

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

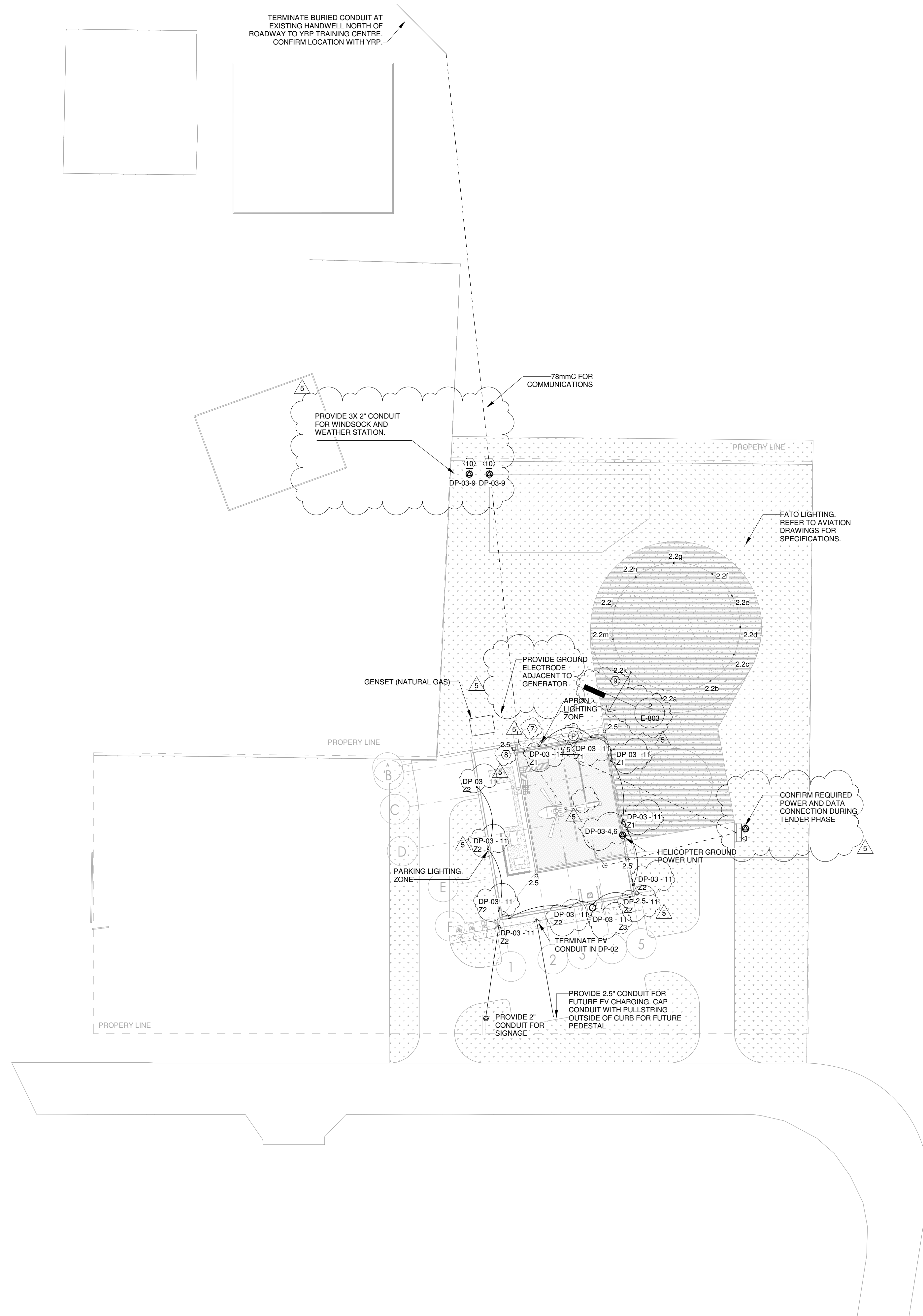
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All measurements are to be checked and verified on site by the contractor before proceeding with work

Drawn by: ZK
Checked by: AO
Original Issue Date: 2024-07-31
Project No: TT-24-005
Scale: As indicated

Drawing
No. **E-100**

| | |
|-----|--|
| 1. | WHERE DIMENSIONS ARE PROVIDED IN METRIC AND IN IMPERIAL UNITS, METRIC DIMENSIONS GOVERN. |
| 2. | EMERGENCY POWER FOR LIGHTING AND SIGNALS: MINIMUM 30 MINUTES (SEE 2012 CBC 3.2.7.4.1)(1)(b)(iv) 30 MIN FOR ANY OTHER BUILDING). |
| 3. | FIRE ALARM INSTALLATION IN ACCORDANCE WITH CANULC-S524-14. |
| 4. | VERIFY FIRE ALARM SYSTEM IN ACCORDANCE WITH CANULC-S557-13. |
| 5. | COMMISSION INTERCONNECTED LIFE SAFETY SYSTEMS IN ACCORDANCE WITH CANULC-S1001-11. |
| 6. | PROVIDE SEISMIC RESTRAINTS IN ACCORDANCE WITH SECTION 26 05 48. THIS IS A POST-DASHTER BUILDING. SEISMIC RESTRAINTS ARE REQUIRED PER 2012 CBC 4.1.8.1.8.(1) AND ARE NOT EXEMPT PER 2012 CBC 4.1.8.1.8.(2). |
| 8. | AVIATION OBSTRUCTION LIGHTS, FED FROM PANEL DP-02-42. |
| 9. | FATO LIGHTS ARE FED FROM HIGHLIGHT LIGHTING CONTROLLER. PROVIDE 3C-12AWG-BND. |
| 10. | COORDINATE FINAL LOCATION OF EQUIPMENT WITH ARCHITECT PRIOR TO INSTALLATION. |
| 11. | REFER TO AVIATION DRAWINGS FOR DETAILS OF AVIATION RELATED EQUIPMENT TO BE PROVIDED BY ELECTRICAL CONTRACTOR. |



GENERAL NOTES:

1. REFER TO POWER AND SIGNALS DRAWINGS FOR SWITCHED RECEPTACLES.



| | | |
|-----|----------------------------|------------|
| 4 | ISSUED FOR ADDENDUM 3 | 2024-09-23 |
| 3 | ISSUED FOR ADDENDUM 1 | 2024-09-16 |
| 2 | ISSUED FOR TENDER | 2024-09-09 |
| 1 | ISSUED FOR BUILDING PERMIT | 2024-07-31 |
| NO. | ISSUED | DATE |

Issues

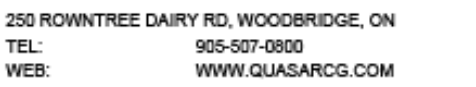
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Do not scale drawings

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Sheet
Title: LIGHTING NEW WORK -
GROUND FLOOR

Drawing
No. **E-200**



350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

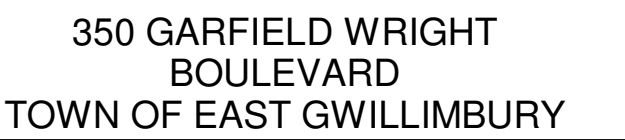


Issues

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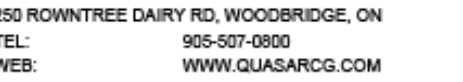
Drawing
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E-300

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Project No: TT-24-005
Scale: 1 : 100

Drawing
No.
E-301





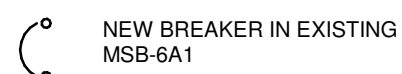
350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key Plan

[illegible]

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TRAINING FACILITY

G NEW 600V GENERATOR

HANGER

ATS-01
600V, 400A, 4P

DP-01

400A
3P

600V, 400A, 3PH, 4W, 3PH

REFER TO PANEL SCHEDULE FOR
BREAKER RATING AND QUANTITIES.

TX-02
75kVA
600V - 208/120V

DP-02

400A
3P

208V, 400A, 3PH, 4W, 3PH

REFER TO PANEL SCHEDULE
FOR BREAKER RATING AND
QUANTITIES.

RECOGNIZED
POINT OF
ISOLATION

DS-01
60A
3P

INTERACTIVE INVERTER

1

PV SYSTEM

ROOF MOUNTED EQUIPMENT

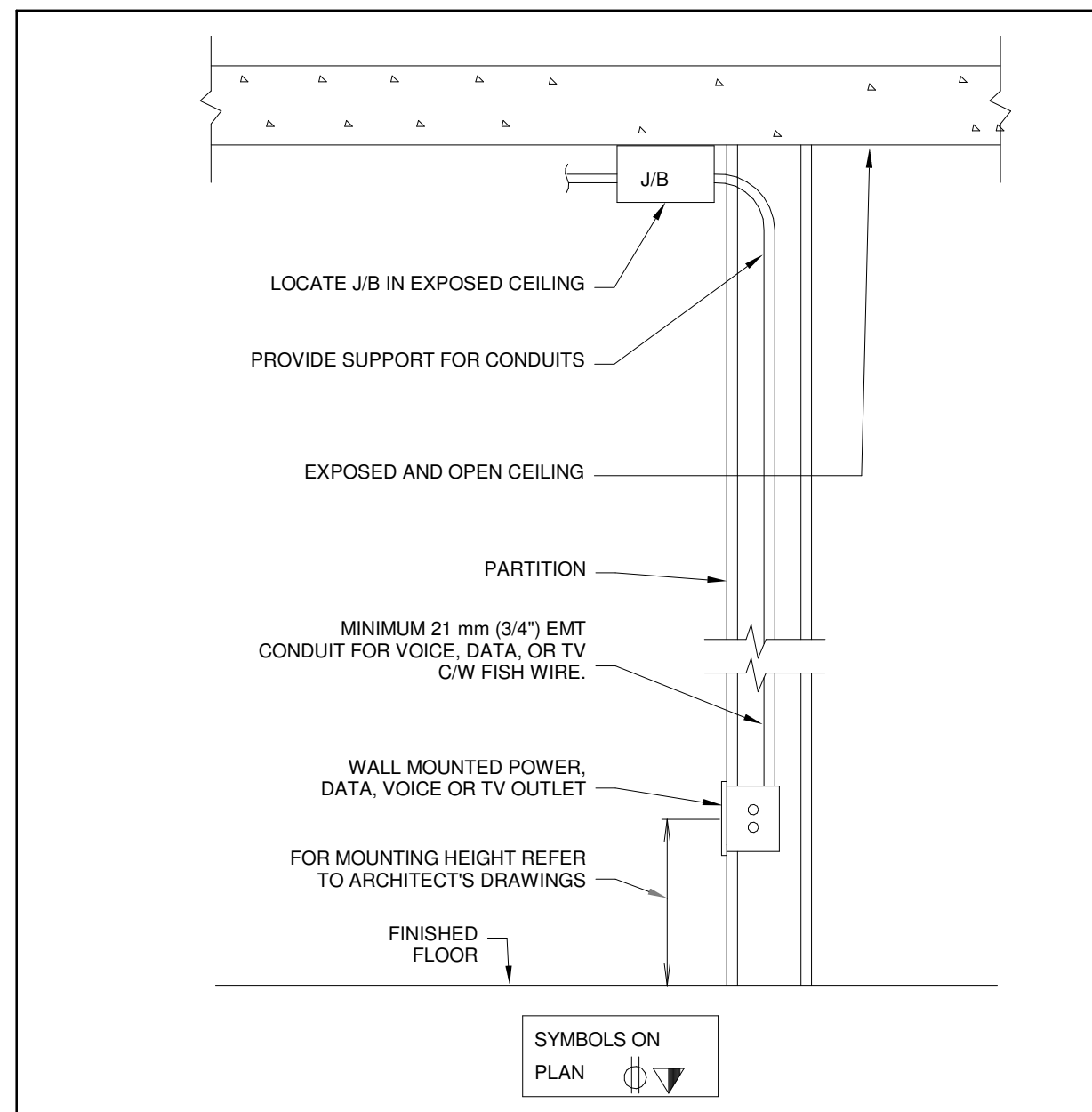
ELECTRICAL SINGLE LINE DIAGRAM

Drawing
No. **E-700**

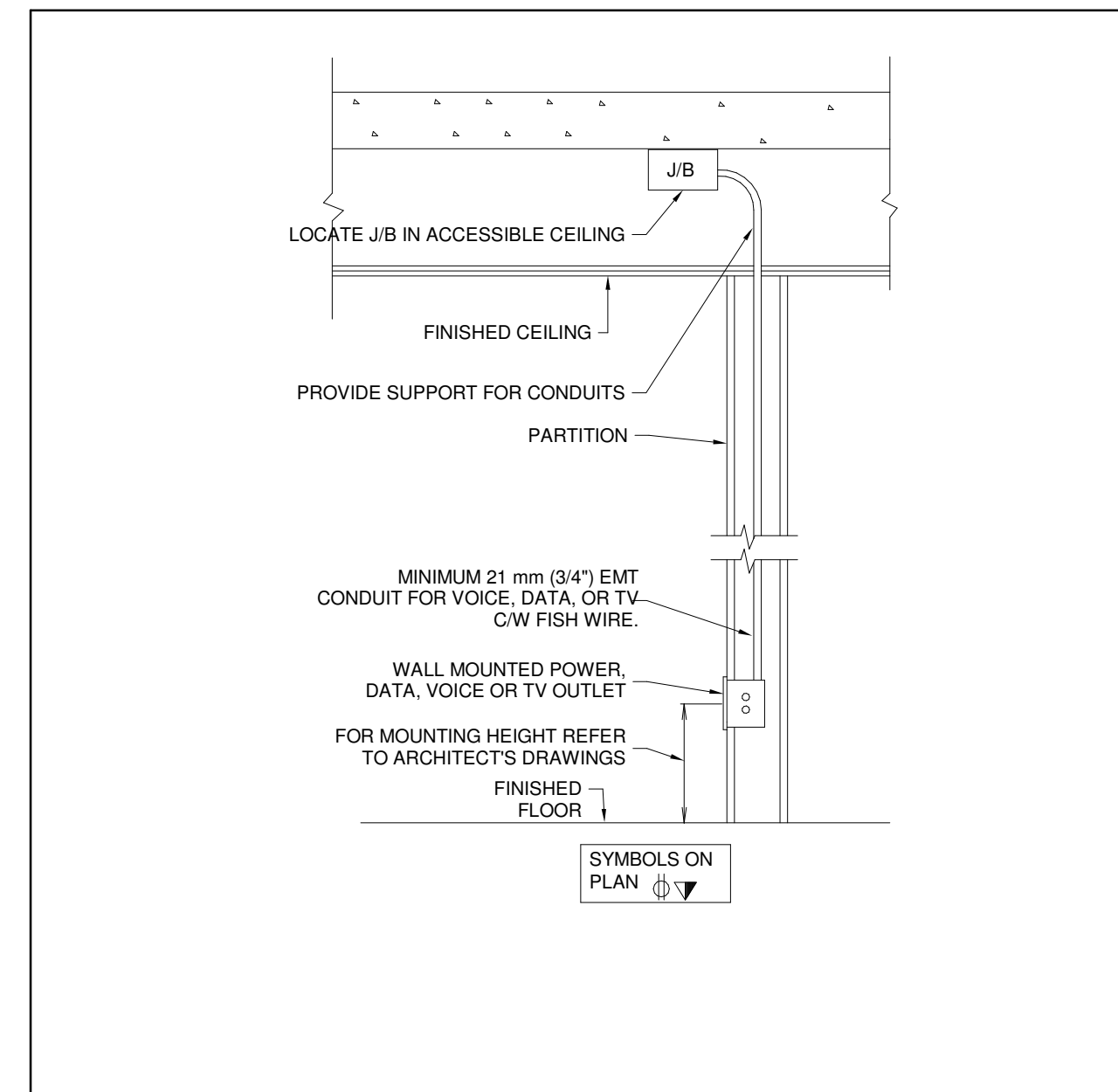
YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

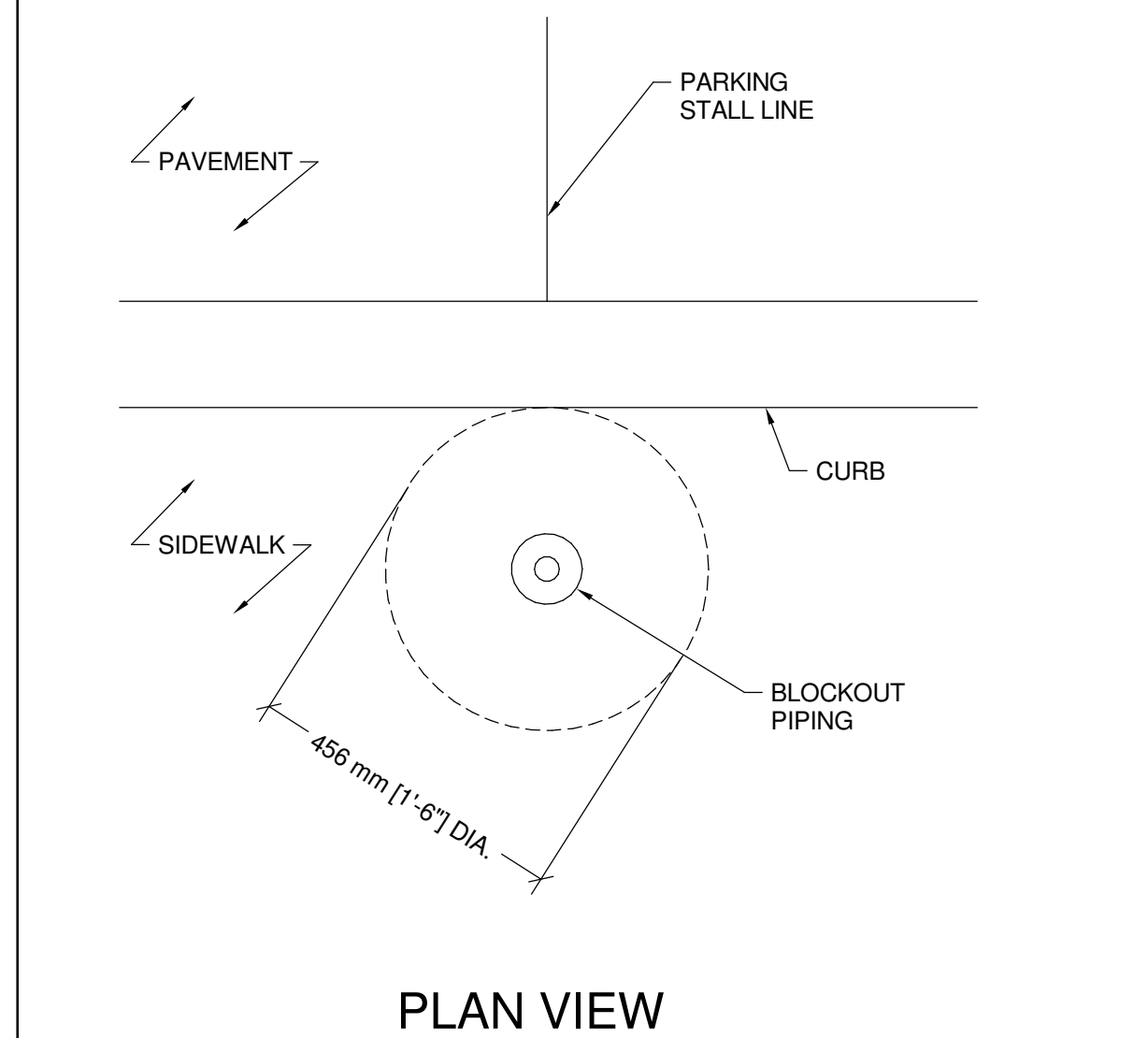
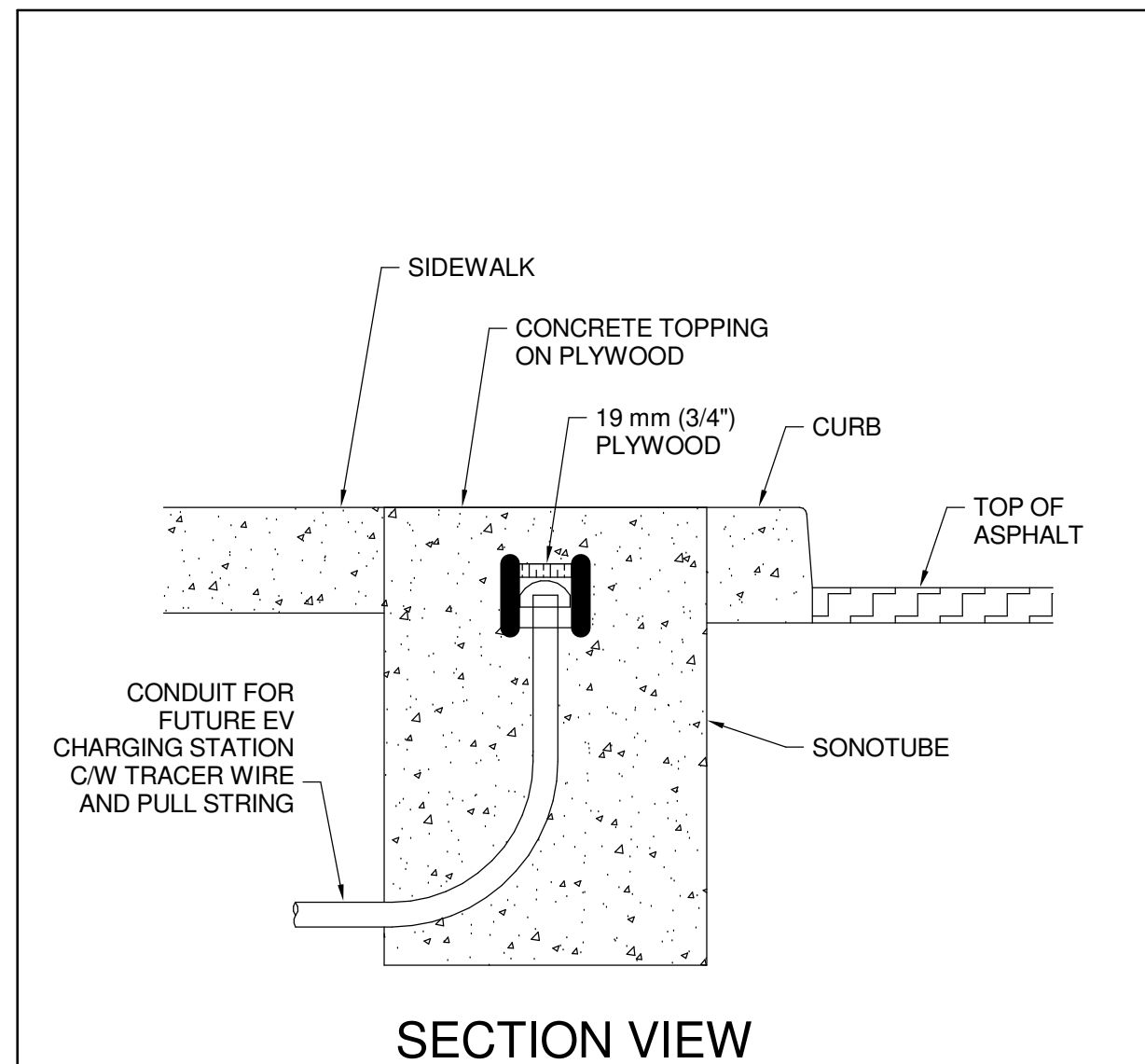
Key Plan



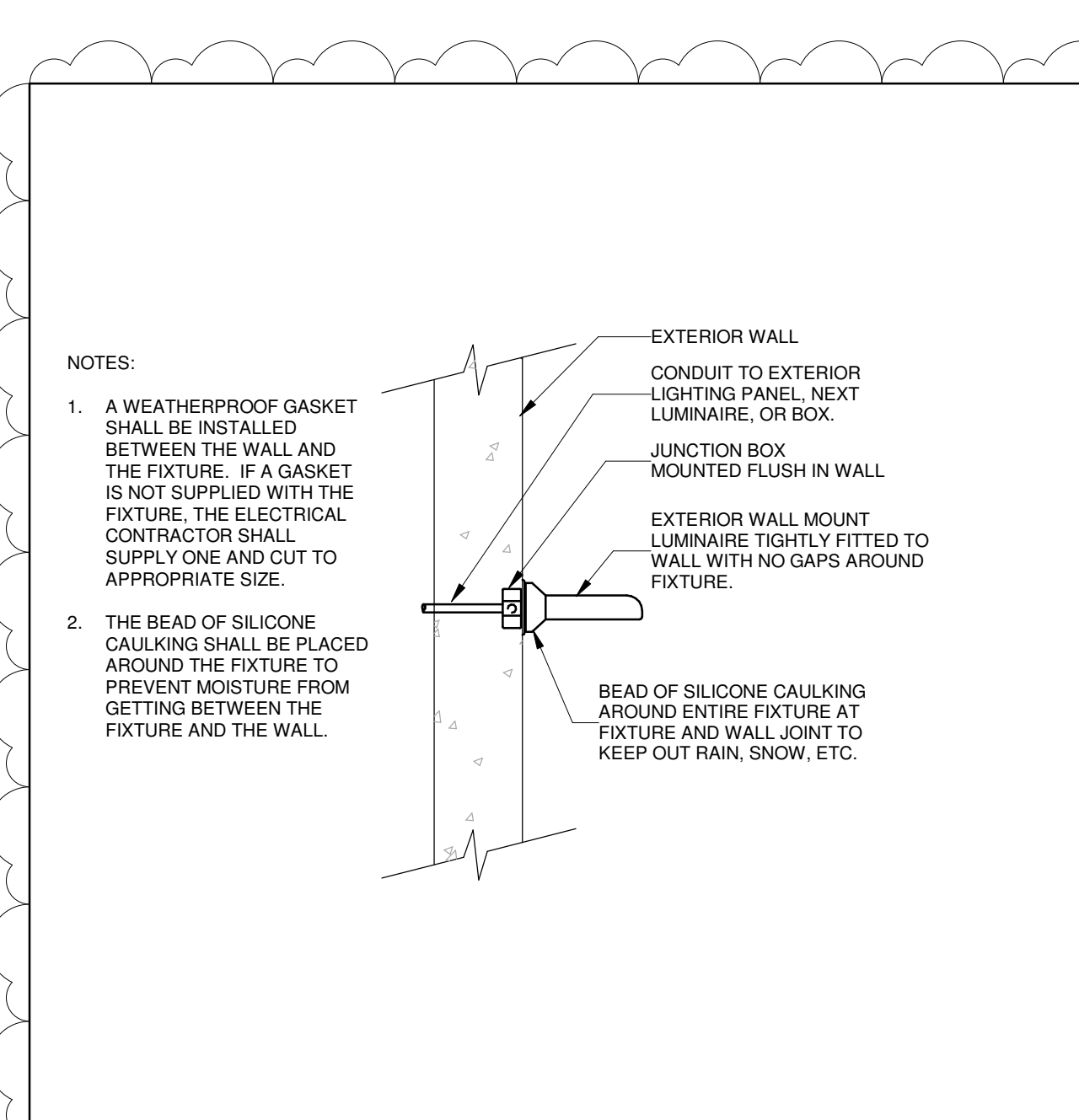
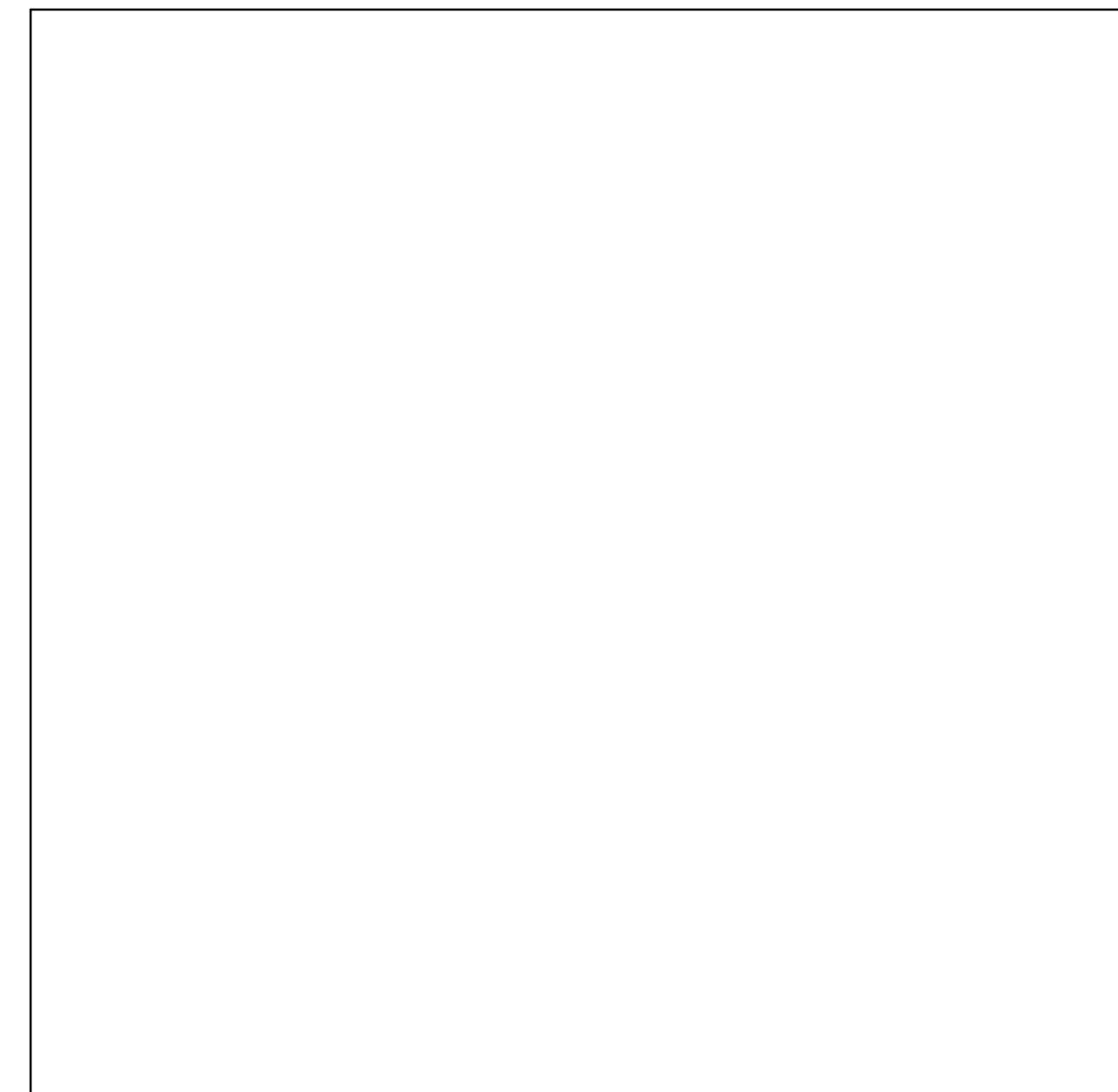
4 Wall Mounted Outlet Box Wall Recessed
SCALE:N.T.S.



2 Wall Mounted Outlet Box Wall Recessed Ceiling
SCALE:N.T.S.



1 Future EV Charging Station Pedestal Rough-In
SCALE: 1 : 10



7 Sealing of Wall Mounted Exterior Luminaires
SCALE:N.T.S.

[illegible]

Issues

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Project No: TT-24-005

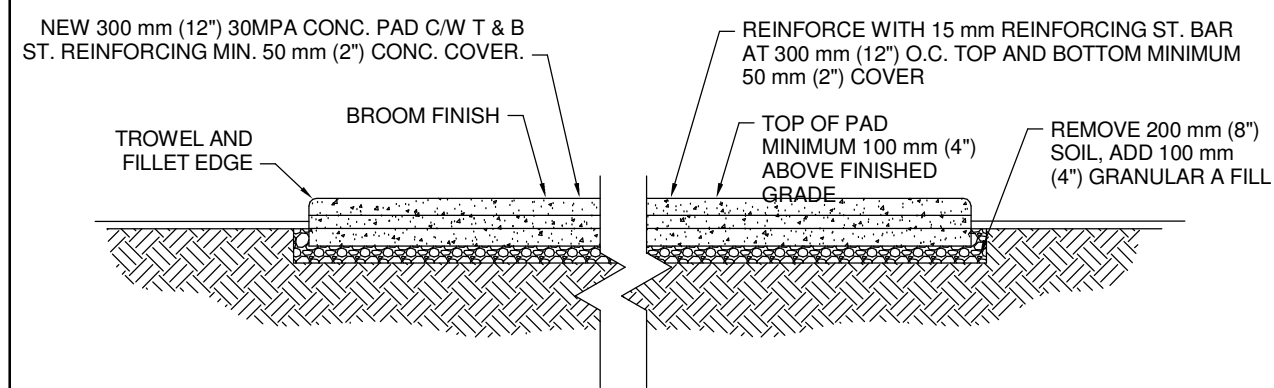
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Drawing
No. **E-800**

YORK REGIONAL POLICE
HELICOPTER HANGAR

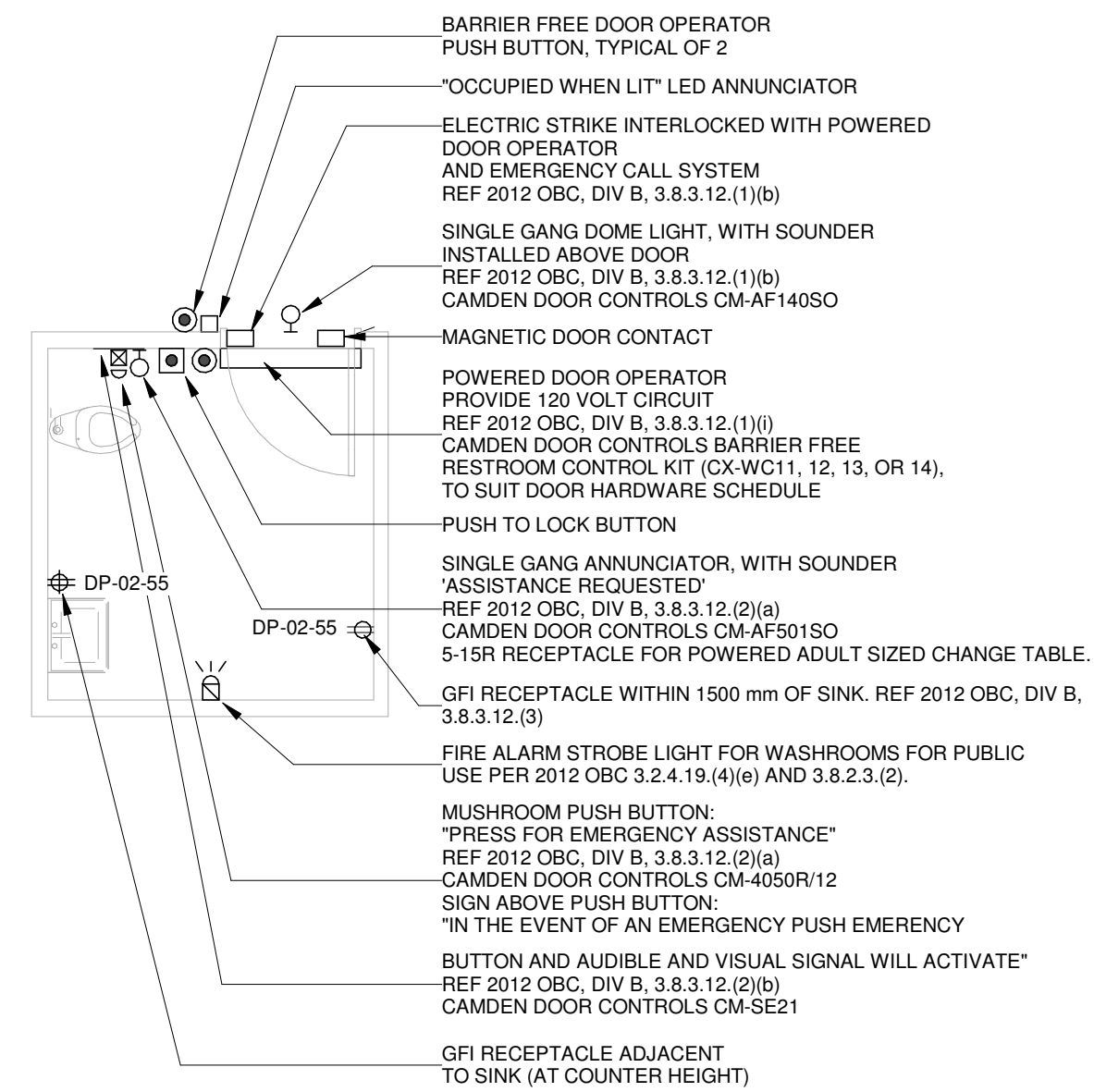
350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key Plan



Cast-In-Place Concrete Generator Pad

SCALE: 1 : 50



UNIVERSAL RESTROOM "EMERGENCY ASSISTANCE" SIGNAL ACTIVATION, ANNUNCIATION AND SUPPORTING SIGNAGE SHALL BE CAMDEN DOOR CONTROLS MODEL CX/WEC10/CX-WEC-11 UNIVERSAL RESTROOM CONTROL KIT.

KIT SHALL INCLUDE:

1. CM-4050R12 SINGLE GAN MUSHROOM PUSH BUTTON, 1/4" THICK BRUSHED ALUMINUM FACELATE AND RED BUTTON, MAINTAINED PUSH/PULL OPERATION WITH "PRESS FOR EMERGENCY ASSISTANCE" PERMANENTLY LASER ETCHED ON THE FACELATE.
2. CM-AF50S0 SINGLE GAN LED ANNUNCIATOR WITH SOUNDER, RATED 85 db AT 100 mm, WEATHER AND VANDAL RESISTANT CONSTRUCTION, BRUSHED STAINLESS STEEL FACELATE, WITH "ASSISTANCE REQUIRED" MESSAGE TEXT, THAT IS NOT REVERSIBLE, LESS THE MESSAGE "EMERGENCY ASSISTANCE".
3. CM-AF40S0 SINGLE GAN DOME LIGHT WITH PIEZO SOUNDER, RATED 93 db AT 1 METRE, BRUSHED STAINLESS STEEL FACELATE AND 24 V INCANDESCENT BULB, 100 WATT, 120 V, 60 HZ, 1000 HOURS, 1000 HOURS, 1000 HOURS, 381 mm Bx 381 mm (15" Bx 15"), FIRE RATED EXPANDED PVC WHITE, WITH 25 mm BLACK LETTERING TEXT SHALL BE: "IN THE EVENT OF AN EMERGENCY PUSH EMERGENCY BUTTON AND AUDIBLE AND VISUAL SIGNAL WILL ACTIVATE".
4. INTERCONNECTED TO THE EMERGENCY PUSH BUTTON DOOR OPERATOR, PUSH TO LOCK BUTTON, ELECTRIC STRIKE, DOOR CONTACT.

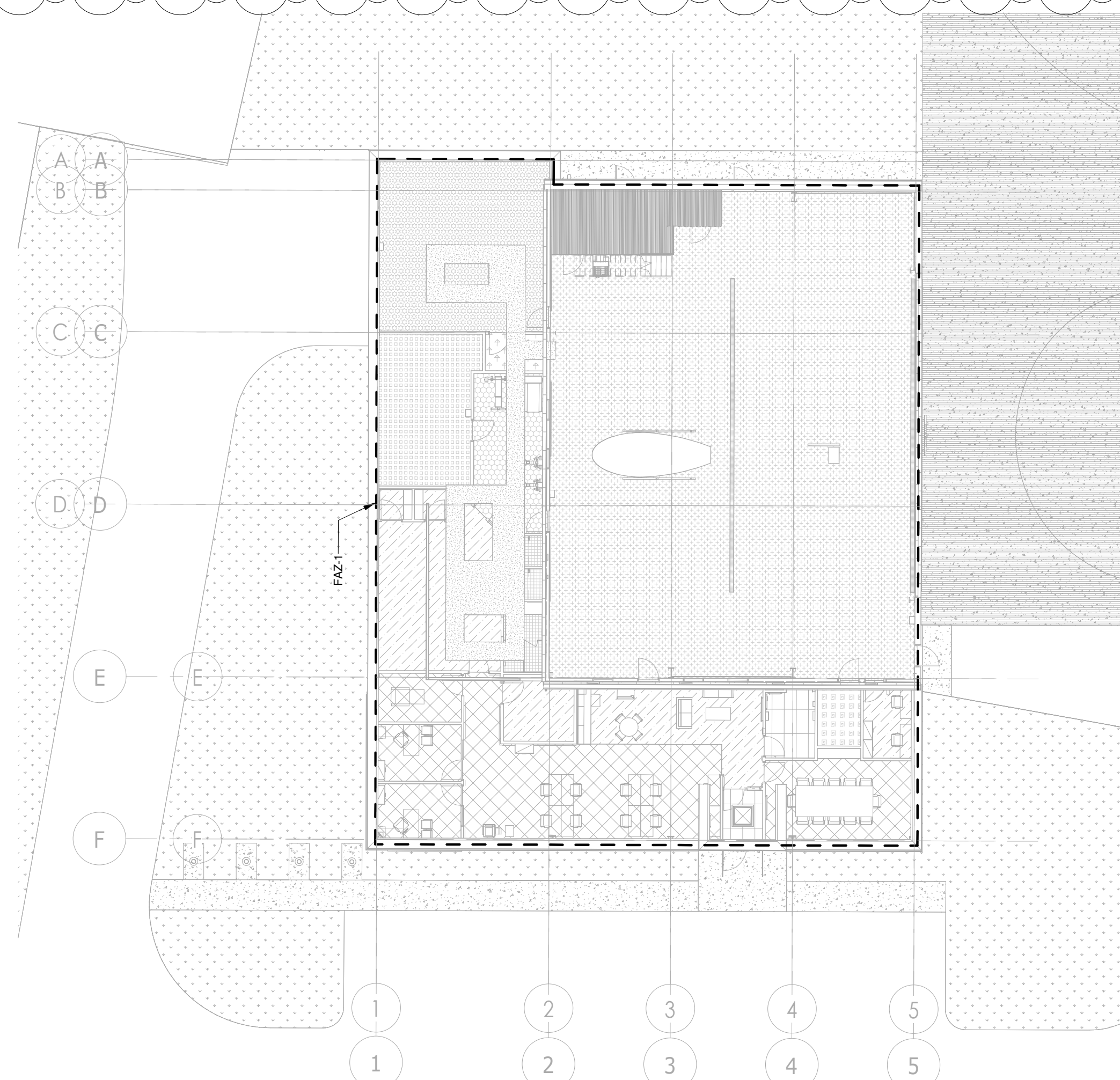
NOTES:

1. CONFIRM EXACT HARDWARE AND ROUGH-IN REQUIREMENTS WITH EMERGENCY CALL SYSTEM VENDOR.
2. CONFIRM EXACT EQUIPMENT LOCATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.

28 26 23 - UNIVERSAL WASHROOM DOOR OPERATOR AND
EMERGENCY CALL SYSTEM

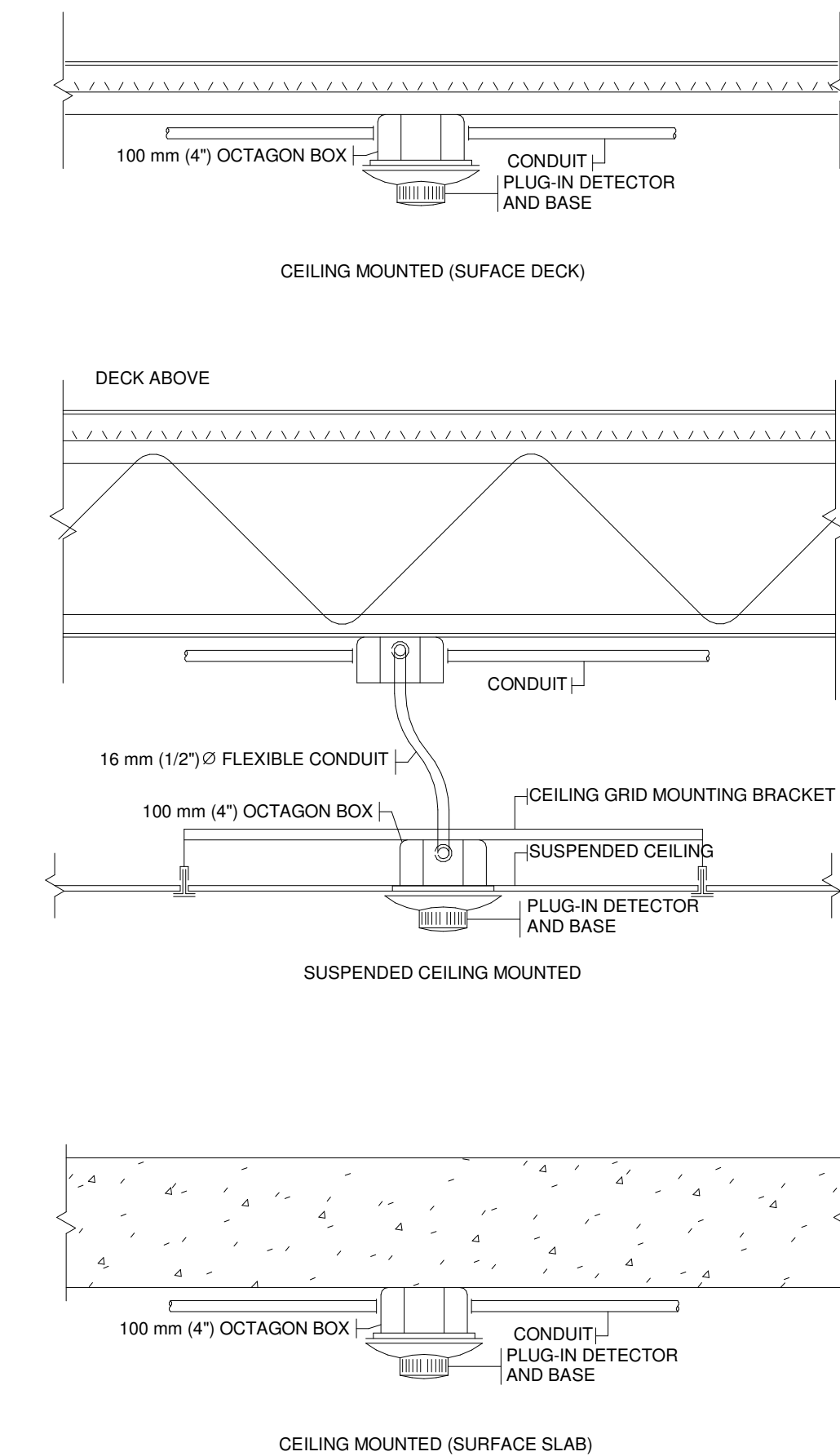
Universal Washroom Door Operator and Emergency Call System

SCALE:N.T.S.



FIRE ALARM ZONES

SCALE:N.T.S.



Typical Smoke Detector Installations

SCALE:N.T.S.

[illegible]

Issues

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Sheet
Title:

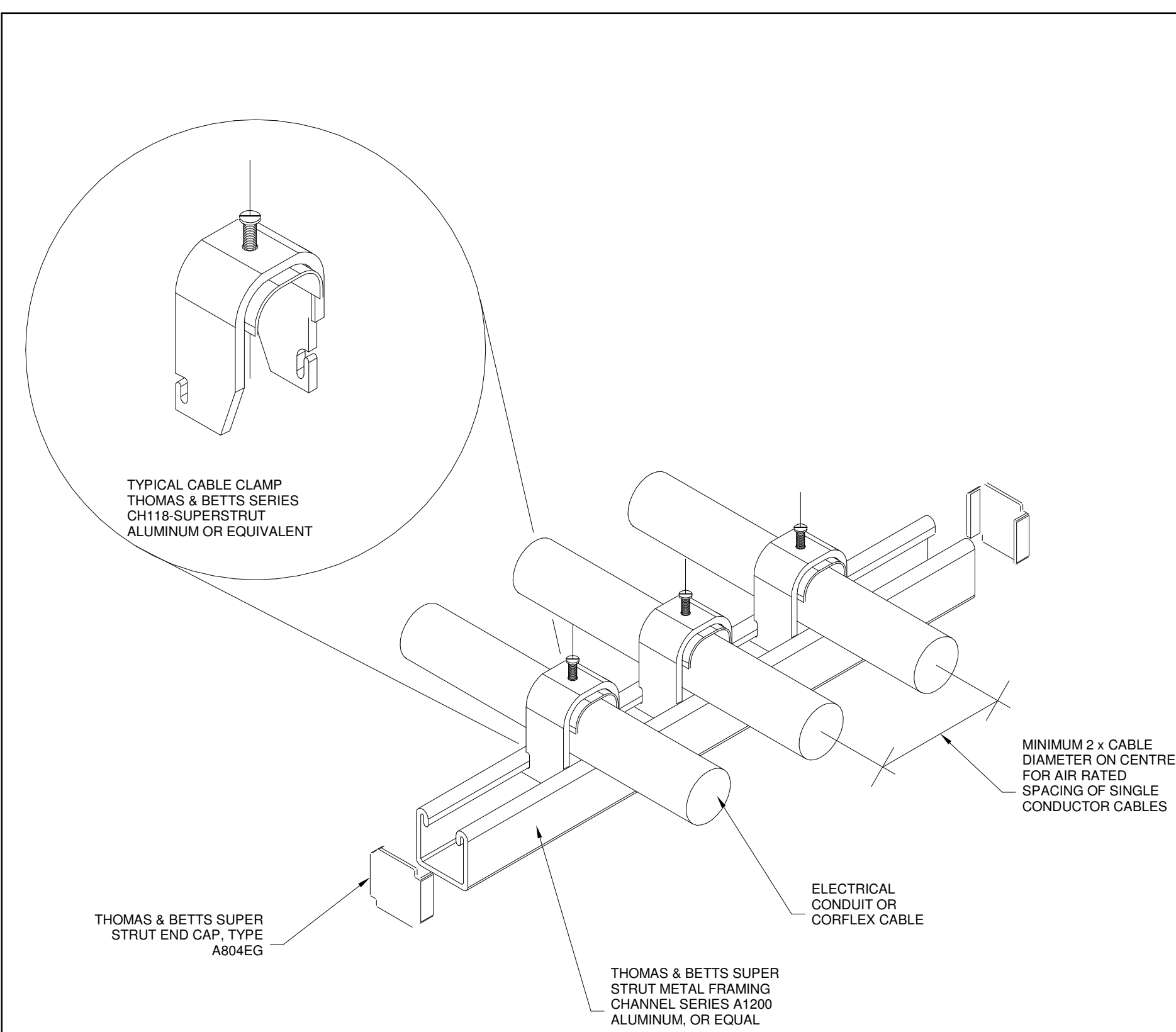
ELECTRICAL DETAILS

Drawing
No. **E-801**

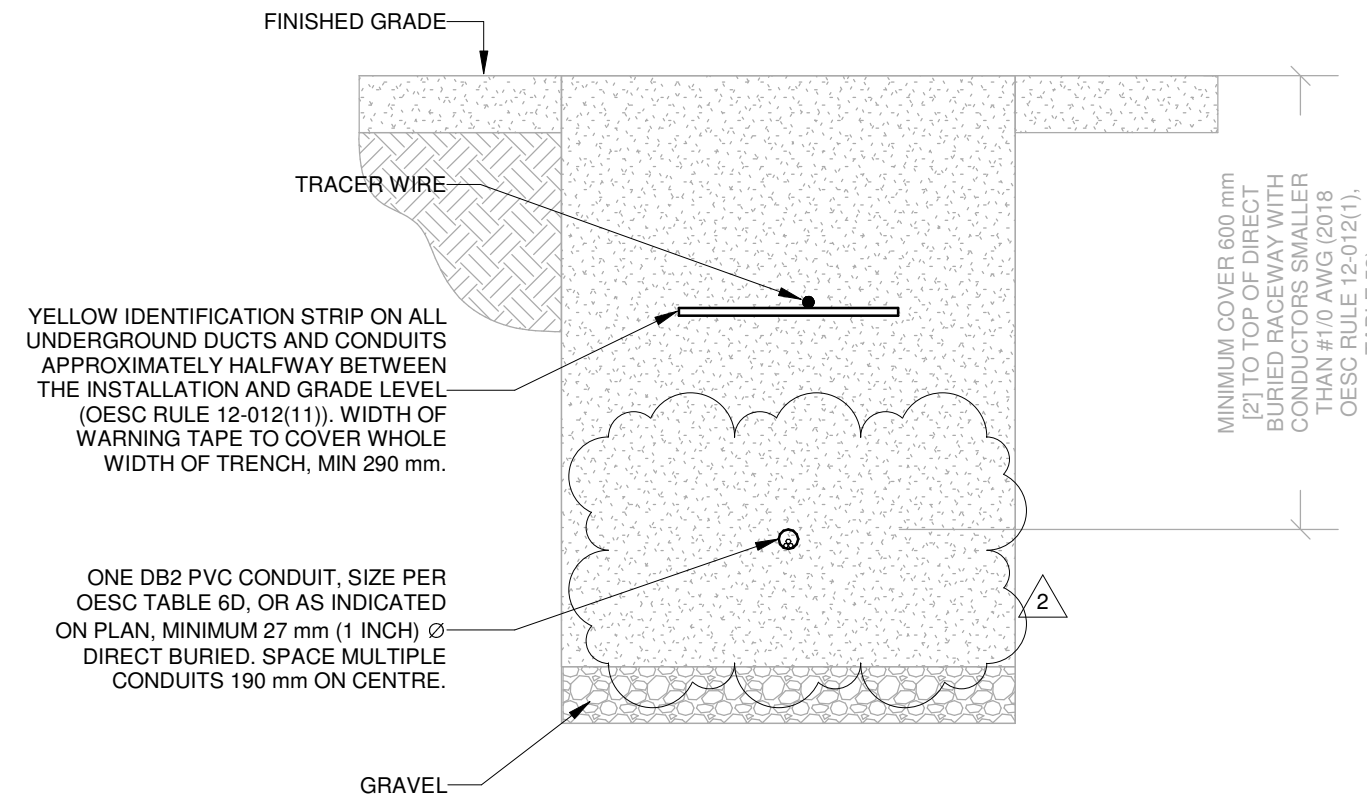
YORK REGIONAL POLICE
HELICOPTER HANGAR

350 GARFIELD WRIGHT
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Key Plan



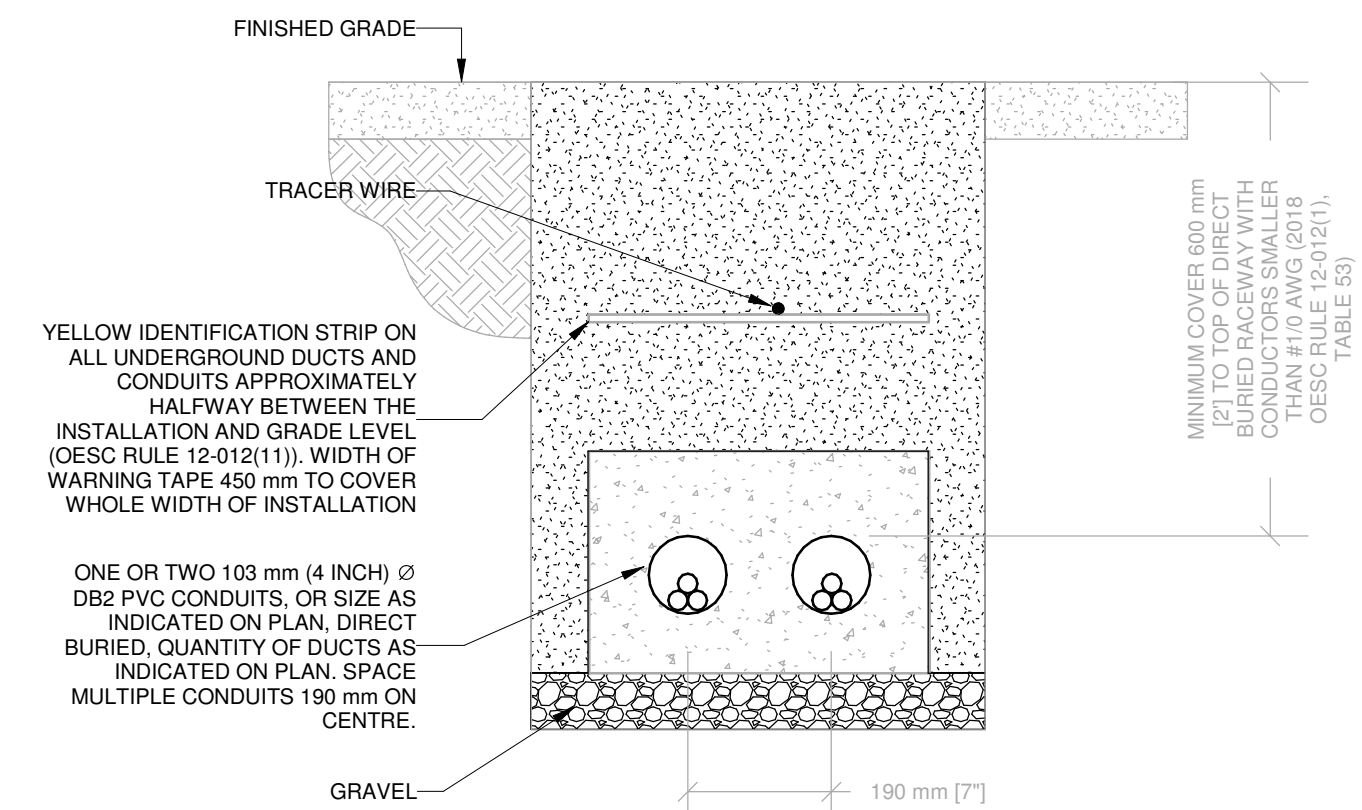
1 Strut Channel Suspension for Conduit and Cable
SCALE: 1:1



DIRECT BURIED RACEWAY SECTION, 750 V OR LESS

NOTES:

1. METRIC DIMENSIONS GOVERN.
2. DIRECT BURIED RACEWAY DUCTS TO BE IN COMPLIANCE WITH 2018 ENTARIO ELECTRICAL SAFETY CODE (OESC), TABLE 53. MINIMUM COVER DEPTH MAY BE REDUCED BASED ON CRITERIA DESCRIBED IN TABLE 53.
3. DIRECT BURIED RACEWAY DUCTS TO BE INSPECTED PRIOR BACKFILL. COORDINATE WITH AUTHORITY HAVING JURISDICTION (ESA) AND RECEIVE ALL NECESSARY APPROVALS.
4. THIS DETAIL DOES NOT APPLY WHERE CONDUCTOR SIZE IS #1/0 OR GREATER IN A DIRECT BURIED RACEWAY. PROVIDE AN AMPACITY CALCULATION IN ACCORDANCE WITH IEEE 835.



DIRECT BURIED 2-DUCT RACEWAY SECTION, 750 V OR LESS

NOTES:

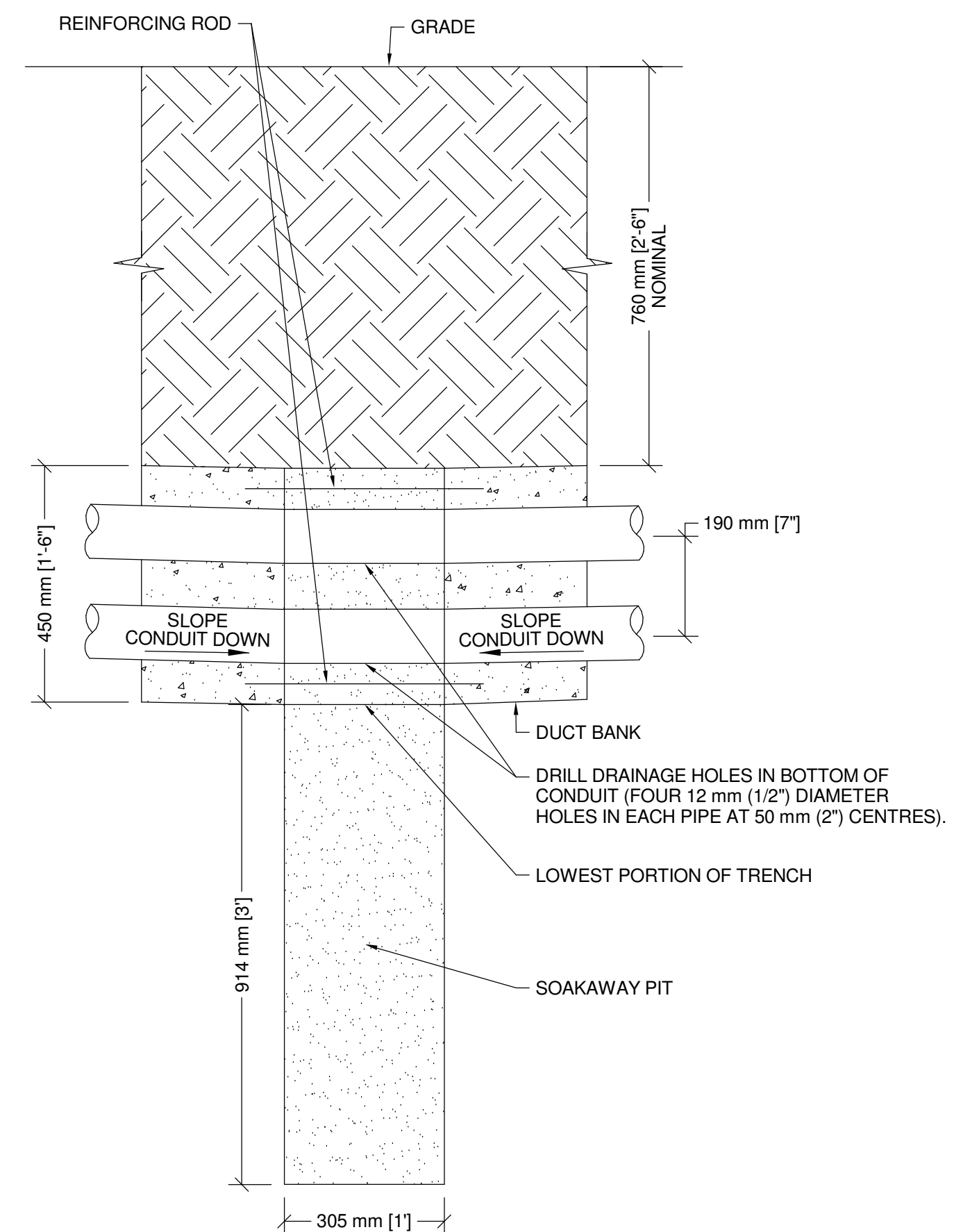
1. METRIC DIMENSIONS GOVERN.
2. DIRECT BURIED RACEWAY DUCTS TO BE IN COMPLIANCE WITH 2018 ONTARIO ELECTRICAL SAFETY CODE (OESC), TABLE 53. MINIMUM COVER DEPTH MAY BE REDUCED BASED ON CRITERIA DESCRIBED IN TABLE 53.
3. DIRECT BURIED RACEWAY DUCTS TO BE INSPECTED PRIOR BACKFILL. COORDINATE WITH AUTHORITY HAVING JURISDICTION (ESA) AND RECEIVE ALL NECESSARY APPROVALS.
4. THIS DETAIL DOES NOT APPLY WHERE CONDUCTOR SIZE IS #10 OR GREATER IN A DIRECT BURIED RACEWAY. PROVIDE AN AMPACITY CALCULATION IN ACCORDANCE WITH IEEE 835.

2018 OESC 1Wx1H x 1in Direct Buried Branch Circuit Ducts
SCALE:N.T.S.

| ELECTRICAL ENERGY EFFICIENCY NOTES FOR PERMIT (ONTARIO BUILDING CODE SB-10) | | | |
|--|--|--|-------------------------|
| ITEM | DESCRIPTION | CODE REFERENCE | SPECIFICATION REFERENCE |
| 1A. | FEEDER CONDUCTORS TO BE SIZED FOR MAXIMUM VOLTAGE DROP OF 2% AT DESIGN LOAD. | OBC SB-10 2017, ASHRAE 90.1-2013, 8.4.1. | 26 05 19 |
| 1B. | BRANCH CIRCUIT CONDUCTORS TO BE SIZED FOR MAXIMUM VOLTAGE DROP OF 3% AT DESIGN LOAD. | OBC SB-10 2017, ASHRAE 90.1-2013, 8.4.1. | 26 05 19 |
| 2. | 50% RECEPTACLE CONTROLS IN CONFERENCE ROOMS, COPY ROOMS, BREAK ROOMS, CLASSROOMS, AND INDIVIDUAL WORKSTATIONS. | OBC SB-10 2017, ASHRAE 90.1-2013, 8.4.2. | 26 09 23 |
| 3. | MEASUREMENT DEVICES ROUGHED IN TO MONITOR THE ELECTRICAL ENERGY USE FOR EACH OF THE FOLLOWING UNLESS EXEMPT: A. TOTAL ELECTRICAL ENERGY; B. HVAC; C. INTERIOR LIGHTING; D. EXTERIOR LIGHTING; E. RECEPTACLE CIRCUITS. | OBC SB-10 2017, ASHRAE 90.1-2013, 8.4.3. | 26 27 13 |
| 4. | NEW LOW VOLTAGE TRANSFORMERS TO MEET THE NOMINAL EFFICIENCIES SHOWN IN ASHRAE 90.1-2013, TABLE 8.4.4. UNLESS EXEMPT | OBC SB-10 2017, ASHRAE 90.1-2013, 8.4.4. | 26 22 13 |
| 5. | PROVIDE LIGHTING CONTROL FUNCTIONS FOR EACH SPACE IN THE BUILDING PER PER ASHRAE 90.1-2013 TABLE 9.6.1. ASHRAE 90.1 EXEMPTIONS: -NORMALLY OFF EMERGENCY LIGHTING -DWELLING UNITS -LIFE SAFETY OR OTHER ORDINANCE | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.1. | 26 09 23 |
| 5.1. | SPACES PROVIDED WITH READILY ACCESSIBLE LOCAL CONTROLS. | OBC SB-10 2017, ASHRAE 90.1-2017, 9.4.1.1A. | 26 09 23 |
| 5.2. | MAXIMUM OCCUPANCY SENSOR TIMEOUT 20 MINUTES. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.1G. ASHRAE 90.1-2013, 9.4.1.1H. | 26 09 23 |
| 6.1 | PARKING GARAGE LIGHTING TO BE PROVIDED WITH AUTOMATIC CONTROLS PER ASHRAE 90.1-2017 SECTION 9.4.1.2. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.2 | |
| 6.2 | PARKING GARAGE LIGHTING TO AUTOMATICALLY REDUCE LIGHTING POWER BY AT LEAST 30% BASED ON OCCUPANCY | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.2 | |
| 6.3 | PARKING GARAGE DAYLIGHT TRANSITION ZONE TO BE ON A SEPARATE SCHEDULE. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.2 | |
| 6.4 | PARKING GARAGE LUMINAIRES TO BE PROVIDED WITH DAYLIGHT HARVESTING, IF NET OPENING-TO-WALL RATIO IS GREATER THAN 4% UNLESS EXEMPT. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.2 | |
| 7. | PROVIDE ADDITIONAL CONTROLS FOR SPECIAL APPLICATIONS LISTED ASHRAE 90.1 SECTION 9.4.1.3. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.3 | 26 09 23 |
| 8. | INTERIOR LIGHTING POWER COMPLIES WITH ASHRAE 90.1-2013 9.2.2.3 AS MODIFIED BY SB-10. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.2.2.3 | 26 51 00 |
| 9.1 | PROVIDE A PHOTOSENSOR FOR AUTOMATIC SHUTOFF OF EXTERIOR LIGHTS WHEN AVAILABLE DAYLIGHT IS SUFFICIENT. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.4 | 26 09 23 |
| 9.2 | PROVIDE A SHUTOFF FOR LANDSCAPE AND FACADE LIGHTING BETWEEN THE HOURS OF MIDNIGHT AND 6:00 A.M. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.4 | 26 09 26 |
| 9.3 | PROVIDE CONTROL TO REDUCE ILLUMINATED SIGNAGE POWER BY AT LEAST 30% BETWEEN MIDNIGHT AND 6:00 A.M. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.1.4 | 26 09 26 |
| 10. | EXTERIOR LIGHTING POWER COMPLIES WITH ASHRAE 90.1-2013 9.4.2. AS MODIFIED BY SB-10. | OBC SB-10 2017, ASHRAE 90.1-2013, 9.4.2. | 26 53 00 |
| 11. | LIGHTING CONTROLS MANUFACTURER'S REPRESENTATIVE TO PROVIDE FUNCTIONAL TESTING AND REPORT IN ACCORDANCE WITH ASHRAE 90.1-2013 | OBC SB-10, ASHRAE 90.1-2010, 9.4.4. | 26 09 23 |

Electrical SB-10 Notes

SCALE: 1 : 1



Duct Bank Soakaway Pit

SCALE: 1 : 10

[illegible]

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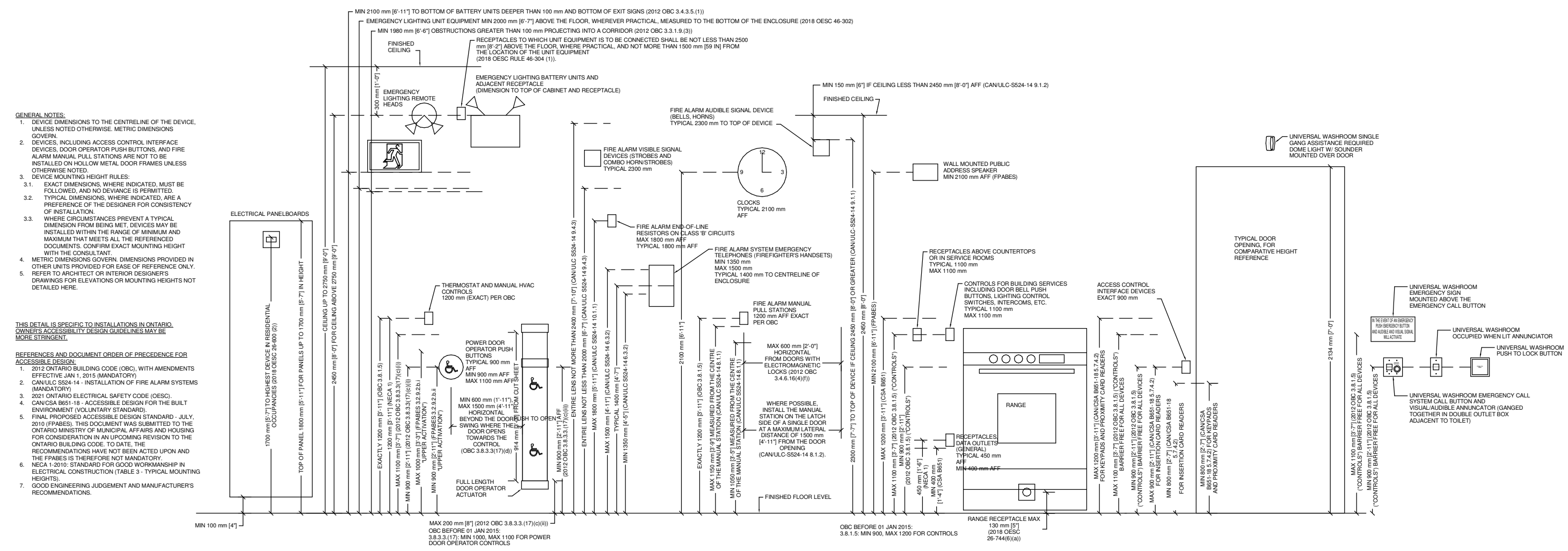
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Drawing
No.
E-803

YORK REGIONAL POLICE
HELICOPTER HANGAR

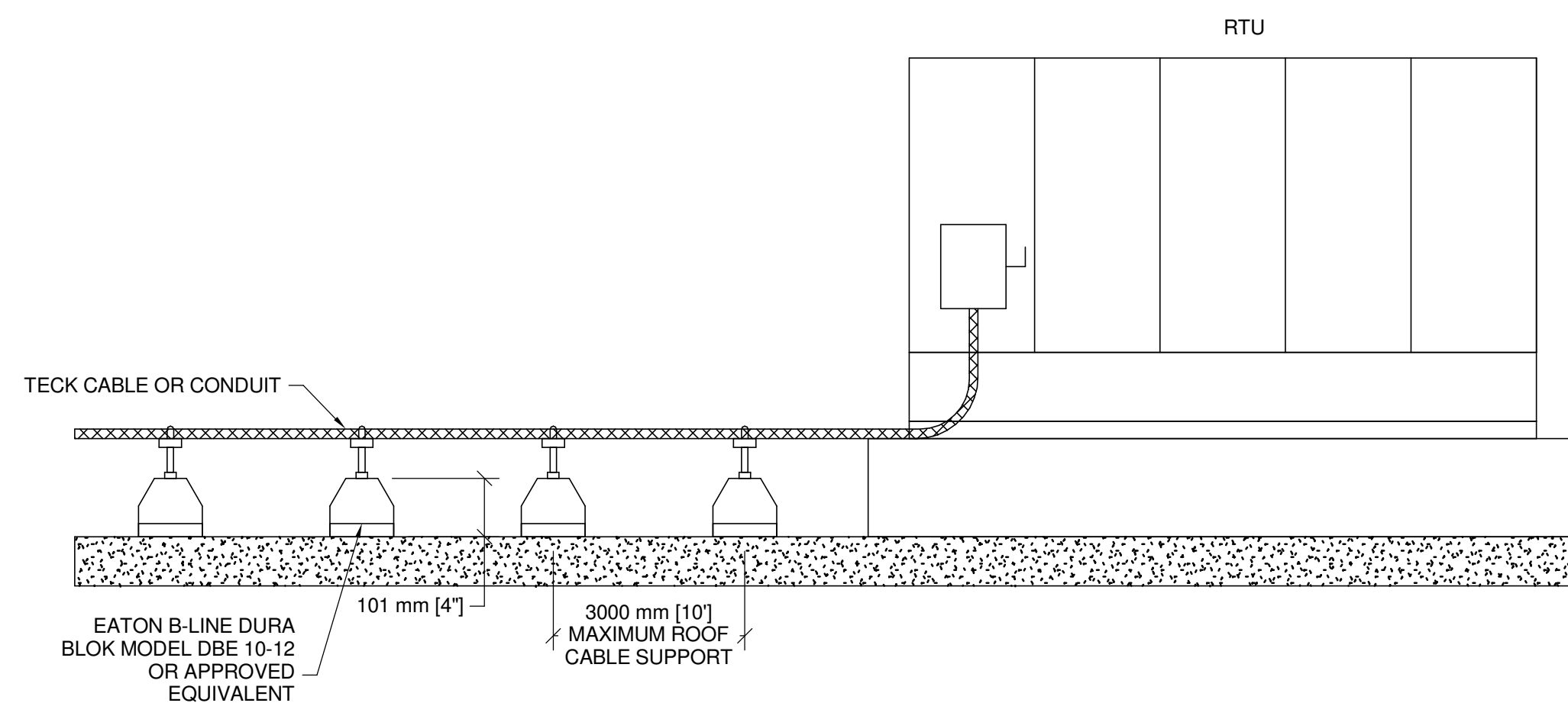
350 GARFIELD WRIGHT
BOULEVARD
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Key Plan

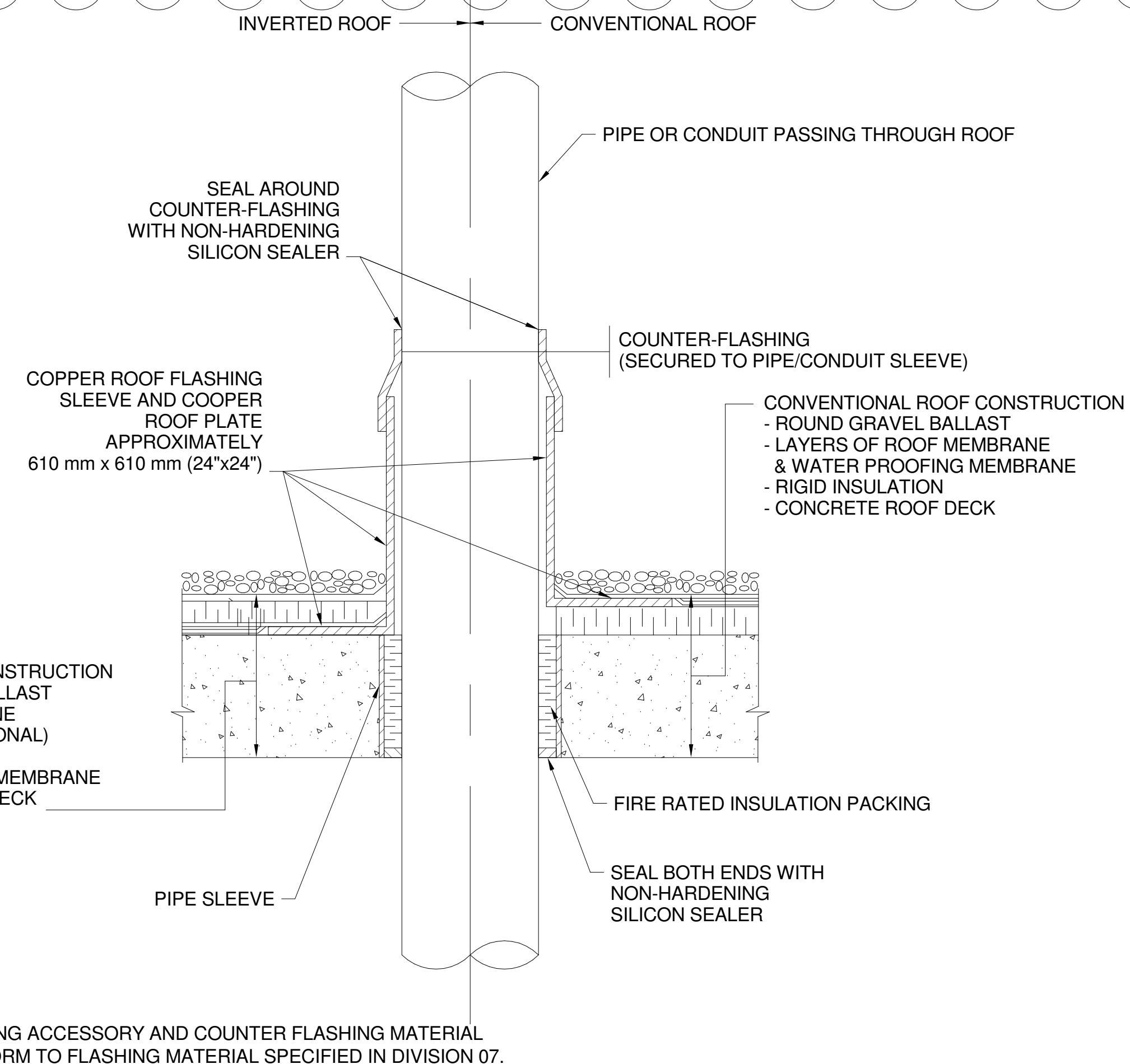


Typical Device Mounting Heights

SCALE:N.T.S



26 05 29.00-04.SI - Roof Mounted Conduit or Cable Supports
SCALE: 1 : 10



NOTE:

ROOF FLASHING ACCESSORY AND COUNTER FLASHING MATERIAL SHALL CONFORM TO FLASHING MATERIAL SPECIFIED IN DIVISION 07.

SLEEVE AND FLASHING OF CONDUITS THROUGH ROOF

[illegible]

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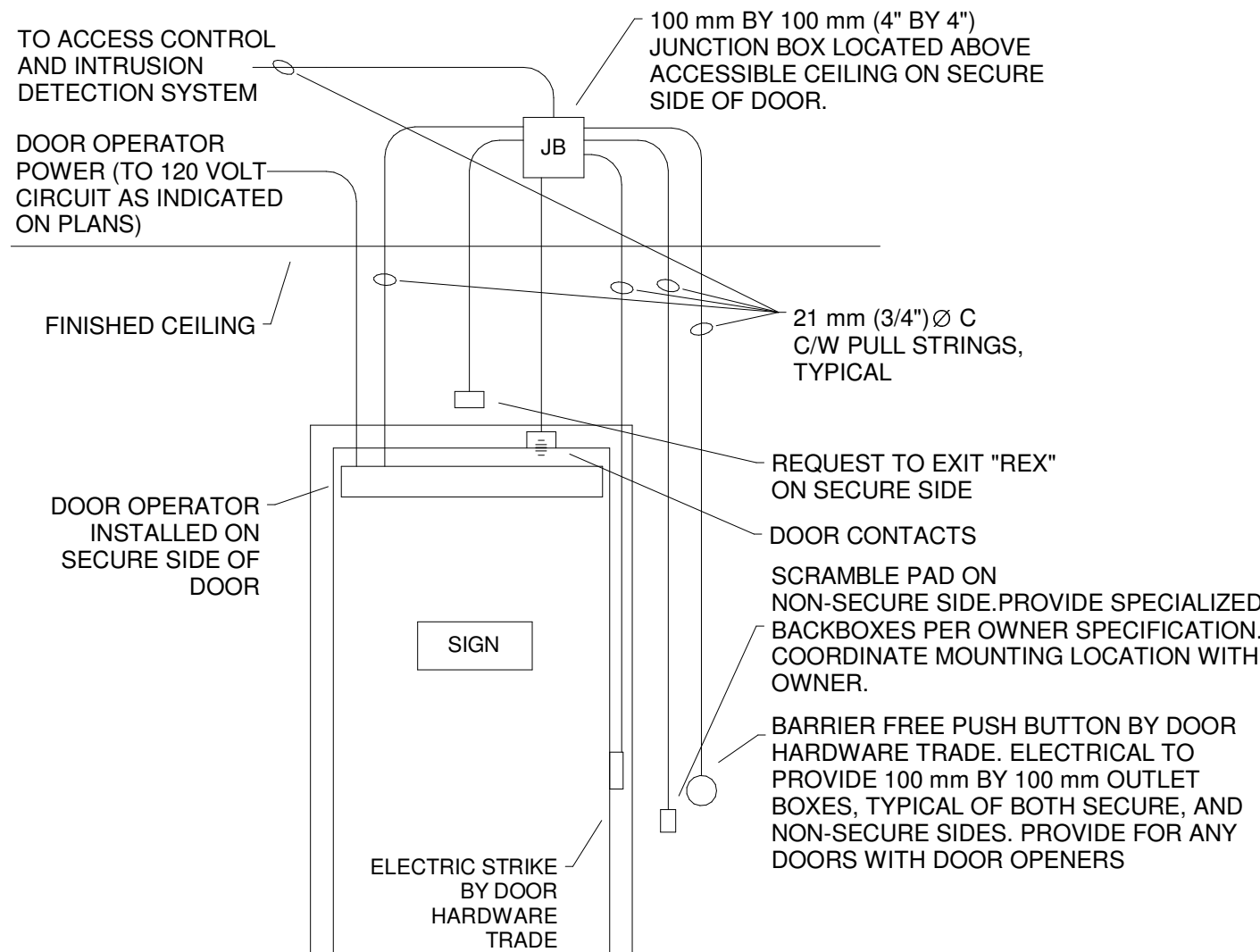
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Drawing
No.
E-804

YORK REGIONAL POLICE
HELICOPTER HANGAR

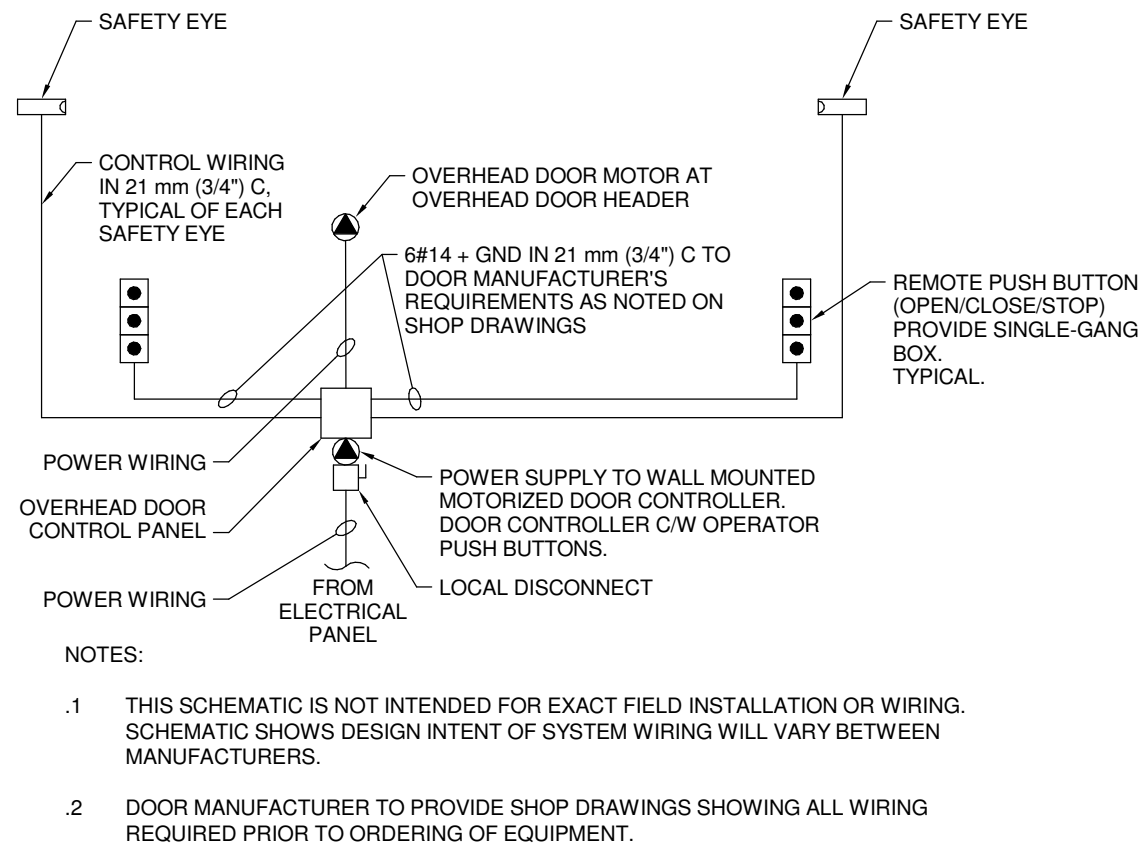
350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key
Plan



NOTES:

1. REFER TO DETAIL "MOUNTING HEIGHTS FOR ACCESSIBLE DESIGN" FOR EXACT MOUNTING HEIGHTS OF DEVICES AND APPLICABLE CODE REFERENCES.
2. REFER TO DOOR HARDWARE SCHEDULE FOR EXACT SCHEDULE OF DEVICES AT DOOR. COORDINATE EXACT ROUGH-IN DETAILS WITH DOOR HARDWARE TRADE.
3. INTERLOCK OPERATION OF DOOR OPERATOR WITH SCRAMBLE PAD ON THE NON-SECURE SIDE.

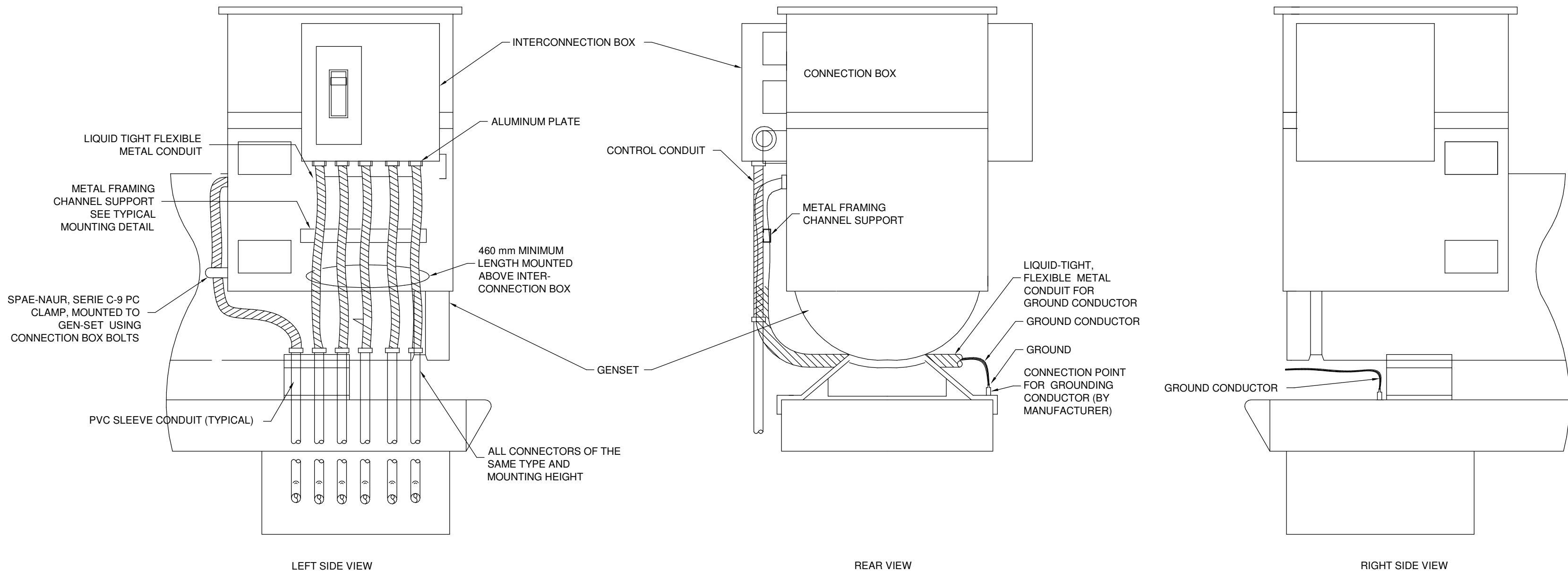


Wiring Diagram for Overhead Doors

SCALE: 1 : 50

Access Control Rough-In

SCALE: 1 : 1



ENGINE GENERATOR BOTTOM FEED

SCALE: N.T.S.

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Sheet
Title:
ELECTRICAL DETAILS

Drawing
No:
E-805

| LIGHT FIXTURE SCHEDULE | | | | | | | | | | | |
|------------------------|---------------------------|-----------------|-------------------|---|-----------|-------|-------------------------|----------|-----------------|-------|----|
| | TYPE | MANUFACTURER | DESCRIPTION | MOUNTING | VOLTAGE | WATTS | LUMENS | DIMMABLE | MOUNTING HEIGHT | Count | |
| D1 | LFR-4RD-M-15L35KWD-DM1 | LFR-4RD-T-CL-S | PRESCOLITE | LITEFRAME 4" ROUND DOWNLIGHT | RECESSED | 120 V | 12 W | 1404 | 0-10V | 3m | 17 |
| D2 | LFR-4RD-M-20L35K8-DM1 | LFR-4RD-T-SH-WT | PRESCOLITE | LITEFRAME 4" ROUND DOWNLIGHT | RECESSED | 120 V | 15 W | 1238 | 0-10V | 3m | 2 |
| F2 | SDL3-1ACF-24G-40-35K-MV | | PEERLESS-ELECTRIC | 2' x 4' LED luminaire for recessed installation in an exposed flat | RECESSED | 120 V | 32 W | 3968 | 0-10V | 3m | 31 |
| F3 | SDL3-1ACF-22G-40-35K-MV | | PEERLESS-ELECTRIC | 2' x 2' LED luminaire for recessed installation in an exposed flat | RECESSED | 120 V | 22 W | 4070 | 0-10V | 3m | 2 |
| FL1 | TSFL-LED-01L-W-30 | | LED Flood Light | | 120 V | 37 W | Modify name as required | | | 1 | |
| L2 | LXD1-40-6U4-4-80-35K-FA-W | | PEERLESS-ELECTRIC | LED luminaire for suspended (with aircraft cables) | SUSPEND | 120 V | 64 W | 3225 | | 2.4m | 1 |
| PA | APA-HB-4-200-35K-A6 | | PEERLESS-ELECTRIC | LED luminaire for surface mounting with brackets | SURFACE | 120 V | 165 W | 20000 | 0-10V | 1.2m | 14 |
| PB | APA-HB-4-150-35K-A6 | | PEERLESS-ELECTRIC | LED luminaire for surface mounting with brackets | SURFACE | 120 V | 119 W | 15000 | 0-10V | 1.2m | 17 |
| PC | AP2W-4-42-35K-A2 | | PEERLESS-ELECTRIC | LED luminaire for surface mounting with brackets | SUSPENDED | 120 V | 35 W | 4200 | 0-10V | 3m | 1 |
| PD | HEM4-35ML-DFA-EU | | PEERLESS-ELECTRIC | LED luminaire for surface mounting with brackets | SUSPENDED | 120 V | 46 W | 5425 | 0-10V | 3m | 4 |
| P1 | NSL-RA-4-60-35K-RA-WH-120 | | PEERLESS-ELECTRIC | LED luminaire for surface or suspended installation with field adjustable aircraft cables or v-links for mounting chain | SURFACE | 120 V | 59 W | 5978 | 0-10V | 4.5m | 3 |
| Z1 | VPW3-160L-85-3K7-4 | | BEACON VIPER WALL | Exterior Wall-mounted Low profile LED luminaire(s) | WALL | 120 V | 95 W | 12595 | 0-10V | 8m | 5 |
| Z2 | VPW3-160L-95-3K7-4 | | BEACON VIPER WALL | Exterior Wall-mounted Low profile LED luminaire | WALL | 120 V | 95 W | 12595 | 0-10V | 4.1m | 7 |
| Z3 | LFR-4RD-M-10L30K8XW-DM1 | LFR-4RD-T-CL-S | PRESCOLITE | LITEFRAME 4" ROUND DOWNLIGHT | RECESSED | 120 V | 8 W | 903 | 0-10V | 2.75m | 1 |
| Grand Total: 106 | | | | | | | | | | | |

| EMERGENCY LIGHTING DEVICE SCHEDULE | | | | |
|------------------------------------|--|---|--|---------|
| Type | | Description | Manufacturer | VOLTAGE |
| E26 | | WATER-PROOF COMPACT REMOTE UNIT WITH DOUBLE HEAD LAMPS: MR16 LED LAMP, 12V, 6W, 540 LUMEN, 25 DEGREE BEAM ANGLE, FACTORY WHITE FINISH | STANPRO "M SERIES": CAT# M1-1V6 LA WH OR APPROVED EQUAL (BEGHELLI, EMERG-LITE, LUXNET, AMLITE). | 120 V |
| EMB-1 | | LIGHTING BATTERY UNIT C/W AUTO TEST, TWO REMOTE HEADS | 12V EMERGENCY LIGHTING BATTERY UNIT C/W AUTO TEST, FACTORY WHITE FINISH, UNIVERSAL 120/347VAC INPUT, AND SIX-ZONE DELTA VOLTAGE SENSING RELAY OPTION TWO LAMPS: MR16 LED LAMP, 12V, 6W, 540 LUMEN, 25 DEGREE BEAM ANGLE -LUMACELL RG12S (360)-2 -LD10-AT-VSR STANPRO SLC SERIES -EMERG-LITE ESL SERIES | 120 V |
| EMB-2 | | LIGHTING BATTERY UNIT C/W AUTO TEST, TWO REMOTE HEADS | SAME AS EMB-1 | 120 V |
| X1 | | SELF-POWERED SLIM EDGE-LIT LED ILLUMINATED PICTOGRAM EXIT SIGN - SINGLE FACE C/W WHITE FINISH RECESSED HOUSING AND AUTOMATIC TEST SELF-DIAGNOSTIC | STANPRO "RMTE SERIES": CAT# RMTE-1UM-WH-IBAT OR APPROVED EQUAL (BEGHELLI, EMERG-LITE, LUXNET, AMLITE). | 120 V |
| Grand total: 27 | | | | |

Grand total: 27

| LIGHTING CONTROL MATRIX 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|-------------|-------------------------------------|----------------------------|---|---|--------------------------------------|------------------------|------------------|---|--|---------------------------------|------------------------------------|---|---|---|------------------|-------------------|--------------------------|---------|--------------------|---------|----------------------------------|-------------------|-------------------|----------------------|--|
| ROOM NAME | ROOM NUMBER | CONTROLS PHILOSOPHY | | LOCAL CONTROL (ASHRAE 90.1-2013 9.4.1.1a) | | | | OCCUPANCY SENSOR | | | | | TIME SCHEDULE | | DAYLIGHT SENSOR | | OTHER | | REMARKS | | | | | | | |
| | | CONTROLS INTEGRATED INTO LUMINAIRES | STANDALONE CONTROL DEVICES | NETWORKED LIGHTING CONTROLS | MANUAL (ON/OFF) ONE ZONE ONLY FOR SPACE | MANUAL (ON/OFF) a. b ZONED SWITCHING | MANUAL DIMMING CONTROL | KEY SWITCH (KS) | SCENE CONTROL (SC) OR GRAPHIC TOUCHSCREEN | VACANCY MODE (MANUAL ON) (ASHRAE 90.1-2013 9.4.1.1b) | OCCUPANCY MODE (AUTO ON) (FULL) | OCCUPANCY MODE (AUTO ON) (PARTIAL) | AUTOMATIC PARTIAL OFF SENSOR TIME OUT (MINUTES) (ASHRAE 90.1-2013 9.4.1.1g) | AUTOMATIC PARTIAL OFF LUMINAIRE DIMMING LEVEL | FULL OFF SENSOR TIME OUT PERIOD (MINUTES) (ASHRAE 90.1-2013 9.4.1.1h) | SCHEDULE ON TIME | SCHEDULE OFF TIME | SCHEDULE OVERRIDE SWITCH | | SWITCHING (ON/OFF) | DIMMING | TARGET LIGHTING LEVELS (Avg. Lc) | EXTERIOR LOCATION | PLUG LOAD CONTROL | CONTROLLED EMERGENCY | |
| VESTIBULE | 101 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| CONFERENCE ROOM | 103 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| OFFICE 4 | 104 | | X | | X | | | | | X | | | | | | | | | | | | X | | | | |
| IT ROOM | 105 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| UNIVERSAL WASHROOM | 106 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| LOUNGE | 107 | | X | | X | | | | | X | | | | | | | | | | | X | | | | | |
| KITCHEN | 108 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| GENERAL OFFICE | 109 | | X | | X | | | | | X | | | | | | | | | | | | X | | | | |
| OFFICE 1 | 111 | | X | | X | | | | | X | | | | | | | | | | | X | | | | | |
| OFFICE 2 | 112 | | X | | X | | | | | X | | | | | | | | | | | X | | | | | |
| OFFICE 3 | 113 | | X | | X | | | | | X | | | | | | | | | | | X | | | | | |
| STORAGE | 114 | | X | | X | | | | | X | | | | | | | | | | | | X | | | | |
| LOCKERS | 115 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| EXTERIOR - PARKING LIGHTING ZONE | 116 | X | | | X | | | | | | | | | | | | | X | | | | | | | | |
| EXTERIOR - APRON LIGHTING ZONE | 117 | X | | | X | | | | | | | | | | | | | X | | | X | | | | | |
| WASHROOMS | 118 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| SHR1 | 119 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| SHR2 | 120 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| MECHANICAL/ELECTRICAL | 122 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| STORAGE 2 | 123 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| VEHICLE BAY | 124 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| STORAGE 3 | 125 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| STORAGE 4 | 126 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| JANITOR ROOM | 127 | | X | | X | | | | | X | | | | | | | | | | | | | | | | |
| HANGAR | 128 | | X | | X | | | | | | 50% | | 20 | | | | | | X | 30 | | | | | | |

APRON LIGHTING CONTROL FUNCTIONAL REQUIREMENTS:

- TURN ON/OFF BASED ON PHOTOCELL
- HELIPOUT OVERRIDE OFF:
 - OFF WHEN HELIPOUT LIGHTING CONTROLLER (HLC) AUXILIARY DRY CONTACT CLOSSES (CORRESPONDS TO FATO LIGHTING TURNING ON, BY HLC)
 - OFF WHEN HELIPOUT TIME LIMIT, DRY CONTACT WILL OPEN. APRON LIGHTING TO RESUME NORMAL FUNCTION CONTROLLED BY PHOTOCELL
- MANUAL OVERRIDE ON
- APRON LIGHTING CAN BE MANUALLY TURNED ON TO OVERRIDE THE HLC CONTACT AND RESUME OPERATION BASED ON PHOTOCELL

4

PARKIN

Parkin Architects Limited
1 VALLEYBROOK DRIVE, TORONTO, CANADA, M3B 2S7 416-467-8000



250 ROWNTREE DAIRY RD, WOODBRIDGE, ON
TEL: 905-507-0800
WEB: WWW.QUASARCG.COM

YORK REGIONAL POLICE HELICOPTER HANGAR

350 GARFIELD WRIGHT
BOULEVARD
TOWN OF EAST GWILLIMBURY

Key Plan

[illegible]

Issues

All measurements are to be checked and verified on site by the contractor before proceeding with work

Do not scale drawings

Drawn by: ZK
Checked by: AO
Original Issue Date: 2024-07-31
Project No: TT-24-005

Sheet
Title:

ELECTRICAL SCHEDULES

Drawing
No. **E-900**

| Branch Panel: DP-01 | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|--|-----|------|-------|----------------|-------------------|---------|---------------|---------|---------|------------------|----------------------|-----|-------------------------------|--|--|-----|--|--|--|--|--|--|
| Location: Room 129 | | | | | | Volts: 347/600V | | | | | | A.I.C. Rating: 42 kA | | | | | | | | | | | |
| Supply From: | | | | | | Phases: 3 | | | | | | Mains Type: | | | | | | | | | | | |
| Mounting: SURFACE | | | | | | Wires: 4 | | | | | | Mains Rating: 400 A | | | | | | | | | | | |
| Enclosure: NEMA 3R | | | | | | MCB Rating: 400 A | | | | | | | | | | | | | | | | | |
| Notes: | | | | | | | | | | | | | | | | | | | | | | | |
| CKT | Circuit Description | QTY | Trip | Poles | A | B | C | A | B | C | Poles | Trip | QTY | Circuit Description | | | CKT | | | | | | |
| 1 | SURGE PROTECTION DEVICE | -- | 60 A | 3 | 0 VA | | | 7967 VA | | | 3 | 30 A | 1 | HANGAR BIFOLD DOOR CONTROLLER | | | 2 | | | | | | |
| 3 | | | | | | 0 VA | | | 7967 VA | | | | | | | | 4 | | | | | | |
| 5 | | | | | | | 0 VA | | | 7967 VA | | | | | | | 6 | | | | | | |
| 7 | RESERVED SPACE FOR FUTURE PV INVERTER SYSTEM | -- | 0 A | 3 | 0 VA | | | 167 VA | | | 3 | 125 A | 1 | AIR SOURCE HEAT PUMP | | | 8 | | | | | | |
| 9 | | | | | | 0 VA | | | 167 VA | | | | | | | | 10 | | | | | | |
| 11 | | | | | | | 0 VA | | | 167 VA | | | | | | | 12 | | | | | | |
| 13 | | | | | | | | | | | | | | | | | 14 | | | | | | |
| 15 | | | | | | | | | | | | | | | | | 16 | | | | | | |
| 17 | | | | | | | | | | | | | | | | | 18 | | | | | | |
| 19 | | | | | | | | | | | | | | | | | 20 | | | | | | |
| 21 | | | | | | | | | | | | | | | | | 22 | | | | | | |
| 23 | | | | | | | | | | | | | | | | | 24 | | | | | | |
| 25 | | | | | | | | | | | | | | | | | 26 | | | | | | |
| 27 | | | | | | | | | | | | | | | | | 28 | | | | | | |
| 29 | | | | | | | | | | | | | | | | | 30 | | | | | | |
| 31 | | | | | | | | | | | | | | | | | 32 | | | | | | |
| 33 | | | | | | | | | | | | | | | | | 34 | | | | | | |
| 35 | | | | | | | | | | | | | | | | | 36 | | | | | | |
| 37 | | | | | | | | | | | | | | | | | 38 | | | | | | |
| 39 | | | | | | | | | | | | | | | | | 40 | | | | | | |
| 41 | | | | | | | | | | | | | | | | | 42 | | | | | | |
| Total Load: | | | | | 8133 VA | | 8133 VA | | 8133 VA | | | | | | | | | | | | | | |
| Total Amps: | | | | | 23 A | | 23 A | | 23 A | | | | | | | | | | | | | | |
| Legend: | | | | | | | | | | | | | | | | | | | | | | | |
| Load Classification | | | | | Connected Load | | | Demand Factor | | | Estimated Demand | | | Panel Totals | | | | | | | | | |
| Other | | | | | | | | | | | | | | | | | | | | | | | |

| Branch Panel: DP-03 | | | | | | | | | | | | | | | | |
|---|-----------------------------|-----|------|-------|----------------|---------|---|--------|------------------|--------|----------------------------|------|-----|---|-----|--|
| Location: Room 129 Supply From: Mounting: SURFACE Enclosure: NEMA 3R | | | | | | | Volts: 120/208 Wye Phases: 3 Wires: 4 | | | | | | | A.I.C. Rating: Mains Type: Mains Rating: 100 A MCB Rating: | | |
| Notes: | | | | | | | | | | | | | | | | |
| CKT | Circuit Description | QTY | Trip | Poles | A | B | C | A | B | C | Poles | Trip | QTY | Circuit Description | CKT | |
| 1 | P-1 | 1 | 25 A | 3 | 433 VA | | | 180 VA | | | 1 | 15 A | 1 | R: GARAGE DOOR | 2 | |
| 3 | | | | | | 433 VA | | | 500 VA | | | | | | 4 | |
| 5 | | | | | | | 433 VA | | | 500 VA | | | | GROUND POWER UNIT | 6 | |
| 7 | EMERGENCY BATTERY PACK | 2 | 15 A | 1 | 100 VA | | | | | | | | | | 8 | |
| 9 | WINDSOCK AND WEATHERSTATION | 2 | 15 A | 1 | | 1000 VA | | | | | | | | | 10 | |
| 11 | PARKING & SIGNAGE LIGHTING | 12 | 15 A | 1 | | | 218 VA | | | | | | | | 12 | |
| 13 | | | | | | | | | | | | | | | 14 | |
| 15 | | | | | | | | | | | | | | | 16 | |
| 17 | | | | | | | | | | | | | | | 18 | |
| 19 | | | | | | | | | | | | | | | 20 | |
| 21 | | | | | | | | | | | | | | | 22 | |
| 23 | | | | | | | | | | | | | | | 24 | |
| 25 | | | | | | | | | | | | | | | 26 | |
| 27 | | | | | | | | | | | | | | | 28 | |
| 29 | | | | | | | | | | | | | | | 30 | |
| 31 | | | | | | | | | | | | | | | 32 | |
| 33 | | | | | | | | | | | | | | | 34 | |
| 35 | | | | | | | | | | | | | | | 36 | |
| 37 | | | | | | | | | | | | | | | 38 | |
| 39 | | | | | | | | | | | | | | | 40 | |
| 41 | | | | | | | | | | | | | | | 42 | |
| Total Load: | | | | | 713 VA | | 1933 VA | | 1151 VA | | | | | | | |
| Total Amps: | | | | | 6 A | | 17 A | | 10 A | | | | | | | |
| Legend: | | | | | | | | | | | | | | | | |
| Load Classification | | | | | Connected Load | | Demand Factor | | Estimated Demand | | Panel Totals | | | | | |
| Other | | | | | 3300 VA | | 100.00% | | 3300 VA | | | | | | | |
| EMERGENCY BATTERY PACK | | | | | 100 VA | | 100.00% | | 100 VA | | Total Conn. Load: 3798 VA | | | | | |
| Receptacle | | | | | 180 VA | | 100.00% | | 180 VA | | Total Est. Demand: 3798 VA | | | | | |
| | | | | | | | | | | | Total Conn.: 11 A | | | | | |
| | | | | | | | | | | | Total Est. Demand: 11 A | | | | | |
| Notes:</ | | | | | | | | | | | | | | | | |

| Branch Panel: DP-02 | | | | | | | | | | | | | | | |
|---------------------|-----------------------|-----|------|--------|--------------------|---------|---------|---------|---------|---------------------|--------|-------|-----|-----------------------------|-----|
| Location: Room 129 | | | | | Volts: 120/208 Wye | | | | | A.I.C. Rating: | | | | | |
| Supply From: | | | | | Phases: 3 | | | | | Mains Type: | | | | | |
| Mounting: SURFACE | | | | | Wires: 4 | | | | | Mains Rating: 400 A | | | | | |
| Enclosure: NEMA 3R | | | | | | | | | | MCB Rating: 400 A | | | | | |
| Notes: | | | | | | | | | | | | | | | |
| CKT | Circuit Description | QTY | Trip | Pole s | A | | B | | C | | Pole s | Trip | QTY | Circuit Description | CKT |
| 1 | LIGHTING | 26 | 15 A | 1 | 2276... | 180 VA | | | | | 1 | 15 A | 1 | R: ELECTRICAL ROOM | 2 |
| 3 | LIGHTING | 28 | 15 A | 1 | | | 2638... | 700 VA | | | 1 | 15 A | 1 | TSP-1 | 4 |
| 5 | LIGHTING | 38 | 15 A | 1 | | | | | 1156... | 1600... | 1 | 15 A | 3 | EF-1, EF-2 | 6 |
| 7 | EF-4 | 1 | 15 A | 1 | 1200... | 1300... | | | | | 1 | 20 A | 1 | B2 | 8 |
| 9 | EF-3 | 1 | 15 A | 1 | | | 900 VA | 1296... | | | 1 | 15 A | 6 | UH-1 TO UH-6 | 10 |
| 11 | B1 | 1 | 20 A | 1 | | | | | 1300... | 1500... | 1 | 15 A | 3 | AUTOMATIC DOOR OPERATORS... | 12 |
| 13 | R: GENERAL OFFICE | 2 | 15 A | 1 | 360 VA | 0 VA | | | | | | | | | 14 |
| 15 | FCU-1 TO FCU-11 | 11 | 15 A | 2 | | | 1500... | 0 VA | | | 3 | 100 A | -- | GENERATOR ENCLOSURE PANEL | 16 |
| 17 | | | | | | | | | 1500... | 0 VA | | | | | 18 |
| 19 | R: VEHICLE BAY | 2 | 15 A | 1 | 360 VA | 1200... | | | | | 1 | 15 A | 1 | EF-4 | 20 |
| 21 | R: MECHANICAL ROOM | 2 | 15 A | 1 | | | 360 VA | 180 VA | | | 1 | 15 A | 1 | R: FRIDGE | 22 |
| 23 | R: WASHROOM | 2 | 15 A | 1 | | | | | 360 VA | 180 VA | 1 | 15 A | 1 | R: KITCHEN | 24 |
| 25 | R: LOUNGE AND TV | 2 | 15 A | 1 | 360 VA | 360 VA | | | | | 1 | 15 A | 2 | R: MECHANICS OFFICE | 26 |
| 27 | R: QUARTERMASTER | 1 | 15 A | 1 | | | 180 VA | 360 VA | | | 1 | 15 A | 1 | R: IT ROOM | 28 |
| 29 | R: HANGAR | 8 | 20 A | 1 | | | | | 1440... | 360 VA | 1 | 15 A | 2 | R: IT ROOM | 30 |
| 31 | R: CONFERENCE ROOM | 2 | 15 A | 1 | 360 VA | 720 VA | | | | | 1 | 15 A | 4 | R: OFFICE 2 | 32 |
| 33 | | | | | | | 167 VA | | | | | | | | 34 |
| 35 | R: OFFICE 1 | 3 | 15 A | 1 | | | | | 540 VA | 167 VA | 3 | 50 A | 1 | RTU-1 | 36 |
| 37 | | | | | 167 VA | 167 VA | | | | | | | | | 38 |
| 39 | RTU-2 | 1 | 40 A | 3 | | | 167 VA | 360 VA | | | 1 | 20 A | 2 | R: MAINTENANCE | 40 |
| 41 | | | | | | | | | 167 VA | 500 VA | 1 | 15 A | 1 | AVIATION LIGHTING | 42 |
| 43 | R: FITNESS | 2 | 15 A | 1 | 360 VA | 180 VA | | | | | 1 | 15 A | 1 | R: PRINTER | 44 |
| 45 | R: FITNESS | 2 | 15 A | 1 | | | 360 VA | 180 VA | | | 1 | 15 A | 1 | R: FRIDGE | 46 |
| 47 | R: RPAS | 1 | 20 A | 1 | | | | | 180 VA | 180 VA | 1 | 20 A | 1 | R: KITCHEN COUNTER | 48 |
| 49 | EXIT SIGNS | 11 | 20 A | 1 | 285 VA | 540 VA | | | | | 1 | 15 A | 3 | R: CONFERENCE ROOM | 50 |
| 51 | R: GARAGE DOOR | 1 | 15 A | 1 | | | 180 VA | 167 VA | | | | | | | 52 |
| 53 | R: GENERAL OFFICE | 4 | 15 A | 1 | | | | | 720 VA | 167 VA | 3 | 30 A | 1 | IT RACK | 54 |
| 55 | R: UNIVERSAL WASHROOM | -- | 15 A | 1 | 500 VA | 167 VA | | | | | | | | | 5 |

Drawing
No. **E-901**