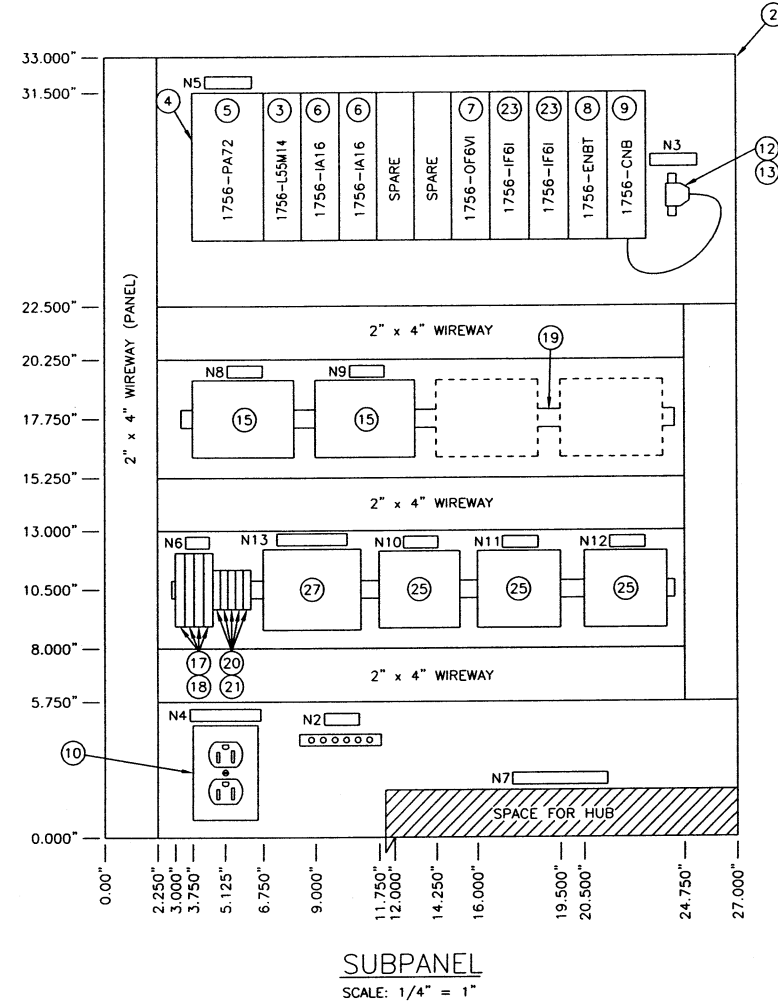
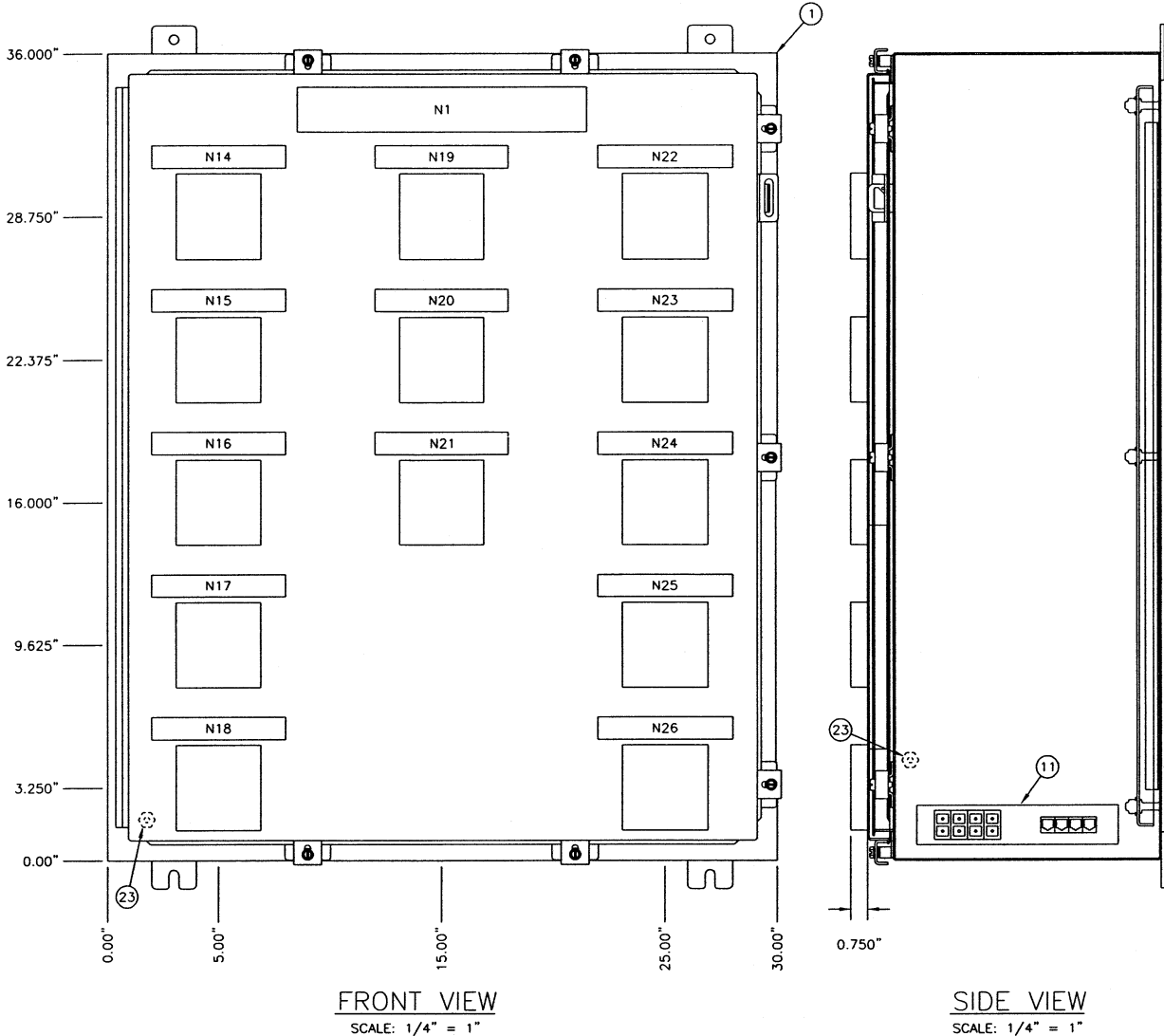


DATE	SYM	REVISION RECORD	AUTH	DR	CK
3/18/02	A	FOR APPROVAL	CUST	HR	BS
5/18/03	B	ADD FIC'S	CUST	RTR	DC

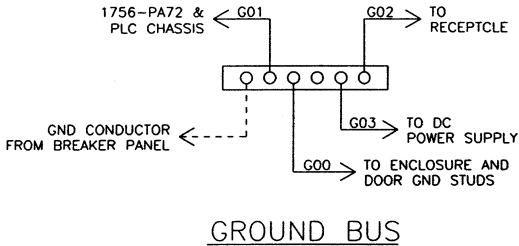
BILL OF MATERIAL

ITEM	QTY	USED FOR	DESCRIPTION
1	1	ENCLOSURE	HOFFMAN #A-36H30DLP, 36"H X 30"W X 12"D, TYPE 4
2	1	SUBPANEL	HOFFMAN #A-36P30, 33"H X 27"W
3	1	PROGRAMMABLE CONTROLLER	ALLEN BRADLEY #1756-L55M14, CONTROLLOGIX PROCESSOR 3.5mB USER MEMORY
4	1	CHASSIS	ALLEN BRADLEY #1756-A10, 10 SLOT
5	1	POWER SUPPLY	ALLEN BRADLEY #1756-PA72 120VAC, 70W MAX. OUTPUT
6	2	INPUT MODULE	ALLEN BRADLEY #1756-IA16, 16 POINT AC INPUT MODULE
7	1	ANALOG OUTPUT MODULE	ALLEN BRADLEY #1756-OF6V, 6 CHANNEL ISOLATED VOLTAGE OUTPUT
8	1	ETHERNET MODULE	ALLEN BRADLEY #1756-ENBT ETHERNET BRIDGE MODULE
9	1	MODULE	ALLEN BRADLEY #1756-CNB, SINGLE POINT NON-REDUNDANT CONTROLNET INTERFACE MODULE
10	1	RECEPTACLE	HUBBELL #CR5362GY WITH BOX & COVERPLATE 20 AMP 125 VOLT DUPLEX
11	1	MIXED-MEDIA HUB	GARRETTCOM MAGNUM #QS580 WITH (4) RJ-45 AND 4) 10MB ST-TYPE PORTS, (1) OPM10MST AND (1) OPM-RJ-45
12	1	CONTROLNET TAP	ALLEN BRADLEY #1786-TPS
13	13	SINGLE LOOP CONTROLLERS	OMEGA CN3251-F PROCESS CONTROLLER W/ 4-20mA OUTPUT NEMA-4X
14	1	GROUND BUS	ILSCO #D167-6 6 PPOINT COPPER GND BUS
15	2	DIGITAL I/O TERMINAL	ALLEN BRADLEY #1492-IFM20F INTERFACE MODULES
16	2	DIGITAL I/O CABLE	ALLEN BRADLEY #1492-CABLE010X WITH WIRING ARM NOT SHOWN
17	4	FUSE TERMINAL	PHOENIX CONTACT #UK6.3-HESI WITH 3 POS. BRIDGE EB10-10
18	4	F1, F2, F3, F4	BUSSMANN #AGC-5 5 AMP FAST-ACTING FUSE 1/4" X 1-1/4"
19	LOT	RAIL	PHOENIX CONTACT #NS35 MOUNTING RAIL
20	5	TERMINAL	PHOENIX CONTACT #UKN6
21	LOT	END BARRIER	PHOENIX CONTACT #D-UK 4/10
22	2	GND STUD	FOR ENCLOSURE AND DOOR
23	2	ANALOG INPUT MODULE	ALLEN BRADLEY #1756-IF6I 6 CHANNEL ISOLATED INPUT
24	2	AI CABLE	ALLEN BRADLEY #1492-ACABLE010X
25	3	ANALOG I/O TERMINAL	ALLEN BRADLEY #1492-AIFM6S-3
26	1	AO CABLE	ALLEN BRADLEY #1492-ACABLE010Y
27	1	DC VOLT SUPPLY	PHOENIX CONTACT #2939247, 120VAC INPUT, 24VDC OUTPUT @ 1.0A
28	LOT	NAMEPLATES	WHITE WITH BLACK CORE

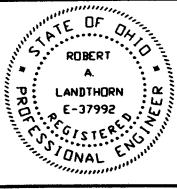


NAMEPLATES WHITE WITH BLACK LETTERING

	QTY	SIZE	LETTER SIZE	MTG. HOLES	LINE 1	LINE 2
N1	1	2" X 13"	1/2"	YES	OPERATOR'S	LABORATORY ENCLOSURE
N2	1	0.5" X 1.5"	1/4"	NO	GND BUS	
N3	1	0.5" X 2"	1/4"	NO	C-NET TAP	
N4	1	0.5" X 3"	1/4"	NO	RECEPTACLE	
N5	1	0.5" X 2"	1/4"	NO	PLC RACK	
N6	1	0.5" X 1"	1/4"	NO	TB1	
N7	1	0.5" X 4"	1/4"	NO	MIXED-MEDIA HUB	
N8	1	0.5" X 1.5"	1/4"	NO	TB101	
N9	1	0.5" X 1.5"	1/4"	NO	TB102	
N10	1	0.5" X 1.5"	1/4"	NO	TB105	
N11	1	0.5" X 1.5"	1/4"	NO	TB106	
N12	1	0.5" X 1.5"	1/4"	NO	TB107	
N13	1	0.5" X 3"	1/4"	NO	DC VOLT SUPPLY	
N14	1	1" X 6"	1/4"	NO	FIC 4	SEC. CLARIFIER VALVE #1
N15	1	1" X 6"	1/4"	NO	FIC 5	SEC. CLARIFIER VALVE #2
N16	1	1" X 6"	1/4"	NO	FIC 6	SEC. CLARIFIER VALVE #3
N17	1	1" X 6"	1/4"	NO	FIC 7	SEC. CLARIFIER VALVE #4
N18	1	1" X 6"	1/4"	NO	FIC 8	SEC. CLARIFIER VALVE #5
N19	1	1" X 6"	1/4"	NO	FIC 1	AER. TANK #1 RAS FLOW
N20	1	1" X 6"	1/4"	NO	FIC 2	AER. TANK #2 RAS FLOW
N21	1	1" X 6"	1/4"	NO	FIC 3	AER. TANK #3 RAS FLOW
N22	1	1" X 6"	1/4"	NO	FIC 9	RAS PUMP #1 SPEED CNTL
N23	1	1" X 6"	1/4"	NO	FIC 10	RAS PUMP #2 SPEED CNTL
N24	1	1" X 6"	1/4"	NO	FIC 11	RAS PUMP #3 SPEED CNTL
N25	1	1" X 6"	1/4"	NO	FIC 12	RAS PUMP #4 SPEED CNTL
N26	1	1" X 6"	1/4"	NO	FIC 13	SPARE



	WIRE LUGS - NO ☒ YES ☐	RING ☐ LOCKING SPADE ☐
	INSULATION: NYLON ☐ PVC ☒	
	WIRE SPECIFICATIONS:	
AC PANEL POWER	AWG #12 BLK.	THW/THHN
AC PANEL NEUTRAL	AWG #12 WHIT.	THW/THHN
AC PANEL GROUND	AWG #12 GRN.	THW/THHN
AC CONTROL POWER	AWG #14 RED	THW/THHN
AC CONTROL NEUTRAL	AWG #14 WHIT.	THW/THHN
AC FOREIGN	AWG #14 YELLOW	THW/THHN
DC POWER	AWG #16 BLUE	THW/THHN
DC CONTROL	AWG #16 BLUE	THW/THHN
SIGNAL/INSTRUMENTS	AWG #16 2 CONDUCTOR SHLD	THW/THHN



KOKOSING CONSTRUCTION CO.
P.O. #

DUBLIN TECHNICAL SYSTEMS, INC.
PROJECT # 02040

TOLERANCES	DUBLIN TECHNICAL SYSTEMS, INC.
DECIMAL ± .03	CITY OF MASSILLON, OHIO REGIONAL WASTEWATER TREATMENT PLANT - UPGRADE 2000 PROJECT NO. E8031
FRACTIONAL ± 1/32"	TITLE OPERATOR'S LABORATORY ENCLOSURE PANEL LAYOUT
ANGULAR ± 1°	DATE 3/18/02
	DRAWING NUMBER DTSI - 02040 - 016