



UNITIZED DISTRIBUTION SUBSTATION (UDS) OFFERING

ESSMETRON
1505 West 3rd Ave
Denver, CO 80223
303-592-1903



UDS STANDARD OFFERINGS

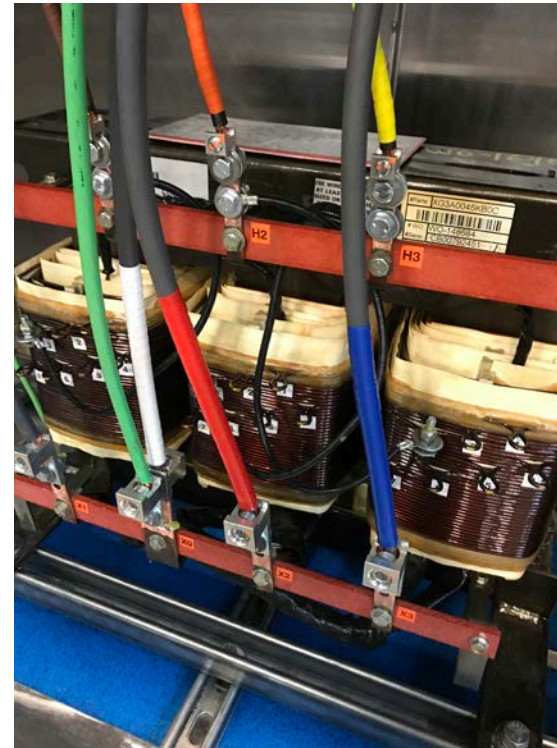
- Overall construction is NEMA 1 with the panelboard, automatic transfer switch, and circuit breaker areas constructed within a dedicated area built to NEMA 12 standards.
- Free standing structure
- Heavy duty construction
- Internally mounted transformer and panelboards
- Cold rolled steel
- Powder coat paint finish
- Typical enclosure dimensions 42" W x 97" H x 20" D
- Dead front doors
- UL listed





UDS ELECTRICAL OPTIONS

- Single or three phase transformer
 - Copper or aluminum wound
 - 80°C and 115°C rise
- Single phase transformers 15kVA to 37.5kVA
 - 480V to 204V/120V
- Three phase transformers 15kVA to 75kVA
 - 480V Delta to 208V/120V Wye
 - 480V Delta to 480V/277V Wye
- Primary/Secondary fused or main breaker disconnect
- Automatic Transfer Switch
- Transient Voltage Surge Suppressor
- Custom modifications available





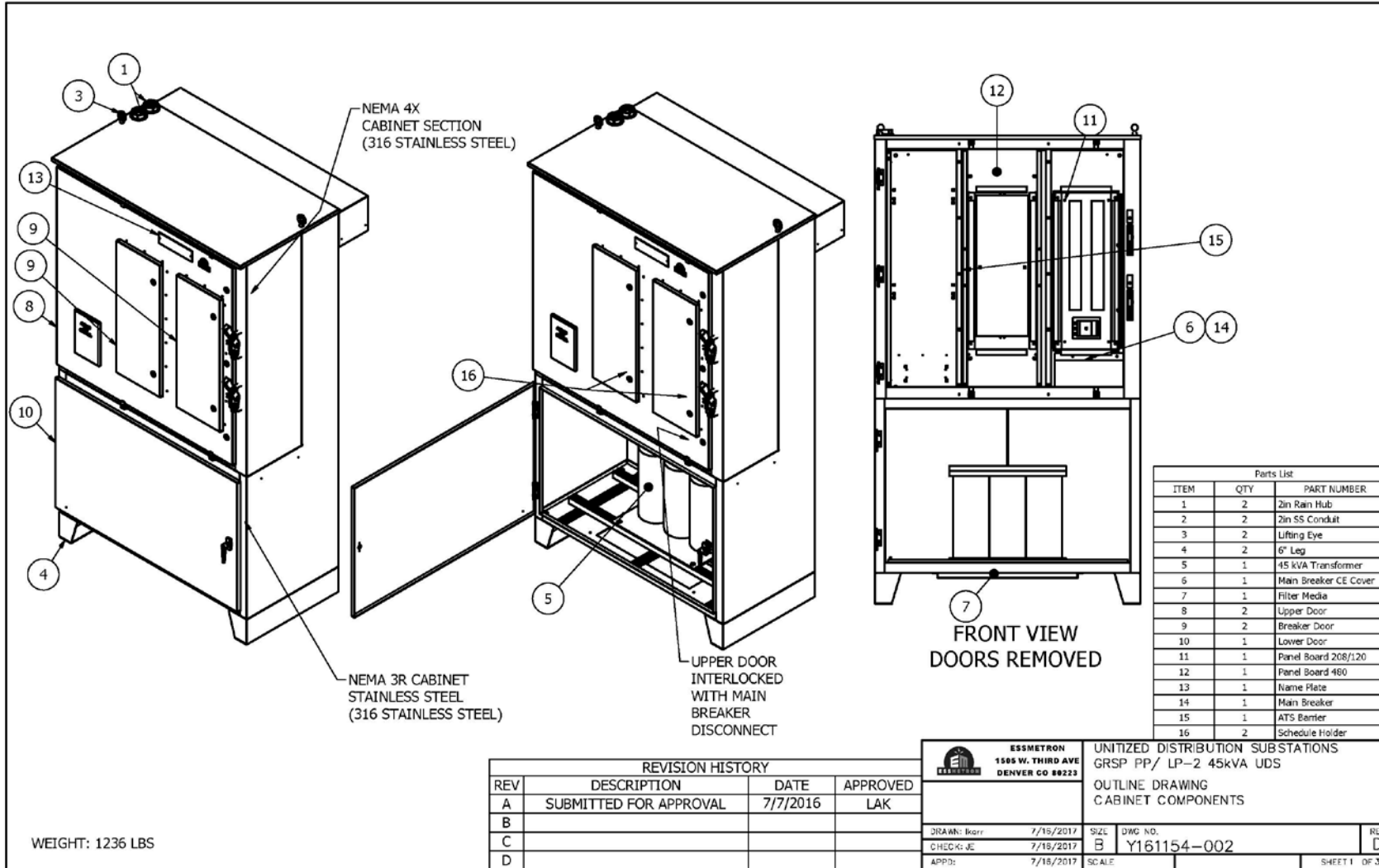
UDS ENCLOSURE OPTIONS

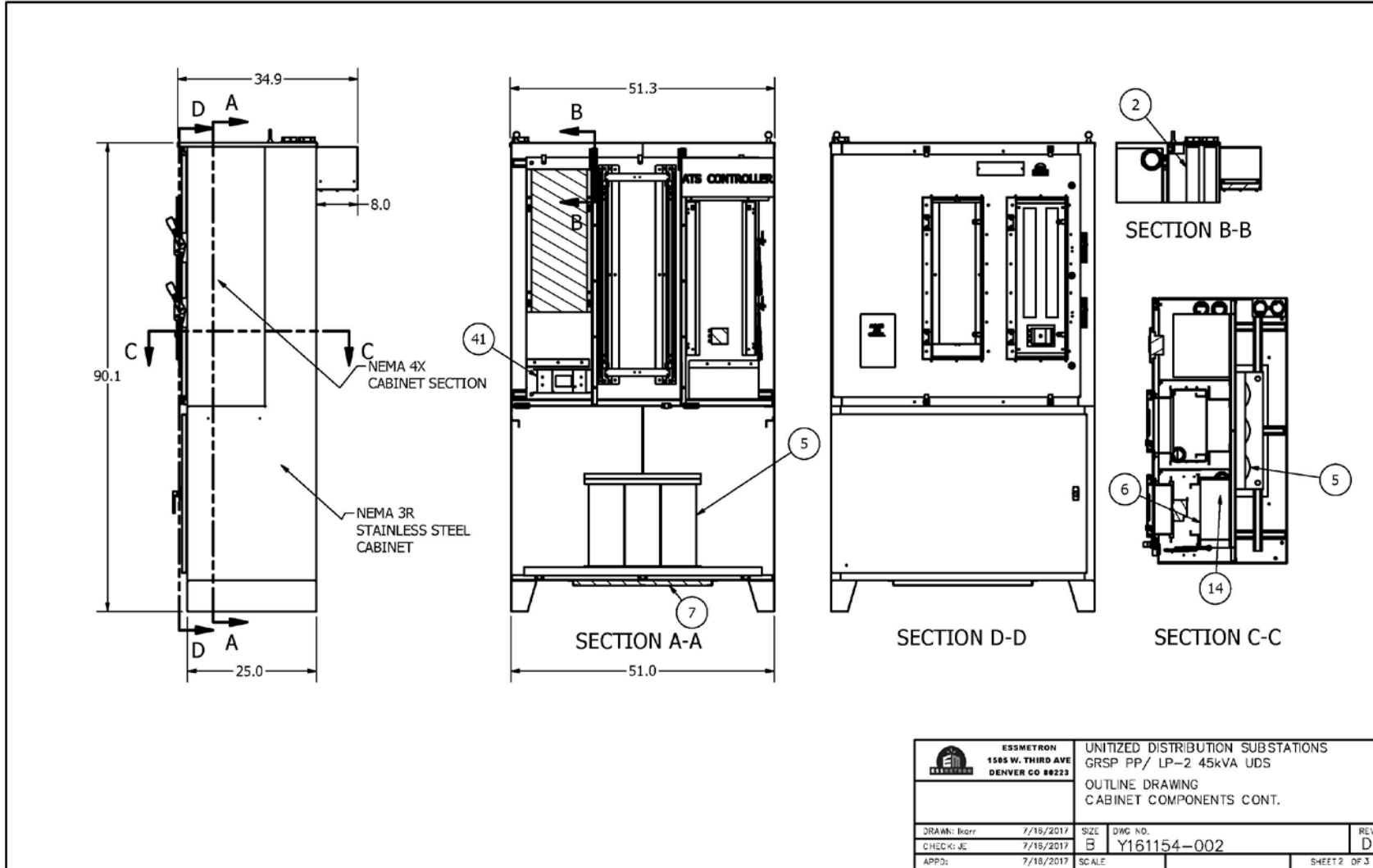
- Stainless steel – 304, 304L, 316, 316L
- Type 3R
- Isolated transformer, panelboard, and controls compartments.
- Keyed or padlockable deadfront doors
- Compartment doors mechanically interlocked with disconnect switch
- Coastal paint to C57.12.29 on stainless for harsh environments
- Rear heat dissipation for isolated transformer

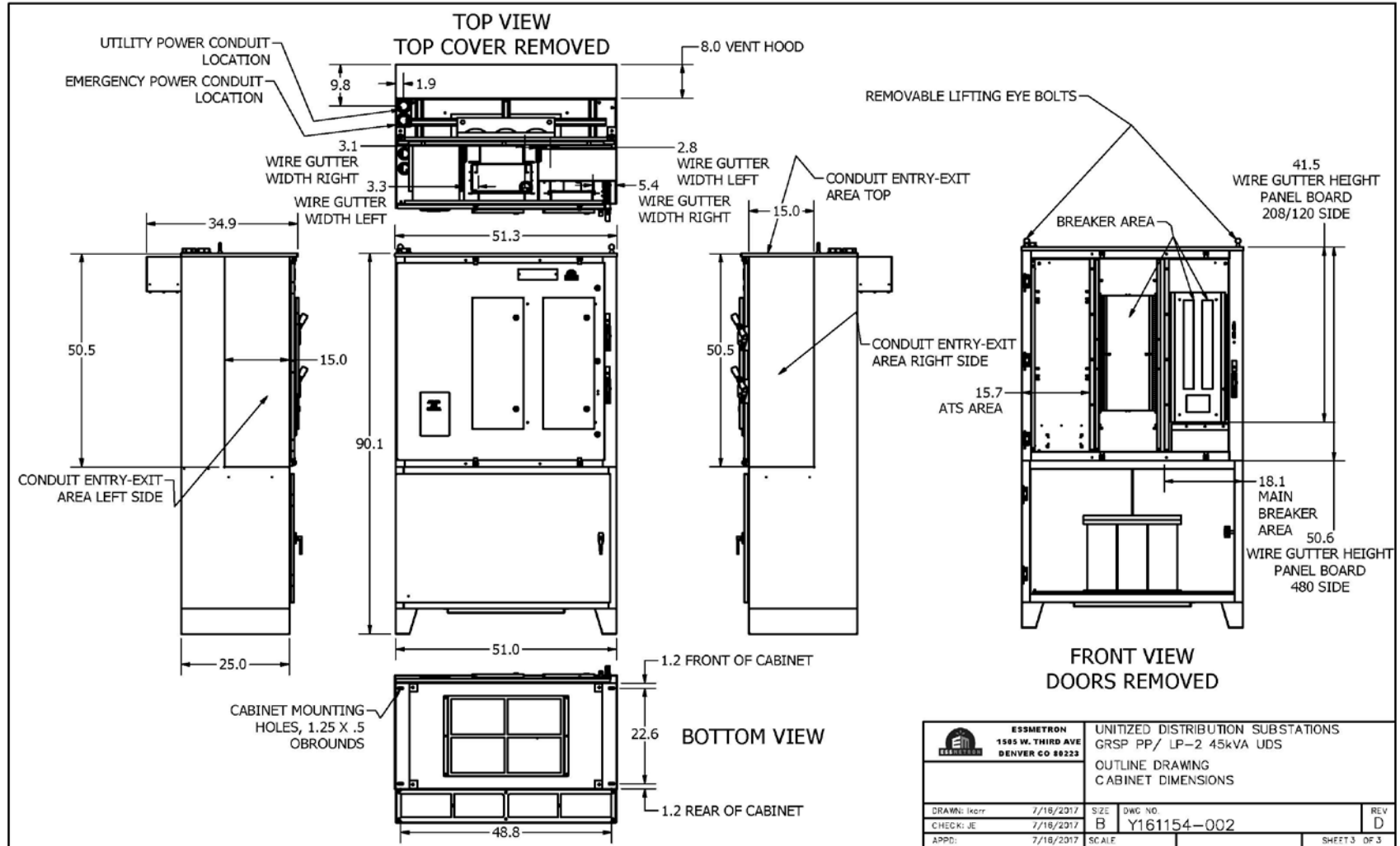


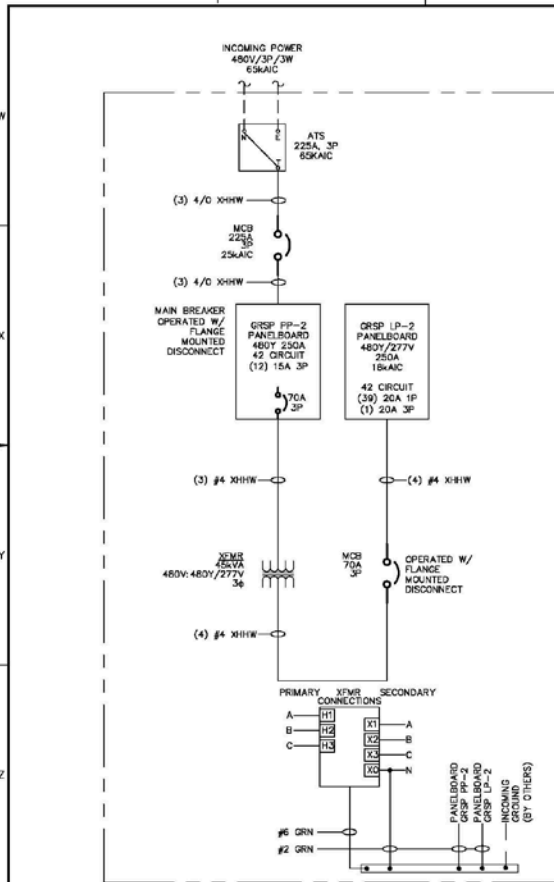


DESIGN PACKAGE EXAMPLE









GRSP PP-2											
LOCATION: GREASE PROCESSING			NEMA: 4X			PH A WEIGHTED VA			2134		
VOLTS: 480			FEED: 480			PH B WEIGHTED VA			2134		
PHASE & WIRE: 3PH 3W			MTG. UDS			PH C WEIGHTED VA			2134		
INTERRUPT: 65 KAIC			BUS RATING: 250			EQUIP SIZING VA			6402		
			MAIN: CB			PANEL AMPS			7.7		
			MAIN RATING: MLO								
IC/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	IC/F	
I	GRSP OVERHEAD DOOR NO. 1	567	15A-3P	1	A	2		433	GRSP BRIDGE CRANE NO. 1	I	
I		567		3	B	4	15A-3P	433		I	
I		567		5	C	6		433		I	
I	GRSP OVERHEAD DOOR NO. 2	567	15A-3P	7	A	8		567	GRSP OVERHEAD DOOR NO. 3	I	
I		567		9	B	10	15A-3P	567		I	
I		567		11	C	12		567		I	
I	SPARE		15A-3P	13	A	14				I	
I				15	B	16	15A-3P		SPARE	I	
I				17	C	18				I	
I	SPARE		15A-3P	19	A	20				I	
I				21	B	22	15A-3P		SPARE	I	
I				23	C	24				I	
I	SPARE		15A-3P	25	A	26				I	
I				27	B	28	15A-3P		SPARE	I	
I				29	C	30				I	
I	SPARE		15A-3P	31	A	32				I	
I				33	B	34	15A-3P		SPARE	I	
I				35	C	36				I	
I	SPARE		15A-3P	37	A	38				I	
I				39	B	40	70A-3P		TRANSFORMER	I	
I	WELDING RECEPTACLES		15A-3P	41	C	42				I	

GRSP LP-2											
LOCATION: SHED CONTROL ROOM			NEMA: 4X			PH A WEIGHTED VA			3846		
VOLTS: 480/277			FEED: 480			PH B WEIGHTED VA			1735		
PHASE & WIRE: 3PH 4W			MTG. UDS			PH C WEIGHTED VA			1670		
INTERRUPT: 18 KAIC			BUS RATING: 250			EQUIP SIZING VA			11538		
			MAIN: MLO			PANEL AMPS			13.9		
IC/F	DESCRIPTION	LOAD (VA)	BKR	CIR	Ø	CIR	BKR	LOAD (VA)	DESCRIPTION	IC/F	
C	GREASE PROCESSING BUILDING NIGHT LIGHTING	1672	20A-1P	1	A	2		1165		C	
C	GREASE PROCESSING BUILDING ROOF LIGHTING	448	20A-1P	3	B	4	20A-3P	940	GRSP LC-2A (GRSP LIGHTING INTERIOR)	C	
C	BOILER ROOM LIGHTING	372	20A-1P	5	C	6		964		C	
C	MECHANICAL & MAINTENANCE ROOM LIGHTING	240	20A-1P	7	A	8	20A-1P		SPARE	C	
I	SPARE		20A-1P	9	B	10	20A-1P		SPARE	I	
I	SPARE		20A-1P	11	C	12	20A-1P		SPARE	I	
I	SPARE		20A-1P	13	A	14	20A-1P		SPARE	I	
I	SPARE		20A-1P	15	B	16	20A-1P		SPARE	I	
I	SPARE		20A-1P	17	C	18	20A-1P		SPARE	I	
I	SPARE		20A-1P	19	A	20	20A-1P		SPARE	I	
I	SPARE		20A-1P	21	B	22	20A-1P		SPARE	I	
I	SPARE		20A-1P	23	C	24	20A-1P		SPARE	I	
I	SPARE		20A-1P	25	A	26	20A-1P		SPARE	I	
I	SPARE		20A-1P	27	B	28	20A-1P		SPARE	I	
I	SPARE		20A-1P	29	C	30	20A-1P		SPARE	I	
I	SPARE		20A-1P	31	A	32	20A-1P		SPARE	I	
I	SPARE		20A-1P	33	B	34	20A-1P		SPARE	I	
I	SPARE		20A-1P	35	C	36	20A-1P		SPARE	I	
I	SPARE		20A-1P	37	A	38	20A-1P		SPARE	I	
I	SPARE		20A-1P	39	B	40	20A-1P		SPARE	I	
I	SPARE		20A-1P	41	C	42	20A-1P		SPARE	I	

NOTES

⊗ DENOTES SHORTING TERMINAL BLOCK. ▴ DENOTES NEMA 4 HOLE PATTERN PROVISIONS
 X DENOTES TEST SWITCH. □ DENOTES FIELD WIRED TERMINAL BLOCK

480V WIRE COLORS: A-BROWN B-ORANGE C-YELLOW N-WHITE (AS NEEDED)
 208V WIRE COLORS: A-BLACK B-RED C-BLUE

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
1	AS BUILT	10/27/17	J.C.

UNITIZED DISTRIBUTION SUBSTATION
 SWBD-480V/3P/3W

ONE LINE
 GRSP PP/LP-2

ESSMETRON 1555 WEST THURS AVENUE DENVER, COLORADO 80229

DRAWN J.C. 6/30/16	SIZE B	DWG NO. Y161150-01	REV 1
CHECK R.S. 2/28/17	SCALE N.T.S.	SHEET 2	OF 8
APPO J.C. 2/28/17			