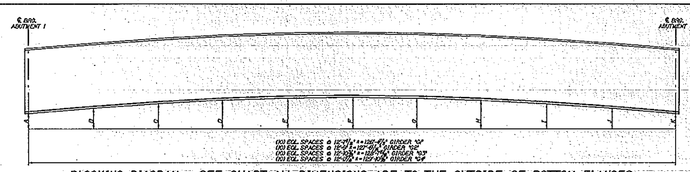
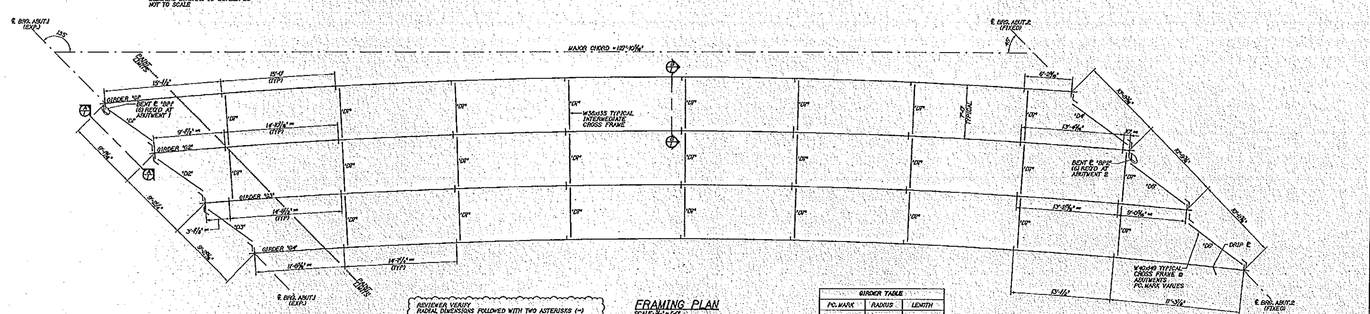


GIRDER LINE	HEIGHT AT BRG. ℄	"1"	"2"	"3"	"4"	"5"	"6"	"7"	"8"	"9"	"10"	HEIGHT AT BRG. ℄
GIRDER "G1"	6"	9¼"	F.O.½"	F.O.½"	F.O.	F.O.½"	F.O.	F.O.½"	F.O.½"	9¼"		6"
GIRDER "G2"	6"	9¼"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	9¼"		6"
GIRDER "G3"	6"	9¼"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	9¼"		6"
GIRDER "G4"	6"	9¼"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	F.O.½"	9¼"		6"

BLOCKING DIAGRAM ~ SEE CHART ALL DIMENSIONS ARE TO THE OUTSIDE OF BOTTOM FLANGES

BLOCKING DIAGRAM IS DEVELOPED
NOT TO SCALE

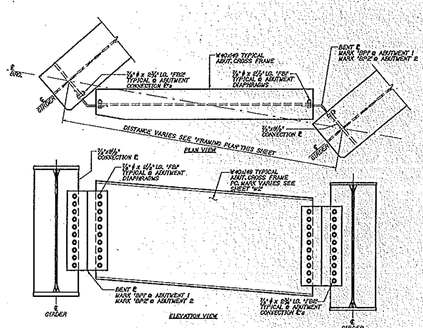


REVIEWER VERIFY
RADIAL DIMENSIONS FOLLOWED WITH TWO ASTERISKS (**)
VARY FROM THE DIMENSIONS SHOWN ON THE CONTRACT
PLANS. THE CONTRACTOR SHALL ADJUST ALL DIMENSIONS ALONG THE
GIRDER LINES ACCORDINGLY WHEN ALL THE INTERNAL
DIAPHRAGMS THE SAME.

FRAMING PLAN

SCALE: 1/8" = 1'-0"

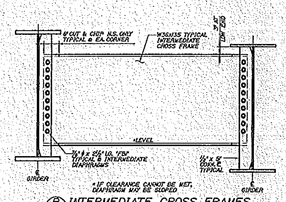
GIRDER TABLE		
PC MARK	RADIUS	LENGTH
"G1"	800.0'±5"	102'-4"
"G2"	793.0'±5"	102'-4½"
"G3"	786.0'±5"	102'-4½"
"G4"	779.0'±5"	102'-4½"



ABUTMENT CROSS FRAMES

A/1

ELEVATION VIEW IS DEVELOPED
SCALE: 3/8" = 1'-0"



INTERMEDIATE CROSS FRAMES

B/1

SCALE: 3/8" = 1'-0"

Vermont Agency of Transportation
RECEIVED
CK'D BY GML OK'D BY JEL
11:20 am, Mar 19, 2012
RESUBMIT _____ APPROVED X
BY KMH DATE 3/19/2012

GENERAL FABRICATION NOTES

MATERIAL SPECIFICATIONS

3.1 GIRDERS SHALL BE WEB PLATE AT STEEL LEAD LOAD CONSTRUCTION.

3.2 ALL MATERIAL EXCEPT THE WATER STRAINERS SHALL BE ASTM A709 GRADE 50W. THE WATER STRAINERS SHALL BE ASTM A36. THE PROVISION OF ASTM A709 SUPPLEMENT S1 SHALL APPLY. THE PROVISION OF ASTM A709 SUPPLEMENT S1 ZONED PLATE CONSTRUCTION. THE PROVISION OF ASTM A709 PERFORMANCE STEEL GIRDER PLATE CONSTRUCTION.

3.3 ALL NON GRADE 50W & 70W MATERIAL IMPORTED FROM SHOP SHALL MEET THE CHEMICAL REQUIREMENTS OF GRADE 50W & 70W PROVIDED.

ITEMS SHALL CALL OUT "50W" FOR EACH APPLICABLE ITEM IN THE BILL OF MATERIAL.

3.4 BOLTS CONTROL PAINT UNITED:
"BOLT SHALL BE HIGH STRENGTH BOLTS ASTM A325, TYPE 3
"NUTS SHALL BE ASTM A563 GRADE C3
"WASHERS SHALL BE ASTM F436 TYPE 3"

BOLTS WITH PAINT UNITED:
"BOLT SHALL BE HIGH STRENGTH BOLTS ASTM A325, TYPE 1(GALV.)
"NUTS SHALL BE ASTM A563 GRADE DH
"WASHERS SHALL BE ASTM F436 TYPE 1(GALV.)

3.5 BOLTS AND NUTS SHALL BE PROPERLY TENSIONED. THE NUTS AND WASHERS FROM BOTH SUPPLIERS ARE NOT INTERCHANGEABLE. NUTS AND WASHERS MUST BE THE SAME LOT NUMBER.

FABRICATION

3.1 CUT STAMPED IS ALLOWED IN SPECIFIED LOCATIONS WITH THE APPROVAL OF THE ENGINEER.

3.2 ALL EDGES OF PLATE CUT MATERIAL SUBJECTED TO CALCULATED STRESSES SHALL BE ROUNDED TO A MINIMUM RADIUS OF 1/16" OR AN EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE.

3.3 ALL PLATES FLAME CUT FROM GIRDER PLATES SHALL BE CUT SO THAT THE PRIMARY DIRECTION OF ROLLING IS PARALLEL TO THE MAIN TENSILE OR COMPRESSIVE STRESS.

3.4 EXPOSED CORNERS IN AREAS TO BE PAINTED SHALL BE ROUNDED TO APPROXIMATELY 1/8 RADIUS.

WELDING

3.1 ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF "STRUCTURAL WELDING CODE".

3.2 NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH AS SPECIFIED IN THE CONTRACT PLANS. FLANGE WEB WELDS WILL TAKE EITHER TOP OR BOTTOM AS SHOWN IN CONTRACT.

FLANGE SPLICES SHALL BE TESTED AS FOLLOWS:
FLANGE SPLICES IN TENSION - TESTED 100%
FLANGE SPLICES IN COMPRESSION - TESTED 50%

WEB SPLICES SHALL BE TESTED AS FOLLOWS:
FOR THE PORTION OF THE WEB IN TENSION AREAS - TESTED 100%
FOR THE REMAINING PORTION OF WEB COMPRESSION AREA - TESTED 25 %

3.3 TERMINATE SLEEPER WELDS AS SHOWN IN TYPICAL WELD TERMINATION DETAILS SHEET 17

GENERAL FABRICATION NOTES

FIELD CONNECTIONS

3.1 FIELD BOLTS SHALL HAVE A HEAVY HEX NUT, HEX HEAD, AND ONE HARD WASHER EACH.

3.2 FIELD MARKS WILL BE LOCATED AS GIVEN ON ERECTION DRAWINGS. ALL ERECTION MARKS WILL BE PAINTED. WELDED MARKS MUST NOT BE EXPOSED IN THE FINISHED STRUCTURE.

3.3 OVERSIZED WASHERS ARE REQUIRED OVER OVERSIZED HOLES.

CLEANING AND PAINTING

3.1 THE PORTION OF THE GIRDERS WITHIN 25 FEET OF THE EXPANSION JOINT AND ON GIRDER LINE SHALL BE PAINTED.

3.2 UNPAINTED STEEL SHALL BE BLAST CLEANED TO SSPC SP-6 TO ACHIEVE A DIVERSE WORKERS APPEARANCE.

3.3 ALL PAINTED AREAS OF GIRDERS SHALL BE PAINTED WITH "ZINC THREE (3) COATS, ZINC RICH PRIMER, EPOXY MIDDLE COAT, AND ACRYLIC TOP COAT". ALL MATERIALS TO RECEIVE PAINT SHALL BE BLAST CLEANED TO SSPC SP-10.

3.4 COATING SYSTEMS SHALL BE "NORTHEAST PROTECTIVE COATING COMMITTEE (NEPCOAT) SPECIFICATIONS:
"ZINC THREE (3) COATS"
"INORGANIC ZINC PRIMER" NEPCOAT/ARIO 053
"TOP COAT: CARBOTHANE 134 UA"

3.5 THE ENTIRE TOP OF GIRDER SHALL BE A UNIFORM RESIN CONTAINING ANTI SLIP AGGREGATE. THE ANTI SLIP AGGREGATE SHALL BE ALUMINUM OXIDE.

3.6 PAINTED SURFACES WITHIN 25 FT. OF GIRDER HOLE SHALL BE PRIMED DAILY.

FINISH					
MATERIAL	SEE DETAIL SHEETS				
HOLES		1	3/30/12	ASNORD	3H
ELECTRODES					
WELDS	PER WELD PROCEDURE				
SURFACE PREP		1	3/30/12	ASNORD	3H
		NO	DATE	DESCRIPTION	BY

REVISIONS

ARC
ARCHITECTS INC

ADVANCED RESOURCES & CONST. ENTERPRISES, INCORPORATED
P.O. BOX 1183 BURLINGTON, VT. 05402
PHONE: (802) 863-2545 - FAX: (802) 863-4264

DRAFTER	JJH	FRAMING DETAILS	PROJECT NO. 893 14(33)
DATE	DEC. 2011	BRIDGE # 27 TWIN BROOKS	
CHECKED	ERE	CONCORD, VERMONT	DWG. NO. 1
DATE	JUN. 2012	T. BUCK CONSTRUCTION	