

Site Plans

Issued for: **Preliminary Determination**

Date Issued: April 2010

Latest Issue: April 2010

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Narragansett Bay Commission

Abbott Valley Interceptor Maintenance Program
Cumberland, Rhode Island
Contract 304.38 C



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

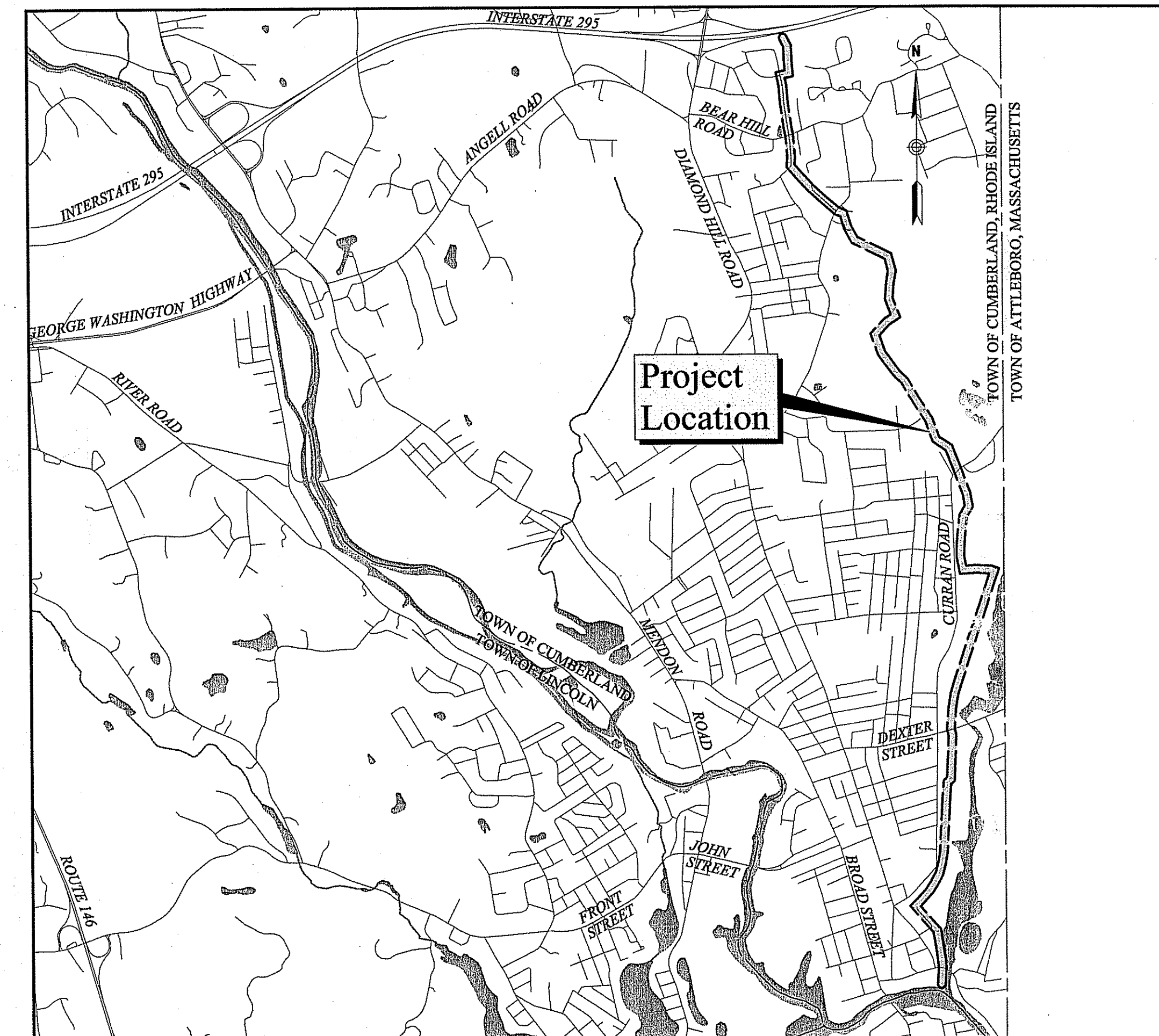
Owner/Applicant:
Narragansett Bay Commission
One Service Road
Providence, Rhode Island 02905
401.861.8848 • Fax 401.861.6540

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 JUN 14 2010 FILE # 10-0001
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Charles A. Harkin

APR 20 2010



Site Location Map

0 1000 2000 Feet

VHB Project No. 71952.00
Cumberland, RI
Issued for: Preliminary Determination

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Legend

- Proposed Silt Fence
- Proposed Gravel Ford
- Proposed Concrete Ford
- Proposed Boulder Barrier
- Proposed Access Gate
- Proposed Chain Link Fencing
- Existing Stockade Fencing
- Existing Stone Wall
- Existing Sewer Line with Manhole
- NBC Manhole Designation
- Existing Building
- Existing Path/Traffic
- Existing Public Roadway
- Existing Contour Line
- Proposed Contour Line
- Proposed Limit of Disturbance
- Easement Line
- Town Line
- Property Line
- Surveyed Edge of Waterway
- Approximate Edge of Waterway
- Edge of Wetland
- ASSF
- Wetland Flag
- Wetland
- 50' Perimeter Wetland
- 100' Riverbank Wetland
- 200' Riverbank Wetland
- Edge of Existing Wooded Area

Notes

Existing Conditions Information:

1. Elevation contours were generated from a 2001 Rhode Island Geographic Information System (RIGIS) Triangulated Irregular Network (TIN) created for the 1997 National Grid USA/RIDOT Digital Orthophoto Project. Elevations are based on North American Vertical Datum (NAVD) 1988.
 2. Existing property line information and supplemental elevation contours were determined by an actual field survey by Vanasse Hangen Brustlin, Inc. performed on the ground by Vanasse Hangen Brustlin, Inc. on or between December 2007 through July 2008.
 3. Existing treeline, and road and structures footprints determined by the field survey as noted above and supplemented by information digitized from Google Maps.
 4. Proposed vegetative clearing limits and limits of disturbance provided in this plan set.
 5. Wetland delineation performed by VHB, Inc. in January 2007. Wetland flags were located in the field by tape survey.
 6. Permanent grade changes proposed by the Project are limited to activity at the locations listed below. Proposed grade lines appear on the plan set. Where proposed contours are not shown, no grade changes are proposed.
- Cumberland Assessor's Plat 21, Lot 817
Cumberland Assessor's Plat 19, Lot 3

Erosion and Sediment Control Notes:

1. 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.
2. 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. Silt fence will be installed down gradient of all work areas within or adjacent to wetland resources. Access to some manhole structures located in wetland areas may be limited.
3. If groundwater is encountered during excavation, a temporary dewatering basin will be utilized proximate to the work area outside of wetlands to detain and filter turbid pump discharges. Dewatering basins will be sized according to the latest version of the Rhode Island Soil Erosion and Sediment Control Handbook.
4. Soils removed from excavations will be temporarily stockpiled in a suitable location away from the wetland edges to reduce the potential for sediment to be transported into wetland resources. Excess soils not utilized during the backfilling operations will be removed from wetlands and floodplains. Excess soils will be spread on upland areas proximate to the site within the right-of-way (ROW), and appropriately stabilized in accordance with applicable regulations or removed and legally disposed off-site.
5. Once work is complete, final surface treatment consisting of seeding and straw or cellulose mulch will be applied to stabilize the disturbed areas.
6. 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.
7. Sediment shall be removed from behind barriers if greater than 6-inches deep or as needed.
8. Damaged or deteriorated erosion/sedimentation control items will be repaired immediately after identification.
9. The underside of silt fence should be entrenched three inches into grade and reset as necessary.
10. Erosion control measures shall remain in place until all disturbed earth has been securely stabilized. Once the site is stabilized, the controls will be removed. All controls shall be removed and properly disposed of by the contractor.
11. 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 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.

12. Equipment typically used during the construction will include dump trucks used to transport fill materials to work sites, excavators and backhoes which will be used to excavate and backfill stumps. This equipment may also be used to maintain existing access roads within upland portions of the ROW during construction. Throughout the Project, pick-up trucks will be used to transport crews and hand held equipment to work sites. Low-bed trailers will be used to transport tracked equipment which cannot be operated on public roadway to the work site. Equipment refueling will only occur within uplands away from wetland areas.

13. The proposed work will be constructed in a progression of activities which will normally proceed as follows:

- ROW survey marking limits of clearing.
- Installation of erosion and sediment controls.
- Construction of culvert/stone ford crossings.
- Restoration of the ROW, removal of erosion and sediment controls.

100-Year Flood Plain Notes:

1. The source of the 100-year floodplain data analyzed for the project consisted of the Rhode Island Geographic Information System (RIGIS) FEMA Statewide coverage line data.
2. It is recognized that, by definition(s) provided in the latest RI Freshwater Wetlands (FWW) Rules and Regulations, all streams, intermittent streams and rivers have 100-year flood plain.
3. It is the opinion of the scientists and engineers responsible for preparing this assessment that any impacts to 100-year floodplain resources will be negligible.

Sequence of Construction:

1. Access gates shall be installed prior to any work within the ROW.

No.	Revision	Date	Appvd.

Designed by _____ Drawn by _____ Checked by _____
 CAD checked by _____ Approved by _____
 Scale: N.T.S. Date: April 2010
 Project Title _____

Abbott Valley Interceptor Maintenance Program

Cumberland, Rhode Island
Issued for _____

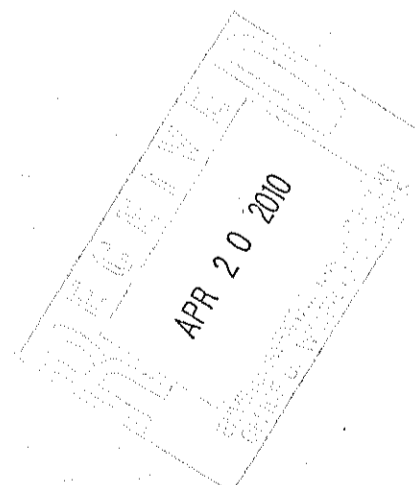
Preliminary Determination

Not Approved for Construction
Drawing Title _____

Notes

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
FRESHWATER WETLANDS PROGRAM
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Charles A. Harkin



Drawing Number _____

C-2

Sheet of 2 11

Project Number 71952.00



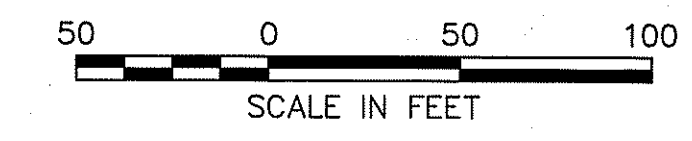
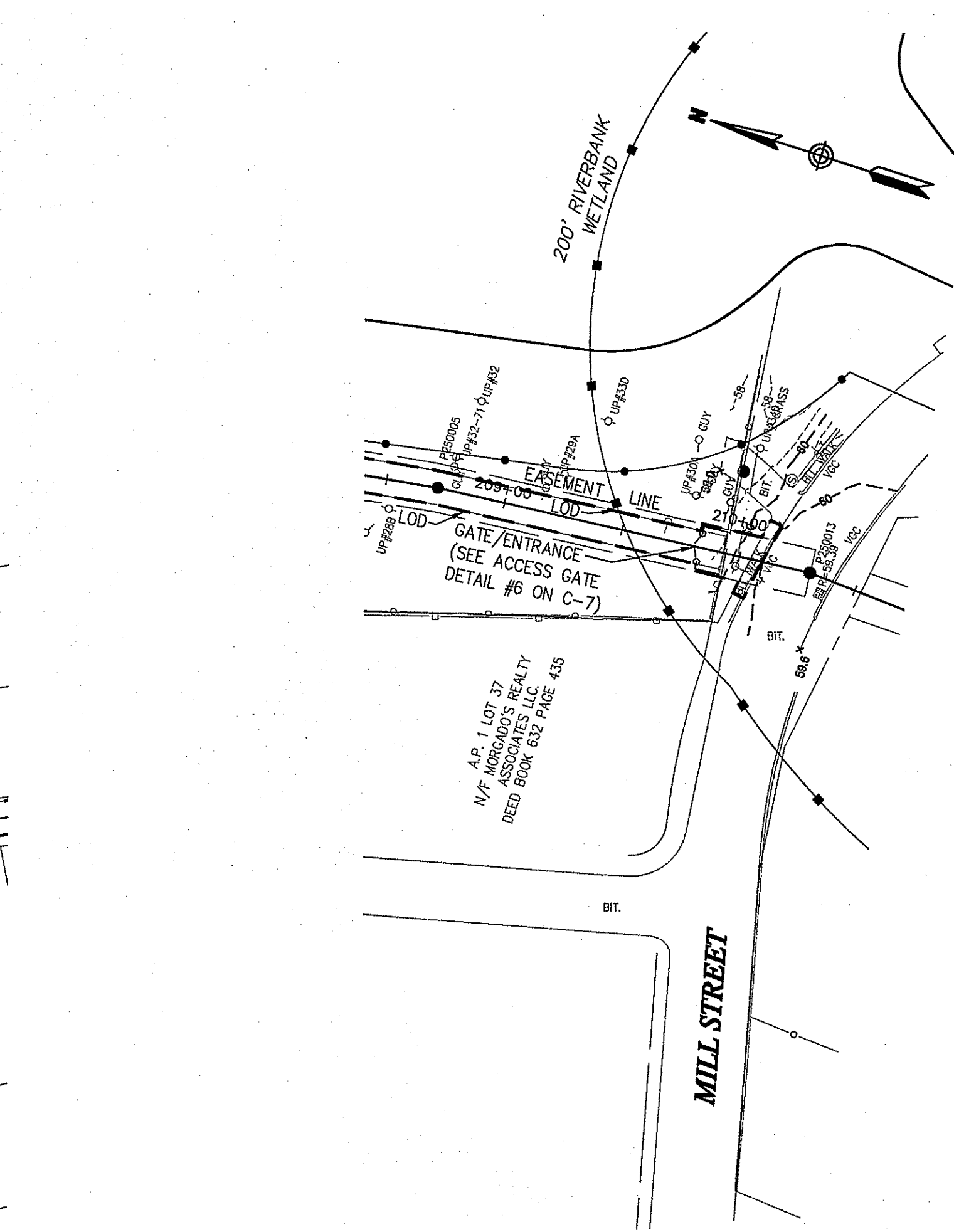
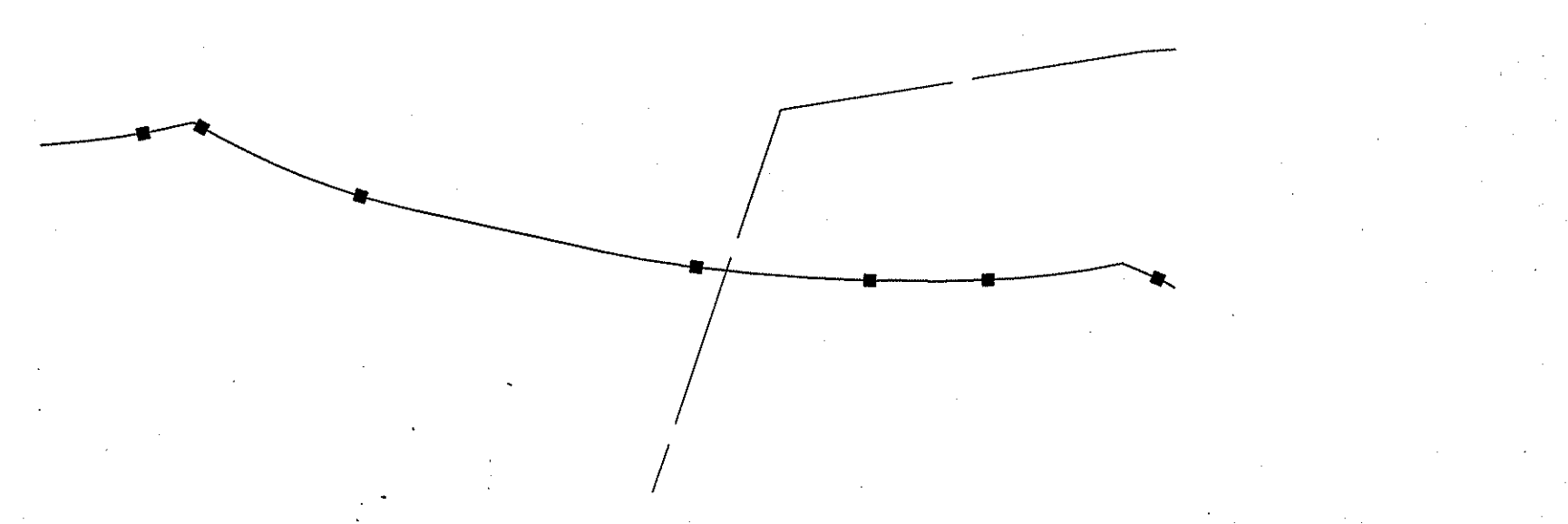
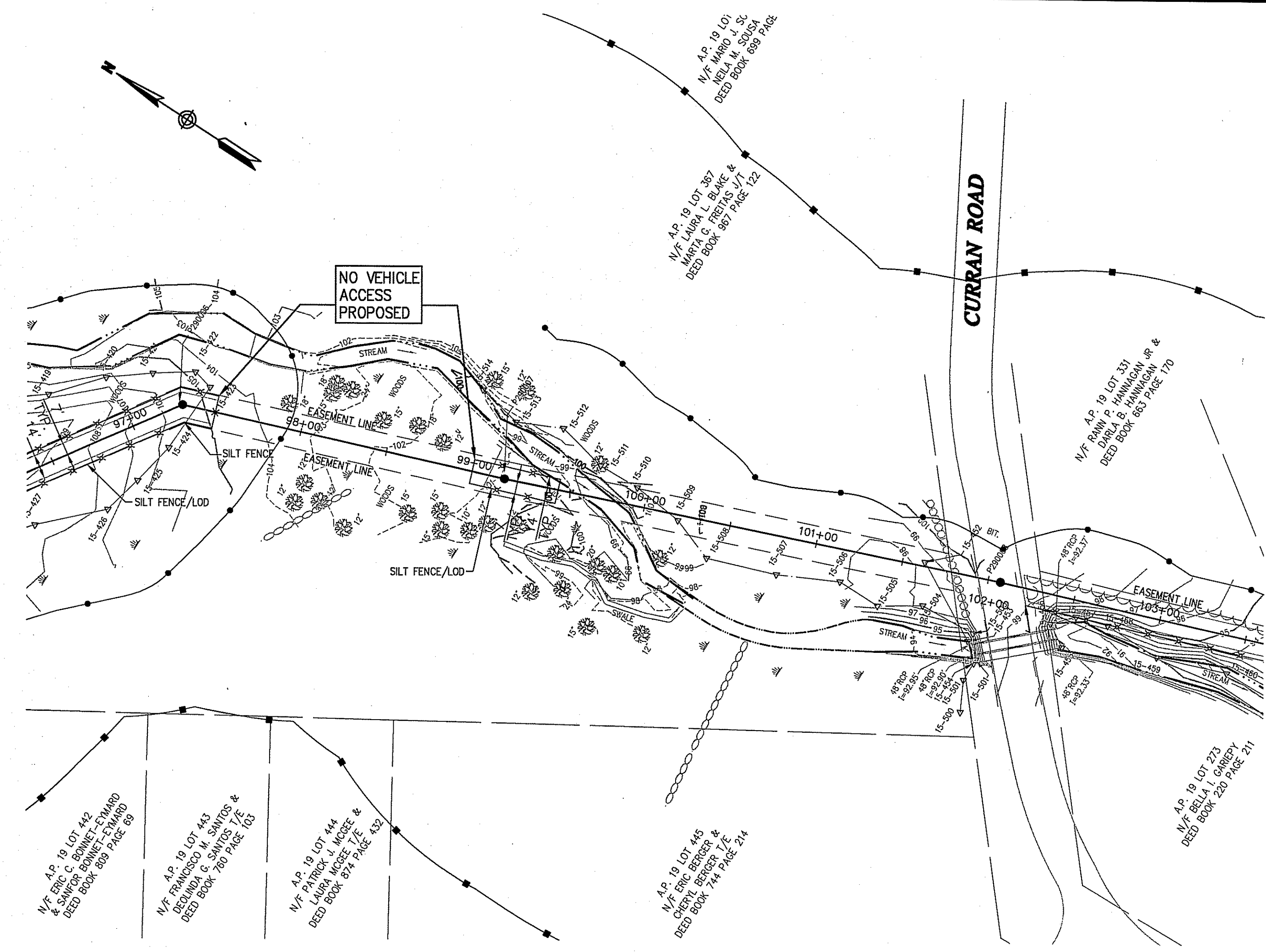
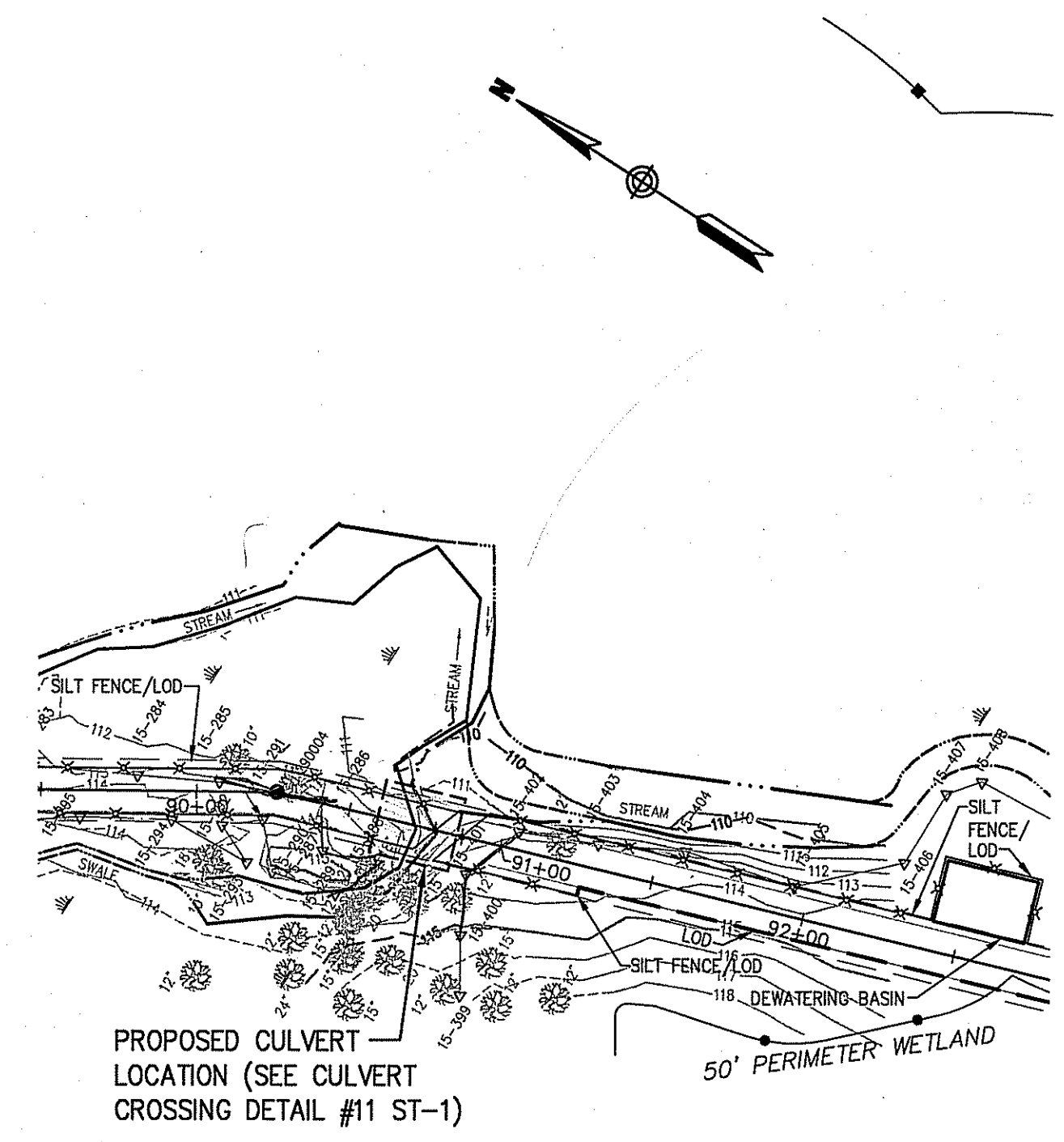
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Legend

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No.	Revision	Date	Appr.

Designed by _____ Drawn by _____ Checked by _____
 CAD checked by _____ Approved by _____
 Scale 1"=50' Date April 2010
 Project Title

Abbott Valley Interceptor Maintenance Program

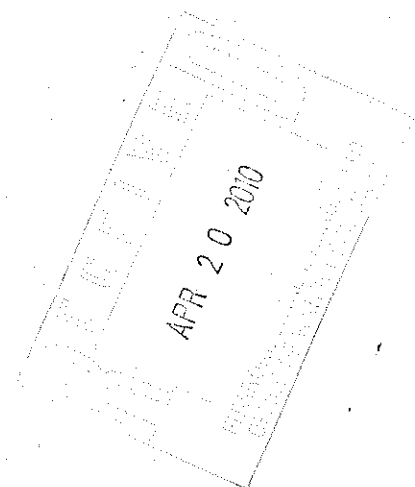
Cumberland, Rhode Island
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Not Approved for Construction
 Drawing Title

Abbott Valley Interceptor

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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 Charles H. Hester



Drawing Number
C-5

Sheet of
 5 11

Project Number
 71952.00

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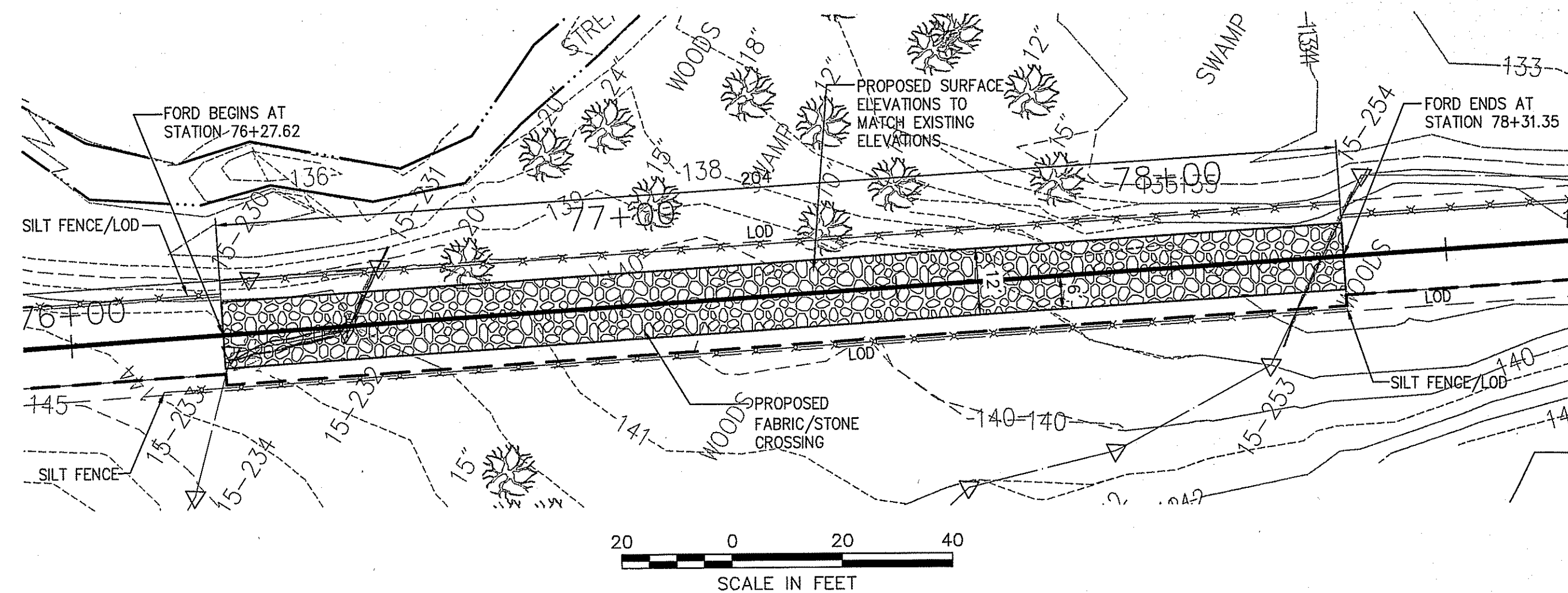
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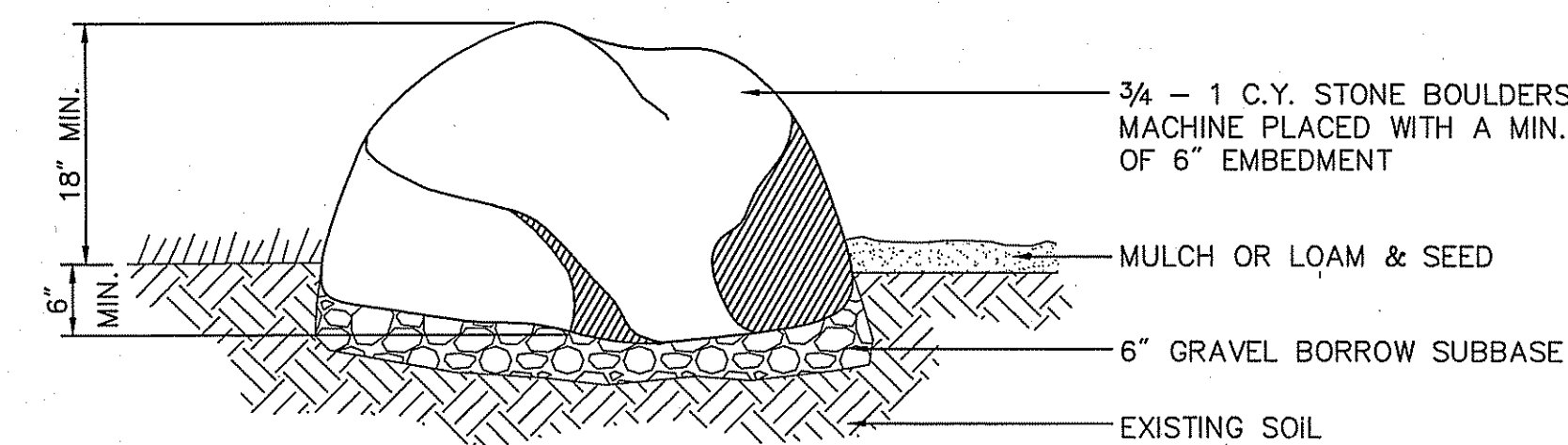
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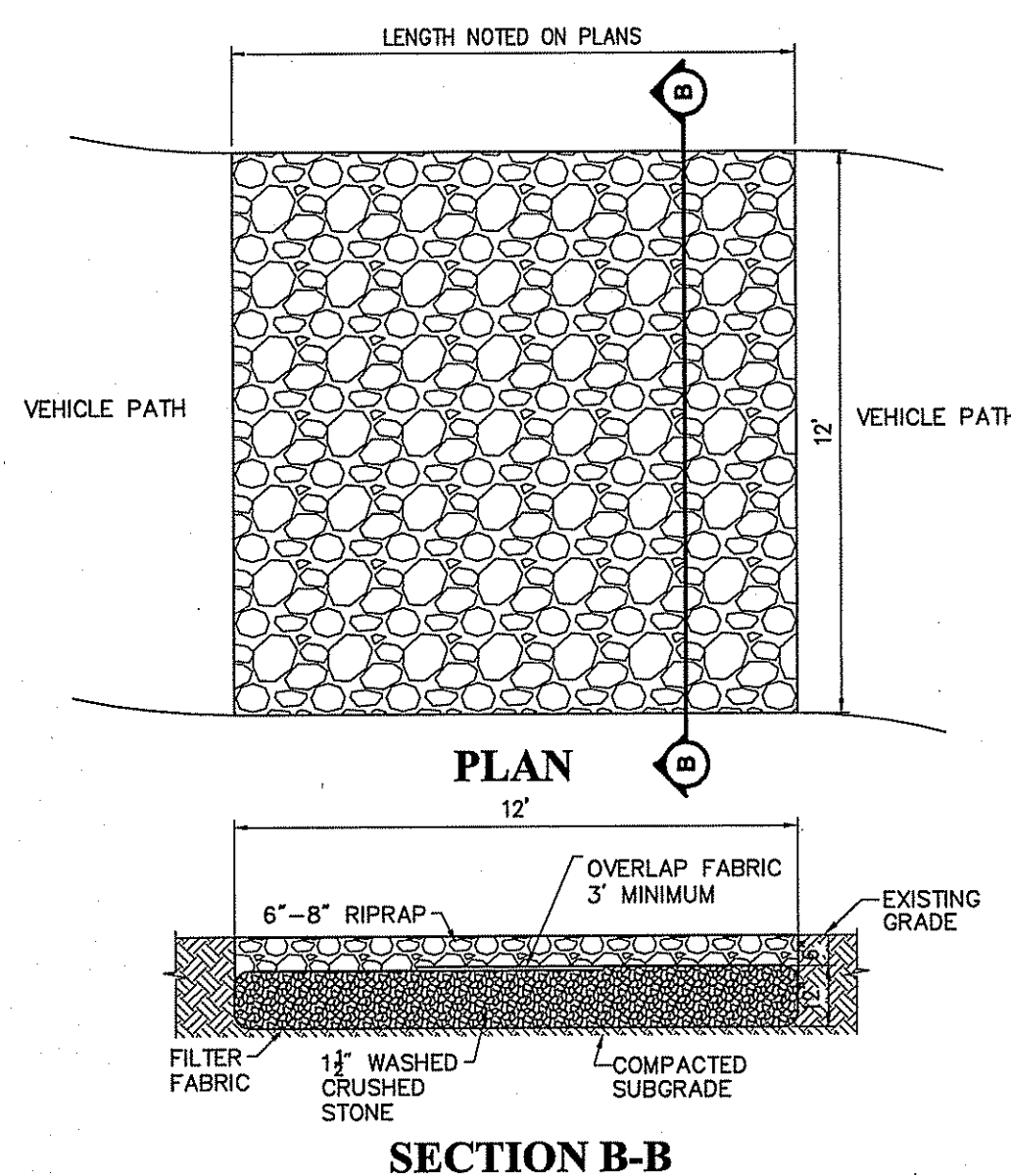


PROPOSED FABRIC/STONE CROSSING - DETAIL #10



NOTE:
TO BE SPACED 6' O.C. WHEN MORE THAN ONE

BOULDER BARRIER



Gravel Stream Crossing 9/08
N.T.S. Source: VHB

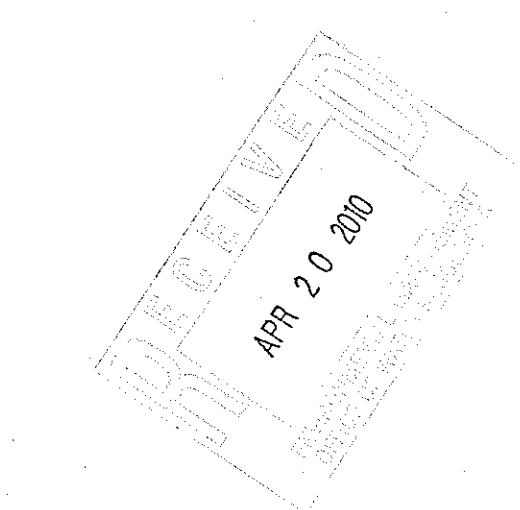
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Abbott Valley Interceptor
Maintenance Program

Cumberland, Rhode Island
Issued for

Preliminary Determination

Not Approved for Construction
Drawing Title



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Charles A. Hester

Details Sheet 3

Drawing Number

C-8

Sheet of 11

Project Number 71952.00

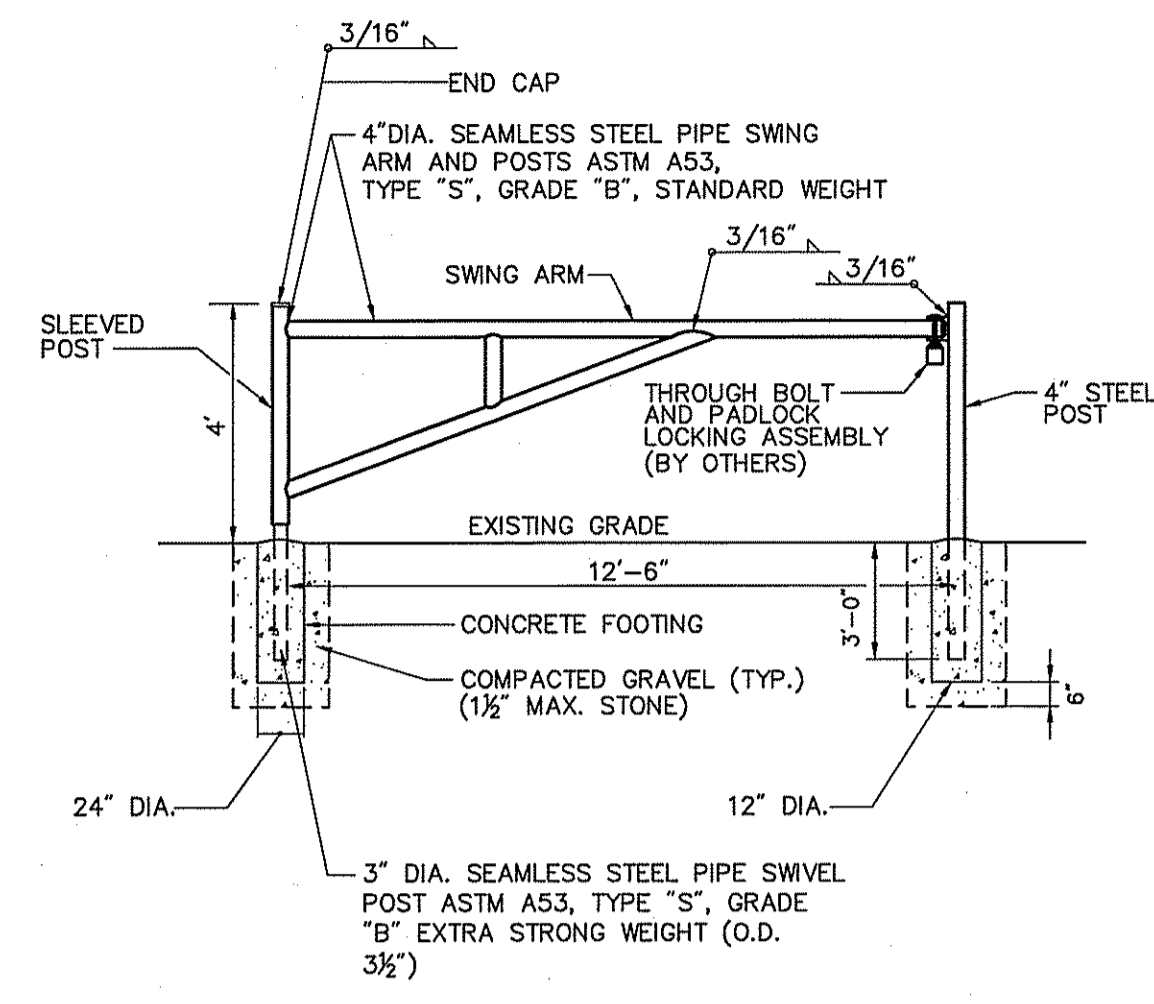
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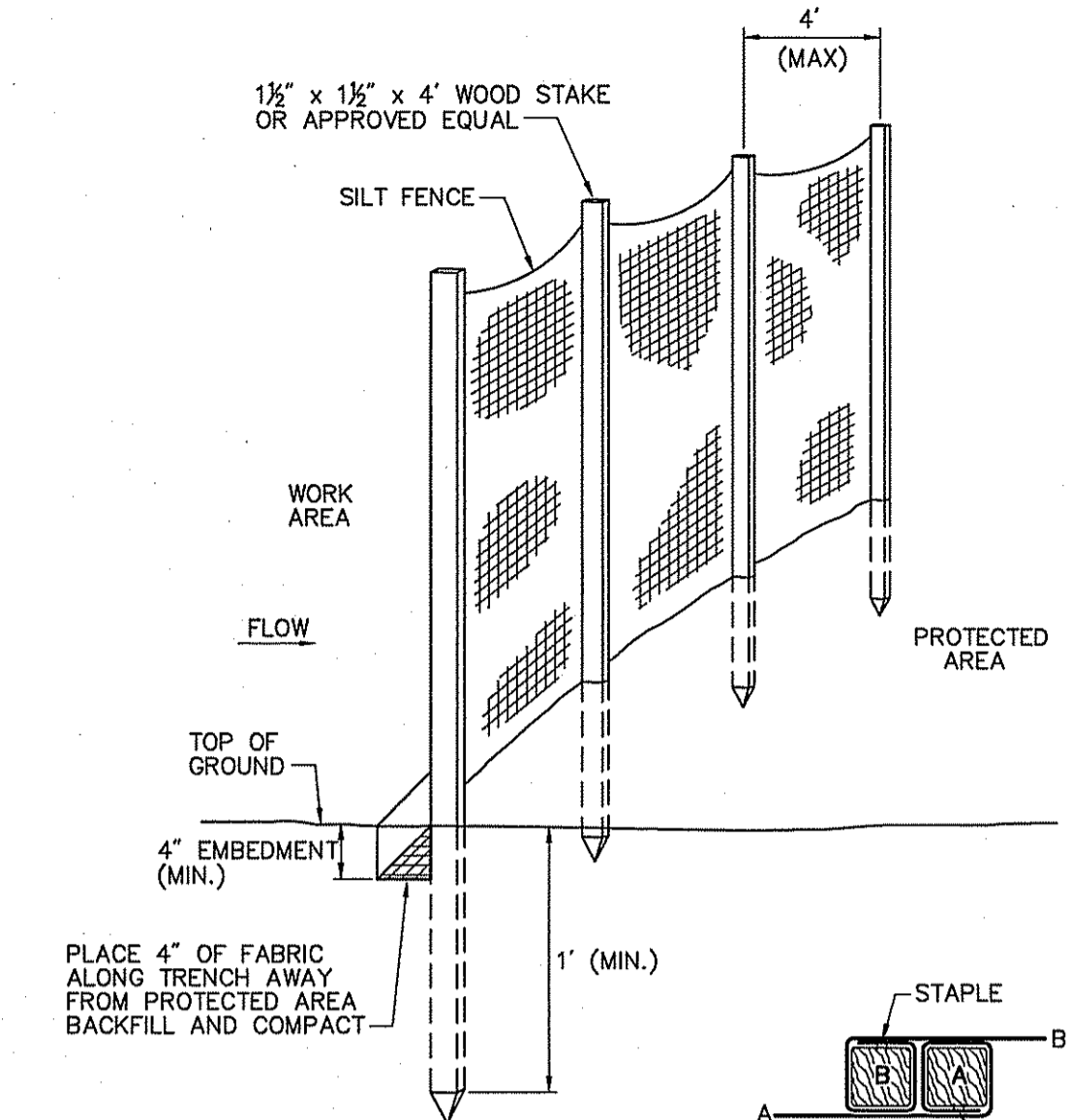
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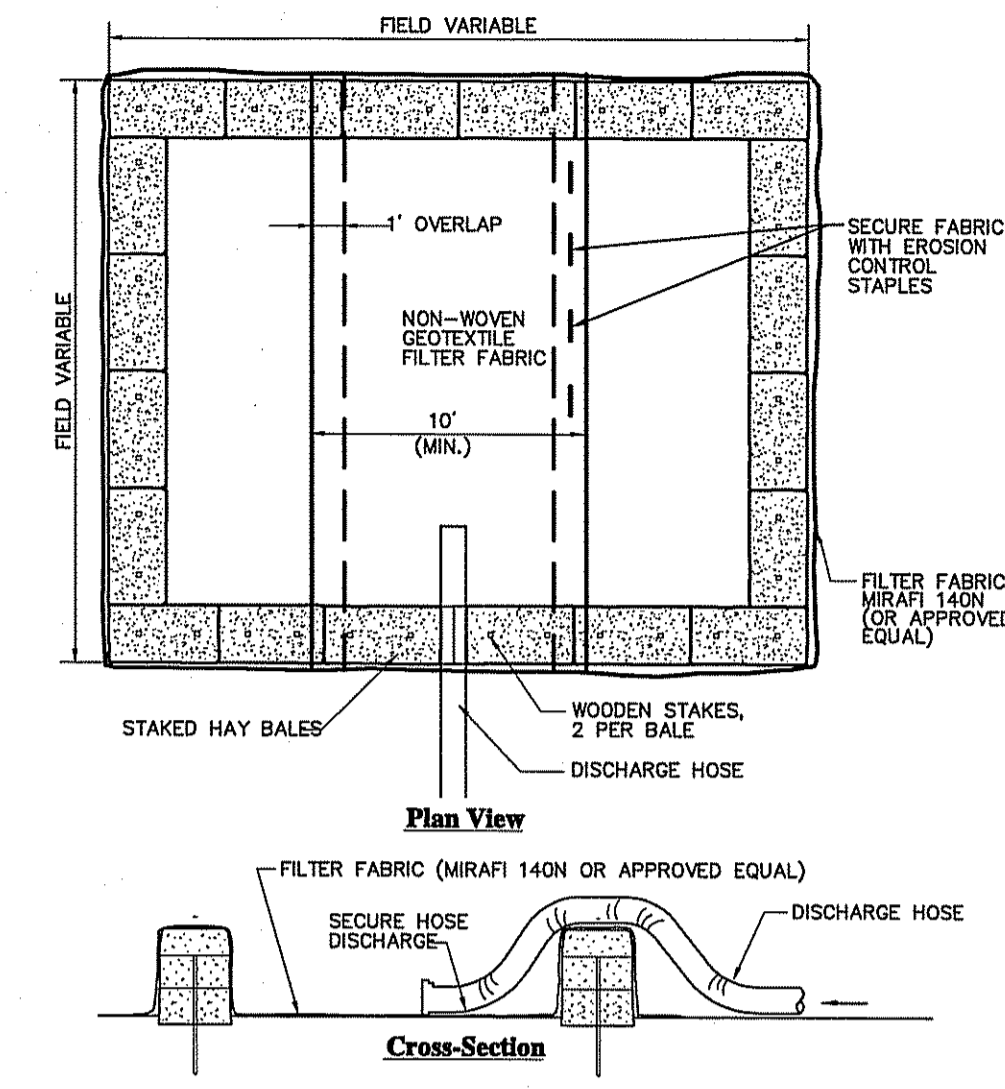
- Notes:**
- SHOP PRIME PAINT EXPOSED SURFACES
FIELD PAINT EPOXY ENAMEL-YELLOW.
 - 3,000 PSI CONCRETE FOOTING

PIPE GATE (SINGLE) - DETAIL #14
SCALE: NTS
S-STD.
H-STD.



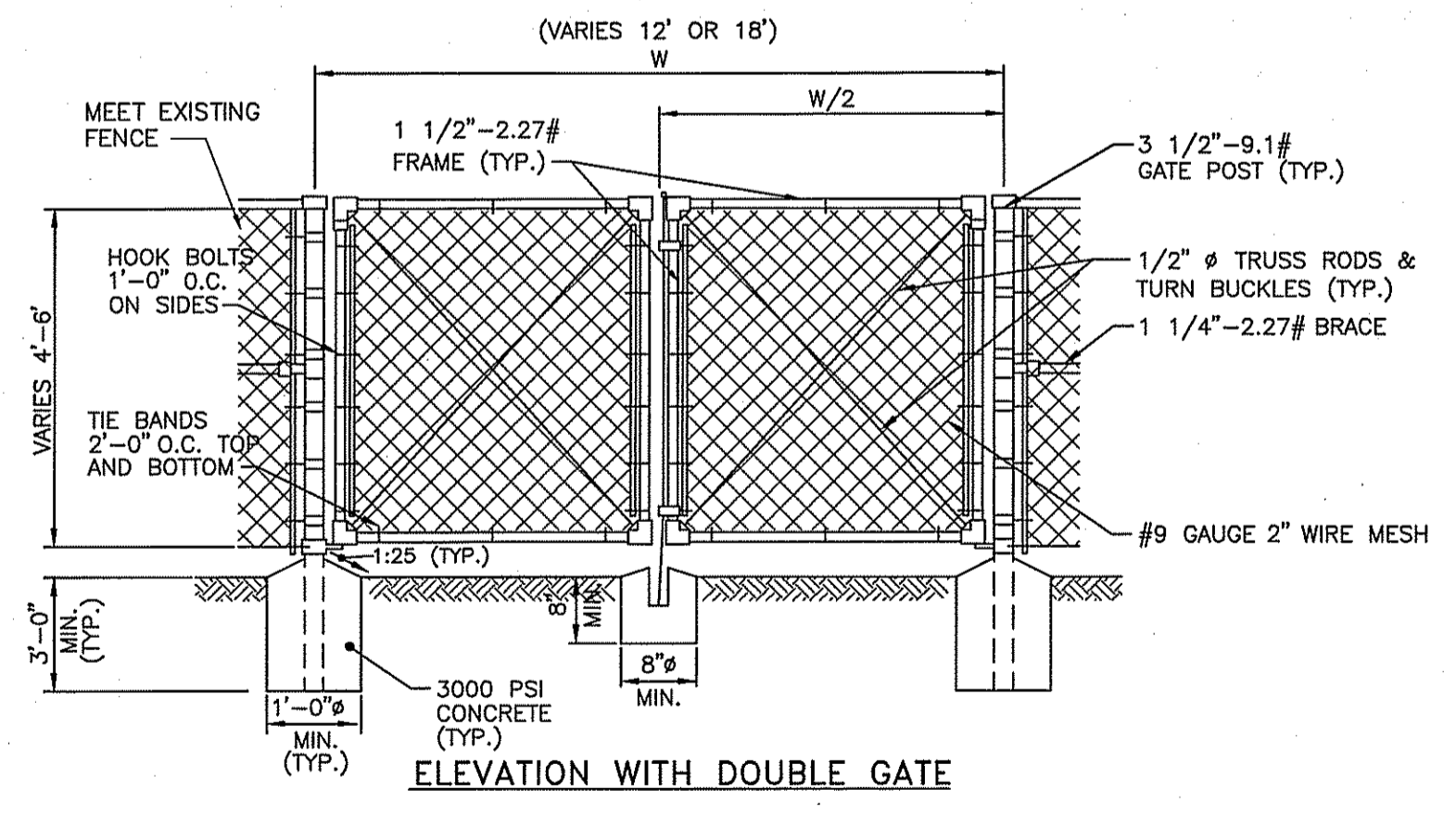
Wood Stake Joint Detail

SILT FENCE BARRIER - DETAIL #16
SCALE: NTS
S-STD.
H-STD.



- Notes:**
- NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
 - THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.

DEWATERING HAYBALE BASIN
SCALE: NTS
S-STD.
H-STD.



CHAIN LINK FENCE GATE - DETAIL #18
SCALE: NTS
S-STD.
H-STD.

- TUBULAR GATE POSTS

	STEEL NOM. O.D.	ALUMINUM NOM. O.D.
DOUBLE GATE OPENING UP TO 12'	100 MM(4 IN.)	75 MM(3-IN.)
DOUBLE GATE OPENING 13' - 26'	100 MM(4-IN.)	100 MM(4-IN.)

THE ABOVE LIMITS OF THE OPENINGS ARE INCLUSIVE
- GATE FRAMES & BRACES

	STEEL NOM. O.D.	ALUMINUM NOM. O.D.
SINGLE GATE FRAME UP TO 6' WIDE	40 MM(1.57 IN.)	50 MM(2 IN.)
SINGLE GATE FRAME OVER 6' WIDE	50 MM(1.97 IN.)	50 MM(1.97 IN.)
- TRUSS ROD DIAMETER

	STEEL NOM. O.D.	ALUMINUM NOM. O.D.
	10 MM(0.39 IN.)	10 MM(0.39 IN.)
- CHAIN LINK FABRIC FOR GATES TO BE THE SAME AS REQUIRED FOR FENCE.
- GATE POST BASE - SEE DETAIL 18 (PORTLAND CEMENT CONCRETE (3000 PSI)
- FOR DESCRIPTION, MATERIALS, AND CONSTRUCTION METHODS, SEE SPECIFICATIONS.

No.	Revision	Date	Appd.

Designed by _____ Drawn by _____ Checked by _____
 CAD checked by _____ Approved by _____
 Scale As Noted Date April 2010
 Project Title

**Abbott Valley Interceptor
Maintenance Program**

Cumberland, Rhode Island
 Issued for

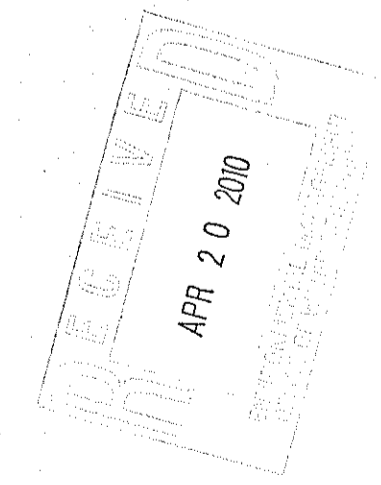
Preliminary Determination

Not Approved for Construction
 Drawing Title

Details Sheet 4

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER RESOURCES
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Charles A. Harkin



Drawing Number

C-9

Sheet of 9 11

Project Number
71952.00

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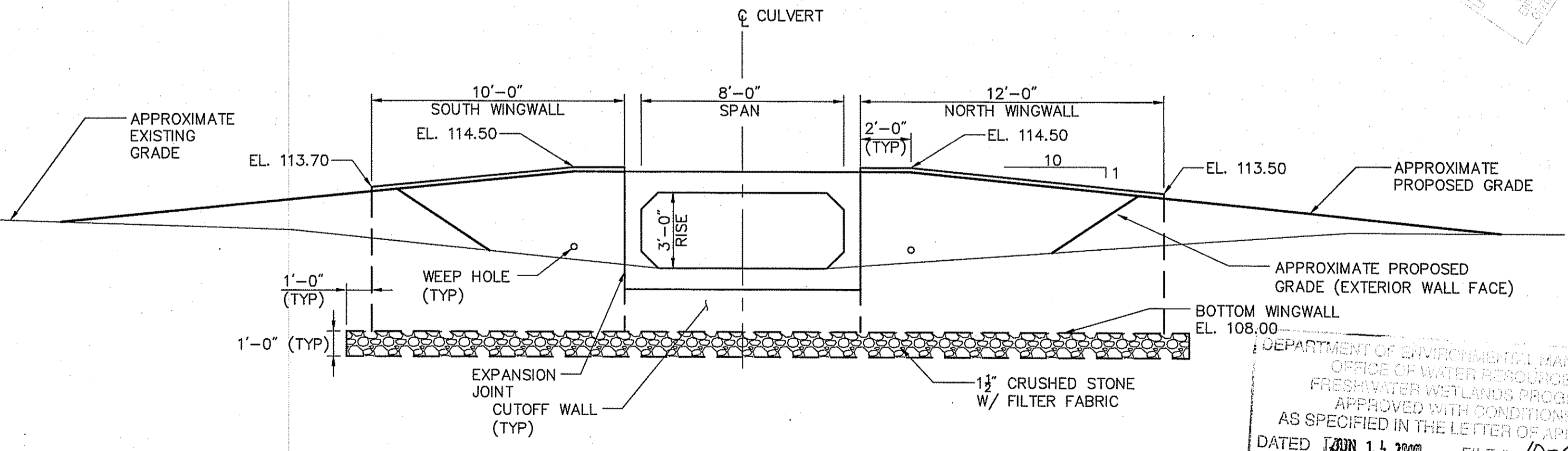
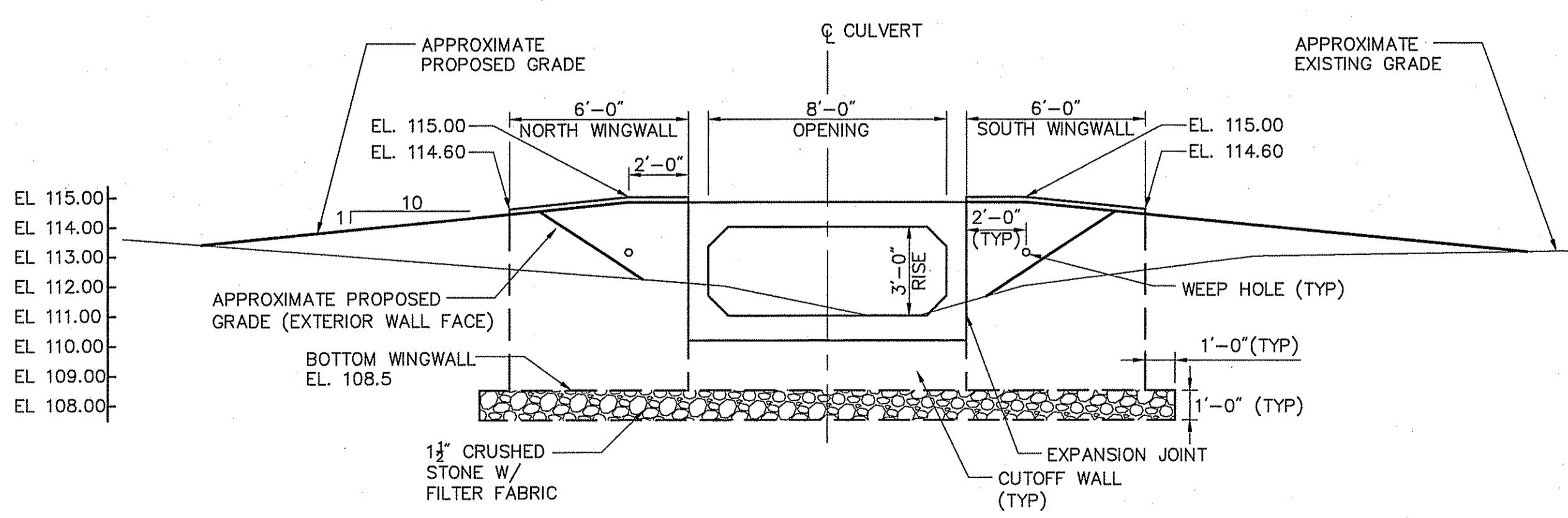
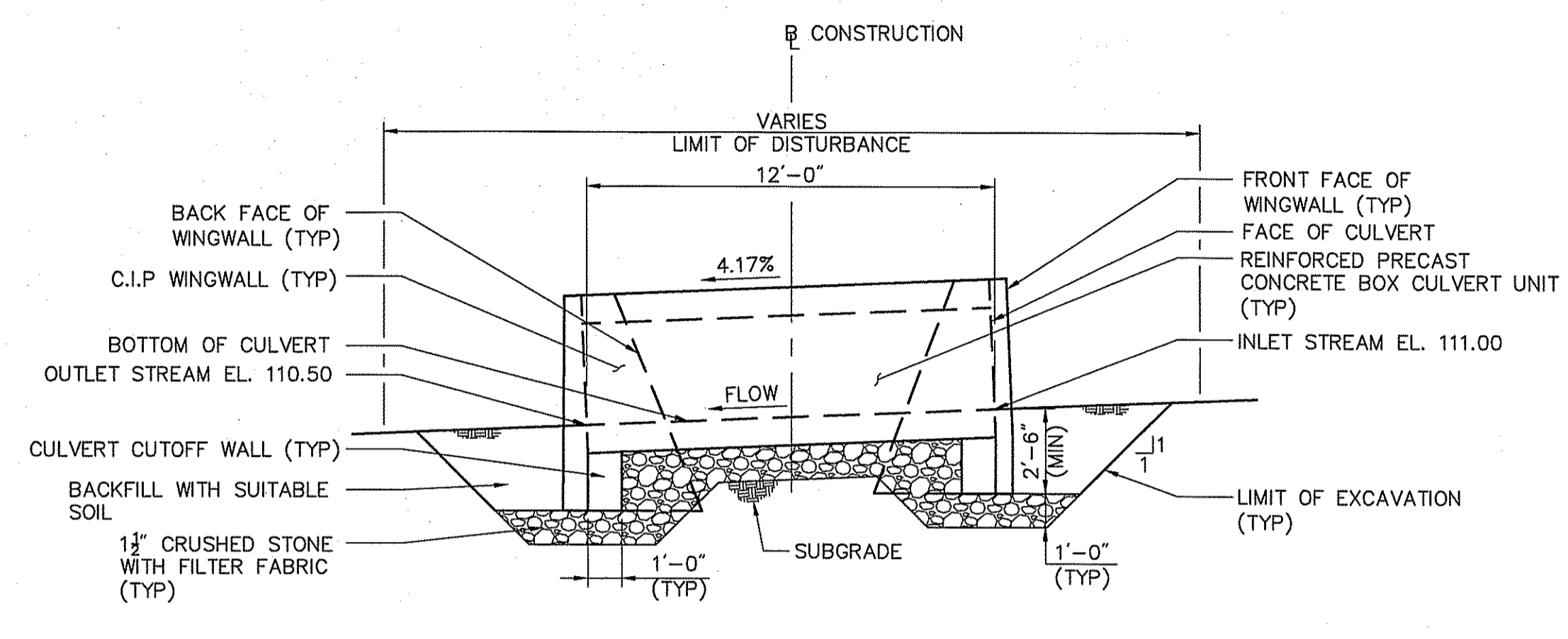
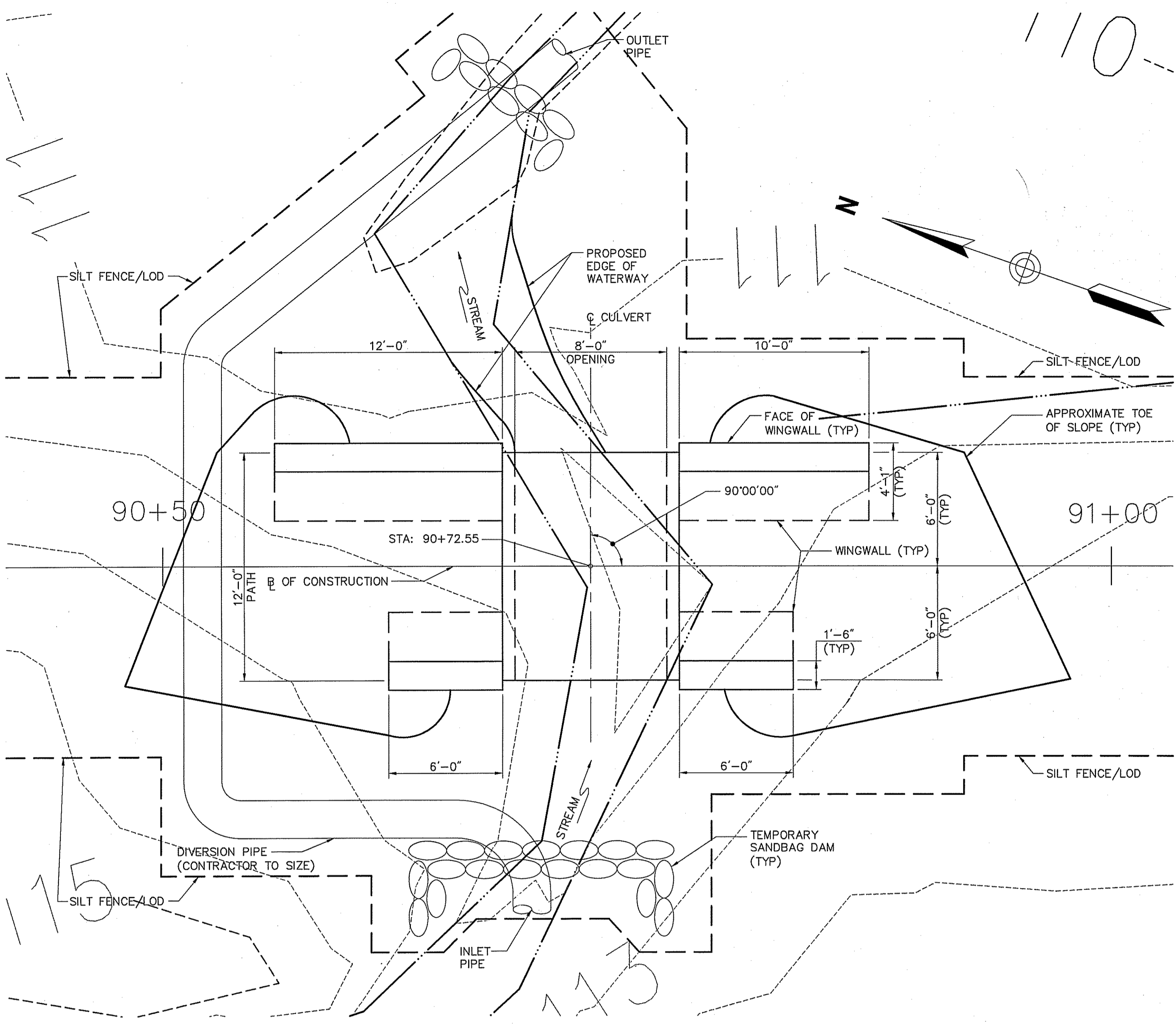


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- NOTE:
- 1) PROVIDE BITUMINOUS DAMP-PROOFING ON BURIED SIDES OF CULVERT AND WINGWALLS



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CAD checked by	Approved by	
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Culvert Crossing Detail #11

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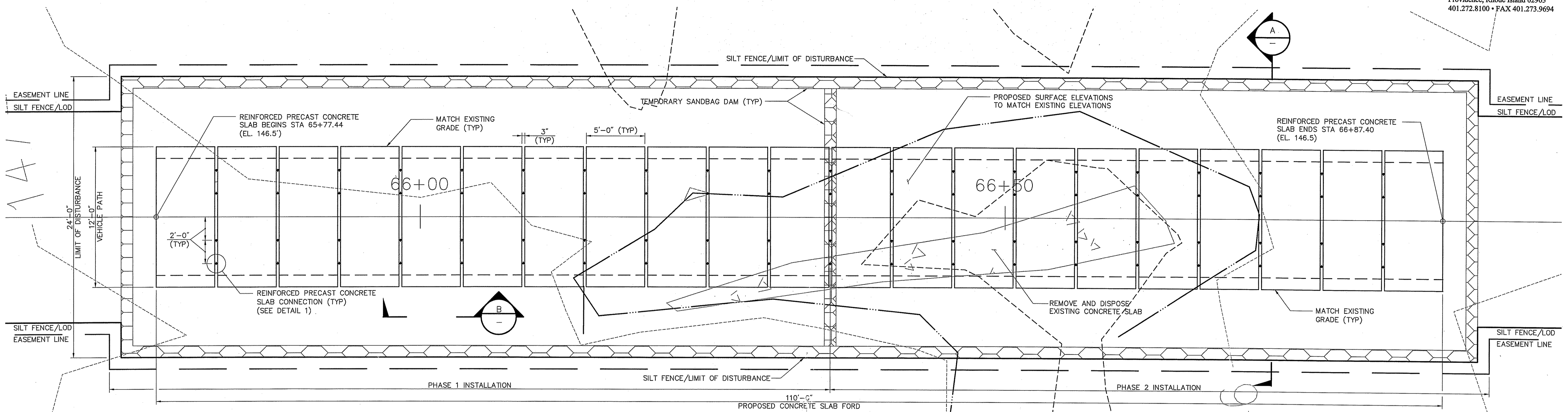
Drawing Number
ST-1
Sheet of
10 11
Project Number
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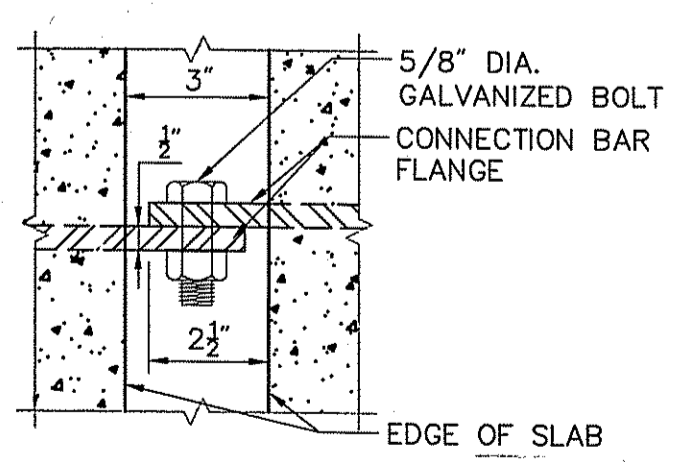
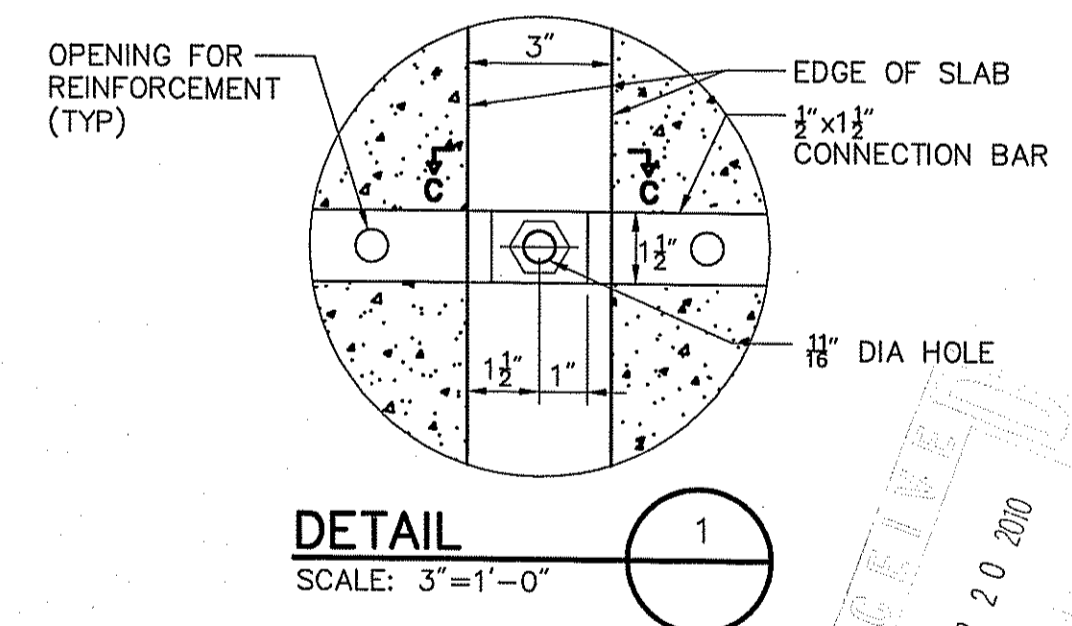
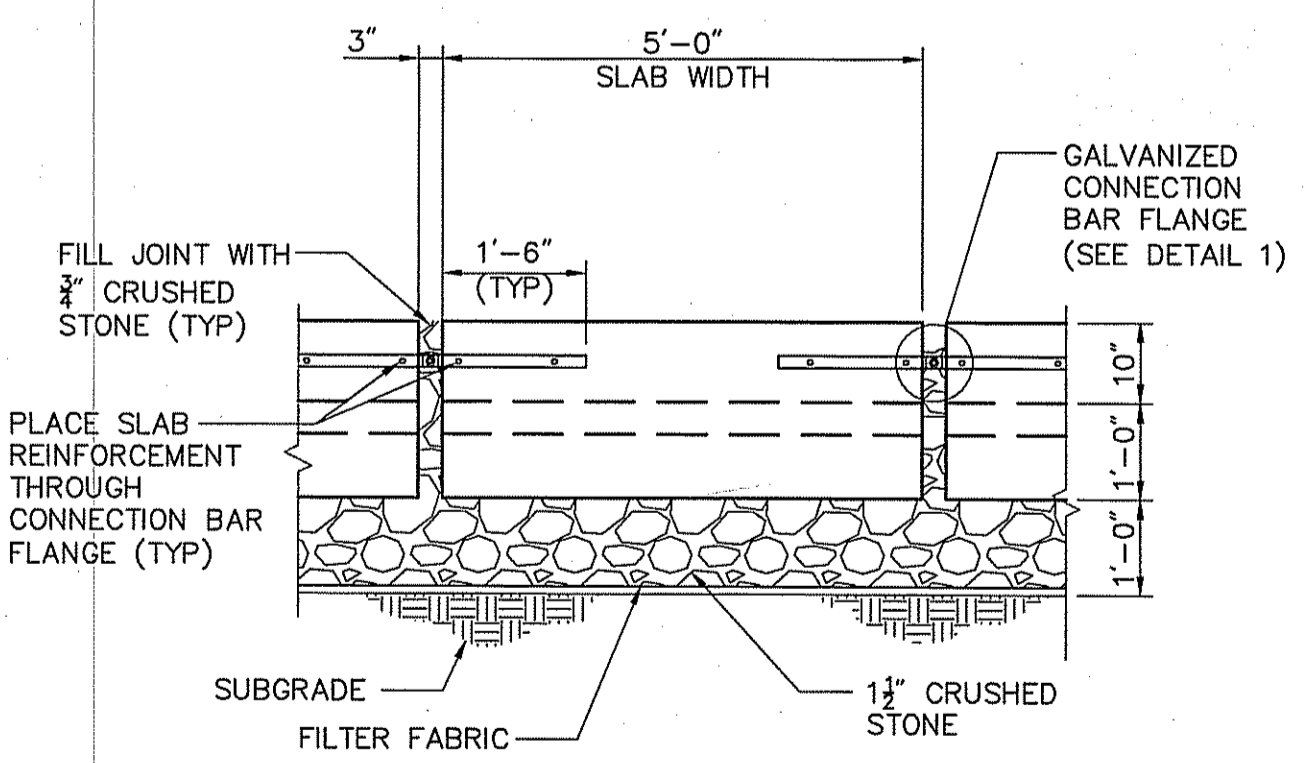
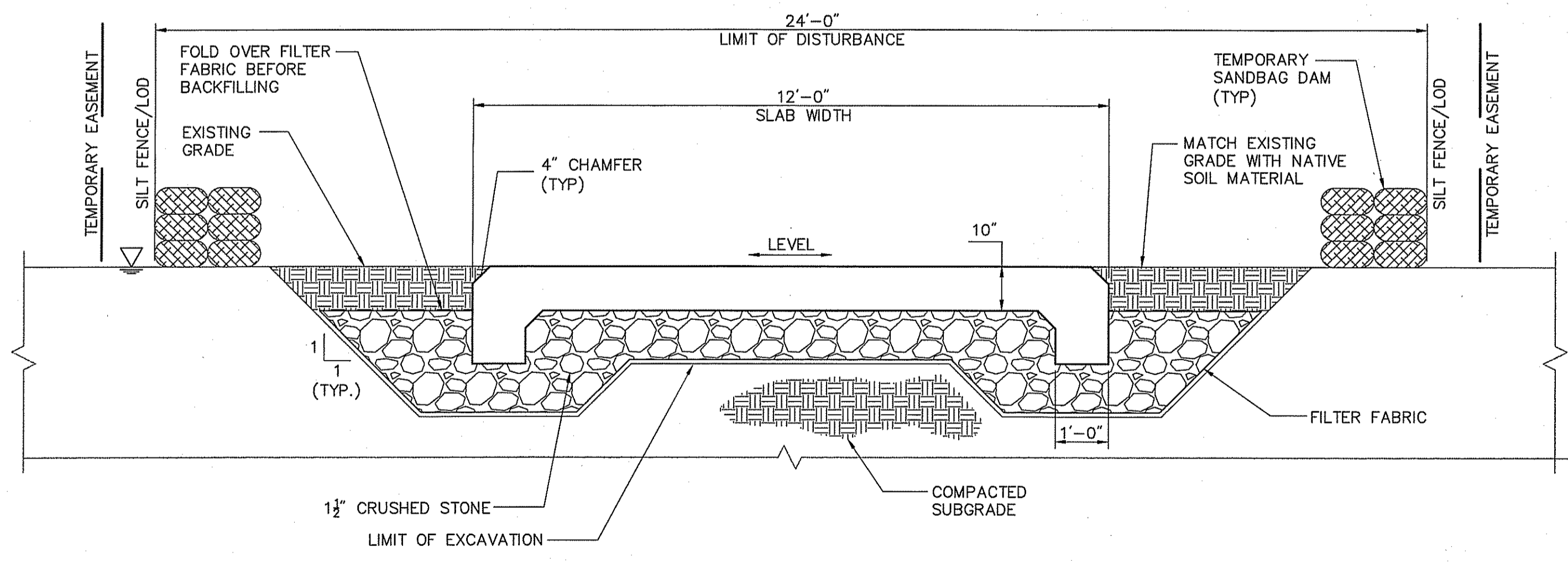
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PLAN

SCALE: 1/4" = 1'-0"



No.	Revision	Date	Apprv.

Designed by	Drawn by	Checked by	
CAD checked by	Approved by		
Scale	As Noted	Date	April 2010

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Cumberland, Rhode Island
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Drawing Title

Concrete Slab Ford Detail #9

AS SPECIFIED IN THE CONTRACT DOCUMENTS
DATED 13 JUN 14 2010 FILE # 10-0001
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Charles A. Harker

Drawing Number
ST-2
Sheet of 11 11
Project Number
71952.00

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