

# PRELIMINARY INFORMATION SHEET (BRIDGE)

## LRFD

INDEX OF SHEETS						FINAL HYDRAULIC REPORT																	
<b>PLAN SHEETS</b>						<b>STANDARDS LIST</b>						<b>HYDROLOGIC DATA</b>						<b>PROPOSED STRUCTURE</b>					
1	TITLE SHEET	B-5	SLOPE GRADING, EMBANKMENTS, MUCK	06-01-1994	DATE: 4/17/2013 DRAINAGE AREA: 8.0 sq. mi. CHARACTER OF TERRAIN: HILLY TO MOUNTAINOUS VALLEY SETTING STREAM CHARACTERISTICS: CHANNELIZED SINUOUS, LITTLE TO NO FLOODPLAIN NATURE OF STREAMBED: SAND AND GRAVEL						STRUCTURE TYPE: SINGLE SPAN STEEL GIRDER CLEAR SPAN (NORMAL TO STREAM): 122.0 FT VERTICAL CLEARANCE ABOVE STREAMBED: 29.3 FT WATERWAY OF FULL OPENING: 2364 SQ.FT												
2	PRELIMINARY INFORMATION SHEET	C-10	CURBING	02-11-2008	Q 2.33 = 400 CFS      Q50 = 1450 CFS Q 10 = 900 CFS      Q 100 = 1700 CFS Q 25 = 1170 CFS      Q 500 = 2280 CFS						WATER SURFACE ELEVATIONS AT: ONE BRIDGE LENGTH UPSTREAM Q 2.33 = 607.0 FT      VELOCITY = 8.7 FT/SEC Q 10 = 608.4 FT      "      11.8 FT/SEC Q 25 = 608.9 FT      "      13.1 FT/SEC Q50 = 609.5 FT      "      14.3 FT/SEC Q 100 = 609.9 FT      "      15.1 FT/SEC												
3	TYPICAL ROADWAY SECTIONS	E-121	STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD	08-08-1995	DATE OF FLOOD OF RECORD: UNKNOWN ESTIMATED DISCHARGE: UNKNOWN WATER SURFACE ELEVATION: UNKNOWN NATURAL STREAM VELOCITY: 6.9 FPS AT Q50 = 1450 CFS ICE CONDITIONS: LOW DEBRIS: LOW TO MODERATE DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? NO IS ORDINARY RISE RAPID? NO IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? NO IF YES, DESCRIBE N/A						IS THE ROADWAY OVERTOPPED BELOW Q100? No FREQUENCY: >Q500 RELIEF ELEVATION: 632.0 +/- DISCHARGE OVER ROAD @ Q100: N/A AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 628.9 FT VERTICAL CLEARANCE: 19.4 FT @ Q50												
4	BRIDGE & EARTHWORK TYPICAL SECTIONS	E-134	BRIDGE NUMBER PLAQUE	08-08-1995	WATERSHED STORAGE: 7%      HEADWATERS: - UNIFORM: X IMMEDIATELY ABOVE SITE: -						SCOUR: CONTRACTION SCOUR FOR Q100 IS 2.3 FT (Q500 IS 3.3 FT) REQUIRED CHANNEL PROTECTION: 4 FT THICK, STONE FILL, TYPE IV												
5	PROJECT NOTES	E-142	REGULATORY SIGN DETAILS	09-20-1995	<b>EXISTING STRUCTURE INFORMATION</b>						<b>PERMIT INFORMATION</b>												
6 - 8	QUANTITY SHEETS	E-193	PAVEMENT MARKING DETAILS	08-18-1995	STRUCTURE TYPE: 15 FT DIAMETER CMPP YEAR BUILT: 1959 CLEAR SPAN (NORMAL TO STREAM): 15 FT VERTICAL CLEARANCE ABOVE STREAMBED: 15 FT WATERWAY OF FULL OPENING: 177 SQ.FT DISPOSITION OF STRUCTURE: COMPLETE REMOVAL TYPE OF MATERIAL UNDER SUBSTRUCTURE: SAND AND GRAVEL						AVERAGE DAILY FLOW: 20 CFS      DEPTH OR ELEVATION: ORDINARY LOW WATER: 10 CFS      603.9 FT ORDINARY HIGH WATER: 180 CFS      606.9 FT												
9	BRIDGE QUANTITY SHEET	G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS)	01-03-2000	<b>TEMPORARY BRIDGE REQUIREMENTS</b>						<b>ADDITIONAL INFORMATION</b>												
10	EARTHWORK SHEET	G-1D	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIUM)	01-03-2000	WATER SURFACE ELEVATIONS AT: UPSTREAM END OF CULVERT Q 2.33 = 609.2 FT      VELOCITY = 20.8 FT/SEC Q 10 = 613.0 FT      "      24.8 FT/SEC Q 25 = 614.8 FT      "      26.2 FT/SEC Q50 = 616.4 FT      "      27.3 FT/SEC Q 100 = 617.8 FT      "      28.1 FT/SEC						STRUCTURE TYPE: N/A CLEAR SPAN (NORMAL TO STREAM): N/A VERTICAL CLEARANCE ABOVE STREAMBED: N/A WATERWAY AREA OF FULL OPENING: N/A												
11	TIE SHEET	G-4	PLANK RAIL, GUIDE POSTS, MARKER POSTS	06-01-1994	<b>TRAFFIC MAINTENANCE NOTES</b>						<b>DESIGN VALUES</b>												
12	LAYOUT SHEET	G-19	GENERIC GRADING PLANS FOR GUARDRAIL END TERMINALS	11-15-2002	1. MAINTAIN TWO-WAY TRAFFIC USING TEMPORARY ROADWAY AND EXISTING AND PROPOSED STRUCTURES. 2. SIDEWALKS ARE NOT NECESSARY						1. DESIGN LIVE LOAD HL-93 2. FUTURE PAVEMENT dp: 2.5 INCH 3. DESIGN SPAN L: 128.00 FT 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) Δ: 0.00 INCH 5. PRESTRESSING STRAND (0.375 INCH DIAMETER - LOW RELAX) fy: 270 KSI 6. PRESTRESSED CONCRETE STRENGTH f'c: 5.0 KSI 7. PRESTRESSED CONCRETE RELEASE STRENGTH f'cr: 4.0 KSI 8. CONCRETE, HIGH PERFORMANCE CLASS AA f'c: --- 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: --- 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: --- 16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: --- 17. NOMINAL BEARING RESISTANCE OF ROCK qn: --- 18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: --- 19. NOMINAL AXIAL PILE RESISTANCE qp: 585.0 KIPS 20. PILE YIELD STRENGTH ASTM A572 fy: 50 KSI 21. PILE SIZE HP 12X74 22. EST. PILE LENGTHS (TWO SUBSTRUCTURES) (ABUTMENT 1 = 27 AND ABUTMENT 2 = 21) FT Lp: --- 23. PILE RESISTANCE FACTOR φ: 0.65 24. LATERAL PILE DEFLECTION Δ: 0.50 INCH 25. BASIC WIND SPEED V3s: 100 MPH 26. MINIMUM GROUND SNOW LOAD pg: --- 27. SEISMIC DATA PGA: 9 %g      Ss: 19 %g      S1: 6 %g												
13	VT 15 PROFILE SHEET	S-360a	BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM	04-23-2012	<b>LRFR LOAD RATING FACTORS</b>						<b>PILE DRIVING AND TESTING REQUIREMENTS</b>												
14	MAINTENANCE OF TRAFFIC - NOTES	S-360b	GUARDRAIL APPROACH SECTION, GALVANIZED 2 RAIL BOX BEAM	04-23-2012	TOWN: HYDE PARK      DISTANCE: 1 MI HIGHWAY #: SILVER RIDGE ROAD      STRUCTURE #: N/A CLEAR SPAN: UNKNOWN      CLEAR HEIGHT: UNKNOWN YEAR BUILT: UNKNOWN      FULL WATERWAY: UNKNOWN STRUCTURE TYPE: CULVERT						1. NOMINAL PILE DRIVING CAPACITY RFD: 585.00 KIP 2. PILE TEST RESISTANCE FACTOR φ: 0.65 3. MAXIMUM PILE TIP ELEVATION See Below 4. PILES SHALL BE DRIVEN A MINIMUM OF 18 FT BELOW BOTTOM OF ABUTMENT ELEVATIONS, REGARDLESS IF REQUIRED DRIVING RESISTANCE HAS BEEN MET.												
15	MAINTENANCE OF TRAFFIC PLAN, PHASE 1	T-1	TRAFFIC CONTROL GENERAL NOTES	08-06-2012	<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
16	MAINTENANCE OF TRAFFIC PLAN, PHASE 2	T-17	TRAFFIC CONTROL MISCELLANEOUS DETAILS	08-06-2012	LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
17	MAINTENANCE OF TRAFFIC PLAN, PHASE 2A	T-24	TRAFFIC CONTROL FOR MAINTENANCE PAVEMENT MARKING OPERATION	08-06-2012	<b>TEMPORARY BRIDGE PROFILE ALONG TEMP CL</b>						<b>TRAFFIC DATA</b>												
18	MAINTENANCE OF TRAFFIC PLAN, PHASE 2B	T-28	CONSTRUCTION SIGN DETAILS	08-06-2012	BOTTOM OF BEAMS ELEV. = 0.00 FT						20 year ESAL for flexible pavement from 2015 to 2035 : 3856000 40 year ESAL for flexible pavement from 2015 to 2055 : 8904000 Design Speed : 50 mph												
19	MAINTENANCE OF TRAFFIC SECTIONS, PHASE 2	T-29	CONSTRUCTION SIGN DETAILS	08-06-2012	<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
20	MAINTENANCE OF TRAFFIC PLAN, PHASE 3	T-30	CONSTRUCTION SIGN DETAILS	08-06-2012	LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
21	MAINTENANCE OF TRAFFIC SECTIONS, PHASE 3	T-35	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS	08-06-2012	<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
22	MAINTENANCE OF TRAFFIC SECTIONS, PHASE 3	T-36	CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS FOR PAVING	08-06-2012	LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
23	CONSTRUCTION APPROACH SIGNING	T-40	DELINEATORS AND MILEPOSTS	01-02-2013	<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
24	BORING INFORMATION & LAYOUT SHEET	T-45	SQUARE TUBE SIGN POST AND ANCHOR	01-02-2013	LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
25 - 28	BORING LOGS				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
29	BRIDGE PLAN & ELEVATION				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
30	SUPERSTRUCTURE PLAN & SECTIONS				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
31	PRECAST CONCRETE DECK PANEL DETAILS				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
32	FRAMING PLAN AND GIRDER ELEVATION				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
33	STEEL GIRDER DETAILS				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
34	ABUTMENT 1 - PLAN & ELEVATION				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
35	ABUTMENT 1 - REINFORCEMENT				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
36	ABUTMENT 2 - PLAN & ELEVATION				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
37	ABUTMENT 2 - REINFORCEMENT				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
38	ABUTMENT SECTIONS				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
39	APPROACH SLAB DETAILS				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
40	REINFORCING STEEL SCHEDULE				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
41 - 42	ROADWAY CROSS SECTIONS				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
43 - 47	CHANNEL CROSS SECTIONS				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
48 - 49	RESOURCE LAYOUT PLAN				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
50	EPSC NARRATIVE				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
51 - 52	EPSC EXISTING CONDITIONS SITE PLAN				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
53 - 54	EPSC CONSTRUCTION SITE PLAN				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
55 - 56	EPSC FINAL CONDITIONS SITE PLAN				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												
57 - 59	EPSC DETAILS				<b>AS BUILT "REBAR" DETAILS</b>						<b>TRAFFIC DATA</b>												
60	UTILITY RELOCATION PLAN				LEVEL I      LEVEL II      LEVEL III TYPE:      TYPE:      TYPE: GRADE:      GRADE:      GRADE:						YEAR      ADT      DHV      % D      % T      ADTT 2014      9900      1100      59      6.8      740 2034      10500      1200      59      11      1300												

