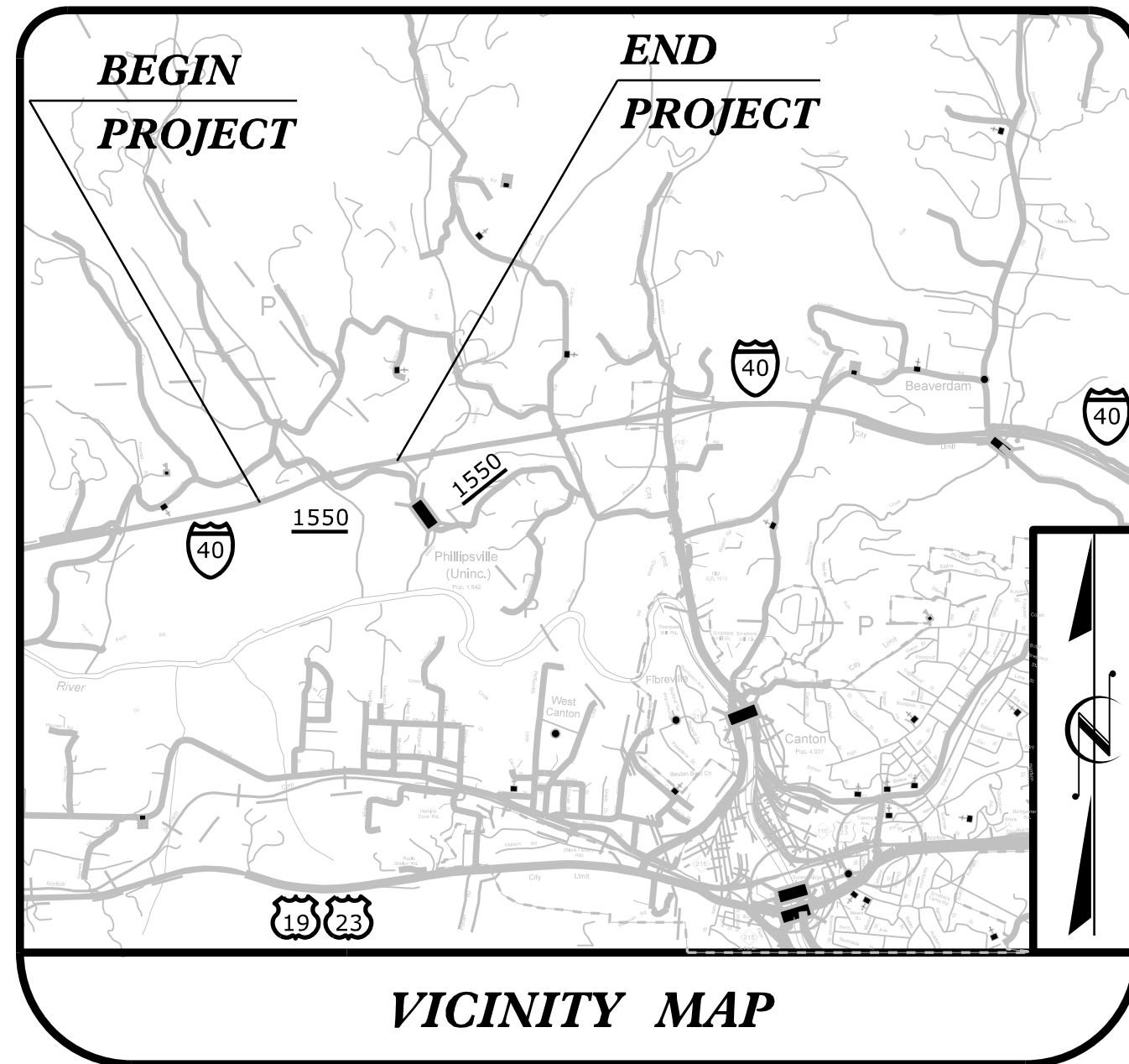


TIP PROJECT: HB-0003



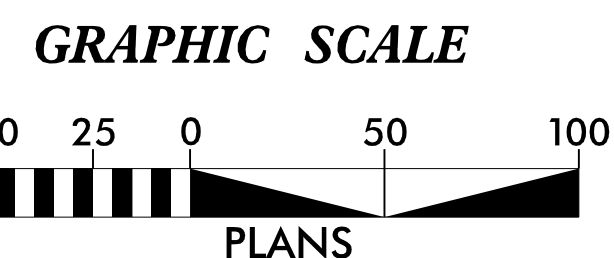
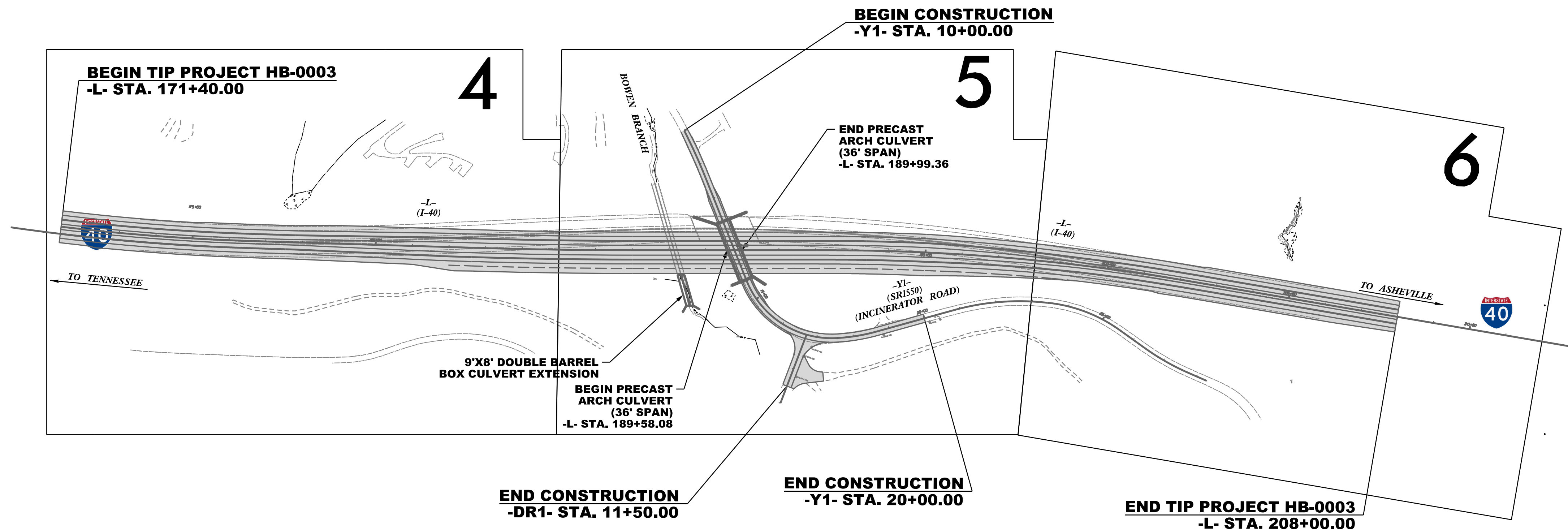
STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 PLAN FOR PROPOSED
 HIGHWAY EROSION CONTROL
HAYWOOD COUNTY

LOCATION: BRIDGE 239 ON I-40 OVER SR1550
 (INCINERATOR ROAD)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURE.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	HB-0003	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

THIS PROJECT CONTAINS
 EROSION CONTROL PLANS
 FOR CLEARING AND
 GRUBBING PHASE OF
 CONSTRUCTION.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
 THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000
 GENERAL CONSTRUCTION PERMIT EFFECTIVE APRIL 1, 2019
 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF
 ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.



1223 JONES FRANKLIN ROAD
 RALEIGH, N.C. 27606
 License No. E-0377
 Tel. 919 851 8077
 Fax 919 851 8107

Prepared in the Office of:
WETHERILL ENGINEERING, INC.
 1223 JONES FRANKLIN ROAD
 RALEIGH, NC 27606

Designed by:
KATIE ESTEP **4485**
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

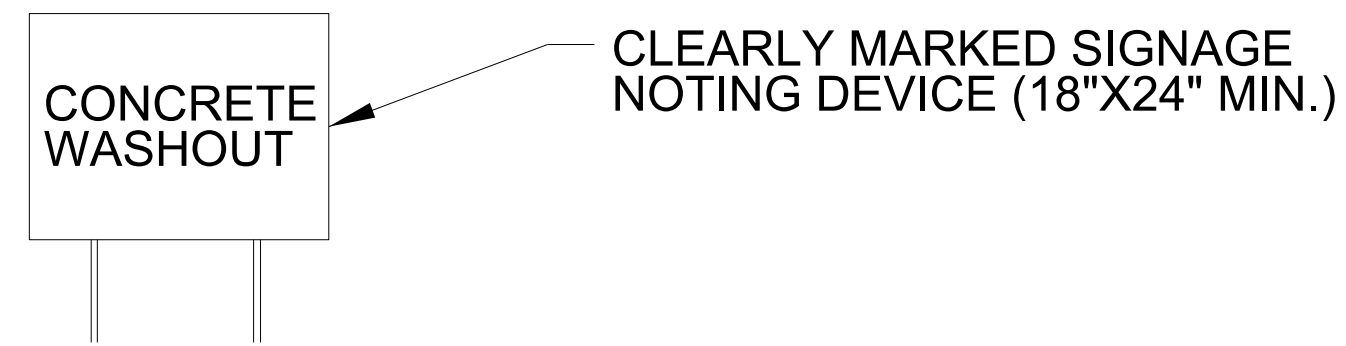
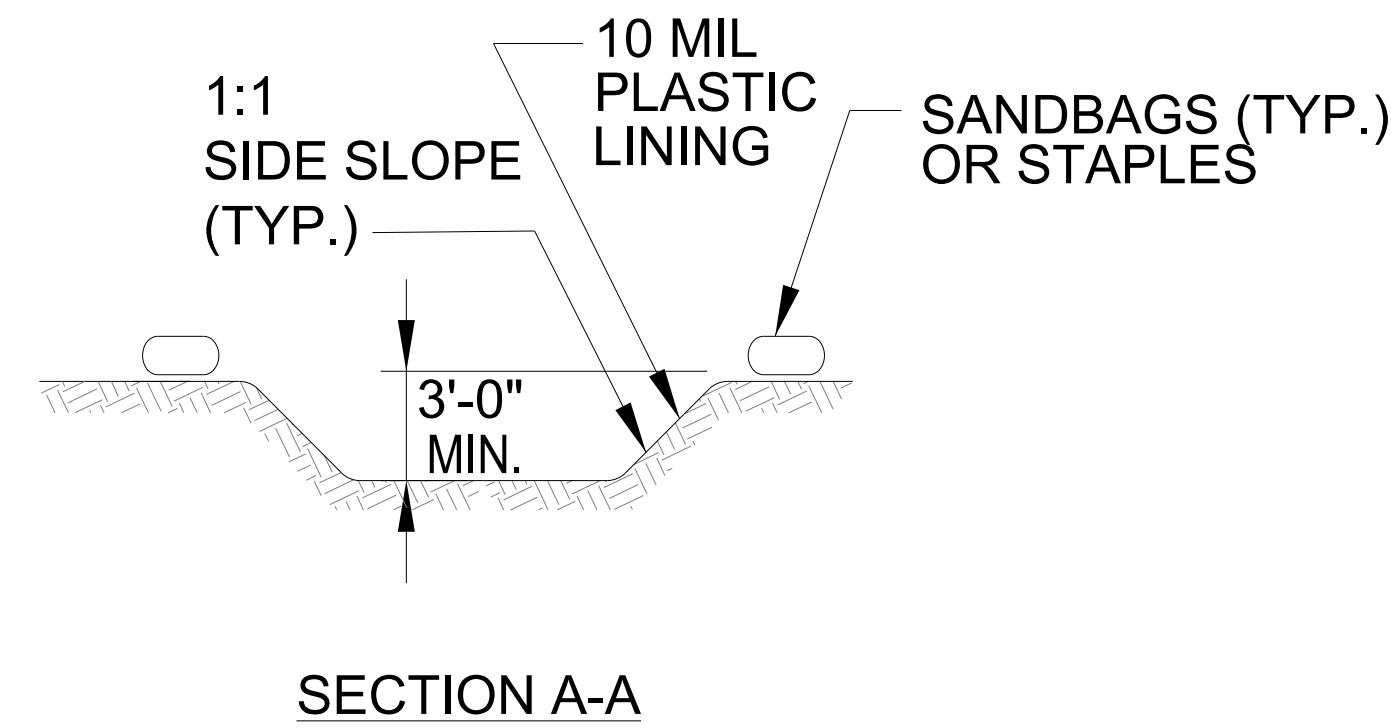
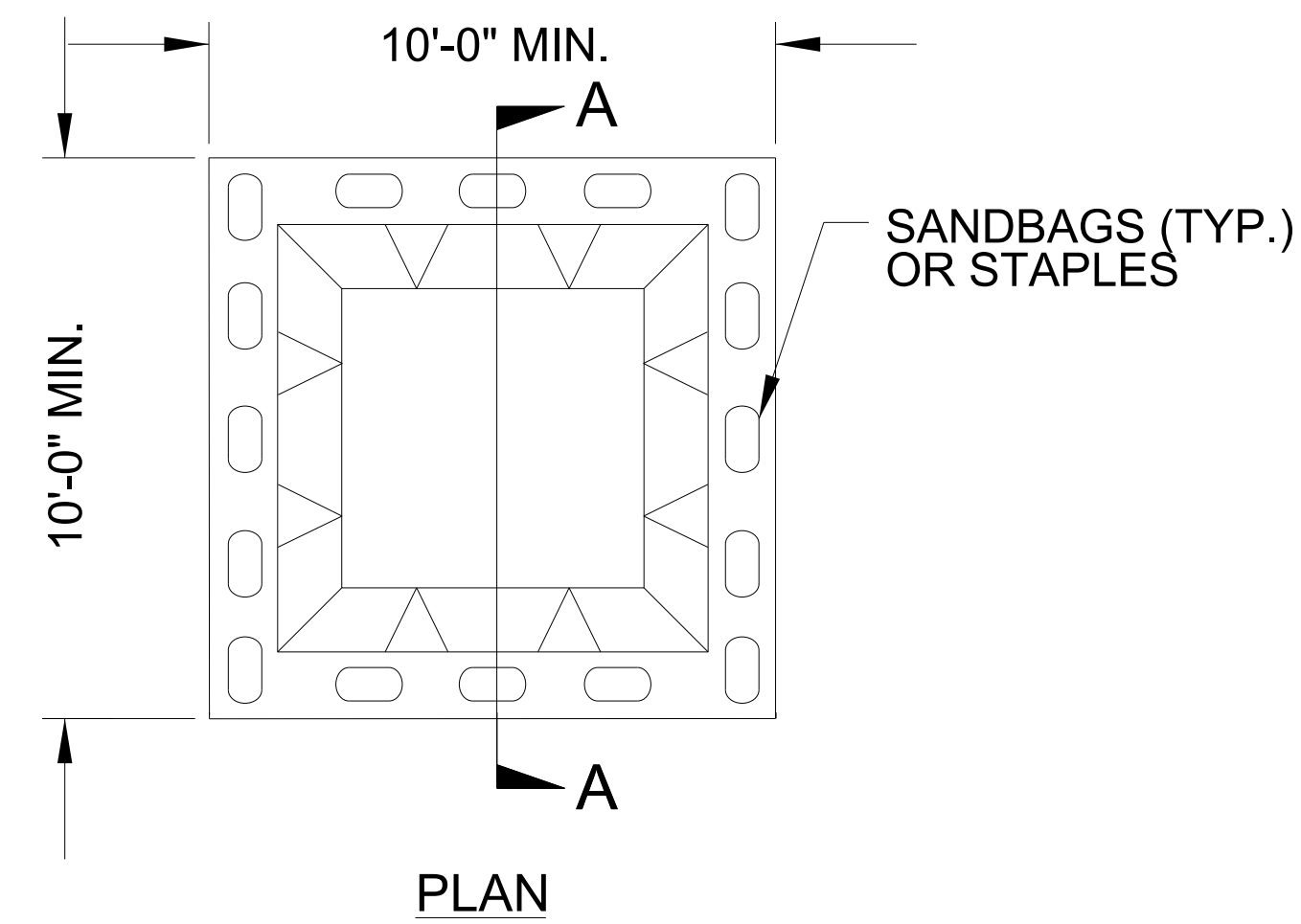
PROJECT REFERENCE NO. HB-0003	SHEET NO. EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A	A	1636.03	Excelsior Wattle Barrier	
1632.02	Type B	B	1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C	C			

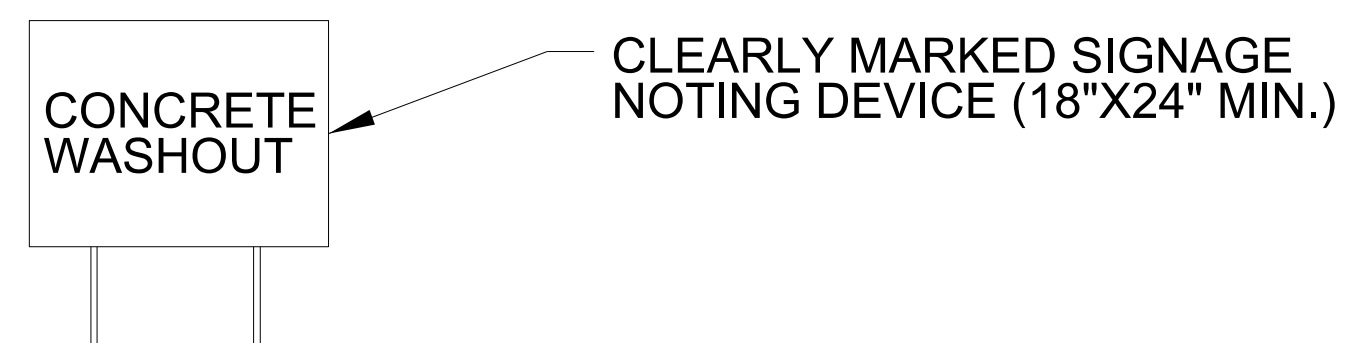
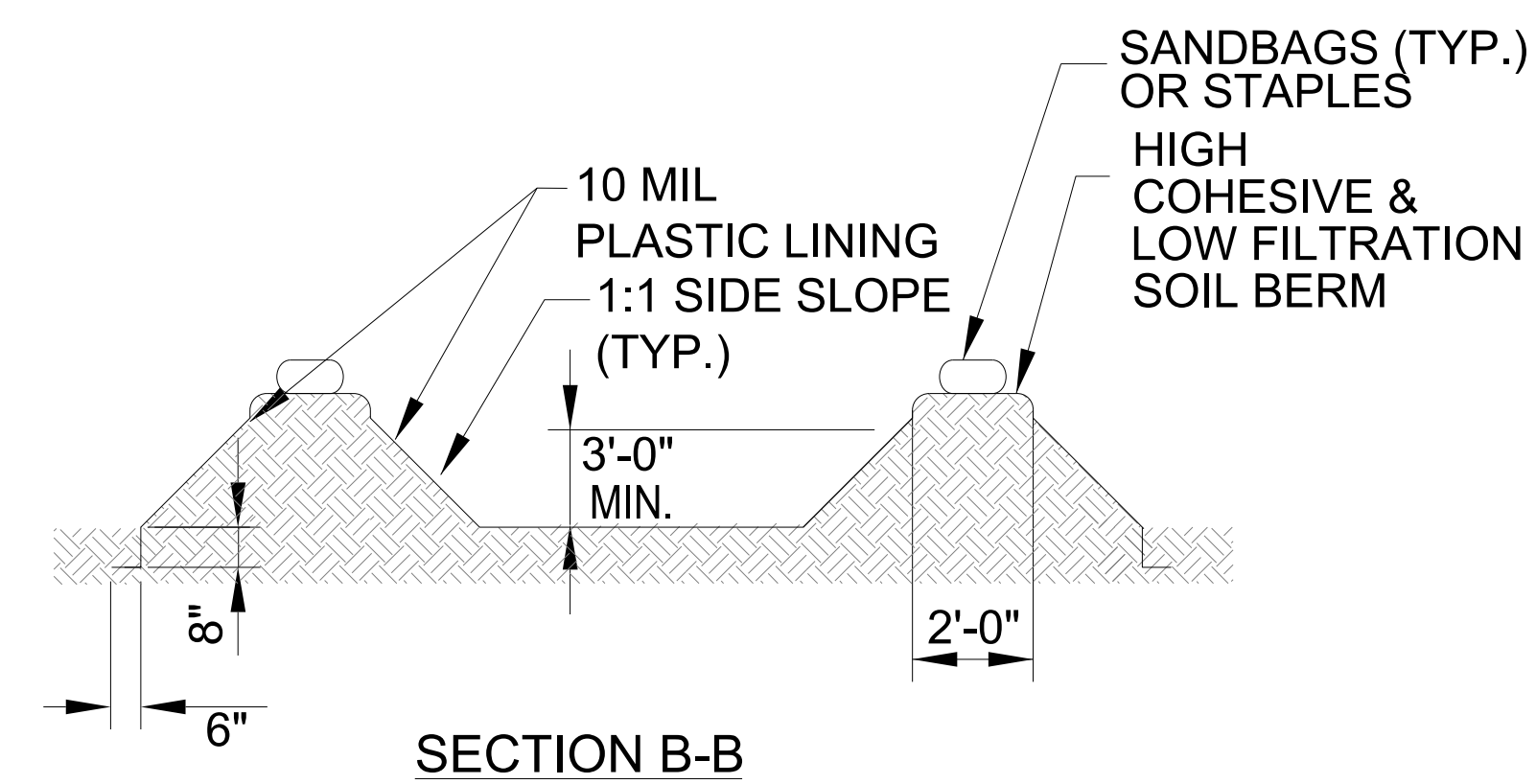
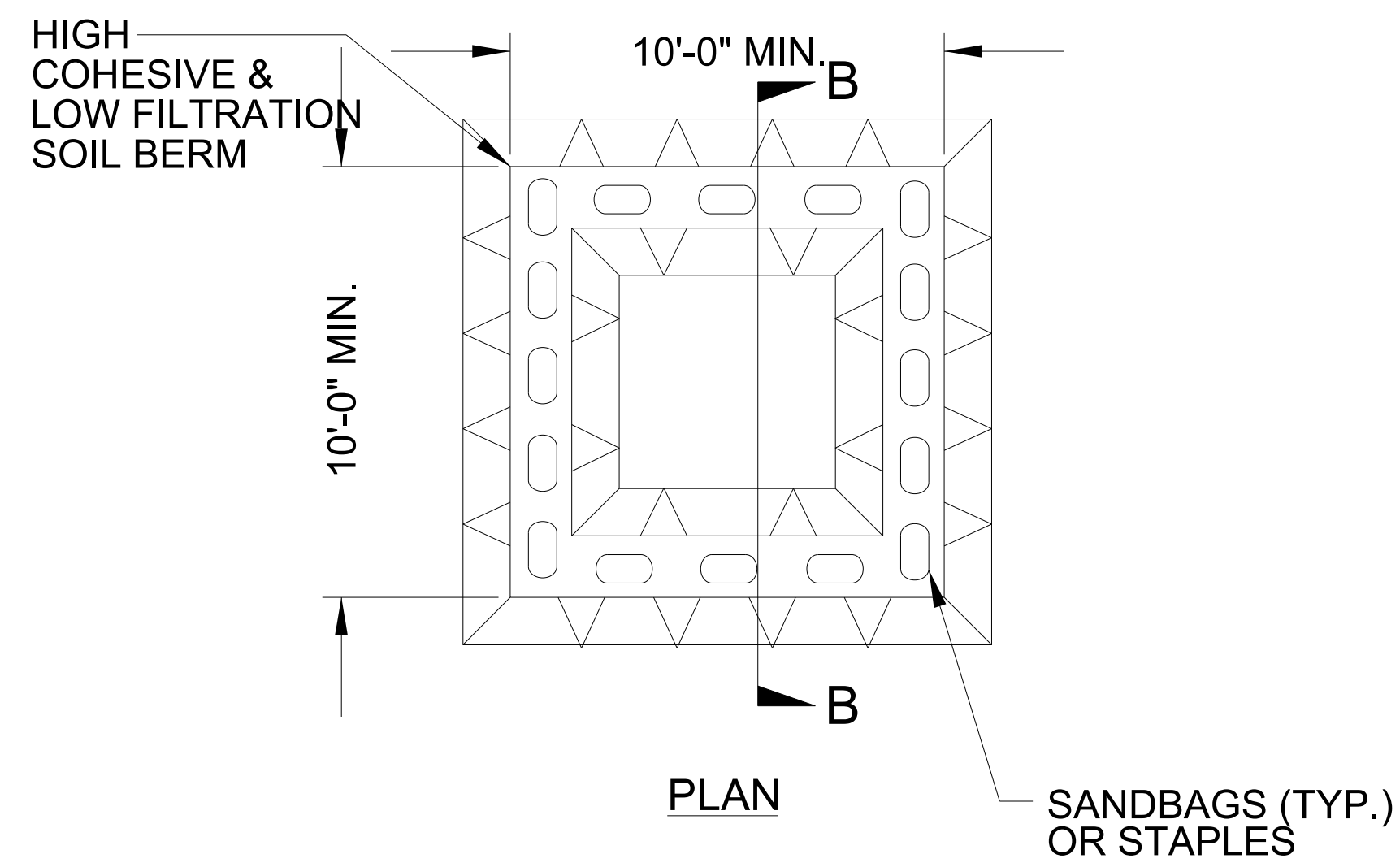
PROJECT REFERENCE NO. <i>HB-0003</i>	SHEET NO. <i>EC-2A</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA


PROJECT REFERENCE NO. <i>HB-0003</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

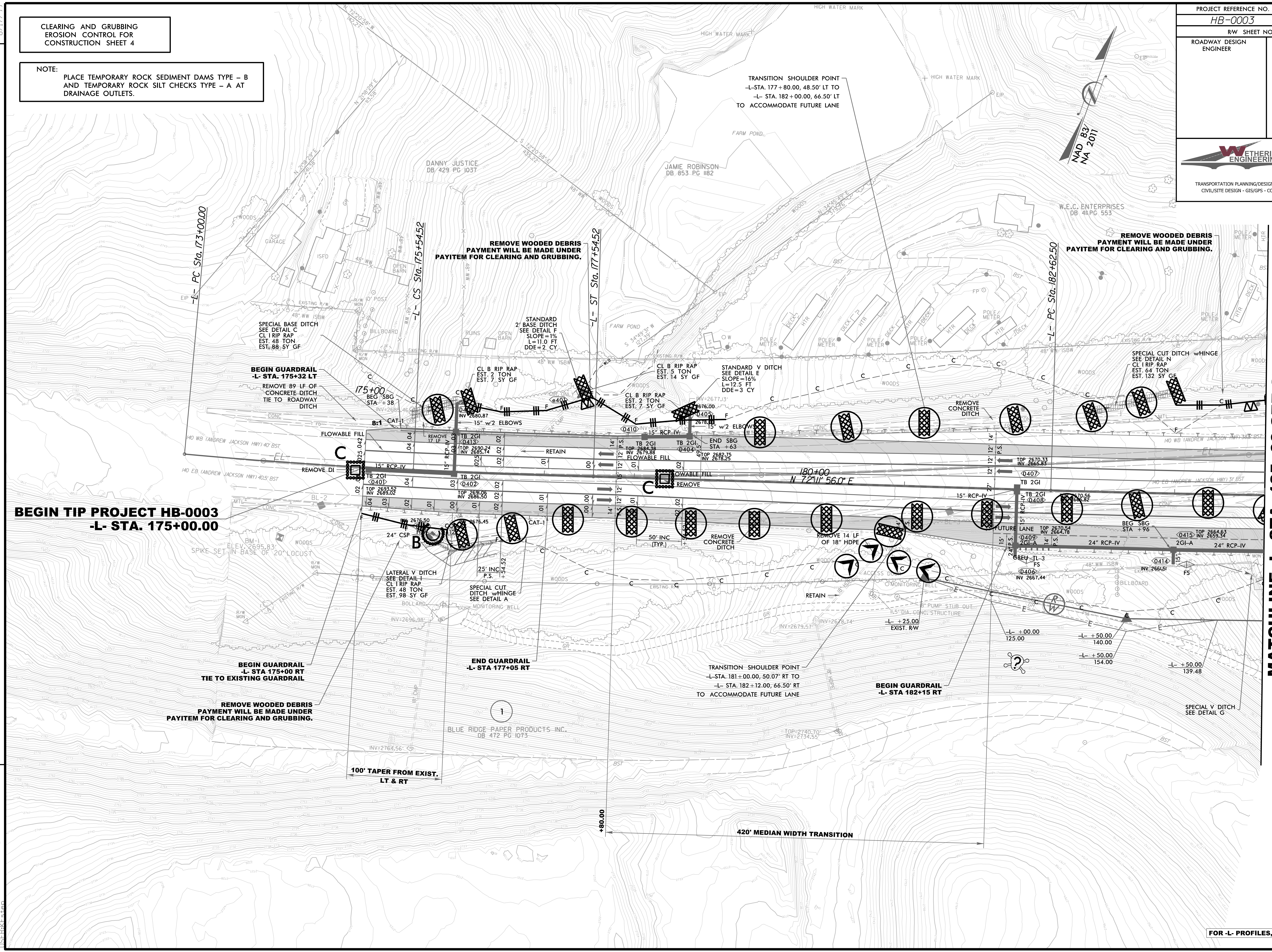
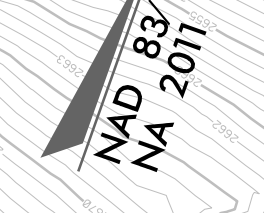
SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

PROJECT REFERENCE NO. HB-0003	SHEET NO. EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION	




REVISIONS

MATCHLINE -L- STA. 185+00 SEE SHEET 5

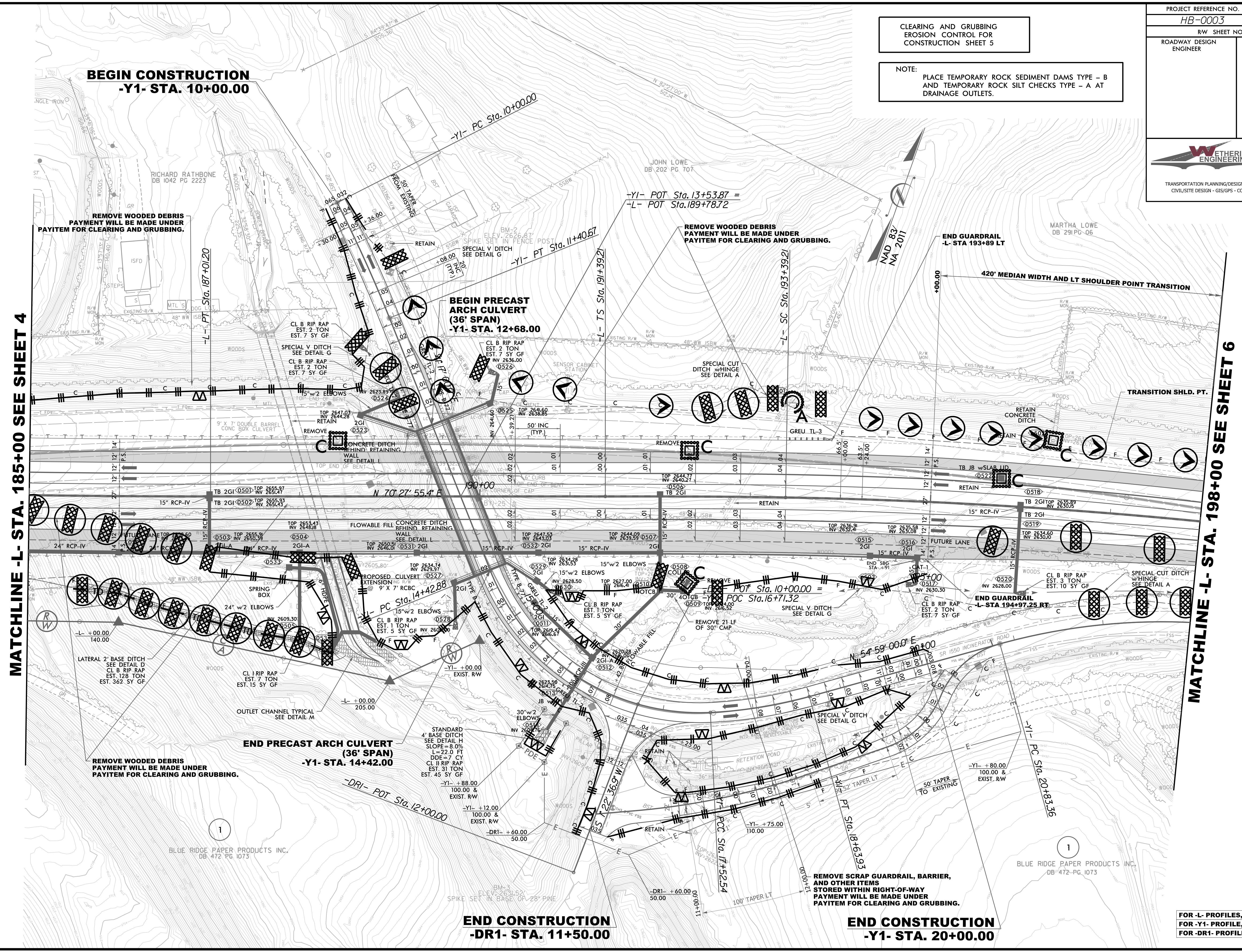
FOR -L- PROFILES, SEE SHEET NO. 7

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PROJECT REFERENCE NO. HB-0003	SHEET NO. EC-5/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION	

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.



MATCHLINE -L- STA. 185+00 SEE SHEET 4

MATCHLINE -L- STA. 198+00 SEE SHEET 6

REVISIONS

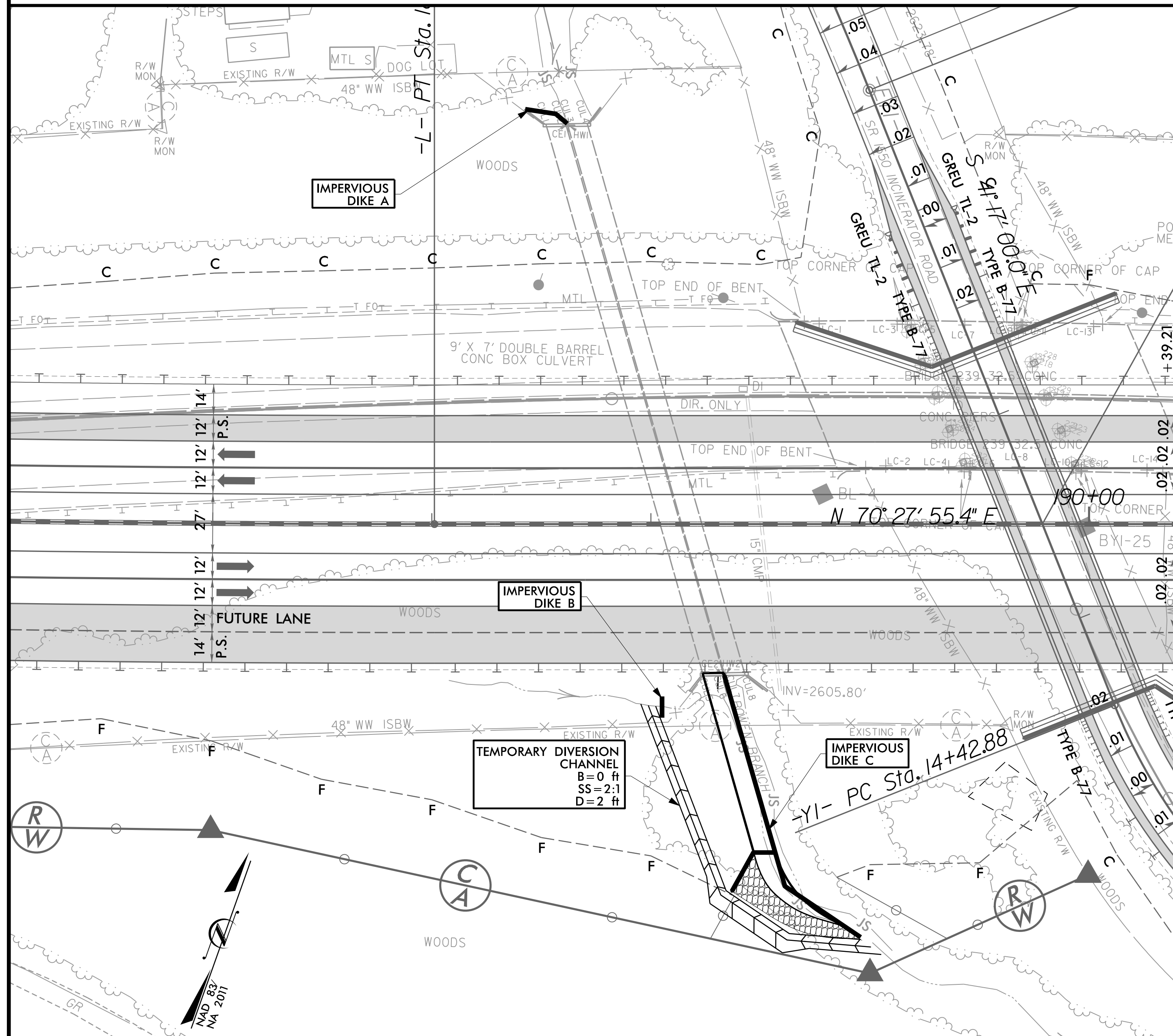
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FOR -L- PROFILES, SEE SHEET NO. 8
FOR -Y1- PROFILE, SEE SHEET NO. 10
FOR -DR1- PROFILE, SEE SHEET NO. 10

PROJECT REFERENCE NO.	SHEET NO.
HB-0003	EC-5A/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

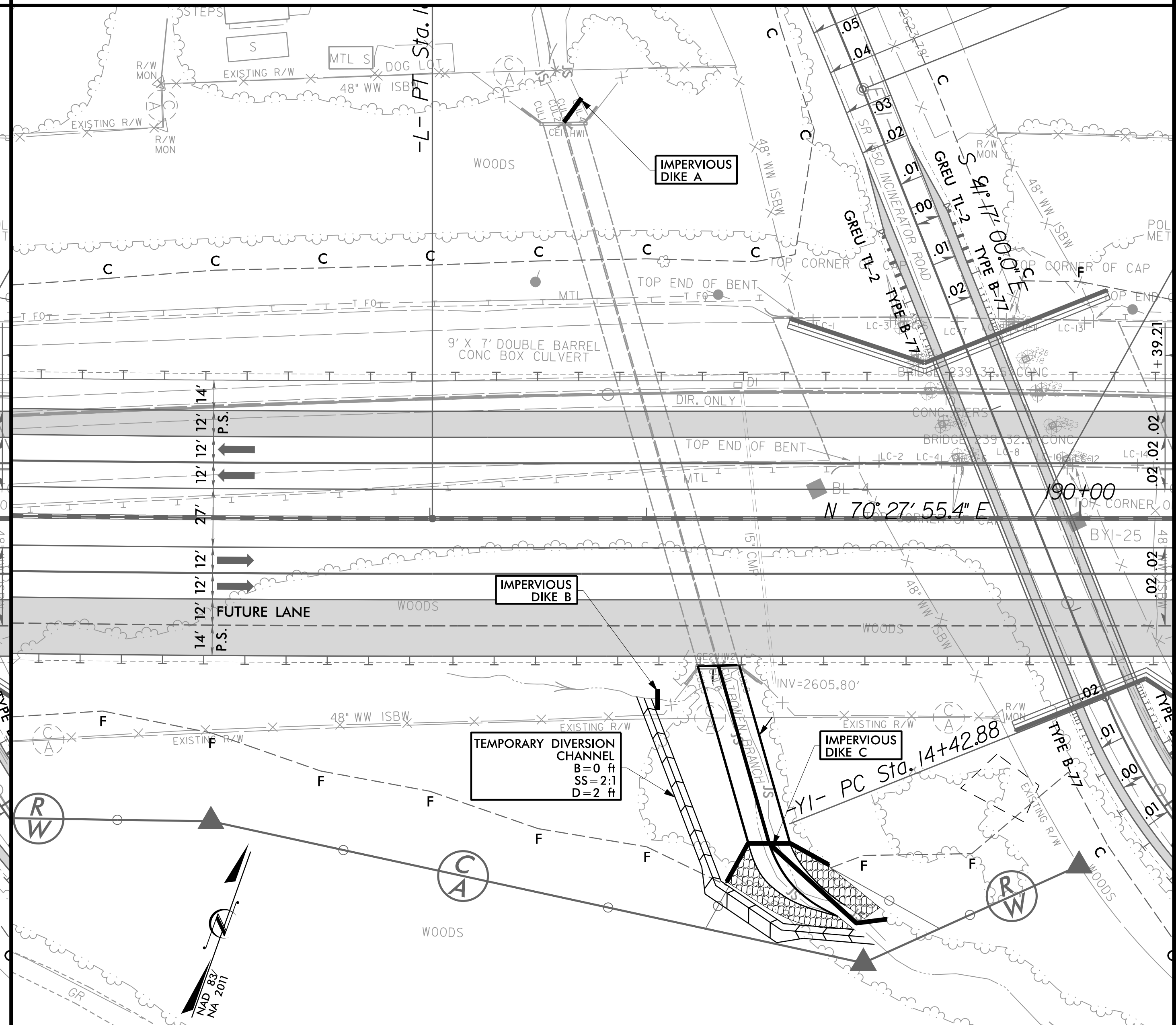
CULVERT CONSTRUCTION SEQUENCE

PHASE I



1. INSTALL SPECIAL STILLING BASIN(S) AS NECESSARY
2. INSTALL IMPERVIOUS DIKES A AND C TO DIVERT FLOW INTO THE EASTERN CULVERT BARREL.
3. INSTALL IMPERVIOUS DIKE B AND TEMPORARY DIVERSION CHANNEL.
4. CONSTRUCT EXTENSION OF WESTERN CULVERT BARREL.
5. COMPLETE CHANNEL IMPROVEMENTS AND RIPRAP ON WESTERN BANK.


PHASE II

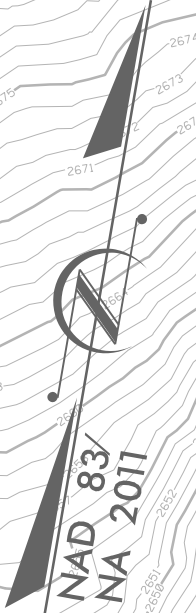


1. ADJUST IMPERVIOUS DIKE A AND C TO DIVERT FLOW INTO NEWLY EXTENDED WESTERN CULVERT BARREL.
2. CONSTRUCT EXTENSION OF EASTERN CULVERT BARREL.
3. REMOVE IMPERVIOUS DIKES A AND C.
4. COMPLETE DOWNSTREAM CHANNEL IMPROVEMENTS.
5. REMOVE IMPERVIOUS DIKE B AND TEMPORARY CHANNEL DIVERSION ONCE PERMANENT CHANNEL IS DIVERTED TO PROPOSED 2' BASE DITCH.
6. REMOVE SPECIAL STILLING BASIN(S).
7. COMPLETE ROADWAY.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

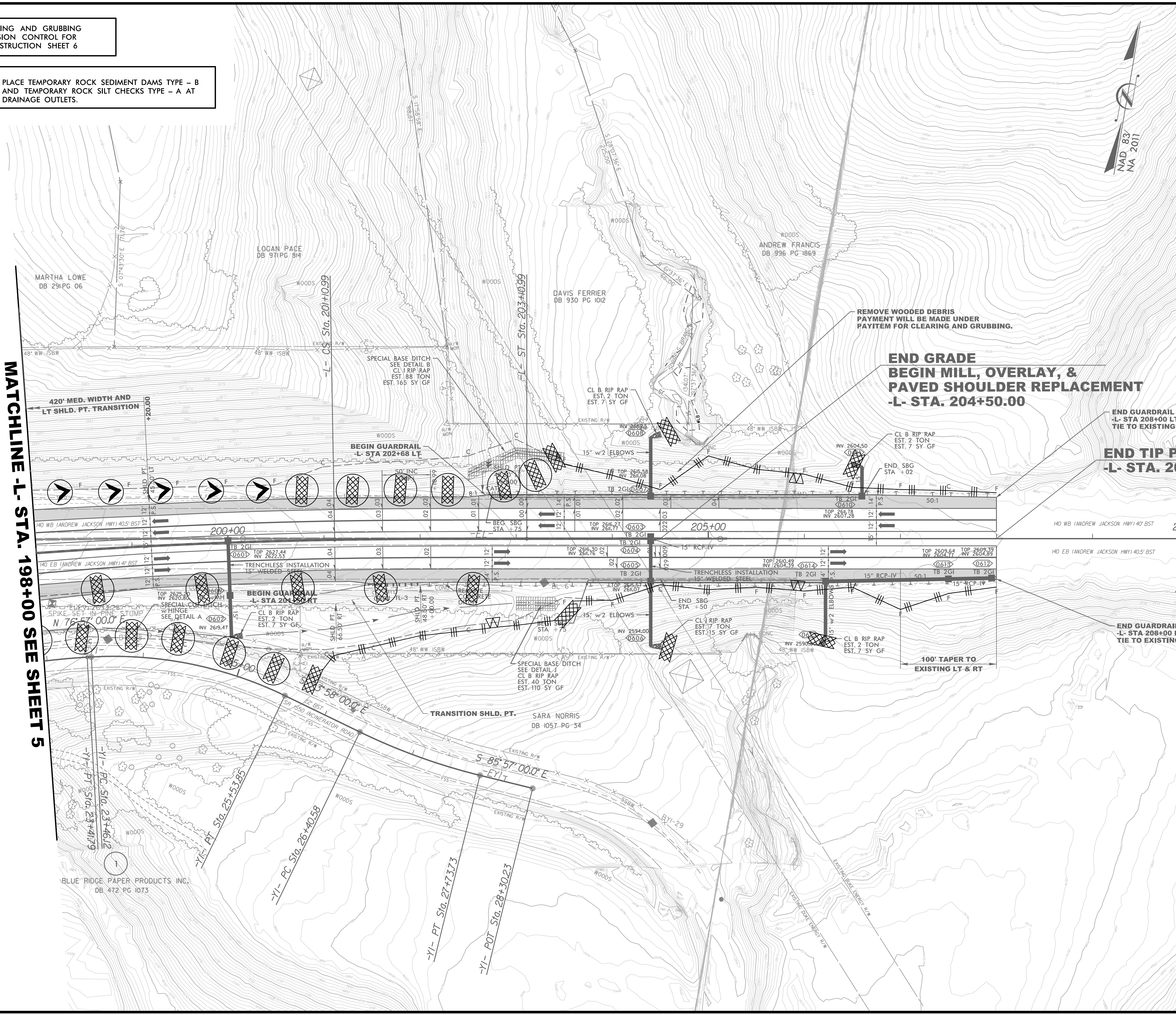
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

PROJECT REFERENCE NO. HB-0003	SHEET NO. EC-6/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION	




MATCHLINE -L- STA. 198+00 SEE SHEET 5

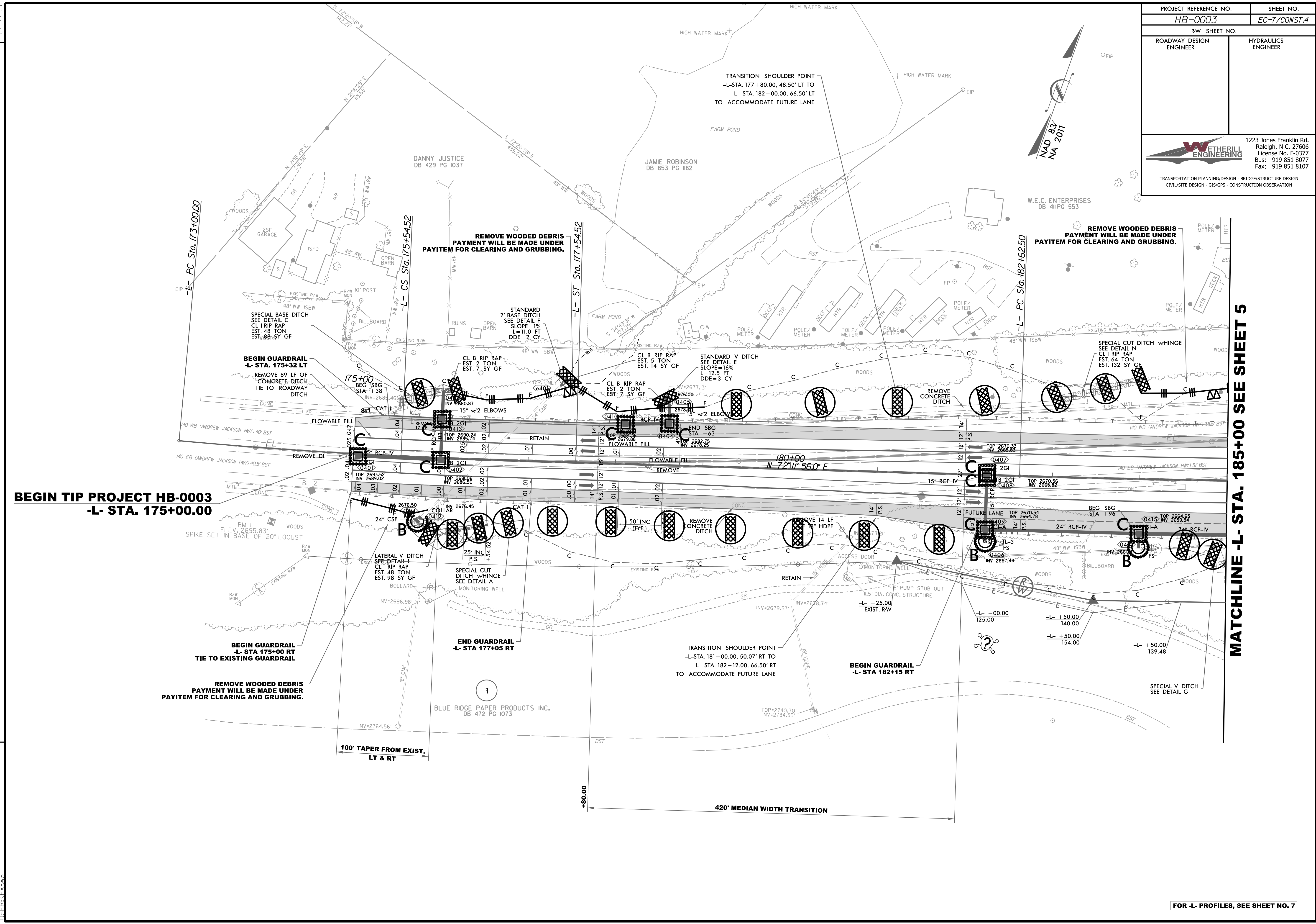
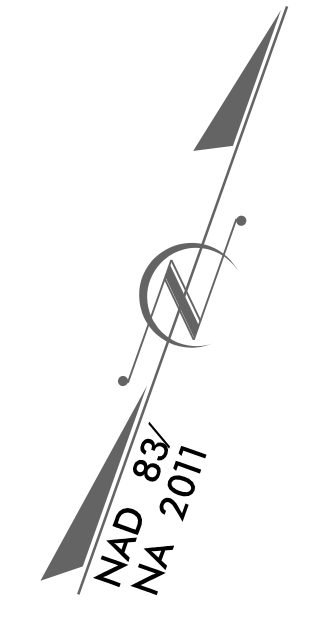
REVISIONS



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FOR -L- PROFILES, SEE SHEET NO. 9

PROJECT REFERENCE NO. HB-0003		SHEET NO. EC-7/CONST.4	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
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REVISIONS

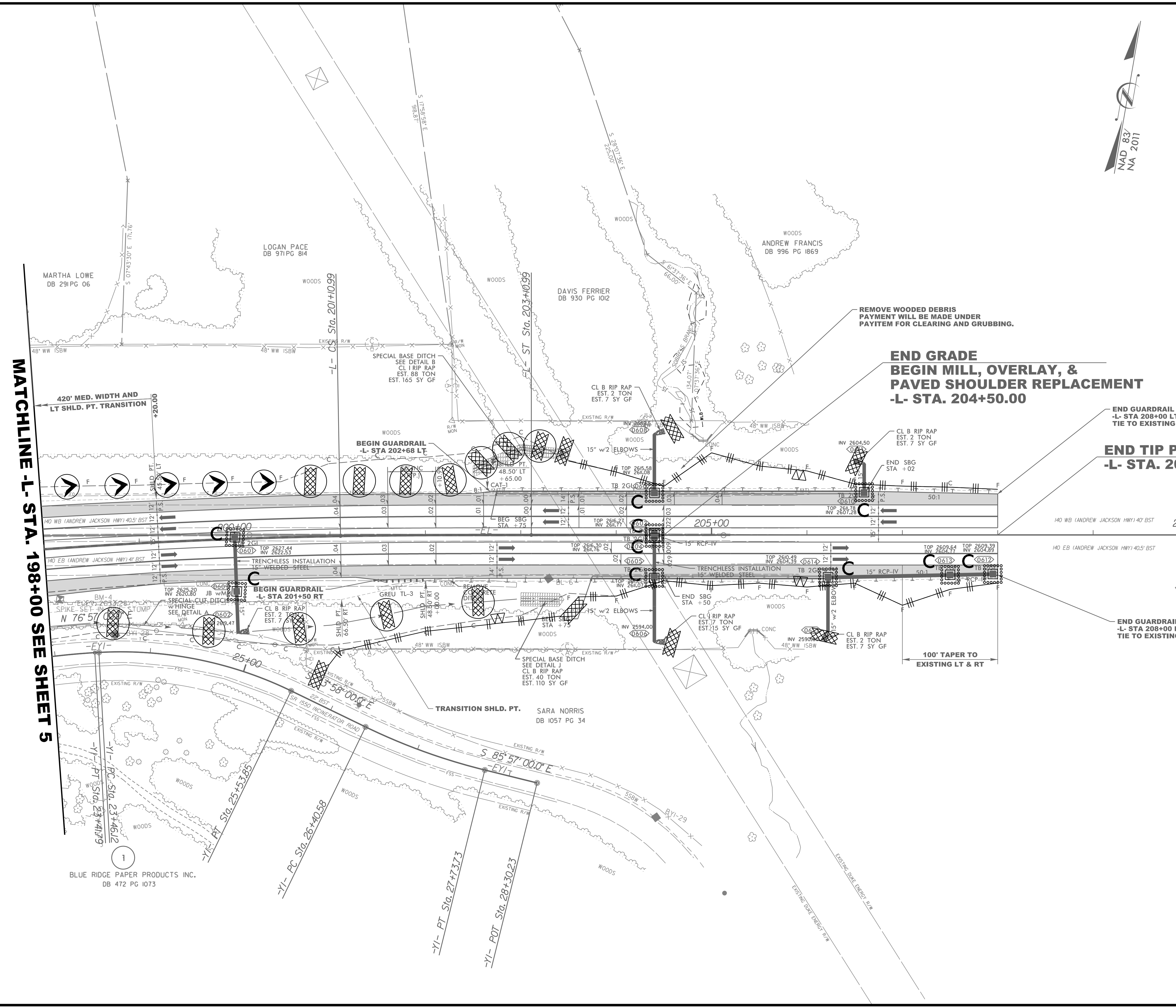
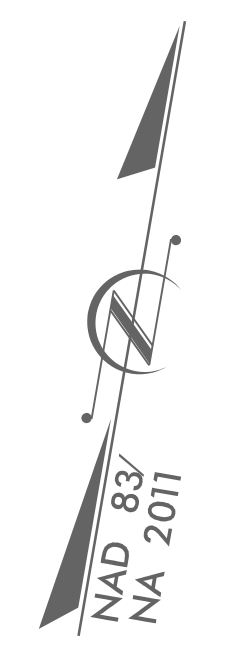
MATCHLINE -L- STA. 185+00 SEE SHEET 5

BEGIN TIP PROJECT HB-0003
-L- STA. 175+00.00

FOR -L- PROFILES, SEE SHEET NO. 7

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PROJECT REFERENCE NO. HB-0003	SHEET NO. EC-9/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
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TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION	



REVISIONS

8.17.99
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FOR -L- PROFILES, SEE SHEET NO. 9