

CONTRACT: C201869 TIP PROJECT: B-4132

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

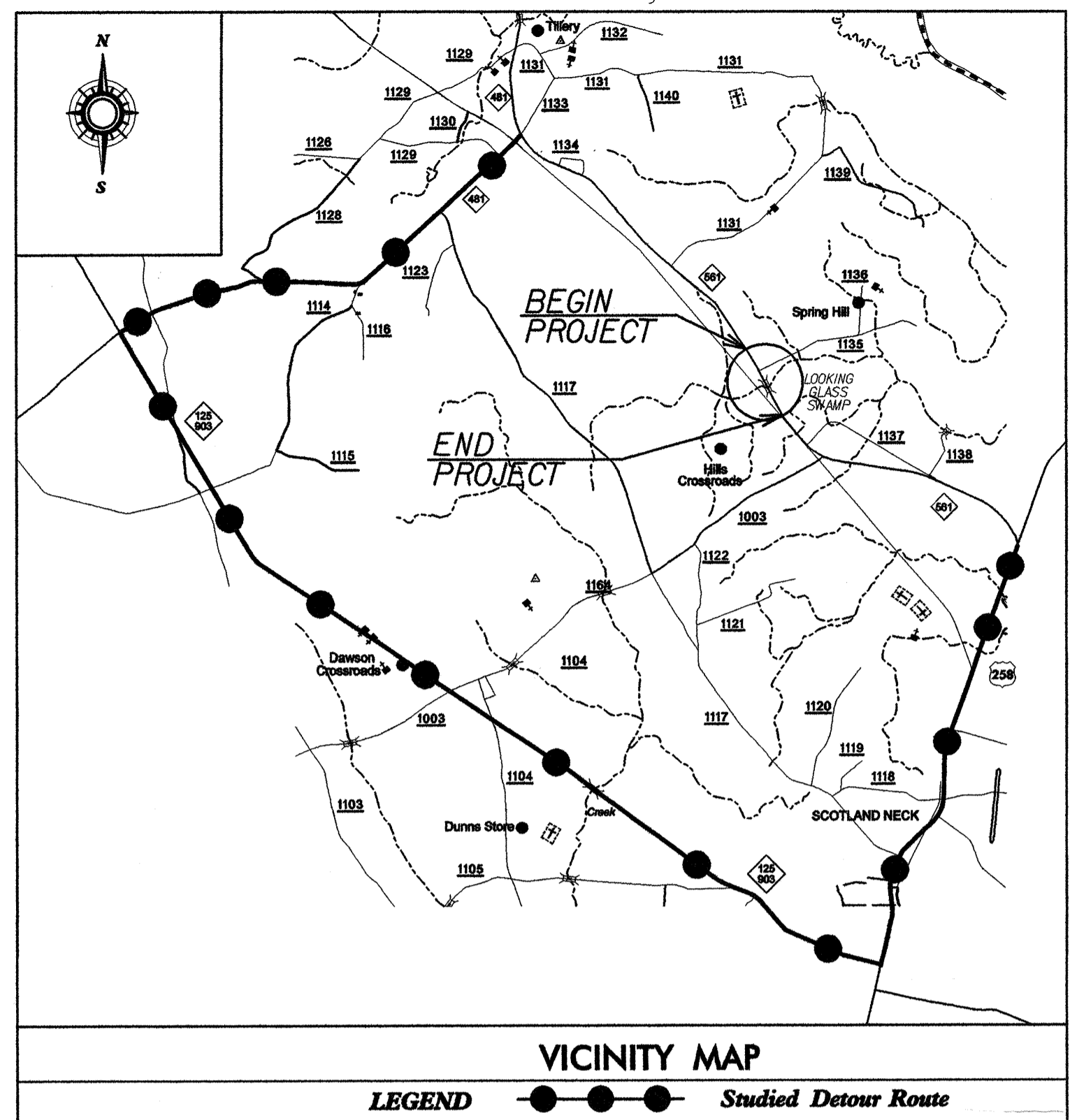
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HALIFAX COUNTY

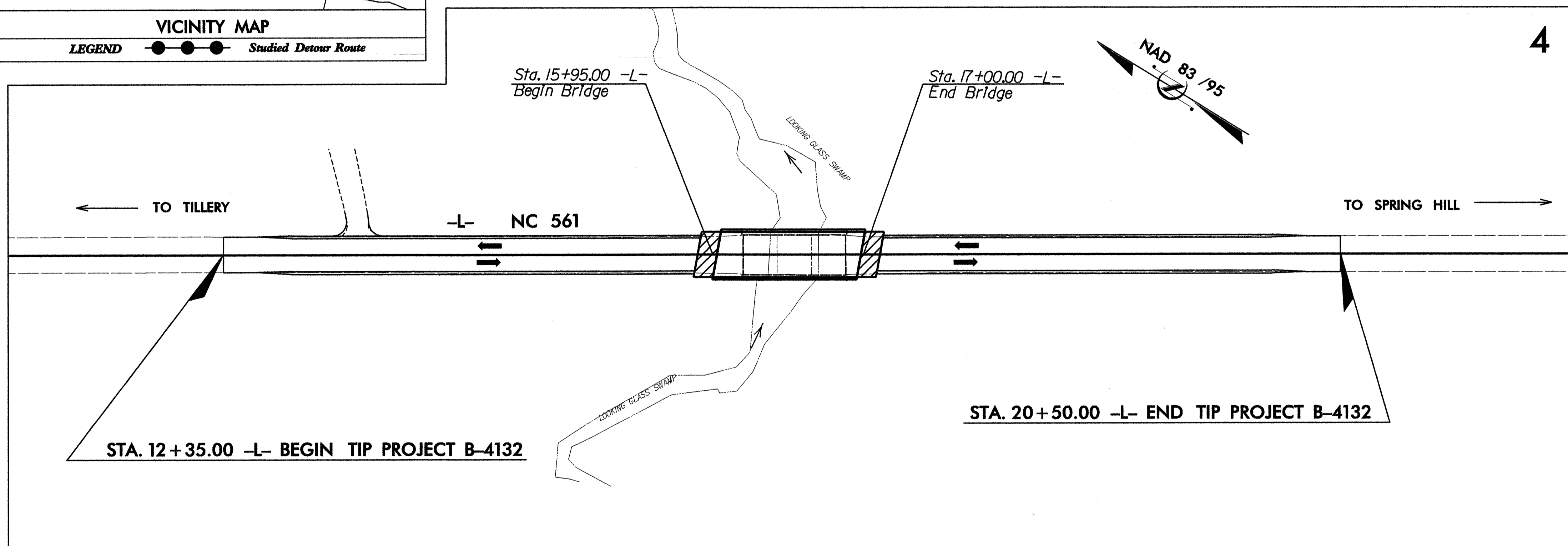
**LOCATION: BRIDGE NO. 97 OVER LOOKING GLASS SWAMP
AND APPROACHES ON NC 561**

TYPE OF WORK: GRADING, DRAINAGE, PAVING AND STRUCTURE

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4132	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
33485.1.1	BRSTP-561(11)	P.E.	
33485.2.1	BRSTP-561(11)	RW, UTIL.	
33485.3.1	BRSTP-561(11)	CONST.	



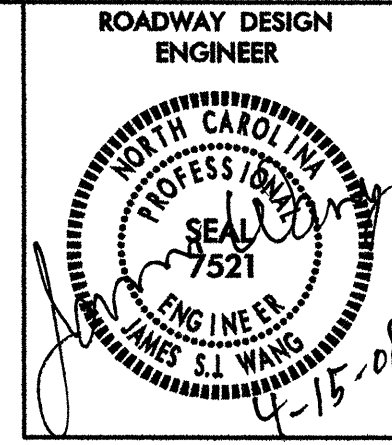
VICINITY MAP
LEGEND ●●● Studied Detour Route



NCDOT CONTACT: CATHY HOUSER, P.E., PROJECT ENGINEER - ROADWAY DESIGN

<p>GRAPHIC SCALES</p> <p>50 25 0 50 100 PLANS</p> <p>50 25 0 50 100 PROFILE (HORIZONTAL)</p> <p>10 5 0 10 20 PROFILE (VERTICAL)</p>	<p>DESIGN DATA</p> <p>ADT 2008 = 1470 ADT 2028 = 2320 DHV = 10 % D = 60 % T = 5 % * V = 60 MPH FUNC. CLASS = RURAL MAJOR COLLECTOR * TTST 3 % DUAL 2 %</p>	<p>PROJECT LENGTH</p> <p>LENGTH ROADWAY TIP PROJECT B-4132 = 0.134 mi. LENGTH STRUCTURE TIP PROJECT B-4132 = 0.020 mi. TOTAL LENGTH TIP PROJECT B-4132 = 0.154 mi.</p>	<p>Prepared in the Office of: WANG ENGINEERING COMPANY, INC. CARY, N.C. FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION</p>	<p>HYDRAULIC ENGINEER</p> <p>SEAL 9334 HENRY WELLS III P.E.</p>	<p>DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA</p> <p>STATE HIGHWAY DESIGN ENGINEER</p>
			<p>2006 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: October 20, 2006</p> <p>LETTING DATE: July 15, 2008</p>	<p>JAMES SJ WANG, P. E. PROJECT ENGINEER</p> <p>SCOTT L. KENNEDY PROJECT DESIGN ENGINEER</p>	

\\sawtooth\p01\647432\B07_1869_1869_4132\2008_3_14_08.dwg



SHEET NUMBER	INDEX OF SHEETS SHEET
1	TITLE SHEET
1-A	INDEX OF SHEETS, GENERAL NOTES, AND LIST OF STANDARD DRAWINGS
1-B	CONVENTIONAL SYMBOLS
1-C	SURVEY CONTROL SHEET
2	TYPICAL SECTIONS AND PAVEMENT SCHEDULE
2-A	ANCHORAGE FOR FRAMES - BRICK/CONCRETE/PRECAST CONCRETE
3	SUMMARY OF QUANTITIES
3A	SUMMARY OF EARTHWORK SUMMARY OF GUARDRAIL, LIST OF PIPES, ENDWALLS, ETC., AND ASPHALT PAVEMENT REMOVAL SUMMARY
4	PLAN/PROFILE SHEET
TCP-1 THRU TCP-4	TRAFFIC CONTROL PLANS
EC-1 THRU EC- 5	EROSION CONTROL PLANS
SIGN-1 THRU SIGN-3	SIGNING PLANS
UC-1 THRU UC-4	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-2	UTILITY BY OTHERS PLANS
X-1	CROSS SECTION INDEX AND SUMMARY SHEET
X-2 THRU X-4	CROSS-SECTIONS
S-1 THRU S-20	STRUCTURE PLANS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated July 18, 2006 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE		
DIVISION 2 - EARTHWORK			
200.03	Method of Clearing - Method III		
225.02	Guide for Grading Subgrade - Secondary and Local	876.02	Guide for Rip Rap at Pipe Outlets
225.04	Method of Obtaining Superelevation - Two Lane Pavement	876.04	Drainage Ditches with Class 'B' Rip Rap
DIVISION 3 - PIPE CULVERTS			
300.01	Method of Pipe Installation - Method 'A'		
310.10	Driveway Pipe Construction		
DIVISION 4 - MAJOR STRUCTURES			
422.10	Reinforced Bridge Approach Fills		
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS			
560.01	Method of Shoulder Construction - High Side of Superelevation Curve - Method I		
DIVISION 8 - INCIDENTALS			
806.01	Concrete Right of Way Marker		
806.02	Grainite Right-of-Way Marker		
815.03	Pipe Underdrain and Blind Drain		
840.00	Concrete Base Pad for Drainage Structures		
840.29	Frames and Narrow Slot Flat Grates		
840.35	Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates		
840.46	Traffic Bearing Precast Drainage Structure		
840.66	Drainage Structure Steps		
846.01	Concrete Curb, Gutter and Curb & Gutter		
846.04	Drop Inlet Installation in Shoulder Berm Gutter		
862.01	Guardrail Placement		
862.02	Guardrail Installation		
862.03	Structure Anchor Units		
862.04	Anchoring End of Guardrail - for B-77 and B-83 Anchor Units		

GENERAL NOTES: 2006 SPECIFICATIONS
EFFECTIVE: 07-18-06
REVISED: 07-18-06

GRADE LINE:
GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.

SIDE ROADS

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECTS. THIS WORK WILL BE PAID FOR AT THE CONTRACT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

SUB SURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS.

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE :
HALIFAX COUNTY PUBLIC UTILITIES
EMBARQ TELEPHONE

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY CONTRACT.

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

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, Property Corner, Property Monument, 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.

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:

Table listing symbols for right of way: Baseline Control Point, Existing Right of Way Marker, Existing Right of Way Line, Proposed Right of Way Line, Proposed Right of Way Line with Iron Pin and Cap Marker, Proposed Right of Way Line with Concrete or Granite Marker, Existing Control of Access, Proposed Control of Access, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent 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 Wheel Chair Ramp, Proposed Wheel Chair Ramp Curb Cut, Curb Cut for Future Wheel Chair 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, 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:

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, Recorded U/G Power Line, Designated U/G Power Line (S.U.E.*); TELEPHONE: Existing Telephone Pole, Proposed Telephone Pole, Telephone Manhole, Telephone Booth, Telephone Pedestal, Telephone Cell Tower, U/G Telephone Cable Hand Hole, Recorded U/G Telephone Cable, Designated U/G Telephone Cable (S.U.E.*), Recorded U/G Telephone Conduit, Designated U/G Telephone Conduit (S.U.E.*), Recorded U/G Fiber Optics Cable, Designated U/G Fiber Optics Cable (S.U.E.*).

WATER:

Table listing symbols for water: Water Manhole, Water Meter, Water Valve, Water Hydrant, Recorded U/G Water Line, Designated U/G Water Line (S.U.E.*), Above Ground Water Line.

TV:

Table listing symbols for TV: TV Satellite Dish, TV Pedestal, TV Tower, U/G TV Cable Hand Hole, Recorded U/G TV Cable, Designated U/G TV Cable (S.U.E.*), Recorded U/G Fiber Optic Cable, Designated U/G Fiber Optic Cable (S.U.E.*).

GAS:

Table listing symbols for gas: Gas Valve, Gas Meter, Recorded U/G Gas Line, Designated U/G Gas Line (S.U.E.*), Above Ground Gas Line.

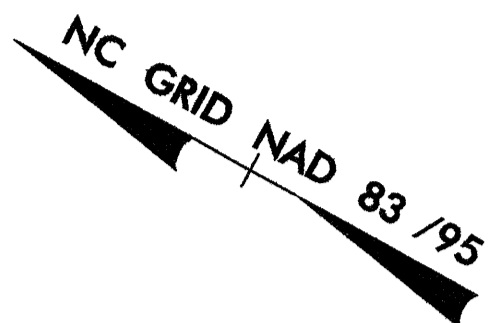
SANITARY SEWER:

Table listing symbols for sanitary sewer: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, Recorded SS Forced Main Line, Designated SS Forced Main Line (S.U.E.*).

MISCELLANEOUS:

Table listing symbols for miscellaneous: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line, U/G Tank; Water, Gas, Oil, AG Tank; Water, Gas, Oil, U/G Test Hole (S.U.E.*), Abandoned According to Utility Records, End of Information.

HALIFAX COUNTY SURVEY CONTROL SHEET B-4132 BRIDGE NO 97 OVER LOOKING GLASS SWAMP ON NC 561



NCDOT BASLINE STATION
GPS B4132-2
N 901731.106
E 2459699.768
ELEV. = 57.97'

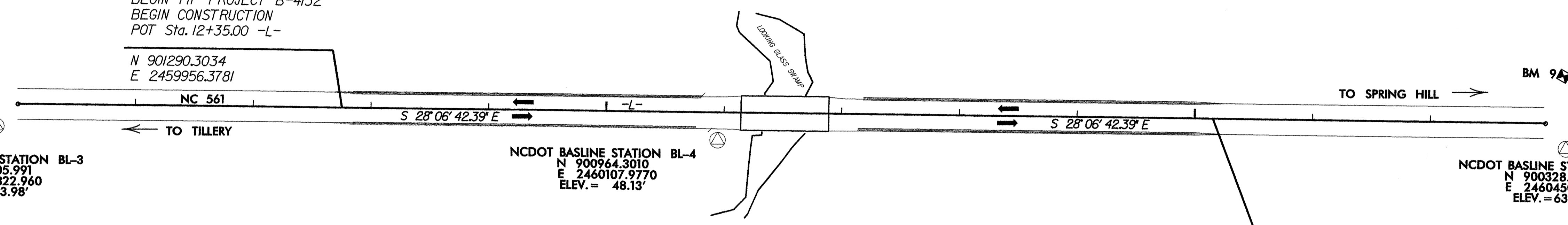
NCDOT BASLINE STATION BL-3
N 901505.991
E 2459822.960
ELEV. = 53.98'

BEGIN TIP PROJECT B-4132
BEGIN CONSTRUCTION
POT Sta. 12+35.00 -L-

N 901290.3034
E 2459956.3781

NCDOT BASLINE STATION BL-4
N 900964.3010
E 2460107.9770
ELEV. = 48.13'

NCDOT BASLINE STATION BL-5
N 900328.7960
E 2460450.7650
ELEV. = 63.72'



END TIP PROJECT B-4132
END CONSTRUCTION
POT Sta. 20+50.00 -L-

N 900571.4489
E 2460340.4005

BL	POINT	DESC.	NORTH	EAST	ELEVATION	L STATION	OFFSET
BL1	GPS MON B4132-1		902545.1670	2459255.1570	64.06	OUTSIDE PROJECT LIMITS (NOT MAPPED)	
BL2	GPS MON B4132-2		901731.1060	2459699.7680	57.97	OUTSIDE PROJECT LIMITS	
BL3		BL-3	901505.9910	2459822.9600	53.98	OUTSIDE PROJECT LIMITS	
BL4		BL-4	900964.3010	2460107.9770	48.13	15+93.98	19.90 RT
BL5		BL-5	900328.7960	2460450.7650	63.72	OUTSIDE PROJECT LIMITS	

NOTES

- THE CONTROL DATA FOR THIS PROJECT CAN BE FOUND ELECTRONICALLY BY SELECTING PROJECT CONTROL DATA AT [HTTP://WWW.DOH.DOT.STATE.NC.US/PRECONSTRUCT/HIGHWAY/LOCATION/PROJECT/](http://www.doh.dot.state.nc.us/preconstruct/highway/location/project/) THE FILES TO BE FOUND ARE AS FOLLOWS:
U4132_LS_CONTROL_051026.TXT
SITE CALIBRATION DATA HAS NOT BEEN PROVIDED FOR THIS PROJECT. IF FURTHER INFORMATION IS NEEDED, PLEASE CONTACT THE LOCATION AND SURVEYS UNIT.
- BL-1 (GPS 4132-1) WAS NOT MAPPED DUE TO THE LENGTH OF THE MON. BEING OUT OF PROJECT LIMITS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT " B4132-2"

WITH NAD 1983/95 STATE PLANE GRID COORDINATES OF
NORTHING: 901731.1066(±) EASTING: 2459699.7689(±)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 1.00001750
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM " B4132-2" TO -L- STATION 12+35.00 IS
S 30° 12' 20" E 510.05'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

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*****
BM8      ELEVATION = 43.02
N 900929      E 2460017
L STATION 15+82 117 RIGHT
R/R SPIKE IN 18" MAPLE
*****
*****
BM9      ELEVATION = 64.82
N 900358      E 2460499
L STATION 22+98
N 82° 28' 17.6" E DIST      42.08
R/R SPIKE IN 20" PINE
*****

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NOTE: DRAWING NOT TO SCALE

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

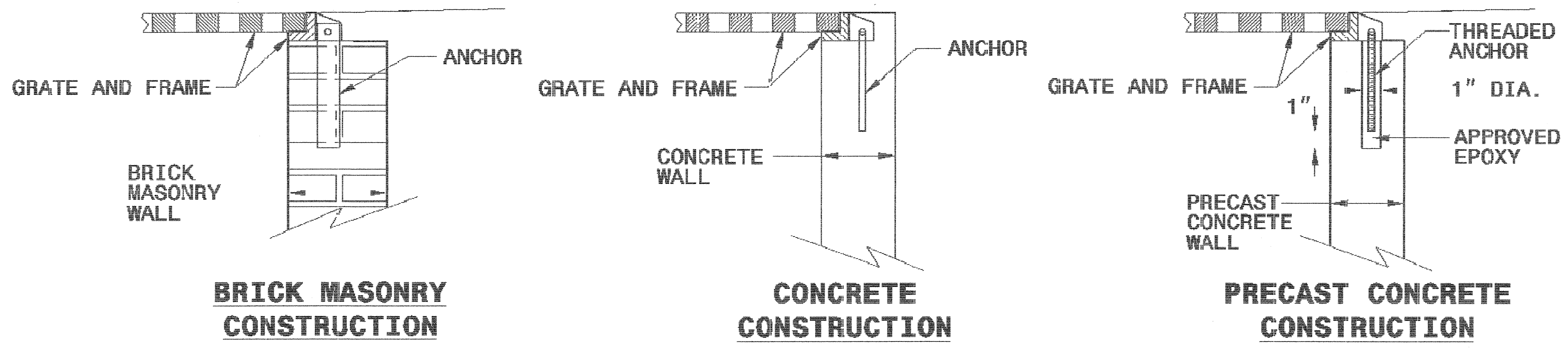
ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

SHEET 1 OF 1
840D25

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

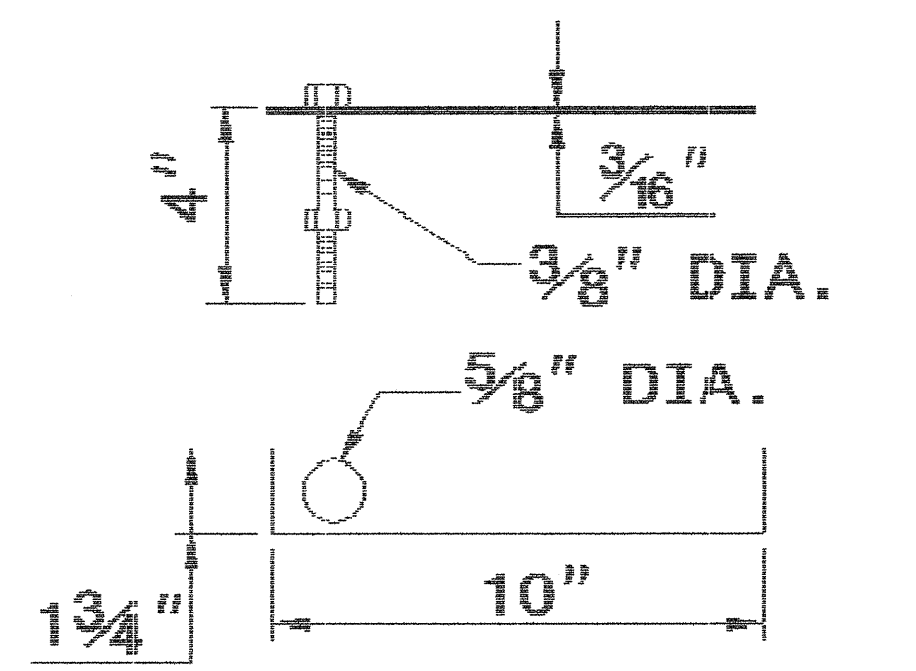
ENGLISH DETAIL DRAWING FOR
ANCHORAGE FOR FRAMES
BRICK/CONCRETE/PRECAST CONCRETE

SHEET 1 OF 1
840D25

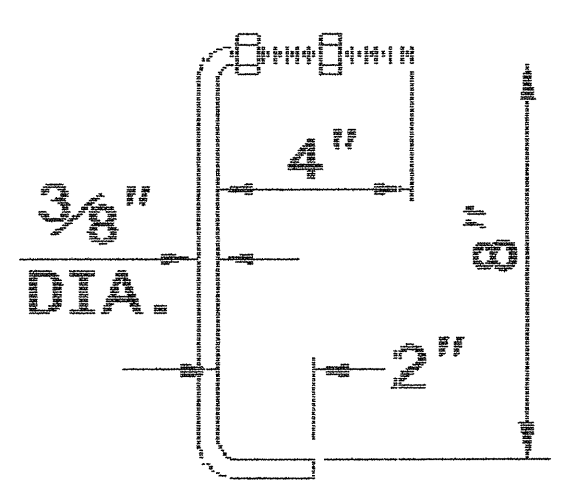


DETAIL SHOWING ANCHORAGE OF FRAME FOR GRATED DROP INLET

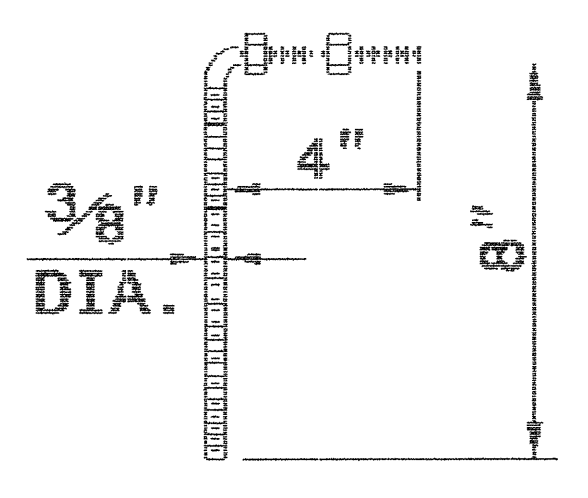
NOTE:
CONSTRUCT GRATED DROP INLET TO COINCIDE WITH NORMAL OR SUPERELEVATED SHOULDER OR PAVEMENT SLOPE.



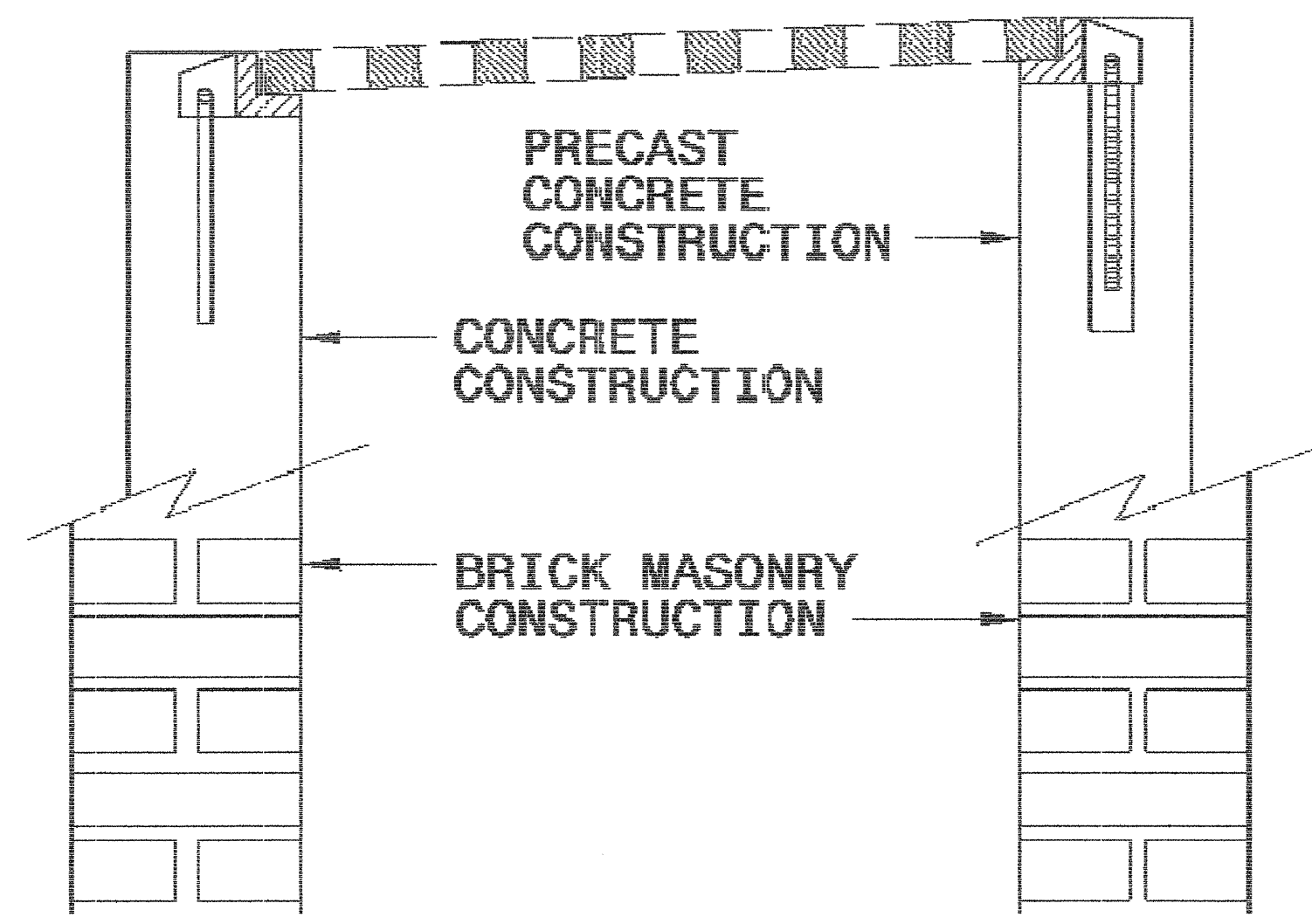
MASONRY ANCHOR
3/8" DIA. BOLT WITH PLATE



CONCRETE ANCHOR
3/8" DIA. BENT BAR

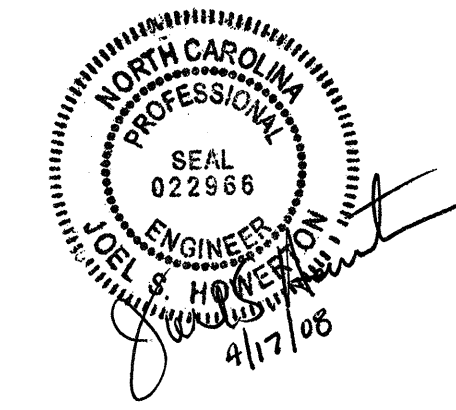


PRECAST CONCRETE ANCHOR
3/8" DIA. BENT BAR



FRAME AND GRATE INSTALLATION FOR NORMAL CROWN AND SUPERELEVATED SECTIONS

Z:\SEF-2006 C&S\Special Details\ward\stds to Special Details\840D25 Anchorage for Frames\840D25.dgn



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
MODIFIED BY: E. E. WARD DATE: 9/25/06
CHECKED BY: DATE:
FILE SPEC.:

Z:\SEF-2006 C&S\Special Details\ward\stds to Special Details\840D25 Anchorage for Frames\840D25.dgn 07/28/2006 11:15:55 AM

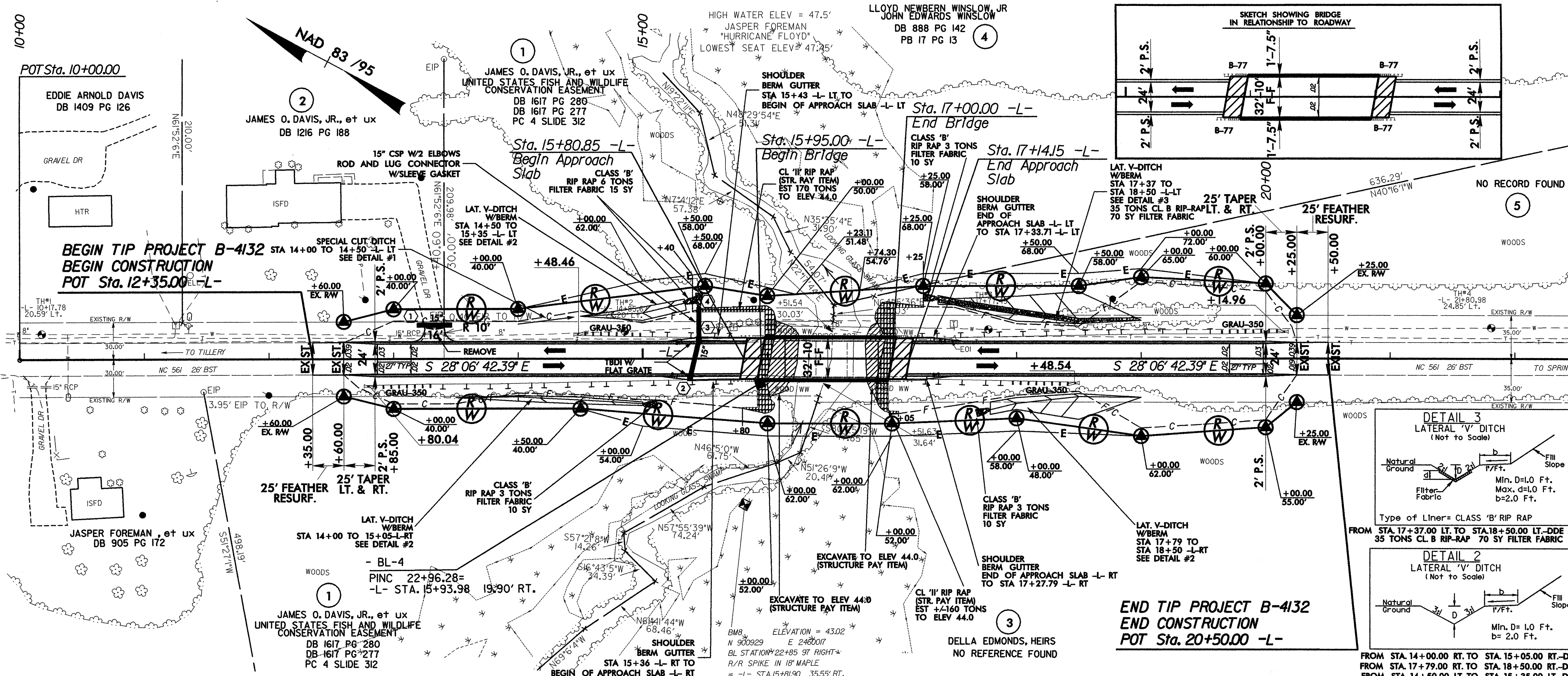
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
SUMMARY OF QUANTITIES

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
ROADWAY SUMMARY OF QUANTITIES FOR CONTRACT - C201869

ItemNumber	Sec #	Quantity	Unit	Description
000010000-N	800	Lump Sum		MOBILIZATION
002900000-N	SP	Lump Sum		REINFORCED BRIDGE APPROACH FILL, STATION ***** (16+47.50)
004300000-N	226	Lump Sum		GRADING
005000000-E	226	1	ACR	SUPPLEMENTARY CLEARING & GRUBBING
005700000-E	226	200	CY	UNDERCUT EXCAVATION
013400000-E	240	144	CY	DRAINAGE DITCH EXCAVATION
019500000-E	265	100	CY	SELECT GRANULAR MATERIAL
019600000-E	270	100	SY	FABRIC FOR SOIL STABILIZATION
031800000-E	300	10	TON	FOUNDATION CONDITIONING MATERIAL, MINOR STRS
034300000-E	310	28	LF	15" SIDE DRAIN PIPE
036600000-E	310	32	LF	15" RC PIPE CULVERTS, CLASS III
070800000-E	310	28	LF	15" BIT COAT CS PIPE CULVERTS, TYPE B 0.064" THICK
080600000-E	310	2	EA	15" BIT COAT CS PIPE ELBOWS, TYPE B 0.064" THICK
095500000-E	340	20	LF	PIPE REMOVAL
122000000-E	545	200	TON	INCIDENTAL STONE BASE
148900000-E	610	334	TON	ASPHALT CONC BASE COURSE, TYPE B25.0B
152500000-E	610	368	TON	ASPHALT CONC SURFACE COURSE, TYPE SF9.5A
156000000-E	620	39	TON	ASPHALT BINDER FOR PLANT MIX, GRADE PG 64-22
200000000-N	806	19	EA	RIGHT OF WAY MARKERS
202200000-E	815	23	CY	SUBDRAIN EXCAVATION
203300000-E	815	17	CY	SUBDRAIN FINE AGGREGATE
204400000-E	815	100	LF	6" PERFORATED SUBDRAIN PIPE
205500000-E	815	3	EA	6" SUBDRAIN PIPE WYES, TEES, & ELBOWS
206600000-N	815	1	EA	CONCRETE PAD FOR SUBDRAIN PIPE OUTLET

ItemNumber	Sec #	Quantity	Unit	Description
207700000-E	815	6	LF	6" OUTLET PIPE (SUBDRAINS)
228600000-N	840	2	EA	MASONRY DRAINAGE STRUCTURES
236700000-N	840	2	EA	FRAME WITH TWO GRATES, STD 840.29
255600000-E	846	117	LF	SHOULDER BERM GUTTER
303000000-E	862	600	LF	STEEL BM GUARDRAIL
315000000-N	862	5	EA	ADDITIONAL GUARDRAIL POSTS
327000000-N	SP	4	EA	GUARDRAIL ANCHOR UNITS, TYPE 350
331700000-N	862	4	EA	GUARDRAIL ANCHOR UNITS, TYPE B-77
364900000-E	876	51	TON	RP RAP, CLASS B
365600000-E	876	266	SY	FILTER FABRIC FOR DRAINAGE
407200000-E	903	14	LF	SUPPORTS, 3-LB STEEL U-CHANNEL
410200000-N	904	1	EA	SIGN ERECTION, TYPE E
415500000-N	907	9	EA	DISPOSAL OF SIGN SYSTEM, U-CHANNEL
440000000-E	1110	287	SF	WORK ZONE SIGNS (STATIONARY)
441000000-E	1110	144	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
444500000-E	1145	112	LF	BARRICADES (TYPE III)
484700000-E	1205	3,260	LF	POLYUREA PAVEMENT MARKING LINES (4", *****) (STANDARD GLASS BEADS)
490000000-N	1251	10	EA	PERMANENT RAISED PAVEMENT MARKERS
532800000-E	1510	396	LF	8" WATER LINE
580100000-E	1530	379	LF	ABANDON 8" UTILITY PIPE
587150000-E	1550	150	LF	TRENCHLESS INSTALLATION OF 8" IN SOIL
587151000-E	1550	100	LF	TRENCHLESS INSTALLATION OF 8" NOT IN SOIL
600000000-E	1605	1,170	LF	TEMPORARY SILT FENCE
600600000-E	1610	75	TON	STONE FOR EROSION CONTROL, CLASS A

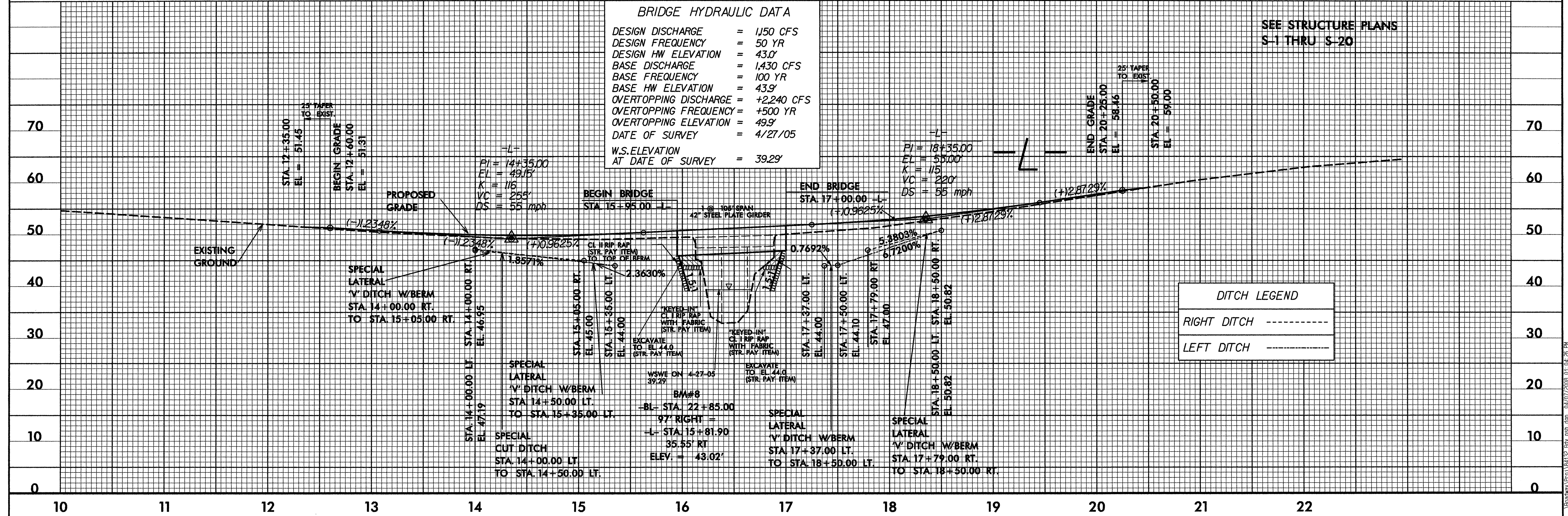
ItemNumber	Sec #	Quantity	Unit	Description
600900000-E	1610	180	TON	STONE FOR EROSION CONTROL, CLASS B
601200000-E	1610	60	TON	SEDIMENT CONTROL STONE
601500000-E	1615	2	ACR	TEMPORARY MULCHING
601800000-E	1620	100	LB	SEED FOR TEMPORARY SEEDING
602100000-E	1620	0.5	TON	FERTILIZER FOR TEMPORARY SEEDING
602400000-E	1622	50	LF	TEMPORARY SLOPE DRAINS
602700000-N	1622	2	EA	INLET PROTECTION AT TEMPORARY SLOPE DRAINS
602900000-E	SP	250	LF	SAFETY FENCE
603000000-E	1630	390	CY	SILT EXCAVATION
603600000-E	1631	730	SY	MATting FOR EROSION CONTROL
604200000-E	1632	40	LF	1/4" HARDWARE CLOTH
607103000-E	SP	180	LF	COIR FIBER BAFFLES
608400000-E	1660	2	ACR	SEEDING & MULCHING
608700000-E	1660	1.5	ACR	MOWING
609000000-E	1661	50	LB	SEED FOR REPAIR SEEDING
609300000-E	1661	0.25	TON	FERTILIZER FOR REPAIR SEEDING
609600000-E	1662	50	LB	SEED FOR SUPPLEMENTAL SEEDING
610800000-E	1665	1.5	TON	FERTILIZER TOPDRESSING
611400000-N	SP	2	HR	SPECIALIZED HAND MOWING
611700000-N	SP	12	EA	RESPONSE FOR EROSION CONTROL



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1150 CFS
DESIGN FREQUENCY	= 50 YR
DESIGN HW ELEVATION	= 43.0'
BASE DISCHARGE	= 1,430 CFS
BASE FREQUENCY	= 100 YR
BASE HW ELEVATION	= 43.9'
OVERTOPPING DISCHARGE	= +2,240 CFS
OVERTOPPING FREQUENCY	= +500 YR
OVERTOPPING ELEVATION	= 49.9'
DATE OF SURVEY	= 4/27/05
W.S. ELEVATION AT DATE OF SURVEY	= 39.29'

SEE STRUCTURE PLANS S-1 THRU S-20



DITCH LEGEND
 RIGHT DITCH - - - - -
 LEFT DITCH - - - - -