

TABLE OF CONTENTS

General Anchor Bolt Notes	3
AB0010PE – Anchor Bolt Plan.....	5
AB0020PE – Sidewall Or Endwall Column Setback.....	6
AB0030PE – Column At Finish Floor	8
AB0040PE – Column Base Pocket.....	10
AB0050PE – Base Plate With Grout Required.....	11
AB0060PE – Endwall Column Inset Detail – (Cold Form).....	13
AB0070PE – Endwall Column Bypass Detail – (Cold Form).....	15
AB0080PE – Endwall Column Inset Detail – (Built - Up).....	16
Fixed Base Post & Beam Corner Columns (Inset Girt Conditions).....	17
BU8LT_PE.....	17
BU8RT_PE.....	20
BU8LB_PE.....	22
BU8RB_PE.....	24
Fixed Base Post & Beam Corner Columns (Bypass Girt Condition).....	26
BUB8LTPE	26
BUB8RTPE.....	28
BUB8LBPE.....	30
BUB8RBPE	32
Single Or Double Cee Post & Beam Corner Columns.....	35
C4LT_PE	35
C4RT_PE	36
C4LB_PE.....	37
C4RB_PE.....	39
Built - Up Endwall Columns	42
BU4LX_PE	42
BU4RX_PE.....	44
Fixed Base Intermediate Endwall Columns.....	45
BU8LX_PE	45
BU8RX_PE.....	47
Single Or Double Cee Endwall Columns.....	49
C4LI_PE . 50	

C4RI_PE	51
Built - Up Rigid Frame Corner Columns.....	54

10.0.1

BU6TL_PE	
30	
BU6TR_PE	
31	
BU6BL_PE	
32	
BU6BR_PE	
33	
Built - Up Rigid Frame Sidewall Details	34
BU6TX_PE	34
BU6BX_PE	
35	
Pipe & Tube Interior Columns	36
RC4IN_PE	36
SC4IN_PE	
37	
Built - Up Interior Columns	38
BU4IN_PE	38
BU6IN_PE	
39	
AB0180PE – Sidewall Portal Frames – General Information	
40	
Sidewall Portal Frame Corner Columns	41
PC6TL_PE	41
PC6TR_PE	
42	
PC6BL_PE	
43	
PC6BR_PE	
44	



PC6BLXPE	
45	
PC6BRXPE	46
PC6TLXPE	47
PC6TRXPE	
48	
AB0190PE – Corner Bracing Tee Plate Details	49
Bracing Tee Plates (At Interior Bays)	50
BT4LX_PE	50
BT4RX_PE	51
BT4BX_PE	
52	
BT4TX_PE	
53	

10.0.2

GENERAL ANCHOR BOLT NOTES

1. Valley Steel supplies (3) sets of 11" X 17" anchor bolt setting plans on all building orders.
2. The anchor bolt patterns and foundation details in this section are shown primarily to assist designers and estimators.
3. Anchor bolt setting plans may be drawn using the data in this section. If such a drawing is done, it must be submitted with the building order to ensure plan details are followed.

10.0.3

BY:

CHK:

4. All anchor bolts are ASTM F1554 Grade 36 unless noted otherwise. Valley Steel sizes the anchor bolt for shear and tension at the column base. All aspects of the foundation design including anchor bolt embedment length and development to the concrete is not by Valley Steel. The responsible architect or engineer for a specific project must see that this is done by a professional who is qualified for this type of work.
5. **ANCHOR BOLTS AND NUTS ARE NOT SUPPLIED BY VALLEY STEEL AS PART OF THE BUILDING ORDER.**
6. *In keeping with a continuing program of product development, all information contained herein is subject to change.*
7. Base plate elevation is assumed to be “at finished floor” (without grout) unless specified otherwise on the order documents.
8. If “Bert” anchor bolt plan and reactions are used, they must be submitted with the order documents.
9. Standard anchor bolt projection is 3” above the bottom of the baseplate (grout thickness needs to be added to the projection where grout is used).
10. **IMPORTANT NOTE: The Valley Steel Anchor Bolt Setting Plan MUST be used in lieu of the Architect’s Anchor Bolt Setting plan.**

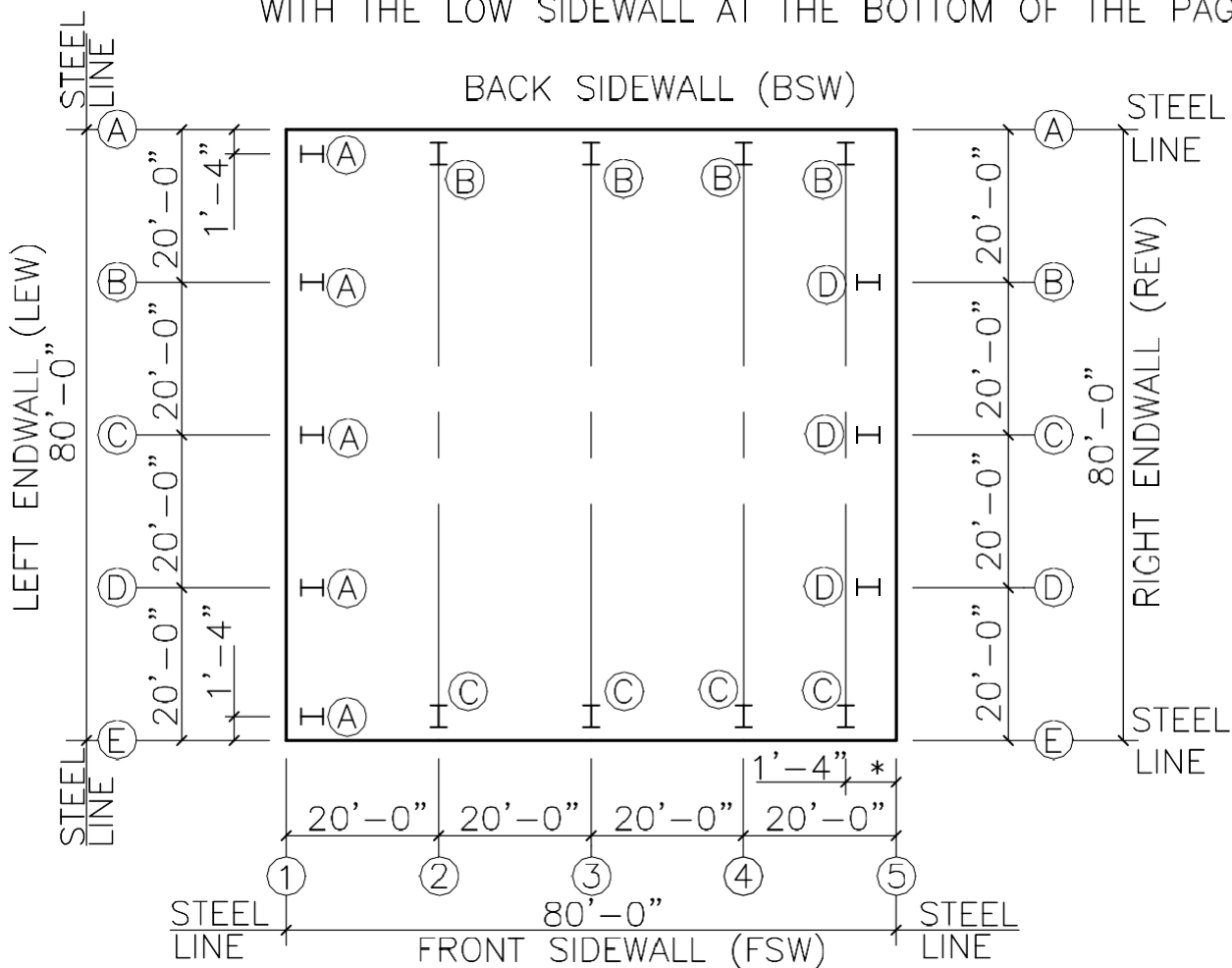
LAST REVISION DATE: 08/14/08 RJF AAJ





AB0010PE – ANCHOR BOLT PLAN

1. STANDARD ORIENTATION SHOWN
2. TYPICALLY SINGLE SLOPE BUILDINGS WILL BE ORIENTED WITH THE LOW SIDEWALL AT THE BOTTOM OF THE PAGE.



LAST REVISION **DETAIL**

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.5



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

*NOTE: AT RIGID FRAME ENDWALLS, 1'-4 IS STANDARD SETBACK. THIS DIMENSION WILL SOMETIMES INCREASE DUE TO AUXILIARY CRANE COLUMN DEPTHS ON CRANE JOBS.

NAME IF

AB0010PE.DWG

AB0020PE – SIDEWALL OR ENDWALL COLUMN SETBACK

LAST REVISION DETAIL

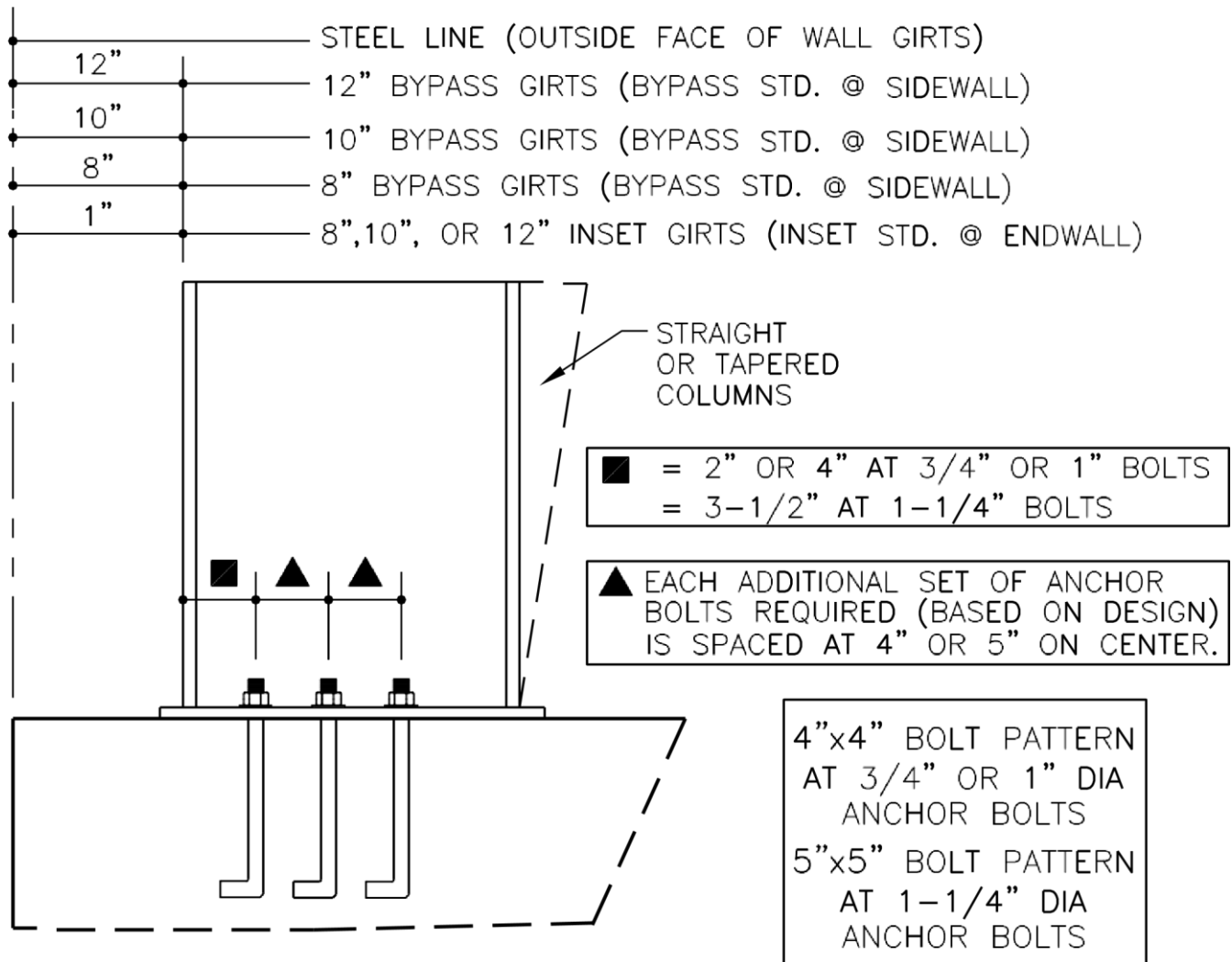
DATE: 08/14/08

BY: RJF CHK: AAJ

NAME IF APPLICABLE

10.0.6

AB0030PE.DWG



LASTDETAIL

DATE:

10.0.7

BY:

CHK:

APPLICABLE



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

REVISION

08/28/09

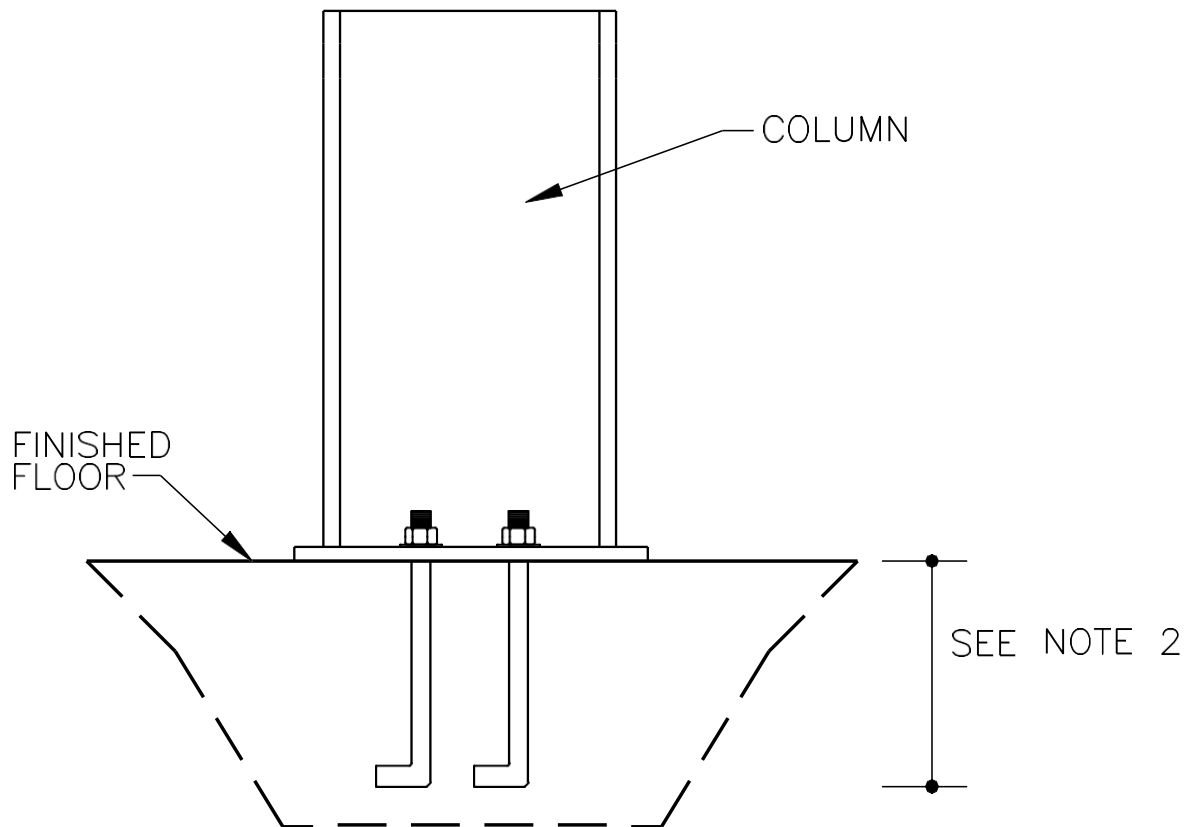
DLC

AES

NAME IF

AB0020PE.DWG

AB0030PE – COLUMN AT FINISH FLOOR



LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

NAME IF APPLICABLE

10.0.8

AB0030PE.DWG



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

NOTES

1. THIS CONDITION IS STANDARD AT ALL COLUMNS. IF COLUMN IS TO BE RECESSED BELOW FINISH FLOOR (AB0040PE), IT MUST BE REQUESTED AND QUOTED AS AN OPTION.
2. ANCHOR BOLT LENGTH TO BE DETERMINED BY FOUNDATION ENGINEER FOR APPROPRIATE REACTIONS AND FOUNDATION CONDITIONS.

LAST DETAIL

DATE:

BY:

CHK:

10.0.9

APPLICABLE



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

AB0040PE – COLUMN BASE POCKET

NOTES

1. COLUMNS MAY BE PLACED IN POCKET TO CONCEAL BASE PLATE AND ANCHOR BOLTS.
2. THIS CONDITION MUST BE REQUESTED AND QUOTED AS AN OPTIONAL CONDITION. THE STANDARD CONDITION IS FOR THE BASE PLATE TO BE AT FINISHED FLOOR.
3. ANCHOR BOLT LENGTH TO BE DETERMINED BY FOUNDATION ENGINEER FOR APPROPRIATE REACTIONS AND FOUNDATION CONDITIONS.

LAST REVISION DETAIL

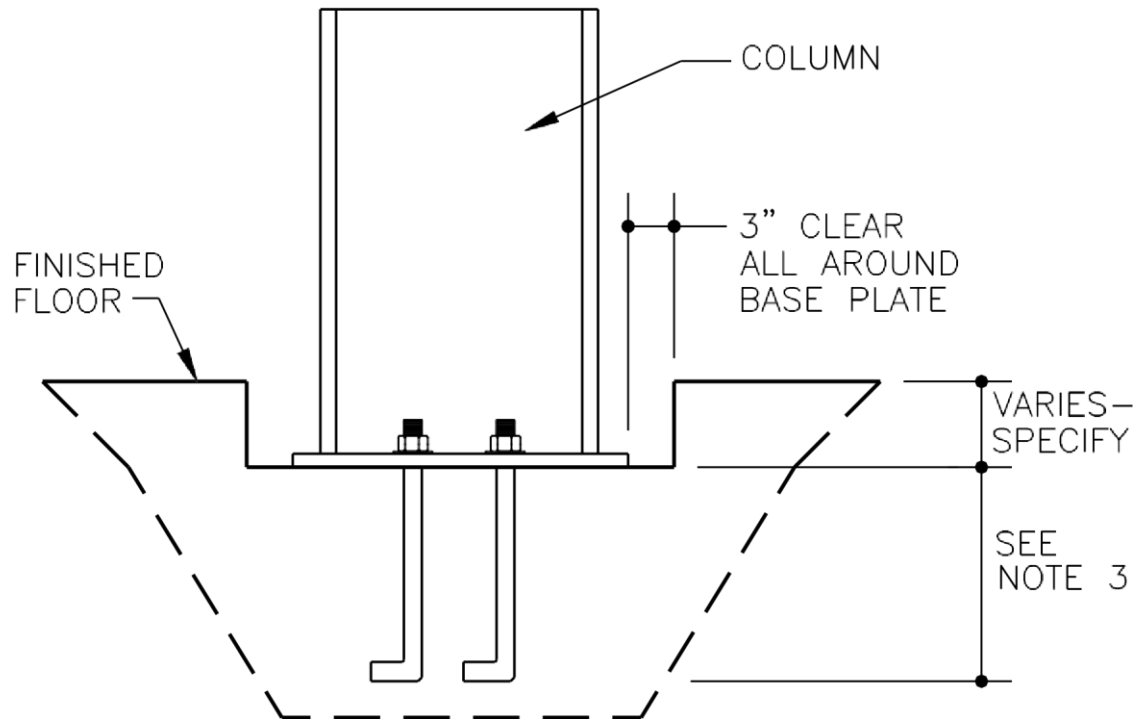
DATE: 08/14/08

BY: RJF CHK: AAJ

NAME IF APPLICABLE

10.0.10

AB0030PE.DWG



AB0050PE – BASE PLATE WITH GROUT REQUIRED

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

NAME IF APPLICABLE

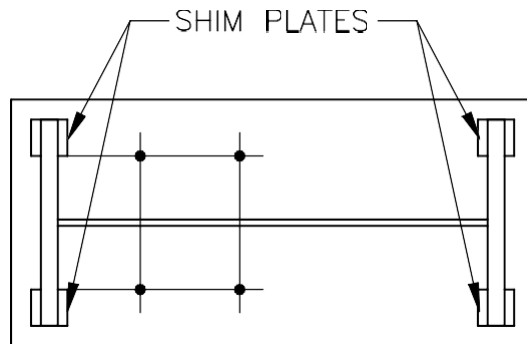
10.0.11

AB0030PE.DWG



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL



LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

NAME IF APPLICABLE

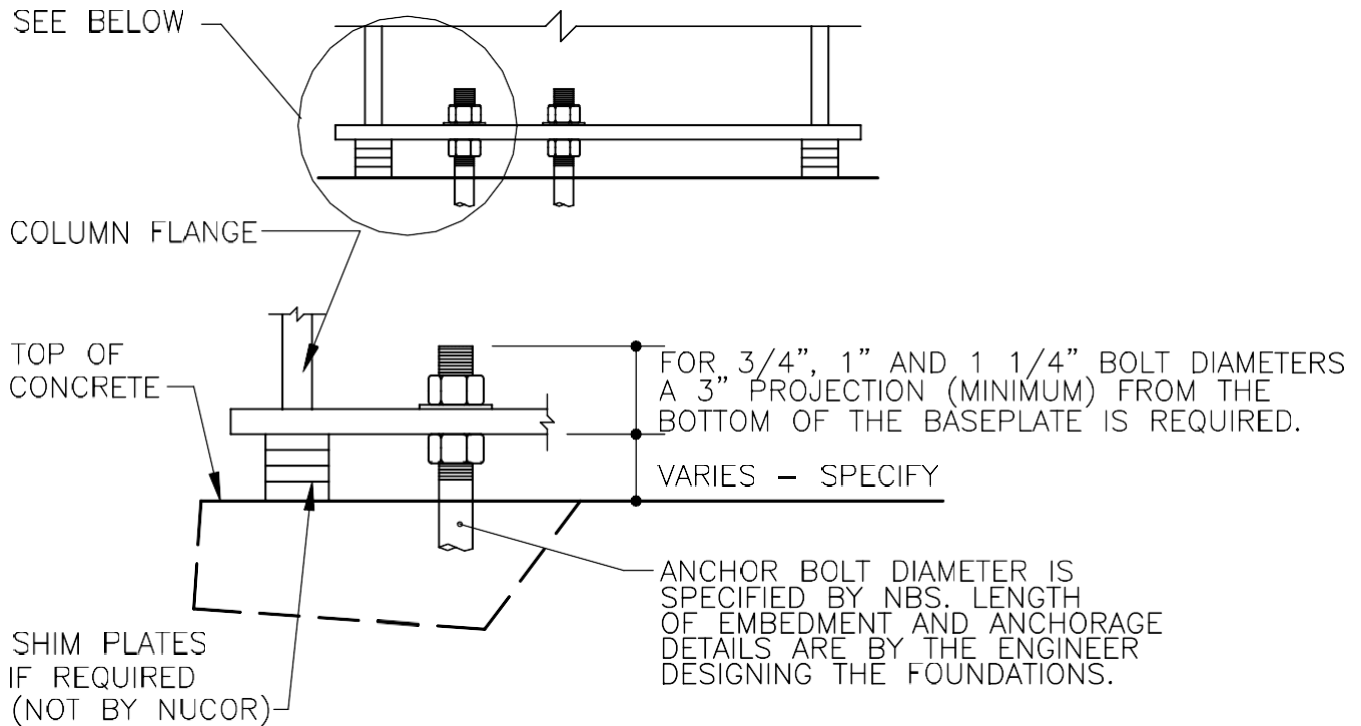
10.0.12

AB0030PE.DWG



**VALLEY
STEEL**
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL



AB0060PE – ENDWALL COLUMN INSET DETAIL – (COLD FORM)

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

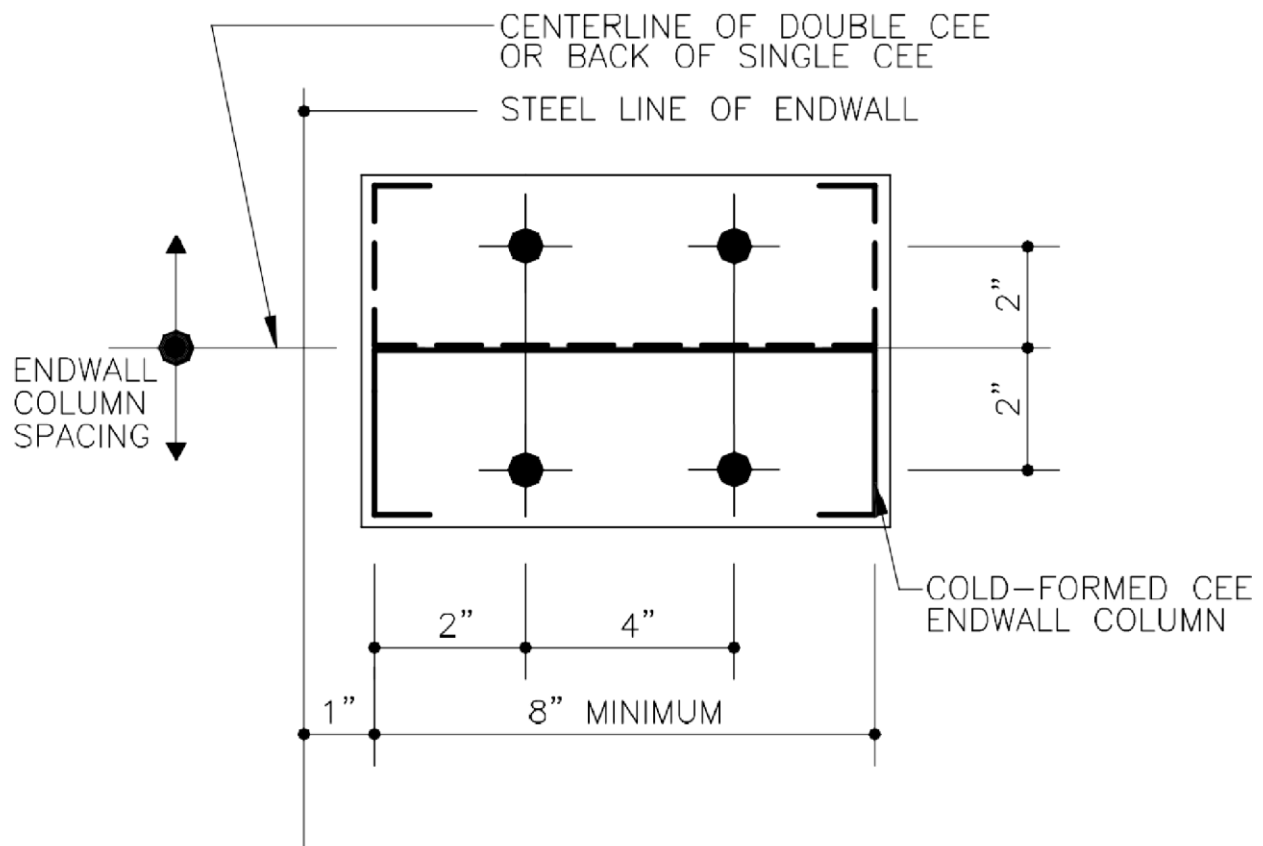
NAME IF APPLICABLE

10.0.13

AB0030PE.DWG



NOTE: FOR EASE OF FABRICATION, COLD-FORMED COLUMNS MAY HAVE (6) BASEPLATE HOLES. ANCHOR BOLTS ARE REQUIRED AS SHOWN ON THE DETAILS.



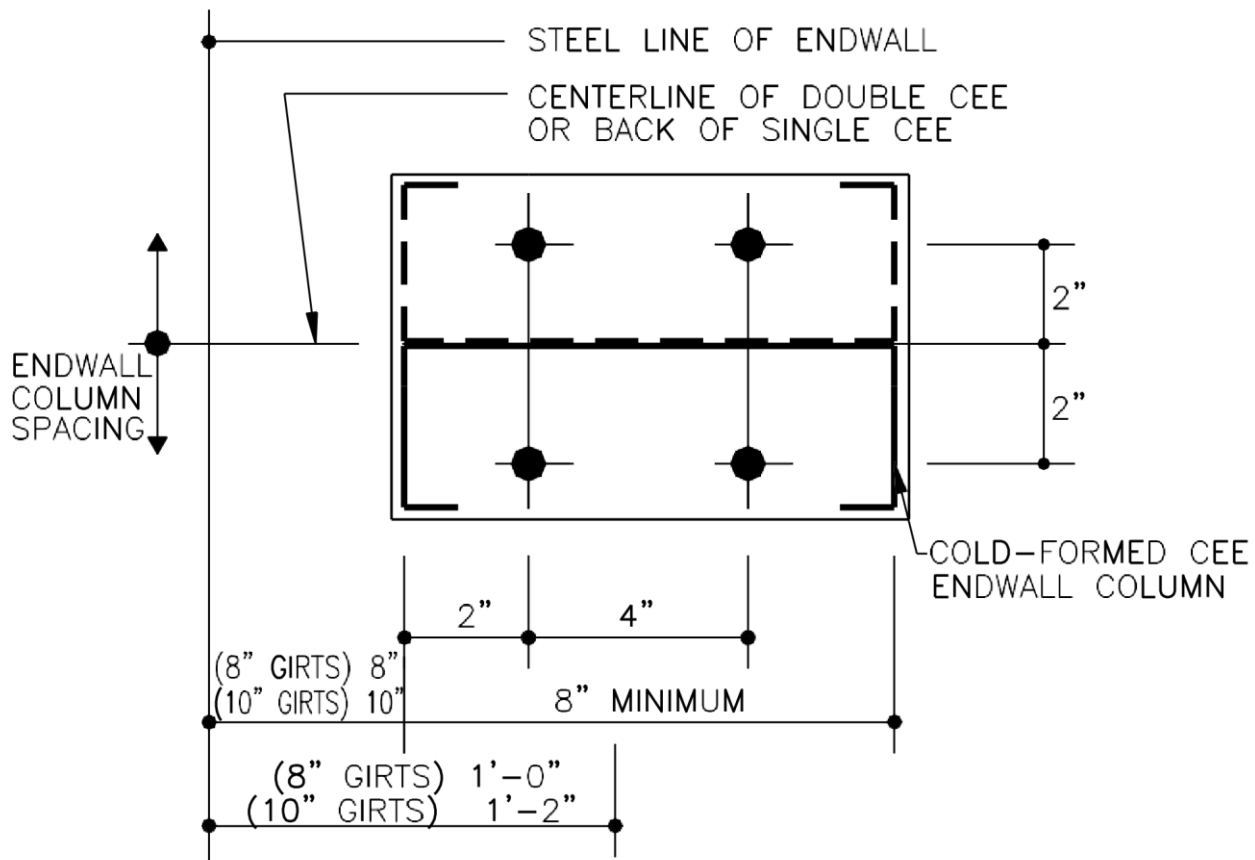
NOTE

1. NUCOR DESIGNS THE ANCHOR BOLT FOR SHEAR AND TENSION FORCES, BUT DOES NOT DETERMINE THE EMBEDMENT LENGTH. THIS IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER.



AB0070PE – ENDWALL COLUMN BYPASS DETAIL – (COLD FORM)

NOTE: FOR EASE OF FABRICATION, COLD-FORMED COLUMNS MAY HAVE (6) BASEPLATE HOLES. ANCHOR BOLTS ARE REQUIRED AS SHOWN ON THE DETAILS.



NOTE

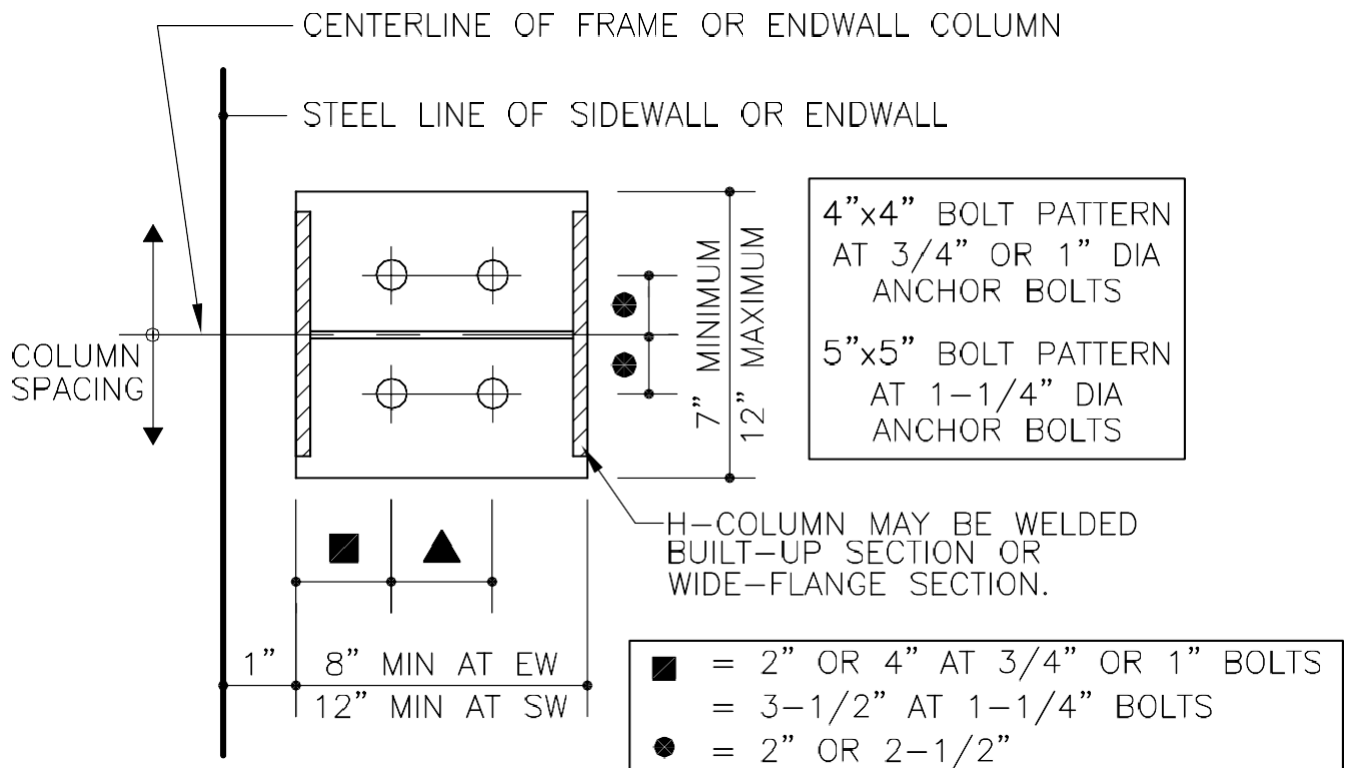
1. NUCOR DESIGNS THE ANCHOR BOLT FOR SHEAR AND TENSION FORCES, BUT DOES NOT DETERMINE THE EMBEDMENT LENGTH. THIS IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER.



NAME IF

AB0070PE.DWG

AB0080PE – ENDWALL COLUMN INSET DETAIL – (BUILT - UP)



LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.16

▲ EACH ADDITIONAL SET OF ANCHOR BOLTS REQUIRED (BASED ON DESIGN) IS SPACED AT 4" OR 5" ON CENTER.

NOTE

- 1 NUCOR DESIGNS THE ANCHOR BOLT FOR SHEAR AND TENSION FORCES, BUT DOES NOT DETERMINE THE EMBEDMENT LENGTH. THIS IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER.

REVISION

08/28/09

NAME IF

DLC AES

AB0080PE.DWG

FIXED BASE POST & BEAM CORNER COLUMNS (INSET GIRT CONDITIONS)

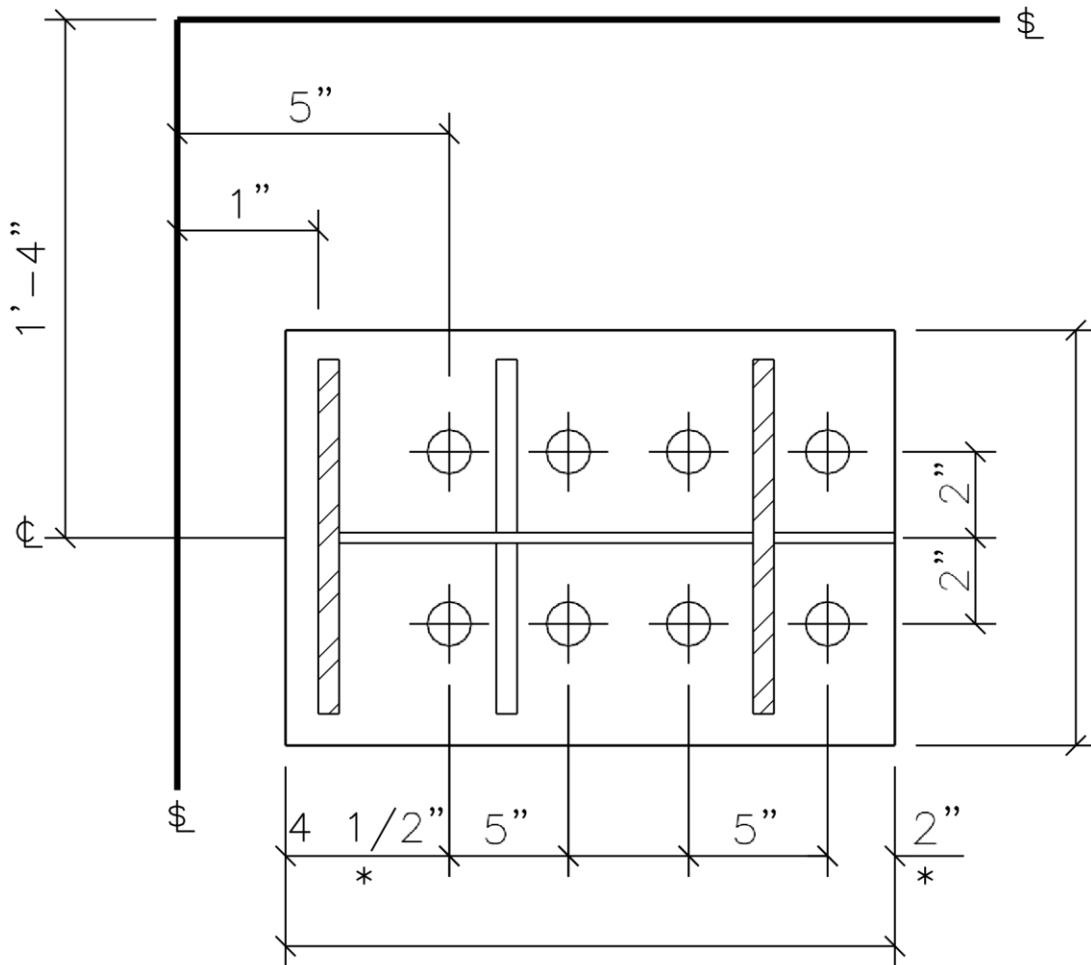
BU8LT PE

LAST DETAIL

APPLICABLE

DATE: **10.0.17**

BY: CHK:



*MAY VARY PER DESIGN

(8) \emptyset ANCHOR
BOLTS WITH A 3" PROJECTION

LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.18



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

NAME IF

BU8LT_PE.DWG

LAST DETAIL

DATE: **10.0.19**

BY: CHK:

APPLICABLE



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

BU8RT PE

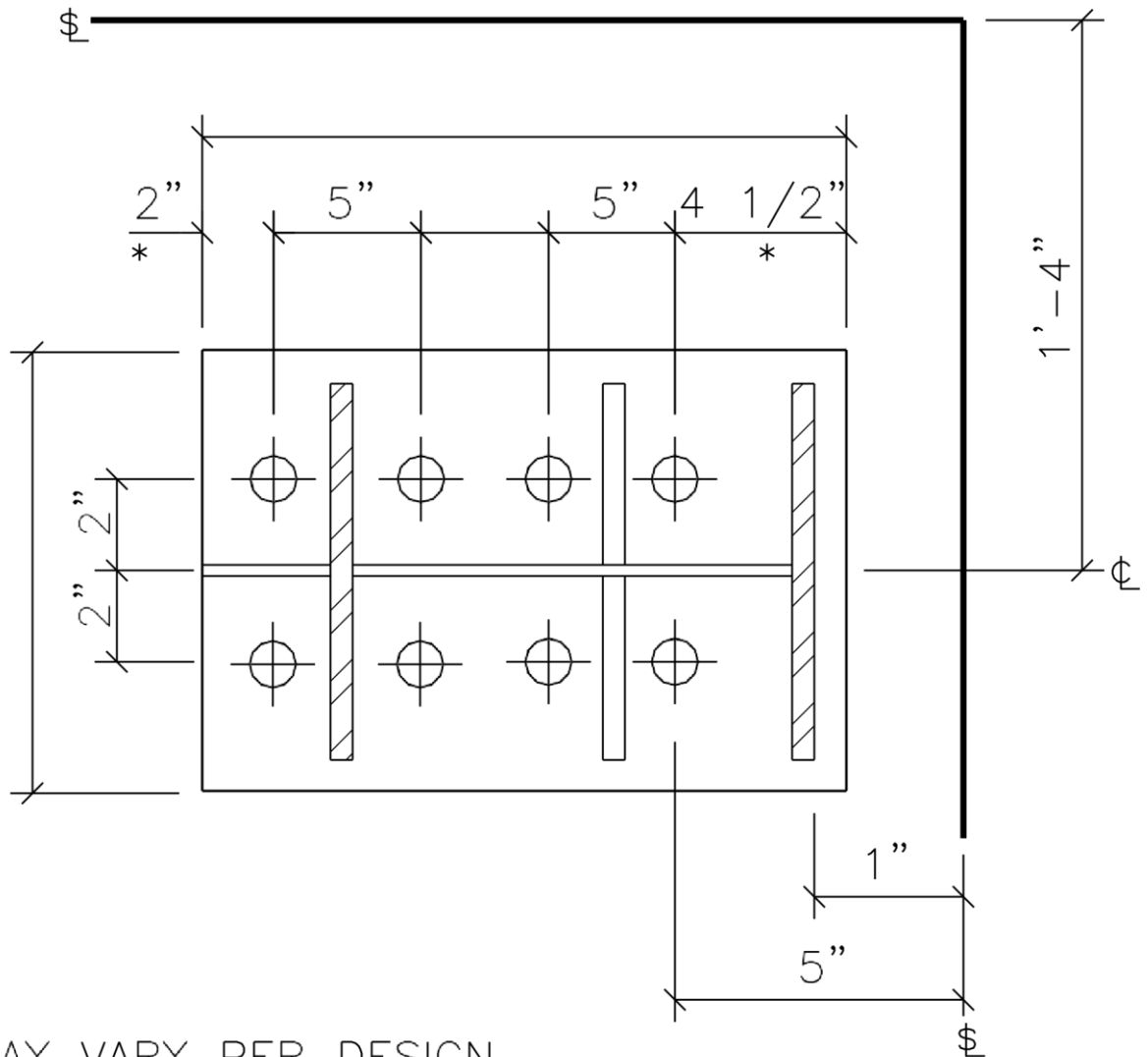
LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.20





V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(8) Ø ANCHOR BOLTS WITH A 3" PROJECTION
--	---

NAME IF

BU8RT_PE.DWG

BU8LB PE

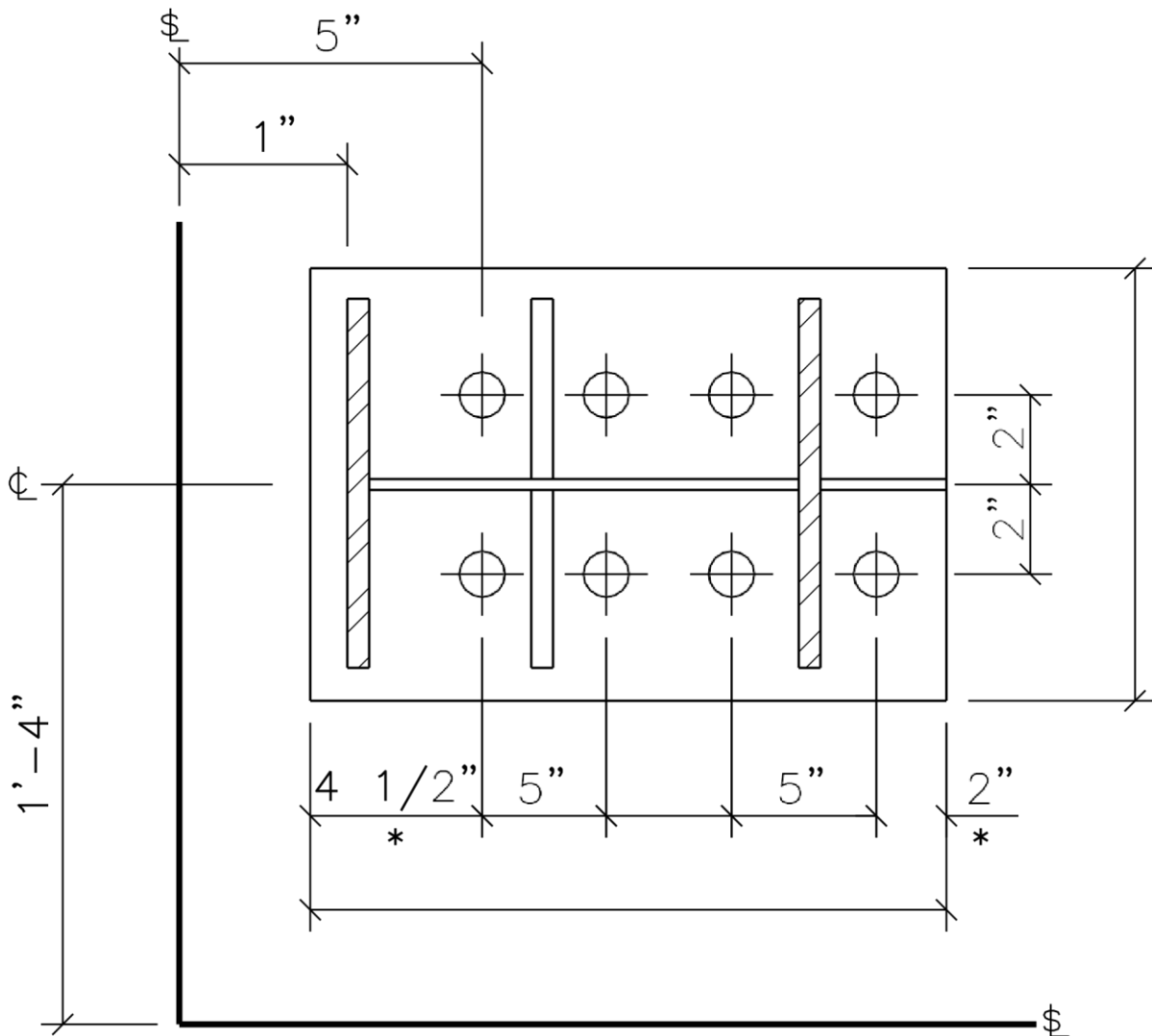
LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.22



*MAY VARY PER DESIGN

LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.23



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(8) Ø ANCHOR BOLTS WITH A 3" PROJECTION
--	---

NAME IF

BU8LB_PE.DWG

BU8RB PE

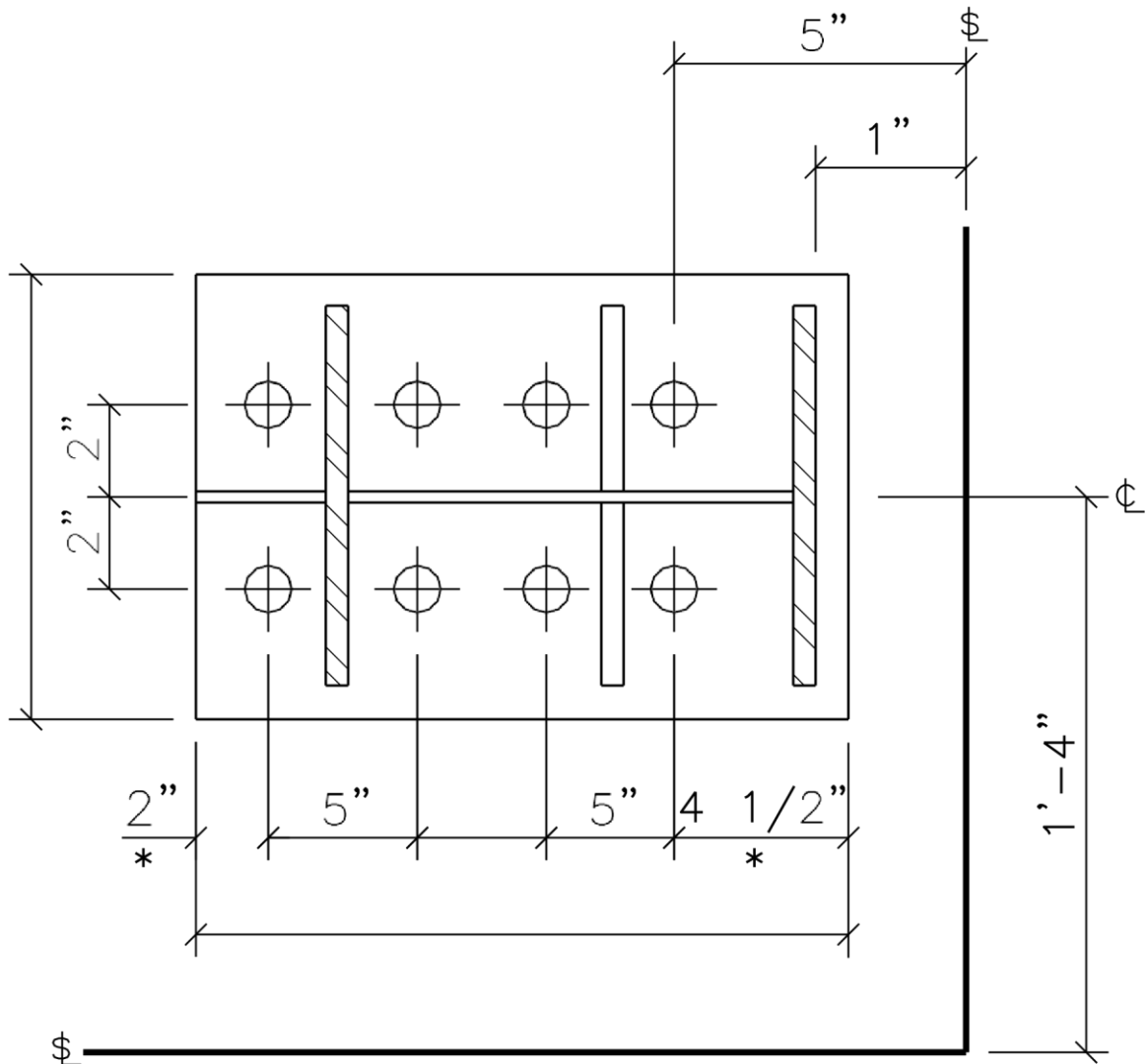
LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.24



***MAY VARY PER DESIGN**

LAST REVISION **DETAIL**

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.25



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(8) \emptyset ANCHOR BOLTS WITH A 3" PROJECTION
--	--

NAME IF

BU8RB_PE.DWG

FIXED BASE POST & BEAM CORNER COLUMNS (BYPASS GIRT CONDITION)

BUB8LTPE

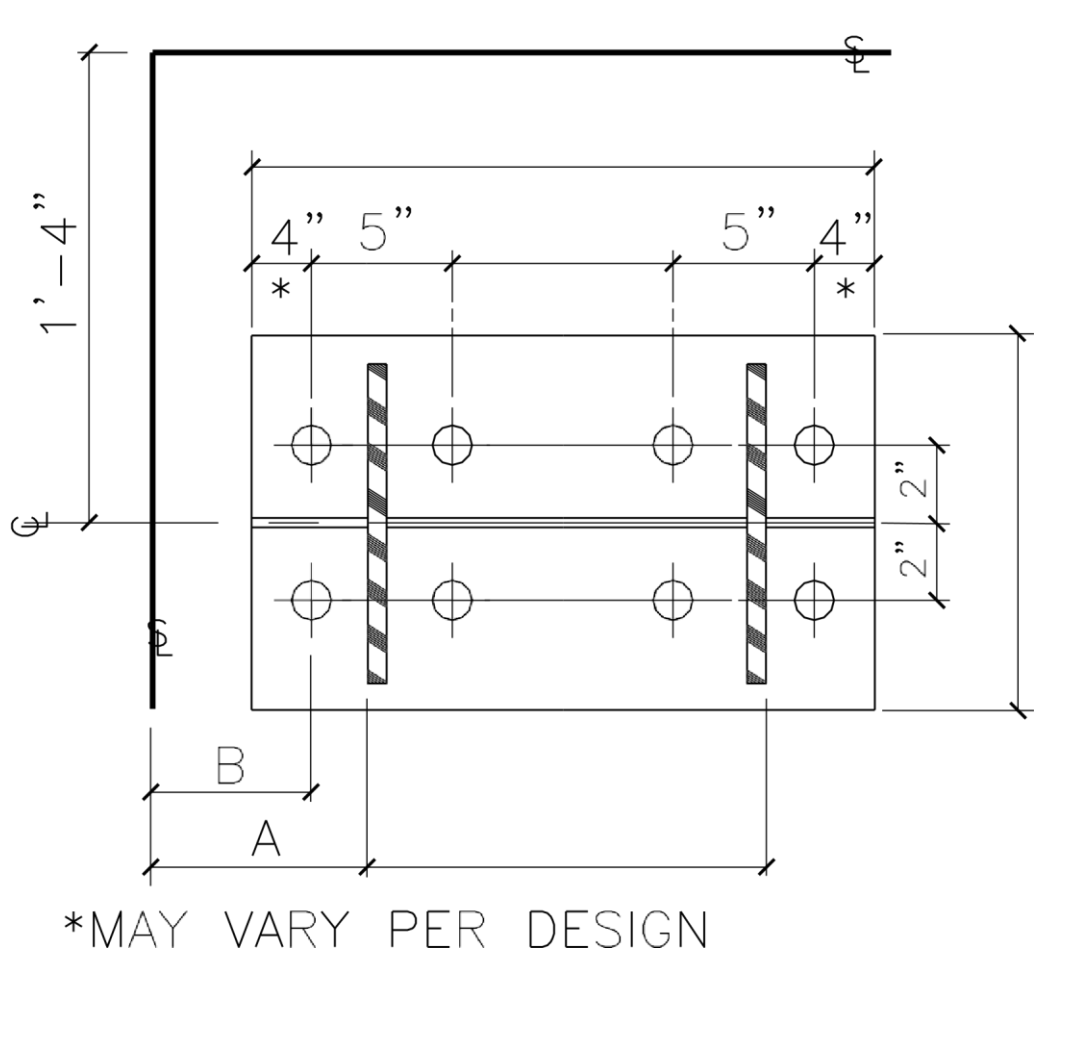
LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.26





V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(8) \emptyset ANCHOR BOLTS WITH A 3" PROJECTION
--	--

A = 8", 10", 12"

B = "A" MINUS 2"

NAME IF

BUB8LTPE.DWG

BUB8RTPE

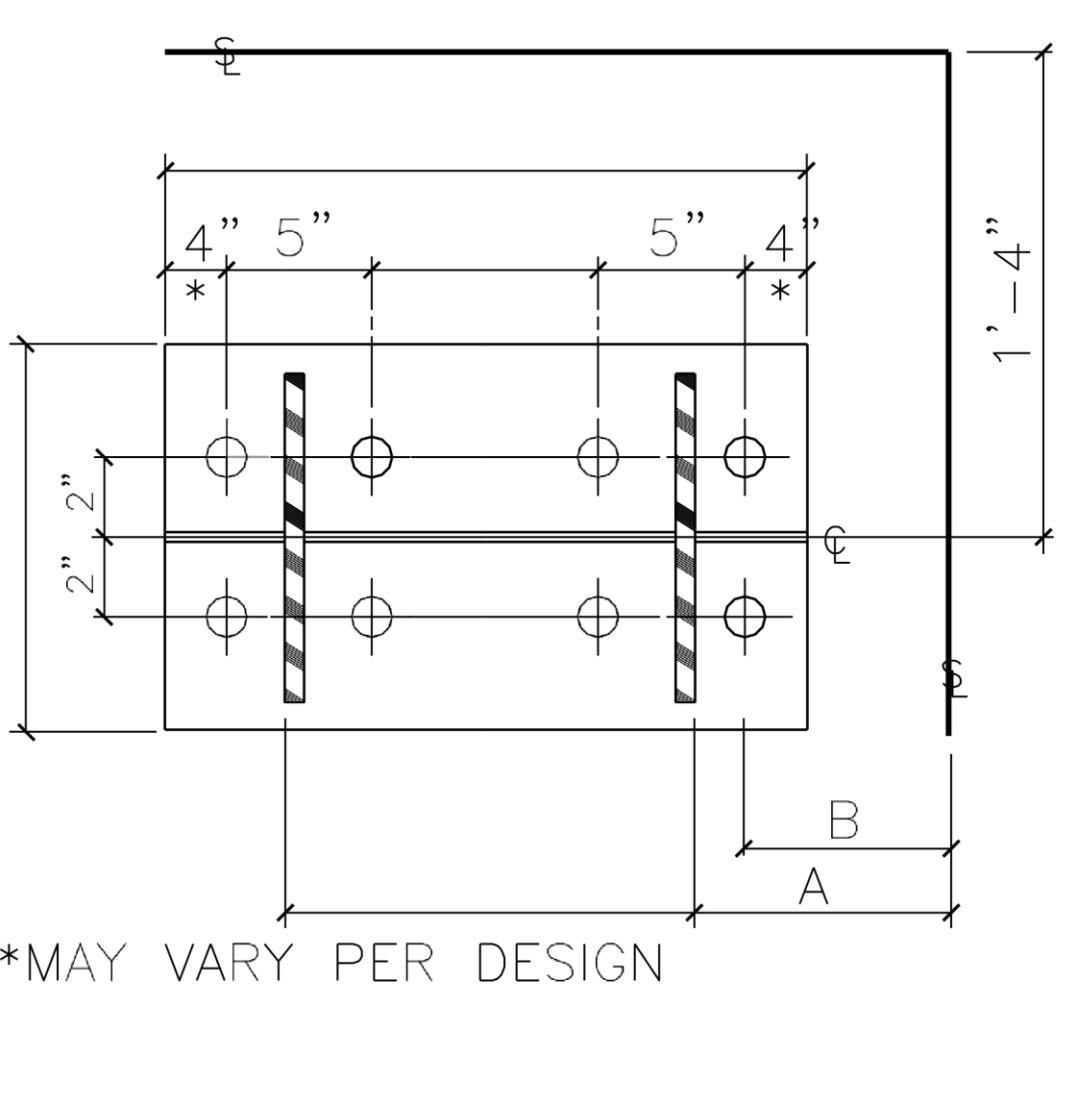
LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.28





V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(8) \emptyset ANCHOR BOLTS WITH A 3" PROJECTION
--	--

A = 8", 10", 12"

B = "A" MINUS 2"

NAME IF

BUB8RTPE.DWG

BUB8LBPE

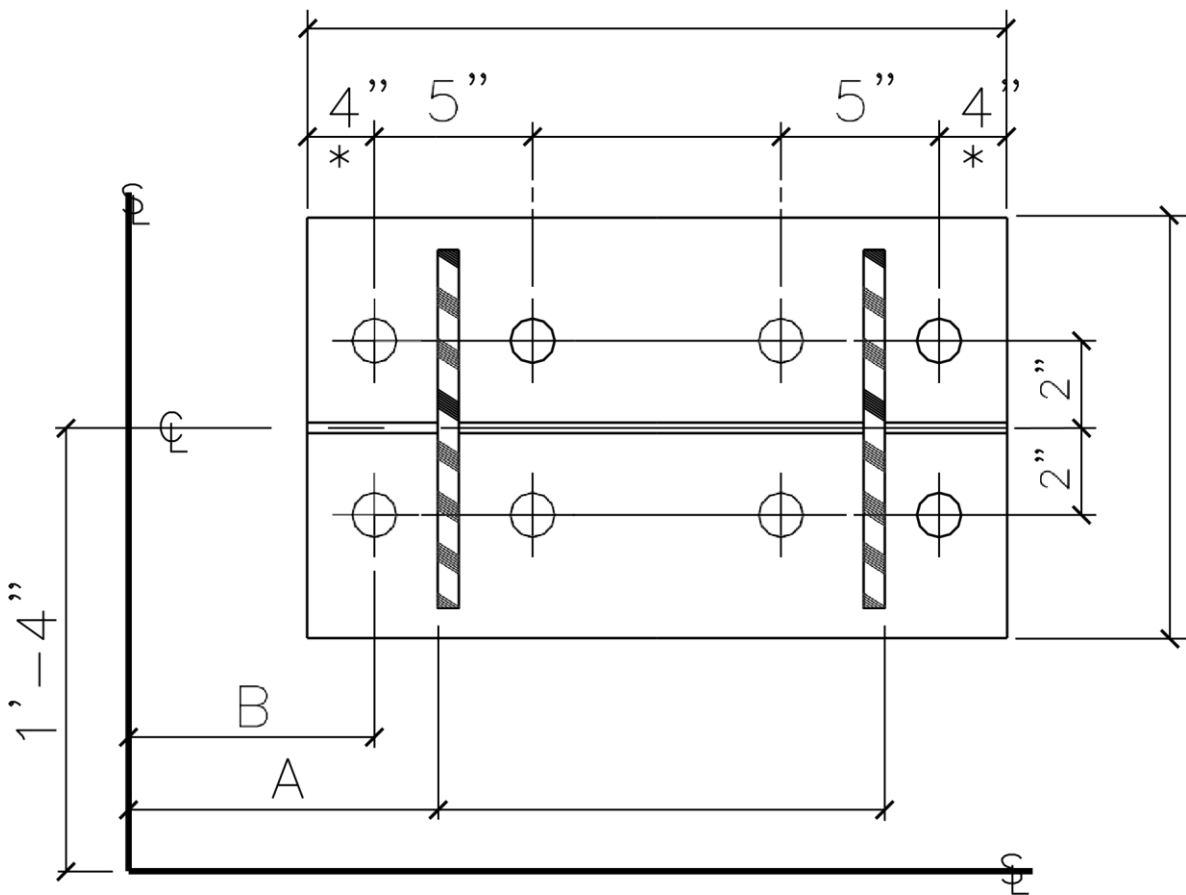
LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.30



*MAY VARY PER DESIGN



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(8) \varnothing ANCHOR BOLTS WITH A 3" PROJECTION
--	--

A = 8", 10", 12"

B = "A" MINUS 2"

NAME IF

BUB8LBPE.DWG

V

BUB8RBPE

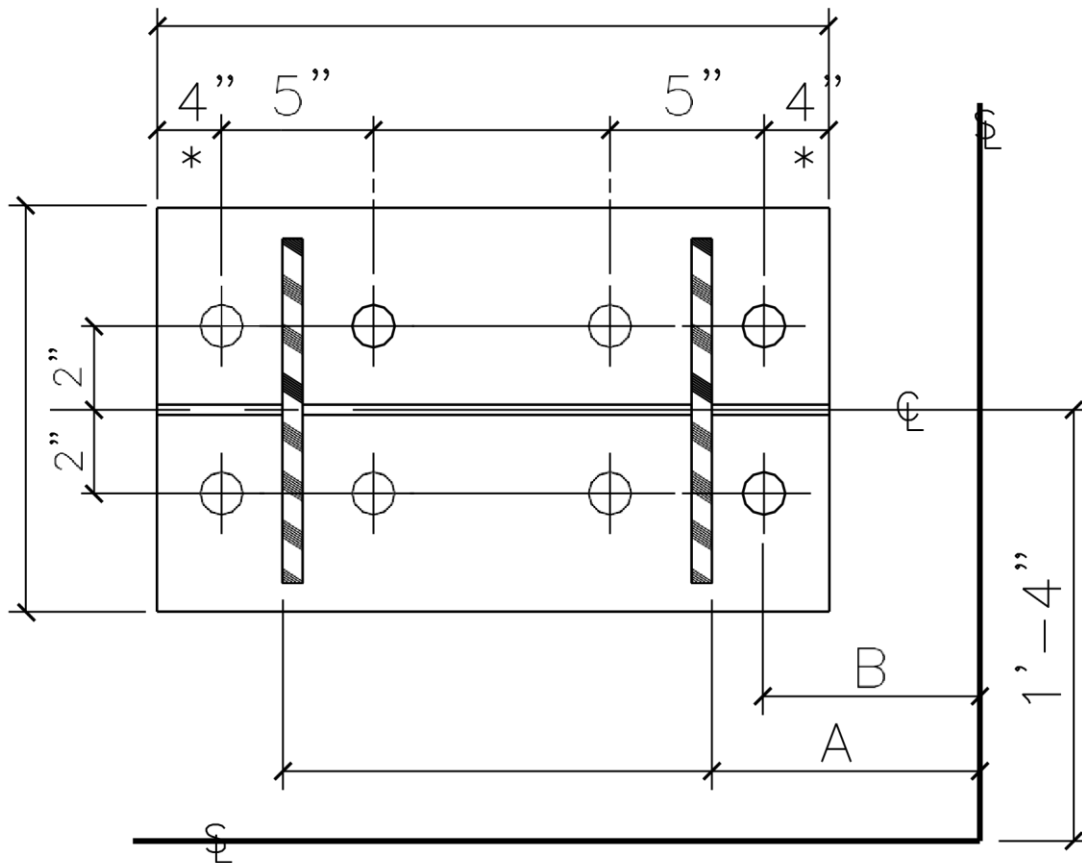
LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

APPLICABLE

10.0.32



*MAY VARY PER DESIGN



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(8) \varnothing ANCHOR BOLTS WITH A 3" PROJECTION
--	--

A = 8", 10", 12"

B = "A" MINUS 2"

NAME IF

BUB8RBPE.DWG

LAST REVISION DETAIL

DATE: 09/27/11

BY: RT CHK: EGB

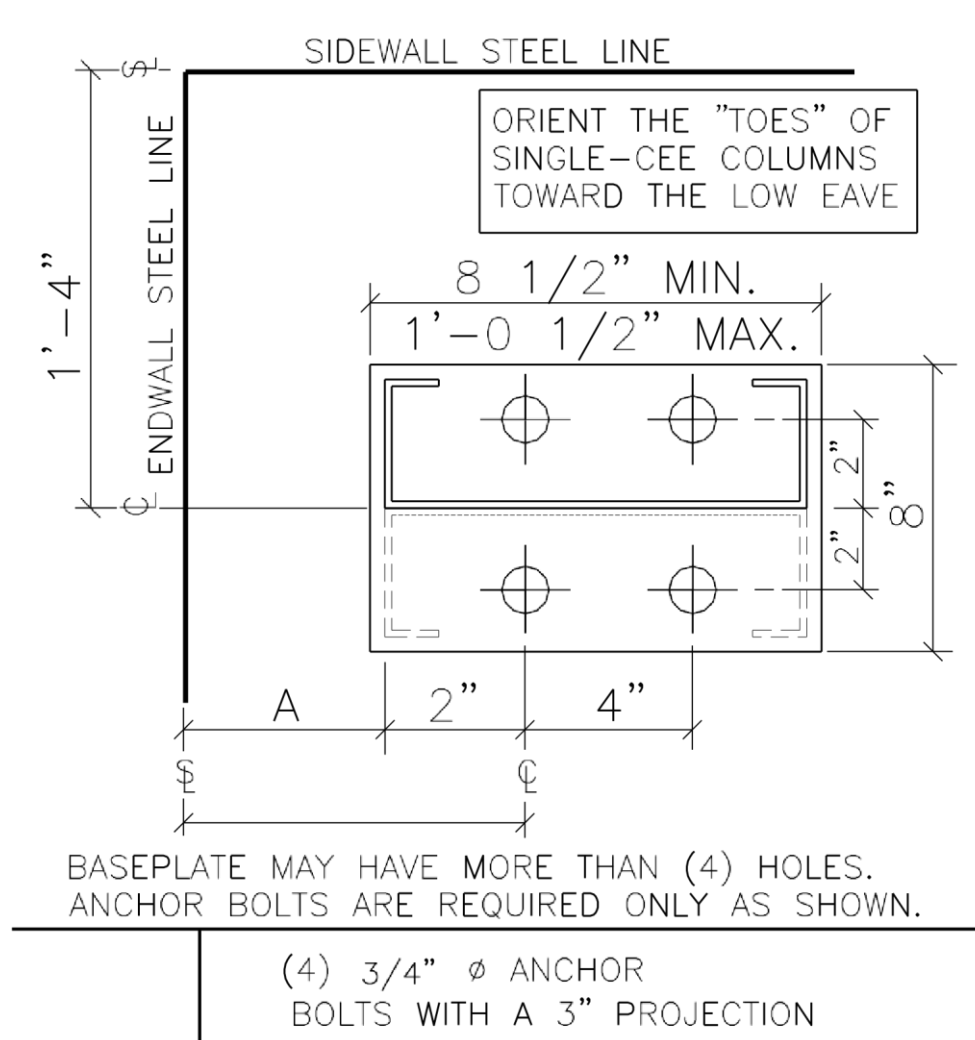
APPLICABLE

10.0.34



SINGLE OR DOUBLE CEE POST & BEAM CORNER COLUMNS

C4LT PE



- Double Cee Columns are factory welded together. Base Plates and Cap Plates are also factory welded.

A = 0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS

LAST REVISION DETAIL

APPLICABLE

DATE: 08/14/08

10.0.35

BY: RJF CHK: AAJ

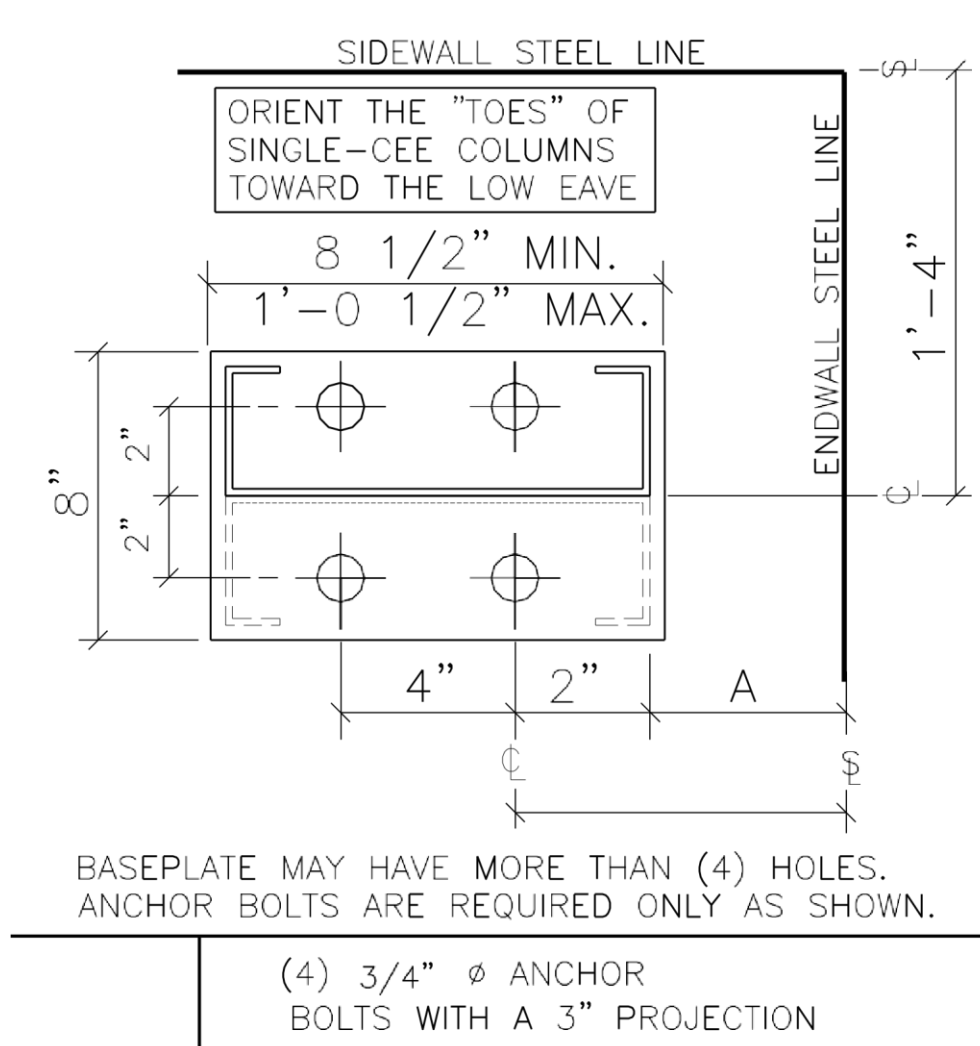


12" – 12" BYPASS GIRTS

NAME IF

C4LT_PE.DWG

C4RT PE



LAST REVISION **DETAIL**

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.36



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

- Double Cee Columns are factory welded together. Base Plates and Cap Plates are also factory welded.

A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS
 10" – 10" BYPASS GIRTS
 12" – 12" BYPASS GIRTS

NAME IF

C4RT_PE.DWG

C4LB PE

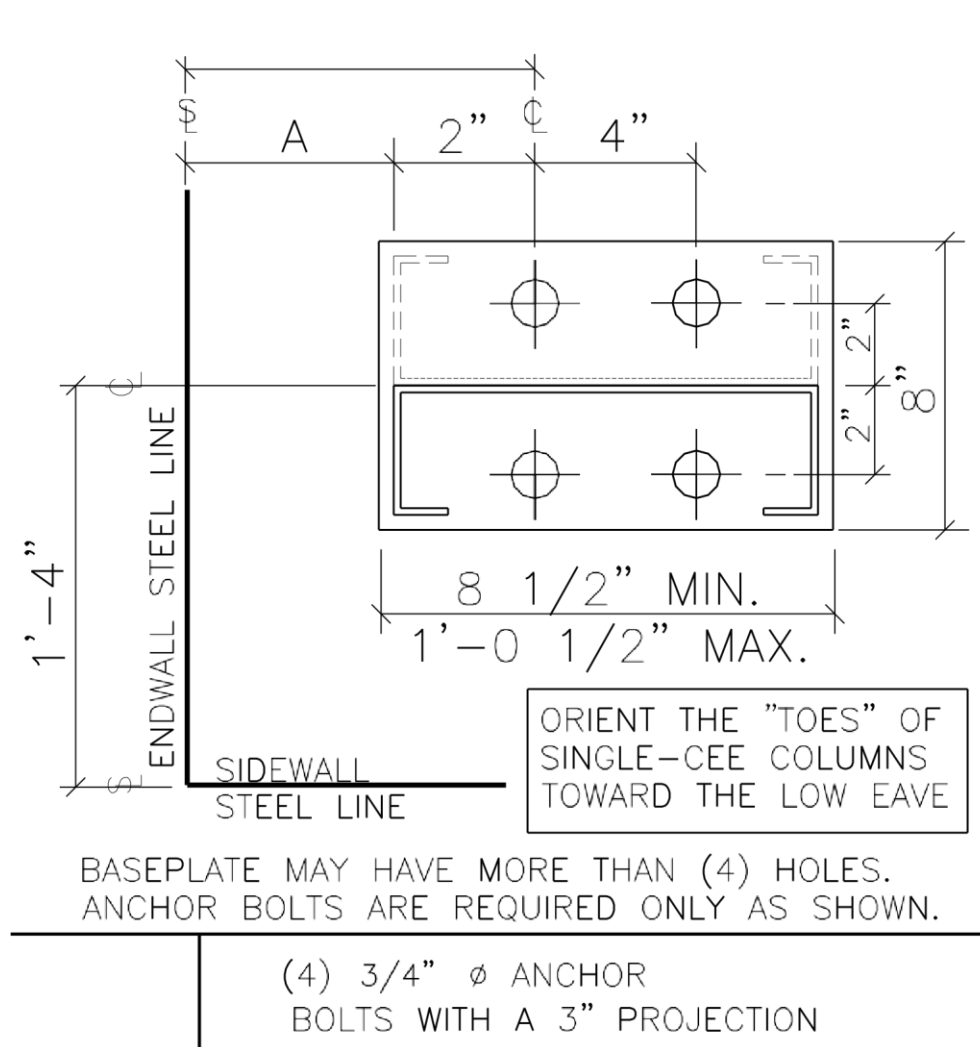
LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.37



- Double Cee Columns are factory welded together. Base Plates and Cap Plates are also factory welded.

A = 0" – FLUSH
1" – INSET

LAST REVISION DETAIL

APPLICABLE

DATE: 08/14/08

10.0.38

BY: RJF CHK: AAJ



PRODUCT & ENGINEERING MANUAL

8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

NAME IF

C4LB_PE.DWG

C4RB PE

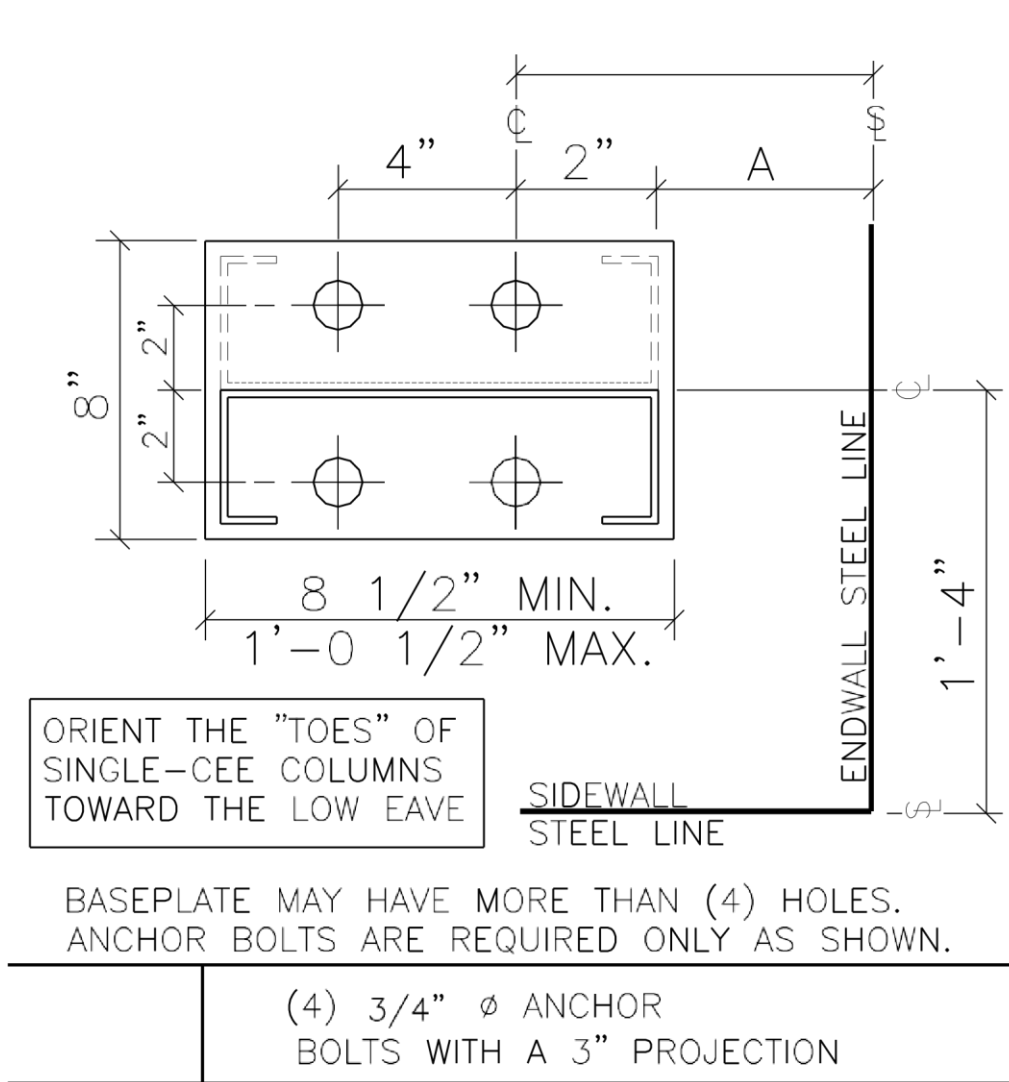
LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.39



- Double Cee Columns are factory welded together. Base Plates and Cap Plates are also factory welded.

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.40

A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS
 10" – 10" BYPASS GIRTS
 12" – 12" BYPASS GIRTS

NAME IF

C4RB_PE.DWG

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.41



PRODUCT & ENGINEERING MANUAL

BUILT - UP ENDWALL COLUMNS

BU4LX PE

REVISION
____08/28/09____

NAME IF

LASTDETAIL

APPLICABLE

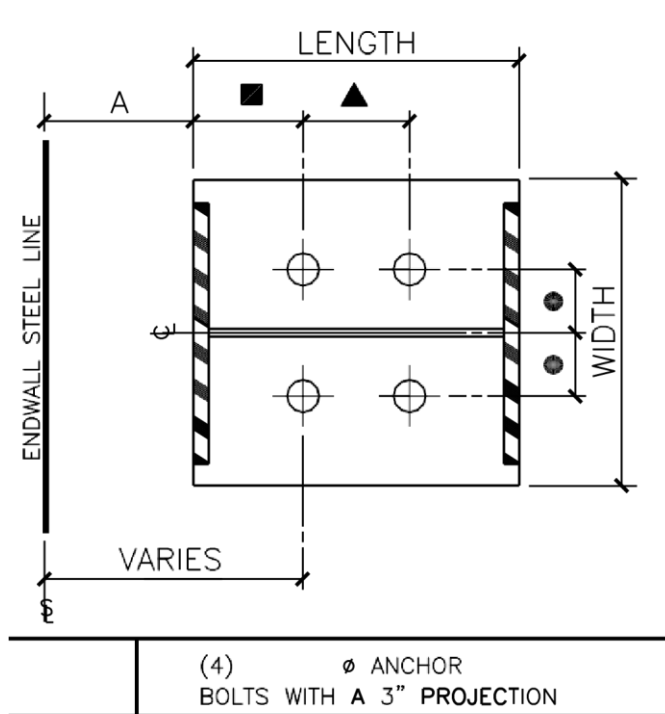
DATE: **10.0.42**

BY: CHK:



DLC AES

BU4LX_PE.DWG



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS

5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
= 3-1/2" AT 1-1/4" BOLTS
● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR
BOLTS REQUIRED (BASED ON DESIGN)
IS SPACED AT 4" OR 5" ON CENTER.

A = 0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

LASTDETAIL

APPLICABLE

DATE: **10.0.43**

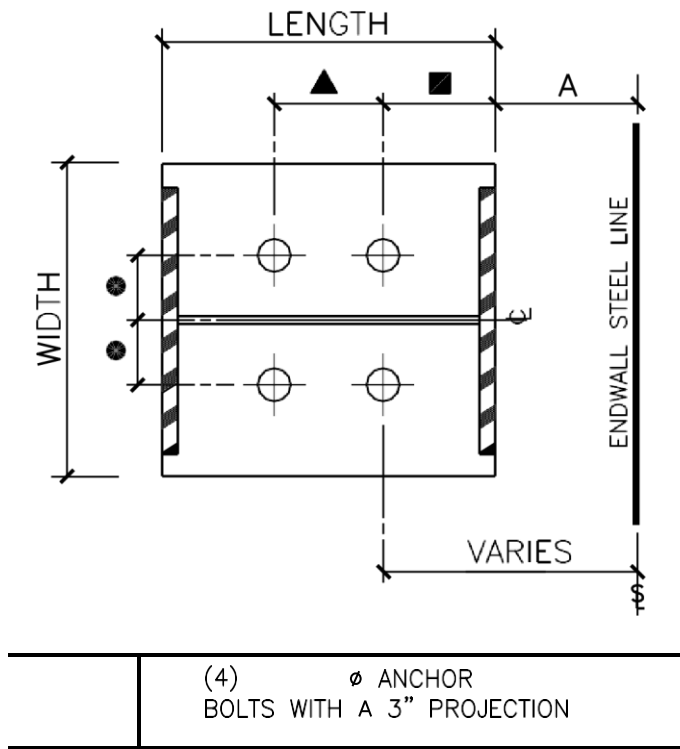
BY: CHK:



PRODUCT & ENGINEERING MANUAL

BU4RX PE

REVISION	NAME IF
<u>08/28/09</u>	BU4RX_PE.DWG
<u>DLC</u> <u>AES</u>	
LASTDETAIL	APPLICABLE
DATE: 10.0.44	BY: CHK:



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS

5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
= 3-1/2" AT 1-1/4" BOLTS
● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR
BOLTS REQUIRED (BASED ON DESIGN)
IS SPACED AT 4" OR 5" ON CENTER.

A = 0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

FIXED BASE INTERMEDIATE ENDWALL COLUMNS

BU8LX PE

REVISION
09/27/11

NAME IF

LASTDETAIL

APPLICABLE

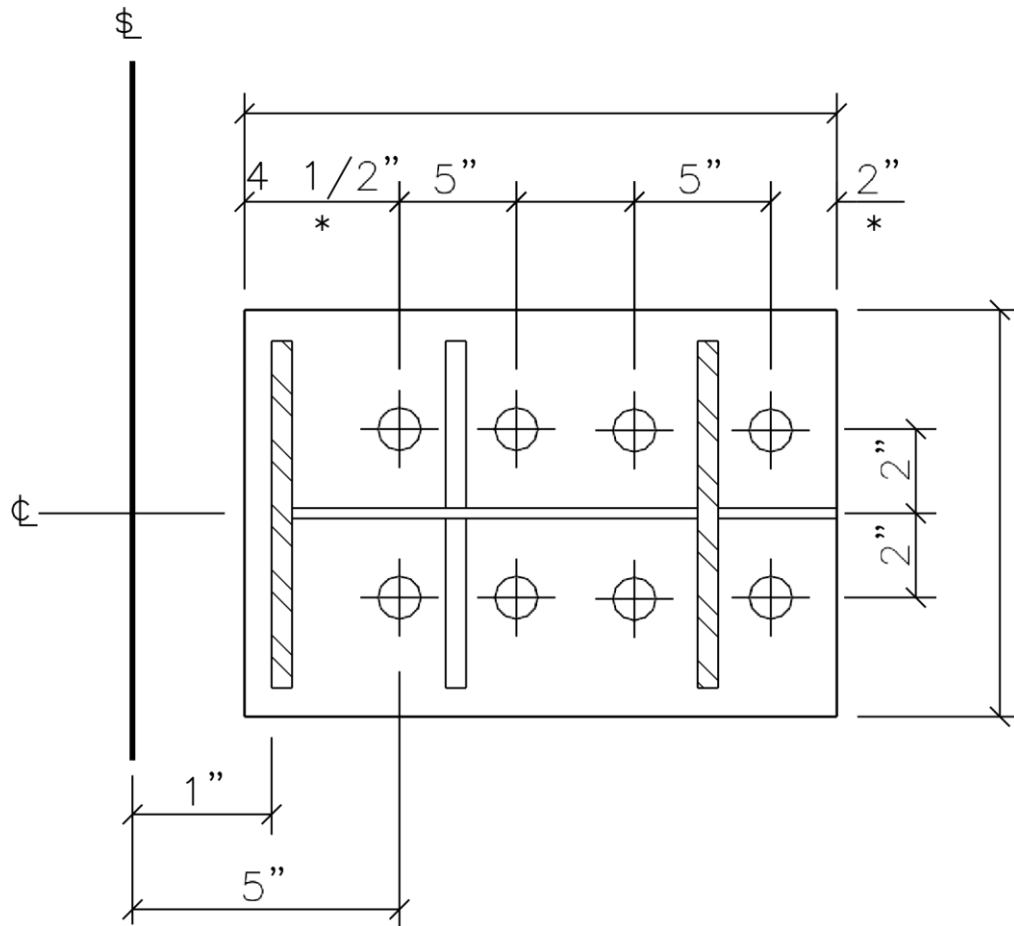
DATE: 10.0.45

BY: CHK:



RT EGB

BU8LX_PE.DWG



*MAY VARY PER DESIGN

(8) \emptyset ANCHOR
BOLTS WITH A 3" PROJECTION

LASTDETAIL

APPLICABLE

DATE: 10.0.46

BY: CHK:



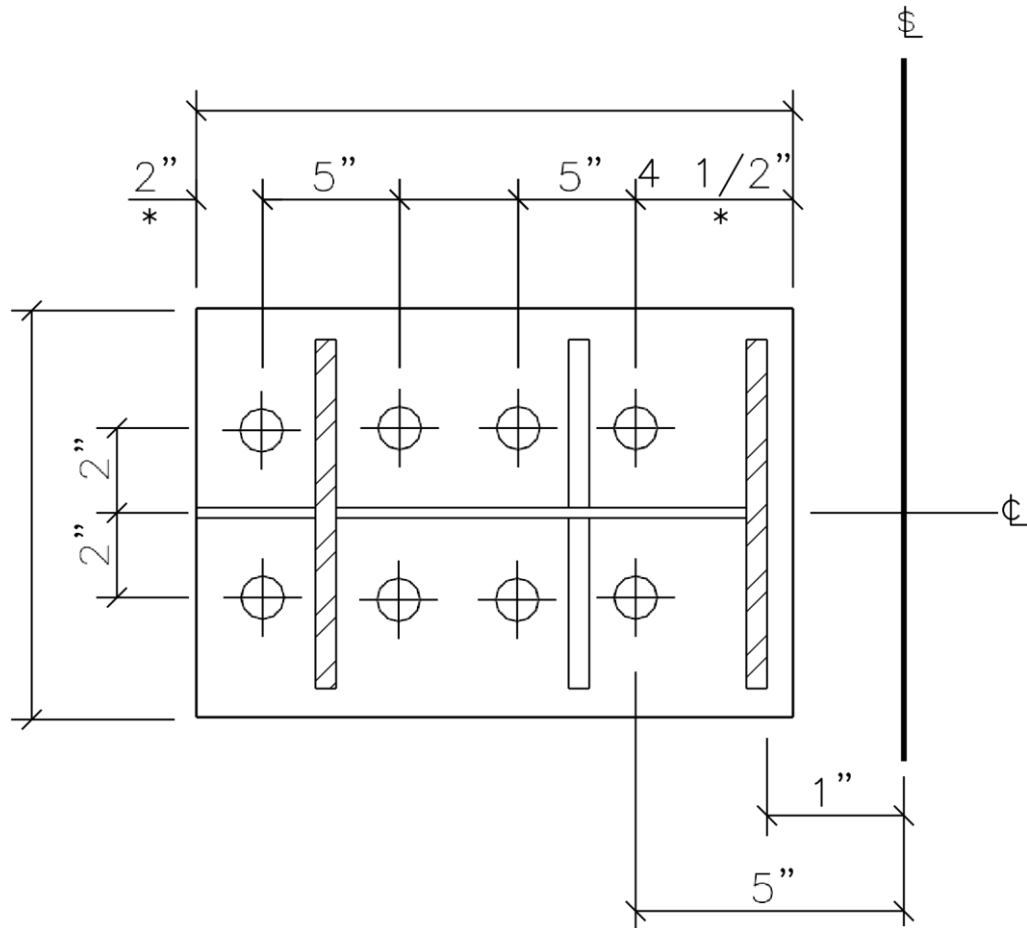
PRODUCT & ENGINEERING MANUAL

**Inset Detail Shown
BU8RX PE

LASTDETAIL

DATE: **10.0.47**
BY: CHK:

APPLICABLE



*MAY VARY PER DESIGN

(8) ∅ ANCHOR
BOLTS WITH A 3" PROJECTION



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

**Inset Detail Shown

REVISION

09/27/11

NAME IF

RT EGB

BU8RX_PE.DWG

SINGLE OR DOUBLE CEE ENDWALL COLUMNS

REVISION

08/14/08

NAME IF

C4LI_PE.DWG

LASTDETAIL

APPLICABLE

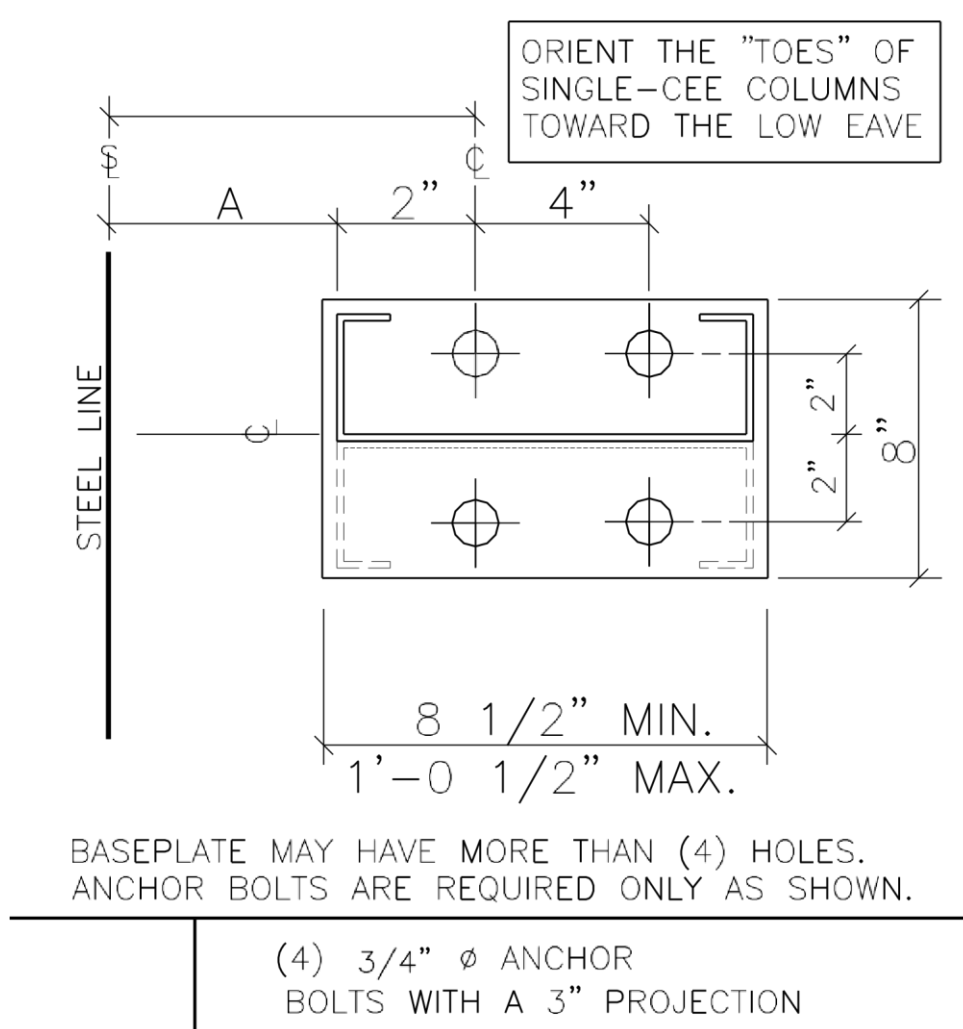
DATE: 10.0.49

BY: CHK:



RJF AAJ

C4LI PE



- Double Cee Columns are factory welded together. Cee Column Base Plates and Cap Plates are also factory welded.

A = 0" – FLUSH

LASTDETAIL

APPLICABLE

DATE: **10.0.50**

BY: CHK:



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

1" – INSET

8" – 8" BYPASS GIRTS

10" – 10" BYPASS GIRTS

12" – 12" BYPASS GIRTS

C4RI_PE

REVISION
____08/14/08____

NAME IF
C4RI_PE.DWG

LASTDETAIL

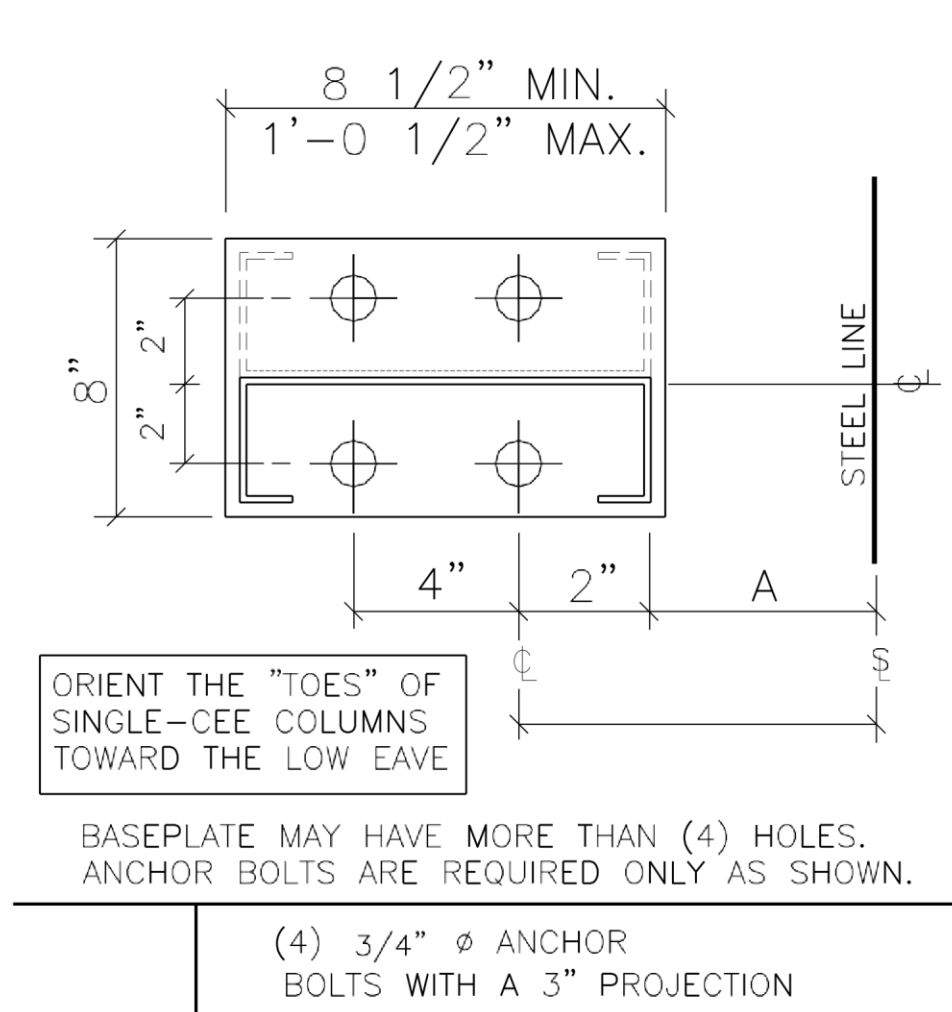
APPLICABLE

DATE: **10.0.51**

BY: CHK:



RJF AAJ



- Double Cee Columns are factory welded together. Cee Column Base Plates and Cap Plates are also factory welded.

A = 0" – FLUSH
1" – INSET

LASTDETAIL

APPLICABLE

DATE: **10.0.52**

BY: CHK:



PRODUCT & ENGINEERING MANUAL

8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

LAST DETAIL

DATE: **10.0.53**

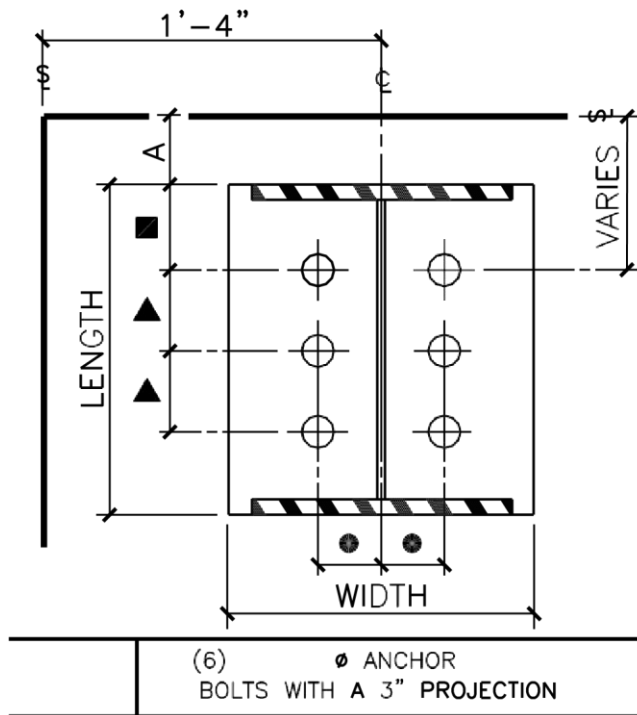
BY: CHK:

APPLICABLE

BUILT - UP RIGID FRAME CORNER COLUMNS

BU6TL PE

NOTE: The third digit of each detail name indicates the number of anchor bolts required. For example: BU6TL requires (6) anchor bolts. BU4TL requires (4) anchor bolts.



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS

5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
= 3-1/2" AT 1-1/4" BOLTS
● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR BOLTS REQUIRED (BASED ON DESIGN) IS SPACED AT 4" OR 5" ON CENTER.

LAST REVISION **DETAIL**

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.54



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS
 10" – 10" BYPASS GIRTS
 12" – 12" BYPASS GIRTS

NAME IF

BU6TL_PE.DWG

BU6TR PE

NOTE: The third digit of each detail name indicates the number of anchor bolts required. For example: BU6TR requires (6) anchor bolts. BU4TR requires (4) anchor bolts.

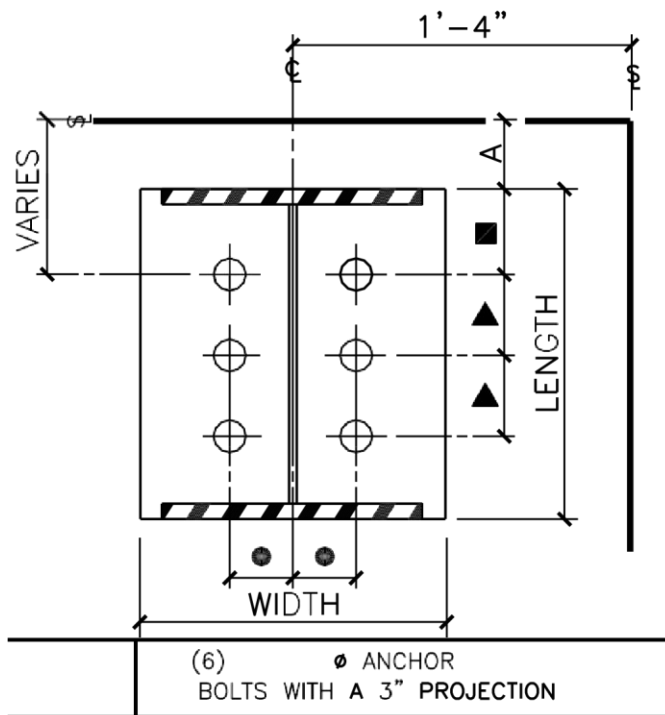
LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.55



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS
5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
= 3-1/2" AT 1-1/4" BOLTS
● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR
BOLTS REQUIRED (BASED ON DESIGN)
IS SPACED AT 4" OR 5" ON CENTER.

A =
0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

NAME IF

LAST REVISION DETAIL

APPLICABLE

DATE: 08/28/09

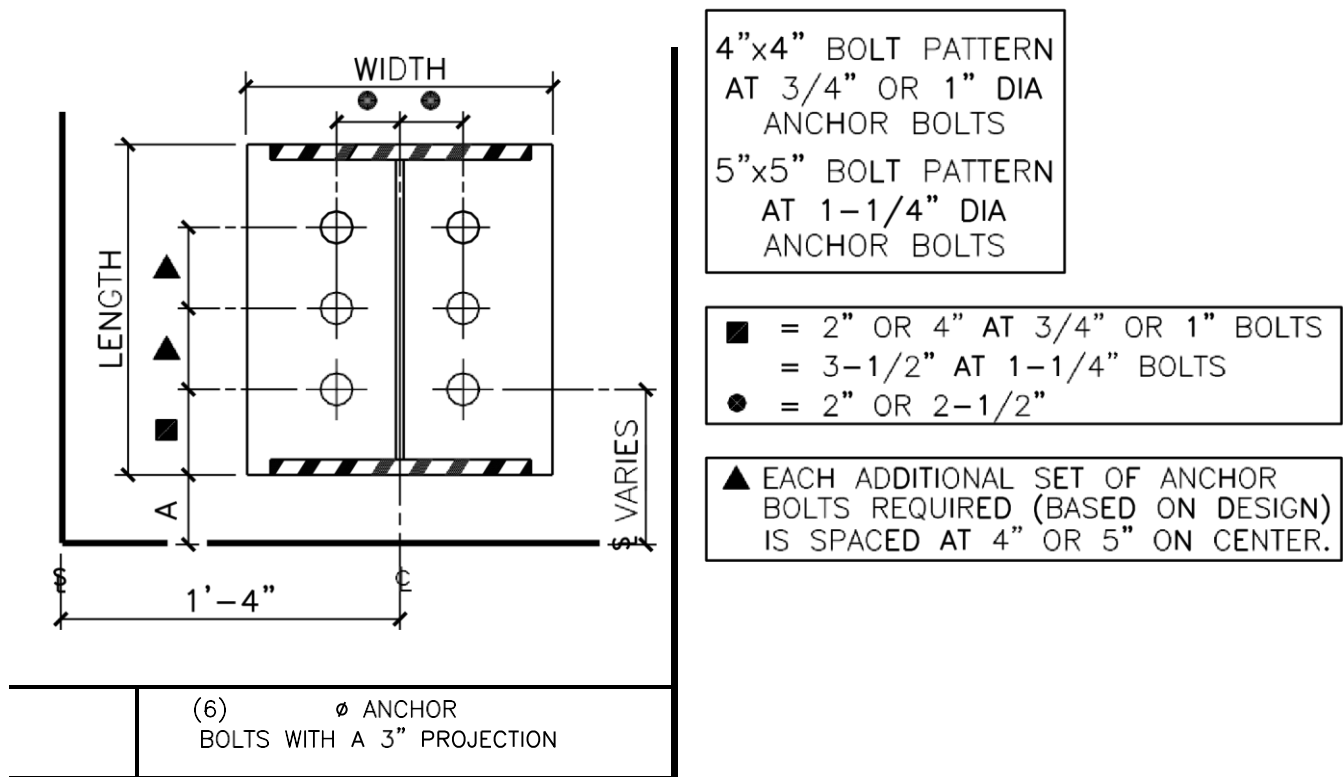
10.0.56

BY: DLC CHK: AES

BU6TR_PE.DWG

BU6BL PE

NOTE: The third digit of each detail name indicates the number of anchor bolts required. For example: BU6BL requires (6) anchor bolts. BU4BL requires (4) anchor bolts.



LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.57



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS
 10" – 10" BYPASS GIRTS
 12" – 12" BYPASS GIRTS

NAME IF

BU6BL_PE.DWG

BU6BR_PE

NOTE: The third digit of each detail name indicates the number of anchor bolts required. For example: BU6BR requires (6) anchor bolts. BU4BR requires (4) anchor bolts.

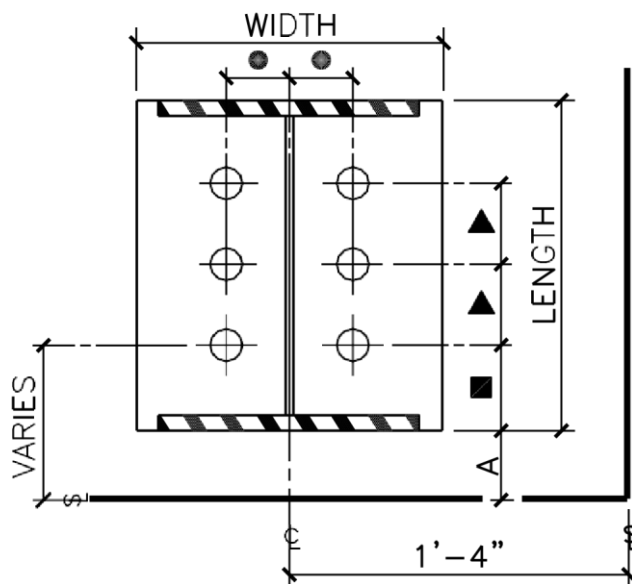
LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.58



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS

5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
 = 3-1/2" AT 1-1/4" BOLTS
 ● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR BOLTS REQUIRED (BASED ON DESIGN) IS SPACED AT 4" OR 5" ON CENTER.

(6) Ø ANCHOR
BOLTS WITH A 3" PROJECTION

A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS
 10" – 10" BYPASS GIRTS
 12" – 12" BYPASS GIRTS

LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.59

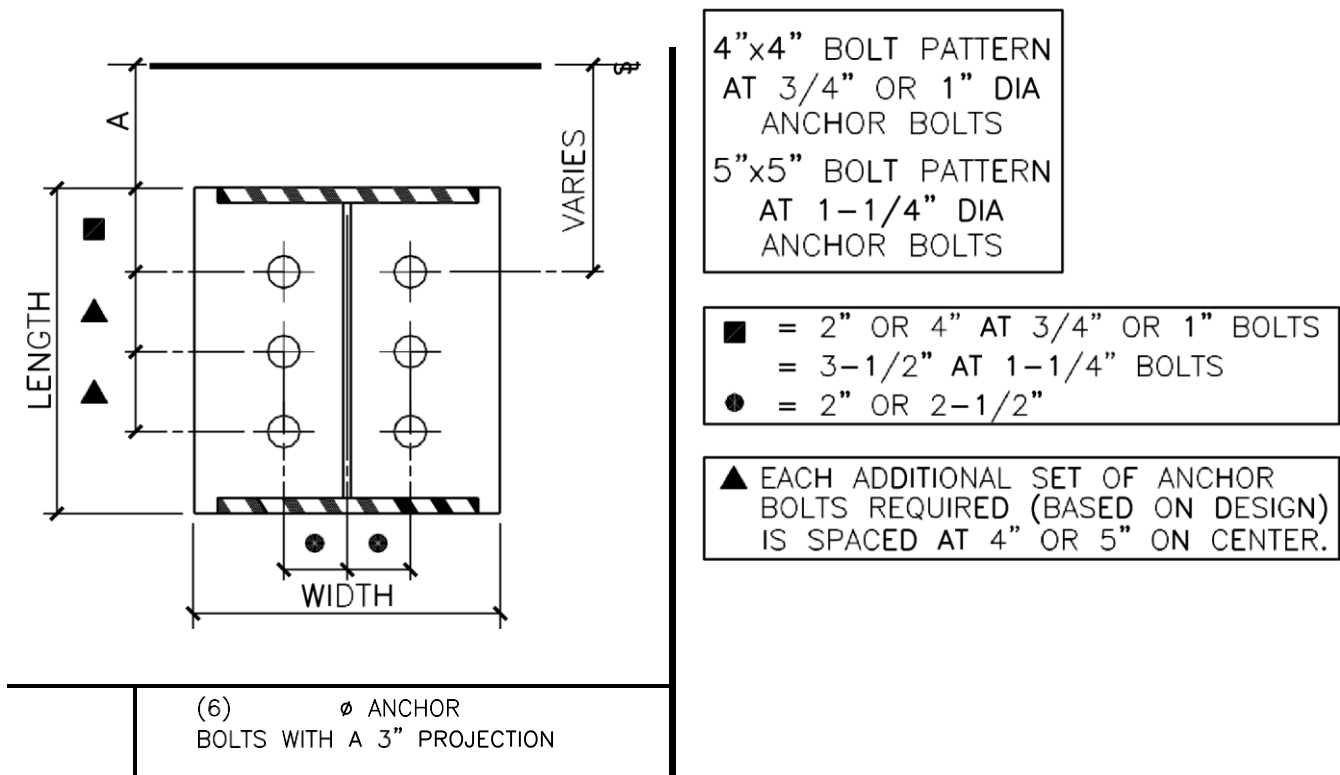
NAME IF

BU6BR_PE.DWG

BUILT - UP RIGID FRAME SIDEWALL DETAILS

BU6TX PE

NOTE: The third digit of each detail name indicates the number of anchor bolts required. For example: BU6TX requires (6) anchor bolts. BU4TX requires (4) anchor bolts.



LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.60



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS
 10" – 10" BYPASS GIRTS
 12" – 12" BYPASS GIRTS

NAME IF

BU6TX_PE.DWG

BU6BX PE

NOTE: The third digit of each detail name indicates the number of anchor bolts required. For example: BU6BX requires (6) anchor bolts. BU4BX requires (4) anchor bolts.

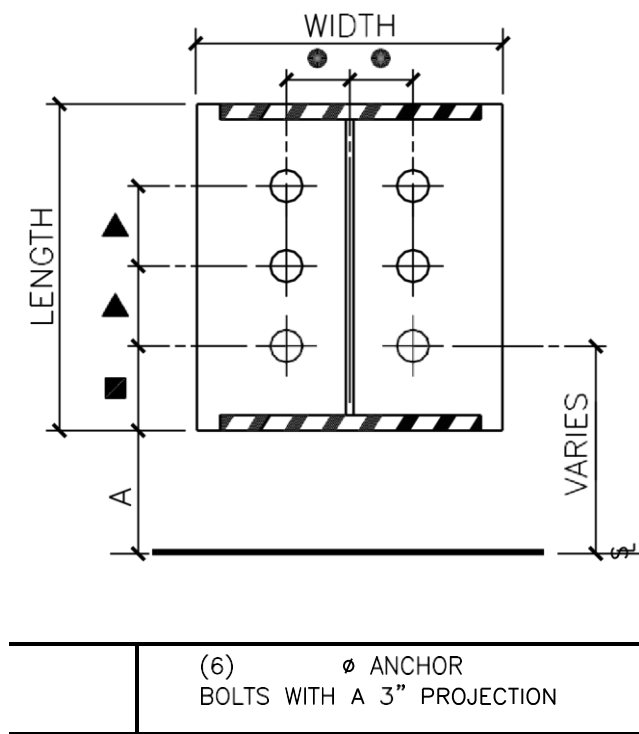
LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.61



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS

5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
= 3-1/2" AT 1-1/4" BOLTS

● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR
BOLTS REQUIRED (BASED ON DESIGN)
IS SPACED AT 4" OR 5" ON CENTER.

A = 0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

NAME IF

BU6BX_PE.DWG

LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

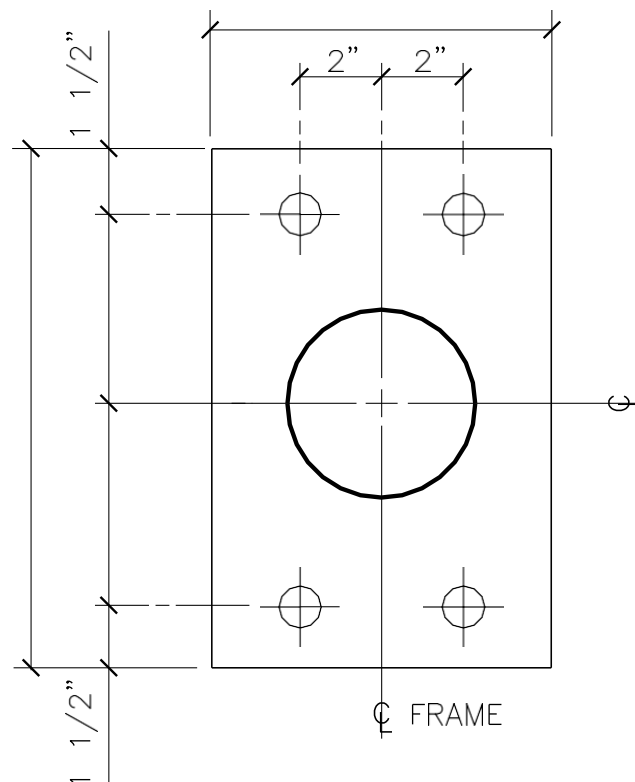
APPLICABLE

10.0.63

PIPE & TUBE INTERIOR COLUMNS

RC4IN PE

NOTE: Pipe columns are the standard. If different shape is required, please specify in **Box 28** of the order documents.



(4) Ø ANCHOR
BOLTS WITH A 3" PROJECTION

LASTDETAIL

DATE: **10.0.64**

BY: CHK:

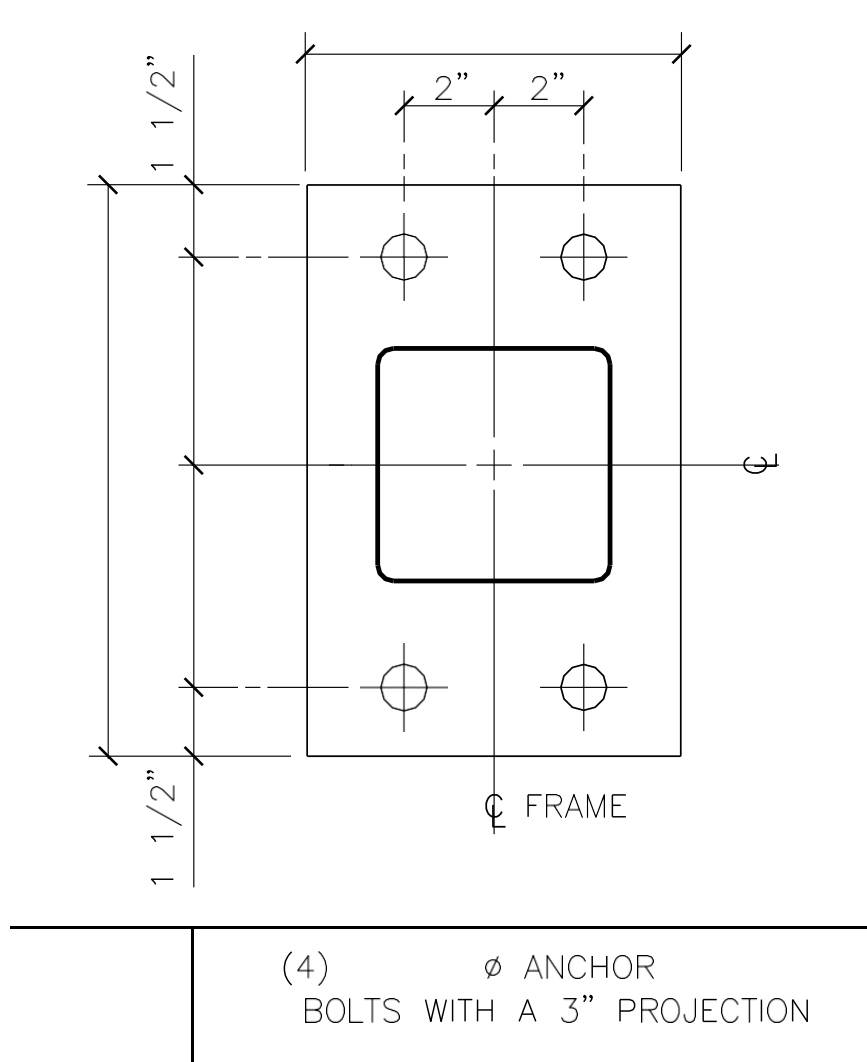
APPLICABLE



REVISION
08/14/08
RJF AAJ

NAME IF
RC4IN_PE.DWG

SC4IN PE



REVISION
08/14/08

NAME IF
SC4IN_PE.DWG

LASTDETAIL

DATE: **10.0.65**
BY: CHK:

APPLICABLE



PRODUCT & ENGINEERING MANUAL

RJF AAJ

BUILT - UP INTERIOR COLUMNS

LAST DETAIL

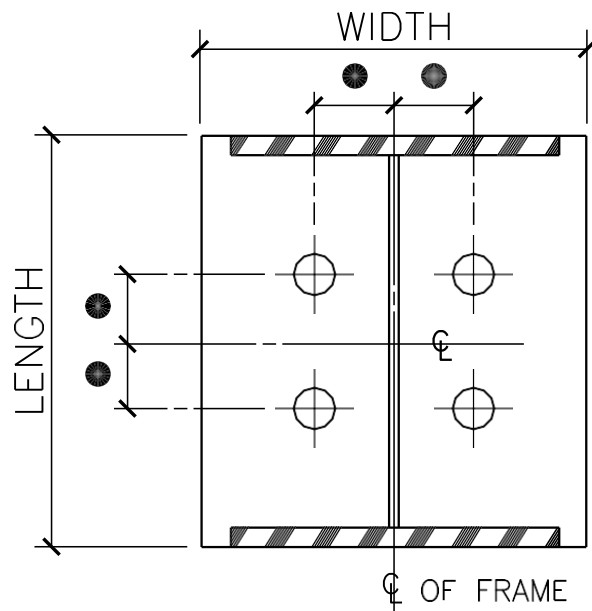
DATE: **10.0.66**

BY: DLC CHK: AES

APPLICABLE



BU4IN PE



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS

5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

● = 2" OR 2-1/2"

(4) ∅ ANCHOR
BOLTS WITH A 3" PROJECTION

REVISION

NAME IF 08/28/09

LAST DETAIL

APPLICABLE

DATE: **10.0.67**

BY: CHK:



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

BU4IN_PE.DWG

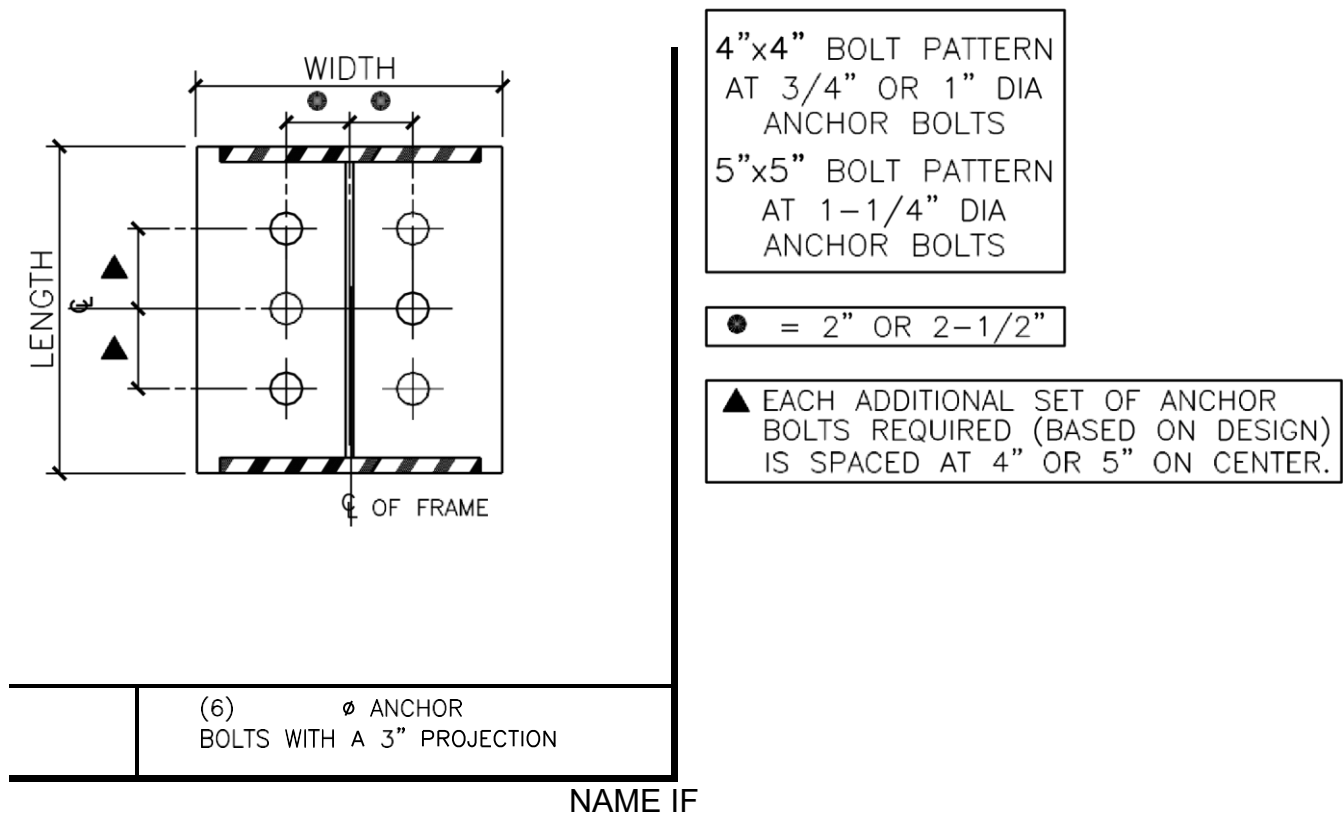
LASTDETAIL

DATE: **10.0.68**

BY: DLC CHK: AES

APPLICABLE

BU6IN PE



BU6IN_PE.DWG

AB0180PE – SIDEWALL PORTAL FRAMES – GENERAL INFORMATION

LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

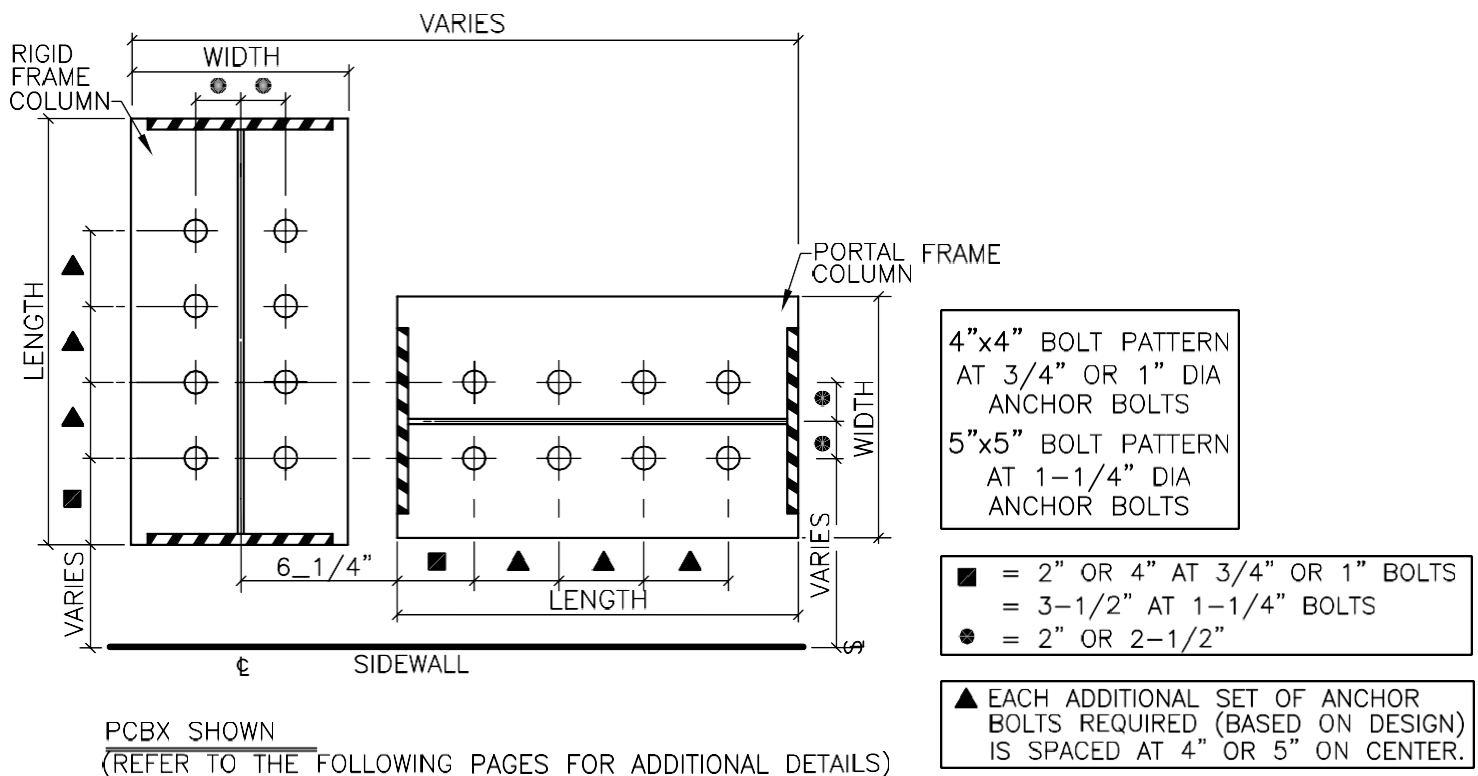
10.0.69



The detail below shows standard dimensions & anchor bolt placement for Portal Frame Columns. The detail shows anchor bolt locations for columns with 4, 6, & 8 anchor bolt requirements.

Typically portal columns will not have more than 4 anchor bolts required and the anchor bolts will be 1" diameter. However, variations occur – please check the design information carefully.

(Note that the rigid frame column and the portal frame column may not have the same bolt quantity or diameter.)



DETAIL APPLICABLE

10.0.70

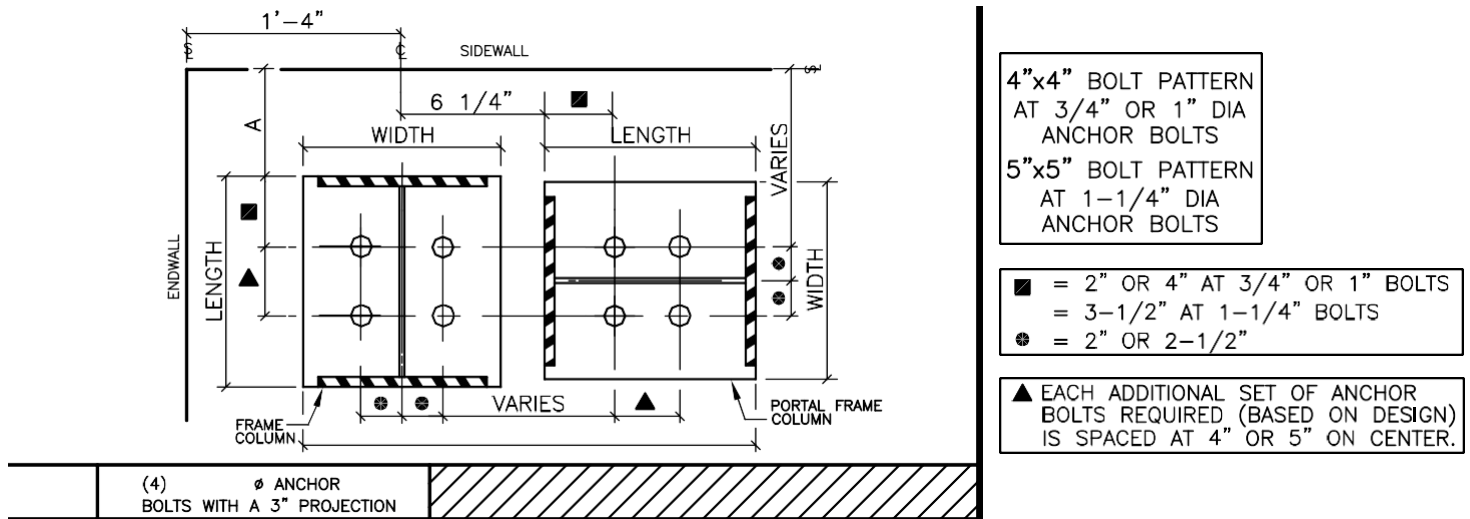
BY: DLC CHK: AES



LAST REVISION _____ NAME IF DATE: 08/28/09
AB0180PE.DWG

SIDEWALL PORTAL FRAME CORNER COLUMNS

PC6TL PE



A = 0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

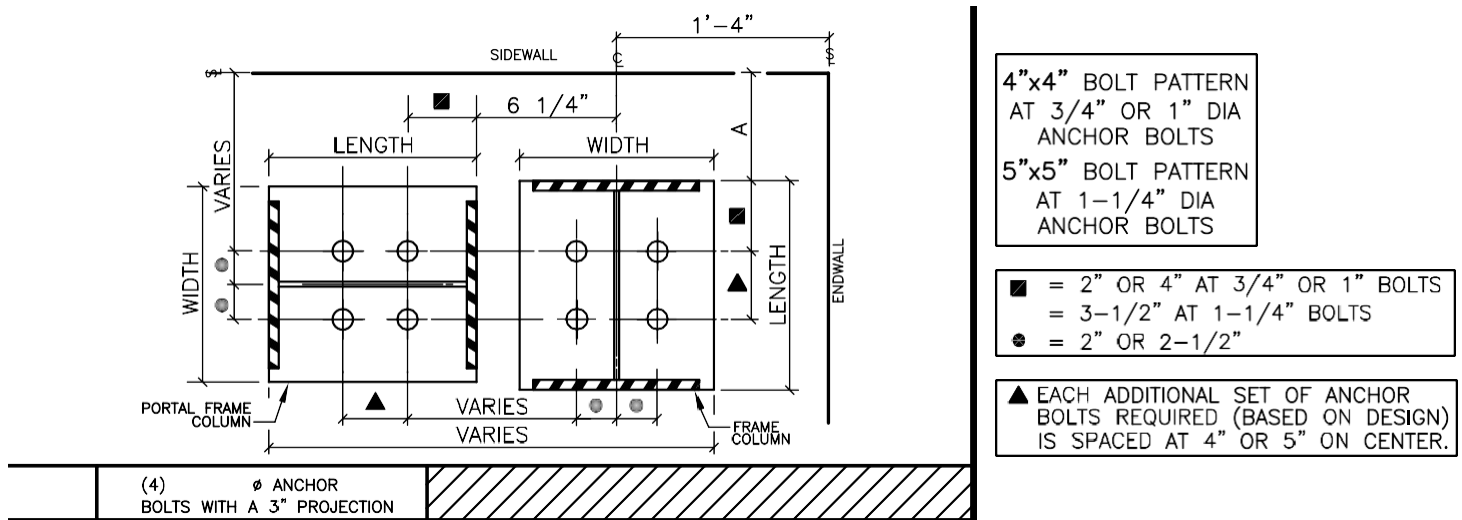
APPLICABLE

10.0.71

NAME IF
PC6TL_PE.DWG



PC6TR PE



A = 0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS

LAST REVISION DETAIL

APPLICABLE

DATE: 08/28/09

10.0.73

BY: DLC CHK: AES



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

NAME IF

PC6TR_PE.DWG

PC6BL PE

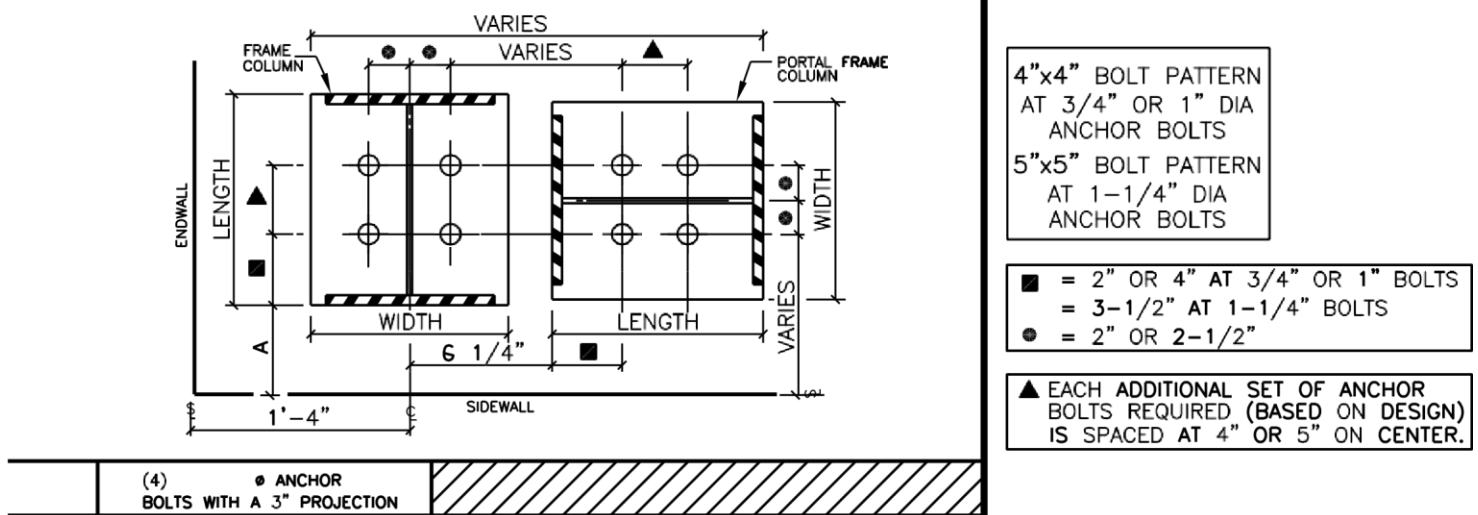
LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.74



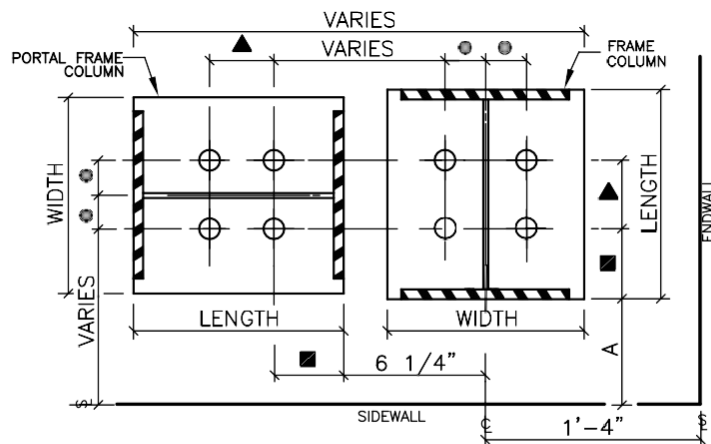
A =
0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS



NAME IF

PC6BL_PE.DWG

PC6BR PE



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS
5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
= 3-1/2" AT 1-1/4" BOLTS
● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR
BOLTS REQUIRED (BASED ON DESIGN)
IS SPACED AT 4" OR 5" ON CENTER.

(4) Ø ANCHOR
BOLTS WITH A 3" PROJECTION

A = 0" – FLUSH

LAST REVISION DETAIL

DATE: 08/28/09

BY: DLC CHK: AES

APPLICABLE

10.0.76



PRODUCT & ENGINEERING MANUAL

1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

NAME IF
PC6BR_PE.DWG

LAST REVISION DETAIL

DATE: 08/28/09

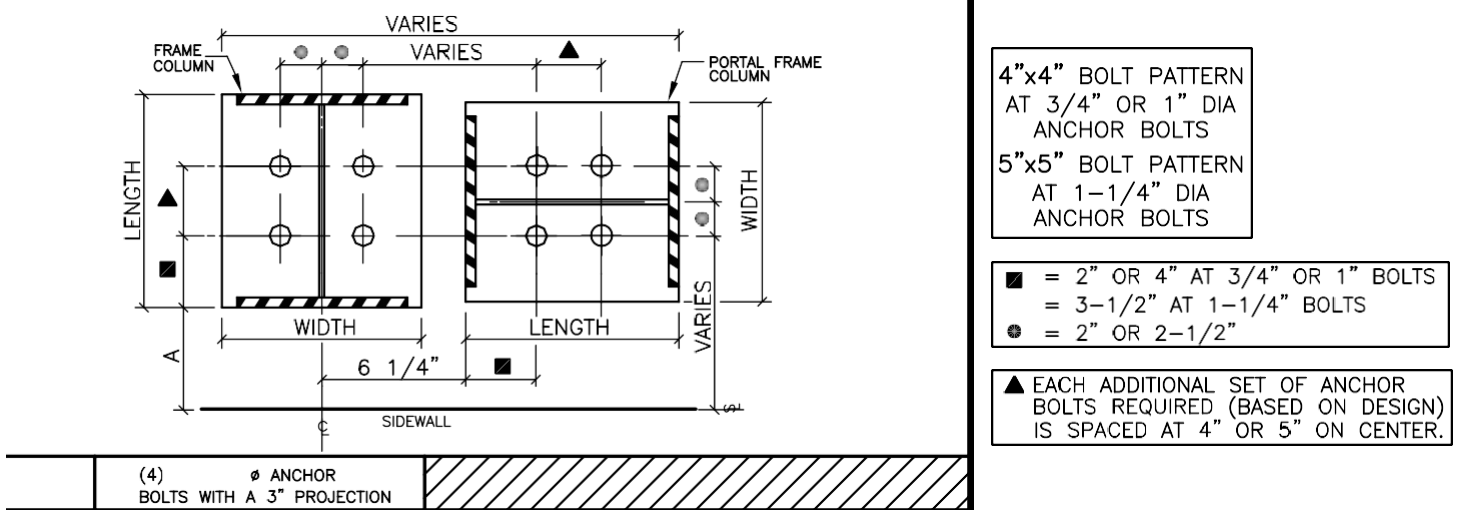
BY: DLC CHK: AES

APPLICABLE

10.0.77

PRODUCT & ENGINEERING MANUAL

PC6BLXPE



LAST REVISION DETAIL

DATE: 08/31/09

BY: DLC CHK: AES

APPLICABLE

10.0.78



PRODUCT & ENGINEERING MANUAL

A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS
 10" – 10" BYPASS GIRTS
 12" – 12" BYPASS GIRTS

NAME IF
PC6BLXPE.DWG

PC6BRXPE

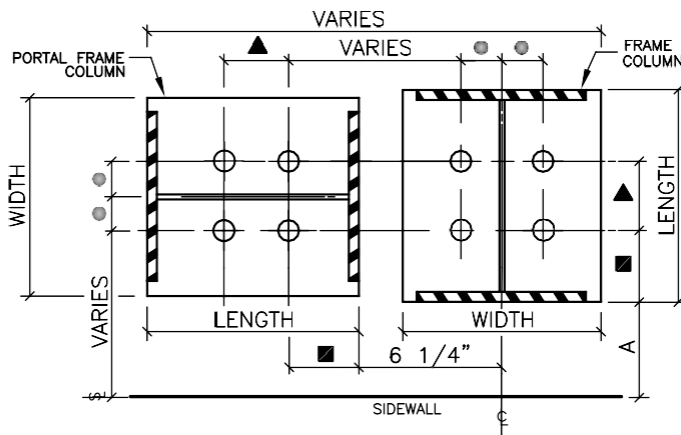
LAST REVISION DETAIL

DATE: 08/31/09

BY: DLC CHK: AES

APPLICABLE

10.0.79



4"x4" BOLT PATTERN
AT 3/4" OR 1" DIA
ANCHOR BOLTS
5"x5" BOLT PATTERN
AT 1-1/4" DIA
ANCHOR BOLTS

■ = 2" OR 4" AT 3/4" OR 1" BOLTS
= 3-1/2" AT 1-1/4" BOLTS
● = 2" OR 2-1/2"

▲ EACH ADDITIONAL SET OF ANCHOR
BOLTS REQUIRED (BASED ON DESIGN)
IS SPACED AT 4" OR 5" ON CENTER.

(4) Ø ANCHOR
BOLTS WITH A 3" PROJECTION

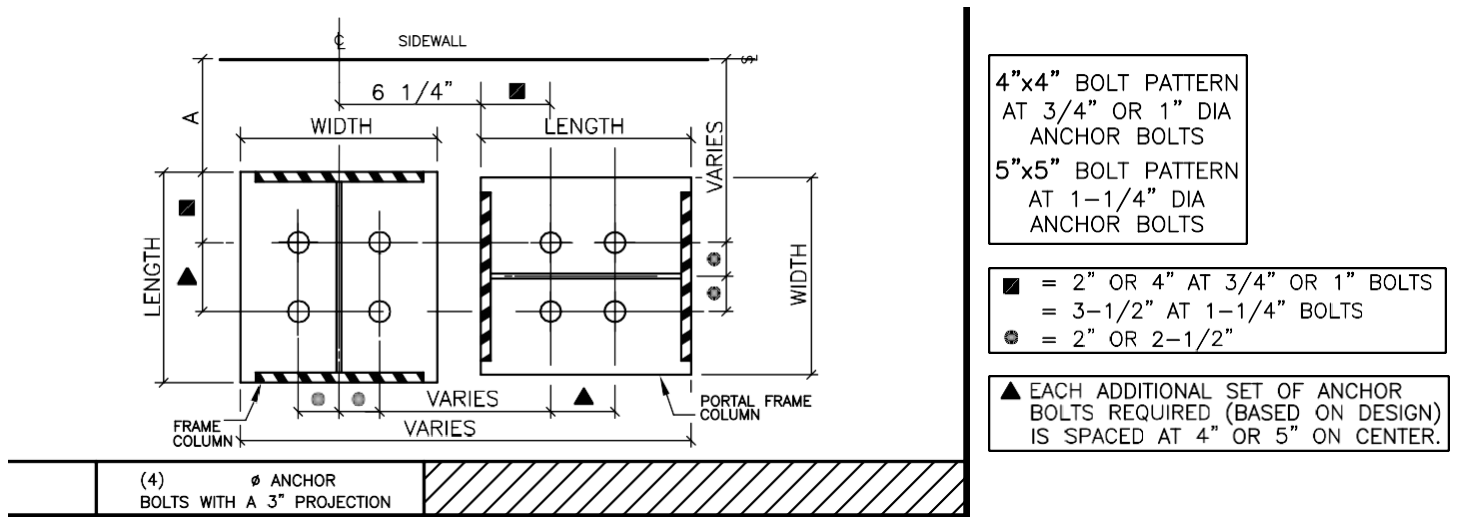
A =
0" – FLUSH
1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS



NAME IF

PC6BRXPE.DWG

PC6TLXPE



A = 0" – FLUSH

LAST REVISION DETAIL

DATE: 08/31/09

BY: DLC CHK: AES

APPLICABLE

10.0.81



PRODUCT & ENGINEERING MANUAL

1" – INSET
8" – 8" BYPASS GIRTS
10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

NAME IF
PC6TLXPE.DWG

LAST REVISION DETAIL

DATE: 08/31/09

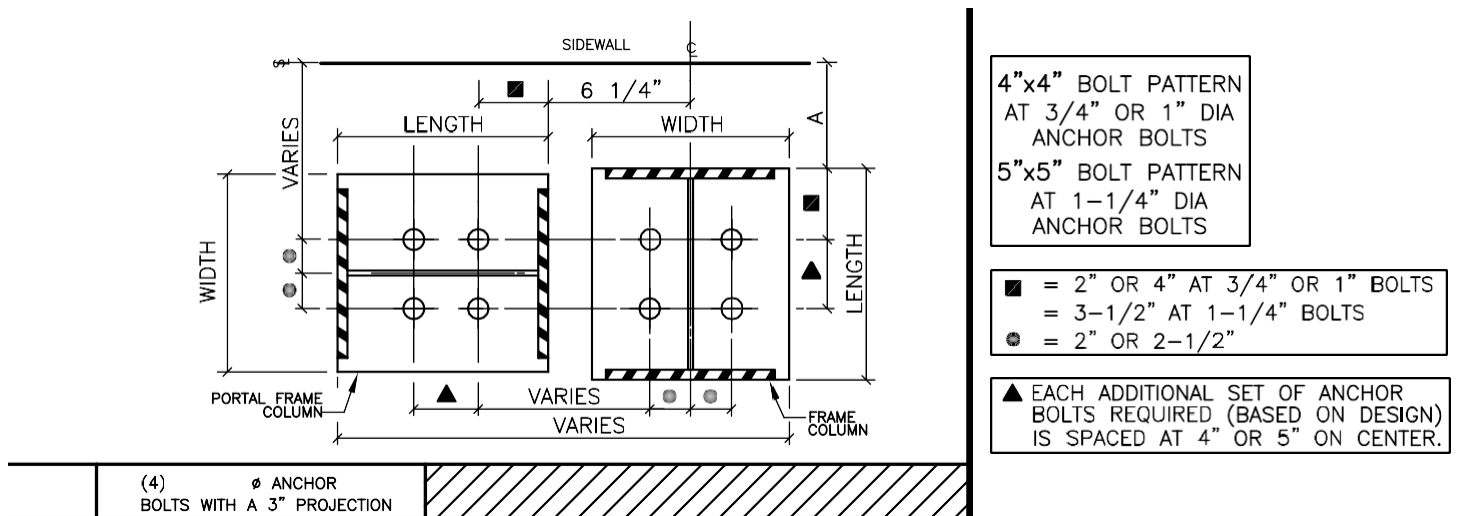
BY: DLC CHK: AES

APPLICABLE

10.0.82



PC6TRXPE



A = 0" – FLUSH
 1" – INSET
 8" – 8" BYPASS GIRTS

LAST REVISION DETAIL

DATE: 08/31/09

BY: DLC CHK: AES

APPLICABLE

10.0.83

10" – 10" BYPASS GIRTS
12" – 12" BYPASS GIRTS

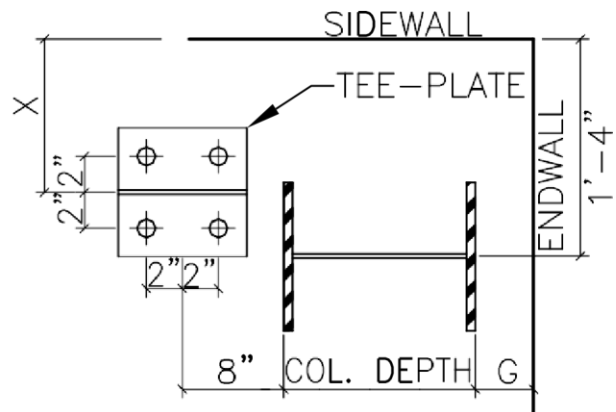
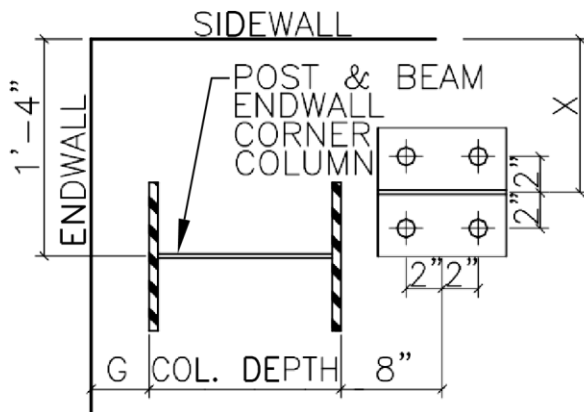
NAME IF

PC6TRXPE.DWG

AB0190PE – CORNER BRACING TEE PLATE DETAILS

NOTE:

BRACING TEE PLATES ARE USED WHEN A COLUMN IS ROTATED SUCH THAT ROD OR CABLE BRACING CANNOT PASS THROUGH THE COLUMN'S WEB.



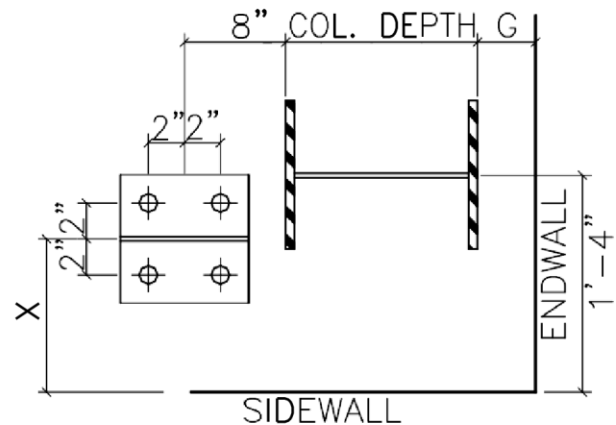
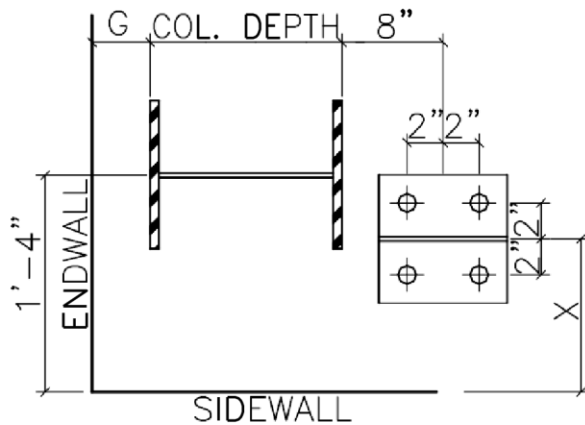
LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.84



X = SIDEWALL GIRT OFFSET + 6"
 - 1" INSET + 6" = 7"
 - 8" BYPASS + 6" = 1'-2"
 - 10" BYPASS + 6" = 1'-4"

NOTE: WHEN THE SIDEWALL END BAY IS BRACED AND THE ADJACENT ENDWALL IS A POST & BEAM FRAME, THE STANDARD IS TO USE BRACING TEE PLATE AS SHOWN ABOVE.

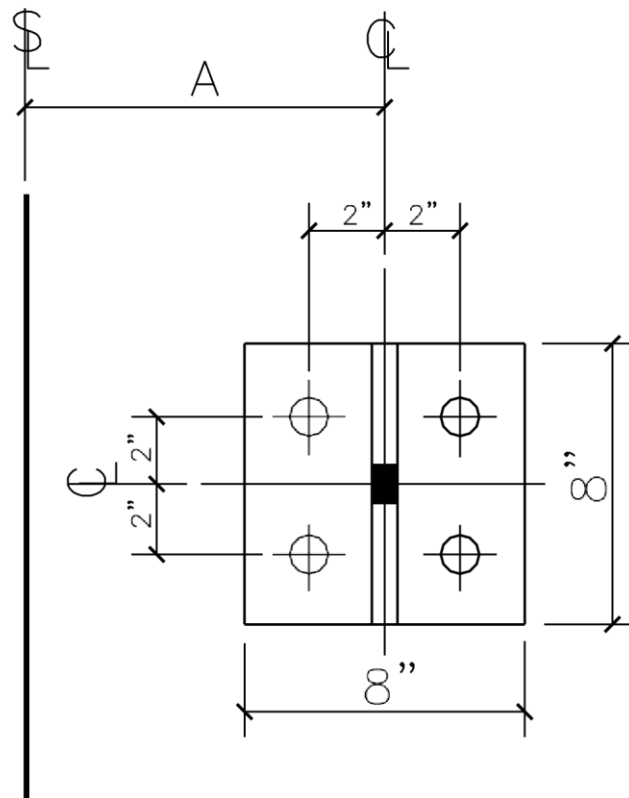
LAST REVISION DATE: 07/24/12 BY: MWD CHK: AES

DETAIL NAME IF APPLICABLE

AB0190PE.DWG

BRACING TEE PLATES (AT INTERIOR BAYS)

BT4LX PE



(4) ϕ ANCHOR
BOLTS WITH A 3" PROJECTION

A = GIRT OFFSET PLUS 4"

NAME IF

BT4LX_PE.DWG

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.86



PRODUCT & ENGINEERING MANUAL

BT4RX PE

A = GIRT OFFSET PLUS 4"

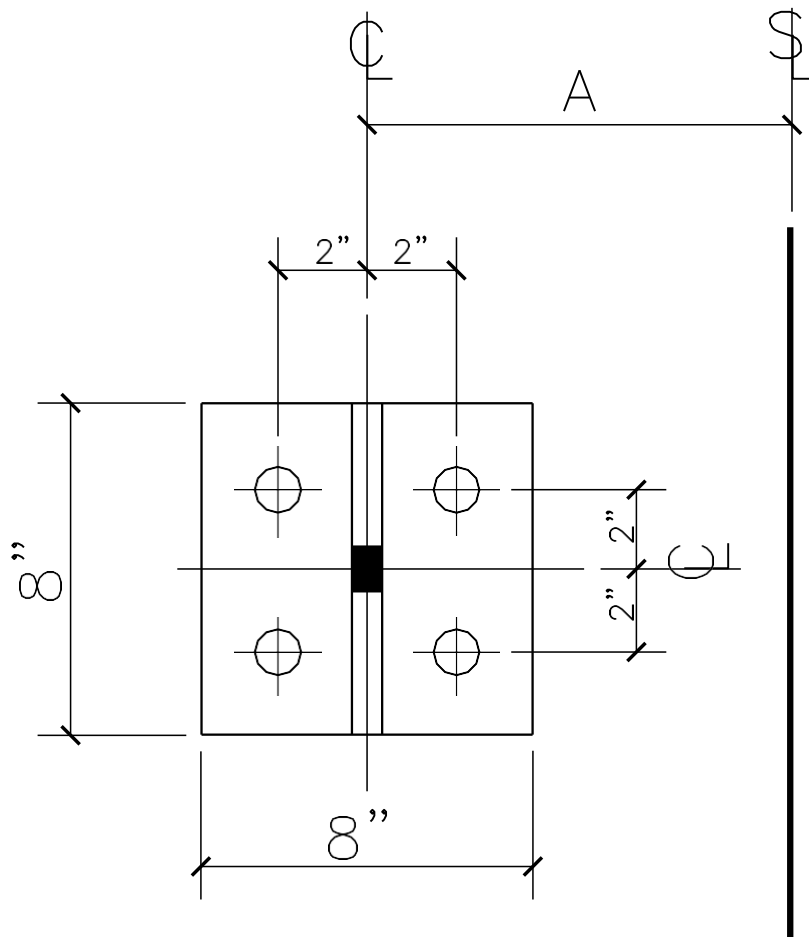
LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.87



A = GIRT OFFSET PLUS 4"

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.88



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(4) \emptyset ANCHOR BOLTS WITH A 3" PROJECTION
--	--

NAME IF

BT4RX_PE.DWG

BT4BX PE

A = GIRT OFFSET PLUS 4"

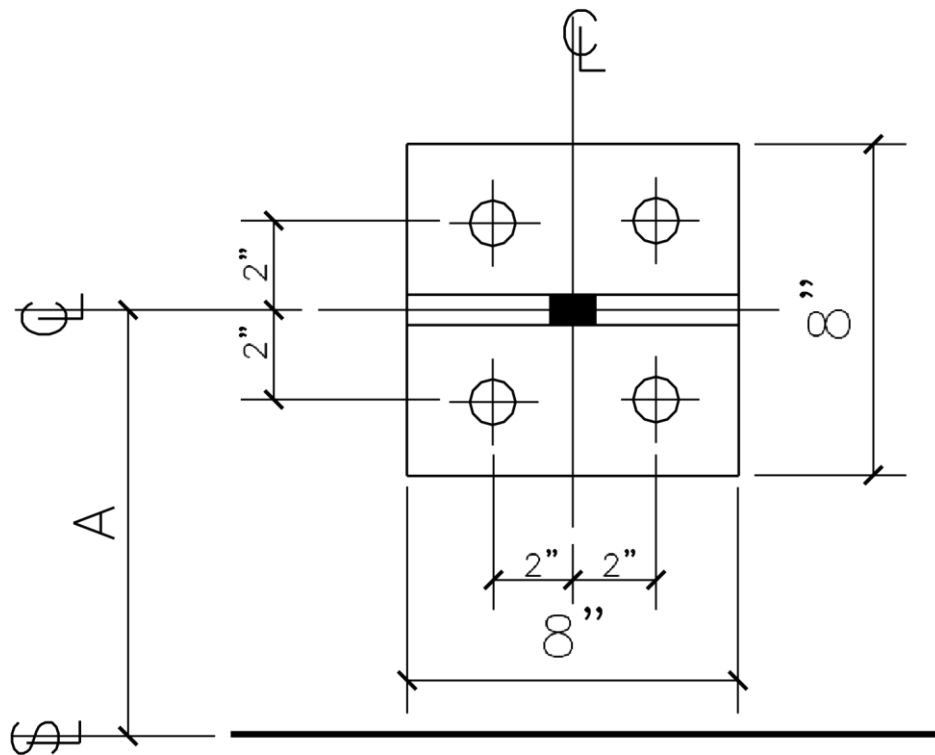
LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.89



A = GIRT OFFSET PLUS 4"

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.90



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(4) \varnothing ANCHOR BOLTS WITH A 3" PROJECTION
--	--

NAME IF

BT4BX_PE.DWG

BT4TX PE

A = GIRT OFFSET PLUS 4"

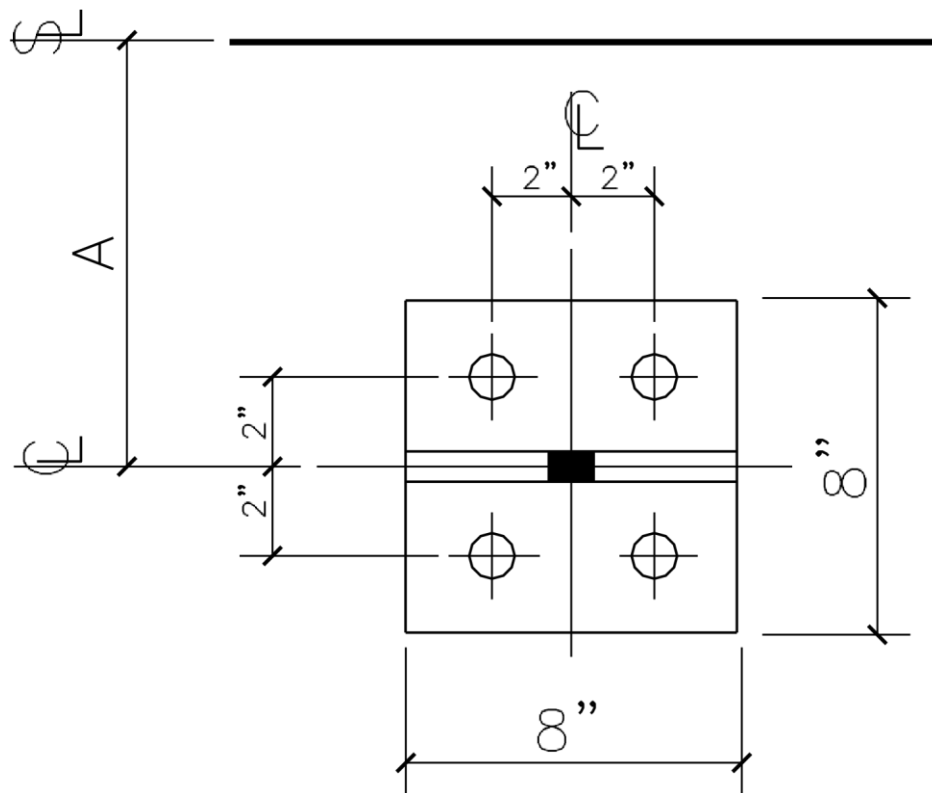
LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.91



A = GIRT OFFSET PLUS 4"

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.92



V A L L E Y
S T E E L
CONSTRUCTION INC.

PRODUCT & ENGINEERING MANUAL

	(4) \varnothing ANCHOR BOLTS WITH A 3" PROJECTION
--	--

NAME IF

BT4TX_PE.DWG

A = GIRT OFFSET PLUS 4"

LAST REVISION DETAIL

DATE: 08/14/08

BY: RJF CHK: AAJ

APPLICABLE

10.0.93