

# PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

INDEX OF SHEETS						FINAL HYDRAULIC REPORT																																																			
PLAN SHEETS			STANDARDS LIST			HYDROLOGIC DATA						PROPOSED STRUCTURE																																													
<div style="border: 1px solid black; border-radius: 50%; padding: 10px; margin: 10px auto; width: 80%;"> <p>⚠ REVISION SHEETS: JUNE 11, 2014</p> <p>152 BR 16 CURTAIN WALL DETAILS (2 OF 2)</p> <p>156 BR 16 ABUTMENT NO 1 PLAN &amp; ELEVATION</p>   <p>⚠ REVISION SHEETS: JUNE 19, 2014</p> <p>122 BR 16 PRELIMINARY INFORMATION SHEET</p> <p>125 BR 16 TYPICAL EARTHWORK SECTIONS</p> <p>150 BR 16 NEXT BEAM DETAILS (3 OF 3)</p> <p>154 BR 16 PRECAST APPROACH SLAB (1 OF 2)</p> </div>						<p>DATE: October 2012</p> <p>DRAINAGE AREA: 6.0 sq. mi.</p> <p>CHARACTER OF TERRAIN: Mountainous, forested, steep</p> <p>STREAM CHARACTERISTICS: Incised, semi-alluvial</p> <p>NATURE OF STREAMBED: Cobbles and gravel</p> <p>PEAK FLOW DATA</p> <table style="width:100%;"> <tr> <td>Q 2.33 = 400 cfs</td> <td>Q 50 = 1400 cfs</td> </tr> <tr> <td>Q 10 = 860 cfs</td> <td>Q 100 = 1650 cfs</td> </tr> <tr> <td>Q 25 = 1150 cfs</td> <td>Q 500 = 2300 cfs</td> </tr> </table> <p>ESTIMATED DISCHARGE: Unknown</p> <p>WATER SURFACE ELEV.: Unknown</p> <p>NATURAL STREAM VELOCITY: @ 50 = 11.4 fps</p> <p>ICE CONDITIONS: Moderate</p> <p>DEBRIS: Moderate</p> <p>DOES THE STREAM REACH MAXIMUM HIGH-WATER ELEV. RAPIDLY? No</p> <p>IS ORDINARY RISE RAPID? No</p> <p>IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No</p> <p>IF YES, DESCRIBE:</p> <p>WATERSHED STORAGE: &lt;1% HEADWATERS: _____</p> <p>UNIFORM: X</p> <p>IMMEDIATELY ABOVE SITE: _____</p> <p>EXISTING STRUCTURE INFORMATION</p> <p>STRUCTURE TYPE: Concrete T-beam</p> <p>YEAR BUILT: 1929</p> <p>CLEAR SPAN(NORMAL TO STREAM): 18'</p> <p>VERTICAL CLEARANCE ABOVE STREAMBED: 8'</p> <p>WATERWAY OF FULL OPENING: 150 sq. ft.</p> <p>DISPOSITION OF STRUCTURE: Replace</p> <p>TYPE OF MATERIAL UNDER SUBSTRUCTURE: See borings</p> <p>WATER SURFACE ELEVATIONS AT:</p> <table style="width:100%;"> <tr> <td>Q2.33 = 945.8'</td> <td>VELOCITY = 9.0 fps</td> </tr> <tr> <td>Q10 = 947.7'</td> <td>" 11.5 fps</td> </tr> <tr> <td>Q25 = 948.6'</td> <td>" 12.8 fps</td> </tr> <tr> <td>Q50 = 950.5'</td> <td>" 13.6 fps</td> </tr> <tr> <td>Q100 = 951.5'</td> <td>" 14.3 fps</td> </tr> </table> <p>LONG TERM STREAMBED CHANGES: None noted</p> <p>IS THE ROADWAY OVERTOPPED BELOW Q100: No</p> <p>FREQUENCY: N/A</p> <p>RELIEF ELEVATION: 952.6'</p> <p>DISCHARGE OVER ROAD @Q100: N/A</p> <p>UPSTREAM STRUCTURE</p> <p>TOWN: Rochester DISTANCE: 1900'</p> <p>HIGHWAY #: TH 40 (NFS 226) STRUCTURE #: _____</p> <p>CLEAR SPAN: 23.5' CLEAR HEIGHT: ~7.5'</p> <p>YEAR BUILT: _____ FULL WATERWAY: _____</p> <p>STRUCTURE TYPE: I-beam bridge with wood deck</p> <p>DOWNSTREAM STRUCTURE</p> <p>TOWN: Rochester DISTANCE: 900'</p> <p>HIGHWAY #: _____ STRUCTURE #: _____</p> <p>CLEAR SPAN: _____ CLEAR HEIGHT: _____</p> <p>YEAR BUILT: _____ FULL WATERWAY: _____</p> <p>STRUCTURE TYPE: Confluence with West Branch White River</p>						Q 2.33 = 400 cfs	Q 50 = 1400 cfs	Q 10 = 860 cfs	Q 100 = 1650 cfs	Q 25 = 1150 cfs	Q 500 = 2300 cfs	Q2.33 = 945.8'	VELOCITY = 9.0 fps	Q10 = 947.7'	" 11.5 fps	Q25 = 948.6'	" 12.8 fps	Q50 = 950.5'	" 13.6 fps	Q100 = 951.5'	" 14.3 fps	<p>STRUCTURE TYPE: Single span prestressed concrete NEXT beam</p> <p>CLEAR SPAN(NORMAL TO STREAM): 46'</p> <p>VERTICAL CLEARANCE ABOVE STREAMBED: 8.5'</p> <p>WATERWAY OF FULL OPENING: 315 sq. ft.</p> <p>WATER SURFACE ELEVATIONS AT:</p> <table style="width:100%;"> <tr> <td>Q2.33 = 945.0'</td> <td>VELOCITY = 9.4 fps</td> </tr> <tr> <td>Q10 = 946.5'</td> <td>" 10.7 fps</td> </tr> <tr> <td>Q25 = 947.3'</td> <td>" 11.0 fps</td> </tr> <tr> <td>Q50 = 947.9'</td> <td>" 11.4 fps</td> </tr> <tr> <td>Q100 = 948.4'</td> <td>" 12.0 fps</td> </tr> </table> <p>IS THE ROADWAY OVERTOPPED BELOW Q100: No</p> <p>FREQUENCY: N/A</p> <p>RELIEF ELEVATION: 952.6'</p> <p>DISCHARGE OVER ROAD @Q100: N/A</p> <p>AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 950.6'</p> <p>VERTICAL CLEARANCE: @ Q50 = 2.7'</p> <p>SCOUR: Contraction scour = 2.0' up to Q500</p> <p>REQUIRED CHANNEL PROTECTION: Stone Fill, Type IV</p> <p>PERMIT INFORMATION</p> <p>AVERAGE DAILY FLOW: 12 cfs DEPTH OR ELEVATION: _____</p> <p>ORDINARY LOW WATER: 6 cfs ~0.5'</p> <p>ORDINARY HIGH WATER: 175 cfs ~1.5'</p> <p>TEMPORARY BRIDGE REQUIREMENTS</p> <p>STRUCTURE TYPE: None needed - detour will be in place during construction</p> <p>CLEAR SPAN (NORMAL TO STREAM): _____</p> <p>VERTICAL CLEARANCE ABOVE STREAMBED: _____</p> <p>WATERWAY AREA OF FULL OPENING: _____</p> <p>ADDITIONAL INFORMATION</p>						Q2.33 = 945.0'	VELOCITY = 9.4 fps	Q10 = 946.5'	" 10.7 fps	Q25 = 947.3'	" 11.0 fps	Q50 = 947.9'	" 11.4 fps	Q100 = 948.4'	" 12.0 fps														
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<p>20 year ESAL for flexible pavement from 2014 to 2034 : 398000</p> <p>40 year ESAL for flexible pavement from 2014 to 2054 : 950000</p> <p>Design Speed : 45 mph</p>						AS BUILT "REBAR" DETAILS						TRAFFIC MAINTENANCE NOTES																																													
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<p>• SEE PROJECT NOTES.</p>						<p>1. NOMINAL PILE DRIVING CAPACITY <math>R_{pd}</math>: _____</p> <p>2. PILE TEST RESISTANCE FACTOR <math>\phi</math>: 0.65</p> <p>3. MAXIMUM PILE TIP ELEVATION _____</p> <p>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 PILES SHOULD BE CALIBRATED BY WAVE EQUATION ANALYSIS.</p>						ADDITIONAL INFORMATION																																													
<p>PROJECT NAME: ROCHESTER</p> <p>PROJECT NUMBER: BRF 0162(17)</p>						<p>PROJECT NAME: ROCHESTER</p> <p>PROJECT NUMBER: BRF 0162(17)</p>						<p>FILE NAME: z85e035 Pl.xls PLOT DATE: 6/18/2014</p> <p>PROJECT LEADER: G.S. GOODRICH DRAWN BY: E.A. FIALA</p> <p>DESIGNED BY: E.A. FIALA CHECKED BY: S.E. BURBANK</p> <p>BR 16 PRELIMINARY INFORMATION SHEET SHEET I22A OF 238</p>																																													

