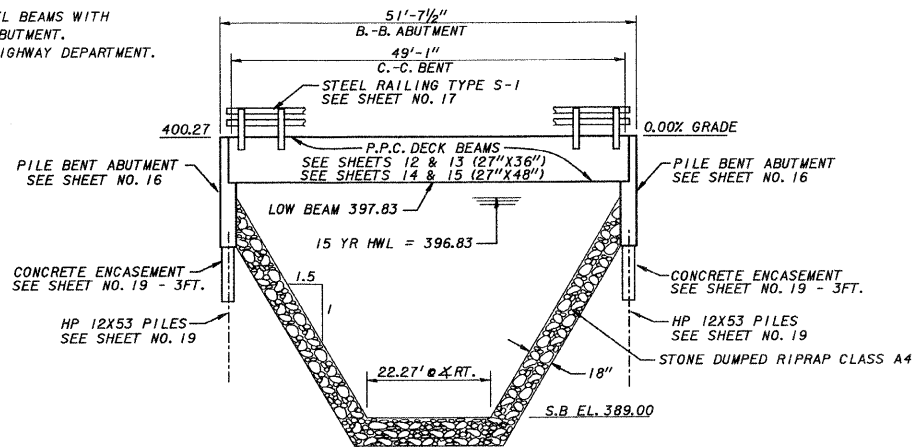


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
T.R. 265	08-01190-00-BR	UNION	19	11
JOB NO. C-99-542-08		PROJECT NO. BROS-16(045)		
LINGLE CREEK ROAD		CONTRACT NO. 99359		

B.M. - 2-60D NAILS SET IN NORTH SIDE OF POWER POLE ± 15' SOUTH OF THE INTERSECTION OF LINGLE CREEK ROAD AND SPRINGVILLE HILL ROAD. CENTERLINE OF IMPROVEMENTS STA. ± 10+62(LCR), ± 16' RT. (ELEV. 397.80)  
 EXISTING STRUCTURE - STA. 9+81 TO 10+19.38' SPAN, 13' WIDTH, STEEL BEAMS WITH TIMBER DECK, TIMBER PILING AND TIMBER ABUTMENT.  
 SALVAGE - STEEL I BEAMS TO BECOME PROPERTY OF UNION COUNTY HIGHWAY DEPARTMENT.



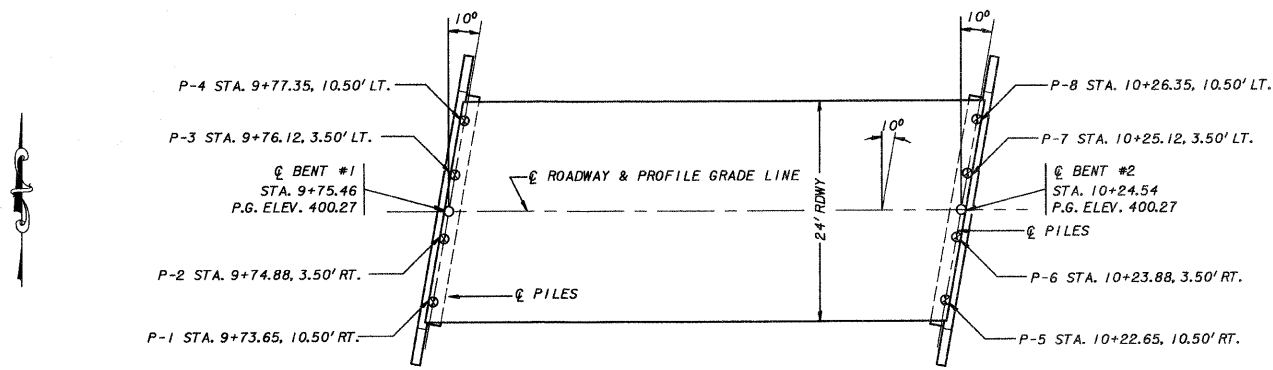
ELEVATION  
(NOT TO SCALE)

GENERAL NOTES

1. THE CONTRACTOR SHALL DRIVE 1 TEST PILES, AS SPECIFIED, IN A PERMANENT LOCATION AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINING PILES.
2. SEE SHEET 18 FOR BORING LOGS.
3. AFTER DECK BEAMS HAVE BEEN SET, THE DECK SURFACE SHALL BE INSPECTED. A WATERPROOFING MEMBRANE SYSTEM AND A BITUMINOUS CONCRETE WEARING SURFACE MAY BE REQUIRED TO PROVIDE A SMOOTH UNIFORM RIDING SURFACE. PAYMENT FOR THIS WORK, IF REQUIRED, WILL BE MADE BY A CHANGE ORDER TO THE CONTRACT.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB.		TOTAL
			PIERS	ABUTS	
REMOVAL OF EXISTING STRUCTURES	EACH				1
STONE DUMPED RIP-RAP, CLASS A-4	TON				300
CONCRETE STRUCTURES	CU. YD.			18.2	18.2
PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ. FT.	1200			1200
STEEL RAILING, TYPE S-1	FOOT	100			100
REINFORCEMENT BARS	POUND			2300	2300
FURNISHING STEEL PILES HP12X53	FOOT			458	458
DRIVING PILES	FOOT			458	458
TEST PILE	EACH			1	1
NAME PLATES	EACH	1			1
CONCRETE ENCASUREMENT	CU. YD.			2.8	2.8



PLAN  
SKEW ANGLE 10°  
NOT TO SCALE

PILE NOTES

1. THE STEEL H-PILES SHALL BE ACCORDING TO AASHTO M-270 GRADE 50.
2. THE TEST PILES SHALL BE DRIVEN TO 110 PERCENT OF THE NOMINAL REQUIRED BEARING INDICATED IN THE PILE DATA INFORMATION.

PILE DATA (2-ABUTS.)

TYPE: STEEL HP 12X53  
 NOMINAL REQUIRED BEARING: 418 kips  
 ALLOWABLE RESISTANCE AVAILABLE: 139 kips  
 ESTIMATED LENGTH (EAST ABUTMENT): 78 FEET EACH  
 ESTIMATED LENGTH (WEST ABUTMENT): 56 FEET EACH  
 NUMBER REQUIRED: 8 (INCLUDES 1 TEST PILE IN ABUTMENT #2)

SEISMIC DATA

SEISMIC PERFORMANCE ZONE (SPZ) = 4  
 DESIGN SPECTRAL ACCELERATION AT 1.0 SEC (S<sub>D1</sub>) = 0.571  
 DESIGN SPECTRAL ACCELERATION AT 0.2 SEC (S<sub>D5</sub>) = 1.273  
 SOIL SITE CLASS = D

LOADING HL93

ALLOW 50 PSF FOR FUTURE WEARING SURFACE.

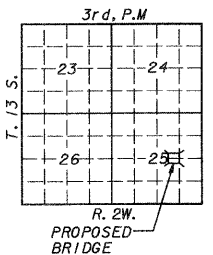
DESIGN SPECIFICATIONS

2007 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS - 4th ED. W/ INTERIMS

LINGLE CREEK  
 SEC. 08-01190-00-BR BUILT 20...  
 TR-265-LINGLE CREEK ROAD  
 UNION COUNTY  
 LOADING HS20  
 STR. NO. 091-3234

LETTERING FOR NAME PLATE

LOCATE NAME PLATE AT NORTHEAST CORNER OF BRIDGE (SEE SHEET NO. 18)



LOCATION SKETCH

INDEX OF SHEETS

11. GENERAL PLAN AND ELEVATION
12. 27" X 36" PPC DECK BEAM
13. 27" X 36" PPC DECK BEAM DETAILS
14. 27" X 48" PPC DECK BEAM
15. 27" X 48" PPC DECK BEAM DETAILS
16. P.P.C. DECK BEAM - PILE BENT ABUTMENT 24' ROADWAY - 27" BEAMS - 10° SKEW
17. STEEL RAILING, TYPE S1 AND CURLED END SECTION DETAILS
18. NAME PLATE AND SOIL BORING LOGS
19. HP PILE DETAILS

STRUCTURAL CERTIFICATION

I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE REVISED STANDARD DETAIL SHEETS AND/OR SPECIAL COMPONENT SHEETS INCLUDED WITH THE STANDARD BRIDGE DETAIL SHEETS ARE STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS AND COMPLY WITH THE REQUIREMENTS OF THE CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.

DATE: 6/18/10  
 ZEYN B. UZMAN  
 S.E. #81-4745  
 EXPIRES NOV. 30, 2010



WATERWAY INFORMATION

DRAINAGE AREA = 5.3 SQ. MI.		LOW GRADE ELEV. = 397.83 @ STA. 10+00					
FLOOD YR.	FREQ.	Q	OPENING SQ. FT.	NAT. HEAD - FT.	EXIST. PROP.	EXIST. PROP.	EXIST. PROP.
DESIGN	15	2250	220	266.5	396.73	0.05	0.10
BASE	100	3605	220	289.8	397.20	0.02	0.14
OVERTOPPING							
MAX. CALC.	500	1323					