PFAU STEEL BUILDINGS

800 38TH ST N FARGO ND 58102

6/14/2022

Pfau steel buildings
800 38th ST N Fargo ND 58102

Cass County Sheriff's Office

Fargo, ND

60'x100'x17' high side, 14'6" Low side, ½ /12 pitch
2- 3070 framed openings and trim for walk doors (Includes doors and hardware)
3- 20'x14' Framed openings and trim (Includes doors and operator)
1- 14'x14' Framed opening and trim (Includes door and operator)
1- 60' full height partition wall insulated and sheeted both sides
100' of gutter and downspouts
Roof- Standing Seam 24 Gauge, R30 cavity field, R10 continuous over the top, poly and liner panel
Walls- 26gauge wall panel, R30 cavity filled, R10 on girts, poly, liner panel and trim
l

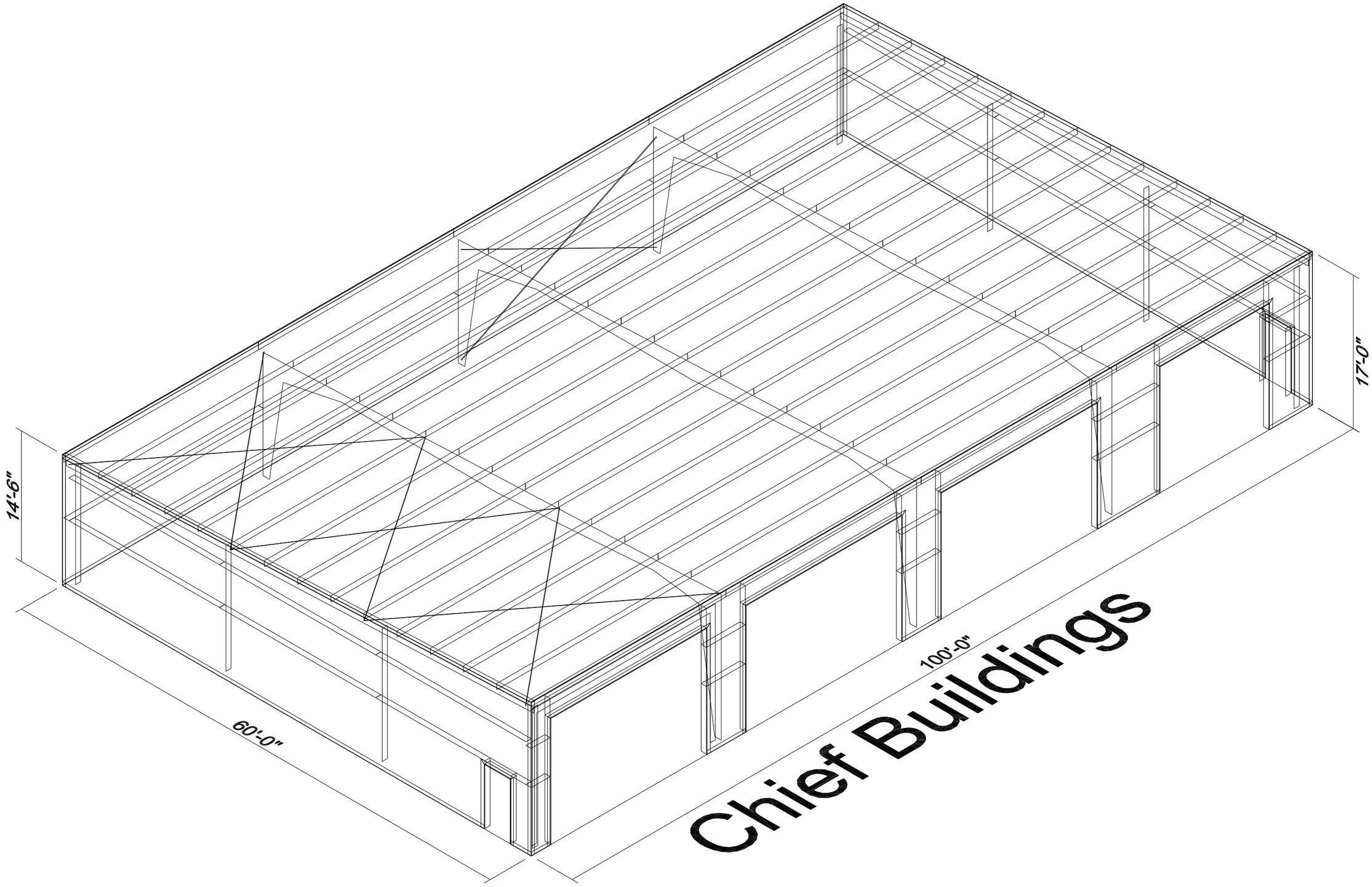
Total Price for Building, labor and freight========== $248,272.00

Price is good for 20 Days

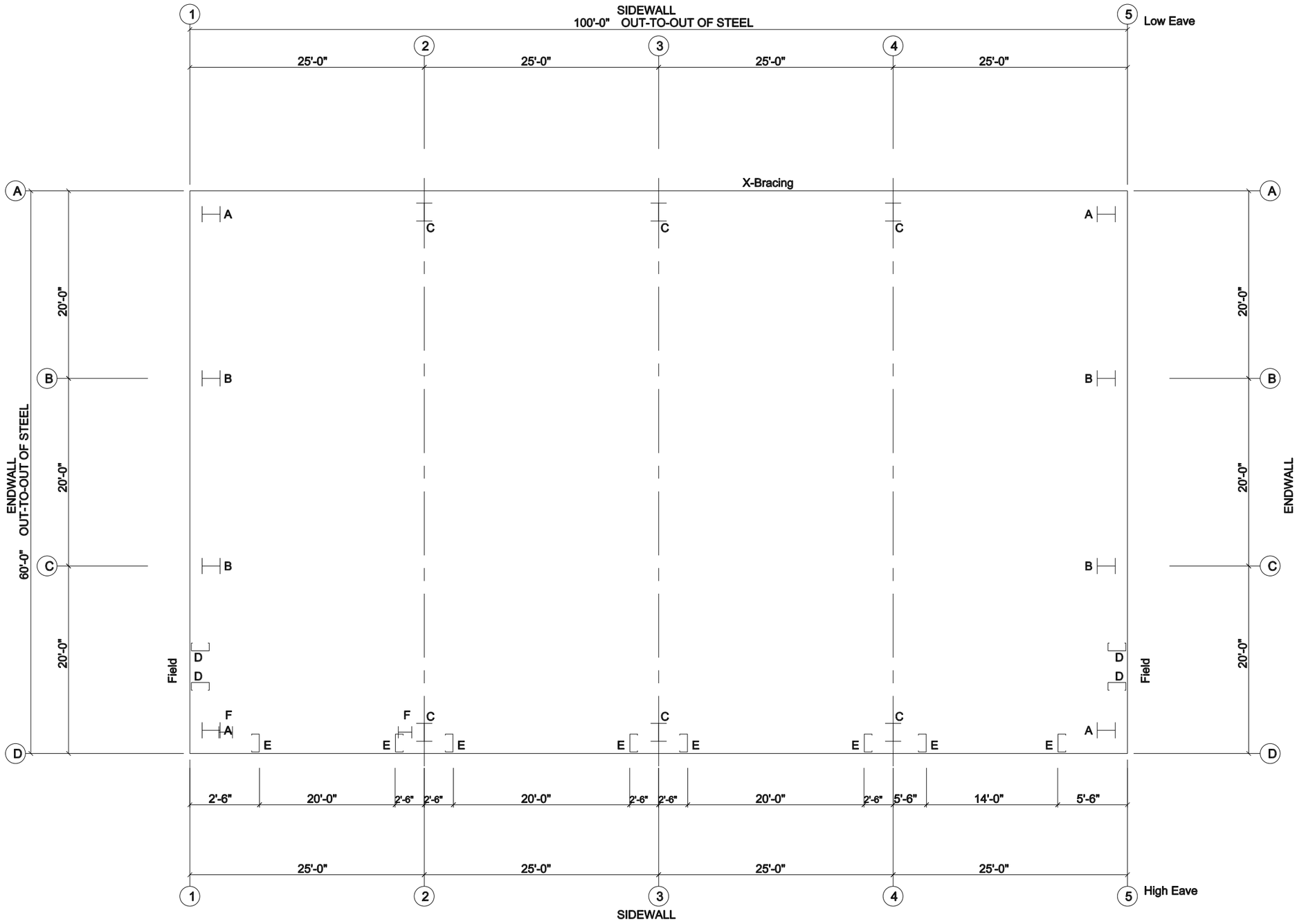
Does not include heat, electrical, plumbing, site plans, excavating, permits or concrete.

Estimate on Concrete for 4' walls and 6" slab ==========$ 80,000.00

Ryan Pfau



Chief Buildings



ANCHOR ROD PLAN

NOTE: All Base Plates @ 100'-0" (U.N.)

REFERENCE NOTES:

1. All Anchor Rods including nuts and washers for same are not furnished by CHIEF BUILDINGS.
2. Anchor Rod material shall conform to ASTM F1554 having a yield of 36 KSI or greater.
3. Rod projections are recommended minimums based on the base plate bearing directly on the concrete pier. If the base plate is to bear on grout, the rod projection must be increased accordingly.
4. Concrete shall have a minimum strength of 3000 PSI.
5. ALL DRAWINGS ARE NOT TO SCALE.

ANCHOR ROD SUMMARY

Qty	Locate	Dia (in)	Type	Proj (in)
● 24	Jamb	1/2"	F1554	1.50
⊕ 32	Endwall	3/4"	F1554	2.00
⊕ 24	Frame	3/4"	F1554	2.00
⊕ 8	WindCol	3/4"	F1554	2.00

PRELIMINARY

- Preliminary drawings for sales and estimating purposes only.
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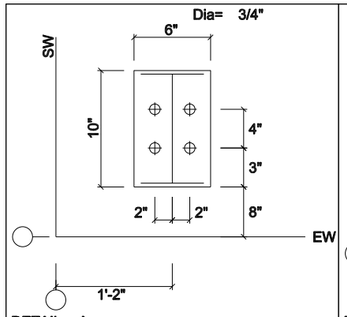
NOT FOR CONSTRUCTION

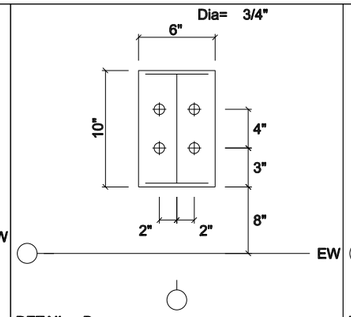
Drawing	ANCHOR ROD
Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

DATE DRAWN	QUOTE NO.
6/13/22	FG26101A



DETAIL A



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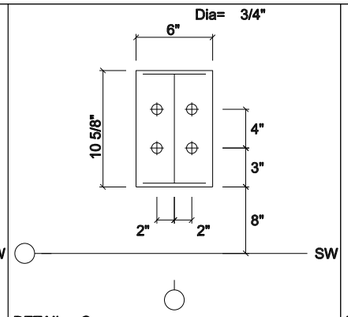

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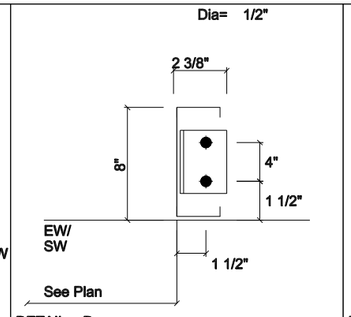
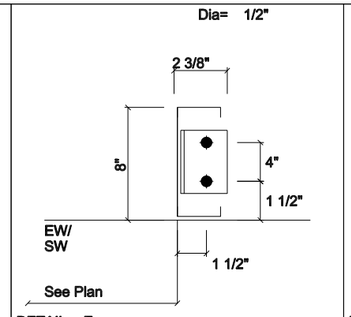
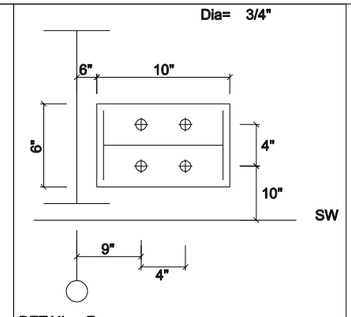


DETAIL D



DETAIL E

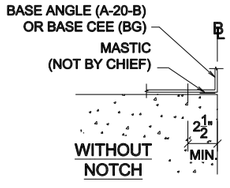


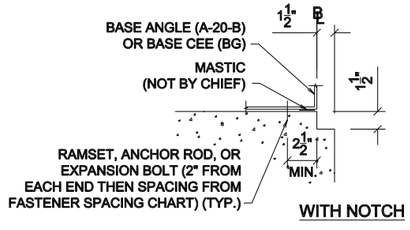
DETAIL F

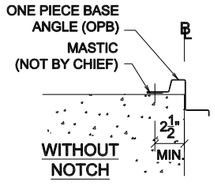
BASE ANCHORAGE SPACING FOR STANDARD BASE ANGLE, BASE CEE OR ONE PIECE BASE WITH CS OR AP WALLS			
FASTENER TYPE & DIAMETER		MINIMUM EMBEDMENT	MAXIMUM SPACING
1/4" WEDGE ANCHOR	①	1 1/4"	3'-0"
1/4" SCREW TYPE ANCHOR	②	1 1/2"	3'-0"
3/8" CAST-IN ANCHOR		4" WITH HOOK OR HEAD	3'-0"
1/4" HAMMER-IN	③	1 3/8"	2'-0"
0.14 POWDER ACTUATED	④	1 1/4"	1'-6"

① HILTI KWIK BOLT®, RAMSET TRUBOLT®, POWERS POWERSTUD®, OR EQUAL
② CFS TAPCON®, HILTI KWIK-CON II®, POWERS WEDGE-BOLT®, OR EQUAL
③ POWERS ZAMAC HAMMER SCREW®, HILTI METAL HIT ANCHOR®, OR EQUAL
④ POWERS BALLISTIC POINT PIN, RAMSET 1500/1600 SERIES, HILTI UNIVERSAL NAIL OR EQUAL

FASTENER SPACING CHART







BASE MEMBER DETAILS

CONTRACTOR IS RESPONSIBLE FOR ANCHORING BASE MEMBER TO CONCRETE.

REFERENCE NOTES:

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.

PRELIMINARY

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NOT FOR CONSTRUCTION

Drawing	ANCHOR ROD
Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

DATE DRAWN	QUOTE NO.
6/13/22	FG26101A

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert
1	A	0.6	0.1	2.0	3.3	-2.6	-1.5	-1.7	-0.6	0.0	0.0	-2.7	-1.6
1	B	1.3	0.3	5.2	8.6	-6.9	-4.0	-4.7	-1.8	-2.6	2.9	-6.9	-4.0
1	C	1.3	0.3	5.2	8.6	-6.9	-4.0	-4.7	-1.8	-2.8	3.1	-6.9	-4.0
1	D	0.7	0.1	2.0	3.3	-2.7	-1.6	-1.9	-0.8	0.0	0.0	-2.6	-1.5

Frm Line	Col Line	Seis Left Vert	Seis Right Vert	-MIN_SNOW- Horz	-MIN_SNOW- Vert	E1PAT_SL_1- Horz	E1PAT_SL_1- Vert	E1PAT_SL_2- Horz	E1PAT_SL_2- Vert	E1PAT_SL_3- Horz	E1PAT_SL_3- Vert	E1PAT_SL_4- Horz	E1PAT_SL_4- Vert
1	A	0.0	0.0	0.0	2.1	0.0	1.8	0.0	0.1	0.0	1.6	0.0	-0.1
1	B	0.0	0.0	0.0	5.5	0.0	2.5	0.0	-0.4	0.0	4.7	0.0	1.8
1	C	0.0	0.0	0.0	5.5	0.0	-0.4	0.0	2.5	0.0	1.8	0.0	4.7
1	D	0.0	0.0	0.0	2.1	0.0	0.1	0.0	1.8	0.0	-0.1	0.0	1.6

Frm Line	Col Line	E1PAT_LL_1- Horz	E1PAT_LL_1- Vert	E1PAT_LL_2- Horz	E1PAT_LL_2- Vert	E1PAT_LL_3- Horz	E1PAT_LL_3- Vert	E1PAT_LL_4- Horz	E1PAT_LL_4- Vert
1	A	0.0	1.9	0.0	-0.2	0.0	2.3	0.0	-0.3
1	B	0.0	5.7	0.0	2.2	0.0	2.6	0.0	2.6
1	C	0.0	2.2	0.0	5.7	0.0	2.5	0.0	2.7
1	D	0.0	-0.2	0.0	1.9	0.0	2.3	0.0	-0.3

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert
5	D	0.7	0.1	2.0	3.3	-1.6	-2.7	-0.8	-1.9	0.0	0.0	-2.6	-1.5
5	C	1.3	0.3	5.2	8.6	-4.0	-6.9	-1.8	-4.7	-2.8	3.1	-6.9	-4.0
5	B	1.3	0.3	5.2	8.6	-4.0	-6.9	-1.8	-4.7	-2.6	2.9	-6.9	-4.0
5	A	0.6	0.1	2.0	3.3	-1.5	-2.6	-0.6	-1.7	0.0	0.0	-2.7	-1.6

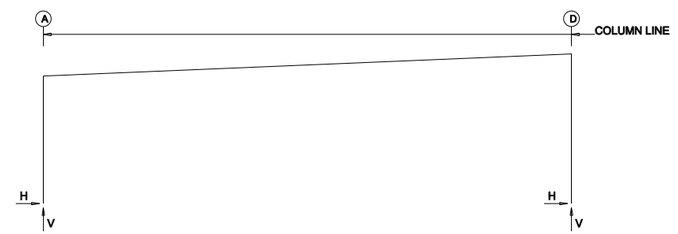
Frm Line	Col Line	Seis Left Vert	Seis Right Vert	-MIN_SNOW- Horz	-MIN_SNOW- Vert	E2PAT_SL_1- Horz	E2PAT_SL_1- Vert	E2PAT_SL_2- Horz	E2PAT_SL_2- Vert	E2PAT_SL_3- Horz	E2PAT_SL_3- Vert	E2PAT_SL_4- Horz	E2PAT_SL_4- Vert
5	D	0.0	0.0	0.0	2.1	0.0	1.8	0.0	0.1	0.0	1.6	0.0	-0.1
5	C	0.0	0.0	0.0	5.5	0.0	2.5	0.0	-0.4	0.0	4.7	0.0	1.8
5	B	0.0	0.0	0.0	5.5	0.0	-0.4	0.0	2.5	0.0	1.8	0.0	4.7
5	A	0.0	0.0	0.0	2.1	0.0	0.1	0.0	1.8	0.0	-0.1	0.0	1.6

Frm Line	Col Line	E2PAT_LL_1- Horz	E2PAT_LL_1- Vert	E2PAT_LL_2- Horz	E2PAT_LL_2- Vert	E2PAT_LL_3- Horz	E2PAT_LL_3- Vert	E2PAT_LL_4- Horz	E2PAT_LL_4- Vert
5	D	0.0	1.9	0.0	-0.2	0.0	2.3	0.0	-0.3
5	C	0.0	5.7	0.0	2.2	0.0	2.5	0.0	2.7
5	B	0.0	2.2	0.0	5.7	0.0	2.6	0.0	2.6
5	A	0.0	-0.2	0.0	1.9	0.0	2.3	0.0	-0.3

ENDWALL COLUMN: MAXIMUM REACTIONS

Frm Line	Col Line	Column_Reactions(k) Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin
1	A	4	0.0	-1.2	4	0.0	-1.2
		5	0.0	4.2			
1	B	6	1.7	-3.4	7	-1.6	-3.4
		8	0.0	10.6	6	1.7	-3.4
1	C	6	1.8	-3.4	7	-1.7	-3.4
		9	0.0	10.6	6	1.8	-3.4
1	D	2	0.0	-1.2	2	0.0	-1.2
		10	0.0	4.2			
5	D	3	0.0	-1.2	3	0.0	-1.2
		11	0.0	4.2			
5	C	12	1.8	-3.4	7	-1.7	-3.4
		13	0.0	10.6	12	1.8	-3.4
5	B	12	1.7	-3.4	7	-1.6	-3.4
		14	0.0	10.6	12	1.7	-3.4
5	A	4	0.0	-1.2	4	0.0	-1.2
		15	0.0	4.2			

FRAME LINES: 2 3 4



RIGID FRAME: MAXIMUM REACTIONS

Frm Line	Col Line	Column_Reactions(k) Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin
2*	A	1	17.6	27.5	2	-5.9	-7.1
					4	-2.9	-7.8
2*	D	3	4.2	-4.1	1	-17.6	27.7
		1	-17.6	27.7	4	3.1	-6.7

2* Frame lines: 2 3 4

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
2*	A	1.9	3.2	0.5	0.7	5.8	9.0	15.2	23.6	-11.7	-15.1	-2.5	-8.1
2*	D	-1.9	3.3	-0.5	0.8	-5.8	9.0	-15.2	23.7	5.4	-13.7	8.9	-10.1

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
2*	A	-9.5	-9.2	0.2	-2.2	-6.7	-16.2	-3.5	-11.0	-0.1	0.0	0.1	0.0
2*	D	3.2	-7.7	6.4	-4.1	7.1	-14.5	3.4	-9.1	-0.1	0.0	0.1	0.0

Frame Line	Column Line	Seismic_Long Horiz	Seismic_Long Vert	-MIN_SNOW- Horiz	-MIN_SNOW- Vert
2*	A	0.0	-0.2	9.7	15.0
2*	D	0.0	0.0	-9.6	15.0

2* Frame lines: 2 3 4

CONTROLLING LOAD CASES

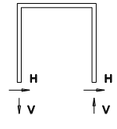
1 Dead+Collateral+Snow+Slide_Snow
2 0.6Dead+0.6Wind_Left1
3 0.6Dead+0.6Wind_Right1
4 0.6Dead+0.6Wind_Long1L
5 Dead+Collateral+Snow/2+E1PAT_SL_1
6 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
7 0.6Dead+0.6Wind_Pressure+0.6Wind_Long1L
8 Dead+Collateral+Snow+1.0E1PAT_SL_2
9 Dead+Collateral+Snow+1.0E1PAT_SL_1
10 Dead+Collateral+Snow/2+E1PAT_SL_2
11 Dead+Collateral+Snow/2+E2PAT_SL_1
12 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
13 Dead+Collateral+Snow+1.0E2PAT_SL_2
14 Dead+Collateral+Snow+1.0E2PAT_SL_1
15 Dead+Collateral+Snow/2+E2PAT_SL_2

BUILDING BRACING REACTIONS

Loc	Wall Line	Col Line	± Reactions(k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel_Shear (lb/ft) Wind	Seis	Note
L_EW	1						44	2	
F_SW	D	1,2							(a)
R_EW	5						44	2	
B_SW	A	4,3	3.8	1.9	0.4	0.2			

(a)Wind bent in bay

WIND BENT REACTIONS



Loc	Wall Line	Col Line	± Reactions Wind(k) Horz	Wind(k) Vert	Seismic(k) Horz	Seismic(k) Vert
F_SW	D	1	2.0	2.7	0.2	0.3
F_SW	D	2	2.0	2.7	0.2	0.3

1. COLUMN FOOTINGS AND PIERS MUST BE DESIGNED TO WITHSTAND HORIZONTAL AND VERTICAL REACTIONS AS SHOWN ON THE ANCHOR ROD PLAN. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR DESIGN OF CONCRETE FOUNDATION. CHIEF BUILDINGS RECOMMENDS THAT THE SERVICES OF A QUALIFIED ENGINEER IS OBTAINED BY THE CONTRACTOR / BUILDER TO DESIGN THE FOUNDATIONS FOR THE INDICATED REACTIONS.

2. REACTIONS ARE GIVEN IN KIPS. (1 KIP = 1000 LBS.) MOMENTS, IF ANY, ARE GIVEN IN KIP-FT.

3. ANCHOR ROD DESIGN IS BASED ON SHEAR, TENSION, AND COMBINED TENSION AND SHEAR. CHIEF BUILDINGS IS NOT RESPONSIBLE FOR ANCHOR ROD SIZE RECOMMENDATIONS WHEN ANCHOR ROD CONFIGURATION PLACES THE RODS IN A BENDING MODE. WHEN THE COLUMN BASE PLATE BEARS ON GROUT, THE CONTRACTOR / BUILDER OR FOUNDATION ENGINEER SHALL INVESTIGATE BENDING IN THE ANCHOR RODS AND PROVIDE A SHEAR KEY FOR THE COLUMN BASE TO THE PIER WHEN THE ANCHOR RODS ARE NOT ADEQUATE IN BENDING ABOUT THE PIER.

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Buyer	Pfau Steel Buildings
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Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

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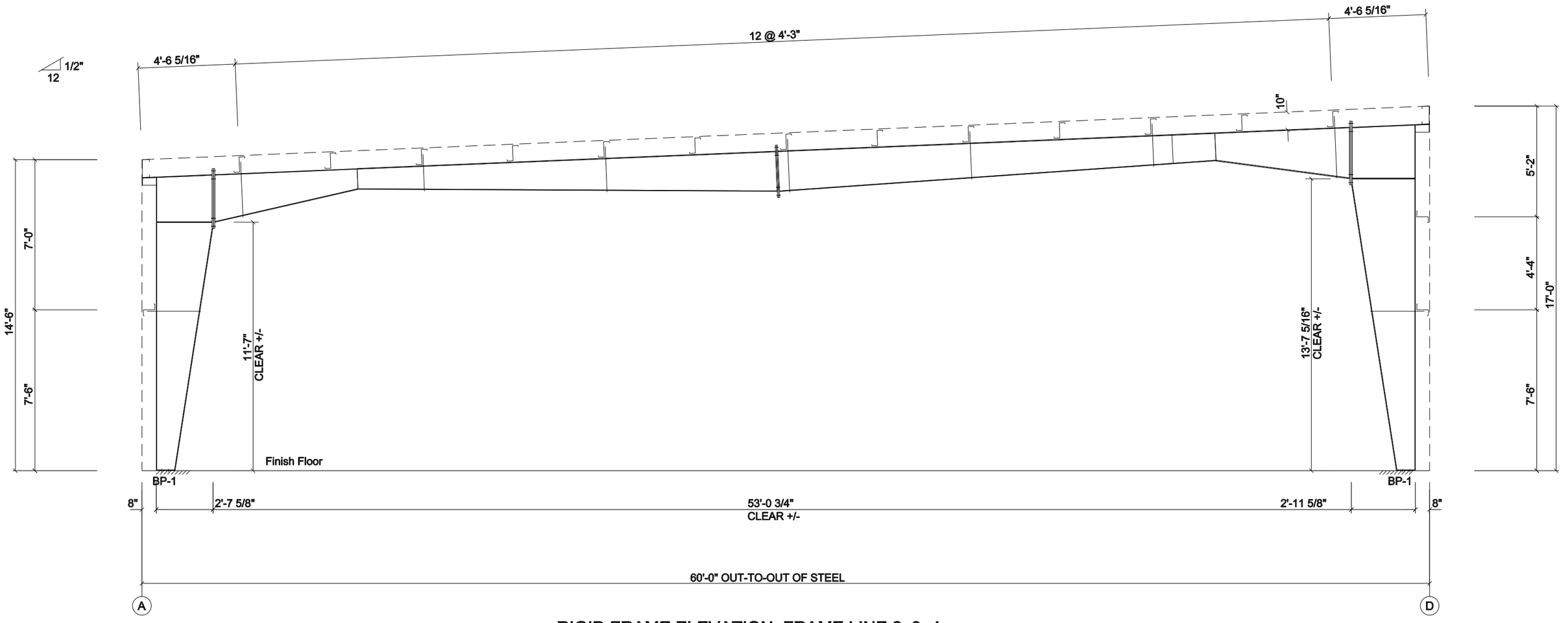
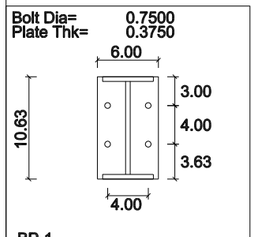
STIFFENER TABLE				
Mark	Stiff Mark	Plate Size Width	Thick	Length
RF1-1	ST1	2.750	0.313	31.00
RF1-4	ST2	2.750	0.375	35.00



RIGID FRAME ELEVATION: FRAME LINE 2 3 4



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Drawing	CROSS SECTION
Buyer	Pfau Steel Buildings
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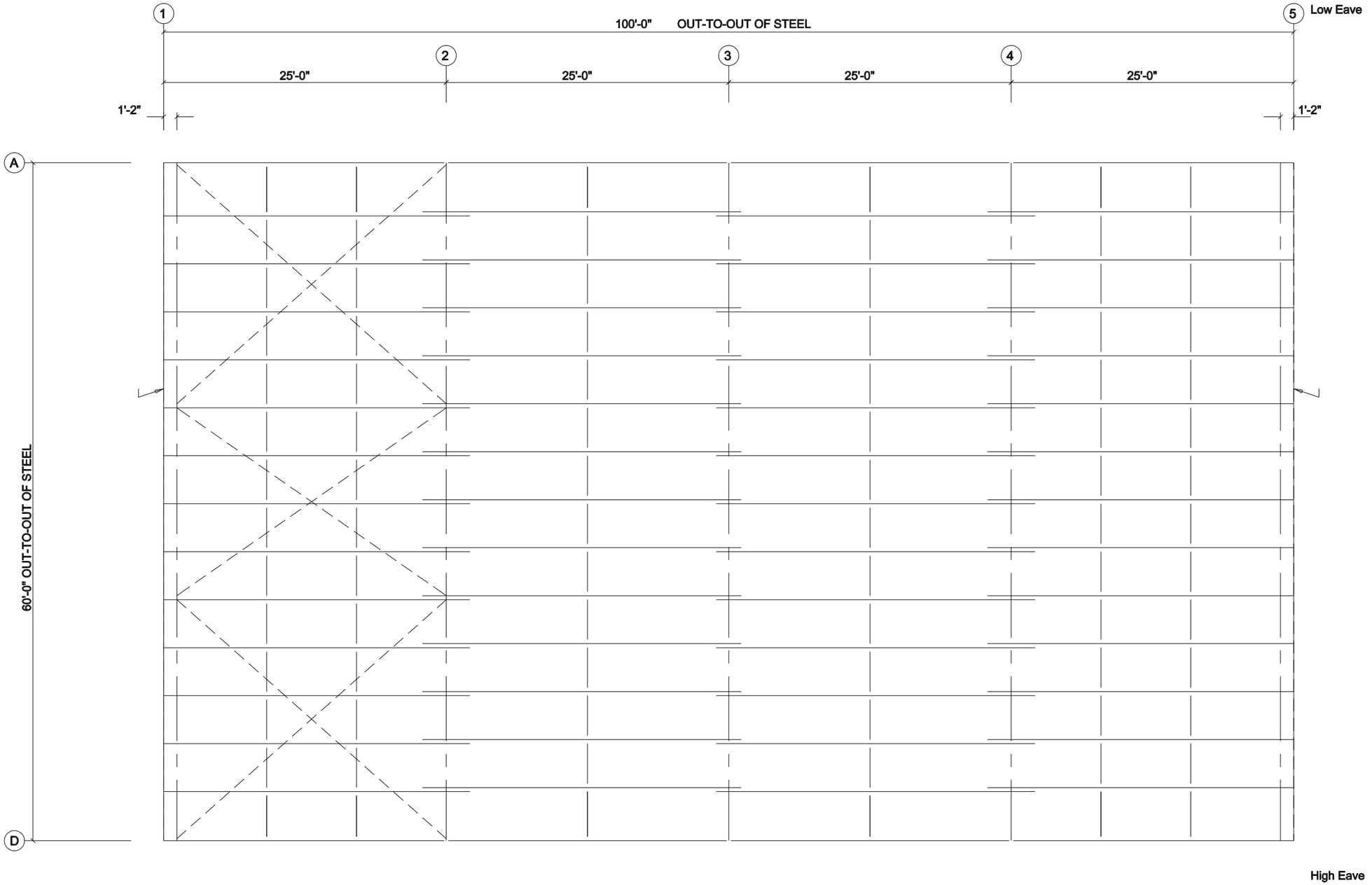

ROOF FRAMING PLAN

PRELIMINARY

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NOT FOR CONSTRUCTION

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Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

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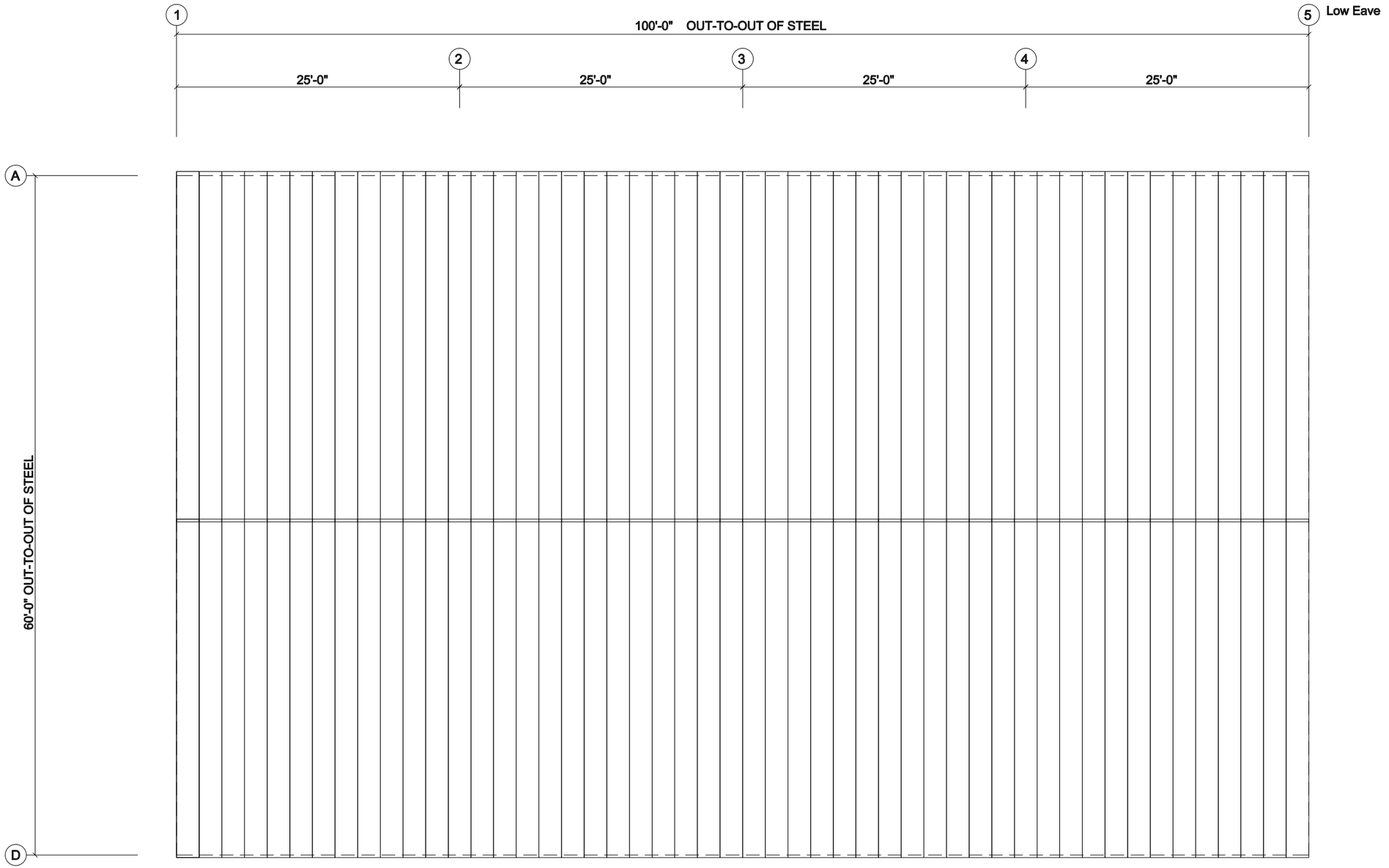

ROOF SHEETING PLAN

PANELS: 24 Ga. STC - Galvalume (GM)

PRELIMINARY

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NOT FOR CONSTRUCTION

Drawing	ROOF SHEETING
Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

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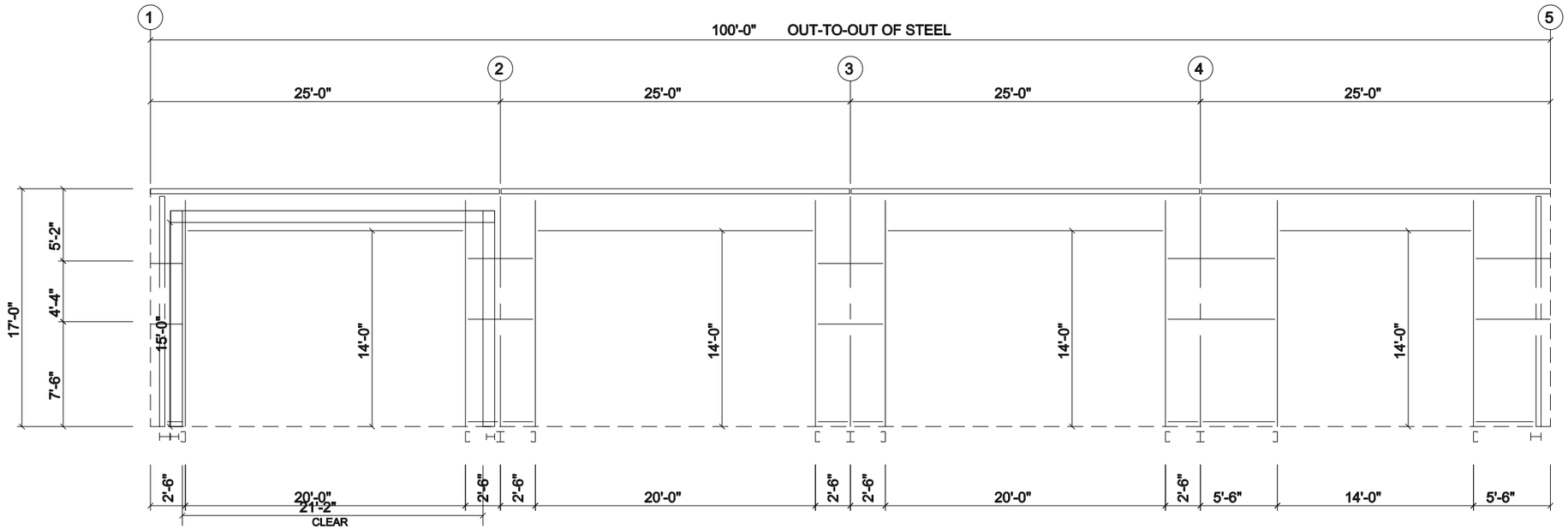
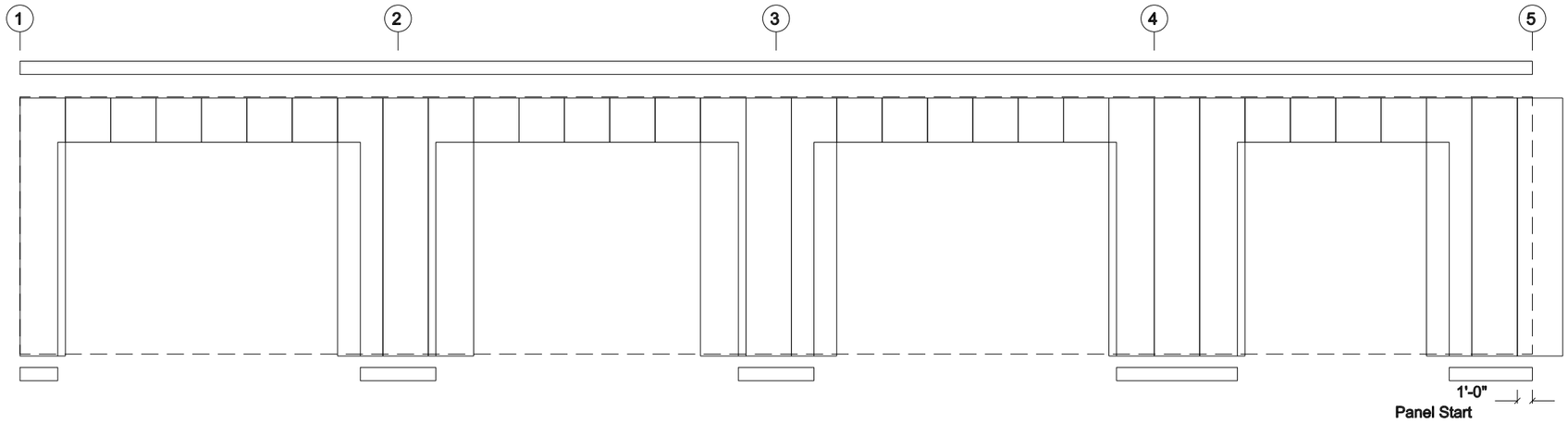


SIDEWALL FRAMING: FRAME LINE D



SIDEWALL SHEETING & TRIM: FRAME LINE D

PANELS: 26 Ga. AP - Std. PVDF Finish

GIRT DEPTH: 8.00

PRELIMINARY

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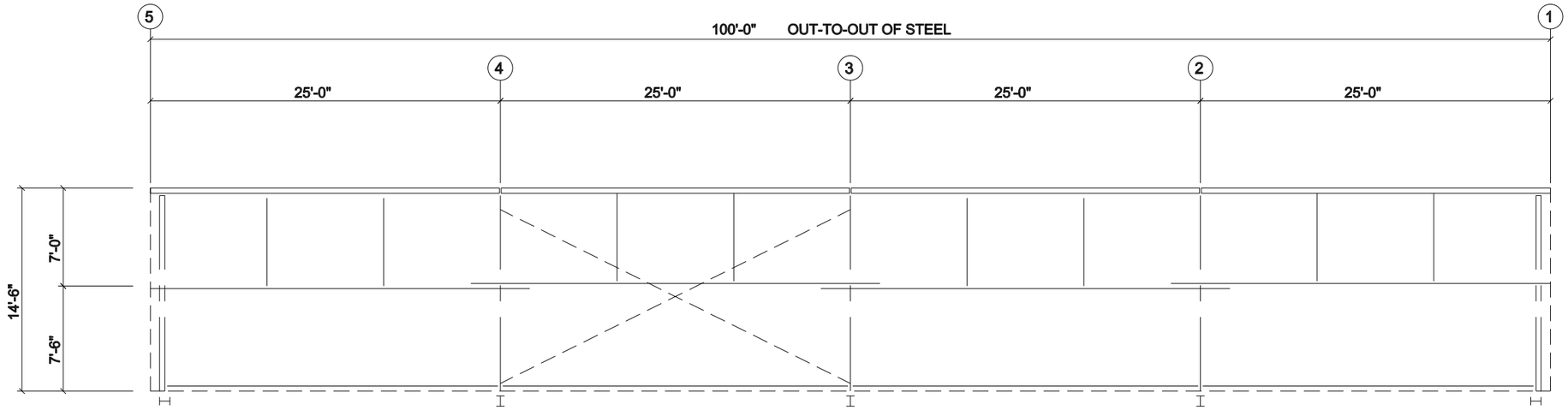
NOT FOR CONSTRUCTION

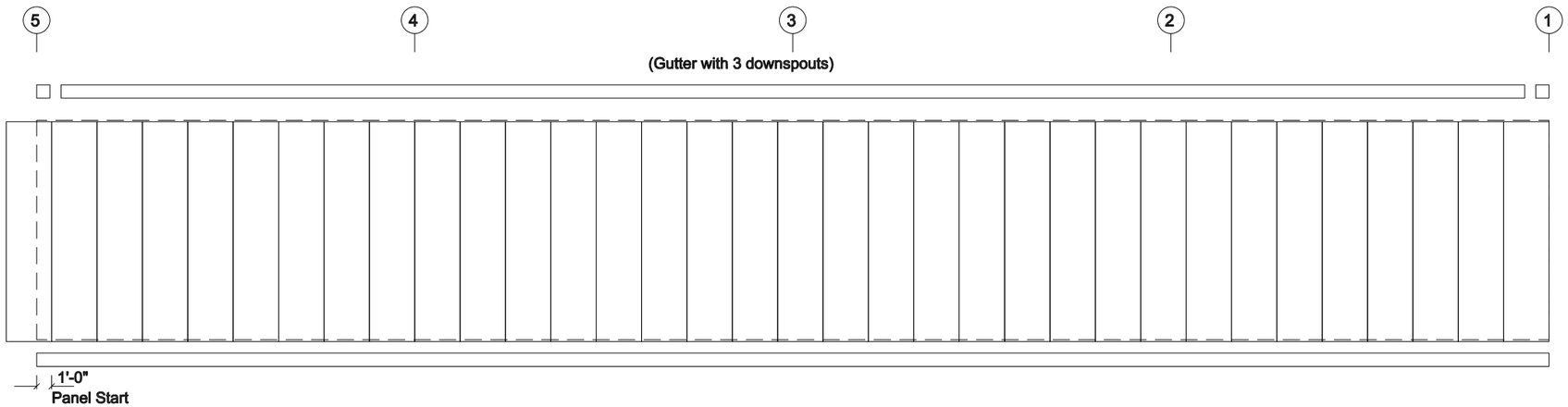
Drawing	SIDEWALL DRAWING
Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

DATE DRAWN	QUOTE NO.
6/13/22	FG26101A



SIDEWALL FRAMING: FRAME LINE A



SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 Ga. AP - Std. PVDF Finish

GIRT DEPTH: 8.00

PRELIMINARY

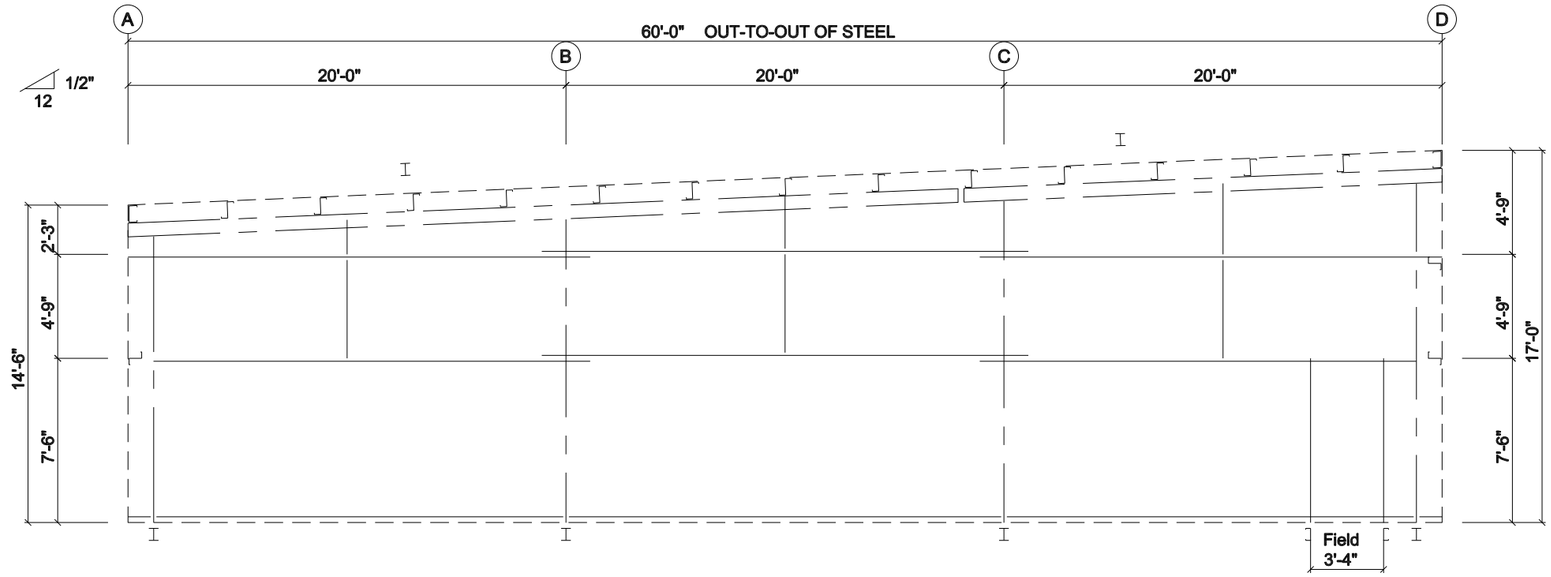
- Preliminary drawings for sales and estimating purposes only.
- Subject to change during order process.

NOT FOR CONSTRUCTION

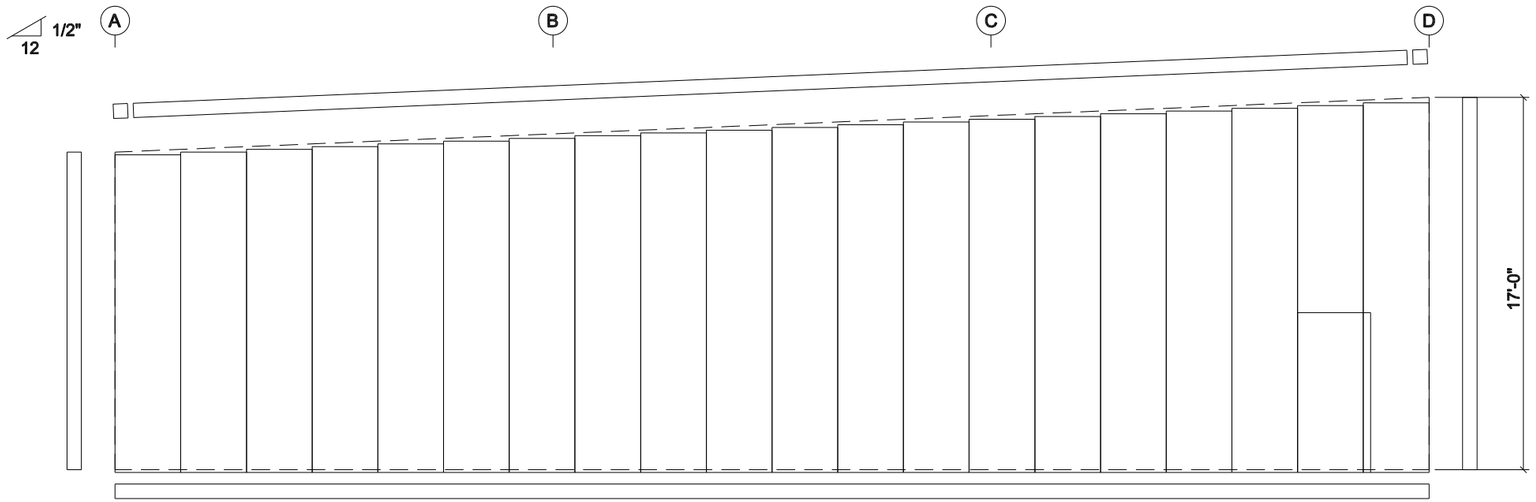
Drawing	SIDEWALL DRAWING
Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

DATE DRAWN	QUOTE NO.
6/13/22	FG26101A



ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga. AP - Std. PVDF Finish

GIRT DEPTH: 8.00

PRELIMINARY

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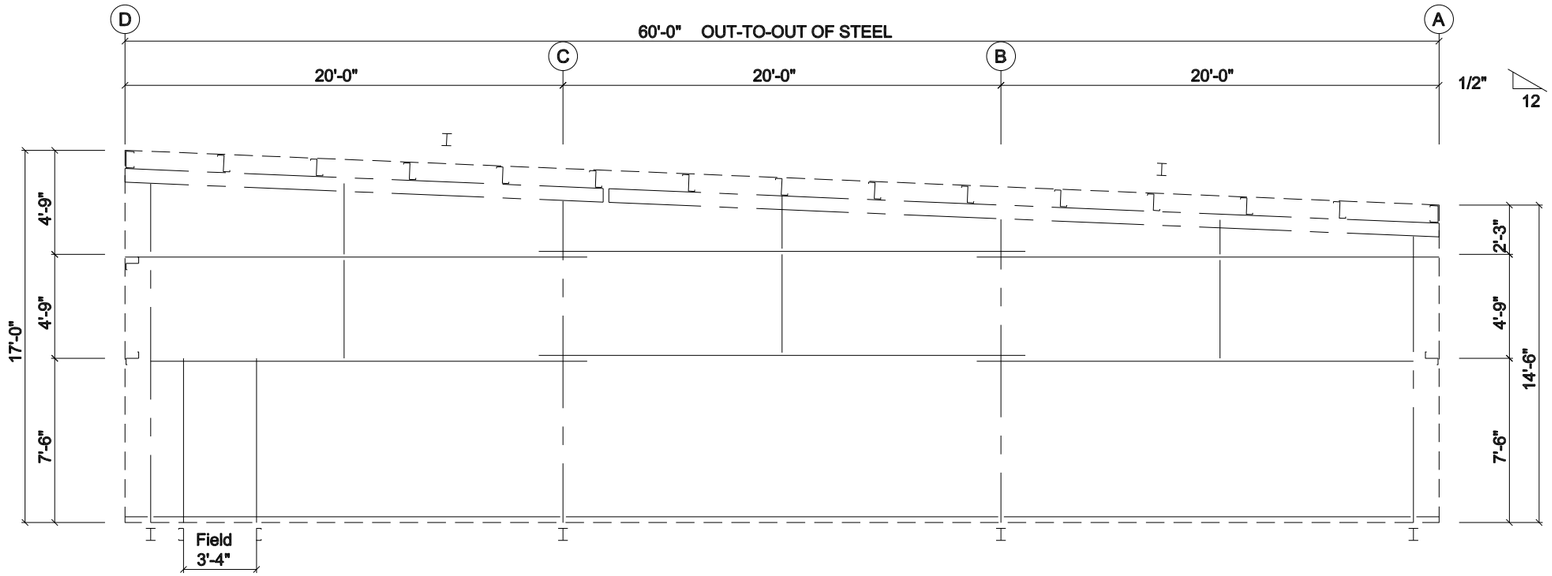
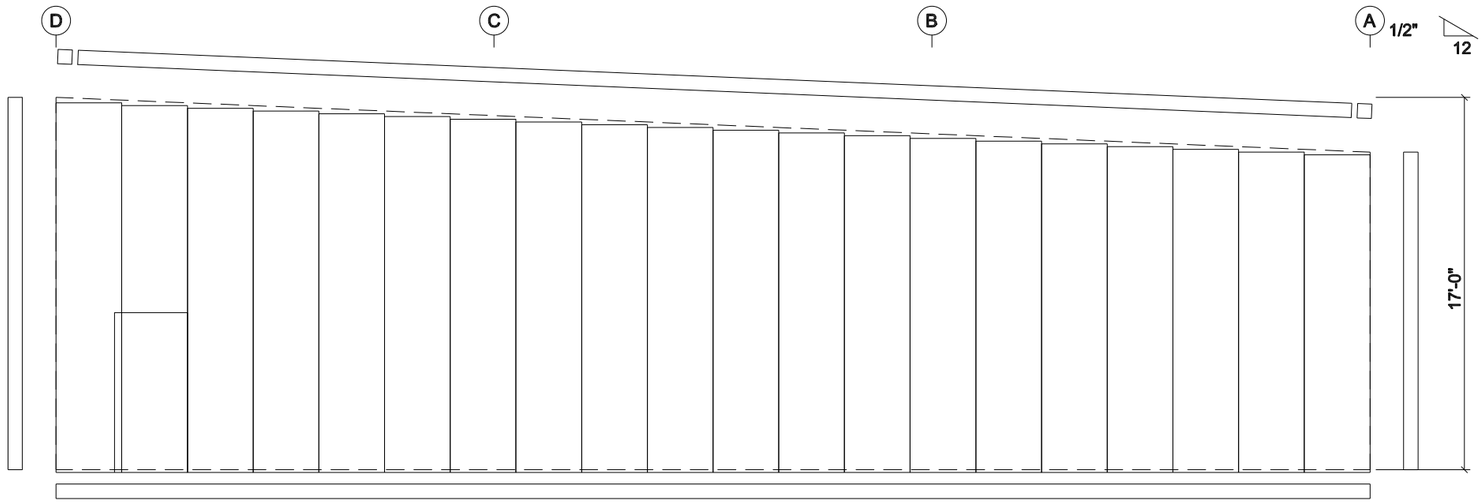
Drawing	ENDWALL DRAWING
Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

DATE DRAWN	QUOTE NO.
6/13/22	FG26101A



ENDWALL FRAMING: FRAME LINE 5



ENDWALL SHEETING & TRIM: FRAME LINE 5

PANELS: 26 Ga. AP - Std. PVDF Finish

GIRT DEPTH: 8.00

PRELIMINARY

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Drawing	ENDWALL DRAWING
Buyer	Pfau Steel Buildings
Customer	Cass County Sheriff's Dept Fargo, ND 58102
Project Name	Cass County Sheriff's Dept.

CHIEF BUILDINGS

DATE DRAWN	QUOTE NO.
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