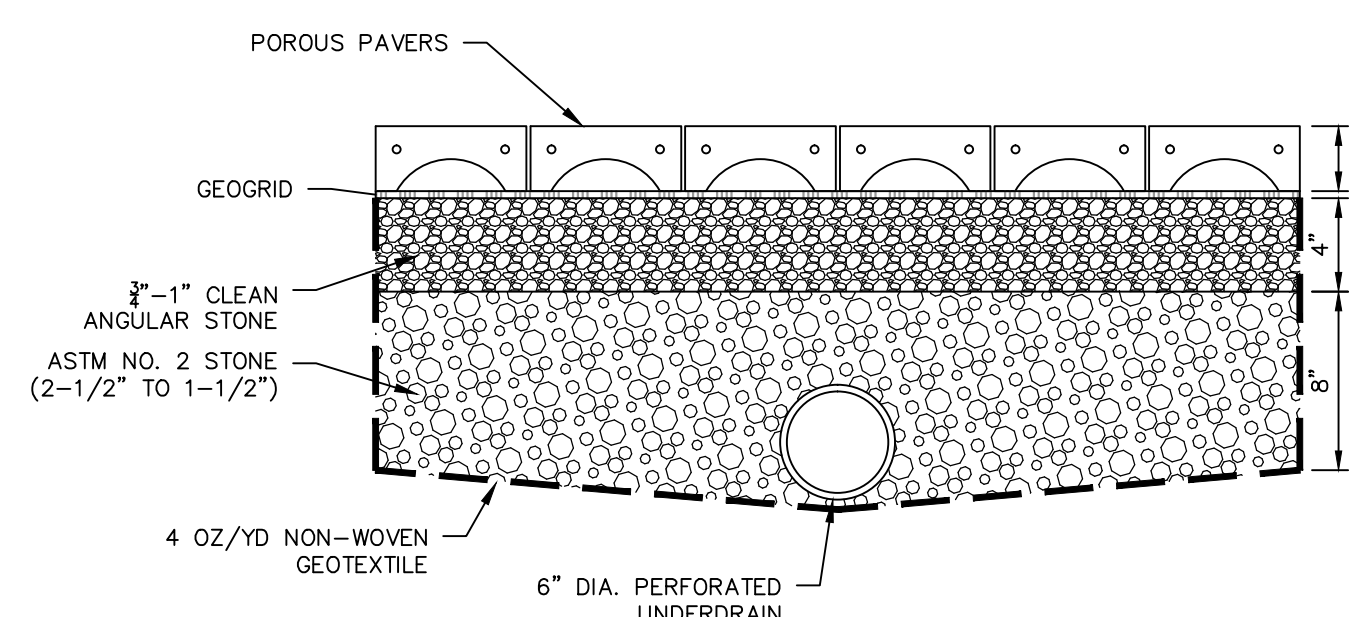
TYPICAL STORMWATER POND SPILLWAY CROSS-SECTION A-A
NOT TO SCALE



TYPICAL STORMWATER POND SPILLWAY PLAN VIEW
NOT TO SCALE

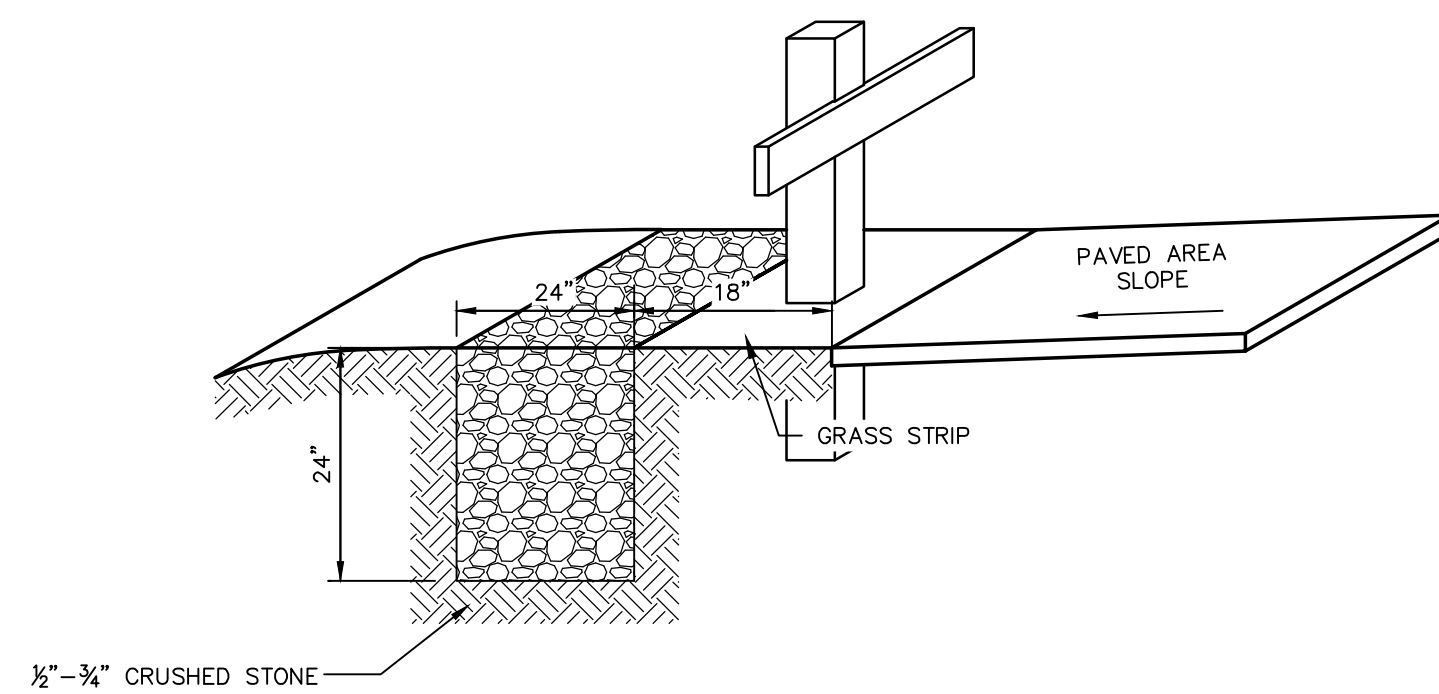


ROOF SLAB FOR OVERSIZED STRUCTURE
ROOF TO BE 8" THICK, WITH STEEL REINF. DESIGNED FOR H-20 LOADING.

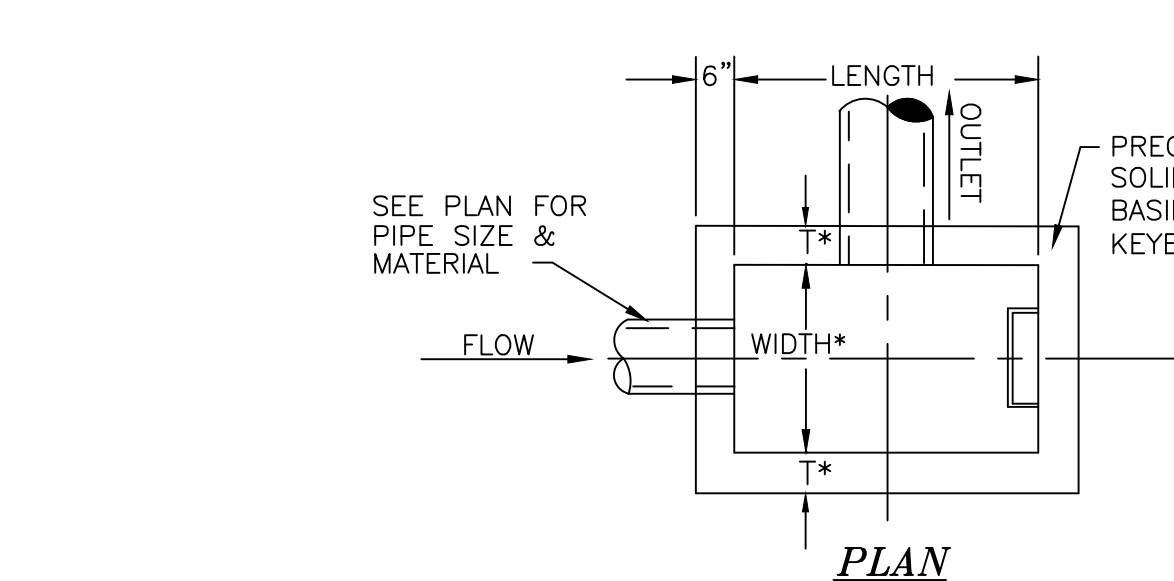


- NOTES:**
1. POROUS PAVERS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
2. POROUS PAVES COLOR TO BE SELECTED BY OWNER.
3. SUBGRADE TO BE FITTED TOWARDS UNDERDRAIN LOCATIONS.
4. UNDERDRAINS TO BE CONNECTED TO CATCH BASINS AS SHOWN ON SITE PLAN.
5. TYPE OF GEOTEXTILE AS RECOMMENDED BY POROUS PAVES MANUFACTURER.

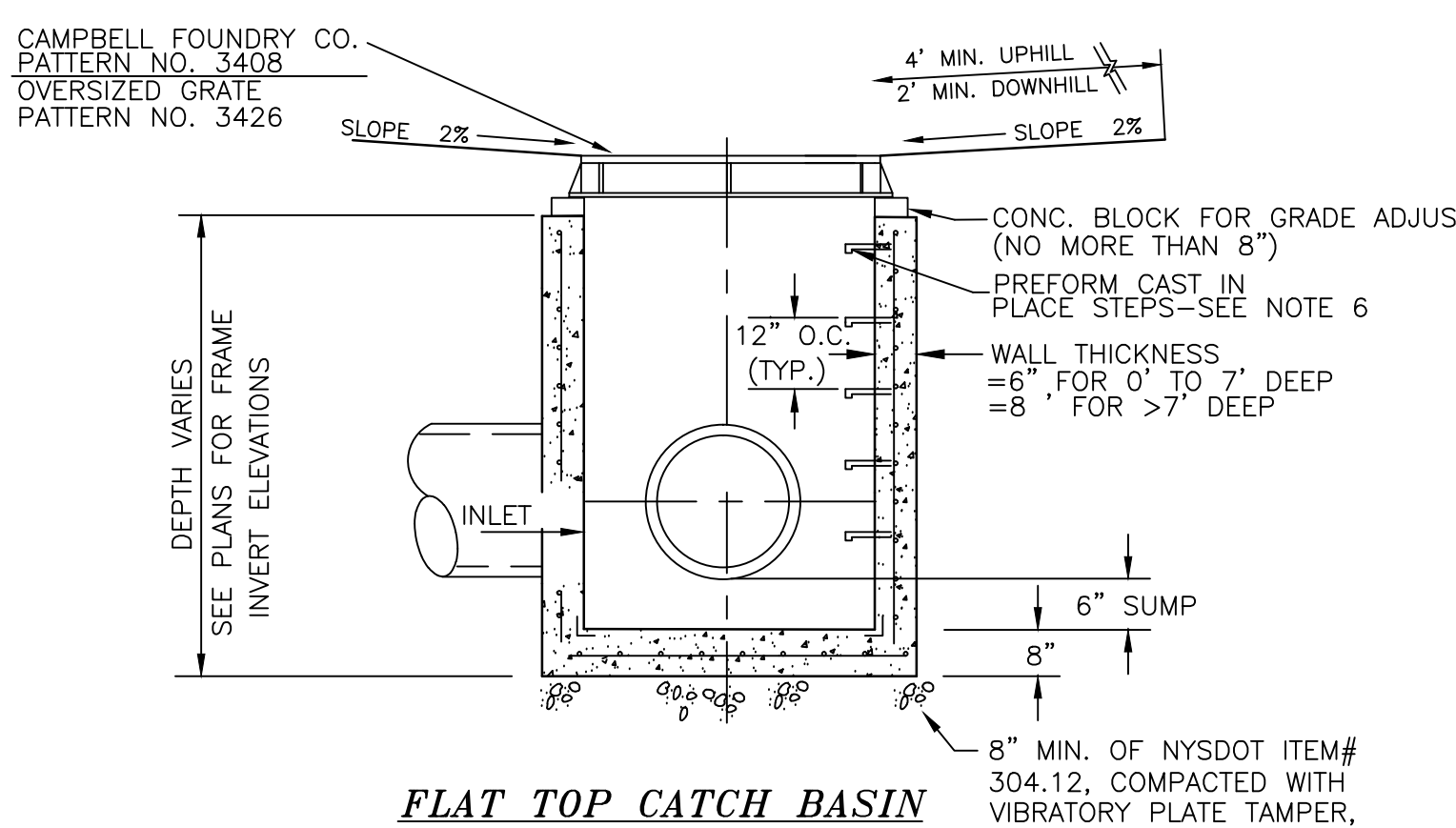
POROUS PAVES DETAIL
NOT TO SCALE



ROAD EDGE AND GRAVEL DIAPHRAGM DETAIL
NOT TO SCALE



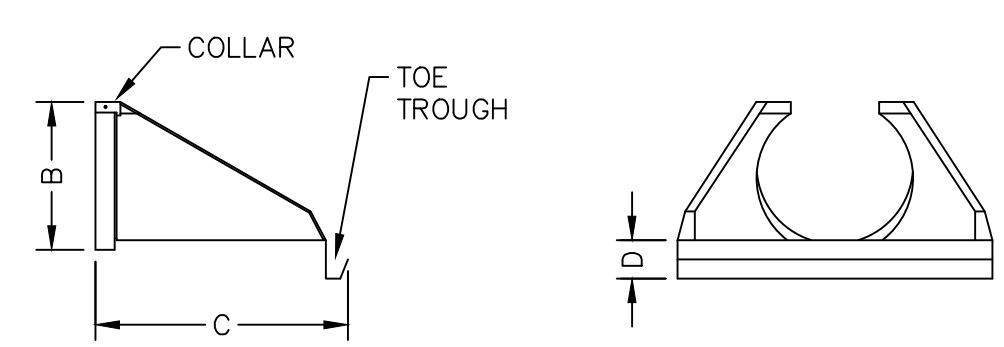
CURB TOP CATCH BASIN



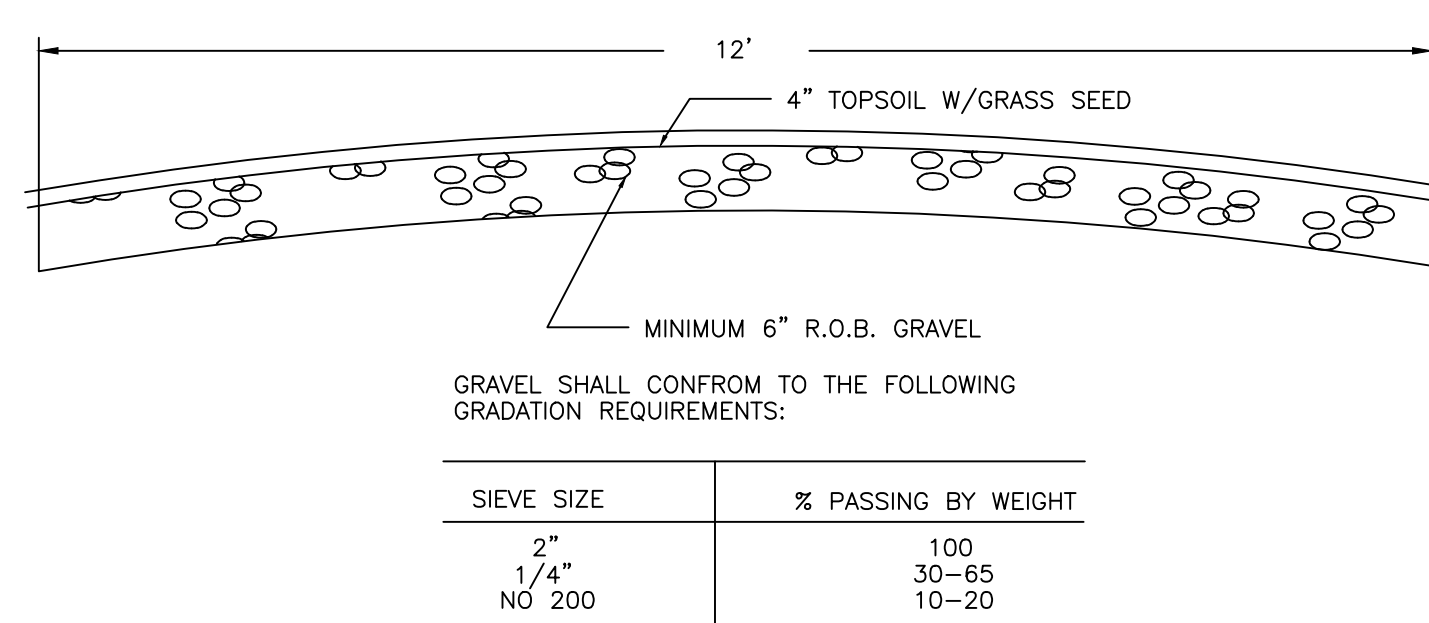
FLAT TOP CATCH BASIN

DIMENSION	PIPE DIAMETER					
	10/12	15	18	24	30	36
A	42	41	49	59.5	88	88
B	14.5	19	22	28	36	43
C	33	34	43	48	63.5	66.5
D	6	6	6	6	6	6

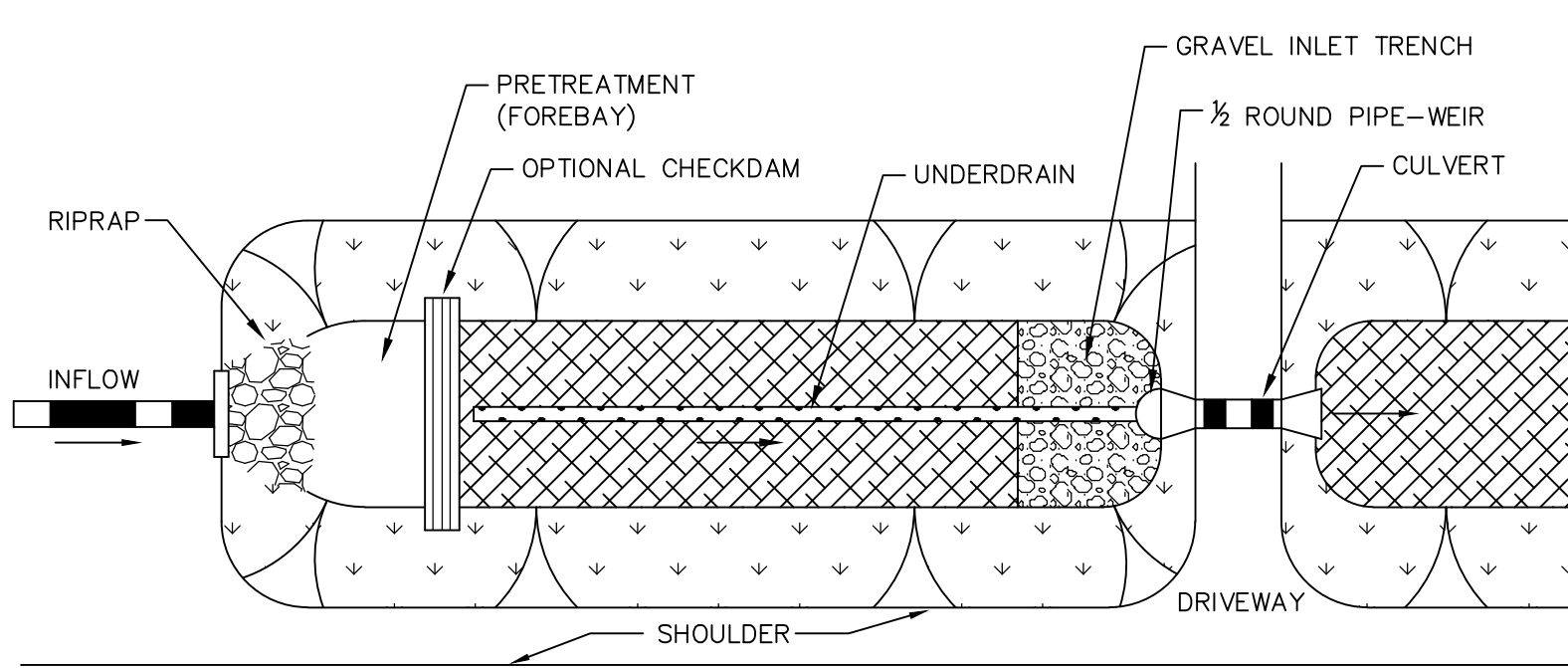
NOTE: ALL MEASUREMENTS IN INCHES



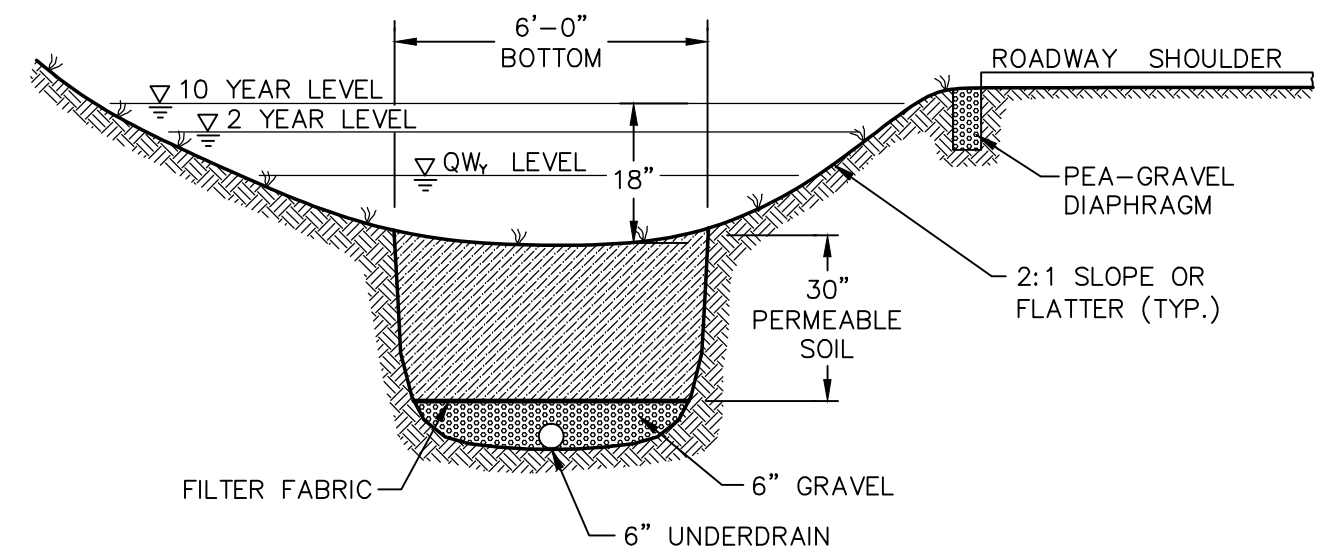
HDPE FLARED END SECTION
NOT TO SCALE



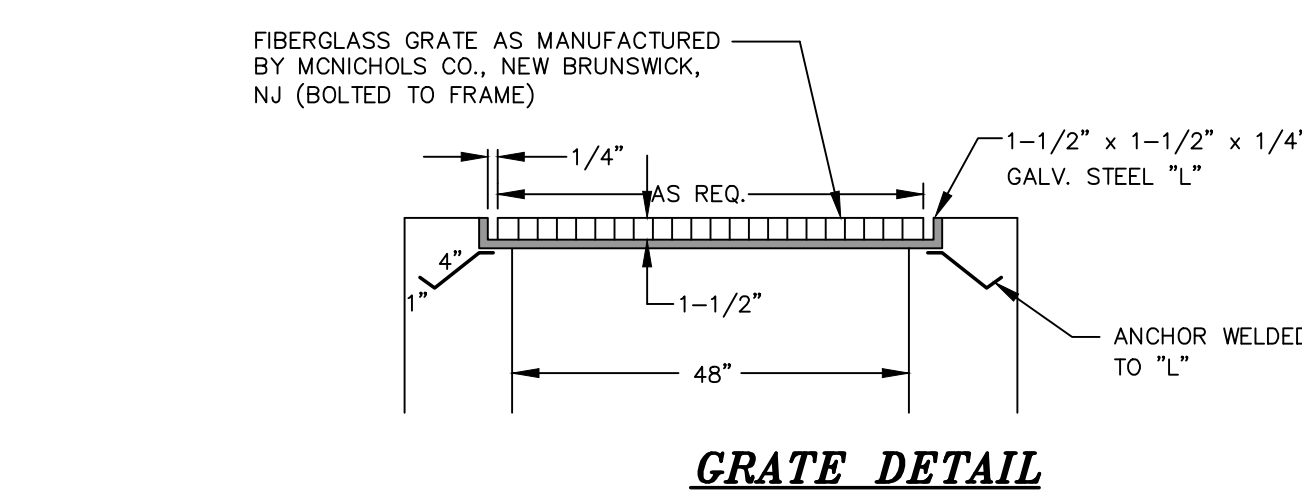
POND MAINTENANCE ACCESS DETAIL
NOT TO SCALE



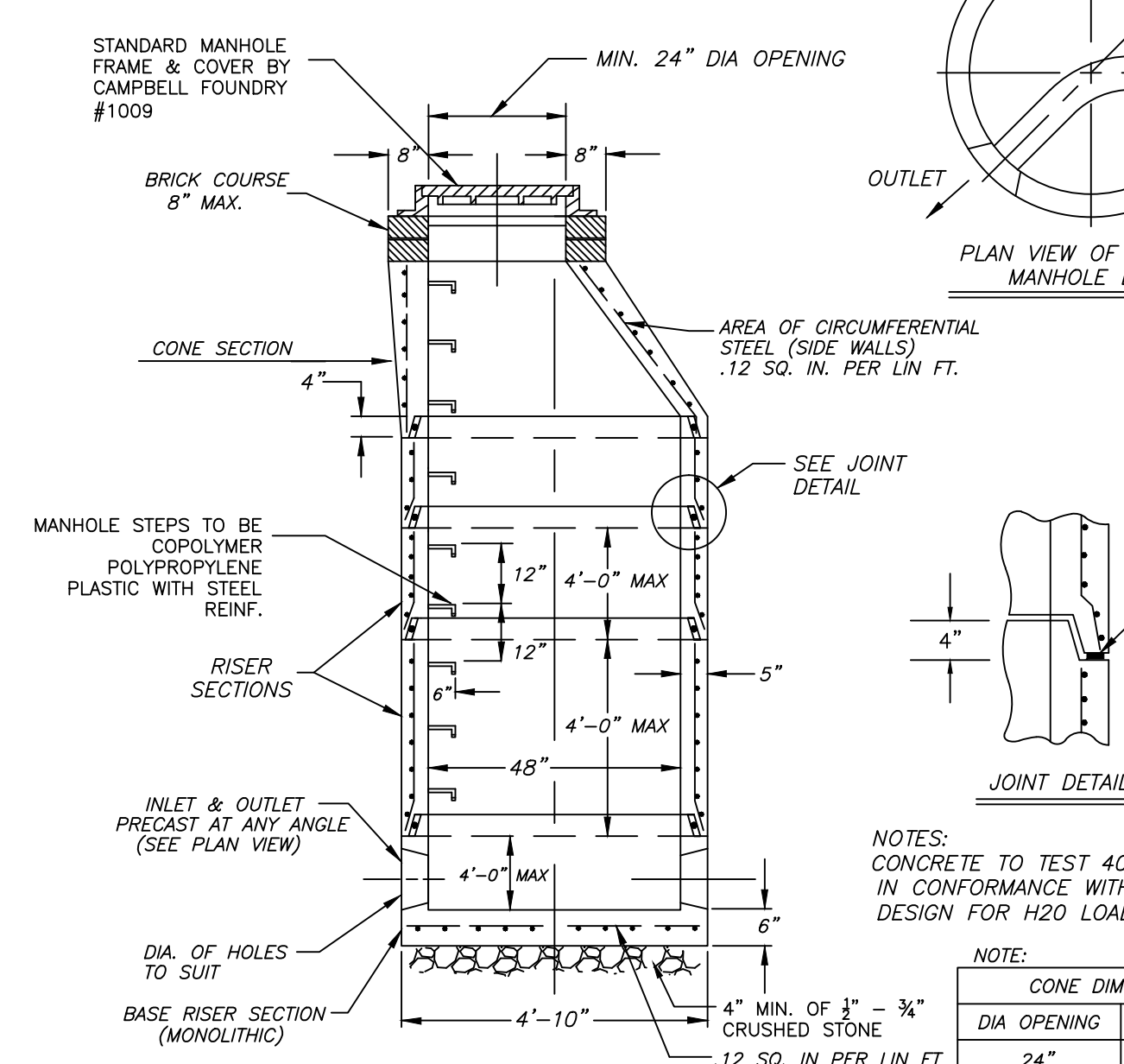
PLAN VIEW



SECTION DRY SWALE DETAIL
NOT TO SCALE



GRATE DETAIL
NOT TO SCALE

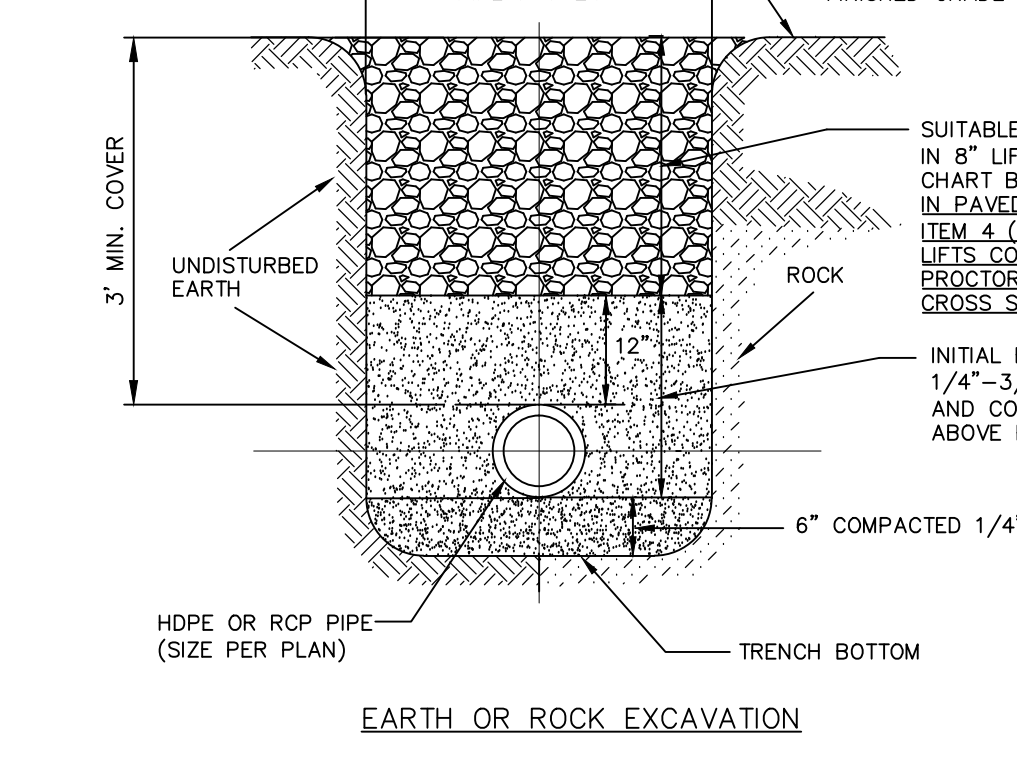


PRE CAST CONCRETE STORM MANHOLE DETAIL
NOT TO SCALE

PRECAST SIZE	PRECAST BASIN SCHEDULE	INTERIOR LENGTH	INTERIOR WIDTH	ROOF SLAB
TYPICAL	48"	48"	48"	NO
OVERSIZED	60"	60"	60"	YES

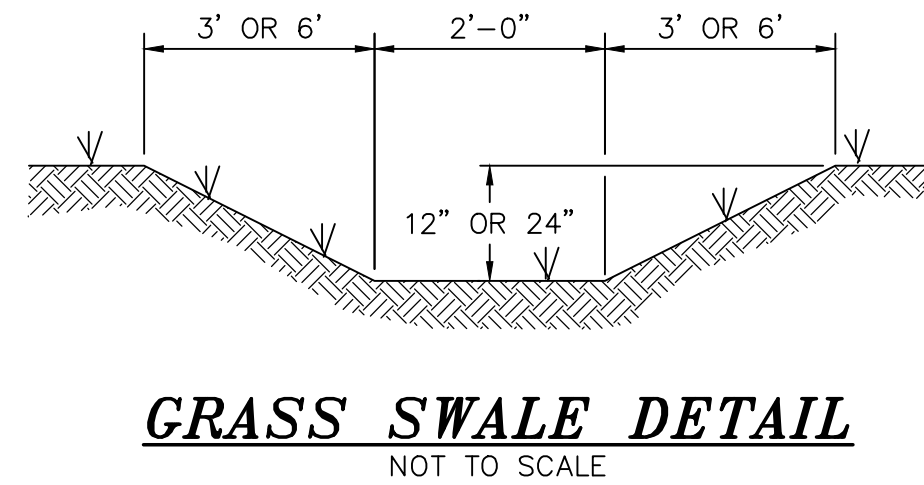
PLAN LEGEND
(OSS) = CATCH BASIN WITH OVERSIZED STRUCTURE AND STANDARD SIZE GRATE
(OSG) = CATCH BASIN WITH OVERSIZED STRUCTURE AND OVERSIZED GRATE

NOTES:
1. CONCRETE STRENGTH: 4000 P.S.I. @ 28 DAYS.
2. BACKFILL AROUND CATCH BASIN IS TO BE ACCEPTABLE DRY RUN OF BANK GRAVEL, FREE OF ANY STONES LARGER THAN 3" IN DIAMETER, COMPACTED IN 8" MAX. LIFTS WITH JUMPING JACK COMPACTOR, ACHIEVING 95% COMPACTION.
3. SPECIFIED CATCH BASINS ARE TO HAVE FLAT GRATES, SEE PLAN LABELS.
4. PIPES TO BE CUT FLUSH WITH INSIDE WALLS OF CATCH BASIN.
5. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE.
6. STEPS ARE TO BE CAMPBELL FOUNDRY CO. PATTERN NO. 2593 2254, OR APPROVED EQUAL.
7. SEE PLAN LABELS FOR SIZE OF STRUCTURE AND GRATE.



DESCRIPTION	SOIL CLASSIFICATION	MINIMUM STANDARD PROCTOR DENSITY %
GRAVEL OR CRUSHED, CRUSHED STONE, GRAVEL	CLASS I - ASTM 1A4810 D2321 0248	56
SAND, GRAVELS AND GRAVEL/SAND MIXTURES; LITTLE OR NO FINES	CLASS II - GW GP SW SP	57 6
SILTY OR CLAYEY GRAVELS, GRAVEL/SAND/SILT OR GRAVEL AND CLAY MIXTURES; SILTY OR CLAYEY SANDS, SAND/CLAY OR SAND/SILT MIXTURES	CLASS III - GM GC SM SC	90%

STORM SEWER TRENCH CROSS SECTION
NOT TO SCALE



GRASS SWALE DETAIL
NOT TO SCALE

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DATE: JULY 21, 2016
REVISION: SEPTEMBER 1, 2016

LEGOLAND NEW YORK
TOWN OF GOSHEN
ORANGE COUNTY, NEW YORK

Drawn by: MK
Checked by: N/A
Title: SEE SHEET 2

Scale: N/A

Sheet No.: C-33
Drawing No.: A-16-0042-01