

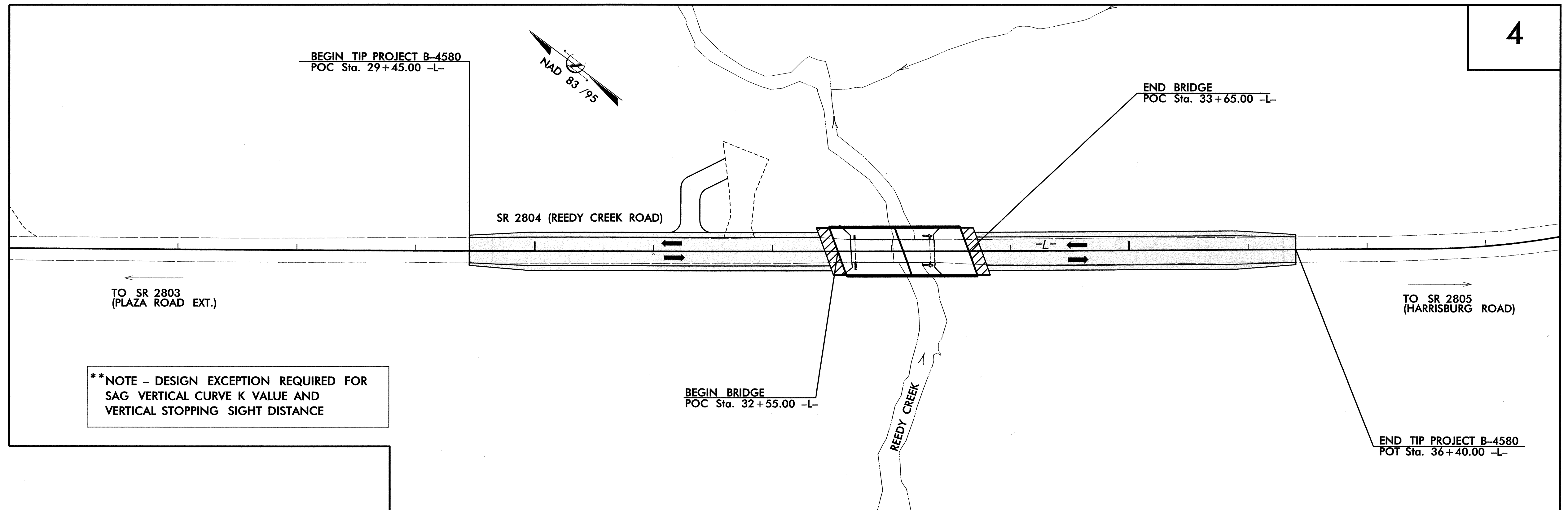
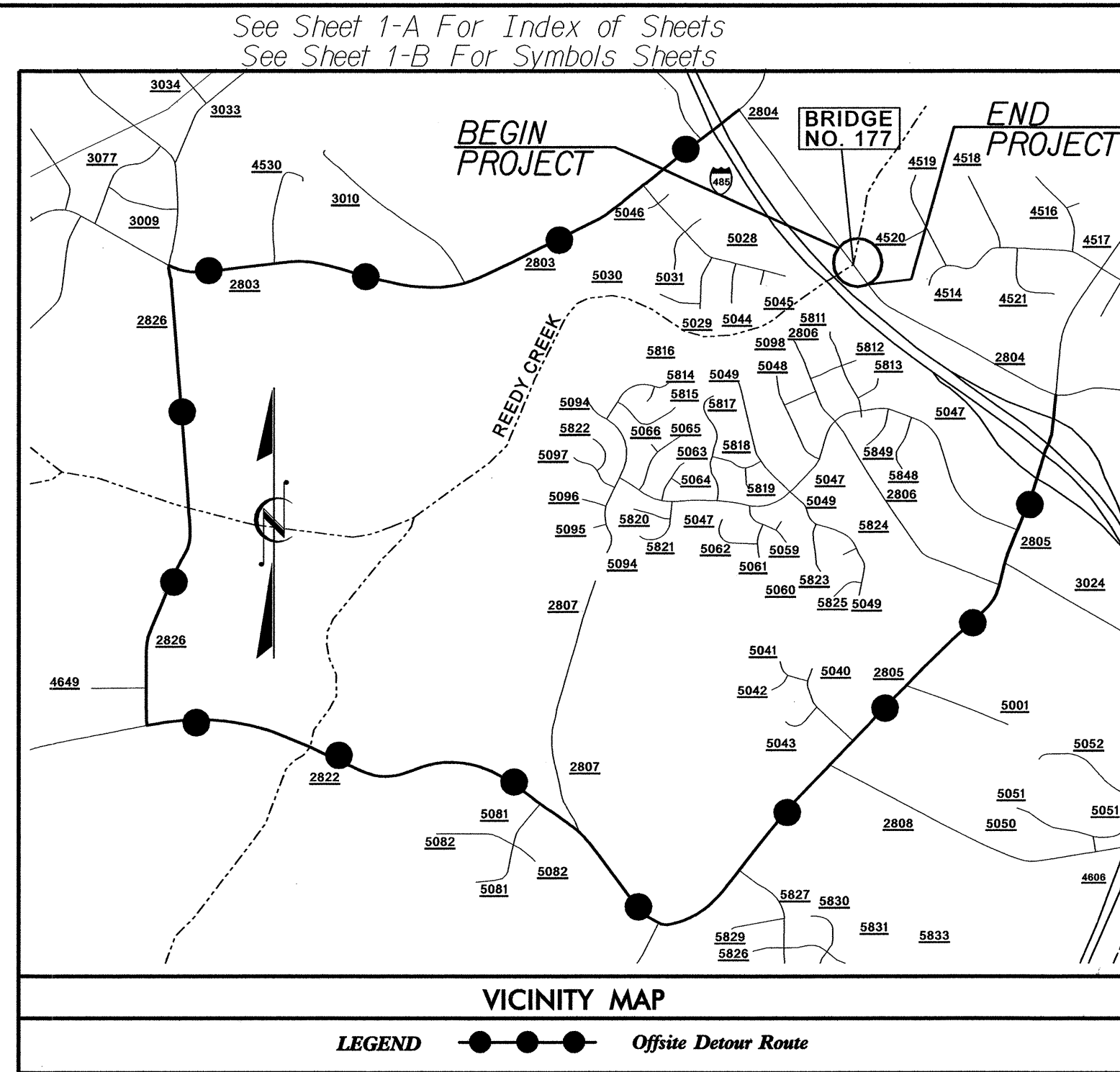
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4580	1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
33782.1.1	BRZ-2804(2)	PE	
33782.2.1	BRZ-2804(2)	RW, UTIL.	
33782.3.1	BRZ-2804(2)	CONSTR.	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MECKLENBURG COUNTY

LOCATION: BRIDGE NO. 177 OVER REEDY CREEK ON SR 2804 (REEDY CREEK ROAD)

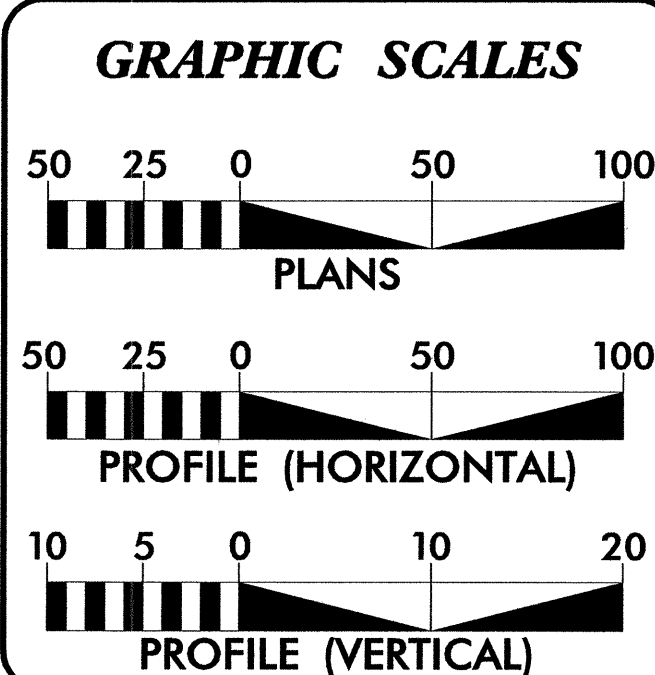
TYPE OF WORK: GRADING, DRAINAGE, STRUCTURE, AND PAVING



NCDOT CONTACT: DOUG TAYLOR, P.E., PROJECT ENGINEER - ROADWAY DESIGN

TIP PROJECT: B-4580

CONTRACT: C202471



DESIGN DATA

ADT 2010	=	6,300
ADT 2030	=	10,000
DHV	=	12 %
D	=	55 %
T	=	3 % *
* * V	=	50 MPH
* TTST	=	1 % DUAL 2 %
FUNC. CLASS	=	RURAL LOCAL
SUBREGIONAL TIER		

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT B-4580	=	0.111 mi.
LENGTH STRUCTURE TIP PROJECT B-4580	=	0.021 mi.
TOTAL LENGTH TIP PROJECT B-4580	=	0.132 mi.

Prepared in the Office of:
WANG ENGINEERING COMPANY, INC.
CARY, N.C.
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: CLIFTON T. REGISTER, P.E.
APRIL 17, 2009
PROJECT ENGINEER

LETTING DATE: SCOTT L. KENNEDY
APRIL 20, 2010
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
SUNGATE DESIGN GROUP

1/19/10
SIGNATURE: _____ P.E.

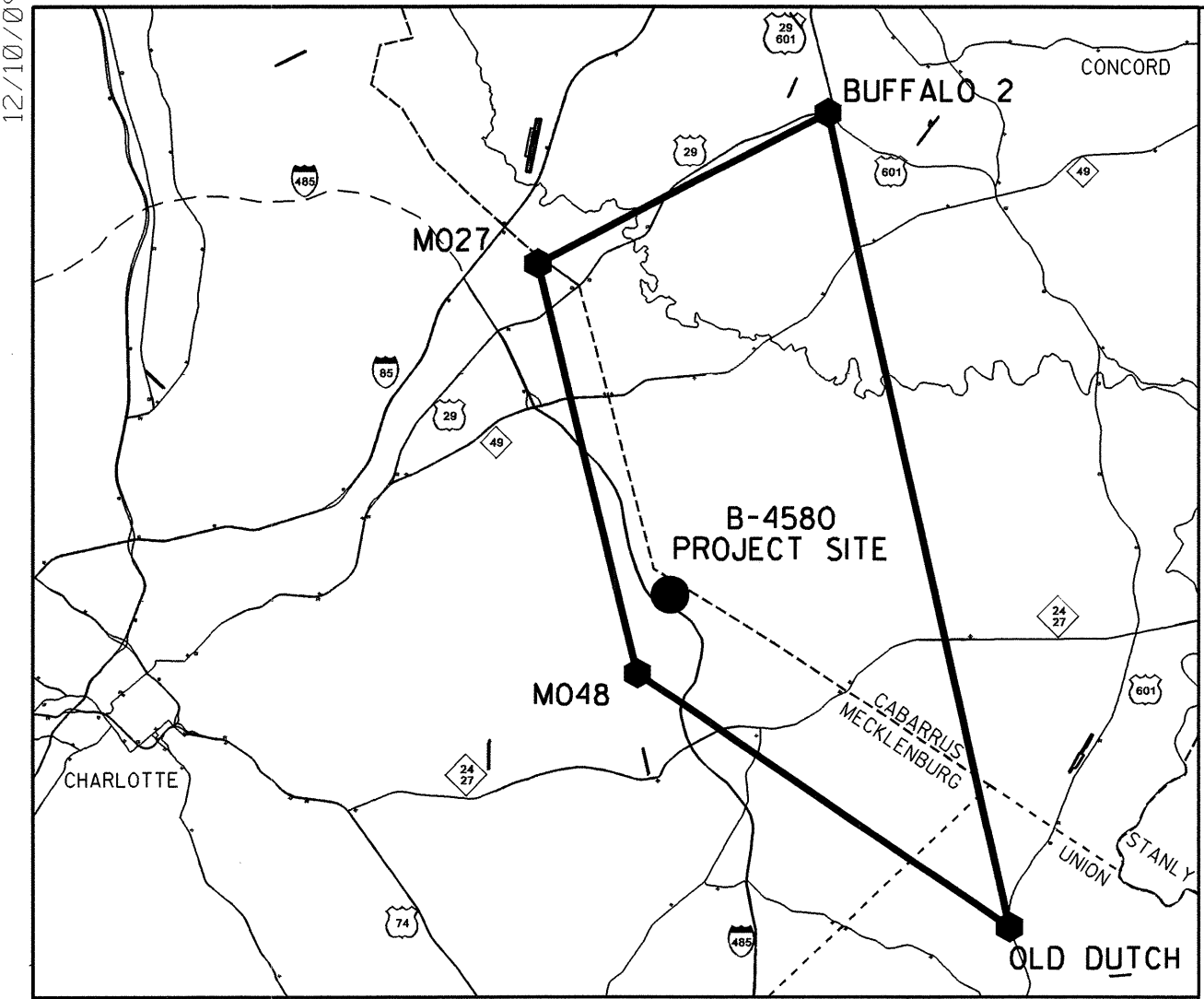
ROADWAY DESIGN ENGINEER
WANG ENGINEERING

1/19/2010
SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

ant m. millan
STATE HIGHWAY DESIGN ENGINEER

SURVEY CONTROL SHEET



GPS CONTROL NETWORK

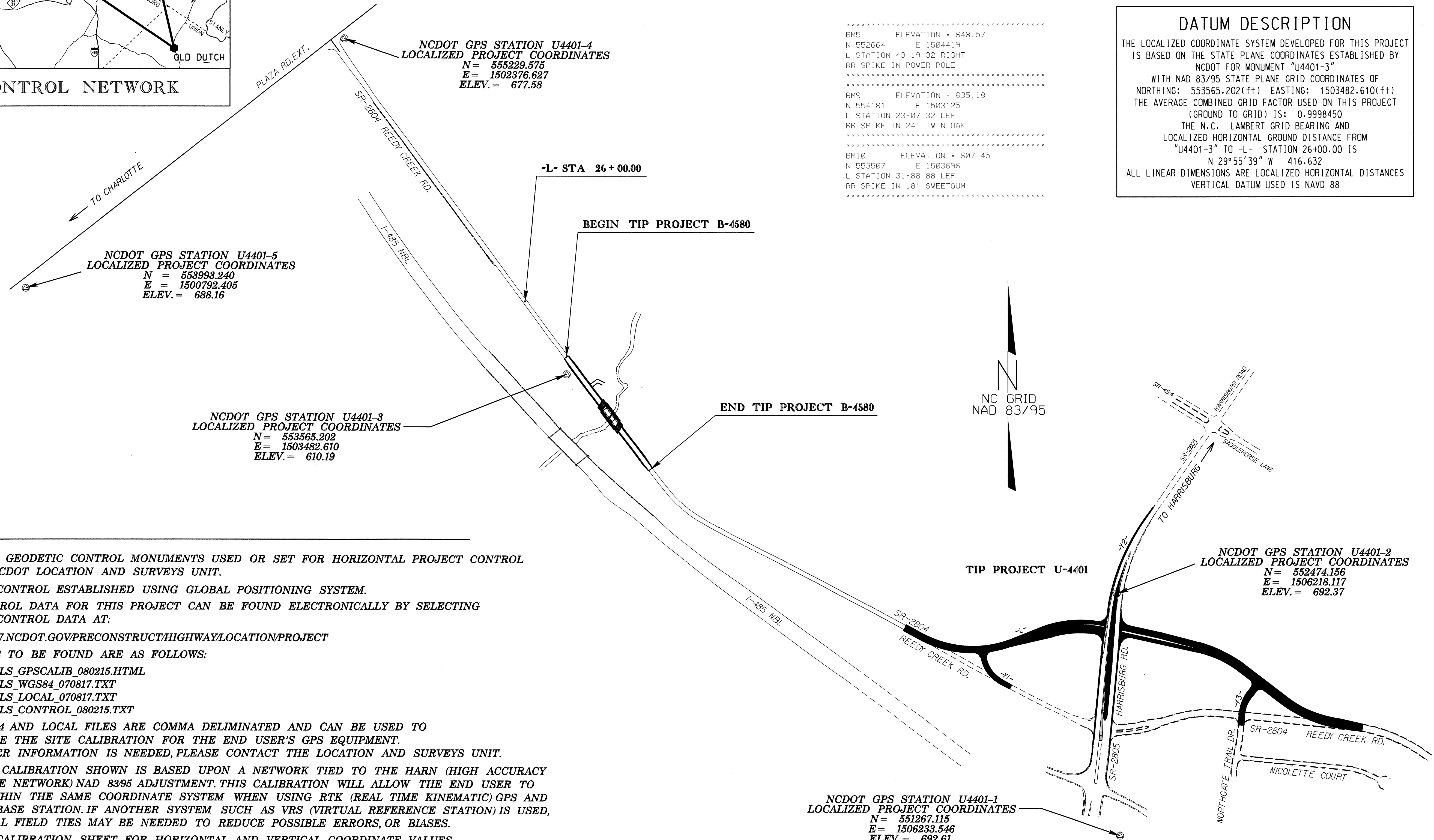
BL POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
4	U4401-4	555229.5750	1502376.6270	677.58	10+17.29	51.71 LT
30	BL-30	554658.6370	1502698.9250	659.42	16+68.72	24.35 RT
31	BL-31	554271.9180	1502993.5200	640.91	21+54.66	18.38 RT
32	BL-32	553982.1730	1503257.5640	624.59	25+44.82	19.36 LT
3	U4401-3	553565.2020	1503482.6100	610.19	30+13.67	48.34 RT
33	BL-33	553406.3130	1503678.6810	609.29	32+58.36	13.14 LT
34	BL-34	552981.1940	1503956.7530	633.49	37+64.57	22.42 RT
13	BY-13	552699.3270	1504374.9720	646.02	42+64.40	19.82 RT
12	BY-12	552356.2500	1505105.0060	687.65	50+70.12	16.05 LT

.....
 BM5 ELEVATION = 648.57
 N 552664 E 1504419
 L STATION 43+19 32 RIGHT
 RR SPIKE IN POWER POLE

 BM9 ELEVATION = 635.18
 N 554181 E 1503125
 L STATION 23+07 32 LEFT
 RR SPIKE IN 24" TWIN OAK

 BM10 ELEVATION = 607.45
 N 553507 E 1503696
 L STATION 31+88 88 LEFT
 RR SPIKE IN 18" SWEETGUM

DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U4401-3" WITH NAD 83/95 STATE PLANE GRID COORDINATES OF NORTHING: 553565.202(ft) EASTING: 1503482.610(ft) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998450 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U4401-3" TO -L- STATION 26+00.00 IS N 29°55'39" W 416.632 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88



NCDOT GPS STATION U4401-4
 LOCALIZED PROJECT COORDINATES
 N = 555229.575
 E = 1502376.627
 ELEV. = 677.58

NCDOT GPS STATION U4401-5
 LOCALIZED PROJECT COORDINATES
 N = 553993.240
 E = 1500792.405
 ELEV. = 688.16

NCDOT GPS STATION U4401-3
 LOCALIZED PROJECT COORDINATES
 N = 553565.202
 E = 1503482.610
 ELEV. = 610.19

NCDOT GPS STATION U4401-2
 LOCALIZED PROJECT COORDINATES
 N = 552474.156
 E = 1506218.117
 ELEV. = 692.37

NCDOT GPS STATION U4401-1
 LOCALIZED PROJECT COORDINATES
 N = 551267.115
 E = 1506233.546
 ELEV. = 692.61

NOTES:

- © INDICATES GEODETIC CONTROL MONUMENTS USED OR SET FOR HORIZONTAL PROJECT CONTROL BY THE NCDOT LOCATION AND SURVEYS UNIT.
- 1. PROJECT CONTROL ESTABLISHED USING GLOBAL POSITIONING SYSTEM.
- 2. THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT:
[HTTP://WWW.NCDOT.GOV/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT](http://www.ncdot.gov/preconstruct/highway/location/project)
 THE FILES TO BE FOUND ARE AS FOLLOWS:
 B4580_LS_GPSCALIB_080215.HTML
 B4580_LS_WGS84_070817.TXT
 B4580_LS_LOCAL_070817.TXT
 B4580_LS_CONTROL_080215.TXT
 THE WGS84 AND LOCAL FILES ARE COMMA DELIMITED AND CAN BE USED TO REPRODUCE THE SITE CALIBRATION FOR THE END USER'S GPS EQUIPMENT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- 3. THE SITE CALIBRATION SHOWN IS BASED UPON A NETWORK TIED TO THE HARN (HIGH ACCURACY REFERENCE NETWORK) NAD 83/95 ADJUSTMENT. THIS CALIBRATION WILL ALLOW THE END USER TO WORK WITHIN THE SAME COORDINATE SYSTEM WHEN USING RTK (REAL TIME KINEMATIC) GPS AND A LOCAL BASE STATION. IF ANOTHER SYSTEM SUCH AS VRS (VIRTUAL REFERENCE STATION) IS USED, ADDITIONAL FIELD TIES MAY BE NEEDED TO REDUCE POSSIBLE ERRORS, OR BIASES.
- 4. SEE GPS CALIBRATION SHEET FOR HORIZONTAL AND VERTICAL COORDINATE VALUES.

NOTE: DRAWING NOT TO SCALE

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 12/10/09

GPS CALIBRATION SHEET

GPS CALIBRATION REPORT

TIP NUMBER U-4401 & B-4580
 USER NAME JJEFFREYS DATE 3/28/2005
 COORDINATE SYSTEM US STATE PLANE 1983 ZONE NORTH CAROLINA 3200
 HORIZONTAL DATUM NAD 1983(1995) (CONUS)
 VERTICAL DATUM NAVD 88 GEOID MODEL GEOID99 (CONUS)
 COORDINATE UNITS US SURVEY FEET
 DISTANCE UNITS US SURVEY FEET
 HEIGHT UNITS US SURVEY FEET

LOCAL SITE INFORMATION

LOCALIZED AROUND U4401-3
 LATITUDE 35°15'34.53454"N
 LONGITUDE 80°39'48.14327"W
 SITE SCALE FACTOR 1.0001550240
 HEIGHT ?

DATUM TRANSFORMATION PARAMETERS

METHOD THREE PARAMETER
 TRANSLATION ALONG X AXIS 13.1835FT
 TRANSLATION ALONG Y AXIS -80.2575FT
 TRANSLATION ALONG Z AXIS 57.5055FT

UPDATED DEFAULT PROJECTION (TRANSVERSE MERCATOR) DEFINITION

UPDATED DEFAULT PROJECTION NOT REQUESTED

HORIZONTAL ADJUSTMENT PARAMETERS

NORTHING COORDINATE OF ROTATION CENTER 553305.8575FT
 EASTING COORDINATE OF ROTATION CENTER 1503820.6615FT
 ROTATION ABOUT THE CENTER POINT 0°00'00"
 TRANSLATION NORTH 0.0005FT
 TRANSLATION EAST 0.0005FT
 SCALE FACTOR 1.00000443

VERTICAL ADJUSTMENT PARAMETERS

NORTHING COORDINATE OF ORIGIN POINT 553565.2025FT
 EASTING COORDINATE OF ORIGIN POINT 1503482.6105FT
 VERTICAL SEPARATION AT ORIGIN 0.0245FT
 SLOPE NORTH 0.317PPM
 SLOPE EAST 15.145PPM

GEOID MODEL DEFINITION

GEOID99 (CONUS)

RESIDUAL DIFFERENCES BETWEEN GPS (WGS84) AND LOCAL COORDINATES

SUMMARY

	MAXIMUM ERROR	ROOT MEAN SQUARE ERROR	POINT
HORIZONTAL	0.0025FT	0.001	U4401-4 GPS
VERTICAL	0.0025FT	0.000	U4401-4 GPS
THREE-DIMENSIONAL	0.0035FT	0.001	U4401-4 GPS

POINT RESIDUALS

WGS84 COORDINATES		CALCULATED POINT FOR DISPLAY ONLY		LOCAL COORDINATES	
POINT	U4401-3 GPS	NORTHING	553565.2025FT	POINT	U4401-3
LATITUDE	35°15'34.53449"N	EASTING	1503482.6105FT	NORTHING	553565.2025FT
LONGITUDE	80°39'48.14311"W	ELEVATION	610.1995FT	EASTING	1503482.6105FT
HEIGHT	510.5935FT	HORZ ERROR	0.0005FT	ELEVATION	610.1995FT
		VERT ERROR	0.0005FT	UTILIZED	HORZ AND VERT
		3D ERROR	0.0005FT	QUALITY	ADJUSTED QUALITY
POINT	U4401-5 GPS	NORTHING	553993.2435FT	POINT	U4401-5
LATITUDE	35°15'38.32022"N	EASTING	1500792.4055FT	NORTHING	553993.2415FT
LONGITUDE	80°40'20.66356"W	ELEVATION	688.1615FT	EASTING	1500792.4065FT
HEIGHT	588.5795FT	HORZ ERROR	0.0025FT	ELEVATION	688.1615FT
		VERT ERROR	0.0005FT	UTILIZED	HORZ AND VERT
		3D ERROR	0.0025FT	QUALITY	ADJUSTED QUALITY
POINT	U4401-4 GPS	NORTHING	555229.5715FT	POINT	U4401-4
LATITUDE	35°15'50.80934"N	EASTING	1502376.6275FT	NORTHING	555229.5745FT
LONGITUDE	80°40'01.81404"W	ELEVATION	677.5905FT	EASTING	1502376.6275FT
HEIGHT	577.9785FT	HORZ ERROR	0.0025FT	ELEVATION	677.5885FT
		VERT ERROR	0.0025FT	UTILIZED	HORZ AND VERT
		3D ERROR	0.0035FT	QUALITY	ADJUSTED QUALITY
POINT	U4401-1 GPS	NORTHING	551267.1175FT	POINT	U4401-1
LATITUDE	35°15'12.26411"N	EASTING	1506233.5455FT	NORTHING	551267.1155FT
LONGITUDE	80°39'14.51564"W	ELEVATION	692.6085FT	EASTING	1506233.5455FT
HEIGHT	592.9955FT	HORZ ERROR	0.0025FT	ELEVATION	692.6095FT
		VERT ERROR	0.0015FT	UTILIZED	HORZ AND VERT
		3D ERROR	0.0025FT	QUALITY	ADJUSTED QUALITY
POINT	U4401-2 GPS	NORTHING	552474.1535FT	POINT	U4401-2
LATITUDE	35°15'24.19754"N	EASTING	1506218.1185FT	NORTHING	552474.1545FT
LONGITUDE	80°39'14.94410"W	ELEVATION	692.3465FT	EASTING	1506218.1175FT
HEIGHT	592.7215FT	HORZ ERROR	0.0025FT	ELEVATION	692.3465FT
		VERT ERROR	0.0015FT	UTILIZED	HORZ AND VERT
		3D ERROR	0.0025FT	QUALITY	ADJUSTED QUALITY
POINT	OLD DUTCH GPS	NORTHING	520065.2975FT	POINT	OLD DUTCH
LATITUDE	35°10'08.92695"N	EASTING	1538964.1355FT	NORTHING	?
LONGITUDE	80°32'34.08587"W	ELEVATION	547.6535FT	EASTING	?
HEIGHT	447.5195FT	HORZ ERROR	?	ELEVATION	547.6525FT
		VERT ERROR	0.0005FT	UTILIZED	VERTICAL
		3D ERROR	0.0005FT	QUALITY	CONTROL QUALITY

NOTES:

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 B4580_LS_WGS84_070817.TXT
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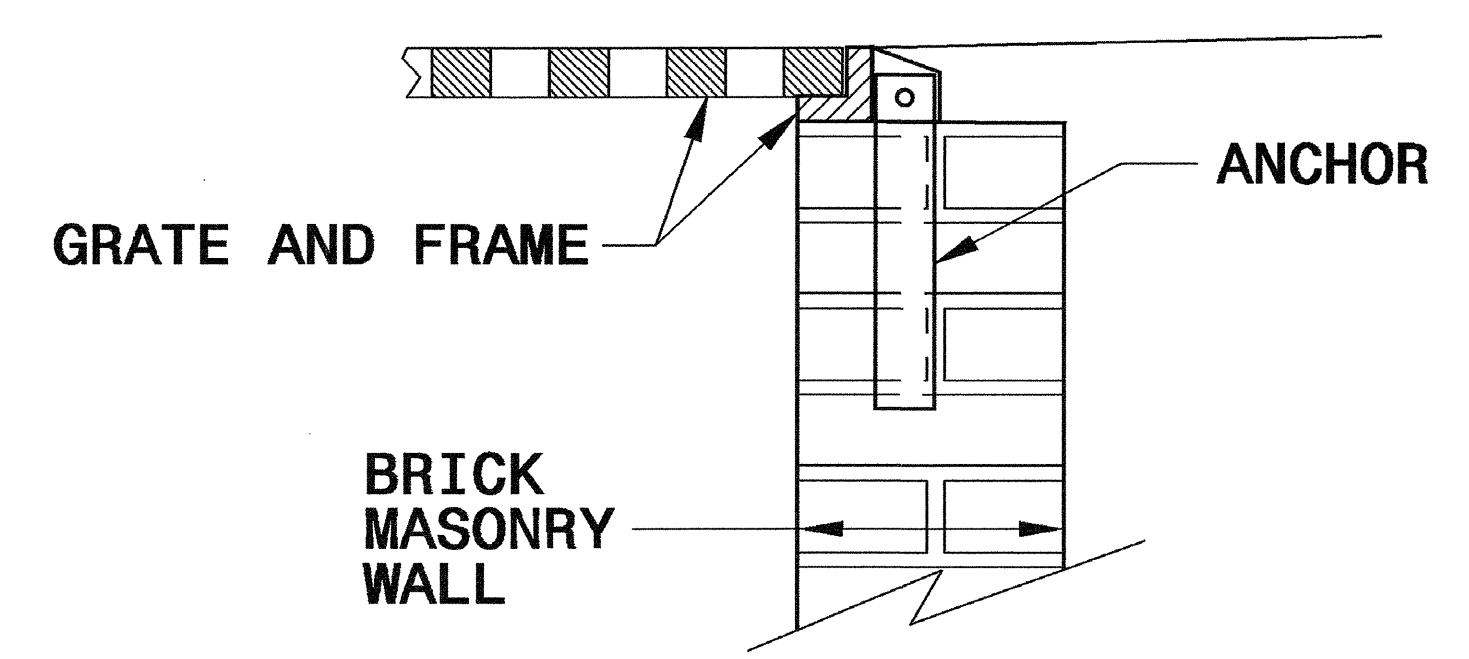
DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "U4401-3"
 WITH NAD 83/95 STATE PLANE GRID COORDINATES OF
 NORTHING: 553565.202(ft) EASTING: 1503482.610(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998450
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U4401-3" TO -L- STATION 26+00.00 IS
 N 29°55'39" W 416.632
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

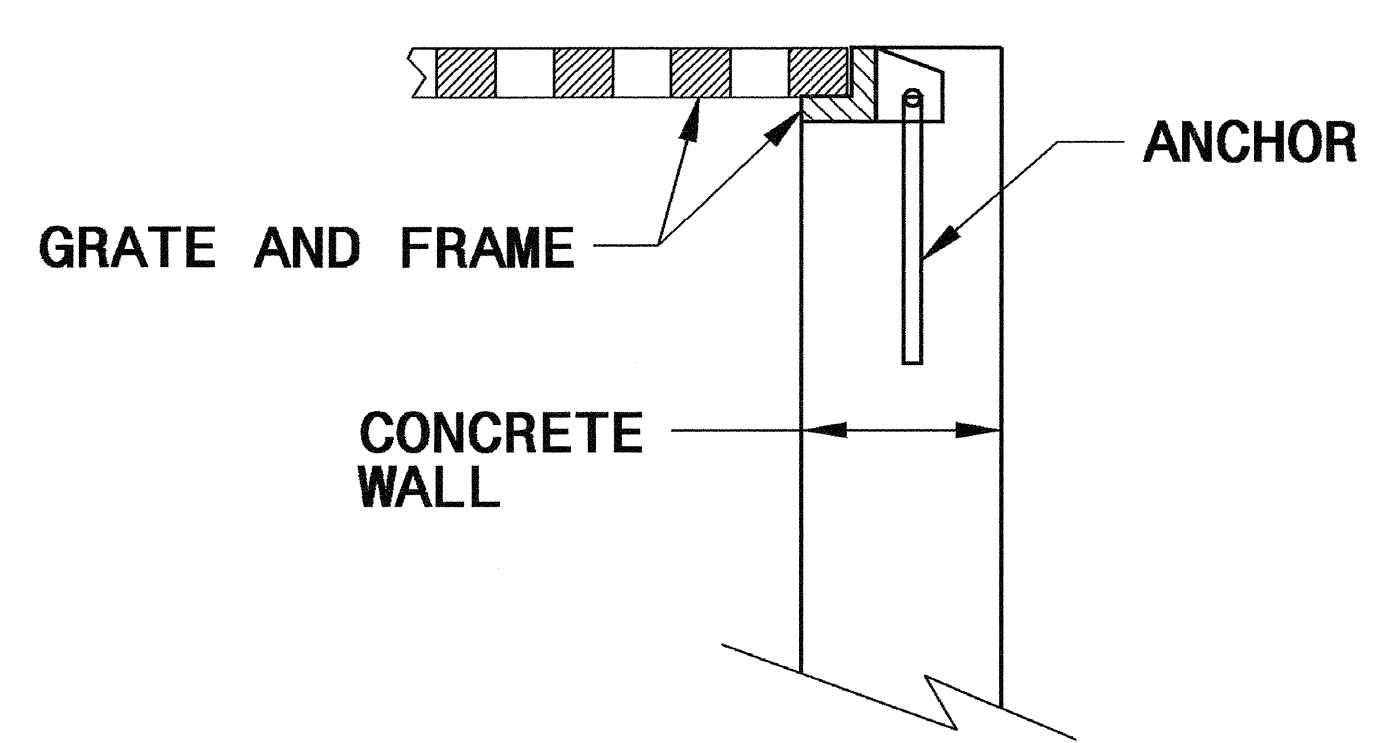
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

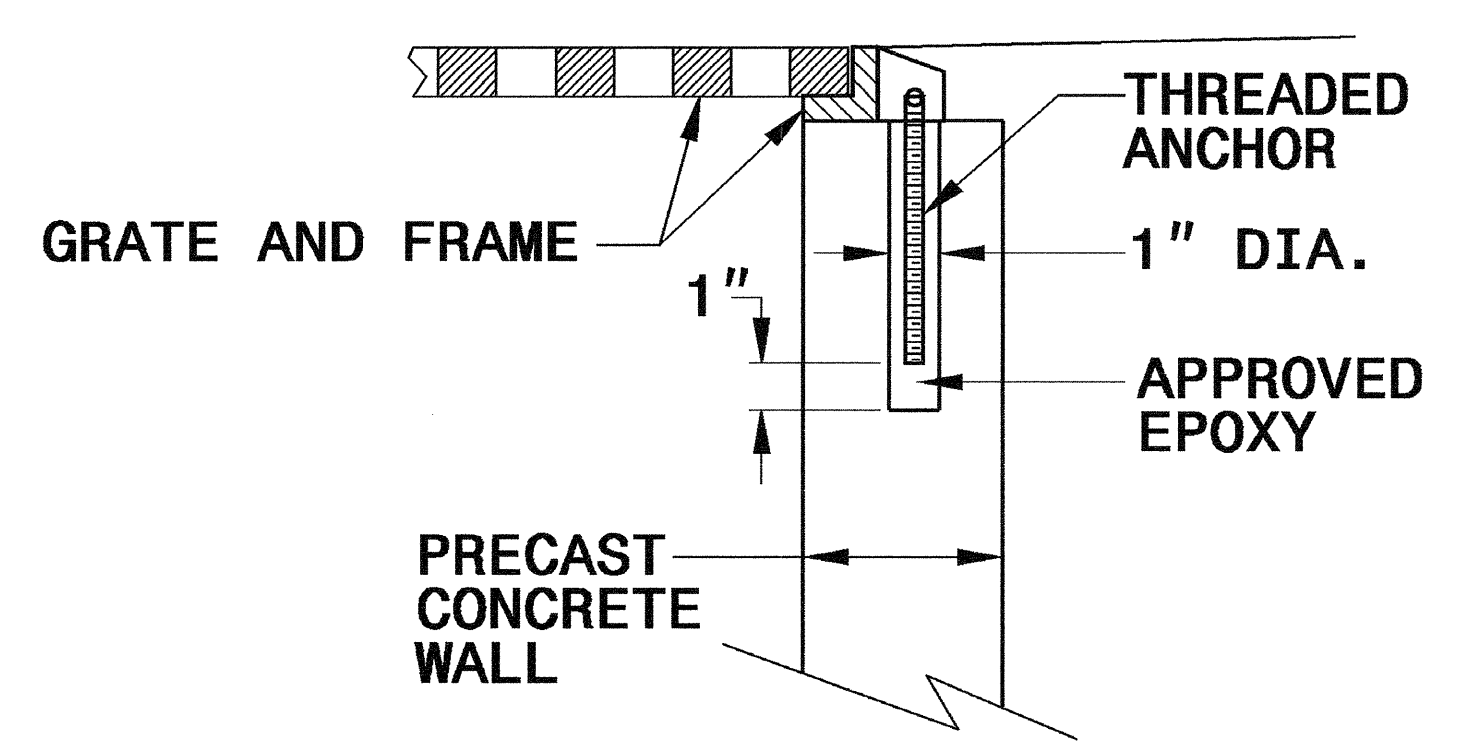
SHEET 1 OF 1
840D25



BRICK MASONRY CONSTRUCTION



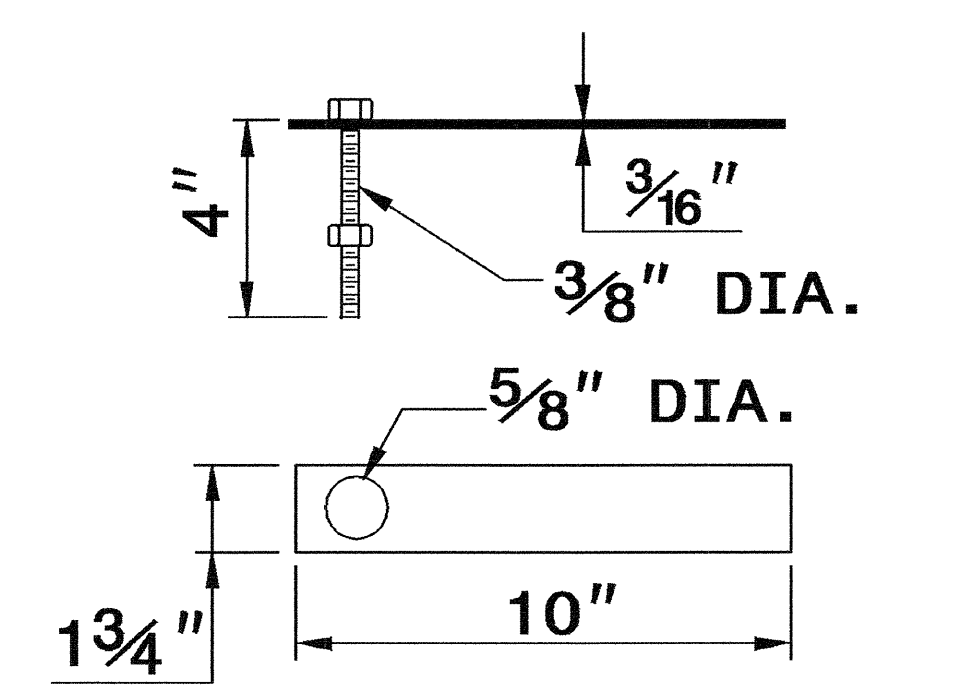
CONCRETE CONSTRUCTION



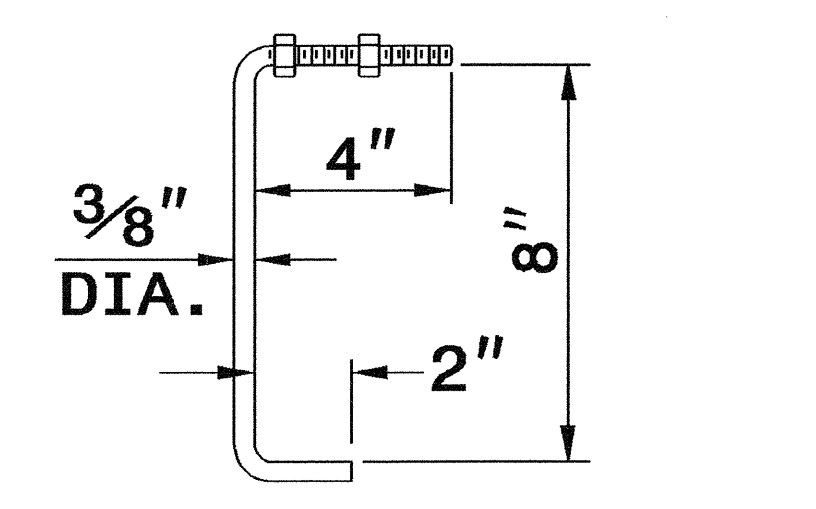
PRECAST CONCRETE CONSTRUCTION

DETAIL SHOWING ANCHORAGE OF FRAME FOR GRATED DROP INLET

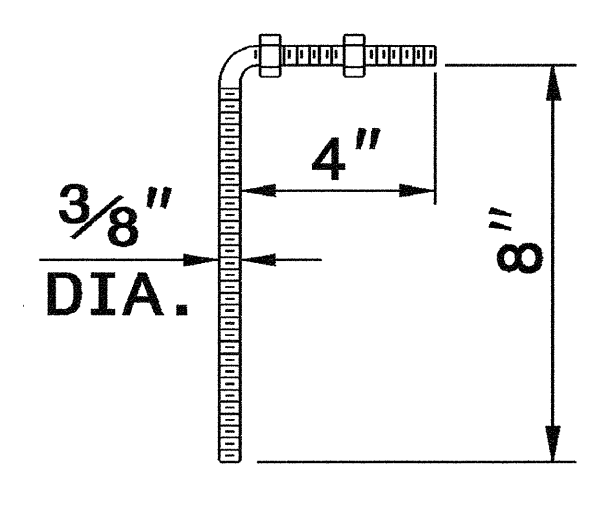
NOTE:
CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



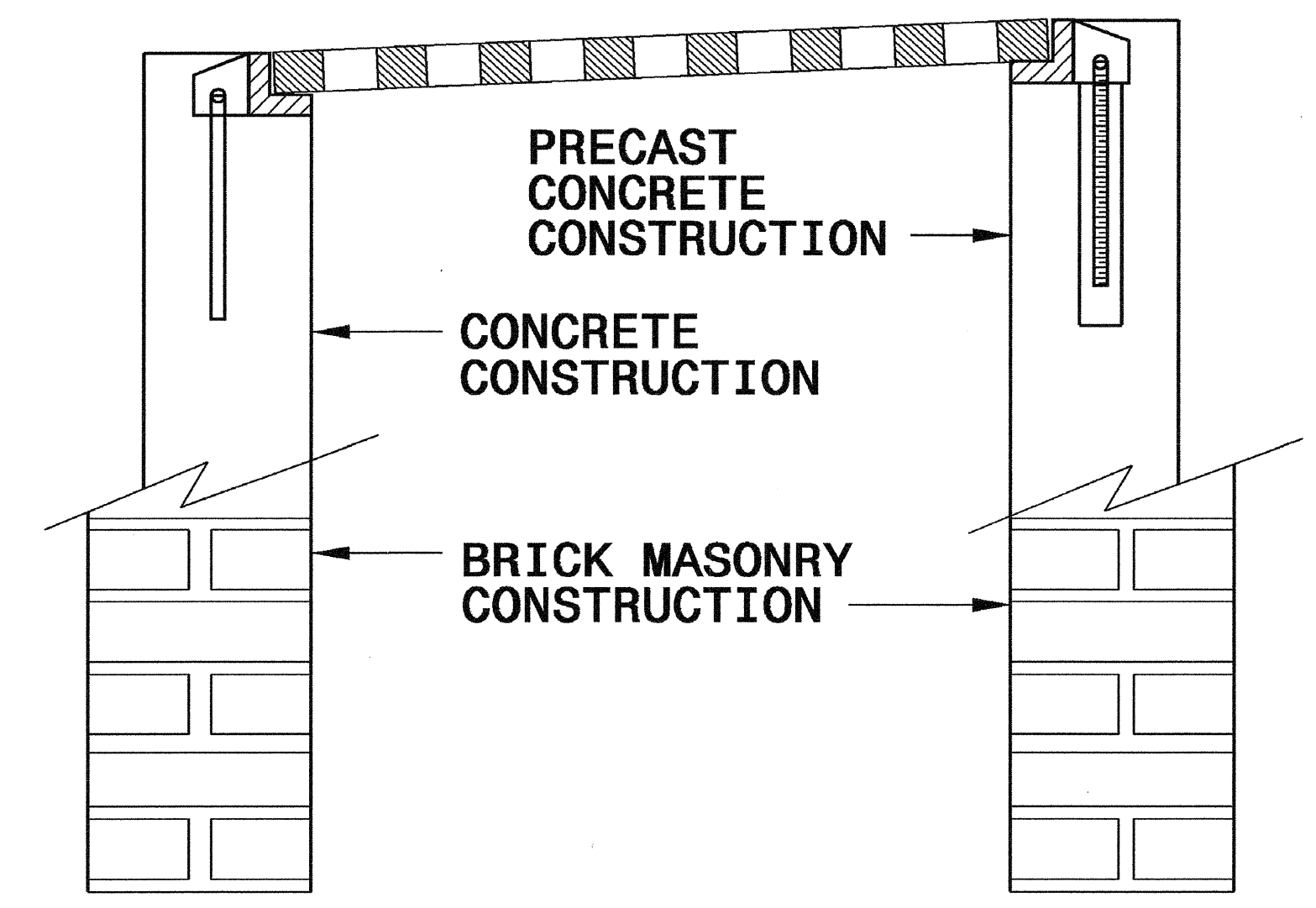
MASONRY ANCHOR
3/8" DIA. BOLT WITH PLATE



CONCRETE ANCHOR
3/8" DIA. BENT BAR



PRECAST CONCRETE ANCHOR
3/8" DIA. BENT BAR



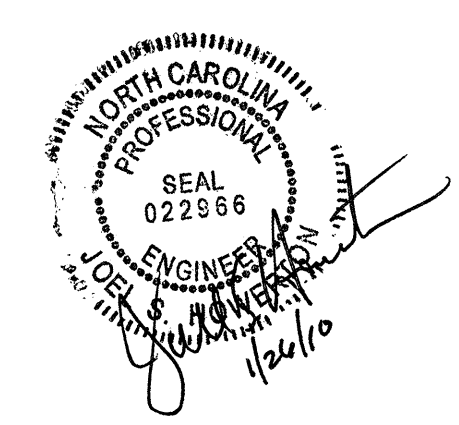
FRAME AND GRATE INSTALLATION FOR NORMAL CROWN AND SUPERELEVATED SECTIONS

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

SHEET 1 OF 1
840D25

27-SEP-2006 08:59 S:\Contracts\Projects\Special Details\eriverd\stda\05\stds to Special Details\84025 Anchorage for Frames\840d25.dgn eriverd AT PS222233



**PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN**
Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

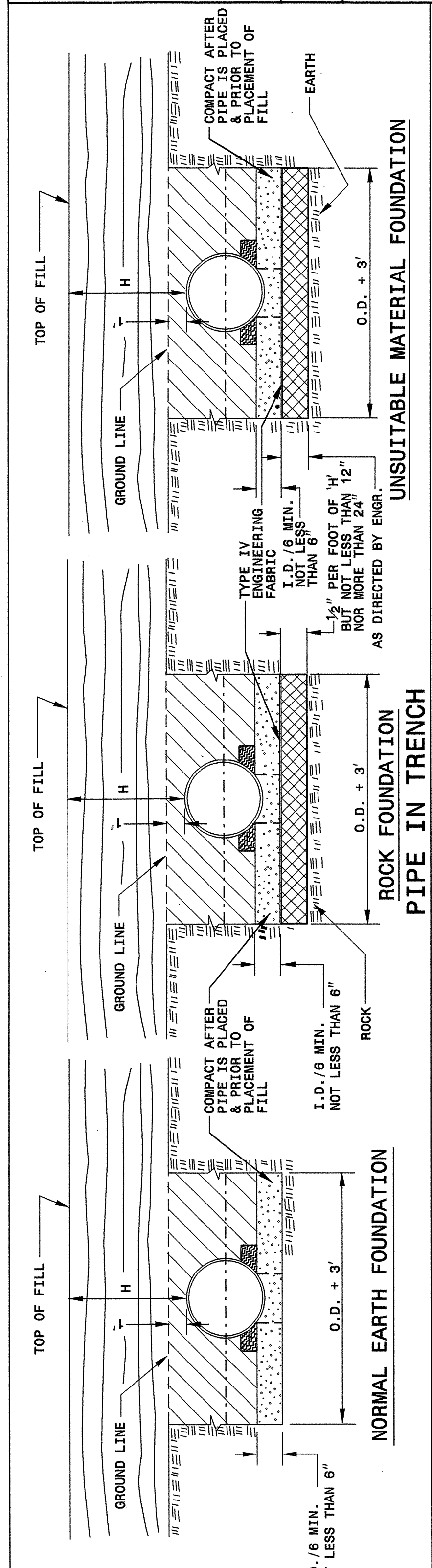
ORIGINAL BY: 2006 STD 840.25 DATE: 07/18/06
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CHECKED BY: DATE:
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 Jpower-ton AT P5237501

5/14/99

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

7-06



ENGLISH DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION
 FLEXIBLE PIPE

SHEET 1 OF 3
300D01

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

7-06

ENGLISH DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION
 FLEXIBLE PIPE

SHEET 1 OF 3
300D01

GENERAL NOTES:
 I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
 O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
 H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

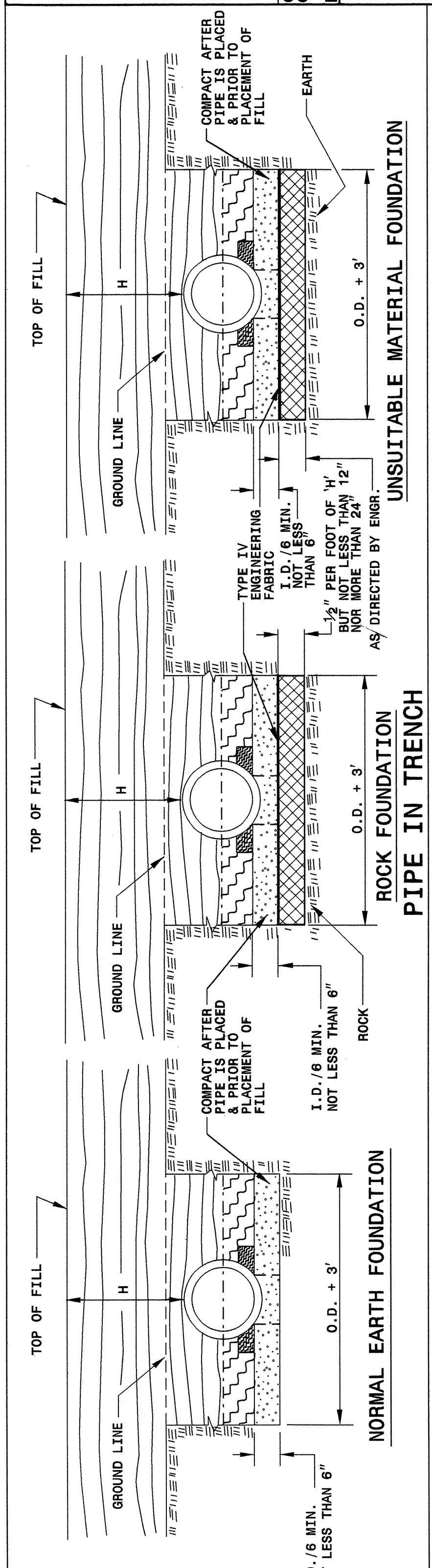
■ TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.
 ■ LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

--- SPRINGLINE OF PIPE
 ▨ SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINGLINE.
 ▩ APPROVED SUITABLE LOCAL MATERIAL.
 ▧ UNDISTURBED EARTH MATERIAL
 ▦ SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH ENGINEERING FABRIC AS DIRECTED BY THE ENGINEER.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

7-06



ENGLISH DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION
 RIGID PIPE

SHEET 2 OF 3
300D01

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

7-06

ENGLISH DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION
 RIGID PIPE

SHEET 2 OF 3
300D01

GENERAL NOTES:
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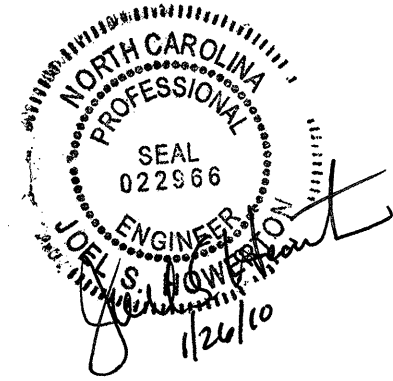
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**PROJECT SERVICES UNIT
 STANDARDS AND SPECIAL DESIGN**
 Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: K Kempf DATE: 5-15-09
 MODIFIED BY: [Signature] DATE: [Blank]
 CHECKED BY: [Signature] DATE: 7/20/09
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STATE OF
 NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

7-06

ENGLISH DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION

FILL HEIGHT TABLES

SHEET 3 OF 3
300D01

FLEXIBLE PIPE

Round Corrugated Steel Pipe
 2 2/3 x 1/2 corrugation **

Diameter (Inches)	Minimum cover (Inches)	Maximum Height of Cover (feet)				
		16	14	12	10	8
12	12	204	266			
15	12	162	204			
18	12	135	169	239		
21	12	115	145	204		
24	12	100	126	178		
30	12	79	100	142		
36	12	65	83	117	152	
42	12	55	70	100	130	160
48	12	48	61	87	113	139
54	12		54	77	100	123
60	12			69	90	111
66	12				81	100
72	12				74	91
78	12					81
84	12					69

Round Corrugated Aluminum Pipe
 2 2/3 x 1/2 corrugation **

Diameter (Inches)	Minimum cover (Inches)	Maximum Height of Cover (feet)								
		16	14	12	10	8	10	12	14	
12	12	123	155	218	281	344				
15	12	98	123	174	224	275				
18	12	81	102	144	187	228				
21	12	69	87	123	160	195				
24	12	60	76	108	139	171				
27	12		67	95	123	151				
30	12		60	85	111	136				
36	12		50	71	92	113				
42	12			60	78	96				
48	12			52	68	84				
54	12			46	50	74				
60	12				50	62				
66	12					51				
72	12					41				

** FOR DIFFERENT CORRUGATIONS AND ARCH PIPES REFER TO ROADWAY DESIGN MANUAL OR MANUFACTURERS SPECIFICATION.

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

- CSP - AASHTO M36
- CAAP - AASHTO M196
- HDPE - AASHTO M294
- PVC - ASTM F949 or AASHTO M304

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

RIGID PIPE

- RCP - * (Minimum fill) 1' for Class IV & CLASS V
- 2' for Class III & Class II
- * (Maximum fill) 10' - Class II pipe
- 20' - Class III pipe
- 30' - Class IV pipe
- 40' - Class V pipe

(For fills > 40' & < 80' use LRFD Direct Design Method)

* FILL HEIGHT IS MEASURED FROM THE TOP OF THE PIPE TO THE BOTTOM OF THE PAVEMENT STRUCTURE

REFER TO THE FOLLOWING FOR PIPE SPECIFICATIONS

- RCP - AASHTO M170

NOTES: FILL HEIGHTS SHOWN WERE CALCULATED USING AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

1' MINIMUM COVER FOR ALL SIDE DRAIN PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS

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7-06

ENGLISH DETAIL DRAWING FOR
METHOD OF PIPE INSTALLATION

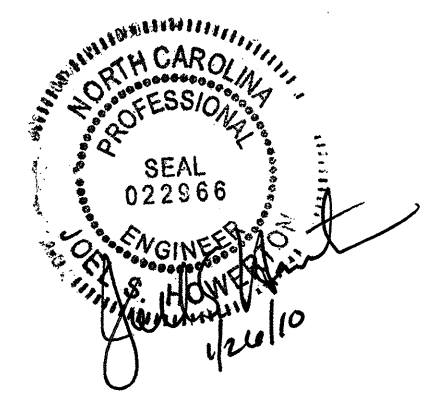
FILL HEIGHT TABLES

SHEET 3 OF 3
300D01

PROJECT SERVICES UNIT
STANDARDS AND SPECIAL DESIGN
 Office 919-250-4128 FAX 919-250-4119

SEE PLATE FOR TITLE

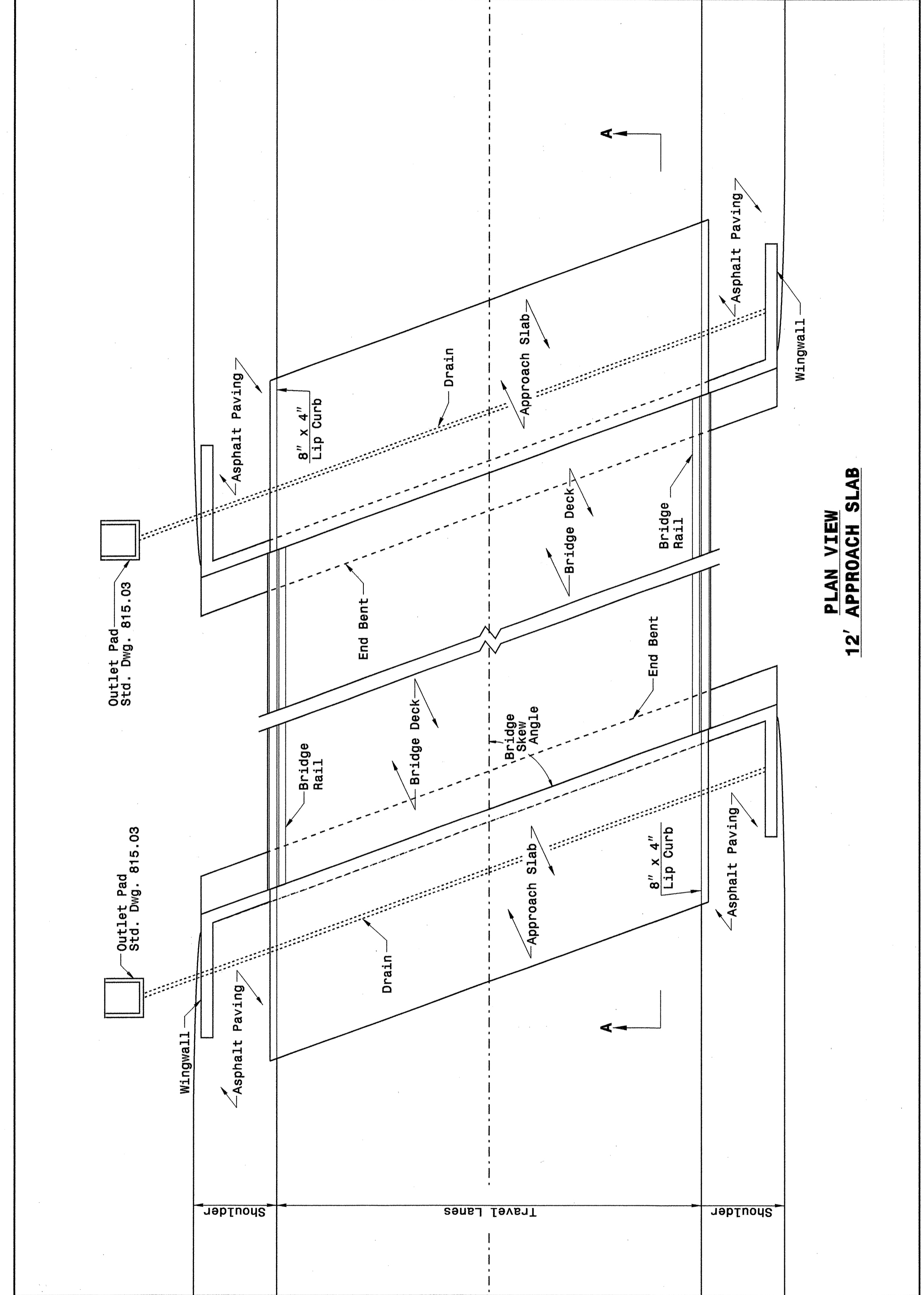
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ENGLISH DETAIL DRAWING FOR
BRIDGE APPROACH FILLS
CORED SLAB & BOX BEAM BRIDGES
SUB REGIONAL TIER

SHEET 1 OF 2
422D11



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ENGLISH DETAIL DRAWING FOR
BRIDGE APPROACH FILLS
CORED SLAB & BOX BEAM BRIDGES
SUB REGIONAL TIER

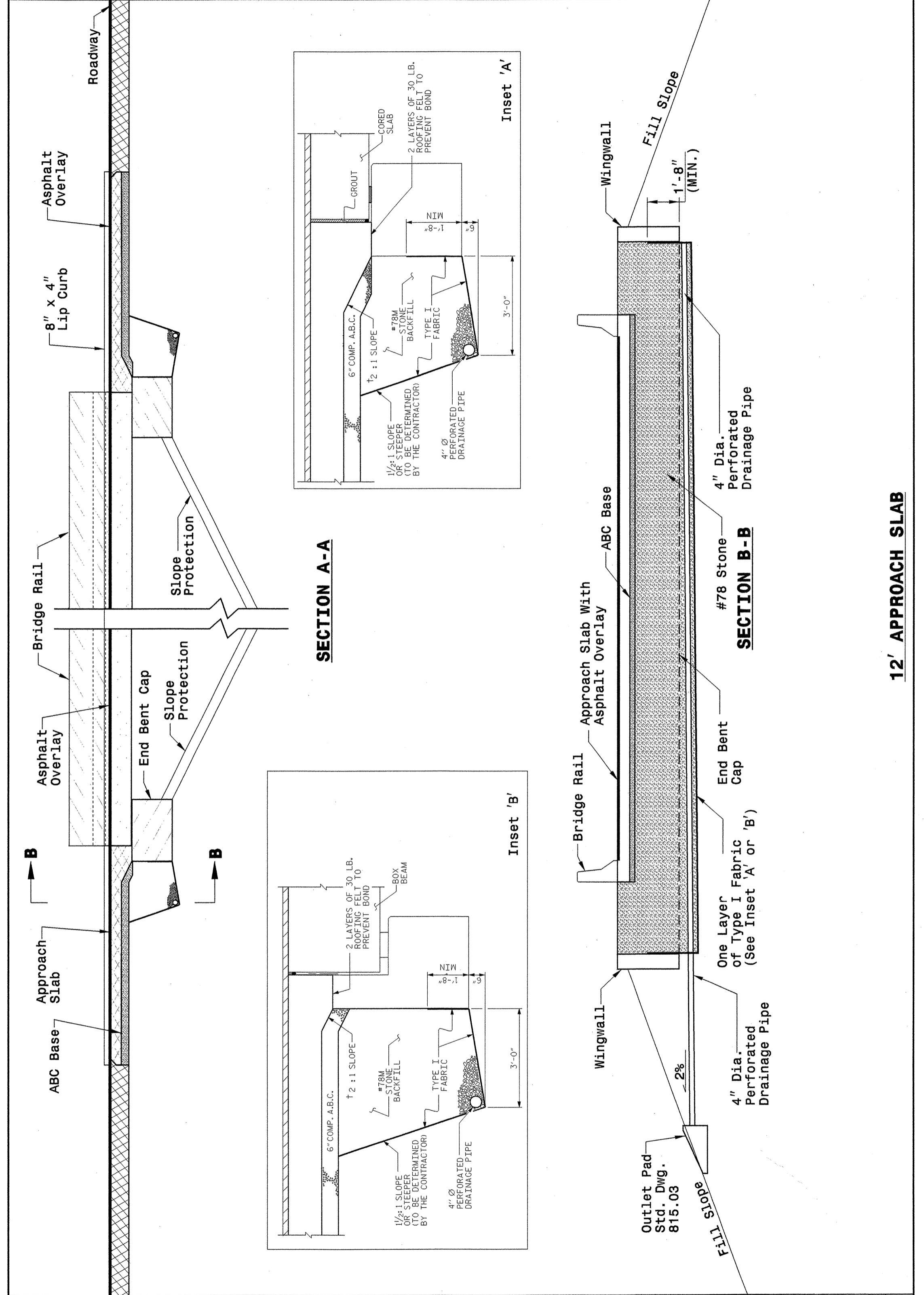
SHEET 1 OF 2
422D11

PLAN VIEW
12' APPROACH SLAB

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ENGLISH DETAIL DRAWING FOR
BRIDGE APPROACH FILLS
CORED SLAB & BOX BEAM BRIDGES
SUB REGIONAL TIER

SHEET 2 OF 2
422D11



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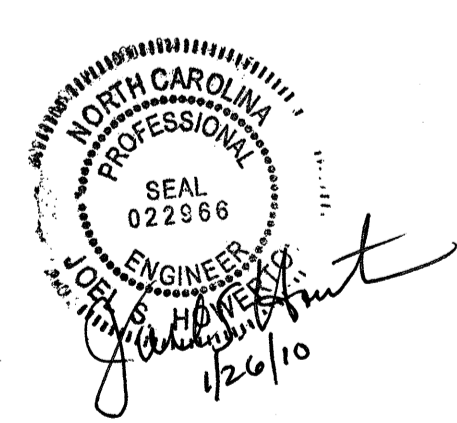
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BRIDGE APPROACH FILLS
CORED SLAB & BOX BEAM BRIDGES
SUB REGIONAL TIER

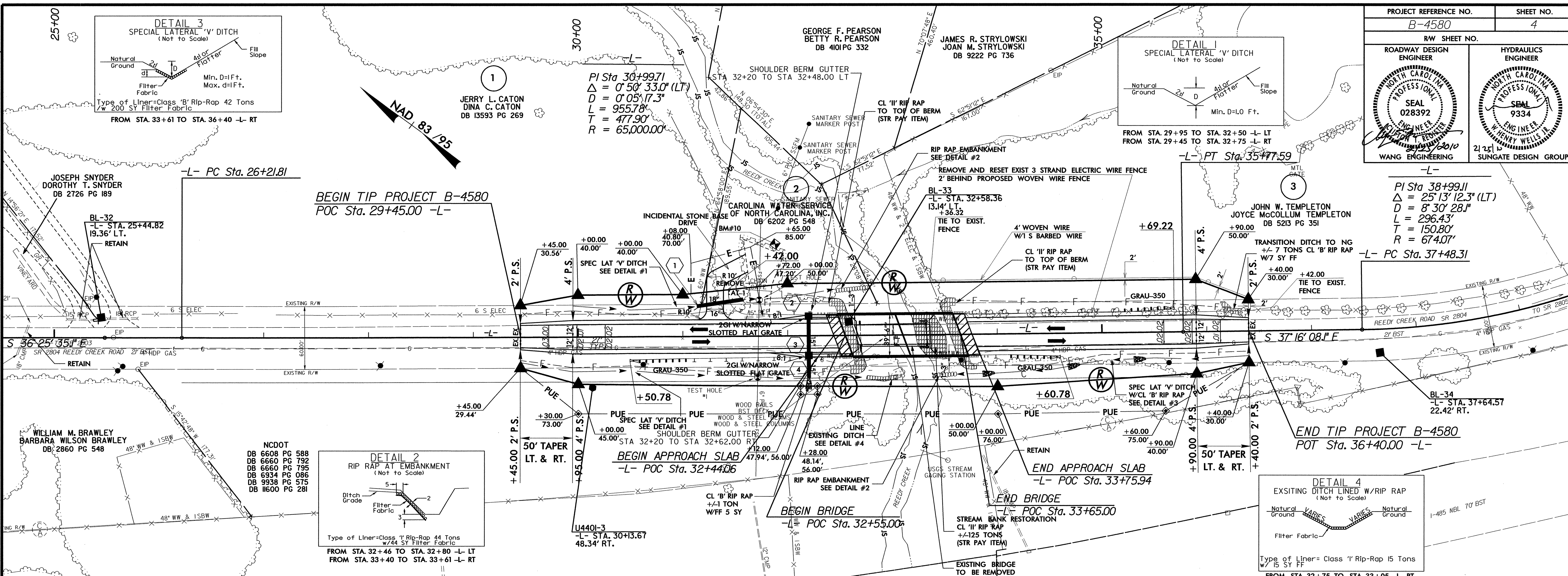
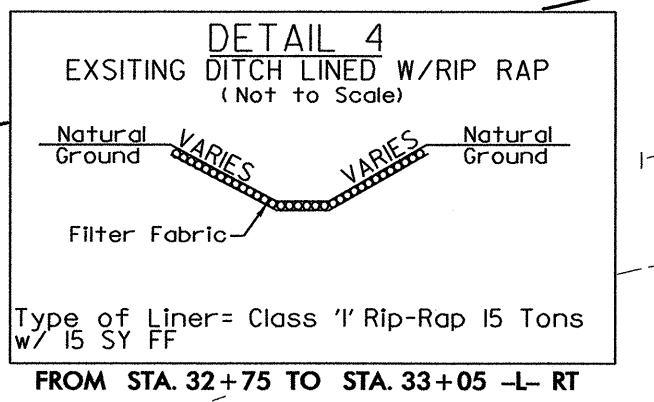
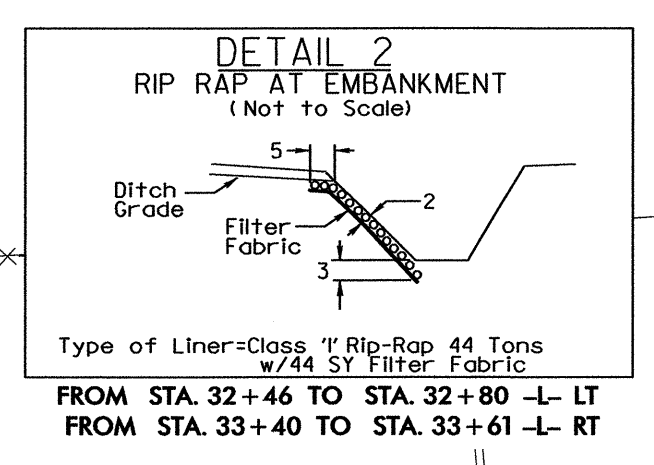
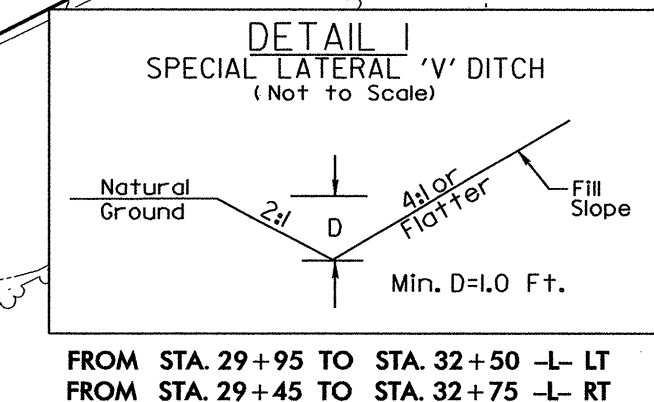
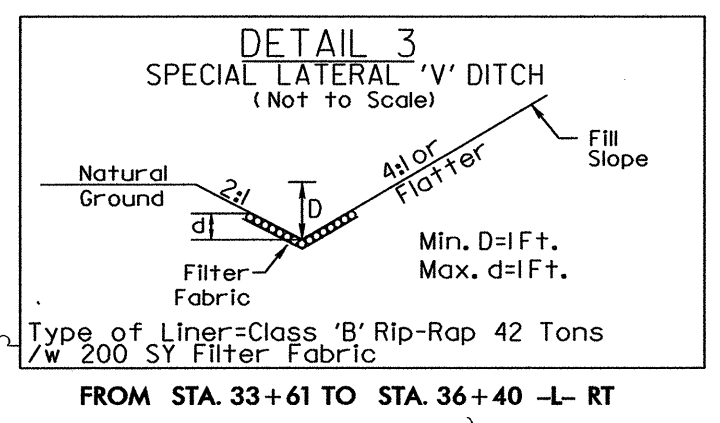
SHEET 2 OF 2
422D11

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BRIDGE APPROACH FILLS
CORED SLAB & BOX BEAM BRIDGES
SUB REGIONAL TIER

ORIGINAL BY: K. A. Kempf DATE: 6-10-08
MODIFIED BY: DATE:
CHECKED BY: DATE: 2/16/09
FILE SPEC.: k Kempf/english/bridge approach fills.dgn





REVISIONS

