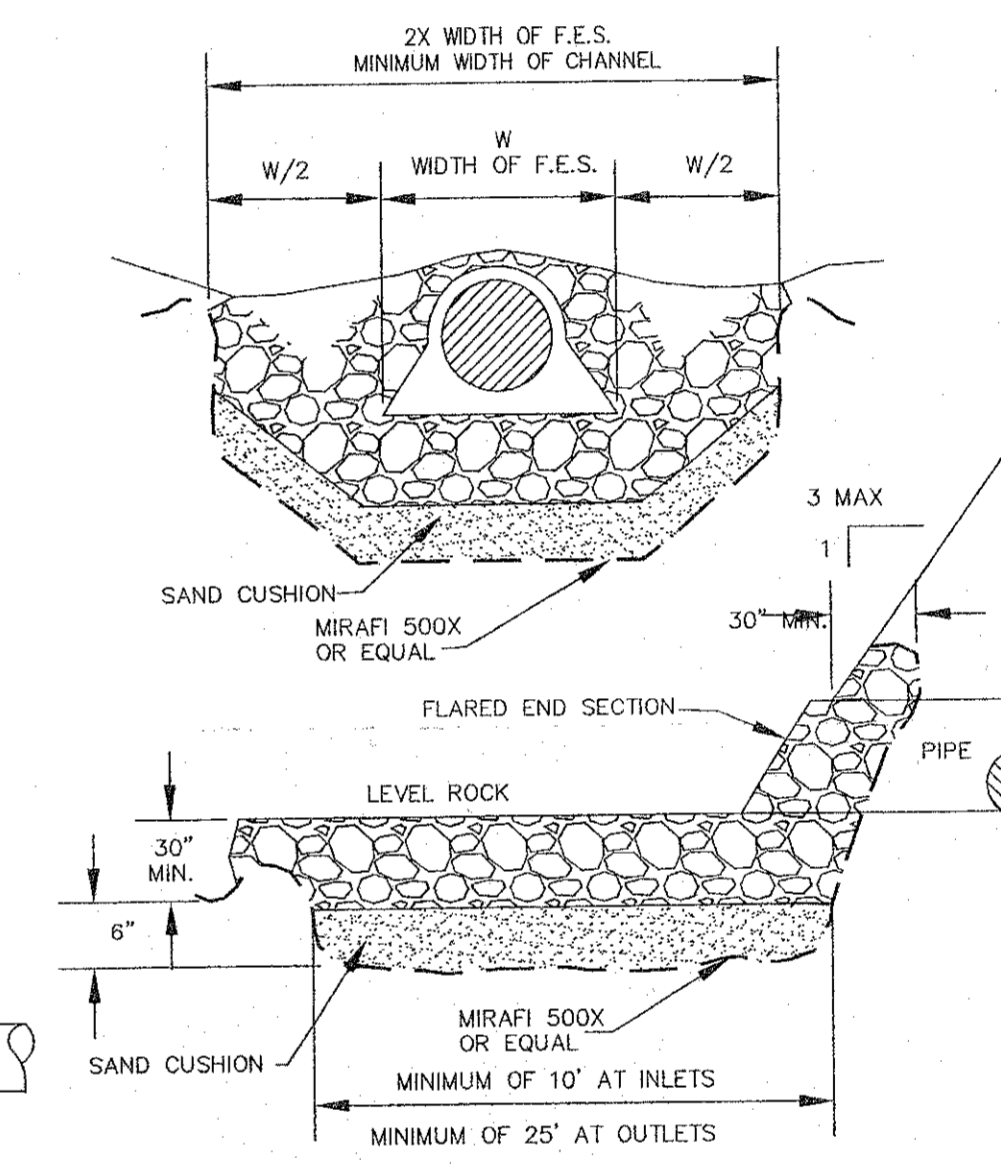
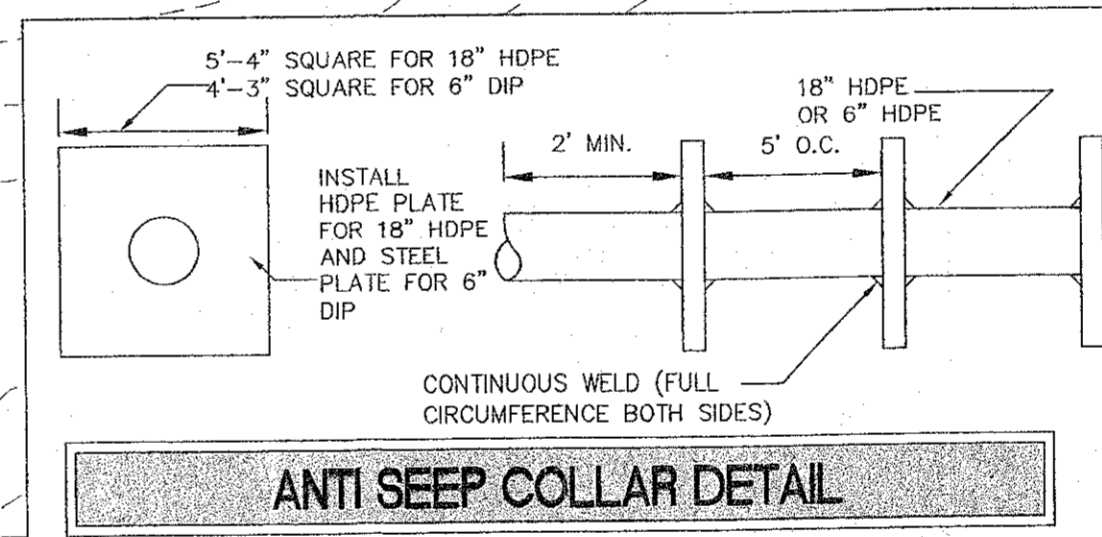


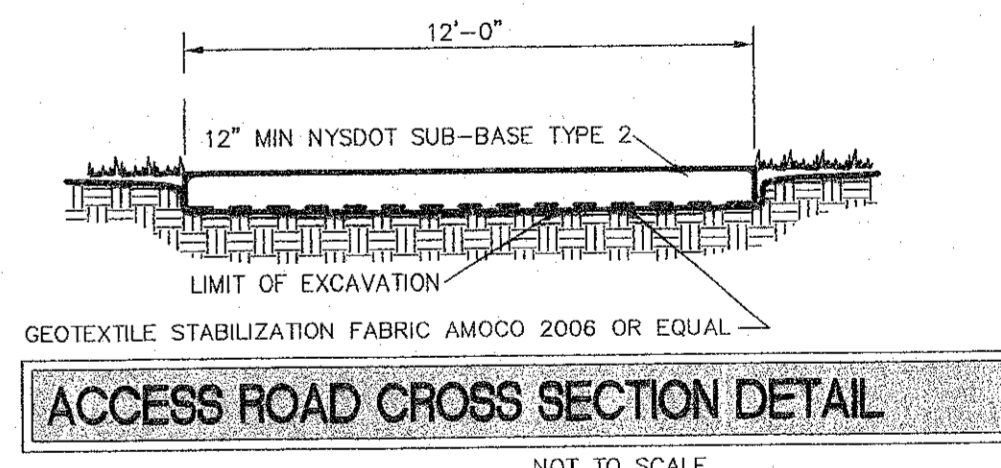
ORIFICE CONTROL STRUCTURE (P-1) DETAIL
NOT TO SCALE



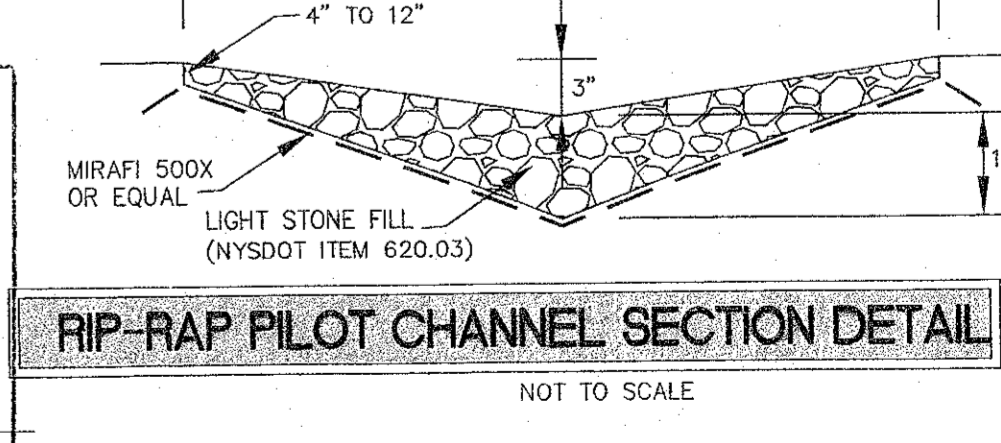
INVERT CHANNEL AND BENCHWALL DETAIL
NOT TO SCALE



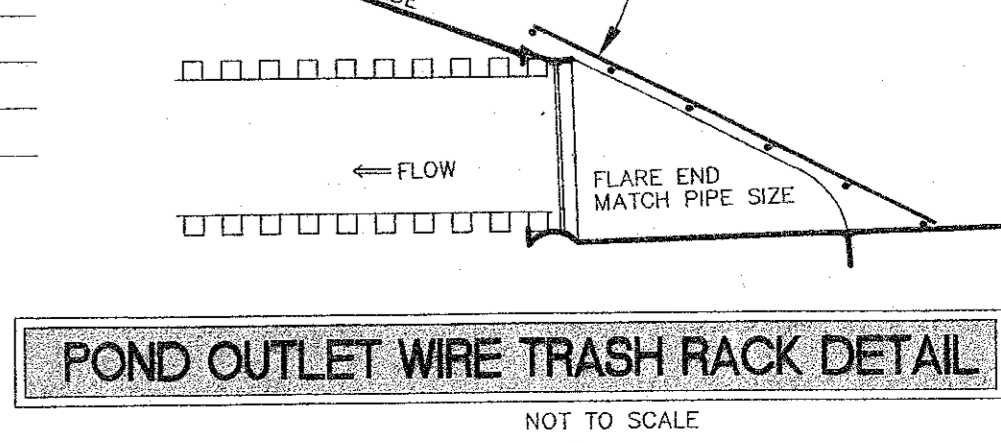
ANTI SEEP COLLAR DETAIL
NOT TO SCALE



ACCESS ROAD CROSS SECTION DETAIL
NOT TO SCALE



RIP-RAP PILOT CHANNEL SECTION DETAIL
NOT TO SCALE



POND OUTLET WIRE TRASH RACK DETAIL
NOT TO SCALE

SWPPP BASIN #1 PLAN VISTA BOULEVARD (TOWN OWNED)

WET EXTENDED DETENTION POND #1 - PLANT MATERIAL SCHEDULE

SYM	BOTANICAL NAME	COMMON NAME	SIZE	AMT	COMMENTS
HERBACEOUS PLANTS					
CC	Calamagrostis canadensis	Blue Joint Grass	2" Plugs	360	
IVS	Iris versicolor	Blue Flag Iris	2" Plugs	320	
LC	Labella cardinalis	Cardinal Flower	2" Plugs	180	
PN	Potamogeton nodosus	Long-leaved Pond Weed	2" Plugs	200	
SA	Scirpus acutus	Hardstem Bulrush	2" Plugs	300	
VA	Vallisneria Americana	Wild Celery	2" Plugs	260	
SHRUBS AND TREES					
IV	Ilex verticillata	Winterberry	3"-4" HT. / 2 GAL.	132	Container Grown
AR	Acer Rubrum	Red Maple	2 1/2"-3" CAL.	8	B & B
PS	Prunus serotina	Black cherry	8"-10" HT. / 7 GAL.	5	Container Grown
FA	Fraxinus Americana	American Ash	2"-2 1/2" CAL.	8	B & B
YD	Viburnum dentatum	Arrowwood Viburnum	3"-4" HT. / 2 GAL.	15	Container Grown

HERBACEOUS PLANTS SHALL BE MAINTAINED AND WARRANTED UNTIL ACCEPTANCE OR A MAXIMUM OF 3 MONTHS AFTER PLANTING. SHRUBS AND TREES SHALL BE MAINTAINED AND WARRANTED FOR 1 YEAR AFTER ACCEPTANCE.

SUMMARY TABLE

	AQUATIC BENCH		SAFETY BENCH	
	ELEVATION	WIDTH	ELEVATION	WIDTH
FOREBAY	193.9 TO 195.4	15' (minimum)	195.4 TO 196.6	12'
MICROPOOL	191.4	962	40	34
	192.0	1988	57	47
	194.0	3520	74	64
	195.4	5478	90	80
MICROPOOL	190.0	866	85	12
	192.0	2072	98	24
	193.0	3504	106	33
	194.0	4333	115	40
	195.4	5408	120	50

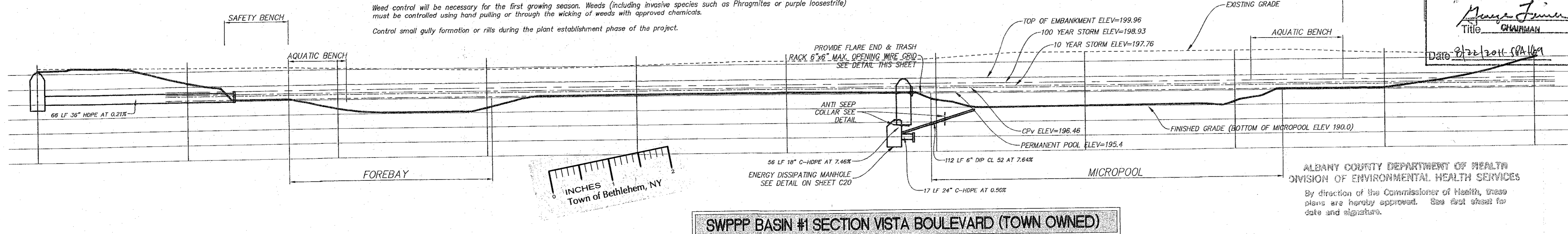
PLANNING BOARD
TOWN OF BETHEHEM
ALBANY COUNTY, NEW YORK
This Site Plan Approved:
[Signature]
Date: 8/22/2011

SEED MIX FOR AREA OF SEASONAL INUNDATION

PERCENTAGE BY WEIGHT	BOTANICAL NAME	COMMON NAME
20.0	Carex vulpinoidea	Fox Sedge
20.0	Polygonum pensylvanicum	Pennsylvania Smartweed
15.0	Panicum viratum	Switchgrass
10.0	Scirpus cespitosus	Woolgrass
5.0	Junus effusus	Soft Rush
5.0	Glyceria striata	Fowl Mannagrass
5.0	Eupatorium fistulosum	Joe Pye Weed
5.0	Iris versicolor	Blue Flag
4.0	Scirpus acutus	Hard Stem Bulrush
4.0	Leersia oryzoides	Rice Cutgrass
4.0	Zizania aquatica	Wild Rice
3.0	Scirpus pungens	Common three square

Seed at 25 Lbs. Per Acre. Mulch with fiber mulch and organic tackifier.
Seeding and Mulching Notes:
A. For areas to be treated after grading:
1. Seed areas after grading at proper season.
2. Utilize a seed mix of 70% Hard Fescue, 20% Perennial Ryegrass, 10% Kentucky Blue (Nassau or Challenger). Apply at 4 lbs. per 1000 S.F.
3. Treat areas with fiber mulch.

WETLAND PLANTING NOTES
A planting plan calling for a variety of submergent and emergent plants is provided as shown on this sheet (Sheet C-6). These will be planted randomly within suitable areas to approximate natural conditions. Preparation will include providing a 6 inch layer of in-situ topsoil which is clay based and highly impervious but rich in nitrogen and phosphorus. Planting will be by seed, by plugs, container grown plants or nursery plants which will be delivered baled and burlapped.
Ensure that the planting area is regularly graded with no serious undulations which can cause problems with watering after planting. Pre-irrigate the site before planting to ensure the entire soil profile is saturated.
After area to be seeded dries to a slightly moist condition, mix and spread seed using a mechanical seeder. Rake to cover seed with 1/4" of soil.
Plant plugs using the "Water Planting Method" - Flood the area to a depth of 2-4 inches. Dig the holes using a plug planter or a pointed shovel and place the plug in the hole, stamp the soil lightly around it. Let the standing water evaporate off down to saturation with no standing water before allowing more water into the system. Depending on climate and daily maximum temperatures, this may take from 5-10 days. Plugs should be planted about 18-20 inches apart. At this spacing, the plugs will grow together in one growing season. Plugs should be planted in the spring or the summer.
After planting, care must be taken not to drown the plants. Over the course of the first growing season, the level of the water in the wetland should be slowly increased. This will encourage the growth of the above ground biomass. The watering frequency should be based on rainfall and daily maximum temperatures. Generally, water should be filled to a 2-3 inch level then drained down naturally for the first month after planting. Drainage time should take about 1 week to 10 days. Refill the system for 15 to 20 days before draining again by controlling outlet level. During the second month, increase the filled level to about 6-8 inches by controlling outlet level. Use the same time frame as the first month. After that let natural variation of water level take place. The main factor is to keep the filled water level so that a majority of the plants need to have at least one quarter to one third of their tops above the waterline. Again, this allows the plants to "breathe."
Weed control will be necessary for the first growing season. Weeds (including invasive species such as Phragmites or purple loosestrife) must be controlled using hand pulling or through the wicking of weeds with approved chemicals.
Control small gully formation or rills during the plant establishment phase of the project.



SWPPP BASIN #1 SECTION VISTA BOULEVARD (TOWN OWNED)

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

HERSHBERG & HERSHBERG
Consulting Engineers and Land Surveyors
18 Locust Street
Albany, New York 12203

ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, IS ILLEGAL.

REVISIONS

DATE	REMARKS
8/19/09 <td>TOWN COMMENTS RE-SUBMISSION</td>	TOWN COMMENTS RE-SUBMISSION
9/20/09 <td>CLAY LINER</td>	CLAY LINER
7/29/10 <td>TOWN COMMENTS RE-SUBMISSION</td>	TOWN COMMENTS RE-SUBMISSION
5/19/10 <td>TOWN COMMENTS RE-SUBMISSION</td>	TOWN COMMENTS RE-SUBMISSION
10/16/10 <td>SWM TOWN COMMENTS</td>	SWM TOWN COMMENTS
12/1/10 <td>SWM TOWN COMMENTS</td>	SWM TOWN COMMENTS

SWPPP BASIN #1 PLAN & DETAILS INFRASTRUCTURE - PHASE 1A
VISTA TECHNOLOGY CAMPUS
TOWN OF BETHEHEM
ALBANY COUNTY, STATE OF NEW YORK

RECEIVED
AUG 12 2011
Town of Bethlehem Planning Board