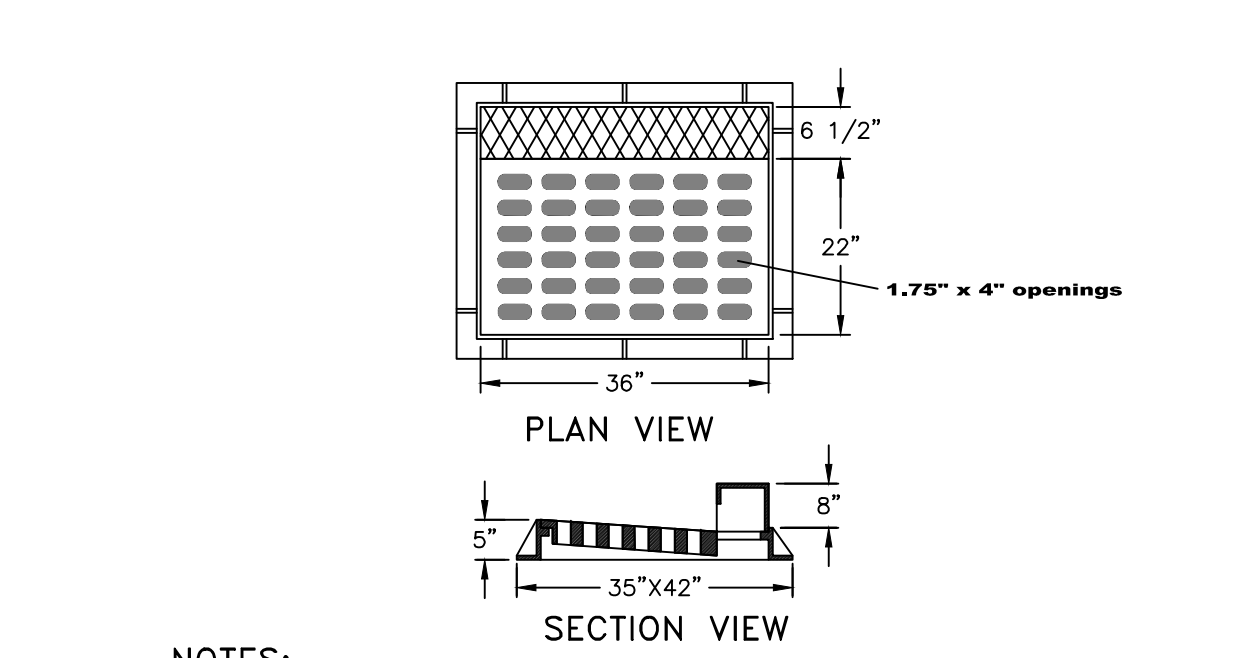


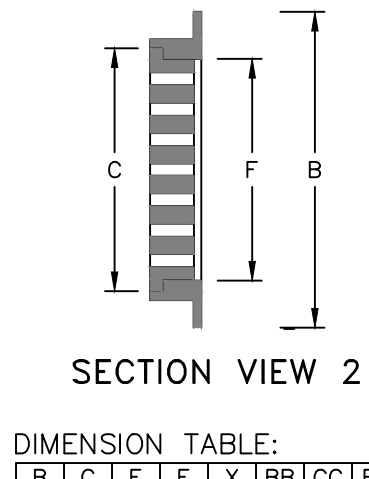
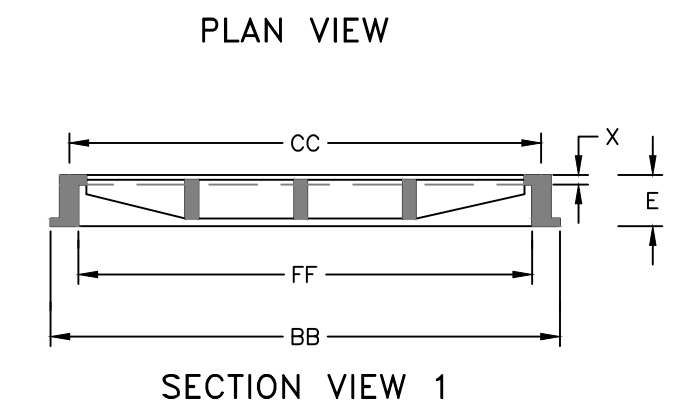
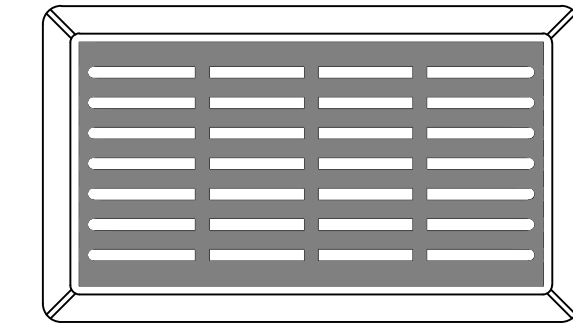
- NOTES:**
1. PRECAST CONCRETE CATCH BASIN WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE CATCH BASIN AND PARGE AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE. CONNECTIONS MADE WITHIN 10 FEET OF A WATER MAIN (OR SERVICE LINE) OR A SEWER MAIN (OR SERVICE LATERAL) SHALL BE MADE WATER-TIGHT.
 4. PROVIDE A MINIMUM 0.1" DROP BETWEEN INLET AND OUTLET INVERTS (MATCH CROWNS FOR PIPES WITH DIFFERENT SIZES) UNLESS OTHERWISE NOTED ON THE PLAN.
 5. CATCH BASINS WITH AN INTERIOR DEPTH OF 4" AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.
 6. HOPE PIPE SHALL BE PROVIDED WITH WATER-TIGHT CONNECTIONS. ADS MODEL N12 W118 OR APPROVED EQUAL.

CATCH BASIN DETAIL
NOT TO SCALE



- NOTES:**
1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2541, OR APPROVED EQUAL.
 2. CATCH BASINS TO RECEIVE CURB INLETS ARE: CB 1-4, CB 6, CB 8 AND WQ 1.

CAST IRON STORMWATER CURB INLET GRATE DETAIL
NOT TO SCALE

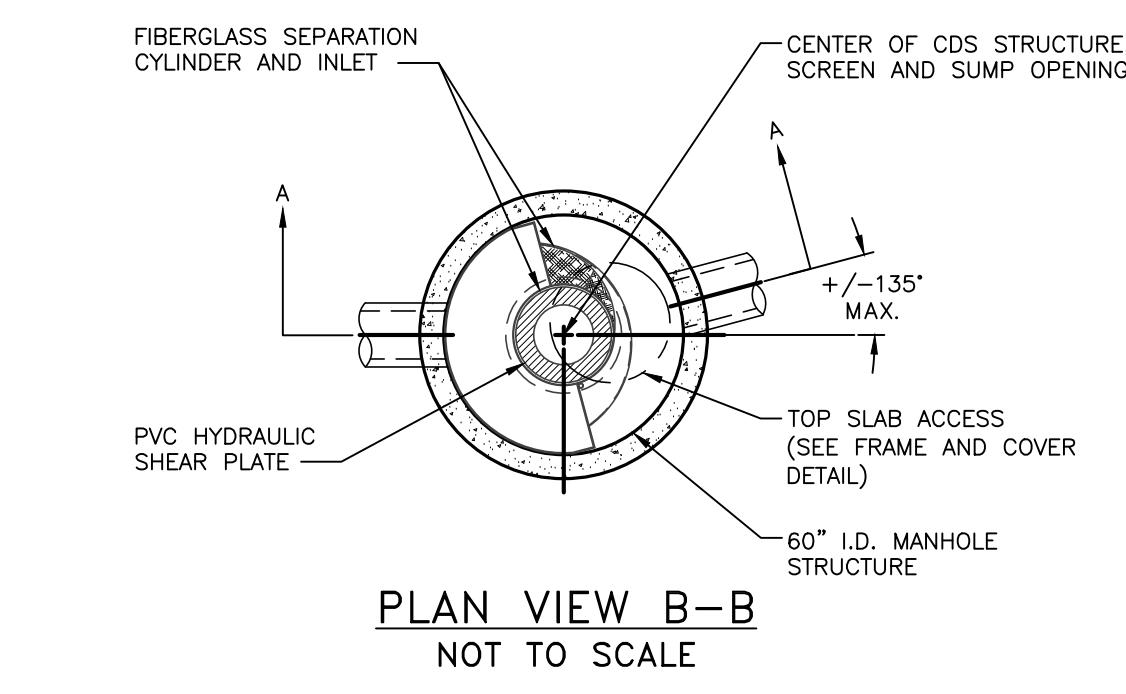


DIMENSION TABLE:

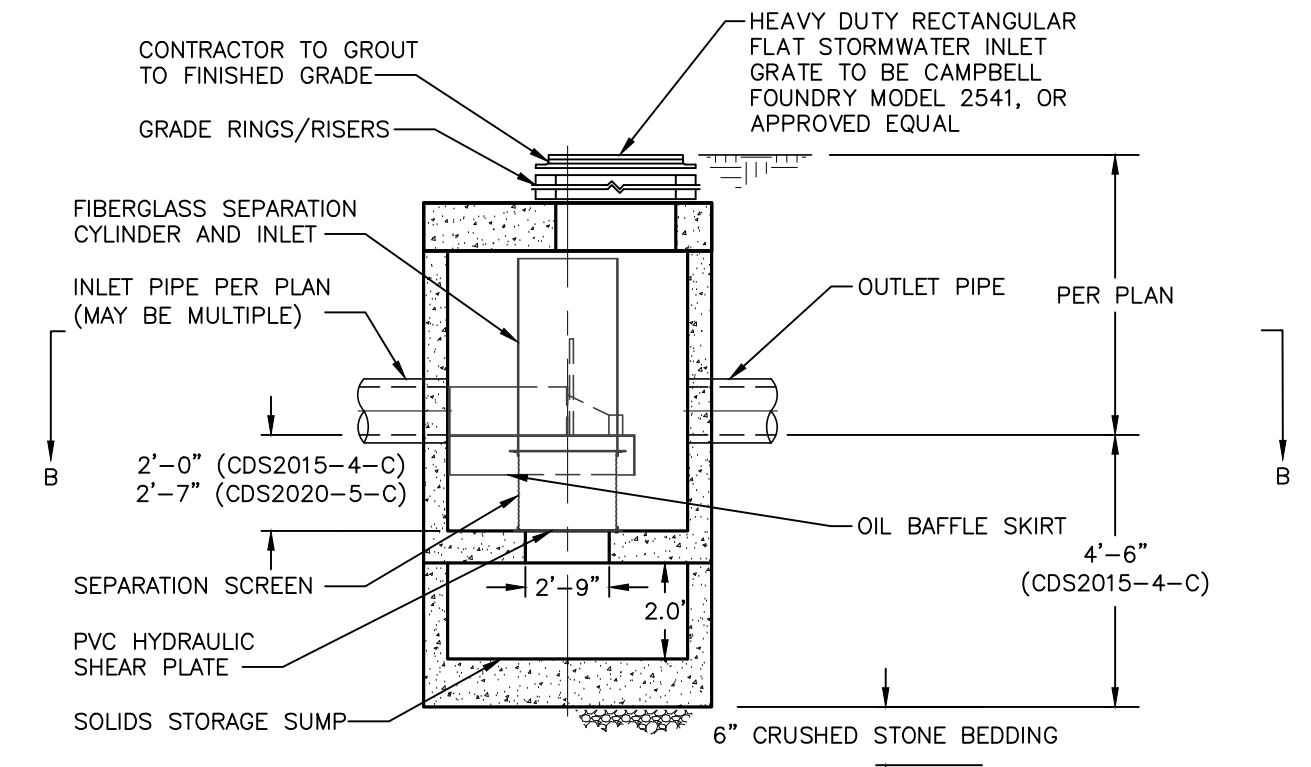
WQ ID	CB/MH MODEL
1	02S2015-4

- NOTES:**
1. HEAVY DUTY RECTANGULAR STORMWATER INLET GRATE TO BE CAMPBELL FOUNDRY MODEL 2413, OR APPROVED EQUAL.
 2. STW1 AND STW 2 RECEIVE SOLID CAST IRON COVERS.

CAST IRON STORMWATER FLAT INLET GRATE DETAIL
NOT TO SCALE



PLAN VIEW B-B
NOT TO SCALE

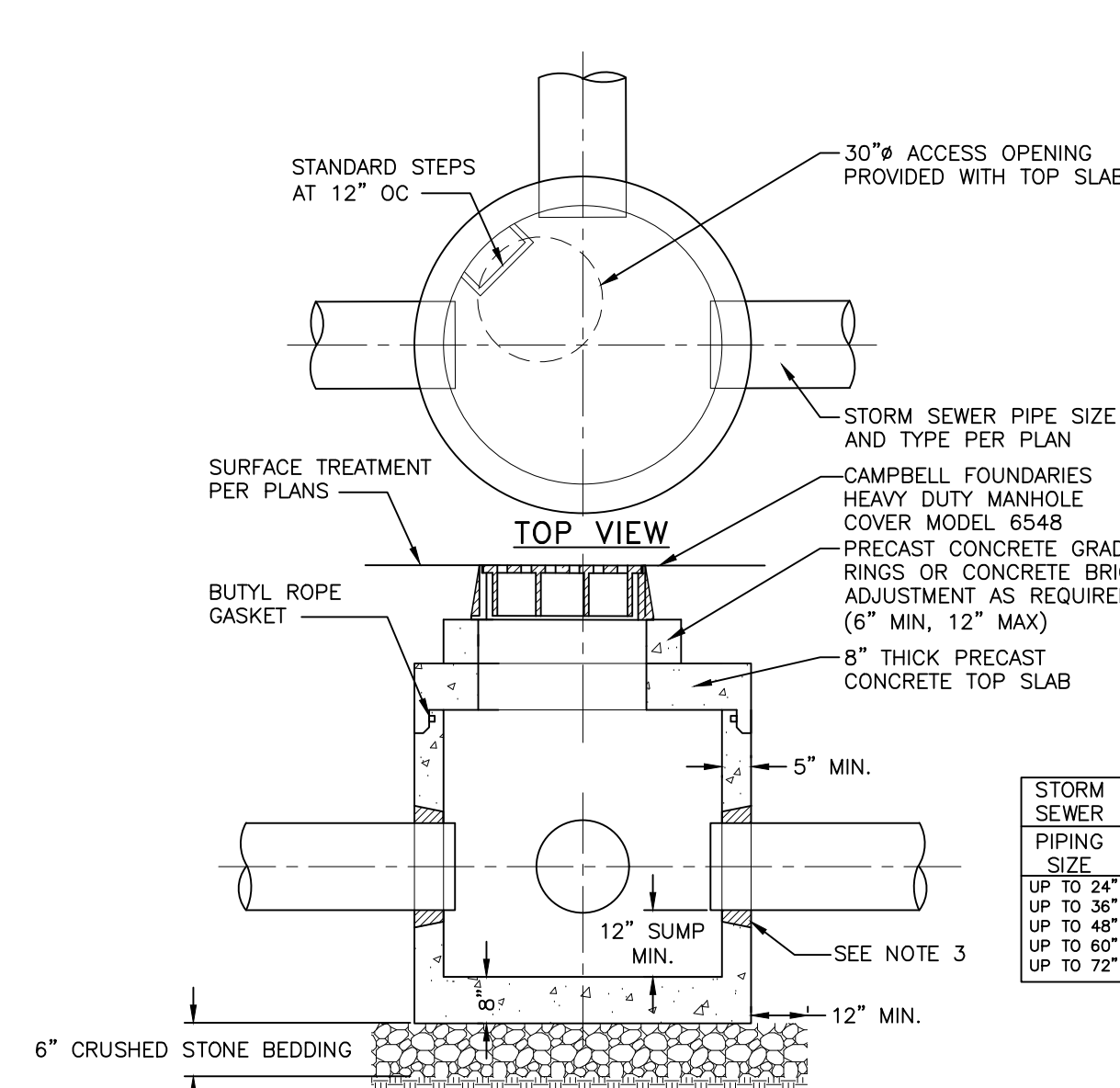


SECTION VIEW A-A
NOT TO SCALE

WQ ID	CB/MH MODEL
1	02S2015-4

- NOTES:**
1. STORMWATER TREATMENT SYSTEM (SWS) SHALL BE DESIGNED TO MEET PERFORMANCE GOALS BASED ON FULL SCALE LABORATORY PERFORMANCE DATA.
 2. SWS SHALL BE DESIGNED TO RETAIN FLOATABLES AND TRAPPED SEDIMENT AT FLOW RATES UP TO AND INCLUDING PEAK TREATMENT CAPACITY.
 3. SWS INVERTS IN AND OUT SHALL BE AT THE SAME ELEVATION.
 4. SWS SHALL NOT BE COMPROMISED BY EFFECTS OF DOWNSTREAM TAILWATER.
 5. SWS SHALL HAVE NO INTERNAL COMPONENTS THAT OBSTRUCT MAINTENANCE ACCESS.
 6. PIPE ORIENTATION MAY VARY; SEE SITE PLAN FOR SIZE AND LOCATION.
 7. PURCHASER SHALL NOT BE RESPONSIBLE FOR ASSEMBLY OF INTERNAL COMPONENTS.
 8. ONE MANHOLE FRAME AND COVER SUPPLIED WITH SYSTEM, NOT INSTALLED.
 9. PURCHASER TO PREPARE EXCAVATION AND PROVIDE LIFTING EQUIPMENT.
 10. STRUCTURE SHALL MEET AASHTO M306 AND CASTINGS SHALL MEET AASHTO M306 LOAD RATING, ASSUMING GROUNDWATER AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION.
 11. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHEET AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.
 12. SEE GRADING & UTILITY PLAN FOR PIPE ORIENTATION, INVERTS AND SIZES.

CDS® PRE-TREATMENT UNIT DETAIL
NOT TO SCALE

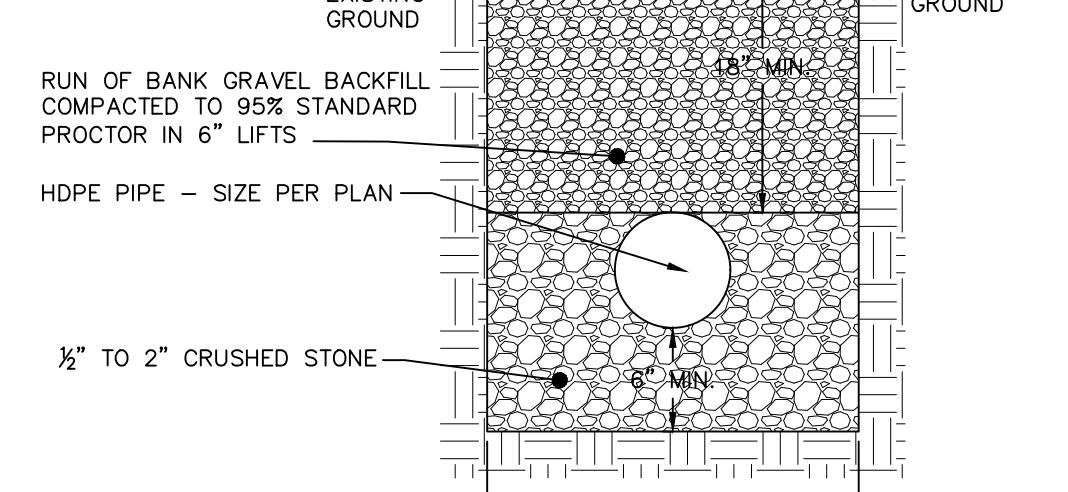


TOP VIEW

SIDE VIEW

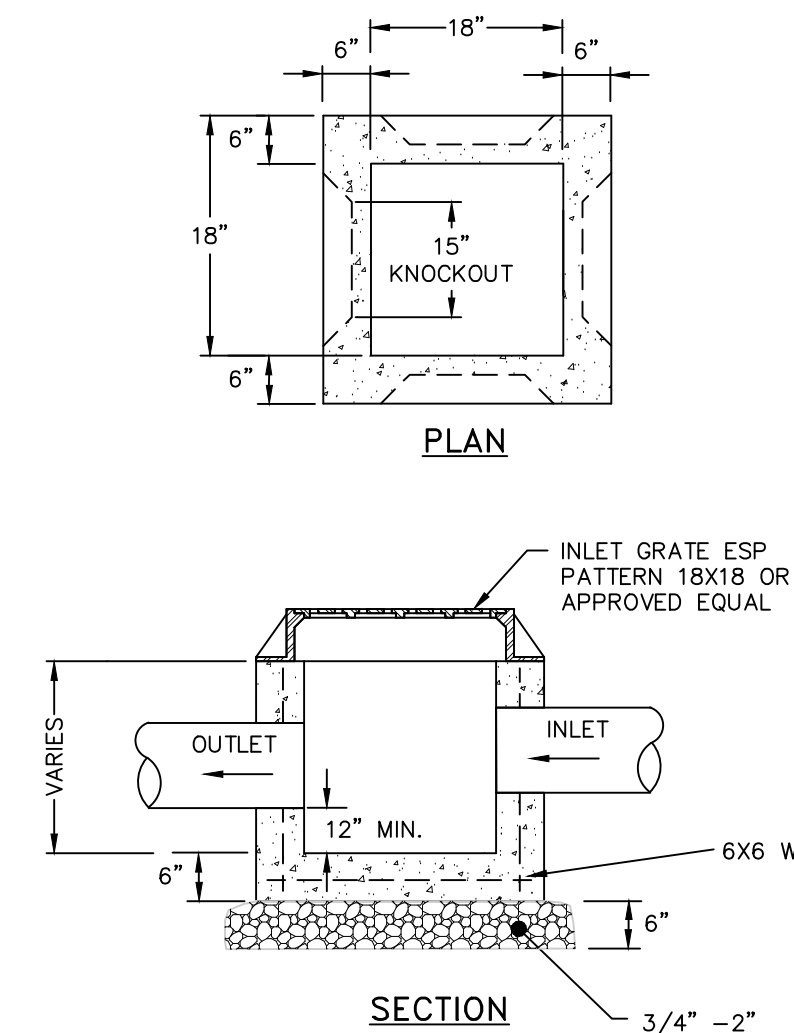
- NOTES:**
1. PRECAST CONCRETE MANHOLE WITH CONCRETE STRENGTH OF 4,000 PSI @ 28 DAYS.
 2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF THE MANHOLE AND PARGE AROUND.
 3. PIPES SHALL BE PARGED AROUND INTERIOR AND EXTERIOR PRIOR TO BACKFILLING OF STRUCTURE.
 4. CONCRETE STRUCTURE AND CASTING SHALL BE RATED FOR H2O TRAFFIC LOADING.
 5. INLET FRAME SHALL BE FULLY SUPPORTED ON THE CONCRETE STRUCTURE FOR H2O LOADING.
 6. MANHOLES WITH AN INTERIOR DEPTH OF 4" AND GREATER SHALL BE FURNISHED WITH STEEL REINFORCED POLYPROPYLENE PLASTIC STEPS AT 12" INTERVALS.

STORMWATER MANHOLE DETAIL
NOT TO SCALE



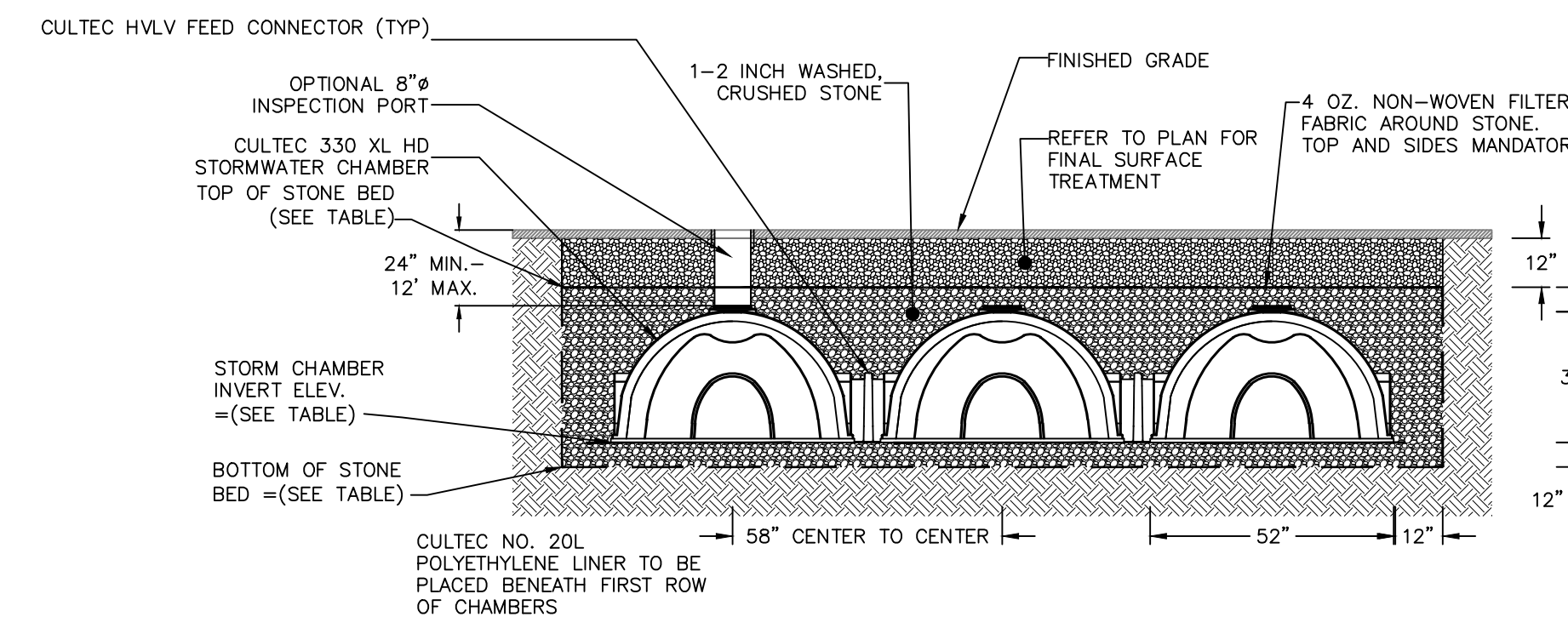
- NOTES:**
1. EXCAVATION AND TRENCHING SHALL MEET ALL OSHA REQUIREMENTS.

STORMWATER PIPE IN TRENCH DETAIL
NOT TO SCALE



- NOTES:**
1. YARD INLET BASINS SHALL BE PRE-CAST REINFORCED CONCRETE. SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI AND SHALL BE IN CONFORMANCE WITH ASTM 478-68. WALLS AND BASE SHALL BE ONE PIECE CONSTRUCTION. YARD INLET BASIN SHOWN BY EXPANDED SUPPLY PRODUCTS (ESP), 3330 ROUTE 9, COLD SPRING, NY (845) 265-3771.
 2. BACKFILL USING SELECT MATERIAL, COMPACTED IN 6" LIFTS.
 3. SUMP SHALL BE 12" DEEP.
 4. FRAMES AND GRATES SHALL BE SET IN A FULL BED OF MORTAR.

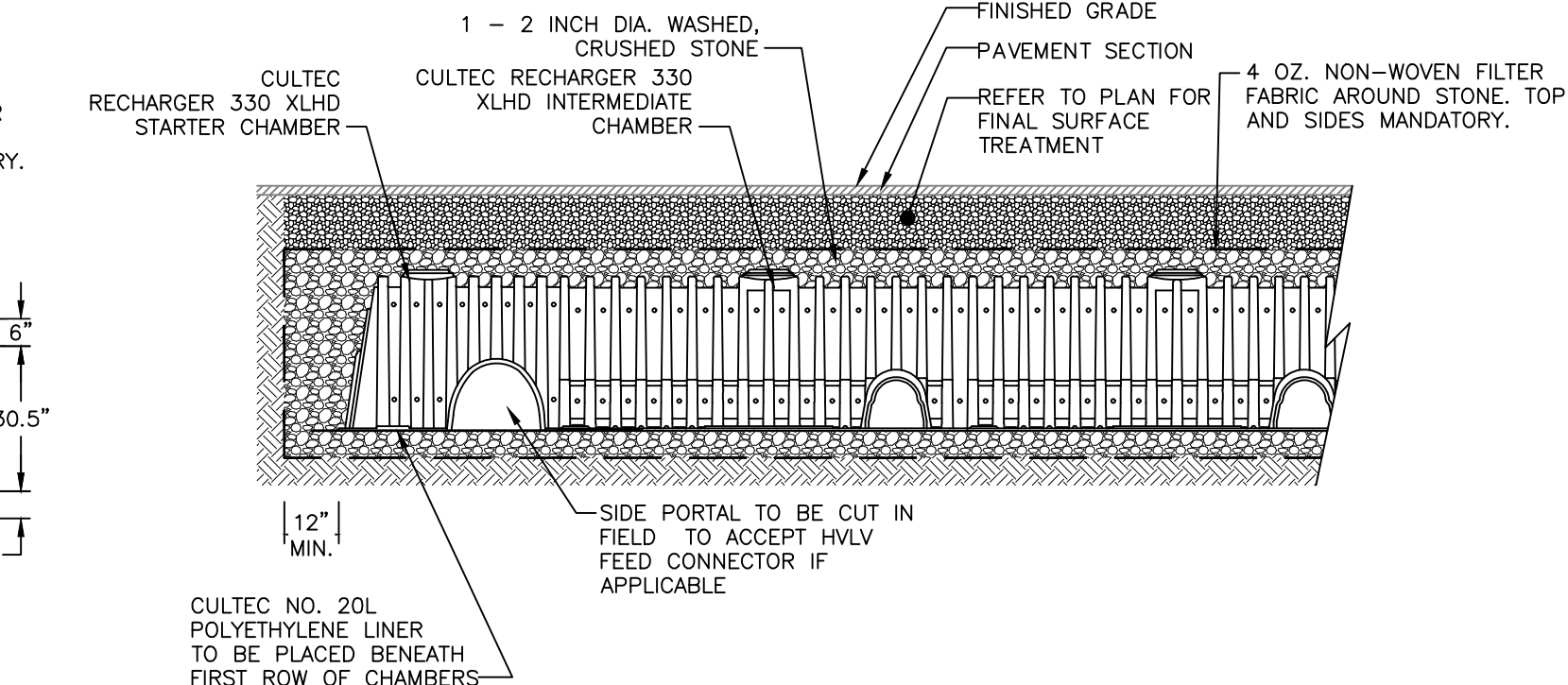
PRE-CAST CONCRETE YARD INLET DETAIL
NOT TO SCALE



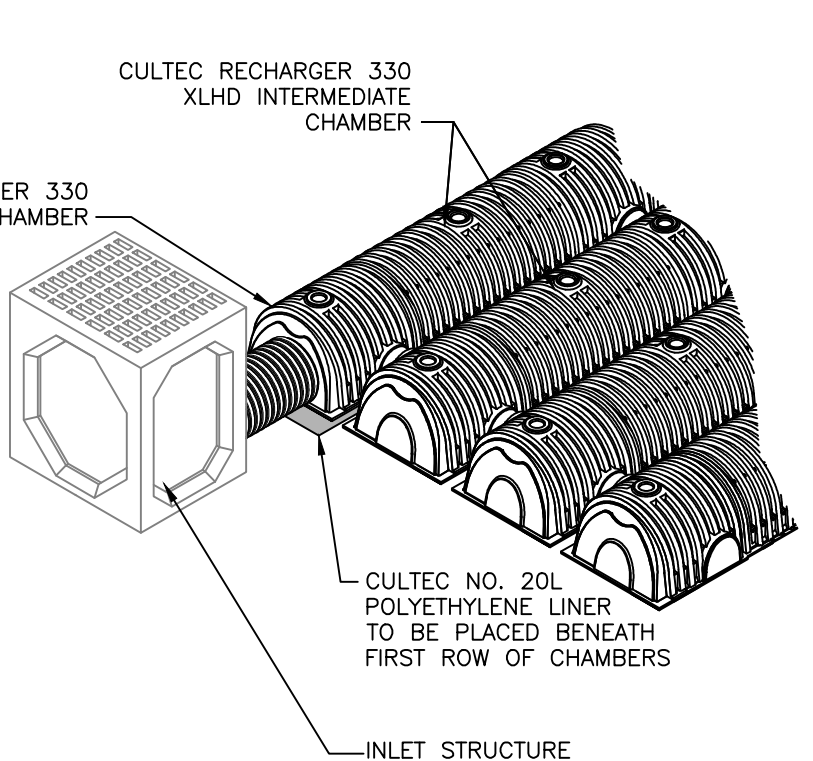
- NOTES:**
1. CULTEC RECHARGER 330XLHD CHAMBERS BY CULTEC, INC. OF BROOKFIELD, CT. ALL CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH CULTEC INC.'S CURRENT RECOMMENDED INSTALLATION GUIDELINES.
 2. THE BED OF THE SYSTEM FOOTPRINT SHALL BE LAD NEARLY LEVEL.
 3. EACH ROW OF CHAMBERS SHALL BE FED VIA A 12" MANHOLE WITH THE CONNECTIONS BY CULTEC OR EQUAL.
 4. THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IF SUBSURFACE CONDITIONS IN THE AREAS OF THE INFILTRATOR TRENCHES IS NOT CONSISTENT WITH THE TEST PIT OR PERCOLATION DATA (E.G. GROUNDWATER OR BEDROCK UNCONFINED, SOIL PROPERTIES ARE NOT CONSISTENT, ETC.).

SYSTEM ID	BOTTOM OF STONE BED ELEVATION	CHAMBER INVERT ELEVATION	TOP OF STONE BED ELEVATION	STONE BED FOOTPRINT
A	100.0	101.0	106.0	26' X 96'
B	80.0	81.0	87.0	16' X 42'

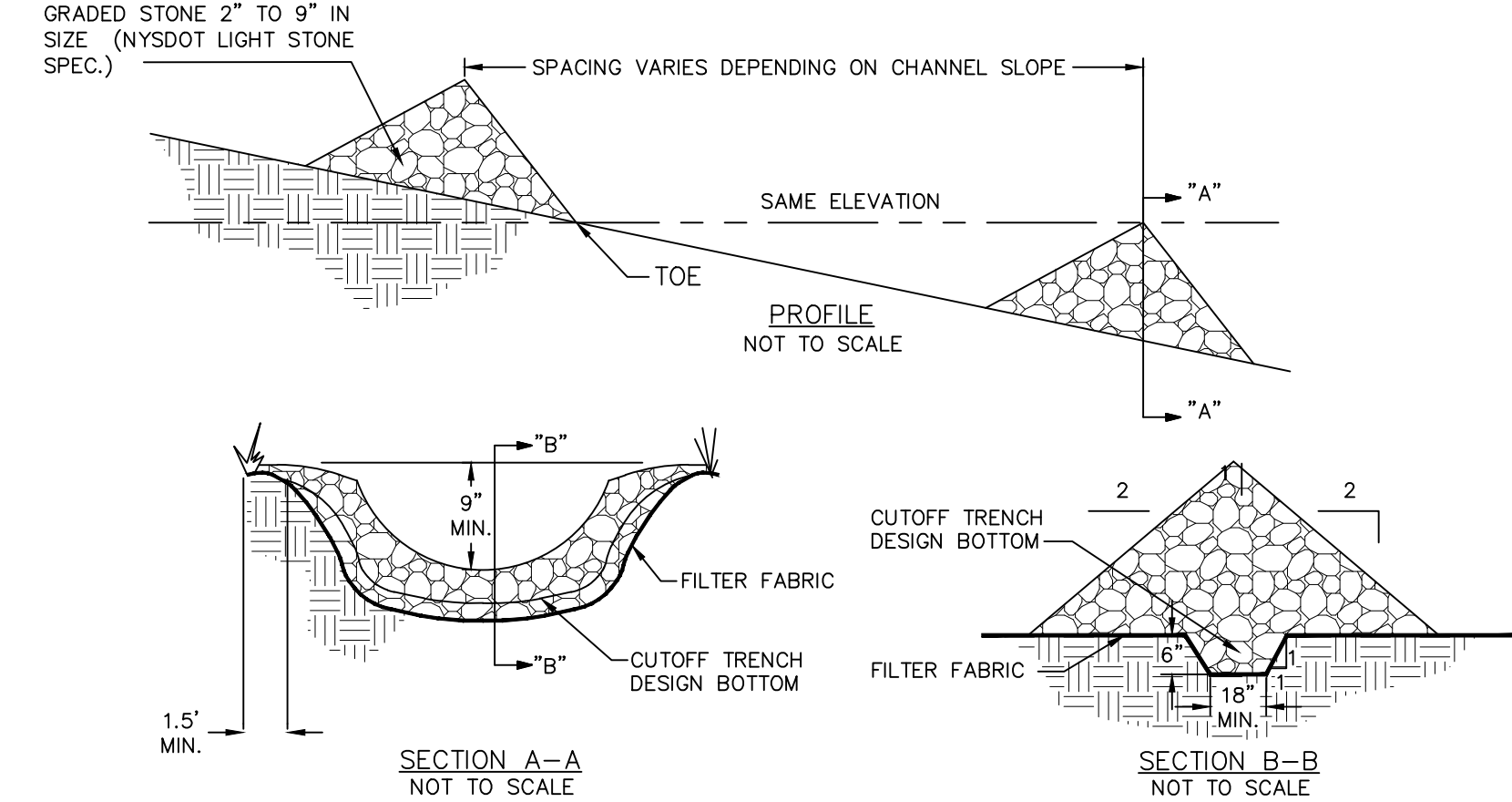
UNDERGROUND DETENTION SYSTEM DETAIL
NOT TO SCALE



SECTION VIEW

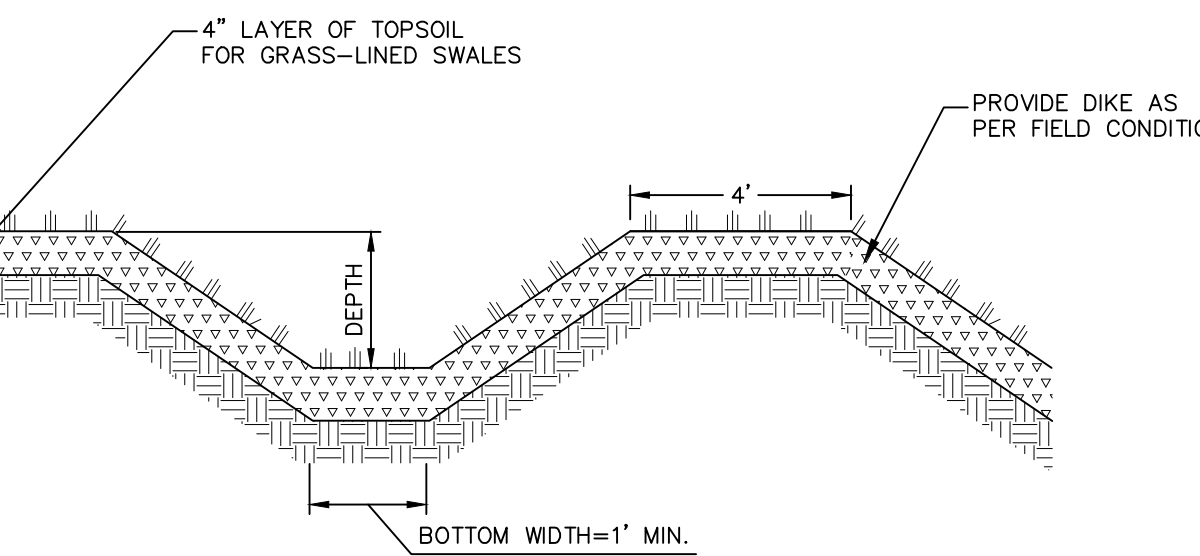


PLAN VIEW



- NOTES:**
1. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWN STREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
 2. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE SLOPE CUTTING AROUND THE DAM.
 3. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
 4. ENSURE THE CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.
 5. CHECK DAMS SHALL BE INSPECTED AFTER EACH RUNOFF EVENT AND ALL DAMAGE THAT OCCURS SHALL BE CORRECTED IMMEDIATELY.
 6. REMOVE SEDIMENT ACCUMULATION BEHIND THE CHECK DAM AS REQUIRED TO ALLOW CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM.

STONE CHECK DAM DETAIL
NOT TO SCALE



SECTION VIEW

- NOTES:**
1. MINIMUM 1" DEPTH AND 1" WIDTH FOR ALL SWALES.
 2. SWALE SHALL BE SEEDED WITH FESCUE SEEDING RYE 15 TO 25 POUNDS PER 1,000 SQUARE FEET AND MULCHED.

GRASS LINED SWALE/DIKE DETAIL
NOT TO SCALE

RECOMMENDED FOR APPROVAL:

MAYOR OF THE CITY OF BEACON _____ DATE _____

APPROVED BY RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BEACON

ON THE _____ DAY OF _____ 20____

APPROVED BY RESOLUTION OF THE PLANNING BOARD OF THE CITY OF BEACON, NEW YORK, ON THE _____ DAY OF _____ 20____ SUBJECT TO ALL REQUIREMENTS AND CONDITIONS OF SAID RESOLUTION; ANY CHANGE, ERASURE, MODIFICATION OR REVISION OF THIS PLAT, AS APPROVED, SHALL VOID THIS APPROVAL.

SIGNED THIS _____ DAY OF _____ 20____ BY _____

_____ CHAIRMAN

_____ SECRETARY

IN ABSENCE OF THE CHAIRMAN OR SECRETARY, THE ACTING CHAIRMAN OR ACTING SECRETARY RESPECTIVELY MAY SIGN IN THIS PLACE.



SEAL
JON D. BODENDORF, P.E.
NYS LICENSE NO. 076245
DANIEL G. KOHLER, P.E.
NYS LICENSE NO. 082716

REVISIONS:			
NO.	DATE	DESCRIPTION	BY