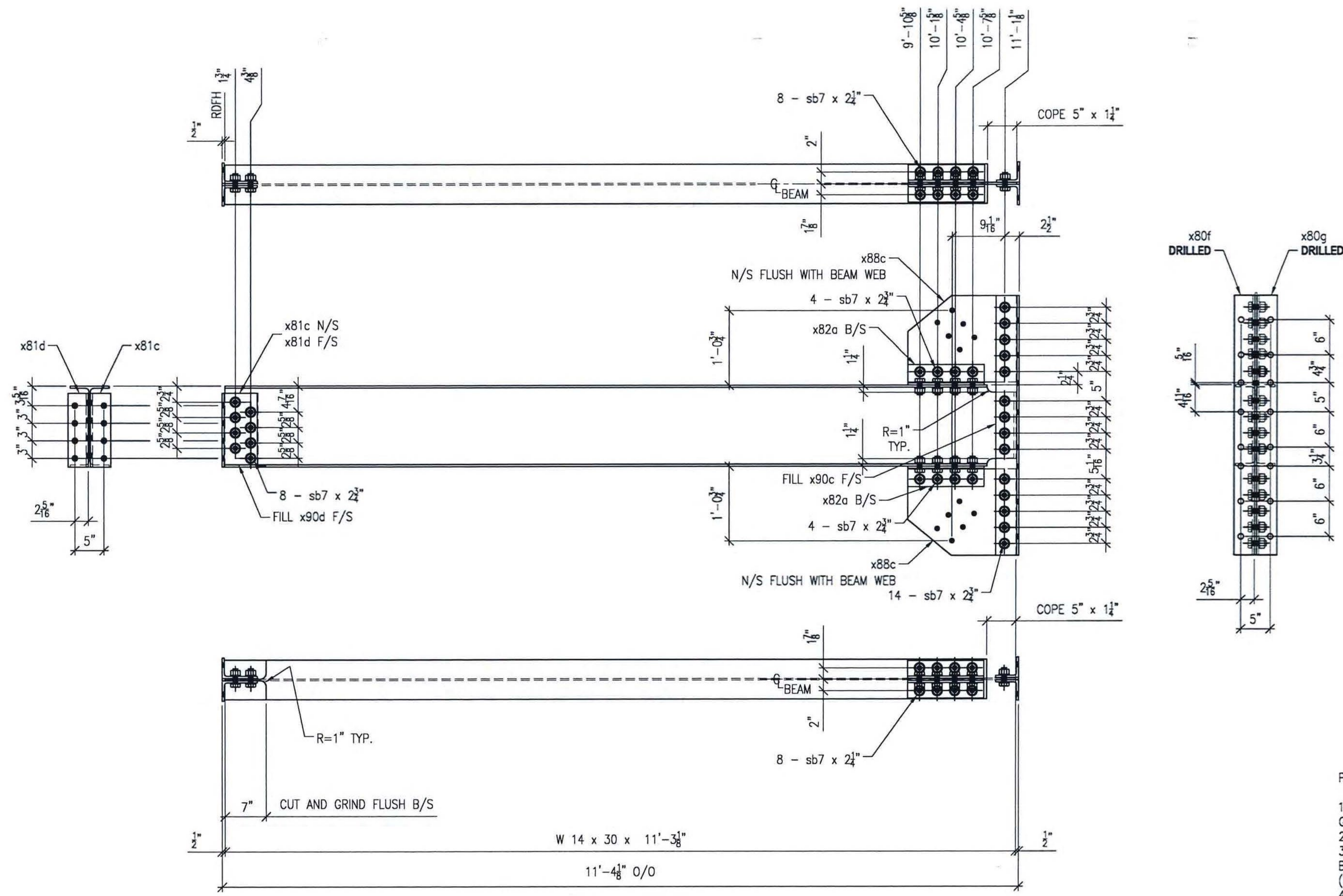

2 REQ'D ~ Mk. M89A

LIFTING WEIGHT
?
lbs

BILL OF MATERIALS

SHOP BILL — MATERIAL ASTM A709-50 T2 U.N.O.

LINE	SEQ	SHIPPING PCS	ASSEMBLY PCS	MARK	SHAPE	DESCRIPTION	LENGTH ft	LENGTH in	REMARKS END EDGE DESCR	REMARKS	MATL GRADE	MATL REMARK	WEIGHT	HEAT NO
1														
2		2		M89A	W	14 x 30	11	3 1/8						
3														
4			2	x80f	L	4 x 3 1/2 x 3/8	3	8 5/16		DRILLED				
5			2	x80g	L	4 x 3 1/2 x 3/8	3	8 5/16		DRILLED				
6														
7			8	x82a	L	3 1/2 x 3 x 3/8	1	1						
8														
9			2	x81c	L	6 x 3 1/2 x3/8	1	0 9/16						
10			2	x81d	L	6 x 3 1/2 x3/8	1	0 9/16						
11														
12			4	x88c	PL	3/8 x 14 3/4	1	6 1/2						
13														
14			2	x90c	PL	1/8 x 3		11 1/4			ASTM A1011			
15			2	x90d	PL	1/8 x 5 5/8	1	0 9/16			ASTM A1011			
16														
17			32	sb7-225	BOLT	7/8 ø		2 1/4		1nut/2wa	A325			
18			92	sb7-275	BOLT	7/8 ø		2 3/4		1nut/2wa	A325			
19												TOTAL lbs		
20														

ALL HOLES TO BE PUNCHED U.N.O.

PAINT NOTES:

1. ALL ITEMS THIS SHEET TO RECEIVE UPPER STEEL PAINT SYSTEM PER GN1.
2. CLEAN AND PRIME BOLTED PARTS PRIOR TO ASSEMBLY.
3. PRIMER ONLY, WITHIN 3" FROM ALL OPEN HOLES, (A307) SHIPPING BOLTS AND NUTS OR TO NEAREST EDGE OR PERPENDICULAR SURFACE (WHICHEVER IS LESS) UNLESS SPECIFICALLY NOTED OTHERWISE.
4. ALL TORQUED BOLTS TO RECEIVE COMPLETE PAINT SYSTEM NOTED. NO PAINT ON (A307) SHIPPING BOLTS AND NUTS.

NOTES:

1. FOR GENERAL NOTES SEE DRAWING GN1.
2. ALL BOLTS THIS SHEET TO BE FULLY TORQUED UNLESS NOTED AS (A307) SHIPPING BOLTS.
3. INSTALL WASHER UNDER HEAD OF BOLT AS WELL AS NUT. ADDITIONAL WASHER IS NOT REQUIRED FOR (A307) SHIPPING BOLTS.
4. ALL HOLES MARKED "⊠" OR "⊠" ARE TO BE FIELD DRILLED HOLES. DO NOT SHOP DRILL.

LEGEND:

- ℄ = CENTERLINE
- CTR'D = CENTERED
- C/C = CENTER TO CENTER
- FLG = FLANGE
- TOP = TOP
- BTM = BOTTOM
- RDFH = RUNNING DIMENSIONS FROM HERE
- (field bolt symbol) = FIELD BOLTS (QUANTITY) DIAMETER x LENGTH
- ◇ = ALTERNATE HOLE DIAMETER
- TYP = TYPICAL
- N/S = NEAR SIDE
- F/S = FAR SIDE
- B/S = BOTH SIDES
- BTS = BOLT TO SHIP
- SHP'G BOLT = SHIPPING BOLT
- ◇ = SHIPPING BOLT
- D.O.R. = DIRECTION OF ROLL
- T2 = CHARPY V-NOTCH TESTING REQUIRED
- F2 = FRACTURE CRITICAL MATERIAL
- ⊠ = FIELD DRILLED HOLE
- ⊠ = FIELD DRILLED HOLE

ALL DIMENSIONS HAVE BEEN FIELD VERIFIED
BY:______________ DATE:__________

☐ NO EXCEPTION TAKEN ☑ MAKE CORRECTIONS NOTED
☐ REJECTED ☐ REVISE AND RESUBMIT
☐ SUBMIT SPECIFIED ITEM

CHECKING IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. ANY ACTION SHOWN IS SUBJECT TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE; FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATION OF HIS WORK WITH THAT OF ALL OTHER TRADES AND THE SATISFACTORY PERFORMANCE OF THE WORK.

CHA
DATE 5/9/12 BY PKK LN

NO.	DATE	BY	REVISION
A	04/25/12	RC	FOR APPROVAL

STS STEEL, INC.
ENGINEERS • FABRICATORS • ERECTORS
PH: (518) 370-2693 FAX: (518) 370-2696

DRAWING TITLE
UPPER STEEL (SWAY FRAMES @ U8 & U10)

PROJECT No. US RT 2 BRIDGE No 24 | FEDERAL AID No.
ENGINEER : CHA
CUSTOMER : Harrison & Burrowes Bridge Constructors, Inc.
PROJECT : RICHMOND, VT - TRUSS BRIDGE REHAB
RICHMOND, VT

HOLES:	15/16"ø U.N.O.	PAINT:	PER SPEC	DATE:	04/12/12
BOLTS:	A325 U.N.O.	DR.BY:	PG	JOB NO.	1156
WELDS:	AWS D1.5	CHK.BY:	SG	DWG NO.	89

D.O.R.
D.O.R. WIDTH
D.O.R. LENGTH
℄
1