FIELD / DEVICE

PLC CONTROL PANEL CP01, XXX1, RACK 0 SLOT 12

FIELD / DEVICE

CONSULTANT NOTE:
CONSULTANT TO ENSURE PROPER WIRING CONFIGURATION IS UTILIZED AS REQUIRED FOR 2-WIRE/4-WIRE INSTRUMENTS.

CONSULTANT TO UPDATE PLC NAME, RACK, SLOT AND CIRCUIT BREAKER

CBR201 (3A)

24VDC

0VDC

ANALOG INPUT (DC)
1756-IF8IH

ANALOG INPUT

CAL

OK

ANALOG INPUT RACK 0 SLOT 12

PUMP #1

PUMP 1 SPEED FEEDBACK

IO:12.0 +

IO:12.0 –

JUNCTION BOX (NEMA 4X)

PE

LIGHTNING ARRESTOR

SENSOR CABLE

INTRINSIC BARRIER

LOCAL POWER ON/OFF SWITCH

+24VDC

WET WELL #1 BACKUP LEVEL

120 VAC FROM CBR101 BACKUP PANEL

L

N

G

LIT

SIGNAL ISOLATOR

BACKUP SYSTEM

IO: 12.0+

IO: 12.0–

IO:12.0SH

shld

(NOTE 3)

NOT USED

IN0

RTN0

RESERVED

PUMP #2

PUMP 2 SPEED FEEDBACK

IO:12.4 +

IO:12.4 –

IO: 12.4+

IO: 12.4–

IO:12.4SH

IN4

RTN4

WELL #1 LEVEL

LOCAL POWER ON/OFF SWITCH

LE

SENSOR CABLE

120VAC FROM CBR113 PLC CONTROL PANEL

IO:12.6 +

IO:12.6 –

IO: 12.6+

IO: 12.6–

IO:12.6SH

IN6

RTN6

CONSULTANT TO DETERMINE WHETHER INSTRUMENT IS LOCATED IN PANEL OR FILED

24VDCFROM CBR05

CBR205

0V

+24V

COM

SH

(NOTE 4)

IO:12.2 +

IO:12.2 –

IO: 12.2+

IO: 12.2–

IO:12.2SH

IN2

RTN2

IO:12.1 +

IO:12.1 –

IO: 12.1+

IO: 12.1–

IO:12.1SH

IN1

RTN1

IO:12.3 +

IO:12.3 –

IO: 12.3+

IO: 12.3–

IO:12.3SH

IN3

RTN3

CBR207

24VDCFROM CBR07

IO:12.5 +

IO:12.5 –

IO: 12.5+

IO: 12.5–

IO:12.5SH

IN5

RTN5

IO:12.7 +

IO:12.7 –

IO: 12.7+

IO: 12.7–

IO:12.7SH

IN7

RTN7

CBR209

24VDCFROM CBR09

RESERVED

NOT USED

PUMP #1

PUMP 1 AMPS

PROCESS METER

JUNCTION BOX (NEMA 4X)

TB-1

DIESEL TANK LEVEL

PUMP #2

PUMP 2 AMPS

SENSOR CABLE

FE

FIT

LOCAL POWER ON/OFF SWITCH

STATION DISCHARGE FLOW

RACK 0

DI DI DI DI DI DI DI DO AI AI AO

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

DO NOT REMOVE: HALTON REGION SCADA STANDARDS JANUARY 2022

NOTES:

1. FUSED TERMINAL BLOCKS TO HAVE FUSE BLOWN INDICATIONS
2. A JUMPER BAR IS REQUIRED TO INTERCONNECT ALL FUSED DI TERMINAL BLOCKS.
3. CABLING BETWEEN FUSE AND PLC CARD MUST BE BELDEN PART NUMBER 8819 FOR DIGITAL I/O. BELDON PART NUMBER 9318 TO BE USED FOR ALL ANALOG I/O FIELD WIRING AND BETWEEN THE TERMINAL BLOCK AND THE PLC CARD.
4. ALL SHIELD TERMINAL BLOCKS TO BE GREEN AND ARE TO BE JUMPERED TOGETHER AND TERMINATED TO THE SHIELD GROUNDING BAR.

THESE DRAWINGS ARE TEMPLATE DRAWINGS

1. REMOVE THIS NOTE AS PART OF THE DESIGN PROCESS.
2. MODIFY THIS DRAWING AS DIRECTED IN THE SCADA STANDARDS.
3. ADD ADDITIONAL DETAILS AS REQUIRED TO MEET THE PROJECT SPECIAL REQUIREMENTS.
4. WHEN THE CONSULTANT DEVIATES FROM THIS TEMPLATE THEY ARE REQUIRED TO NOTIFY HALTON REGION THROUGH THE USE OF THE STANDARDS DEVIATION MEMO.
5. FUSED TERMINAL BLOCKS AND CIRCUIT BREAKERS TO BE SIZED APPROPRIATELY.
6. SHOW ADDITIONAL RIO RACKS (UP TO A MAXIMUM OF 2) ONLY IF NECESSARY BASED ON DESIGN REQUIREMENTS.
7. THE CONSULTANT IS TO SPECIFY SIGNAL ISOLATORS WHERE REQUIRED. FOLLOW MANUFACTURERS' SPECIFICATIONS FOR GROUNDING OF SHIELDS.

NO	Date	By	REVISIONS	MANU/CAD

Design	---	Ch'kd	---	Date
Drawn	---	Ch'kd	---	
Scale	N.T.S.			References

Field Notes

Stamp

Regional

ACCEPTED FOR CONSTRUCTION OF REGIONAL INFRASTRUCTURE

REVIEWED FOR COMPLIANCE WITH REGIONAL STANDARDS ONLY.

Director, Water & Wastewater Treatment

Manager, Plant Capital & Engineering

Halton REGION

CONSULTANT TO UPDATE PROJECT TITLE AND DRAWING NAME

TITLE REGIONAL MUNICIPALITY OF HALTON
CONSULTANT PROJECT TITLE

SLOT 12
AI LOOP DIAGRAM

Consultant File NO	Regional Drawing NO
---	---
CONTRACT NO	Drawing NO 1915
---	SHEET XX OF XX

1915_Slot_12_AI_Loop_Diagram.dwg