Total weight (lbs): 35482

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G101	ONE	GIRDER					35482.1	1	1
G101	1	.GIRDER		128-8 9/16					
TFA101	1	PL1 1/2x16	A70950W	75-0 1/4	CVN	100-1	6130.1		
TFB101	1	PL1 1/2x16	A709050W	53-8 1/16	CVN	100-4	4383.2		
WA101	1	PL 9/16x36	A709050W2	49-2 3/16	CVN	100-5	3389.0		
WB101	1	PL 9/16x36	A709050W2	79-6 7/16	CVN	100-2	5480.6		
BFA101	1	PL2x18	A709050W	74-11 3/4	CVN	100-3	9185.0		
BFB101	1	PL2x18	A709050W	53-7 1/4	CVN	100-6	6565.2		
x108b	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x108a	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x108e	5	PL 1/2x5	A709050W	3-0		101-2	127.7		
x108d	1	PL 1/4x4	A709050W	1-0 1/16		101-3	3.5		
x108c	1	PL 1/4x4	A709050W	1-0 1/16		101-3	3.5		

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 67517.00

Reviewed By: RMoore

Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G101

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO:
SAG	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO:
CG	JANUARY 2014	101-00

PRINTED ON: 26 Feb 2014 AT 16:14:05 BY: marcelb
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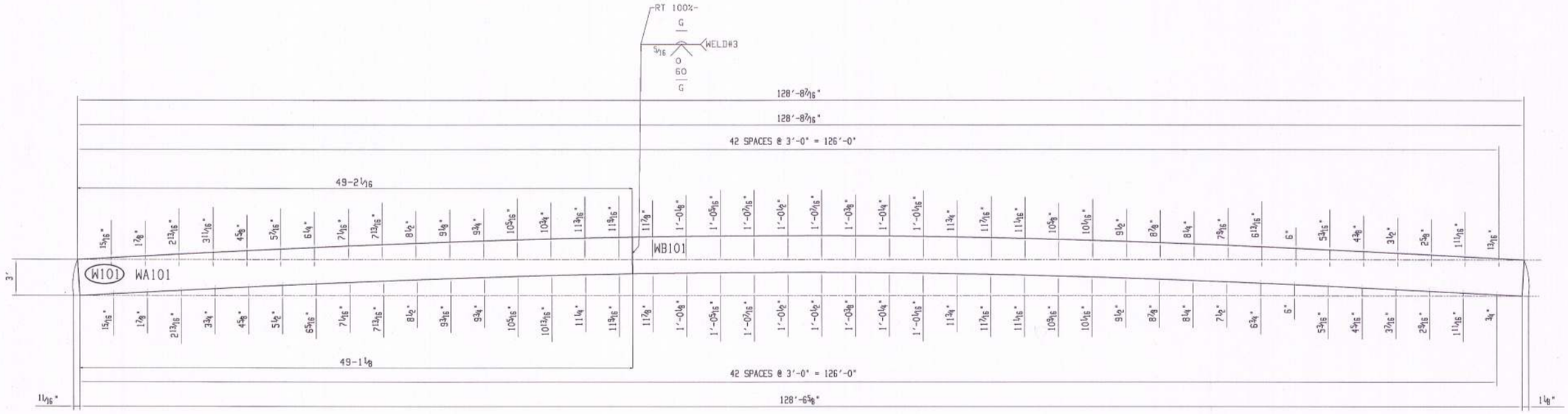
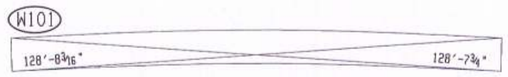


ONE WEB PLATE W101

WA101 = PL 3/16"
WB101 = PL 3/16"



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VHB Vanasse Hangen Brustlin, Inc. Job Number: 57517.00 Reviewed By: BMann Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

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A	FOR APPROVAL	Feb 5 2014	LN	CG

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BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
WEB GIRDER G101

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO:
LN	JANUARY 2014	000540
DESIGN BY:	DATE:	DRAWING NO:
CG	JANUARY 2014	101-01

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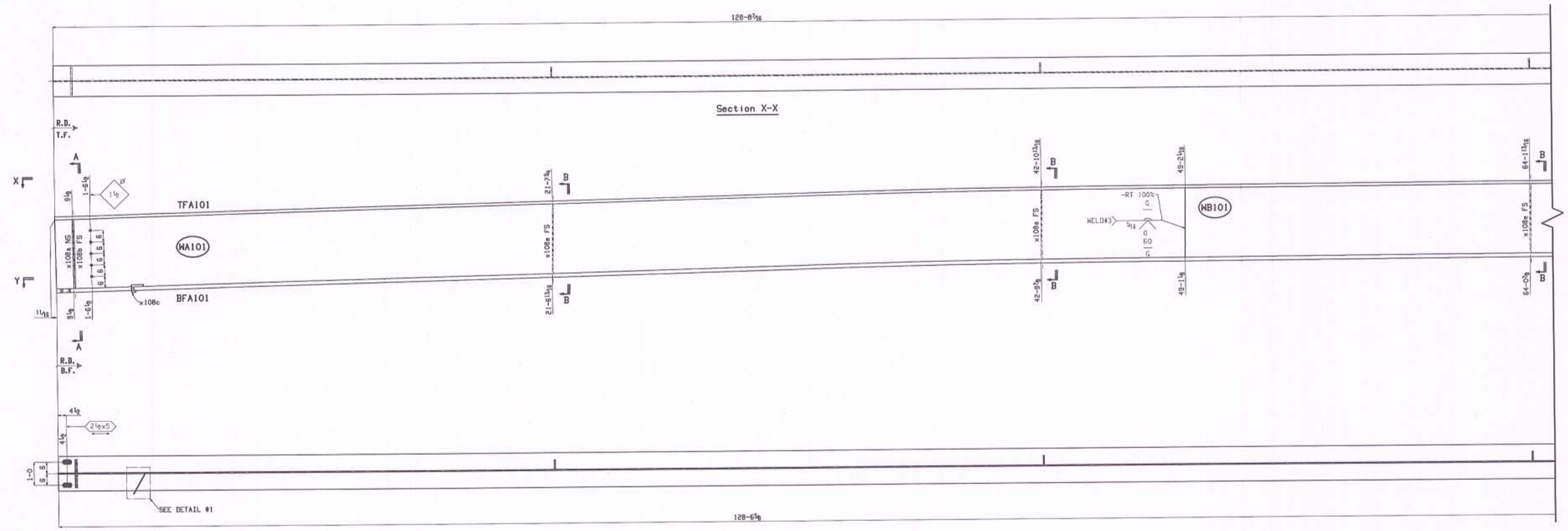
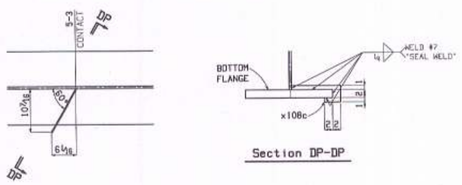
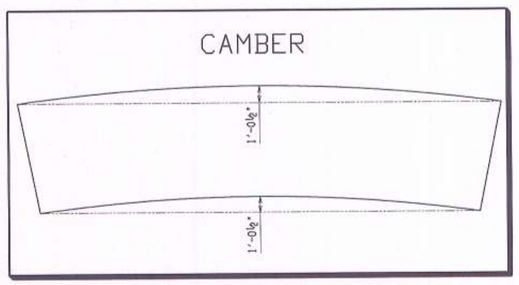
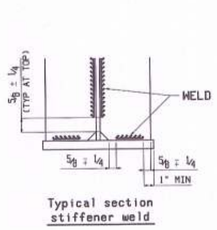
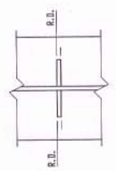


ONE GIRDER G101









SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00
Reviewed By: B Moen
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Clearmont, NH
T.603.542.5292 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G101

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	101-02

PRINTED ON: 26 Feb 2014 AT 15:14:09 BY mwcguth
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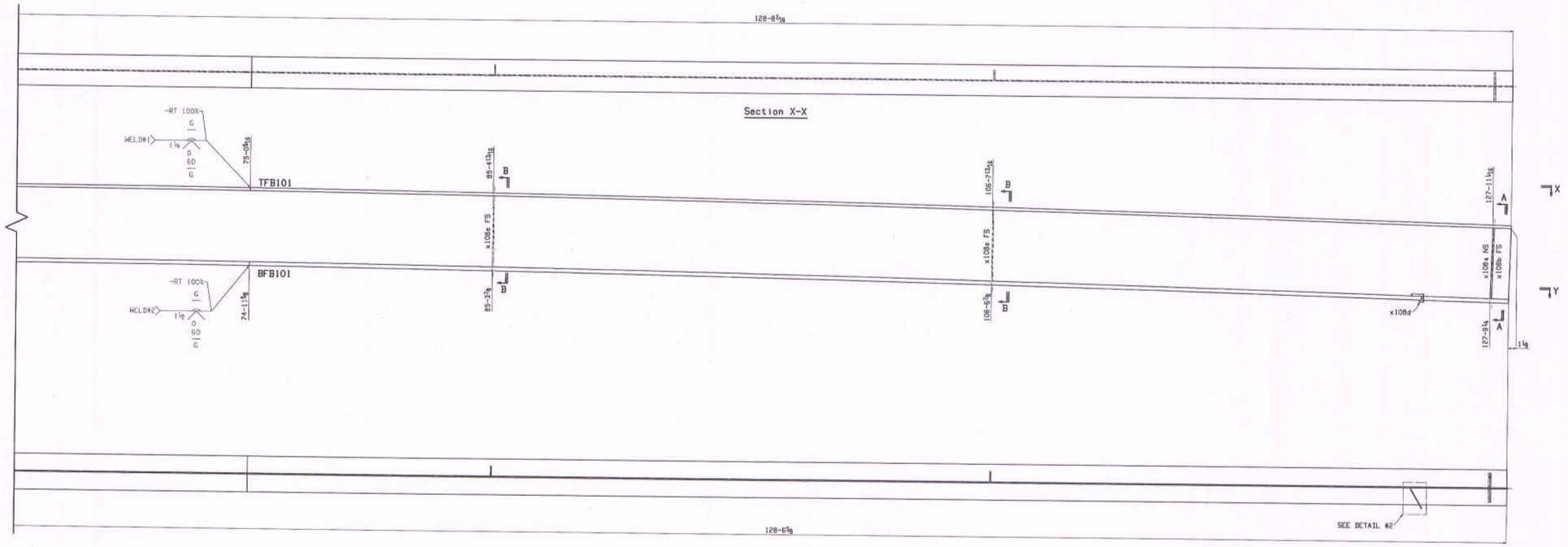
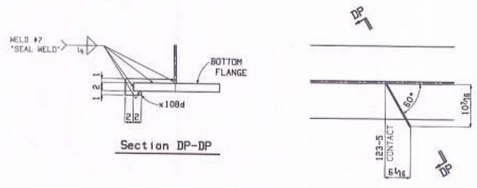


Section X-X

Section Y-Y

ONE GIRDER G101



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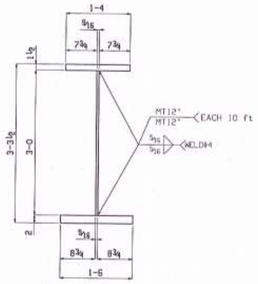
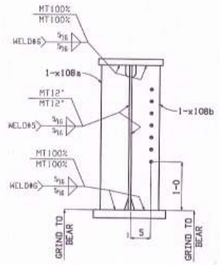
DETAIL #2



Typical Section



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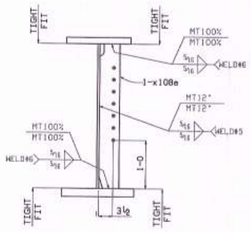

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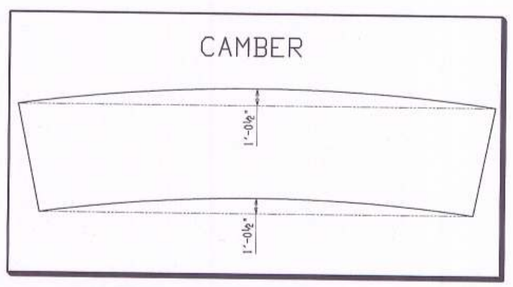
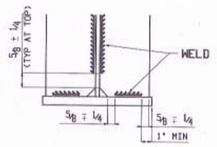
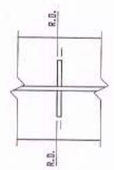




Typical section
stiffener weld



Typical running
position detail
for stiffener

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57577.00
Reviewed By: BMcm
Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.3260 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G101

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	101-03

PRINTED ON 05 Feb 2014 AT 15:14:11 BY mcgrath
36x48
M8x2-07.dgn

Total weight (lbs): 35603

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G102	ONE	GIRDER					35502.8	1	1
G102	1	.GIRDER		128-8 3/16					
TFA102	1	PL 1 1/2x16	A70950W	75-0 1/4	CVN	100-1	6130.1		
TFB102	1	PL 1 1/2x16	A70950W	53-8 1/32	CVN	100-4	4383.2		
WA102	1	PL 3/8x36	A70950W2	49-2 1/32	CVN	100-5	3389.0		
WB102	1	PL 3/8x36	A709050W2	79-6 7/32	CVN	100-2	5480.6		
BFA102	1	PL2x18	A709050W	74-11 1/4	CVN	100-3	9185.0		
BFB102	1	PL2x18	A709050W	53-7 1/8	CVN	100-6	6565.2		
x10Bb	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x10Bg	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x10Be	5	PL 1/2x5	A709050W	3-0		101-2	127.7		
x10Bh	5	PL 1/2x5	A709050W	3-0		101-2	127.7		

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

Vermont Agency of Transportation

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 52512.00

Reviewed By: BMcne

Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
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1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5200 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G102

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO:
SAG	JANUARY 2014	Q00540
DESIGN BY:	DATE:	DRAWING NO:
CG	JANUARY 2014	102-00

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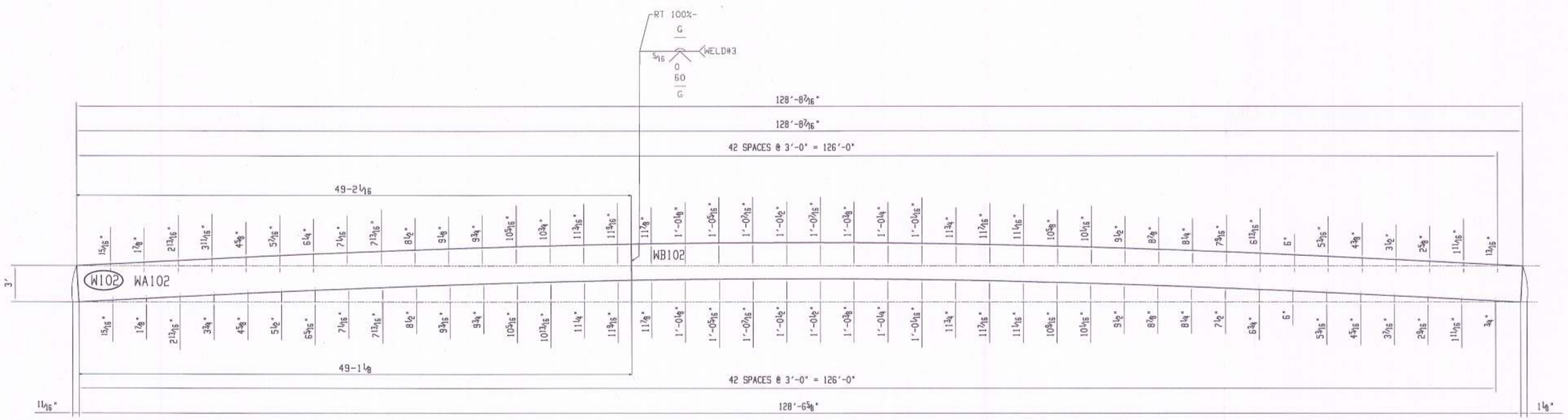
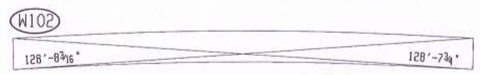
Adobe VP.250



ONE WEB PLATE W102

WA102 = PL 9/16"
WB102 = PL 9/16"



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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 67517.00
Reviewed By: R Mone
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED
ON: February 28, 2014
and Checked for
CONFORMANCE
BY: Jennifer Fitch DATE: 03/03/2014

No	DESCRIPTION	DATE	BY	CHK
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A	FOR APPROVAL	Feb 5 2014	LN	CG

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BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
316 River Road, Clearmont, NH
T.603.542.5202 F.603.542.3317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
WEB GIRDER G102

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
LN	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	102-01

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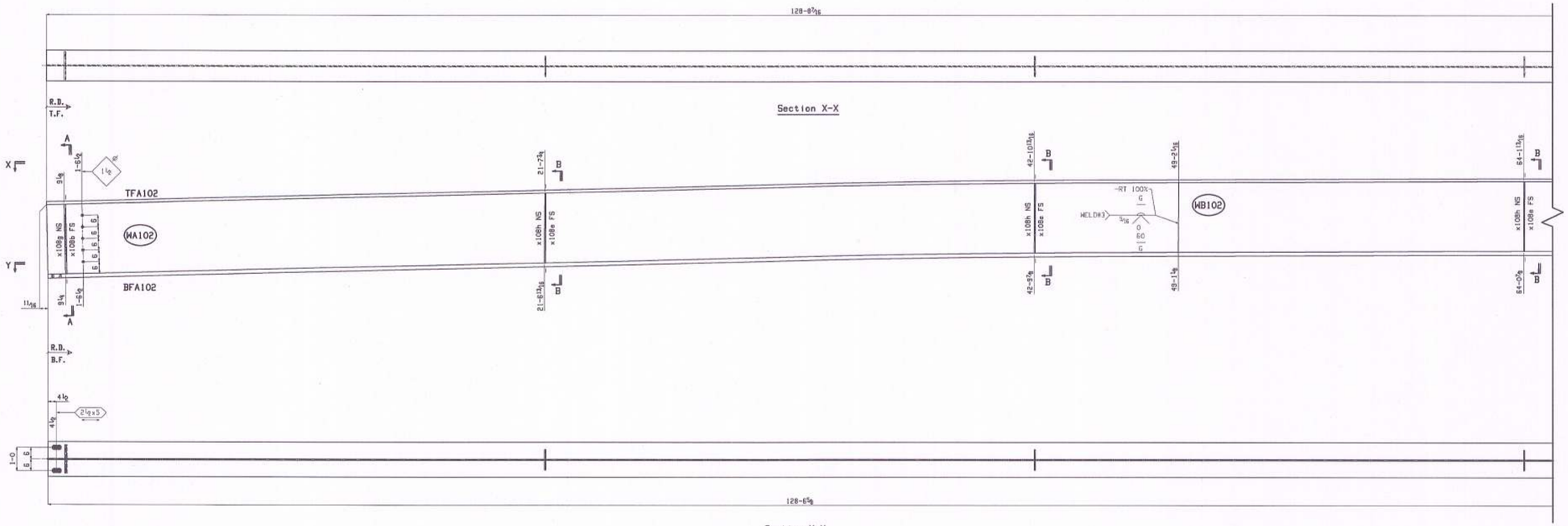
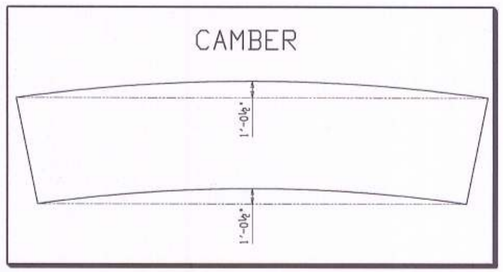
105/1 +7.250

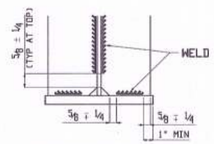


Section X-X

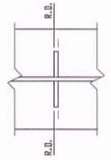
Section Y-Y

ONE GIRDER G102





Typical section stiffener weld



Typical running position detail for stiffener

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc. Job Number: 52517.00 Reviewed By: BMoss Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5282 F.603.542.5317

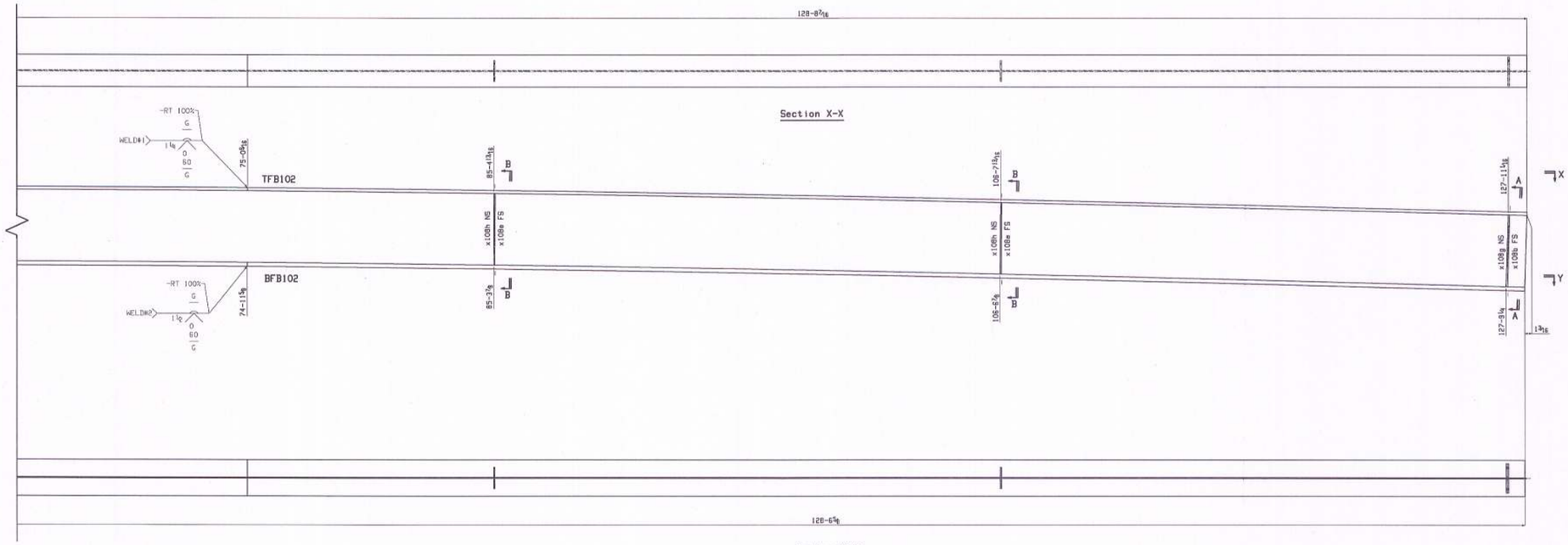
PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G102

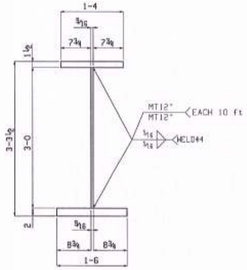
REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO:
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO:
CG	JANUARY 2014	102-02

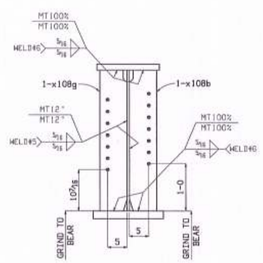
PRINTED ON: 25 Feb 2014 AT: 16:14:17 BY: sarag.lib
25x18
BRS-2 v7.250



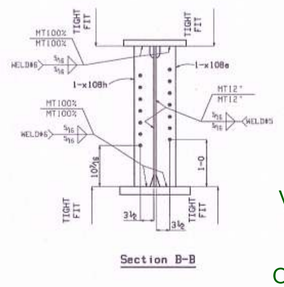
ONE GIRDER G102



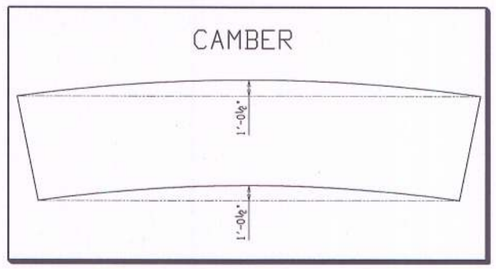
Typical Section

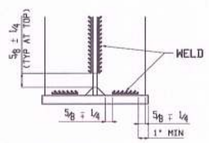


Section A-A

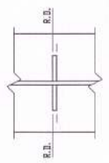


Section B-B





Typical section stiffener weld



Typical running position detail for stiffener

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00
Reviewed By: BMcam
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
286 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: MAIN GIRDER G102

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	SHEET NO.
CG	JANUARY 2014	102-03

PRINTED ON: 28 Feb 2014 AT 16:14:20 BY mcarlo

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G103	ONE	GIRDER					35602.8	1	1
G103	1	.GIRDER		128-8 15/16					
TFA103	1	PL 1 1/2x16	A70950W	75-0 3/4	CVN	100-1	6130.1		
TFB103	1	PL 1 1/2x16	A70950W	53-8 1/16	CVN	100-4	4383.2		
WA103	1	PL 3/4x36	A70950W2	43-2 3/16	CVN	100-5	3389.0		
WB103	1	PL 3/4x36	A709050W2	79-5 7/16	CVN	100-2	5480.6		
BFA103	1	PL2x18	A709550W	74-11 1/4	CVN	100-3	9185.0		
BFB103	1	PL2x18	A709550W	53-7 1/4	CVN	100-6	6565.2		
x108j	4	PL 3/4x7	A709550W	3-0	MB	101-1	214.5		
x108k	10	PL 1/2x5	A709550W	3-0		101-2	255.3		

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

Total weight (lbs): 35603

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00
Reviewed By: BMann
Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
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A	FOR APPROVAL	Feb 5 2014	LN	CG

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1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G103

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	103-00

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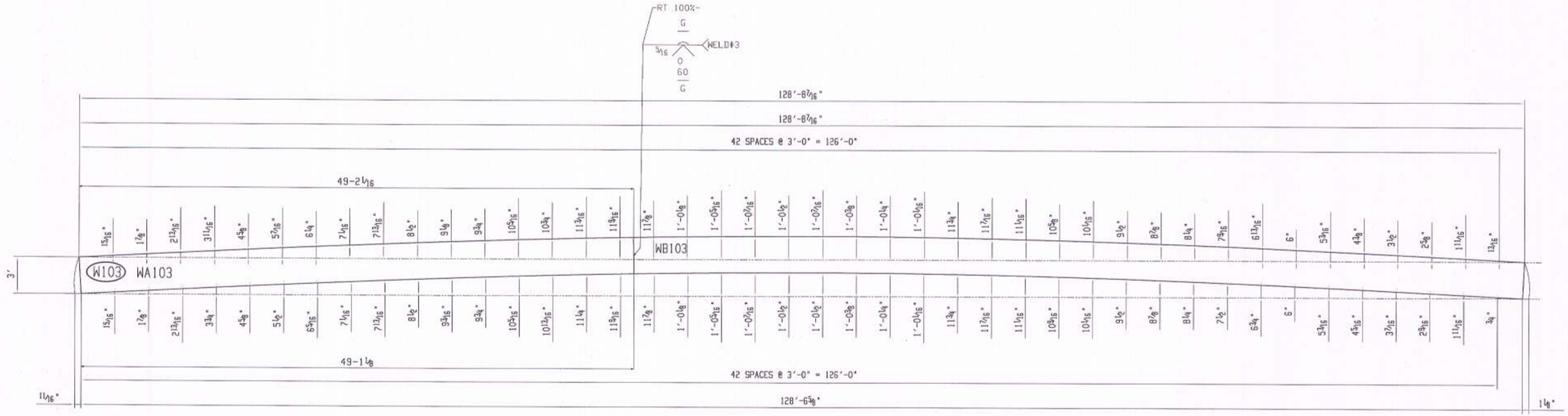
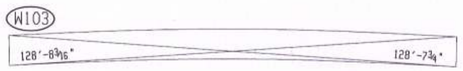


ONE WEB PLATE W103

WA103 = PL 5/16"
WB103 = PL 5/16"



SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 52017.00
Reviewed By: RMoore
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

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1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.3260 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
WEB GIRDER G103

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
LN	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	103-01

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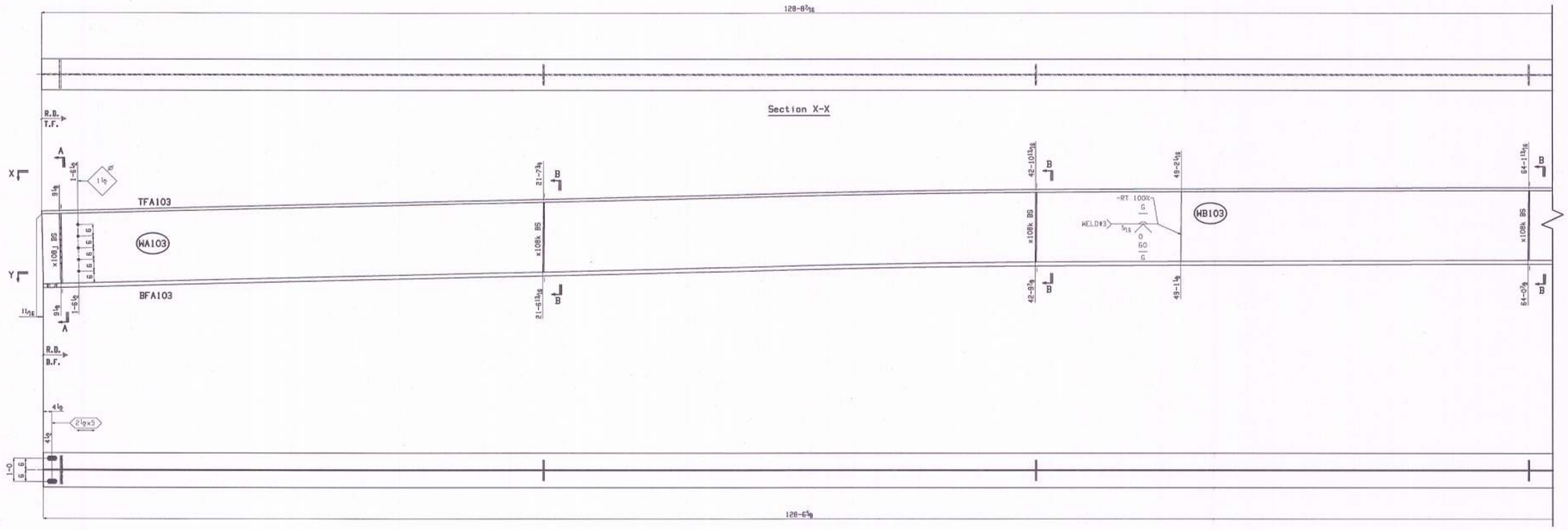

ONE GIRDER G103

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 53517.00
Reviewed By: BMcCann
Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

Vermont Agency of Transportation

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No	DESCRIPTION	DATE	BY	CHK
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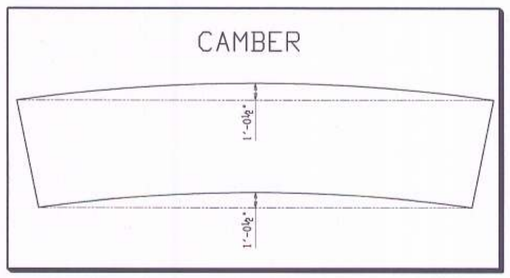
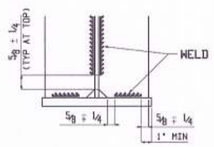
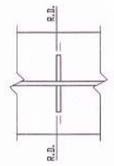




Typical section stiffener weld



Typical running position detail for stiffener

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5200 F.603.542.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: MAIN GIRDER G103

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	103-02

PRINTED ON 25 Feb 2014 AT 15:14:26 BY mwright
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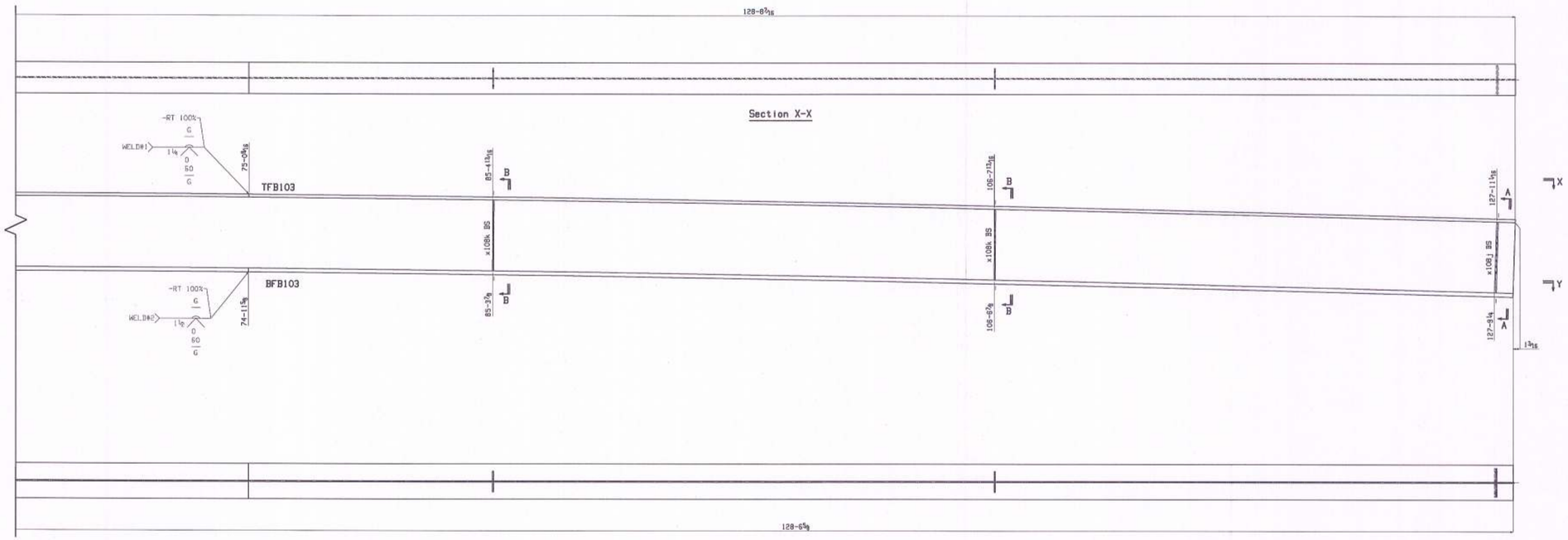
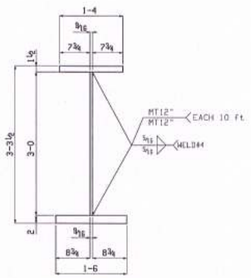
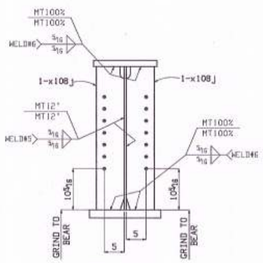
S85/0 v7.250



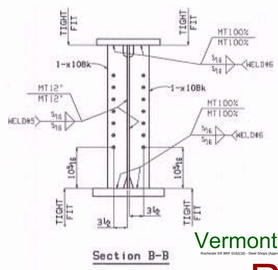
ONE GIRDER G103



Typical Section



Section A-A



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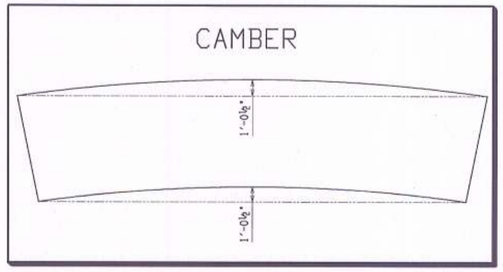
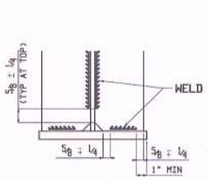
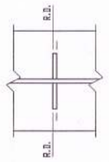




Typical section stiffener weld



Typical running position detail for stiffener

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc. Job Number: 52517.00 Reviewed By: BMann Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Clairemont, NH
T.603.542.5202 F.603.542.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: MAIN GIRDER G103

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	103-03

35x48 PRINTED ON: 25 Feb 2014 AT 16:14:29 BY: mcargill
186x2 v7.250

Total weight (lbs): 35603

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G104	ONE	GIRDER					35602.8	1	1
G104	1	.GIRDER		128-8 5/16					
TFA104	1	PL 1 1/4x16	A70950W	75-0 3/4	CVN	100-1	6130.1		
TFB104	1	PL 1 1/4x16	A709050W	53-8 1/16	CVN	100-4	4383.2		
WA104	1	PL 3/4x36	A709050W2	40-2 1/16	CVN	100-5	3389.0		
WB104	1	PL 3/4x36	A709050W2	70-6 7/16	CVN	100-2	5480.6		
BFA104	1	PL 2x18	A709050W	74-11 3/8	CVN	100-3	9185.0		
BFB104	1	PL 2x18	A709050W	53-7 1/8	CVN	100-6	6565.2		
x108b	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x108g	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x108e	5	PL 1/2x5	A709050W	3-0		101-2	127.7		
x108h	5	PL 1/2x5	A709050W	3-0		101-2	127.7		

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

X REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00

Reviewed By: B Moore

Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5200 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: MAIN GIRDER G104

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	104-00

PRINTED ON 26 Feb 2014 AT 16:14:21 BY marcelo

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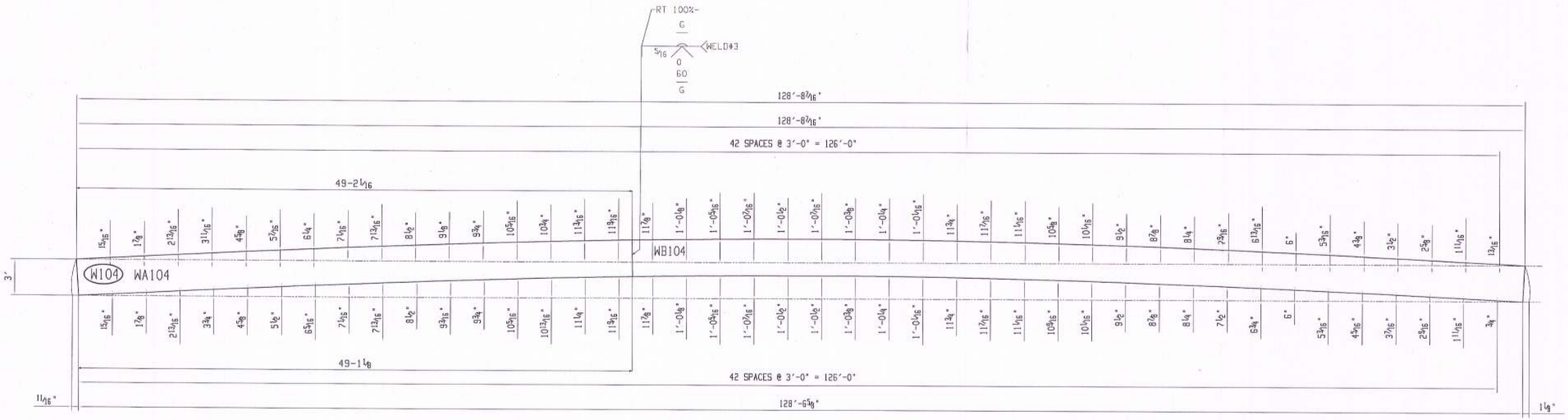
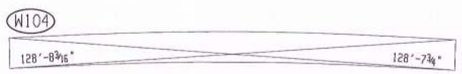


ONE WEB PLATE W104

WA104 = PL 9/16"
WB104 = PL 9/16"



SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57512.00
Reviewed By: G. Moore
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

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BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5262 F.603.542.3317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
WEB GIRDER G104

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
LN	JANUARY 2014	Q00540
DESIGN BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	104-01

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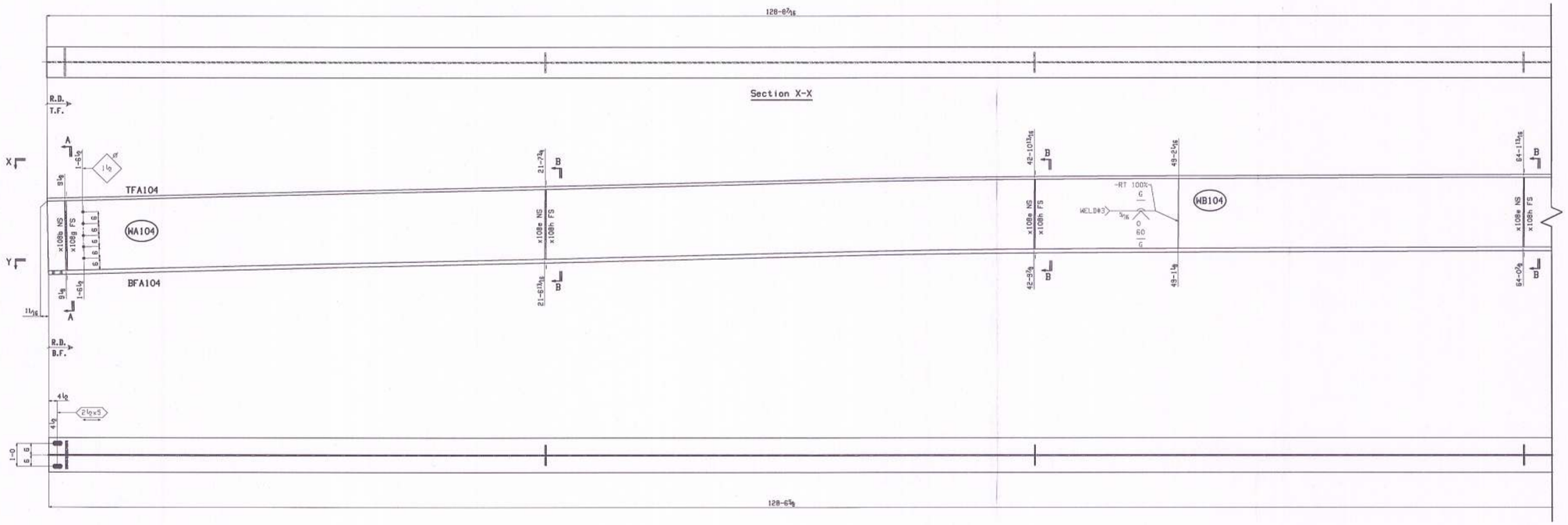
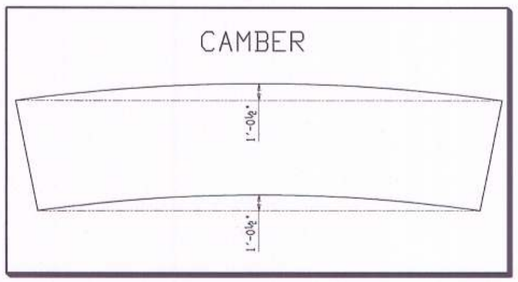
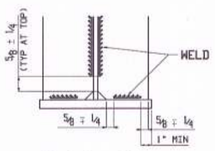
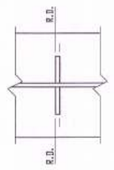


ONE GIRDER G104





Typical section stiffener weld



Typical running position detail for stiffener

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 53517.00
Reviewed By: B Moore
Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

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BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Clearmont, NH
T.603.542.5202 F.603.542.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: MAIN GIRDER G104

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	104-02

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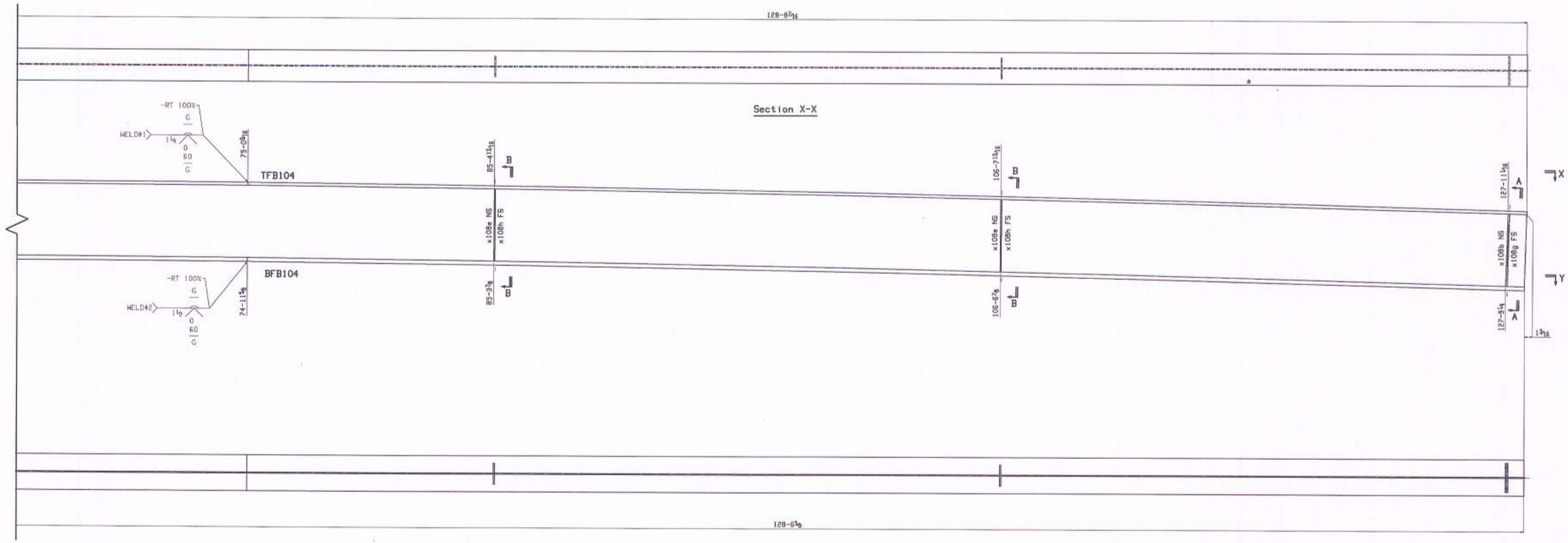
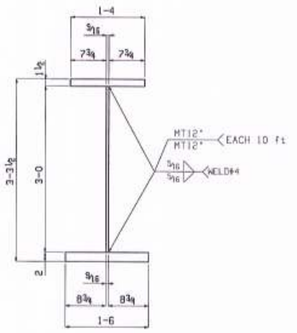
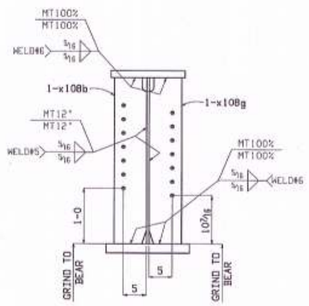
MBS-6 v7.050



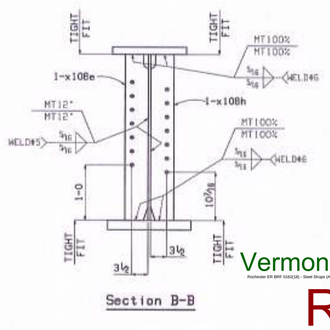
ONE GIRDER G104



Typical Section



Section A-A



Section B-B

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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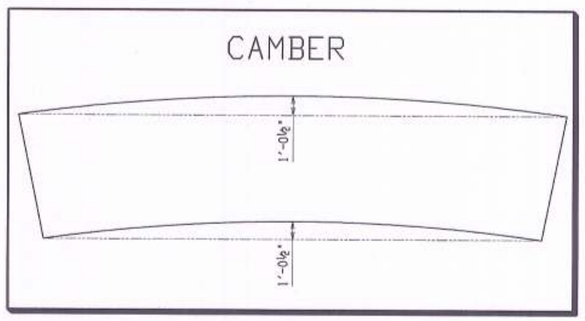
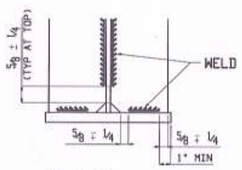
VHB Vanasse Hangen Brustlin, Inc. Job Number: 57517.00 Reviewed By: B Mann Date: 2-28-14

GENERAL NOTE: SEE GN101

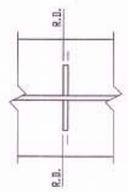
HOLES: 15/16" (U.N.D.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101





Typical section stiffener weld



Typical running position detail for stiffener

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
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1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
306 River Road, Claremont, NH
T.603.542.3202 F.603.542.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: MAIN GIRDER G104

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	104-03

PRINTED ON 26 Feb 2014 AT 16:14:27 BY marg.lb
35x48
GDS-2 v7.250

Total weight (lbs): 35482

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
G105	ONE	GIRDER					35482.1	1	1
G105	1	.GIRDER		128-8 5/16					
TFA105	1	PL 1/2x16	A70950W	75-0 1/4	CVN	100-1	6130.1		
TFB105	1	PL 1/2x16	A70950W	53-8 1/16	CVN	100-4	4383.2		
WA105	1	PL 9/16x36	A709050W2	49-2 3/16	CVN	100-5	3389.0		
WB105	1	PL 9/16x36	A709050W2	79-6 7/16	CVN	100-2	5480.6		
BFA105	1	PL2x18	A709050W	74-1 1/4	CVN	100-3	9185.0		
BFB105	1	PL2x18	A709050W	53-7 9/16	CVN	100-6	6565.2		
x108b	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x108a	2	PL 3/4x7	A709050W	3-0	MB	101-1	107.3		
x108e	5	PL 1/2x5	A709050W	3-0		101-2	127.7		
x108d	1	PL 1/4x4	A709050W	1-0 3/16		101-3	3.5		
x108c	1	PL 1/4x4	A709050W	1-0 3/16		101-3	3.5		

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00
Reviewed By: B Moon
Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
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1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5202 F.603.543.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G105

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	105-00

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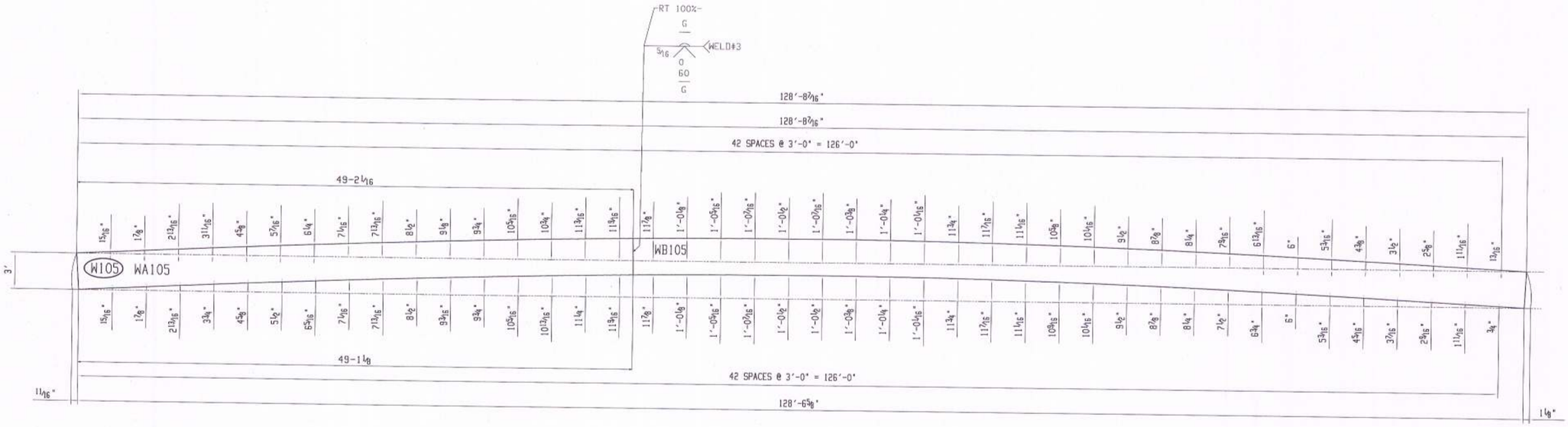
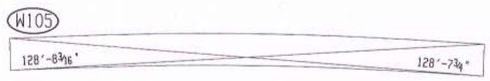


ONE WEB PLATE W105

WA105 = PL $^{9}/_{16}$"
WB105 = PL $^{9}/_{16}$"



SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 52517.00
Reviewed By: B Mann
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

No	DESCRIPTION	DATE	BY	CHK
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A	FOR APPROVAL	Feb 5 2014	LN	CG

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1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
306 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
WEB GIRDER G105

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
LN	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	105-01

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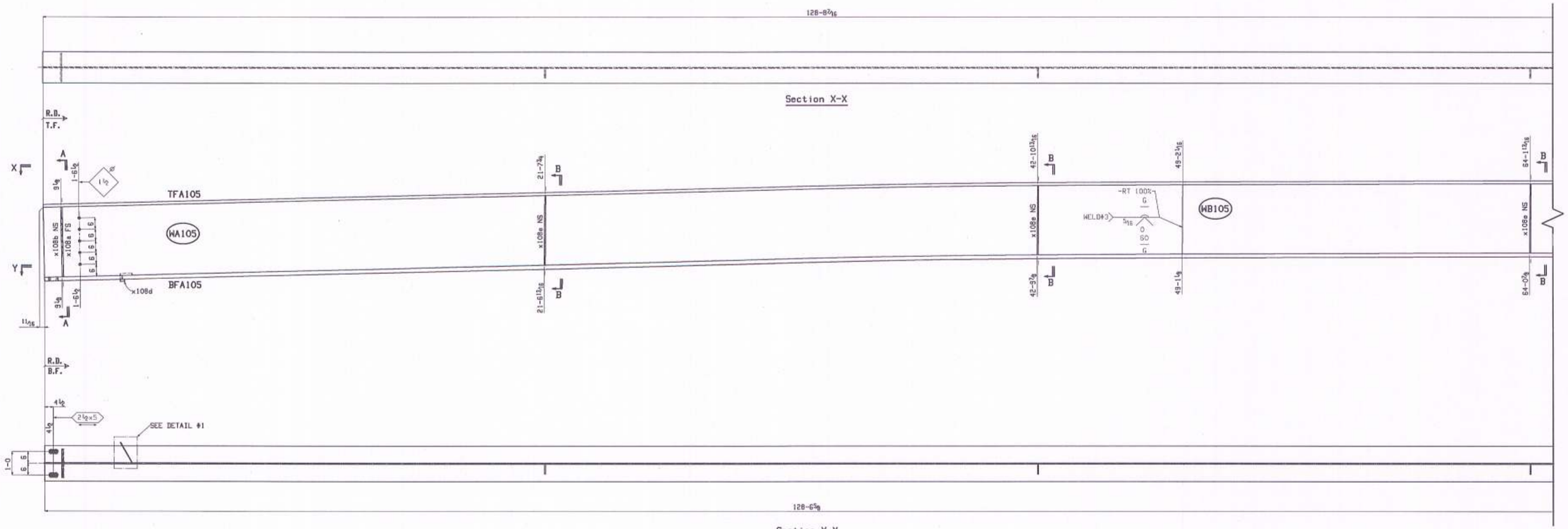
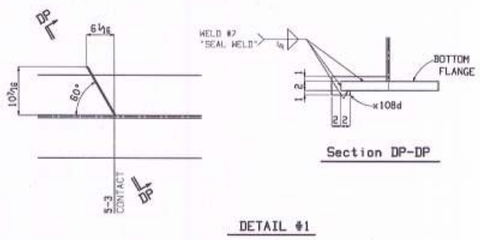
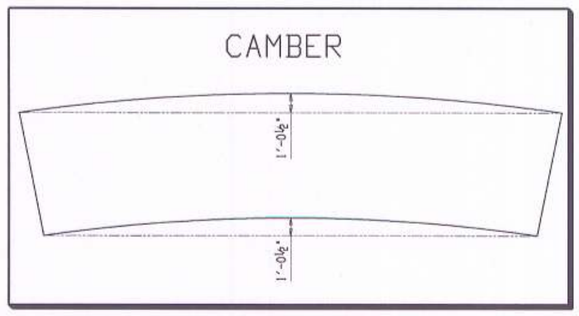
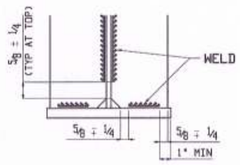


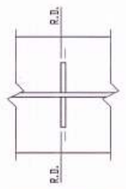
ONE GIRDER G105







Typical section stiffener weld



Typical running position detail for stiffener

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00
Reviewed By: B Moore
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

ON: February 28, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

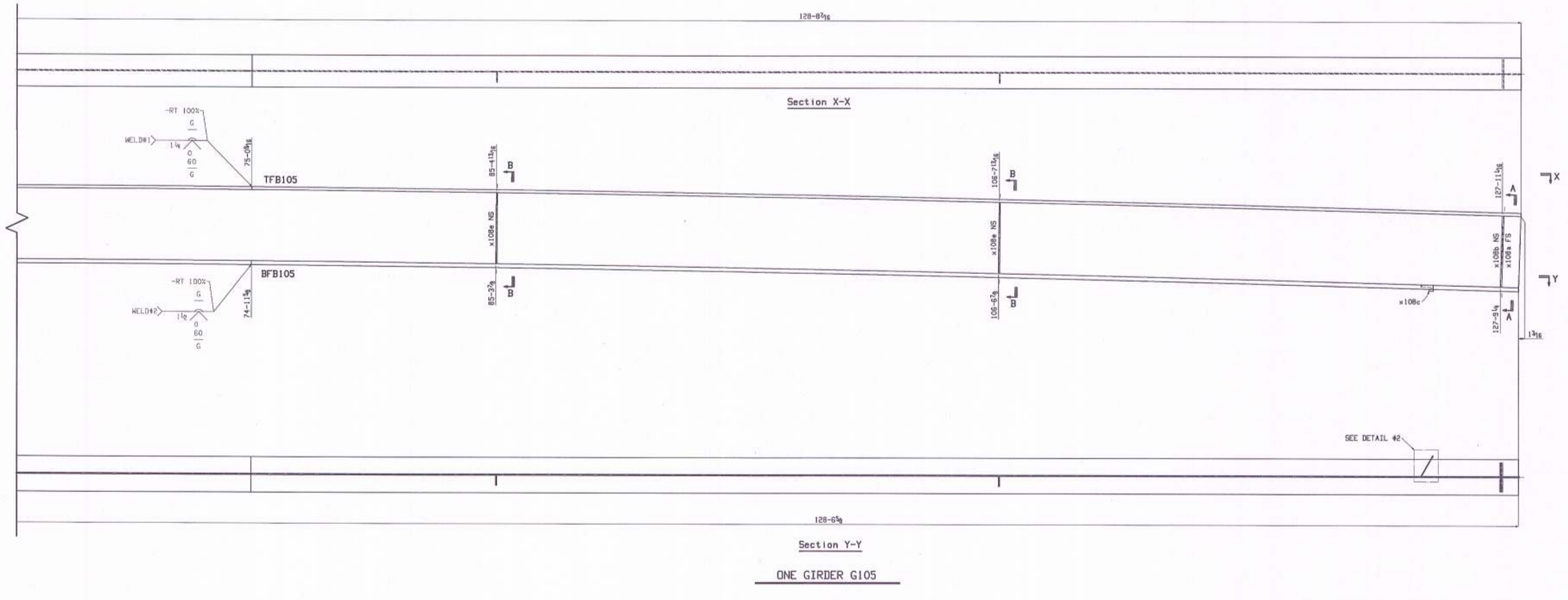
STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

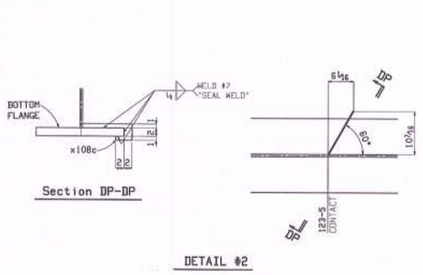
TITLE: MAIN GIRDER G105

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	105-02

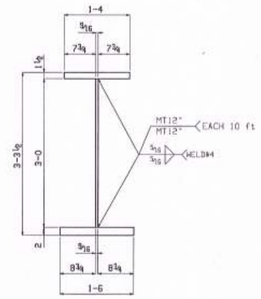


ONE GIRDER G105

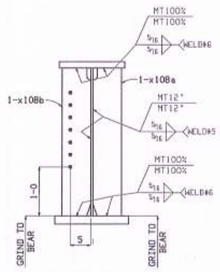


Section DP-DP

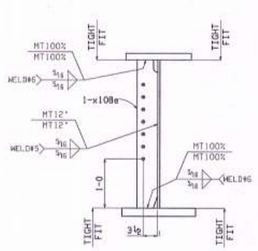
DETAIL #2



Typical Section



Section A-A



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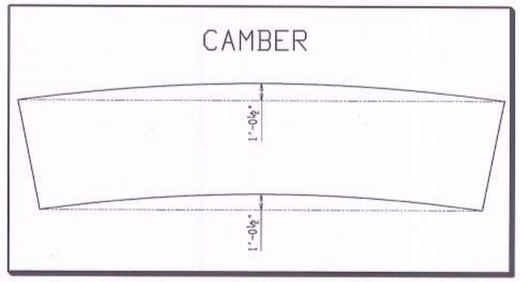
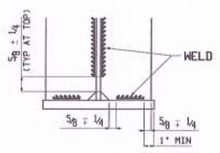
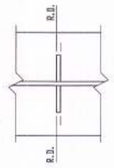




Typical section stiffener weld



Typical running position detail for stiffener

Vermont Agency of Transportation

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ON: February 28, 2014

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BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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☐ REJECTED ☐ REVISE AND RESUBMIT ☐ FURNISH AS CORRECTED

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00

Reviewed By: BMcave

Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

WELD PROCEDURE: SEE WELDING PROCEDURE ON S101

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
MAIN GIRDER G105

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	105-03

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35x48
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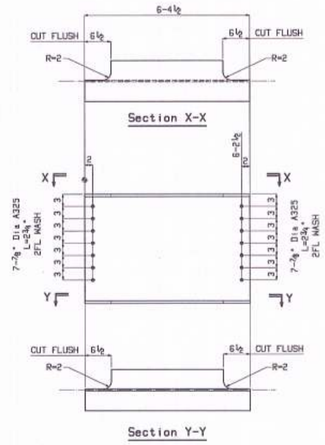
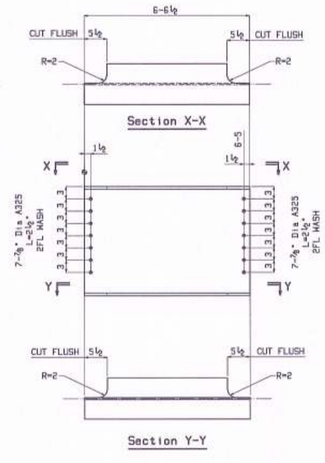


8 DIAPHRAGMS D106A



20 DIAPHRAGMS D106B

Vermont Agency of Transportation

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BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 52517.00
Reviewed By: B Morse
Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16"

Total weight (lbs): 15854

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
D106A	8	DIAPHRAGM					4461.1	1	8
D106A	8	W27x84	A709 50W	6-4½		102-1	4284.0		
FB		FIELD BOLTS							
78F2341	112	⅞ Dia A325 TYP3		2¾	2FL WASH		177.1		
D106B	20	DIAPHRAGM					11392.5	1	20
D106B	20	W27x84	A709 50W	6-6½		103-1	10990.0		
FB		FIELD BOLTS							
78F2120	280	⅞ Dia A325 TYP3		2½	2FL WASH		402.5		

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Clearwater, MN
T.603.542.5200 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
ABUTMENT & INTERMEDIATE DIAPHRAGMES

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
DESIGNED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	106

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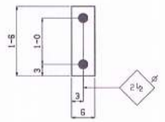
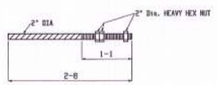
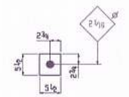


5 LEVELING PLATES M107A



10 ANCHOR STUDS M107AB



20 PLATE WASHERS M107C

Vermont Agency of Transportation

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ON: February 28, 2014

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CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00

Reviewed By: B Mason

Date: 2-28-14

GENERAL NOTE: SEE GN101

HOLES: 15/16" (U.N.O.)

Total weight (lbs): 740

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq
M107A	5	LEVELING PLATE					153.1	1	5
M107A	5	PL1x6	A709 50W	1-6		104-1	153.1		
M107AB	10	ANCHOR STUD					544.4	1	10
M107AB	10	BOLT 2" Dia.	A449	2-8	TYPE 1		544.4		
	30	2" Dia. HEAVY HEX NUT							
M107C	20	PLATE WASHER					42.9	1	20
M107C	20	PL4x5½	A709 50W	5½			42.9		

BILL OF MATERIAL

Mark	Qty.	Description	Stl Grd	Length	Remark	ABM	Total(lbs) Weight	Seq	Qty /Seq

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

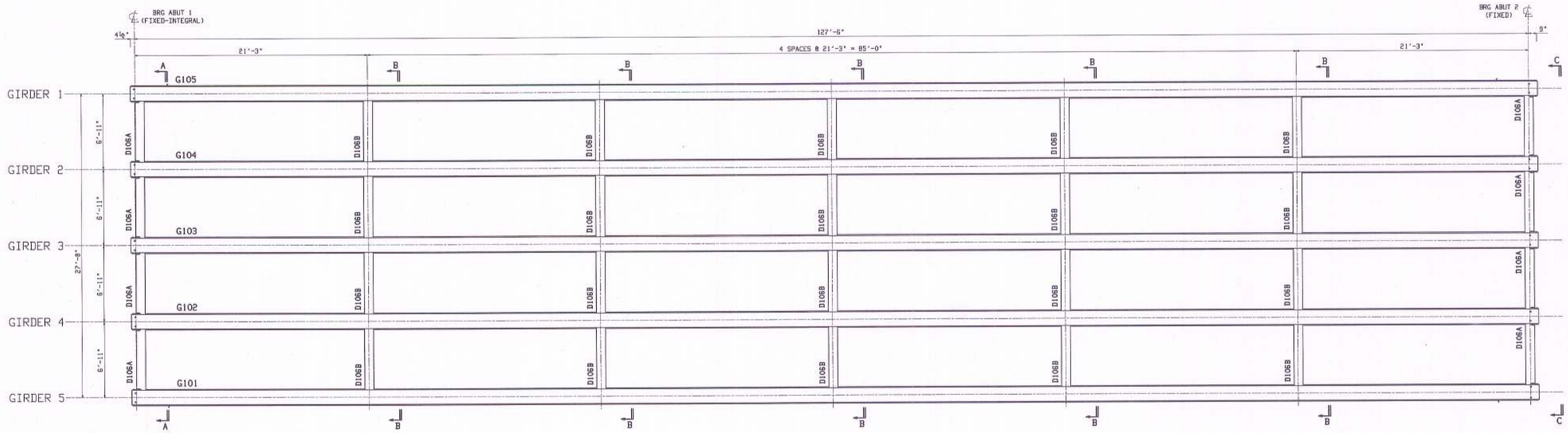
TITLE:
LEVELING PLATE, ANCHOR STUD & PLATE WASHER ABUTMENT 1

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
LN	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	107

PRINTED ON: 26 Feb 2014 AT 16:14:50 BY: escoglio

36x48 SIZE: 47.250



PLAN VIEW

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 53512.00
Reviewed By: B Moore
Date: 2-28-14

Vermont Agency of Transportation

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ON: February 28, 2014

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CONFORMANCE

BY: Jennifer Fitch DATE: 03/03/2014

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Clearmont, NH
T.603.543.5202 F.603.543.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: ERECTION PLAN

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO:
CRC	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING NO:
CG	JANUARY 2014	E101

HEADS OF BOLTS MUST BE LOCATED ON THE EXTERIOR SIDE OF THE SPAN

P.S. THE NUTS TO BE INSTALLED ON THE LESS SEEN SIDE OF THE STRUCTURE

WORK THIS DRAWING
IN CONJUNCTION WITH E102

*** THIS DRAWING IS TO BE USED FOR MARKS AND BOLTS ONLY AND MUST BE READ IN CONJUNCTION WITH THE CONTRACT DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION SEQUENCING OR AS AN ERECTION PROCEDURE.

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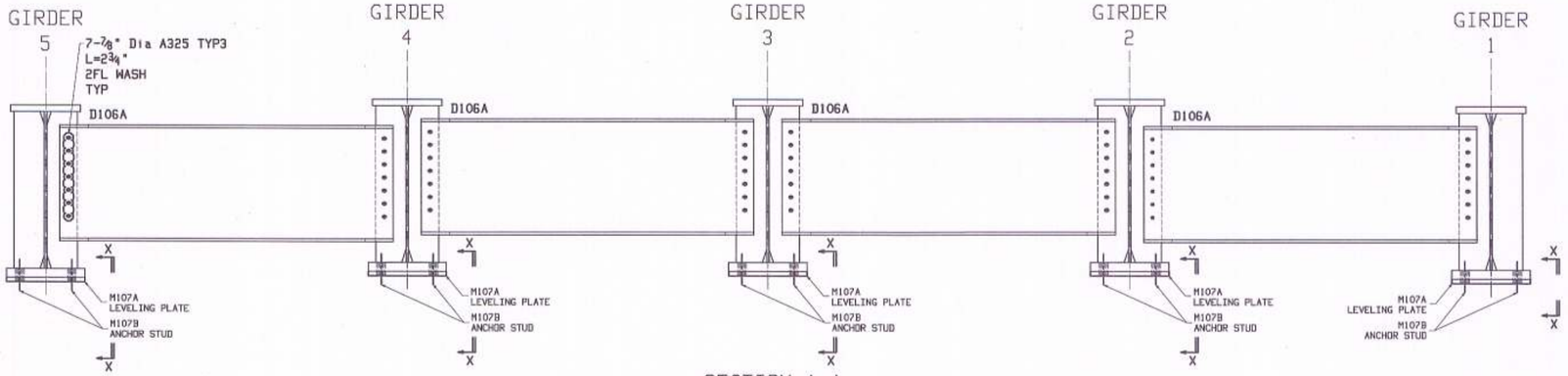
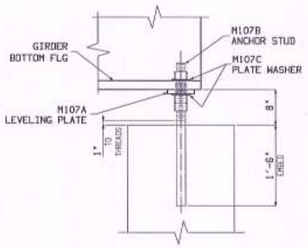


SECTION A-A



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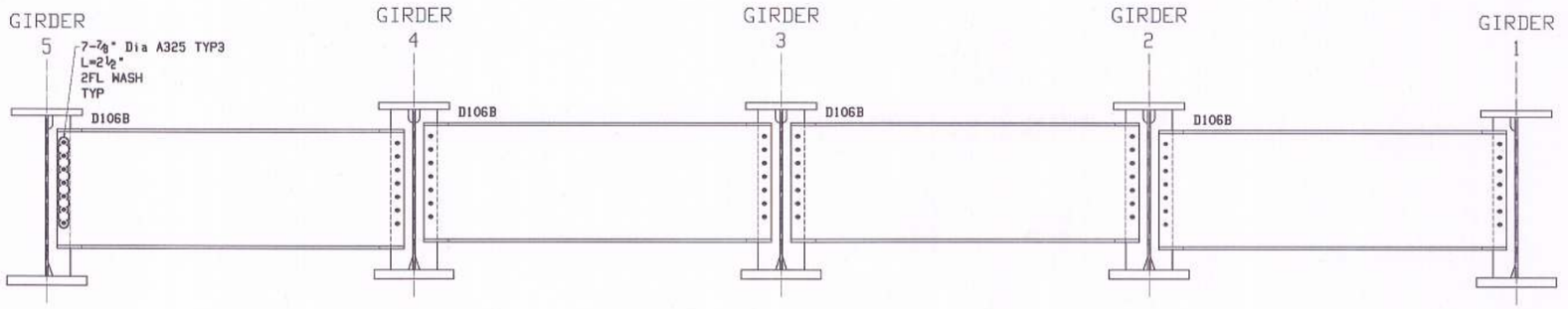
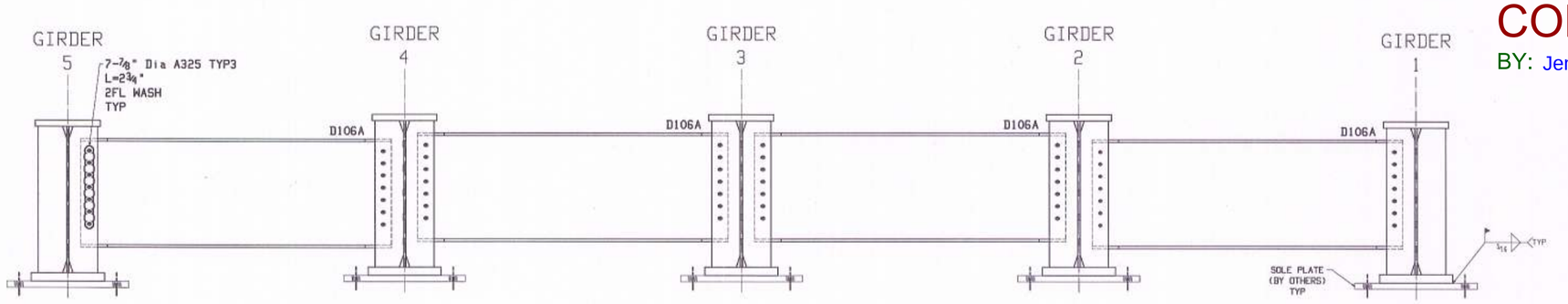


SECTION B-B



SECTION C-C

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 53512.00
Reviewed By: B Magee
Date: 2-28-14

WORK THIS DRAWING
IN CONJUNCTION WITH E101

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HEADS OF BOLTS MUST BE LOCATED ON THE EXTERIOR SIDE OF THE SPAN

P.S. THE NUTS TO BE INSTALLED ON THE LESS SEEN SIDE OF THE STRUCTURE

Vermont Agency of Transportation
RECEIVED
ON: February 28, 2014
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CONFORMANCE
BY: Jennifer Fitch DATE: 03/03/2014

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N., 1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
380 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
ERECTION SECTIONS

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
CRC	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	E102

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36448
S05-1 v7.250

GENERAL NOTES

1. CONSTRUCTION SPECIFICATIONS:

ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THEIR LATEST REVISION.

2. MATERIAL SPECIFICATIONS:

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

MATERIAL NOTED "CVN" ON "SHOP" DRAWING IN (REMARK) SHALL BE CHARPY V NOTCH TESTED IN ACCORDANCE WITH VERMONT STD SPEC'S. AS INDICATED IN SUBSECTION 714.01

HIGHT STRENGTH BOLTS: AASHTO M164 (ASTM A325) $^{7}/_{8}$"DIA. IN $^{15}/_{16}$" DIAMETER HOLES (U/N).

TYPE 3 SHALL BE USED FOR UNPAINTED CONNECTIONS.

3. FABRICATION:

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

STUDS ARE SUPPLIED AND INSTALLED BY OTHERS.

TIGHT FIT (WELDED ENDS ONLY). 50% OF THE PROJECTED AREA SHALL BE IN CONTACT WITHIN (0.02") WITH A PERMISSIBLE VARIATION OF ($^{1}/_{16}$") FOR THE REMAINING 50% OF THE PROJECTION AREA.

GRIND TO BEAR. 75% OF THE PROJECTED AREA SHALL BE IN CONTACT WITHIN (0.01") WITH A PERMISSIBLE VARIATION OF ($^{1}/_{32}$") FOR THE PROJECTED AREA.

4. WELDING:

THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS D.1.5 BRIDGE WELDING CODE AND WITH THE SPECIFICATIONS SHOWN BESIDE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.

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

NON DESTRUCTIVE TESTING OF WLDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.

5. CLEANING:

ALL STEEL THAT WILL REMAIN UNPAINTED SHALL BE BLAST CLEANED AS PER SSPC SP-10 PER SPEC. 506.14(a).

6. FIELD CONNECTIONS:

ALL FIELD CONNECTIONS SHALL BE MADE WITH $^{7}/_{8}$" DIAMETER HIGH STRENGTH BOLTS AASHTO M164 (ASTM A325) TYPE 3. IN $^{15}/_{16}$" DIAMETER HOLES UNLESS OTHERWISE NOTED. INSTALLED PER 506.19(c) AND SPECIAL PROVISIONS.

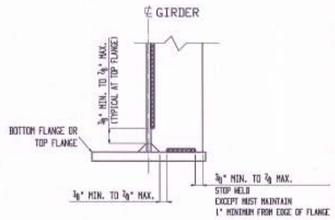
BOLTS SHALL HAVE
-HEAVY HEX. NUT, AASHTO M291 (ASTM A563) DH3 HEAVY HEX NUT
-HEX. HEAD
-ONE FLAT WASHER (U.N.O.), AASHTO M293 (ASTM F436)
EASCH (WASHER TO BE PLACED UNDER TURNED ELEMENT).

PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWING.

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

7. EASE EDGE:

ALL SHARP CORNERS AND EDGES THAT ARE MARRED, CUT, OR ROUGHENED IN HANDLING SHALL BE ROUNDED TO A $^{1}/_{16}$" RADIUS BY GRINDING. 506.12(d)



TYPICAL WELD DETAIL

SHOP DRAWING REVIEW

X REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00
Reviewed By: BMoore
Date: 2-28-14

Vermont Agency of Transportation
RECEIVED
ON: February 28, 2014
and Checked for
CONFORMANCE
BY: Jennifer Fitch DATE: 03/03/2014

No	DESCRIPTION	DATE	BY	CHK
B	FOR 2nd APPROVAL	Feb 25 2014	LN	CG
A	FOR APPROVAL	Feb 5 2014	LN	CG

NOTE: BOLT 1 WASHER: 1 WASHER UNDER NUT U.N.
BOLT 2 WASHERS: 1 WASHER UNDER HEAD U.N.
1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5010 F.603.542.3307

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: GENERAL NOTES

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT No.
LN	JANUARY 2014	000540
CHECKED BY:	DATE:	DRAWING No.
CG	JANUARY 2014	GN101

PRINTED ON 28 Feb 2014 AT 15:14:00 BY mscrosslin
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Q00540

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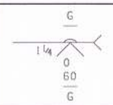
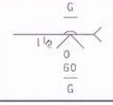
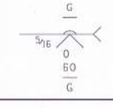
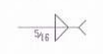
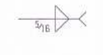
WELD.1		S50W-1G-3			
WELD.2		S50W-1G-3			
WELD.3		S50W-1G-3			
WELD.4		S50W-2F-GM			
WELD.5		S50W-2F-DART			
WELD.6		F50W-F1 F50W-F-2 F50W-F			
WELD.7		F50W-F1 F50W-F-2 F50W-F			

SHOP DRAWING REVIEW

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VHB Vanasse Hangen Brustlin, Inc.

Job Number: 57517.00
Reviewed By: BMann
Date: 2-28-14

Vermont Agency of Transportation

RECEIVED

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1 WASHER UNDER NUT U.N.

STRUCTAL
Building Better Bridges
385 River Road, Claremont, NH
T.603.542.5202 F.603.542.5317

PROJECT: VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE: WELDING PROCEDURES

REFERENCE: PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
LN	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	S101

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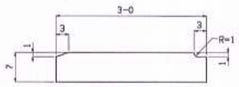

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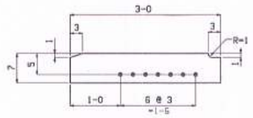

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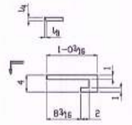

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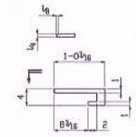

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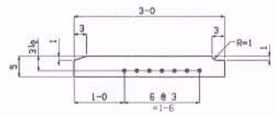

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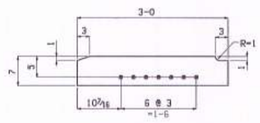

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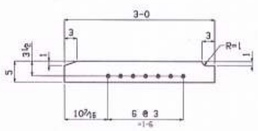

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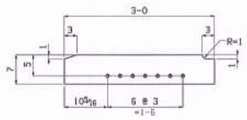

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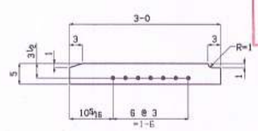

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Date: 2-28-14

Vermont Agency of Transportation

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STRUCTAL
Building Better Bridges
386 River Road, Claremont, NH
T.603.542.5200 F.603.542.5317

PROJECT:
VERMONT RTE 73
BRIDGE NO 19
TOWN OF ROCHESTER

TITLE:
SUBMATERIALS DETAILS

REFERENCE:
PROJECT NUMBER: ER-BRF-0162 (18)

DRAWN BY:	DATE:	CONTRACT NO.
SAG	JANUARY 2014	Q00540
CHECKED BY:	DATE:	DRAWING NO.
CG	JANUARY 2014	X108

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