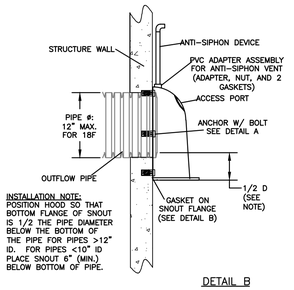
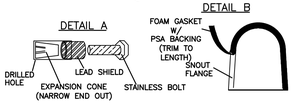
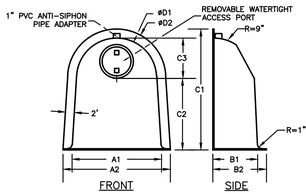
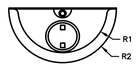


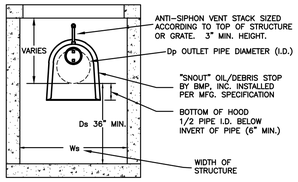
INSTALLATION NOTE:
POSITION HOOD SO THAT BOTTOM FLANGE OF SNOUT IS 1/2 THE PIPE DIAMETER BELOW THE BOTTOM OF THE PIPE FOR PIPES >12" ID. FOR PIPES <10" ID PLACE SNOUT 6" (MIN.) BELOW BOTTOM OF PIPE.







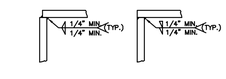
DESIGN PARAMETER GUIDELINES FOR WATER QUALITY IMPROVEMENT



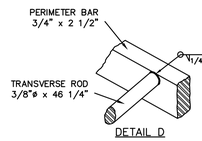
NOTES:
1. SELECT THE SNOUT OIL & DEBRIS STOP OF SIZE AND CONFIGURATION TO FIT APPLICATION. SEE TABLE.
2. CENTER THE SNOUT DIRECTLY OVER THE EXIT PIPE SO THAT THE ENTIRE PIPE IS COVERED AND SO THAT THE LOWER EDGE OF THE HOOD IS AT LEAST 1/2 THE PIPE DIAMETER BELOW THE LOWEST INSIDE POINT OF THE PIPE.
3. DRILL EQUALLY SPACED 7/16" HOLES THROUGH THE SNOUT FLANGE. (NUMBER OF HOLES MAY VARY WITH SIZE OF SNOUT.)
4. MARK AND DRILL CATCH BASIN AND INSTALL THE TAMP-IN LEAD ANCHORS:
   A) DRILL A 3/4" HOLE INTO THE BASE MATERIAL TO THE REQUIRED DEPTH.
   B) BLOW THE HOLE CLEAN OF DUST AND OTHER MATERIAL.
   C) INSERT THE ANCHOR INTO THE HOLE (LEAD SHIELD OUT).
   D) POSITION THE SETTING TOOL IN THE ANCHOR. THE OUTER RIM OF THE TOOL SHOULD SEAT ONTO THE LEAD SHIELD RIM.
   E) USING THE TOOL, SET THE ANCHOR BY DRIVING THE LEAD SLEEVE OVER THE CONE USING SEVERAL SHARP HAMMER BLOWS. BE SURE THE ANCHOR IS AT THE REQUIRED EMBEDMENT DEPTH.
5. ATTACH THE VENT PIPE ADAPTER IN THE PREDRILLED HOLE IN THE TOP OF THE SNOUT USING THE 2 FLAT O-RING GASKETS AND PVC LOCK-NUT SUPPLIED IN KIT. INSTALL WITH THE FEMALE SLIP ADAPTER UP AND A WASHER ON EACH SIDE OF THE SNOUT SHELL. TIGHTEN LOCK-NUT HAND TIGHT.
6. REMOVE PSA BACKING AND WITH FIRM PRESSURE, ATTACH GASKET STRIP TO BACK OF FLANGE AND TRIM EXCESS.
7. ATTACH THE SNOUT TO THE CATCH BASIN WALL WITH 3/8" DIAMETER STAINLESS STEEL BOLTS DO NOT OVER TIGHTEN: 10 to 15 FOOT POUNDS SHOULD BE SUFFICIENT.
8. CUT THE ANTI-SIPHON VENT STACK TO LENGTH AND ATTACH TO HOOD WITH PVC CEMENT.
9. ATTACH 90 DEGREE FITTING TO VENT STACK WITH PVC CEMENT. INSURE THAT FITTING OPENING IS ACCESSIBLE FOR MAINTENANCE AND INSPECTION.

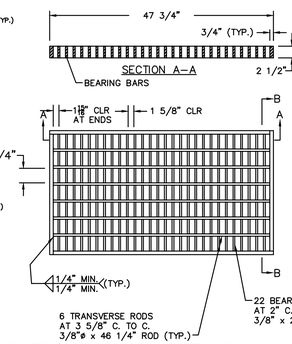
SNOUT DIMENSION												
SIZE	A1	A2	B1	B2	C1	C2	C3	D1	D2	PORT ø	R1	R2
LARGE 24F	26"	30"	13"	15"	34"	20"	12"	24"	28"	10"	13"	15"
SMALL 18F	20"	24"	10"	12"	27"	16"	9"	18"	22"	6.5"	10"	12"

WATER QUALITY SNOUT INLET INSERT DETAIL
NOT TO SCALE

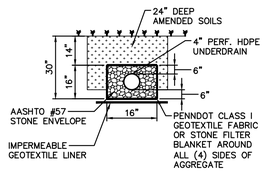


TYPICAL CORNER DETAILS





STORM SEWER INLET GRATE (STRUCTURAL STEEL-BICYCLE SAFE) DETAIL
NOT TO SCALE



NOTES:
1. REFER TO PCSM PLAN(S) FOR NUMBER AND SPACING OF UNDERDRAIN(S).
2. ALL CLEANOUTS AND ANGLES WITHIN UNDERDRAIN SHOULD NOT EXCEED 45 DEGREES.
3. ALL CLEANOUTS SHOULD BE WATERTIGHT TO ENSURE WATER DOES NOT ENTER THE UNDERDRAIN THROUGH THE TOP OF THE CLEANOUT.
4. AGGREGATE FOR UNDERDRAIN BEDDING AND ENVELOPE SHOULD BE CLEAN WASHED STONE FOR WATER QUALITY REASONS.
5. UNDERDRAIN SHOULD HAVE A MINIMUM FLOW RATE OF 10 GAL (1.34 CF) PER MINUTE PER LINEAR FOOT OF PIPE.
6. UNDERDRAIN SHOULD BE PERFORATED TO PROVIDE A MINIMUM WATER INLET AREA OF 1.4 SQUARE INCHES PER LINEAR FOOT OF PIPE.

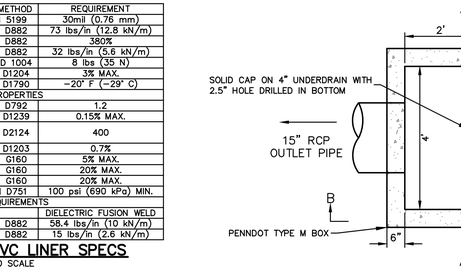
BASIN UNDERDRAIN DETAIL
NOT TO SCALE

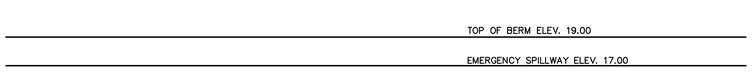
NOTES:
1. PRODUCT SHOULD BE TIDEFLEX CHECKMATE ULTRAFLEX INLINE CHECK VALVE OR APPROVED EQUAL.
2. FASTENS WITH INTERNAL EXPANSION CLAMP.

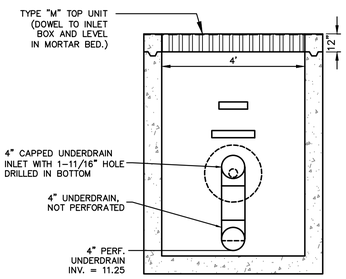
BACKFLOW PREVENTER DETAIL (OR APPROVED EQUAL)
NOT TO SCALE

PROPERTY	TEST METHOD	REQUIREMENT
THICKNESS	ASTM 5199	30mil (0.76 mm)
STRENGTH AT BREAK	ASTM D882	73 lbs/in (12.8 kN/m)
ELONGATION AT BREAK	ASTM D882	380%
MODULUS AT 100% ELONG.	ASTM D882	32 lbs/in (5.6 kN/m)
TEAR STRENGTH	ASTM D 1004	8 lbs (35 N)
DIMENSIONAL STABILITY	ASTM D1204	3% MAX.
LOW TEMP. IMPACT	ASTM D1790	-20° F (-29° C)
INDEX PROPERTIES		
SPECIFIC GRAVITY	ASTM D792	1.2
WATER EXTRACTION	ASTM D1239	0.15% MAX.
AVERAGE PLASTICIZER MOLECULAR WEIGHT	ASTM D2124	400
VOLATILE LOSS	ASTM D1203	0.7%
BREAKING FACTOR	ASTM G160	5% MAX.
ELONGATION AT BREAK	ASTM G160	20% MAX.
MODULUS AT 100% ELONG.	ASTM G160	20% MAX.
HYDROSTATIC RESISTANCE	ASTM D751	100 psi (690 kPa) MIN.
SEAM REQUIREMENTS		
FACTORY SEAMING METHOD		DIELECTRIC FUSION WELD
SHEAR STRENGTH	ASTM D882	58.4 lbs/in (10 kN/m)
PEEL ADHESION	ASTM D882	15 lbs/in (2.6 kN/m)

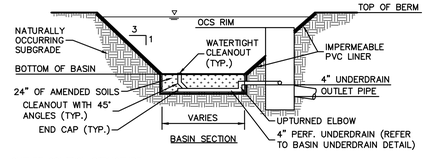
IMPERMEABLE PVC LINER SPECS
NOT TO SCALE

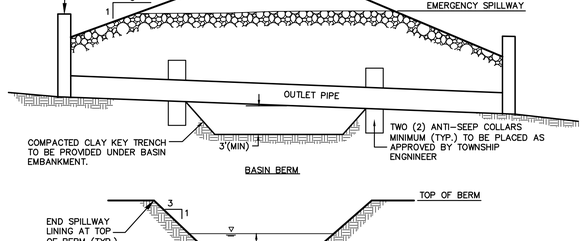


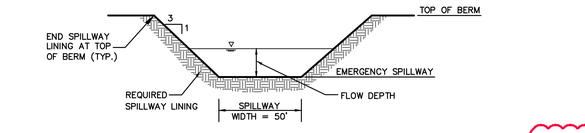


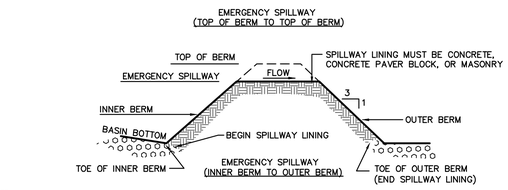


OCS-1 DETAIL
NOT TO SCALE





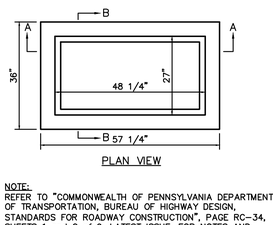


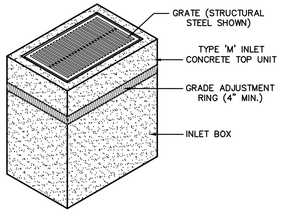


NOTE:
1. ALL BASIN EMBANKMENTS SHALL BE PLACED IN LIFTS NOT TO EXCEED EIGHT INCHES IN THICKNESS AND EACH LIFT SHALL BE COMPACTED TO A MINIMUM OF 95% OF MODIFIED PROCTOR DENSITY AS ESTABLISHED BY ASTM D-1557. PRIOR TO PROCEEDING TO THE NEXT LIFT, THE COMPACTION SHALL BE CHECKED BY A SOILS ENGINEER EMPLOYED BY THE APPLICANT/DEVELOPER. COMPACTION TESTS SHALL BE RUN ON THE LEADING AND TRAILING EDGE OF THE BERM ALONG WITH THE TOP OF THE BERM. VERIFICATION OF REQUIRED COMPACTION SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER PRIOR TO UTILIZATION OF ANY BASIN FOR STORMWATER MANAGEMENT.

PCSM BMP	2-YR WATER ELEV	100-YR WATER ELEV	TOP OF BERM	EMER SPILLWAY ELEV	EMER SPILLWAY WIDTH	OCS RIM	BOTTOM OF BASIN	BOTTOM OF AMENDED SOILS	UNDERDRAIN INVERT IN BASIN	UNDERDRAIN INVERT IN OCS	OCS OUTLET	OCS OUTLET INVERT
LINED MRC BASIN	14.39	16.15	19.00	17.00	50 FT	16.25	13.25	11.25	11.25	12.67	15"RCP	12.50

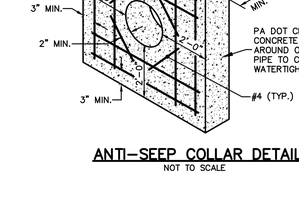
LINED MRC BASIN SECTIONS
NOT TO SCALE





NOTE:
REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-34, SHEETS 1 and 2 of 9, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.

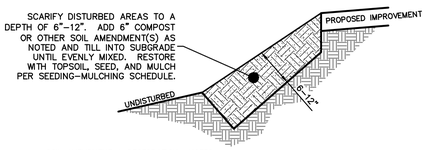
TYPE 'M' INLET DETAIL
NOT TO SCALE



ANTI-SEEP COLLAR DETAIL
NOT TO SCALE

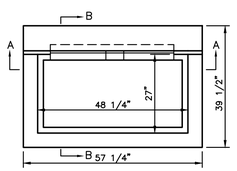
COMPOST MATERIAL SHALL BE WEED FREE COMPOST DERIVED FROM WELL-DECOMPOSED ORGANIC MATTER. COMPOST SHALL BE PRODUCED USING AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS. COMPOST MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

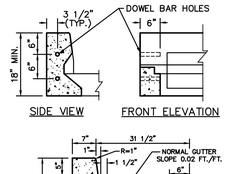
ORGANIC MATTER CONTENT	25% - 100%
ORGANIC PORTION	FIBROUS & ELONGATED
pH	5.5 - 8.5
MOISTURE CONTENT	30% - 60%
PARTICLE SIZE	30-50% PASS 3/8" SIEVE
SOLUBLE SALT	5.0 dS/m MAXIMUM

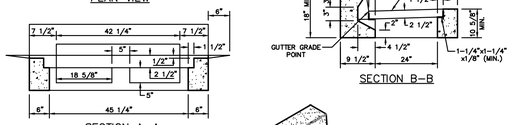


SOIL AMENDMENT & RESTORATION- NOTES
1. COMPOST TO BE ADDED AT A RATE OF 2:1 (SOIL:COMPOST). IF A PROPRIETARY PRODUCT IS USED, THE MANUFACTURER'S INSTRUCTIONS TO BE FOLLOWED IN TERMS OF MIXING AND APPLICATION RATE.
2. ON-SITE SOILS WITH AN ORGANIC CONTENT OF AT LEAST 5 PERCENT CAN BE PROPERLY STOCKPILED (TO MAINTAIN ORGANIC CONTENT) AND REUSED.
3. PROCEDURE: ROTOTILL OR RIP THE SUBGRADE, REMOVE ROCKS, DISTRIBUTE THE COMPOST, SPREAD THE NUTRIENTS, ROTOTILL AGAIN.
4. ADD 6 INCHES COMPOST/AMENDMENT AND TILL UP TO 12 INCHES.
5. COMPOST SOIL AMENDMENT INSTALLATION
   a. SPREAD 2-3 INCHES OF APPROVED COMPOST ON EXISTING SOIL. TILL ADDED SOIL INTO EXISTING SOIL WITH A ROTARY TILLER THAT IS SET TO A DEPTH OF 6 INCHES. ADD AN ADDITIONAL 4 INCHES OF APPROVED COMPOST TO BRING THE AREA UP TO GRADE.
   b. AFTER PERMANENT PLANTING/SEEDING, 2-3 INCHES OF COMPOST BLANKET WILL BE APPLIED TO ALL AREAS NOT PROTECTED BY GRASS OR OTHER PLANTS.

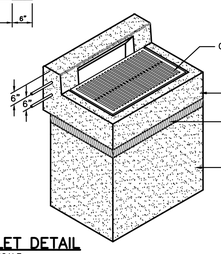
SOIL AMENDMENT RESTORATION
NOT TO SCALE







NOTES:
1. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION", PAGE RC-34, SHEETS 1 and 2 of 9, LATEST ISSUE, FOR NOTES AND SPECIFICATIONS REGARDING PRECAST INLET CONSTRUCTION.



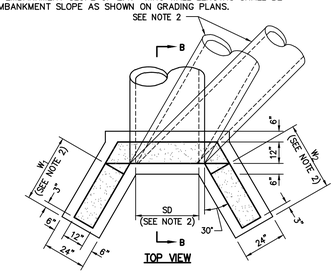
TYPE 'C' INLET DETAIL
NOT TO SCALE

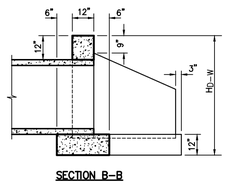
NOTES
1. PRECAST ENDWALLS SHALL CONFORM AND USERS SHALL REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION," PAGE RC-31M, LATEST ISSUE, FOR NOTES REGARDING PRECAST CONCRETE ENDWALL CONSTRUCTION.
2. REFER TO "COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, BUREAU OF HIGHWAY DESIGN, STANDARDS FOR ROADWAY CONSTRUCTION," PAGE RC-31M, SHEET 2 OF 2, TABLE 'A' FOR SPECIFIC DIMENSIONS THAT ARE DEPENDENT UPON PIPE SKEW.
3. WING WALL DIMENSIONS ASSUME AN EMBANKMENT SLOPE OF 2:1. WING WALL LENGTHS SHALL BE ADJUSTED TO PROVIDE REQUIRED EMBANKMENT SLOPE AS SHOWN ON GRADING PLANS.

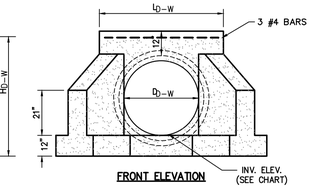
TYPE D-W ENDWALL SCHEDULE OF DIMENSIONS

PIPE I.D.	L	W	H
15"	3.5'	3.0'	2.4'
18"	3.8'	3.0'	2.7'
21"	4.1'	3.5'	3.0'
24"	4.3'	3.5'	3.2'
27"	4.5'	4.0'	3.5'
30"	4.8'	4.0'	3.8'
36"	5.8'	4.6'	4.3'
42"	6.3'	5.8'	4.9'
48"	6.9'	6.9'	5.4'
54"	7.5'	7.8'	6.0'
60" *	8.1'	9.2'	6.5'
72" *	9.2'	11.5'	7.6'

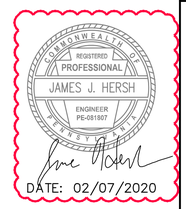
* WALL THICKNESS INCREASED TO 15"







PENNDOT TYPE D-W ENDWALL
NOT TO SCALE



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES
CORPORATE HEADQUARTERS
65 EAST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901 • (215) 345-4330 • www.gilmore-assoc.com

JOB NO.: 2012-07083
MUNICIPAL FILE NO.:
TAX MAP PARCEL NO.: 13-51-1-5
N/A
DESIGNED BY: BMS
DRAWN BY: BMS
CHECKED BY: JJH

APPLICANT:
ELCON RECYCLING SERVICES
1720 WALTON ROAD
BLUE BELL, PA 19422
(585) 465-5364

TOTAL AREA: 32.297 AC.
DATE: 12/10/18
TOTAL LOTS: 1
SCALE: AS NOTED

LAND DEVELOPMENT PLAN
PCSM DETAILS 1
ELCON RECYCLING
FALLS TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA

REV.	DESCRIPTION	DATE	BY
5	PA DEP RESUBMISSION	02/07/20	JJH
4	PA DEP RESUBMISSION	01/17/20	JJH
3	NPDES RESUBMISSION	10/07/19	JJH
2	NPDES SUBMISSION	07/12/19	JJH
1	FALLS TOWNSHIP RESUBMISSION	04/18/19	JJH

SHEET NO.: 3

Q:\LANDDEV\2012\2012070B3_Elcon Recycling\DESIGN\CAD\Production Drawings\2070B3_13-18_DETAILS.dwg Layout: PCSM Details 1 Plotted By: bstuder, on Fri Feb 07, 2020 at 9:50am