

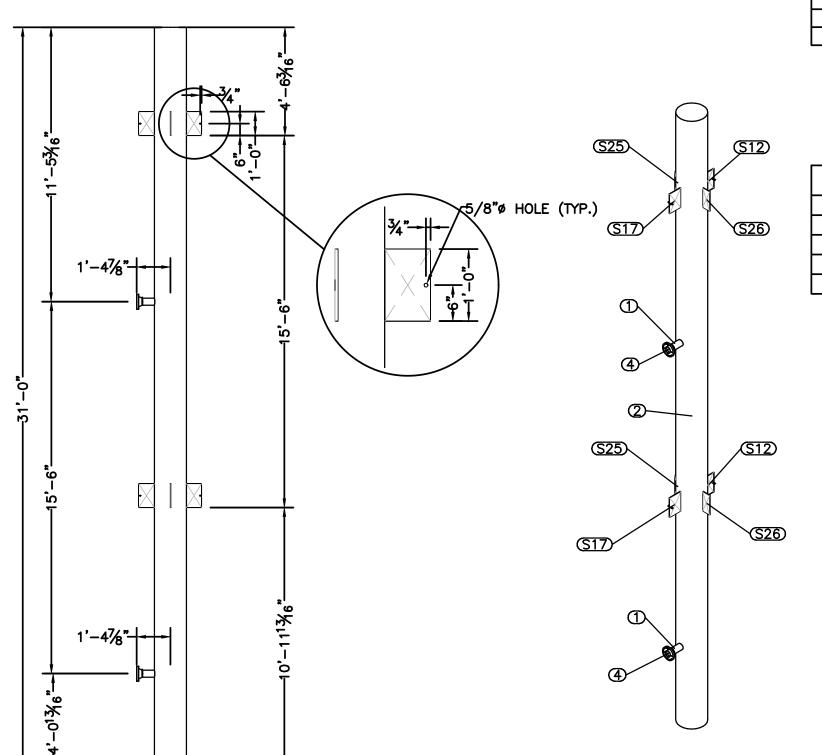
		Murphy-PFFS-S	PO	OL-	-BC	M	
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	2	Sch 40 SA-53B CS ERW Pipe Saddle			6"	6.000	16x3
3	2	150lb RF Sch 40 Bore SA105 CS WN Flg					3
2	1	Std Wt SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	16

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k	Qty	Description	End 1	End 2	Lft	LDec	Size	CONSTRUCT
	2	Sch 40 SA-53B CS ERW Pipe Saddle			6"	6.000	16x3	12 St.
	2	150lb RF Sch 40 Bore SA105 CS WN Flg					3	31
	1	Std Wt SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	16	BIN

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	CTORS	•ENGINEERS	MECHA	NICAL •	INDUSTRI	AL.
CONSTRU						

	ВОМ-	-STEEL-PLA	TE	
Item No	Size	Description	Qty	Area (sq ft)
S12	12.000 x 7.625	ASTM A36 CS Plate 1/2" Thick	2	0.816
S25	12.000 x 3.875	ASTM A36 CS Plate 1/2" Thick	2	0.450
S17	12.000 x 7.875	ASTM A36 CS Plate 1/2" Thick	2	0.840
S24	12.000 x 5.688	ASTM A36 CS Plate 1/2" Thick	2	0.627

DRN CHK	NOIL	DESCRIPTION	DATE	REV DATE		NI3EN-04-01	710170
				0		210140_DICED_04_01	010170
				ا ا	IT: SHT/NO REV	KING NO.	DRAWING NO./TRACKING NO.
NA MURPHY WPS#	¥ ¥	¥	¥	¥		1	KEr.UWG.
					10140-RISER-04		
COMMENTS	X-RAY HYDRO TEST PWHT	X-RAY HYD	ASME	SPFC		SERVICE NA	
ATION	SPOOL IDENTIFICATION				MEOII NISENS	140	JOB NO. 210140
I'D TIGHT	BOLTS/CPLG'S/TH'D TIGHT						APP
NOIL	FITTING ORIENTATION						CHK
ORIENTATION	FLANGE WEIGHT/ORIENTATION		QA/QC ACCEPT		RESEARCH BILLIDING	7/16/2021 WIISM	DRN JMM



		Murphy-PFFS-S	PO	OL-	-BC	M		
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	
3	2	CS Sch40 Butt Weld Joint					3	
1	2	Sch 40 SA-53B CS ERW Pipe Saddle			6"	6.000	16x3	
4	2	150lb RF Sch 40 Bore SA105 CS WN Flg					3	
2	1	Std Wt SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	16	

	BOM-	-STEEL-PLA	TE	
Item No	Size	Description	Qty	Area (sq ft)
S12	12.000 x 7.625	ASTM A36 CS Plate 1/2" Thick	2	0.816
S26	12.000 x 4.875	ASTM A36 CS Plate 1/2" Thick	2	0.548
S17	12.000 x 7.875	ASTM A36 CS Plate 1/2" Thick	2	0.840
S25	12.000 x 3.875	ASTM A36 CS Plate 1/2" Thick	2	0.450

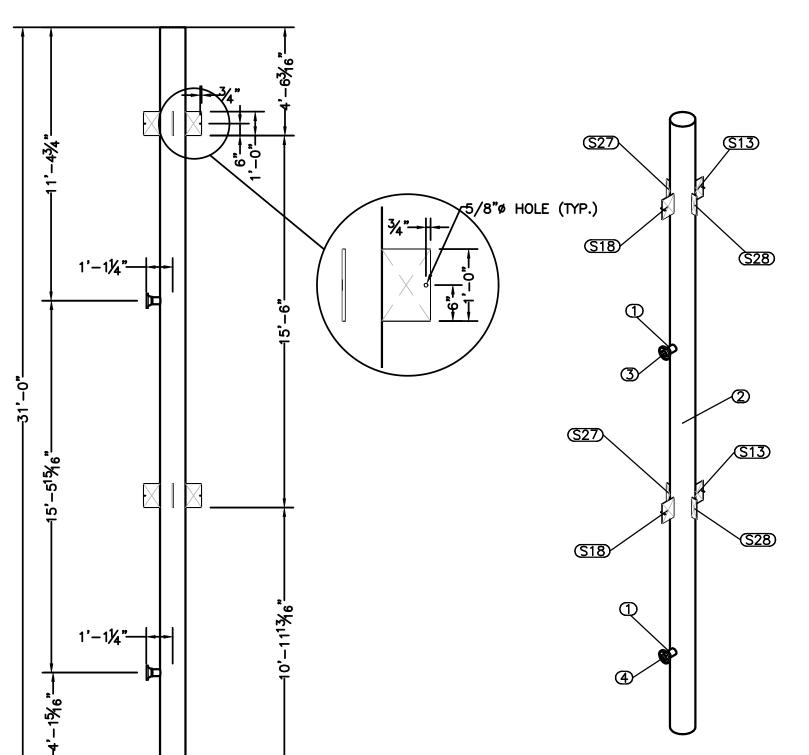
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CONSTRUCTORS - CHIGHEERS MECHANICAL - INDUSTRIAL

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

₽S#	#SAM AHANNM	NA N	N	
COMMENTS	8	THWH	HYDRO TEST	£
	ATION	SPOOL IDENTIFICATION	SPOOL	
⊨	4'D TIGH	BOLTS/CPLG'S/TH'D TIGHT	BOLTS,	
	VOIT	FITTING ORIENTATION	FITTIN	
'ATION	ORIENT	FLANGE WEIGHT/ORIENTATION	FLANG	

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1/16/2021		WIND TO TOO TO TOO TO TOO TO TOO TO TOO TO T	<u> </u>		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	DAVICE ACCEPT	
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	2						
140	Σ	MECH RISERS					- 1
	SERVICE NAME						ı
				SPEC.	ASME	E X-RAY	≽
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		_ PO_	>	PEV DATE	DATE		_



		Murphy-PFFS-S	PO	OL-	-BC	M		
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	ı
4	2	CS Sch40 Butt Weld Joint					3	ı
1	2	Sch 40 SA-53B CS ERW Pipe Saddle			4"	4.000	12x3	ı
3	2	150lb RF Sch 40 Bore SA105 CS WN Flg					3	L
2	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	12	ſ

	BOM-	-STEEL-PLA	TE	
Item No	Size	Description	Qty	Area (sq ft)
S28	12.000 x 3.500	ASTM A36 CS Plate 1/2" Thick	2	0.414
S13	12.000 x 8.125	ASTM A36 CS Plate 1/2" Thick	2	0.864
S27	12.000 x 5.000	ASTM A36 CS Plate 1/2" Thick	2	0.560
S18	12.000 x 8.250	ASTM A36 CS Plate 1/2" Thick	2	0.877

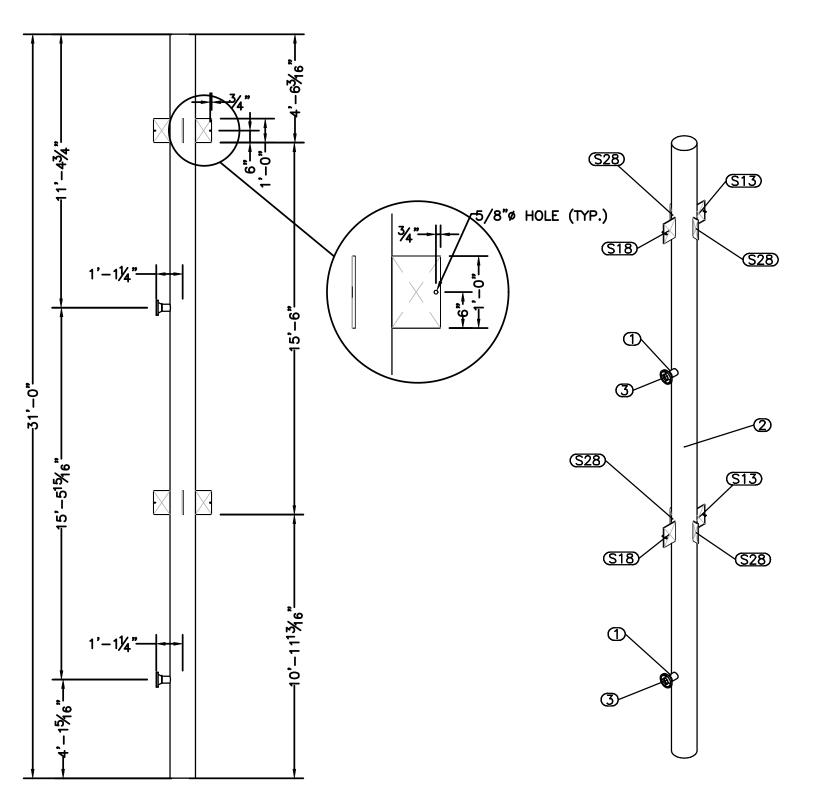
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St. Louis, MO 63132-2303
314-997-6600 phone
BIMCAD@murphy-stl.com

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	∦ Sd	Murphy wps#	NA N	¥	
	COMMENTS	8	PWHT	HYDRO TEST	Ħ
		ATION	SPOOL IDENTIFICATION	SPOOL	
	⊨	'D TIGH	BOLTS/CPLG'S/TH'D TIGHT	BOLTS	
		NOIL	FITTING ORIENTATION	FITIN	
	ATION	ORIENT	FLANGE WEIGHT/ORIENTATION	FLANG	

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			NKB					
		ME	MECH RISERS					
	SERVICE NAME	LAME			0100	ŀ	ļ.	2
	٠	77077	210140_DISFB_04		SPEC.	ASME	¥	X-18
	4	Γ - - -	10 NISEN 04		Ą	¥	L	Ą
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			Murphy-PFFS-S	PO	OL-	-BC	M		MUR
Ī	Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	CONSTRUCTORS •ENGINEERS
ĺ	1	2	Sch 40 SA-53B CS ERW Pipe Saddle			4"	4.000	12x3	1233 N. Price St. Louis, MO
ı	3	2	150lb RF Sch 40 Bore SA105 CS WN Flg					3	314-997-660
ı	2	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	12	BIMCAD@murp
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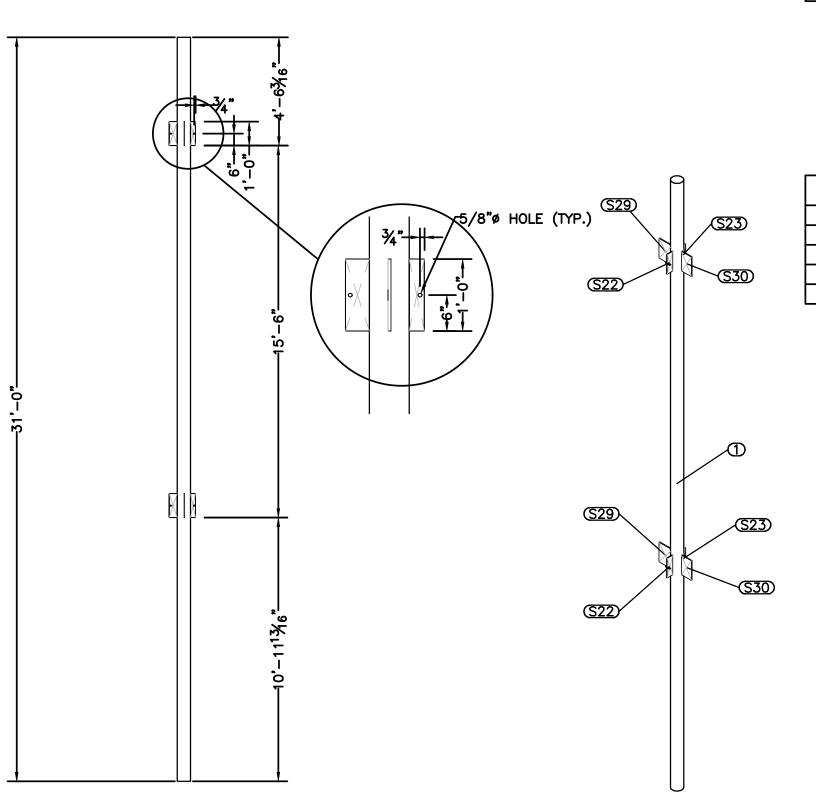
CONSTRUCTORS EMBINEERS MECHANICAL INDUSTRIAL

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

	ВОМ-	-STEEL-PLA	ΤE	
Item No	Size	Description	Qty	Area (sq ft)
S28	12.000 x 3.500	ASTM A36 CS Plate 1/2" Thick	2	0.414
S13	12.000 x 8.125	ASTM A36 CS Plate 1/2" Thick	2	0.864
S28	12.000 x 3.500	ASTM A36 CS Plate 1/2" Thick	2	0.414
S18	12.000 x 8.250	ASTM A36 CS Plate 1/2" Thick	2	0.877

MURPHY WPS#	NA NA	NA NA	NA NA
COMMENTS			
ATION	SPOOL IDENTIFICATION	- SF	
I'D TIGHT	BOLTS/CPLG'S/TH'D TIGHT	BC	
TION	FITTING ORIENTATION	证	
ORIENTATION	FLANGE WEIGHT/ORIENTATION	FL	QA/QC ACCEPT

1/10/2021		CALLED TO THE BEAT ABOUT 1502 (0.1)	<u></u>
	MOOM NE		
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140	ME	MECH RISERS	
	SERVICE NAME		
	21017	210140-RISER-04	
CKING NO.	بر	SHT/NO R	REV
RISFR-04-04	4-04 1	101	C



		Murphy-PFFS-	SPC	OL	-BC	MC	
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	6

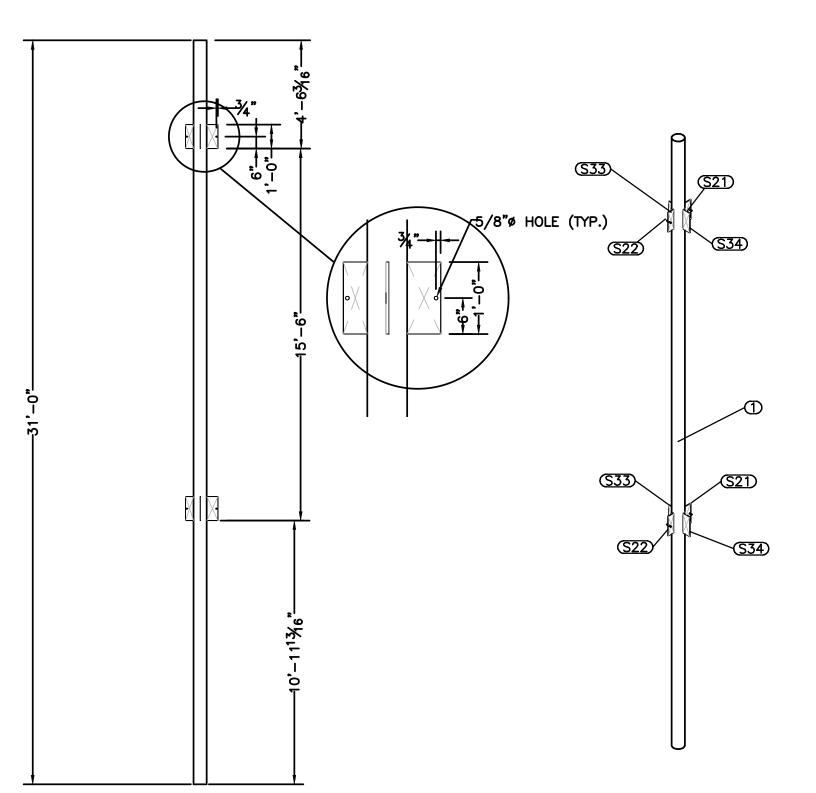
	ВОМ-	-STEEL-PLA	TE	
Item No	Size	Description	Qty	Area (sq ft)
S30	12.000 x 7.000	ASTM A36 CS Plate 1/2" Thick	2	0.755
S29	12.000 x 9.250	ASTM A36 CS Plate 1/2" Thick	2	0.974
S23	12.000 x 2.500	ASTM A36 CS Plate 1/2" Thick	2	0.317
S22	12.000 x 4.000	ASTM A36 CS Plate 1/2" Thick	2	0.463

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СОМЗТВИСТОВЯ ВНОВНЕВЯ МЕСЬНОМИ МОИЗТВИЛЬ

1233 N. Price Rd.
St. Louis, MO 63132—2303
314—997—6600 phone

WIISM BESEABCH BIIII DING	DING	QA/QC	QA/QC ACCEPT	FLANG	FLANGE WEIGHT/ORIENTATION	DRIENTATIC	_ N	
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:				BOLTS	BOLTS/CPLG'S/TH'D TIGHT	D TIGHT		1-99 CAD
MECH RISERS				SPOOL	SPOOL IDENTIFICATION	VOIT		97–6 @mi
SERVICE NAME			F	1	t ave			6600 urph
T 010140_DISFD_04		SPEC. AS	ASME X-KAT	A-KAT HTDRO IESI		COMMENIS	0) 1y-
2 1 0 1 +0 NISEN		¥	W.	¥	NA NA	MURPHY WPS#		pho -stl
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		Murphy-PFFS-:	SPC	OL	-B(MC	
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	1	Sch 40 SA-53B CS ERW Pipe PE	BEV	BEV	31'-0"	372.000	6

	ВОМ-	-STEEL-PLA	TE	
Item No	Size	Description	Qty	Area (sq ft)
S22	12.000 x 4.000	ASTM A36 CS Plate 1/2" Thick	2	0.463
S33	12.000 x 3.250	ASTM A36 CS Plate 1/2" Thick	2	0.390
S21	12.000 x 5.563	ASTM A36 CS Plate 1/2" Thick	2	0.615
S34	12.000 x 4.813	ASTM A36 CS Plate 1/2" Thick	2	0.5 4 2

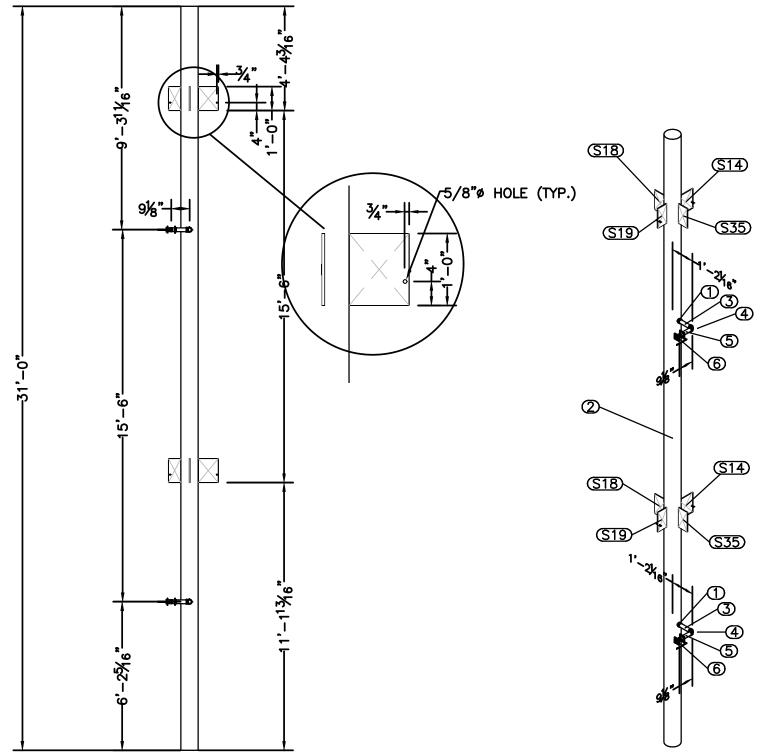
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CONSTRUCTORS *CHORREERS MECHANICAL * INDUSTRIAL

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

DRN JMM 7/16/2021	WIND DESERBEL BILLDING		QA/QC ACCEPT	ËΡΤ	FLANGE WE	FLANGE WEIGHT/ORIENTATION	
	WOSM NESERNOI BOILDING				FITTING ORIENTATION	ENTATION	
					BOLTS/CPL	BOLTS/CPLG'S/TH'D TIGHT	
JOB NO. 210140	MECH RISERS				SPOOL IDEN	SPOOL IDENTIFICATION	
	SERVICE NAME	SPEC.	ASME	X-RAY	X-RAY HYDRO TEST PWHT	T COMMENTS	
	Z10140-KISEK-04	AM	1	N N	N N	MIRRE	
DRAWING NO./TRACKING NO.	QTY. SHT/NO REV	<u> </u>	= { -	£	<u> </u>	ı	
	_	0					
Z I U I 4U-RISER-U4-U0	4-06 1 10FI 0	REV	DATE	DESC	DESCRIPTION	DRN CHK	APP

NOTE: PLATE IS 2" ON THE MPS LINE THAN THE OTHERS ON THE RISER FOR EXPANSION.



		Murphy-PFFS-S	SPC)OL	. – B	ОМ		
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	
6	2	83A-140 CS 1500 lb 3pc FP Ball Valve THD					1-1/2	
4	2	3M A105 FS SW 90 Deg Ell					1-1/2	
1	2	3000∯ FS Soc-0-Let			1 3/8"	1.375	1-1/2x8	L
2	1	Sch 40 SA-53B CS Smls Pipe PE	BEV	BEV	31'-0"	372.000	8	ַ
5	2	Sch 80 A106B CS SMLS Pipe	SW	MPT	6"	6.000	1-1/2	١.
3	2	Sch 80 A106B CS SMLS Pipe	SW	SW	7 3/8"	7.374	1-1/2	

	BOM-	-STEEL-PLA	ΓΕ	
Item No	Size	Description	Qty	Area (sq ft)
S18	12.000 x 8.250	ASTM A36 CS Plate 1/2" Thick	2	0.877
S14	12.000 x 10.000	ASTM A36 CS Plate 1/2" Thick	2	1.047
S35	12.000 x 6.250	ASTM A36 CS Plate 1/2" Thick	2	0.682
S19	12.000 x 6.250	ASTM A36 CS Plate 1/2" Thick	2	0.682

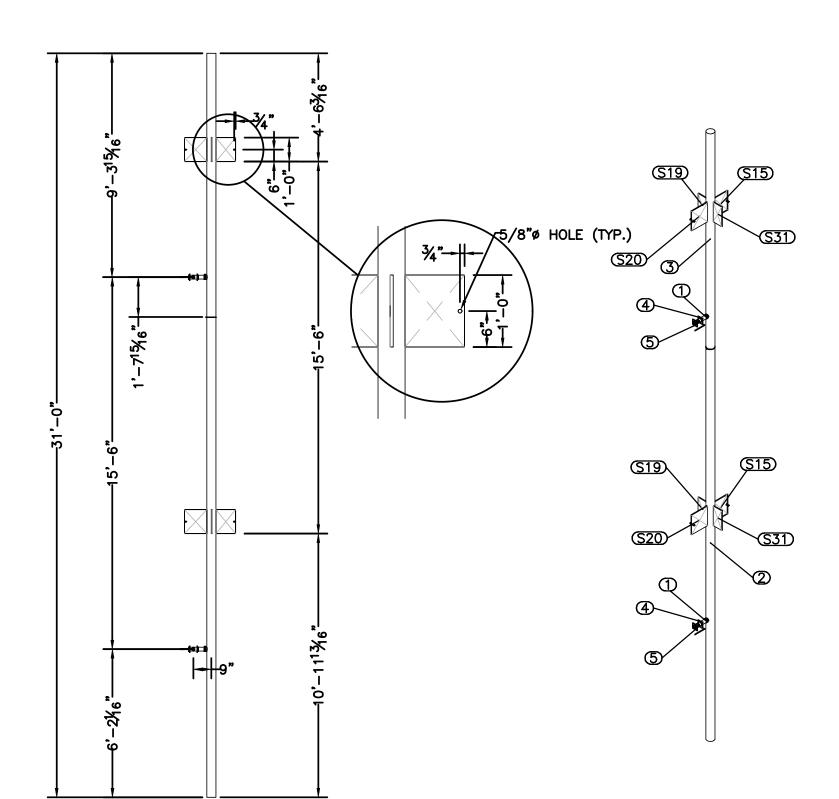
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CONSTRUCTORS •ENGINEERS MECHANICAL • INDUSTRIAL 1233 N. Price Rd. St. Louis, MO 63132-2303 314-997-6600 phone BIMCAD@murphy-stl.com

QQV	NOC	200		1
	#S ∦	MURPHY WPS#	NA M	
	COMMENTS	8	PWHT	ĭ
		ATION	OL IDENTIFICATION	ᆲ
	E	'D TIGH	"S/CPLG'S/TH'D TIGHT	Š
		NOIL	NG ORIENTATION	ž
	'ATION	ORIENT	IGE WEIGHT/ORIENTATION	9

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		Σ	Ä	MECH RISERS	_			SPOOL
T	SERVICE NAME	AME				ŀ	ŀ	
Т	C	1	7	210140_DISED_04	<u>හ</u>	SPEC. ASI	ASME X-RAY HYDRO TEST	MDRO TEST
	7	2	-	FU-NISEN-U4	Z	X	¥	¥
		ΩT.		SHT/NO	REV			
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MECH RIS	SERVICE NAME	 NG NO. QTY. SHT/NO	0-RISER-04-07 1 1 1 1 1 1 1
210140		/TRACKING NO.)-RISE



		Murphy-PFFS-	SP	OC)L-B	ОМ		M
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size	CONSTRUCTORS
5	2	83A-140 CS 1500 lb 3pc FP Ball Valve THD					1-1/2	1233 St. L
1	2	3000# FS Soc-0-Let			1 3/8"	1.375	1-1/2x4	314- BIMC
2	1	XH SA-53B CS SMLS Pipe	BEV	BEV	20'-0"	240.000	4	Billio
3	1	XH SA-53B CS SMLS Pipe	BEV	BEV	10'-11 7/8"	131.860	4	
4	2	Sch 80 A106B CS SMLS Pipe	SW	MPT	4"	4.000	1-1/2	7

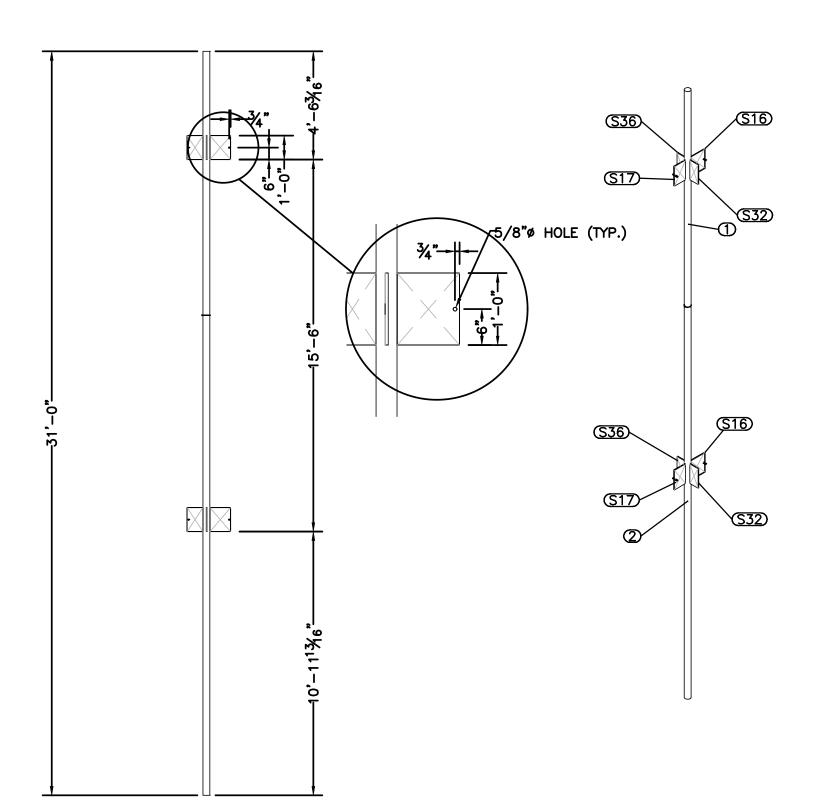
	ВОМ-	-STEEL-PLA	ΤΕ	
Item No	Size	Description	Qty	Area (sq ft)
S31	12.000 x 6.000	ASTM A36 CS Plate 1/2" Thick	2	0.657
S15	12.000 x 9.875	ASTM A36 CS Plate 1/2" Thick	2	1.035
S19	12.000 x 6.250	ASTM A36 CS Plate 1/2" Thick	2	0.682
S20	12.000 x 11.250	ASTM A36 CS Plate 1/2" Thick	2	1.169

33 N. Price . Louis, MO 4-997-66	631	
MCAD@mur		

DRN CHK		DESCRIPTION	DESC	DATE	, c
MURPHY WPS#	NA MURP	¥	¥	¥	≰
COMMENTS	PWHT	HYDRO TEST	X-RAY	ASME	EC.
NOI	SPOOL IDENTIFICATION	SPOOLI			
TIGHT	BOLTS/CPLG'S/TH'D TIGHT	BOLTS/(
N.	FITTING ORIENTATION	FITTING			
IENTATION	FLANGE WEIGHT/ORIENTATION	FLANGE	CEPT	QA/QC ACCEPT	Q

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BUILDING				<u>چ</u>	C
	.RS	/U-d			Ţ.
RESEARCH NRB	4 RISERS	. NAME 210140-DISEP-04		SHT/NO	, L
	MECH	AME 101 <i>1</i> 0	2	<u>oπ.</u>	_
MSO/		ERVICE NAME 21(1		α C I

DRN JMM	7/16/2021	WIICH	ו סבי
CHK			
APP			
JOB NO. 210	210140		ME
		SERVICE NAME	AME
REF.DWG.		.7	21017
DRAWING NO./TRACKING NO.	ACKING NO.		QTY.
210140-	210140-RISER-04-08	 	_



	1	durphy-PFF	S-:	SPC	OL-BO	MC	
Mark	Qty	Description	End 1	End 2	Lft	LDec	Size
1	1	XH SA-53B CS SMLS Pipe	BEV	BEV	10'-11 7/8"	131.860	3
2	1	XH SA-53B CS SMLS Pipe	BEV	BEV	20'-0"	240.000	3

	MURPHY SINCE 1907
ze	CONSTRUCTORS • ENGINEERS MECHANICAL • INDUSTRIAL
3	1233 N. Price Rd. St. Louis, MO 63132-2303
7	314-997-6600 phone

314-997-6600 phone BIMCAD@murphy-stl.com

	BOM-	-STEEL-PLA	ΤE	
Item No	Size	Description	Qty	Area (sq ft)
S16	12.000 x 10.375	ASTM A36 CS Plate 1/2" Thick	2	1.084
S32	12.000 x 5.875	ASTM A36 CS Plate 1/2" Thick	2	0.645
S36	12.000 x 5.500	ASTM A36 CS Plate 1/2" Thick	2	0.609
S17	12.000 x 7.875	ASTM A36 CS Plate 1/2" Thick	2	0.840

MSI IW	RF	WUSM RESEARCH BUILDING		QA/QC,	QA/QC ACCEPT	FLANG	FLANGE WEIGHT/ORIENTATION	ORIENT/	NOIT
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	Ì	מטוטוס - וכ				BOLTS	BOLTS/CPLG'S/TH'D TIGHT	'D TIGH	
	ME	MECH RISERS	1			SPOOL	SPOOL IDENTIFICATION	ATION	
SERVICE NAME	F F			SPEC. ASA	ASME X-RAY HYDRO TEST PWHT	HYDRO TEST	PWHT	8	COMMENTS
7	0	Z10140-RISEK-04	2	3	AN AN	ΨV	ı	#SOM AHGGIIN	
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