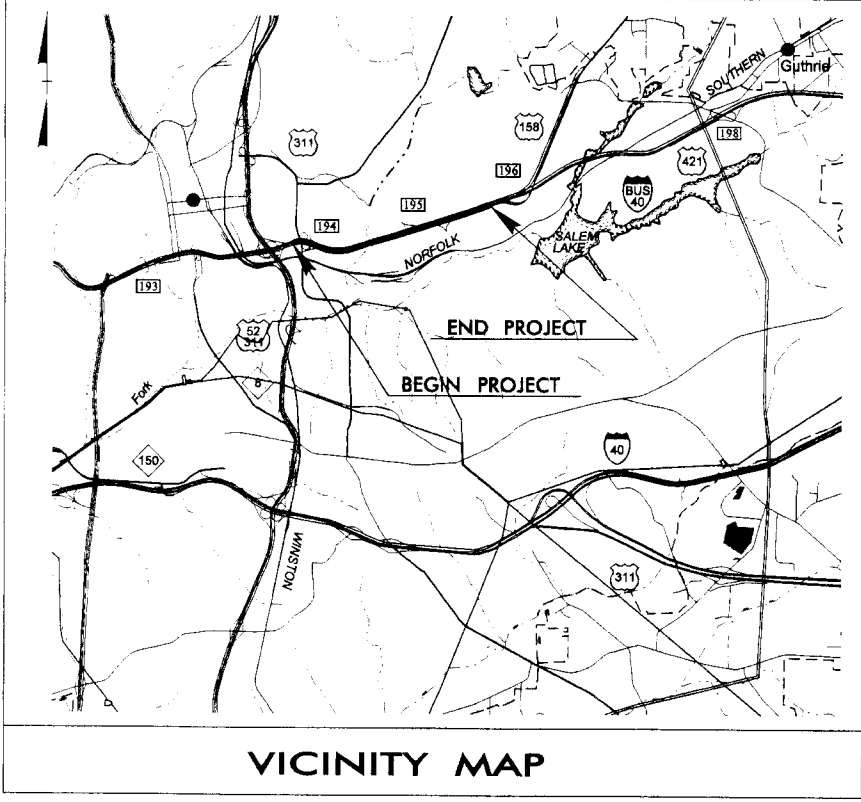


FORSYTH COUNTY
PRESENTED & RECORDED
JULIE C. BOON REGISTERED PROFESSIONAL ENGINEER
07-1-0771-0777

U-2827C

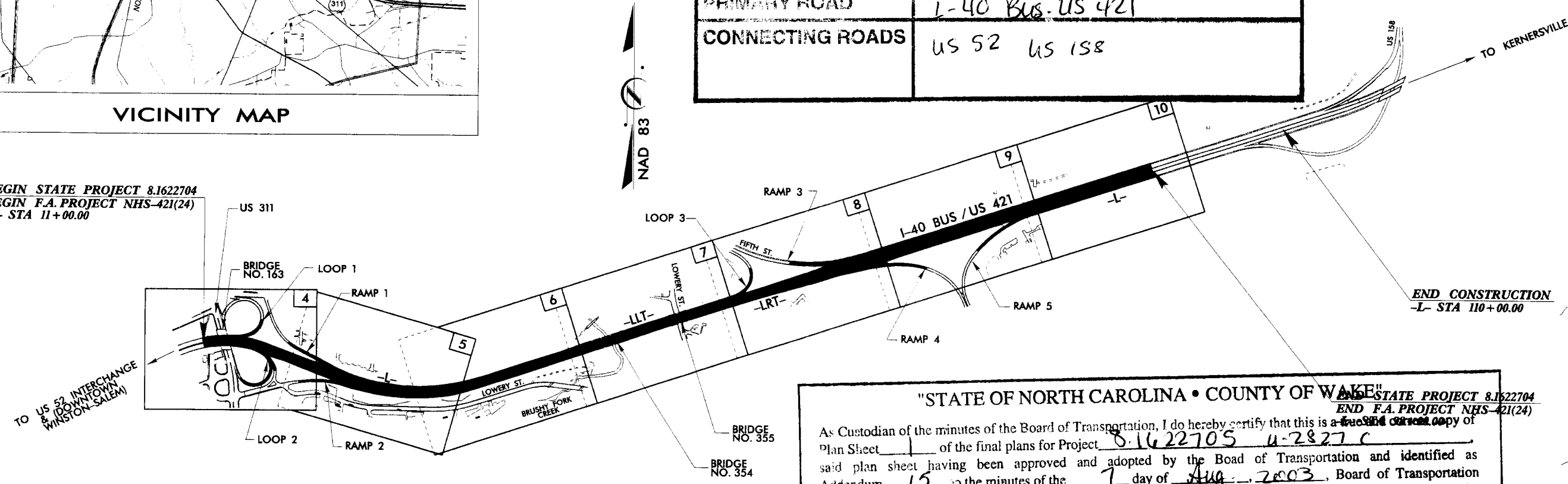
PROJECT: 8.1622704

See Sheet 1-A For Index of Sheets



VICINITY MAP

BEGIN STATE PROJECT 8.1622704
BEGIN F.A. PROJECT NHS-421(24)
-L- STA 11+00.00



THIS IS A CONTROLLED-ACCESS PROJECT,
WITH ACCESS BEING LIMITED TO INTERSECTIONS.

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS FORSYTH COUNTY

LOCATION: WINSTON-SALEM I-40 BUSINESS / US 421
FROM WEST OF US 311 TO WEST OF US 158

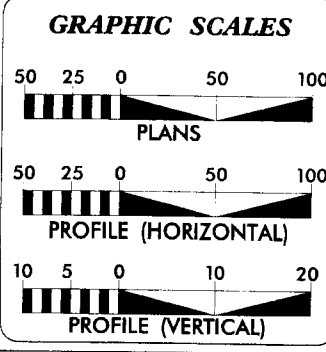
TYPE OF WORK: PAVEMENT REHABILITATION, SAFETY
IMPROVEMENTS, SIGNING, LIGHTING

PROJECT	8.1622704 U-2827C
PRIMARY ROAD	I-40 Bus. US 421
CONNECTING ROADS	US 52 US 158

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2827C	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
8.1622701	NHF-421(5)	PE	
8.1622704	NHS-421(24)	CONST.	
34872.2.3	NHS-421(24)	RW, UTIL	



"STATE OF NORTH CAROLINA • COUNTY OF WAKE"
As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of
Plan Sheet 1 of the final plans for Project 8.1622704 U-2827C
said plan sheet having been approved and adopted by the Board of Transportation and identified as
Addendum 15 to the minutes of the 7 day of Aug, 2003, Board of Transportation
meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the
21 day of Aug, 2003.
Sherry C. Brew
Secretary to Board of Transportation



DESIGN DATA

ADT 2003 = 66070-72630
ADT 2020 = 85600-93600
DHV = 9 %
D = 58 %
T = 8 % *
V = 60 MPH
* TTST 5 % DUAL 3 %

PROJECT LENGTH

LENGTH ROADWAY F.A. PROJECT NHS-421(24) = 1.648 Miles
TOTAL LENGTH ROADWAY STATE PROJECT 8.1622704 = 1.648 Miles

Prepared in the Office of:

DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh, NC 27610

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: May 19, 2003	G.E. BREW, PE PROJECT ENGINEER
LETTING DATE: July 15, 2003	D. WILLIAMS PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

Randall C. Henson
SIGNATURE

ROADWAY DESIGN ENGINEER

Sherry C. Brew
SIGNATURE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

D.M. Barbour
STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR

DATE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PROJECT REFERENCE NO.
U-2827C

SHEET NO.
1-B

*S.U.E = SUBSURFACE UTILITY ENGINEER

ROADS & RELATED ITEMS

Edge of Pavement	---
Curb	---
Prop. Slope Stakes Cut	C
Prop. Slope Stakes Fill	F
Prop. Woven Wire Fence	○
Prop. Chain Link Fence	□
Prop. Barbed Wire Fence	◇
Prop. Wheelchair Ramp	WCR
Curb Cut for Future Wheelchair Ramp	CCR
Exist. Guardrail	---
Prop. Guardrail	---
Equality Symbol	⊕
Pavement Removal	XXXX

RIGHT OF WAY

Baseline Control Point	◆
Existing Right of Way Marker	△
Exist. Right of Way Line w/Marker	---
Prop. Right of Way Line with Proposed	---
R/W Marker (Iron Pin & Cap)	▲
Prop. Right of Way Line with Proposed	---
(Concrete or Granite) R/W Marker	●
Exist. Control of Access Line	⊙
Prop. Control of Access Line	⊙
Exist. Easement Line	E
Prop. Temp. Construction Easement Line	E
Prop. Temp. Drainage Easement Line	TDE
Prop. Perm. Drainage Easement Line	PDE

HYDROLOGY

Stream or Body of Water	---
River Basin Buffer	BZ
Flow Arrow	→
Disappearing Stream	---
Spring	○
Swamp Marsh	⊕
Shoreline	---
Falls, Rapids	---
Prop Lateral, Tail, Head Ditches	---

STRUCTURES

MAJOR	
Bridge, Tunnel, or Box Culvert	CONC
Bridge Wing Wall, Head Wall	
and End Wall	CONC WW

MINOR

Head & End Wall	CONC HW
Pipe Culvert	---
Footbridge	---
Drainage Boxes	CB
Paved Ditch Gutter	---

Exist. Pole	
Exist. Power Pole	
Prop. Power Pole	
Exist. Telephone Pole	
Prop. Telephone Pole	
Exist. Joint Use Pole	
Prop. Joint Use Pole	
Telephone Pedestal	
U/G Telephone Cable Hand Hole	
Cable TV Pedestal	
U/G TV Cable Hand Hole	
U/G Power Cable Hand Hole	
Hydrant	
Satellite Dish	
Exist. Water Valve	
Sewer Clean Out	
Power Manhole	
Telephone Booth	
Cellular Telephone Tower	
Water Manhole	
Light Pole	
H-Frame Pole	
Power Line Tower	
Pole with Base	
Gas Valve	
Gas Meter	
Telephone Manhole	
Power Transformer	
Sanitary Sewer Manhole	
Storm Sewer Manhole	
Tank; Water, Gas, Oil	
Water Tank With Leg	
Traffic Signal Junction Box	
Fiber Optic Splice Box	
Television or Radio Tower	
Utility Power Line Connects to Traffic	
Signal Lines Cut Into the Pavement	TS

UTILITIES

"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of the minutes of the final plans for Project U-2827C, as approved and adopted by the Board of Transportation and identified as such in the minutes of the day of AUG 2003. Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF I have hereunto set my hand this 21 day of AUG 2003.

Secretary to Board of Transportation

Recorded Water Line

Designated Water Line (S.U.E.*)	---
Sanitary Sewer	SS
Recorded Sanitary Sewer Force Main	FSS
Designated Sanitary Sewer Force Main(S.U.E.*)	FSS
Recorded Gas Line	G
Designated Gas Line (S.U.E.*)	G
Storm Sewer	S
Recorded Power Line	P
Designated Power Line (S.U.E.*)	P
Recorded Telephone Cable	T
Designated Telephone Cable (S.U.E.*)	T
Recorded U/G Telephone Conduit	TC
Designated U/G Telephone Conduit (S.U.E.*)	TC
Unknown Utility (S.U.E.*)	UTL
Recorded Television Cable	TV
Designated Television Cable (S.U.E.*)	TV
Recorded Fiber Optics Cable	FO
Designated Fiber Optics Cable (S.U.E.*)	FO
Exist. Water Meter	⊙
U/G Test Hole (S.U.E.*)	⊙
Abandoned According to U/G Record	ATTUR
End of Information	E.O.I.

BOUNDARIES & PROPERTIES

State Line	---
County Line	---
Township Line	---
City Line	---
Reservation Line	---
Property Line	---
Property Line Symbol	PL
Exist. Iron Pin	EIP
Property Corner	ECM
Property Monument	123
Property Number	6
Parcel Number	---
Fence Line	---
Existing Wetland Boundaries	WLB
High Quality Wetland Boundary	HQWLB
Medium Quality Wetland Boundaries	MCWLB
Low Quality Wetland Boundaries	LQWLB
Proposed Wetland Boundaries	WLB
Existing Endangered Animal Boundaries	EAB
Existing Endangered Plant Boundaries	EPB

BUILDINGS & OTHER CULTURE

Buildings	---
Foundations	---
Area Outline	---
Gate	---
Gas Pump Vent or U/G Tank Cap	---
Church	---
School	---
Park	---
Cemetery	---
Dam	---
Sign	---
Well	---
Small Mine	---
Swimming Pool	---

TOPOGRAPHY

Loose Surface	---
Hard Surface	---
Change in Road Surface	---
Curb	---
Right of Way Symbol	R/W
Guard Post	GP
Paved Walk	---
Bridge	---
Box Culvert or Tunnel	---
Ferry	---
Culvert	---
Footbridge	---
Trail, Footpath	---
Light House	---

VEGETATION

Single Tree	---
Single Shrub	---
Hedge	---
Woods Line	---
Orchard	---
Vineyard	---

RAILROADS

Standard Gauge	---
RR Signal Milepost	---
Switch	---

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME
1	5	CITY OF WINSTON SALEM
2	5	CITY OF WINSTON SALEM
3	5,6	WILLIAM H. WHITEHART
4	6,7	CITY OF WINSTON SALEM
5	7,8	UNKNOWN
6	8,9,10	UNKNOWN

PARCEL No.	SHEET No.	PROPERTY OWNER NAME

"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 3-2 of the final plans for Project 8-1622705 U-2827C said plan sheet, having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 21 day of Aug, 2003

Thomas Dennis
Secretary to Board of Transportation

"STATE OF NORTH CAROLINA - COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of
Plan Sheet 4 of the final plans for Project 8-1622705 U-2827C
said plan sheet having been approved and adopted by the Board of Transportation and identified as
Addendum 15 to the minutes of the day of Aug 2003 Board of Transportation
meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the
21 day of Aug 2003

Thomas Dennis
Secretary to Board of Transportation

REVISIONS

NAD '83

-L-
PI Sta 12+96.47
 $\Delta = 34^{\circ} 29' 41.2"$ (RT)
D = 6'00' 00.0"
L = 574.91'
T = 296.47'
R = 954.93'
PI Sta 16+24.94
 $\Theta_s = 4^{\circ} 30' 00.0"$
Ls = 150.00'
LT = 100.03'
ST = 50.03'

-LLT-
PI Sta 11+26.79
 $\Delta = 16^{\circ} 21' 28.6"$ (RT)
D = 6'29' 41.8"
L = 251.86'
T = 126.79'
R = 882.16'
PI Sta 14+17.27
 $\Delta = 19^{\circ} 29' 41.0"$ (RT)
D = 5'57' 00.3"
L = 327.64'
T = 165.42'
R = 962.94'
PI Sta 16+29.95
 $\Theta_s = 4^{\circ} 30' 03.6"$
Ls = 151.29'
LT = 100.89'
ST = 50.46'

-LRT-
PI Sta 11+24.68
 $\Delta = 13^{\circ} 37' 24.3"$ (RT)
D = 5'29' 20.6"
L = 248.19'
T = 124.68'
R = 1,043.82'
PI Sta 14+10.86
 $\Delta = 19^{\circ} 29' 41.0"$ (RT)
D = 6'03' 02.3"
L = 322.19'
T = 162.67'
R = 946.94'
PI Sta 16+19.98
 $\Theta_s = 4^{\circ} 29' 56.4"$
Ls = 148.71'
LT = 99.77'
ST = 49.60'

BL-33
PINC 308+05.64 =
-L- STA. 10+79.19
52.61' RT.

BEGIN PROJECT
-L- Sta. 11+00.00

-LLT-PCSta. 10+00.00
(5' LEFT)

-L- PCSta. 10+00.00

-LRT-PCSta. 10+00.00
(5' RIGHT)

-LOOP1-
PI Sta 11+62.37
 $\Delta = 18^{\circ} 38' 53.9"$ (LT)
D = 15'46' 44.4"
L = 118.18'
T = 59.62'
R = 363.11'
PI Sta 13+54.28
 $\Delta = 78^{\circ} 50' 11.3"$ (LT)
D = 35'18' 58.6"
L = 223.23'
T = 133.35'
R = 162.24'

-LOOP2-
PI Sta 10+71.28
 $\Delta = 23^{\circ} 19' 39.5"$ (RT)
D = 16'35' 37.2"
L = 140.58'
T = 71.28'
R = 345.29'
PI Sta 12+09.62
 $\Delta = 47^{\circ} 25' 09.2"$ (RT)
D = 36'26' 41.3"
L = 130.11'
T = 69.04'
R = 157.21'
PI Sta 19+9.09
 $\Delta = 154^{\circ} 00' 37.9"$ (RT)
D = 38'17' 28.4"
L = 402.21'
T = 648.40'
R = 149.63'

-RAMP1-
PI Sta 18+86.47
 $\Delta = 10^{\circ} 20' 57.3"$ (RT)
D = 17'48' 48.8"
L = 87.60'
T = 43.92'
R = 485.00'
PI Sta 18+09.25
 $\Theta_s = 5^{\circ} 54' 24.4"$
Ls = 100.00'
LT = 66.70'
ST = 33.37'

-LOOP1- POTSta. 14+64.93

-LOOP1- PTSta. 14+44.16

-LOOP1- PCCSta. 12+20.93

-LOOP1- PCSta. 11+02.75

-LOOP1- POTSta. 10+00.00
-L- PCCSta. 12+89.82
(32.00' LT)

-LLT-PCCSta. 12+51.86

-LOOP2-PCSta. 10+00.00
-L- PCCSta. 15+16.32
(32.00' RT)

BEGIN GRADE
-L- Sta. 15+24.55

-LRT-CSSSta. 15+70.38

-LOOP2-PCCSta. 11+40.58

-LOOP2-PCCSta. 12+70.69

-LRT-PCCSta. 12+48.19

-LOOP2-PTSta. 16+72.90

-L- STSta. 17+24.91

-LLT-STSta. 17+30.78

-RAMP1- PTSta. 19+30.16

BL-34
PINC 318+57.05 =
NCGS "CLAREMONT"
-L- STA. 18+23.25
107.46' LT.

-RAMP1- SCSta. 18+42.55

-RAMP1- TSSSta. 17+42.55

-LRT-S 68'50' 36.6"
US 24 E.B. 24 BST

TRANSITION FROM PROP.
EXPRESSWAY GUTTER TO
EXIST. 2'-6" CURB & GUTTER

END GUTTER
-L- STA. 13+00.00

-RAMP2- POTSta. 17+27.88

MATCH LINE -L- STA. 19+80.00 SEE SHEET 5

REVISIONS

FOR SOIL NAIL WALL (ALTERNATE 1) SEE STRUCTURE PLANS.
FOR GRAVITY RETAINING WALL (ALTERNATE 2) USE STANDARD DRAWING NO. 842.02.
(ALTERNATE PERTAINS TO RETAINING WALL 1 ONLY)

-LLT-
PI Sta 23+77.35
Es = 4' 30' 04.2"
Ls = 298.82'
LT = 199.28'
ST = 99.67'

PI Sta 29+85.62
Δ = 29° 57' 02.4" (LT)
D = 3' 00' 45.4"
L = 994.17'
T = 508.72'
R = 1901.86'

PI Sta 23+67.45
Es = 4' 29' 55.9"
Ls = 301.8'
LT = 200.85'
ST = 100.45'

PI Sta 29+80.79
Δ = 29° 57' 03.4" (LT)
D = 2' 59' 14.9"
L = 1,002.55'
T = 513.01'
R = 1917.86'

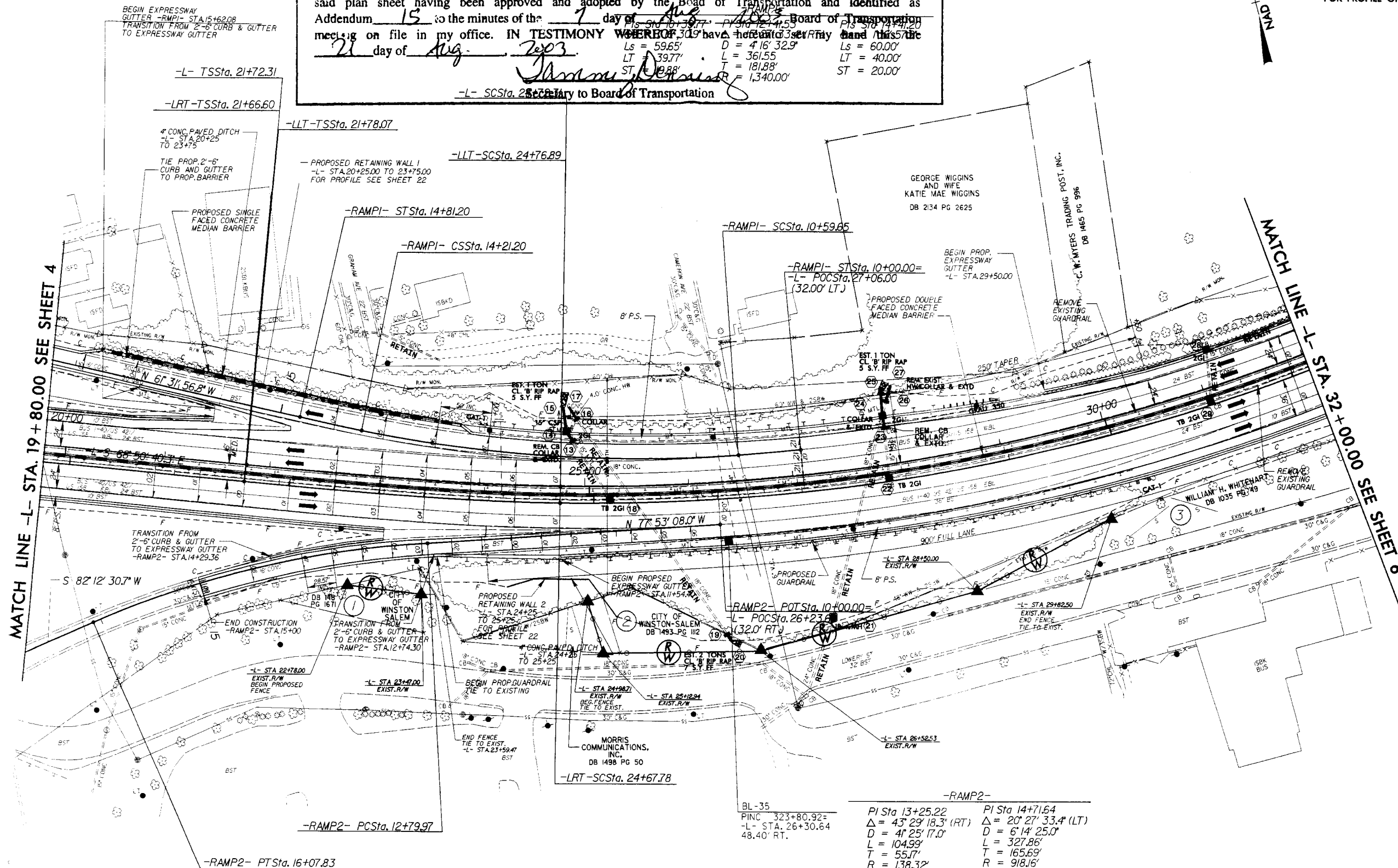
PI Sta 23+72.38
Es = 4' 30' 00.0"
Ls = 300.00'
LT = 200.06'
ST = 100.06'

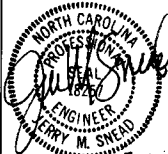
PI Sta 29+83.18
Δ = 29° 57' 03.1" (LT)
D = 3' 00' 00.0"
L = 998.36'
T = 510.87'
R = 1,909.86'

"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 5 of the final plans for Project 8-1622105 U-2827C said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003 Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand and this 7th day of Aug, 2003.

-L- SCSta. 25+72.19 to Board of Transportation

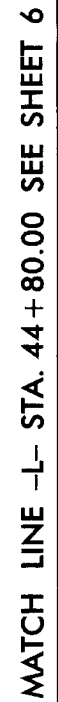


PROJECT REFERENCE NO. U-2827C	SHEET NO. 5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 

FOR PROFILE OF -LLT- SEE SHEET 11
FOR PROFILE OF -LRT- SEE SHEET 15
FOR PROFILE OF -RAMP1- SEE SHEET 19
FOR PROFILE OF -RAMP2- SEE SHEET 19

NAD 83

5-19-03



MATCH LINE -I- STA. 58+80.00 SEE SHEET 8

James Jensen
Secretary to Board of Transportation

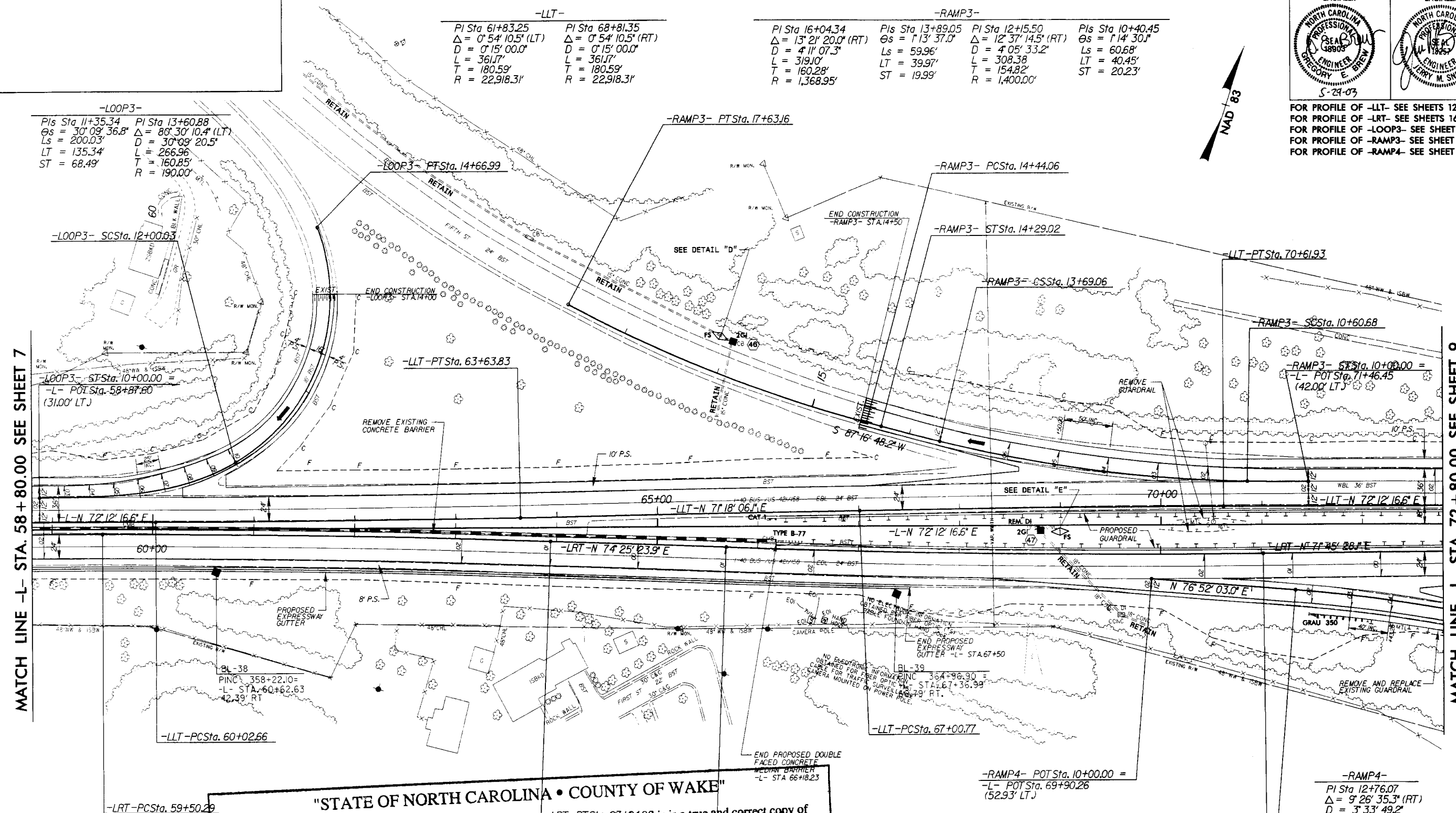
09 MAY 2003 13:52
R:\proj\11827cs07.ash
DYPuryear AT 1101503D

	REVISIONS
11/22/71	

NOTE: REMOVAL OF EXISTING CONCRETE BARRIER RAIL WILL NOT BE A SEPERATE PAY ITEM

PROJECT REFERENCE NO.	SHEET NO.
U-2827C	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
S-29-073	5-19

FOR PROFILE OF -LLT- SEE SHEETS 12 &
FOR PROFILE OF -LRT- SEE SHEETS 16 &
FOR PROFILE OF -LOOP3- SEE SHEET 21
FOR PROFILE OF -RAMP3- SEE SHEET 20
FOR PROFILE OF -RAMP4- SEE SHEET 20



"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

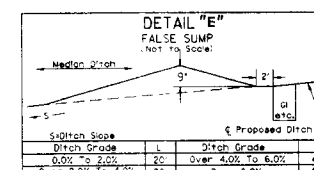
As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 8 of the final plans for Project 8-162703 42827C identified as said plan sheet having been approved and adopted by the Board of Transportation and identified as the minutes of the 7 day of Aug. 2003 Board of Transportation. I hereby hand this the

said plan sheet having been filed for 7 day of Aug 1963
 to the minutes of the 15
 on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 15 day of Aug 1963
 533.10'
 266.60'
 11,459.16'

Outside Pipe
 Traffic Pipe
 20' 20'

DETAIL "D"
 FALSE SUMP
 (NOT TO SCALE)

Secretary to Board of Transportation



REVISIONS

NAD 83

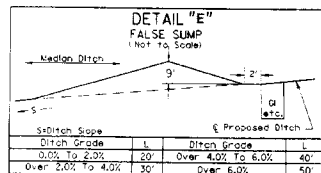
STATE OF NORTH CAROLINA • COUNTY OF WAKE

I, the undersigned, in the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of the said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003, Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF I have hereunto set my hand this the 21 day of Aug, 2003.

Secretary to Board of Transportation

PROJECT REFERENCE NO. U-2827C	SHEET NO. 9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER NORTH CAROLINA PROFESSIONAL SEAL GREGORY E. BROWN 5-29-03	HYDRAULICS ENGINEER NORTH CAROLINA PROFESSIONAL SEAL JERRY M. SNEAD 5-19-03

FOR PROFILE OF -LRT- SEE SHEET 17
FOR PROFILE OF -LRT- SEE SHEET 17
FOR PROFILE OF -RAMP4- SEE SHEET 20
FOR PROFILE OF -RAMP5- SEE SHEET 21



BL-40
PINC 375+97.56
-L- STA 78+36.02
6.84' RT.

BL-41
PINC 383+13.44
-L- STA 85+51.89
3.38' RT.

MATCH LINE -L- STA. 72 + 80.00 SEE SHEET 8

MATCH LINE -L- STA. 86 + 80.00 SEE SHEET 10

-RAMP4-
PI Sta 15+30.33
 $\Delta = 17' 42' 00.0''$ (RT)
D = 7' 18' 30.0"
L = 242.19'
T = 122.07'
R = 783.98'

-RAMP4- PCC Sta. 14+08.27

-RAMP4- PT Sta. 16+50.45

-RAMP5- SCS Sta. 11+00.16

-RAMP5-
PI Sta 13+97.48
 $\Delta = 27' 49' 54.5''$ (LT)
D = 4' 46' 28.7"
L = 582.91'
T = 297.32'
R = 1,200.00'

PIs Sta 10+66.78
 $\Theta s = 2' 23' 28.1''$
Ls = 100.16'
LT = 66.78'
ST = 33.39'

-RAMP5- PT Sta. 16+83.07
-RAMP5- POT Sta. 17+31.55

7/2/99
13 MAY 2003 09:25
D:\Projects\10-2827C\10-2827C.dwg
D:\Projects\10-2827C\10-2827C.plt

REVISIONS

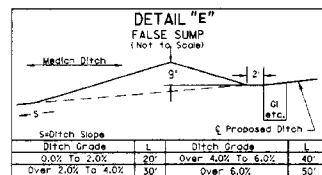
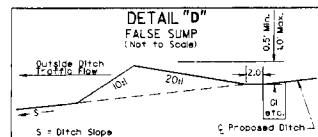
"STATE OF NORTH CAROLINA • COUNTY OF WAKE"

As Custodian of the minutes of the Board of Transportation, I do hereby certify that this is a true and correct copy of Plan Sheet 10 of the final plans for Project 8-1622205 U-2827C, said plan sheet having been approved and adopted by the Board of Transportation and identified as Addendum 15 to the minutes of the 7 day of Aug, 2003, Board of Transportation meeting on file in my office. IN TESTIMONY WHEREOF, I have hereunto set my hand this the 21 day of Aug, 2003.

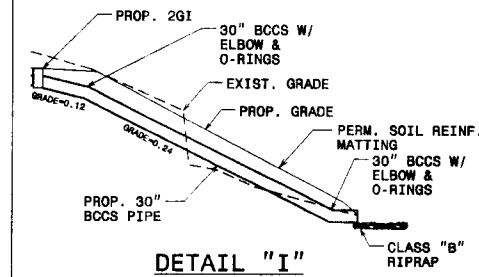
Secretary to Board of Transportation

PROJECT REFERENCE NO. U-2827C	SHEET NO. 10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FOR PROFILE OF -LLT- SEE SHEETS 13 & 14
FOR PROFILE OF -LRT- SEE SHEETS 17 & 18
FOR PROFILE OF -RAMPS- SEE SHEET 21



BL-42
PINC 391+40.22=
-L- STA. 93+78.63
4.80' LT.

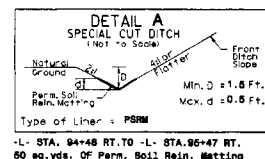


END PROJECT U-2827C
-L- STA.98+00.00 =
-LLT- STA.97+99.85 (18' LEFT)
-LRT- STA.98+00.68 (18' RIGHT)

MATCH LINE -L- STA. 86+80.00 SEE SHEET 9

-RAMP5- ST Sta. 10+00.00 =
-L- POT Sta. 87+79.34
(42.00' RT.)

-RAMP5-
Pls Sta 10+66.78
Gs = 2' 23' 28.1"
Ls = 100.16'
LT = 66.78'
ST = 33.39'



MORRIS COMMUNICATIONS, INC.
DB 1498 PG 50

END PROJECT
-L- STA.98+00.00 =
-LLT- STA.98+99.85 (18' LEFT)
-LRT- STA.99+00.68 (18' RIGHT)

NOTE: END CONSTRUCTION AND
END SIGNING CONSTRUCTION
AT -L- STA.110+00