

# Plans

Issued for: **Request for Preliminary Determination**

Date Issued: November 8, 2012

Latest Issue: January 21, 2013

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# National Grid Rhode Island Reliability Project

## Proposed Additional Tree Clearing Access from Iron Mine Hill Road North Smithfield, Rhode Island

JAN 22 2013

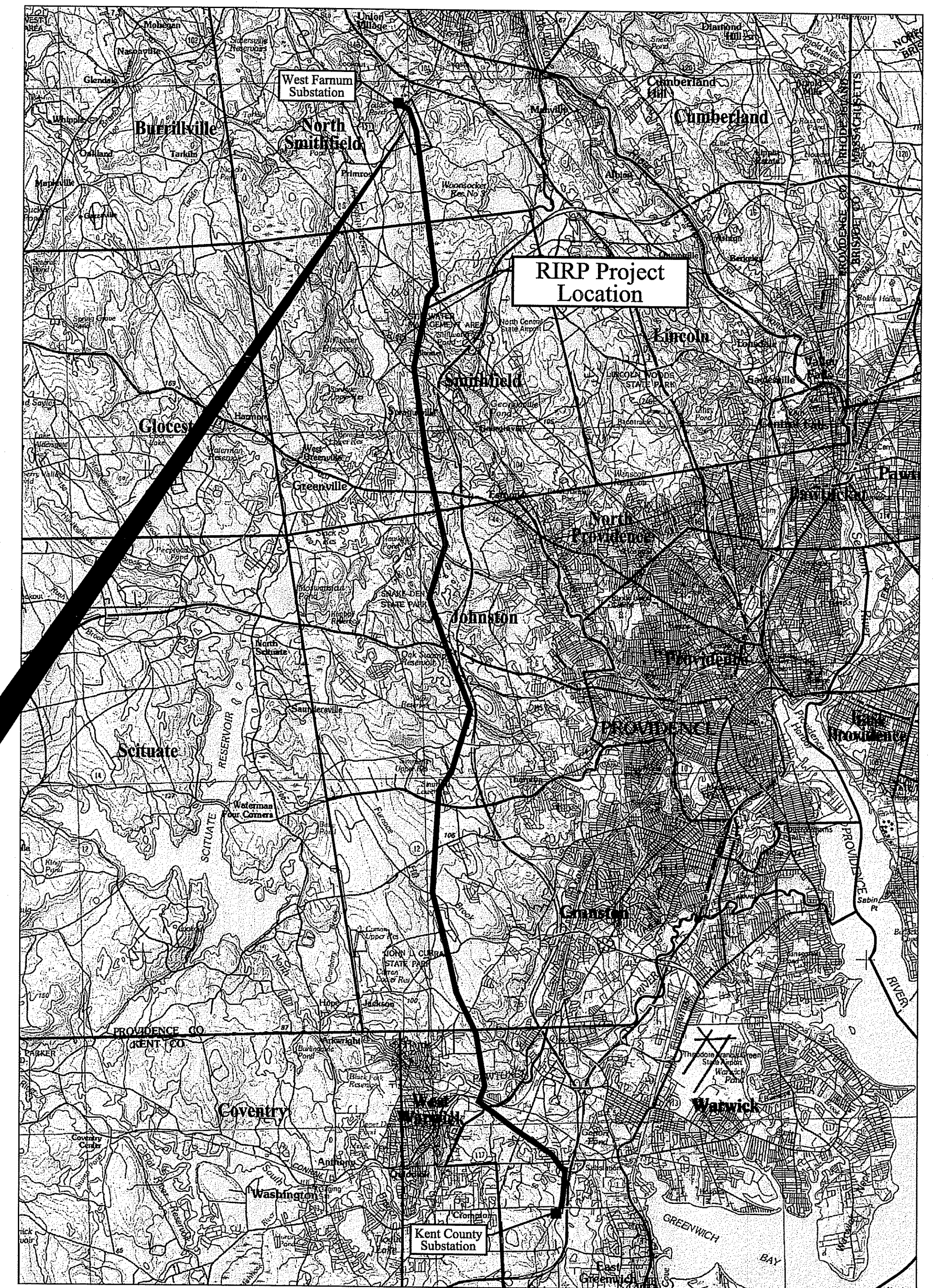


*Vanasse Hangen Brustlin, Inc.*  
Transportation  
Land Development  
Environmental Services

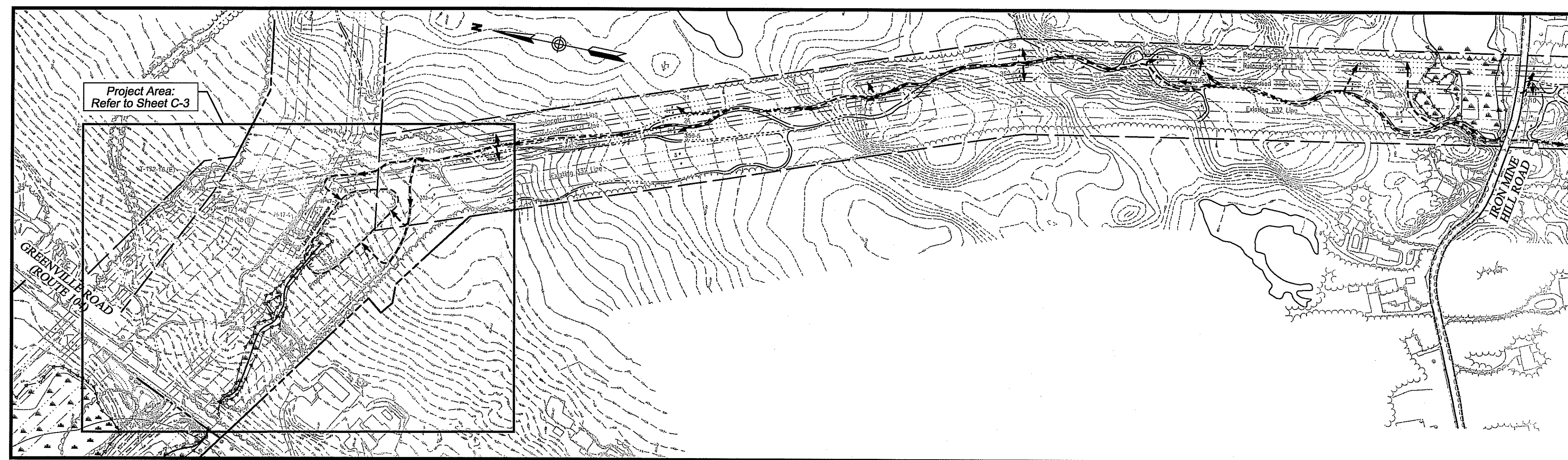
10 Dorrance Street, Suite 400  
Providence, Rhode Island 02903  
401-272-8100 / FAX 401-273-9694

Owner/Applicant:

The Narragansett Electric Company  
d/b/a National Grid  
280 Melrose Street  
Providence, Rhode Island 02907  
508-389-2935 / FAX 508-389-2836



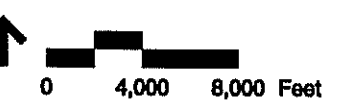
Locus Map



**Note:**  
Plan Depicting the Area also Shown on Sheet C-4 and C-5 of Application to Alter File No. 09-0163 Plan Set Approved October 15, 2010, and Sheet C-3 of Request for Preliminary Determination File No. 12-0003 planset, approved February 22, 2012.

Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED **FEB 08 2013** FILE # **12-0194**  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE



*Martin D. Wenzel*



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Land Development  
Environmental Services

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**Notes**

**Existing Conditions Information:**

**References:**

- Intersection of Iron Mine Hill Road and Greenville Road (Route 104) is located approximately 4,000 feet southwest of the Project Site.
- Plan depicting the area shown on C-4 and C-5 of Application to Alter File No. 09-0153 Plan Set approved October 15, 2010 and C-3 of Requested Preliminary Determination File No. 12-0003 plan set approved February 22, 2012.
- Kent County Corridor: Base Mapping compiled by James W. Sewall Company of Old Town, ME on November 19th 2007 by photogrammetric methods from color aerial photographs dated April 20th 2007 at a scale of 1" = 300'. Ground control supplied by BSC Group and is NAD 83 UTM Zone 18N, and vertically NAVD 88. Base mapping was provided electronically to Vanasse Hangen Brustlin, Inc. as AutoCAD drawing files on November 26 2007. This map meets national map accuracy standards for 1"=100' maps with two foot contours.  
T-sheet No.: 3189; Dated: February 27, 1957; Last Revised: June 25, 2004  
T-sheet No.: 3190; Dated: February 27, 1957; Last Revised: June 25, 2004
- Transmission line right-of-way (ROW) limits and easement boundaries based on the following T-sheets provided by the Narragansett Electric Company. ROW and easement lines are approximate and intended to be a graphical representation. This shall not be construed to represent an actual boundary survey and is subject to such changes as an accurate boundary survey may disclose.  
T-sheet No.: 3189; Dated: February 27, 1957; Last Revised: June 25, 2004  
T-sheet No.: 3190; Dated: February 27, 1957; Last Revised: June 25, 2004
- Except as indicated on specific plan sheets, wetland boundary delineation was performed by Vanasse Hangen Brustlin, Inc., (VHB) Providence, RI. Flag locations were located by a global positioning system (GPS) field survey conducted by VHB between May 31, 2007 and June 30, 2011. This survey conforms to a Class IV standard as defined in the Procedural and Technical Standards for Performing Land Surveying in the State of Rhode Island and Providence Plantations.
- Proposed grade lines appear on the plan set. Where proposed contours are not shown, no grade changes are proposed.

**Erosion and Sediment Control Notes:**

- Prior to starting any Site work, the contractor shall notify appropriate agencies and shall install erosion control measures as shown on the plans and as identified in Federal, State and Local approval documents pertaining to this Project.
- A soil erosion and sedimentation control plan has been designed to protect on-Site wetlands and watercourses and off-Site areas during and after construction.
- In areas where high runoff velocities or high sediment loads are expected, hay bale barriers will be backed with silt fencing.
- Typical, crushed-stone construction entrance/exits will be constructed at each street access point throughout the project area.
- Once work is complete, final surface treatment consisting of straw or cellulose mulch will be applied to stabilize the disturbed areas.
- As directed in the Rhode Island Soil Erosion and Sediment Control Handbook, these erosion/sedimentation control barriers will be inspected periodically and maintained as necessary, at the end of each work day and after significant rainfall events. Areas of soil disturbance will be kept to a minimum, and all disturbed areas will be stabilized with hay mulch.
- Sediment shall be removed from behind barriers if greater than 6 inches deep or as needed.
- Damaged or deteriorated erosion/sedimentation control items will be repaired immediately after identification.
- Erosion control measures shall remain in place until all disturbed earth has been securely stabilized. Once the Site is stabilized, the hay bales will be removed or broken up and spread as mulch. All other controls shall be removed and properly disposed of by the contractor.
- In the event of a fuel spill or equipment malfunction resulting in a release of hazardous material, all work will be stopped in this area until the release/spill is cleaned up.
- Equipment used for the construction of the transmission line will be properly maintained and operated to reduce the chances of spill occurrences of petroleum products. Refueling of equipment will be required to carry spill containment and prevention devices (i.e., absorbent pads, clean up rags, five gallon containers, absorbent material, etc.) at all times. In addition, maintenance equipment and replacement parts for construction equipment will be on hand to repair failures and stop a spill in the event of equipment malfunction.
- Any hazardous waste spills shall be cleaned up immediately, and if the spill amount is equal to or exceeds the EPA Reportable Quantity (RQ) for that substance in accordance with 40 CFR Parts 1010, 117, or 302, the contractor shall immediately contact the National Response Center at 1-800-424-8802. The contractor will also be responsible for submitting in writing a description of the release to the EPA Regional Office and RIDEM providing the date and circumstances of the release and the steps to be taken to prevent another release. Directions for cleaning up spills shall be clearly posted at a designated on-site location, and construction personnel shall be made aware of the procedures and location of cleanup supplies. Personnel shall wear appropriate protective gear and have proper training to prevent injury from contact with any hazardous substances.

**Shrub Protection**

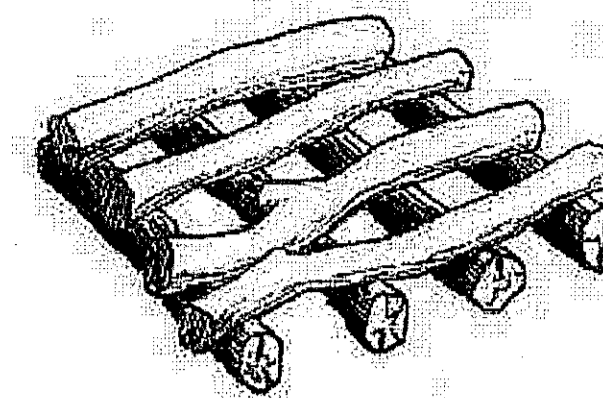
- Existing shrubs to remain shall be identified and protected prior to tree clearing.

**Planting Notes**

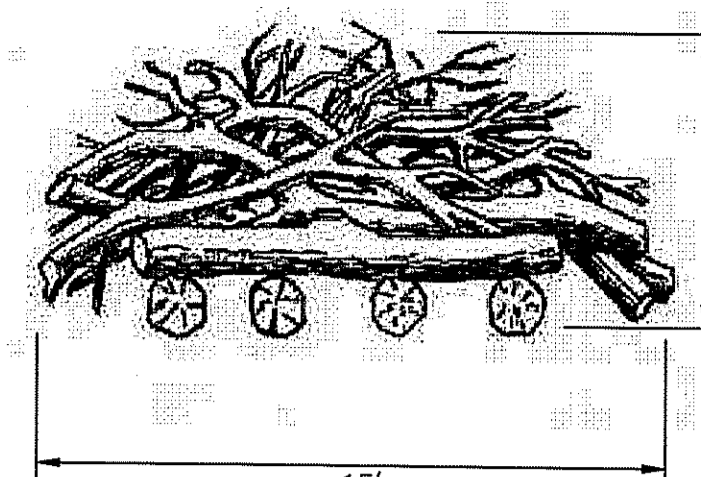
- No plant materials shall be installed until all tree clearing has been completed in the immediate area.
- Any proposed plant substitutions must be approved in writing by the owner's representative.
- All plant materials shall be guaranteed for one year following date of final acceptance.
- A 3" deep shredded pine bark mulch shall be installed under all planted trees and shrubs.
- Watering shall be required during the first growing season after planting, when natural rainfall is below one inch per week.
- Water shall be applied in sufficient quantity to thoroughly saturate the soil in the root zone of each plant.
- The applicant shall replace dead or dying plants at the end of the first year.
- All plant materials installed shall meet or exceed the specifications of the "American Standards for Nursery Stock" by the American Association of Nurserymen.

**Restrictions**

- All tree stumps and roots are to be left intact. No grubbing is permitted.
- Any soil disturbance associated with equipment access to structures or structure excavations should be mulched with hay on all disturbed areas as soon as possible but not more than 14 days after the construction activity in that area has temporarily or permanently ceased, unless the activity is to resume within 21 days.
- In accordance with the RIPDES General Permit, all stormwater control measures, disturbed areas, areas used for the storage of materials that are exposed to precipitation (including unstabilized soil stockpiles), discharge locations and locations where vehicles enter or exit the site, as outlined in Part IV of this permit, must be inspected by or under the supervision of the applicant at least once every seven (7) calendar days and within twenty-four (24) hours after any storm event which generates at least 0.25 inches of rainfall per twenty-four (24) hour period and/or after a significant amount of runoff. Such areas shall be inspected for evidence of, or the potential for, pollutants entering the waters of the State or a separate storm sewer system. All BMPs shall be maintained to prevent uncontrolled releases of measurable amounts of sediment or sediment laden water from traveling beyond the limits of disturbance.



BASE PLAN

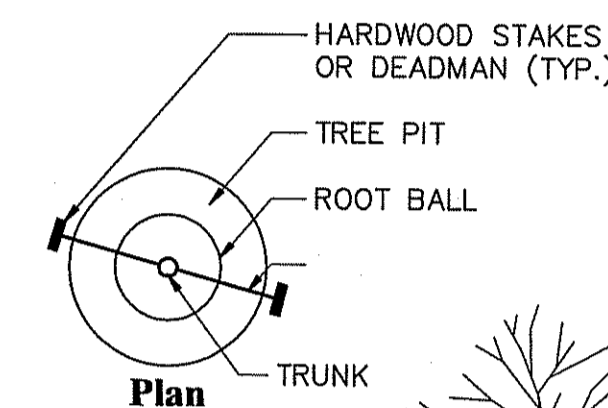


PROFILE

**Brush Pile**

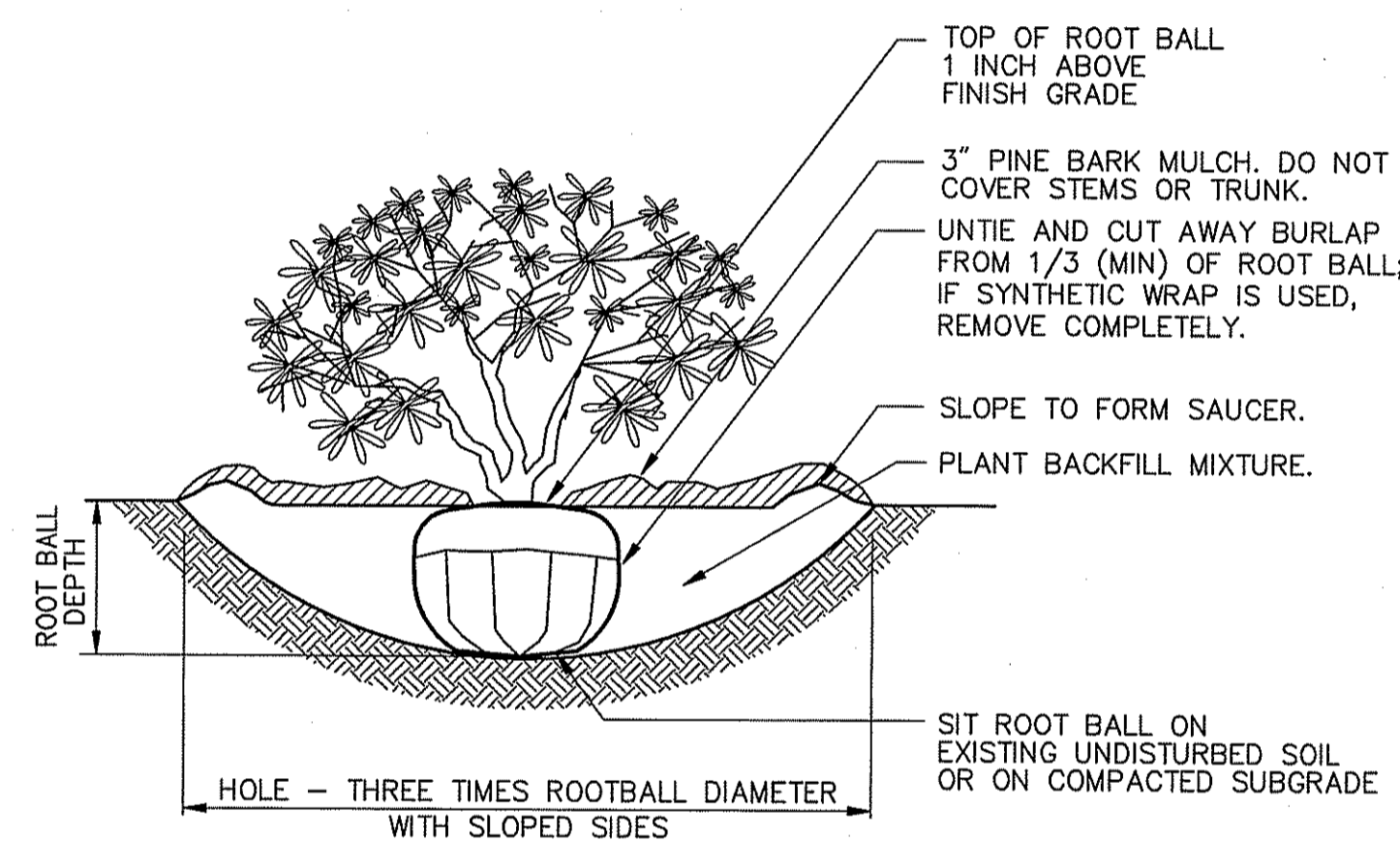
N.T.S.

Source: Sketch: Cornell University Press



**Notes:**

- STAKING IS NOT REQUIRED FOR TREES UNDER 3" CALIPER.



**Notes:**

- LOOSEN ROOTS AT THE OUTER EDGE OF ROOTBALL OF CONTAINER GROWN SHRUBS.

**Shrub Planting**

N.T.S.

Source: VHB

6/08

LD\_600

**Tree Planting (For Trees Under 4" Caliper)**

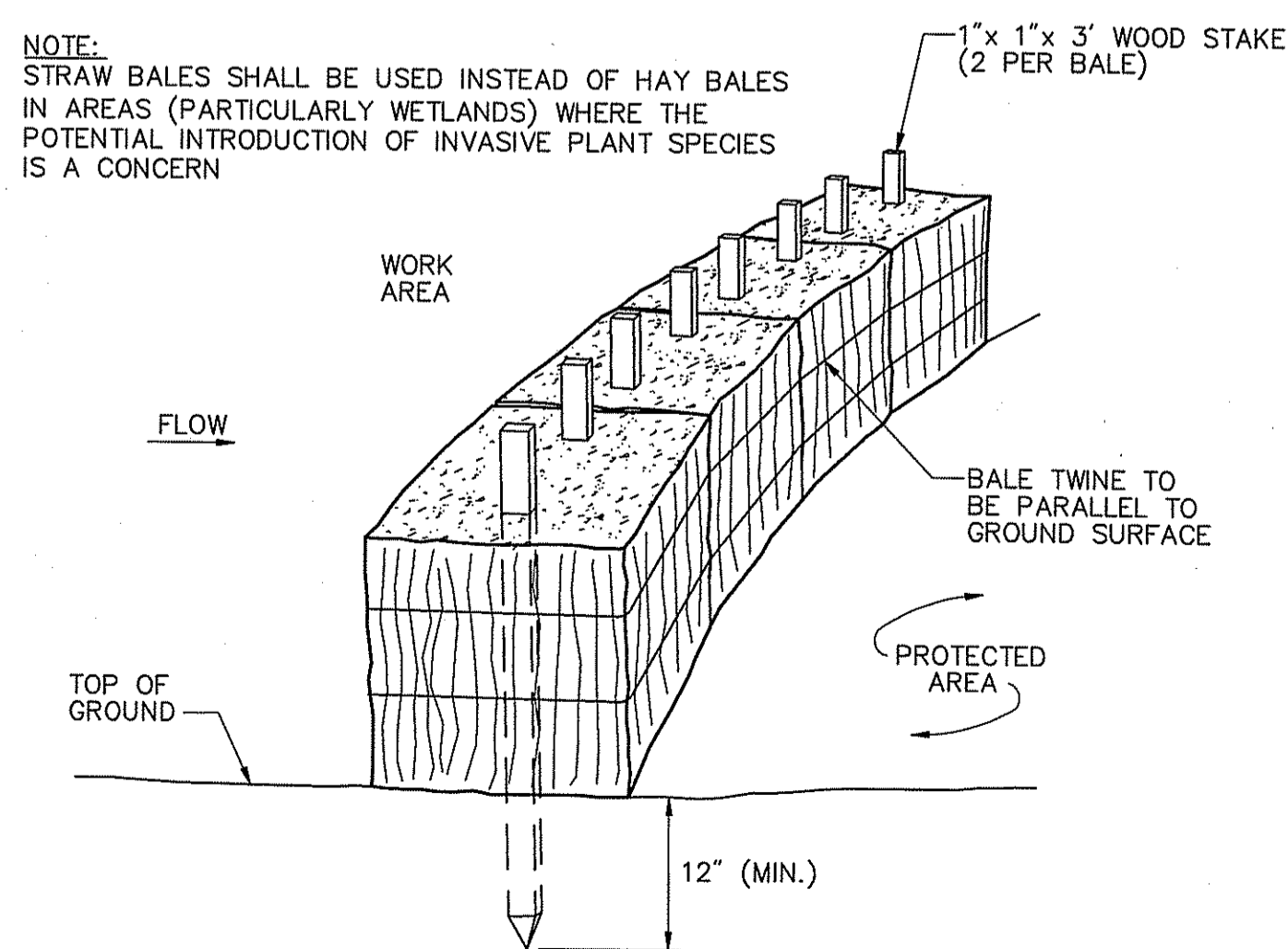
N.T.S.

Source: VHB

1/10

LD\_602

NOTE:  
STRAW BALES SHALL BE USED INSTEAD OF HAY BALES IN AREAS (PARTICULARLY WETLANDS) WHERE THE POTENTIAL INTRODUCTION OF INVASIVE PLANT SPECIES IS A CONCERN



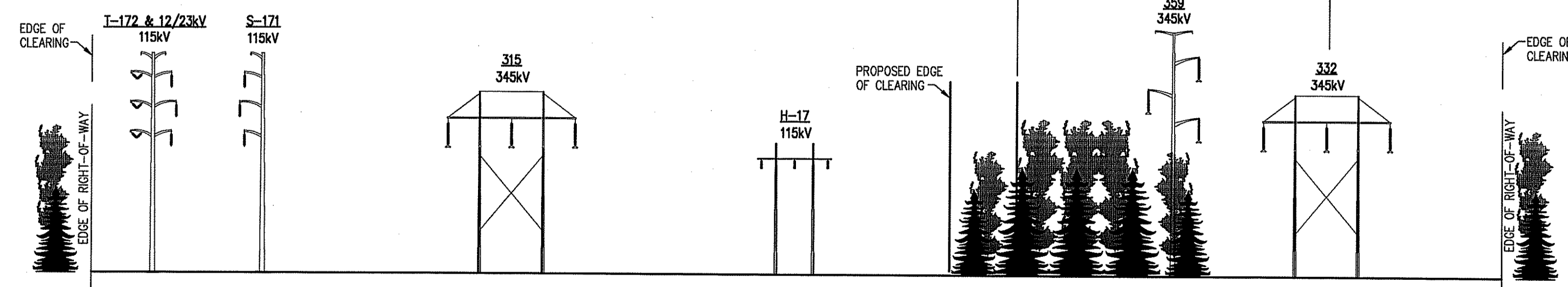
**Straw Bale Barrier (Non-Embedded)**

N.T.S.

Source: VHB/NGRID EG-303

12/08

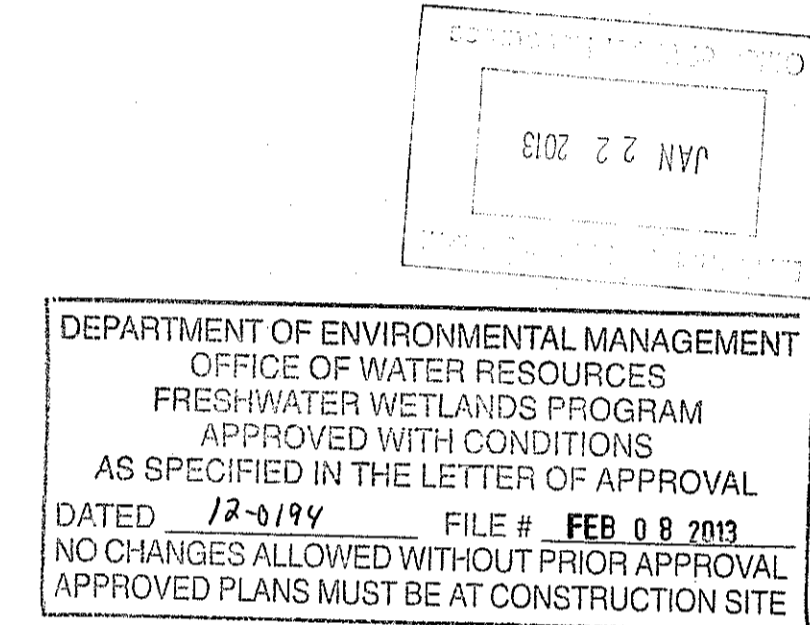
REV LD\_653



**Standard Cross Section Detail  
Looking Southerly from Greenville Road**

N.T.S.

Source: VHB/NGRID EG-303



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER RESOURCES FRESHWATER WETLANDS PROGRAM APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED 12-21-12 FILE # FEB 08 2013 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE			
1	RIDEM COMMENTS	12/21/12	
No.	Revision	Date	Approved
Designed by	Drawn by	Checked by	
CAD checked by	Approved by		
Scale	As Noted	Date	November 8, 2012
Project Title			
National Grid Rhode Island Reliability Project			
Proposed Additional Tree Clearing Access from Iron Mine Hill Road North Smithfield, Rhode Island Issued for			
Request for Preliminary Determination			
Drawing Title			
Drawing Number			
Legend, General Notes and Details			
Sheet of			
2 3			
Project Number			
72005			

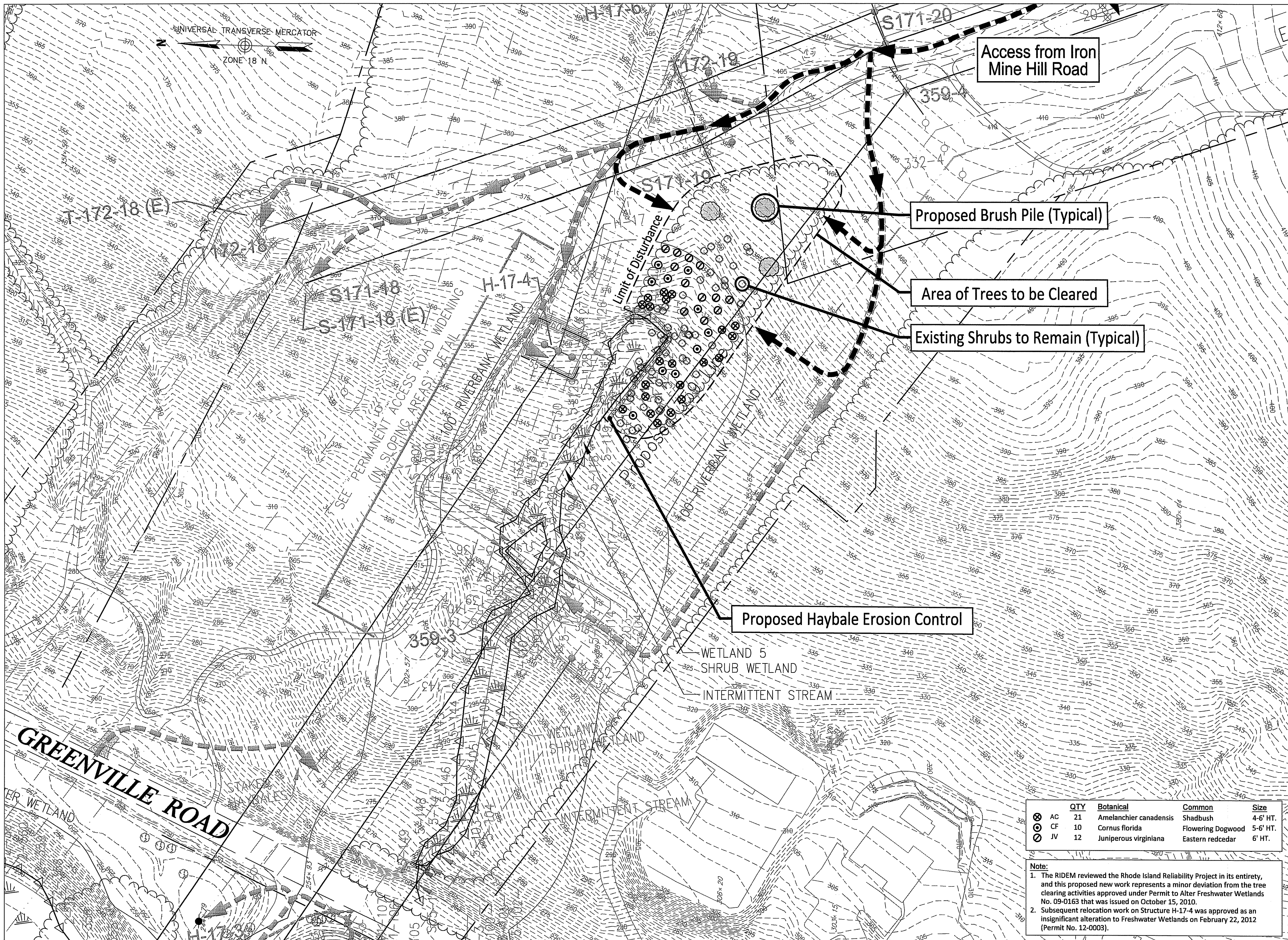
C-2

Sheet of

2 3

Project Number

72005



Vanasse Hangen Brustlin, Inc.

Transportation  
Land Development  
Environmental Services

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**Legend**

- EXISTING SHRUBS TO REMAIN
- ⊙ PROPOSED BRUSH PILE
- ▭ WETLAND SYMBOL
- △ WETLAND FLAG
- FLOWING BODY OF WATER
- 50' PERIMETER WETLAND
- 50' PERIMETER WETLAND
- 100' RIVERBANK WETLAND
- 100' RIVERBANK WETLAND APPROXIMATE R.O.W. LIMITS
- EX. STRUCTURE
- EX. OVERHEAD ELECTRIC LINES
- EX. ACCESS ROAD
- 250 EX. CONTOUR TOPOGRAPHIC (MAJOR)
- 252 EX. CONTOUR TOPOGRAPHIC (MINOR)
- EX. TREELINE
- PROP. OVERHEAD TRANSMISSION LINES (L)
- PROP. LIMIT OF DISTURBANCE
- PROP. EAS CONTROL
- PROP. ACCESS ROUTE
- EX. ACCESS ROUTE TO BE ABANDONED
- LIMIT OF DISTURBANCE (PREVIOUSLY PERMITTED)
- EAS CONTROL (PREVIOUSLY PERMITTED)
- ACCESS ROUTE (PREVIOUSLY PERMITTED)
- STRUCTURE (PREVIOUSLY PERMITTED)
- GUY WIRE ANCHOR (PREVIOUSLY PERMITTED)

JAN 22 2013

2	RIDEM COMMENTS	1/18/13
1	RIDEM COMMENTS	12/21/12
No.	Revision	Date
Designed by	Drawn by	Checked by
CAD checked by	Approved by	
Scale	As Noted	Date
Project Title	November 8, 2012	

**National Grid  
Rhode Island Reliability Project**

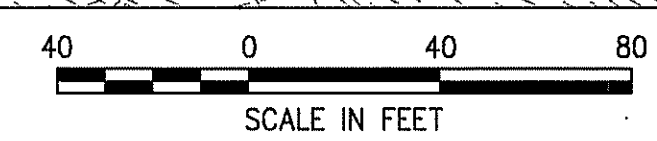
Proposed Additional Tree Clearing  
Access from Iron Mine Hill Road  
North Smithfield, Rhode Island  
Issued for

**Request for  
Preliminary Determination**

**Project Access and  
Planting Plan**

	QTY	Botanical	Common	Size
⊙	AC 21	Amelanchier canadensis	Shadbush	4-6' HT.
○	CF 10	Cornus florida	Flowering Dogwood	5-6' HT.
○	JV 12	Juniperus virginiana	Eastern redcedar	6' HT.

**Note:**  
1. The RIDEM reviewed the Rhode Island Reliability Project in its entirety, and this proposed new work represents a minor deviation from the tree clearing activities approved under Permit to Alter Freshwater Wetlands No. 09-0163 that was issued on October 15, 2010.  
2. Subsequent relocation work on Structure H-17-4 was approved as an insignificant alteration to Freshwater Wetlands on February 22, 2012 (Permit No. 12-0003).



Kindly be advised that this Permit is not equivalent to a verification of the type or extent of freshwater wetlands on site.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED FEB 08 2013 FILE # 12-0134  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Drawing Number  
**C-3**  
Sheet of  
3 3  
Project Number  
72005