

PRELIMINARY INFORMATION SHEET (BRIDGE)

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FINAL HYDRAULIC REPORT

PLAN SHEETS

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HYDROLOGIC DATA DATE: _____
SECTION NOT APPLICABLE

DRAINAGE AREA: _____
CHARACTER OF TERRAIN: _____
STREAM CHARACTERISTICS: _____
NATURE OF STREAMBED: _____

Q 2.33 = _____ Q50 = _____
Q 10 = _____ Q 100 = _____
Q 25 = _____ Q 500 = _____

DATE OF FLOOD OF RECORD: _____
ESTIMATED DISCHARGE: _____
WATER SURFACE ELEVATION: _____
NATURAL STREAM VELOCITY: _____
ICE CONDITIONS: _____
DEBRIS: _____
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? _____
IS ORDINARY RISE RAPID? _____
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? _____
IF YES, DESCRIBE _____

WATERSHED STORAGE: _____ HEADWATERS: _____
UNIFORM: _____
IMMEDIATELY ABOVE SITE: _____

PROPOSED STRUCTURE

STRUCTURE TYPE: _____

CLEAR SPAN (NORMAL TO STREAM): _____
VERTICAL CLEARANCE ABOVE STREAMBED: _____
WATERWAY OF FULL OPENING: _____

WATER SURFACE ELEVATIONS AT:
Q 2.33 = _____ VELOCITY = _____
Q 10 = _____ " _____
Q 25 = _____ " _____
Q50 = _____ " _____
Q 100 = _____ " _____

IS THE ROADWAY OVERTOPPED BELOW Q100? _____
FREQUENCY: _____
RELIEF ELEVATION: _____
DISCHARGE OVER ROAD @ Q100: _____

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: _____
VERTICAL CLEARANCE: _____

SCOUR: _____

REQUIRED CHANNEL PROTECTION: Stone Fill Class IV at Abutments

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: _____
YEAR BUILT: _____
CLEAR SPAN (NORMAL TO STREAM): _____
VERTICAL CLEARANCE ABOVE STREAMBED: _____
WATERWAY OF FULL OPENING: _____
DISPOSITION OF STRUCTURE: _____
TYPE OF MATERIAL UNDER SUBSTRUCTURE: _____

WATER SURFACE ELEVATIONS AT:
Q 2.33 = _____ VELOCITY = _____
Q 10 = _____ " _____
Q 25 = _____ " _____
Q50 = _____ " _____
Q 100 = _____ " _____

LONG TERM STREAMBED CHANGES: _____

PERMIT INFORMATION

AVERAGE DAILY FLOW: _____ DEPTH OR ELEVATION: _____
ORDINARY LOW WATER: _____
ORDINARY HIGH WATER: _____

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: _____
CLEAR SPAN (NORMAL TO STREAM): _____
VERTICAL CLEARANCE ABOVE STREAMBED: _____
WATERWAY AREA OF FULL OPENING: _____

ADDITIONAL INFORMATION

UPSTREAM STRUCTURE

TOWN: _____ DISTANCE: _____
HIGHWAY #: _____ STRUCTURE #: _____
CLEAR SPAN: _____ CLEAR HEIGHT: _____
YEAR BUILT: _____ FULL WATERWAY: _____
STRUCTURE TYPE: _____

DOWNSTREAM STRUCTURE

TOWN: _____ DISTANCE: _____
HIGHWAY #: _____ STRUCTURE #: _____
CLEAR SPAN: _____ CLEAR HEIGHT: _____
YEAR BUILT: _____ FULL WATERWAY: _____
STRUCTURE TYPE: _____

DESIGN VALUES

1. DESIGN LIVE LOAD	HL-93
2. FUTURE PAVEMENT	d _p : 2.5 INCH
3. ABUTMENT BEARING TO BEARING LENGTH (TWO SPANS) (240.00 - 148.00) FT	L: 388.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ: ---
5. PRESTRESSING STRAND	f _y : ---
6. PRESTRESSED CONCRETE STRENGTH	f' _c : ---
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f' _{cr} : ---
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	f _y : 60 KSI
13. STRUCTURAL STEEL AASHTO M270 (WEATHERING)	f _y : 50 & 70 KSI
14. SOIL UNIT WEIGHT	γ: 0.140 KCF
15. NOMINAL BEARING RESISTANCE OF SOIL	q _n : ---
16. SOIL BEARING FACTOR OF SAFETY	φ: ---
17. NOMINAL BEARING RESISTANCE OF ROCK	q _n : ---
18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: ---
19. NOMINAL AXIAL PILE RESISTANCE	q _p : 1720.0 KIPS
20. PILE YIELD STRENGTH ASTM A572	f _y : 50 KSI
21. PILE SIZE	HP 14X117
22. EST. PILE LENGTH	L _p : 65 FT
23. PILE RESISTANCE FACTOR	φ: 0.50
24. LATERAL PILE DEFLECTION	Δ: ---
25. BASIC WIND SPEED	V _{3s} : 100 MPH
26. MINIMUM GROUND SNOW LOAD	P _g : ---
27. SEISMIC DATA	PGA: 9 %g S _s : 16 %g S _f : 4 %g

LRFR LOAD RATING FACTORS

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	3.71	1.29					
POSTING							
OPERATING	4.82	1.67	1.75	1.16	2.53	2.2	2.2
COMMENTS:							

AS BUILT "REBAR" DETAILS

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

AS BUILT RECORD PLANS

PILE DRIVING AND TESTING REQUIREMENTS

1. NOMINAL PILE DRIVING CAPACITY	Reqd: 790.00 KIP
2. PILE TEST RESISTANCE FACTOR	φ: 0.65
3. MAXIMUM PILE TP ELEVATION	VARIES
4. 0	

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT	
2010	11300	1500	Unk	Unk	Unk	20 year ESAL for flexible pavement from 2010 to 2030 : 0
2030	Unk	Unk	Unk	Unk	Unk	40 year ESAL for flexible pavement from 2010 to 2050 : 0
						Design Speed : 65 mph

PROJECT NAME: **BRATTLEBORO**

PROJECT NUMBER: **I-91 BRIDGE IMPROVEMENTS**

FILE NAME: z02a014pi_6.dgn PLOT DATE: 8/18/2012
PROJECT LEADER: P. KENDALL DRAWN BY: S. MORGAN
DESIGNED BY: J. OLUND CHECKED BY: D. MYERS
PRELIMINARY INFO. SHEET BR. No. 6N & 6S SHEET **ZB-100-GP-103**