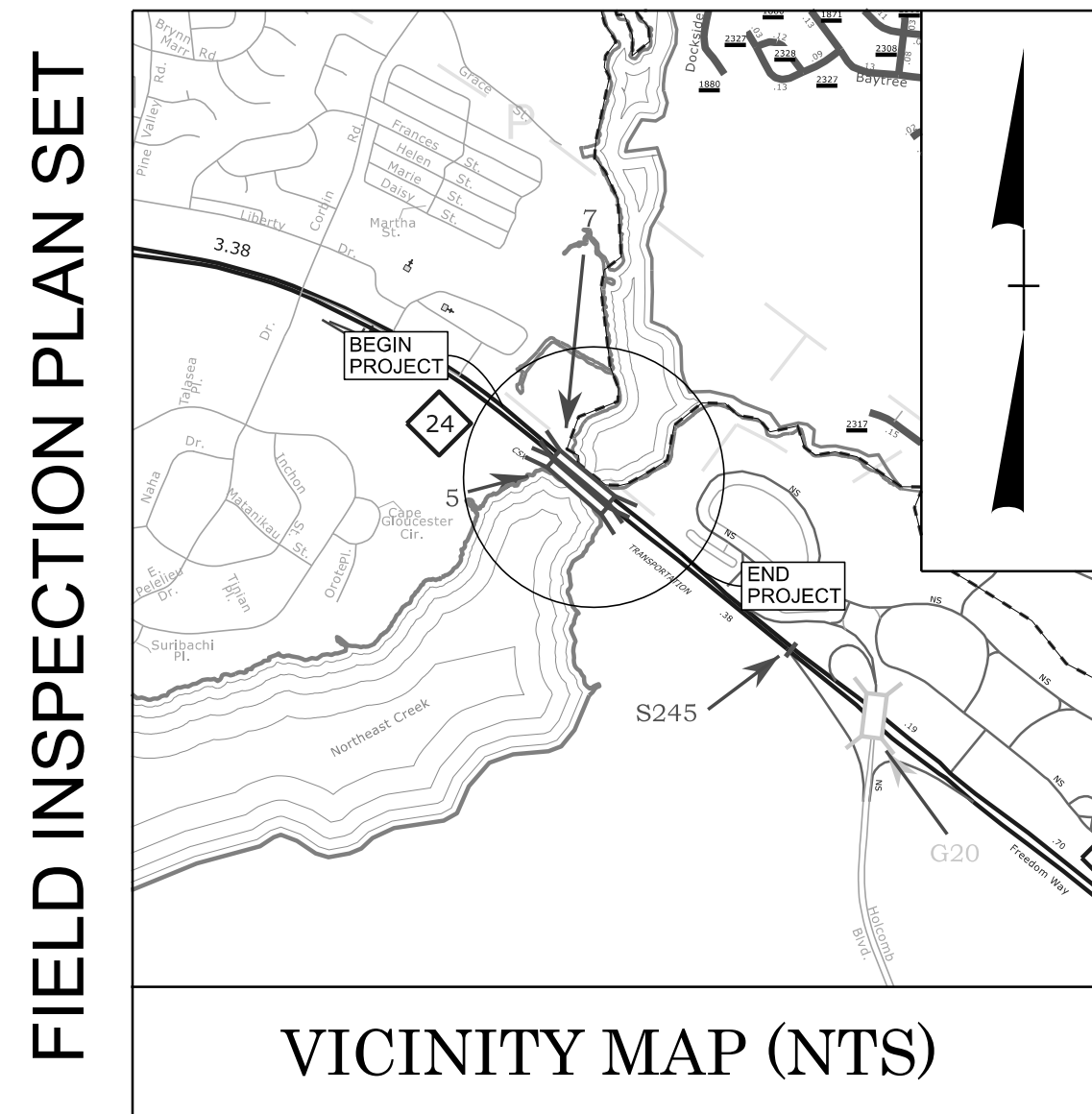


CONTRACT: TIP PROJECT: BR-0193

CONTRACT: TIP PROJECT: BR-0193

See Sheet 1A For Index of Sheets



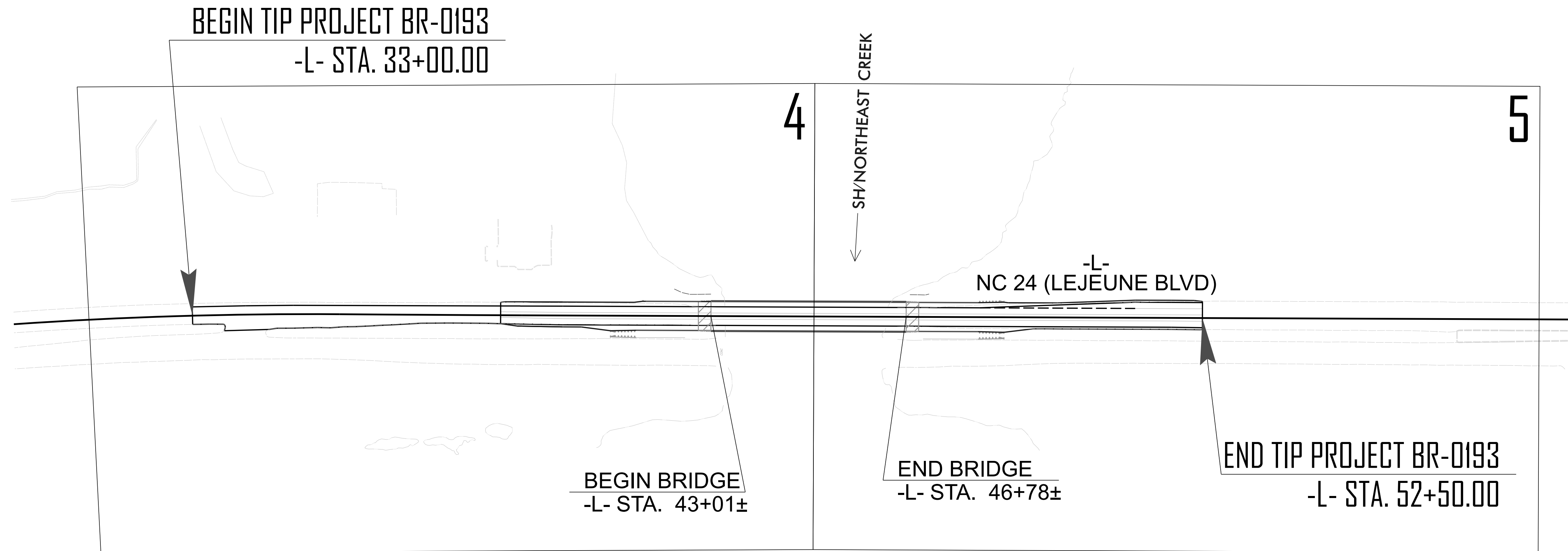
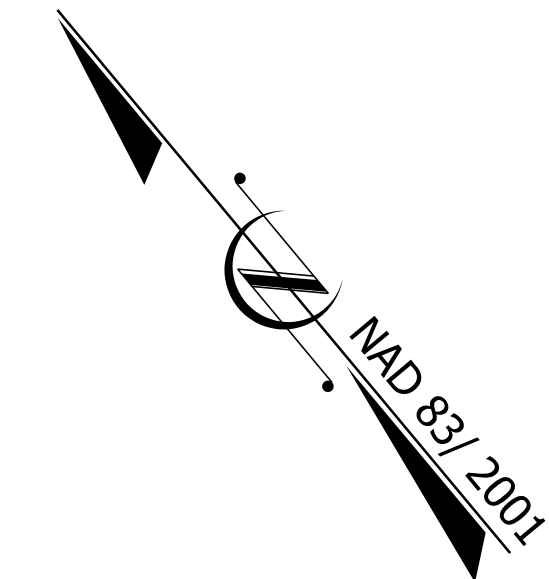
STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

ONSLOW COUNTY

LOCATION: *REPLACE BRIDGE NO. 7 OVER NORTHEAST CREEK
ON NC 24 (LEJEUNE BLVD.)*

TYPE OF WORK: *GRADING, PAVING, DRAINAGE, STRUCTURES*

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0193	11	
STATE PROJ. NO.		F. A. PROJ. NO.	
67193.1.1		P.E.	

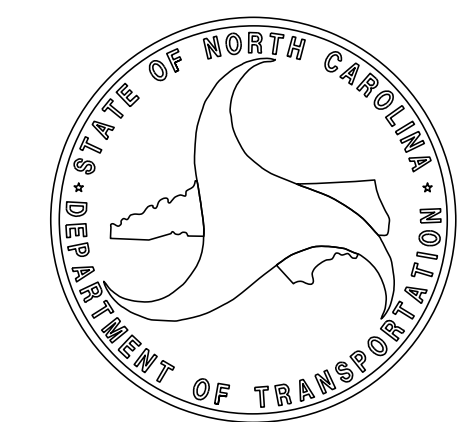


THIS PROJECT IS LOCATED WITHIN THE MUNICIPAL BOUNDARY OF JACKSONVILLE.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY MODIFIED METHOD III.

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

<p>GRAPHIC SCALES</p> <p>50' 25' 0 50' 100'</p> <p style="text-align: center;">PLANS</p> <p>50' 25' 0 50' 100'</p> <p style="text-align: center;">PROFILE (HORIZONTAL)</p> <p>10' 5' 0 10' 20'</p> <p style="text-align: center;">PROFILE (VERTICAL)</p>	<p>DESIGN DATA</p> <p>ADT 2027 = 35,250 ADT 2047 = 52,880</p> <p>K = 9 % D = 55 % T = 12 % * V = 60 MPH</p> <p>* TTST = DUAL FUNC CLASS = PRINCIPAL ARTERIAL STATEWIDE TIER</p>	<p style="text-align: center;">PROJECT LENGTH</p> <p>LENGTH OF ROADWAY TIP PROJECT BR-0193 = 0.298 MILES LENGTH OF STRUCTURE TIP PROJECT BR-0193 = 0.071 MILES TOTAL LENGTH OF TIP PROJECT BR-0193 = 0.369 MILES</p>	<p style="text-align: center;">HR</p> <p style="font-size: small;">Prepared in the Office of: HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116 FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION</p> <p style="font-size: x-small;">2024 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: JUNE 16, 2025</p> <p>LETTING DATE: JUNE 15, 2027</p>	<p style="text-align: center;">HYDRAULICS ENGINEER</p> <p style="text-align: center;">S. KENT DICKENS, PE <i>PROJECT ENGINEER</i></p> <p style="text-align: center;">KYLE HIPPI, PE <i>PROJECT DESIGN ENGINEER</i></p> <p style="text-align: center;">ERIC MURRAY <i>NC DOT CONTACT</i></p>	<p style="text-align: center;">SIGNATURE: _____ P.E.</p> <p style="text-align: center;"><i>ROADWAY DESIGN ENGINEER</i></p> <p style="text-align: center;">SIGNATURE: _____ P.E.</p>
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Note: Not to Scale

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS
CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

Table listing symbols for boundaries and property: State Line, County Line, Township Line, City Line, Reservation Line, Property Line, Existing Iron Pin (EIP), Computed Property Corner, Existing Concrete Monument (ECM), Parcel / Sequence Number, Existing Fence Line, Proposed Woven Wire Fence, Proposed Chain Link Fence, Proposed Barbed Wire Fence, Existing Wetland Boundary, Proposed Wetland Boundary, Existing Endangered Animal Boundary, Existing Endangered Plant Boundary, Existing Historic Property Boundary, Known Contamination Area: Soil, Potential Contamination Area: Soil, Known Contamination Area: Water, Potential Contamination Area: Water, Contaminated Site: Known or Potential.

BUILDINGS AND OTHER CULTURE:

Table listing symbols for buildings and other culture: Gas Pump Vent or U/G Tank Cap, Sign, Well, Small Mine, Foundation, Area Outline, Cemetery, Building, School, Church, Dam.

HYDROLOGY:

Table listing symbols for hydrology: Stream or Body of Water, Hydro, Pool or Reservoir, Jurisdictional Stream, Buffer Zone 1, Buffer Zone 2, Flow Arrow, Disappearing Stream, Spring, Wetland, Proposed Lateral, Tail, Head Ditch, False Sump.

RAILROADS:

Table listing symbols for railroads: Standard Gauge, RR Signal Milepost, Switch, RR Abandoned, RR Dismantled.

RIGHT OF WAY & PROJECT CONTROL:

Table listing symbols for right of way and project control: Primary Horiz Control Point, Primary Horiz and Vert Control Point, Secondary Horiz and Vert Control Point, Vertical Benchmark, Existing Right of Way Monument, Proposed Right of Way Monument (Rebar and Cap), Proposed Right of Way Monument (Concrete), Existing Permanent Easement Monument, Proposed Permanent Easement Monument (Rebar and Cap), Existing C/A Monument, Proposed C/A Monument (Rebar and Cap), Proposed C/A Monument (Concrete), Existing Right of Way Line, Proposed Right of Way Line, Existing Control of Access Line, Proposed Control of Access Line, Proposed ROW and CA Line, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent Drainage/Utility Easement, Proposed Permanent Utility Easement, Proposed Temporary Utility Easement, Proposed Aerial Utility Easement.

ROADS AND RELATED FEATURES:

Table listing symbols for roads and related features: Existing Edge of Pavement, Existing Curb, Proposed Slope Stakes Cut, Proposed Slope Stakes Fill, Proposed Curb Ramp, Existing Metal Guardrail, Proposed Guardrail, Existing Cable Guiderail, Proposed Cable Guiderail, Equality Symbol, Pavement Removal.

VEGETATION:

Table listing symbols for vegetation: Single Tree, Single Shrub, Hedge.

Table listing symbols for woods and vineyard: Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for existing structures: MAJOR: Bridge, Tunnel or Box Culvert, Bridge Wing Wall, Head Wall and End Wall; MINOR: Head and End Wall, Pipe Culvert, Footbridge, Drainage Box: Catch Basin, DI or JB, Paved Ditch Gutter, Storm Sewer Manhole, Storm Sewer.

UTILITIES:

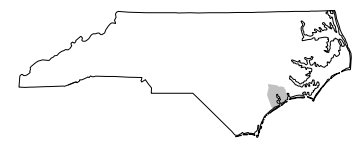
* SUE - Subsurface Utility Engineering
LOS - Level of Service - A, B, C or D (Accuracy)

Table listing symbols for utilities: POWER: Existing Power Pole, Proposed Power Pole, Existing Joint Use Pole, Proposed Joint Use Pole, Power Manhole, Power Line Tower, Power Transformer, U/G Power Cable Hand Hole, H-Frame Pole, U/G Power Line Test Hole (SUE - LOS A)*, U/G Power Line (SUE - LOS B)*, U/G Power Line (SUE - LOS C)*, U/G Power Line (SUE - LOS D)*.

TELEPHONE:

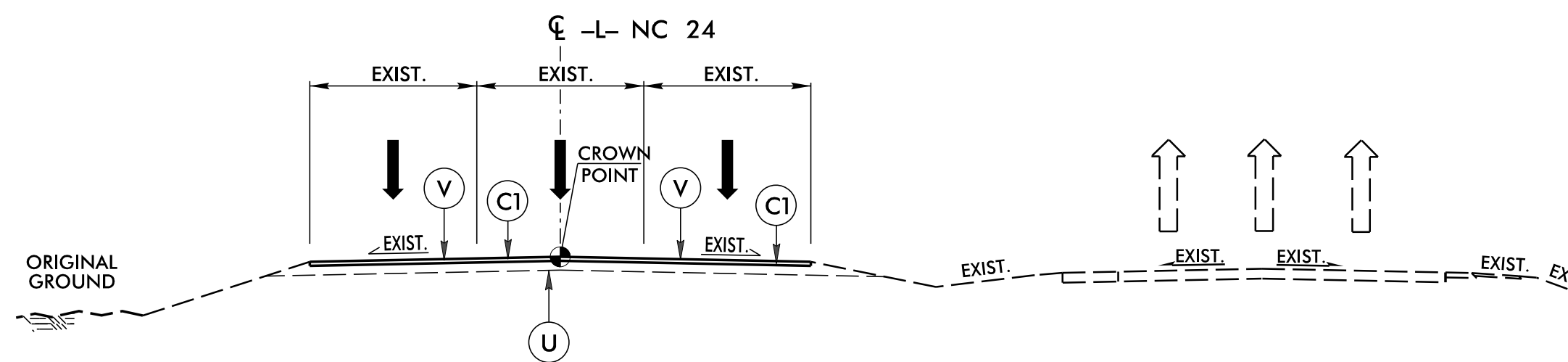
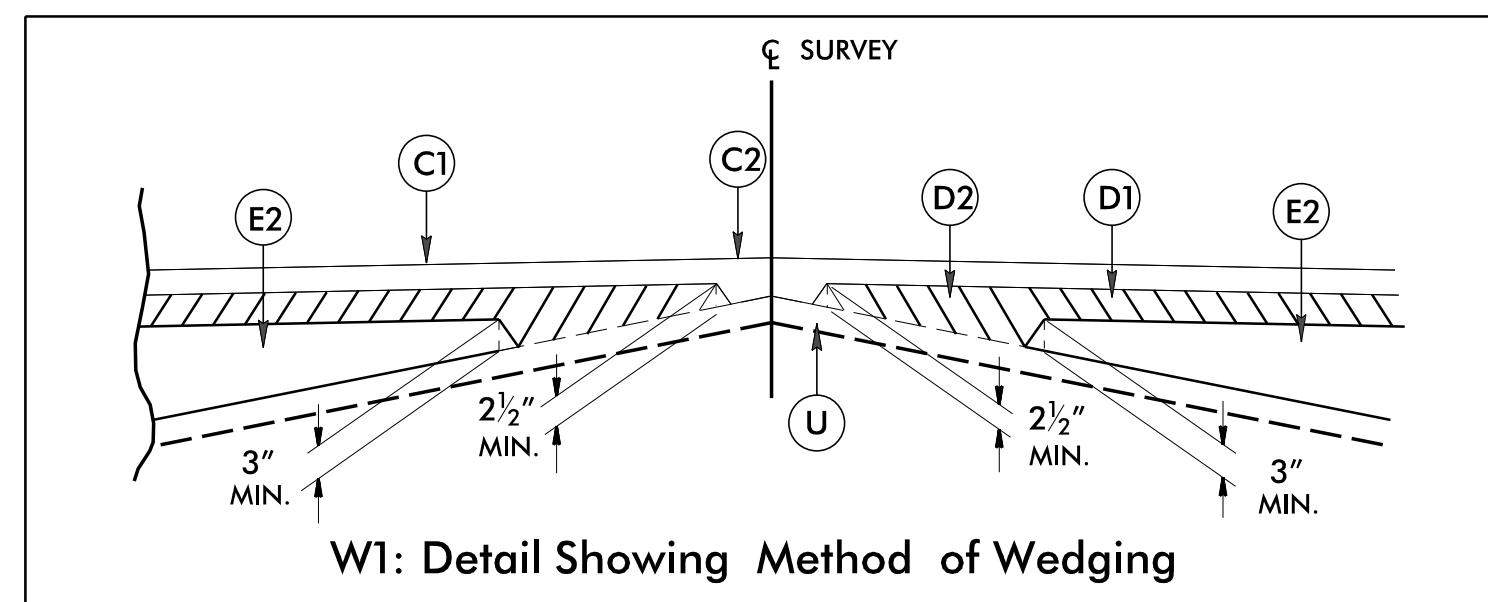
Table listing symbols for telephone: Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Pedestal, Telephone Cell Tower, U/G Telephone Cable Hand Hole, U/G Telephone Test Hole (SUE - LOS A)*, U/G Telephone Cable (SUE - LOS B)*, U/G Telephone Cable (SUE - LOS C)*, U/G Telephone Cable (SUE - LOS D)*, U/G Telephone Conduit (SUE - LOS B)*, U/G Telephone Conduit (SUE - LOS C)*, U/G Telephone Conduit (SUE - LOS D)*, U/G Fiber Optics Cable (SUE - LOS B)*, U/G Fiber Optics Cable (SUE - LOS C)*, U/G Fiber Optics Cable (SUE - LOS D)*.

Table listing symbols for water, TV, gas, sanitary sewer, and miscellaneous: WATER: Water Manhole, Water Meter, Water Valve, Water Hydrant, U/G Water Line Test Hole (SUE - LOS A)*, U/G Water Line (SUE - LOS B)*, U/G Water Line (SUE - LOS C)*, U/G Water Line (SUE - LOS D)*, Above Ground Water Line; TV: TV Pedestal, TV Tower, U/G TV Cable Hand Hole, U/G TV Test Hole (SUE - LOS A)*, U/G TV Cable (SUE - LOS B)*, U/G TV Cable (SUE - LOS C)*, U/G TV Cable (SUE - LOS D)*, U/G Fiber Optic Cable (SUE - LOS B)*, U/G Fiber Optic Cable (SUE - LOS C)*, U/G Fiber Optic Cable (SUE - LOS D)*; GAS: Gas Valve, Gas Meter, U/G Gas Line Test Hole (SUE - LOS A)*, U/G Gas Line (SUE - LOS B)*, U/G Gas Line (SUE - LOS C)*, U/G Gas Line (SUE - LOS D)*, Above Ground Gas Line; SANITARY SEWER: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, SS Force Main Line Test Hole (SUE - LOS A)*, SS Force Main Line (SUE - LOS B)*, SS Force Main Line (SUE - LOS C)*, SS Force Main Line (SUE - LOS D)*; MISCELLANEOUS: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line (SUE - LOS B)*, U/G Tank; Water, Gas, Oil, Underground Storage Tank, Approx. Loc., A/G Tank; Water, Gas, Oil, Geoenvironmental Boring, Abandoned According to Utility Records, End of Information.



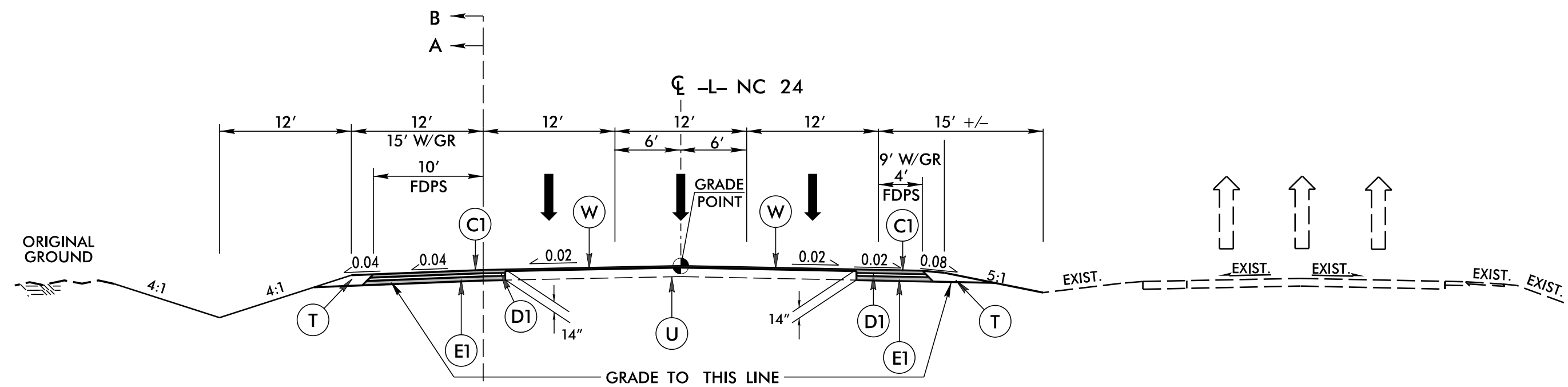
PAVEMENT SCHEDULE

C1	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.	P	PRIME COAT.
C2	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.	R1	SHOULDER BERM GUTTER.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	T	EARTH MATERIAL.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.	U	EXISTING PAVEMENT.
E1	PROP. APPROX. 7" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.	V	3" MILLING
E2	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.	W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL).
J	10" AGGREGATE BASE COURSE.	NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.	

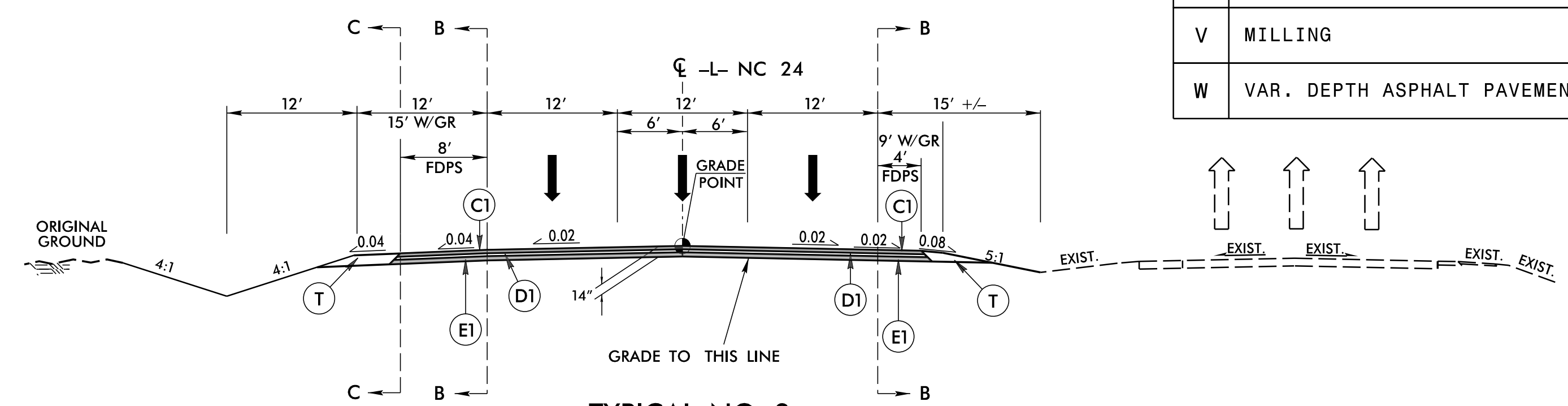


TYPICAL NO. 1
-L- STA. 33+00.00 TO 38+95.00

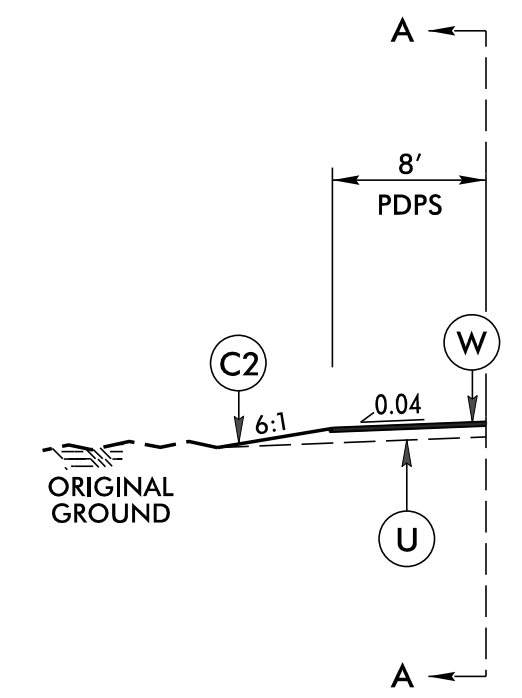
REVISIONS



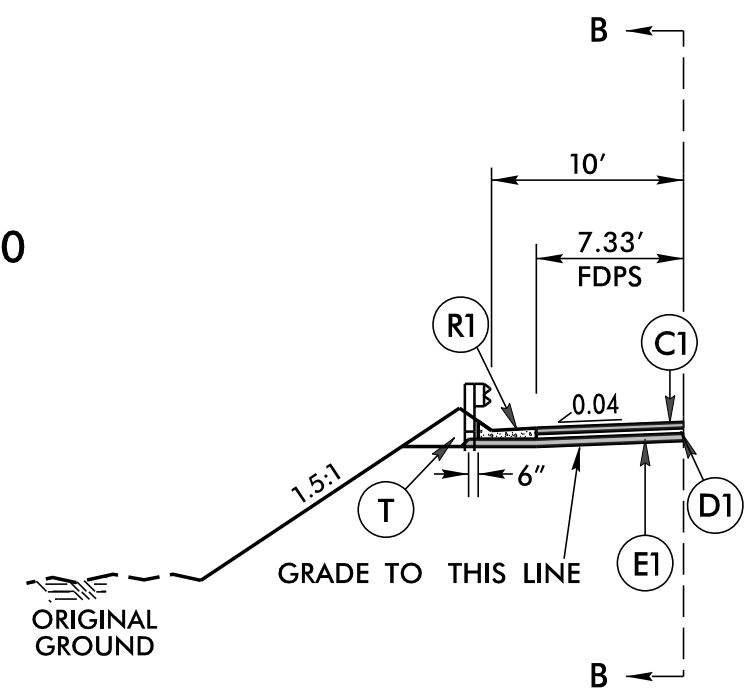
TYPICAL NO. 2
 -L- STA. 38+95.00 TO 40+75.00
 -L- STA. 47+75.00 TO 52+50.00



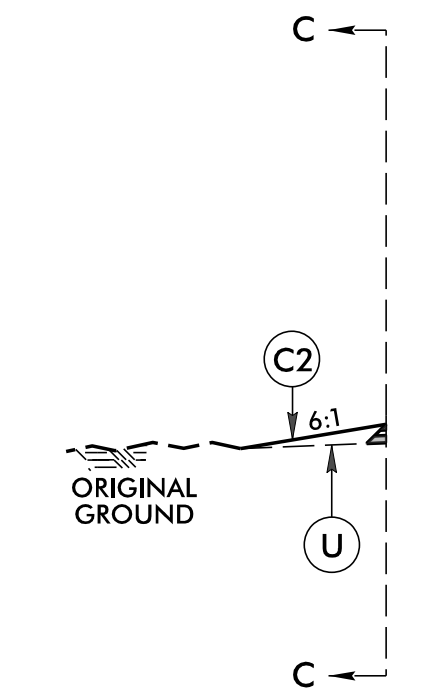
TYPICAL NO. 3
 -L- STA. 40+75.00 TO 43+01.00 (BEGIN BRIDGE)
 -L- STA. 46+78.00 (END BRIDGE) TO 47+75.00



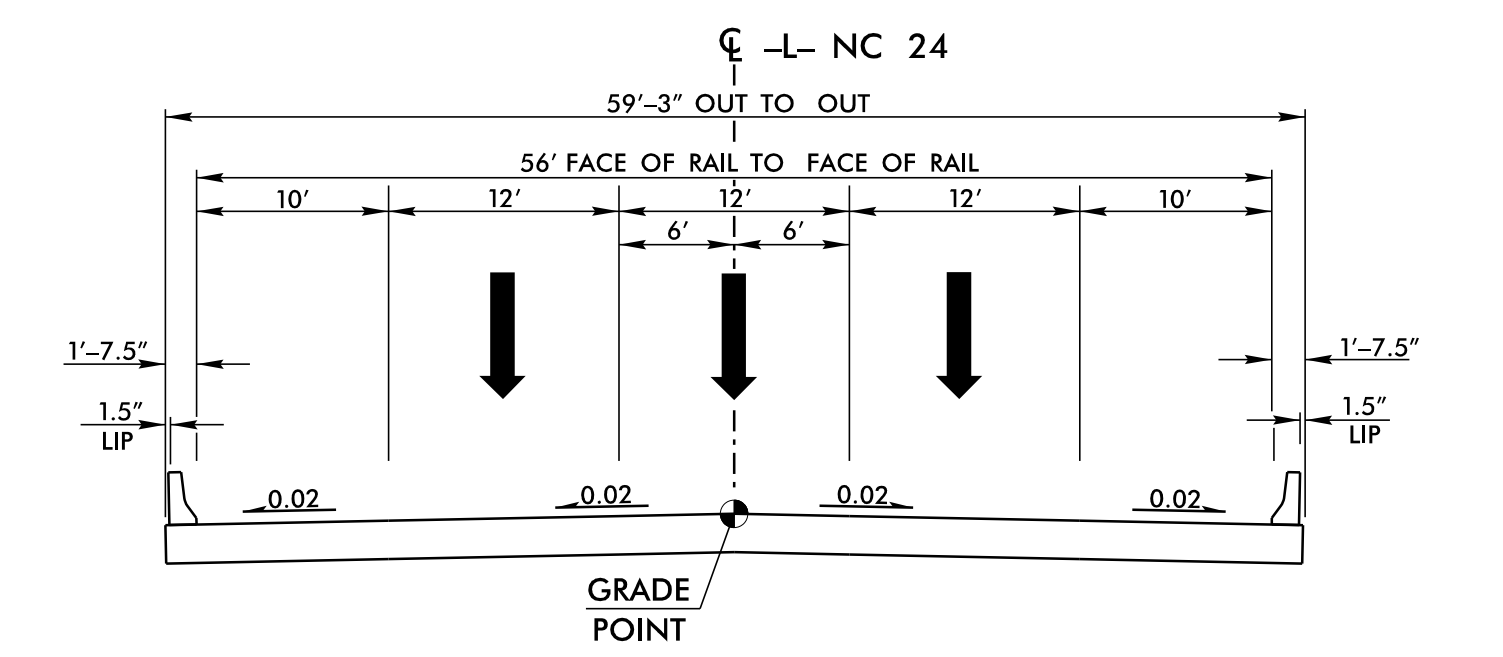
MATCHLINE A-A
 -L- STA. 38+95.00 TO 40+75.00



MATCHLINE B-B
 -L- STA. 42+22.00 TO 42+76.83 - LT
 -L- STA. 42+22.00 TO 42+76.83 - RT (INVERSED)
 -L- STA. 47+02.17 TO 48+00.00 - LT
 -L- STA. 47+02.17 TO 47+21.00 - RT (INVERSED)



MATCHLINE C-C
 -L- STA. 40+75.00 TO 42+10.00



TYPICAL NO. 4
 -L- STA. 43+01 +/- (BEGIN BRIDGE) TO 46+78 +/- (END BRIDGE)

PAVEMENT SCHEDULE	
C1	3" S9.5C
C2	VAR. S9.5C
D1	4" I19.0C
D2	VAR. I19.0C
E1	7" B25.0C
E2	VAR. B25.0C
J	10" ABC
P	PRIME COAT
R1	SHOULDER BERM GUTTER
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING
W	VAR. DEPTH ASPHALT PAVEMENT

BR-0193
2A-2
 NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 ONSLOW COUNTY

ROADWAY DESIGN UNIT
 ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

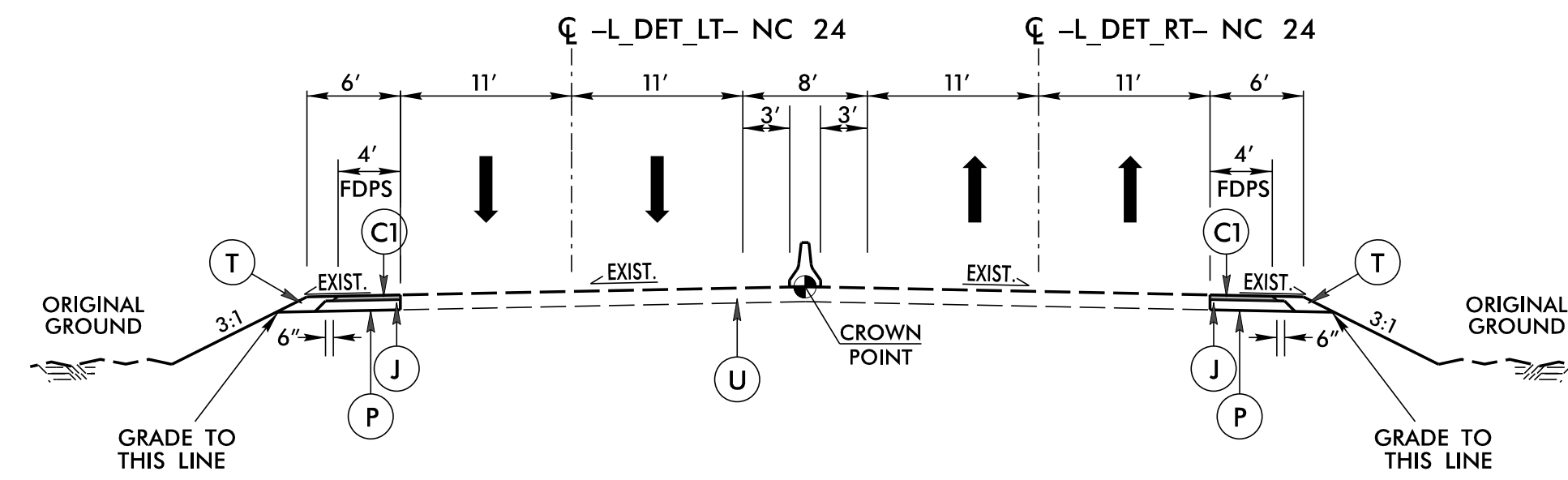
HYDRAULICS ENGINEER

INCOMPLETE PLANS
 FOR THE RECORD - ACCEPTATION

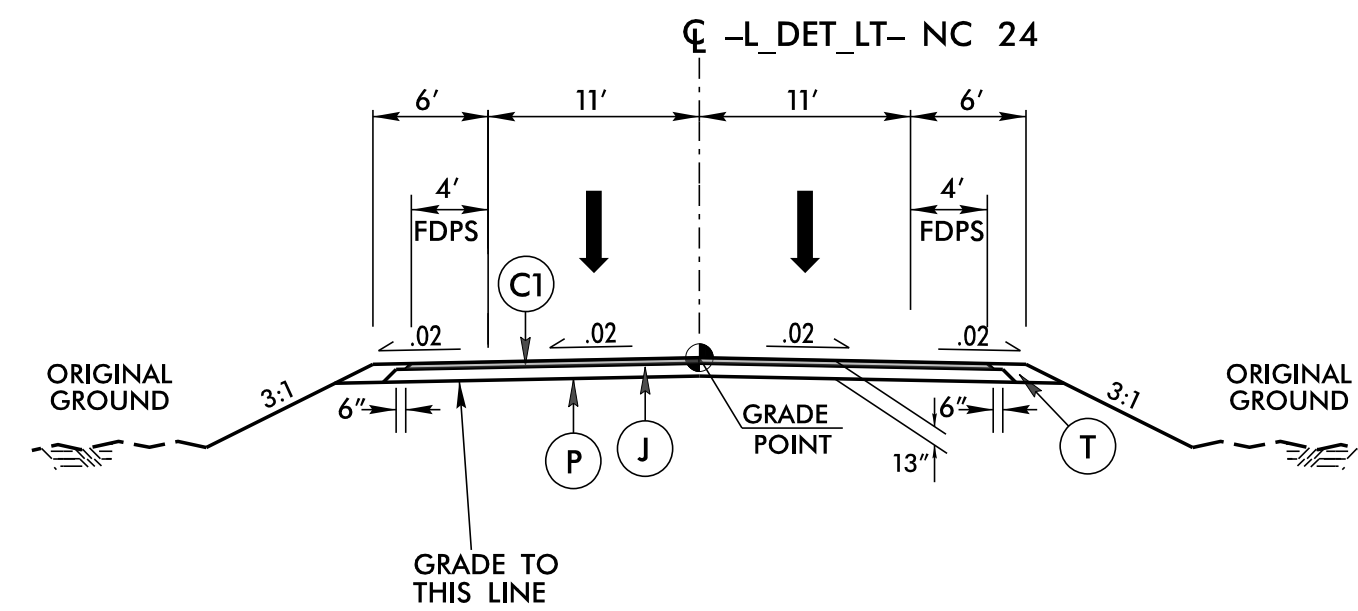
PREPARED BY

HDR HDR Engineering, Inc. of the Carolinas
 405 Fayetteville St., Suite 600 Raleigh, N.C. 27601
 N.C. E.E.S. License Number F-4119

REVISIONS



TYPICAL NO. 5
 -L_DET_LT- STA. 14+59.28 TO 25+95.00



TYPICAL NO. 6
 -L_DET_LT- STA. 12+92.44 TO 14+59.28
 -L_DET_LT- STA. 25+95.00 TO 27+19.50

PAVEMENT SCHEDULE	
C1	3" S9.5C
C2	VAR. S9.5C
D1	4" I19.0C
D2	VAR. I19.0C
E1	7" B25.0C
E2	VAR. B25.0C
J	10" ABC
P	PRIME COAT
R1	SHOULDER BERM GUTTER
T	EARTH MATERIAL
U	EXIST. PAVEMENT
V	MILLING
W	VAR. DEPTH ASPHALT PAVEMENT

BR-0193
2A-3

NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 ONSLOW COUNTY

ROADWAY DESIGN UNIT
 ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

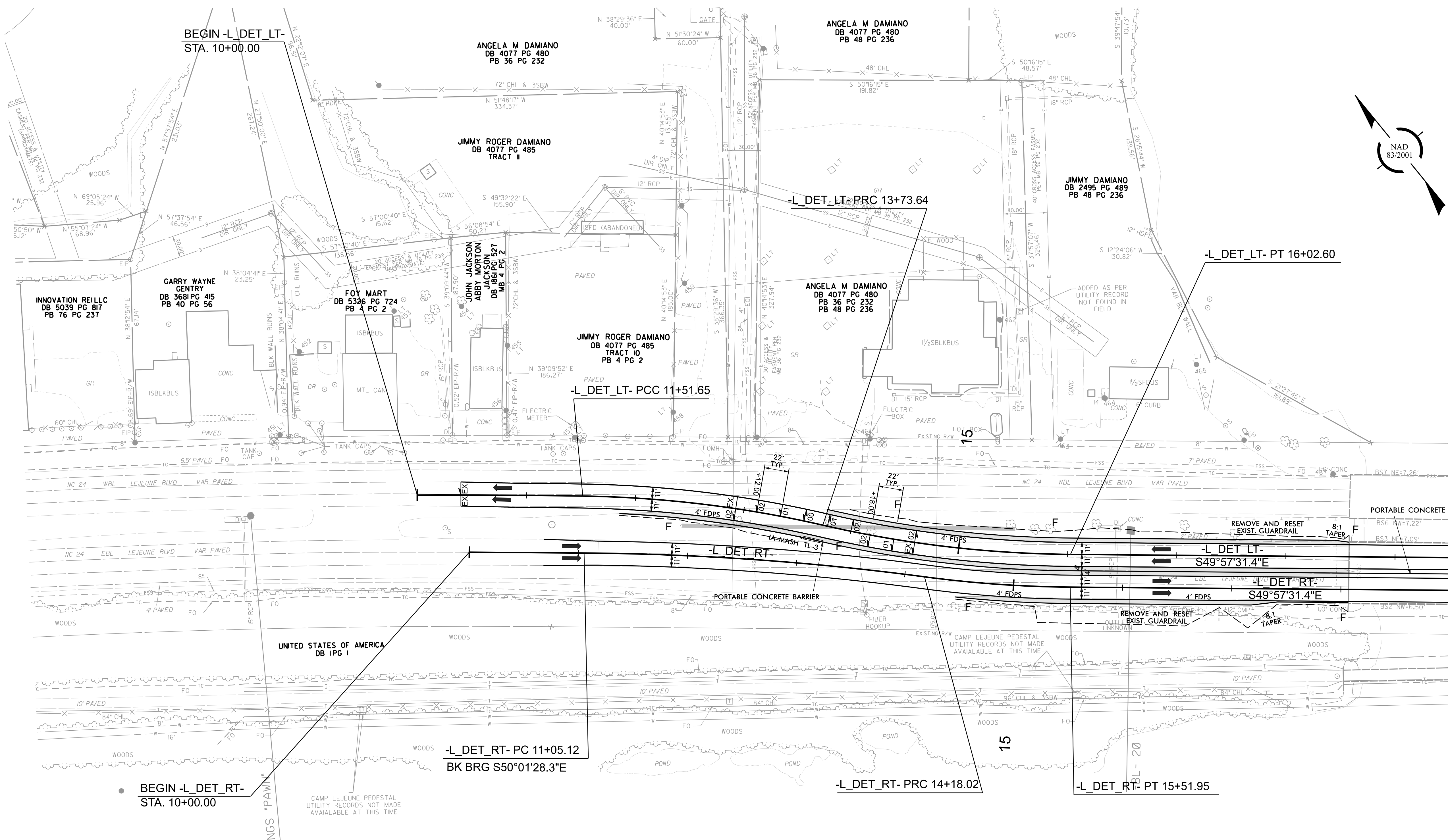
HYDRAULICS ENGINEER

INCOMPLETE PLANS
 FOR THE PROJECT ACQUISITION

PREPARED BY

HDR HDR Engineering, Inc. of the Carolinas
 455 Fayetteville St., Suite 600 Raleigh, NC 27601
 N.C.E.E.S. License Number F-0119

REVISIONS



MATCH LINE -L_DET_LT- STA 20+45.31 SEE SHEET 2B-2

BEGIN -L_DET_RT-
STA. 10+00.00

CUR DATA -L_DET_LT-
 Plc 10+75.83
 $\Delta c = 01^{\circ}03'09.6''$ (RT)
 $D = 00^{\circ}41'39.0''$
 $Lc = 151.65$
 $Tc = 75.83$
 $R = 8,254$
 $SE = NC$

CUR DATA -L_DET_LT-
 Plc 12+63.06
 $\Delta c = 12^{\circ}06'48.8''$ (RT)
 $D = 05^{\circ}27'24.3''$
 $Lc = 221.99$
 $Tc = 111.41$
 $R = 1,050$
 $SE = NC$

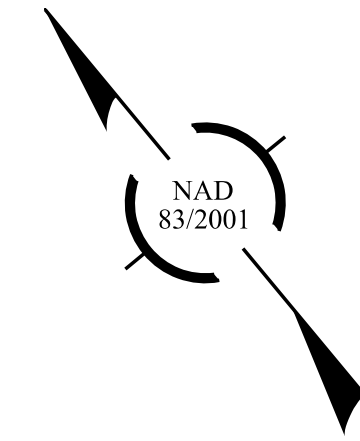
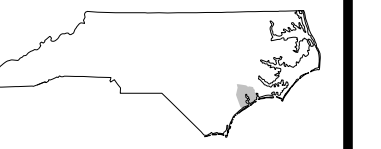
CUR DATA -L_DET_LT-
 Plc 14+88.58
 $\Delta c = 12^{\circ}29'37.9''$ (LT)
 $D = 05^{\circ}27'24.3''$
 $Lc = 228.96$
 $Tc = 114.94$
 $R = 1,050$
 $SE = NC$

CUR DATA -L_DET_RT-
 Plc 12+61.77
 $\Delta c = 07^{\circ}10'16.4''$ (RT)
 $D = 02^{\circ}17'30.6''$
 $Lc = 312.90$
 $Tc = 156.66$
 $R = 2,500$
 $SE = NC$

CUR DATA -L_DET_RT-
 Plc 14+85.07
 $\Delta c = 07^{\circ}06'19.5''$ (LT)
 $D = 05^{\circ}18'18.6''$
 $Lc = 133.93$
 $Tc = 67.05$
 $R = 1,080$
 $SE = NC$

FOR -L_DET_LT- PROFILE SEE SHEETS 007

REVISIONS



MATCH LINE -L_DET_LT- STA 20+45.31 SEE SHEET 2B-1

20

-L_DET_LT- PC 24+46.06

-L_DET_LT- PRC 26+73.83

END -L_DET_LT-
STA. 29+77.45

-L_DET_LT- PT 25+79.37
AHD BRG S49°57'31.4"E

-L_DET_LT-
S49°57'31.4"E

-L_DET_RT-
S49°57'31.4"E

-L_DET_RT-
S49°52'07.2"E

-L_DET_RT- PC 23+95.41

-L_DET_RT- PRC 24+87.40

-L_DET_RT- PT 27+04.28

END -L_DET_RT-
STA. 29+79.93

CUR DATA -L_DET_LT-
Plc 25+60.39
 $\Delta c = 12^\circ 25' 44.8''$ (LT)
D = 05°27'24.3"
Lc = 227.78
Tc = 114.34
R = 1,050
SE = NC

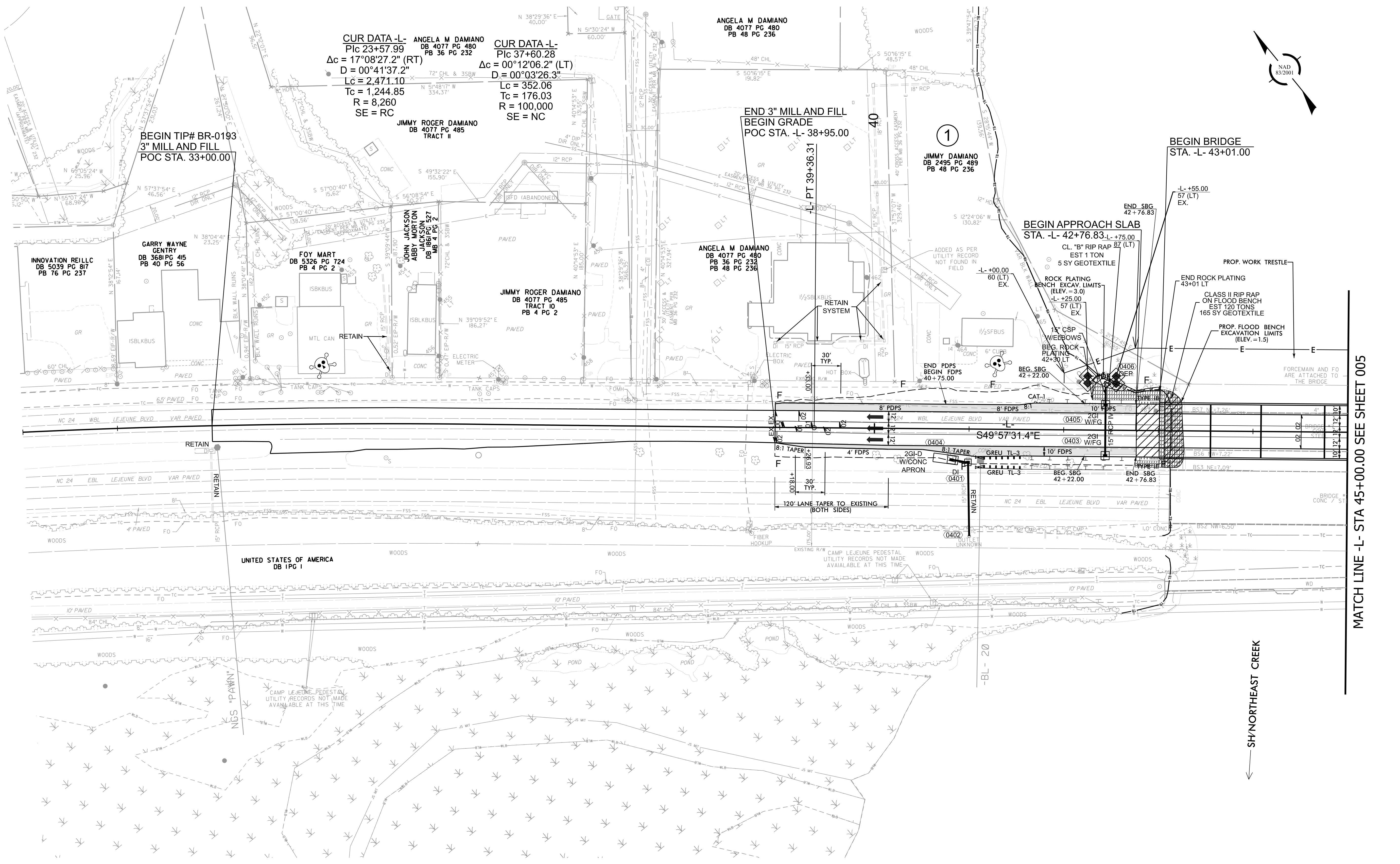
CUR DATA -L_DET_LT-
Plc 27+88.17
 $\Delta c = 12^\circ 25' 44.8''$ (RT)
D = 05°27'24.3"
Lc = 227.78
Tc = 114.34
R = 1,050
SE = NC

CUR DATA -L_DET_RT-
Plc 24+41.43
 $\Delta c = 04^\circ 52' 49.2''$ (LT)
D = 05°18'18.6"
Lc = 91.99
Tc = 46.02
R = 1,080
SE = NC

CUR DATA -L_DET_RT-
Plc 25+95.91
 $\Delta c = 04^\circ 58' 13.3''$ (RT)
D = 02°17'30.6"
Lc = 216.87
Tc = 108.50
R = 2,500
SE = NC

FOR -L_DET_LT- PROFILE SEE SHEETS 007

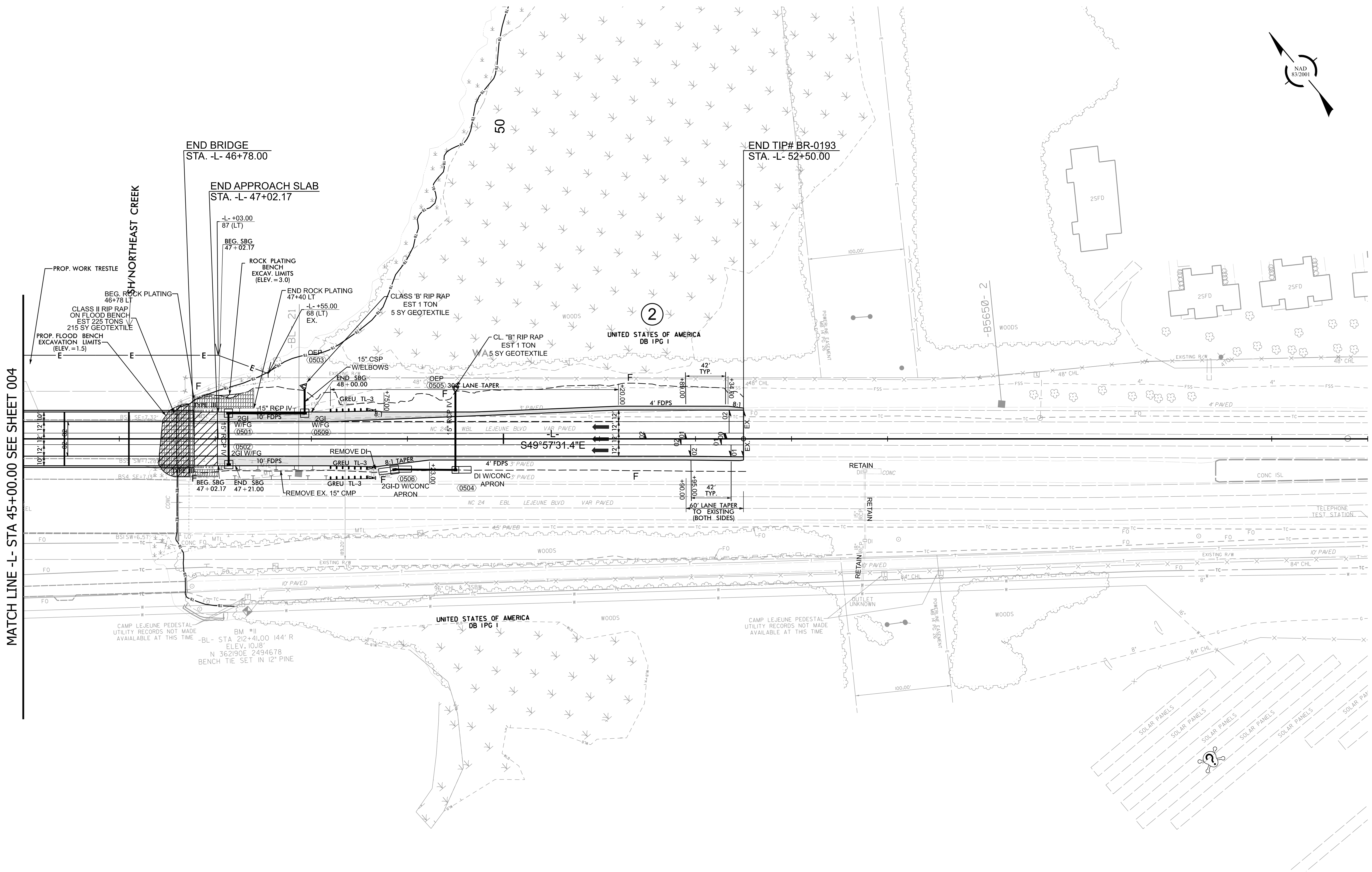
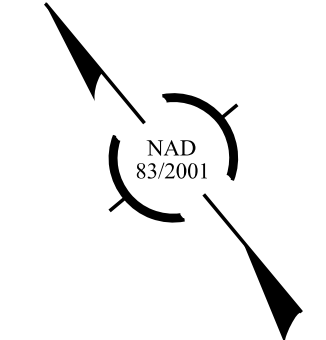
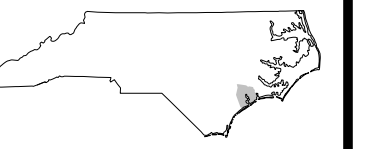
REVISIONS



MATCH LINE -L- STA 45+00.00 SEE SHEET 005

FOR -L- PROFILE SEE SHEET 006

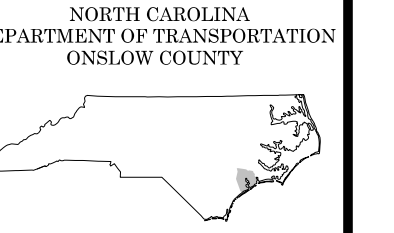
REVISIONS



MATCH LINE -L- STA 45+00.00 SEE SHEET 004

REVISIONS

FOR -L- PROFILE SEE SHEET 006

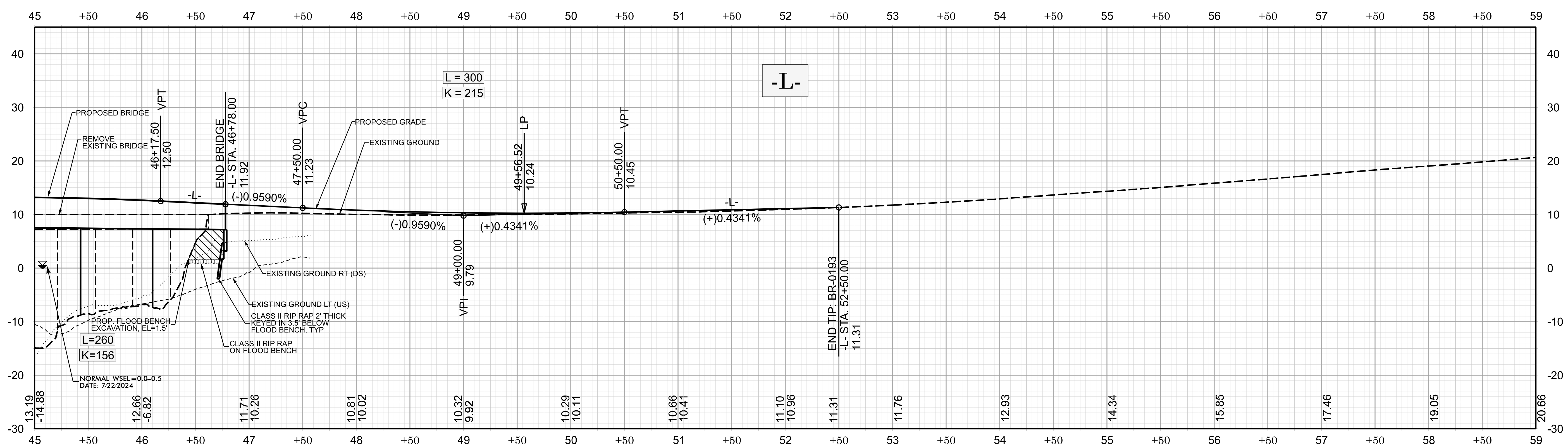
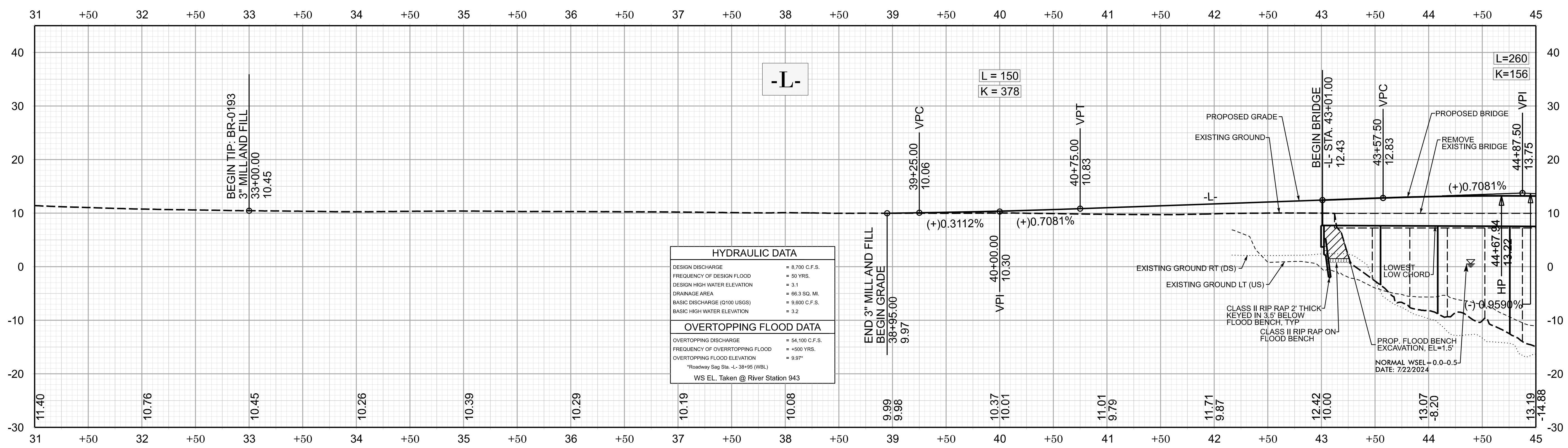


ROADWAY DESIGN UNIT
ROADWAY DESIGN ENGINEER

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED
HYDRAULICS ENGINEER

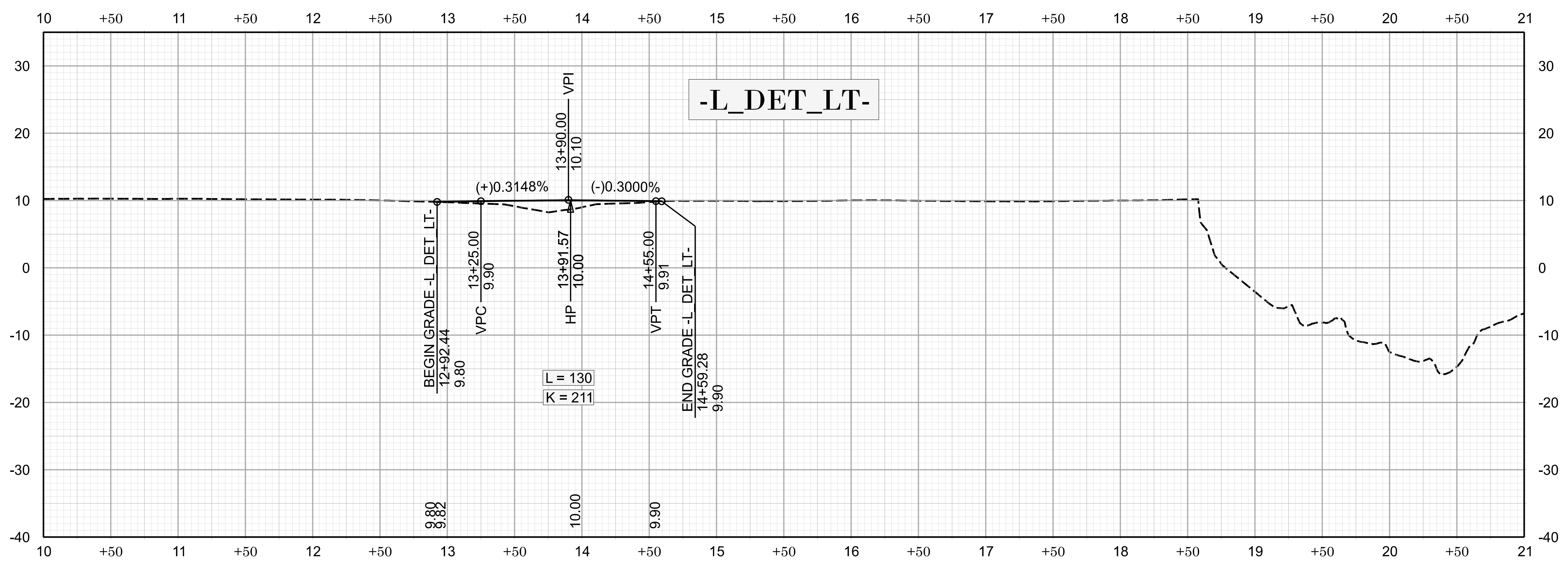
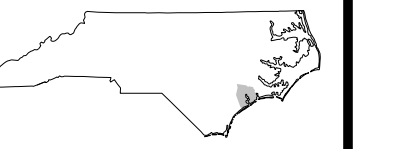
INCOMPLETE PLANS
PREPARED BY

HR Engineering, Inc. of the Carolinas
455 Fayetteville St., Suite 600 Raleigh, NC 27601
N.C. P.E. License Number F41718

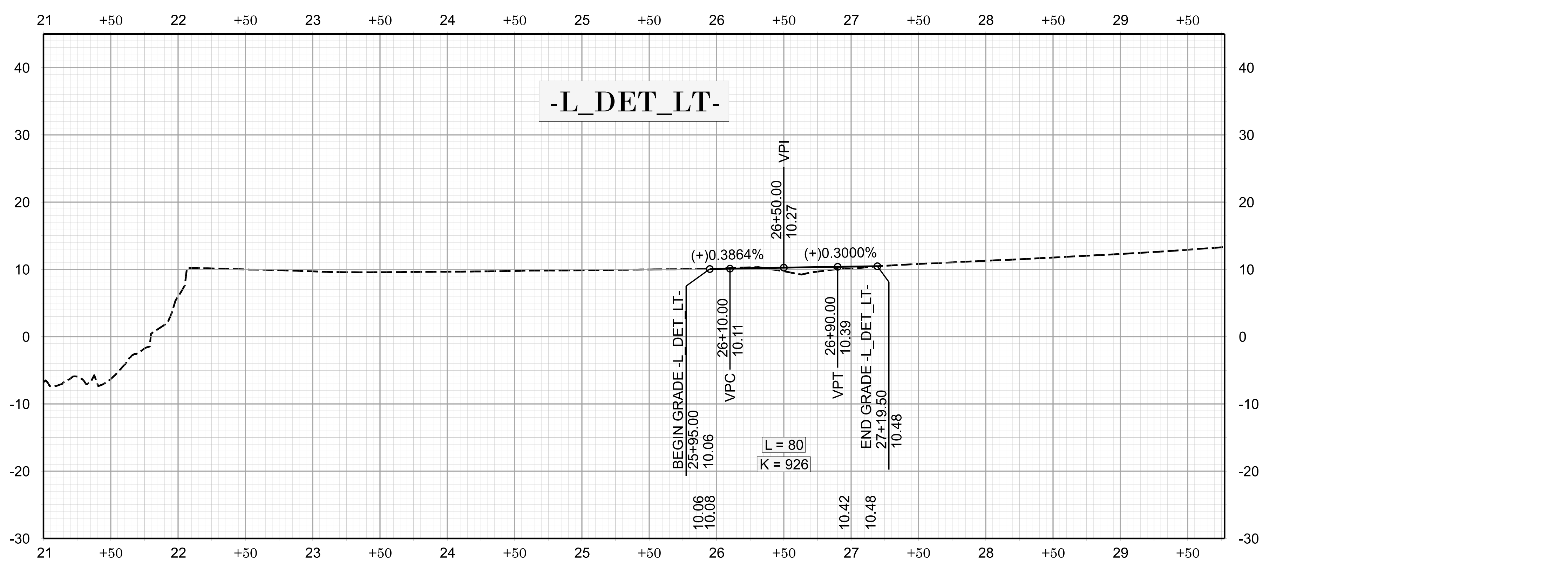


FOR -L- PLAN SEE SHEETS 004 & 005

REVISIONS



FOR -L_DET_LT- PLAN, SEE SHEET 2B-1



FOR -L_DET_LT- PLAN, SEE SHEET 2B-2

REVISIONS