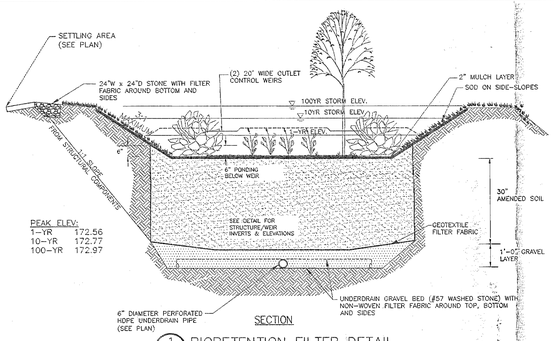
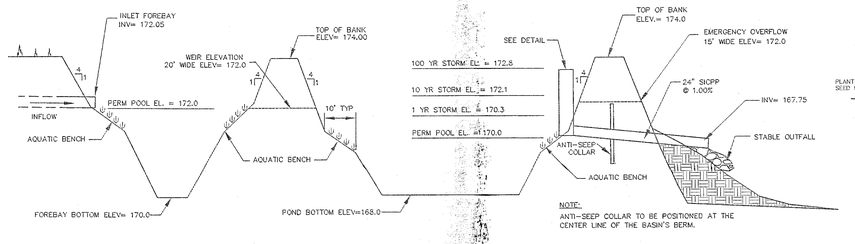


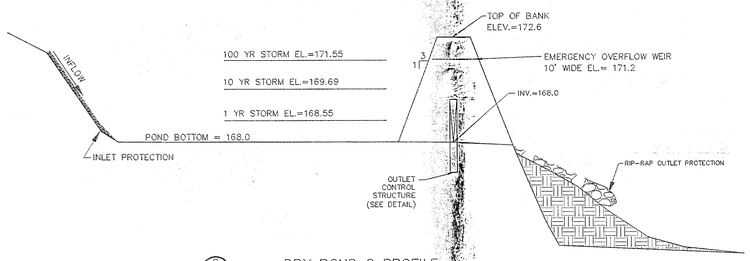
1/11 BIORETENTION FILTER DETAIL
(NOT TO SCALE)
(NYSDEC STORMWATER DESIGN MANUAL TYPE F-5)

NOTES:

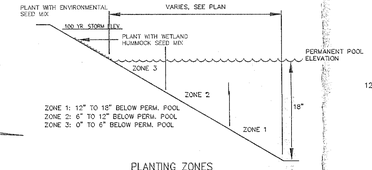
1. ALL DRAINAGE AREAS TO A BIORETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF AMENDED SOILS, MULCH OR PLANTINGS.
2. AMENDED SOIL WILL ONLY BE PERMITTED WITH A VALID SOIL ANALYSIS REPORT. NO AMENDED SOIL SHALL BE ALLOWED ON THE SIDE SLOPES.
   AMENDED SOIL COMPOSITION: 85% MEDIUM SAND
   13% COMPOST MATERIAL
   2% MIN ORGANIC SOIL (i.e. PEAT)
3. INSTALL WIRE SCREENING AROUND ALL OUTLET OPENINGS TO PREVENT LOSS OF MULCH.
4. ONLY SMALL MATURING TREES ARE ALLOWED TO BE PLANTED IN THE AMENDED SOILS.
5. FILTER SYSTEM SHALL REMAIN 'OFF-LINE' UNTIL THE SITE IS STABILIZED AND APPROVED BY THE DESIGN ENGINEER.
6. DURING CONSTRUCTION, ALL SLOPES IN THE FILTER AREA SHALL BE PROTECTED BY EROSION CONTROL MATTING AND SEEDED IMMEDIATELY AFTER THE COMPLETION OF GRADING.
7. VEGETATION SHALL BE PLANTED IN A RANDOM NATURAL ORDER WITH TREES 10-20' O.C. AND SHRUBS 5-10' O.C. SEE PLAN VIEW AND PLANTING SCHEDULE FOR SPECIES AND ORIENTATION. SEE GRADING PLAN SHEET OF THIS SET FOR PLANTING SCHEDULE.



7/11 WET POND 1 DETAIL
NOT TO SCALE
(NYSDEC STORMWATER DESIGN MANUAL TYPE P-1)



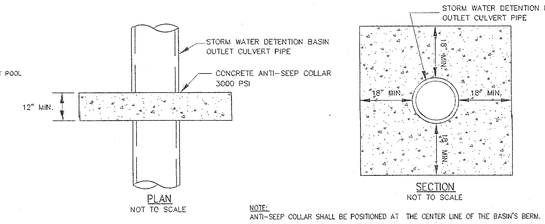
8/11 DRY POND 2 PROFILE
NOT TO SCALE



PLANTING ZONES

POND EMBANKMENT NOTES:

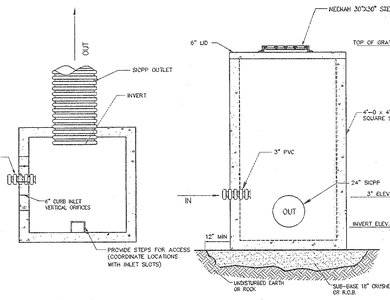
1. THE GROUND SURFACE LOCATED BELOW THE EMBANKMENT SHALL BE STRIPPED OF ALL VEGETATION, ORGANIC, AND OTHERWISE OBJECTIONABLE MATERIALS.
2. AFTER STRIPPING, THE IN-PLACE MATERIAL SHOULD BE MOISTENED, IF DRY, AND COMPACTED BEFORE PLACEMENT OF THE FIRST LAYER OF EMBANKMENT MATERIAL.
3. INCLUSION OF VEGETATION, ORGANIC MATERIALS, OR FROZEN SOIL IN THE EMBANKMENT IS PROHIBITED.
4. THE EMBANKMENT MATERIAL SHALL BE PLACED IN 1' MAXIMUM LIFTS.
5. EACH LIFT WILL BE COMPACTED TO 90% OF THE MAXIMUM DRY DENSITY AS ESTABLISHED BY A MODIFIED PROCTOR COMPACTION TEST.
6. THE MATERIAL BEING USED FOR THE EMBANKMENT SHALL BE FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, OR OTHER OBJECTIONABLE MATERIALS.
7. RELATIVELY PERVIOUS MATERIALS SUCH AS GRAVEL (I.E. UNIFIED SOIL CLASSES GW, GP, SW, & SP) SHALL NOT BE PLACED IN THE EMBANKMENT.
8. BACKFILL AROUND CONDUITS WITHIN THE EMBANKMENT SHALL BE PLACED IN 4" LIFTS AND SHALL HAVE A MAXIMUM PARTICLE SIZE OF 3". IT SHALL ALSO MEET 90% COMPACTION.
9. THE SLOPES OF THE EMBANKMENT SHALL NEVER EXCEED 1(V):3(H). ( )
10. A TRASH RACK SHALL BE INSTALLED AT THE OUTLET STRUCTURE IN ORDER TO PROTECT THE VERTICAL ORIFICES FROM CLOGGING.
11. THE ANTI-SEEP COLLAR SHALL BE POSITIONED AT THE CENTERLINE OF THE BASINS BERM.



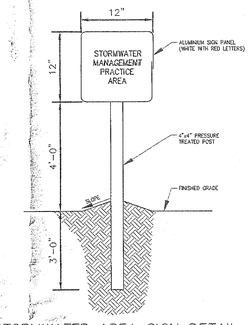
NOTE:
ANTI-SEEP COLLAR SHALL BE POSITIONED AT THE CENTER LINE OF THE BASIN'S BERM.

NOTE: FOR ADDITIONAL CONSTRUCTION SPECIFICATIONS REFER TO THE TOWN OF BETHLEHEM SANITARY SEWER, WATER DISTRIBUTION, STORM SEWER, & HIGHWAY STANDARD DETAIL SHEETS

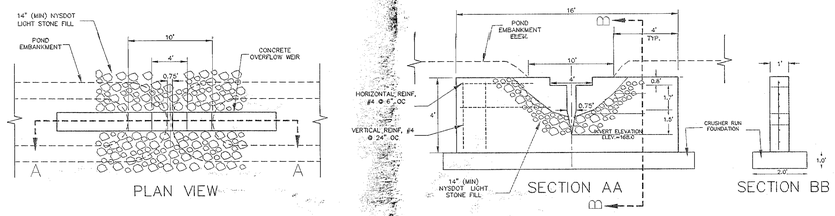
13/11 CONCRETE ANTI-SEEP COLLAR
NOT TO SCALE



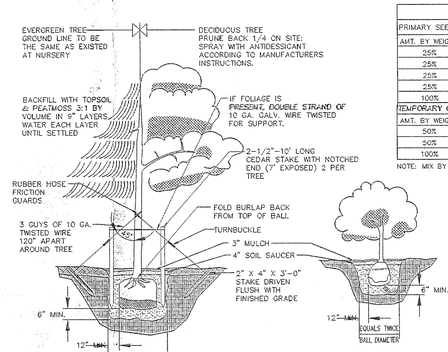
2/11 POND OUTLET STRUCTURE DETAIL (OCS-1)
(NOT TO SCALE)



5/11 STORMWATER AREA SIGN DETAIL
NOT TO SCALE



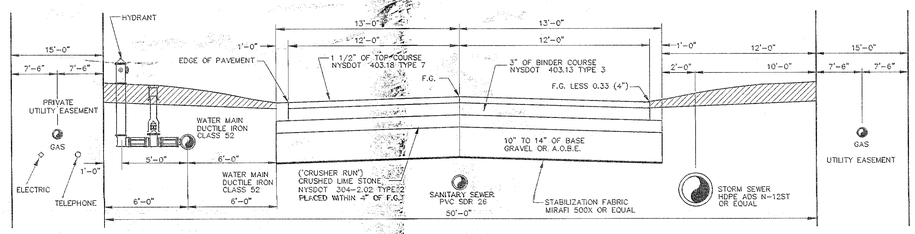
9/11 POND OUTLET STRUCTURE DETAIL (OCS-2)
(NOT TO SCALE)



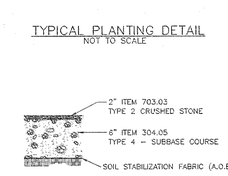
14/11 TYPICAL PLANTING DETAIL
NOT TO SCALE

SEEDING MIX		
PRIMARY SEED MIX (ERNMX-113):		
AMT. BY WEIGHT	SPECIES OR VARIETY	SEED RATE
25%	CREEPING RED FESCUE	3-5 LB PER 1,000 SF
25%	ANNUAL RYE GRASS	
25%	PERENNIAL RYE 'AMAZING GS'	
25%	PERENNIAL RYE 'GRAND SLAM'	
100%		
TEMPORARY COVER SEED MIX (ERNMX-104):		SEED RATE
AMT. BY WEIGHT	SPECIES OR VARIETY	50 LB PER ACRE
50%	ANNUAL RYE GRASS	
50%	PERNIAL RYE 'BLACKCAT II'	
100%		

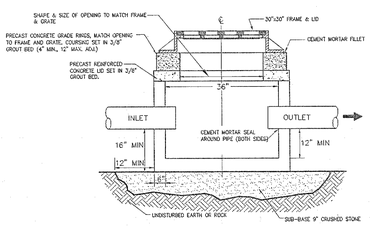
NOTE: MIX BY ERNST SEED MIX OR APPROVED EQUAL



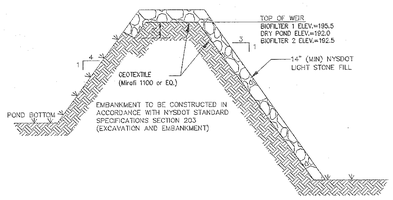
10/11 ROAD SECTION
50' TOWN OF BETHLEHEM RIGHT OF WAY



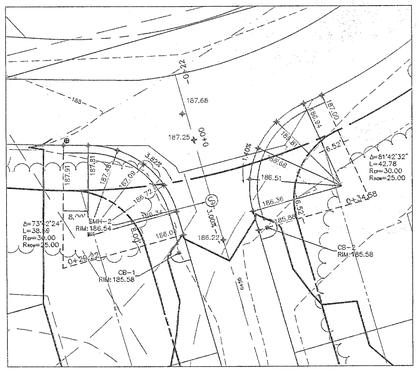
14/11 GRAVEL ACCESS ROAD
NOT TO SCALE



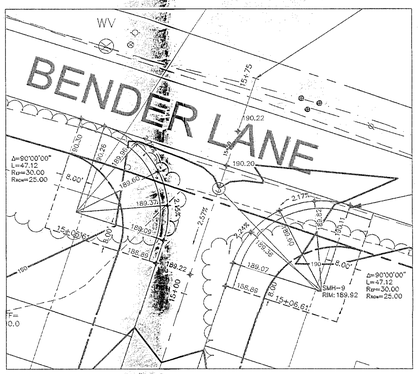
3/11 4' I.D. CONCRETE MANHOLE
(NOT TO SCALE)



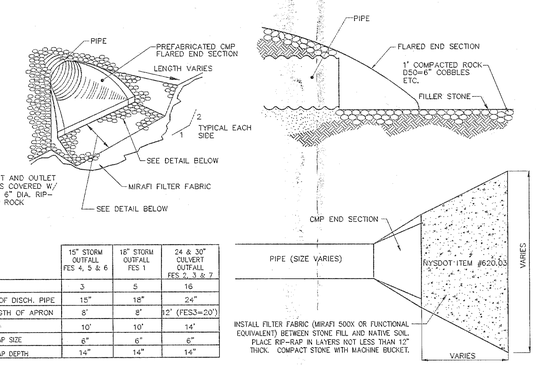
4/11 EARTH BERM OVERFLOW WEIR DETAIL
(NOT TO SCALE)



11/11 INTERSECTION 1 DETAIL
SCALE: 1"=20'



12/11 INTERSECTION 2 DETAIL
SCALE: 1"=20'



	15" STORM OUTFALL FES 4, 5 & 6	18" STORM OUTFALL FES 1	24 & 30" CULVERT OUTFALL FES 2, 3 & 7
Q_{25}(CFS)	3	5	16
D= DIA. OF DISCH. PIPE	15"	18"	24"
LA= LENGTH OF APRON	8'	8'	12' (FES3=20')
W= LA+D	10'	10'	14'
D_{50} RIP-RAP SIZE	6"	6"	6"
D_{50} RIP-RAP DEPTH	14"	14"	14"

NOTES:
1) REFERENCE FIG. 5B.12 OF NYS STANDARDS & SPECIFICATIONS FOR EROSION & SEDIMENT CONTROL.
2) 6" RIP-RAP SIZE EQUIVALENT TO NYS DOT LIGHT STONE FILL

PIPE OUTLET PROTECTION

13/11 PIPE W/ FLARED END SECTION
NOT TO SCALE

TOWN OF BETHLEHEM, NEW YORK
PLANNING DEPT. ORIGINAL
- SCANNED -
0 1 INCHES 2

ALBANY COUNTY DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH SERVIC.
By direction of the Commissioner of Health, these plans are hereby approved. See this sheet for date and signature.
ALBANY COUNTY HEALTH DEPARTMENT APPROVAL

PLANNING BOARD
TOWN OF BETHLEHEM
ALBANY COUNTY, NEW YORK
By direction of the Chairman, these drawings are hereby approved.
See sheet(s) 3 of 11
for date and signature
TOWN OF BETHLEHEM PLANNING BOARD

FOR MUNICIPAL APPROVAL ONLY
NOT FOR CONSTRUCTION

NOTE: 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONTACT DIG SAFELY NEW YORK TO LOCATE ALL UNDERGROUND UTILITIES. 1-800-962-7962

NO.	DATE:	REVISIONS	BY:
7	2/2/17	REVISIONS PER TOWN COMMENT	JCH
6	9/8/16	REVISIONS PER PRELIMINARY PLAT COMMENT	PJY
5	7/13/16	REVISIONS PER TOWN & TDE COMMENTS	PJY
4	6/27/16	REVISION PER TOWN COMMENT	PJY
3	5/18/16	REVISION PER TOWN COMMENTS	CDL
2	2/12/16	REVISIONS PER TOWN & TDE COMMENTS	CDL
1	1/8/16	CURVE DATA ADDED TO INTERSECTION DETAILS	CDL

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DETAILS
BENDER FARMS
250 & 288 BENDER LANE
TOWN OF BETHLEHEM

ALBANY COUNTY — STATE OF NEW YORK
DATE: MAY 13, 2015 — CHECKED BY: D.F.I. JOB NO. 14-066 — SCALE: N.T.S.
DRAWN BY: C.D.L. CADD FILE: 14-066 Details.dwg — SHEET 11 OF 11