

# PRELIMINARY INFORMATION SHEET (BRIDGE)

LRFD

INDEX OF SHEETS						FINAL HYDRAULIC REPORT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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DISPOSITION OF STRUCTURE: Remove and replace												<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="6" style="text-align: center;"><b>TRAFFIC MAINTENANCE NOTES</b></td> </tr> <tr> <td colspan="6">1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.</td> </tr> <tr> <td colspan="6">2. TRAFFIC SIGNALS ARE NOT NECESSARY.</td> </tr> <tr> <td colspan="6">3. SIDEWALKS ARE NOT NECESSARY</td> </tr> <tr> <td colspan="6">4. ACCESS TO NORTH BRANCH RD SHALL BE MAINTAINED</td> </tr> <tr> <td colspan="6" style="text-align: center;"><b>DESIGN VALUES</b></td> </tr> <tr> <td colspan="6">1. DESIGN LIVE LOAD HL-93</td> </tr> <tr> <td colspan="6">2. FUTURE PAVEMENT dp: 0.0 INCH</td> </tr> <tr> <td colspan="6">3. DESIGN SPAN L: 61'-6" FT</td> </tr> <tr> <td colspan="6">4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) Δ: 2.75 INCH</td> </tr> <tr> <td colspan="6">5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX) fy: 270 KSI</td> </tr> <tr> <td colspan="6">6. PRESTRESSED CONCRETE STRENGTH f'c: 10 KSI</td> </tr> <tr> <td colspan="6">7. PRESTRESSED CONCRETE RELEASE STRENGTH f'el: 7 KSI</td> </tr> <tr> <td colspan="6">8. CONCRETE, HIGH PERFORMANCE CLASS AA f'c: 4.0 KSI</td> </tr> <tr> <td colspan="6">9. CONCRETE, HIGH PERFORMANCE CLASS A f'c: 4.0 KSI</td> </tr> <tr> <td colspan="6">10. CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3.5 KSI</td> </tr> <tr> <td colspan="6">11. CONCRETE, CLASS C f'c: ---</td> </tr> <tr> <td colspan="6">12. REINFORCING STEEL fy: 60 KSI</td> </tr> <tr> <td colspan="6">13. STRUCTURAL STEEL AASHTO M270 (GALVANIZED) fy: 50 KSI</td> </tr> <tr> <td colspan="6">14. SOIL UNIT WEIGHT γ: 0.140 KCF</td> </tr> <tr> <td colspan="6">15. NOMINAL BEARING RESISTANCE OF SOIL qn: ---</td> </tr> <tr> <td colspan="6">16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: ---</td> </tr> <tr> <td colspan="6">17. NOMINAL BEARING RESISTANCE OF ROCK qn: 29.0 KSF</td> </tr> <tr> <td colspan="6">18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: 0.45</td> </tr> <tr> <td colspan="6">19. NOMINAL AXIAL PILE RESISTANCE qp: ---</td> </tr> <tr> <td colspan="6">20. PILE YIELD STRENGTH ASTM A572 fy: ---</td> </tr> <tr> <td colspan="6">21. PILE SIZE ---</td> </tr> <tr> <td colspan="6">22. EST. PILE LENGTH Lp: ---</td> </tr> <tr> <td colspan="6">23. PILE RESISTANCE FACTOR φ: ---</td> </tr> <tr> <td colspan="6">24. LATERAL PILE DEFLECTION Δ: ---</td> </tr> <tr> <td colspan="6">25. BASIC WIND SPEED V3s: ---</td> </tr> <tr> <td colspan="6">26. MINIMUM GROUND SNOW LOAD pg: ---</td> </tr> <tr> <td colspan="6">27. SEISMIC DATA PGA: --- Ss: --- S1: ---</td> </tr> </table>						<b>TRAFFIC MAINTENANCE NOTES</b>						1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.						2. TRAFFIC SIGNALS ARE NOT NECESSARY.						3. SIDEWALKS ARE NOT NECESSARY						4. ACCESS TO NORTH BRANCH RD SHALL BE MAINTAINED						<b>DESIGN VALUES</b>						1. DESIGN LIVE LOAD HL-93						2. FUTURE PAVEMENT dp: 0.0 INCH						3. DESIGN SPAN L: 61'-6" FT						4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) Δ: 2.75 INCH						5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX) fy: 270 KSI						6. PRESTRESSED CONCRETE STRENGTH f'c: 10 KSI						7. PRESTRESSED CONCRETE RELEASE STRENGTH f'el: 7 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: ---						12. REINFORCING STEEL fy: 60 KSI						13. STRUCTURAL STEEL AASHTO M270 (GALVANIZED) 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: 29.0 KSF						18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: 0.45						19. NOMINAL AXIAL PILE RESISTANCE qp: ---						20. PILE YIELD STRENGTH ASTM A572 fy: ---						21. PILE SIZE ---						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: --- S1: ---																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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LONG TERM STREAMBED CHANGES: There is an 8' deep scour hole through the bridge area. No significant changes are anticipated in the future, due to ledge.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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### STRUCTURES DETAILS

SD-501.00	CONCRETE DETAILS AND NOTES	02-09-2012
SD-502.00	CONCRETE DETAILS AND NOTES	10-10-2012
SD-516.10	BRIDGE JOINT ASPHALTIC PLUG	08-29-2011

**⚠ REVISION: NEW SHEET, NOVEMBER 4, 2013**

**⚠ REVISION SHEETS: NOVEMBER 4, 2013**

2 PRELIMINARY INFORMATION SHEET

49 NEXT BEAM DETAILS (2 OF 3)

51 CURTAIN WALL DETAILS (1 OF 2)

54a BEARING DETAILS (1a OF 2)

63 WINGWALL NO 1

64 WINGWALL NO 2

65 WINGWALL NO 3

66 WINGWALL NO 4

67 WINGWALL DETAILS (1 OF 2)

**⚠ REVISION SHEETS: NOVEMBER 13, 2013**

60 ABUTMENT NO. 2 FOOTING

### AS BUILT "REBAR" DETAILS

LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

### TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2014	1900	250	55	6.6	95
2034	2000	260	55	10	150

20 year ESAL for flexible pavement from 2014 to 2034 : 417000
40 year ESAL for flexible pavement from 2014 to 2054 : 953000
Design Speed : 25 mph



PROJECT NAME: MIDDLEBURY  
PROJECT NUMBER: RS 0174(8)  
FILE NAME: z78f217pi.xls PLOT DATE: 11/1/2013  
PROJECT LEADER: M.A. COLGAN DRAWN BY: B.J. MASSE  
DESIGNED BY: VHB CHECKED BY: G.S. GOODRICH  
PRELIMINARY INFORMATION SHEET SHEET 2 OF 104