GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

1). ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O.) BRIDGE DESIGN SPECIFICATIONS DATED 2010, AND ITS LATEST REVISIONS.

△1

MATERIAL SPECIFICATIONS

1). UNLESS NOTED, ALL NEW STRUCTURAL STEEL CONFORM TO AASHTO M270 GRADE 50 (ASTM A709-50).

2). MATERIAL NOTED "T2" ON DETAIL DRAWINGS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS (SUBSECTION 714.01).

3). HIGH STRENGTH BOLTS: AASHTO M164 (ASTM A325) TYPE 1, 7/8" DIA. IN 15/16" DIAMETER HOLES. △1 BOLT, NUT AND WASHER SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH AASHTO M 298, CLASS 50, TYPE 1.

△1 4). DIRECT TENSION INDICATOR (DTI) WASHERS CONFORMING TO ASTM F959 SHALL BE INSTALLED WITH ALL HIGH STRENGTH BOLTS.

FABRICATION

1). BOLT HOLES SHALL BE FABRICATED TO THE REQUIREMENTS OF THE 2012 AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS, SECTION 11.4.8, EXCEPT THAT HOLES SHALL NOT BE PUNCHED FULL SIZE.

2). EACH MEMBER SHALL BE IDENTIFIED WITH AN ERECTION MARK CORRESPONDING WITH THE MEMBER IDENTIFICATION MARK ON THE APPROVED SHOP DRAWINGS.

3). TIGHT FIT (WELDED ENDS ONLY). 50% OF THE PROJECTED BEARING AREA SHALL BE IN CONTACT WITHIN 0.5mm (0.02") WITH A PERMISSIBLE VARIATION OF 1.6mm (1/16") FOR THE REMAINING 50% OF THE PROJECTED AREA.

4). GRIND TO BEAR. 75% OF THE PROJECTED AREA SHALL BE IN CONTACT WITHIN 0.25mm (0.01") WITH A PERMISSIBLE VARIATION OF 0.8mm (1/32") FOR THE PROJECTED AREA.

5). MILL TO BEAR. 100% OF THE PROJECTED AREA SHALL BE IN FULL CONTACT.

WELDING

△1

1). THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS 2010 D1.5 BRIDGE WELDING CODE AND WITH SPECIFICATIONS SHOWN BESIDE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.

2). WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGE ARC & SHIELDED METAL ARC PROCESS. ALL WELDS ARE CONTINUOUS U.N.

3). NON-DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATIONS.

FIELD CONNECTIONS

1). ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH BOLTS AASHTO M164 (ASTM A325) TYPE 1, IN 15/16" DIAMETER HOLES UNLESS OTHERWISE NOTED. INSTALLED PER 506.19(c) AND SPECIAL PROVISIONS.

2). BOLTS SHALL HAVE HEAVY HEX. NUT, HEX. HEAD AND ONE DTI'S/LOAD INDICATOR FLAT WASHER AND 1 HARDENED WASHER EACH (HARDENED WASHER TO BE PLACED UNDER TURNED ELEMENT (NUT), DTI TO BE △1 PLACED UNDER THE HEAD OF THE BOLT WITH THE PROTRUSIONS FACING THE HEAD OF THE BOLT). BOLT, NUT AND WASHER SHALL BE MECHANICALLY GALVANIZED IN ACCORDANCE WITH AASHTO M 298, CLASS 50,TYPE 1.

3). PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWING.

4). BOLTS INSTALLED WITH THE STEM VERTICAL SHALL HAVE HEADS UP. BOLTS INSTALLED WITH THE STEM HORIZONTAL SHALL HAVE HEADS TOWARDS THE WEATHER UNLESS CLEARANCE RESTRICTIONS DICTATE OTHERWISE.

CLEANING:

△1

1). ALL STEEL SHALL BE BLAST CLEANED AS PER SSPC SP-10 (NEAR WHITE) PER SPEC. 506.14(c).

PAINTING:

1). ALL STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

2). THE FINAL COLOR SHALL BE BROWN IN ACCORDANCE WITH SUBSECTION 708.03 (FED. STD 595, COLOR CHIP 20059).

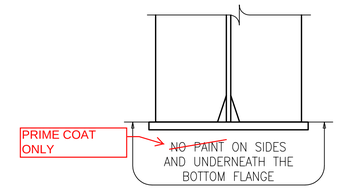
3). GREASE SHALL BE APPLIED FOR A DISTANCE OF 10'-0" STARTING AT THE ABUTMENT #1 END OF THE SPAN. ALL CHANNELS AND CONNECTION PLATES LOCATED IN THIS AREA SHALL ALSO BE GREASED. THE GREASE SHALL BE BROWN.

4). PAINT SYSTEM SHALL BE AS FOLLOWS FROM CARBOLINE COMPANY:
PRIME COAT: CARBOZINC 859 ORGANIC ZINC RICH EPOXY PRIMER (3.5-5 MILS DFT) △1
INTERMEDIATE COAT: CARBOGUARD 893 EPOXY INTERMEDIATE (3-6 MILS DFT)
TOP COAT: CARBOTHANE 133 VOC ALIPHATIC POLYURETHANE (2.5-4 MILS DFT) △1
△1 TOTAL THICKNESS SHALL BE BETWEEN 5.5 AND 10.0 MILS

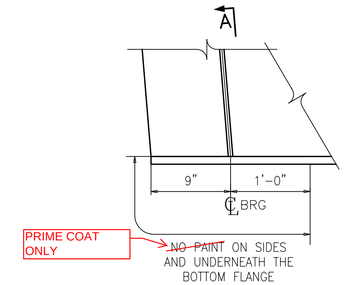
5). TOP OF GIRDER TOP FLANGES SHALL ONLY RECEIVE A PRIME COAT (LESS THAN 1.5 MILS OF PRIMER). (SEE DETAIL 1)

6). FAYING SURFACES OF BOLTED CONNECTION (BOTH SIDES OF ALL PLIES) SHALL ONLY RECEIVE A PRIME COAT FOR A DISTANCE OF $1\frac{1}{2}$" AROUND HOLES.

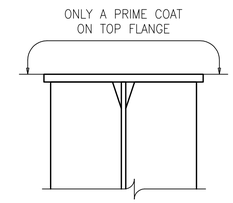
7). FIELD WELD AREAS AT BEARING SOLE PLATES SHALL BE LEFT UNPAINTED (SEE SKETCH P1).



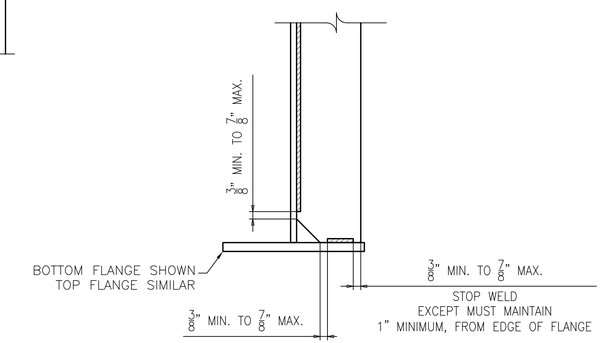
SECTION A



SKETCH P1



DETAIL 1



DETAIL "WS1"
STIFF. WELD TERMINATION

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL: | SURFACE PREP. & PAINT: | HOLES: AS NOTED | SHOP BOLTS: AS NOTED

DESCRIPTION: GENERAL NOTES

ENGINEERING REVIEW STAMP

Vermont Agency of Transportation
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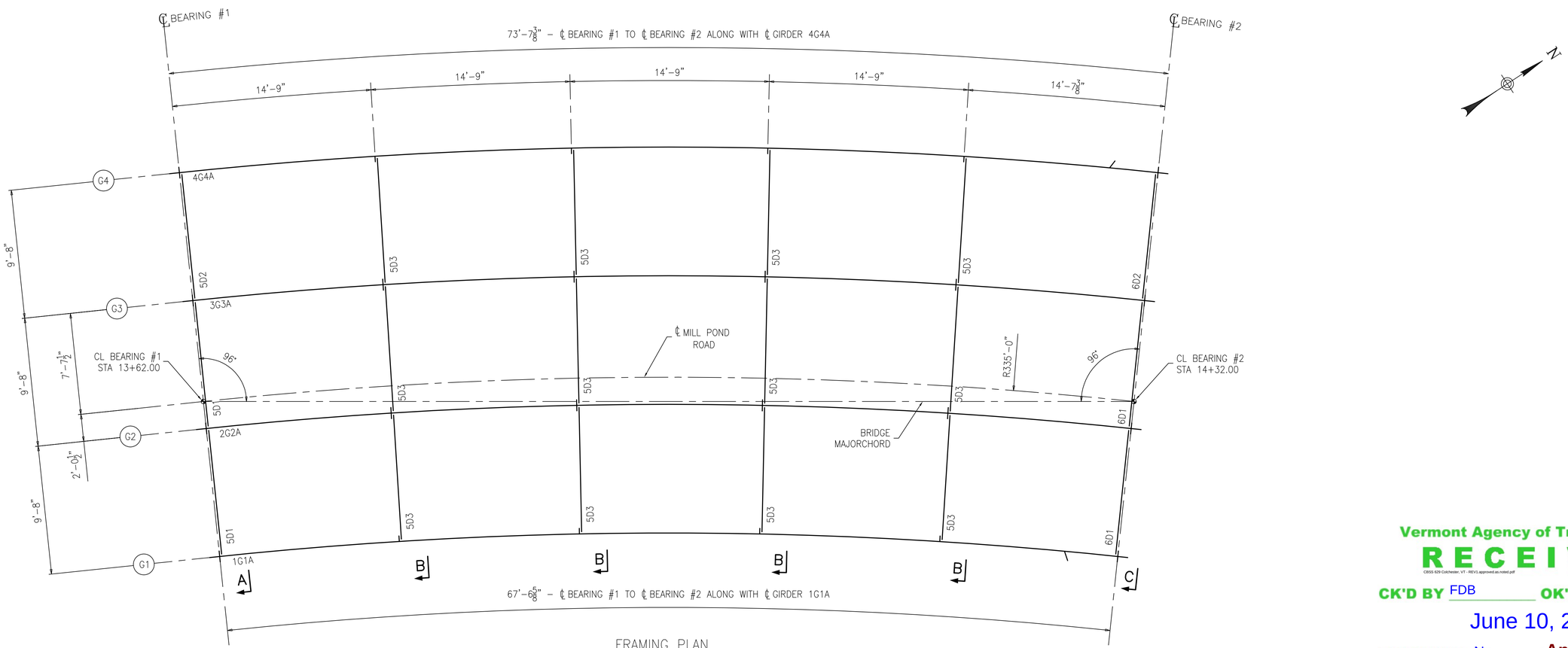
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

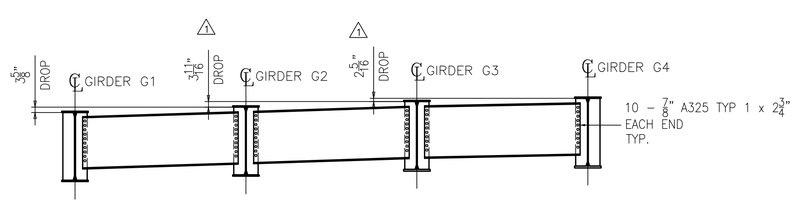
DRAWN: BK DATE: 04/21
CHKD: YT DATE: 04/28

LOCATION: COLCHESTER / CHITTENDEN, VT
PROJ NO. STP 5600(12)
CUSTOMER: A.L. ST. ONGE

JOB NO. 629-1
DWG NO. GN1
REV. △1



FRAMING PLAN



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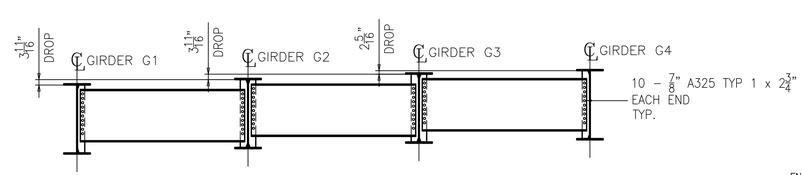

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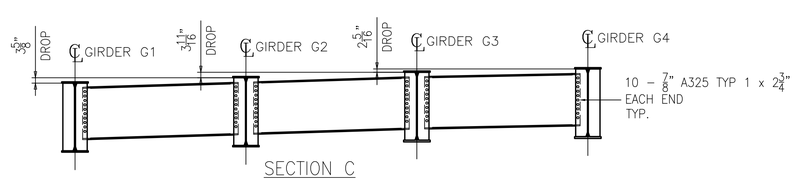

SECTION C

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NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL:	SURFACE PREP. & PAINT:	HOLES:	SHOP BOLTS:
		–	NONE

DESCRIPTION: FRAMING PLAN

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CASCO BAY STEEL STRUCTURES, INC.

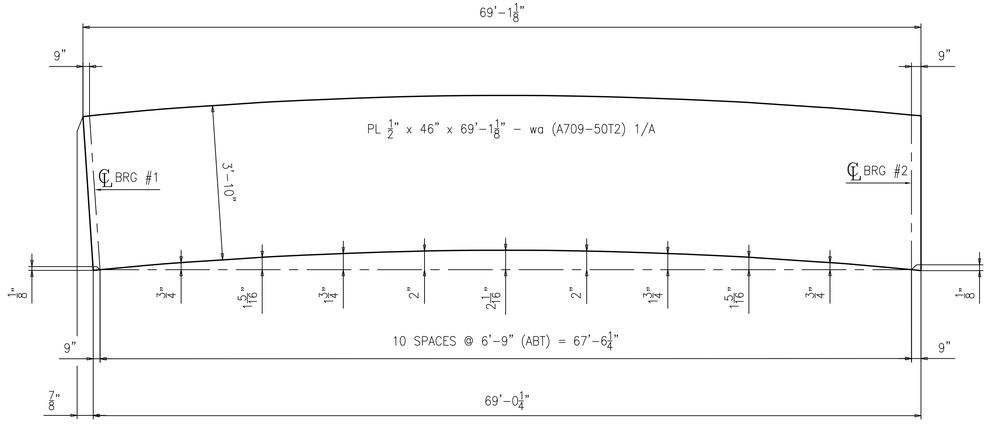
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726

TENCA 1415

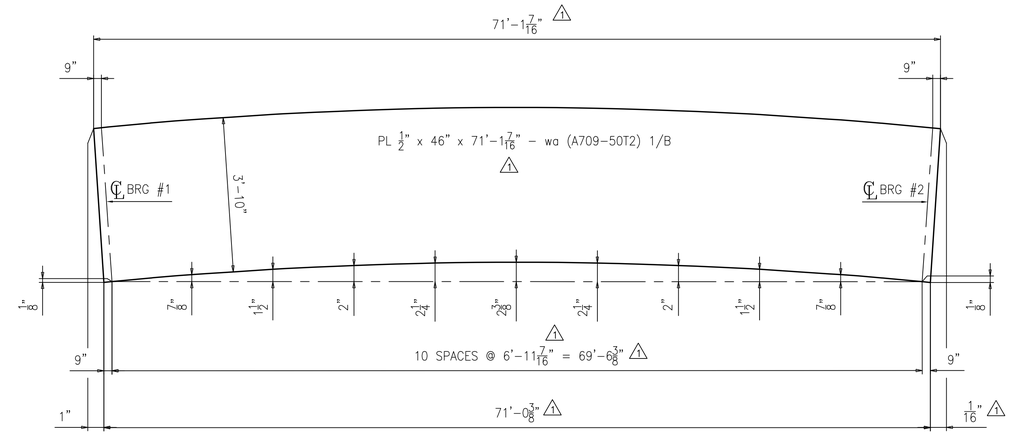
STRUCTURE:

REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN: BK	DATE: 04/21	
CHKD: YT	DATE: 04/28	
LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO. 629-1	DWG NO. E1
PROJ NO. STP 5600(12)		REV. 1
CUSTOMER: A.L. ST. ONGE		



CAMBER DIAGRAM FOR 1G1A



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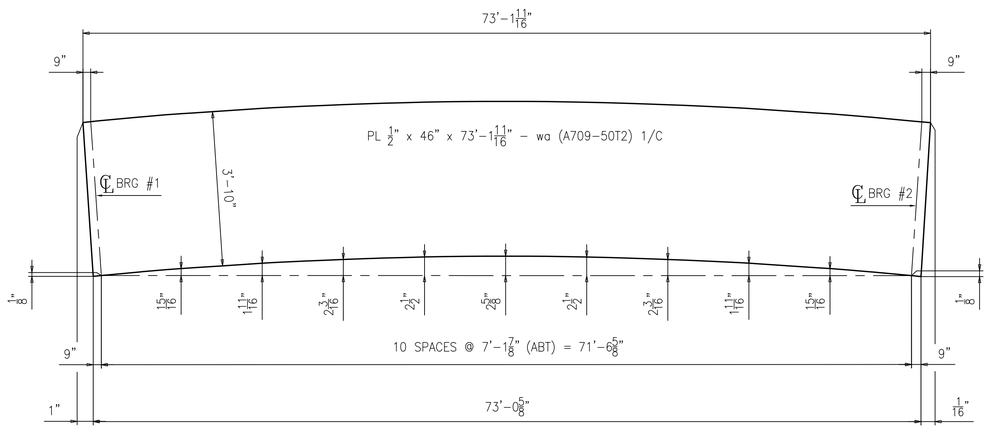
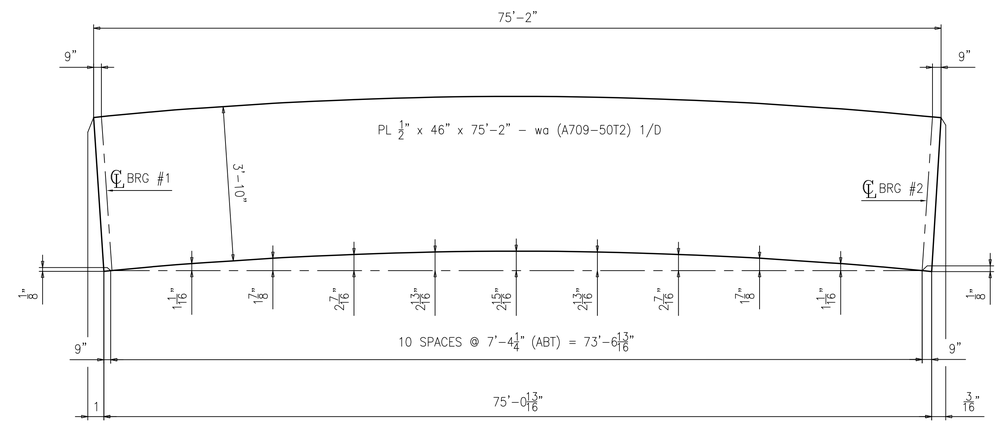


CAMBER DIAGRAM FOR 3G3A



CAMBER DIAGRAM FOR 4G4A

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 - DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL:	SURFACE PREP. & PAINT: SEE DWG GN1	HOLES: 15/16"	SHOP BOLTS: NONE

DESCRIPTION: CAMBER DIAGRAMS

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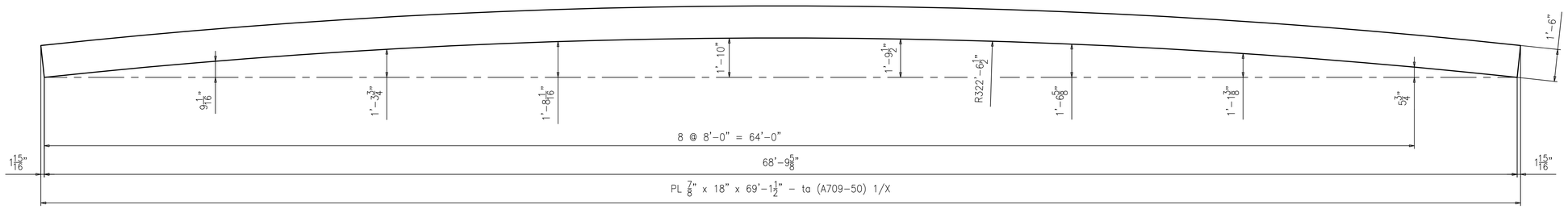
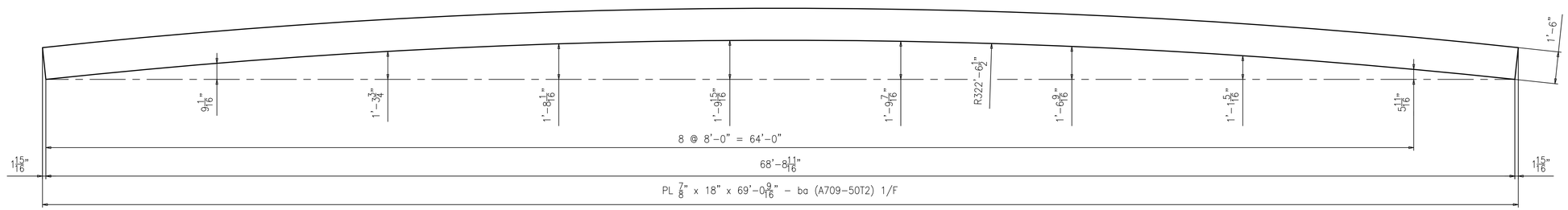
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN:	DATE:
BK	04/22
CHKD: YT	DATE: 04/28

LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO. STP 5600(12)	629-1	C1
CUSTOMER: A.L. ST. ONGE		REV. 1





FLANGE DIAGRAMS FOR 1G1A

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 - DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
0						

MATERIAL:	SURFACE PREP. & PAINT: SEE DWG GN1	HOLES: AS NOTED	SHOP BOLTS: AS NOTED

DESCRIPTION: FLANGE DIAGRAMS FOR 1G1A

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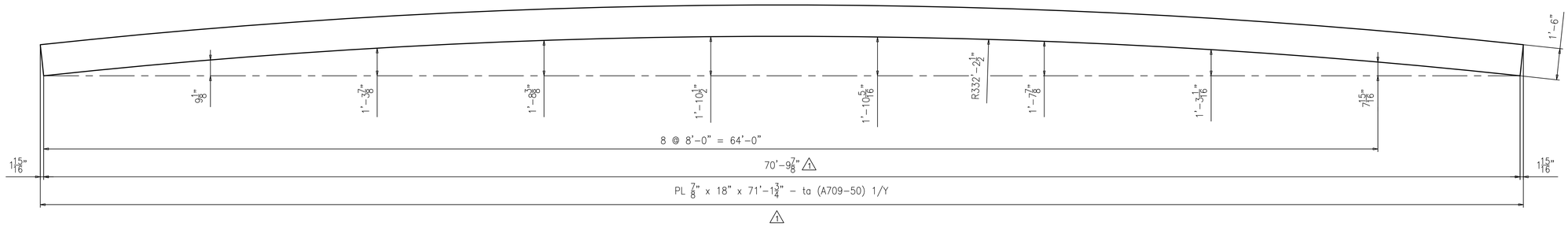
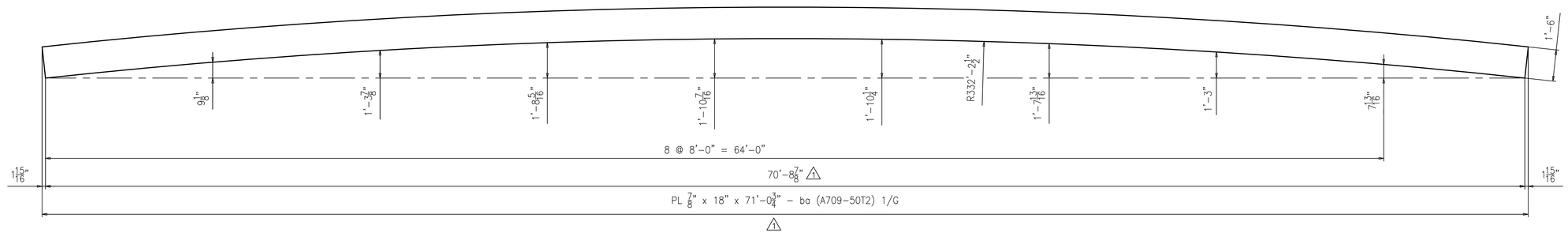
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN:	DATE:
BK	04/22
CHKD: YT	DATE: 04/28

LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO. STP 5600(12)	629-1	C2
CUSTOMER: A.L. ST. ONGE		REV. 0





FLANGE DIAGRAMS FOR 2G2A

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 – DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL:	SURFACE PREP. & PAINT: SEE DWG GN1	HOLES: AS NOTED	SHOP BOLTS: AS NOTED

DESCRIPTION: FLANGE DIAGRAMS FOR 2G2A

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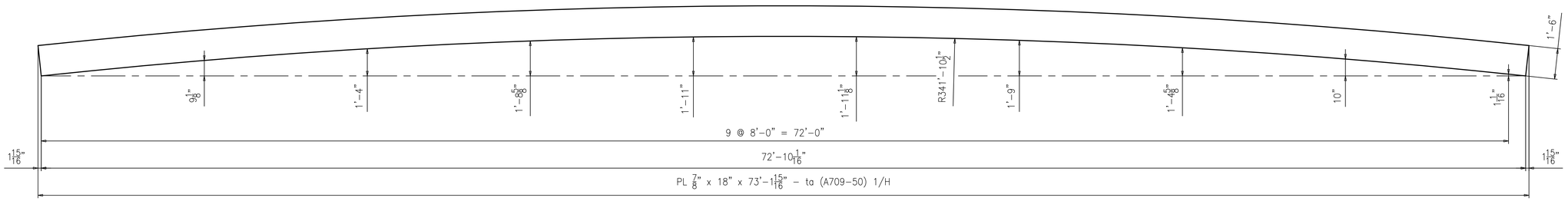
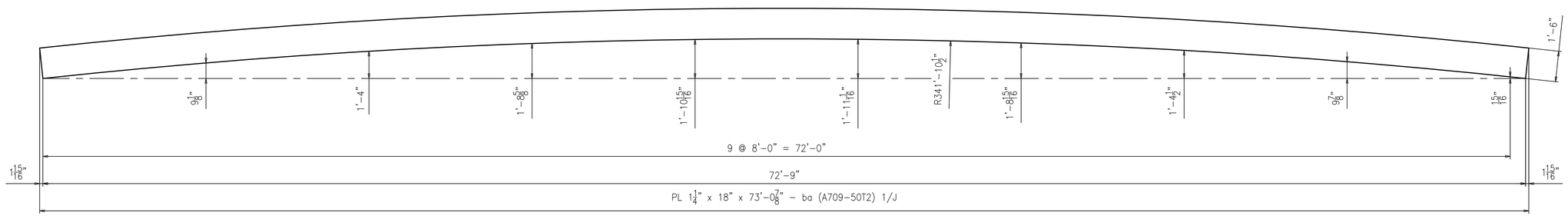
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN: BK	DATE: 04/23
CHKD: YT	DATE: 04/28

LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO. STP 5600(12)	629-1	C3
CUSTOMER: A.L. ST. ONGE		REV. △1





FLANGE DIAGRAMS FOR 3G3A

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 - DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
0						

MATERIAL:	SURFACE PREP. & PAINT: SEE DWG GN1	HOLES: AS NOTED	SHOP BOLTS: AS NOTED

DESCRIPTION: FLANGE DIAGRAMS FOR 3G3A

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:	DRAWN:	DATE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK TOWN OF COLCHESTER, COUNTY OF CHITTENDEN STATE OF VERMONT AGENCY OF TRANSPORTATION	BK	04/22
	CHKD: YT	DATE: 04/28
LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO. STP 5600(12)	629-1	C4
CUSTOMER: A.L. ST. ONGE		REV. 0

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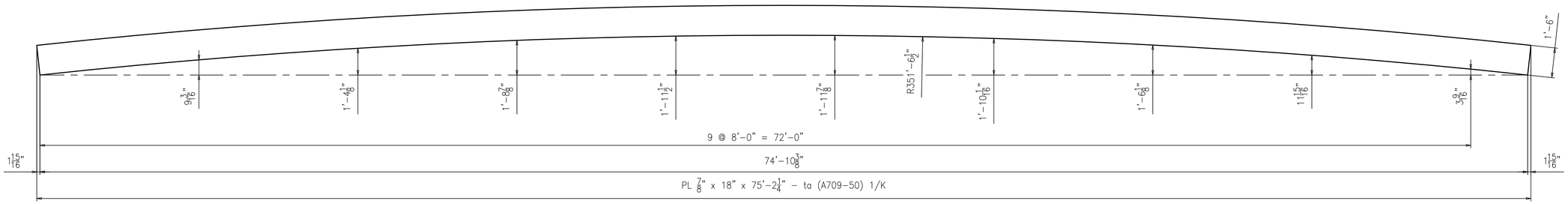

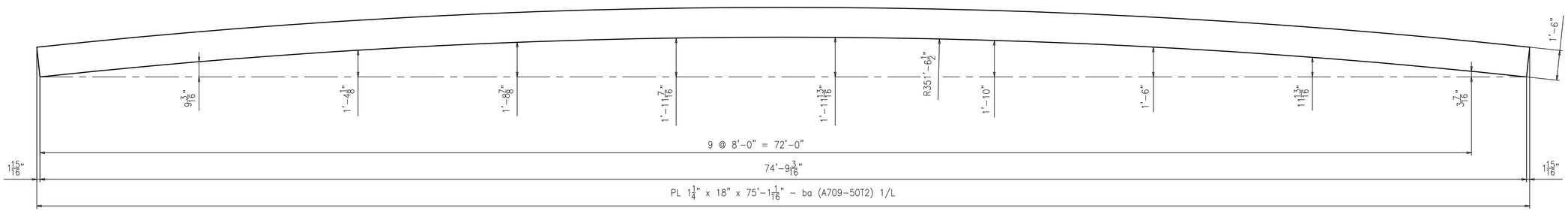

FLANGE DIAGRAMS FOR 4G4A

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 - DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
0						

MATERIAL:	SURFACE PREP. & PAINT: SEE DWG GN1	HOLES: AS NOTED	SHOP BOLTS: AS NOTED

DESCRIPTION: FLANGE DIAGRAMS FOR 4G4A

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BY Carolyn Carlson DATE 06/11/15

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN:	DATE:
BK	04/22
CHKD: YT	DATE: 04/28

LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO. STP 5600(12)	629-1	C5
CUSTOMER: A.L. ST. ONGE		REV. 0

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
								629	FB1	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
			360		A325 TYP 1 7/8ø		2 3/4	1FL DTIS WASHER		
								+ 1 FL WASHER		

FIELD BOLT LIST						A325 TYPE 1 BOLTS								
LINE	NO REQ'D	BOLT DIAM.	BOLT LEN.	BOLTS /CONN.	NO OF /CONN.	GRIP*	THICK. OF PCS. CONNECTED						WASH CODE	PIECES CONNECTED AND REMARKS
1	360	7/8"ø	2 3/4"	10	36	1 1/8"	5/8"	1/2"					3	DIAPHRAGM TO GIRDER CONNECTION PLATE

* GRIP LENGTHS EXCLUDE WASHER THICKNESS

1: 1 HARD DTI'S/LOAD INDICATOR FLAT WASHER
2: 2 HARD DTI'S/LOAD INDICATOR FLAT WASHERS
3: 1 HARD DTI'S/LOAD INDICATOR FLAT WASHER AND 1 HARDENED WASHER.

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BY Carolyn Carlson DATE 06/11/15

WORK THIS DRAWING WITH E1

ENGINEERING REVIEW STAMP

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
0						

MATERIAL: | SURFACE PREP. & PAINT: | HOLES: 15/16"ø | SHOP BOLTS: NONE

DESCRIPTION: FIELD BOLT LIST

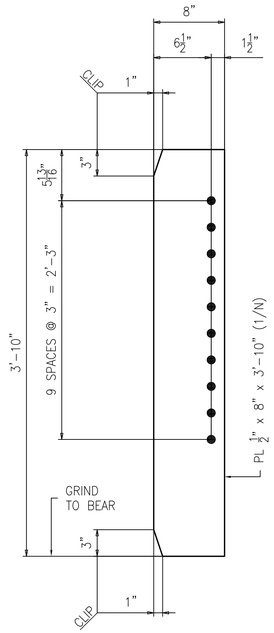
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

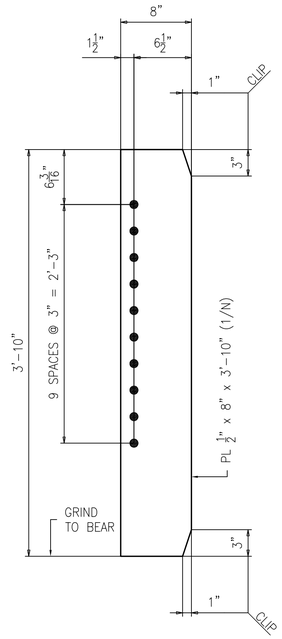
DRAWN: BK DATE: 04/22
CHKD: YT DATE: 04/28

LOCATION: COLCHESTER / CHITTENDEN, VT
PROJ NO. STP 5600(12)
CUSTOMER: A.L. ST. ONGE

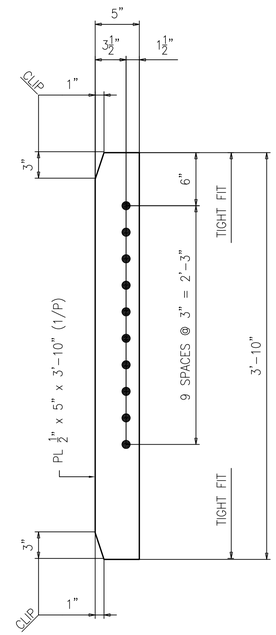
JOB NO. 629-1
DWG NO. FB1
REV. 0



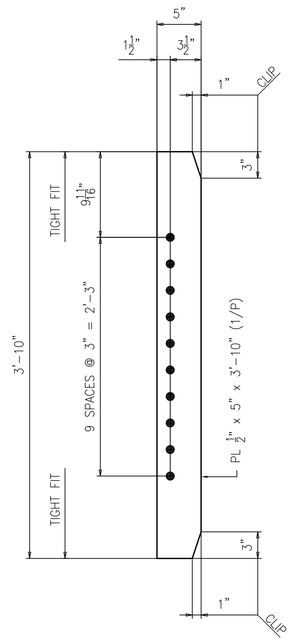
6 ~ BEARING STIFFENER ~ x1a



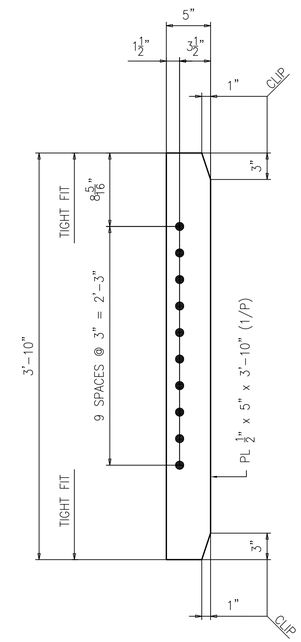
6 ~ BEARING STIFFENER ~ x1b



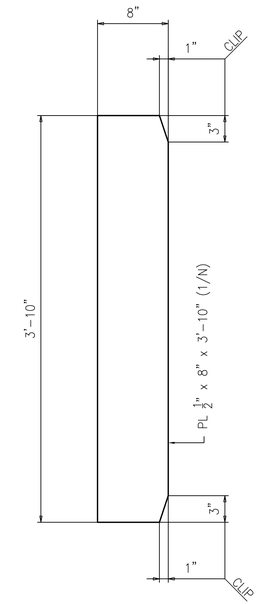
12 ~ INTERMEDIATE STIFFENER ~ x1c



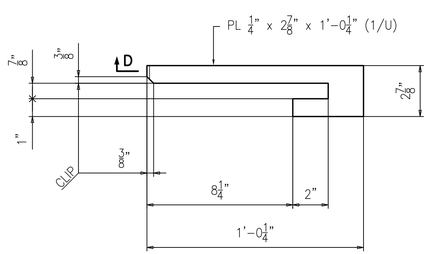
8 ~ INTERMEDIATE STIFFENER ~ x1d



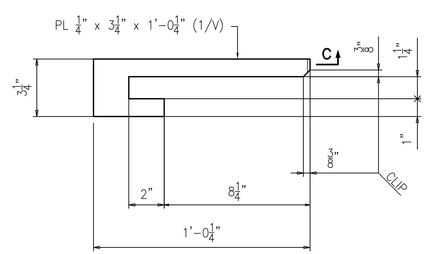
4 ~ INTERMEDIATE STIFFENER ~ x1f



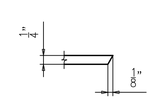
4 ~ BEARING STIFFENER ~ x1g



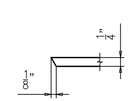
1 ~ DRIP PLATE ~ x1h



1 ~ DRIP PLATE ~ x1k



SECTION C



SECTION D

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
0						

MATERIAL:	SURFACE PREP. & PAINT:	HOLES:	SHOP BOLTS:
A709-50 U.N.	SEE DWG GN1	15/16"ø	NONE

DESCRIPTION: GIRDER STANDARD DETAILS

ENGINEERING REVIEW STAMP

Vermont Agency of Transportation
RECEIVED
CBSS 626 Colchester, VT - REV1.approved.as.noted.pdf

CK'D BY FDB OK'D BY HIS

June 10, 2015

RESUBMIT No Approved

BY Carolyn Carlson DATE 06/11/15

CASCO BAY STEEL STRUCTURES
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

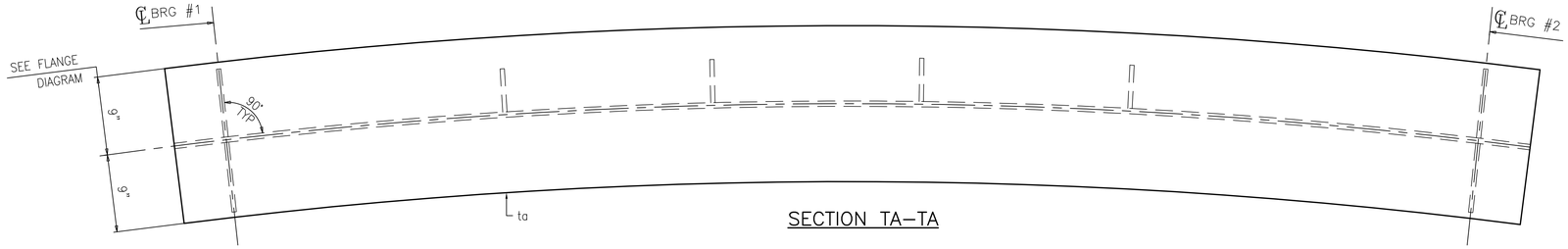
STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN: BK DATE: 04/22
CHKD: YT DATE: 04/28

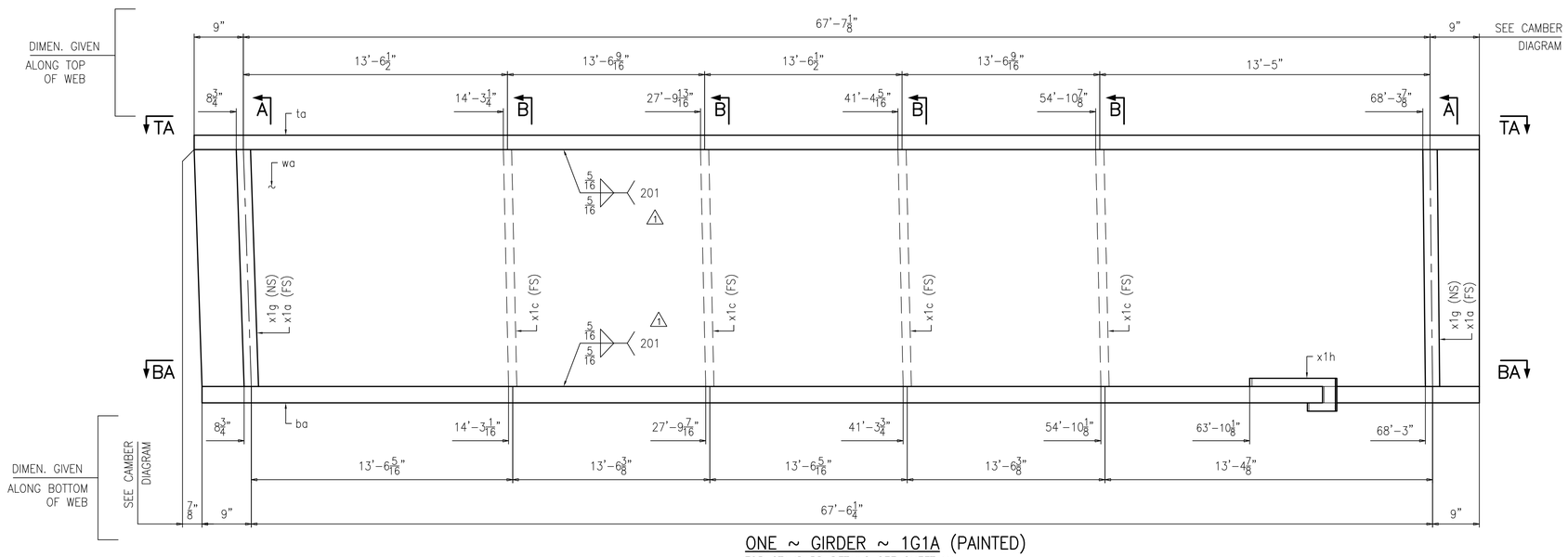
LOCATION: COLCHESTER / CHITTENDEN, VT
PROJ NO. STP 5600(12)
CUSTOMER: A.L. ST. ONGE

JOB NO. 629-1
DWG NO. X1
REV. 0

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
								629	1	1
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		1G1A	1		GIRDER			PAINTED	13142	
1	A		1	wa	PL 1/2 x 46	69	1 1/8	A709-50T2	5403	
1	X		1	ta	PL 7/8 x 18	69	1 1/2		3702	
1	F		1	ba	PL 7/8 x 18	69	0 9/16	A709-50T2	3697	
1	N		2	x1a	PL 1/2 x 8	3	10	M1E	104	
1	P		4	x1c	PL 1/2 x 5	3	10		130	
1	N		2	x1g	PL 1/2 x 8	3	10	M1E	104	
1	U		1	x1h	PL 1/4 x 2 7/8	1	0 1/4		2	

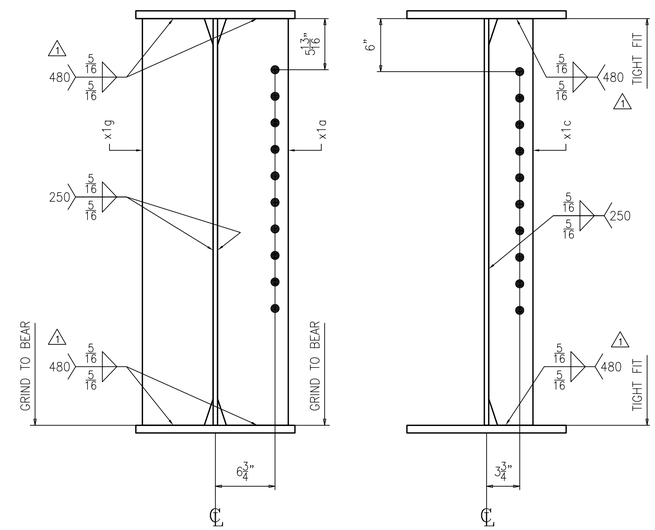


SECTION TA–TA



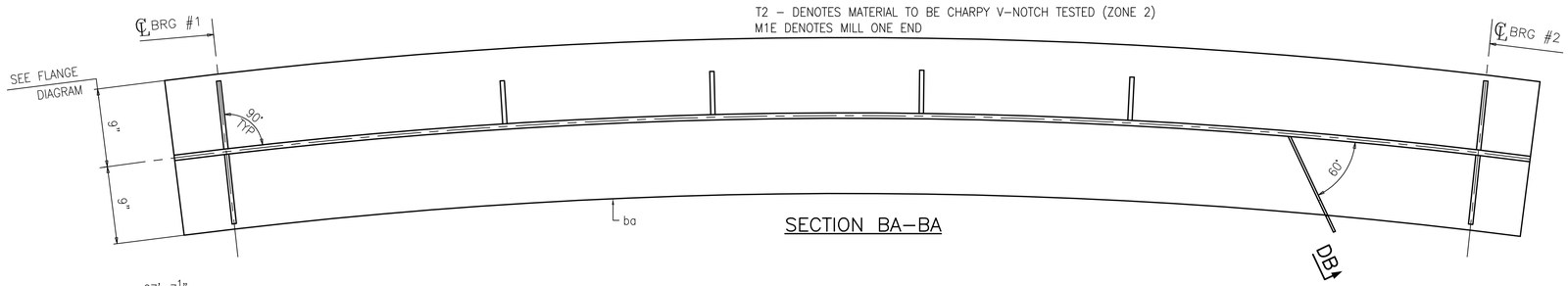
ONE ~ GIRDER ~ 1G1A (PAINTED)

FOR STANDARD DETAILS SEE SHEET X1
FOR CAMBER DIAGRAM SEE SHEET C1
FOR FLANGE DIAGRAM SEE SHEET C2
FOR GENERAL NOTES SEE SHEET GN1
T2 – DENOTES MATERIAL TO BE CHARPY V–NOTCH TESTED (ZONE 2)
M1E DENOTES MILL ONE END

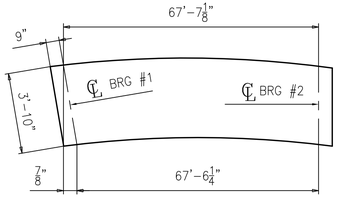


SECTION A

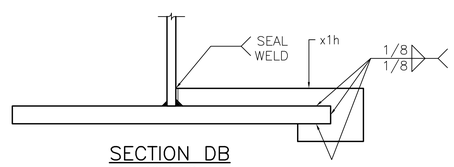
SECTION B



SECTION BA–BA



ORIENTATION DIAGRAM



SECTION DB
ROTATED

Vermont Agency of Transportation
RECEIVED
CBSS 629 Colchester, VT - REV3.approved.as.noted.pdf
CK'D BY FDB OK'D BY HIS
June 10, 2015
RESUBMIT No Approved
BY Carolyn Carlson DATE 06/11/15

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL: A709-50 U.N.
SURFACE PREP. & PAINT: SEE DWG GN1
HOLES: 15/16"ø
SHOP BOLTS: NONE

DESCRIPTION: GIRDER 1G1A

ENGINEERING REVIEW STAMP

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

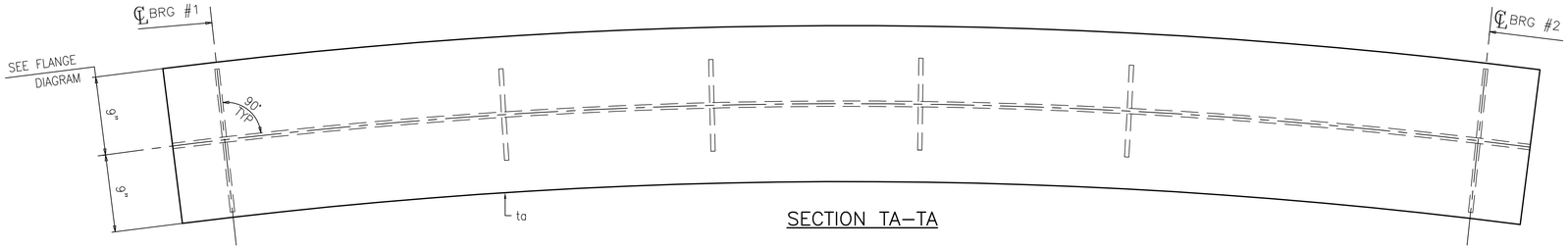
STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN: BK DATE: 04/22
CHKD: YT DATE: 04/23

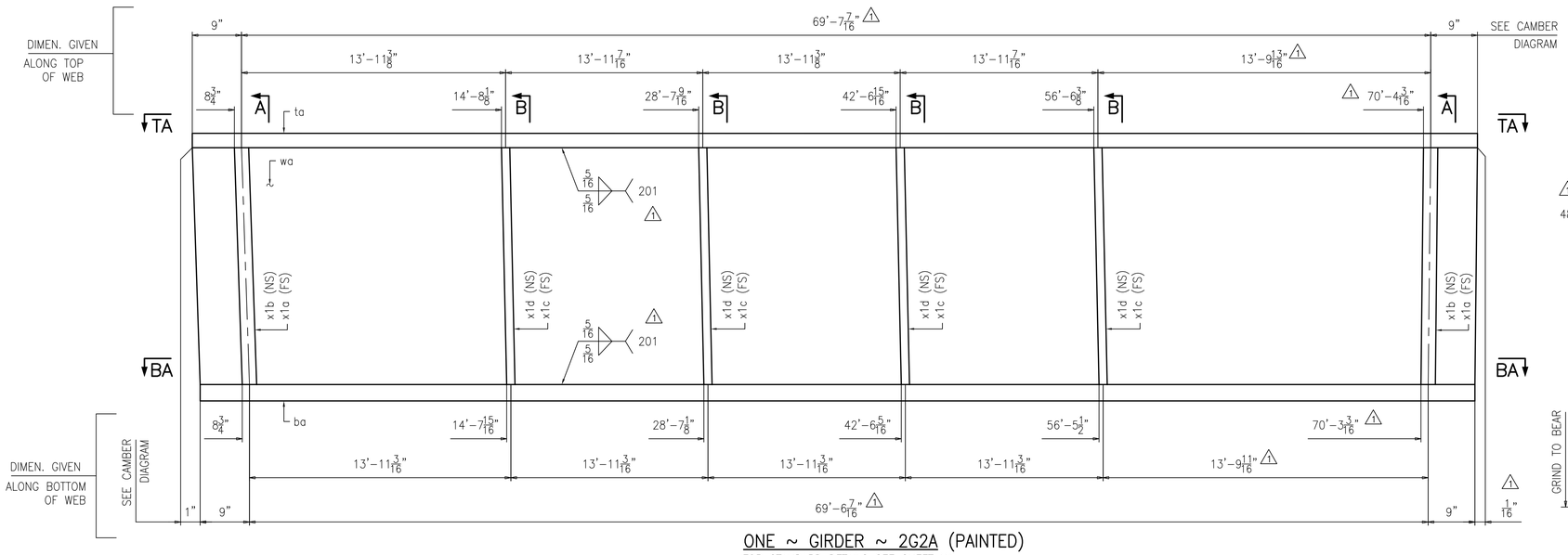
LOCATION: COLCHESTER / CHITTENDEN, VT
PROJ NO. STP 5600(12)
CUSTOMER: A.L. ST. ONGE

JOB NO. 629-1
DWG NO. 1
REV. 1

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
								629	2	1
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		2G2A	1		GIRDER			PAINTED	13646	
1	B		1	wa	PL 1/2 x 46	71	1 7/16	A709-50T2	5562	
1	Y		1	ta	PL 7/8 x 18	71	1 3/4		3810	
1	G		1	ba	PL 7/8 x 18	71	0 3/4	A709-50T2	3806	
1	N		2	x1a	PL 1/2 x 8	3	10	M1E	104	
1	N		2	x1b	PL 1/2 x 8	3	10	M1E	104	
1	P		4	x1c	PL 1/2 x 5	3	10		130	
1	P		4	x1d	PL 1/2 x 5	3	10		130	

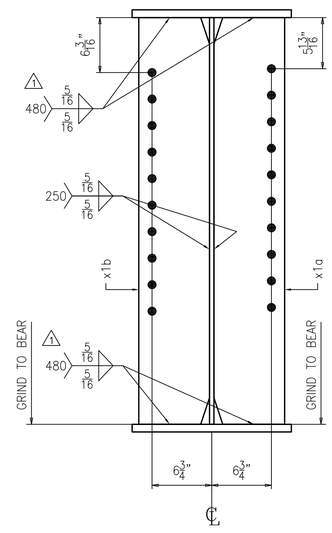


SECTION TA–TA

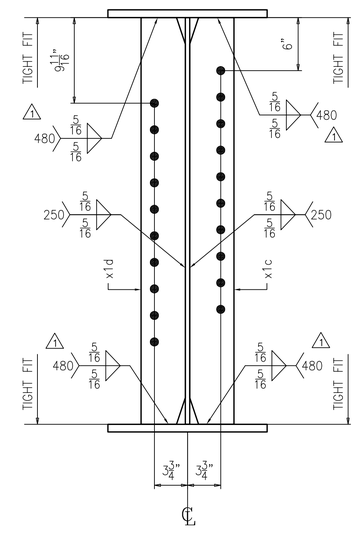


ONE ~ GIRDER ~ 2G2A (PAINTED)

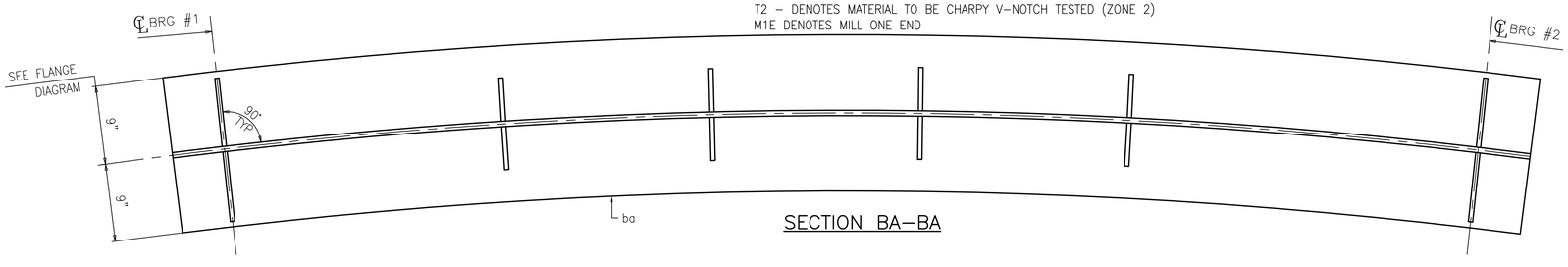
FOR STANDARD DETAILS SEE SHEET X1
FOR CAMBER DIAGRAM SEE SHEET C1
FOR FLANGE DIAGRAM SEE SHEET C3
FOR GENERAL NOTES SEE SHEET GN1
T2 – DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)
M1E DENOTES MILL ONE END



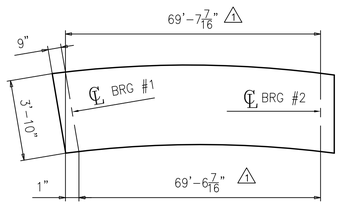
SECTION A



SECTION B



SECTION BA–BA



ORIENTATION DIAGRAM

Vermont Agency of Transportation
RECEIVED
CBSS 629 Colchester, VT - REV1.approved.as.noted.pdf

CK'D BY FDB OK'D BY HIS

June 10, 2015

RESUBMIT No Approved
BY Carolyn Carlson DATE 06/11/15

ENGINEERING REVIEW STAMP

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL:	SURFACE PREP. & PAINT:	HOLES:	SHOP BOLTS:
A709-50 U.N.	SEE DWG GN1	15/16"ø	NONE

DESCRIPTION: GIRDER 2G2A

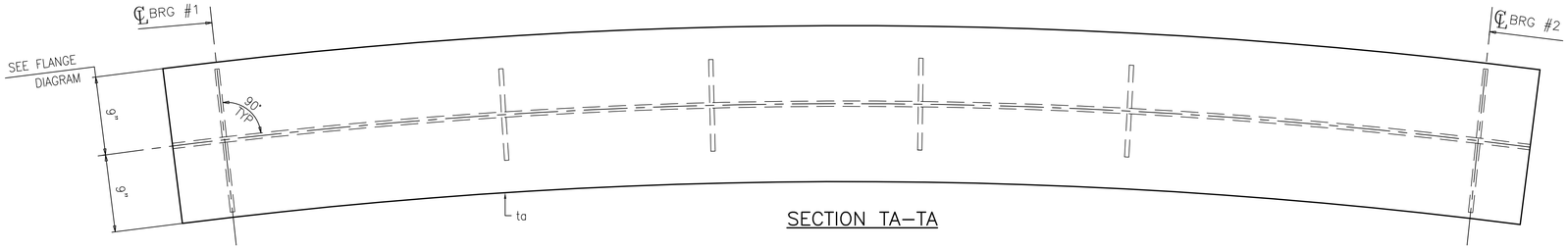
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. SOUTH PORTLAND, ME 04106
PHONE (207) 780-6722 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

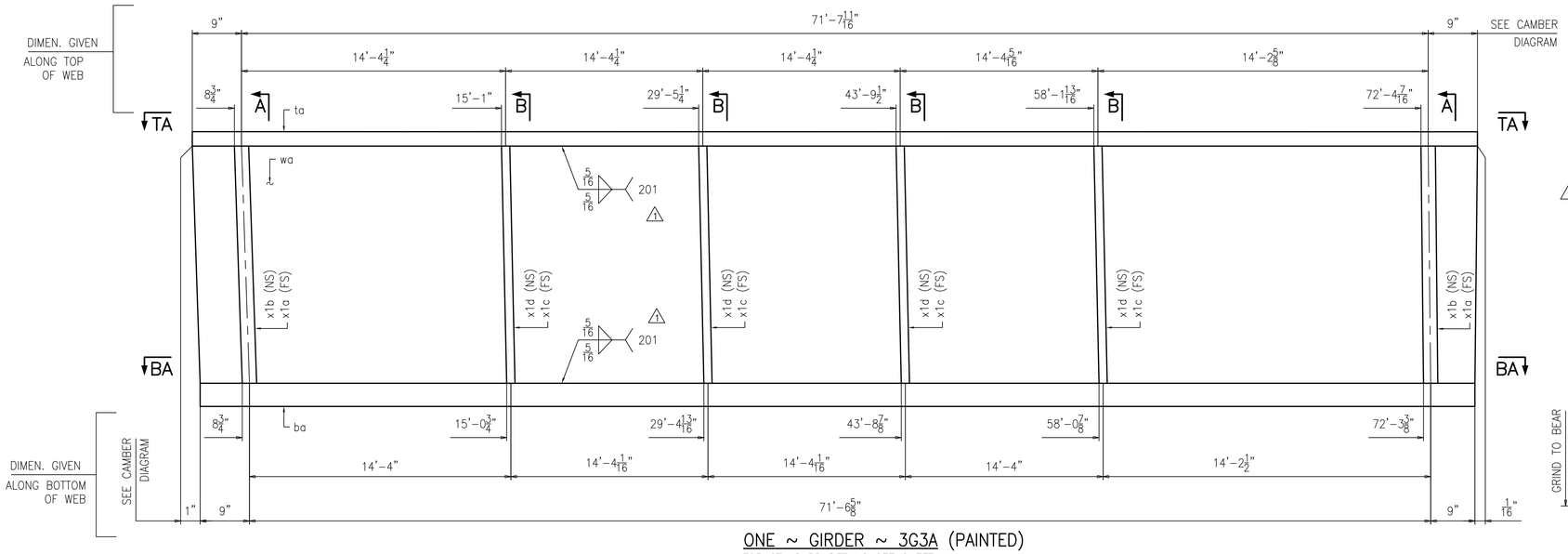
DRAWN:	DATE:
BK	04/23
CHKD: YT	DATE: 04/23

LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO. STP 5600(12)	629-1	2
CUSTOMER: A.L. ST. ONGE		REV. 1

ABM INFO		SHIP	BILL OF MATERIAL						JOB NO.	DRAWING NO.	REV.
									629	3	1
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		3G3A	1		GIRDER			PAINTED	15696		
1	C		1	wa	PL 1/2 x 46	73	1 11/16	A709-50T2	5720		
1	H		1	ta	PL 7/8 x 18	73	1 15/16		3918		
1	J		1	ba	PL 1 1/4 x 18	73	0 7/8	A709-50T2	5590		
1	N		2	x1a	PL 1/2 x 8	3	10	M1E	104		
1	N		2	x1b	PL 1/2 x 8	3	10	M1E	104		
1	P		4	x1c	PL 1/2 x 5	3	10		130		
1	P		4	x1d	PL 1/2 x 5	3	10		130		

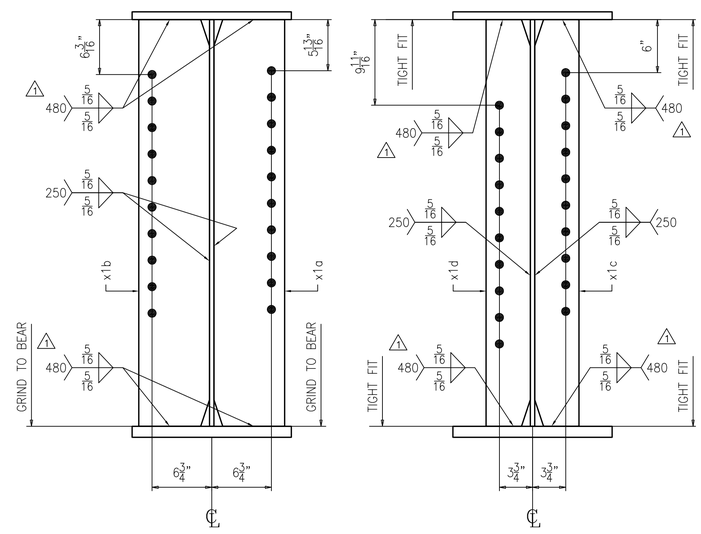


SECTION TA–TA



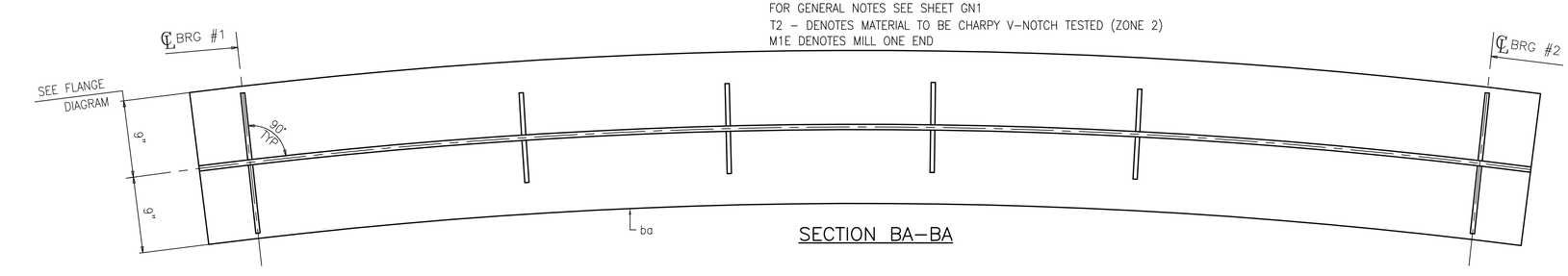
ONE ~ GIRDER ~ 3G3A (PAINTED)

FOR STANDARD DETAILS SEE SHEET X1
FOR CAMBER DIAGRAM SEE SHEET C1
FOR FLANGE DIAGRAM SEE SHEET C4
FOR GENERAL NOTES SEE SHEET GN1
T2 – DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)
M1E DENOTES MILL ONE END

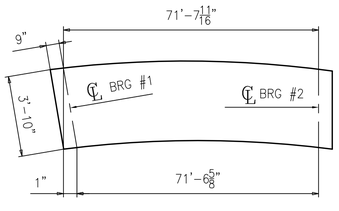


SECTION A

SECTION B



SECTION BA–BA



ORIENTATION DIAGRAM

Vermont Agency of Transportation
RECEIVED
CBGS 629 Colchester_VT - REV3_approved as noted.pdf
CK'D BY FDB OK'D BY HIS
June 10, 2015
RESUBMIT No Approved
BY Carolyn Carlson DATE 06/11/15

ENGINEERING REVIEW STAMP

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL:	SURFACE PREP. & PAINT:	HOLES:	SHOP BOLTS:
A709-50 U.N.	SEE DWG GN1	15/16"ø	NONE

DESCRIPTION: GIRDER 3G3A

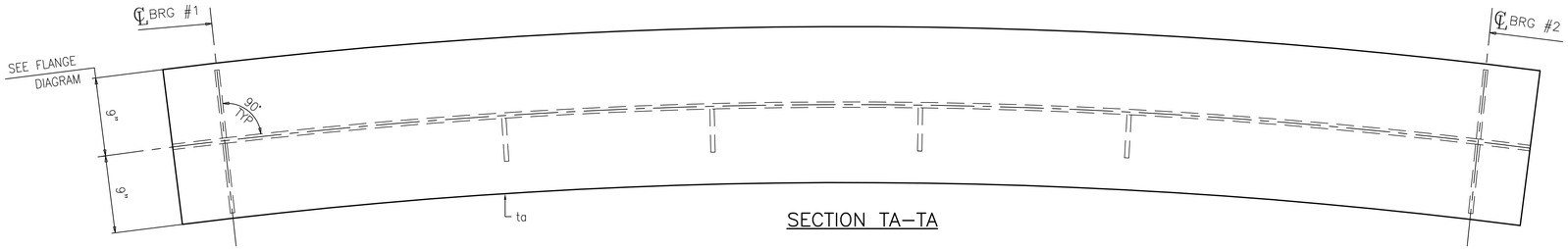
CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

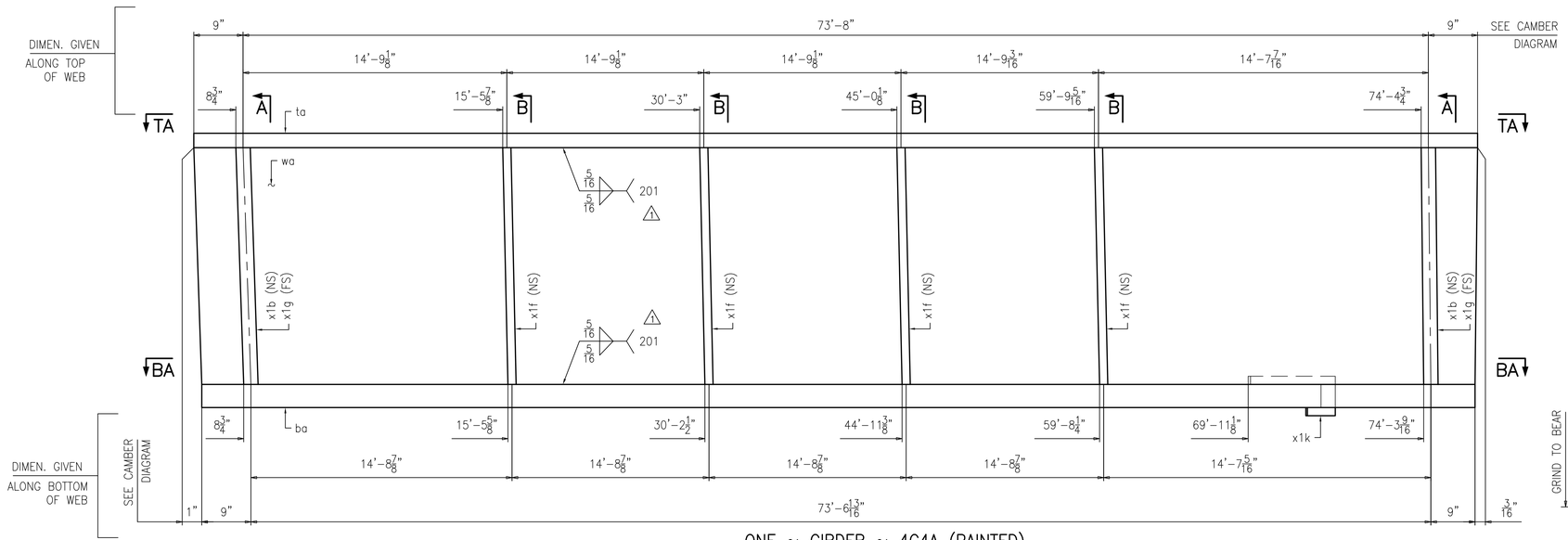
DRAWN:	DATE:
BK	04/23
CHKD: YT	DATE: 04/23

LOCATION: COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO. STP 5600(12)	629-1	3
CUSTOMER: A.L. ST. ONGE		REV. 1

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
								629	4	1
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		4G4A	1		GIRDER			PAINTED	15989	
1	D		1	wa	PL 1/2 x 46	75	2	A709-50T2	5878	
1	K		1	ta	PL 7/8 x 18	75	2 1/4		4026	
1	L		1	ba	PL 1 1/4 x 18	75	1 1/16	A709-50T2	5744	
1	N		2	x1b	PL 1/2 x 8	3	10	M1E	104	
1	N		2	x1g	PL 1/2 x 8	3	10	M1E	104	
1	P		4	x1f	PL 1/2 x 5	3	10		130	
1	V		1	x1k	PL 1/4 x 3 1/4	1	0 1/4		3	

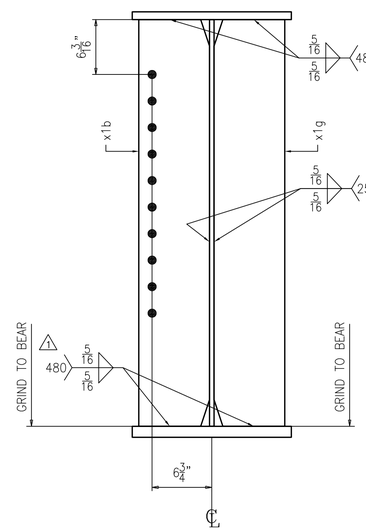


SECTION TA–TA

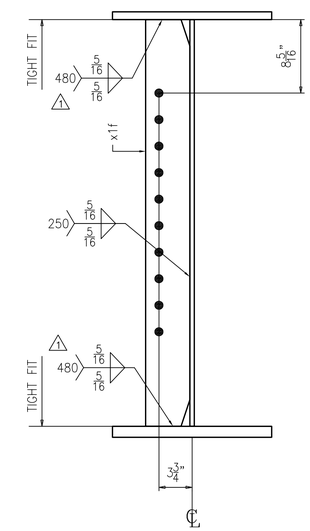


ONE ~ GIRDER ~ 4G4A (PAINTED)

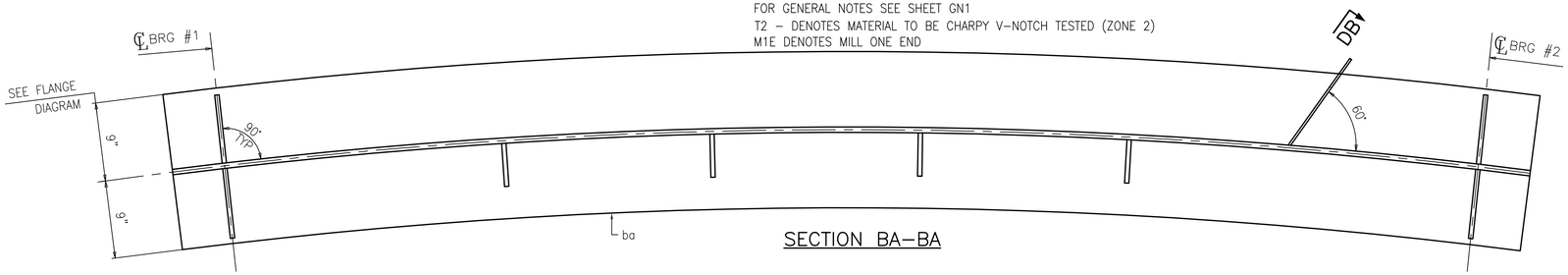
FOR STANDARD DETAILS SEE SHEET X1
FOR CAMBER DIAGRAM SEE SHEET C1
FOR FLANGE DIAGRAM SEE SHEET C5
FOR GENERAL NOTES SEE SHEET GN1
T2 – DENOTES MATERIAL TO BE CHARPY V–NOTCH TESTED (ZONE 2)
M1E DENOTES MILL ONE END



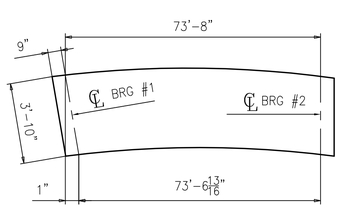
SECTION A



SECTION B

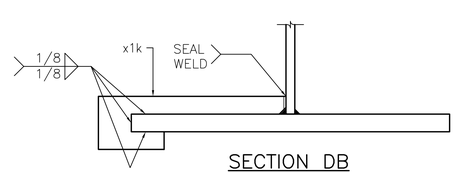


SECTION BA–BA



ORIENTATION DIAGRAM

Vermont Agency of Transportation
RECEIVED
CB55 629 Colchester, VT - REV1.approved as noted.pdf
CK'D BY FDB OK'D BY HIS
June 10, 2015
RESUBMIT No Approved
BY Carolyn Carlson DATE 06/11/15



SECTION DB
ROTATED

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL: A709-50 U.N.
SURFACE PREP. & PAINT: SEE DWG GN1
HOLES: 15/16"ø
SHOP BOLTS: NONE

DESCRIPTION: GIRDER 4G4A

ENGINEERING REVIEW STAMP

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. SOUTH PORTLAND, ME 04106
PHONE (207) 780-6722 FAX. (207) 780-6726
TENCA 1415

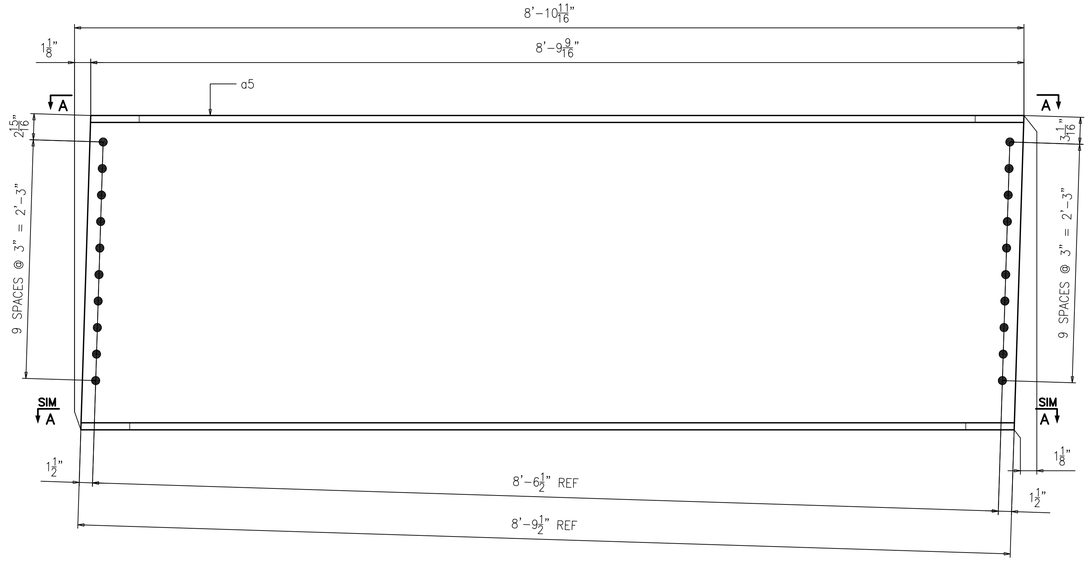
STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN: BK DATE: 04/23
CHKD: YT DATE: 04/23

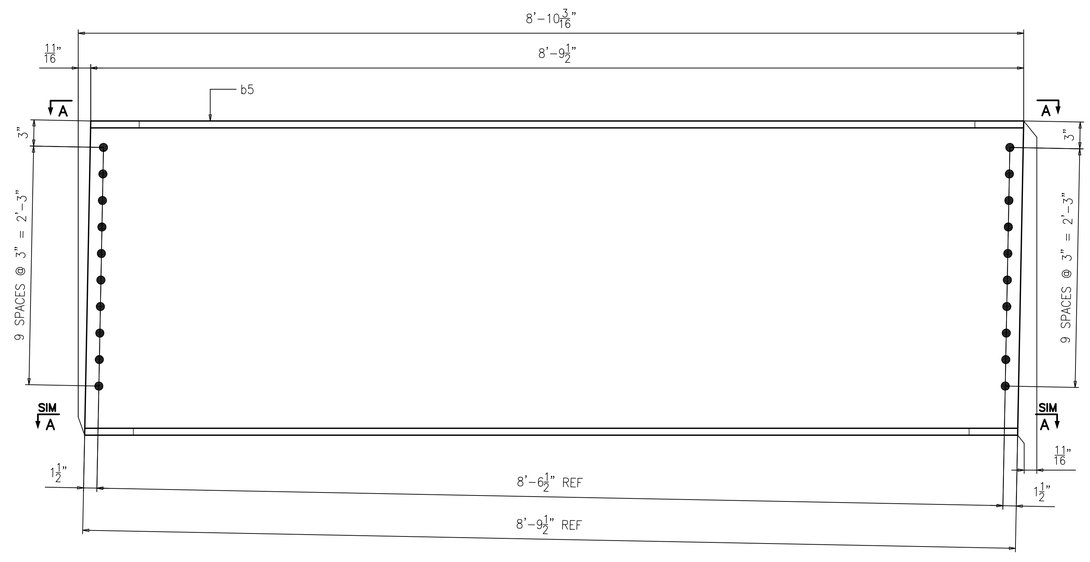
LOCATION: COLCHESTER / CHITTENDEN, VT
PROJ NO. STP 5600(12)
CUSTOMER: A.L. ST. ONGE

JOB NO. 629-1
DWG NO. 4
REV. 1

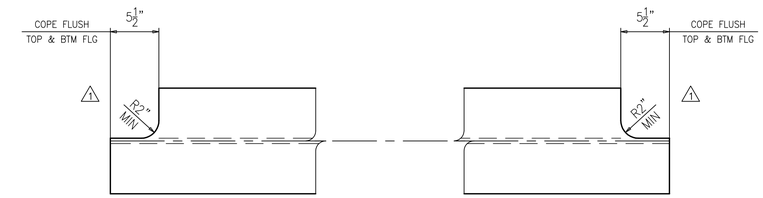
ABM INFO		SHIP	BILL OF MATERIAL						JOB NO.	DRAWING NO.	REV.
									629	5	1
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		5D1	2		DIAPHRAGM			PAINTED	2400		
1	R		2	a5	W 36 x 135	8	10 11/16	A709-50T2	2400		
		5D2	1		DIAPHRAGM			PAINTED	1195		
1	R		1	b5	W 36 x 135	8	10 3/16	A709-50T2	1195		
		5D3	12		DIAPHRAGM			PAINTED	15053		
1	S		12	c5	W 36 x 135	9	3 1/2	A709-50T2	15053		



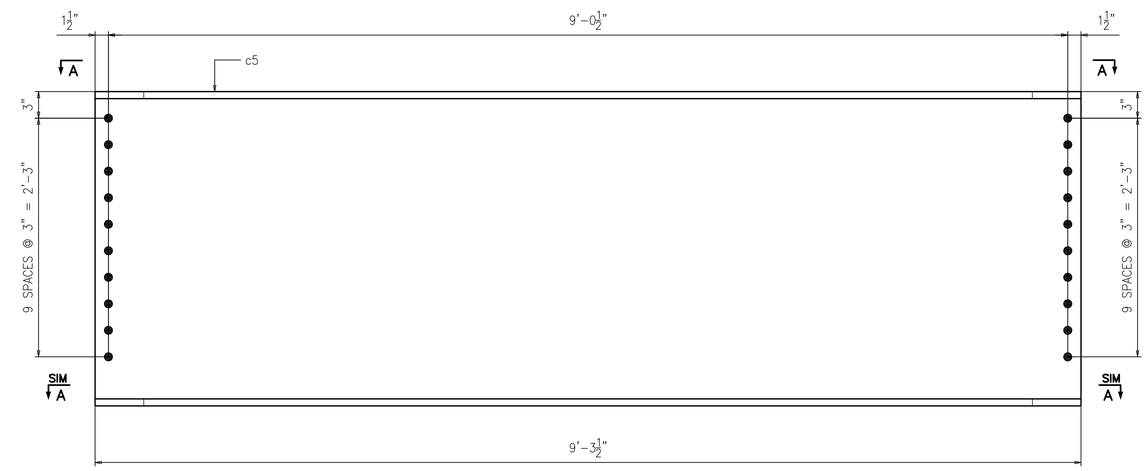
2 ~ DIAPHRAGM ~ 5D1 (PAINTED)
BEARING #1



ONE ~ DIAPHRAGM ~ 5D2 (PAINTED)
BEARING #1



SECTION A–A



12 ~ DIAPHRAGM ~ 5D3 (PAINTED)
INTERMEDIATE

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 – DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL:	SURFACE PREP. & PAINT:	HOLES:	SHOP BOLTS:
A709-50 U.N.	SEE DWG GN1	15/16"ø	NONE

DESCRIPTION: DIAPHRAGMS

CASCO BAY STEEL STRUCTURES, INC.
1 WALLACE AVE. PHONE (207) 780-6722
SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
TENCA 1415

STRUCTURE:
REPLACEMENT OF BRIDGE NO. 12 ON TH27 INCLUDING APPROACH ROADWAY AND CHANNEL WORK
TOWN OF COLCHESTER, COUNTY OF CHITTENDEN
STATE OF VERMONT AGENCY OF TRANSPORTATION

DRAWN:	DATE:
BK	02/24
CHKD: YT	DATE: 04/28

LOCATION:	COLCHESTER / CHITTENDEN, VT	JOB NO.	DWG NO.
PROJ NO.	STP 5600(12)	629-1	5
CUSTOMER:	A.L. ST. ONGE		REV. 1

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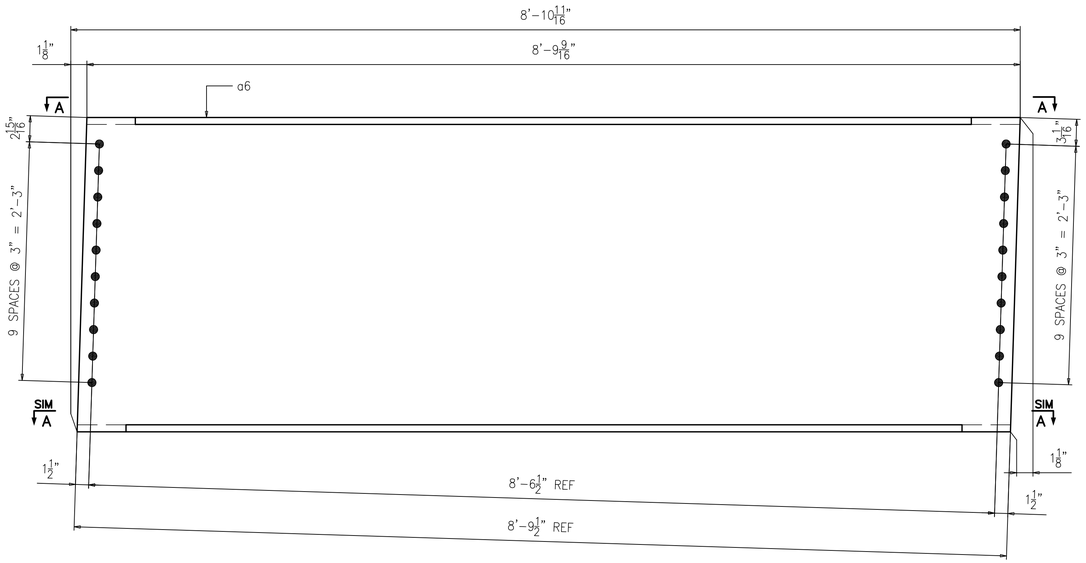
CK'D BY FDB OK'D BY HIS

June 10, 2015

RESUBMIT No Approved

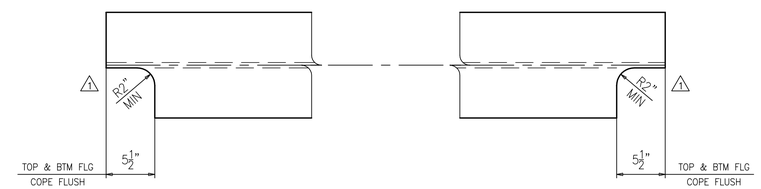
BY Carolyn Carlson DATE 06/11/15

ABM INFO		SHIP	BILL OF MATERIAL						JOB NO.	DRAWING NO.	REV.
									629	6	1
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		6D1	2		DIAPHRAGM			PAINTED	2400		
1	R		2	a6	W 36 x 135	8	10 11/16	A709-50T2	2400		
		6D2	1		DIAPHRAGM			PAINTED	1195		
1	R		1	b6	W 36 x 135	8	10 3/16	A709-50T2	1195		

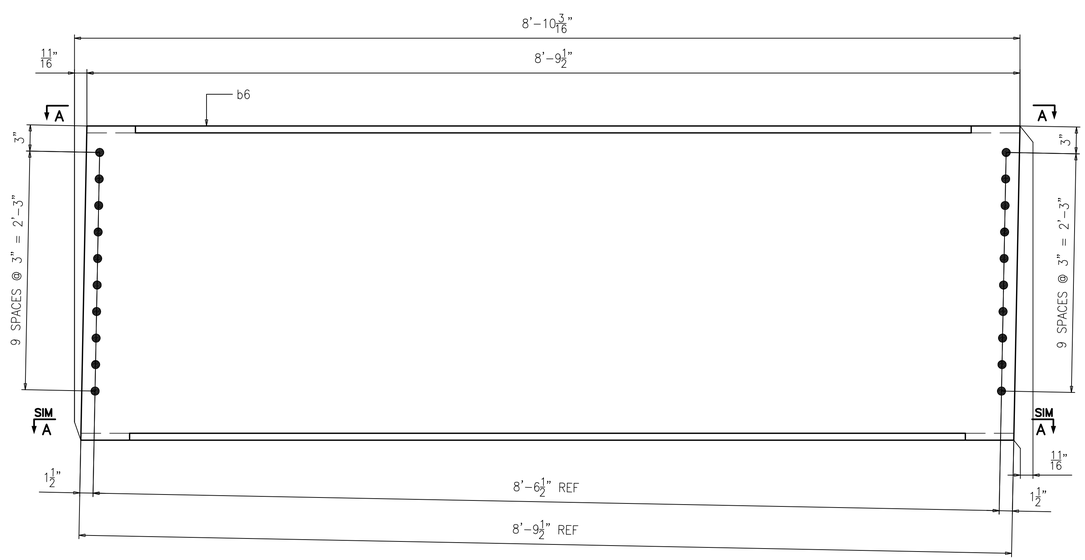


2 ~ DIAPHRAGM ~ 6D1 (PAINTED)

BEARING #2



SECTION A–A



ONE ~ DIAPHRAGM ~ 6D2 (PAINTED)

BEARING #2

NOTES:

1. FOR GENERAL NOTES SEE SHEET GN1.
2. T2 – DENOTES MATERIAL TO BE CHARPY V-NOTCH TESTED (ZONE 2)

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
1	06/05/15	PER APPROVAL COMMENTS	EG	YT		
0						

MATERIAL:	SURFACE PREP. & PAINT:	HOLES:	SHOP BOLTS:
A709-50 U.N.	SEE DWG GN1	15/16"ø	NONE

DESCRIPTION: DIAPHRAGMS

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SOUTH PORTLAND, ME 04106 FAX. (207) 780-6726
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DRAWN: BK DATE: 02/24
CHKD: YT DATE: 04/28

LOCATION: COLCHESTER / CHITTENDEN, VT
PROJ NO. STP 5600(12)
CUSTOMER: A.L. ST. ONGE

JOB NO. 629-1
DWG NO. 6
REV. 1

ENGINEERING REVIEW STAMP

Vermont Agency of Transportation
RECEIVED
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CK'D BY FDB OK'D BY HIS

June 10, 2015

RESUBMIT No Approved

BY Carolyn Carlson DATE 06/11/15