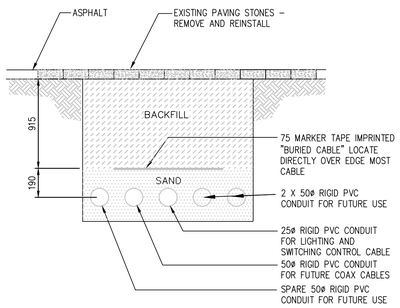
## SYMBOL SCHEDULE:

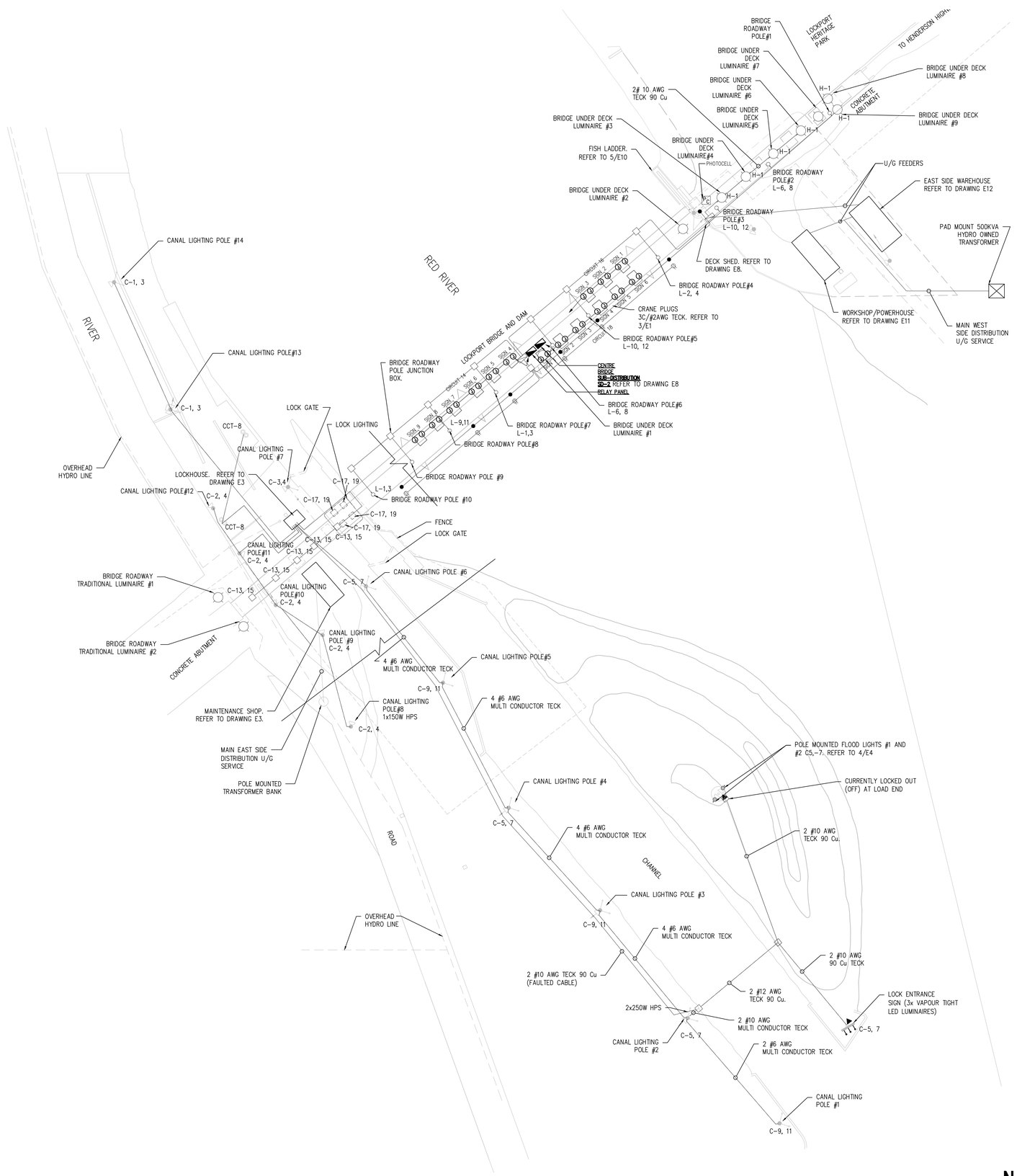
- TWO GANG SWITCH
- ONE GANG SWITCH
- DUPLEX RECEPTACLE
- JUNCTION BOX
- POLE
- RECESSED DOWNLIGHT
- WALL MOUNT LUMINAIRE
- RECESSED LUMINAIRE
- STRIP TYPE LUMINAIRE
- SURFACE MOUNT LUMINAIRE
- PHOTOCELL
- UNIT HEATER
- MOTOR CONNECTION C/W DISCONNECT
- EMERGENCY LIGHTING BATTERY BANK C/W DUAL REMOTE
- PANELBOARD




NOTES:

1. TYPICAL TRENCH LAYOUT SHOWN. VARY TRENCH DIMENSIONS TO SUIT ACTUAL CONDUITS.
2. CABLE INSTALLATION TO BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE.

2 / E1 TRENCH DETAIL–1
NTS




1 / E1 ELECTRICAL SITE PLAN
1:1000

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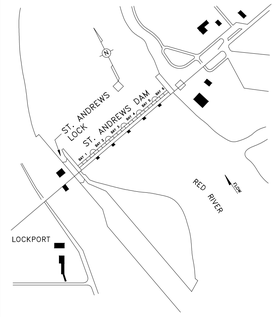
REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest




SITE PLAN
N.T.S.

RECORD DRAWING
MAY 2016

**DO NOT SCALE DRAWINGS**

| Revision/Revision | Description/Description | Date/Date |
|---|---|---|
| 0 | RECORD DRAWING | 16/05/20 |

Client/client

**ST. ANDREWS LOCK AND DAM**

**ST. ANDREWS, MANITOBA**

Project title/Titre du projet

**ST. ANDREWS LOCK AND DAM**
**ST. ANDREWS, MANITOBA**

**LIGHTING AND ELECTRICAL UPGRADES**

Approved by/Approuve par

Designed by/Concept par

Drawn by/Dessine par

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSGC

Client/client

Drawing title/Titre du dessin

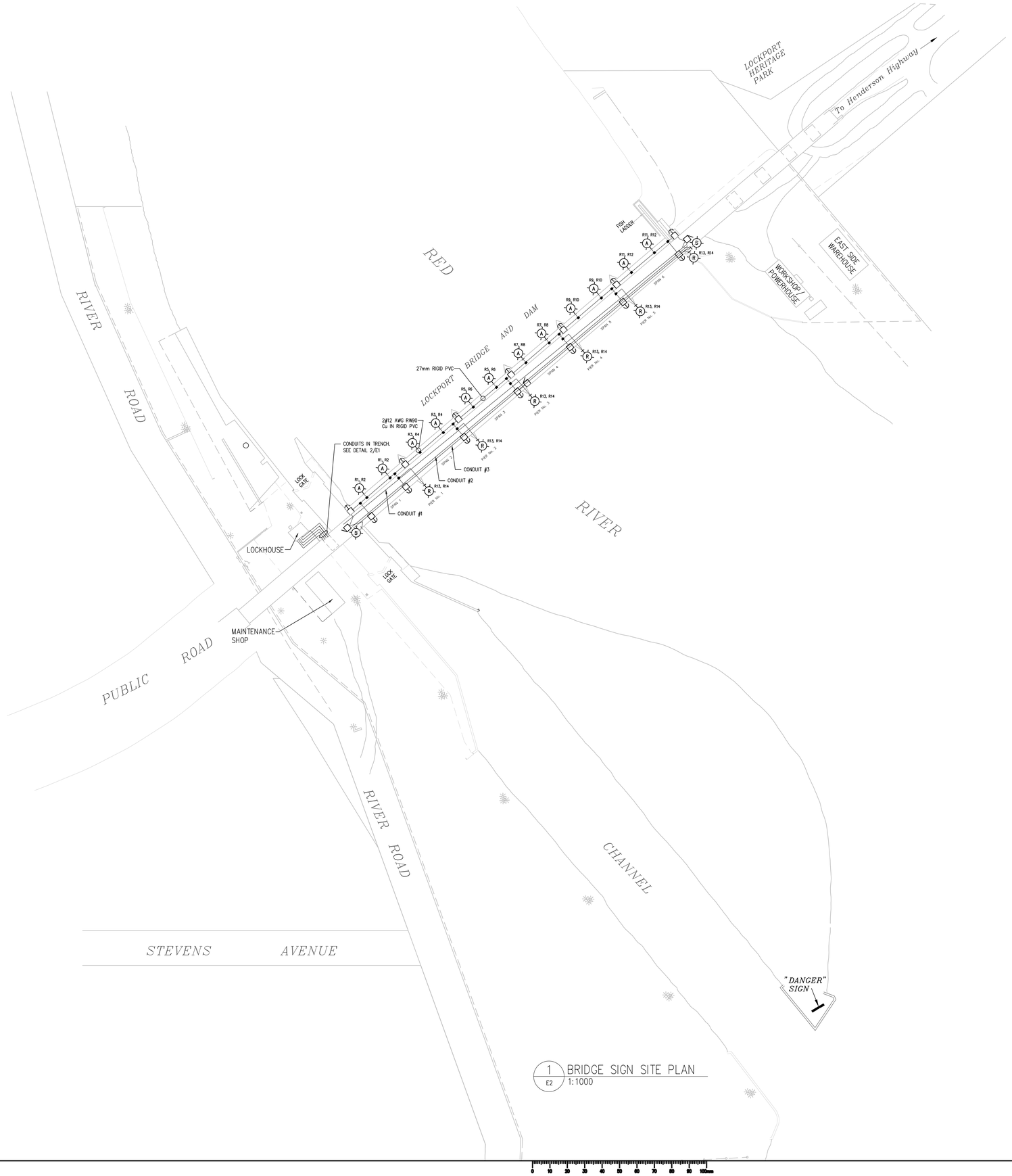
**ELECTRICAL**
**SITE PLAN AND SYMBOL SCHEDULES**

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E1 OF 16 | 0 |

PWGSC – B1 – 1000X707

0 10 20 30 40 50 60 70 80 90 100mm

E1




1 / E2 BRIDGE SIGN SITE PLAN
1:1000

NOTES:

1. LIGHTING CONTROL PANEL LCP AND MASTER SWITCH STATION ARE LOCATED IN LOCKHOUSE. 25# RIGID PVC CONDUIT IS TERMINATED IN LOCKHOUSE IN JUNCTION BOX AND EXTENDED TO PANEL LCP AND MASTER SWITCH STATION.

2. TYPE A SIGNAL LIGHT IS 12 INCH AMBER LED TRAFFIC BEACON WITH 2 POLE FLASHER WITH MOUNTING HARDWARE AND SEALING KITS.
BODY: ONE PIECE ALUMINUM UNIT WITH INTEGRAL SERRATIONS ON 5° INCREMENTS IN THE END SECTIONS. EACH BODY PROVIDES MOUNTING TERMINAL BLOCKS AND ATTACHING BACKPLATES.
DOOR: ONE PIECE ALUMINUM UNIT WITH STAINLESS STEEL HINGE PINS. THUMBSCREWS HOLD THE DOOR AGAINST THE BODY.
VISOR: ONE PIECE ALUMINUM WITH SLOTTED MOUNTING HOLES. CUTAWAY VISOR.
REFLECTOR: SWING OUT UNIT, ALUMINUM ALZAK FINISH AND SILVERED GLASS.
LENS: GLASS, CONFORMING TO ITE SPECIFICATIONS.
LAMPS: LIGHT EMITTING DIODES (LED).
GASKETS; NEOPRENE.

3. TYPE R SIGNAL LIGHT IS 12 INCH RED LED TRAFFIC BEACON WITH 2 POLE FLASHER WITH MOUNTING HARDWARE AND SEALING KITS.
BODY: ONE PIECE ALUMINUM UNIT WITH INTEGRAL SERRATIONS ON 5° INCREMENTS IN THE END SECTIONS. EACH BODY PROVIDES FOR MOUNTING TERMINAL BLOCKS AND ATTACHING BACKPLATES.
DOOR: ONE PIECE ALUMINUM UNIT WITH STAINLESS STEEL HINGE PINS. THUMBSCREWS HOLD THE DOOR AGAINST THE BODY.
VISOR: ONE PIECE ALUMINUM WITH SLOTTED MOUNTING HOLES. CUTAWAY VISOR.
REFLECTOR: SWING OUT UNIT, ALUMINUM ALZAK FINISH AND SILVERED GLASS.
LENS: GLASS, CONFORMING TO ITE SPECIFICATIONS.
LAMPS: LIGHT EMITTING DIODES (LED).
GASKETS; NEOPRENE.

4. TYPE A AND TYPE R SIGNAL CONTROLLED THROUGH RELAYS IN RELAY PANEL AND WIRED WITH #12RW90 CONDUCTORS.

5. ALARM SYSTEM CONSISTS OF MUSHROOM HEAD PUSHBUTTONS, TYPE B STROBE LIGHTS AND SIRENS; THE PUSH BUTTONS ACTIVATE THE SIRENS AND STROBE LIGHTS THROUGH A CONTROL INPUT UNIT IN THE RELAY PANEL.
MUSHROOM HEAD PUSHBUTTONS: MOMENTARY CONTACT, 120V. AC, NORMALLY OPEN TYPE WITH RED MUSHROOM HEAD OPERATOR.
TYPE B STROBE LIGHTS: CROUSE-HINDS #VDAS/B, BLUE, 120V, AC., 60 FLASHES PER MINUTE, FOR WET LOCATIONS, SOLID STATE COMPONENTS, CORROSION RESISTANT ALUMINUM, BODY, LEXAN FRESNEL LENS.
SIRENS: EDWARDS #5520-NS, WEATHERPROOF, SOLID STATE, HIGH DECIBEL SOUND OUTPUT.

6. ALL EQUIPMENT AND DEVICES AS INDICATED ARE APPROXIMATE LOCATIONS.

7. CONDUIT IDENTIFICATION: REFER TO SITE PLAN
PULLCORDS IN EMPTY CONDUITS.
CONDUIT #1 – 25# RIGID PVC CONDUIT FROM RELAY CONTROL PANEL ON BRIDGE TO LOCKHOUSE FOR LIGHTING AND SWITCHING CONTROL CABLES.
CONDUIT #2 – 50# RIGID PVC CONDUIT FROM EAST SIDE OF BRIDGE, EAST ABUTMENT TO LOCKHOUSE FOR FUTURE COAX CABLES.
CONDUIT #3 – 50# RIGID PVC CONDUIT FROM EAST SIDE OF BRIDGE, EAST ABUTMENT TO LOCKHOUSE FOR FUTURE USE.

8. CONDUITS INSTALLED ON EXISTING BRIDGE CONDUIT SUPPORT SYSTEM.

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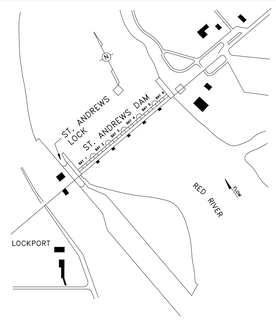


SITE PLAN
N.T.S.

RECORD DRAWING
MAY 2016

DO NOT SCALE DRAWINGS

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Drawing title/Titre du dessin

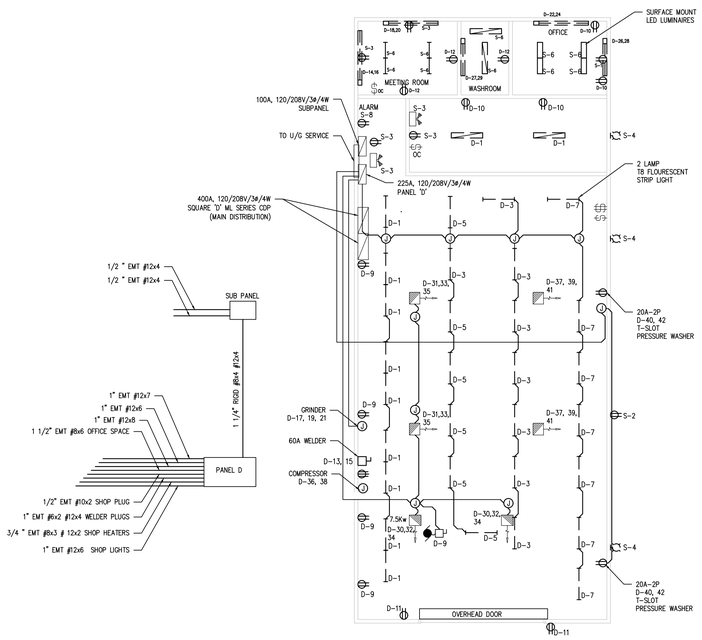
BRIDGE SIGN SITE PLAN

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E2 OF 16 | 0 |

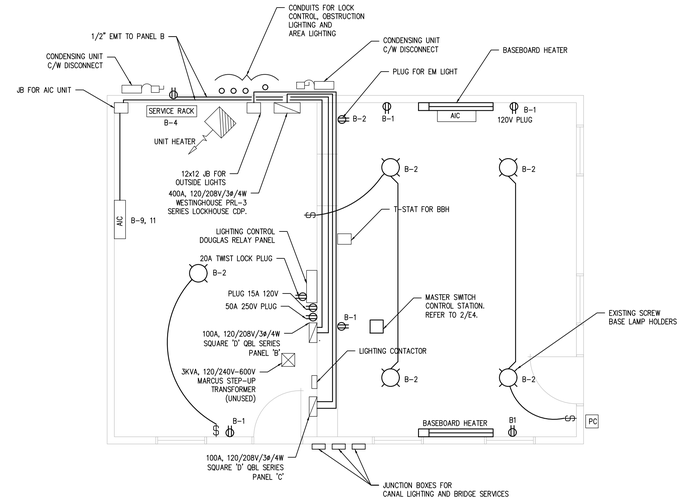
PWGSC – B1 – 1000X707

0 10 20 30 40 50 60 70 80 90 100mm

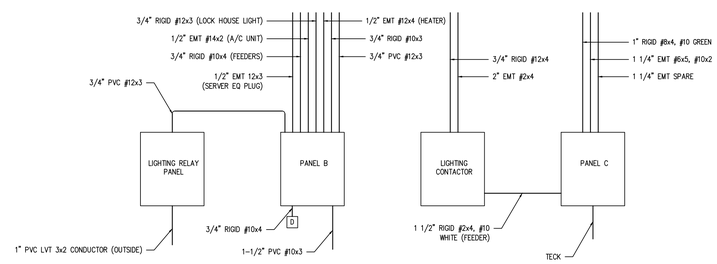
E2




1 E3 MAINTENANCE SHOP ELECTRICAL LAYOUT
NTS




2 E3 LOCK HOUSE ELECTRICAL LAYOUT
NTS




NOTE:
MOST CONDUITS LEAVING TOP OF PANELS DISAPPEAR INTO CEILING

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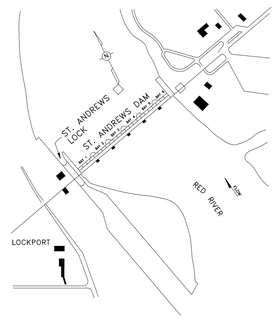


SITE PLAN
N.T.S.

RECORD DRAWING
MAY 2016

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PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSGC

Client/client

Drawing title/Titre du dessin
MAINTENANCE SHOP AND LOCK HOUSE ELECTRICAL LAYOUT

N

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E3 OF 16 | 0 |

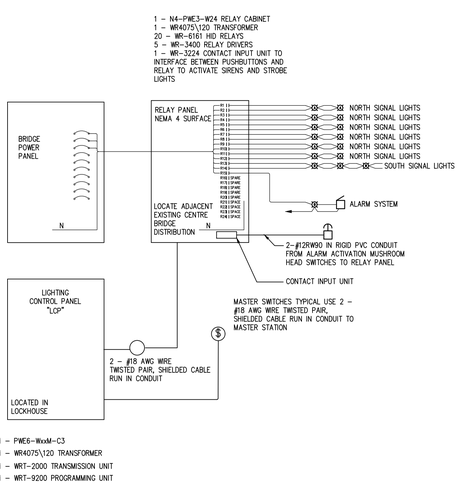
PWGSC – B1 – 1000X707

0 10 20 30 40 50 60 70 80 90 100mm

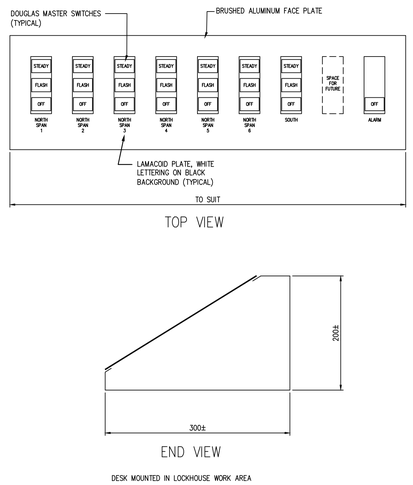
E3

## LIGHTING CONTROL PANEL "LCP"

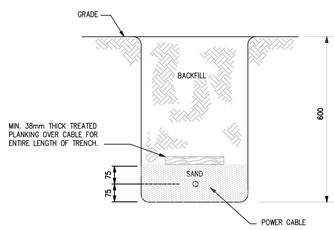
| DESCRIPTION | Circuit Number | Relay Number | Local Switch | Master Switch | T/C Zone | PC Zone |
|---|---|---|---|---|---|---|
| NORTH SPAN 1 – STEADY | 1 | 1 | | | | |
| NORTH SPAN 1 – FLASHING | 1 | 2 | | | | |
| NORTH SPAN 2 – STEADY | 1 | 3 | | | | |
| NORTH SPAN 2 – FLASHING | 1 | 4 | | | | |
| NORTH SPAN 3 – STEADY | 1 | 5 | | | | |
| NORTH SPAN 3 – FLASHING | 1 | 6 | | | | |
| NORTH SPAN 4 – STEADY | 1 | 7 | | | | |
| NORTH SPAN 4 – FLASHING | 1 | 8 | | | | |
| NORTH SPAN 5 – STEADY | 1 | 9 | | | | |
| NORTH SPAN 5 – FLASHING | 1 | 10 | | | | |
| NORTH SPAN 6 – STEADY | 1 | 11 | | | | |
| NORTH SPAN 6 – FLASHING | 1 | 12 | | | | |
| SOUTH – STEADY | 2 | 13 | | | | |
| SOUTH – FLASHING | 2 | 14 | | | | |
| ALARM SYSTEM | 3 | 15 | | | | |
| SPARE RELAY | | 16 | | | | |
| SPARE RELAY | | 17 | | | | |
| SPARE RELAY | | 18 | | | | |
| SPARE RELAY | | 19 | | | | |
| SPARE RELAY | | 20 | | | | |
| SPACE | | 21 | | | | |
| SPACE | | 22 | | | | |
| SPACE | | 23 | | | | |
| SPACE | | 24 | | | | |



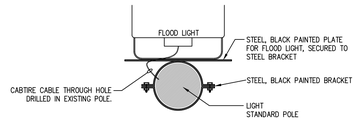

1 / E4 FULL 2-WAY LIGHTING CONTROL SCHEMATIC
NTS




2 / E4 MASTER SWITCH CONTROL STATION
NTS



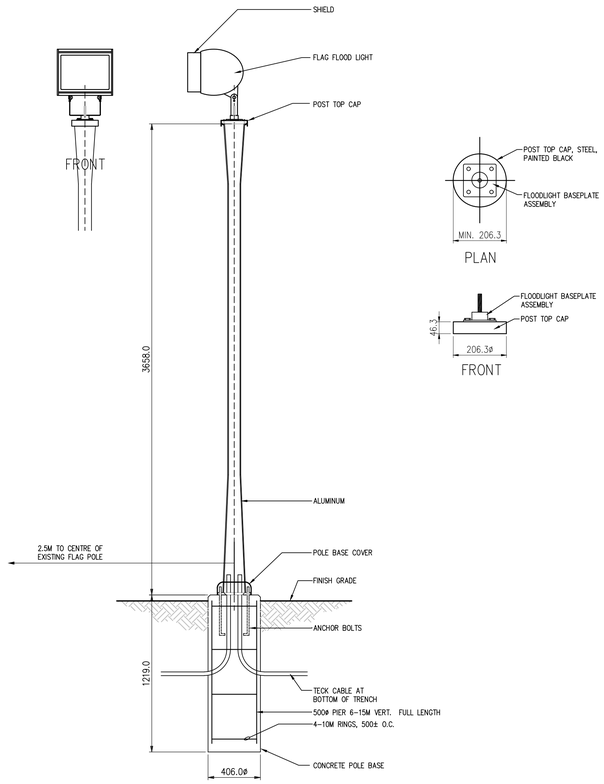

3 / E4 TRENCH DETAIL
NTS




5 / E4 FLOODLIGHT MOUNTING BRACKET
NTS

NOTE:

REFER TO SCHEDULES ON DRAWING E15 AND E16 FOR LOCATIONS OF FLOODLIGHTS.




4 / E4 FLAG LIGHTING DETAIL
NTS

N

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**EAST SIDE ELECTRICAL DETAILS**

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E4 OF 16 | - |

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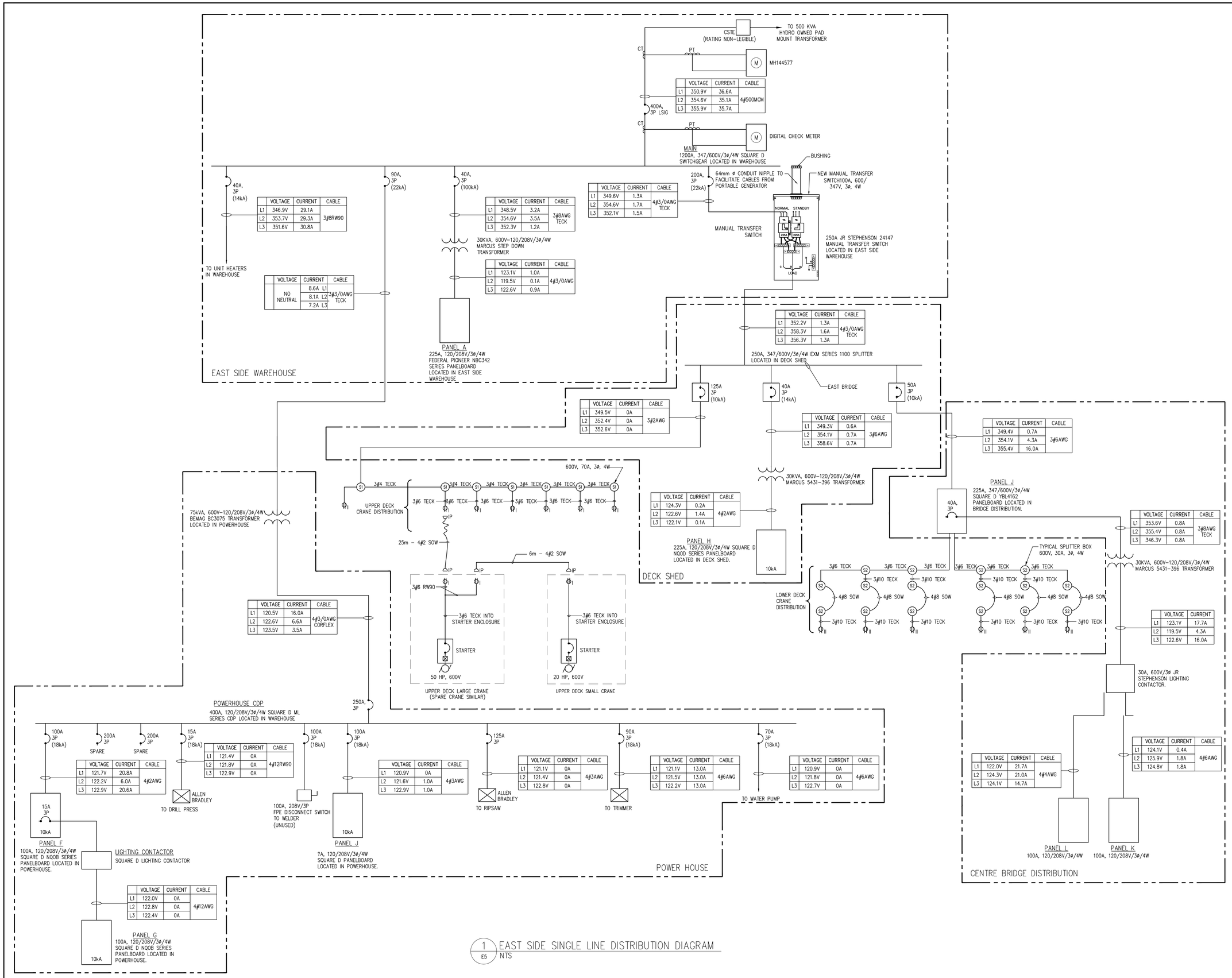


1 / E5 EAST SIDE SINGLE LINE DISTRIBUTION DIAGRAM
NTS

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 346.9V | 29.1A | 3#8RW90 |
| L2 | 353.7V | 29.3A | |
| L3 | 351.6V | 30.8A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| NO NEUTRAL | | 8.6A L1 | 3#3/0AWG TECK |
| | | 8.1A L2 | |
| | | 7.2A L3 | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 348.5V | 3.2A | 3#8AWG TECK |
| L2 | 354.6V | 3.5A | |
| L3 | 352.3V | 1.2A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 123.1V | 1.0A | 4#3/0AWG |
| L2 | 119.5V | 0.1A | |
| L3 | 122.6V | 0.9A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 349.6V | 1.3A | 4#3/0AWG TECK |
| L2 | 354.6V | 1.7A | |
| L3 | 352.1V | 1.5A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 352.2V | 1.3A | 4#3/0AWG TECK |
| L2 | 358.3V | 1.6A | |
| L3 | 356.3V | 1.3A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 349.5V | 0A | 3#2AWG |
| L2 | 352.4V | 0A | |
| L3 | 352.6V | 0A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 349.3V | 0.6A | 3#6AWG |
| L2 | 354.1V | 0.7A | |
| L3 | 358.6V | 0.7A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 349.4V | 0.7A | 3#6AWG |
| L2 | 354.1V | 4.3A | |
| L3 | 355.4V | 16.0A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 124.3V | 0.2A | 4#2AWG |
| L2 | 122.6V | 1.4A | |
| L3 | 122.1V | 0.1A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 353.6V | 0.8A | 3#8AWG TECK |
| L2 | 355.4V | 0.8A | |
| L3 | 346.3V | 0.8A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 120.5V | 16.0A | 4#3/0AWG CORFLEX |
| L2 | 122.6V | 6.6A | |
| L3 | 123.5V | 3.5A | |

| | VOLTAGE | CURRENT |
|---|---|---|
| L1 | 123.1V | 17.7A |
| L2 | 119.5V | 4.3A |
| L3 | 122.6V | 16.0A |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 121.7V | 20.8A | 4#2AWG |
| L2 | 122.2V | 6.0A | |
| L3 | 122.9V | 20.6A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 121.4V | 0A | 4#12RW90 |
| L2 | 121.8V | 0A | |
| L3 | 122.9V | 0A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 120.9V | 0A | 4#3AWG |
| L2 | 121.6V | 1.0A | |
| L3 | 122.9V | 1.0A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 121.1V | 0A | 4#3AWG |
| L2 | 121.4V | 0A | |
| L3 | 122.8V | 0A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 121.1V | 13.0A | 4#6AWG |
| L2 | 121.5V | 13.0A | |
| L3 | 122.2V | 13.0A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 120.9V | 0A | 4#6AWG |
| L2 | 121.8V | 0A | |
| L3 | 122.7V | 0A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 122.0V | 21.7A | 4#4AWG |
| L2 | 124.3V | 21.0A | |
| L3 | 124.1V | 14.7A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 124.1V | 0.4A | 4#6AWG |
| L2 | 125.9V | 1.8A | |
| L3 | 124.8V | 1.8A | |

| | VOLTAGE | CURRENT | CABLE |
|---|---|---|---|
| L1 | 122.0V | 0A | 4#12AWG |
| L2 | 122.8V | 0A | |
| L3 | 122.4V | 0A | |

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Région de l'ouest

RECORD DRAWING
MAY 2016

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EAST SIDE SINGLE LINE DISTRIBUTION DIAGRAM

| Project No./No. du projet | Sheet/Feuille | Revision no./La Révision no. |
|---|---|---|
| R.076331 | E5 OF 16 | |

PWGSC – B1 – 1000X707

## PANELBOARD DIRECTORY - EAST SIDE WAREHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | WEST SIDE LIGHTS | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 122.5V |
| 3 | CENTRE LIGHTS | 0.9A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.5V |
| 5 | EAST SIDE LIGHTS | 1.0A | 15A | FUNCTIONAL | #12AWG | GOOD | 124.5V |
| 7 | 30A RECEPTACLE | 0A | 30A 2P | FUNCTIONAL | #10AWG | GOOD | 122.6V |
| 9 | | 0A | | | #10AWG | GOOD | 121.9V |
| 11 | 30A RECEPTACLE | 0A | 30A 2P | FUNCTIONAL | #10AWG | GOOD | 123.6V |
| 13 | | 0A | | | #10AWG | GOOD | 122.6V |
| 15 | 30A RECEPTACLE | 0A | 30A 2P | FUNCTIONAL | #10AWG | GOOD | 121.6V |
| 17 | | 0A | | | #10AWG | GOOD | 123.8V |
| 19 | 50A WELDER RECEPTACLE | 0A | 50A 2P | FUNCTIONAL | #8AWG | GOOD | 122.7V |
| 21 | | 0A | | | #8AWG | GOOD | 121.6V |
| 23 | | | | | | | |
| 25 | | | | | | | |
| 27 | | | | | | | |
| 29 | | | | | | | |
| 31 | | | | | | | |
| 33 | | | | | | | |
| 35 | | | | | | | |
| 37 | | | | | | | |
| 39 | | | | | | | |
| 41 | | | | | | | |
| 2 | EXTERIOR LIGHTS WEST EXTERIOR REC | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 123.0V |
| 4 | SOUTH SIDE INT,EXT.RECS+WEST SIDE RECS | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.8V |
| 6 | EMERG LIGHT/WEST REC'S | 0.1A | 15A | FUNCTIONAL | #12AWG | GOOD | 123.9V |
| 8 | EAST REC'S | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 123.2V |
| 10 | EAST SIDE REC'S + SOUTH SIDE REC'S | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.7V |
| 12 | NORTH OUTSIDE PLUG | 0A | 15A | FUNCTIONAL | #10AWG | GOOD | 124.0V |
| 14 | BENCH REC | 0A | 15A | FUNCTIONAL | #10AWG | GOOD | 122.6V |
| 16 | COMPRESSOR | 0A | 50A 2P | FUNCTIONAL | #8AWG | GOOD | 121.6V |
| 18 | | 0A | | | #8AWG | GOOD | 124.0V |
| 20 | BACK YARD LIGHTS | 0A | 15A 2P | FUNCTIONAL | #14AWG | GOOD | 122.8V |
| 22 | | 0A | | | #14AWG | GOOD | 121.8V |
| 24 | GARAGE DOOR | 0.1A | 15A | FUNCTIONAL | #14AWG | GOOD | 123.9V |
| 26 | | | | | | | |
| 28 | | | | | | | |
| 30 | | | | | | | |
| 32 | | | | | | | |
| 34 | | | | | | | |
| 36 | | | | | | | |
| 38 | | | | | | | |
| 40 | | | | | | | |
| 42 | | | | | | | |
| | | | | | 225A, 120/208V/3ø/4W | | |

## PANEL F - POWERHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | FURNACE WEST | 10A | 15A | FUNCTIONAL | #12AWG | GOOD | 119.7V |
| 3 | FURNACE EAST | 0.1A | 20A | FUNCTIONAL | #12AWG | GOOD | 120.0V |
| 5 | LUMBER SHED (DELETED) | 0A | 20A | FUNCTIONAL | #12AWG | GOOD | 122.2V |
| 7 | 20A REC WEST WALL | 0A | 20A 2P | FUNCTIONAL | #8AWG | GOOD | 119.6V |
| 9 | | 0A | | | #8AWG | GOOD | 120.4V |
| 11 | EMERGENCY LIGHTING REC | 0A | 15A | FUNCTIONAL | #14AWG | GOOD | 121.8V |
| 13 | LIGHTS | 5.0A | 15A | FUNCTIONAL | #12AWG | GOOD | 119.6V |
| 15 | LIGHTS | 5.8A | 15A | FUNCTIONAL | #12AWG | GOOD | 120.1V |
| 17 | LIGHTS | 5.8A | 15A | FUNCTIONAL | #12AWG | GOOD | 122.0V |
| 19 | RECEPTACLE EAST WALL | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 119.2V |
| 21 | RECEPTACLE EAST WALL | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 120.3V |
| 23 | RECEPTACLE EAST WALL | 0A | 20A | FUNCTIONAL | #12AWG | GOOD | 121.7V |
| 25 | RECEPTACLE EAST WALL | 0.5A | 15A | FUNCTIONAL | #12AWG | GOOD | 119.6V |
| 27 | HEAT TRACE (WELL PUMP) | 0.1A | 15A | FUNCTIONAL | #12AWG | GOOD | 120.5V |
| 29 | PRESSURE TANK | 0.1A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.7V |
| 2 | LIGHTING CONTACTOR (FEEDS SUB PANEL G) | 0A | 15A 3P | FUNCTIONAL | #12AWG | GOOD | 119.5V |
| 4 | | 0A | | | #12AWG | GOOD | 120.6V |
| 6 | | 0A | | | #12AWG | GOOD | 121.6V |
| 8 | *LINE SIDE BREAKER METAL FATIGUED* | | | POOR | | | |
| 10 | NORTH WALL PL#2 | 0.1A | 15A | FUNCTIONAL | #12AWG | GOOD | 120.6V |
| 12 | SUB PANEL K | 0.2A | 30A 2P | FUNCTIONAL | #10AWG | GOOD | 121.7V |
| 14 | | 6.1A | | | #10AWG | GOOD | 119.8V |
| 16 | PARKING LOT PLUGS | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.0V |
| 18 | PARKING LOT PLUGS | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.5V |
| 20 | SHEAR | 0.1A | 15A 3P | FUNCTIONAL | #12AWG | GOOD | 119.8V |
| 22 | | 0A | | | #12AWG | GOOD | 121.0V |
| 24 | | 0A | | | #12AWG | GOOD | 121.3V |
| 26 | NORTH WALL PLUG | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 119.8V |
| 28 | WEST WALL PLUG | 0A | 15A 2P | FUNCTIONAL | #12AWG | GOOD | 121.0V |
| 30 | WEST WALL PLUG | 0A | | | #12AWG | GOOD | 121.2V |
| | | | | | 225A, 120/208V/3ø/4W | | |

## PANEL G - POWERHOUSE NO LOAD

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION |
|---|---|---|---|---|---|---|
| 1 | AREA LIGHTS | 0A | 15A, 2P | FUNCTIONAL | #12AWG | GOOD |
| 3 | AREA LIGHTS | 0A | | | #12AWG | GOOD |
| 5 | AREA LIGHTS | 0A | 15A, 2P | FUNCTIONAL | #12AWG | GOOD |
| 7 | AREA LIGHTS | 0A | | | #12AWG | GOOD |
| 9 | SPACE | | | | | |
| 11 | SPACE | | | | | |
| 2 | SPACE | | | | | |
| 4 | SPACE | | | | | |
| 6 | SPACE | | | | | |
| 8 | SPACE | | | | | |
| 10 | SPACE | | | | | |
| 12 | SPACE | | | | | |
| | | | | | 100A, 120/208V/3ø/4W | |

## PANELBOARD DIRECTORY - H - DECK SHED

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | UNDER ROAD/PHOTOCELL/ FISH LADDER | 0A | 30A | FUNCTIONAL | #10AWG | GOOD | 124V |
| 3 | SPACE | | | | | | |
| 5 | CONTACTOR (UNUSED) | 0A | 15A 2P | FUNCTIONAL | #12AWG | GOOD | 122.8V |
| 7 | | 0A | | | #12AWG | GOOD | 122.0V |
| 9 | DECK SHED LIGHTS | 1.4A | 15A | FUNCTIONAL | #12AWG | GOOD | 122.0V |
| 11 | OUTDOOR PLUG | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 122.1V |
| 2 | PANEL PLUG | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 123.7V |
| 4 | 20A TWIST LOCK PANEL PLUG | 0A | 15A 3P | FUNCTIONAL | #12AWG | GOOD | 123.2V |
| 6 | | 0A | | | #12AWG | GOOD | 121.3V |
| 8 | | 0A | | | #12AWG | GOOD | 121.6V |
| 10 | PARK LIGHTS (TWO POLES) | 0.1A | 15A 2P | FUNCTIONAL | #12AWG | GOOD | 122.2V |
| 12 | | 0.1A | | | #12AWG | GOOD | 121.5V |
| | | | | | 225A, 120/208V/3ø/4W | | |

## PANEL K - POWERHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | LUNCH RM MIC. FR, LUNCH+OFFICE LTS, HALL RECS | 4.1A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.2V |
| 2 | BACK LTS, EMD LTS, S. WALL REC'S | 2.0A | 15A | FUNCTIONAL | #12AWG | GOOD | 121.2V |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | OFFICE REC'S | 0.2A | 15A | FUNCTIONAL | #14AWG | GOOD | 123.4V |
| 6 | OUTSIDE PLUGS | 0A | 15A | FUNCTIONAL | #12AWG | GOOD | 123.4V |
| 7 | | | | | | | |
| 8 | | | | | | | |
| | | | | | 100A, 120/208V/3ø/4W | | |

## MAIN CDP - POWERHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION |
|---|---|---|---|---|---|---|
| 1 | PANEL F | 20.8A | 100A 3P | FUNCTIONAL | #2AWG | GOOD |
| 3 | | 6.0A | | | #2AWG | GOOD |
| 5 | | 20.6A | | | #2AWG | GOOD |
| 7 | SPARE | | 200A 3P | FUNCTIONAL | | |
| 9 | | | | | | |
| 11 | | | | | | |
| 13 | SPARE | | 200A 3P | FUNCTIONAL | | |
| 15 | | | | | | |
| 17 | | | | | | |
| 19 | DRILL PRESS | 0A | 15A 3P | FUNCTIONAL | #12AWG | GOOD |
| 21 | | 0A | | | #12AWG | GOOD |
| 23 | | 0A | | | #12AWG | GOOD |
| 25 | WELDER | 0A | 100A 3P | FUNCTIONAL | #3AWG | GOOD |
| 27 | | 0A | | | #3AWG | GOOD |
| 29 | | 0A | | | #3AWG | GOOD |
| 2 | PANEL J | 0A | 100A 3P | FUNCTIONAL | #3AWG | GOOD |
| 4 | | 1.0A | | | #3AWG | GOOD |
| 6 | | 1.0A | | | #3AWG | GOOD |
| 8 | RIP SAW | 0A | BREAKER SIZE UNKNOWN | FUNCTIONAL | #3AWG | GOOD |
| 10 | | 0A | | | #3AWG | GOOD |
| 12 | | 0A | | | #3AWG | GOOD |
| 14 | SPACE | | | | | |
| 16 | | | | | | |
| 18 | | | | | | |
| 20 | TRIMMER | 13.0A | 90A 3P | FUNCTIONAL | #6AWG | GOOD |
| 22 | | 13.0A | | | #6AWG | GOOD |
| 24 | | 13.0A | | | #6AWG | GOOD |
| 26 | WATER PUMP | 0A | 70A 3P | FUNCTIONAL | #6AWG | GOOD |
| 28 | | 0A | | | #6AWG | GOOD |
| 30 | | 0A | | | #6AWG | GOOD |
| | | | | | 400A, 120/208V/3ø/4W | |

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

RECORD DRAWING
MAY 2016

**DO NOT SCALE DRAWINGS**

| Revision/ Revision | Description/Description | Date/Date |
|---|---|---|
| 0 | RECORD DRAWING | 16/05/20 |

Client/client

**ST. ANDREWS LOCK AND DAM**

**ST. ANDREWS, MANITOBA**

Project title/Titre du projet

**ST. ANDREWS LOCK AND DAM**
**ST. ANDREWS, MANITOBA**

**LIGHTING AND ELECTRICAL UPGRADES**

Approved by/Approuve par

Designed by/Concept par

Drawn by/Dessine par

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'Ingénierie, TPSGC

Client/client

Drawing title/Titre du dessin

**EAST SIDE ELECTRICAL PANELBOARD SCHEDULES-1**

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E6 OF 16 | 0 |

PWGSC – B1 – 1000X707

## PANELBOARD DIRECTORY - K - BRIDGE CENTRE DISTRIBUTION

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | UNKNOWN | 0.8A | 15A | ORIGINAL BREAKER | #12AWG | GOOD | 124.0V |
| 3 | UNKNOWN | 0.4A/1.2A | A-15A/B-15A | ORIGINAL BREAKER | 2x#12AWG | GOOD | 126.3V/126.0V |
| 5 | UNKNOWN | 1.8A | 15A | ORIGINAL BREAKER | #12AWG | GOOD | 125.3V |
| 7 | UNKNOWN | | 50A 3P | ORIGINAL BREAKER (SPARE) | | | |
| 9 | UNKNOWN | | | | | | |
| 11 | UNKNOWN | | | | | | |
| 2 | UNKNOWN | | 30A 3P | ORIGINAL BREAKER (SPARE) | | | |
| 4 | UNKNOWN | | | | | | |
| 6 | UNKNOWN | | | | | | |
| 8 | UNKNOWN | 0.8A | 15A | ORIGINAL BREAKER | #4AWG | GOOD | 124.3V |
| 10 | UNKNOWN | 0.8A | 15A | ORIGINAL BREAKER | #4AWG | GOOD | 124.1V |
| 12 | UNKNOWN | 0.8A | A-15A/B-15A | ORIGINAL BREAKER | 2x#12AWG | GOOD | 0.0V/125.2V |
| | | | | | 225A, 120/208V/3ø/4W | | |

## PANELBOARD DIRECTORY - L - BRIDGE CENTRE DISTRIBUTION

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | BRIDGE LIGHTS | 2.8A | 15A 2P | ORIGINAL BREAKER | #8AWG | FAIR | 122.4V |
| 3 | | 1.8A | | | #8AWG | FAIR | 124.7V |
| 5 | BRIDGE LIGHTS | 1.2A | 15A 2P | ORIGINAL BREAKER | #8AWG | FAIR | 124.0V |
| 7 | | 1.2A | | | #8AWG | FAIR | 122.6V |
| 9 | BRIDGE LIGHTS | | 15A 2P | ORIGINAL BREAKER | #8AWG | FAIR | 124.9V |
| 11 | | | | | #8AWG | FAIR | 124.1V |
| 13 | SPARE | | 30A 3P | ORIGINAL BREAKER | | | |
| 15 | | | | | | | |
| 17 | | | | | | | |
| 19 | SPACE | 2.8A | | | | | |
| 2 | BRIDGE LIGHTS | 3.8A | 15A 2P | ORIGINAL BREAKER | #8AWG | POOR | 123.0V |
| 4 | | 3.8A | | | #8AWG | POOR | 125.2V |
| 6 | BRIDGE LIGHTS | 2.9A | 15A 2P | ORIGINAL BREAKER | #8AWG | POOR | 124.5V |
| 8 | | 2.9A | | | #8AWG | POOR | 123.1V |
| 10 | BRIDGE LIGHTS | | 15A 2P | ORIGINAL BREAKER | #8AWG | POOR | 125.2V |
| 12 | | | | | #8AWG | POOR | 124.5V |
| 14 | SIGN LIGHTS N.W. | 12.8A | 20A | ORIGINAL BREAKER | #10AWG | POOR | 122.8V |
| 16 | SIGN LIGHTS N.E. | 11.8A | 15A | ORIGINAL BREAKER | #10AWG | POOR | 125.3V |
| 18 | SIGN LIGHTS SOUTH | 7.5A | 20A | ORIGINAL BREAKER | #10AWG | POOR | 125.3V |
| 20 | SPACE | | | | | | |
| | | | | | 100A, 120/208V/3ø/4W | | |

## PANEL J - POWERHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | 20A, 3ø PLUG EAST WALL | 0A | 20A 3P | ORIGINAL BREAKER | #12AWG | GOOD | 122.1V |
| 3 | | 0A | | | #12AWG | GOOD | 124.0V |
| 5 | | 0A | | | #12AWG | GOOD | 119.9V |
| 7 | SPLIT PLUG EAST WALL | 0A | 20A 2P | ORIGINAL BREAKER | #12AWG | GOOD | 121.9V |
| 9 | | 0A | | | #12AWG | GOOD | 123.5V |
| 11 | GRINDER | 0A | 15A 3P | ORIGINAL BREAKER | #12AWG | GOOD | 119.5V |
| 13 | | 0A | | | #12AWG | GOOD | 121.7V |
| 15 | | 0A | | | #12AWG | GOOD | 123.4V |
| 17 | LUNCH ROOM N. WALL REC/HOT WATER TANK | 0A | A-15A/B-15A | ORIGINAL BREAKER | 2x#12AWG | GOOD | 119.4V/119.3V |
| 19 | A/C | 0A | 20A 2P | ORIGINAL BREAKER | #12AWG | GOOD | 121.6V |
| 21 | | 0A | | | #12AWG | GOOD | 123.6V |
| 23 | WELDER PLUG EAST WALL | 0A | 50A 2P | ORIGINAL BREAKER | #8AWG | GOOD | 119.7V |
| 25 | | 0A | | | #8AWG | GOOD | 121.7V |
| 27 | PLANER PLUG | 0A | 40A 2P | ORIGINAL BREAKER | #10AWG | GOOD | 123.1V |
| 29 | | 0A | | | #10AWG | GOOD | 119.6V |
| 2 | SHAPER | 0A | 20A 3P | ORIGINAL BREAKER | #12AWG | GOOD | 121.9V |
| 4 | | 0A | | | #12AWG | GOOD | 123.3V |
| 6 | | 0A | | | #12AWG | GOOD | 119.5V |
| 8 | FEEDER | 0A | 15A 3P | ORIGINAL BREAKER | #12AWG | GOOD | 121.2V |
| 10 | | 0A | | | #12AWG | GOOD | 122.9V |
| 12 | | 0A | | | #12AWG | GOOD | 118.7V |
| 14 | AIR COMPRESSOR | 0A | 30A 3P | ORIGINAL BREAKER | #12AWG | GOOD | 121.2V |
| 16 | | 0A | | | #12AWG | GOOD | 122.4V |
| 18 | | 0A | | | #12AWG | GOOD | 118.7V |
| 20 | DUST COLLECTOR #1 | 0.6A | 30A 3P | ORIGINAL BREAKER | #12AWG | GOOD | 120.5V |
| 22 | | 0.6A | | | #12AWG | GOOD | 122.3V |
| 24 | | 0A | | | #12AWG | GOOD | 119.0V |
| 26 | DUST COLLECTOR #2 | 0.5A | 30A 3P | ORIGINAL BREAKER | #12AWG | GOOD | 121.4V |
| 28 | | 0.5A | | | #12AWG | GOOD | 123.3V |
| 30 | | 0A | | | #12AWG | GOOD | 120.0V |
| | | | | | 225A, 347/600V/3ø/4W | | |

NOTES:
1. CCT'S #27,29 #14,16,18 #20,22,24 #26,28,30 HAVE WIRING THAT DOES NOT MEET MINIMUM CODE REQUIREMENTS FOR AMPACITY.

## PANELBOARD DIRECTORY - J - BRIDGE CENTRE DISTRIBUTION

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION | VOLTAGE |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | TRANSFORMER | 0.8A | 40A 3P | ORIGINAL BREAKER | #8AWG | GOOD | |
| 7 | | 0.8A | | | #8AWG | GOOD | |
| 8 | | 0.8A | | | #8AWG | GOOD | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | HOIST PLUGS | 0A | 30A 3P | ORIGINAL BREAKER | #6AWG | GOOD | 355.5V |
| 14 | | 0A | | | #6AWG | GOOD | 355.7V |
| 15 | | 0A | | | #6AWG | GOOD | 345.5V |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | | | | | |
| 26 | | | | | | | |
| 27 | | | | | | | |
| 28 | | | | | | | |
| 29 | HOIST PLUGS | 0A | 30A 3P | ORIGINAL BREAKER | #6AWG | GOOD | 354.7V |
| 30 | | 0A | | | #6AWG | GOOD | 355.7V |
| 31 | | 0A | | | #6AWG | GOOD | 344.8V |
| 32 | | | | | | | |
| 33 | | | | | | | |
| 34 | | | | | | | |
| | | | | | 225A, 120/208V/3ø/4W | | |

Public Works and Government Services Canada / Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest

RECORD DRAWING
MAY 2016

DO NOT SCALE DRAWINGS

| Revision/Revision | Description/Description | Date/Date |
|---|---|---|
| 0 | RECORD DRAWING | 16/05/20 |

Client/client

**ST. ANDREWS LOCK AND DAM**

**ST. ANDREWS, MANITOBA**

Project title/Titre du projet
ST. ANDREWS LOCK AND DAM
ST. ANDREWS, MANITOBA

**LIGHTING AND ELECTRICAL UPGRADES**

Approved by/Approuve par

Designed by/Concept par

Drawn by/Dessine par

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSGC

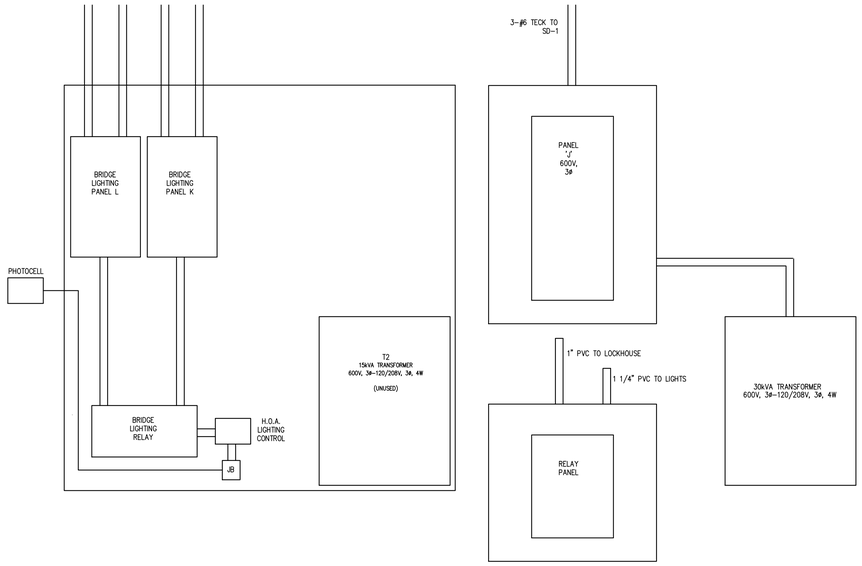
Client/client

Drawing title/Titre du dessin

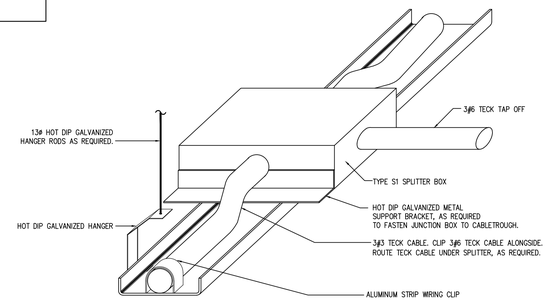
**EAST SIDE ELECTRICAL PANELBOARD SCHEDULES-2**

| Project No./No. du projet | Sheet/Feuille | Revision no./La Révision no. |
|---|---|---|
| R.076331 | E7 OF 16 | 0 |

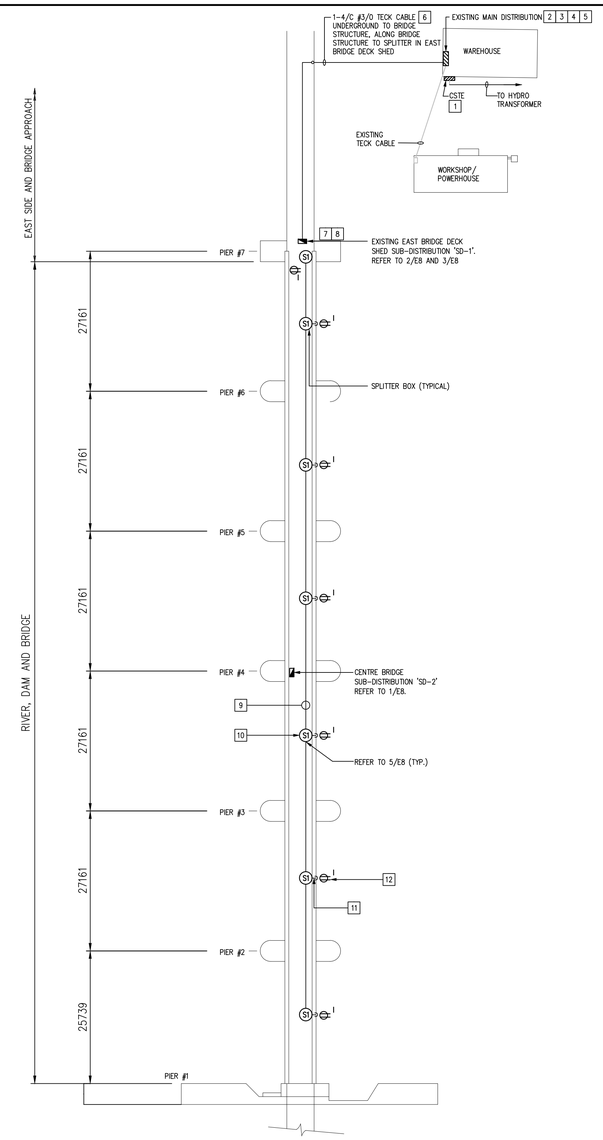
PWGSC – B1 – 1000X707



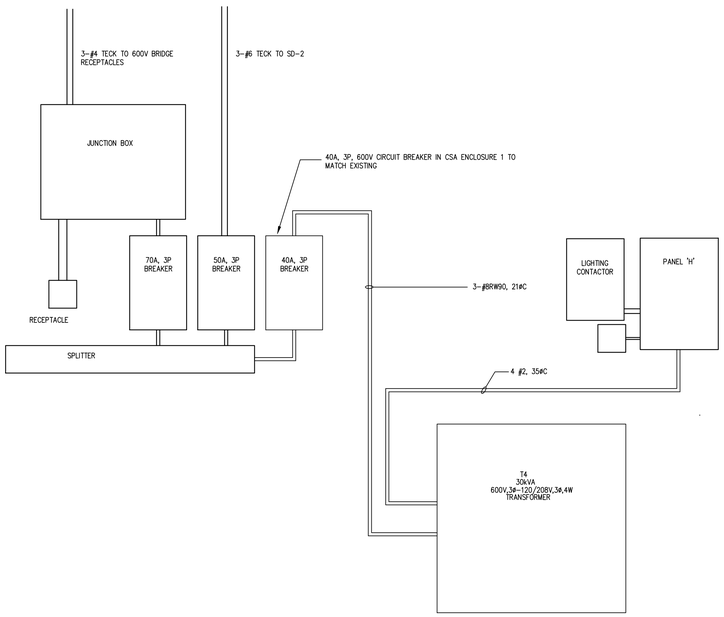

1 / E8 CENTRE BRIDGE SUB-DISTRIBUTION
NTS



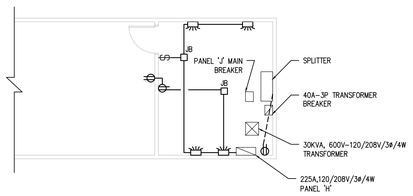

5 / E8 TYPE S1 SPLITTER BOX AND CABLE THROUGH DETAIL
NTS




4 / E8 SERVICES LAYOUT
NTS




2 / E8 EAST BRIDGE DECK SUB-DISTRIBUTION
NTS




3 / E8 DECK SHED BRIDGE WEST-EAST
NTS

NOTES:

2 4-1/C #600 MCM RW90 CONDUCTORS IN 100# CONDUIT FROM CSTE TO MAIN DISTRIBUTION.

3 EXISTING 600V, 400A, 3P SQUARE 'D' TYPE MXL BREAKER.

4 EXISTING 600V, 200A, 3P SQUARE 'D' TYPE KA SUB-BREAKER IN DISTRIBUTION SECTION OF MAIN DISTRIBUTION.

5 EXISTING 600V, 250A, 3P MANUAL TRANSFER SWITCH WITH 600V, 225A, 3P BREAKERS.

6 EXISTING 4/C #3/0 TECK CABLE FROM NEW 225A, 3P SUB BREAKER (EAST BRIDGE DECK SUB-DISTRIBUTION) TO 250A, 4P SPLITTER IN EAST BRIDGE DECK SHED.

7 EXISTING 600V, 250A, 4P SPLITTER.

8 EXISTING 600V, 125A, 3P ENCLOSED CIRCUIT BREAKER.

9 EXISTING 3/C #1 TECK CABLES FROM 125A, 3P BREAKER (ITEM #8) IN EAST BRIDGE DECK SHED TO SPLITTER BOXES S1 (ITEM #10) AND FROM SPLITTER BOXES (S1) TO RECEPTACLES (ITEM #12).

10 EXISTING SPLITTER BOXES WITH INTERNAL BARRIER.

11 EXISTING 3/C #6 TECK FROM SPLITTER BOXES (S1) TO RECEPTACLES.

12 EXISTING 600V, 100A, 4P GROUNDING RECEPTACLES.

N

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|---|---|---|
| 0 | RECORD DRAWING | 16/05/20 |

Client/client

ST. ANDREWS LOCK AND DAM

ST. ANDREWS, MANITOBA

Project title/Titre du projet
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ST. ANDREWS, MANITOBA

LIGHTING AND ELECTRICAL UPGRADES

Approved by/Approuve par

Designed by/Concept par

Drawn by/Dessine par

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSGC

Client/client

Drawing title/Titre du dessin

DECK SHED ELECTRICAL LAYOUT AND DISTRIBUTION DIAGRAM AND CENTRE BRIDGE DISTRIBUTION DIAGRAM AND SERVICES LAYOUT

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E8 OF 16 | 0 |

PWGSC – B1 – 1000X707

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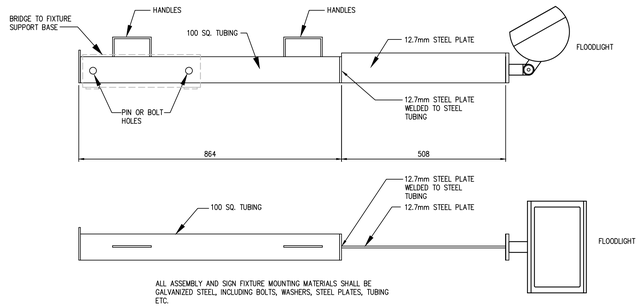
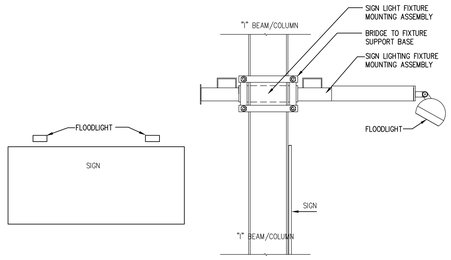
E8




ALL ASSEMBLY AND SIGN FIXTURE MOUNTING MATERIALS SHALL BE GALVANIZED STEEL, INCLUDING BOLTS, WASHERS, STEEL PLATES, TUBING ETC.

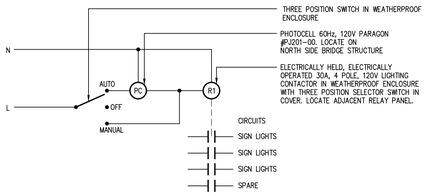
1 / E9 SIGN LIGHTING FIXTURE MOUNTING ASSEMBLY
1:500



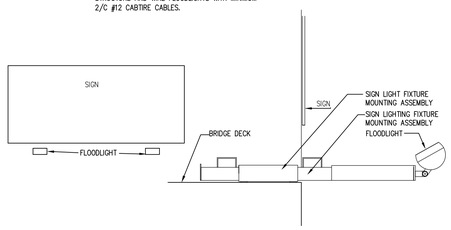

3 / E9 BRIDGE SOUTH SIDE SIGN LIGHTING
NTS

TYPICAL FOR SIGNS 1 TO 6 AS INDICATED ON SOUTH ELEVATION.

MOUNT JUNCTION BOXES ON STEEL BRIDGE STRUCTURE AND WIRE FLOODLIGHTS WITH MINIMUM 2/C #12 CABTIRE CABLES.

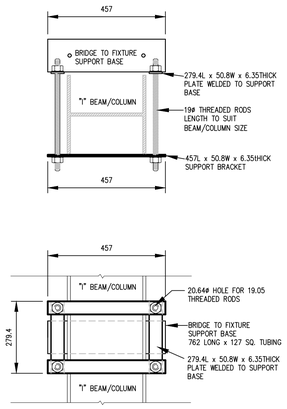



2 / E9 SIGN LIGHTING CONTROL SCHEMATIC
NTS

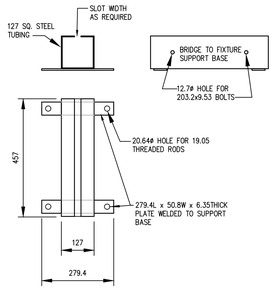



4 / E9 BRIDGE NORTH SIDE SIGN LIGHTING
NTS

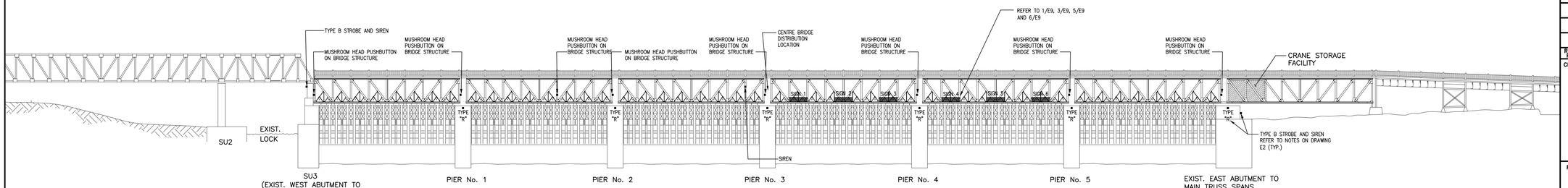
TYPICAL FOR SIGNS 1 TO 9 AS INDICATED ON NORTH ELEVATION.



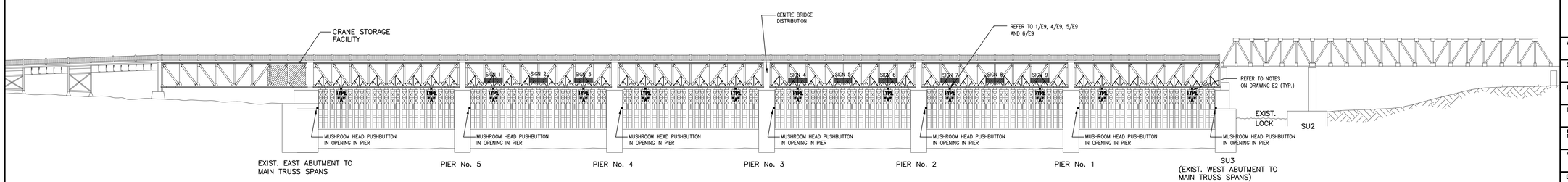

5 / E9 SIGN LIGHT FIXTURE MOUNTING ASSEMBLY
NTS




6 / E9 BRIDGE TO FIXTURE SUPPORT BASE
NTS




7 / E9 SOUTH ELEVATION
1:500




8 / E9 NORTH ELEVATION
1:500

N

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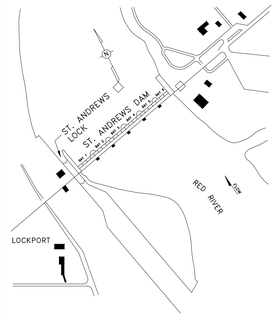
Western Region
SERVICES IMMOBILIERS
Région de l'ouest




SITE PLAN
N.T.S.

RECORD DRAWING
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| 0 | RECORD DRAWING | 16/05/20 |

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PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSGC

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Drawing title/Titre du dessin

SOUTH AND NORTH ELEVATION, BRIDGE SIGN LIGHTING AND DETAILS

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|---|---|---|
| R.076331 | E9 OF 16 | 0 |

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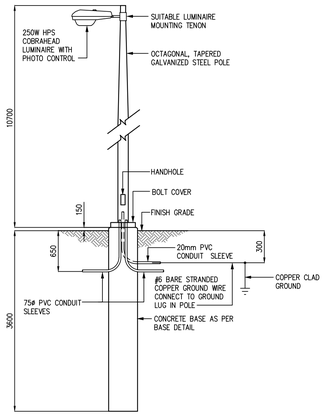
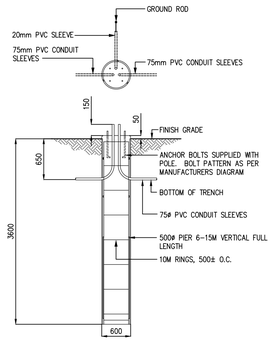
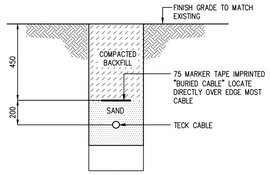
E9



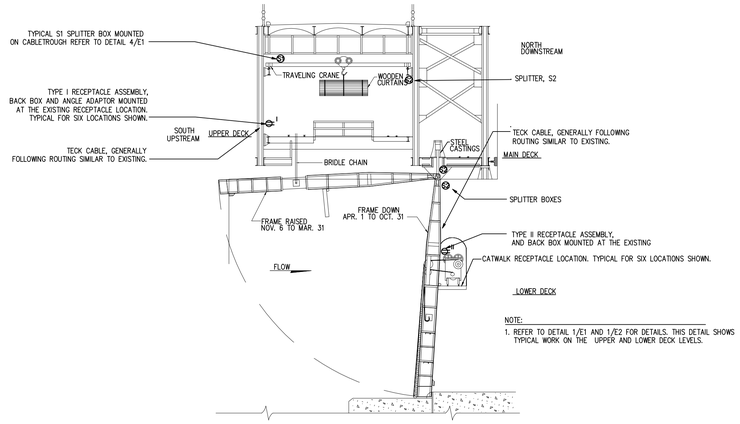

1 E10 POLE ELEVATION
NTS




2 E10 BASE DETAIL
NTS

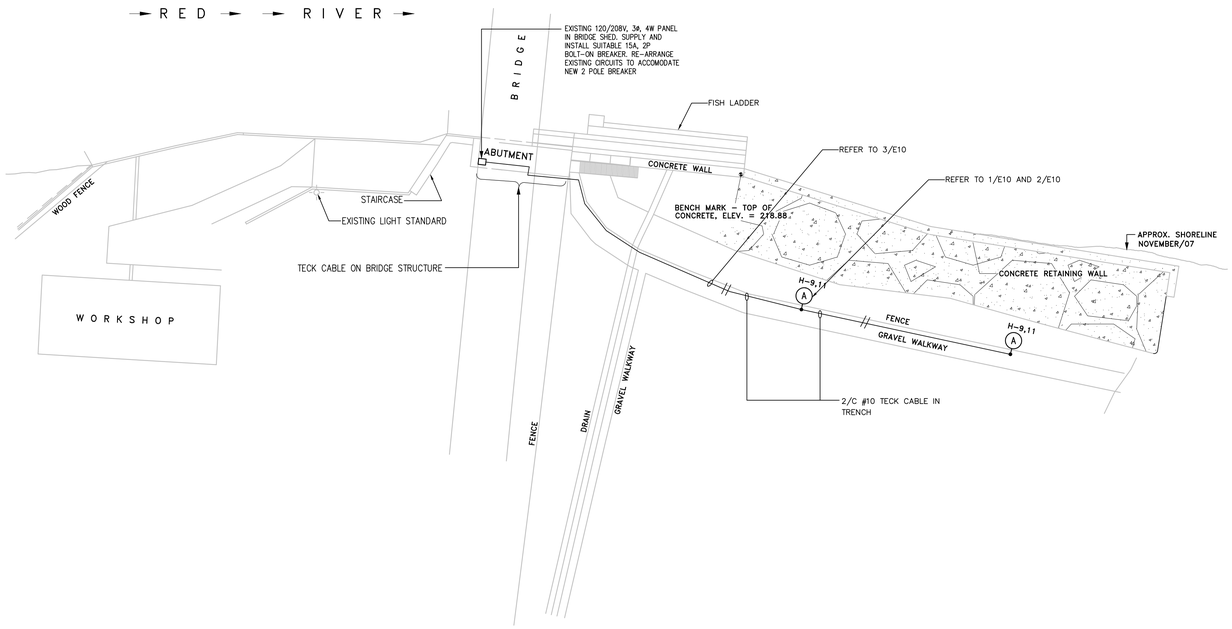



3 E10 TRENCH DETAIL
NTS




NOTE:
1. REFER TO DETAIL 1/E1 AND 1/E2 FOR DETAILS. THIS DETAIL SHOWS TYPICAL WORK ON THE UPPER AND LOWER DECK LEVELS.

4 E10 BRIDGE SECTION
NTS




5 E10 FISH LADDER DETAIL
NTS

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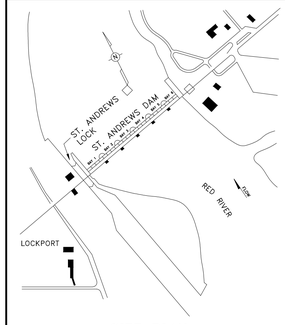
Western Region
SERVICES IMMOBILIERS
Région de l'ouest




SITE PLAN
N.T.S.

RECORD DRAWING
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FISH LADDER DETAIL, BRIDGE SECTION AND DETAILS

N

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|---|---|---|
| R.076331 | E10 OF 16 | 0 |

PWGSC – B1 – 1000X707

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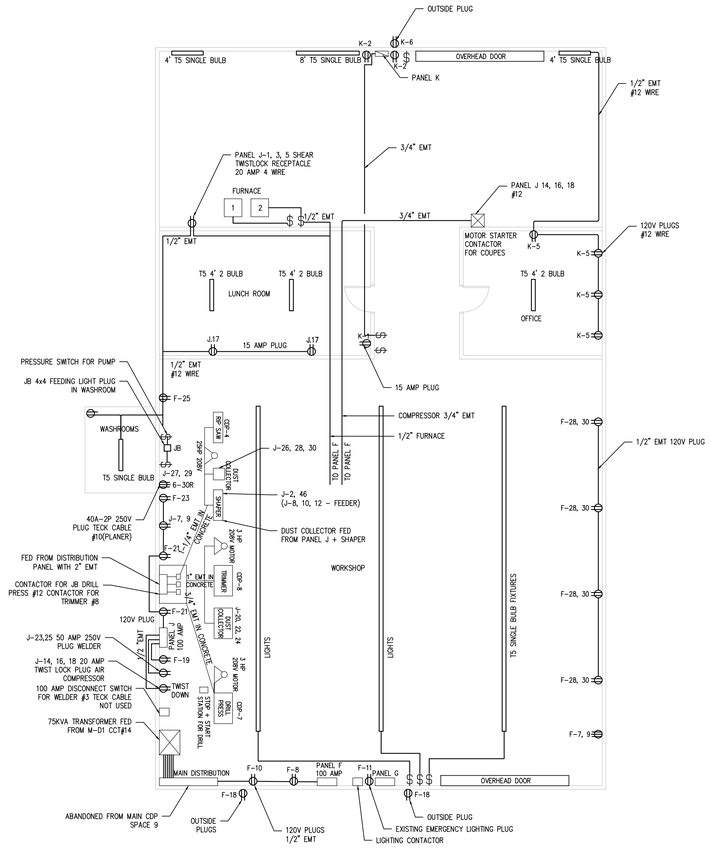
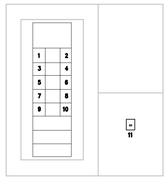
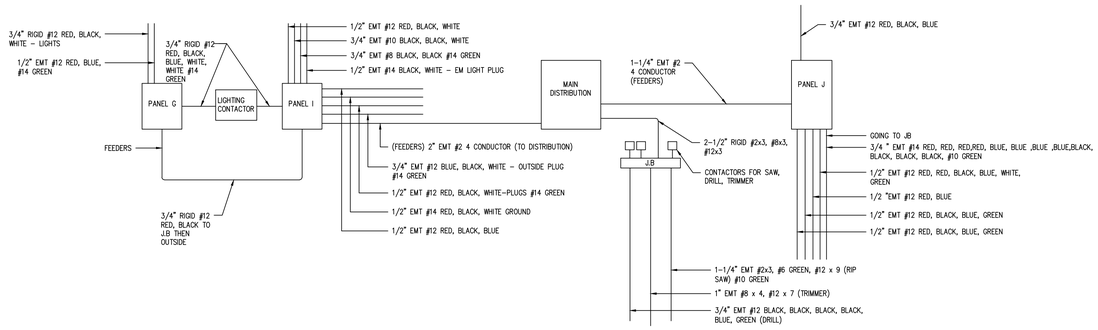



1 / E11 WORKSHOP/POWER HOUSE FLOOR PLAN
1:100




1. PANEL Y1; 100A, 3P
2. PANEL Y2; 100A, 3P
3. 200A, 3P - SPARE
4. RIP SAW; 125A, 3P (25HP)
5. 200A, 3P; SPARE
6. SPACE
7. DRILL PRESS; 15A, 3P (2HP)
8. TRIMMER; 90A, 3P (15HP)
9. WELDER; 100A, 2P
10. WATER PUMP; 70A, 3P (15HP)
11. MAIN BREAKER; 250A, 3P

3 / E11 WORKSHOP/POWERHOUSE MAIN DISTRIBUTION MD-1
1:100

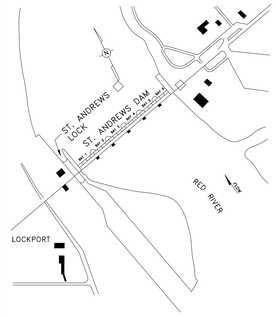



2 / E11 WORKSHOP/POWER HOUSE PIPE FILL
NTS

N

Public Works and Government Services Canada
Travaux publics et Services gouvernementaux Canada

REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest




SITE PLAN
N.T.S.

RECORD DRAWING
MAY 2016

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| Revision/ Revision | Description/Description | Date/Date |
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WORKSHOP POWER HOUSE FLOOR PLAN AND WORKSHOP/POWER HOUSE PIPE FILL

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E11 OF 16 | 0 |

PWGSC – B1 – 1000X707

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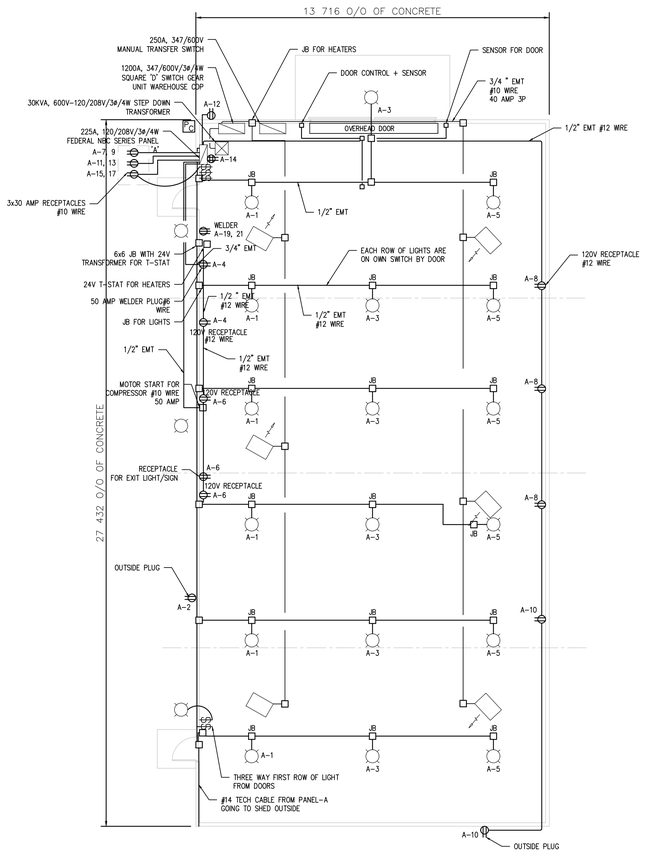
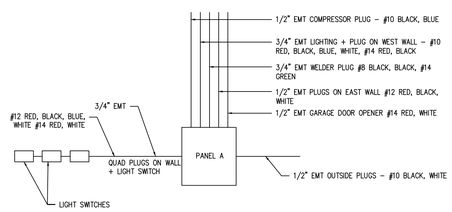



1 / E12 EAST SIDE WAREHOUSE FLOOR PLAN
1:50




2 / E12 PIPE FILL
NTS

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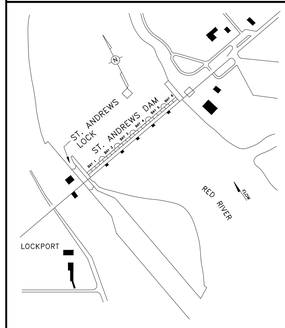
REAL PROPERTY SERVICES
Western Region
SERVICES IMMOBILIERS
Région de l'ouest




*SITE PLAN*
*N.T.S.*

RECORD DRAWING
MAY 2016

DO NOT SCALE DRAWINGS

| Revision/ Revision | Description/Description | Date/Date |
|---|---|---|
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**EAST SIDE WAREHOUSE FLOOR PLAN, PIPE FILL AND EAST SIDE ELECTRICAL SCHEMATIC**

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E12 OF 16 | 0 |

PWGSC – B1 – 1000X707

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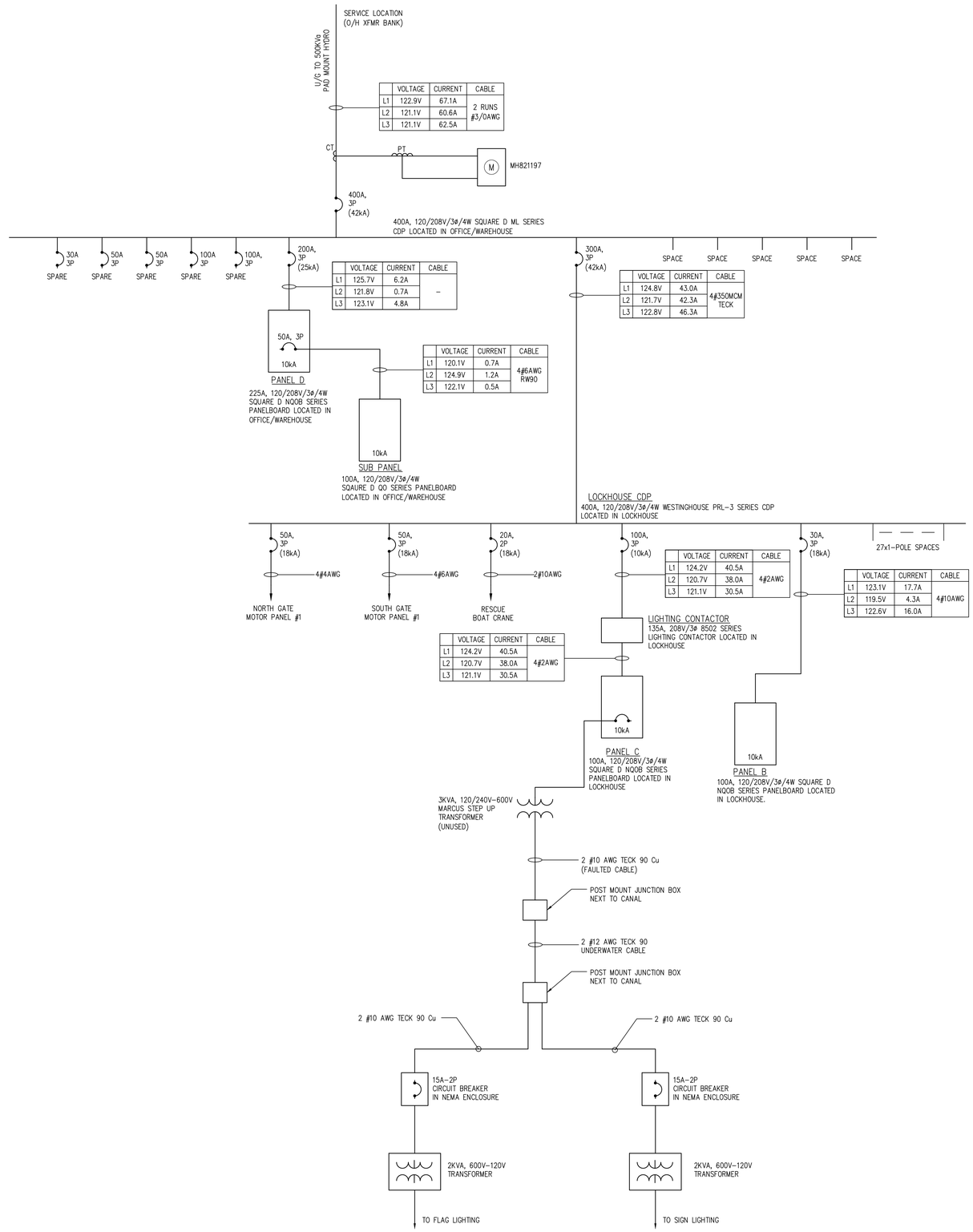
E12




1 / E13 WEST SIDE SINGLE LINE DISTRIBUTION DIAGRAM
NTS

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REAL PROPERTY SERVICES
Western Region
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**WEST SIDE**
**SINGLE LINE DISTRIBUTION DIAGRAM**

| Project No./No. du projet | Sheet/Feuille | Revision no./La Révision no. |
|---|---|---|
| R.076331 | E13 OF 16 | 0 |

## PANELBOARD DIRECTORY - B - LOCKHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION |
|---|---|---|---|---|---|---|
| 1 | LOCKHOUSE PLUGS | 1.8A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 3 | OFFICE A/C | 0.2A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 5 | LIGHTING CONTROLS | 0A (BREAKER OFF) | 15A | FUNCTIONAL | #12AWG | GOOD |
| 7 | HUMIDITY FAN | 1.0A | 15A | FUNCTIONAL | 2x#12AWG | GOOD |
| 9 | BACKROOM A/C | 0.2A | 20A 2P | FUNCTIONAL | #14AWG | GOOD |
| 11 | | 0.2A | | | #14AWG | GOOD |
| 2 | LOCKHOUSE LIGHTS | 2.8A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 4 | EQUIPMENT RACK | 4.3A/0.2A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 6 | UNIT HEATERS | 16.1A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 8 | OFFICE BASEBOARD HEATERS | 13.7A | 20A 2P | FUNCTIONAL | #12AWG | GOOD |
| 10 | | 13.7A | | | #12AWG | GOOD |
| 12 | NOT IN USE | 0A | 15A | FUNCTIONAL | #12AWG | GOOD |
| | | | | | 100A, 120/208V/3ø/4W | |

## PANELBOARD DIRECTORY - C - LOCKHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION |
|---|---|---|---|---|---|---|
| 1 | LIGHTS, NORTH SIDE 2 POLES | 10.5A | 30A 2P | FUNCTIONAL | #6AWG | GOOD |
| 3 | | 10.5A | | | #6AWG | GOOD |
| 5 | LIGHTS, NORTH SIDE 3 POLES | 13.8A | 30A 2P | FUNCTIONAL | #6AWG | GOOD |
| 7 | | 12.0A | | | #6AWG | GOOD |
| 9 | LIGHTS, SOUTH SIDE 3 POLES | 12.4A | 20A 2P | FUNCTIONAL | #6AWG | GOOD |
| 11 | | 12.4A | | | #6AWG | GOOD |
| 13 | BRIDGE LIGHTS | 4.5A | 15A 2P | FUNCTIONAL | #8AWG | GOOD |
| 15 | | 4.5A | | | #8AWG | GOOD |
| 17 | LIGHTS OVER LOCKS UNDER BRIDGE (4 LUMINAIRES) | 7.3A | 15A 2P | FUNCTIONAL | #8AWG | GOOD |
| 19 | | 7.2A | | | #8AWG | GOOD |
| 2 | LIGHTS ALONG RIVER ROAD (5 POLES) | 16.0A | 20A 2P | FUNCTIONAL | #6AWG | GOOD |
| 4 | | 16.1A | | | #6AWG | GOOD |
| 6 | SPARE | | 30A | FUNCTIONAL | | |
| 8 | RANGE LIGHTS | 1.3A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 10 | SPARE | | 15A | FUNCTIONAL | | |
| 12 | SPACE | | | | | |
| 14 | SPACE | | | | | |
| 16 | SPACE | | | | | |
| 18 | SPACE | | | | | |
| 20 | SPACE | | | | | |
| | NOTES:<br>1. VOLTAGE DROP TO 'DO NOT ENTER' SIGN ON ISLAND IS SHARED WITH CIRCUITS #2,4. VOLTAGE DROP AT SIGN IS CCT#2 – 121.2V; CCT#4 – 118.7V. | | | | 100A, 120/208V/3ø/4W | |

## PANELBOARD DIRECTORY - D - MAINTENANCE SHOP

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION |
|---|---|---|---|---|---|---|
| 1 | WEST SHOP LIGHTS + HALLWAYS LIGHTS | 5.8A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 3 | CENTRE SHOP LIGHTS | 4.5A | 15A | FUNCTIONAL | #10AWG | POOR |
| 5 | CENTRE SHOP LIGHTS | 4.0 | 15A | FUNCTIONAL | #10AWG | POOR |
| 7 | EAST SHOP LIGHTS | 4.5A | 15A | FUNCTIONAL | #10AWG | POOR |
| 9 | GARAGE DOOR | NOT IN USE | 15A | FUNCTIONAL | #10AWG/#14AWG | POOR |
| 11 | SOUTH WALL PLUG/OUTSIDE | 0A (BREAKER OFF) | 15A | FUNCTIONAL | #10AWG | POOR |
| 13 | WELDER | 0.1A | 60A 2P | FUNCTIONAL | #6AWG | POOR |
| 15 | | 0.1A | | | #6AWG | POOR |
| 17 | GRINDER | 0.1A | 15A 3P | FUNCTIONAL | #10AWG | POOR |
| 19 | | 0.1A | | | #10AWG | POOR |
| 21 | | 0.1A | | | #10AWG | POOR |
| 23 | WELL PUMP | 0.1A | 20A | FUNCTIONAL | #12AWG | GOOD |
| 25 | HOT WATER TANK | 0.1A | 15A | FUNCTIONAL | #10AWG | POOR |
| 27 | WASHROOM BASEBOARD | 0.1A | 15A 2P | FUNCTIONAL | #10AWG | GOOD |
| 29 | | 0.2A | | | #10AWG | GOOD |
| 31 | WEST CEILING HEATERS (x2) | 28.8A | 40A 3P | FUNCTIONAL | #8AWG | GOOD |
| 33 | | 30.3A | | | #8AWG | GOOD |
| 35 | | 30.6A | | | #8AWG | GOOD |
| 37 | EAST CEILING HEATERS (x2) | 29.4A | 40A 3P | FUNCTIONAL | #8AWG | GOOD |
| 39 | | 29.8A | | | #8AWG | GOOD |
| 41 | | 30.5A | | | #8AWG | GOOD |
| 2 | SUB PANEL | 0.6A | 50A 3P | FUNCTIONAL | #6AWG | GOOD |
| 4 | | 1.4A | | | #6AWG | GOOD |
| 6 | | 0.7A | | | #6AWG | GOOD |
| 8 | SOUTH/EAST OFFICE PLUG | 0.1A | 15A | FUNCTIONAL | #10AWG | POOR |
| 10 | N. OFFICE PLUGS + HALLWAY PLUGS | 0.2A | 15A | FUNCTIONAL | #10AWG | POOR |
| 12 | SOUTH LOUNGE PLUGS | 0.1A | 15A | FUNCTIONAL | #10AWG | POOR |
| 14 | WEST LOUNGE BASEBOARD | 6.6A | 15A 2P | FUNCTIONAL | #10AWG | POOR |
| 16 | | 6.8A | | | #10AWG | POOR |
| 18 | NORTH LOUNGE BASEBOARD | 6.8A | 15A 2P | FUNCTIONAL | #10AWG | POOR |
| 20 | | 7.0A | | | #10AWG | POOR |
| 22 | NORTH OFFICE BASEBOARD | 7.2A | 15A 2P | FUNCTIONAL | #10AWG | POOR |
| 24 | | 7.3A | | | #10AWG | POOR |
| 26 | EAST OFFICE BASEBOARD | 6.9A | 15A 2P | FUNCTIONAL | #10AWG | GOOD |
| 28 | | 7.0A | | | #10AWG | GOOD |
| 30 | SOUTH CEILING HEATERS (x2) | 29.3A | 40A 3P | FUNCTIONAL | #8AWG | GOOD |
| 32 | | 30.4A | | | #8AWG | GOOD |
| 34 | | 30.6A | | | #8AWG | GOOD |
| 36 | COMPRESSOR | 0.1A | 30A 2P | FUNCTIONAL | #12AWG | GOOD |
| 38 | | 0.2A | | | #12AWG | GOOD |
| 40 | PRESSURE WASHER | 0.1A | 20A 2P | FUNCTIONAL | #12AWG | GOOD |
| 42 | | 0.1A | | | #12AWG | GOOD |
| | | | | | 225A, 120/208V/3ø/4W | |

## LOCKHOUSE CDP - LOCKHOUSE

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION |
|---|---|---|---|---|---|---|
| 1 | NORTH GATE MOTOR PANEL | 0.1A | 50A 3P | FUNCTIONAL | #4AWG | GOOD |
| 3 | | 0.1A | | | #4AWG | GOOD |
| 5 | | 0.1A | | | #4AWG | GOOD |
| 7 | SOUTH GATE MOTOR PANEL | 0.1A | 50A 3P | FUNCTIONAL | #6AWG | GOOD |
| 9 | | 0.1A | | | #6AWG | GOOD |
| 11 | | 0.1A | | | #6AWG | GOOD |
| 13 | RESCUE BOAT CRANE | 0.1A | 20A 3P | FUNCTIONAL | #10AWG | GOOD |
| 15 | | 0.1A | | | #10AWG | GOOD |
| 17 | | | | | | |
| 19 | | | | | | |
| 21 | | | | | | |
| 23 | | | | | | |
| 25 | | | | | | |
| 27 | | | | | | |
| 29 | | | | | | |
| 31 | | | | | | |
| 33 | | | | | | |
| 35 | | | | | | |
| 37 | | | | | | |
| 39 | | | | | | |
| 41 | | | | | | |
| 2 | PANEL B | 17.5A | 30A 3P | FUNCTIONAL | #10AWG | GOOD |
| 4 | | 18.2A | | | #10AWG | GOOD |
| 6 | | 16.1A | | | #10AWG | GOOD |
| 8 | PANEL C | 41.9A | 100A 3P | FUNCTIONAL | #2AWG | GOOD |
| 10 | | 41.4A | | | #2AWG | GOOD |
| 12 | | 30.8A | | | #2AWG | GOOD |
| 14 | | | | | | |
| 16 | | | | | | |
| 18 | | | | | | |
| 20 | | | | | | |
| 22 | | | | | | |
| 24 | | | | | | |
| 26 | | | | | | |
| 28 | | | | | | |
| 30 | | | | | | |
| 32 | | | | | | |
| 34 | | | | | | |
| 36 | | | | | | |
| 38 | | | | | | |
| 40 | | | | | | |
| 42 | | | | | | |
| | | | | | 400A, 120/208V/3ø/4W | |

## SUB PANEL - MAINTENANCE SHOP

| C | ITEM | MEASURED LOAD | CIRCUIT BREAKER | BREAKER CONDITION | WIRE SIZE | WIRE CONDITION |
|---|---|---|---|---|---|---|
| 1 | OFFICE COMPUTER PLUG | 0.5A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 3 | EMERGENCY LIGHTS + LOUNGE PLUGS | 0.1A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 5 | AIR CONDITIONER | 0.1A | 20A 2P | FUNCTIONAL | #10AWG | GOOD |
| 7 | | 0.1A | | | #10AWG | GOOD |
| 9 | ROADWAY GATE | 0.1A | 40A 2P | FUNCTIONAL | #12AWG | GOOD |
| 11 | | 0.1A | | | #12AWG | GOOD |
| 2 | EAST OUTSIDE WALL PLUG | 0.1A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 4 | LIGHTS IN OFFICE + OUTSIDE | 1.2A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 6 | LOUNGE + WASHROOM LIGHTS | 0.6A | 15A | FUNCTIONAL | #12AWG | GOOD |
| 8 | | | | | | |
| 10 | | | | | | |
| 12 | | | | | | |
| | NOTES:<br>1. PANEL COVER HAS BEEN FLIPPED.<br>2. CCT#9,11 – WIRING FROM PANEL TO JUNCTION BOX IS TOO SMALL. #12's ARE INSTALL AND CODE REQUIRES #8's. JUNCTION BOX TO GATE ARE SIZED CORRECTLY. | | | | 100A, 120/208V/3ø/4W | |

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| Revision/Revision | Description/Description | Date/Date |
|---|---|---|
| 0 | RECORD DRAWING | 16/05/20 |

Client/client

**ST. ANDREWS LOCK AND DAM**

**ST. ANDREWS, MANITOBA**

Project title/Titre du projet

ST. ANDREWS LOCK AND DAM
ST. ANDREWS, MANITOBA

**LIGHTING AND ELECTRICAL UPGRADES**

Approved by/Approuve par

Designed by/Concept par

Drawn by/Dessine par

PWGSC Project Manager/Administrateur de Projets TPSGC

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Client/client

Drawing title/Titre du dessin

**WEST SIDE ELECTRICAL PANELBOARD SCHEDULES**

| Project No./No. du projet | Sheet/Feuille | Revision no./La Révision no. |
|---|---|---|
| R.076331 | E14 OF 16 | 0 |

PWGSC – B1 – 1000X707

## APPENDIX A - West Side Distribution Existing Condition

**Warehouse**

| Tag | Item | Manufacturer | Catalogue Number | Description | Location | Condition | Additional Comments |
|---|---|---|---|---|---|---|---|
| No Tag' | Main Distribution | Square D | S/N V938800-J1 | 400A, 120/208V/3P/4W c/w 400A Main Breaker | Maintenance Shop | Fair | Distribution is beginning to show signs of rust. |
| Panel D | Panelboard | Square D | | 225A, 120/208V/3P/4W | Maintenance Shop | Good | Updated, typewritten panelboard directory should be provided for clarity |
| No Tag' | Panelboard | Square D | QO312ML-1 | 100A, 120/208V/3P/4W | Maintenance Shop | Good | Missing Tag (Sub-Panel per panel D directory). |
| Lockhouse CDP | Panelboard | Eaton Cutler Hammer | PRL-3 | 400A, 120/208V/3P/4W | Lockhouse | Good | Missing lamacoid for Rescue Boat Crane breaker. (Indicated in permanent marker). |
| Panel B | Panelboard | Square D | QBL412-T2 | 100A, 120/208V/3P/4W | Lockhouse | Good | Updated, typewritten panelboard directory should be provided for clarity |
| Panel C | Panelboard | Square D | QBL420-T2 | 100A, 120/208V/3P/4W | Lockhouse | Good | Updated, typewritten panelboard directory should be provided for clarity |
| No Tag' | Transformer Step-Up | Marcus | S/N 3747-602 | 3kVA, 120/240V-600V/1P/3W | Lockhouse | Fair | Transformer is currently unused due to fault in underground line for island lighting. |
| Lighting Contactor | Contactor | Square D | Class 8502 Type FG2 | 135A, 208V/3P | Lockhouse | Fair | Enclosure is beginning to show signs of rust. |

## APPENDIX B - Partial East Side Distribution Existing Condition

**Warehouse**

| Tag | Item | Manufacturer | Catalogue Number | Description | Location | Condition | Additional Comments |
|---|---|---|---|---|---|---|---|
| Main | Switchgear | Square D | S/N 17031058-006 14076 | 1200A, 347/600V/3P/4W | Warehouse | Good | |
| T3 | Transformer Step Down | Marcus | S/N 5430-396 | 30kVA, 600V-120/208V/3P/4W | Warehouse | Good | |
| Panel A | Panelboard | Federal Pioneer | NBC342 | 225A, 120/208V/3P/4W | Warehouse | Good | |
| No Tag' | Manual Transfer Switch | JR Stephenson | S/N 24147 | 250A, 347/600V/3P/4W | Warehouse | Good | Missing Generator Connection Lugs. Missing Nameplate. |
| No Tag' | Splitter | EXM | 1100 T3203 | 225A, 600V | Deck Shed | Good | |
| Crane Plugs | Circuit Breaker | Square D | Enclosed Circuit Breaker Interrupter | 125A-3P | Deck Shed | Good | Missing Nameplate. (Current tag written in permanent marker). |
| Panel J | Circuit Breaker | Square D | Enclosed Circuit Breaker Interrupter | 50A-3P | Deck Shed | Good | Nameplate could be clarified |
| Transformer T4, 30kVA | Circuit Breaker | Square D | Enclosed Circuit Breaker Interrupter | 40A-3P | Deck Shed | Good | |
| Transformer T4, 30kVA | Transformer Step Down | Marcus | S/N 5431-396 | 30kVA, 600V-120/208V/3P/4W | Deck Shed | Good | |
| Panel H | Panelboard | Square D | NQOD Series | 225A, 120/208V/3P/4W | Deck Shed | Good | Missing panelboard directory |
| Panel J | Panelboard | Square D | YBL4162 | 225A, 347/600/3P/4W | Bridge Distribution | Fair | Panelboard is in good condition however enclosure is showing signs of rust and corrosion. |
| No Tag' | Transformer Step Down | Unknown | Unknown | 30kVA, 600V-120/208V/3P/4W | Bridge Distribution | Good | Transformer is housed in a secondary galvanized steel enclosure. No signs of corrosion or rust were observed. |
| No Tag' | Lighting Contactor | JR Stephenson | 67607 | 30A, 600V/3P | Bridge Distribution | Good | |
| Panel L | Panelboard | Square D | QBL-420 | 100A, 120/208V/3P/4W | Bridge Distribution | Poor | Missing Nameplate. (Current tag written in permanent marker). Significant rust and corrosion was observed. |
| Panel K | Panelboard | Square D | NQOD412L100CU | 100A, 120/208V/3P/4W | Bridge Distribution | Poor | Missing Nameplate. (Current tag is written in permanent marker). Missing panelboard directory. Significant rust and corrosion was observed. |
| Transformer T2 | Transformer | Marcus | 4329-396 | 15kVA | Bridge Distribution | N/A | Transformer is currently not being used. |
| No Tag' | Relay Panel | Douglas | | | Bridge Distribution | Fair | Relays are in good condition however enclosure is showing signs of rust and corrosion. |

## APPENDIX C - Bridge Roadway Lighting Existing Condition

**Roadway Pole Mounted Luminaires**

| Item | Luminaire type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Pole Type | Pole Condition | Base Type | Base Condition | Additional Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| Pole #1 | Cobra Head | Good | HPS | 250W | Non-Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion with the exception of the lamp, which is likely burnt out. |
| Pole #2 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |
| Pole #3 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |
| Pole #4 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |
| Pole #5 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |
| Pole #6 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |
| Pole #7 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |
| Pole #8 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |
| Pole #9 | Cobra Head | Good | HPS | 250W | Non-Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion with the exception of the lamp, which is likely burnt out. |
| Pole #10 | Cobra Head | Good | HPS | 250W | Functional | Galvanized Steel Round Tapered 30' | Good | 4-Bolt Fastened to Structure of Bridge | Good | Pole mounted luminaire overall condition is good, showing little to no signs of rust or corrosion. |

**Bridge Roadway Canopy Mounted Luminaires**

| Item | Luminaire Type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Additional Comments |
|---|---|---|---|---|---|---|
| Luminaire #1 | Surface Mount Canopy | Good | HPS | 250W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #2 | Surface Mount Canopy | Good | HPS | 250W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #3 | Surface Mount Canopy | Good | HPS | 250W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #4 | Surface Mount Canopy | Good | HPS | 250W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #5 | Surface Mount Canopy | Good | HPS | 250W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |

**Bridge Roadway Traditional Luminaires**

| Item | Luminaire Type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Additional Comments |
|---|---|---|---|---|---|---|
| Luminaire #1 | Traditional Pole Mounted | Good | HPS | 250W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #2 | Traditional Pole Mounted | Good | HPS | 250W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |

## APPENDIX D - Canal Lighting Existing Condition

**Poles Along Canal**

| Item | Luminaire type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Pole Type | Pole Condition | Base Type | Base Condition | Additional Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| Pole #1 | 2x Cobra Heads | Good | HPS | CH - 250W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #2 | 2x Cobra Heads + Flood Light | Good | HPS | CH - 250W/F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #3 | 2x Cobra Heads + Flood Light | Good | HPS | CH - 250W/F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #4 | 2x Cobra Heads + Flood Light | Good | HPS | CH - 250W/F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #5 | 2x Cobra Heads | Good | HPS | CH - 250W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #6 | 2x Cobra Heads + Flood Light | Good | HPS | CH - 250W/F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #7 | 2x Cobra Heads + Flood Light | Good | HPS | CH - 250W/F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #8 | Flood Light | Good | HPS | F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #9 | Flood Light | Good | HPS | F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #10 | Flood Lights | Good | HPS | F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #11 | 2x Flood Light | Good | HPS | F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #12 | Flood Light | Good | HPS | F-150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #13 | 2x Cobra Heads + 3x Flood Lights | Good | HPS | CH - 250W/F - 150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |
| Pole #14 | 2x Cobra Heads + Flood Light | Good | HPS | CH - 250W/F-150W | Functional | 30' Painted Steel Round Tapered | Fair | 4-Bolt fastened to concrete pile | Good | Pole mounted luminaire overall condition is fair, the poles are showing signs of rust and corrosion and the paint is peeling |

**Lock Lighting**

| Item | Luminaire Type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Additional Comments |
|---|---|---|---|---|---|---|
| Luminaire #1 | Surface Mount Canopy | Good | HPS | 400W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #2 | Surface Mount Canopy | Good | HPS | 400W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #3 | Surface Mount Canopy | Good | HPS | 400W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |
| Luminaire #4 | Surface Mount Canopy | Good | HPS | 400W | Functional | Canopy luminaire overall condition is good, showing little to no signs of rust or corrosion |

## APPENDIX E - Lock Entrance Sign and Flag Lighting Existing Condition

**Lock Entrance Sign**

| Item | Luminaire Type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Additional Comments |
|---|---|---|---|---|---|---|
| Luminaire #1 | Marine type | Good | LED | Unknown | Functional | |
| Luminaire #2 | Marine type | Good | LED | Unknown | Functional | |
| Luminaire #3 | Marine type | Good | LED | Unknown | Functional | |

**Flag Lighting**

| Item | Luminaire Type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Additional Comments |
|---|---|---|---|---|---|---|
| Luminaire #1 | Pole Mounted Flood Light | Good | HPS | 250W | Unknown | Luminaire is currently non-functional due to fault in underground line. |
| Luminaire #2 | Pole Mounted Flood Light | Good | HPS | 250W | Unknown | Luminaire is currently non-functional due to fault in underground line. |


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| 0 | RECORD DRAWING | 16/05/20 |

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LIGHTING AND ELECTRICAL UPGRADES

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Designed by/Concept par

Drawn by/Dessine par

PWGSC Project Manager/Administrateur de Projets TPSGC

PWGSC, Architectural and Engineering Resources Manager/ Ressources Architectural et de Directeur d'ingénierie, TPSGC

Client/client

Drawing title/Titre du dessin

EXISTING CONDITION SPREADSHEET -1/2

| Project No./No. du projet | Sheet/Feuille | Revision no./ La Révision no. |
|---|---|---|
| R.076331 | E15 OF 16 | 0 |

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## APPENDIX F - Bridge Under Deck Lighting Existing Condition

| Item | Luminaire Type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Additional Comments |
|---|---|---|---|---|---|---|
| Luminaire #1 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #2 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #3 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #4 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #5 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #6 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #7 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #8 | Surface Mount Canopy | Good | HPS | 150W | Functional | |
| Luminaire #9 | Surface Mount Canopy | Good | HPS | 150W | Functional | |

## APPENDIX G - East Side Warehouse Lighting Existing Condition

| Item | Luminaire Type | Luminaire Condition | Lamp Type | Lamp Wattage | Lamp Condition | Additional Comments |
|---|---|---|---|---|---|---|
| Luminaire #1 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | Luminaires were being retrofitted with new 19W LED screw base lamps at time of site visit on January 13th, 2016. |
| Luminaire #2 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #3 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #4 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #5 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #6 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #7 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #8 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #9 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #10 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #11 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #12 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #13 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #14 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #15 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #16 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |
| Luminaire #17 | Ceiling Mounted Low Bay | Good | HPS | 150W | Functional | |


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Drawn by/Dessine par

PWGSC Project Manager/Administrateur de Projets TPSGC

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Client/client

Drawing title/Titre du dessin

EXISTING CONDITION
SPREADSHEET 2/2

| Project No./No. du projet | Sheet/Feuille | Revision no./La Révision no. |
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| R.076331 | E16 OF 16 | 0 |

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