

WESTCONNAUG BROOK RESTORATION

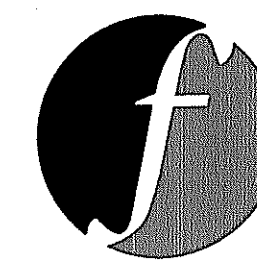
PLAINFIELD PIKE AND TUNK HILL ROAD · SCITUATE · RHODE ISLAND

RIDEM PRELIMINARY DETERMINATION APPLICATION PERMITTING DRAWINGS

PARCEL ID 53-0/000-00

FEBRUARY 2012, REVISED MAY 11, 2012

PREPARED FOR
**PROVIDENCE WATER
 SUPPLY BOARD**
 552 ACADEMY AVENUE
 PROVIDENCE, RI 02908



PREPARED BY
FUSS & O'NEILL

317 IRON HORSE WAY, SUITE 204
 PROVIDENCE, RI 02908
 401.861.3070
 www.fando.com

SHEET INDEX

SHEET No.	SHEET TITLE
GI-001	COVER SHEET
CN-001	LEGEND & GENERAL NOTES
CS-101	EXISTING CONDITIONS PLAN
CS-102 - CS-103	SITE ACCESS, DEMOLITION, AND EROSION CONTROL PLAN NO. 1 & 2
CS-104 - CS-105	SITE LAYOUT AND RESTORATION PLAN NO. 1 & 2
CD-501 - CD-502	DETAILS
CT-401	TEMPORARY TRAFFIC CONTROL PLAN

PROJECT TEAM

DESIGN ENGINEER

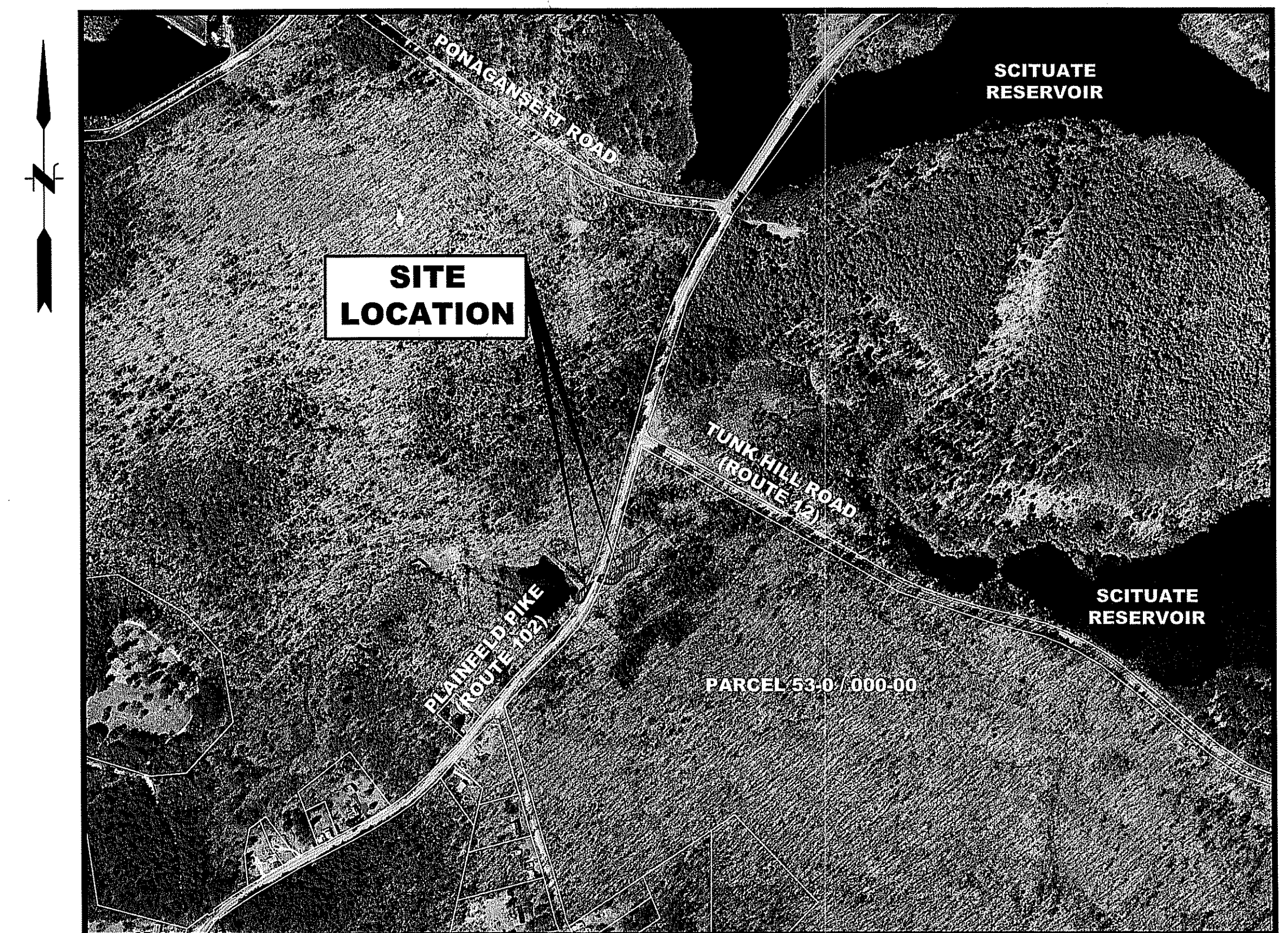
FUSS & O'NEILL, INC.
 317 IRON HORSE WAY, SUITE 204
 PROVIDENCE, RI 02908
 P: 401-861-3070

PERMITTING BIOLOGIST

NATURAL RESOURCE SERVICES, INC.
 P.O. BOX 311
 HARRISVILLE, RI 02830
 P: 401-568-7390

LAND SURVEYOR

NATIONAL SURVEYORS-DEVELOPERS, INC.
 42 HAMLET AVENUE
 WOONSOCKET, RI 02895
 P: 401-769-7779



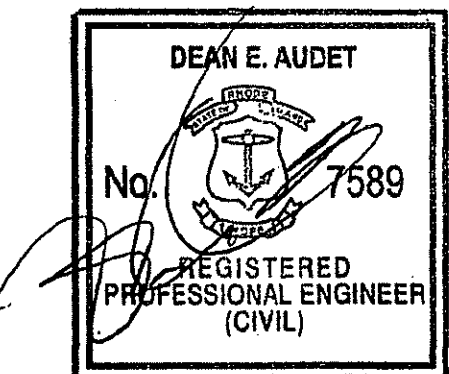
LOCATION MAP

SCALE: 1" = 500'

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JUN 06 2012 FILE # 12-0033
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Herbert

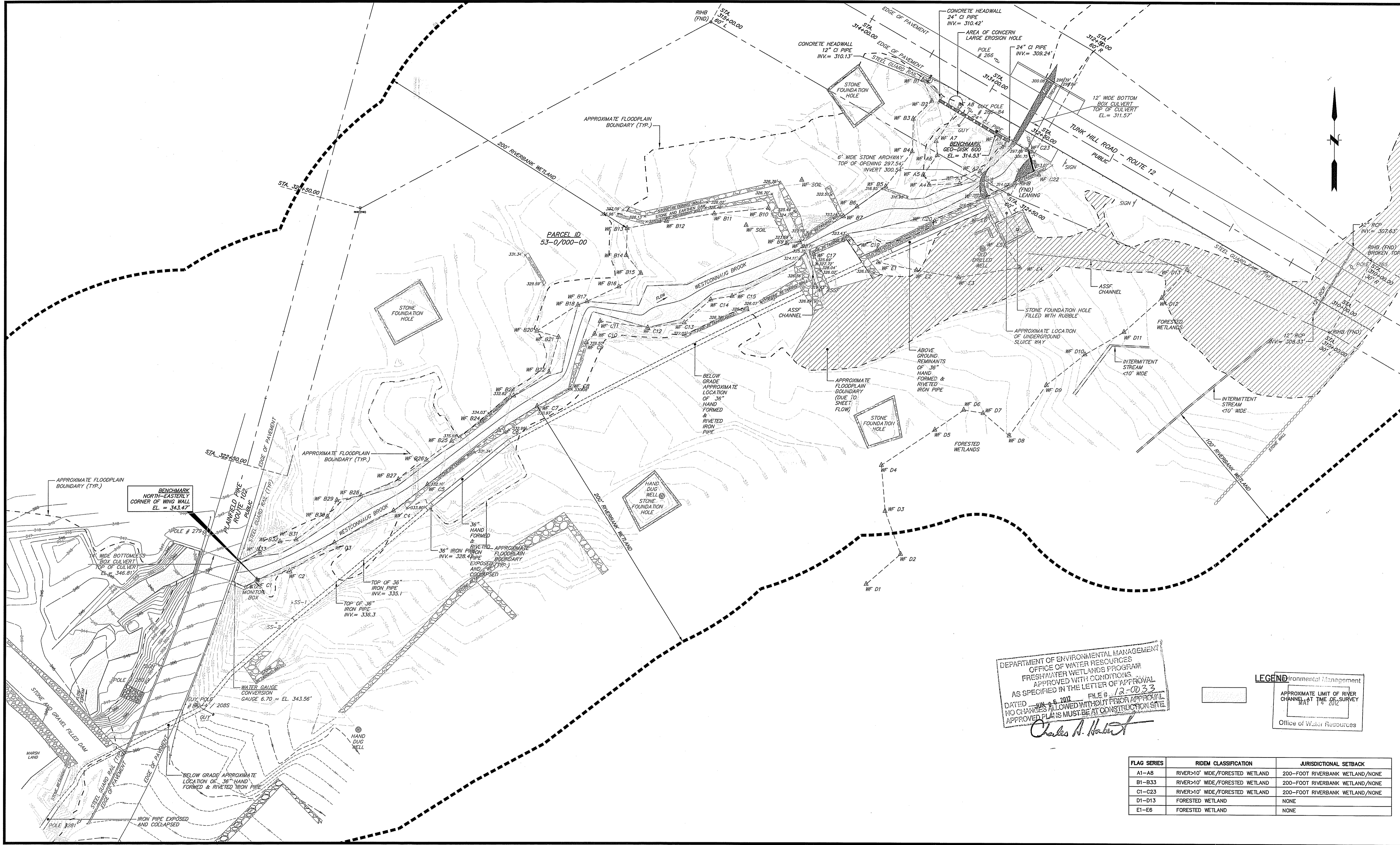
Office of Water Resources
 MAY 14 2012



PROJ. No.: 2003272C10
 DATE: FEBRUARY 2012

GI-001
 1 OF 10

File Path: J:\DWG\2003272\C10\2-EXISTING.dwg, Layout: CS-101, Plotted: Fri, May 11, 2012, 1:28 PM User: slions
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 LAYER STATE:



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Charles A. Herbert

LEGEND
 Environmental Management
 APPROXIMATE LIMIT OF RIVER CHANNEL AT TIME OF SURVEY
 MAY 14 2012
 Office of Water Resources

FLAG SERIES	RIDEM CLASSIFICATION	JURISDICTIONAL SETBACK
A1-A8	RIVER>10' WIDE/FORESTED WETLAND	200-FOOT RIVERBANK WETLAND/NONE
B1-B33	RIVER>10' WIDE/FORESTED WETLAND	200-FOOT RIVERBANK WETLAND/NONE
C1-C23	RIVER>10' WIDE/FORESTED WETLAND	200-FOOT RIVERBANK WETLAND/NONE
D1-D13	FORESTED WETLAND	NONE
E1-E6	FORESTED WETLAND	NONE

No.	DATE	RIDEM COMMENTS	DESCRIPTION	DESIGNER	REVIEWER
1.	05-10-12			DEA	DEA

SEAL

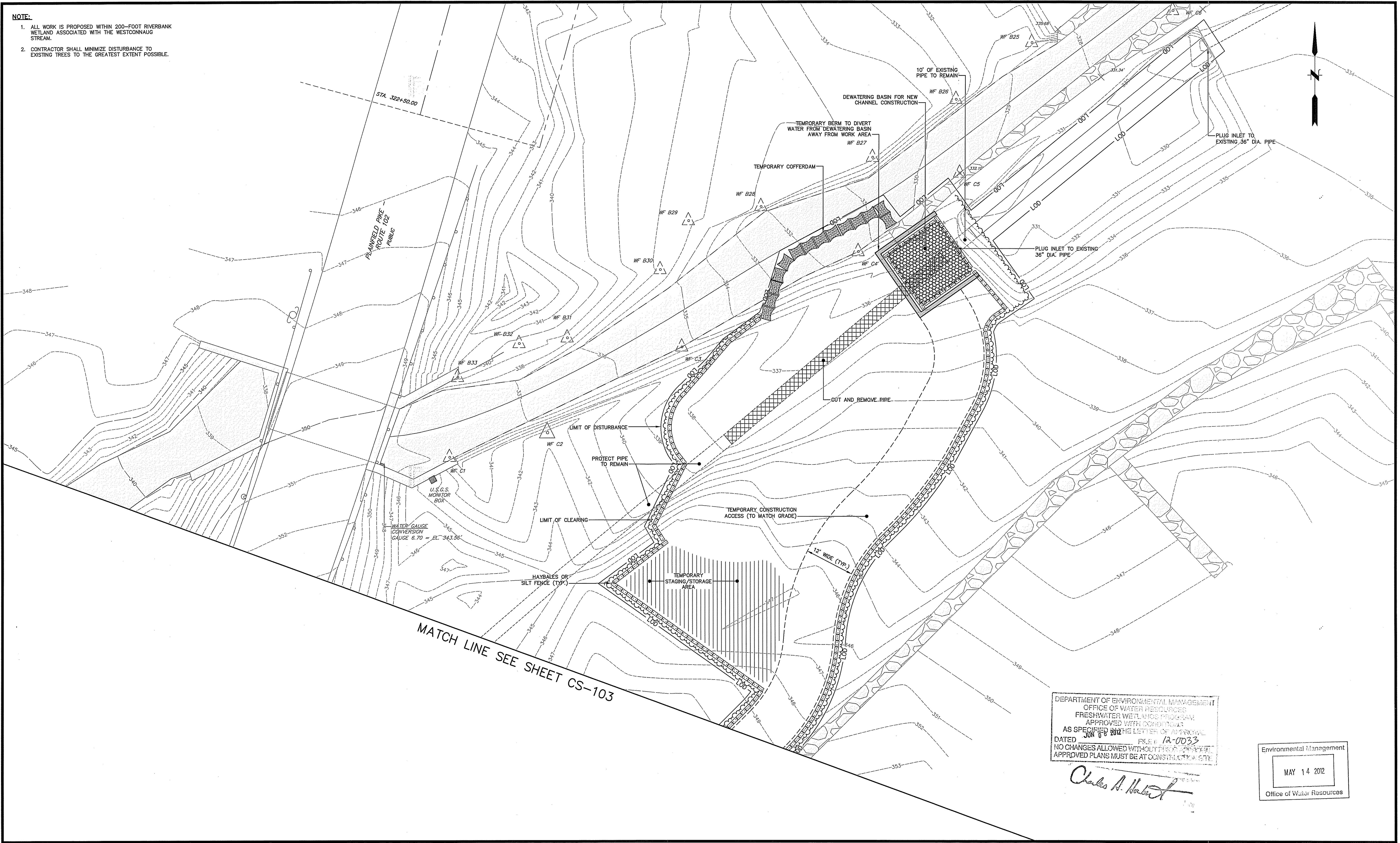
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PROVIDENCE WATER SUPPLY BOARD
 EXISTING CONDITIONS PLAN
 PLAINFIELD PIKE AND TUNK HILL ROAD
 SCITUATE RHODE ISLAND

PROJ. No.: 2003272.C10
 DATE: FEBRUARY 2012
CS-101
 3 OF 10

- NOTE:**
1. ALL WORK IS PROPOSED WITHIN 200-FOOT RIVERBANK WETLAND ASSOCIATED WITH THE WESTCONNAUG STREAM.
 2. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING TREES TO THE GREATEST EXTENT POSSIBLE.



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 APPROVED WITH CONDITIONS
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 DATED JUN 16 2012 FILE # 12-0033
 NO CHANGES ALLOWED WITHOUT THE APPROVAL OF THE
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Hester

Environmental Management
 MAY 14 2012
 Office of Water Resources

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SEAL

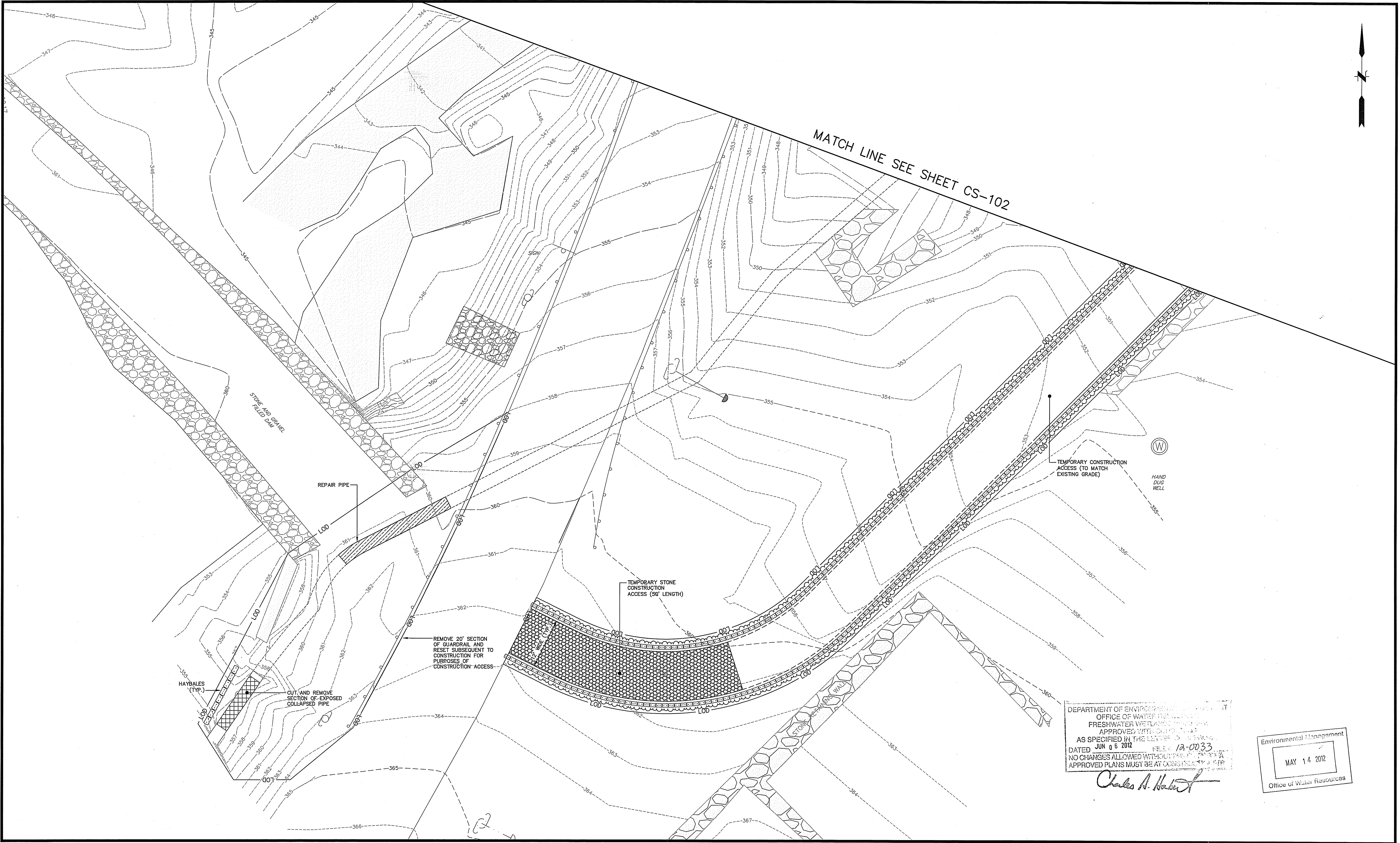
DEAN E. AUDET
 No. 7589
 REGISTERED PROFESSIONAL ENGINEER (CIVIL)

SCALE:
 HORIZ.: 1" = 10'
 VERT.:
 DATUM:
 HORIZ.:
 VERT.:
 GRAPHIC SCALE

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PROVIDENCE WATER SUPPLY BOARD
 SITE ACCESS, DEMOLITION, AND
 EROSION CONTROL PLAN NO. 1
 PLAINFIELD PIKE AND TUNK HILL ROAD
 SCITUATE RHODE ISLAND

PROJ. No: 2003272.C10
 DATE: FEBRUARY 2012
CS-102
 4 OF 10



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS
 APPROVED WITH CONDITIONS
 AS SPECIFIED IN THE LETTER OF APPROVAL
 DATED JUN 05 2012 FILE # 18-0033
 NO CHANGES ALLOWED WITHOUT THE DEPARTMENT'S APPROVAL
 APPROVED PLANS MUST BE AT COMPLIANCE WITH ACP

Charles A. Hackett

Environmental Management
 MAY 14 2012
 Office of Water Resources

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No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
1.	05-10-12	RIDEM COMMENTS	DEA	DEA

SEAL

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 DATUM:
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 GRAPHIC SCALE

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PROVIDENCE WATER SUPPLY BOARD
 SITE ACCESS, DEMOLITION, AND
 EROSION CONTROL PLAN NO. 2
 PLAINFIELD PIKE AND TUNK HILL ROAD
 SCITUATE RHODE ISLAND

PROJ. No.: 2003272.C10
 DATE: FEBRUARY 2012
CS-103
 5 OF 10

PLANTINGS

TREES

COMMON NAME	SCIENTIFIC NAME	HEIGHT
Pinus Strobus	Eastern White Pine	5-6' ht.

SHRUBS

COMMON NAME	SCIENTIFIC NAME	SPACING	HEIGHT
Speckled Alder	Alnus rugosa	8' o.c.	18"
Sweet Pepperbush	Clethra alnifolia	8' o.c.	18"
High Bush Blueberry	Vaccinium corymbosum	8' o.c.	18"
Swamp Azalea	Rhododendron viscosum	8' o.c.	18"

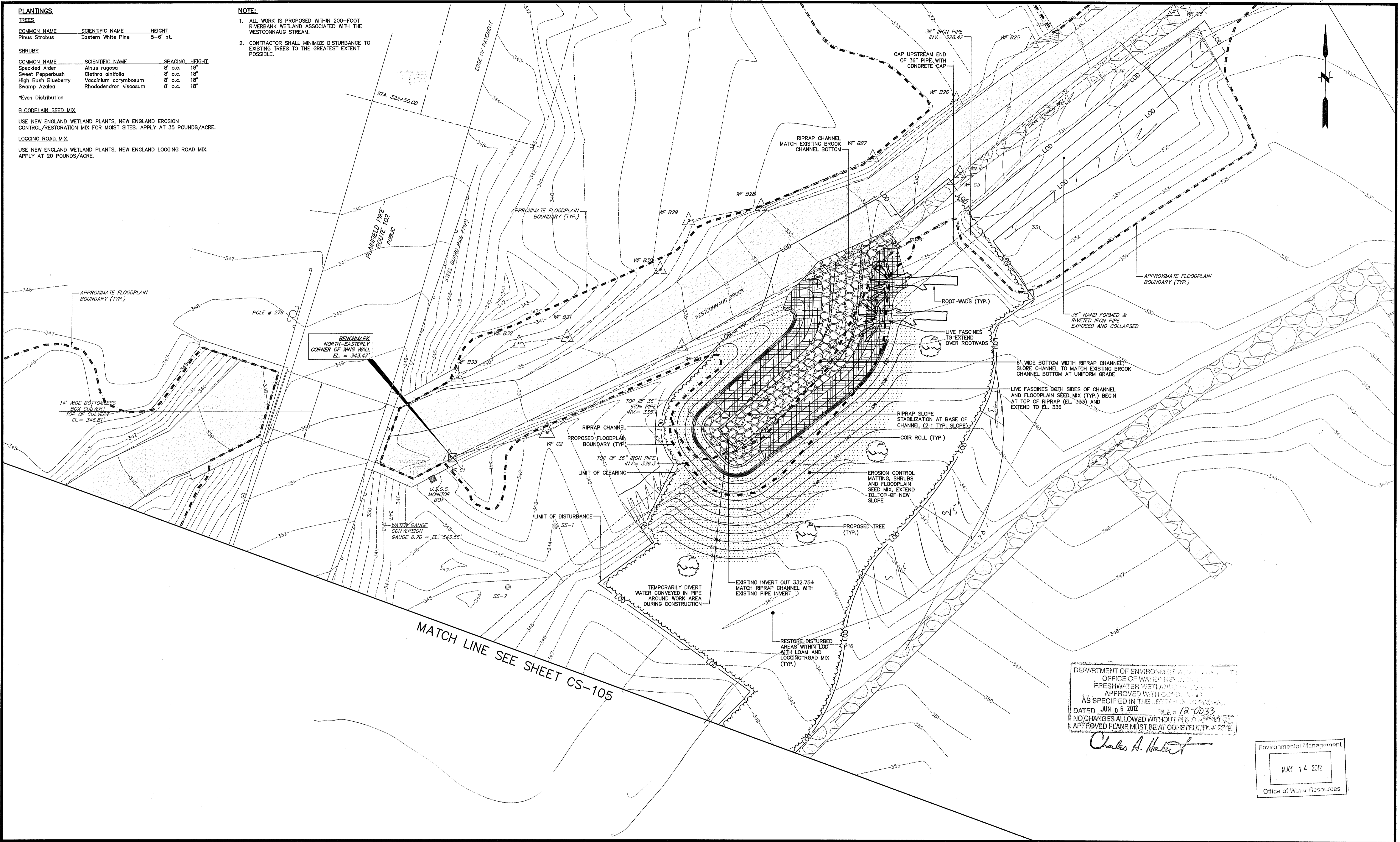
*Even Distribution

FLOODPLAIN SEED MIX
 USE NEW ENGLAND WETLAND PLANTS, NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR MOIST SITES. APPLY AT 35 POUNDS/ACRE.

LOGGING ROAD MIX
 USE NEW ENGLAND WETLAND PLANTS, NEW ENGLAND LOGGING ROAD MIX. APPLY AT 20 POUNDS/ACRE.

NOTE:

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- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING TREES TO THE GREATEST EXTENT POSSIBLE.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
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 DATED JUN 6 2012 FILE # 12-0033
 NO CHANGES ALLOWED WITHOUT PREVIOUSLY APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Haber

Environmental Management
 MAY 14 2012
 Office of Water Resources

File Path: J:\DWG\IP\2003272C10\42-fockland\Plan\2003272C10_SITP01.dwg, Layout: CS-104, Plotted: Fri, May 11, 2012 - 1:28 PM User: siron
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No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
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SEAL

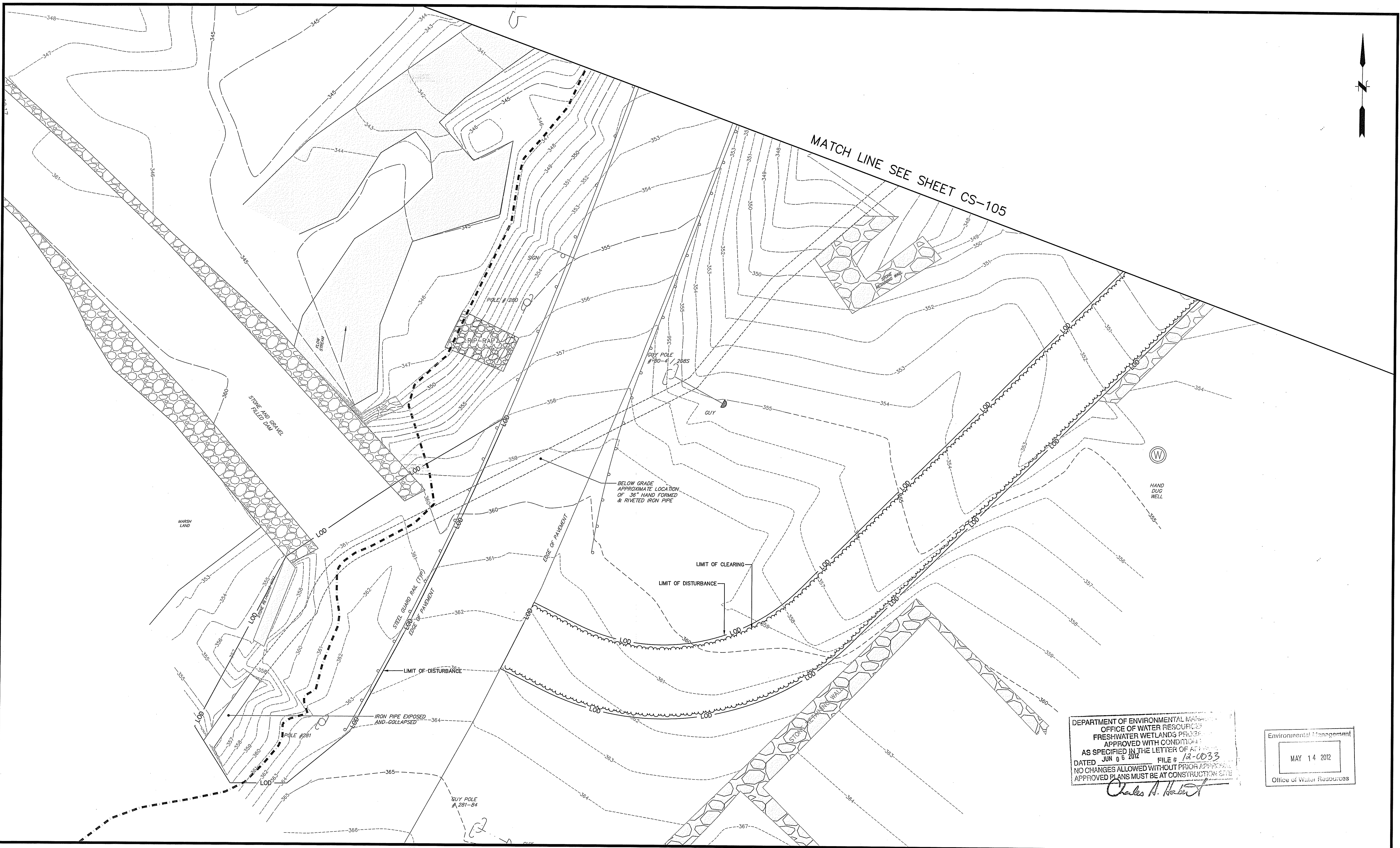
DEAN E. AUDET
 No. 7589
 REGISTERED PROFESSIONAL ENGINEER (CIVIL)

SCALE:
 HORZ.: 1" = 10'
 VERT.:
 DATUM:
 HORZ.:
 VERT.:
 GRAPHIC SCALE

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PROVIDENCE WATER SUPPLY BOARD
 SITE LAYOUT AND RESTORATION PLAN NO. 1
 PLAINFIELD PIKE AND TUNK HILL ROAD
 SCITUATE RHODE ISLAND

PROJ. No.: 2003272.C10
 DATE: FEBRUARY 2012
CS-104
 6 OF 10



MATCH LINE SEE SHEET CS-105

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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FRESHWATER WETLANDS PROGRAM
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Charles A. Horvath

Environmental Management
MAY 14 2012
Office of Water Resources

File Path: J:\DWG\2003272C10-STP01.dwg, Layout: CS-105, Plotted: Fri, May 11, 2012 - 1:28 PM, User: alrons
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No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
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SEAL

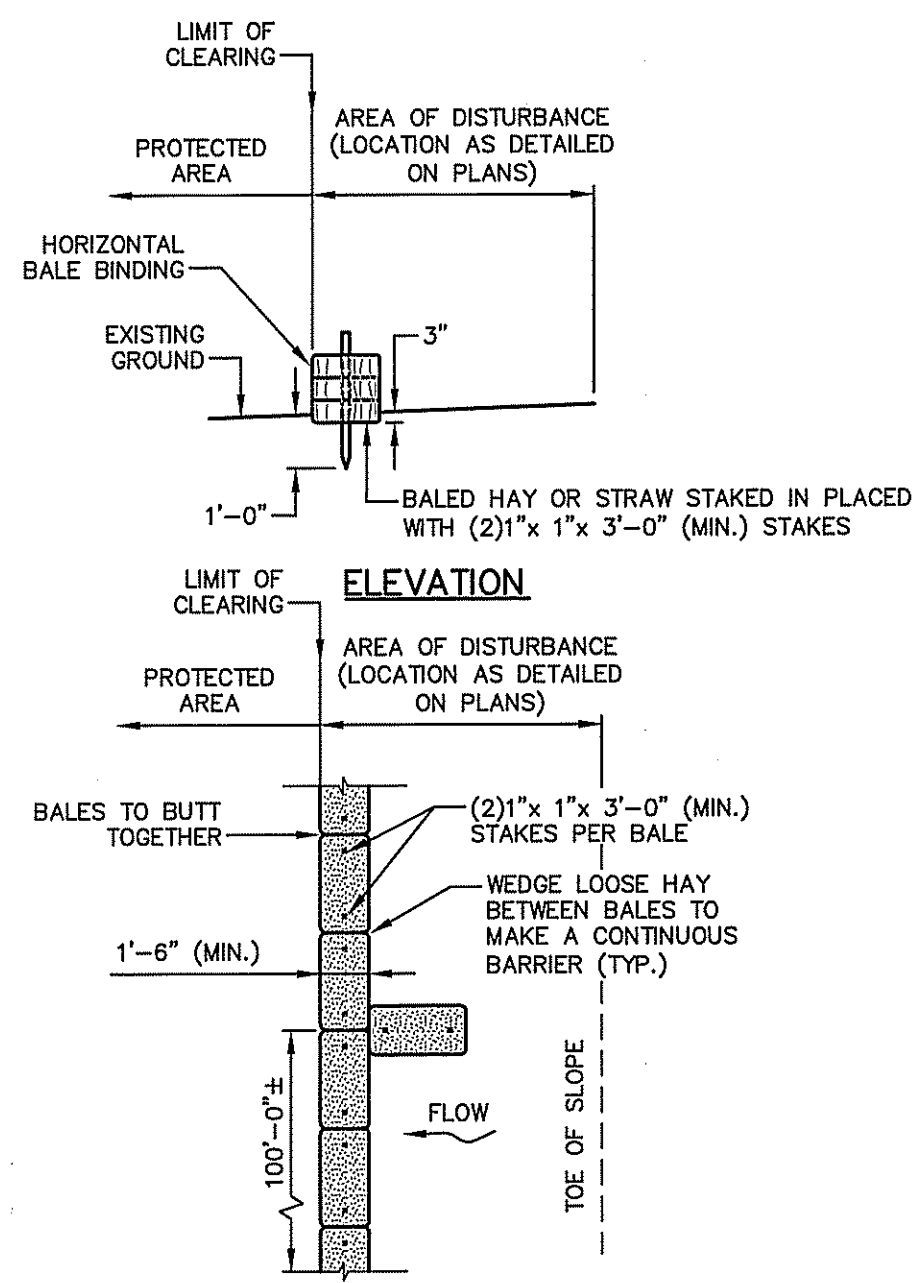
DEAN E. AUDET
No. 7589
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DATUM:
HORZ.:
VERT.:
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GRAPHIC SCALE

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PROVIDENCE WATER SUPPLY BOARD
SITE LAYOUT AND RESTORATION PLAN NO. 2
PLAINFIELD PIKE AND TUNK HILL ROAD
SCITUATE RHODE ISLAND

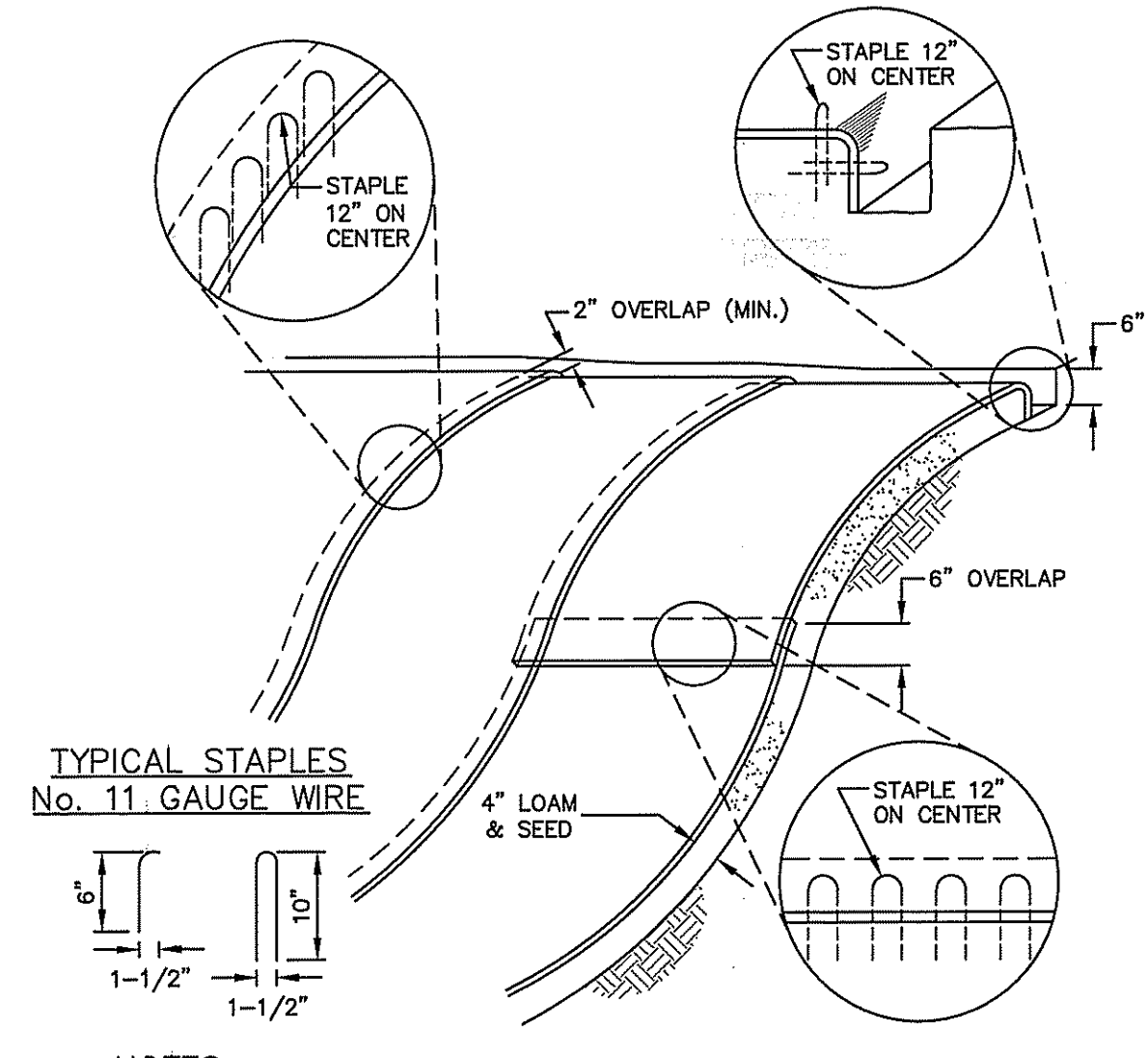
PROJ. No.: 2003272.C10
DATE: FEBRUARY 2012
CS-105
7 OF 10



NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
2. TO BE USED WHERE THE EXISTING GROUND SLOPES AWAY FROM THE HIGHWAY EMBANKMENT AS CALLED FOR ON PLANS.
3. AT APPROXIMATE 100'-0" INTERVALS A BALE OF HAY IS TO BUTT PERPENDICULARLY.

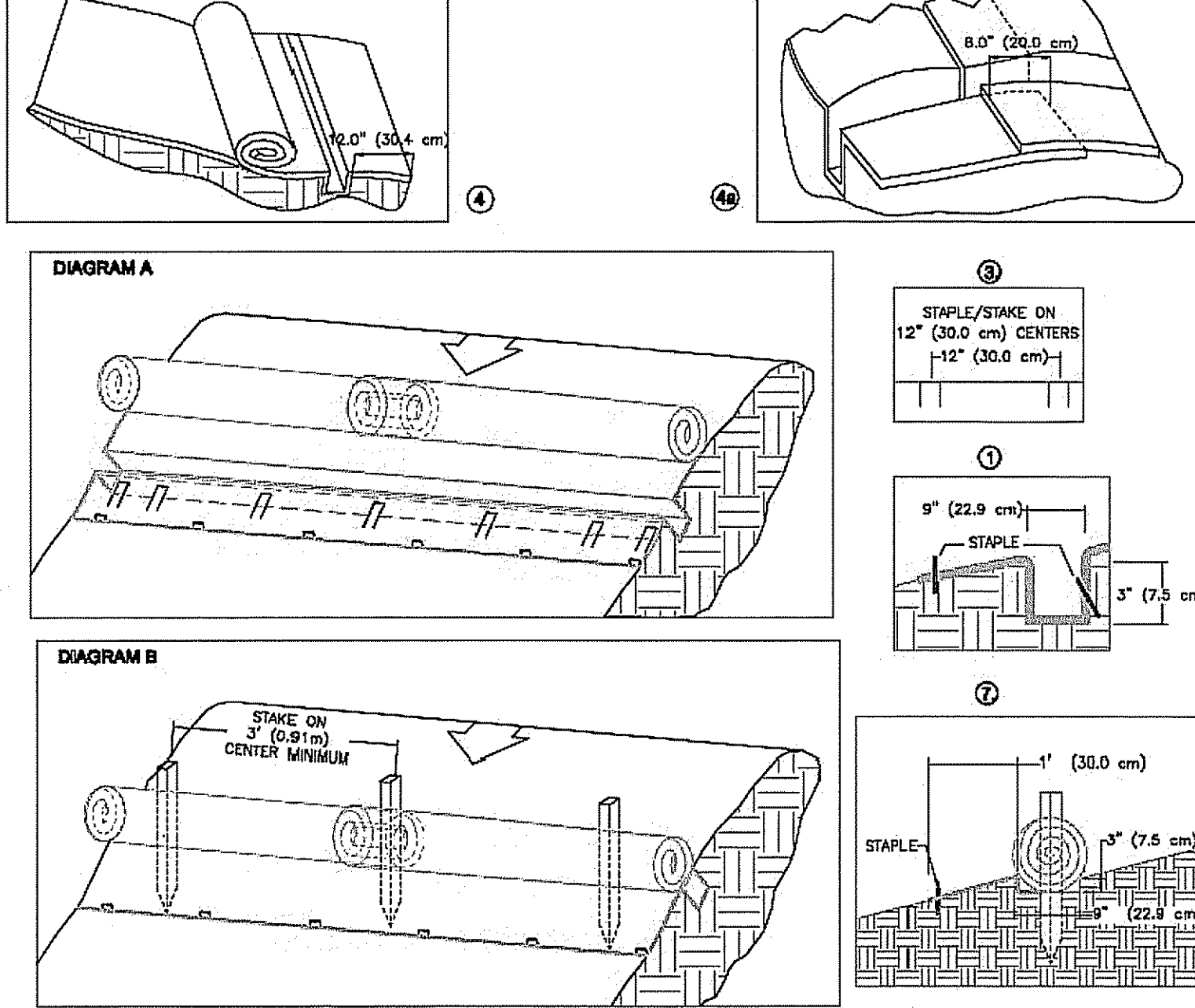
BALED HAY EROSION CHECK
(R.I. STD. 9.1.0)
NOT TO SCALE



NOTES:

1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. ROLL THE BLANKET DOWN THE SLOPE IN THE DIRECTION OF THE WATER FLOW.
3. THE EDGES OF BLANKETS MUST BE STAPLED WITH APPROXIMATE 14-INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
4. WHEN BLANKETS MUST BE SPLICED, PLACE BLANKET END OVER END WITH 6-INCH (MIN.) OVERLAP AND ANCHOR DOWN SLOPE BLANKET IN A 6-INCH DEEP TRENCH.

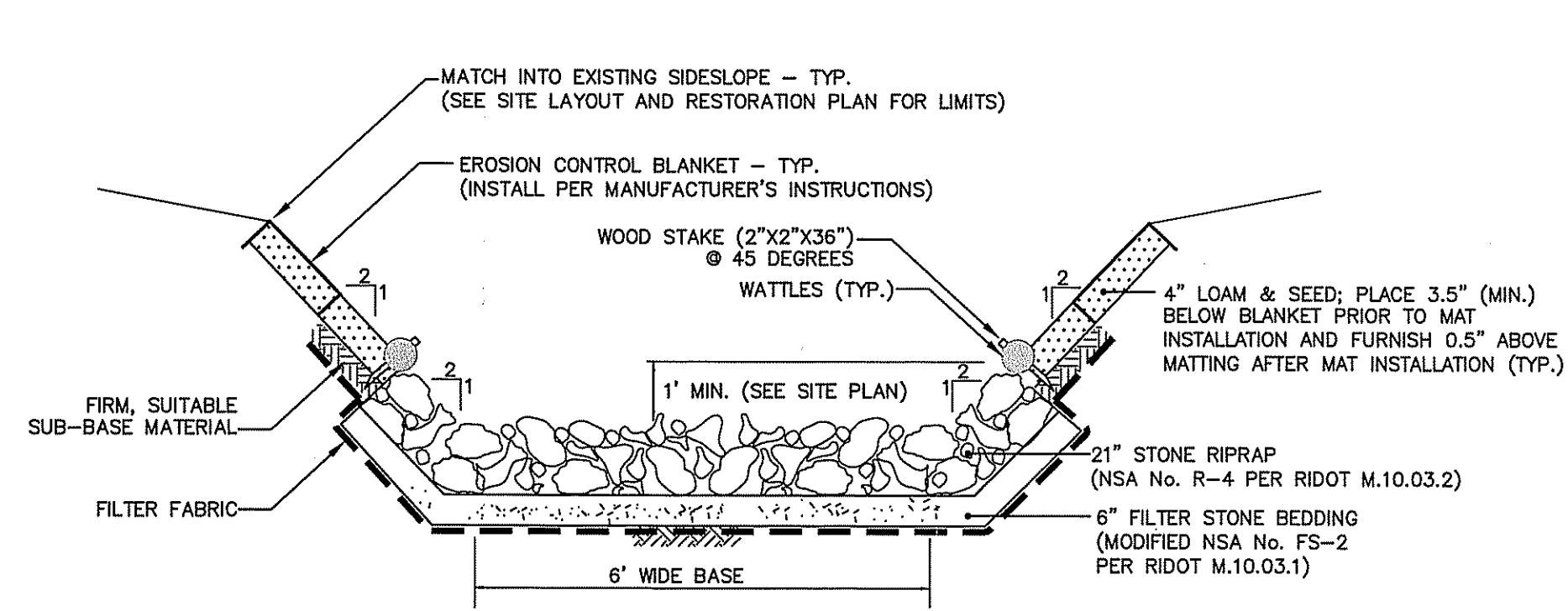
EROSION CONTROL BLANKETING (SLOPE INSTALLATION)
PERMANENT EROSION CONTROL BLANKETING INSTALLATION
NOT TO SCALE



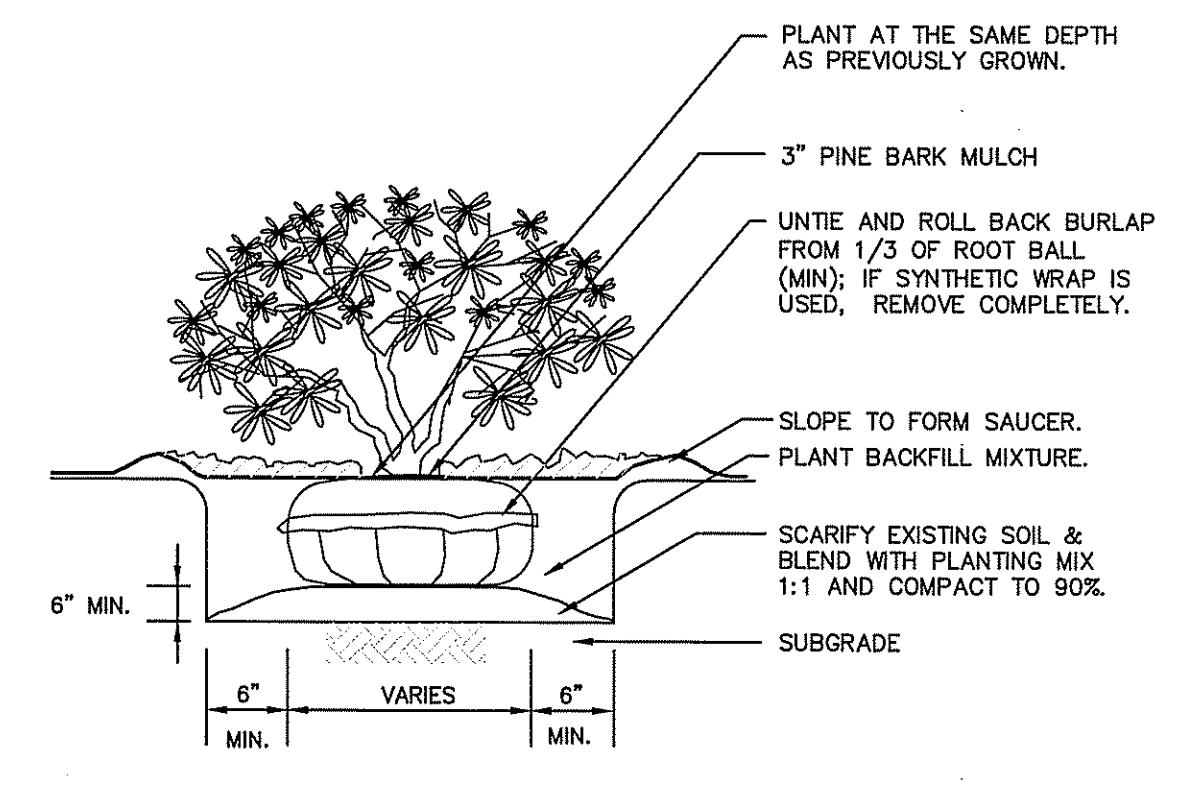
NOTES:

1. BEGIN AT THE LOCATION WHERE THE COIR ROLL IS TO BE INSTALLED BY EXCAVATING A 3" (7.5CM) DEEP X 9" (22.9 CM) WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. UNROLL THE COIR ROLL SO THE SECTION WITH THE 2" WIDE TOP NETTING IS THE DOWN SLOPE END (SPASH APRON). THE SPLASH APRON OF THE COIR ROLL SHOULD COVER THE ANCHOR TRENCH ENSURING THAT APPROXIMATELY 12" (30 CM) IS EXTENDED BEYOND THE LOWER EDGE OF THE ANCHOR TRENCH. NOTE: SEEDING MUST BE CONDUCTED PRIOR TO INSTALLATION OF THE COIR ROLL.
3. SECURE THE COIR ROLL IN THE ANCHOR TRENCH BY PLACING A ROW OF STAPLES/STAKES ON 12" (30 CM) CENTERS ACROSS THE ENTIRE LENGTH OF THE COIR ROLL. A SECOND ROW OF STAPLES/STAKES MUST BE PLACED ACROSS THE ENTIRE LOWER EDGE OF THE COIR ROLL SPLASH APRON ON APPROXIMATELY 12" (30 CM) CENTERS, STAGGERED WITH THE FIRST ROW OF STAPLES/STAKES.
4. BEGIN ROLLING THE COIR ROLL FROM ITS UPPER EDGE (UP-SLOPE EDGE) INTO A CONSISTENT ROLL DIAMETER UNTIL THE ROLL IS LOCATED IN THE ANCHOR TRENCH. PLACE ADDITIONAL ORGANIC MATERIAL (I.E. STRAW, LEAVES, PINE NEEDLES OR LAWN CLIPPINGS) ACROSS THE ENTIRE WIDTH OF THE COIR ROLL PRIOR TO ROLLING. SEE DIAGRAM 4A FOR SEAMING OF ADJACENT COIR ROLL ROLLS.
5. STOP ROLLING THE COIR ROLL WHEN THE ROLL IS LOCATED IN THE ANCHOR TRENCH.
6. SECURE THE COIR ROLL STRUCTURE TO THE SLOPE SURFACE BY DRIVING APPROXIMATELY 18"-24" (45-60 CM) STAKES THROUGH THE CENTER OF THE ROLL EVERY 3' (0.9 M) ON CENTER. IF TWO COIR ROLL STRUCTURES ARE SEAMED TOGETHER ENSURE A STAKE IS DRIVEN THROUGH THE SEAM. THE FINAL STRUCTURES DIAMETER WILL DICTATE STAKE LENGTH. LEAVE A SUFFICIENT AMOUNT OF STAKE EXPOSED ABOVE THIS COIR ROLL TO ENSURE THE STRUCTURE IS NOT COMPRESSED. BOTH LONGITUDINAL ENDS SHOULD BE ANGLED UP SLOPE.
7. BACKFILL AND COMPACT SOIL INTO THE UP-SLOPE PORTION OF THE ANCHOR TRENCH. SMOOTH AND LEVEL ANY SOIL REMAINING ABOVE THE COIR ROLL NOT USED TO FILL THE ANCHOR TRENCH. PLACE SEED ALONG UP-SLOPE PORTION OF COIR ROLL IF REQUIRED.

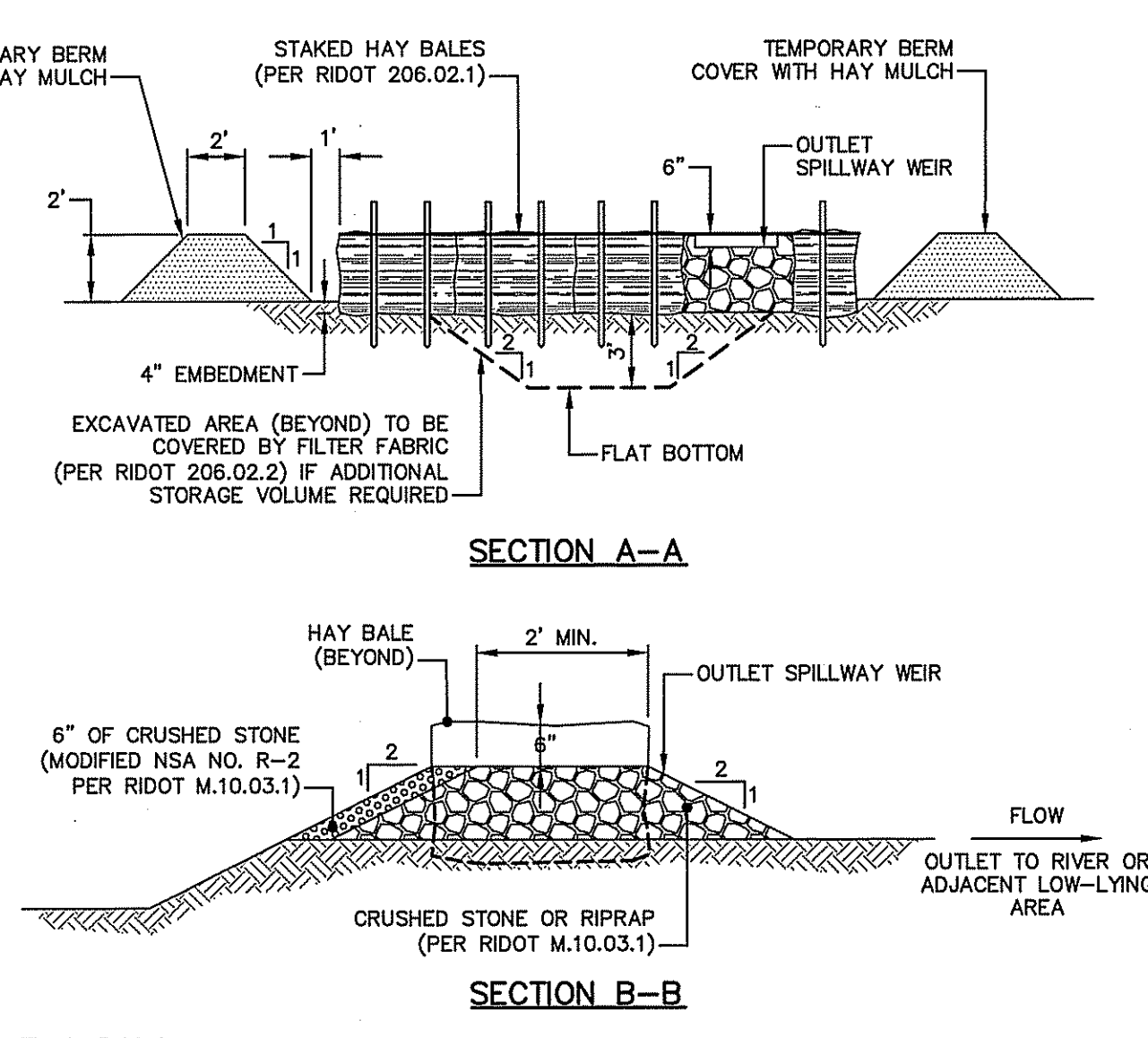
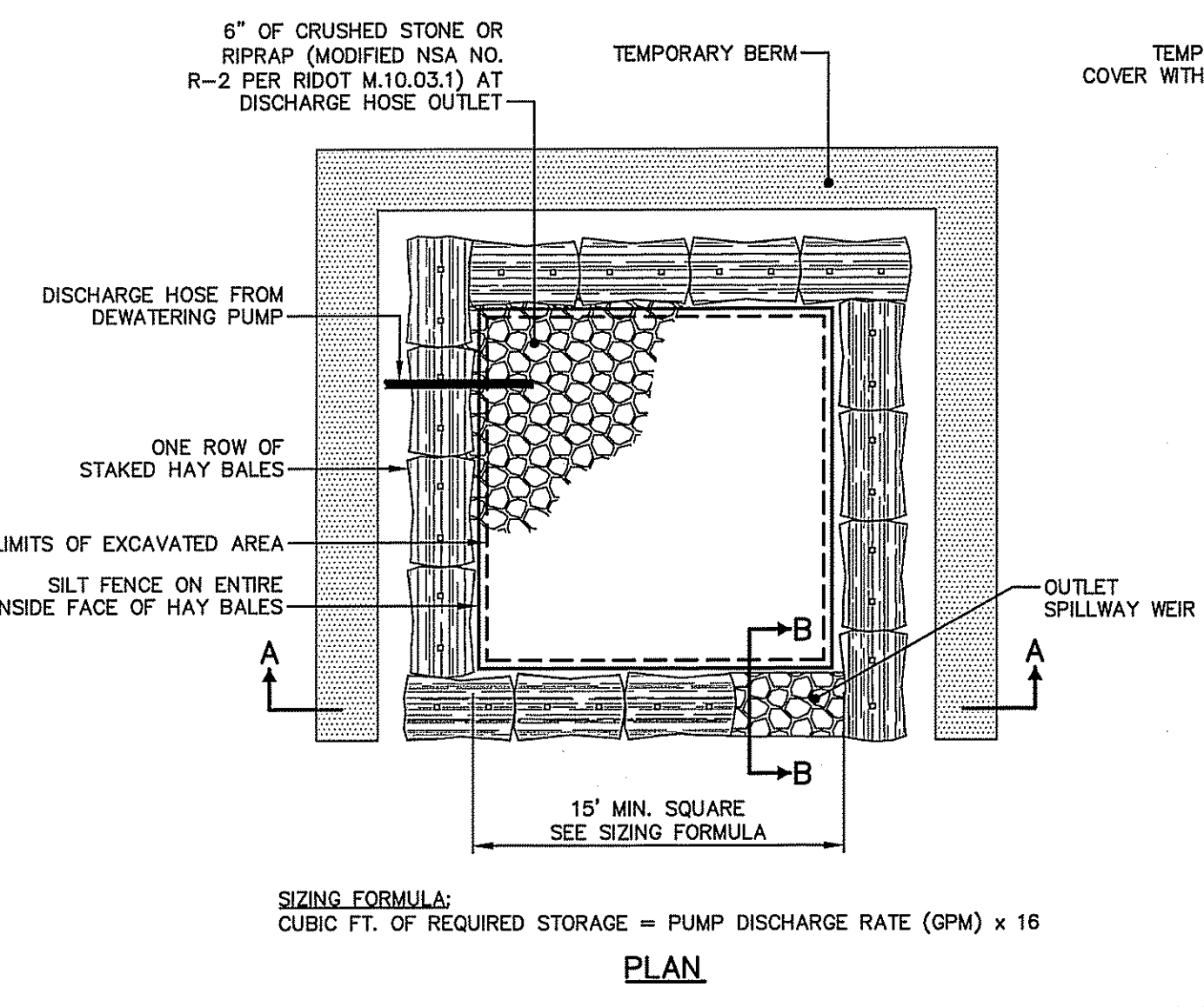
COIR ROLL
NOT TO SCALE



TYPICAL CROSS-SECTION RIPRAP CHANNEL
NOT TO SCALE



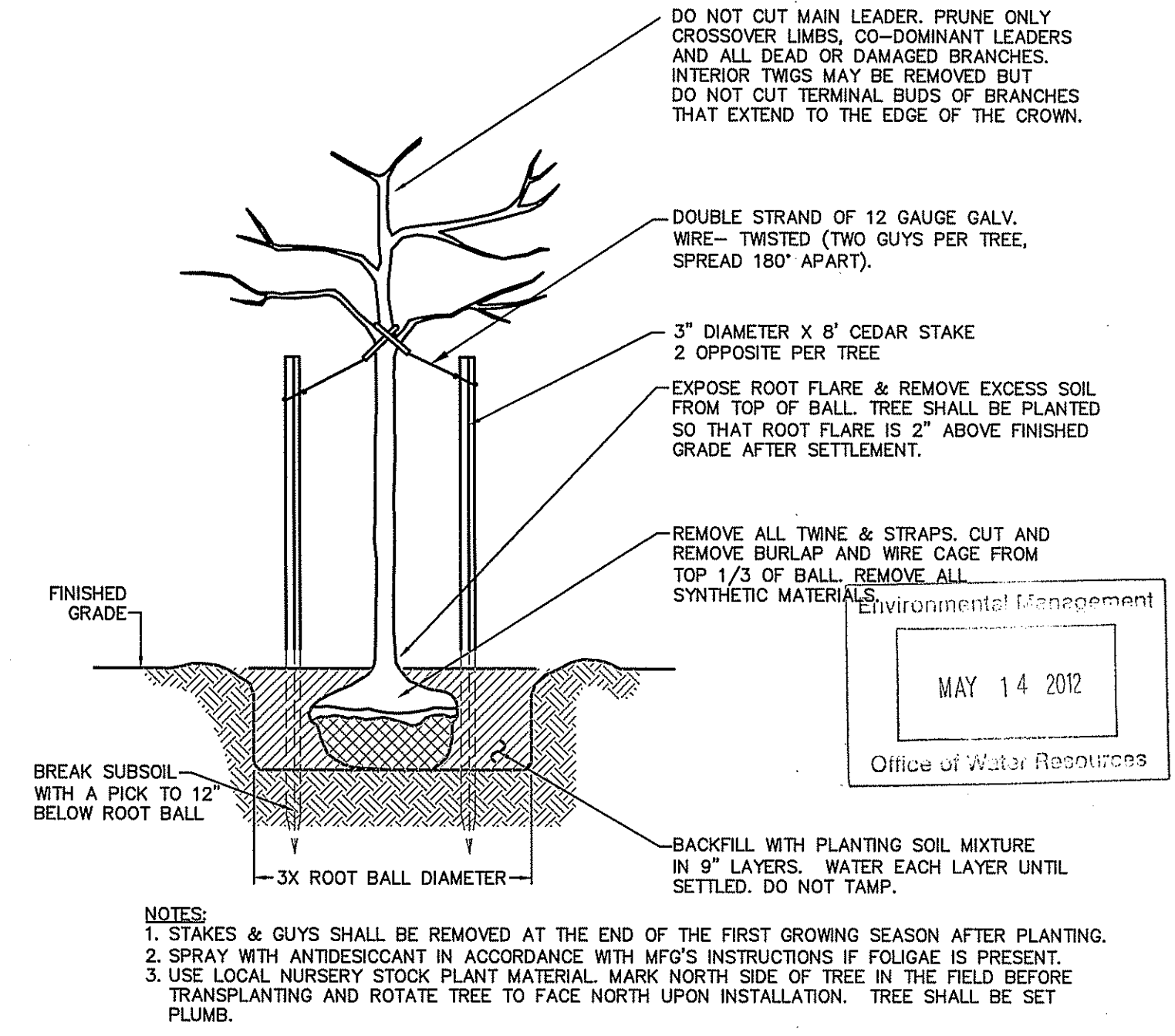
SHRUB PLANTING
NOT TO SCALE



DEWATERING BASIN
NOT TO SCALE

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Charles H. Roberts



TREE PLANTING DETAIL
NOT TO SCALE

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1.	05-10-12		DEA	DEA

SEAL

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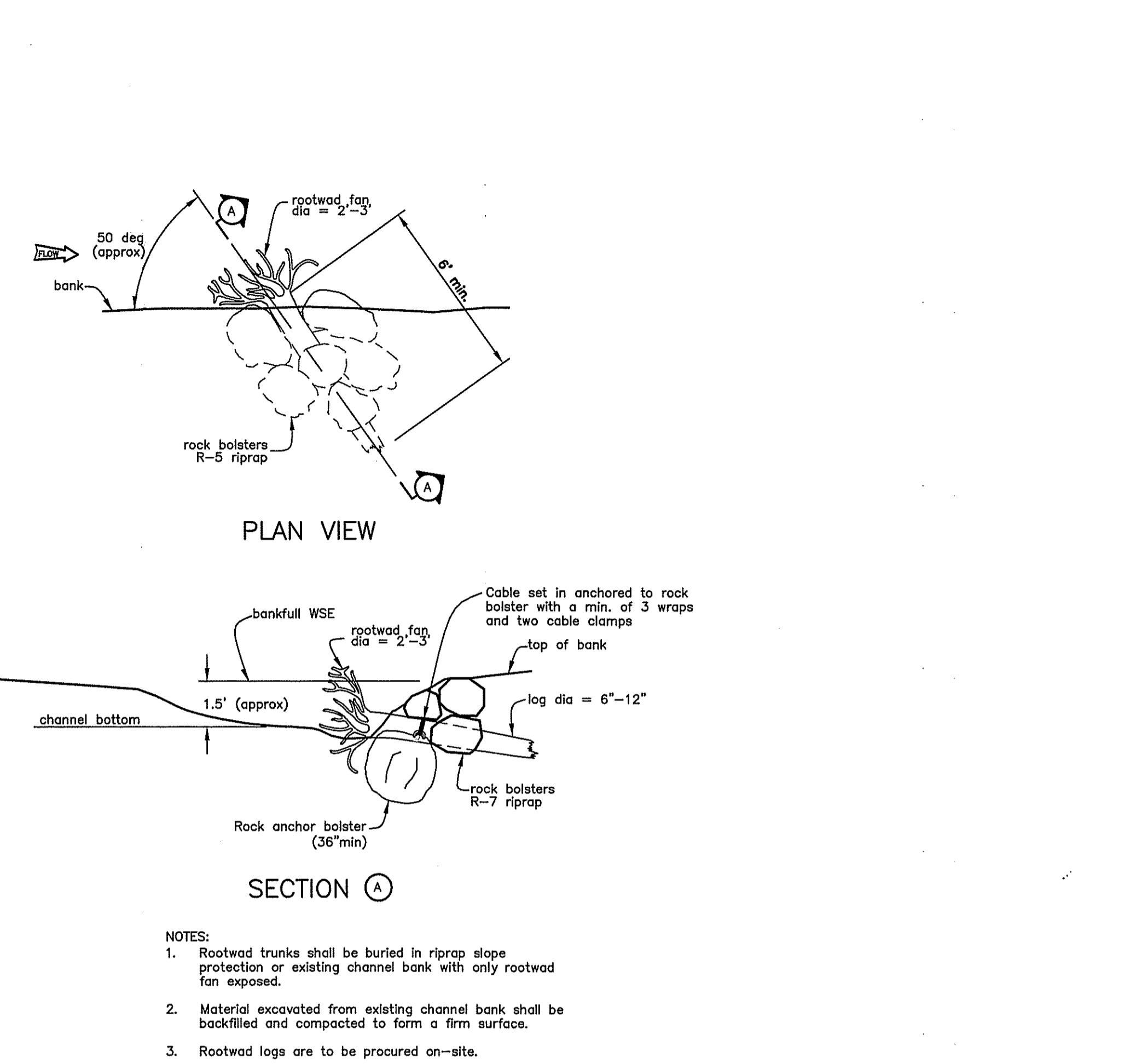
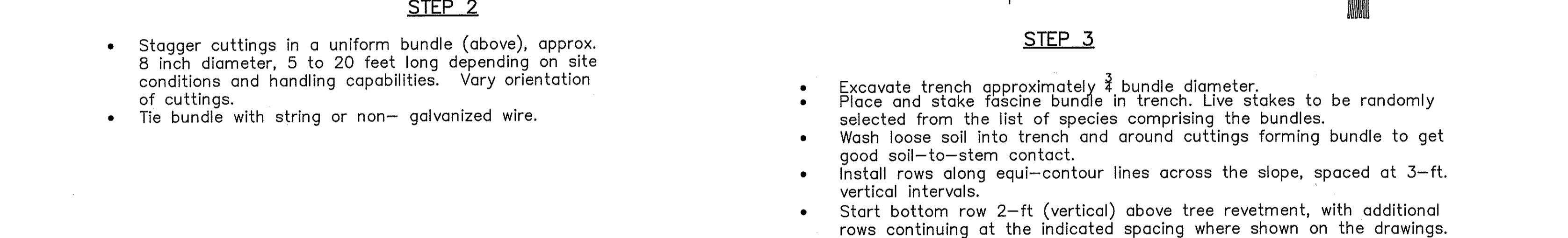
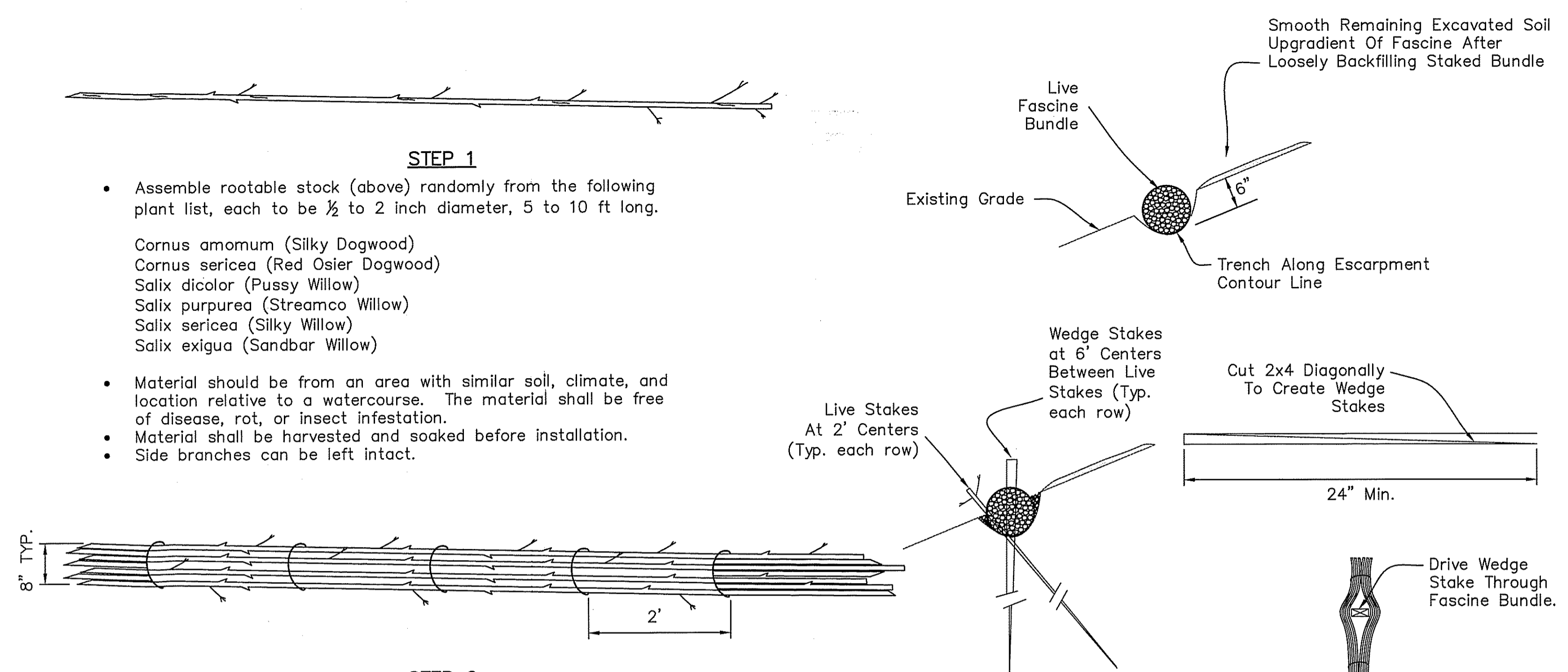
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VERT.:
GRAPHIC SCALE

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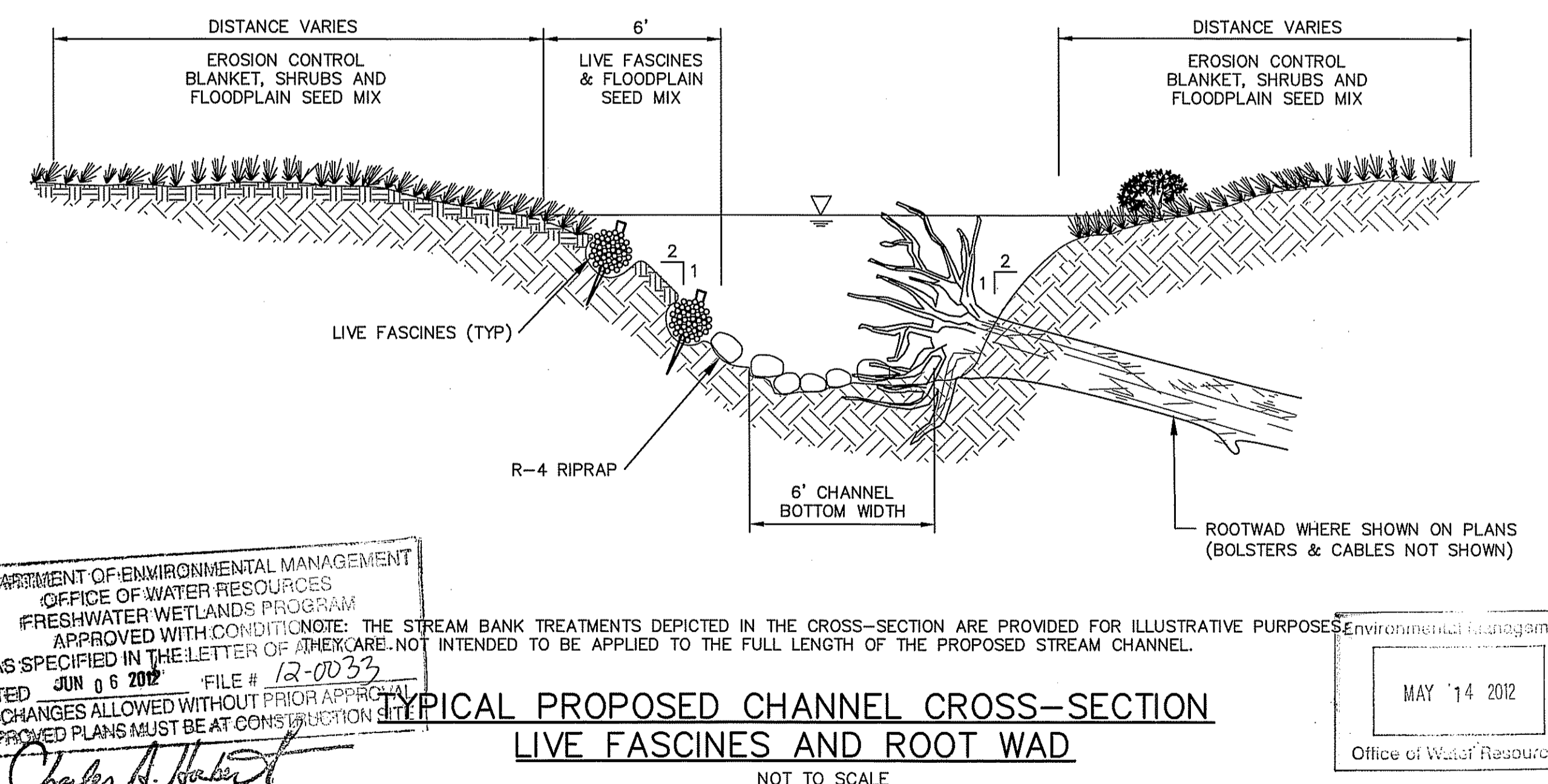
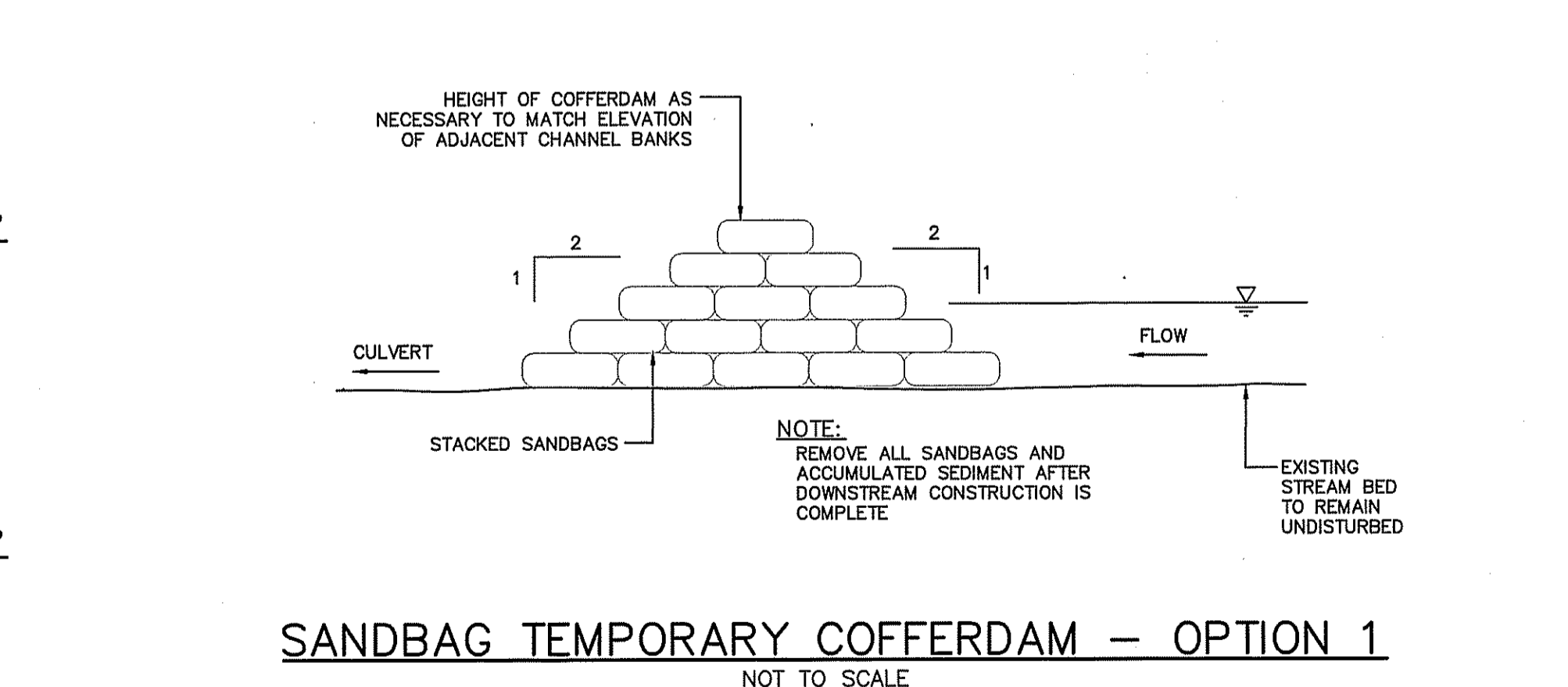
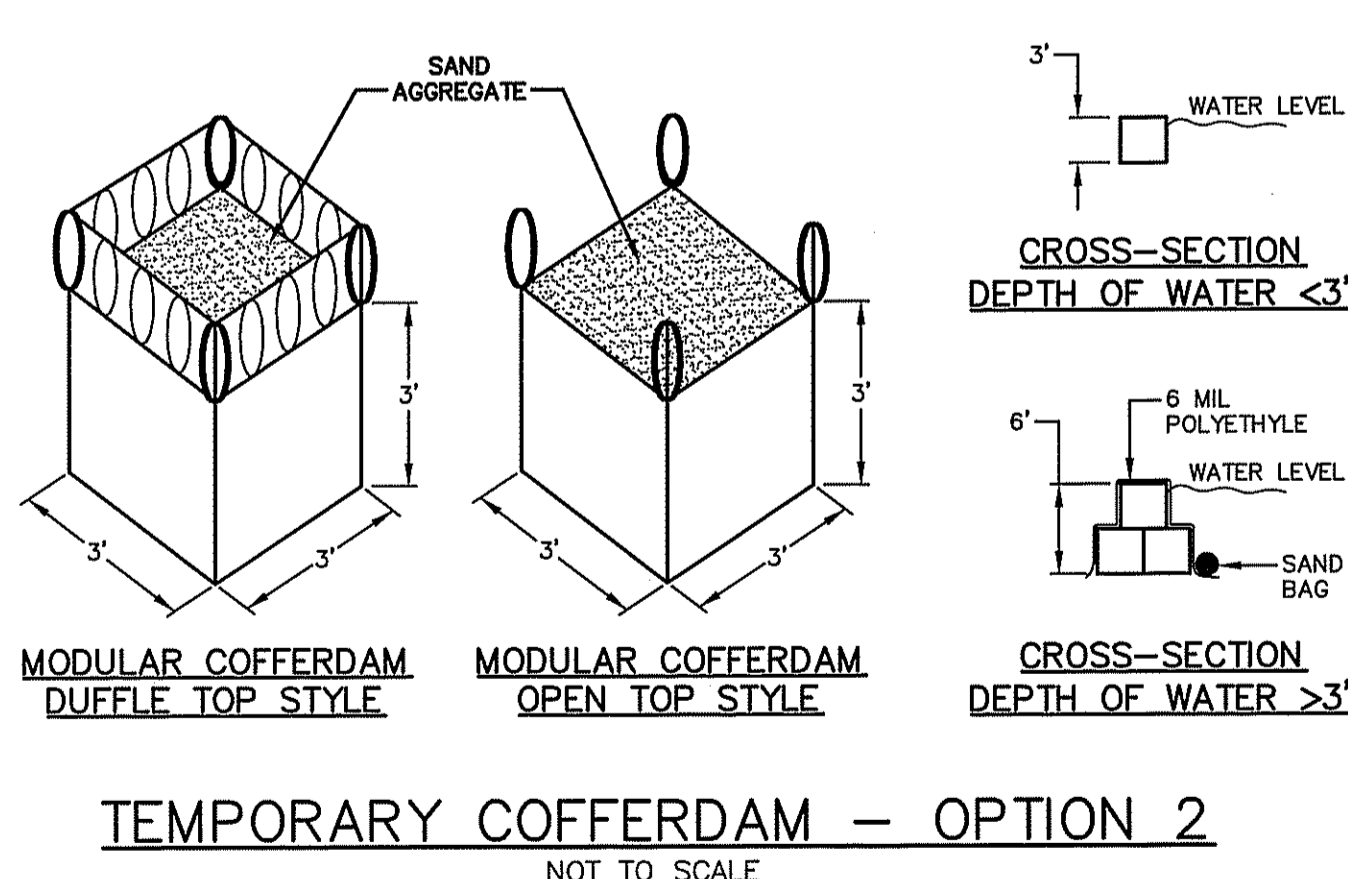
PROVIDENCE WATER SUPPLY BOARD
DETAILS
PLAINFIELD PIKE AND TUNK HILL ROAD
SCITUATE RHODE ISLAND

PROJ. No.: 2003272.C10
DATE: FEBRUARY 2012
CD-501
8 OF 10

File Path: J:\DWG\2003272\CD-502 - 1:28 PM User: shions
 Plotter: NONE CTB File: F&O STANDARD.CTB
 LAYER STATE:



NOTES:
 1. Rootwad trunks shall be buried in riprap slope protection or existing channel bank with only rootwad fan exposed.
 2. Material excavated from existing channel bank shall be backfilled and compacted to form a firm surface.
 3. Rootwad logs are to be procured on-site.



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
 FRESHWATER WETLANDS PROGRAM
 APPROVED WITH CONDITION: THE STREAM BANK TREATMENTS DEPICTED IN THE CROSS-SECTION ARE PROVIDED FOR ILLUSTRATIVE PURPOSES. APPROVED IN THE LETTER OF AGENCY CARE, NOT INTENDED TO BE APPLIED TO THE FULL LENGTH OF THE PROPOSED STREAM CHANNEL.
 AS SPECIFIED IN THE LETTER OF AGENCY CARE, APPROVED PLANS MUST BE AT CONSTRUCTION SITE.
 DATED JUN 06 2012 FILE # 12-0033
 Charles A. Harte

Environmental Management
 MAY 14 2012
 Office of Water Resources

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1.	05-10-12			DEA	DEA

SEAL
 DEAN E. AUDET
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