

PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

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SD-501.00	CONCRETE DETAILS AND NOTES				6/4/2010																		
SD-502.00	CONCRETE DETAILS AND NOTES				6/4/2010																		
SD-516.10	BRIDGE JOINT ASPHALTIC PLUG				6/4/2010																		
						TRAFFIC DATA																	
YEAR	ADT	DHV	% D	% T	ADTT	20 year ESAL for flexible pavement from 2015 to 2035	2064000																
2015	4000	450	52	5.8	250	40 year ESAL for flexible pavement from 2015 to 2055	4920000																
2035	4200	470	52	8.9	410	Design Speed :	30 mph																
						AS BUILT "REBAR" DETAIL																	
LEVEL I		LEVEL II		LEVEL III																			
TYPE:		TYPE:		TYPE:																			
GRADE:		GRADE:		GRADE:																			
						LRFR LOAD RATING FACTORS																	
						TRUCK																	
LOADING LEVELS	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEMI																
TONNAGE	20	36	36	66	30	34.5	38																
INVENTORY	2.03	1.1																					
POSTING																							
OPERATING	2.85	1.46	2.77	1.85	2.39	2.14	2.35																
COMMENTS:	The exterior beam controls the rating.																						
						PILE DRIVING AND TESTING REQUIREMENTS																	
						1. NOMINAL PILE DRIVING CAPACITY R_{pd} : *																	
						2. PILE TEST RESISTANCE FACTOR ϕ : 0.65																	
						3. MAXIMUM PILE TIP ELEVATION *																	
						4. A MINIMUM OF 3 DYNAMIC TESTS SHALL BE PERFORMED DURING INSTALLATION. NO LESS THAN 1 TEST SHOULD BE PERFORMED AT EACH ABUTMENT. THE REMAINING SHOULD BE CALIBRATED BY WAVE EQUATION ANALYSIS.																	
						TRAFFIC MAINTENANCE NOTES																	
						1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.																	
						2. TRAFFIC SIGNALS ARE NOT NECESSARY.																	
						3. SIDEWALKS ARE NOT NECESSARY																	
						DESIGN VALUES																	
						1. DESIGN LIVE LOAD						HL-93											
						2. FUTURE PAVEMENT						d_p : 0.0 INCH											
						3. DESIGN SPAN						L : 67.30 FT											
						4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) Δ :						2.15 INCH											
						5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX) f_y :						270 KSI											
						6. PRESTRESSED CONCRETE STRENGTH f'_c :						10.0 KSI											
						7. PRESTRESSED CONCRETE RELEASE STRENGTH f'_{ci} :						7.5 KSI											
						8. CONCRETE, HIGH PERFORMANCE CLASS AA f'_c :						---											
						9. CONCRETE, HIGH PERFORMANCE CLASS A f'_c :						---											
						10. CONCRETE, HIGH PERFORMANCE CLASS B f'_c :						---											
						11. CONCRETE, CLASS C f'_c :						---											
						12. REINFORCING STEEL f_y :						60 KSI											
						13. STRUCTURAL STEEL AASHTO M270 f_y :						---											
						14. SOIL UNIT WEIGHT γ :						0.140 KCF											
						15. NOMINAL BEARING RESISTANCE OF SOIL q_n :						---											
						16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) ϕ :						---											
						17. NOMINAL BEARING RESISTANCE OF ROCK q_n :						---											
						18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) ϕ :						---											
						19. NOMINAL AXIAL PILE RESISTANCE q_p :						---											
						20. PILE YIELD STRENGTH ASTM A572 f_y :						50 KSI											
						21. PILE SIZE						HP 12x63											
						22. EST. PILE LENGTH L_p :						75 FT											
						23. PILE RESISTANCE FACTOR ϕ :						0.65											
						24. LATERAL PILE DEFLECTION Δ :						---											
						25. BASIC WIND SPEED V_{3s} :						---											
						26. MINIMUM GROUND SNOW LOAD p_g :						---											
						27. SEISMIC DATA PGA :						---											
												S_1 : ---											
						* - SEE PROJECT NOTES																	
						PROJECT NAME: CASTLETON																	
						PROJECT NUMBER: BRF 015-2(10)																	
						FILE NAME: z12b138pi.dgn						PLOT DATE: 10/23/2014											
						PROJECT LEADER: S.E. BURBANK						DRAWN BY: E.A. FIALA											
						DESIGNED BY: E.A. FIALA						CHECKED BY: S.E. BURBANK											
						PRELIMINARY INFORMATION SHEET						SHEET 2 OF 82											

