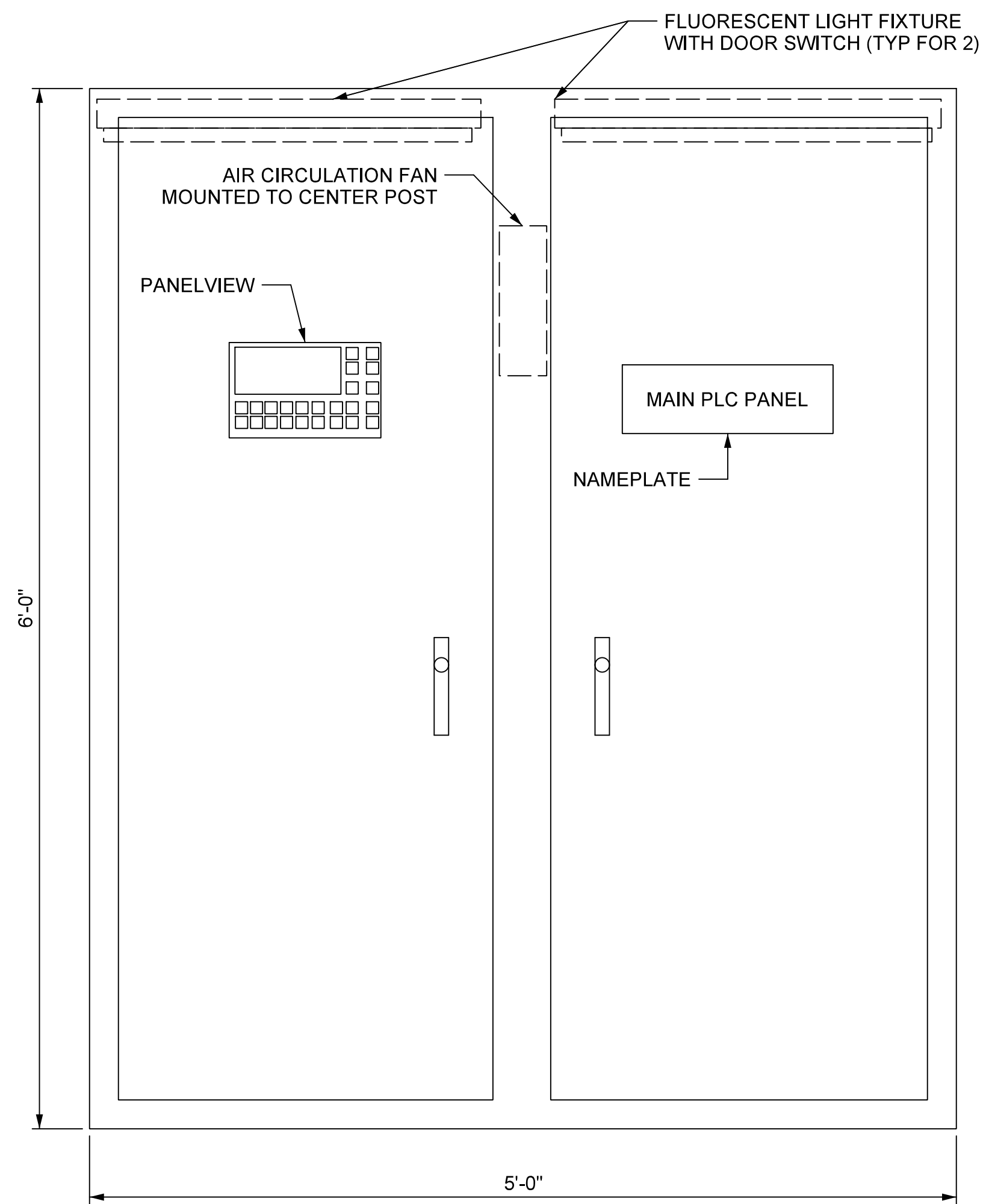


PROPOSED MAIN PLC PANEL (MPLC) INTERNAL LAYOUT
SCALE: 1 1/2" = 1'-0"



MAIN PLC PANEL (MPLC) LAYOUT
SCALE: 1 1/2" = 1'-0"

BILL OF MATERIAL

TAG	QTY	MODEL NUMBER	DESCRIPTION
CR-UV	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-RSR	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-YSR	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-GSR	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-GONG	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-BCR	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-RSR-LWR	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-FLASHER	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-XX	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
CR-XX	1	700-P	NEMA MACHINE TOOL CONTROL RELAY
NODE 00: PROCESSOR A	1	1756-A7	7 SLOT RACK
-	1	1756-L72	PROCESSOR WITH 4096 I/O AND UP TO 64K MEMORY
-	1	1756-RM2	REDUNDANCY MODULE
-	2	1756-EN2T	10/100 Mbps & 127 TCP/IP CONNECTIONS & LOGIX CONNECTIONS
-	3	1756-N2	FILLER FOR EMPTY RACK SLOT
NODE 01: PROCESSOR B	1	1756-PA/72C	POWER SUPPLY FOR THE SYSTEM
-	1	1756-A7	7 SLOT RACK
-	1	1756-L72	PROCESSOR WITH 4096 I/O AND UP TO 64K MEMORY
-	1	1756-RM2	REDUNDANCY MODULE
-	2	1756-EN2T	10/100 Mbps & 127 TCP/IP CONNECTIONS & LOGIX CONNECTIONS
-	3	1756-N2	FILLER FOR EMPTY RACK SLOT
NODE 03: I/O RACK	1	1756-PA/72C	POWER SUPPLY FOR THE SYSTEM
-	1	1756-A13	13 SLOT RACK
-	1	1756-PA/72C	POWER SUPPLY FOR THE SYSTEM
-	5	1756-IA16	16 DISCRETE INPUTS, 120VAC
-	1	1756-OX8I	8 DIGITAL OUTPUTS, 120VAC
-	1	1756-EN2T	10/100 Mbps & 127 TCP/IP CONNECTIONS & LOGIX CONNECTIONS
-	3	1756-N2	FILLER FOR EMPTY RACK SLOT
ESW-MPLC	1	STRATIX 5700 1783 BMS10CGP	10 PORT ETHERNET SWITCH WITH 2 SFP ADAPTER TO CONNECT DIRECTLY TO FIBER LINE
-	1	-	NOISE FILTER
-	1	-	FLASHER UNIT
REC-MPLC	2	1SNAB92461R1500	SIEMENS ENERGY AND AUTOMATION GROUND BAR
LT-MPLC	2	-	ABB CONTROL INC. RECEPTACLE
TB	AS REQUIRED	1492-J4	PANEL MOUNTED FLUORESCENT LIGHT WITH DOOR SWITCH
PS-MPLC	1	1606-XLP9SE	ALLEN BRADLEY TERMINAL BLOCKS
TH-MPLC	1	1711000010	ALLEN BRADLEY COMPACT SWITCHED MODE POWER SUPPLIES 24VDC
HTR-MPLC	1	1701SOO007	PFANNENBERG THERMOSTAT
NF-MPLC	1	IC SERIES	PFANNENBERG 1SOW RADIANT HEATER
PANELVIEW MPLC	1	-	ISLATROL IC+ SERIES
TR-RSR	1	A726018SSFSD	12" TOUCHSCREEN PANELVIEW PLUS
CB-BCP1	1	-	72" X 60" X 18" NEMA-12 STAINLESS STEEL PANEL WITH BACKPLATE
CB-CP-1	1	1489-A1C200	RED SIGNAL TIMING RELAY
TO	-	1489-A1C050	ALLEN BRADLEY 1 POLE CIRCUIT BREAKER 20A
CB-CP-3	1	1489-A1C050	ALLEN BRADLEY 1 POLE CIRCUIT BREAKER 5A
CB-MPLC-1	1	1489-A1C050	ALLEN BRADLEY 1 POLE CIRCUIT BREAKER 5A
TO	-	-	ALLEN BRADLEY 1 POLE CIRCUIT BREAKER 5A
CB-MPLC-19	1	1489-A1C050	ALLEN BRADLEY 1 POLE CIRCUIT BREAKER 5A

* EXCLUDING PLC EQUIPMENT, MODEL NUMBER PARTS ARE THE RECOMMENDED PARTS AND MAY BE REPLACED WITH APPROVED EQUAL.

NOTES:

- FOR GENERAL ABBREVIATIONS SEE DWG. NO. E-2.
- MPLC PANEL ENCLOSURE SHALL BE A NEMA TYPE 12 HOFFMAN ENCLOSURE CATALOG NO. A726018SSFSD OR APPROVED EQUAL.
- THE CONTRACTOR SHALL USE THE LAYOUT VIEW AS A GUIDE TO INSTALLING THE ELECTRICAL COMPONENTS. IF REQUIRED, THE CONTRACTOR SHALL RELOCATE COMPONENTS TO ALLOW FOR PROPER INSTALLATION OF THE COMPONENTS.
- ALL CORNERS AND EDGES SHALL BE ROUNDED AND SMOOTHED.
- LEVEL MPLC PANEL DURING INSTALLATION.
- PROVIDE TWO FLUORESCENT LIGHT FIXTURES INSIDE THE RPLC PANEL WITH STANDARD 18" BULB PROTECTED BY A CLEAR, NON-YELLOWING PLASTIC LENS. LIGHT SHALL BE AUTOMATICALLY CONTROLLED BY DOOR SWITCH ACTIVATED BY THE DOOR.
- PROVIDE, AS SHOWN ON THE LAYOUT, TWO DUPLEX RECEPTACLES 15 AMP, 125 VAC, FEDERAL SPEC GRADE INSTALLED IN STANDARD UTILITY BOX WITH METAL COVER PLATE.
- INTERNAL COMPONENTS SHALL BE MOUNTED ON BACK PANELS. BUSHED OPENINGS SHALL BE PROVIDED FOR CONDUCTORS ACCESS. FIELD CONNECTIONS TO CONTROL ENCLOSURE. ALL FIELD WIRING SHALL TERMINATE ON TERMINAL BLOCKS.
- CIRCUIT BREAKERS SHALL BE MOUNTED ON HIGH RISE TERMINAL RAIL.
- LOW VOLTAGE AND ANALOG SIGNALS SHALL BE ISOLATED FROM 120VAC WIRING AND EQUIPMENT.
- SEE ETHERNET SCHEMATIC LAYOUT ON SHEET E-29 FOR THE NODE MODULE DETAILS.

CIRCUIT BREAKER IDENTIFICATION

- A CB-BCP1
- B CB-CP-1
- C CB-CP-2
- D CB-CP-3
- E CB-MPLC-1
- F CB-MPLC-2
- G CB-MPLC-3
- H CB-MPLC-4
- I CB-MPLC-5
- J CB-MPLC-6
- K CB-MPLC-7
- L CB-MPLC-8
- M CB-MPLC-9
- N CB-MPLC-10
- O CB-MPLC-11
- P CB-MPLC-12
- Q CB-MPLC-13
- R CB-MPLC-14
- S CB-MPLC-15
- T CB-MPLC-16
- U CB-MPLC-17
- V CB-MPLC-18
- W CB-MPLC-19

RELAY IDENTIFICATION

- 1 CR-UV
- 2 CR-RSR
- 3 CR-YSR
- 4 CR-GONG
- 5 CR-BCR
- 6 CR-RSR-LWR
- 7 CR-FLASHER
- 8 TR-RSR
- 9 CR-XX (SPARE)
- 10 CR-XX (SPARE)
- 11 CR-XX (SPARE)
- 12 CR-XX (SPARE)
- 13 CR-XX (SPARE)
- 14 CR-XX (SPARE)
- 15 CR-XX (SPARE)
- 16 CR-XX (SPARE)

DRAWN BY: QIV DATE: 8/8/2016
 CHECKED BY: MJT DATE: 8/8/2016
 DESIGN ENGINEER OF RECORD: CHS DATE: 8/8/2016

DWG NUMBER	TOTAL DWGS	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	NO	BY	DATE	NO	BY	DATE	SHEET NO.
39	90		1			3			E-23
			2			4			TOTAL SHEETS 51

PROJECT NO. B-5936
TYRRELL COUNTY
 BRIDGE NO: 7

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
MAIN PROGRAMMABLE LOGIC CONTROLLER: INTERIOR & LAYOUT
ALLIGATOR RIVER SWING SPAN

DocuSigned by:
 Scott Reynolds
 9/14/2016

*****DTM*****
 *****DGN*****
 *****USERNAME*****