

NAMEPLATE ENGRAVING

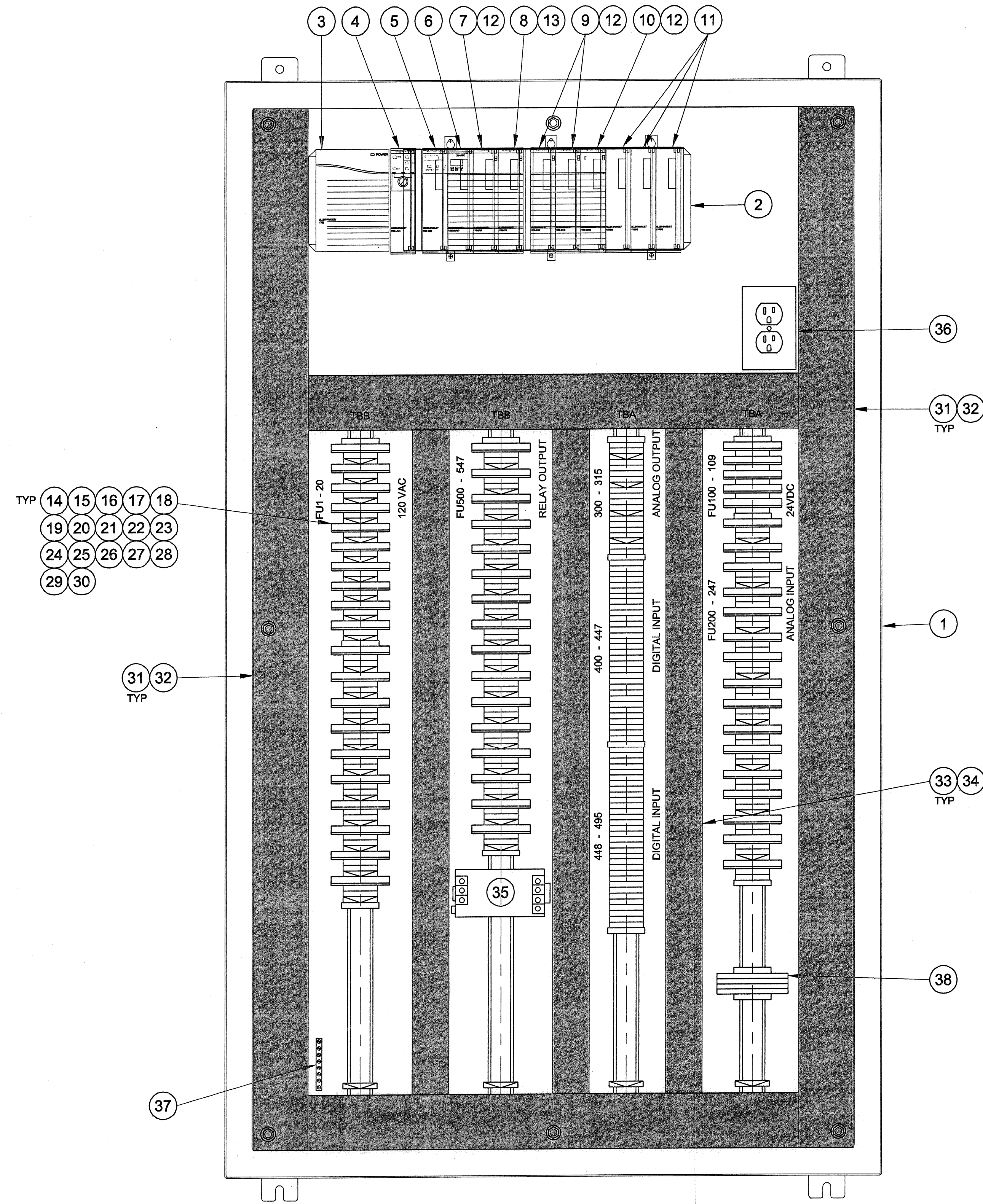
N1	CONTROL BUILDING	4" x 1" WHITE SURFACE
	MAIN PLC CONTROL PANEL	3/16" HIGH BLACK LETTERING

GENERAL NOTES

- ALL WIRING SHALL BE AS DIRECTED ON DWGS. AND AS FOLLOWS:
 MINIMUM WIRE SIZES (SIZE PER SCHEMATIC DIAGRAM)
 PANEL WIRING - TB TO PLC
 120VAC - #14 AWG (BELDEN #8520)
 24VDC - #18 AWG (BELDEN #8521)
 24VDC (ANALOG) - 2/C#22 SHLD (BELDEN #8451)
- FIELD WIRING -
 120VAC - #14 AWG MTW
 24VDC (POWER) - #16 AWG MTW
 24VDC (ANALOG) - 2/C#16 SHLD
 24VDC (DIGITAL) - 2/C#16 TW
- WIRE COLOR CODES
 120VAC POWER-L1 - BLACK
 120VAC POWER-N - WHITE
 120VAC CONTROL - RED
 120VAC CONTROL NEUTRAL - WHITE
 24DC+ - BLUE
 24VDC RETURN - BROWN
 GROUND - GREEN
 24VDC ANALOG (+) - RED
 24VDC ANALOG (-) - BLACK
 EXTERNAL CONTROL - YELLOW
- THE GROUND TERMINAL AT THE BOTTOM OF EACH TERMINAL BLOCK MOUNTING RAIL SHALL BE CONNECTED TO GROUND.
- CONNECTIONS SHALL BE MADE TO DEVICES PER SCHEMATIC WIRING DIAGRAMS
- ALL PANEL EQUIPMENT SHALL BE INSTALLED SO THAT THERE IS ACCESS TO ALL NECESSARY COMPONENTS AND SO THAT ALL EQUIPMENT DOORS CAN OPEN 90°.

BILL OF MATERIAL

ITEM	NO.	DESCRIPTION
1	1	HOFFMAN NEMA 12 ENCLOSURE CAT. #A-603608LP COMPLETE WITH PANEL CAT. #A60P36
2	1	ALLEN-BRADLEY CONTROLLOGIX 17 SLOT RACK CAT. #1756-A17
3	1	ALLEN-BRADLEY CONTROLLOGIX POWER SUPPLY CAT. #1756-PA75
4	1	ALLEN-BRADLEY CONTROLLOGIX PROCESSOR CAT. #1756-L5M12
5	1	ALLEN-BRADLEY CONTROLLOGIX ETHERNET COMM. CARD CAT. #1756-ENBT
6	1	ALLEN-BRADLEY CONTROLLOGIX REMOTE I/O COMM. CARD CAT. #1756-DHRIO
7	1	ALLEN-BRADLEY CONTROLLOGIX ANALOG INPUT MODULE CAT. #1756-IF16
8	1	ALLEN-BRADLEY CONTROLLOGIX ANALOG OUTPUT MODULE CAT. #1756-OF4
9	2	ALLEN-BRADLEY CONTROLLOGIX DIGITAL INPUT MODULE CAT. #1756-IB16I
10	1	ALLEN-BRADLEY CONTROLLOGIX RELAY CONT. OUTPUT MODULE CAT. #1756-OW16I
11	3	ALLEN-BRADLEY CONTROLLOGIX SLOT FILLER CAT. #1756-N2
12	4	ALLEN-BRADLEY CONTROLLOGIX RTB CAT. #1756-TBCH WITH TBE HOUSING
13	1	ALLEN-BRADLEY CONTROLLOGIX RTB CAT. #1756-TBNH WITH TBE HOUSING
14	12'-0"	ALLEN-BRADLEY DIN MOUNTING RAIL CAT. #199-DR1
15	179	ALLEN-BRADLEY IEC FEED-THROUGH TERMINAL BLOCK CAT. #1492-W10
16	5	ALLEN-BRADLEY TERMINAL BLOCK END BARRIER CAT. #1492-EB10
17	52	ALLEN-BRADLEY GROUNDING TERMINAL BLOCK CAT. #1492-WG10S
18	3	ALLEN-BRADLEY TERMINAL BLOCK END BARRIER CAT. #1492-EB10-Y
19	57	ALLEN-BRADLEY FUSE TERMINAL BLOCK CAT. #1492-H6
20	57	ALLEN-BRADLEY FUSE TERMINAL END BARRIER CAT. #1492-N37
21	57	FUSE ELEMENTS - LITTLEFUSE OR EQUAL SEE SCHEMATIC DIAGRAMS FOR FUSE SIZE
22	4	ALLEN-BRADLEY TERMINAL GROUP MARKER CAT. #1492-GM35
23	1	ALLEN-BRADLEY TERMINAL MARKER (1-100) CAT. #1492-SM8X12H1-100
24	1	ALLEN-BRADLEY TERMINAL MARKER (101-200) CAT. #1492-SM8X12H101-200
25	1	ALLEN-BRADLEY TERMINAL MARKER (201-300) CAT. #1492-SM8X12H201-300
26	1	ALLEN-BRADLEY TERMINAL MARKER (301-400) CAT. #1492-SM8X12H301-400
27	1	ALLEN-BRADLEY TERMINAL MARKER (401-500) CAT. #1492-SM8X12H401-500
28	1	ALLEN-BRADLEY TERMINAL MARKER (501-600) CAT. #1492-SM8X12H501-600
29	12	ALLEN-BRADLEY END ANCHOR CAT. #1492-EA35
30	12'-0"	AICKINSTRUT POLYESTER HEAVY DUTY CHANNEL CAT. #20P-2000 (BOLT TO BACK PANEL AS REQUIRED)
31	14'-0"	PANDUIT WIRING DUCT 3" x 4" CAT. #E3x4LG6
32	14'-0"	PANDUIT WIRING DUCT COVER CAT. #C3LG6
33	9'-0"	PANDUIT WIRING DUCT 2" x 4" CAT. #E2x4LG6
34	9'-0"	PANDUIT WIRING DUCT COVER CAT. #C2LG6
35	1	SOLA/HEVI-DUTY 24VDC POWER SUPPLY CAT. #SDN 20-24-100
36	1	HUBBELL DUPLEX RECEPTACLE CAT.#5362 MOUNTED IN BOX #6080 WITH COVER #95101
37	1	SQUARE-D GROUND BAR KIT CAT. #PK0GTA6
38	4	MTL SURGE TECHNOLOGIES SURGE SUPPRESSOR CAT. #SD32X



FRONT VIEW
WITH DOORS REMOVED

DATE PRINTED
5/28/05

100% REVIEW DRAWINGS
NOT FOR CONSTRUCTION

SCALE VERIFICATION: THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

No	Revision	Date	Initial

Approved

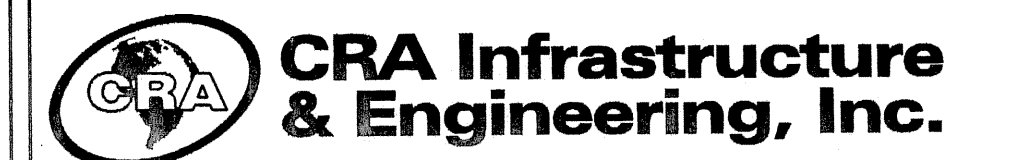


J. Egan
5/26/05

HOOKER/RUCO SITE
HICKSVILLE, NEW YORK

BIOSPARGE TREATMENT SYSTEM

MAIN PLC CONTROL PANEL
ARRANGEMENT



Source Reference:		Date: SEPTEMBER 2003	
Project Manager: J. KAY	Reviewed By: TFP	Designed By: DLS	Drawn By: DLS
Scale: 3"=1'-0"	Project No: 06883-10	Report No: 045	Drawing No: E-10