

New York State Department of Environmental Conservation  
625 Broadway  
Albany, NY 12233-4500  
Attn: Stephen Tomasik

Subject:

**Cricket Valley Energy Project, Dover, New York – Response to Comments on Revised Article 24 Wetlands Permit Application**

Dear Mr. Tomasik:

Date:  
August 13, 2012

In response to your July 18, 2012 request for additional information on the June 28, 2012 revised Article 24 wetland permit application for the subject Project, please find the following full-sized plans and supporting materials attached:

Contact:  
Fred Sellars

Phone:  
978.322.4517

Email:  
[frederick.sellars@arcadis-us.com](mailto:frederick.sellars@arcadis-us.com)

Our ref:  
MA001146.0013

- Landscape and Restoration Plans for the Project Development Area and former Rasco parcel.
- Landscape Details Plan.
- Preliminary Grading Plans for the Project Development Area and former Rasco parcel, which depict the proposed locations of temporary silt fencing.
- Preliminary Site Plan for the former Rasco parcel, which depicts the proposed locations of the three 1-foot x 3-foot turtle signs on the former Rasco parcel.
- Preliminary Typical Erosion and Sediment Control Notes & Details, which provides specifications for the silt fencing along with measures to avoid and minimize impacts to protected species, including a drawing of the turtle warning signs.
- Signage Plan, which depicts the proposed location of the 2.5-foot x 4-foot turtle warning sign at the site entrance.
- Details Plan, which provides a drawing of the 2.5-foot x 4-foot turtle warning sign to be located at the site entrance and protected species notes.

**Imagine the result**

- A description and map delineating the approximately 79-acre portion of the Project property proposed to be permanently preserved through incorporation of a conservation easement, permanent deed restriction or donation into a conservation trust. A sample conservation easement agreement is also provided.
- A narrative on the construction sequence and schedule, detailing when impacts and restoration will occur and in what sequence.

Please do not hesitate to contact me with any questions or comments on the attached materials or if any further information is required

Thank you again for your assistance.

Sincerely,

ARCADIS U.S., Inc.



Frederick M. Sellars  
Vice President

Copies:

Heather Gierloff/NYSDEC

Lisa Masi/NYSDEC

Lynn Gresock/ARCADIS

Matt Martin/Cricket Valley Energy Center

**LANDSCAPE LEGEND:**

- WASTE EXCAVATION LIMITS
- WETLAND FILL AREA
- EXISTING NYSDEC 100' ADJACENT AREA BOUNDARY
- PROPERTY LINE
- EXISTING WETLAND
- SEED MIX NAME
- SEED MIX AREA

**RESTORATION LEGEND:**

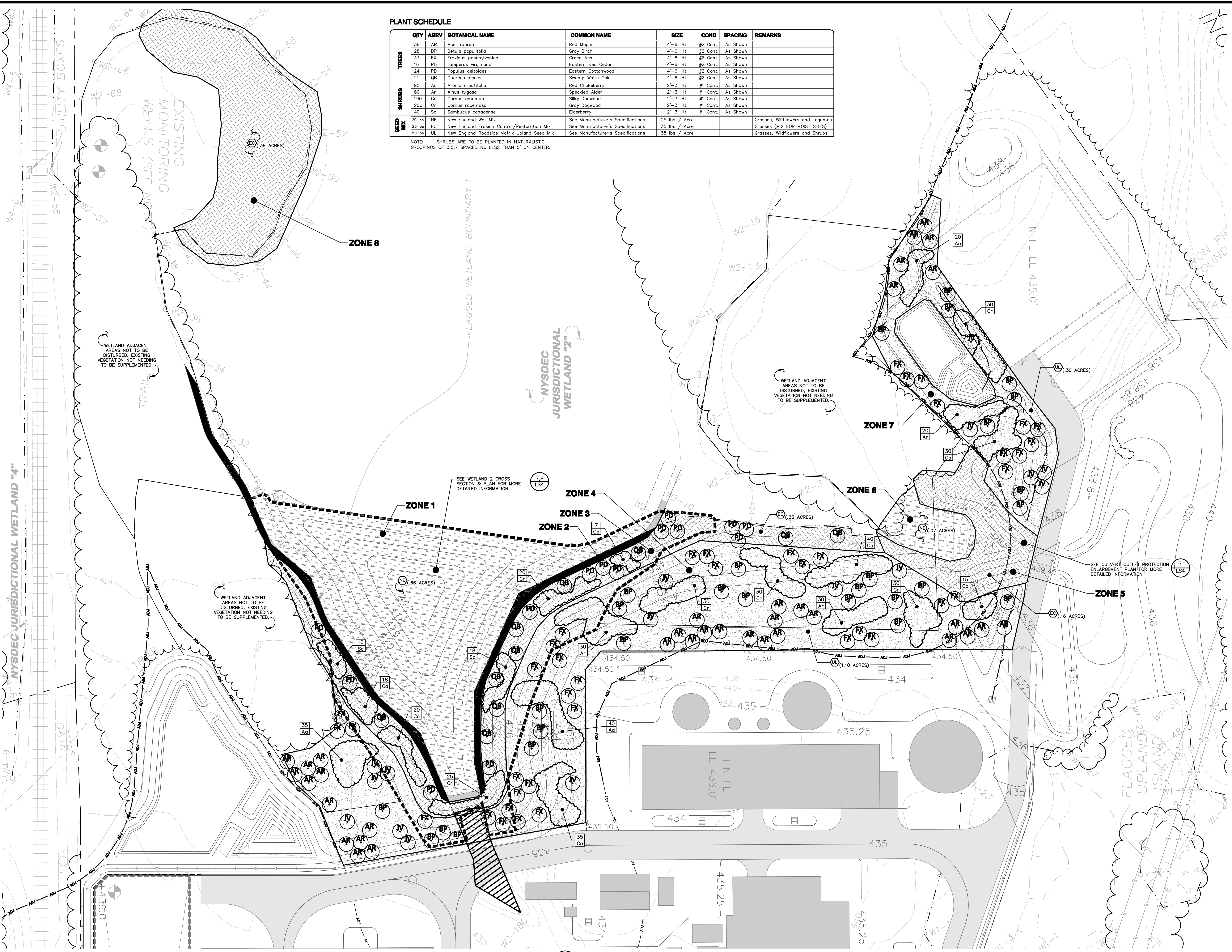
- SILT FENCE DURING RESTORATION STAGE
- EXISTING CONTOURS
- RESTORATION CONTOURS AFTER REMOVAL OF STONE & INSTALLATION OF TOPSOIL

**PLANT SCHEDULE**

QTY	ABRV	BOTANICAL NAME	COMMON NAME	SIZE	COND	SPACING	REMARKS
36	AR	Acer rubrum	Red Maple	4'-6" Ht.	#2 Cont.	As Shown	
28	BP	Betula populifolia	Gray Birch	4'-6" Ht.	#2 Cont.	As Shown	
43	FX	Fraxinus pennsylvanica	Green Ash	4'-6" Ht.	#2 Cont.	As Shown	
16	PD	Juniperus virginiana	Eastern Red Cedar	4'-6" Ht.	#2 Cont.	As Shown	
24	PD	Populus deltoides	Eastern Cottonwood	4'-6" Ht.	#2 Cont.	As Shown	
14	QB	Quercus bicolor	Swamp White Oak	4'-6" Ht.	#2 Cont.	As Shown	
95	Aa	Aronia arbutifolia	Red Chokeberry	2'-3" Ht.	#1 Cont.	As Shown	
80	Ar	Alnus rugosa	Speckled Alder	2'-3" Ht.	#1 Cont.	As Shown	
190	Ca	Cornus amomum	Silky Dogwood	2'-3" Ht.	#1 Cont.	As Shown	
200	Cr	Cornus racemosa	Gray Dogwood	2'-3" Ht.	#1 Cont.	As Shown	
40	Sc	Sambucus canadensis	Elderberry	2'-3" Ht.	#1 Cont.	As Shown	
20 lbs	NE	New England Wet Mix	See Manufacturer's Specifications	25 lbs / Acre			Grosses, Wildflowers and Legumes
25 lbs	EC	New England Erosion Control/Restoration Mix	See Manufacturer's Specifications	35 lbs / Acre			Grosses (MIX FOR MOST SITES)
50 lbs	UL	New England Roadside Matrix Upland Seed Mix	See Manufacturer's Specifications	35 lbs / Acre			Grosses, Wildflowers and Shrubs

NOTE: SHRUBS ARE TO BE PLANTED IN NATURALISTIC GROUPINGS OF 3,5,7 SPACED NO LESS THAN 5' ON CENTER.

- RESTORATION PLANTING ZONES:**
- ZONE 1: OPEN WATER (REFER TO SHEET 2 OF 3 FOR CROSS-SECTION):** OPEN WATER AREA TO BE CREATED WITHIN AREA W2-A BY EXCAVATION OF NON-NATIVE SEDIMENT. REPRESENTS 0.66 ACRES IN SIZE FROM CONTOUR 422' - 417'. AREA TO BE BROADCAST SEEDED WITH NEW ENGLAND WET SEED MIX AT A RATE OF 15 POUNDS PER ACRE. OPEN WATER AREA ALLOWED TO NATURALLY REVEGETATE.
  - ZONE 2: WETLAND CREATION AREA:** REPRESENTS 0.08 ACRES OF EMERGENT ZONE CREATED ALONG THE PERIMETER OF AREA W2-A (FROM APPROXIMATE FLAG W2-10 TO FLAG W2-30) TO BE BROADCAST SEEDED WITH NEW ENGLAND WET SEED MIX AT A RATE OF 15 POUNDS PER ACRE.
  - ZONE 3: WETLANDS ADJACENT AREA TO BE RESTORED/REPLANTED DUE TO WASTE EXCAVATION:** REPRESENTS APPROXIMATELY 0.33 ACRES OF WETLAND ADJACENT AREA PROPOSED TO BE RESTORED BY WASTE DEBRIS REMOVAL AND EXCAVATION; TO BE BROADCAST SEEDED WITH NEW ENGLAND EROSION CONTROL/RESTORATION SEED MIX AT A RATE OF 35 POUNDS PER ACRE & TO BE REPLANTED/RESTORED WITH NATIVE TREE/SHRUB SPECIES AT THE RATE OF 436 SPECIMENS PER ACRE.
    - TREES (24)
      - 14 - Populus deltoides, Eastern Cottonwood
      - 10 - Quercus bicolor, Swamp White Oak
    - SHRUBS (118)
      - 43 - Cornus racemosa, Gray Dogwood
      - 45 - Cornus amomum, Silky Dogwood
      - 28 - Sambucus canadensis, Elderberry
  - ZONE 4: WETLANDS ADJACENT AREA TO BE EVALUATED FOR SELECTIVE RESTORATION/REPLANTING:** REPRESENTS 1.10 ACRES (APPROXIMATELY 08 OUTSIDE WETLAND ADJACENT AREA) AREAS OF EXISTING SHRUB/TREE COVER ON MODERATE SLOPES WITHIN THE PROPOSED LIMITS OF CONSTRUCTION GROUND DISTURBANCE. TO BE BROADCAST SEEDED WITH NEW ENGLAND ROADSIDE MATRIX UPLAND SEED MIX AT A RATE OF 35 POUNDS PER ACRE & RE-VEGETATION WITH APPROPRIATELY SIZED NATIVE TREE/SHRUB SPECIES AT THE RATE OF 436 SPECIMENS PER ACRE.
    - TREES (80)
      - 30 - Fraxinus pennsylvanica, Green Ash
      - 20 - Betula populifolia, Gray Birch
      - 30 - Acer rubrum, Red Maple
    - SHRUBS (330)
      - 90 - Cornus racemosa, Gray Dogwood
      - 90 - Cornus amomum, Silky Dogwood
      - 75 - Alnus rugosa, Speckled Alder
      - 75 - Aronia arbutifolia, Red Chokeberry
  - ZONE 5: WETLANDS ADJACENT AREA TO BE RESTORED/REPLANTED DUE TO FACILITY CONSTRUCTION:** REPRESENTS 0.16 ACRES (APPROXIMATELY 04 ACRES OUTSIDE WETLAND ADJACENT AREA) IN AREAS PROPOSED TO BE DISTURBED BY FACILITY CONSTRUCTION AS WELL AS AROUND PROPOSED BIO-RETENTION BASINS. TO BE BROADCAST SEEDED WITH NEW ENGLAND EROSION CONTROL/RESTORATION SEED MIX AT A RATE OF 35 POUNDS PER ACRE & TO BE REPLANTED/RESTORED WITH NATIVE TREE/SHRUB SPECIES AT A RATE OF 436 SPECIMENS PER ACRE.
    - TREES (14)
      - 10 - Populus deltoides, Eastern Cottonwood
      - 4 - Quercus bicolor, Swamp White Oak
    - SHRUBS (82)
      - 35 - Cornus racemosa, Gray Dogwood
      - 35 - Cornus amomum, Silky Dogwood
      - 12 - Sambucus canadensis, Elderberry
  - ZONE 6: WETLANDS ADJACENT AREA TO BE RESTORED/REPLANTED DUE TO WASTE EXCAVATION:** REPRESENTS 0.7 ACRES OF WETLAND ADJACENT AREA PROPOSED TO BE DISTURBED FOR CONSTRUCTION OF THE PROPOSED BOX CULVERT; BROADCAST SEEDED WITH NEW ENGLAND WET SEED MIX AT A RATE OF 15 POUNDS PER ACRE.
  - ZONE 7: UPLAND AREA FOR RESTORATION/REPLANTING:** REPRESENTS .30 ACRES ON MODERATE SLOPES OUTSIDE THE WETLAND ADJACENT AREA AND AROUND PROPOSED BIORETENTION BASIN. TO BE BROADCAST SEEDED WITH NEW ENGLAND ROADSIDE MATRIX UPLAND SEED MIX AT A RATE OF 35 POUNDS PER ACRE. RE-VEGETATION WITH APPROPRIATELY SIZED NATIVE TREE/SHRUB SPECIES AT THE RATE OF 436 SPECIMENS PER ACRE.
    - TREES (24)
      - 10 - Fraxinus pennsylvanica, Green Ash
      - 8 - Betula populifolia, Gray Birch
      - 6 - Acer rubrum, Red Maple
    - SHRUBS (100)
      - 30 - Cornus racemosa, Gray Dogwood
      - 30 - Cornus amomum, Silky Dogwood
      - 20 - Alnus rugosa, Speckled Alder
      - 20 - Aronia arbutifolia, Red Chokeberry
  - ZONE 8: WETLANDS ADJACENT AREA TO BE RESTORED/REPLANTED DUE TO WASTE EXCAVATION:** REPRESENTS 0.38 ACRES OF WETLAND ADJACENT AREA PROPOSED TO BE RESTORED BY WASTE DEBRIS REMOVAL AND EXCAVATION; FOR STABILIZATION, AREA TO BE BROADCAST SEEDED WITH NEW ENGLAND EROSION CONTROL/RESTORATION SEED MIX AT A RATE OF 15 POUNDS PER ACRE.



1 WETLAND RESTORATION PLAN  
SCALE: 1"=20'

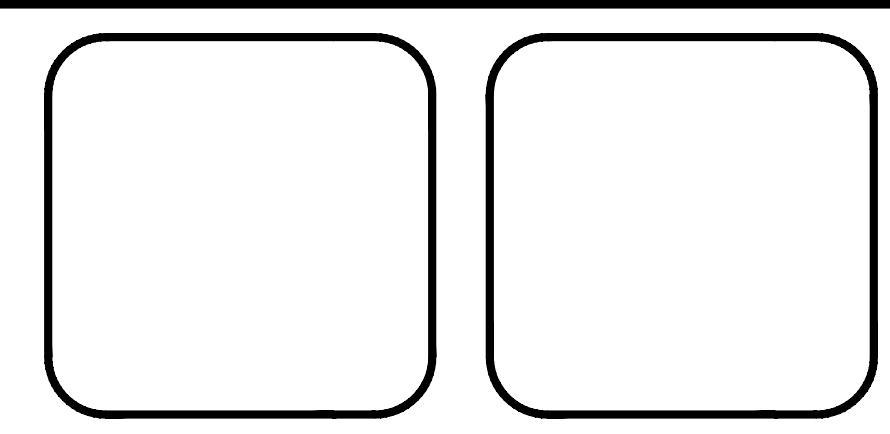
ISSUED FOR PRELIMINARY USE ONLY

PROJECT NAME  
CRICKET VALLEY ENERGY

DEVELOPER  
CRICKET VALLEY ENERGY CENTER, LLC.

OWNER OF RECORD  
HOWLANDS LAKE PARTNERS, LLC  
P.O. BOX 285  
MOUNT KISCO, NEW YORK 10549

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Engineers/Surveyors  
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Environmental Scientists  
Landscape Architects

**CHAZEN ENGINEERING, LAND SURVEYING**  
LANDSCAPE ARCHITECTURE CO., P.C.

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 Capital District Office: 547 River Street, Troy, New York 12180, Phone: (518) 273-0055  
 North Country Office: 100 Glen Street, Oneida, New York 13601, Phone: (518) 812-0013

REV.	DATE	DESCRIPTION

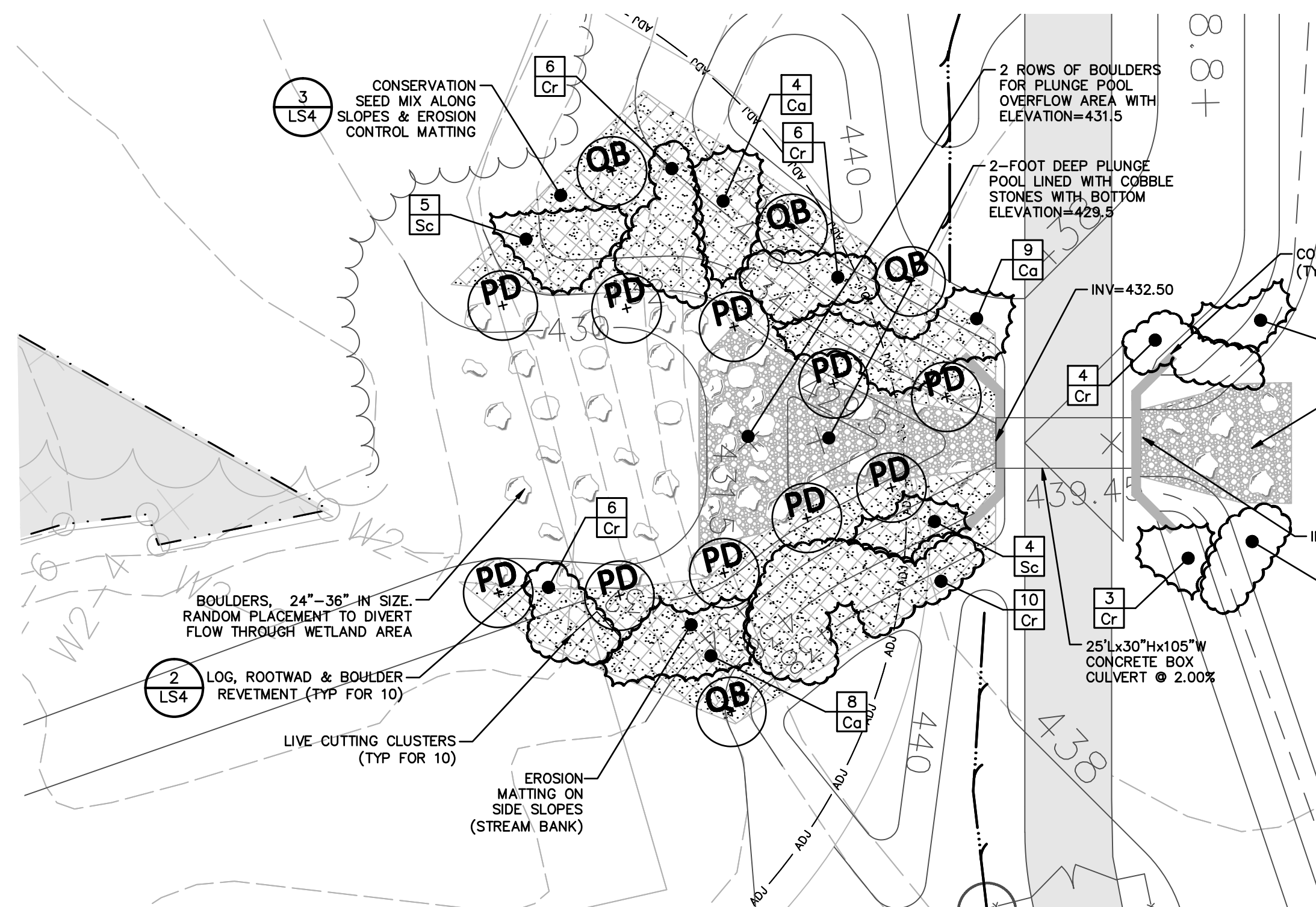
**CRICKET VALLEY ENERGY**

**WETLAND RESTORATION PLANTING AREA PLAN**

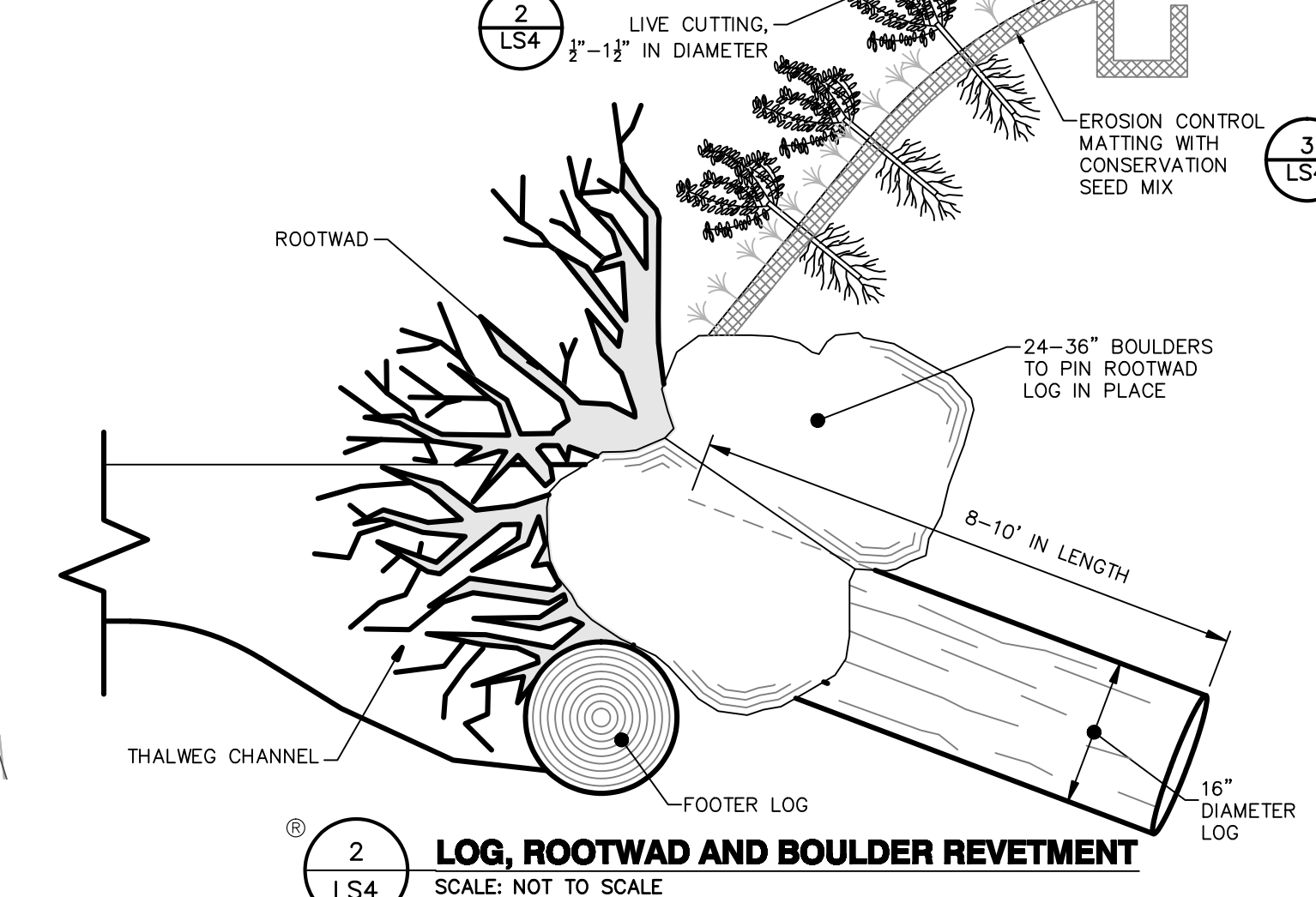
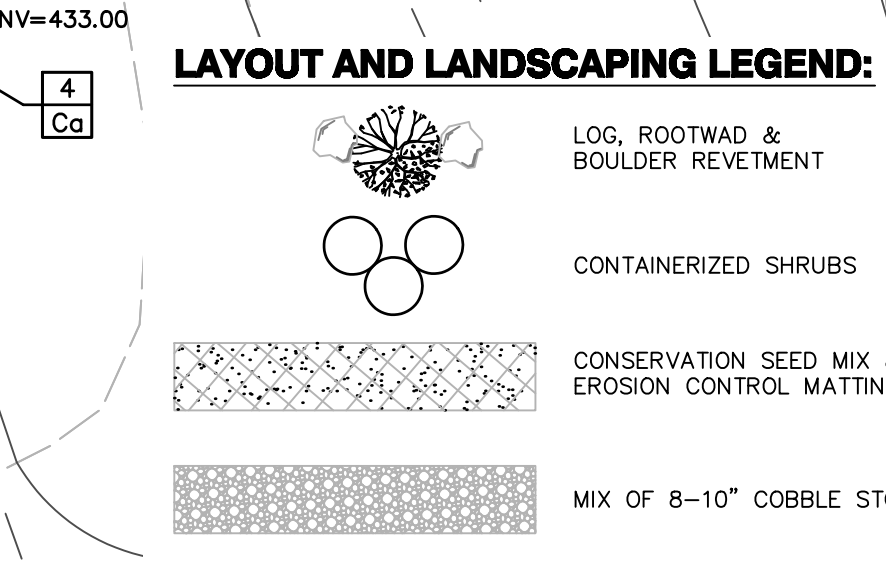
TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

drawn	checked
HPS	CL
date	scale
8/30/12	1"=30'
project no.	81001.00
sheet no.	LS3

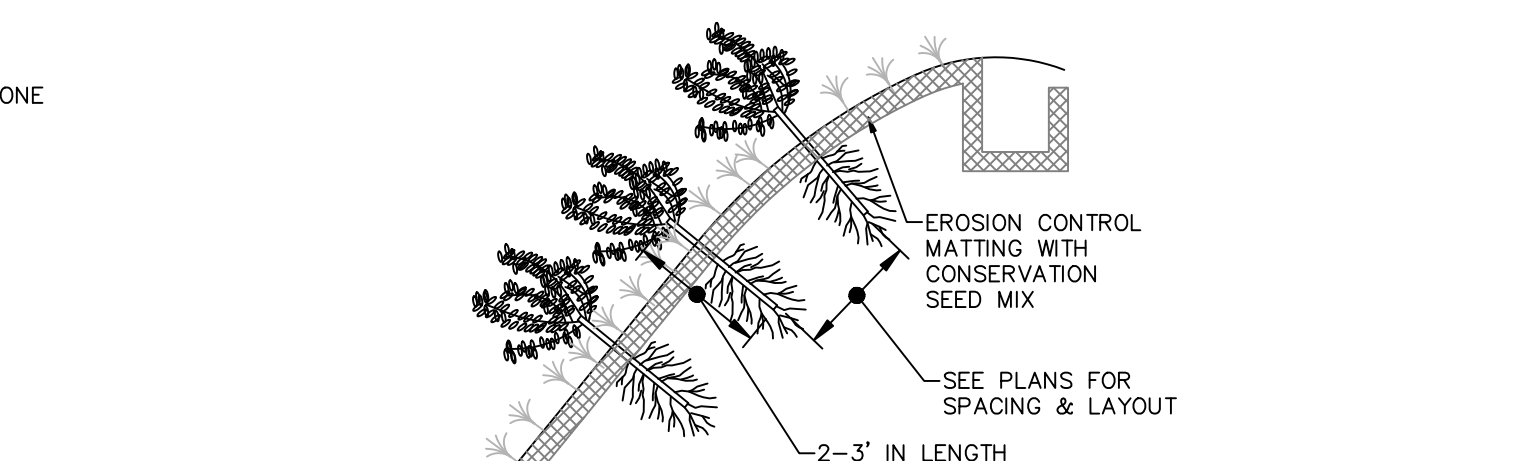
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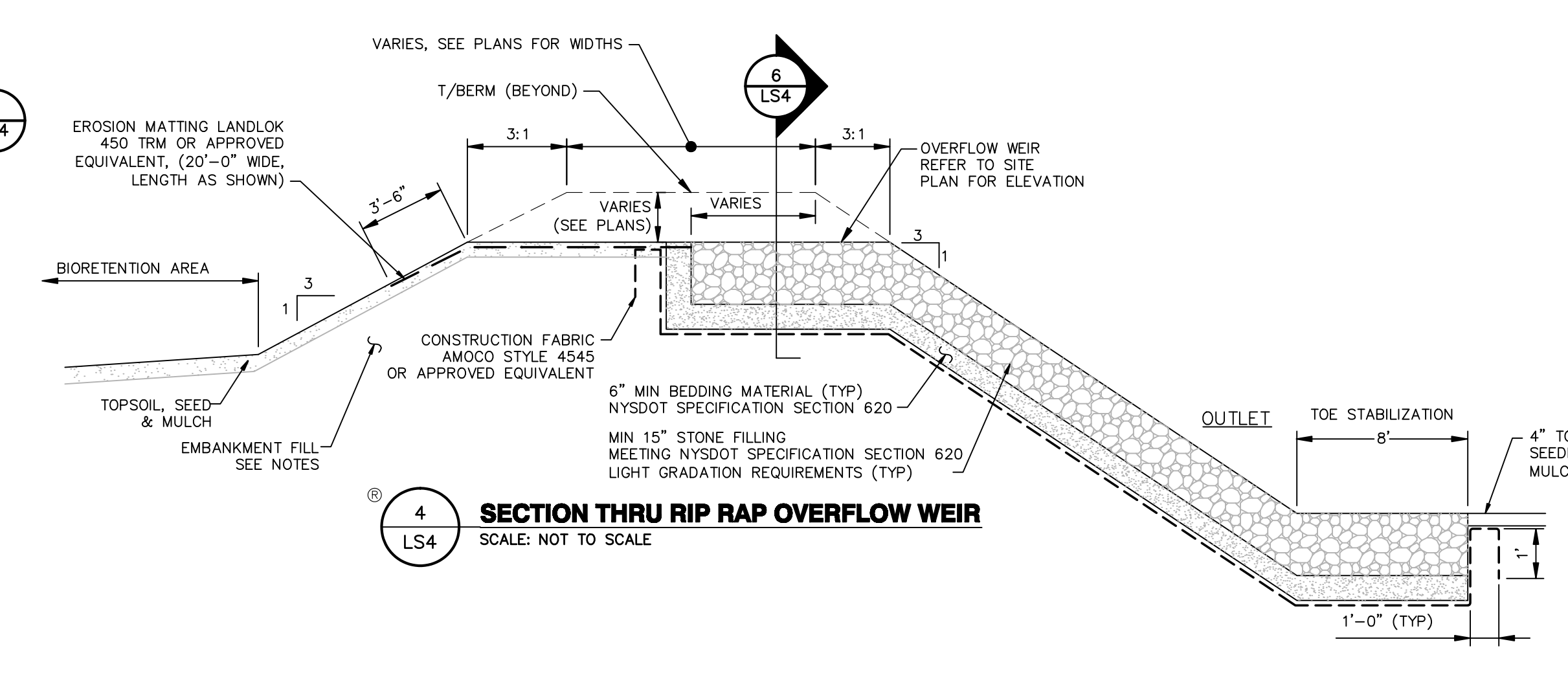
**1 CULVERT OUTLET PROTECTION ENLARGEMENT PLAN**  
SCALE: 1"=20'



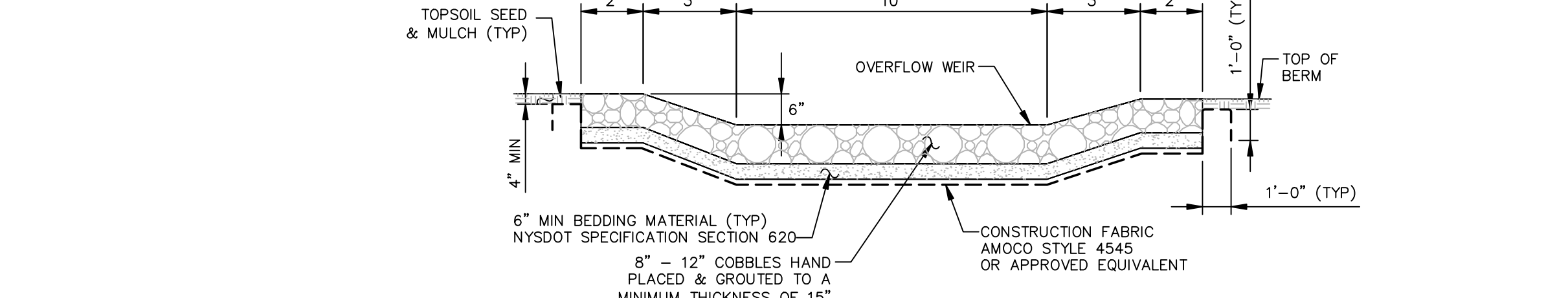
**2 LOG, ROOTWAD AND BOULDER REVETMENT**  
SCALE: NOT TO SCALE



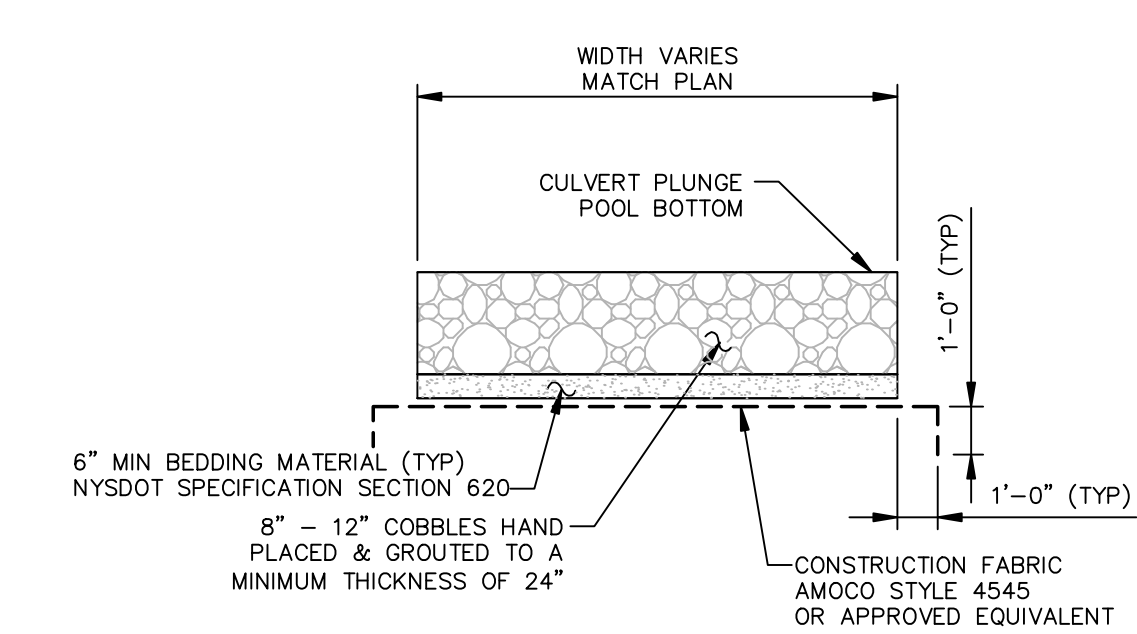
**3 LIVE CUTTING & SLOPE STABILIZATION**  
SCALE: NOT TO SCALE



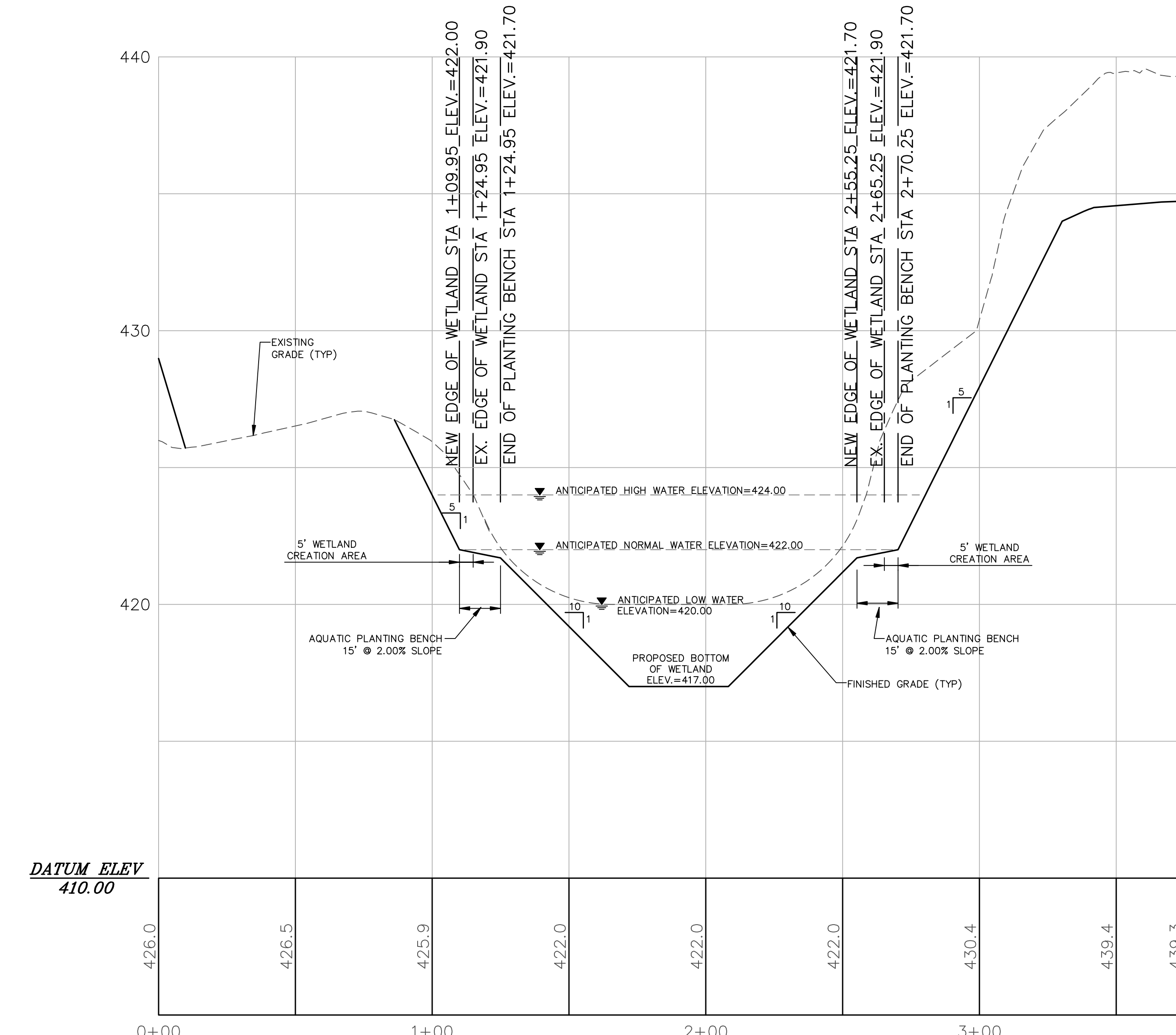
**4 SECTION THRU RIP RAP OVERFLOW WEIR**  
SCALE: NOT TO SCALE



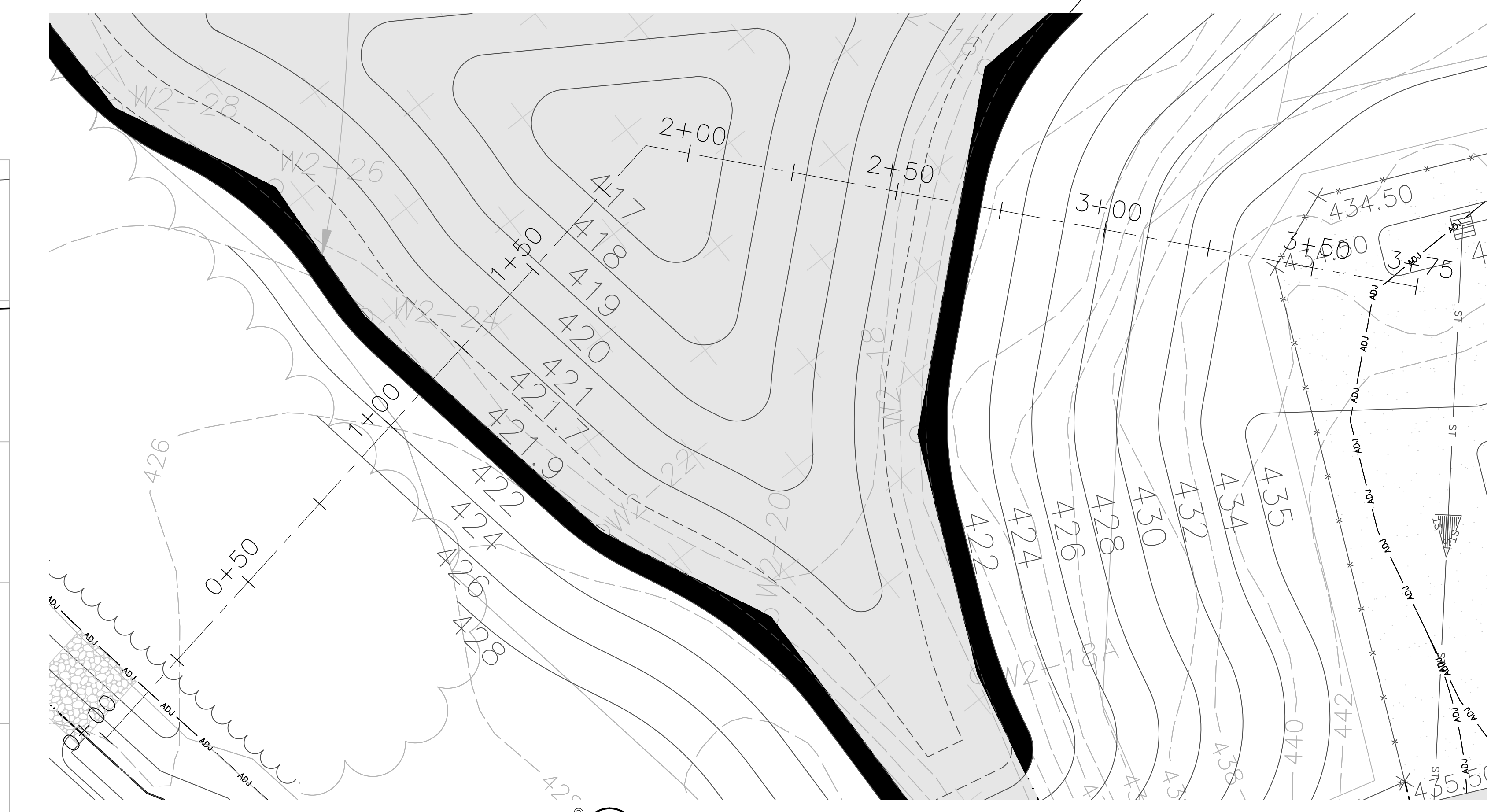
**5 SECTION THRU BIORETENTION AREA OVER FLOW WEIR**  
SCALE: NOT TO SCALE



**6 CULVERT PLUNGE POOL BOTTOM SECTION**  
SCALE: NOT TO SCALE



**7 WETLAND 2 CROSS SECTION**  
SCALE: 1"=20'



**8 WETLAND 2 PLAN**  
SCALE: 1"=20'

**OVERFLOW WEIR NOTES:**

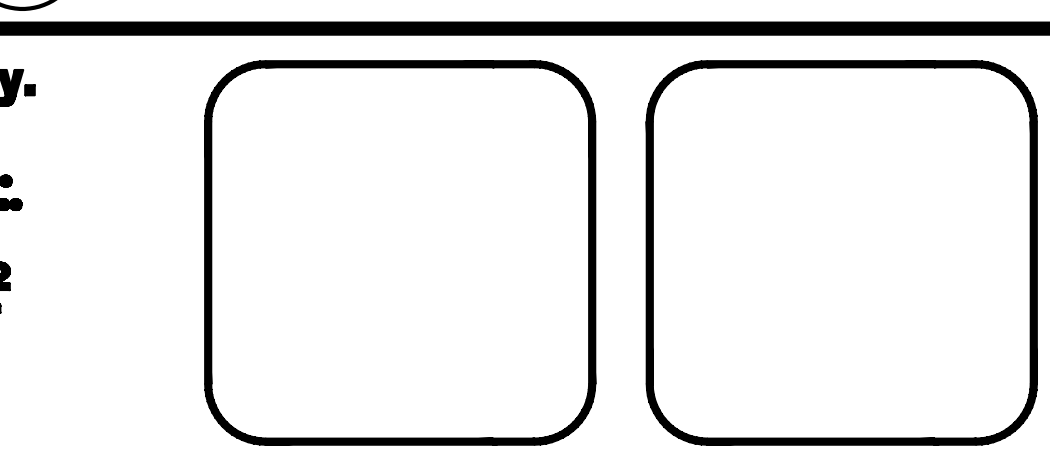
1. EMBANKMENT FILL FOR THE WEIR SHALL CONSIST OF SILT, CLAY, SAND AND GRAVEL WITH NO PARTICLES LARGER THAN 6 INCHES. IF SUITABLE, EXCAVATED ON SITE SOILS SHALL BE SELECTIVELY STOCKPILED FOR USE AS EMBANKMENT FILL IN AREAS DESIGNATED BY THE ENGINEER. SOIL SUITABLE FOR USE AS EMBANKMENT FILL SHALL HAVE AT LEAST 40 PERCENT BY WEIGHT FINER THAN THE NO. 200 SIEVE AND NO MORE THAN 15 PERCENT BY WEIGHT COARSER THAN THE NO. 4 SIEVE. THE FILL SHALL BE FREE OF VEGETATION, ORGANIC MATERIAL AND FROZEN SOIL.
2. ALL AREAS TO BE FILLED SHALL BE FIRST PREPARED BY STRIPPING ALL TOPSOIL AND REMOVING ALL SOFT, WET OR ORGANIC SOIL THAT CANNOT BE COMPACTED BY PROOFROLLING WITH A VIBRATOR ROLLER WEIGHING AT LEAST 10 TONS. PROOFROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER AND SOIL WHICH CANNOT BE COMPACTED SHALL BE REMOVED.
3. ALL FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS WHEN LOOSE AND BE COMPACTED TO A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM-1527. ROUGH UP SUBGRADE TO BLEND WITH FIRST LIFT.

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rev.	date	description

**CRICKET VALLEY ENERGY**

**WETLAND RESTORATION NOTES & DETAILS**

TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

drawn	checked
HPS	CL
8/30/12	AS SHOW
project no.	81001.00
sheet no.	LS4