

PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

INDEX OF SHEETS		STANDARDS LIST		FINAL HYDRAULIC REPORT	
PLAN SHEETS				HYDROLOGIC DATA Date: March 2012	
1	TITLE SHEET	C-2A	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES WITH SIDEWALK A	10-14-2005	DRAINAGE AREA : 33.4 sq. mi. CHARACTER OF TERRAIN : Hilly to mountainous, mostly forested with some open areas STREAM CHARACTERISTICS : Sinuous and alluvial. Currently flood damaged and unstable. NATURE OF STREAMBED : Mostly cobbles with some gravel and boulders
2	PRELIMINARY INFORMATION SHEET (BRIDGE)	C-10	CURBING	02-11-2008	
3	PRELIMINARY INFORMATION SHEET (BOX CULVERT)	D-1	PRECAST REINFORCED CONCRETE DROP INLET DETAILS	06-01-1994	PEAK FLOW DATA Q 2.33 = 2,400 cfs Q 50 = 9,300 cfs Q 10 = 5,100 cfs Q 100 = 11,500 cfs Q 25 = 7,200 cfs Q 500 = 19,000 cfs
4	GENERAL NOTES	E-100	CONSTRUCTION APPROACH SIGNS	01-02-2004	
5 - 7	QUANTITY SHEET 1-3	E-100A	SIDE ROAD CONSTRUCTION - APPROACH SIGNS	01-02-2004	DATE OF FLOOD OF RECORD : Unknown ESTIMATED DISCHARGE : Unknown WATER SURFACE ELEV. : Unknown NATURAL STREAM VELOCITY : @ Q50 = 18.1 fps ICE CONDITIONS : Moderate DEBRIS : Moderate DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? : Yes IS ORDINARY RISE RAPID? : Yes IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? : No IF YES, DESCRIBE :
8	BRIDGE QUANTITY SHEET	E-101	CONSTRUCTION SIGN DETAILS	05-30-2003	
9 - 10	TYPICAL SECTIONS 1-2	E-102	CONSTRUCTION SIGN DETAILS	06-30-2003	WATERSHED STORAGE : < 1% HEADWATERS : UNIFORM : X IMMEDIATELY ABOVE SITE :
11	TIE SHEET	E-102A	CONSTRUCTION SIGN DETAILS	05-01-2004	
12	ALIGNMENT	E-107	DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS	06-30-2003	EXISTING STRUCTURE INFORMATION STRUCTURE TYPE : Two span steel beam bridge with concrete deck. Removed in 2011. YEAR BUILT : Built in 1936 and widened in 1979 CLEAR SPAN(NORMAL TO STREAM) : Two 55' clear spans = 110' total clear span VERTICAL CLEARANCE ABOVE STREAMBED : 14' maximum on upstream side WATERWAY OF FULL OPENING : 1040 sq. ft. DISPOSITION OF STRUCTURE : It has been removed. TYPE OF MATERIAL UNDER SUBSTRUCTURE : See boring logs.
13 - 14	LAYOUT 1-2	E-107A	BREAKAWAY BARRICADE DETAILS	06-08-2009	
15 - 16	MAINLINE PROFILE 1-2	E-121	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD	08-08-1995	WATER SURFACE ELEVATIONS AT: Q2.33 = 723.7' VELOCITY = 9.9 fps Q10 = 726.0' " 13.9 fps Q25 = 727.4' " 14.0 fps Q50 = 728.6' " 15.2 fps Q100 = 729.6' " 16.3 fps
17	FIRE DRIVE & WATER STREET PROFILES	E-134	BRIDGE NUMBER PLAQUE	08-08-1995	
18	BOX CULVERT PROFILE	E-140	REGULATORY SIGN DETAILS	08-30-1996	LONG TERM STREAMBED CHANGES : Up to 6' of channel degradation and scour from 1936 to 2007. Recent flooding changed the river and future changes are expected.
19	DRAINAGE PIPE PROFILE	E-141	REGULATORY SIGN DETAILS	09-20-1995	
20	DRAINAGE DETAIL SHEET	E-143	REGULATORY SIGN DETAILS	06-15-2004	IS THE ROADWAY OVERTOPPED BELOW Q100: No FREQUENCY: Above Q100 RELIEF ELEVATION: 729.5' within project survey limits DISCHARGE OVER ROAD @Q100: None
21 - 22	SIGN & PAVEMENT MARKINGS 1-2	E-152	WARNING SIGN DETAILS	05-01-2004	
23	PROPOSED UTILITY LAYOUT	E-154	WARNING SIGN DETAILS	05-01-2004	TEMP. IN PLACE
24	RAIL LAYOUT	E-164	SQUARE STEEL SIGN POST	06-08-2009	
25	BRIDGE RAIL DETAILS	E-191	PAVEMENT MARKING DETAILS	02-01-1999	DESIGN VALUES 1. DESIGN LIVE LOAD : HL-93 2. FUTURE PAVEMENT : dp: 3.0 INCH 3. DESIGN SPAN : L: 130.00 FT 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) : Δ: --- 5. PRESTRESSING STRAND : fy: --- 6. PRESTRESSED CONCRETE STRENGTH : f'c: 6.0 KSI 7. PRESTRESSED CONCRETE RELEASE STRENGTH : f'cr: 5.0 KSI 8. CONCRETE, HIGH PERFORMANCE CLASS AA : f'c: 4.0 KSI 9. CONCRETE, HIGH PERFORMANCE CLASS A : f'c: 4.0 KSI 10. CONCRETE, HIGH PERFORMANCE CLASS B : f'c: 3.5 KSI 11. CONCRETE, CLASS C : f'c: 3.0 KSI 12. REINFORCING STEEL : fy: 60 KSI 13. STRUCTURAL STEEL AASHTO M270 (WEATHERING) : fy: 50 KSI 14. SOIL UNIT WEIGHT : γ: 0.140 KCF 15. NOMINAL BEARING RESISTANCE OF SOIL : qn: 4.0 KSF 16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) : φ: --- 17. NOMINAL BEARING RESISTANCE OF ROCK : qn: 10.0 KSF 18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) : φ: --- 19. NOMINAL AXIAL PILE RESISTANCE : qp: SEE GEN. NOTES 20. PILE YIELD STRENGTH ASTM A572 : fy: 50 KSI 21. PILE SIZE : HP 12X 84 22. EST. PILE LENGTH : Lp: --- 23. PILE RESISTANCE FACTOR : φ: --- 24. LATERAL PILE DEFLECTION : Δ: --- 25. BASIC WIND SPEED : V3s: --- 26. MINIMUM GROUND SNOW LOAD : pg: --- 27. SEISMIC DATA : PGA: --- Ss: --- Sf: ---
26	APPROACH RAIL WW1 AND WW3	E-193	PAVEMENT MARKING DETAILS	08-18-1995	
27	APPROACH RAIL WW2 AND WW4	G-1B	BOX BEAM GUARD RAIL	06-01-1994	
28 - 29	APPROACH RAIL DETAILS 1-2	S-352A	BRIDGE RAILING, GALVANIZED STEEL TUBING/CONCRETE COMBINATION	08-22-2012	ADDITIONAL INFORMATION Existing bridge hydraulics based on the former bridge geometry placed on new post-flood survey. That may not represent the actual pre-flood existing bridge conditions, but it provides an accurate comparison between the former bridge and proposed bridge.
30	BORING LAYOUT SHEET	S-352B	BRIDGE RAILING, GALVANIZED STEEL TUBING/CONCRETE COMBINATION	08-22-2012	
31 - 33	BORING LOGS 1-3	S-352C	BRIDGE RAILING, GALVANIZED STEEL TUBING/CONCRETE COMBINATION	08-22-2012	PILE DRIVING AND TESTING REQUIREMENTS 1. NOMINAL PILE DRIVING CAPACITY : f'pd: SEE GEN. NOTES 2. PILE TEST RESISTANCE FACTOR : φ: 0.65 3. MAXIMUM PILE TIP ELEVATION : SEE GEN. NOTES 4. A MINIMUM OF 3 DYNAMIC TESTS SHALL BE PERFORMED DURING INSTALLATION. NO LESS THAN 1 TEST SHALL BE PERFORMED AT EACH ABUTMENT. THE REMAINING PILES SHALL BE CALIBRATED BY WAVE EQUATION ANALYSIS.
34	DECK REINFORCING PLAN				
35	FRAMING PLAN & GIRDER ELEVATION				TRAFFIC DATA YEAR ADT DHV % D % T ADTT 2013 2700 440 53 9 240 2033 2900 480 53 14.5 410
36	CAMBER & DEFLECTION				
37	BEARING DETAILS				AS BUILT "REBAR" DETAIL LEVEL I LEVEL II LEVEL III TYPE: TYPE: TYPE: GRADE: GRADE: GRADE:
38	APPROACH SLAB DETAILS				
39 - 40	ABUTMENTS 1-2				STRUCTURES DETAILS SD-501.00 CONCRETE DETAILS AND NOTES 04-07-2010 SD-502.00 CONCRETE DETAILS AND NOTES 05-04-2010 SD-516.10 BRIDGE JOINT ASPHALTIC PLUG 04-07-2010 SD-601.00 STRUCTURAL STEEL DETAILS & NOTES 05-04-2010 SD-602.00 STRUCTURAL STEEL PLATE GIRDER DETAILS AND NOTES 04-02-2011
41 - 42	WINGWALLS 1-2				
43	BOX LAYOUT				
44	EPSC NARRATIVE				
45 - 46	EPSC EXISTING CONDITIONS SHEET 1-2				
47 - 48	EPSC DURING CONSTRUCTION SHEET 1-2				
49 - 50	EPSC FINAL CONDITIONS SHEET 1-2				
51 - 53	EPSC DETAILS 1-3				
54 - 55	MATERIAL TRANSITION / BANKING DIAGRAMS 1-2				
56 - 61	MAINLINE SECTIONS 1-6				
62 - 63	WATER STREET SECTIONS 1-2				
64 - 65	FIRE DRIVE SECTIONS 1-2				
66 - 69	BOX CULVERT SECTIONS 1-4				
70 - 79	CHANNEL SECTIONS 1-10				
80	ROW DETAIL SHEET				
81 - 82	ROW LAYOUT SHEETS 1-2				