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WUSM RESEARCH BUILIDIN NRB PRV-1

DRAWING NO./TRACKING NO. 210140-A002

HPS/MPS

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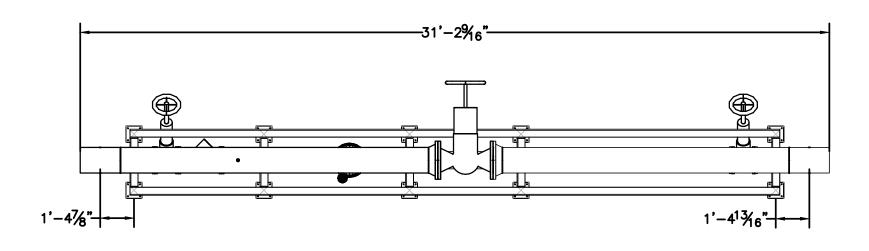


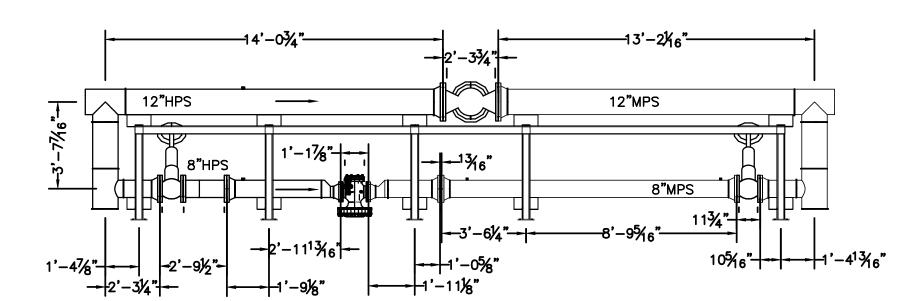
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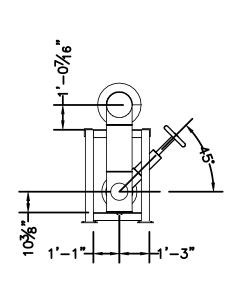
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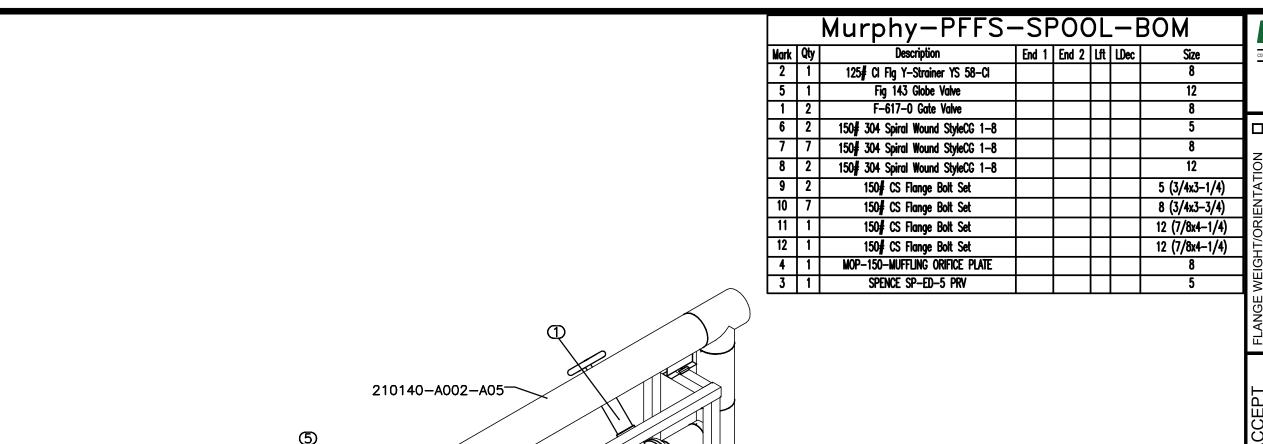
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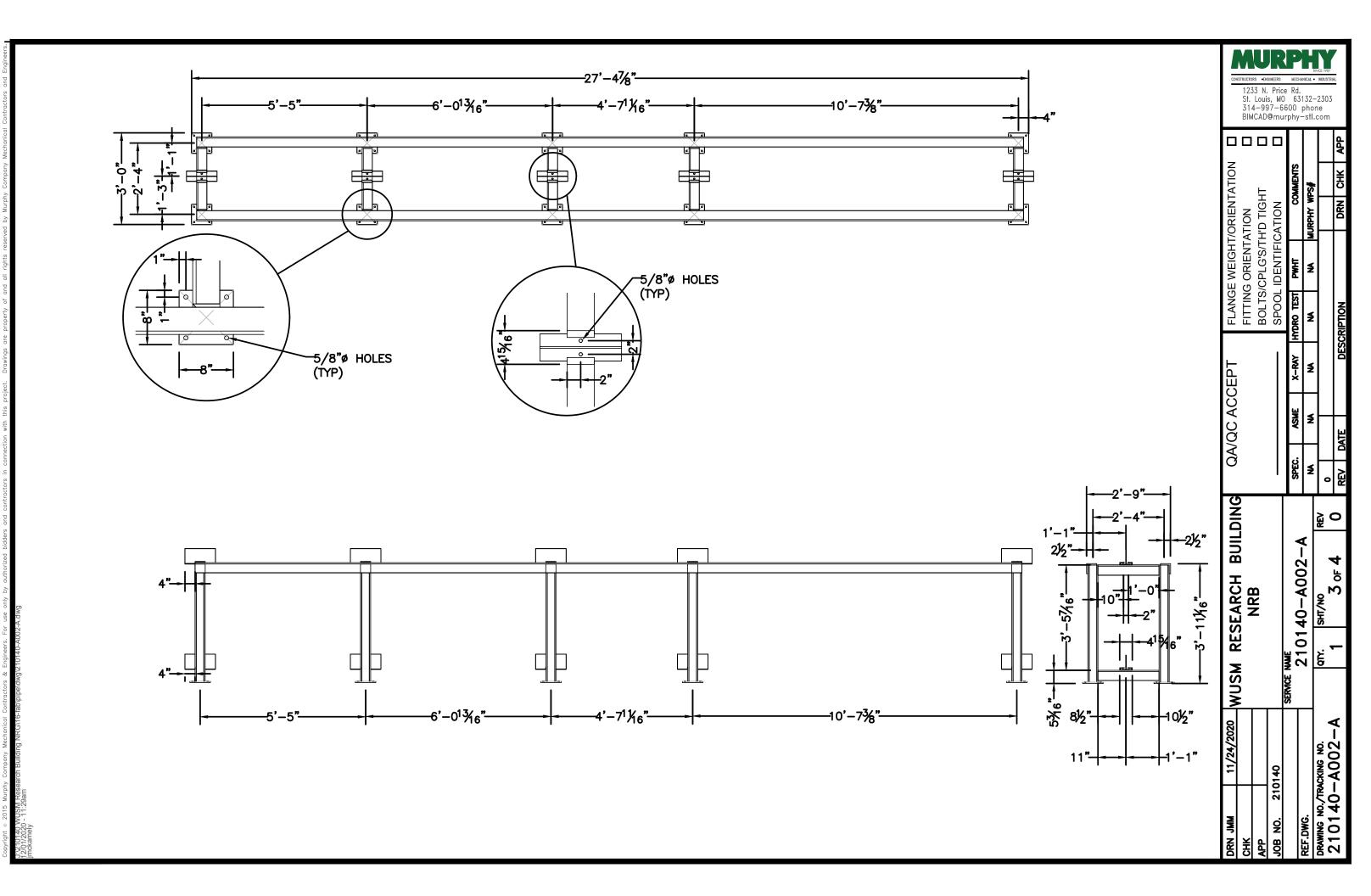


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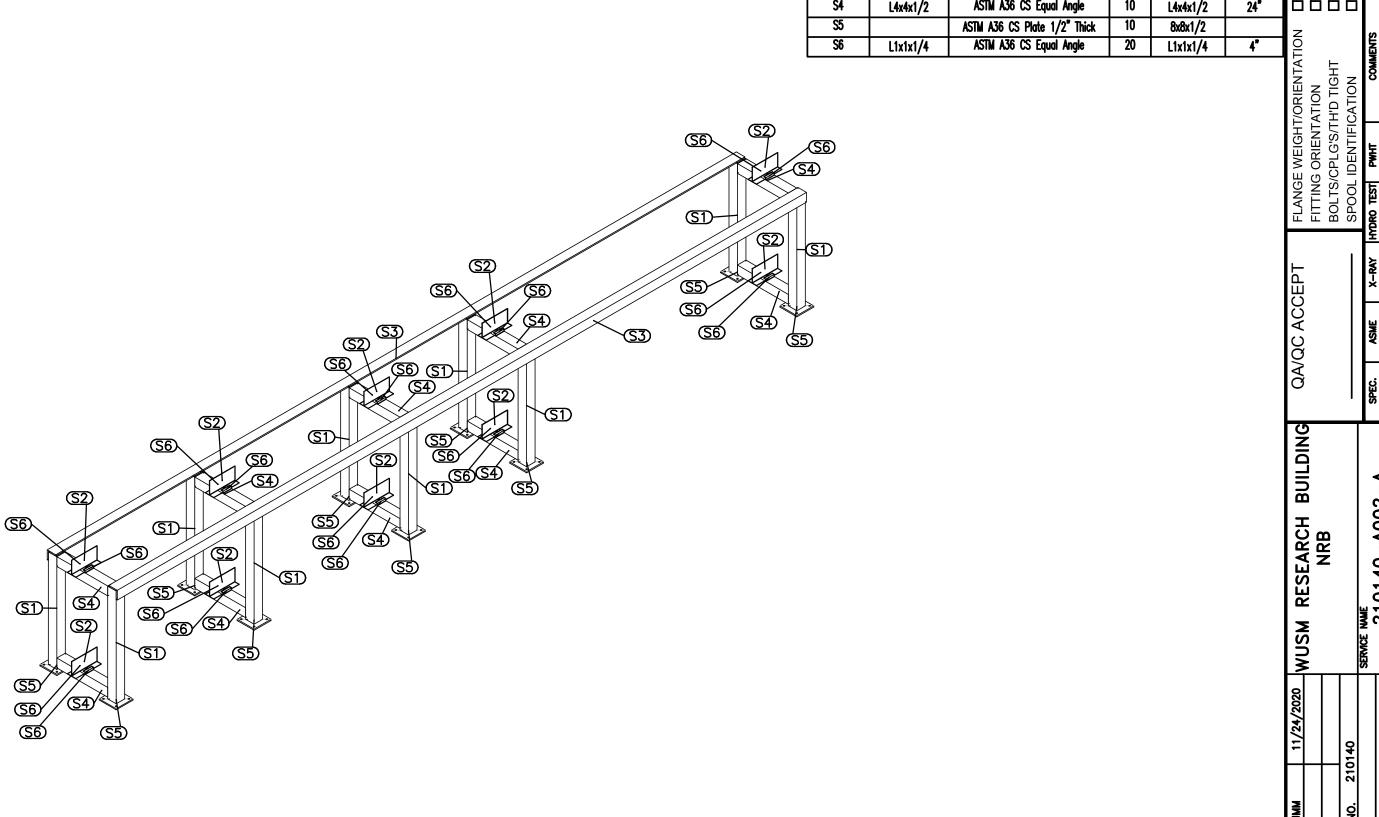


CONSTRUCTORS • ENGINEERS MECHANICAL • INDUSTRIA 1233 N. Price Rd.
St. Louis, M0 63132-2303
314-997-6600 phone
BIMCAD@murphy-stl.com FLANGE WEIGHT/ORIENTATION
FITTING ORIENTATION
BOLTS/CPLG'S/TH'D TIGHT
SPOOL IDENTIFICATION QA/QC ACCEPT WUSM RESEARCH BUILDING NRB <u>ن</u> و 40-A002 SERVICE NAME 21014 REF.DWG.
DRAWING NO./TRACKING NO.
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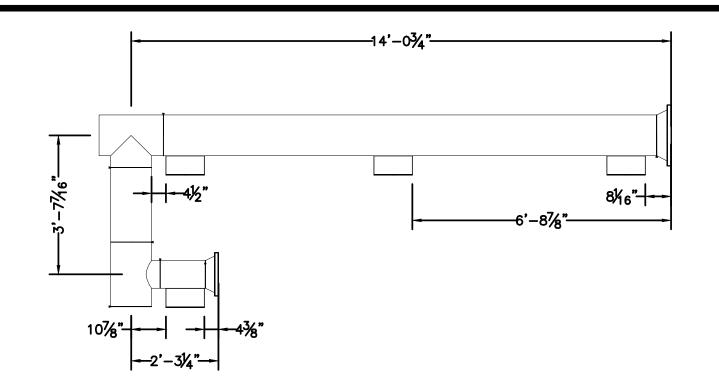


		BOM-STEE	L		
Item No	Order	Description	Qty	Size	Steel L
S1	CS SQ Tube	ASTM A36 CS Square Tube	10	SQ4x4x1/2	46"
S2	WT6x7		10		12"
S3	L4x4x1/2	ASTM A36 CS Equal Angle	2	L4x4x1/2	325"
S 4	L4x4x1/2	ASTM A36 CS Equal Angle	10	L4x4x1/2	24°
S5		ASTM A36 CS Plate 1/2" Thick	10	8x8x1/2	
S6	L1x1x1/4	ASTM A36 CS Equal Angle	20	L1x1x1/4	4"



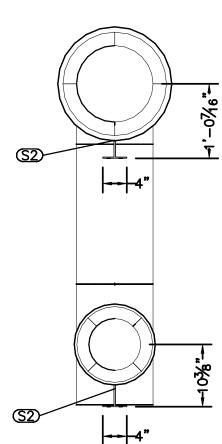
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Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	CONSTRUCTORS •ENGINEERS	М
3	1	Std Wt SA234 WPB CS BW RED TEE					12x8	1233 N. Price St. Louis, MO	
1	1	Std Wt SA234 WPB CS BW TEE					12	314-997-66	0(
6	1	150lb RF Sch 40 Bore SA105 CS WN Flg					8	BIMCAD@mur	pr
7	1	150lb RF Sch 40 Bore SA105 CS WN Flg					12		
4	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-2"	13.995	8		
2	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-11 3/16"	23.185	12	NO	É
5	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	12'-10"	154.000	12	ΔŢĮ	1
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		BOM-S	ΓEEL		
Item No	Order	Description	Qty	Size	Steel L
S2	WT6x7		4		12"



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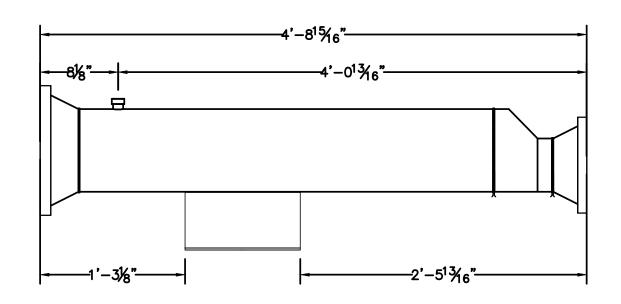
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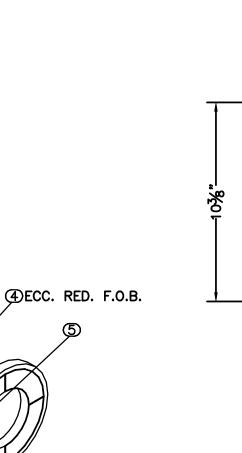
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	BUILDING
	WUSM RESEARCH BUILDING NRB
	WUSM
*** ***	12/1/2020



Murphy-PFFS-SPOOL-BOM								
Mark	Qty		End 1	End 2	Lft	LDec	Size	
5	1	150lb RF Sch 40 Bore SA105 CS WN Flg					5	
1	1	150lb RF Sch 40 Bore SA105 CS WN Flg					8	
4	1	Std Wt SA234 WPB CS BW ECC RED					8x5	
3	1	3000# FS Thread-0-Let			1 1/16"	1.063	3/4x8	[
2	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	3'-7 1/16"	43.063	8	١,
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	BOM-STEEL							
Item No	Order	Description	Qty	Size	Steel L			
S2	WT6x7		1		12 "			



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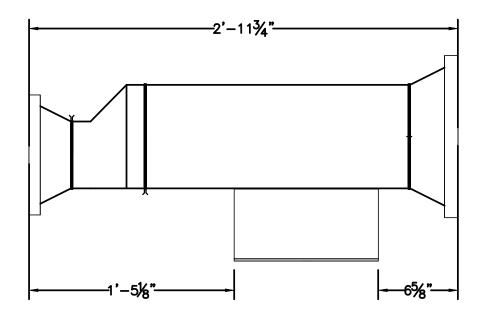
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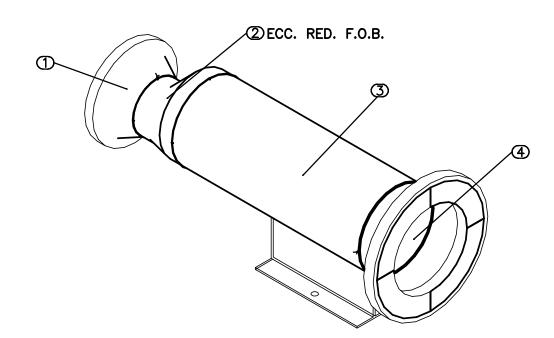
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12/1/2020 WUSM RESEARCH BUILD
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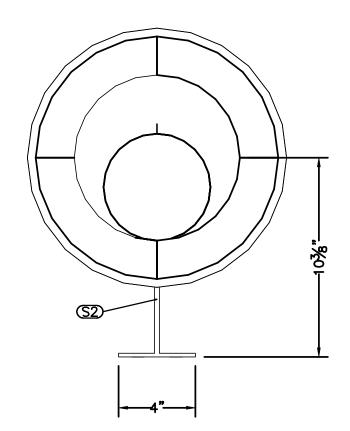
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		Murphy-PFFS-S	SPO	OL	-B0	M	
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	1	150lb RF Sch 40 Bore SA105 CS WN Flg					5
4	1	150lb RF Sch 40 Bore SA105 CS WN Flg					8
2	1	Std Wt SA234 WPB CS BW ECC RED					8x5
3	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-9 7/8"	21.870	8

		BOM-S	ΓEEL		
Item No	Order	Description	Qty	Size	Steel L
S2	WT6x7		1		12"



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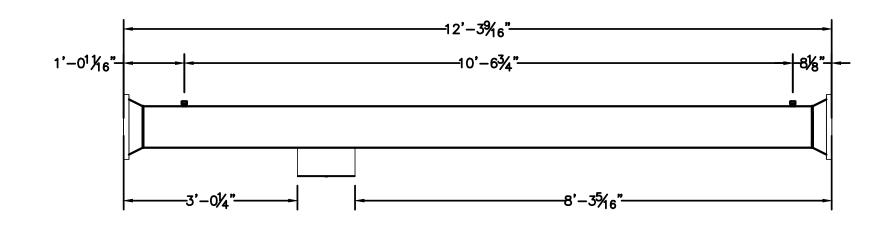
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SERVICE NAME 21014

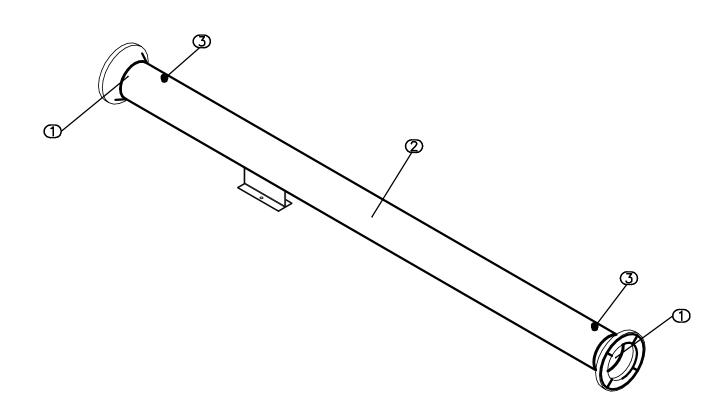
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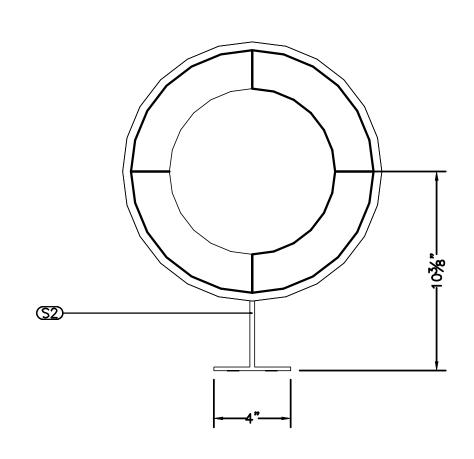
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		Murphy-PFFS-	SP	00	L-BC	M		
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	
1	2	150lb RF Sch 40 Bore SA105 CS WN Flg					8	
3	2	3000∦ FS Thread-0-Let			1"	1.000	1/2x8	
2	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	11'-7 5/16"	139.289	8	L

		BOM-S	ΓEEL		
Item No	Order	Description	Qty	Size	Steel L
S2	WT6x7		1		12"





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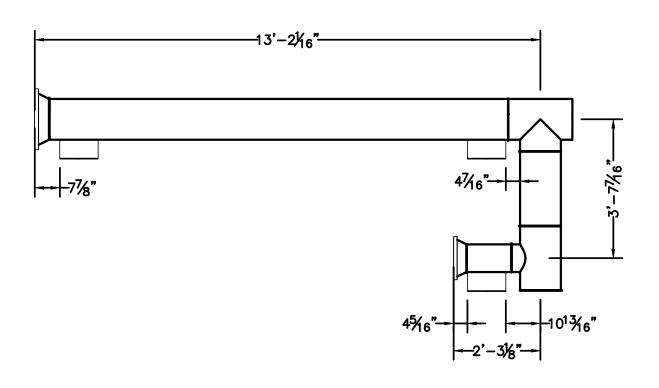
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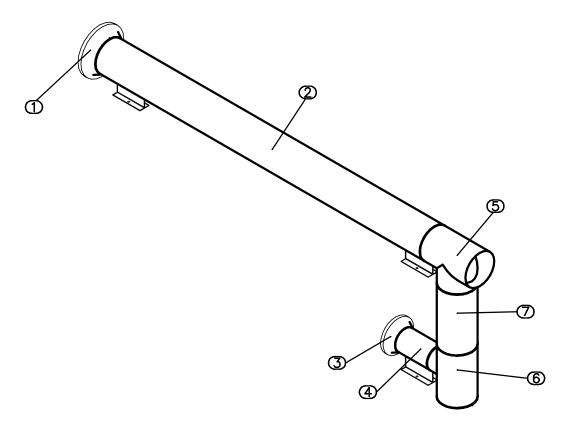
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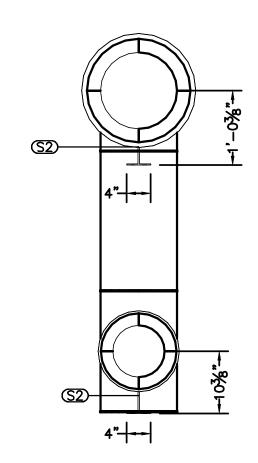
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		SERVICE NAME	AME
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DRAWING NO./TRACKING NO.	CKING NO.		QTY.
210140-	210140-A002-A04	4	-





Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
6	1	Std Wt SA234 WPB CS BW RED TEE					12x
5	1	Std Wt SA234 WPB CS BW TEE					12
3	1	150lb RF Sch 40 Bore SA105 CS WN Flg					8
1	1	150lb RF Sch 40 Bore SA105 CS WN Flg					12
4	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-1 7/8"	13.875	8
2	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	11'-11 5/16"	143.286	12
7	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-11 3/16"	23.185	12

	1	BOM-S	TEEL		
Item No	Order	Description	Qty	Size	Steel L
S2	WT6x7		3		12"



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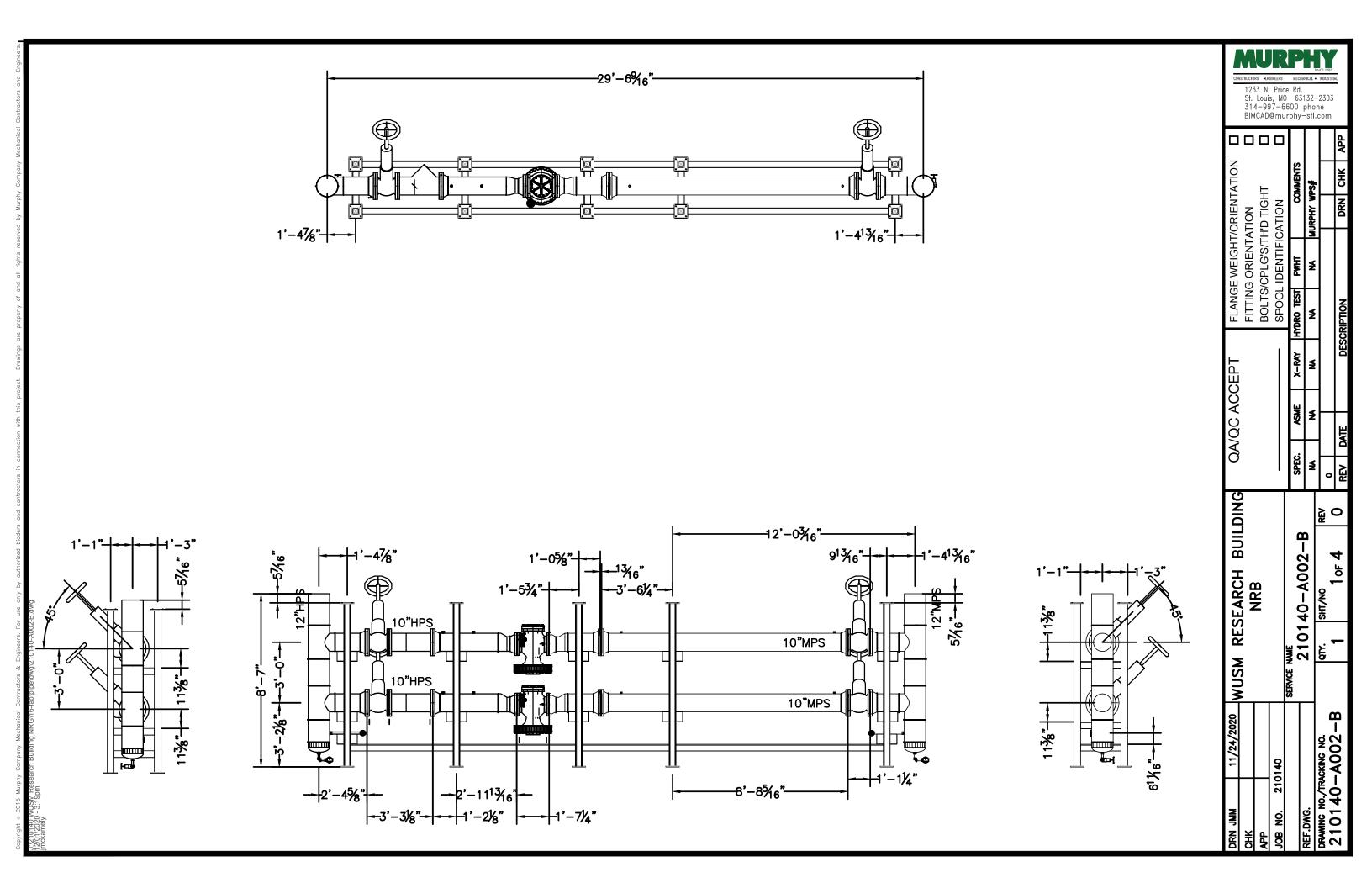
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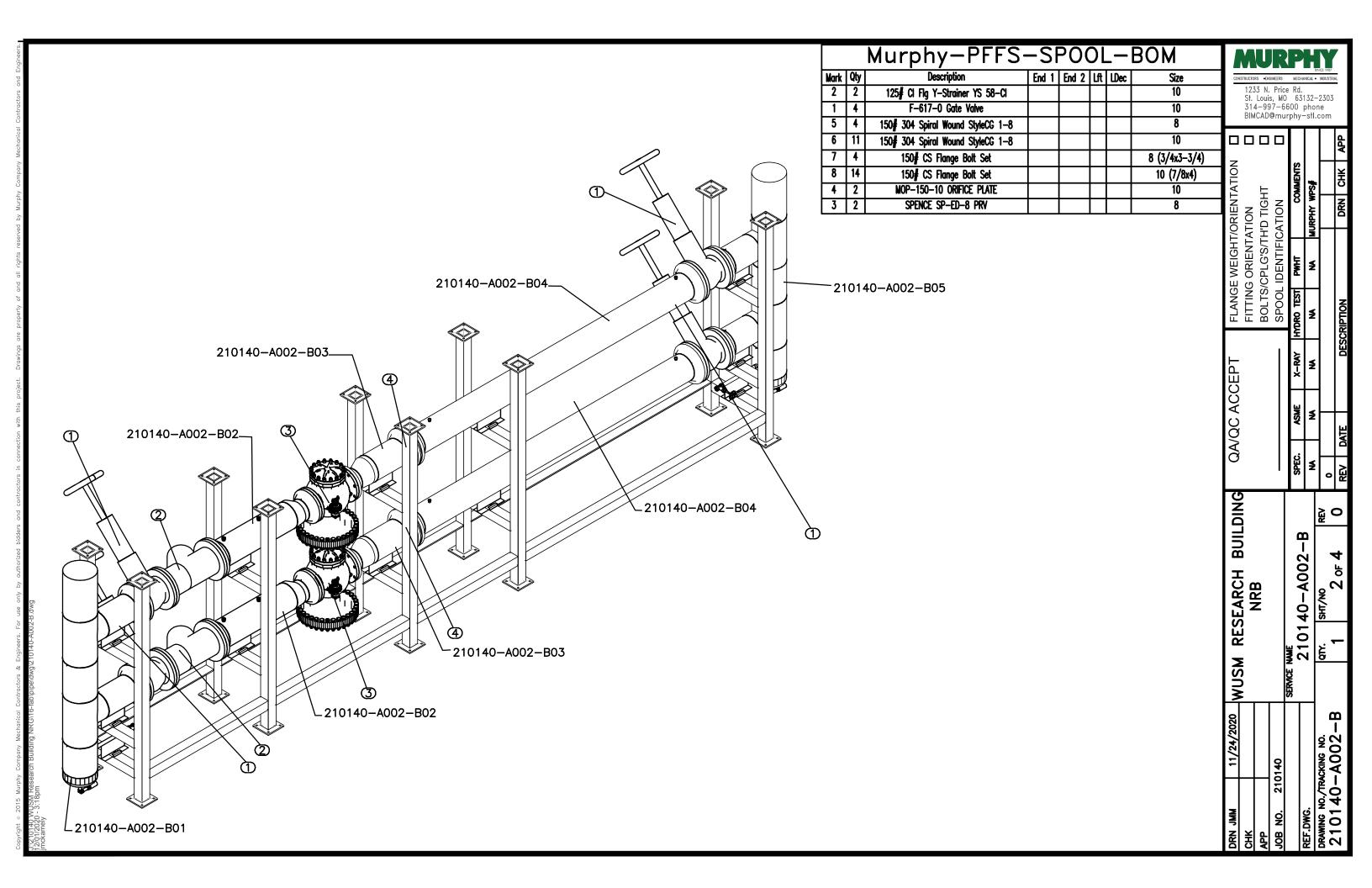
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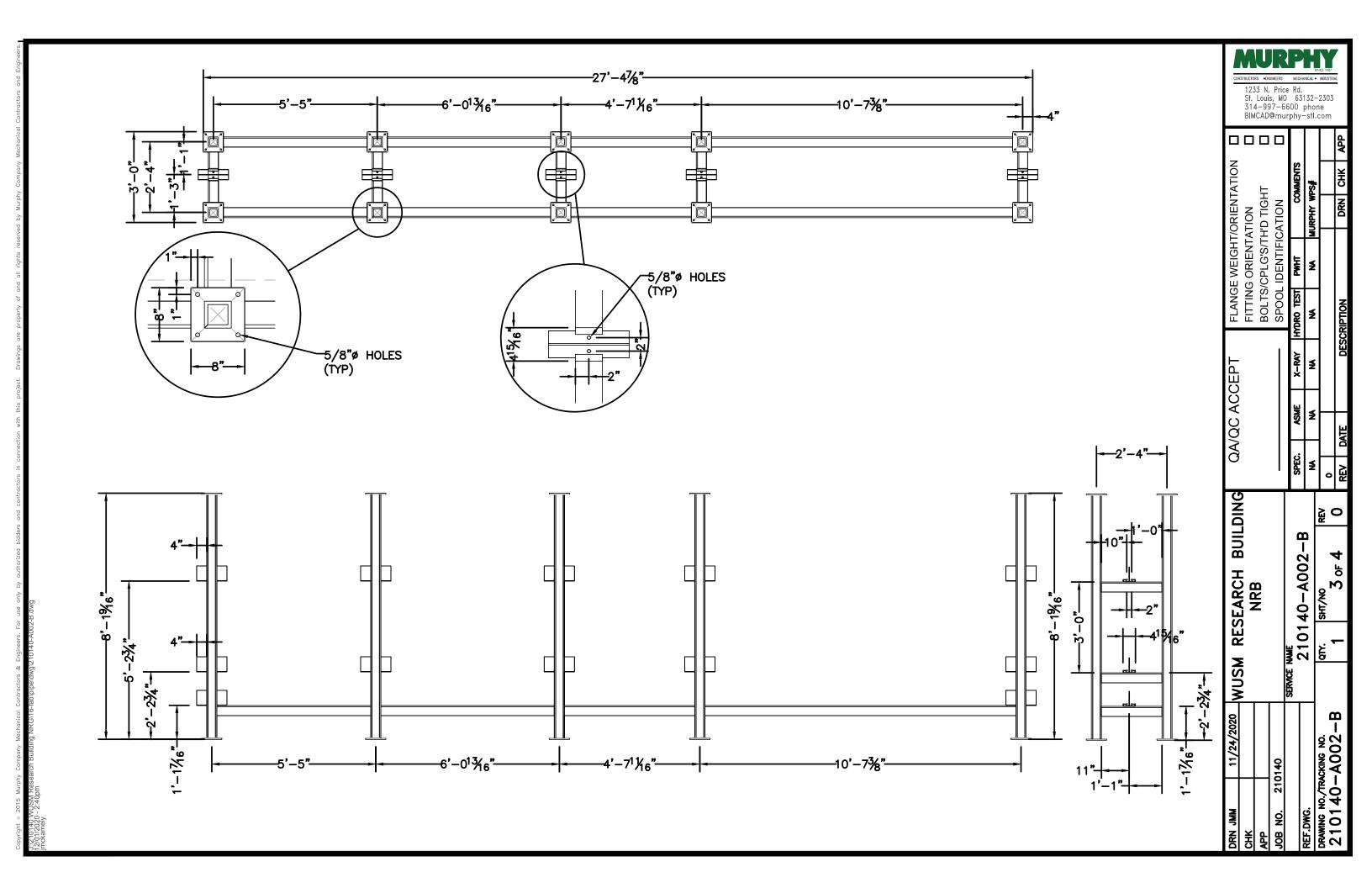
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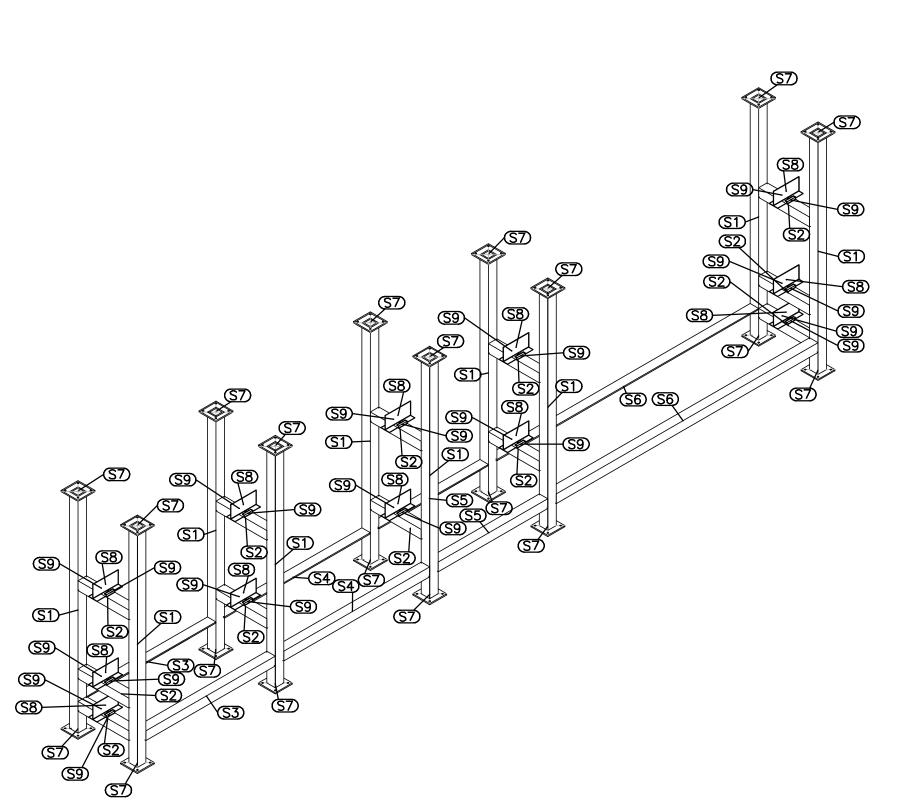
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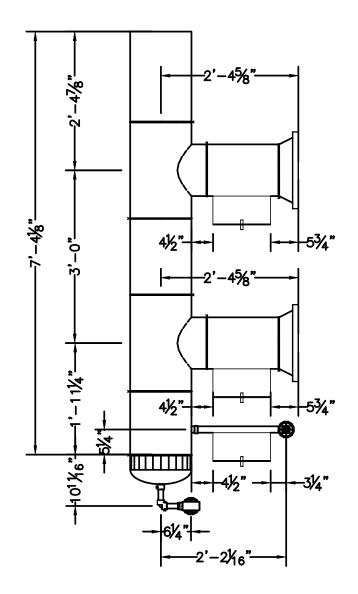


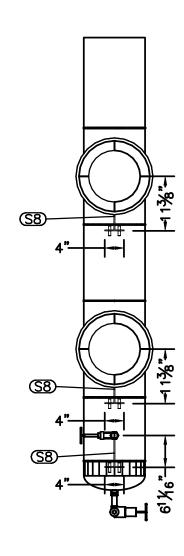
		BOM-STEE			
Item No	Order	Description	Qty	Size	Steel L
S1	CS SQ Tube	ASTM A36 CS Square Tube	10	SQ4x4x1/2	96 1/2"
S2	L4x4x1/2	ASTM A36 CS Equal Angle	12	L4x4x1/2	24"
S3	L4x4x1/2	ASTM A36 CS Equal Angle	2	L4x4x1/2	61"
S4	L4x4x1/2	ASTM A36 CS Equal Angle	2	L4x4x1/2	68 3/4"
S 5	L4x4x1/2	ASTM A36 CS Equal Angle	2	L4x4x1/2	51 3/4"
S6	L4x4x1/2	ASTM A36 CS Equal Angle	2	L4x4x1/2	123 1/2"
S7		ASTM A36 CS Plate 1/2" Thick	20	8x8x1/2	
S8	WT6x7	·	12		12°
S9	L1x1x1/4	ASTM A36 CS Equal Angle	24	L1x1x1/4	4"

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Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	CONSTRUCTORS •ENGINEERS	MECHAN	SINCE 19)STRIAL
2	2	Std Wt SA234 WPB CS BW RED TEE					12x10	1233 N. Pri St. Louis, M		32-230	N3
11	1	800# FS BB OS&Y Gate Valve SW					3/4	314-997-6	600 p	hone	
15	1	T-134 Gate Valve					1	BIMCAD@mi	ırpny–	SILCOR	n
14	2	150lb RF Sch 40 Bore SA105 CS WN Flg					10				
10	1	3M FS SW Cplg					3/4	1_		L	
4	1	Std Wt SA234 WPB CS BW Cap					12	<u> </u>	Ę		ŀ
7	1	3M A105 FS SW 90 Deg Ell					3/4	F ⊢	COMMENTS	#S#	ŀ
5	1	3000 ∦ FS Soc−0-Let			1 1/16"	1.063	3/4x12	WEIGHT/ORIENTATION ORIENTATION PLG'S/TH'D TIGHT DENTIFICATION	8	-	T
8	1	3000# FS Thread-0-Let			1 5/16"	1.313	1x12	PRIE NOI UT U		MURPHY	ď
13	2	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-2 7/8"	14.875	10	HT/OF ITATI(/TH'D	Н	3	T
1	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-3 3/4"	15.750	12	E WEIGHT/ORIEN ORIENTATION CPLG'S/TH'D TIG	_		1
3	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-1 1/8"	13.136	12	WEIGH ORIEN PLG'S,	PWHT	≨	1
9	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-6 3/4"	18.750	12			Щ	1
12	1	Sch 80 A106B CS SMLS Pipe	MPT	MPT	1'-6 5/16"	18.308	1	FLANGE FITTING GENERALING GENERAL	TEST		
6	2	Sch 80 A106B CS SMLS Pipe	SW	SW	3"	3.000	3/4	FL/ BO SP.	잁	≨	

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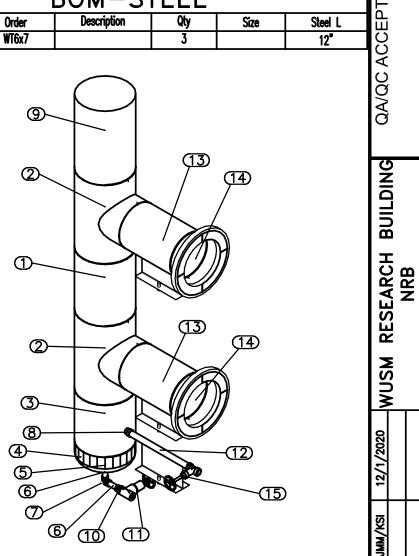
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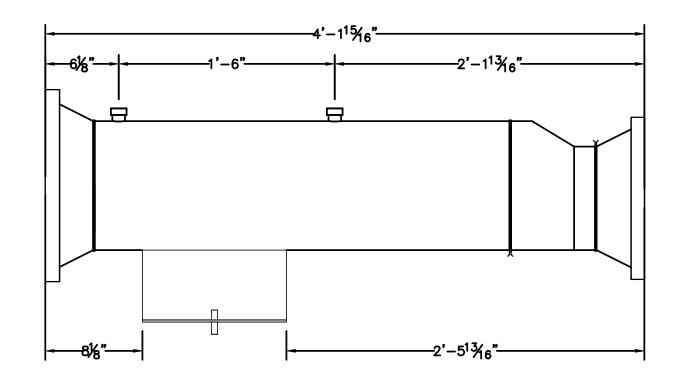
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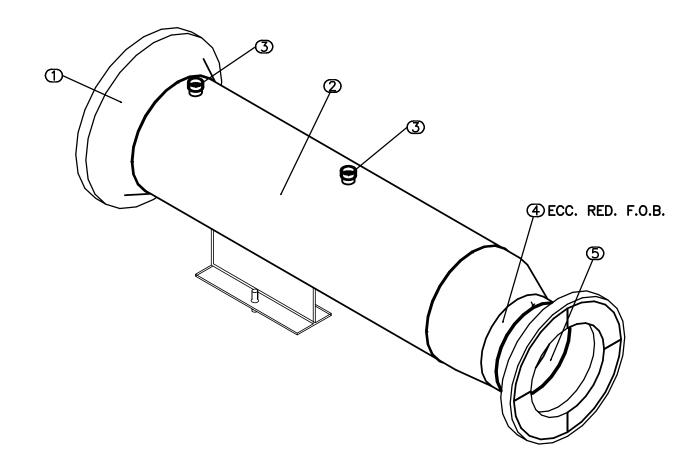
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DRAWING NO./TRACKING NO.
210140—A002—

		BOM-S	TEEL		
Item No	Order	Description	Qty	Size	Steel L
S8	WT6x7		3		12*



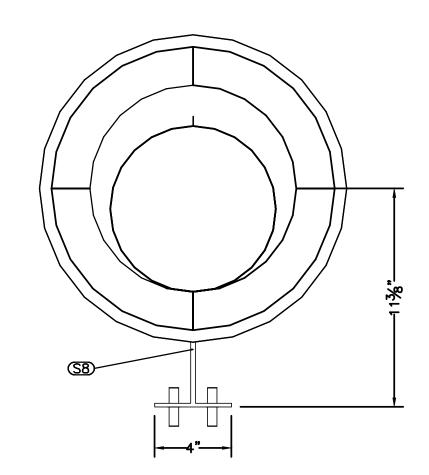




		Murphy-PFFS-	SP	OC	L-BC)M		
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	
5	2	150lb RF Sch 40 Bore SA105 CS WN Flg					8	
1	2	150lb RF Sch 40 Bore SA105 CS WN Flg					10	
4	2	Std Wt SA234 WPB CS BW ECC RED					10x8	L
3	4	3000# FS Thread-0-Let			1 1/16"	1.063	3/4x10	[
2	2	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	2'-10 9/16"	34.558	10	

		BOM-S	TEEL		
Item No	Order	Description	Qty	Size	Steel L
S8	WT6x7		2		12 "

QUANTITY OF 2



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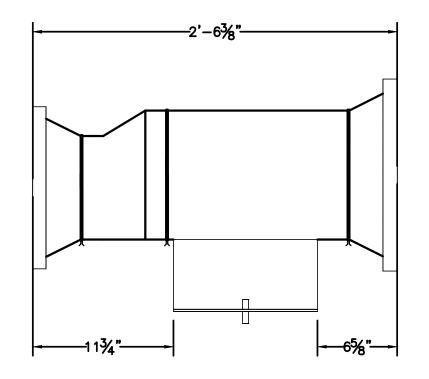
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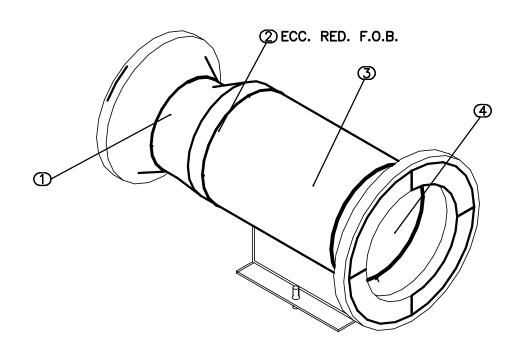
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		SERVICE NAME	VAME
REF.DWG.			210
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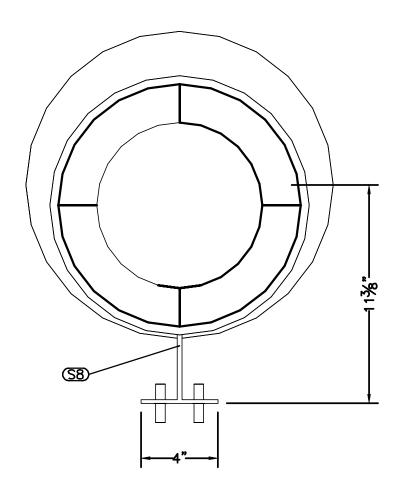




		Murphy-PFFS-SF	200)L-	BO	М	
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
4	2	150lb FF Sch 40 Bore SA105 CS WN Flg					10
1	2	150lb RF Sch 40 Bore SA105 CS WN Flg					8
2	2	Std Wt SA234 WPB CS BW ECC RED					10x8
3	2	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-3"	14.995	10

	[BOM-S	TEEL		
Item No	Order	Description	Qty	Size	Steel L
S8	WT6x7		2		12"

QUANTITY OF 2



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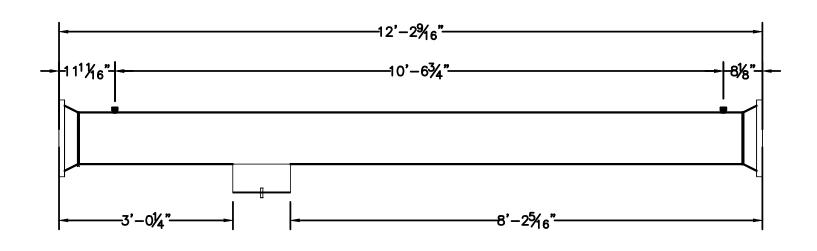
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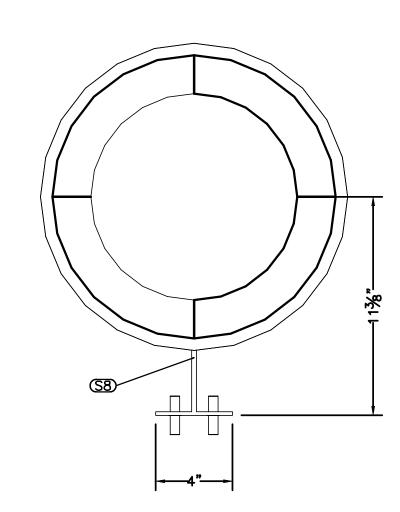
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			Murphy-PFFS-	-SF	00)L-B(MC		
Ī	Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	
	1	4	150lb RF Sch 40 Bore SA105 CS WN Flg					10	
	3	4	3000∯ FS Thread—0—Let			1*	1.000	1/2x10	ı
	2	2	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	11'-6 5/16"	138.291	10	L

		BOM-S	TEEL		
Item No	Order	Description	Qty	Size	Steel L
S8	WT6x7		2		12"

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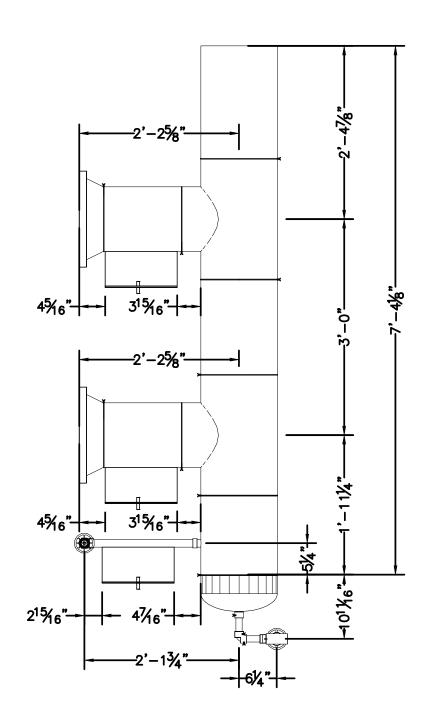
1233 N. Price Rd. St. Louis, MO 63132-2303 314-997-6600 phone BIMCAD@murphy-stl.com

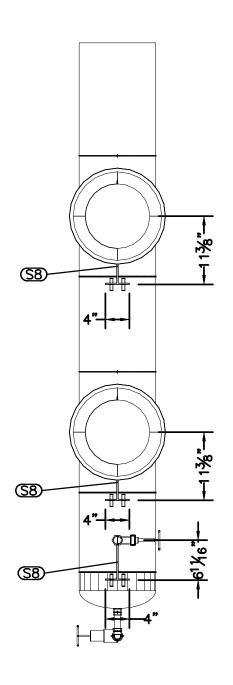
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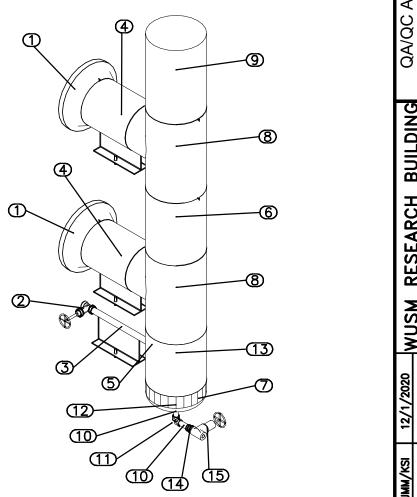
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		Murphy-PFFS-	SP) 	L-BC	DM		N
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	CONSTRI
8	2	Std Wt SA234 WPB CS BW RED TEE					12x10	
15	1	800# FS BB OS&Y Gate Valve SW					3/4	3
2	1	T-134 Gate Valve					1	
1	2	150lb RF Sch 40 Bore SA105 CS WN Flg					10	
14	1	3M FS SW Cplg					3/4	_
7	1	Std Wt SA234 WPB CS BW Cap					12	₫
11	1	3M A105 FS SW 90 Deg Ell					3/4	ΑT
12	1	3000∯ FS Soc-0-Let			1 1/16°	1.063	3/4x12	WEIGHT/ORIENTATION
5	1	3000∦ FS Thread-0-Let			1 5/16"	1.313	1x12	
4	2	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-0 7/8"	12.872	10	
6	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-3 3/4"	15.750	12	를
9	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-6 3/4"	18.750	12	WE
13	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	1'-1 1/8"	13.136	12	
3	1	Sch 80 A106B CS SMLS Pipe	MPT	MPT	1'-6"	18.000	1	FLANGE
10	2	Sch 80 A106B CS SMLS Pipe	SW	SW	3**	3.000	3/4	급 :

		BOM-S1	ΓEEL		
Item No	Order	Description	Qty	Size	Steel L
S8	WT6x7		3		12"



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