

PRELIMINARY INFORMATION SHEET (BRIDGE)

INDEX OF SHEETS						FINAL HYDRAULIC REPORT																																																																																
PLAN SHEETS						PROPOSED STRUCTURE																																																																																
1	TITLE SHEET	C-2A	PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES WITH SIDEWALK A	10-14-2005	<p>HYDROLOGIC DATA Date: May 2016</p> <p>DRAINAGE AREA : 16.0 sq. mi.</p> <p>CHARACTER OF TERRAIN : Hilly, mixture woods and open, rural and urban settings</p> <p>STREAM CHARACTERISTICS : Incised, sinuous and alluvial</p> <p>NATURE OF STREAMBED : Gravel and cobbles</p> <p>PEAK FLOW DATA - ANNUAL EXCEEDANCE PROBABILITY (AEP)</p> <table style="width:100%;"> <tr> <td>43% = 700 cfs</td> <td>2% = 2500 cfs</td> </tr> <tr> <td>10% = 1500 cfs</td> <td>1% = 3000 cfs</td> </tr> <tr> <td>4% = 2000 cfs</td> <td>0.2% = 4200 cfs</td> </tr> </table> <p>DATE OF FLOOD OF RECORD : Unknown</p> <p>ESTIMATED DISCHARGE : Unknown</p> <p>WATER SURFACE ELEV. : Unknown</p> <p>NATURAL STREAM VELOCITY : @ 2% AEP = 10.3 fps</p> <p>ICE CONDITIONS : Moderate</p> <p>DEBRIS : Light to moderate</p> <p>DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No</p> <p>IS ORDINARY RISE RAPID? No</p> <p>IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? Yes</p> <p>IF YES, DESCRIBE : Small dam downstream that backwaters this site</p> <p>WATERSHED STORAGE: <1% HEADWATERS: UNIFORM: X IMMEDIATELY ABOVE SITE:</p> <p>EXISTING STRUCTURE INFORMATION</p> <p>STRUCTURE TYPE: Concrete T-beam</p> <p>YEAR BUILT: 1935</p> <p>CLEAR SPAN(NORMAL TO STREAM): 21'</p> <p>VERTICAL CLEARANCE ABOVE STREAMBED: 10.3'</p> <p>WATERWAY OF FULL OPENING: 212 sq. ft.</p> <p>DISPOSITION OF STRUCTURE: Remove and replace superstructure</p> <p>TYPE OF MATERIAL UNDER SUBSTRUCTURE: See borings</p> <p>WATER SURFACE ELEVATIONS AT:</p> <table style="width:100%;"> <tr> <td>43% AEP = 691.2'</td> <td>VELOCITY = 5.0 fps</td> </tr> <tr> <td>10% AEP = 694.4'</td> <td>" 7.5 fps</td> </tr> <tr> <td>4% AEP = 695.9'</td> <td>" 9.4 fps</td> </tr> <tr> <td>2% AEP = 697.3'</td> <td>" 10.7 fps</td> </tr> <tr> <td>1% AEP = 698.3'</td> <td>" 11.1 fps</td> </tr> </table> <p>LONG TERM STREAMBED CHANGES: None noted</p> <p>IS THE ROADWAY OVERTOPPED BELOW 1% AEP: Yes</p> <p>FREQUENCY: Below 2% AEP</p> <p>RELIEF ELEVATION: 697.2'</p> <p>DISCHARGE OVER ROAD @ 1% AEP: 430 cfs</p> <p>UPSTREAM STRUCTURE</p> <p>TOWN: Woodstock DISTANCE: 400'</p> <p>HIGHWAY #: STRUCTURE #:</p> <p>CLEAR SPAN: CLEAR HEIGHT:</p> <p>YEAR BUILT: FULL WATERWAY:</p> <p>STRUCTURE TYPE: Pedestrian Bridge</p> <p>DOWNSTREAM STRUCTURE</p> <p>TOWN: Woodstock Village DISTANCE: 470'</p> <p>HIGHWAY #: TH 5 STRUCTURE #: 71</p> <p>CLEAR SPAN: 25' CLEAR HEIGHT:</p> <p>YEAR BUILT: 1950 FULL WATERWAY:</p> <p>STRUCTURE TYPE: Concrete T-beam bridge</p> <p>LRFR LOAD RATING FACTORS</p> <table border="1" style="width:100%; text-align: center;"> <thead> <tr> <th rowspan="2">LOADING LEVELS</th> <th colspan="7">TRUCK</th> </tr> <tr> <th>H-20</th> <th>HL-93</th> <th>3S2</th> <th>6 AXLE</th> <th>3A STR.</th> <th>4A STR.</th> <th>5A SEMI</th> </tr> </thead> <tbody> <tr> <td>TONNAGE</td> <td>20</td> <td>36</td> <td>36</td> <td>66</td> <td>30</td> <td>34.5</td> <td>38</td> </tr> <tr> <td>INVENTORY</td> <td>2.11</td> <td>1.34</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>POSTING</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OPERATING</td> <td>3.03</td> <td>1.86</td> <td>3.2</td> <td>1.67</td> <td>2.23</td> <td>2.05</td> <td>2.7</td> </tr> </tbody> </table> <p>COMMENTS:</p> <p>AS BUILT "REBAR" DETAIL</p> <table border="1" style="width:100%; text-align: center;"> <thead> <tr> <th>LEVEL I</th> <th>LEVEL II</th> <th>LEVEL III</th> </tr> </thead> <tbody> <tr> <td>TYPE:</td> <td>TYPE:</td> <td>TYPE:</td> </tr> <tr> <td>GRADE:</td> <td>GRADE:</td> <td>GRADE:</td> </tr> </tbody> </table> <p>STRUCTURES DETAIL SHEETS</p> <p>SD-502.00 CONCRETE DETAILS AND NOTES 10/10/2012</p>										43% = 700 cfs	2% = 2500 cfs	10% = 1500 cfs	1% = 3000 cfs	4% = 2000 cfs	0.2% = 4200 cfs	43% AEP = 691.2'	VELOCITY = 5.0 fps	10% AEP = 694.4'	" 7.5 fps	4% AEP = 695.9'	" 9.4 fps	2% AEP = 697.3'	" 10.7 fps	1% AEP = 698.3'	" 11.1 fps	LOADING LEVELS	TRUCK							H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEMI	TONNAGE	20	36	36	66	30	34.5	38	INVENTORY	2.11	1.34						POSTING								OPERATING	3.03	1.86	3.2	1.67	2.23	2.05	2.7	LEVEL I	LEVEL II	LEVEL III	TYPE:	TYPE:	TYPE:	GRADE:	GRADE:	GRADE:
43% = 700 cfs	2% = 2500 cfs																																																																																					
10% = 1500 cfs	1% = 3000 cfs																																																																																					
4% = 2000 cfs	0.2% = 4200 cfs																																																																																					
43% AEP = 691.2'	VELOCITY = 5.0 fps																																																																																					
10% AEP = 694.4'	" 7.5 fps																																																																																					
4% AEP = 695.9'	" 9.4 fps																																																																																					
2% AEP = 697.3'	" 10.7 fps																																																																																					
1% AEP = 698.3'	" 11.1 fps																																																																																					
LOADING LEVELS	TRUCK																																																																																					
	H-20	HL-93	3S2	6 AXLE											3A STR.	4A STR.	5A SEMI																																																																					
TONNAGE	20	36	36	66											30	34.5	38																																																																					
INVENTORY	2.11	1.34																																																																																				
POSTING																																																																																						
OPERATING	3.03	1.86	3.2	1.67											2.23	2.05	2.7																																																																					
LEVEL I	LEVEL II	LEVEL III																																																																																				
TYPE:	TYPE:	TYPE:																																																																																				
GRADE:	GRADE:	GRADE:																																																																																				
2	PRELIMINARY INFORMATION SHEET	C-10	CURBING	02-11-2008																																																																																		
3 - 4	GENERAL NOTES	E-173	PULL BOXES AND JUNCTION BOXES	08-09-1995																																																																																		
5	BRIDGE TYPICAL SECTION	E-191	PAVEMENT MARKING DETAILS	02-01-1999																																																																																		
6	TYPICAL ABUTMENT EARTHWORKS SECTION	E-193	PAVEMENT MARKING DETAILS	08-18-1995																																																																																		
7 - 8	QUANTITY SHEETS	T-1	TRAFFIC CONTROL GENERAL NOTES	04-25-2016																																																																																		
9	SYMBOLOLOGY LEGEND	T-2	TRAFFIC SIGN GENERAL NOTES	04-25-2016																																																																																		
10	TIE SHEET	T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	08-06-2012																																																																																		
11	LAYOUT SHEET	T-17	TRAFFIC CONTROL MISCELLANEOUS DETAILS	08-06-2012																																																																																		
12	MAINLINE PROFILE	T-28	CONSTRUCTION SIGN DETAILS	08-06-2012																																																																																		
13	SIDEWALK DETAILS	T-45	SQUARE TUBE SIGN POST AND ANCHOR	01-02-2013																																																																																		
14	UTILITY LAYOUT																																																																																					
15	SIGN AND PAVEMENT MARKINGS SHEET																																																																																					
16	RAIL LAYOUT																																																																																					
17	LEFT RAILING PROFILE																																																																																					
18	RIGHT RAILING PROFILE																																																																																					
19	RAILING SECTIONS																																																																																					
20	PHASE 1 TRAFFIC CONTROL LAYOUT SHEET																																																																																					
21	PHASE 2 TRAFFIC CONTROL LAYOUT SHEET																																																																																					
22	TRAFFIC CONTROL NOTES																																																																																					
23	LOCAL DETOUR																																																																																					
24	REGIONAL TRUCK DETOUR																																																																																					
25	BRIDGE SEAT 1																																																																																					
26	BRIDGE SEAT 2																																																																																					
27	BRIDGE SEAT REINFORCEMENT																																																																																					
28	UTILITY CONDUIT ELEVATION																																																																																					
29	RETAINING WALL																																																																																					
30	WINGWALL 3																																																																																					
31	SOLID SLAB FRAMING PLAN																																																																																					
32	SOLID SLAB TYPICAL SECTION																																																																																					
33 - 35	SOLID SLAB DETAILS																																																																																					
36	END BRIDGE DETAILS																																																																																					
37	BRIDGE SIDEWALK LAYOUT																																																																																					
38	BRIDGE SIDEWALK DETAILS																																																																																					
39	APPROACH SLAB 1																																																																																					
40	APPROACH SLAB 2																																																																																					
41	REINFORCING STEEL SCHEDULE																																																																																					
42 - 43	MAINLINE CROSS SECTIONS																																																																																					
44 - 47	CHANNEL CROSS SECTIONS																																																																																					
48	EPSC EXISTING SITE PLAN																																																																																					
49	EPSC PLAN																																																																																					
50	EPSC DETAILS																																																																																					
51	EPSC NARRATIVE																																																																																					
52	ROW DETAIL SHEET #1																																																																																					
53	ROW LAYOUT SHEET 1 OF 1																																																																																					

TRAFFIC DATA						
YEAR	ADT	DHV	% D	% T	ADTT	20 year ESAL for flexible pavement from 2017 to 2037 : 3867000
2017	10000	1100	55	3.1	450	40 year ESAL for flexible pavement from 2017 to 2057 : 8988000
2037	10600	1200	55	4.6	700	Design Speed : 25 mph

DESIGN VALUES									
1. DESIGN LIVE LOAD									HL-93
2. FUTURE PAVEMENT									dp: 3.0 INCH
3. DESIGN SPAN									L: VARIES FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)									Δ: ---
5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX)									fy: 270 KSI
6. PRESTRESSED CONCRETE STRENGTH									f'c: 8.0 KSI
7. PRESTRESSED CONCRETE RELEASE STRENGTH									f'ci: 5.5 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: ---
11. CONCRETE, CLASS C									f'c: ---
12. REINFORCING STEEL									fy: 60 KSI
13. STRUCTURAL STEEL AASHTO M270									fy: ---
14. NOMINAL BEARING RESISTANCE OF SOIL									qn: ---
15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)									φ: ---
16. NOMINAL BEARING RESISTANCE OF ROCK									qn: ---
17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)									φ: ---
18. PILE RESISTANCE FACTOR									φ: ---
19. LATERAL PILE DEFLECTION									Δ: ---
20. BASIC WIND SPEED									V3s: ---
21. MINIMUM GROUND SNOW LOAD									pg: ---
22. SEISMIC DATA	PGA: 0								Ss: ---
									Sf: ---
23.									---
24.									---
25.									---
26.									---

PROJECT NAME:	WOODSTOCK VILLAGE		
PROJECT NUMBER:	BF 020-2(43)		
FILE NAME:	s13j280pi.dgn	PLOT DATE:	09-AUG-2017
PROJECT LEADER:	R. YOUNG	DRAWN BY:	S. COLEY
DESIGNED BY:	S. COLEY	CHECKED BY:	W. LAMMER
PRELIMINARY INFORMATION SHEET		SHEET	2 OF 53