

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT**

STRUCTURE SUBSURFACE INVESTIGATION

PROJ. REFERENCE NO. 17BP.14.R.33 F.A. PROJ. n/a
 COUNTY JACKSON
 PROJECT DESCRIPTION Bridge No. 279 on SR 1371 over
Brushy Fork Creek

CONTENTS

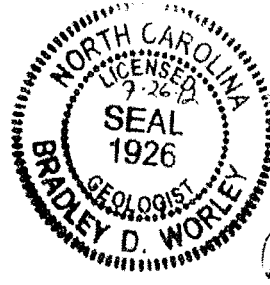
SHEET	DESCRIPTION	PERSONNEL
1	TITLE SHEET	<u>B. Smith</u>
2	LEGEND	<u>J. Bare</u>
3	SITE PLAN	<u>J. Gentry</u>
4-7	BORING LOGS	

PREPARED BY B. Worley, PG
 CHECKED BY D. Dewey, PE
 SUBMITTED BY Summit Design & Engineering
 DATE JULY, 2012

CAUTION NOTICE

This report was prepared by the Geotechnical Engineering Unit of the North Carolina Department of Transportation. It is the property of the State of North Carolina and is loaned to the recipient. It is not to be distributed outside the recipient's organization. The recipient is responsible for the safekeeping and return of this report. The recipient is also responsible for the safekeeping and return of any equipment or materials provided for the investigation. The recipient is also responsible for the safekeeping and return of any data or information provided for the investigation. The recipient is also responsible for the safekeeping and return of any other items provided for the investigation. The recipient is also responsible for the safekeeping and return of any other items provided for the investigation.

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Bradley D. Worley

DRAWN BY: B. Worley, PG

PROJECT IDENTIFICATION NO. _____ SHEET NO. 7

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION

SOIL IS CONSIDERED TO BE THE UNFRACTIONATED, SOFT-LIMB MASSES OF VARIOUSLY COLLOIDAL MATERIALS THAT CAN BE DEFORMED WITH A CONSISTENT PLASTIC POWER AFTER AND YIELD LOSS. IN THE LOW-DRAINAGE FLOODING BELIEVED TO STAYCOUL (EVEN AFTER FLOODING) (22% MOISTURE) SOIL CLASSIFICATION IS BASED ON THE MOISTURE SYSTEM. SOIL DESCRIPTIONS GENERALLY SHALL INDICATE CONSISTENCY, COLOR, TEXTURE, PARTICLE SIZES, CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS ORGANIC CONTENT, TENDENCY FOR ANGLE, STRENGTH, PLASTICITY, ETC., EXCEPT:

FOR USE OF SAND AND GRAVEL AND GRANULAR SOILS, SEE PART 4.7.6

GRADATION

WELL-SORTED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZE FROM 10% TO 80% (BUT NOT 100%) INDICATES THAT SOIL PARTICLES ARE ALL APPROPRIATELY THE SAME SIZE RANGE.

POORLY SORTED - INDICATES A MIXTURE OF UNIFORM PARTICLES OF TWO OR MORE SIZES.

ANGULARITY OF GRAINS

THE ANGULARITY OR BOUNDEDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS ANGULAR, SUBANGULAR, SUBROUND, OR ROUND.

SOIL LEGEND AND AASHTO CLASSIFICATION

GENERAL CLASS	COARSE SAND MATERIALS P.C. 20 - 200 PASSES #20	FINE SAND MATERIALS P.C. 200 PASSES #200	ORGANIC MATERIALS
GROUP CLASS.	A-1, A-1(1), A-2, A-2(1), A-2(2), A-3, A-4, A-5, A-6, A-7	A-1, A-2, A-3, A-4, A-5, A-6, A-7	A-1, A-2, A-3, A-4, A-5, A-6, A-7
PERCENT PASSING	75, 100, 200, 425, 600, 75, 100, 200, 425, 600	75, 100, 200, 425, 600, 75, 100, 200, 425, 600	75, 100, 200, 425, 600, 75, 100, 200, 425, 600
GROUP INDEX	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50

MINERALOGICAL COMPOSITION

MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, mica, CLAY, KUNIPIA, ETC., ARE USED IN DESCRIPTIONS WHEREAS THEY ARE CONSIDERED OF SIGNIFICANCE.

COMPRESSIBILITY

SLIGHTLY COMPRESSIBLE
MODERATELY COMPRESSIBLE
HIGHLY COMPRESSIBLE

PERCENTAGE OF MATERIAL

ORGANIC MATTER	GRAVEL	SILT	CLAY	OTHER MATERIALS
PERCENT OF ORGANIC MATTER	2 - 5	3 - 5	1 - 2	1 - 10
LITTLE ORGANIC MATTER	1 - 5	5 - 12	1	10 - 20
Moderately Organic	5 - 10	12 - 20	SOME	10 - 20
Highly Organic	10 - 20	20	Highly	20 - 40

GROUND WATER

WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING
STATIC WATER LEVEL AFTER 24 HOURS
PERMEABLE WATER SATURATED ZONE OR WATER BEARING STRATA
SPRING OR DEEP

CONSISTENCY OR DENSENESS

PRIMARY SOIL TYPE	CONSISTENCY OR DENSENESS	RAVE OF STANDARD PENETRATION RESISTANCE (IN 30 CM)	RANGE OF UNCONSOLIDATED COMPRESSIVE STRENGTH (TENSILE σ_c)
SANDS AND GRAVELS (NON-COHESIVE)	VERY LOOSE	0 - 10	0 - 10
	LOOSE	10 - 30	10 - 30
	MEDIUM DENSE	30 - 50	30 - 50
	VERY DENSE	50 - 100	50 - 100
SILTS AND CLAYS (COHESIVE)	VERY SOFT	0 - 2	0 - 100
	SOFT	2 - 10	10 - 100
	MEDIUM STIFF	10 - 30	30 - 100
	STIFF	30 - 50	50 - 100

MISCELLANEOUS SYMBOLS

ROADWAY EMBANKMENT (BT) WITH SOIL DESCRIPTION
SOIL SYMBOL
ARTIFICIAL FILL (GRAVEL OR SAND) ROADWAY EMBANKMENT
IMPROVED SOIL (GRAVEL)
IMPROVED SOIL (CLAY)
ALUMINUM SOIL (GRAVEL)
DIP & STRIKES DIRECTION OF ROCK STRIKE DATA
TEST BORING
TEST BORING WITH GROUT
SOIL BOUNDARY
GOOD BOUNDARY
NON-FUNCTIONAL WALL
DISCRETE INSULATION
SLOPE INDICATED INSULATION
LINE PENETRATION TEST

TEXTURE OR GRAIN SIZE

GRAIN SIZE (mm)	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
75	100	100	100	100	100	100	100
150	100	100	100	100	100	100	100
300	100	100	100	100	100	100	100
600	100	100	100	100	100	100	100
1200	100	100	100	100	100	100	100

ABBREVIATIONS

AR - ALGER REFUGAL OF BORING TERMINATED	MD - MEDIUM	MR - MEDIUM	TEST WIDE BORING TEST
EL - ELEVATION	MD - MEDIUM	MR - MEDIUM	TEST WIDE BORING WITH GROUT
LD - LABORATORY TEST	MD - MEDIUM	MR - MEDIUM	SOIL BOUNDARY
SL - LABORATORY TEST	MD - MEDIUM	MR - MEDIUM	GOOD BOUNDARY
WT - WIND TOWER	MD - MEDIUM	MR - MEDIUM	NON-FUNCTIONAL WALL
PC - POWER CONDUIT	MD - MEDIUM	MR - MEDIUM	DISCRETE INSULATION
FC - FLOW CONTROL	MD - MEDIUM	MR - MEDIUM	SLOPE INDICATED INSULATION
FR - FLOOD RESISTANT	MD - MEDIUM	MR - MEDIUM	LINE PENETRATION TEST

SOIL MOISTURE - CORRELATION OF TERMS

SOIL MOISTURE CONTENT (WET BASIS) - PERCENTAGE OF WATER IN SOIL (WET BASIS)

PLASTIC LIMIT (LL) - PERCENTAGE OF WATER IN SOIL (WET BASIS) AT PLASTIC LIMIT

LIQUID LIMIT (WL) - PERCENTAGE OF WATER IN SOIL (WET BASIS) AT LIQUID LIMIT

SHRINKAGE LIMIT (SL) - PERCENTAGE OF WATER IN SOIL (WET BASIS) AT SHRINKAGE LIMIT

PLASTICITY INDEX (PI) - DIFFERENCE BETWEEN PLASTIC LIMIT AND SHRINKAGE LIMIT

EQUIPMENT USED ON SUBJECT PROJECT

TEST BORING	TEST BORING WITH GROUT	TEST BORING WITH GROUT
SOIL BOUNDARY	GOOD BOUNDARY	NON-FUNCTIONAL WALL
DISCRETE INSULATION	SLOPE INDICATED INSULATION	LINE PENETRATION TEST
ROADWAY EMBANKMENT (BT) WITH SOIL DESCRIPTION	SOIL SYMBOL	ARTIFICIAL FILL (GRAVEL OR SAND) ROADWAY EMBANKMENT
IMPROVED SOIL (GRAVEL)	IMPROVED SOIL (CLAY)	ALUMINUM SOIL (GRAVEL)
DIP & STRIKES DIRECTION OF ROCK STRIKE DATA		

PLASTICITY

LOW PLASTICITY	LOW PLASTICITY	LOW PLASTICITY
MEDIUM PLASTICITY	MEDIUM PLASTICITY	MEDIUM PLASTICITY
HIGH PLASTICITY	HIGH PLASTICITY	HIGH PLASTICITY

COLON

SOIL DESCRIPTION WITH SYMBOLS - USED TO IDENTIFY SOILS IN CROSS-SECTIONAL VIEW, WITH YELLOW-BROWN, BLUE, AND RED SOILS. SOILS ARE IDENTIFIED BY COLOR AND SYMBOLS IN THE LEGEND.

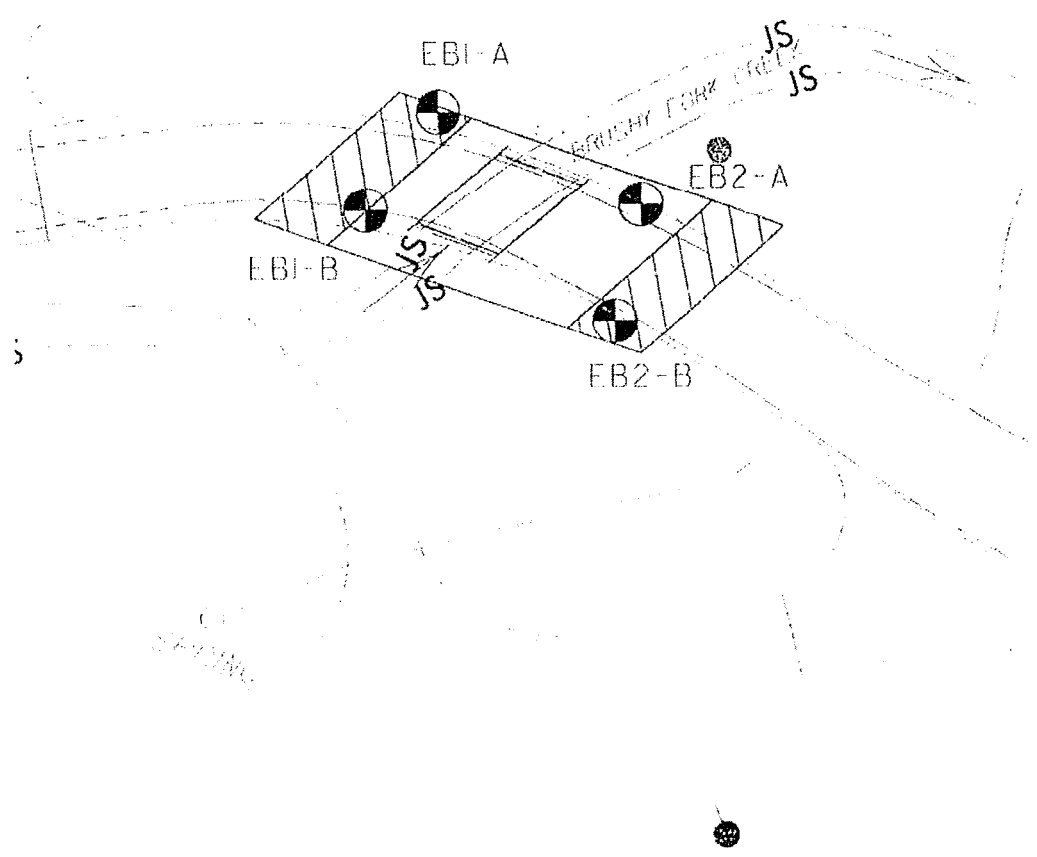
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
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SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Main table containing sections: ROCK DESCRIPTION, WEATHERING, ROCK TERMINOLOGY, FRACTURE SPACING, BLEEDING, and INDURATION. Includes detailed descriptions, symbols, and abbreviations for various geological terms.

SITE PLAN

Bridge 279, Jackson Co.

STATE	STATE PROJECT NUMBER	DATE	SCALE
N.C.	17BP.14.R.55	5	7



SCALE 30:1



NCDOT GEOTECHNICAL ENGINEERING UNIT

BORELOG REPORT

WBS 17BP.14.R.33	TIP 490279	COUNTY JACKSON	GEOLOGIST Brett Smith
SITE DESCRIPTION Bridge # 279 on SR 1371 across Brushy Fork Creek			GROUND WTR (ft)
BORING NO. EB1-A	STATION N/A	OFFSET N/A	ALIGNMENT -L-
COLLAR ELEV. 2,322.6 ft	TOTAL DEPTH 12.2 ft	NORTHING 598,594	EASTING 722,038
DRILL RIG/HAMMER EFF./DATE SUM0093 DIEDRICH D-50 82% 07/22/2011		DRILL METHOD NW Casing w/ Advancer	HAMMER TYPE Automatic
DRILLER Jacob Bare	START DATE 03/28/12	COMP. DATE 03/28/12	SURFACE WATER DEPTH N/A

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)		
			0-5ft	5-10ft	10-15ft	0	25	50	75	100							
2325																	
															2,322.6	GROUND SURFACE	0.0
															2,320.3	COLLUVIAL brown, SILTY CLAY with cobbles and boulders (A-7)	2.5
2320	2,318.8	4.0	14	16	14											RESIDUAL black, brown, and white, saprolitic, micaceous, fine to cse. SAND and rock fragments (A-1-b)	7.0
2315	2,313.8	9.0	60	40/0.2												WEATHERED ROCK (Biotite Gneiss)	
	2,310.6	12.2	60/0.0													CRYSTALLINE ROCK (Biotite Gneiss)	12.2
																Boring Terminated with Casing Advancer Refusal at Elevation 2,310.6 ft on Crystalline Rock (Biotite Gneiss)	
																Harder drilling at 7.0 feet was interpreted as the top of weathered rock	

NCDOT BORE SINGLE BR # 279 JACKSON COUNTY GINT. GP. NO. DOT. GDT 7/25/12



NCDOT GEOTECHNICAL ENGINEERING UNIT

BORELOG REPORT

WBS 17BP.14.R.33		TIP 490279		COUNTY JACKSON		GEOLOGIST Brett Smith										
SITE DESCRIPTION Bridge # 279 on SR 1371 across Brushy Fork Creek							GROUND WTR (ft)									
BORING NO. EB1-B		STATION N/A		OFFSET N/A		ALIGNMENT -L-	0 HR. N/A									
COLLAR ELEV. 2,323.6 ft		TOTAL DEPTH 19.2 ft		NORTHING 598,532		EASTING 722,040	24 HR. 3.8									
DRILL RIG/HAMMER EFF./DATE SUM0093 DIEDRICH D-50 82% 07/22/2011				DRILL METHOD NW Casing w/ Advance		HAMMER TYPE Automatic										
DRILLER Jacob Bare		START DATE 03/28/12		COMP. DATE 03/28/12		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					ELEV (ft)	DEPTH (ft)
2325														2,323.6	GROUND SURFACE	0.0
2320	2,319.6	4.2	11	9	9										ALLUVIAL brown, gravel and fine to cse SAND (A-1-b)	
2315	2,314.4	9.2	65	35/0	3									2,315.4	WEATHERED ROCK (Biotite Gneiss)	8.2
2310	2,309.2	14.2	80	20/0	2											
2305	2,304.4	19.2	60/0	0										2,304.4	CRYSTALLINE ROCK (Biotite Gneiss) Boring Terminated with Standard Penetration Test Refusal at Elevation 2,304.4 ft on Crystalline Rock (Biotite Gneiss) Harder drilling at 8.2 feet was interpreted as the top of weathered rock.	19.2

NCDOT BORE SINGLE BR # 279 JACKSON COUNTY GINT GPJ NC DOT 1/26/12



NCDOT GEOTECHNICAL ENGINEERING UNIT BORELOG REPORT

WBS 17BP.14.R.33		TIP 490279		COUNTY JACKSON		GEOLOGIST Brett Smith											
SITE DESCRIPTION Bridge # 279 on SR 1371 across Brushy Fork Creek							GROUND WTR (ft)										
BORING NO. EB2-A		STATION N/A		OFFSET N/A		ALIGNMENT -L-	0 HR. N/A										
COLLAR ELEV. 2,322.1 ft		TOTAL DEPTH 15.0 ft		NORTHING 598,966		EASTING 722,076	24 HR. Dry										
DRILL RIG/HAMMER EFF./DATE SUM0093 DIEDRICH D-50 82% 07/22/2011				DRILL METHOD NW Casing w/ Advancer		HAMMER TYPE Automatic											
DRILLER Jacob Bare		START DATE 03/28/12		COMP. DATE 03/28/12		SURFACE WATER DEPTH N/A											
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP NO.	LOG MO	L O G	SOIL AND ROCK DESCRIPTION			
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				ELEV (ft)	DEPTH (ft)		
2325															2,322.1	0.0	GROUND SURFACE
2320	2,317.1	5.0	3	7	5										2,314.6	7.5	ALLUVIAL brown, SAND (A-1-a) and gravel
2315	2,312.1	10.0	23	20	79										2,307.1	15.0	RESIDUAL brown, saprolitic, micaceous SANDY SILT with trace rock fragments (A-4)
2310	2,307.1	15.0	60/0/0														CRYSTALLINE ROCK (Biotite Gneiss) Boring Terminated with Standard Penetration Test Refusal at Elevation 2,307.1 ft on Crystalline Rock (Biotite Gneiss)

NCDOT BORE SINGLE BR # 279 JACKSON COUNTY GINT GPJ NC DOT GDT 7/25/12



NCDOT GEOTECHNICAL ENGINEERING UNIT

BORELOG REPORT

WBS 17BP.14.R.33		TIP 490279		COUNTY JACKSON		GEOLOGIST Brett Smith										
SITE DESCRIPTION Bridge # 279 on SR 1371 across Brushy Fork Creek							GROUND WTR (ft)									
BORING NO. EB2-B		STATION N/A		OFFSET N/A		ALIGNMENT -L-										
COLLAR ELEV. 2,321.8 ft		TOTAL DEPTH 20.6 ft		NORTHING 598,947		EASTING 722,087										
DRILL RIG/HAMMER EFF./DATE SUM0093 DIEDRICH D-50 82% 07/22/2011				DRILL METHOD NW Casing w/ Advancer		HAMMER TYPE Automatic										
DRILLER Jacob Bare		START DATE 03/28/12		COMP. DATE 03/28/12		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP NO.	L O G	SOIL AND ROCK DESCRIPTION			
			0.5ft	0.5ft	0.5ft	0	25	50	75	100			ELEV (ft)	DEPTH (ft)		
2325														2,321.8	0.0	GROUND SURFACE
2320	2,317.3	4.5	2	7	10											ALLUVIAL brown, SILTY fine to cse. SAND with trace gravel (A-1-b)
2315	2,312.3	9.5	27	45	45									2,314.8	7.0	RESIDUAL brown, SAND (A-1-a) with rock fragments
2310	2,307.3	14.5	29	32	37									2,309.8	12.0	dark brown, saprolitic, micaceous SANDY SILT (A-4)
2305	2,302.3	19.5	84	160	0									2,302.8	19.0	WEATHERED ROCK (Biotite Gneiss)
	2,301.2	20.6	60	0	0									2,301.2	20.6	CRYSTALLINE ROCK (Biotite Gneiss) Boring Terminated with Casing Advancer Refusal at Elevation 2,301.2 ft on Crystalline Rock (Biotite Gneiss) Encountered alluvial cobbles and boulders from 0.0-7.0 feet. Potential man-made debris impacted from 3-4 feet. Harder drilling at 19.0 feet was interpreted as the top of weathered rock

NCDOT BORE SINGLE BR # 279 JACKSON COUNTY GINT.GPJ NC_DOT_GDT 7/28/12

14+00

13+00

2330

2320

2310

2300

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HORIZONTAL CURVE DATA -L-

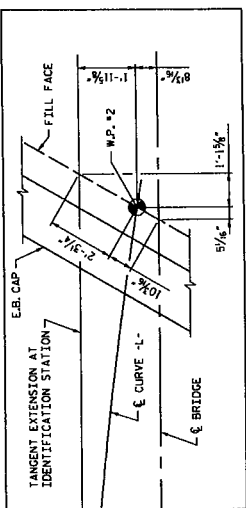
PT STA. 12+84.28
 P.O.C. STA. 12+68.12
 Δ = 48°59'20.1" (RT)
 D = 38°11'49.3"
 L = 115.16'
 T = 60.69'
 R = 150.00'

HYDRAULIC DATA

DESIGN DISCHARGE 400 CFS
 FREQUENCY OF DESIGN FLOOD 5 YR.
 DESIGN HIGH WATER ELEVATION 2322.00
 DRAINAGE AREA 2.37 SQ. MI.
 BASIC DISCHARGE (Q 100) 1,350 CFS
 BASIC HIGH WATER ELEVATION 2323.71

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE 543 CFS
 FREQUENCY OF OVERTOPPING FLOOD 10- YR.
 OVERTOPPING FLOOD ELEVATION 2322.10



INSET SHOWING W.P. #2

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

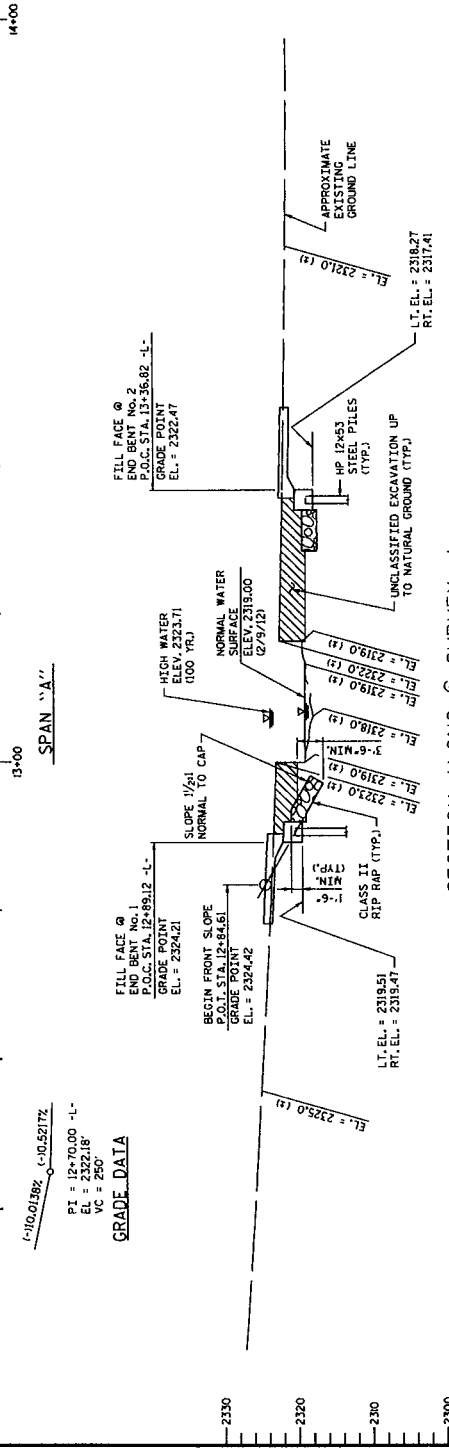
PROJECT NO. 17BP.14.R.33
 JACKSON COUNTY
 STATION: P.O.C. 13+12.50 -L-
 SHEET 1 OF 2 REPLACES BRIDGE NO. 273

AECOM

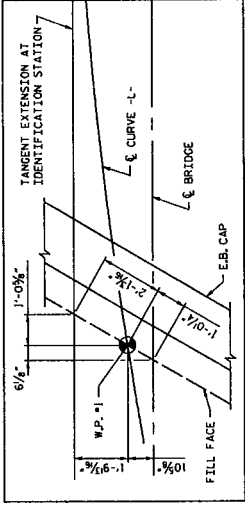
STATE OF MISSISSIPPI
 DEPARTMENT OF TRANSPORTATION
 GENERAL DRAWING
 FOR BRUSHY FORK CREEK
 BETWEEN SR 1475 & DEAD END ROAD
 27'-10" CLEAR ROADWAY - 120° SKEW

REV.	DATE	BY	CHKD.
1	08/12	MB	CS
2	08/12		

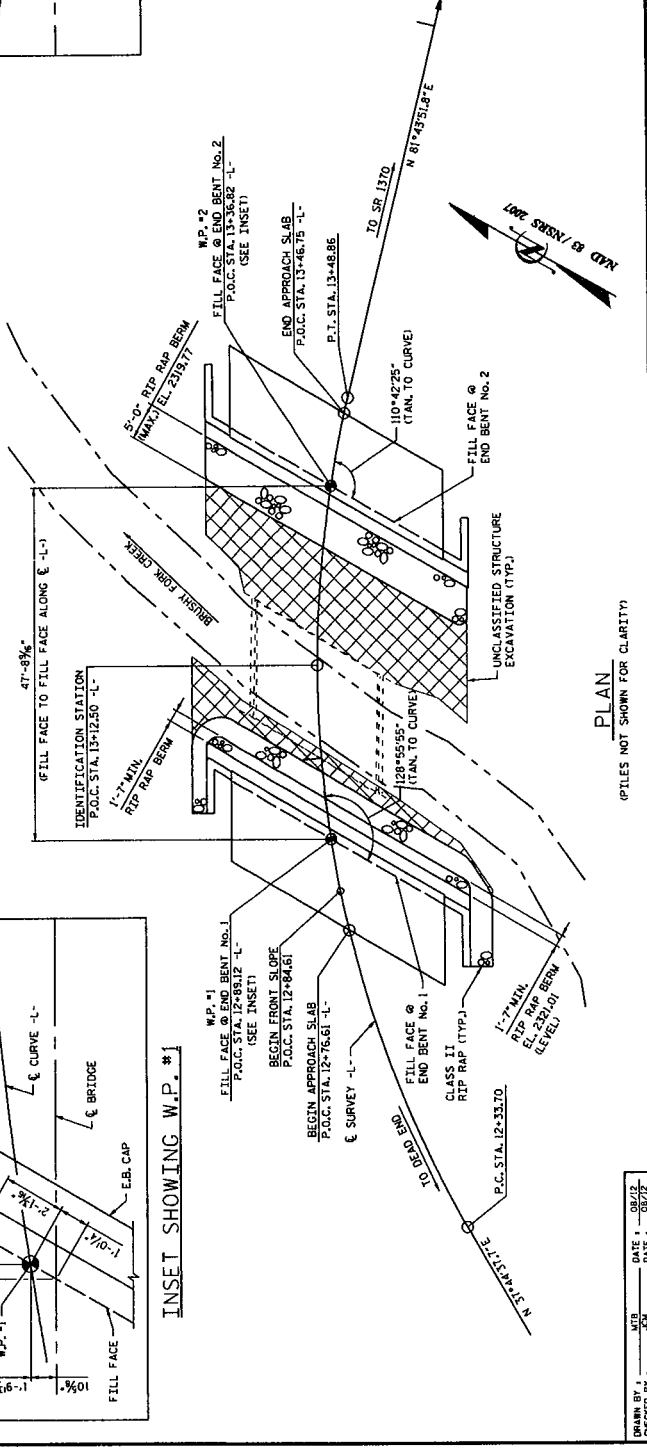
SHEET NO. S-01
 TOTAL SHEETS 13



SECTION ALONG CENTERLINE SURVEY -L-
(SECTIONS AT END BENTS ARE AT RIGHT ANGLES)

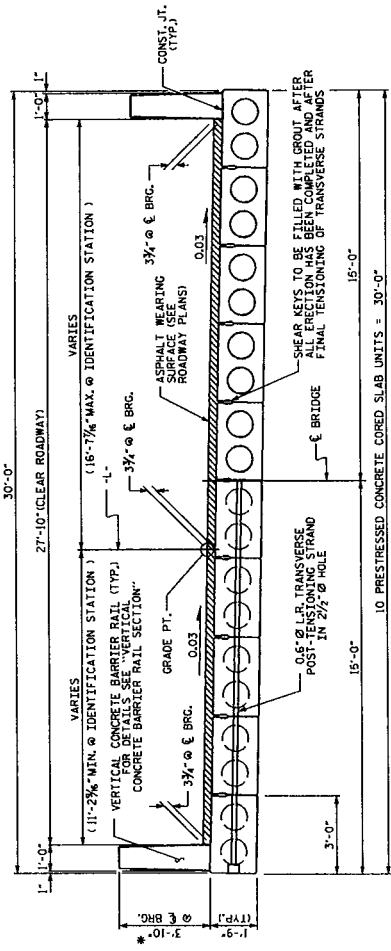


INSET SHOWING W.P. #1



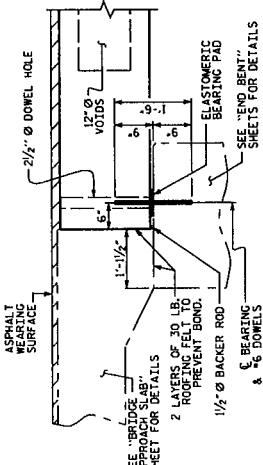
PLAN
(PILES NOT SHOWN FOR CLARITY)

DRAWN BY: MB
 CHECKED BY: CS
 DATE: 08/12
 DATE: 08/12

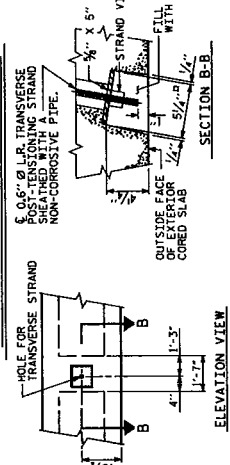


TYPICAL SECTION
 HALF SECTION AT INTERMEDIATE DIAPHRAGMS
 HALF SECTION THROUGH VOIDS
 10. PRESTRESSED CONCRETE CORED SLAB UNITS = 30'-0"

* - THE MAXIMUM BARRIER RAIL HEIGHT AND ASPHALT THICKNESS IS SHOWN. THE HEIGHT OF THE BARRIER RAIL AND ASPHALT THICKNESS VARIES WHILE THE TOP OF THE BARRIER RAIL FOLLOWS THE PROFILE OF THE OUTERLINE FOR RAIL HEIGHT DETAILS, AND ASPHALT THICKNESS SEE THE "VERTICAL CONCRETE BARRIER RAIL SECTION DETAIL."
 ** - SHEAR KEYS TO BE FILLED WITH GROUT AFTER ALL ERECTION HAS BEEN COMPLETED AND AFTER FINAL TENSIONING OF TRANSVERSE STRANDS



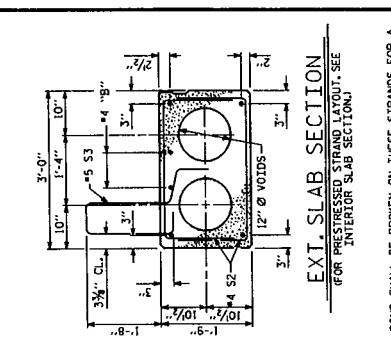
SECTION AT END BENT



ELEVATION VIEW

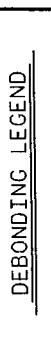
GROUTED RECESS AT END OF POST-TENSIONING STRAND OF CORED SLABS

SHOWING PLACEMENT OF DOUBLE STIRRUPS AND TRANSVERSE STRANDS. INTERIOR SLAB UNIT SHOWN-EXTERIOR SLAB UNIT SIMILAR EXCEPT SHEAR KEY LOCATION.



EXT. SLAB SECTION
 (FOR PRESTRESSED STRAND LAYOUT, SEE INTERIOR SLAB SECTION.)

▲ BOND SHALL BE BROKEN ON THESE STRANDS FOR A DISTANCE OF 6'-0" FROM END OF CORED SLAB UNIT. SEE STANDARD SPECIFICATIONS, ARTICLE 1078-7.
 □ BOND SHALL BE BROKEN ON THESE STRANDS FOR A DISTANCE OF 6'-0" FROM END OF CORED SLAB UNIT. SEE STANDARD SPECIFICATIONS, ARTICLE 1078-7.
 ● OPERATIONAL LOADS SHALL BE REINFORCED STRANDS. OPERATIONAL LOADS SHALL NOT BE REQUIRED IF THE FABRICATOR CHOOSES TO INCLUDE THESE STRANDS IN THE CORED SLAB UNIT. THE WIDTH OF THE UNIT AT NO ADDITIONAL COST. SEE STANDARD SPECIFICATIONS, ARTICLE 1078-7.



INTERIOR SLAB SECTION
 (40' & 45' UNIT)
 13 STRANDS REQUIRED

0.6" Ø LOW RELAXATION STRAND LAYOUT

DEBONDING LEGEND

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

PROJECT NO. 17BP-14.R-33
 JACKSON COUNTY
 STATION: P.O.C. 13+12.50 -L-
 SHEET 1 OF 3 REPLACES BRIDGE NO. 279

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLAB UNIT
 120° SKEW

AECOM
 ARCHITECTURAL ENGINEERING CONSULTANTS
 10000 WOODBRIDGE DRIVE
 FAYETTEVILLE, NC 28404

DATE	BY	CHK	REV	DATE
10/20	10/20			
10/20	10/20			
10/20	10/20			
10/20	10/20			

SHEET NO. S-04
 DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

DATE 10/20

NOTES

SIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR DOMELS.
 THE LATERAL GUIDES ARE NOT TO BE POURED UNTIL AFTER THE CORED SLAB CURE IS IN PLACE.
 THE CONCRETE IN THE SHADED AREA OF THE CAP IS TO BE CAST WITH THE VERTICAL CONCRETE BARRIER RAIL IS CAST IF SLIP FORMING IS USED.
 FOR PILE SPlice DETAILS, SEE SHEET 4 OF 4.
 FOR WING DETAILS, SEE SHEET 3 OF 4.
 THE CONTRACTOR HAS THE OPTION TO OMIT THE LATERAL GUIDE IF APPROVED BY THE ENGINEER.

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

TOP OF PILE ELEVATIONS	
①	2320.51
②	2320.51
③	2320.51
④	2320.51
⑤	2320.51

* ELEVATIONS PROJECTED ALONG & BEARINGS.

PROJECT NO. 17BP-14R-33
 JACKSON COUNTY
 STATION: P.O.C. 13+12.50 -L-
 SHEET 1 OF 4 REPLACES BRIDGE NO. 279

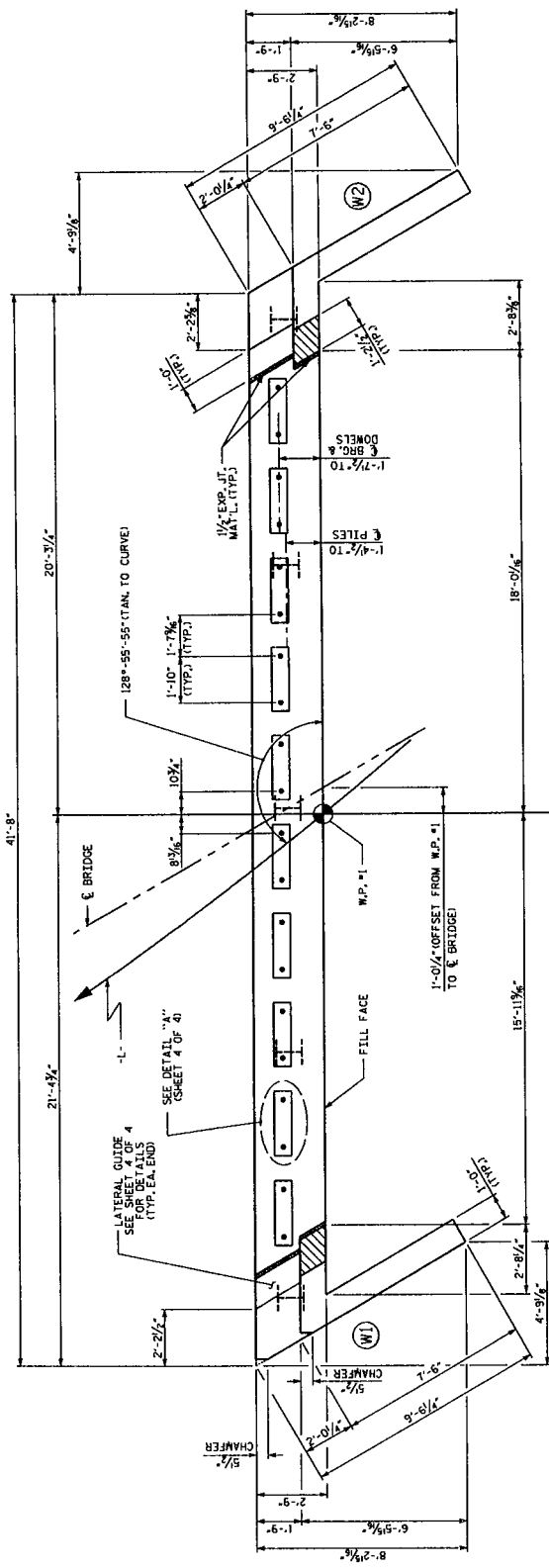


STATE OF MISSISSIPPI
 DEPARTMENT OF TRANSPORTATION

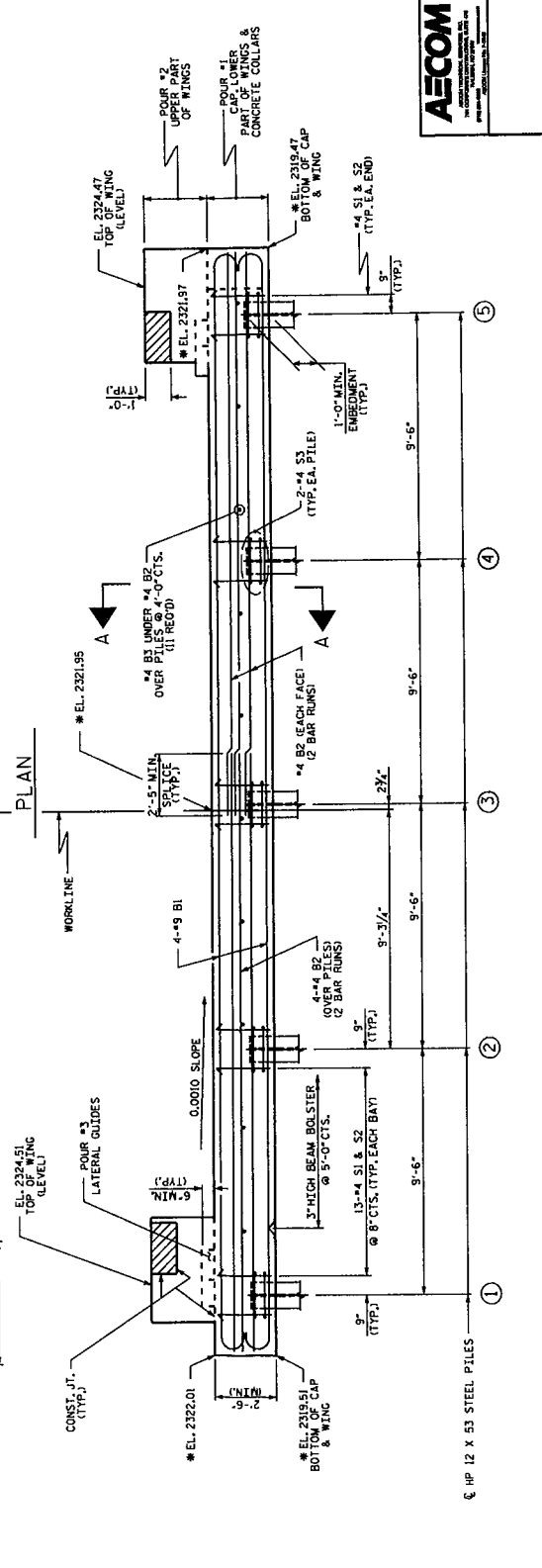
SUBSTRUCTURE
 END BENT NO. 1

REVISIONS	
NO.	DATE
1	02/10/12
2	02/10/12
3	02/10/12
4	02/10/12

SHEET NO. S-08
 DATE 02/10/12
 DRAWN BY JCM
 CHECKED BY JMT
 \$10.00 PER 30 DORS



PLAN



ELEVATION

MINUS NOT SHOWN FOR CLARITY.
 FOR SECTION A-A, SEE SHEET 4 OF 4.
 CONCRETE COLLARS FOR STEEL PILES NOT SHOWN IN PLAN AND ELEVATION VIEWS FOR CLARITY.
 SEE CORROSION PROTECTION FOR STEEL PILES DETAIL, SHEET 4 OF 4.

ASSEMBLED BY: MIB	DATE: 08/12
CHECKED BY: JCM	DATE: 08/12
DRAWN BY: JMT	DATE: 02/10
CHECKED BY: JMT	DATE: 02/10

NOTES

STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR DOWELS.
 THE LATERAL GUIDES ARE NOT TO BE PLACED IN PLACE UNTIL THE CURED SLAB UNITS ARE IN PLACE.
 THE CONCRETE IN THE SANDWICH AREA OF THE CAP SHALL BE Poured AFTER THE VERTICAL CONCRETE BARRIER RAIL IS CAST IF SLIP FORMING IS USED.
 FOR PILE SPlice DETAILS, SEE SHEET 4 OF 4.
 FOR WING DETAILS, SEE SHEET 3 OF 4.
 THE CONTRACTOR HAS THE OPTION TO OMIT THE LATERAL GUIDE IF APPROVED BY THE ENGINEER.

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

TOP OF PILE ELEVATIONS	
①	2319.24
②	2319.04
③	2318.84
④	2318.64
⑤	2318.44

*ELEVATIONS PROJECTED ALONG C & BEARINGS.

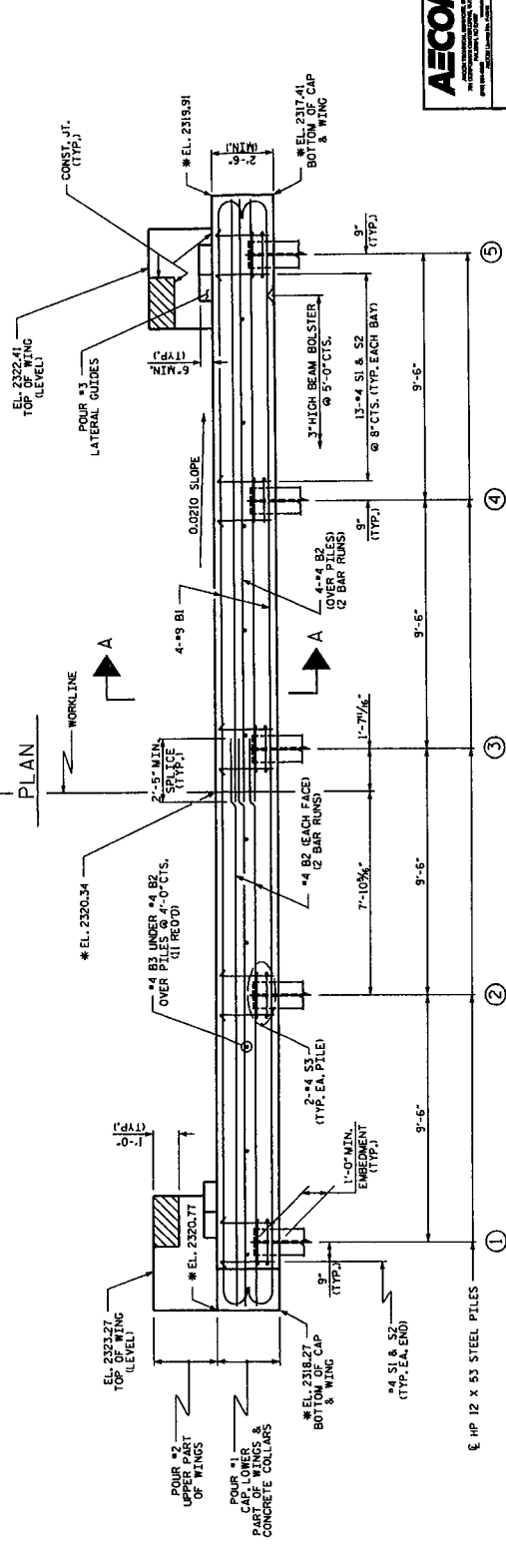
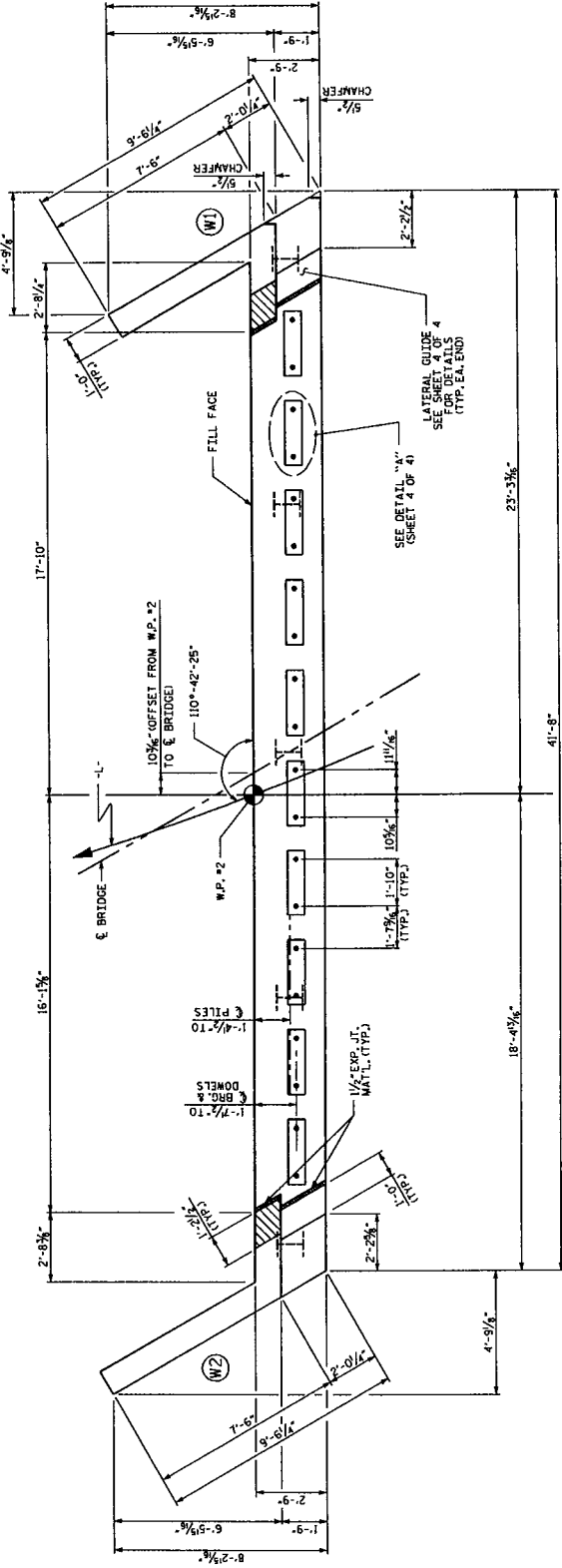
PROJECT NO. 17BP.14.R.33
 JACKSON COUNTY
 STATION: P.O.C. 13+12.50 -L-
 SHEET 2 OF 4 REPLACES BRIDGE NO. 279



STATE OF MISSISSIPPI
 DEPARTMENT OF TRANSPORTATION
 BRIDGE

SUBSTRUCTURE
 END BENT NO. 2

NO.	BY	DATE	REVISIONS
1	JM	08/12	REVISED
2	JM	08/12	REVISED
3	JM	08/12	REVISED
4	JM	08/12	REVISED



ELEVATION

WINGS NOT SHOWN FOR CLARITY.
 FOR SECTION A-A, SEE SHEET 4 OF 4.
 CONCRETE COLLARS FOR STEEL PILES NOT SHOWN IN PLAN AND ELEVATION VIEWS FOR CLARITY.
 SEE CORROSION PROTECTION FOR STEEL PILES DETAIL, SHEET 4 OF 4.

ASSEMBLED BY: MIB
 CHECKED BY: JCM
 DATE: 08/12
 DATE: 08/12

DRAWN BY: JCM
 CHECKED BY: MIB

SHEET NO. 2 OF 4