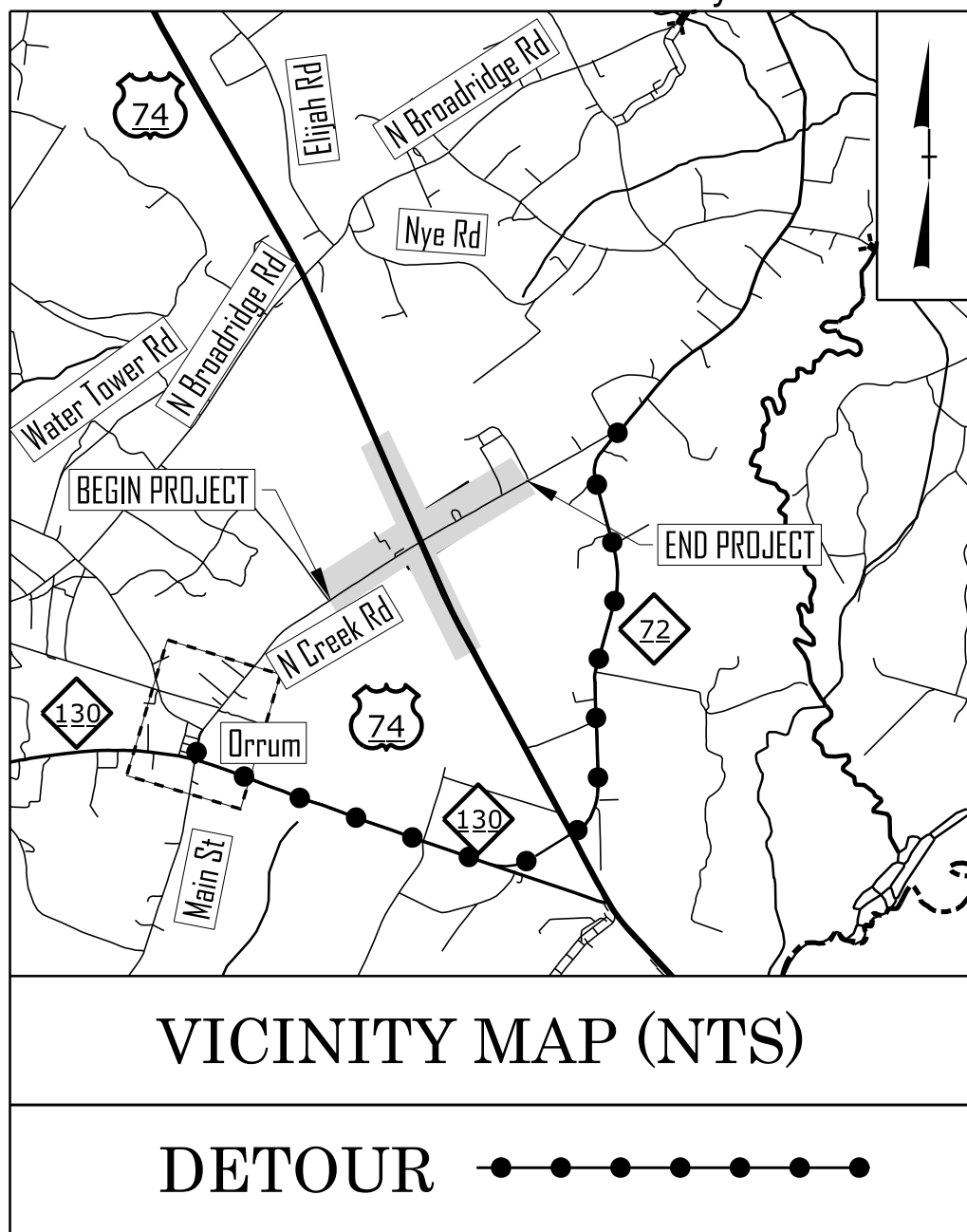




STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

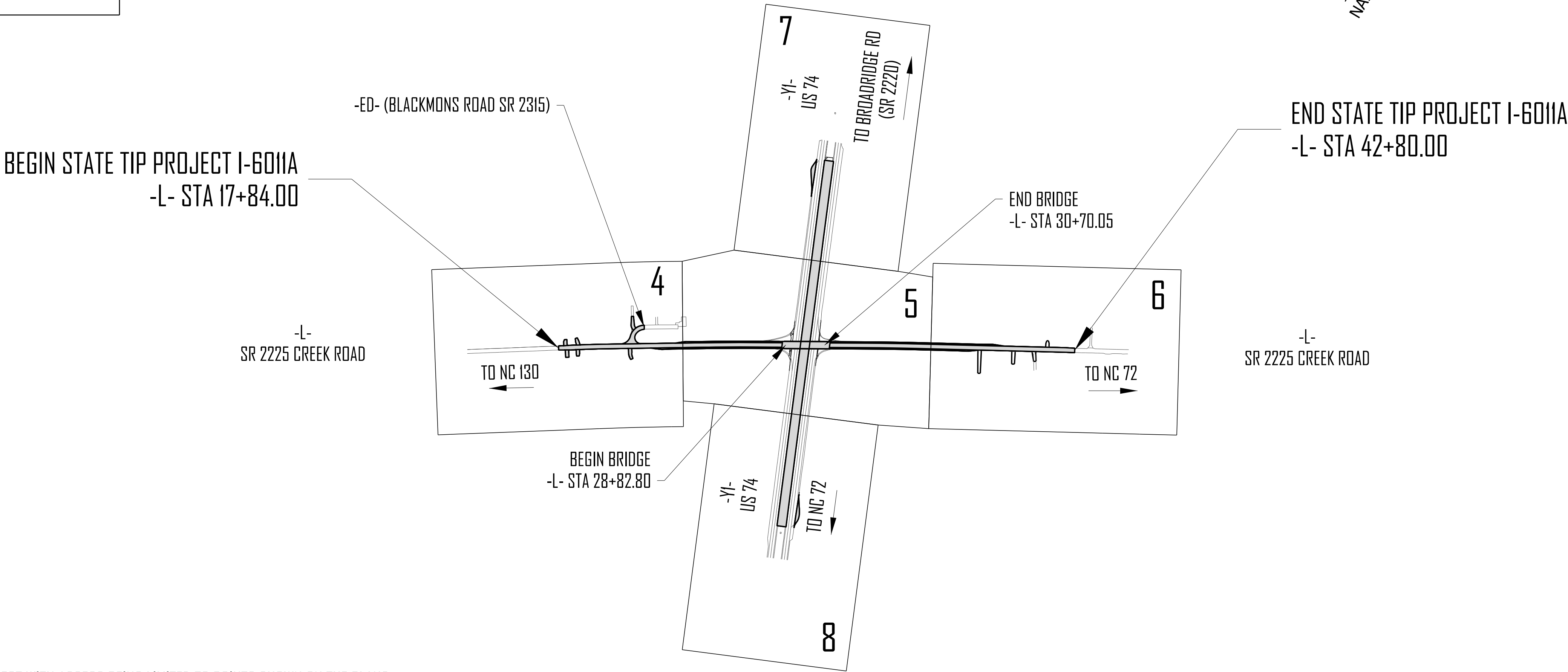
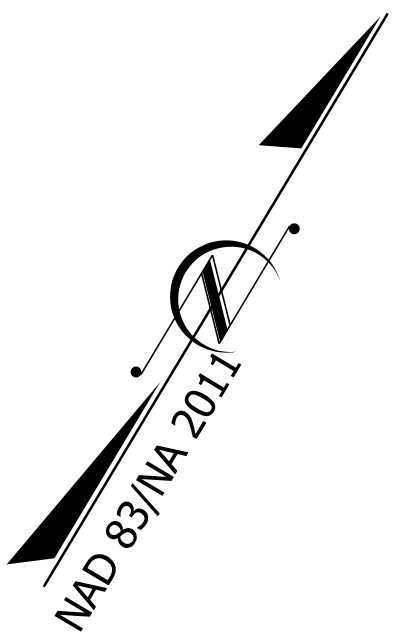
ROBESON COUNTY

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

LOCATION: *US 74 CONVERT AT GRADE
INTERSECTION OF US 74 AND
SR 2225 (CREEK ROAD) TO GRADE SEPARATION*

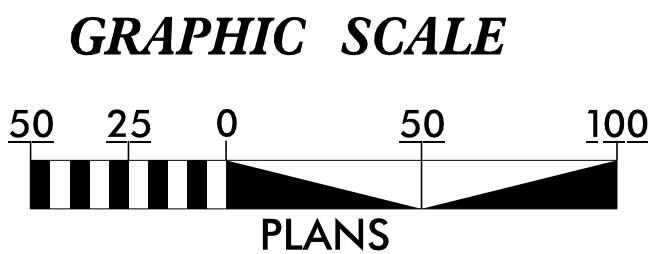
TYPE OF WORK: *PAVING, GRADING,
DRAINAGE, AND STRUCTURE*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-6011A	EC-1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
48690.1.2	N/A	PE	



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

THIS IS A PARTIAL CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS SHOWN ON THE PLANS.
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE APPLICABLE REGULATIONS SET FORTH BY THE NCG-010000
GENERAL CONSTRUCTION PERMIT AND ISSUED BY THE NORTH
CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION
OF ENERGY, MINERAL, AND LAND RESOURCES



Prepared In the Office of:

MOFFATT & NICHOL
4700 FALLS OF NEUSE RD, SUITE 300
RALEIGH, NC 27609

Designed by:

JUSTIN DAVENPORT 3989
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

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	
1630.04	Stilling Basin	
1630.05	Temporary Diversion	
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	

Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	
1635.02	Rock Pipe Inlet Sediment Trap Type B	
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	
	Silt Fence Coir Fiber Wattle Break	
1636.03	Excelsior Wattle Barrier	
1636.03	Coir Fiber Wattle Barrier	

I-6011A

EC-02

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROBESON COUNTY

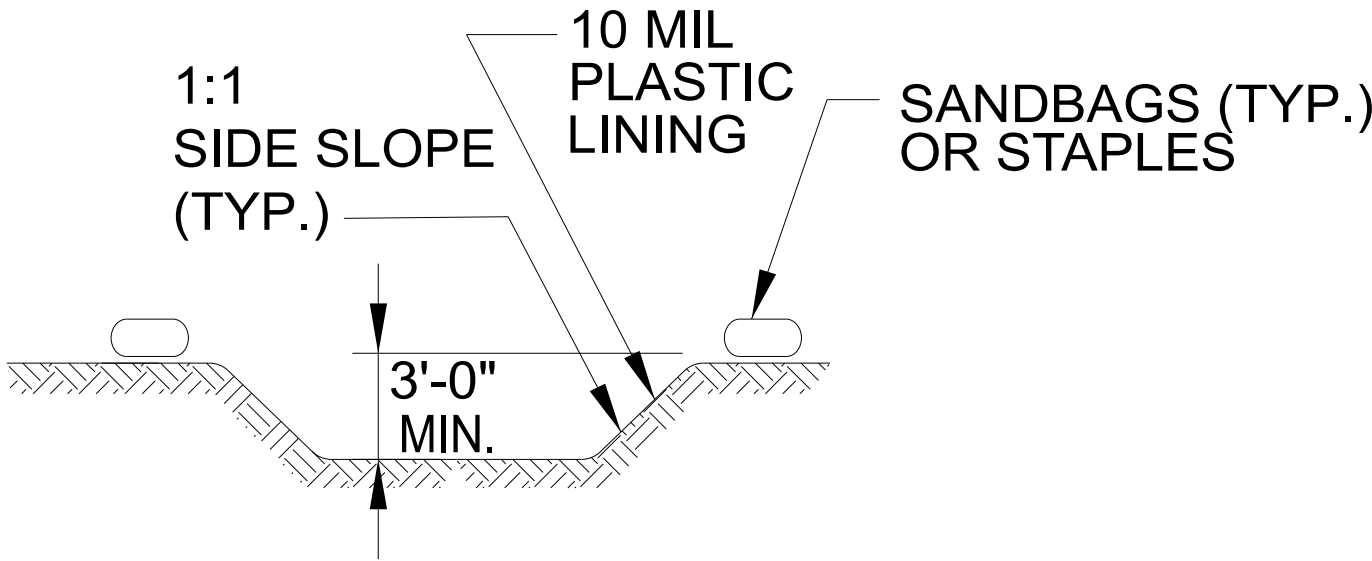
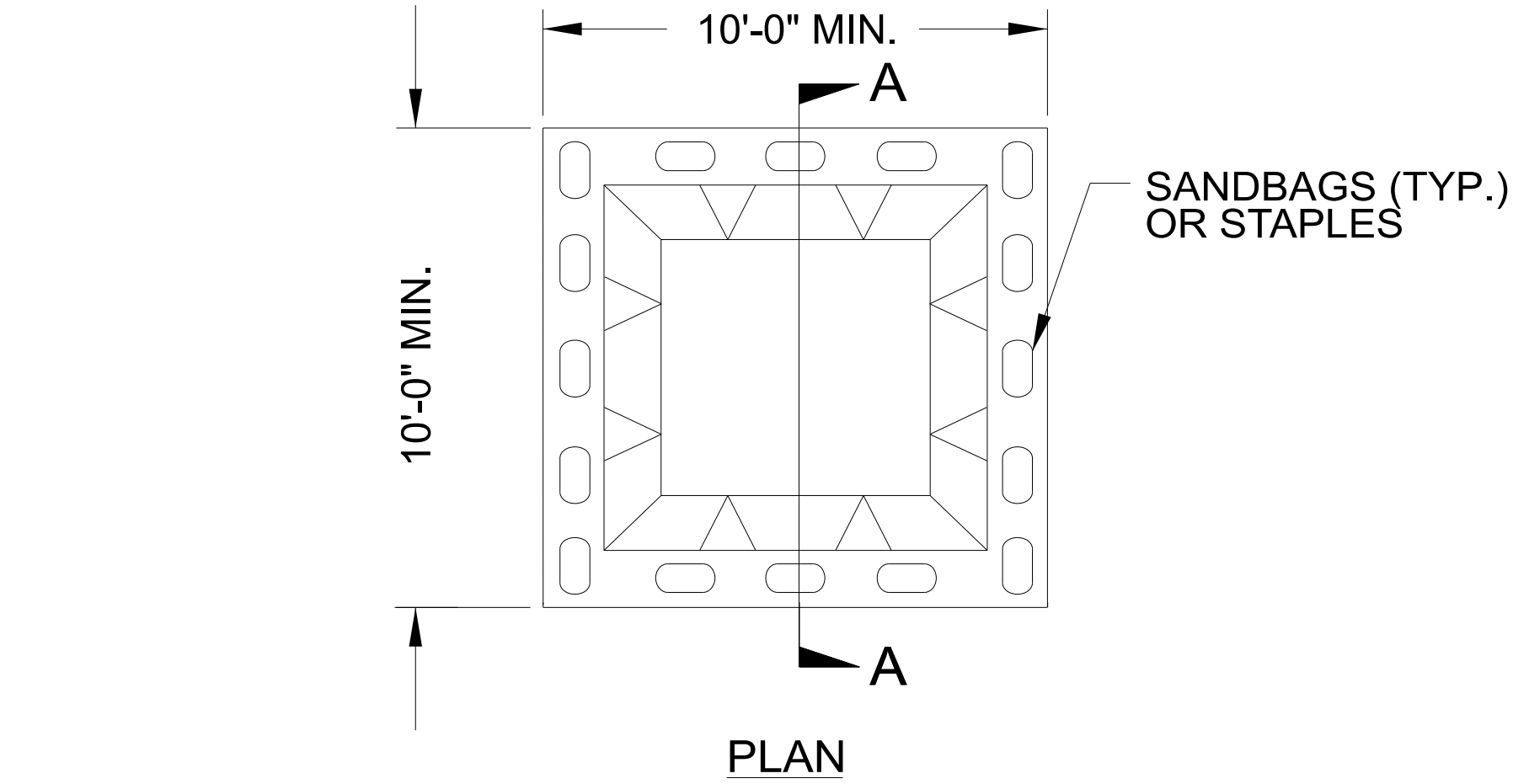
ROADSIDE ENVIRONMENTAL UNIT

PREPARED BY

moffatt & nichol

REVISIONS

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

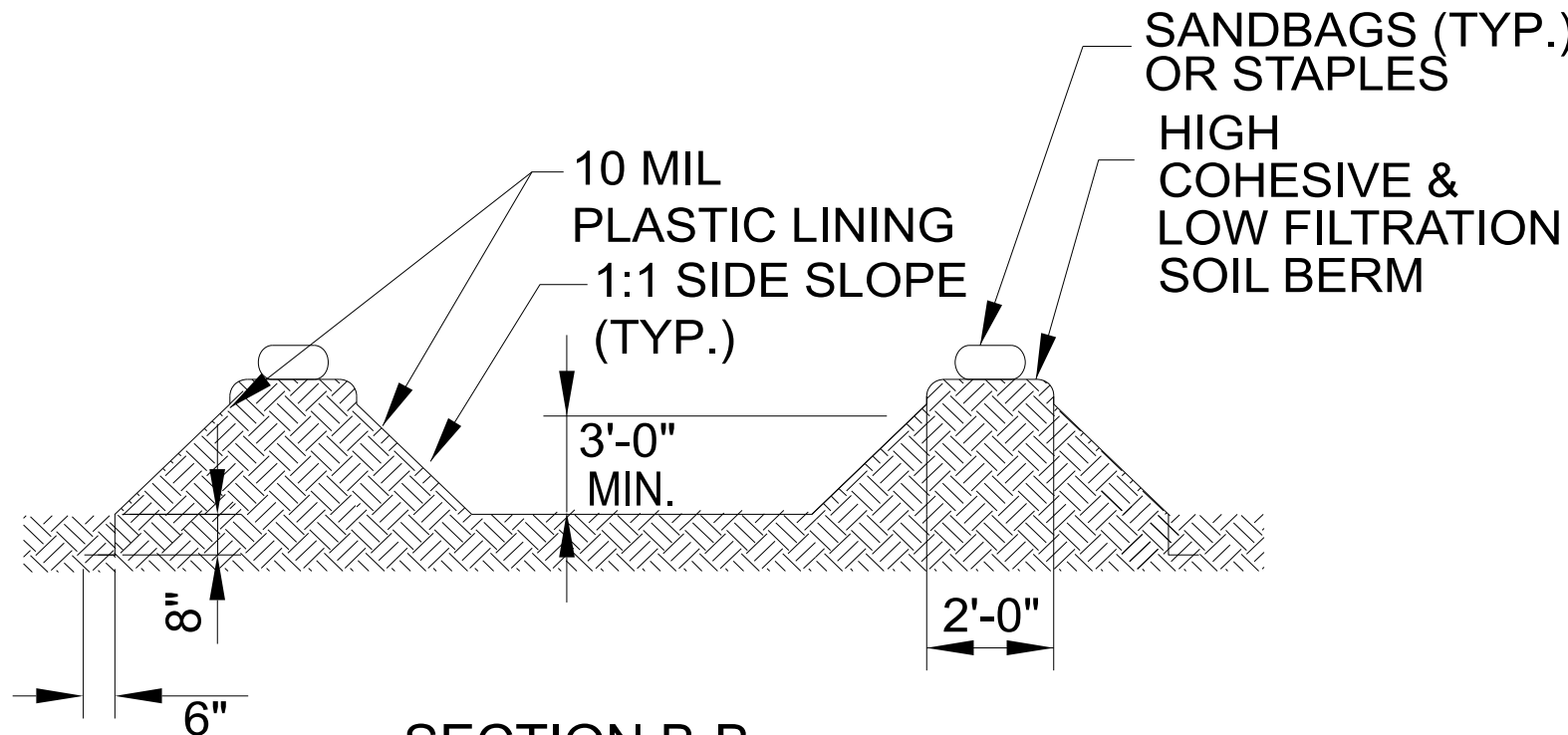
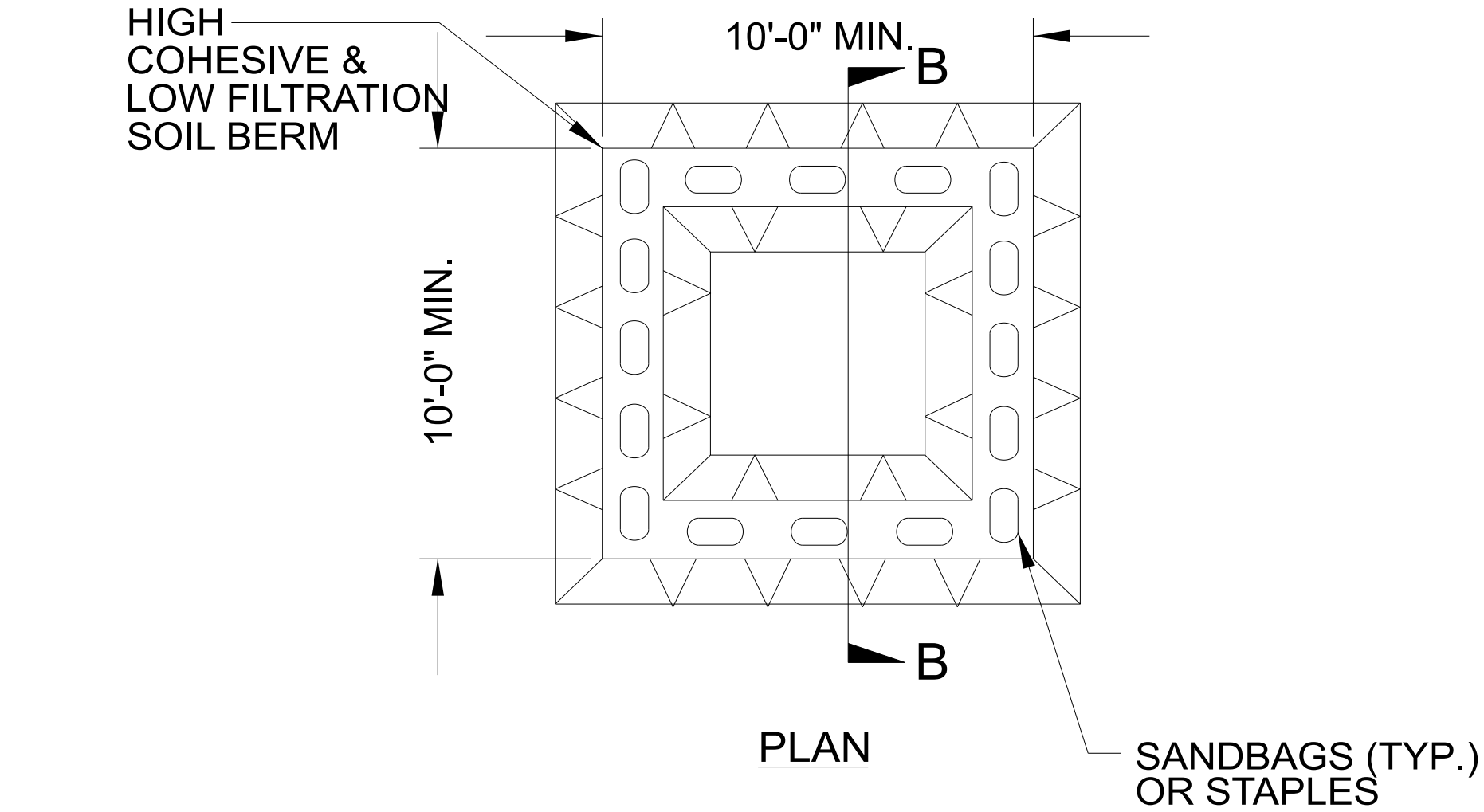


SECTION A-A

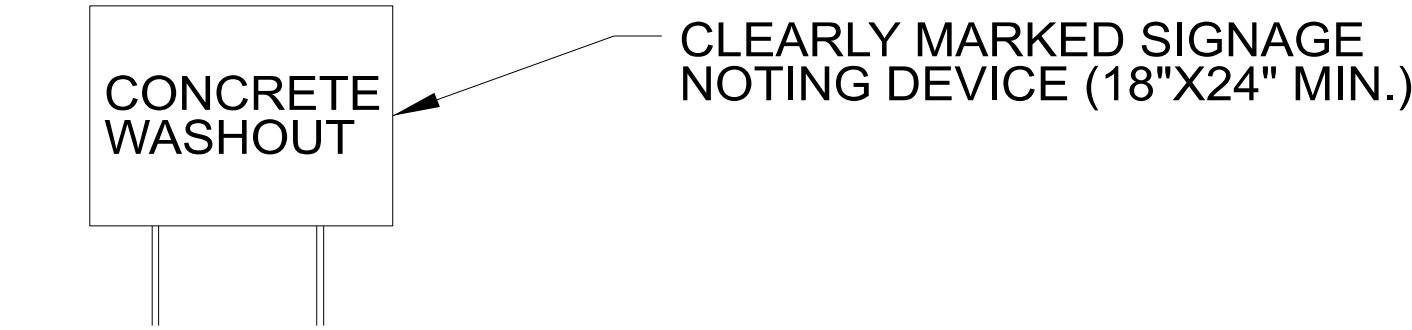


BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- 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.



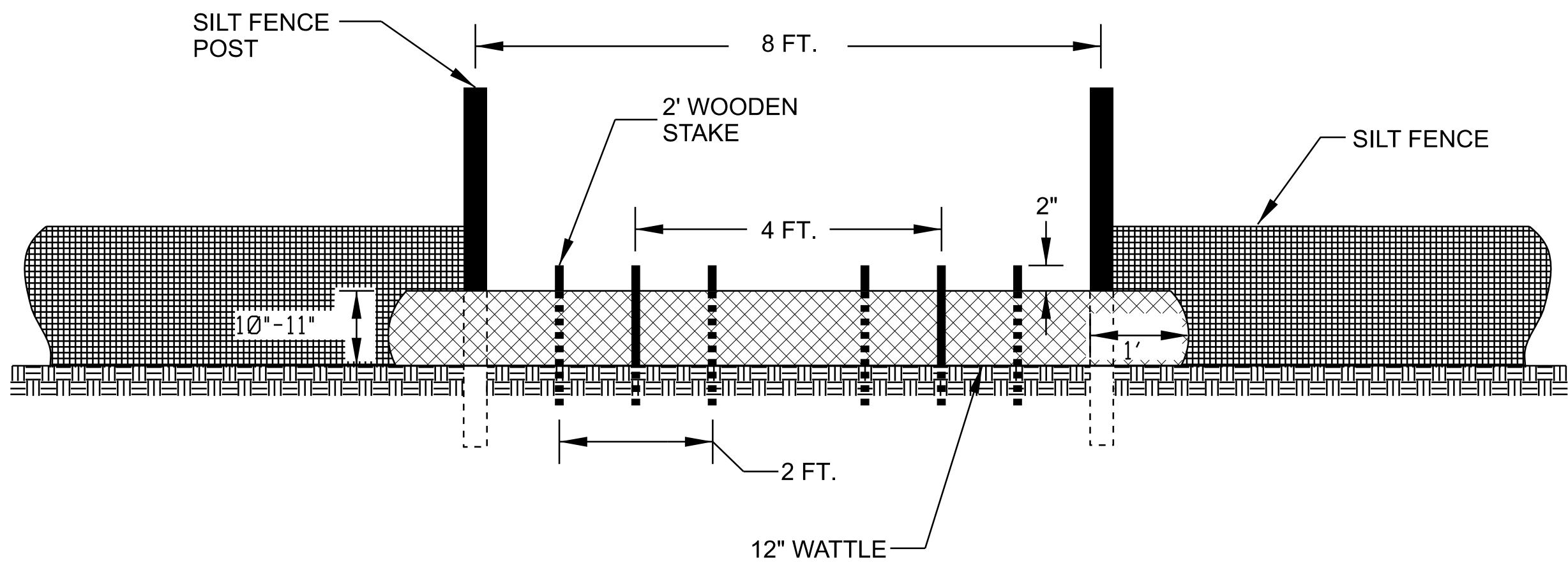
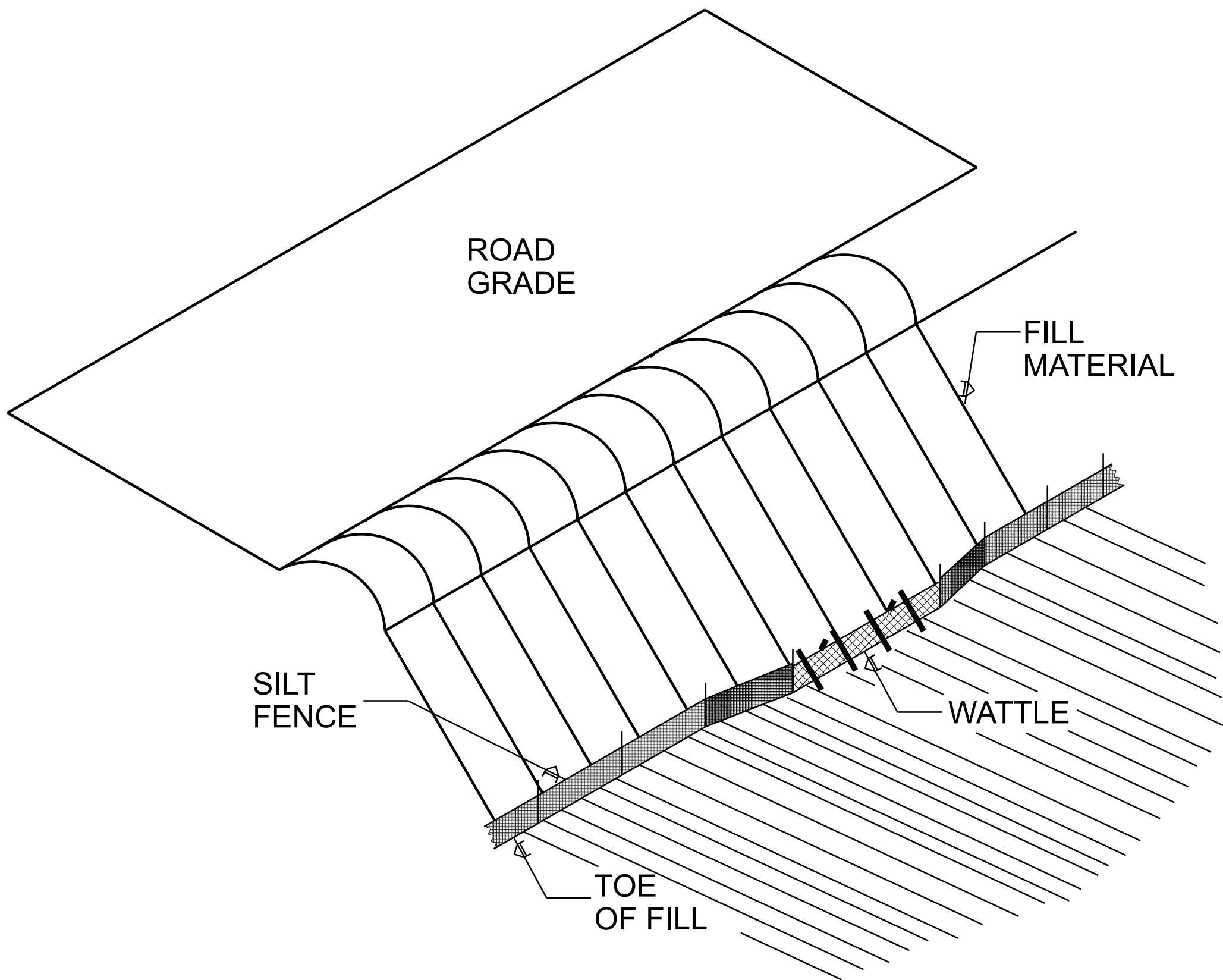
SECTION B-B



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.

SILT FENCE COIR FIBER WATTLE BREAK DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

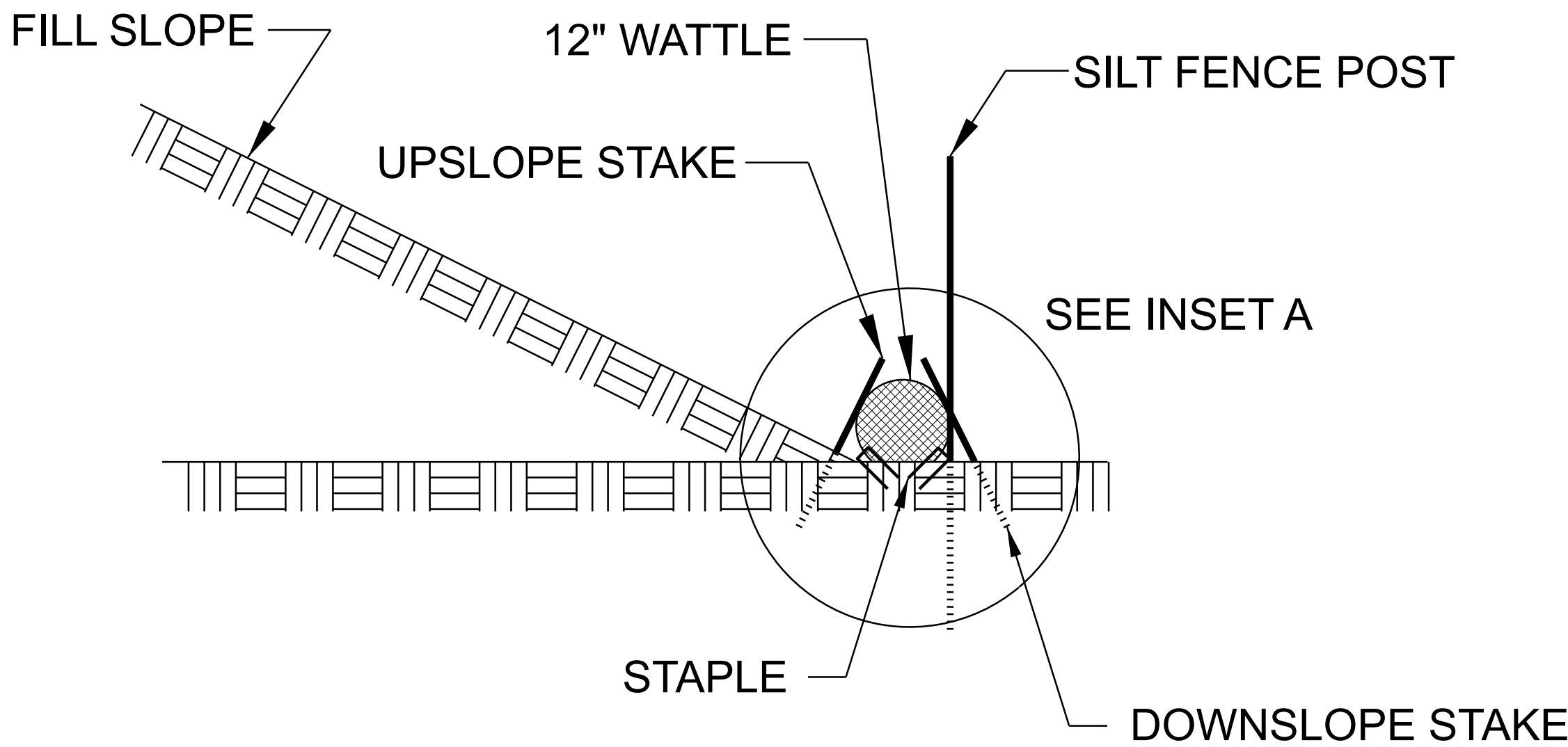
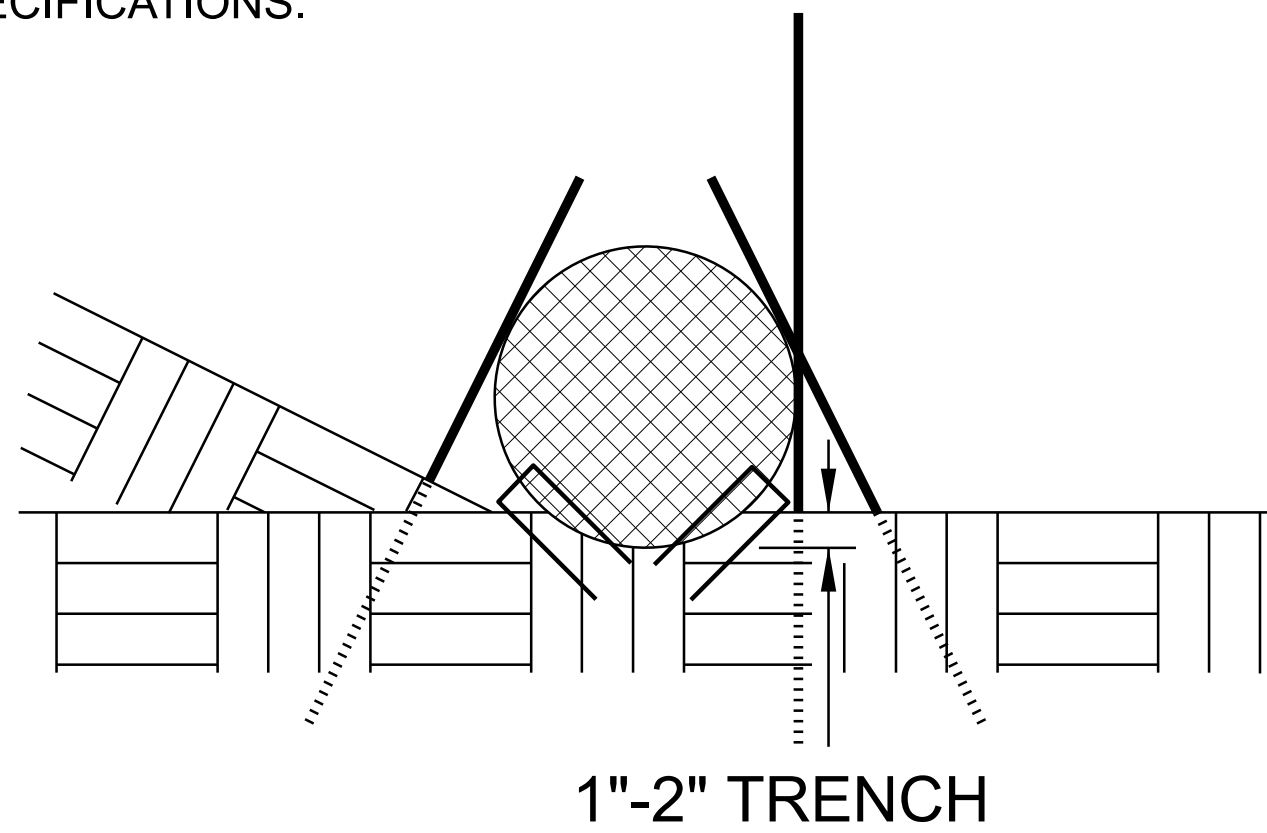
PROVIDE STAPLES MADE OF 11 GAUGE STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 6" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A



BORROW PIT DEWATERING BASIN DETAIL

GENERAL NOTES:

DETERMINE BORROW PIT DEWATERING BASIN SIZE USING $V = 8.0203 \cdot Q \cdot T$, WHERE V IS VOLUME (FT³), Q IS PUMP FLOW RATE (GPM), AND T IS DEWATERING TIME (HR). USE MAXIMUM FLOW RATE OF 1000 GPM AND A MINIMUM DEWATERING TIME OF 2 HOURS.

RISER SHALL BE A NON-PERFORATED, SMOOTH OR CORRUGATED MATERIAL WITH A FLASHBOARD OPTION.

CONSTRUCT THE COIR FIBER BAFFLE IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1640.01 AND WITH MATERIAL THAT MEETS THE SPECIFICATIONS OF ROADWAY STANDARD 1640-14.

PROVIDE 5' STEEL POSTS OF THE SELF-FASTENER ANGLE STEEL TYPE. INSTALL STEEL POSTS WITH NO MORE THAN 3' OF THE POST APPEARING ABOVE THE GROUND.

ATTACH THE COIR FIBER MAT TO THE STEEL POSTS WITH WIRE OR OTHER ACCEPTABLE MEANS AND STAPLED INTO THE BOTTOM AND SIDE SLOPES OF THE BASIN WITH 12" STAPLES.

INSTALL TYPE 2 GEOTEXTILE ON SIDESLOPES AND BOTTOM OF BASIN AT INLET AS SHOWN IN THE DETAIL.

USE THE TYPICAL SECTION SHOWN FOR THE BORROW PIT DEWATERING BASIN AS A GUIDE. THE BASIN MAY HAVE ANY TYPE CONFIGURATION AS LONG AS SUFFICIENT VOLUME IS PROVIDED AND PROVISIONS ARE MADE FOR A NON-PERFORATED RISER.

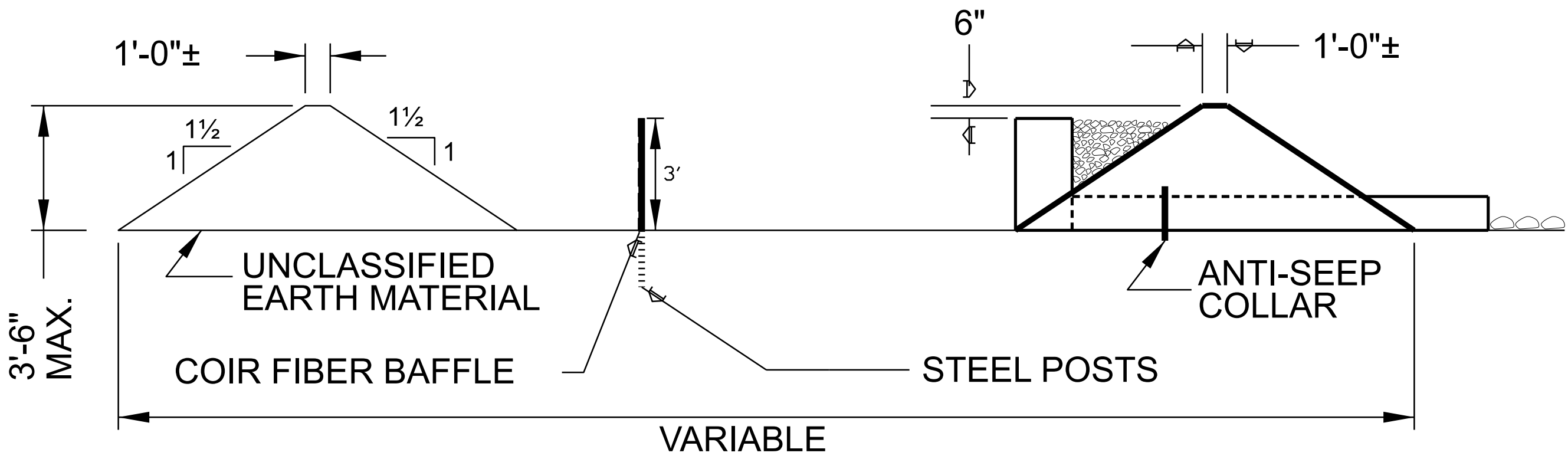
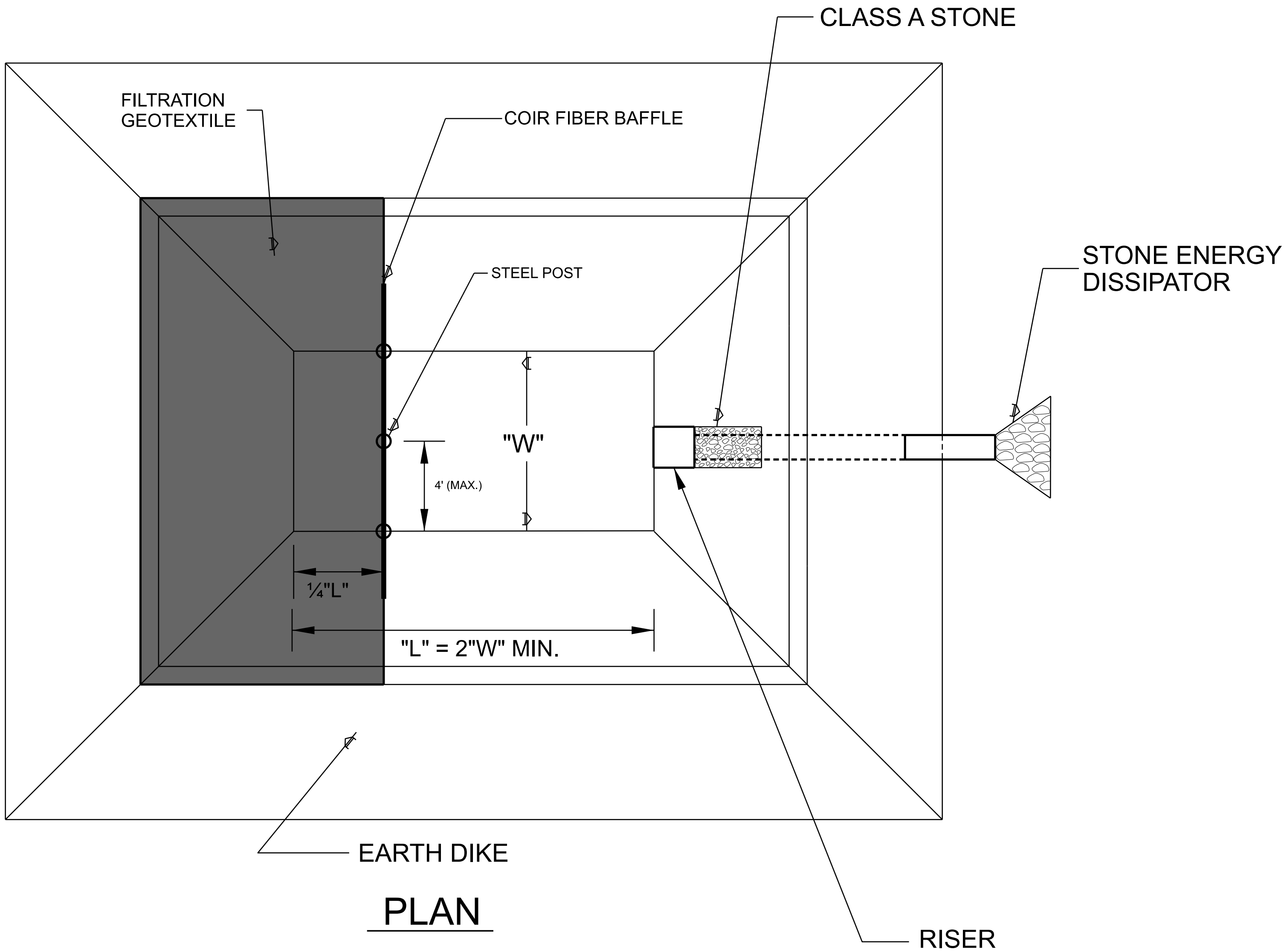
DO NOT EXCEED 3½ FT. IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR BORROW PIT DEWATERING BASIN.

THE BORROW PIT DEWATERING BASIN SIZE IS VARIABLE AND DEPENDENT ON SPECIFIC SITE REQUIREMENTS AS WELL AS PROPOSED CONSTRUCTION OPERATIONS.

SUBMIT THE SIZE, LOCATION AND RISER PIPE MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

PUMP THE EFFLUENT INTO THE BORROW PIT DEWATERING BASIN TO A MAXIMUM DEPTH OF 6 IN. BELOW TOP OF EARTH DIKE.

PROVIDE A STONE ENERGY DISSIPATOR PAD AT THE OUTLET OF THE PUMP DISCHARGE HOSE AND OUTLET OF THE RISER BARREL IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 876.02 FOR OUTLET W/O DITCH.



TYPICAL SECTION VIEW

NOT TO SCALE

EXCELSIOR MATTING FOR EROSION CONTROL

[illegible]

		SUBTOTAL STRAW MATTING	10,700
		SUBTOTAL EXCELSIOR MATTING	755
	MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER		9,310
		TOTAL MATTING	20,765
		SAY	20,800

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

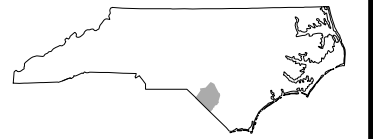
SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

I-6011A

EC-038

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROBESON COUNTY



ROADSIDE ENVIRONMENTAL UNIT

INCOMPLETE PLANS
DO NOT USE FOR CONSTRUCTION

PREPARED BY


moffatt & nichol

REVISIONS

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

I-6011A

EC-04004

NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

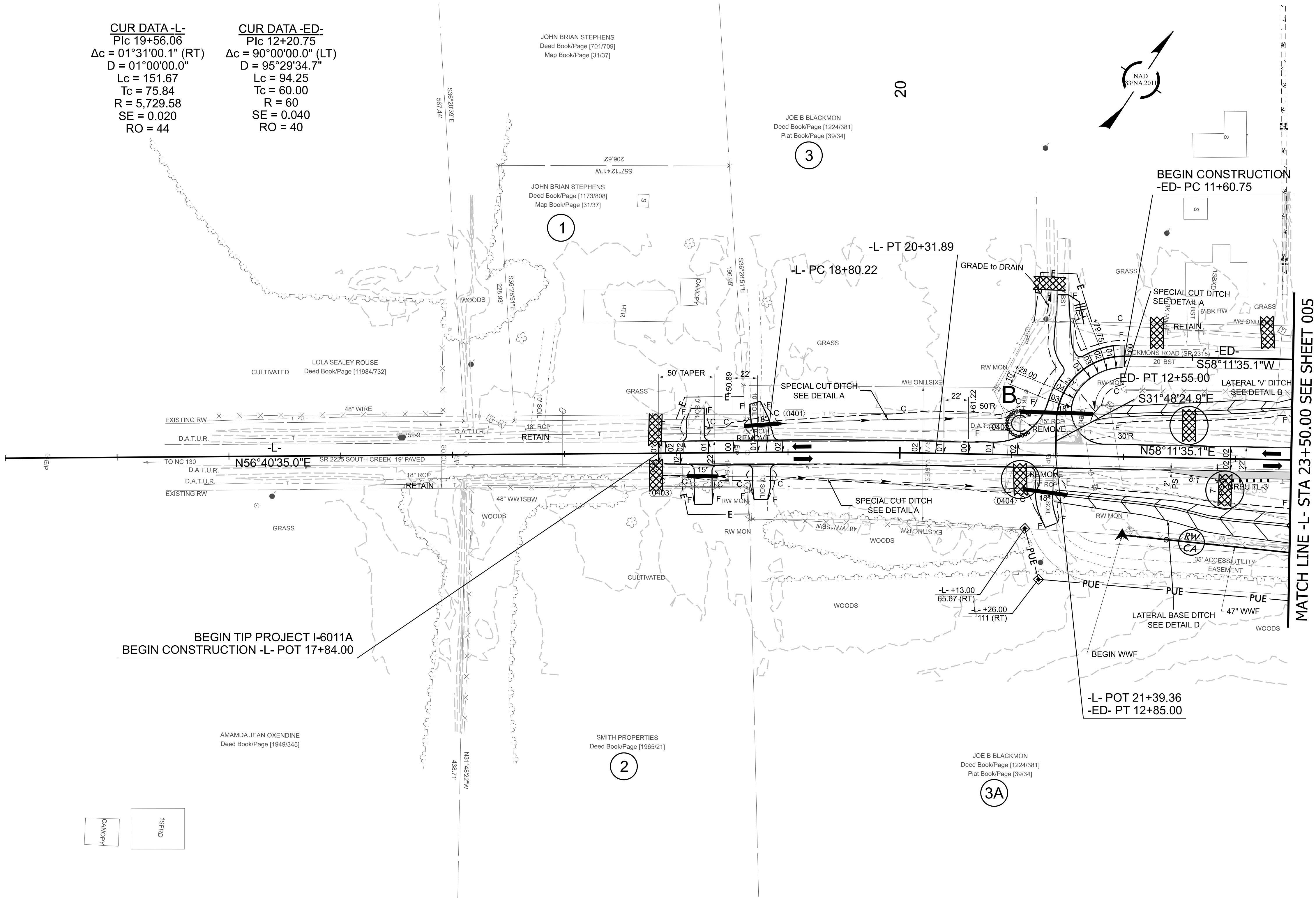
ROBERTSON COUNTY

ROADSIDE ENVIRONMENTAL UNIT

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PREPARED BY

moffatt & nichol



CUR DATA -L-

Plc 19+56.06

$\Delta c = 01^{\circ}31'00.1''$ (RT)

D = $01^{\circ}00'00.0''$

Lc = 151.67

Tc = 75.84

R = 5,729.58

SE = 0.020

RO = 44

CUR DATA -ED-

Plc 12+20.75

$\Delta c = 90^{\circ}00'00.0''$ (LT)

D = $95^{\circ}29'34.7''$

Lc = 94.25

Tc = 60.00

R = 60

SE = 0.040

RO = 40

BEGIN TIP PROJECT I-6011A
BEGIN CONSTRUCTION -L- POT 17+84.00

PAVEMENT REMOVAL

FOR -L- PROFILE, SEE SHEET NO. 009

FOR -ED- PROFILE, SEE SHEET NO. 010

REVISIONS

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

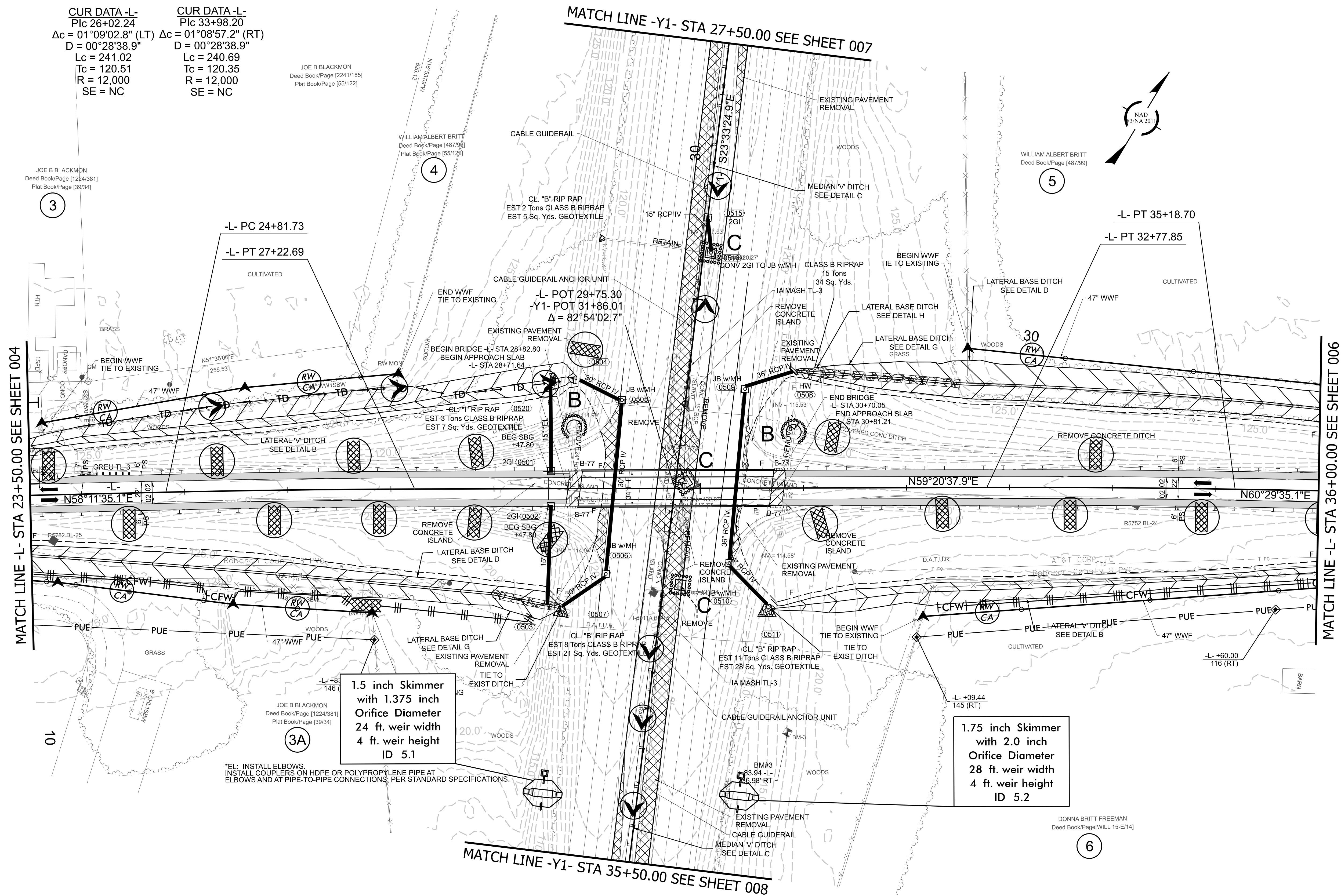
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

I-6011A

EC-05005

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROBERSON COUNTY

ROADSIDE ENVIRONMENTAL UNIT



*EL: INSTALL ELBOWS.
INSTALL COUPLERS ON HDPE OR POLYPROPYLENE PIPE AT
ELBOWS AND AT PIPE-TO-PIPE CONNECTIONS, PER STANDARD SPECIFICATIONS.

PAVEMENT REMOVAL
FOR -L- PROFILE, SEE SHEET NO. 009

REVISIONS

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

I-6011A

EC-06006

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROBESON COUNTY

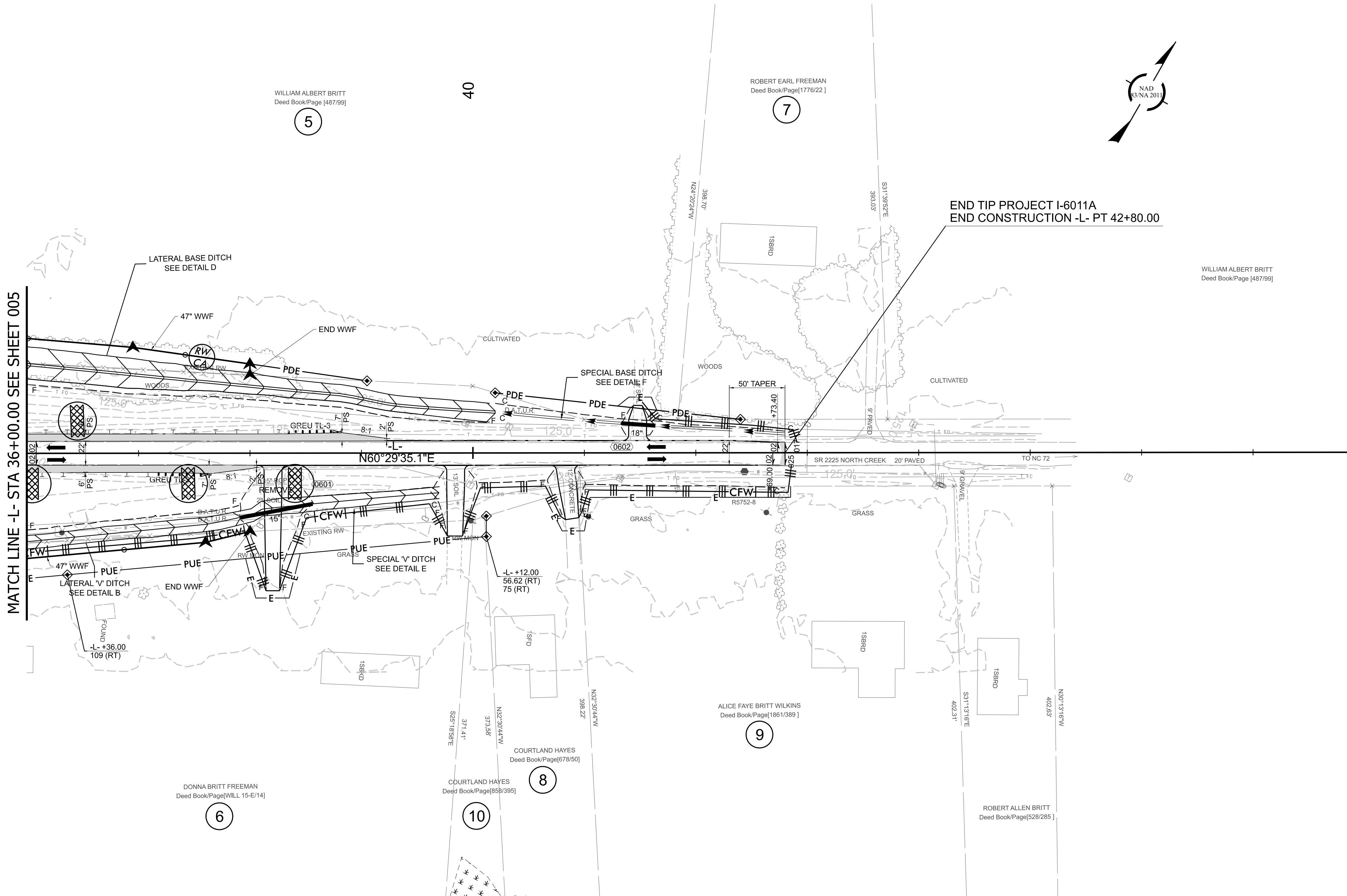
ROADSIDE ENVIRONMENTAL UNIT

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PREPARED BY

moffatt & nichol

REVISIONS



PAVEMENT REMOVAL
FOR -L- PROFILE, SEE SHEET NO. 009

5/26/20

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

I-6011A

EC-07007

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROBERSON COUNTY

ROADSIDE ENVIRONMENTAL UNIT

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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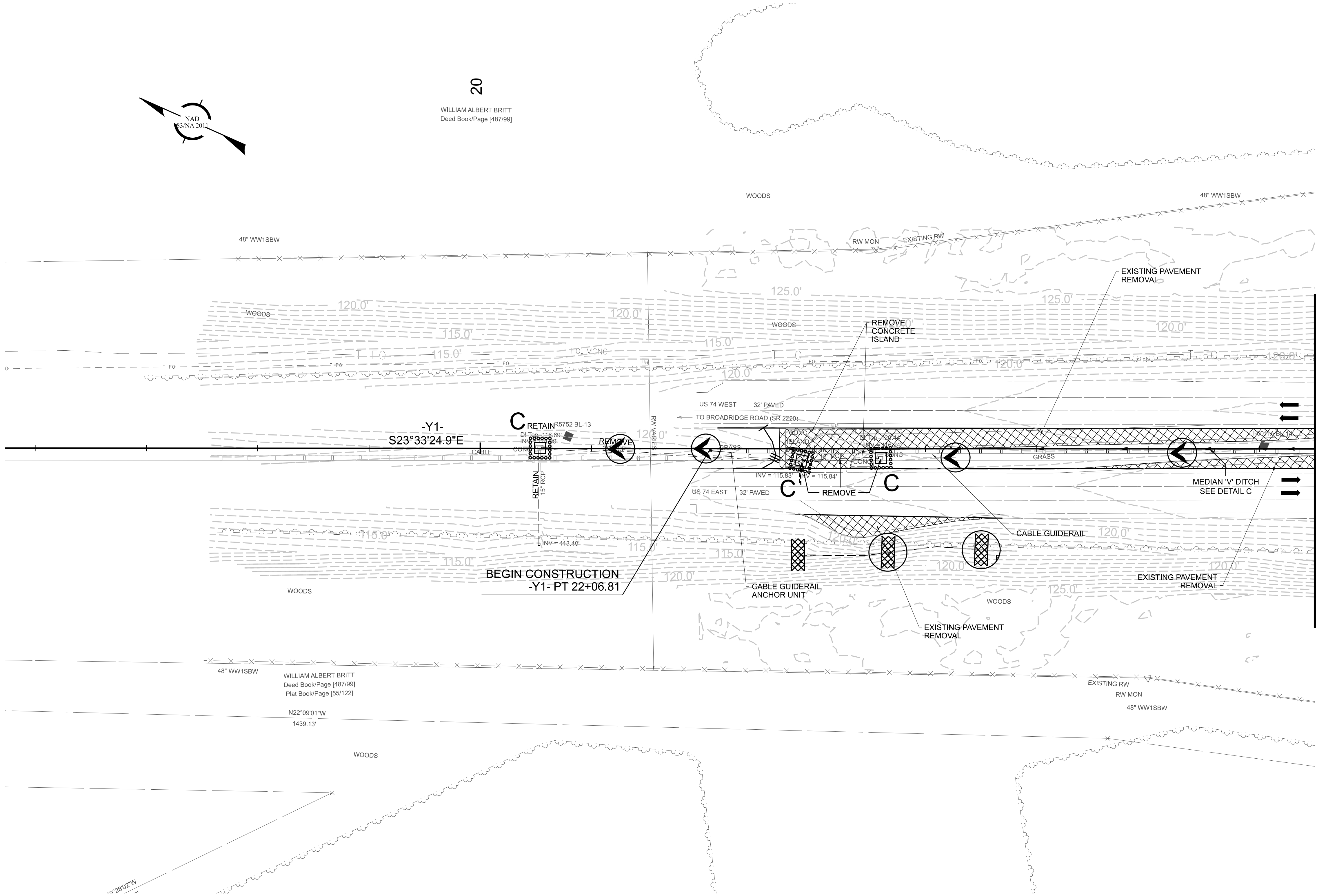
moffatt & nichol

REVISIONS



20

WILLIAM ALBERT BRITT
Deed Book/Page [487/99]



PAVEMENT REMOVAL

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8

I-6011A

EC-08008

NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

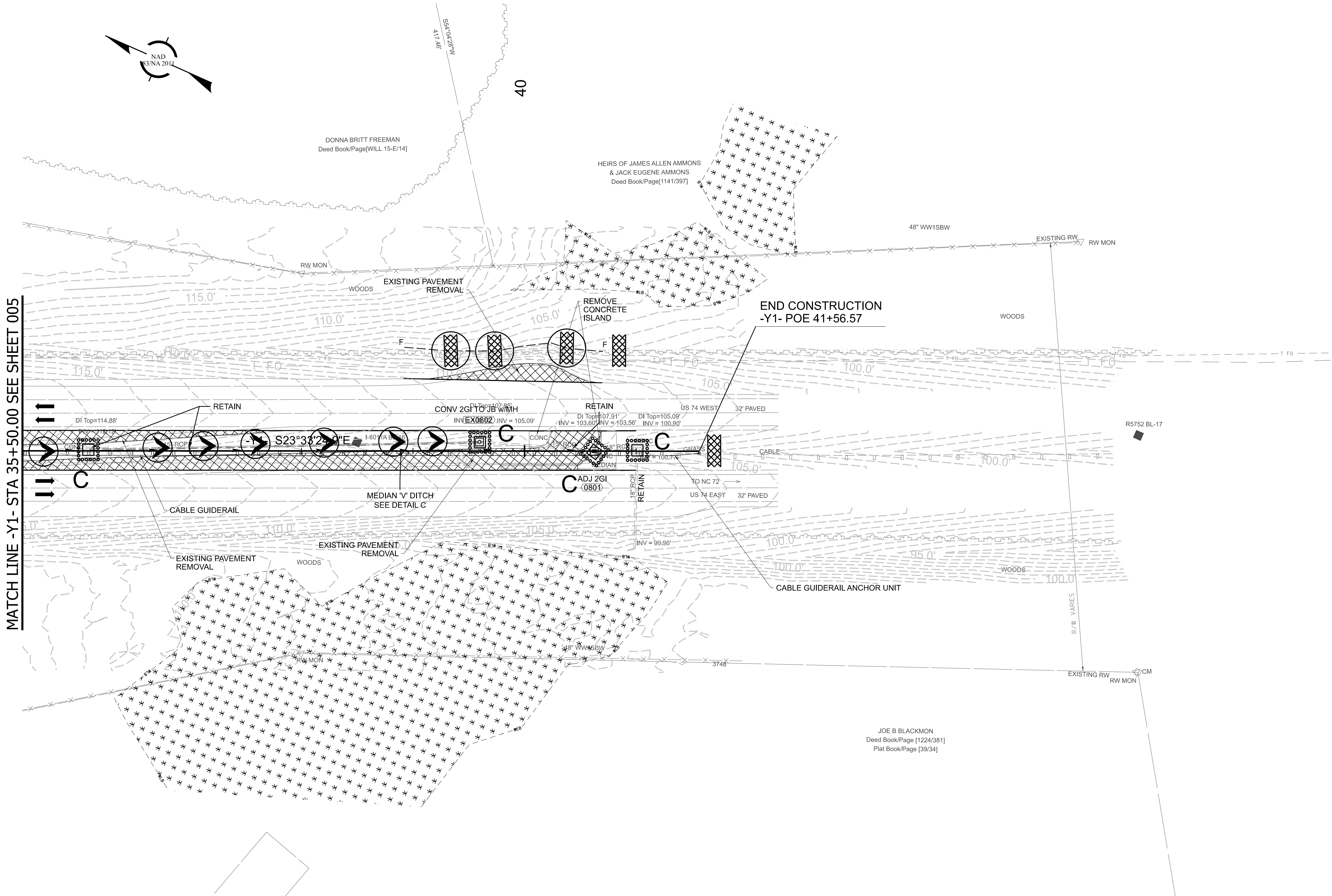
ROBERSON COUNTY

ROADSIDE ENVIRONMENTAL UNIT

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

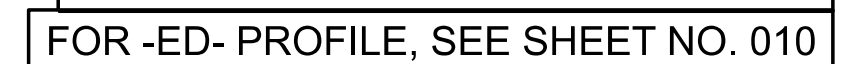
PREPARED BY

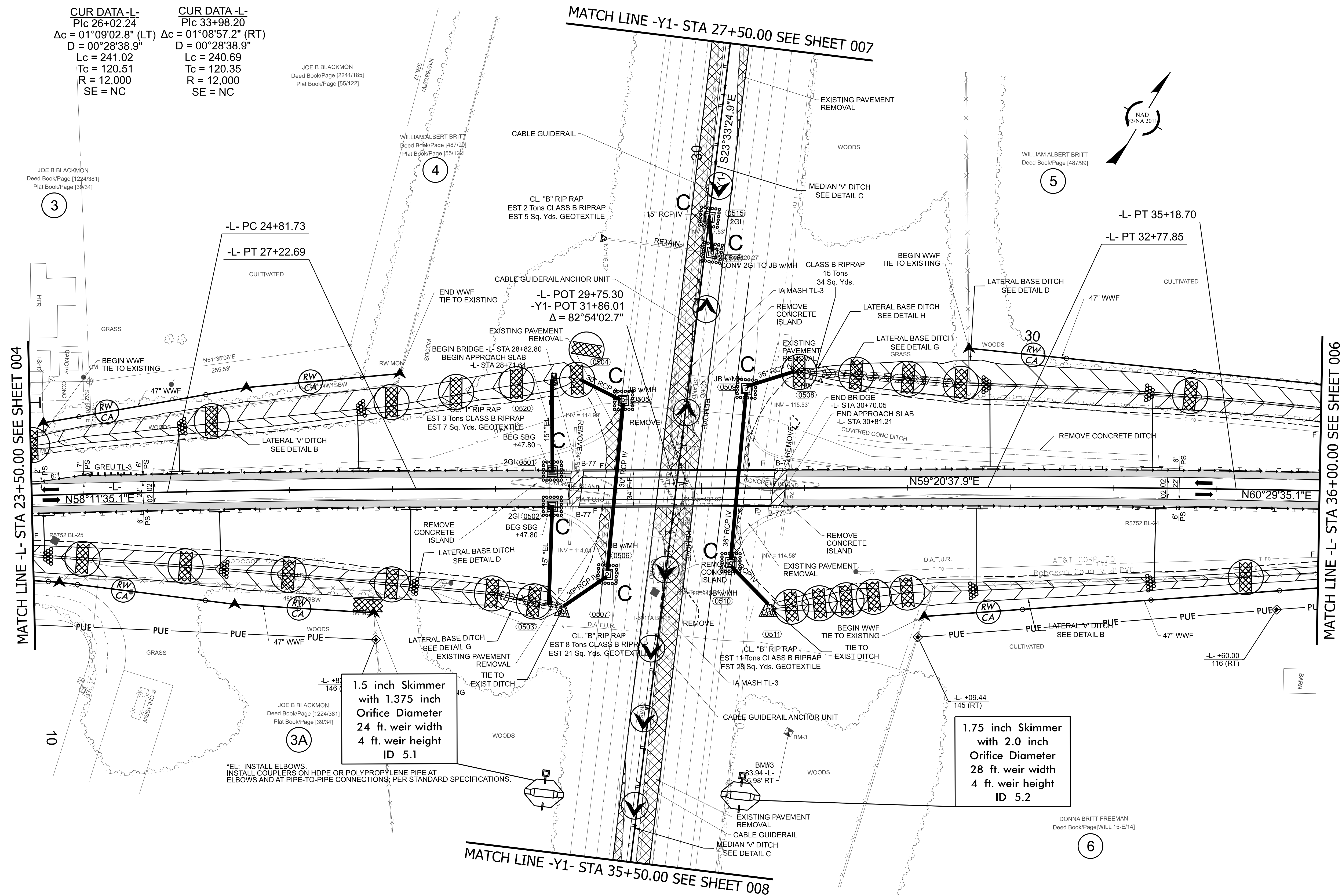
moffatt & nichol



PAVEMENT REMOVAL

REVISIONS





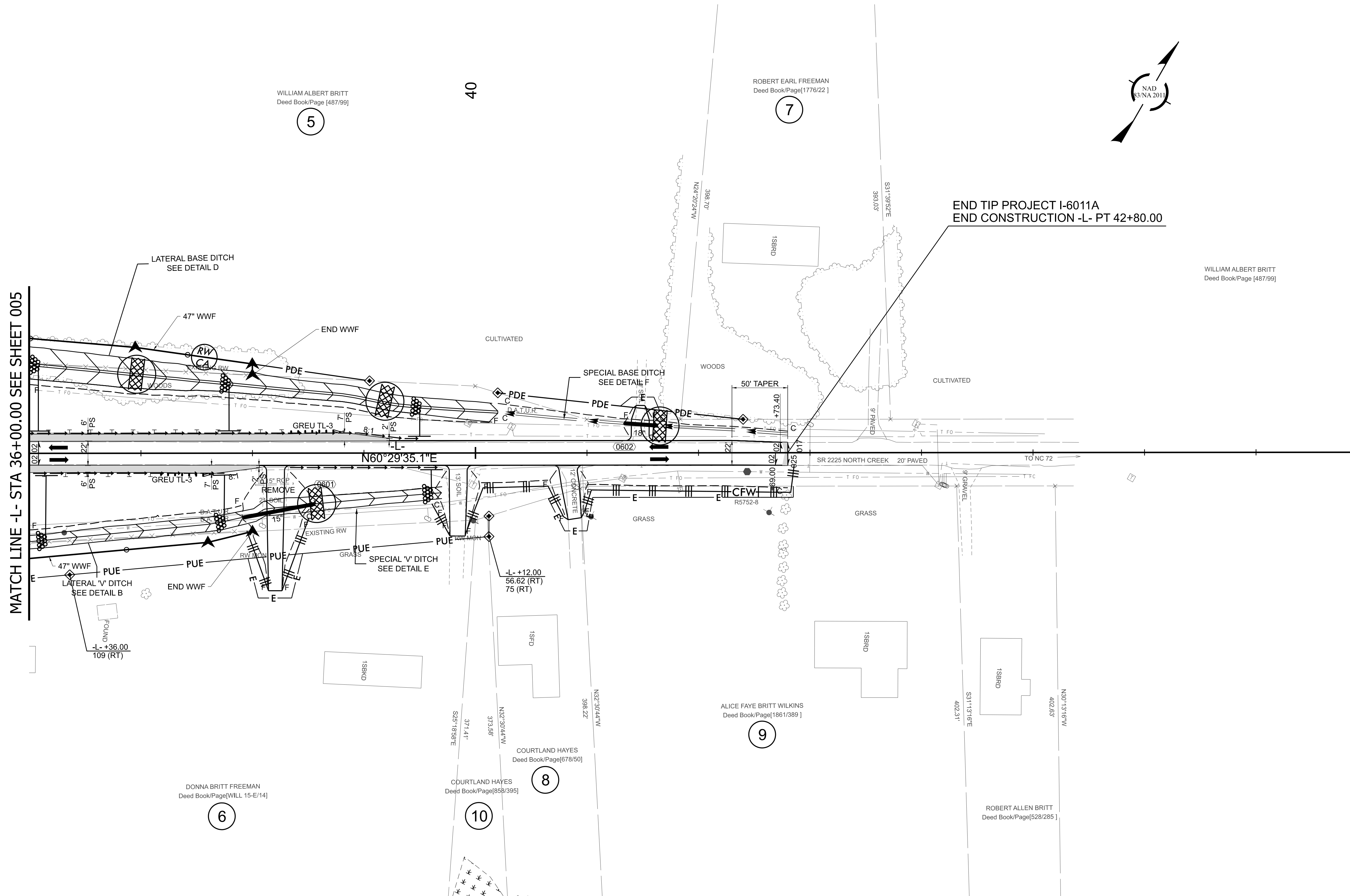
FOR -L- PROFILE, SEE SHEET NO. 009

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

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REVISIONS



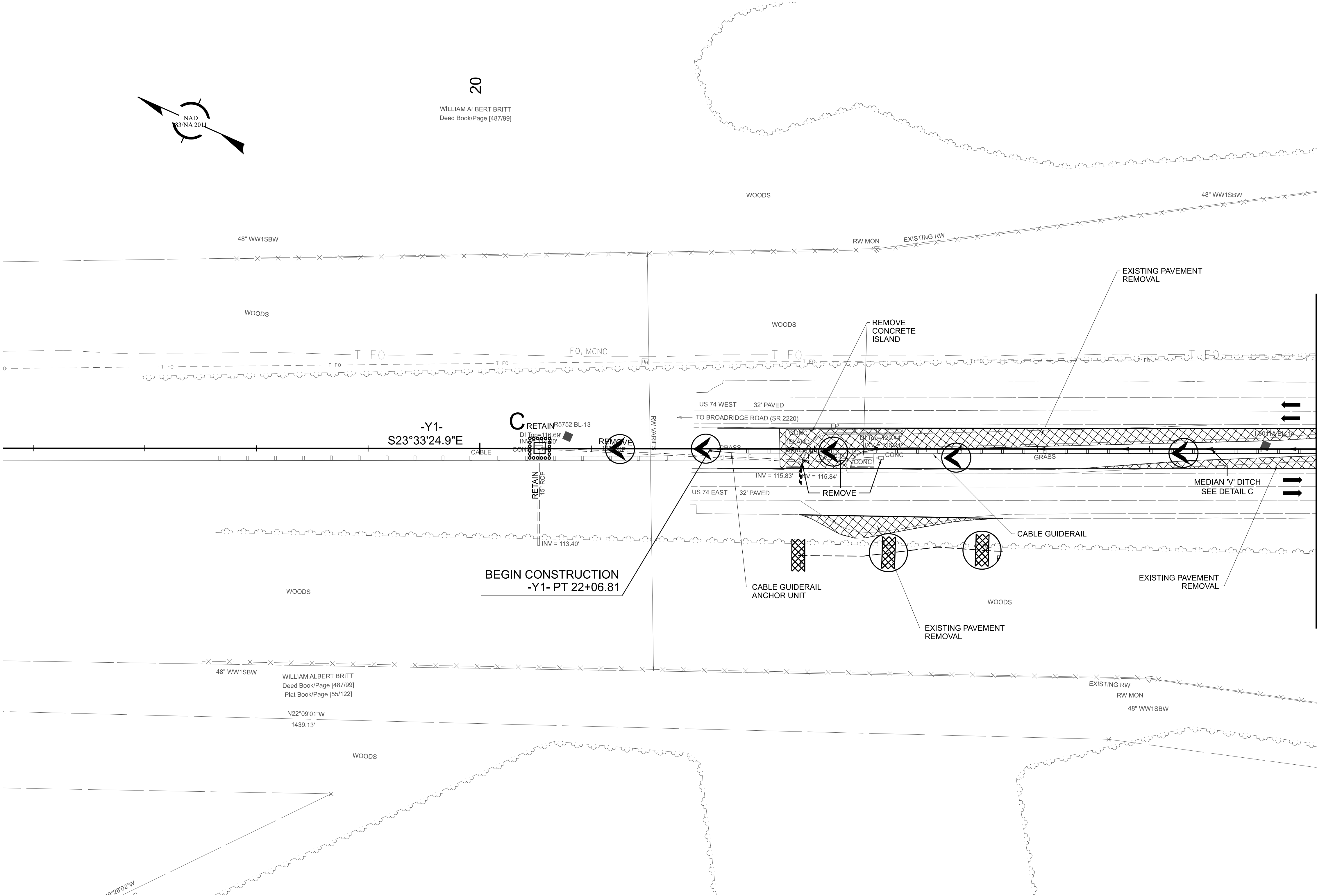
PAVEMENT REMOVAL
FOR -L- PROFILE, SEE SHEET NO. 009

5/26/20



20

WILLIAM ALBERT BRITT
Deed Book/Page [487/99]



BEGIN CONSTRUCTION
-Y1- PT 22+06.81

MATCH LINE -Y1- STA 27+50.00 SEE SHEET 005

PAVEMENT REMOVAL

I-6011A

EC-12007

NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
ROBERSON COUNTY

ROADSIDE ENVIRONMENTAL UNIT

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PREPARED BY

moffatt & nichol

REVISIONS



PREPARED BY



moffatt & nichol

CONTACT A FIN