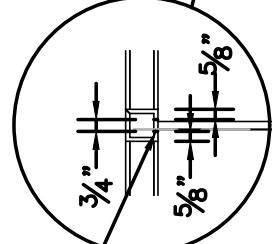
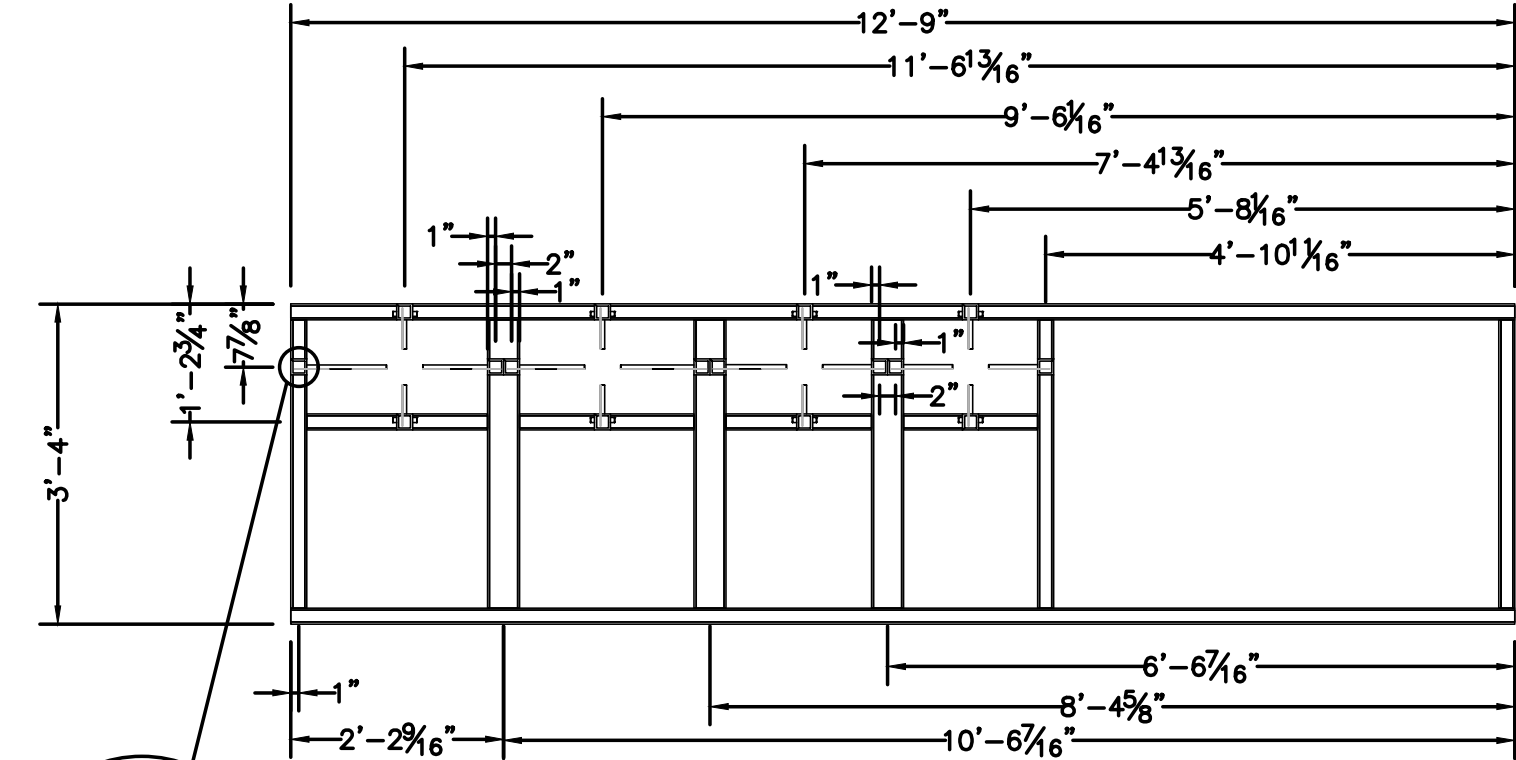


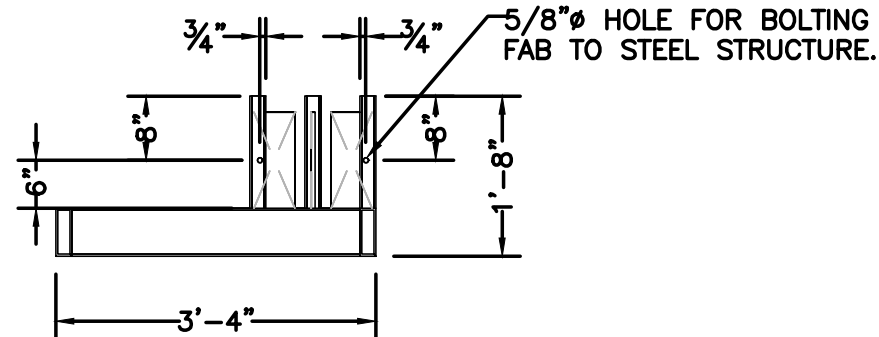
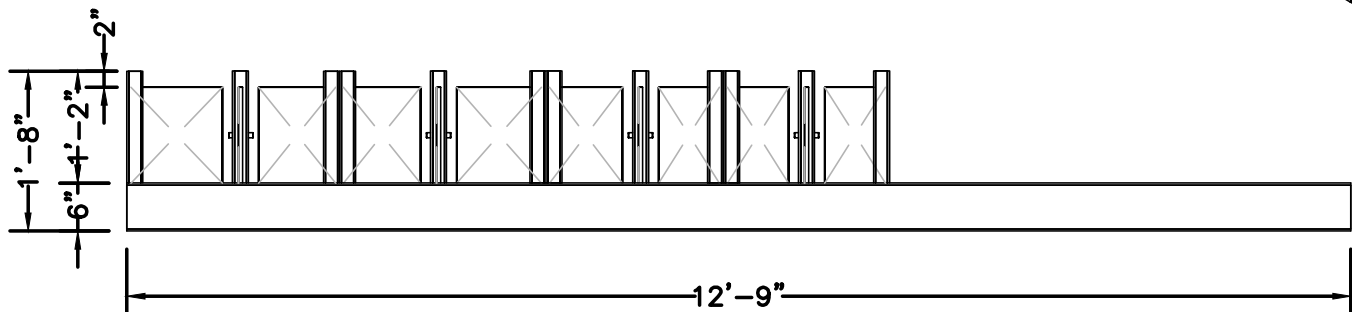
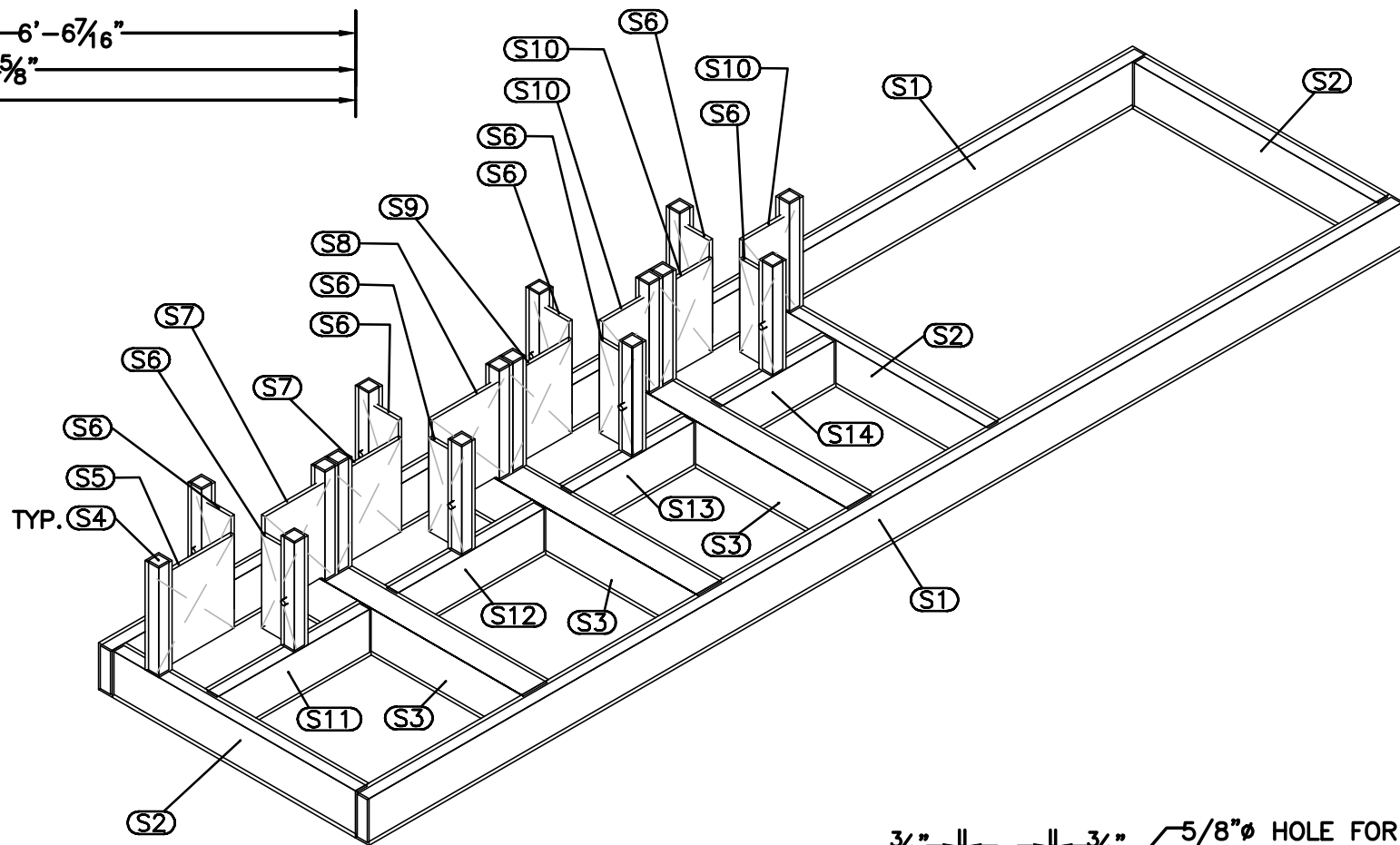
REF.DWG.		SERVICE NAME	
DRAWING NO./TRACKING NO. 210140-RISER-01		QTY. 1	SHT/NO 1 OF 2
			REV 0



3/4" VERTICAL SLICE IN TUBE STEEL (TYP.)

QTY 2

BOM-STEEL					
Item No	Order	Description	Qty	Size	Steel L
S1	CS RECT Tube		4	6x2x1/4	153"
S2	CS RECT Tube		6	6x2x1/4	36"
S3	CS RECT Tube		6	6x4x1/4	36"
S4	CS SQ Tube	ASTM A36 CS Square Tube	32	SQ2x2x1/4	14"
S5		ASTM A36 CS Plate 1/2" Thick	2	12.000 x 11.438 x 1/2	
S6		ASTM A36 CS Plate 1/2" Thick	16	12.000 x 5.125 x 1/2	
S7		ASTM A36 CS Plate 1/2" Thick	4	12.000 x 9.625 x 1/2	
S8		ASTM A36 CS Plate 1/2" Thick	2	12.000 x 10.625 x 1/2	
S9		ASTM A36 CS Plate 1/2" Thick	2	12.000 x 9.125 x 1/2	
S10		ASTM A36 CS Plate 1/2" Thick	6	12.000 x 7.625 x 1/2	
S11	CS RECT Tube		2	6x2x1/4	22 1/2"
S12	CS RECT Tube		2	6x2x1/4	21 3/4"
S13	CS RECT Tube		2	6x2x1/4	18 1/4"
S14	CS RECT Tube		2	6x2x1/4	16 3/4"



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FLANGE WEIGHT/ORIENTATION

FITTING ORIENTATION

BOLTS/CPLG'S/TH'D TIGHT

SPOOL IDENTIFICATION

QA/QC ACCEPT

WUSM RESEARCH BUILDING

NRB

MECH RISERS

DRN JMM

CHK

APP

JOB NO. 210140

REF.DWG.

DRAWING NO./TRACKING NO.

210140-RISER-01

7/14/2021

QTY. 1

SHT/NO 2 OF 2

REV 0

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COMMENTS

MURPHY WPS#

ASME

NA

NA

NA

NA

NA

DATE

REV

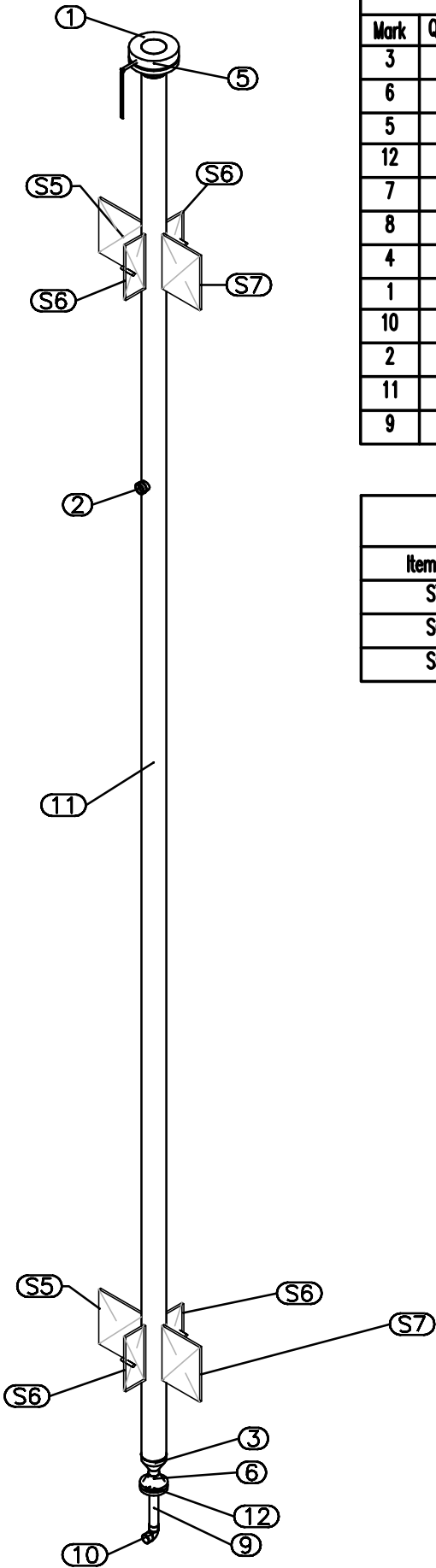
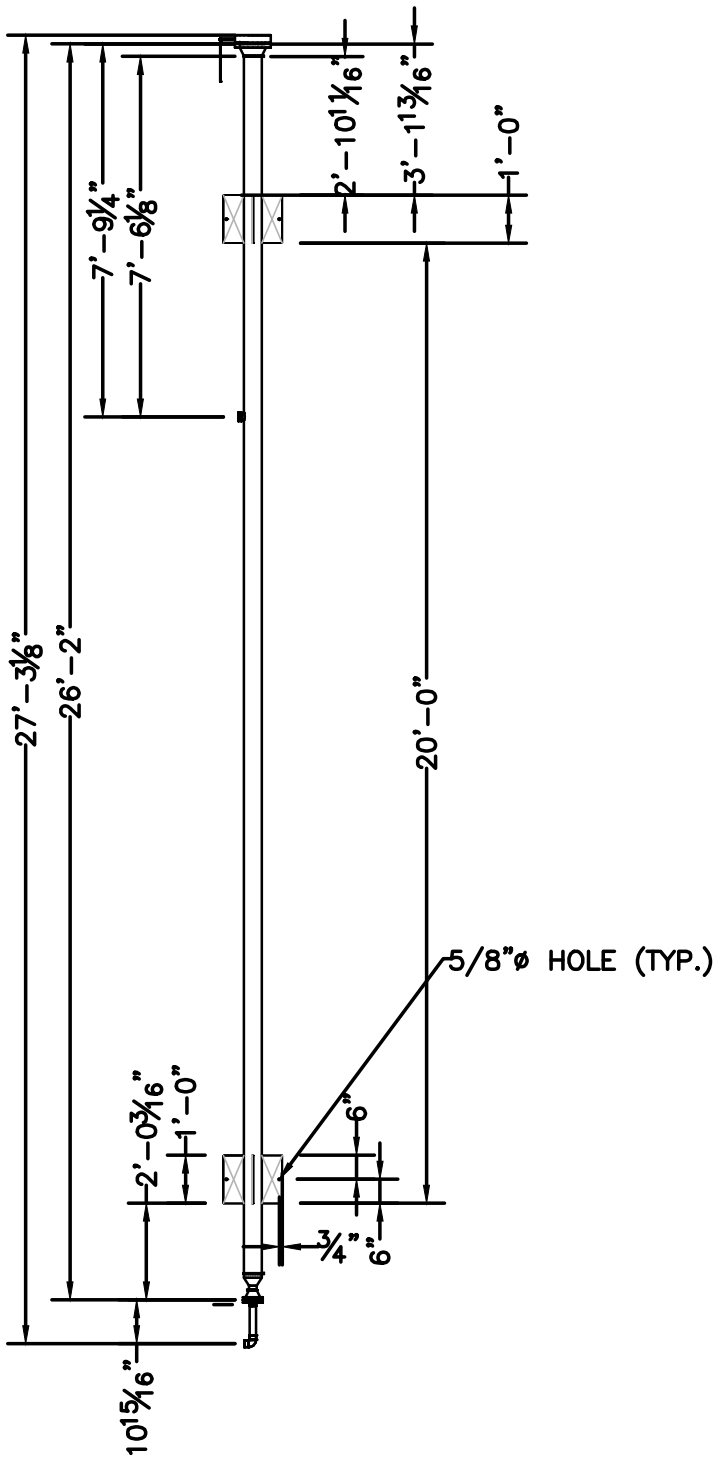
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DESCRIPTION

DRN

CHK

APP



## Murphy-PFFS-SPOOL-BOM

Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
3	1	Std Wt SA234 WPB CS BW CONC RED					4x1-1/2
6	1	150lb RF Sch 40 Bore SA105 CS WN Flg					1-1/2
5	1	150lb RF Sch 40 Bore SA105 CS WN Flg					4
12	1	150lb 672 2pc LF Compainion Flange					1-1/2
7	1	150# CS Flange Bolt Set					1-1/2 (1/2x2-1/2)
8	1	150# RF Garlock Gasket 1/16 Thick					1-1/2
4	1	150lb CS Flange Cap Screw Set					4 (5/8x1-3/4)
1	1	LD-2000 Butterfly Valve					4
10	1	Wrot 607 90 Deg Ell CxC					1-1/2
2	1	3000# FS Thread-O-Let			1 3/8"	1.375	1-1/2x4
11	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	25'-4 3/16"	304.188	4
9	1	Type K Hard Copper Pipe	Copper Ftg	Copper Ftg	9 1/2"	9.509	1-1/2

## BOM-STEEL-PLATE

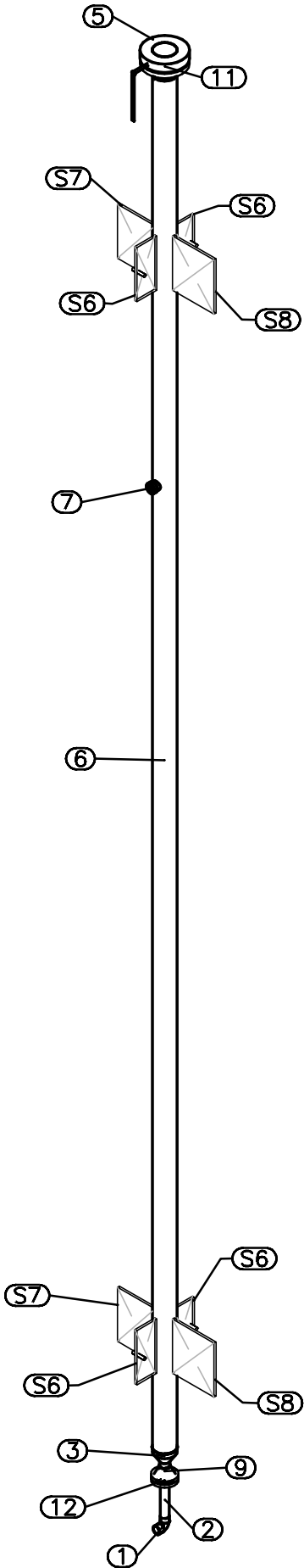
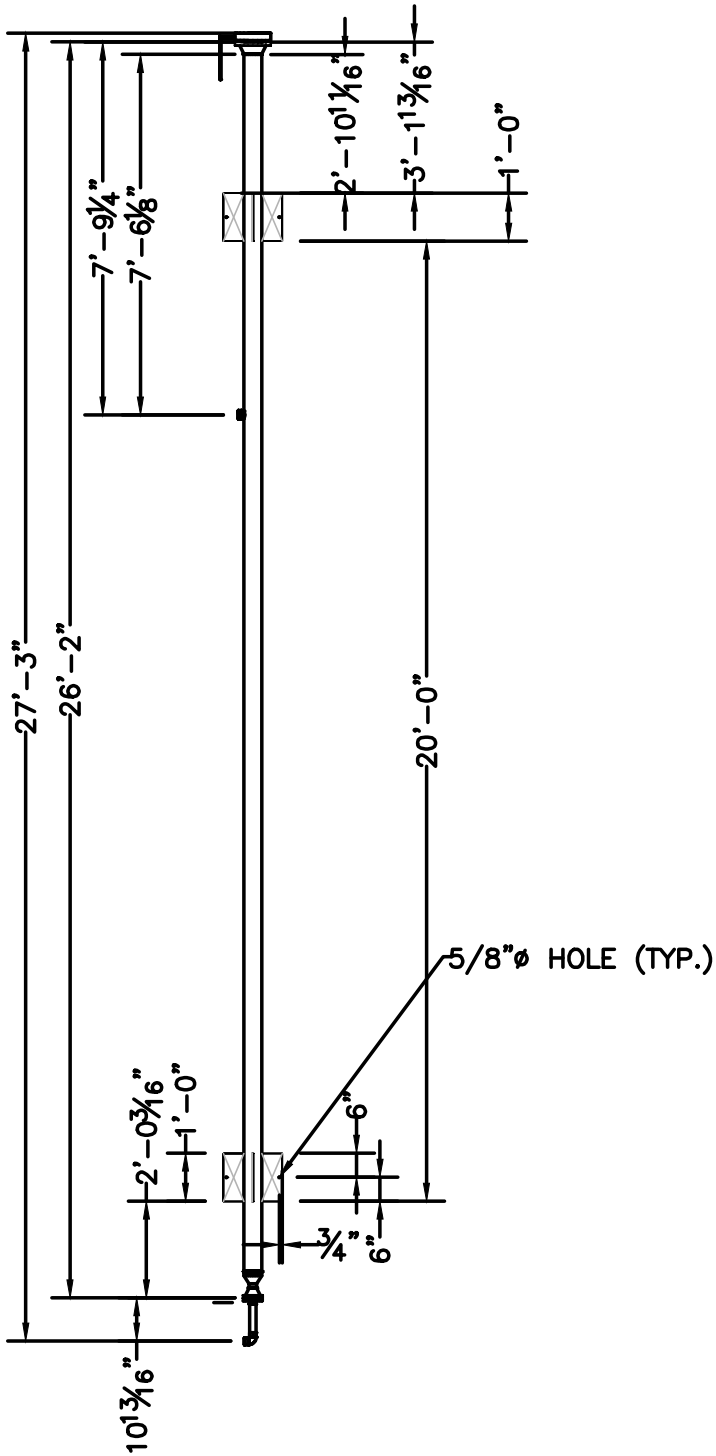
Item No	Size	Description	Qty	Area (sq ft)
S7	12.000 x 9.625	ASTM A36 CS Plate 1/2" Thick	2	1.010
S6	12.000 x 5.125	ASTM A36 CS Plate 1/2" Thick	4	0.572
S5	12.000 x 11.438	ASTM A36 CS Plate 1/2" Thick	2	1.187

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QA/QC ACCEPT	FLANGE WEIGHT/ORIENTATION				<input type="checkbox"/>	
	FITTING ORIENTATION				<input type="checkbox"/>	
	BOLTS/CPLG'S/TH'D TIGHT				<input type="checkbox"/>	
	SPOOL IDENTIFICATION				<input type="checkbox"/>	
WUSM RESEARCH BUILDING NRB MECH RISERS	SPEC.		ASME	X-RAY	HYDRO TEST	COMMENTS
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	0		DATE	REV	DRN	CHK
	1		1 OF 1	1	1	APP
REF.DWG.	SERVICE NAME					
210140-RISER-01-01	210140-RISER-01 RACK					
DRAWING NO./TRACKING NO.	QTY.		SHT/NO		REV	
210140-RISER-01-01	1		1 OF 1		0	



Murphy-PFFS-SPOOL-BOM							
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
3	1	Std Wt SA234 WPB CS BW CONC RED					4x1-1/2
9	1	150lb RF Sch 40 Bore SA105 CS WN Flg					1-1/2
11	1	150lb RF Sch 40 Bore SA105 CS WN Flg					4
12	1	150lb 672 2pc LF Compainion Flange					1-1/2
8	1	150# CS Flange Bolt Set					1-1/2 (1/2x2-1/2)
10	1	150# RF Garlock Gasket 1/16 Thick					1-1/2
4	1	150lb CS Flange Cap Screw Set					4 (5/8x1-3/4)
5	1	LD-2000 Butterfly Valve					4
1	1	Wrot 607 90 Deg Ell CxC					1-1/2
7	1	3000# FS Thread-0-Let			1 3/8"	1.375	1-1/2x4
6	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	25'-4 3/16"	304.188	4
2	1	Type K Hard Copper Pipe	Copper Ftg	Copper Ftg	9 3/8"	9.368	1-1/2

BOM-STEEL-PLATE				
Item No	Size	Description	Qty	Area (sq ft)
S6	12.000 x 5.125	ASTM A36 CS Plate 1/2" Thick	4	0.572
S7	12.000 x 9.625	ASTM A36 CS Plate 1/2" Thick	2	1.010
S8	12.000 x 10.625	ASTM A36 CS Plate 1/2" Thick	2	1.108

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FLANGE WEIGHT/ORIENTATION

FITTING ORIENTATION

BOLTS/CPLG'S/TH'D TIGHT

SPOOL IDENTIFICATION

QA/QC ACCEPT

0

REV

DATE

ASME

NA

X-RAY

NA

HYDRO TEST

NA

PWHT

NA

COMMENTS

MURPHY WPS#

WUSM RESEARCH BUILDING

NRB

MECH RISERS

SERVICE NAME

210140-RISER-01 RACK

REF.DWG.

DRAWING NO./TRACKING NO.

210140-RISER-01-02

QTY.

1

SHT/NO

1 of 1

REV

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DRN

JMM

7/14/2021

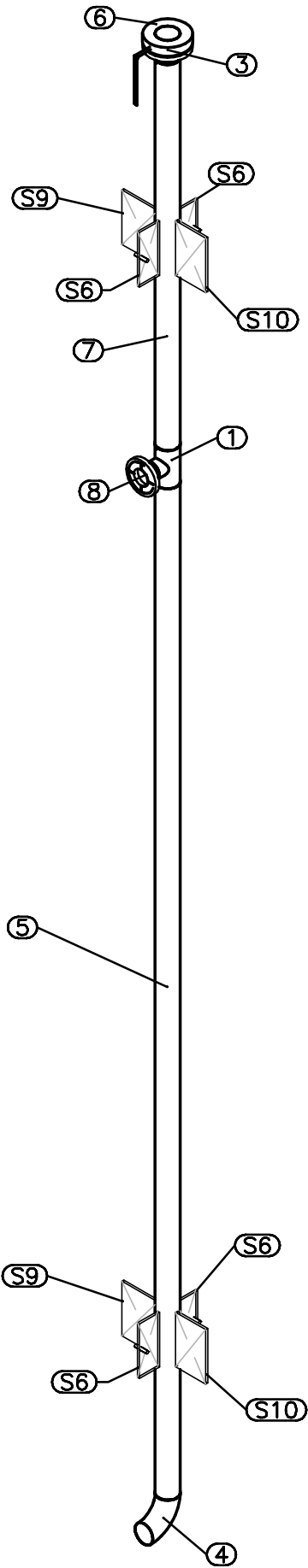
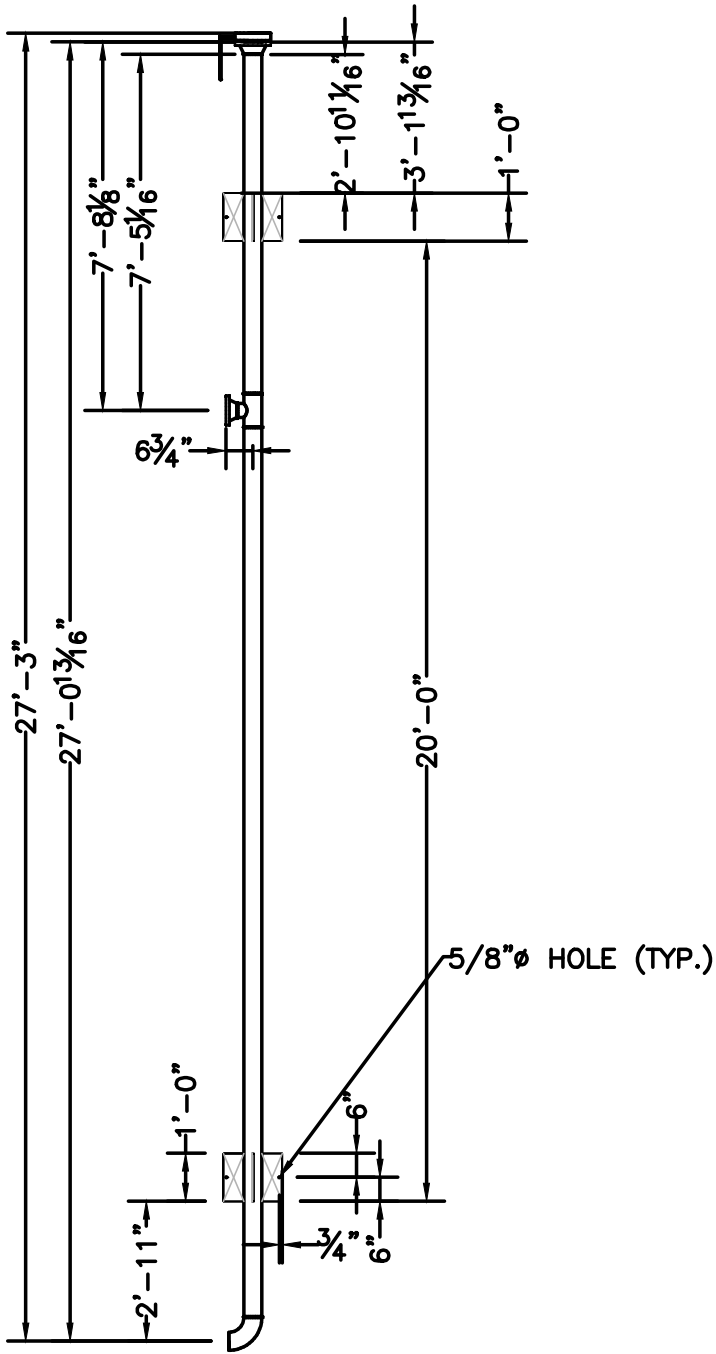
CHK

APP

JOB NO.

210140

REV



Murphy-PFFS-SPOOL-BOM

Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	1	Std Wt SA234 WPB CS BW RED TEE					4x3
8	1	150lb RF Sch 40 Bore SA105 CS WN Flg					3
3	1	150lb RF Sch 40 Bore SA105 CS WN Flg					4
2	1	150lb CS Flange Cap Screw Set					4 (5/8x1-3/4)
6	1	LD-2000 Butterfly Valve					4
4	1	Std Wt SA234 WPB CS BW LR 90 Deg El					4
5	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	18'-6 5/16"	222.292	4
7	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	7'-0 3/4"	84.779	4

BOM-STEEL-PLATE

Item No	Size	Description	Qty	Area (sq ft)
S6	12.000 x 5.125	ASTM A36 CS Plate 1/2" Thick	4	0.572
S9	12.000 x 9.125	ASTM A36 CS Plate 1/2" Thick	2	0.962
S10	12.000 x 7.625	ASTM A36 CS Plate 1/2" Thick	2	0.816

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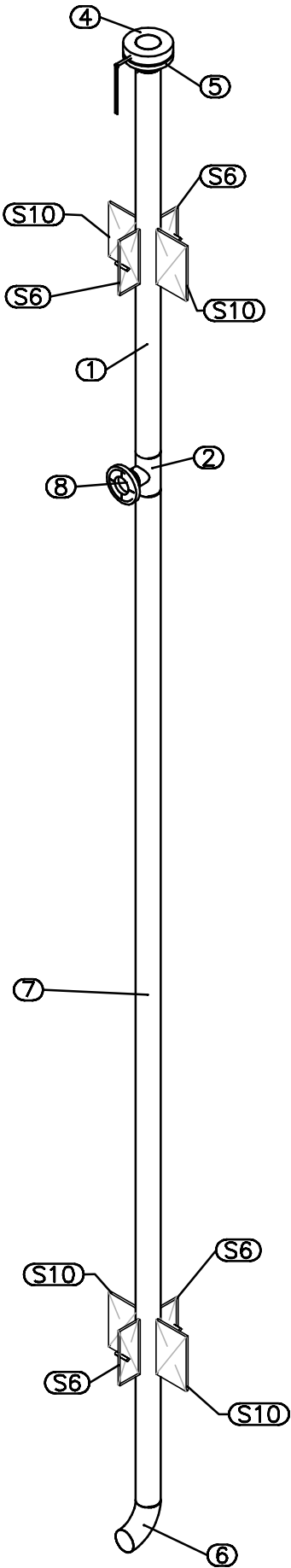
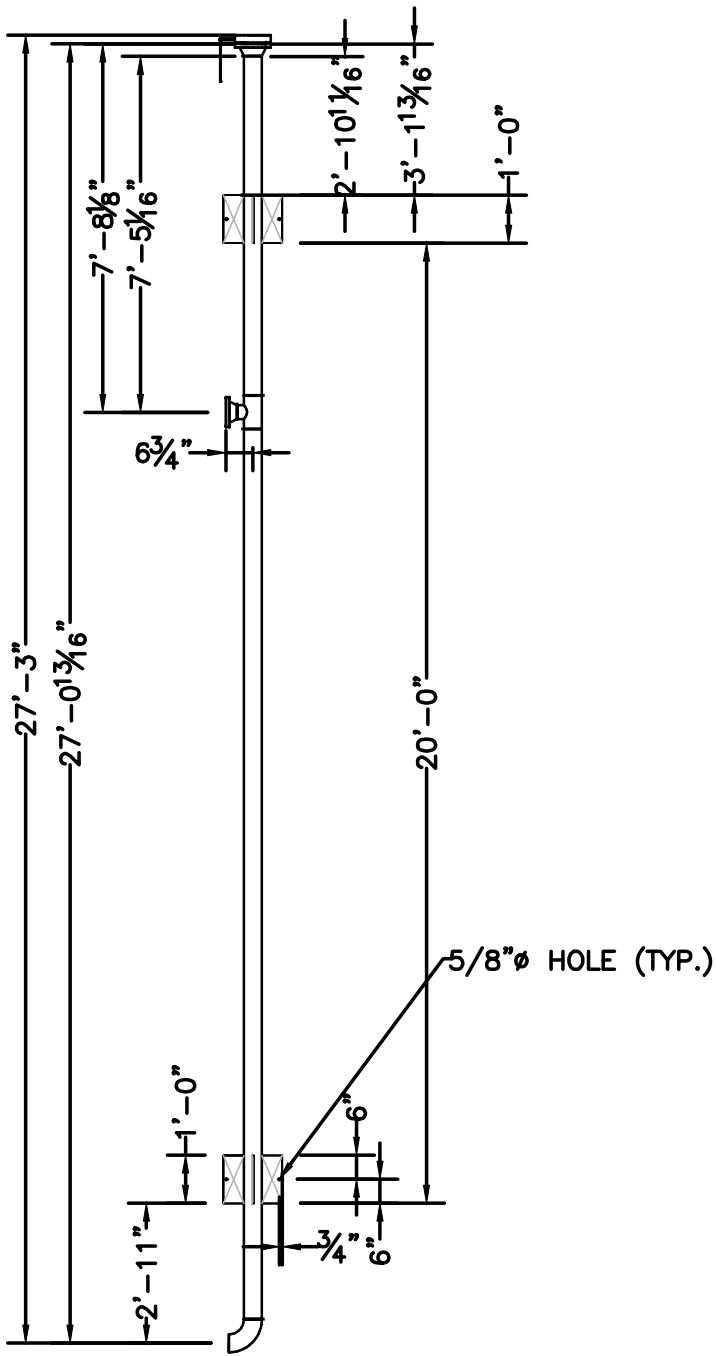
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QA/QC ACCEPT	FLANGE WEIGHT/ORIENTATION				<input type="checkbox"/>		
	FITTING ORIENTATION				<input type="checkbox"/>		
	BOLTS/CPLG'S/TH'D TIGHT				<input type="checkbox"/>		
	SPOOL IDENTIFICATION				<input type="checkbox"/>		
WUSM RESEARCH BUILDING NRB MECH RISERS	SERVICE NAME 210140-RISER-01 RACK	SPEC.	ASME	X-RAY	HYDRO TEST	PWHT	COMMENTS
		NA	NA	NA	NA	NA	MURPHY WPS#
		0					
		REV	DATE	DESCRIPTION		DRN	CHK



## Murphy-PFFS-SPOOL-BOM

Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
2	1	Std Wt SA234 WPB CS BW RED TEE					4x3
8	1	150lb RF Sch 40 Bore SA105 CS WN Flg					3
5	1	150lb RF Sch 40 Bore SA105 CS WN Flg					4
3	1	150lb CS Flange Cap Screw Set					4 (5/8x1-3/4)
4	1	LD-2000 Butterfly Valve					4
6	1	Std Wt SA234 WPB CS BW LR 90 Deg El					4
1	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	7'-0 11/16"	84.691	4
7	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	18'-6 5/16"	222.292	4

## BOM-STEEL-PLATE

Item No	Size	Description	Qty	Area (sq ft)
S6	12.000 x 5.125	ASTM A36 CS Plate 1/2" Thick	4	0.572
S10	12.000 x 7.625	ASTM A36 CS Plate 1/2" Thick	4	0.816

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FLANGE WEIGHT/ORIENTATION FITTING ORIENTATION BOLTS/CPLG'S/TH'D TIGHT SPOOL IDENTIFICATION	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
	QA/QC ACCEPT		WUSM RESEARCH BUILDING		NRB		MECH RISERS	
	SPEC. NA		ASME NA		X-RAY NA		HYDRO TEST NA	
	REV 0		DATE		SHT/NO 1		REV 0	
DESCRIPTION		DATE		SHT/NO 1		REV 0		
MURPHY WPS#		MURPHY WPS#		MURPHY WPS#		MURPHY WPS#		
DRN		CHK		APP		APP		