GENERAL NOTES

- ALL DRAWINGS ARE FOR DIAGRAMMATIC PURPOSES ONLY AND SHALL BE READ IN CONJUNCTION WITH THE ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS FOR LOCATION OF ALL LUMINAIRES, LIGHTING CONTROL DEVICES, OUTLETS, SYSTEM DEVICES, DIMENSIONS, MOUNTING HEIGHTS, AND CONSTRUCTION
- ALL OPENINGS THROUGH RATED WALLS OR FLOORS (APPLIES TO ALL INSTANCES) SHALL BE SEALED WITH APPROVED FIRE STOPPING MATERIAL. ANY FIREPROOFING MATERIAL REMOVED WILL BE REPLACED WITH A SUITABLE AND APPROVED FIREPROOFING MATERIAL AND SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS TO APPLICABLE BUILDING AND FIRE CODES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIR OF DAMAGED BUILDING AREAS AND FINISHES AFFECTED BY THE WORK AS OUTLINED UNDER SCOPE OF WORK OF THIS PROJECT.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND DISTRIBUTION OF TEMPORARY POWER AND LIGHTING WITHIN THE PREMISES DURING THE CONSTRUCTION PERIOD.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL THE WORK WITH ALL OTHER TRADES, CONSULTANTS, AND THE OWNER.
- 6. ALL NEW DEVICES INSTALLED WHERE NEW FINISHES OCCUR SHALL BE FLUSH MOUNTED, UNLESS OTHERWISE
- ALL CONDUIT RUNS SHOWN ON PLANS ARE FOR INFORMATION AND DIAGRAMMATIC PURPOSES ONLY. CONTRACTOR SHALL VERIFY EXACT LOCATION AND ROUTING OF ALL RUNS ON SITE PRIOR TO BEGINNING
- PROVIDE SEISMIC RESTRAINTS WHERE REQUIRED BY LOCAL CODE REQUIREMENTS. OBTAIN THE SERVICES OF A SEISMIC RESTRAINT ENGINEER AND COMPLY WITH ALL REQUIREMENTS IN THEIR REPORT. SUBMIT A COPY OF THE REPORT TO MECHANICAL AND ELECTRICAL CONSULTANTS AND INCLUDE IN MAINTENANCE MANUAL.
- 9. PROVIDE SUPPORT CHAINS FOR ALL LUMINAIRES. SUPPORT ALL LUMINAIRES DIRECTLY TO CEILING SLAB STRUCTURE, NOT TO CEILING HANGERS, T-BAR, DUCTWORK, PIPING, CABLE TRAYS, ROOF DECK, ETC.
- 10. NEW ELECTRICAL WIRING AND CABLES EXPOSED WITHIN THE CEILING SPACES SHALL CONFORM TO THE PLENUM REQUIREMENTS OF THE LOCAL BUILDING CODE.
- 11. PROPERLY LABEL ALL ELECTRICAL PANELS, CLEARLY INDICATING ALL INFORMATION INCLUDING CIRCUIT NUMBERS. CIRCUITING SHOWN ON DRAWING IS DIAGRAMMATIC TO SHOW GENERAL CIRCUIT ARRANGEMENT AND PANEL DESIGNATION.
- 12. PROVIDE 2#12AWG + G IN 21MMC FOR ALL 15A AND 20A CIRCUITS WITH A NOMINAL VOLTAGE OF 120V UNLESS OTHERWISE NOTED. CONDUCTORS SHALL BE OVERSIZED TO SUIT VOLTAGE DROP AS PER SPECIFICATIONS FOR CIRCUIT LENGTH EXCEEDING 90 FEET.
- 13. PROVIDE A SEPARATE NEUTRAL AND GROUNDING TO ALL CIRCUITS SERVING A RECEPTACLE FOR A COPIER/PRINTER. COORDINATE RECEPTACLES CONFIGURATION WITH THE COPIER SUPPLIER AND TENANT

COMMUNICATIONS

- 14. ALL COMMUNICATIONS SCOPE OF WORK TO FOLLOW CITY OF BRAMPTON IT PERFORMANCE SPECIFICATION. REFER TO SPECIFICATION SECTION 27 00 00 FOR MORE INFORMATION INCLUDING MOUNTING HEIGHTS OF DEVICES, CABLING INSTALLATIONS, ETC. PRIOR TO INSTALLATION.
- 15. VOICE & DATA EMPTY CONDUIT AND BACK BOXES FOR COMMUNICATION CABLE AND DATA OUTLET SHALL BE SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR. DATA FACE PLATE AND COMMUNICATION CABLE BY COMMUNICATION CONTRACTOR.
- 16. CABLES FOR VOICE AND DATA SYSTEMS ARE TO BE SUPPLIED, INSTALLED AND TERMINATED BY
- 17. ELECTRICAL CONTRACTOR TO COORDINATE THE INSTALLATION OF ALL DATA WALL AND FLOOR OUTLET BOXES AND ASSOCIATED DATA CONDUIT SIZES WITH ELECTRICAL DRAWINGS AND COMMUNICATIONS CONTRACTORS.
- 18. COMMUNICATIONS CONTRACTOR MUST BE COMMSCOPE SYSTIMAX CERTIFIED.
- 19. COMMUNICATIONS CONTRACTOR WILL BE RESPONSIBLE TO INSTALL WIRELESS ACCESS POINTS THAT WILL BE PROVIDED BY THE CITY OF BRAMPTON.
- 20. COMMUNICATIONS SYSTEM IS TO BE AN END TO END COMMSCOPE SYSTEMAX CERTIFIED SOLUTION. ALL PATCH CABLES MUST BE PROVIDED TO ACCOMMODATE ALL DROPS INSTALLED. CABLES TO BE ORDERED AS PER CITY OF BRAMPTON IT PERFORMANCE SPECIFICATION V1.6 (SECTION 27 00 00).

- 21. CONNECT ALL EMERGENCY REMOTE HEADS TO THE INDICATED BATTERY UNIT WITH #10 AWG COPPER WIRE MINIMUM. PROVIDE LARGER WIRE SIZE AS REQUIRED OR AS RECOMMENDED BY MANUFACTURER. PROVIDE MEASUREMENT OF LIGHT LEVELS TO OBTAIN LOCAL INSPECTION APPROVALS AND PERMITS. AN AUTHORIZED TECHNICIAN OF THE MANUFACTURER SHALL PREPARE AND PROVIDE A SIGNED TEST REPORT VERIFYING THAT THE SYSTEM IS PROPERLY WORKING AND THAT LIGHT LEVELS MEET LOCAL CODE REQUIREMENTS. INCLUDE REQUIRED TEST MEASUREMENTS IN REPORT AND SUBMIT TO CONSULTANT FOR REVIEW. ALL COST FOR TESTING/VERIFICATION SHALL BE INCLUDED IN THE TENDER BID.
- 22. SUBMIT FIRE ALARM VERIFICATION REPORT CONFORMING TO CAN/ULC-S537 TO CONSULTANT FOR REVIEW. AUDIBILITY REPORT SHALL HAVE 15 SEPARATE READINGS IN VARIOUS LOCATIONS THROUGHOUT FLOOR AREA INDICATING SOUND PRESSURE PRODUCED BY FIRE ALARM SIGNALING DEVICES.

	ELECTRICAL DRAWING LIST
DRAWING #	DRAWING NAME
E001	ELECTRICAL LEGEND AND GENERAL NOTES
E101	ELECTRICAL SITE PLAN
E102	ELECTRICAL SITE LIGHTING PLAN
E103	ELECTRICAL SITE PLAN DETAILS
E104	ELECTRICAL SITE PLAN - ALECTRA DETAILS
E201	LEVEL 1 PLAN - LIGHTING
E301	LEVEL 1 PLAN - POWER & SYSTEMS
E302	ROOF PLAN - POWER & SYSTEMS
E401	FIRE ALARM KEY PLAN
E501	ELECTRICAL DETAILS (1)
E502	ELECTRICAL DETAILS (2)
E503	ELECTRICAL DETAILS (3)
E504	ELECTRICAL DETAILS (4)
E601	ELECTRICAL SCHEDULES (1)
E602	ELECTRICAL SCHEDULES (2)
E603	ELECTRICAL SCHEDULES (3)

LINETYPES JEW WORK WORK TO BE DEMOLISHED, OR REMOVED EXISTING MATERIAL/EQUIPMENT/SERVICES TO REMAIN GUTURE WORK (NOT IN SCOPE) EXTENTS OF FIRE ALARM ZONE, WET LOCATION, OR OTHER AREA AS NOTED ON PLANS ABBREVIATIONS EXISTING TO REMAIN EXISTING TO REMAIN EXISTING IN RELOCATED POSITION REMOVE AND RELOCATE CEILING MOUNTED CONNECTION WALL MOUNTED CONNECTION BOVE FINISHED FLOOR BOVE FINISHED FLOOR BOVE FINISHED FLOOR BOVE FOUNTER JOHN COUNTER JOHN
IEW WORK VORK TO BE DEMOLISHED, OR REMOVED EXISTING MATERIAL/EQUIPMENT/SERVICES TO REMAIN FUTURE WORK (NOT IN SCOPE) EXTENTS OF FIRE ALARM ZONE, WET LOCATION, OR DITHER AREA AS NOTED ON PLANS ABBREVIATIONS EXISTING TO REMAIN EXISTING TO REMAIN EXISTING IN RELOCATED POSITION EXEMOVE AND RELOCATE CEILING MOUNTED CONNECTION FLOOR MOUNTED CONNECTION FLOOR MOUNTED CONNECTION FLOOR MOUNTED GRADE EXPERIENCE OF THE STANDARD STAN
VORK TO BE DEMOLISHED, OR REMOVED EXISTING MATERIAL/EQUIPMENT/SERVICES TO REMAIN FUTURE WORK (NOT IN SCOPE) EXTENTS OF FIRE ALARM ZONE, WET LOCATION, OR EXISTING TO REMAIN EXISTING TO REMAIN EXISTING TO BE DEMOLISHED/REMOVED EXISTING IN RELOCATED POSITION EXAMPLE AND RELOCATE EXHILING MOUNTED CONNECTION EXAMPLE CONNECTION
EUTURE WORK (NOT IN SCOPE) EXTENTS OF FIRE ALARM ZONE, WET LOCATION, OR DTHER AREA AS NOTED ON PLANS ABBREVIATIONS EXISTING TO REMAIN EXISTING TO BE DEMOLISHED/REMOVED EXISTING IN RELOCATED POSITION REMOVE AND RELOCATE SEILING MOUNTED CONNECTION EVALL MOUNTED CONNECTION ELOOR MOUNTED CONNECTION ELOOR MOUNTED GRADE EVER COUNTER ENDER CABINET EXECUTE EXECUT
EXTENTS OF FIRE ALARM ZONE, WET LOCATION, OR OTHER AREA AS NOTED ON PLANS ABBREVIATIONS EXISTING TO REMAIN EXISTING TO BE DEMOLISHED/REMOVED EXISTING IN RELOCATED POSITION REMOVE AND RELOCATE CEILING MOUNTED CONNECTION VALL MOUNTED CONNECTION REOVE FINISHED FLOOR REOVE FINISHED FLOOR REOVE FINISHED GRADE OVER COUNTER UNDER CABINET CIRCUIT BROUND FAULT CIRCUIT INTERRUPTER WIST LOCK SAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY JOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS DNTARIO BUILDING CODE DNTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
ABBREVIATIONS ABBREVIATIONS EXISTING TO REMAIN EXISTING TO BE DEMOLISHED/REMOVED EXISTING IN RELOCATED POSITION REMOVE AND RELOCATE CEILING MOUNTED CONNECTION VALL MOUNTED CONNECTION CLOOR MOUNTED CONNECTION REMOVE FINISHED FLOOR REMOVE FINISHED FLOOR REMOVE FINISHED GRADE OVER COUNTER UNDER CABINET CIRCUIT SEROUND FAULT CIRCUIT INTERRUPTER WIST LOCK BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY IOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
EXISTING TO REMAIN EXISTING TO BE DEMOLISHED/REMOVED EXISTING IN RELOCATED POSITION REMOVE AND RELOCATE CEILING MOUNTED CONNECTION VALL MOUNTED CONNECTION FLOOR MOUNTED CONNECTION REMOVE FINISHED FLOOR REMOVE FINISHED FLOOR REMOVE FINISHED GRADE EXISTING TO REMAIN REMOVE FINISHED FLOOR REMOVE FINISHED FLOOR REMOVE FINISHED GRADE EXISTING TO REMAIN REMOVE FINISHED GRADE EXISTING TO REMOVE EXISTI
EXISTING TO BE DEMOLISHED/REMOVED EXISTING IN RELOCATED POSITION REMOVE AND RELOCATE DELIING MOUNTED CONNECTION VALL MOUNTED CONNECTION REOVE FINISHED FLOOR REOVE FINISHED FLOOR REOVE FINISHED GRADE DVER COUNTER UNDER CABINET DIRCUIT REOUND FAULT CIRCUIT INTERRUPTER REVIST LOCK RAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY ROT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS DNTARIO BUILDING CODE DNTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES RCOUSTIC CEILING TILE (T-BAR)
REMOVE AND RELOCATE CEILING MOUNTED CONNECTION VALL MOUNTED CONNECTION REOVE FINISHED FLOOR REOVE FINISHED FLOOR REOVE FINISHED GRADE OVER COUNTER UNDER CABINET CIRCUIT CROUND FAULT CIRCUIT INTERRUPTER WIST LOCK SAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY SIOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
CEILING MOUNTED CONNECTION VALL MOUNTED CONNECTION CLOOR MOUNTED CONNECTION CROWN FINISHED FLOOR CROWN FINISHED GRADE OVER COUNTER UNDER CABINET CROUND FAULT CIRCUIT INTERRUPTER WIST LOCK CAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY COT IN CONTRACT CIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
VALL MOUNTED CONNECTION ELOOR MOUNTED CONNECTION ABOVE FINISHED FLOOR ABOVE FINISHED GRADE OVER COUNTER UNDER CABINET CIRCUIT GROUND FAULT CIRCUIT INTERRUPTER WIST LOCK BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY IOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
ELOOR MOUNTED CONNECTION ABOVE FINISHED FLOOR ABOVE FINISHED GRADE OVER COUNTER UNDER CABINET CIRCUIT EROUND FAULT CIRCUIT INTERRUPTER WIST LOCK BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY IOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
ABOVE FINISHED GRADE OVER COUNTER JINDER CABINET CIRCUIT GROUND FAULT CIRCUIT INTERRUPTER WIST LOCK BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY JOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
DVER COUNTER JINDER CABINET CIRCUIT GROUND FAULT CIRCUIT INTERRUPTER TWIST LOCK BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY HOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS DNTARIO BUILDING CODE DNTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
UNDER CABINET CIRCUIT GROUND FAULT CIRCUIT INTERRUPTER WIST LOCK BAY DOOR OPERATOR WIRE GUARD WEATHER PROOF ROUGH-IN ONLY HOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
CIRCUIT GROUND FAULT CIRCUIT INTERRUPTER WIST LOCK BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY JOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS DNTARIO BUILDING CODE DNTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
WIST LOCK BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY IOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
BAY DOOR OPERATOR VIRE GUARD VEATHER PROOF ROUGH-IN ONLY BOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS DNTARIO BUILDING CODE DNTARIO ELECTRICAL SAFETY CODE DNTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
VIRE GUARD VEATHER PROOF ROUGH-IN ONLY IOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO ELECTRICAL SAFETY CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
VEATHER PROOF ROUGH-IN ONLY NOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO ELECTRICAL SAFETY CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
ROUGH-IN ONLY JOT IN CONTRACT SIMILAR TO TYPICAL REVIATIONS - CODES AND STANDARDS DISTARIO BUILDING CODE DISTARIO ELECTRICAL SAFETY CODE DISTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
COUSTIC CEILING TILE (T-BAR)
PYPICAL REVIATIONS - CODES AND STANDARDS DINTARIO BUILDING CODE DINTARIO ELECTRICAL SAFETY CODE DINTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
REVIATIONS - CODES AND STANDARDS ONTARIO BUILDING CODE ONTARIO ELECTRICAL SAFETY CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
ONTARIO BUILDING CODE ONTARIO ELECTRICAL SAFETY CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
ONTARIO ELECTRICAL SAFETY CODE ONTARIO FIRE CODE ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
ABBREVIATIONS - CEILING TYPES ACOUSTIC CEILING TILE (T-BAR)
COUSTIC CEILING TILE (T-BAR)
EXPOSED CEILING
SYPSUM BOARD CEILING
PPEN WEB STEEL JOISTS
VOOD CEILING ANNOTATIONS
ANNOTATIONS
VASHROOM
PLUMBING
ELECTRONIC TRAP PRIMER
PLUMBING SENSOR CONTROL (TOUCHLESS FAUCETS) HVAC
HERMOSTAT OR TEMPERATURE SENSOR
IMER CONTROL
ELECTRIC BASEBOARD HEATER (BBH)
ORCED FLOW HEATER ENERGY RECOVERY VENTILATOR
EAT RECOVERY VENTILATOR
AKE-UP AIR UNIT
CONDUIT AND BOXES
CONDUIT WITH END BUSHING CONDUIT UP
CONDUIT DOWN
CONDUIT CONTINUES
UNCTION BOX
PULL BOX
HAND HOLE
CONNECTIONS TO EQUIPMENT
DISHWASHER
RIDGE
MICROWAVE
HAND DRYER. ALLOW UP TO 208V-1PH-20A -PHASE DIRECT CONNECTION OUTLET AS NOTED.
-PHASE DIRECT CONNECTION OUTLET AS NOTED.
CONNECTION TO SINGLE PHASE MOTOR, HP (KW) AS NOTED. PROVIDE LOCAL DISCONNECT.
THREE PHASE MOTOR, HP (KW) AS NOTED. PROVIDE
OCAL DISCONNECT.
LIGHTING CONTROLS ICATIONS AND RESPECTIVE SCHEDULES FOR EXACT
REQUIREMENTS SWITCH OR OTHER USER INTERFACE DEVICE AS
DESCRIBED ON LIGHTING CONTROLS SCHEDULE.
-WAY SWITCH ADJACENT TO SWITCH DENOTES DIMMING SWITCH
ADJACENT TO SWITCH, DENOTES DIMMING SWITCH. ADJACENT TO SWITCH, DENOTES COUNTDOWN TIMER
SWITCH
NDJACENT TO SWITCH, DENOTES ASTRONOMICAL TIMER SWITCH
DJACENT TO SWITCH, DENOTES DOOR SWITCH
DUAL TECHNOLOGY SENSOR
NDJACENT TO SWITCH, DENOTES MASTER CONTROL
OR ALL LUMINAIRES IN A ROOM OR SPACE, OR AS IOTED.
VALL MOUNTED SWITCH/OCCUPANCY SENSOR. PIR DENOTES 'PASSIVE INFRARED', DT DENOTES 'DUAL
PASSIVE INFRARED, UT DENOTES DUAL PASSIVE INFRARED, ULTRASONIC'. LINE VOLTAGE TO BUIT CONTROLLED CIRCUIT, OR AS NOTED.
OWER PACK
CENE CONTROLLER.
PHOTOCELL SENSOR.
CEILING MOUNTED OCCUPANCY SENSOR. PIR
DENOTES 'PASSIVE INFRARED', UT DENOTES JLTRASONIC' (OR MICROPHONIC), DT DENOTES 'DUAL
TOUNDLOOM TOOLDENGTED TOTAL
ECHNOLOGY`. 'OS' DENOTES UNЌNOWN ECHNOLOGY.
ECHNOLOGY.
ECHNOLOGY. VALL MOUNTED OCCUPANCY SENSOR.

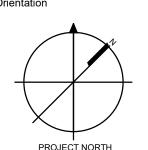
ı	ELECTRICAL LEGEND		ELECTRICAL LEGEND
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SURFACE MOUNTED LIGHTING AND RECEPTACLE	VALAB.	WIRELESS ACCESS POINT (WIFI), PROVIDE 2D UNLESS
	PANELBOARD RECESSED RECEPTACLE AND LIGHTING PANELBOARD	WAP	OTHERWISE NOTED. PUBLIC ADDRESS SYSTEM SPEAKER, CEILING
	DISTRIBUTION PANELBOARD	(S) H(Ø)	MOUNTED. PUBLIC ADDRESS SYSTEM SPEAKER, WALL MOUNTED.
	DISCONNECT SWITCH FUSED DISCONNECT SWITCH		PUBLIC ADDRESS HORN SPEAKER WALL MOUNTED.
C	CONTACTOR	HS	PUBLIC ADDRESS SYSTEM HANDSET
	LOOSE STARTER. COORDINATE STARTING CHARACTERISTIC WITH EQUIPMENT REQUIREMENTS.	ACC H—VOL	PUBLIC ADDRESS SYSTEM ADMIN CONTROL CONSOLE PUBLIC ADDRESS SPEAKER VOLUME CONTROL
⊠¹	COMBINATION STARTER.	10 1 V OL	SWITCH. INTERCOM
VFD	ADJACENT TO STARTER, DENOTES VARIABLE FREQUENCY DRIVE	IDS	VIDEO INTERCOM SYSTEM DOOR CALL STATION
	POWER RECEPTACLES AND BOXES 120V U-GROUND DUPLEX RECEPTACLE.	IMS D	VIDEO INTERCOM SYSTEM MASTER STATION CLOCK.
 	120V U-GROUND DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP OR AS INSTRUCTED ON SITE.	MTX	GPS CLOCK SYSTEM MASTER TRANSMITTER
+	120V U-GROUND 20A DUPLEX RECEPTACLE.	RX	GPS CLOCK SYSTEM GPS RECEIVER
+	120V U-GROUND DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP OR AS INSTRUCTED ON SITE.	RTX	GPS CLOCK SYSTEM SATELLITE TRANSMITTER (REPEATER)
₩	120V U-GROUND DUPLEX RECEPTACLE - AUTOMATICALLY CONTROLLED (ASHRAE 90.1-2013,	&RX	GPS CLOCK SYSTEM RECEIVER SWITCH
	8.4.2). 120V U-GROUND 20A DUPLEX RECEPTACLE -	CR	ACCESS CONTROL AND DOOR HARDWARE CARD READER
₩	AUTOMATICALLY CONTROLLED (ASHRAE 90.1-2013, 8.4.2).	DA	DOOR ALARM SOUNDER
*	120V U-GROUND DUPLEX RECEPTACLE - HALF OF RECEPTACLE AUTOMATICALLY CONTROLLED (ASHRAE	DC ES	DOOR CONTACT ELECTRIC STRIKE
	90.1-2013, 8.4.2). SPLIT RECEPTACLE. IF MANUALLY CONTROLLED.	KS	KEY SWITCH
	SHOWN CONNECTED TO SWITCH.	ML REX	ELECTROMAGNETIC LOCK REQUEST TO EXIT SENSOR
•	SPLIT RECEPTACLE MOUNTED ABOVE COUNTER TOP OR AS INSTRUCTED ON SITE.		MUSHROOM HEAD PUSH BUTTON FOR 'REQUEST TO
 	120V U-GROUND QUAD RECEPTACLE. INDICATES DUPLEX RECEPTACLE COMPLETE WITH	•	EXIT' MAGLOCK RELEASE, OR OTHER PUSH BUTTON AS INDICATED
•	ONE TYPE A AND ONE TYPE C USB CHARGING PORTS. TOP RECEPTACLE TO BE CONTROLLED BY	DR	DOOR RELEASE ADJACENT TO THE ABOVE, PUSHBUTTON INTEGRATED WITH ELECTRIFIED DOOR
	SINGLE-POLE SWITCH AS INDICATED ON DRAWINGS 14-30R RECEPTACLE FOR LAUNDRY DRYER, OR	•	HARDWARE DEVICE. BARRIER FREE DOOR OPERATOR PUSH BUTTON
#	OTHER RECEPTACLE AS NOTED.	WS	TOUCHLESS "WAVE SWITCH" FOR DOOR OPERATOR CONTROL
=	14-50R RECEPTACLE FOR ELECTRIC RANGE, OR OTHER RECEPTACLE AS NOTED. PROVIDE 40A/2P BREAKER TO SUIT.		DOOR BELL C/W SOUNDER AND STROBE
	SPECIAL RECEPTACLE. VERIFY OUTLET REQUIREMENTS PRIOR TO ROUGH-IN.		DOOR BELL (SOUNDER ONLY)
•	SPECIAL RECEPTACLE. VERIFY OUTLET		INTRUSION DETECTION GLASS BREAK (GB)
	REQUIREMENTS PRIOR TO ROUGH-IN. FLOOR RECEPTACLE OR RECEPTACLE IN FLOOR BOX	MD	MOTION DETECTOR (MD)
	(POWER ONLY) SERVICE POLE. PROVIDE POWER TO JUNCTION BOX IN	KP	VIDEO SURVEILLANCE
	CEILING SPACE ABOVE. DEVICES ON POLE AS NOTED ON PLANS.		CCTV CAMERA
FB1	ADJACENT TO FLOOR RECEPTACLE, DENOTES FLOOR BOX TYPE	C/P	CCTV CAMERA, CEILING OR POLE MOUNTED CCTV CAMERA, WALL MOUNTED
FSA	DENOTES FIRE STATION ALERTING DEVICE	PTZ	PAN-TILT-ZOOM
SYMBOLS IN AC	LIGHTING FIXTURES CCORDANCE WITH IES DG-3-00 AND IES HB-10-11 WHERE		DURESS SYSTEM
	NOT DETAILED OTHERWISE HERE.	● DB	DURESS BUTTON (MOUNTED ON UNDERSIDE OF TABLETOP)
	EXACT FIXTURE REQUIREMENTS. LINEAR LUMINAIRE, SURFACE MOUNTED TO CEILING	• DB-W	WALL MOUNTED DURESS BUTTON WITH POLYCARBONATE ANTI-TAMPER COVER
	LINEAR LUMINAIRE, RECESSED IN CEILING	DB) =	DURESS SYSTEM STROBE LIGHT FIRE DETECTION AND ALARM - GENERAL
	LINEAR LUMINAIRE, SUSPENDED: PENDANT, CHAIN, STEM, OR AIRCRAFT CABLE HUNG TO SUIT	FACP	FIRE ALARM CONTROL PANEL
X •	APPLICATION, OR AS NOTED IN SCHEDULE. "X", WHEN USED DENOTES POWER FEED LOCATION.	FAAP	FIRE ALARM ANNUNICIATOR PANEL
	LINEAR LUMINAIRE, WALL MOUNTED	FAPG FAMP	FIRE ALARM PASSIVE GRAPHIC FIRE ALARM ULC MONITORING PANEL
00	ROUND OR SQUARE DOWNLIGHT, RECESSED ROUND SUSPENDED LUMINAIRE	FAZ	FIRE ALARM ZONE
<u> </u>	WALL SCONCE OR OTHER WALL MOUNTED	FSZ	FIRE ALARM SUPERVISORY ZONE FIRE ALARM PANEL (FACP, FAAP, FAMP) AS DENOTED
EM	LUMINAIRES. CONNECTED TO EMERGENCY NIGHT LIGHT CIRCUIT		ON PLANS. FIRE DETECTION - INITIATION DEVICES
	(24 HOUR) LUMINAIRE CONNECTED TO NON-EMERGENCY NIGHT		MANUAL PULL STATION (MPS)
NL A D 71 72	LIGHT CIRCUIT (24 HOUR) DENOTES ZONING/CIRCUTING ASSIGNMENTS FOR	LX	WHERE NOTED ADJACENT TO MANUAL PULL STATIONS, DENOTES PULL STATION C/W
A, B, Z1, Z2, ETC.	LUMINAIRES AND CONTROLS IN THE SAME SPACE.	WC	POLYCARBONATE (LEXAN) COVER. WHERE NOTED ADJACENT TO MANUAL PULL STATIONS DENOTES BUILD STATION CAN MURE CHARD.
REFER TO EN	EMERGENCY LIGHTING MERGENCY LIGHTING FIXTURE SCHEDULE FOR EXACT FIXTURE REQUIREMENTS.	WG	STATIONS, DENOTES PULL STATION C/W WIRE GUARD COVER. WHERE NOTED ADJACENT TO MANUAL PULL
	CEILING OR WALL MOUNTED ILLUMINATED EXIT SIGN. SHADED AREA INDICATES ILLUMINATED FACE.	A	STATIONS OR DETECTOR, DENOTES DEVICE C/W AUXILIARY CONTACT.
⊠ ₩	PROVIDE DIRECTIONAL ARROWS AS INDICATED ON PLANS.	•	PHOTOELECTRIC SMOKE DETECTOR
	CEILING OR WALL MOUNTED ILLUMINATED EXIT SIGN. SHADED AREA INDICATES ILLUMINATED FACE.	HD	SAME AS ABOVE, WALL MOUNTED DUCT MOUNTED SMOKE DETECTOR
X X	PROVIDE DIRECTIONAL ARROWS AS INDICATED ON PLANS.	СО	CARBON MONOXIDE DETECTOR
	EMERGENCY LIGHTING BATTERY UNIT, WITH AND WITHOUT HEADS.	•	HEAT DETECTOR - 58 DEGREES C (135 DEGREES F) FIXED TEMPERATURE AND RATE OF RISE, RESTORABLE
_	ONE, TWO, AND THREE HEAD WALL MOUNTED EMERGENCY LIGHTING REMOTE UNITS.	⊬	SAME AS ABOVE, WALL MOUNTED
, o o o o o	ONE, TWO, AND THREE HEAD CEILING MOUNTED EMERGENCY LIGHTING REMOTE UNITS.	НТ	ADJACENT TO HEAT DETECTOR, DENOTES "HIGH TEMPERATURE", 94 DEGREES C (200 DEGREES F) OR
•	RECESSED EMERGENCY REMOTE HEAD.		AS NOTED ON PLANS.
EM CCT	DENOTES "EMERGENCY" CORRELATED COLOUR TEMPERATURE	•	HEAT DETECTOR - 58 DEGREES C (135 DEGREES F) FIXED TEMPERATURE, NON-RESTORABLE
CRI	COLOUR RENDERING INDEX	⊗	HEAT DETECTOR - 94 DEGREES C (200 DEGREES F) FIXED TEMPERATURE, NON-RESTORABLE
	EXTERIOR LIGHTING	FS	FLOW SWITCH
-	ARM MOUNTED LUMINAIRE ON POLE. DIRECTIONAL ARROW, WHERE INDICATED DENOTES PRIMARY LUMEN ORIENTATION.		E DETECTION AND ALARM - SUPERVISORY DEVICES
(A)	POST TOP LUMINAIRE ON POLE. DIRECTIONAL	[L]	LOW TANK LEVEL LOSS OF POWER
(D)>	ARROW, WHERE INDICATED DENOTES PRIMARY LUMEN ORIENTATION.		LOW TEMPERATURE
\(\alpha\)	LIGHTING BOLLARD. DIRECTIONAL ARROW, WHERE INDICATED DENOTES PRIMARY LUMEN ORIENTATION.	PS SVI	PRESSURE SWITCH
	GROUND MOUNTED FLOOD LIGHT	(SV)	SUPERVISED VALVE FIRE ALARM MONITORING POINT, REFER TO FLOOR
•	TELECOMMUNICATIONS WALL MOUNTED DATA (D) OR VOICE (V) OUTLET.		PLANS FOR DETAILS. E DETECTION AND ALARM - SIGNALLING DEVICES
	PROVIDE 2D UNLESS NOTED OTHERWISE. WALL MOUNTED VOICE (TELEPHONE) OUTLET.	2 0	FIRE ALARM BELL, WALL MOUNTED.
4	PROVIDE 1V UNLESS NOTED OTHERWISE. WALL MOUNTED DATA OUTLET. PROVIDE 2D UNLESS	С	ADJACENT TO BELL OR HORN, DENOTES CEILING MOUNTED.
4	NOTED OTHERWISE.		FIRE ALARM HORN ADJACENT TO FIRE ALARM HORN, DENOTES 'MINI'
	WALL MOUNTED TELEVISION OUTLET. VOICE, DATA, OR TV OUTLET AS DESCRIBED ABOVE,	M	HORN
★ 	MOUNTED ABOVE COUNTER TOP OR AS INSTRUCTED ON SITE.		FIRE ALARM HORN/STROBE, WALL MOUNTED. SILENCE SWITCH
В	ADJACENT TO COMMUNICATIONS OUTLET, INDICATES BLANK-OFF PLATE.		FIRE ALARM WALL MOUNTED STROBE LIGHT
[HDMI]	HDMI OUTLET.	,	FIRE DETECTION AND ALARM - OTHER DEVICES
	AUDIO VIDEO GANG, AS NOTED. GENERIC. ALL SYMBOLS LISTED MAY NOT BE	EOL THIS I EGEND I	END OF LINE DEVICE S GENERIC. ALL SYMBOLS LISTED MAY NOT BE
APPLICABLE FOR USED DEVICES A	R THIS PROJECT. REFER TO FLOOR PLANS TO DETERMINE ND EQUIPMENT.	APPLICABLE FO	OR THIS PROJECT. REFER TO FLOOR PLANS TO DETERMINE S AND EQUIPMENT.

	ELECTRICAL LEGEND		ELECTRICAL LEGEND
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WIRELESS ACCESS POINT (WIFI), PROVIDE 2D UNLESS OTHERWISE NOTED.	WG	WIRE GUARD
	PUBLIC ADDRESS SYSTEM SPEAKER, CEILING	DNE	"DO NOT ENTER" SIGN
<u> </u>	MOUNTED. PUBLIC ADDRESS SYSTEM SPEAKER, WALL MOUNTED.	[CM]	CONTROL MODULE MONITOR MODULE
<u>,</u> 1	PUBLIC ADDRESS HORN SPEAKER WALL MOUNTED.	HO	MAGNETIC DOOR HOLDER AND RELEASIN ("HOLD OPEN")
	PUBLIC ADDRESS SYSTEM HANDSET		FIRE SUPPRESSION ABORT STATION
(0)	PUBLIC ADDRESS SYSTEM ADMIN CONTROL CONSOLE PUBLIC ADDRESS SPEAKER VOLUME CONTROL		SINGLE LINE DIAGRAM
VOL	SWITCH. INTERCOM	< < < > → >	AIR CIRCUIT BREAKER MOLDED CASE CIRCUIT BREAKER
	VIDEO INTERCOM SYSTEM DOOR CALL STATION	0 0	DISCONNECT (UNFUSED)
	VIDEO INTERCOM SYSTEM MASTER STATION		DISCONNECT (FUSED)
	CLOCK.		FUSE
<u> </u>	GPS CLOCK SYSTEM MASTER TRANSMITTER	? }	METERING CABINET
7	GPS CLOCK SYSTEM GPS RECEIVER GPS CLOCK SYSTEM SATELLITE TRANSMITTER		TRANSFORMER
	(REPEATER)	3118	TRAINSFORMER
<u> </u>	GPS CLOCK SYSTEM RECEIVER SWITCH ACCESS CONTROL AND DOOR HARDWARE	G	GENERATOR
	CARD READER		
	DOOR ALARM SOUNDER	®\	AUTOMATIC TRANSFER SWITCH
<u> </u>	DOOR CONTACT ELECTRIC STRIKE	6	
	KEY SWITCH	8 Q 6	AUTOMATIC TRANSFER SWITCH C/W SING
	ELECTROMAGNETIC LOCK		BYPASS ISOLATION
1	REQUEST TO EXIT SENSOR MUSHROOM HEAD PUSH BUTTON FOR 'REQUEST TO		AUTOMATIC TRANSFER SWITCH C/W DOU!
	EXIT' MAGLOCK RELEASE, OR OTHER PUSH BUTTON AS INDICATED	1.70	
1	DOOR RELEASE ADJACENT TO THE ABOVE, PUSHBUTTON INTEGRATED WITH ELECTRIFIED DOOR	ATS C	AUTOMATIC TRANSFER SWITCH CONTACTOR
	HARDWARE DEVICE.	DP	DISTRIBUTION PANELBOARD
<u> </u>	BARRIER FREE DOOR OPERATOR PUSH BUTTON TOUCHLESS "WAVE SWITCH" FOR DOOR OPERATOR	LP	LIGHTING PANELBOARD
ı ⊃ (CONTROL DOOR BELL C/W SOUNDER AND STROBE	RP SPD	RECEPTACLE PANELBOARD SURGE PROTECTIVE DEVICE
<u> </u>	DOOR BELL (SOUNDER ONLY)	TX	TRANSFORMER
	INTRUSION DETECTION	UPS	UNINTERRUPTIBLE POWER SUPPLY DETAIL REFERENCES
) I	GLASS BREAK (GB)	$\langle 1 \rangle$	SHEET KEYNOTE
<u> </u>	MOTION DETECTOR (MD) KEYPAD (KP)		SHEET RETNOTE
	VIDEO SURVEILLANCE	E101	REFER TO DETAIL. EXAMPLE SHOWN INDIC REFERENCE TO DETAIL 1 ON DRAWING E1
<u></u>	CCTV CAMERA CCTV CAMERA, CEILING OR POLE MOUNTED	<u></u>	REVISION NUMBER
	CCTV CAMERA, WALL MOUNTED	THIS LEGEND IS	S GENERIC. ALL SYMBOLS LISTED MAY NOT BE
<u>z</u>	PAN-TILT-ZOOM		OR THIS PROJECT. REFER TO FLOOR PLANS TO AND EQUIPMENT.
OB	DURESS SYSTEM DURESS BUTTON (MOUNTED ON UNDERSIDE OF		
	TABLETOP) WALL MOUNTED DURESS BUTTON WITH		
OB-W	POLYCARBONATE ANTI-TAMPER COVER		
	DURESS SYSTEM STROBE LIGHT FIRE DETECTION AND ALARM - GENERAL		
CP	FIRE ALARM CONTROL PANEL		
AP	FIRE ALARM ANNUNICIATOR PANEL		
PG MP	FIRE ALARM PASSIVE GRAPHIC FIRE ALARM ULC MONITORING PANEL		
7	FIRE ALARM ZONE		
<u>Z</u>	FIRE ALARM SUPERVISORY ZONE FIRE ALARM PANEL (FACP, FAAP, FAMP) AS DENOTED		
	ON PLANS.		
	FIRE DETECTION - INITIATION DEVICES MANUAL PULL STATION (MPS)		
	WHERE NOTED ADJACENT TO MANUAL PULL STATIONS, DENOTES PULL STATION C/W		
	POLYCARBONATE (LEXAN) COVER. WHERE NOTED ADJACENT TO MANUAL PULL		
3	STATIONS, DENOTES PULL STATION C/W WIRE GUARD COVER.		
	WHERE NOTED ADJACENT TO MANUAL PULL STATIONS OR DETECTOR, DENOTES DEVICE C/W		
	AUXILIARY CONTACT. PHOTOELECTRIC SMOKE DETECTOR		
	SAME AS ABOVE, WALL MOUNTED		
	DUCT MOUNTED SMOKE DETECTOR		
	CARBON MONOXIDE DETECTOR HEAT DETECTOR - 58 DEGREES C (135 DEGREES F)		
	FIXED TEMPERATURE AND RATE OF RISE, RESTORABLE		
_	SAME AS ABOVE, WALL MOUNTED		
	ADJACENT TO HEAT DETECTOR, DENOTES "HIGH TEMPERATURE", 94 DEGREES C (200 DEGREES F) OR AS NOTED ON PLANS.		
	HEAT DETECTOR - 58 DEGREES C (135 DEGREES F) FIXED TEMPERATURE, NON-RESTORABLE		
	HEAT DETECTOR - 94 DEGREES C (200 DEGREES F) FIXED TEMPERATURE, NON-RESTORABLE		
FIRE	FLOW SWITCH DETECTION AND ALARM - SUPERVISORY DEVICES		
	LOW TANK LEVEL		
	LOSS OF POWER LOW TEMPERATURE		
ı	LOW ILIVII LIVATOINE		

SYMBOL	DESCRIPTION			
WG	WIRE GUARD			
DNE	"DO NOT ENTER" SIGN			
CM	CONTROL MODULE			
MM	MONITOR MODULE			
НО	MAGNETIC DOOR HOLDER AND RELEASING DEVICE ("HOLD OPEN")			
\boxtimes HD	FIRE SUPPRESSION ABORT STATION			
	SINGLE LINE DIAGRAM			
< <	AIR CIRCUIT BREAKER			
,	MOLDED CASE CIRCUIT BREAKER			
0	DISCONNECT (UNFUSED)			
111-0	DISCONNECT (FUSED)			
	FUSE			
	METERING CABINET			
	TRANSFORMER			
G	GENERATOR			
©\	AUTOMATIC TRANSFER SWITCH			
0 0	AUTOMATIC TRANSFER SWITCH C/W SINGLE SIDED BYPASS ISOLATION			
	AUTOMATIC TRANSFER SWITCH C/W DOUBLE SIDED BYPASS ISOLATION			
ATS	AUTOMATIC TRANSFER SWITCH			
С	CONTACTOR			
DP	DISTRIBUTION PANELBOARD			
LP	LIGHTING PANELBOARD			
RP	RECEPTACLE PANELBOARD			
SPD	SURGE PROTECTIVE DEVICE			
TX	TRANSFORMER			
UPS	UNINTERRUPTIBLE POWER SUPPLY			
	DETAIL REFERENCES			
1	SHEET KEYNOTE			
1 E101	REFER TO DETAIL. EXAMPLE SHOWN INDICATES REFERENCE TO DETAIL 1 ON DRAWING E101			
1	REVISION NUMBER			
APPLICABLE FO	GENERIC. ALL SYMBOLS LISTED MAY NOT BE R THIS PROJECT. REFER TO FLOOR PLANS TO DETERMINE AND EQUIPMENT.			

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

J	ISSUED FOR CONSTRUCTION	2021-12-20
ı	ISSUED FOR TENDER	2021-08-12
Н	ISSUED FOR BUILDING PERMIT	2021-07-27
G	90% CD	2021-05-03
F	SITE PLAN RESUBMISSION	2021-04-23
Е	SPA	2021-02-12
D	50% CD	2021-02-05
С	BUILDING PERMIT	2021-02-05
В	PERMIT/SPA COORDINATION	2021-02-02
Α	100% DESIGN DEVELOPMENT	2021-01-19
	1 2	
Nο	Revision	Date



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Project Information BFES Station 201 (SPA-2021-0032)

WEB: WWW.QUASARCG.COM

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

City of Brampton Fire & Emergency Services

Drawing Title

ELECTRICAL LEGEND AND GENERAL NOTES

2021-12-20 Drawn by DTH Scale 1:1

CONDUIT FOR TRAFFIC CONTROLLER TO TERMINATE IN IT ROOM 109 AT TRAFIC CONTROL CABINET AND AT PROPERTY LINE. CONFIRM EXACT LOCATION WITH TRAFFIC CONTROLS CONTRACTOR PRIOR TO INSTALLATION.

KEYNOTES:

—U/G EV CHARGING STATION FEEDER

EV CHARGING STATION

EV CHARGING-STATION

REFUSE/REC. ENCLOSURE -

- CONDUIT FOR SIGNALLING CONTROLLER TO TERMINATE AT ANTENNA LOCATED AT HOSE-TOWER ROOF AND AT PROPERTY LINE. CONFIRM EXACT LOCATIONS WITH SIGNALLING CONTRACTOR PRIOR TO INSTALLATION.
- EV CHARGING STATION TO BE CHARGEPOINT CT4000 LEVEL 2 DUAL PORT BOLLARD MOUNT CHARGING STATION (CAT.#: CT4021-GW1-GW1) COMPLETE WITH 2 30A INPUT CURRENT (WITH AN ITENGRAL COMMUNICATION GATEWAY MODEM TO ALLOW PAYMENT). PROVIDE TWO (2) DEDICATED 208V.40A.2P NON-GFCI BREAKERS AND FEEDERS.

PROVIDE TWO (2) DATA DROPS FOR SIGNAGE. CABLING TO BE OUTDOOR RATED.

-COMMUNICATION'S

EXT'G HYDRANT

DUCTBANK

—APPROXIMATE LOCATION

PROVIDE PULLBOX AND

COORDINATE WITH ISP PRIOR TO INSTALLATION

—PROVIDE PULLBOX FOR

TRAFIC CONTROLLER
CONDUIT TO, BE INSTALLED
AT PROPERTY LINE

PROVIDE PULLBOX FOR SIGNALLING CONTROLLER CONDUIT, TO BE INSTALLED AT PROPERTY LINE

COMMUNICATIONS SERVICE AT PROPERTY LINE,

OF INCOMING

PRIVATE DRIVEWAY

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J	ISSUED FOR CONSTRUCTION	2021-12
- 1	ISSUED FOR TENDER	2021-08
Н	ISSUED FOR BUILDING PERMIT	2021-07
G	90% CD	2021-05
F	SITE PLAN RESUBMISSION	2021-04
Е	SPA	2021-02
D	50% CD	2021-02
С	BUILDING PERMIT	2021-02
В	PERMIT/SPA COORDINATION	2021-02
Α	100% DESIGN DEVELOPMENT	2021-01

CLARK BOULEVARD



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Project Information

BFES Station 201 (SPA-2021-0032)

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City of Brampton Fire & Emergency Services

Drawing Title

ELECTRICAL SITE PLAN

Project No Drawing No 2021-12-20 Drawn by DTH CM-20-063 **E101** Scale

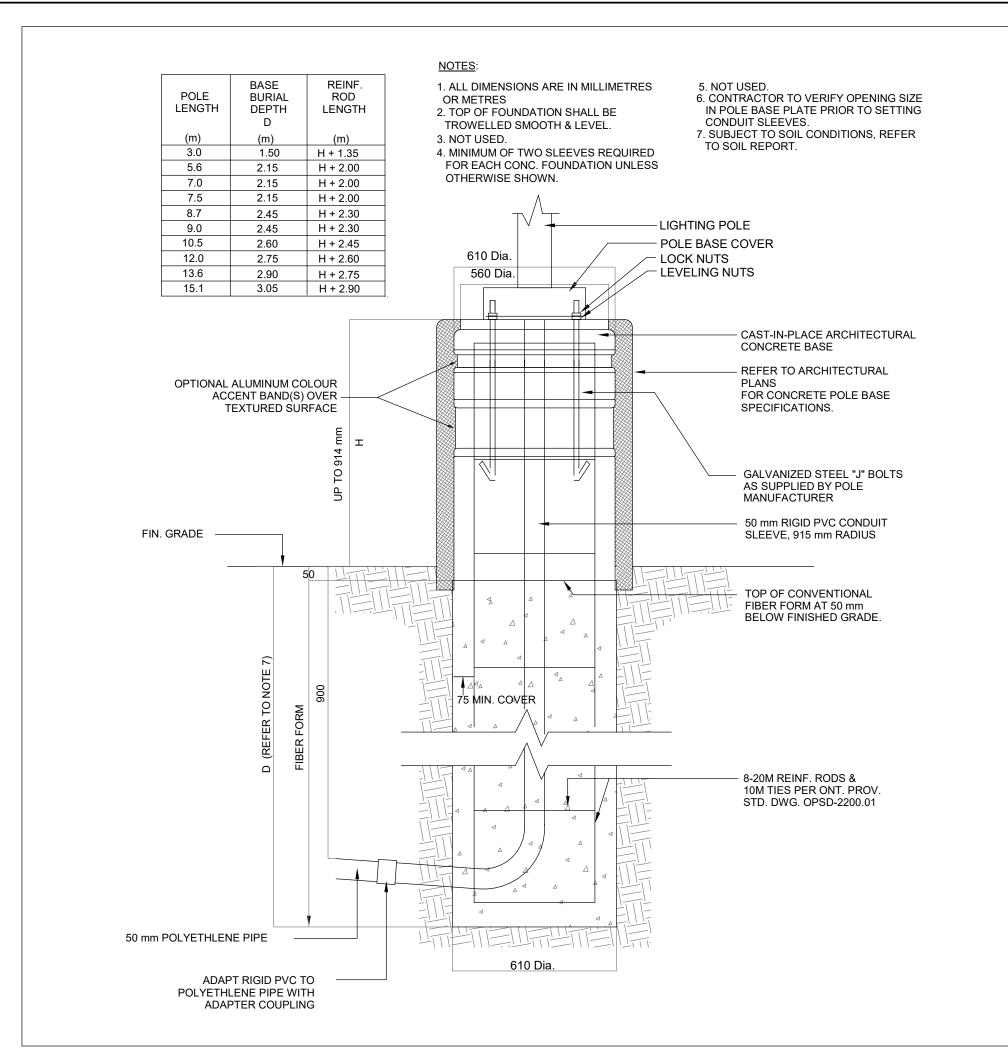
1:300

ELECTRICAL SITE PLAN SCALE:1:300

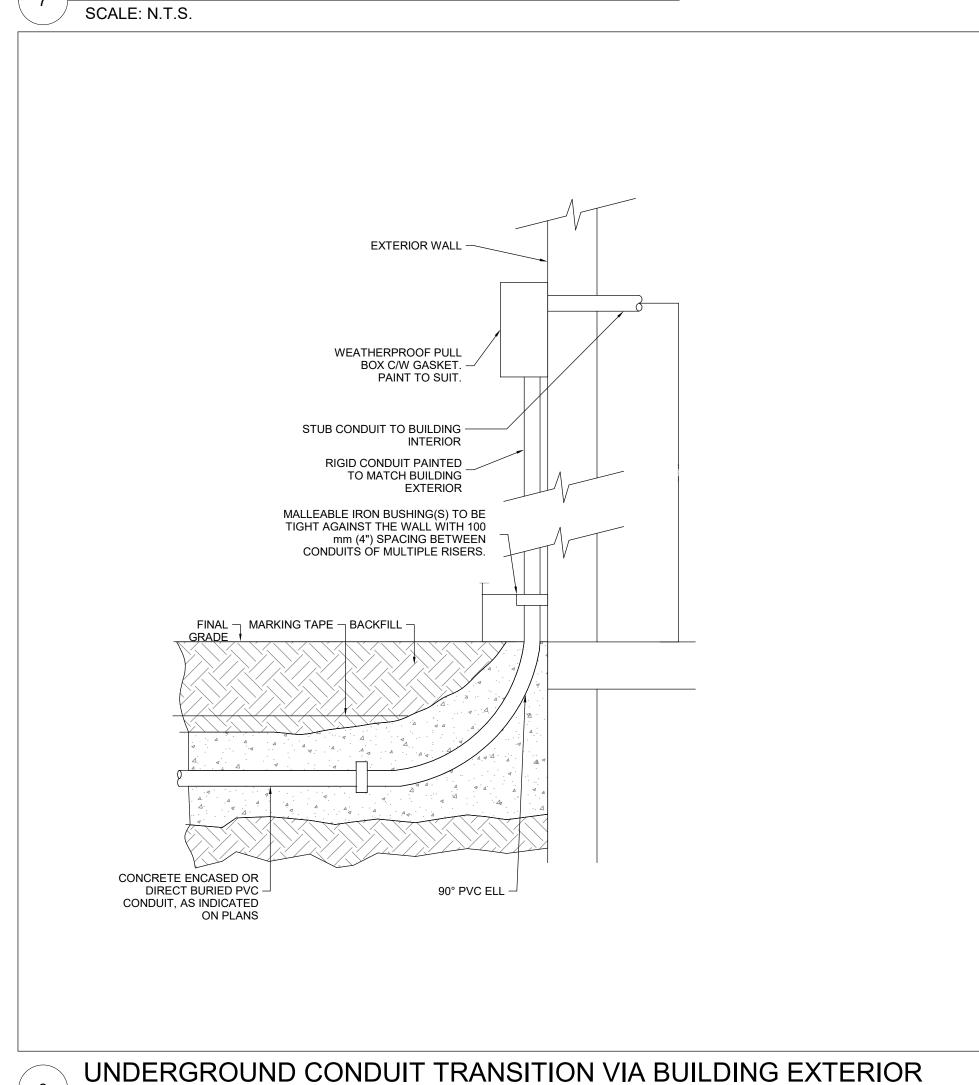
SITE LIGHTING PLAN

SCALE:1:300

Drawn by DTH Scale 1:300

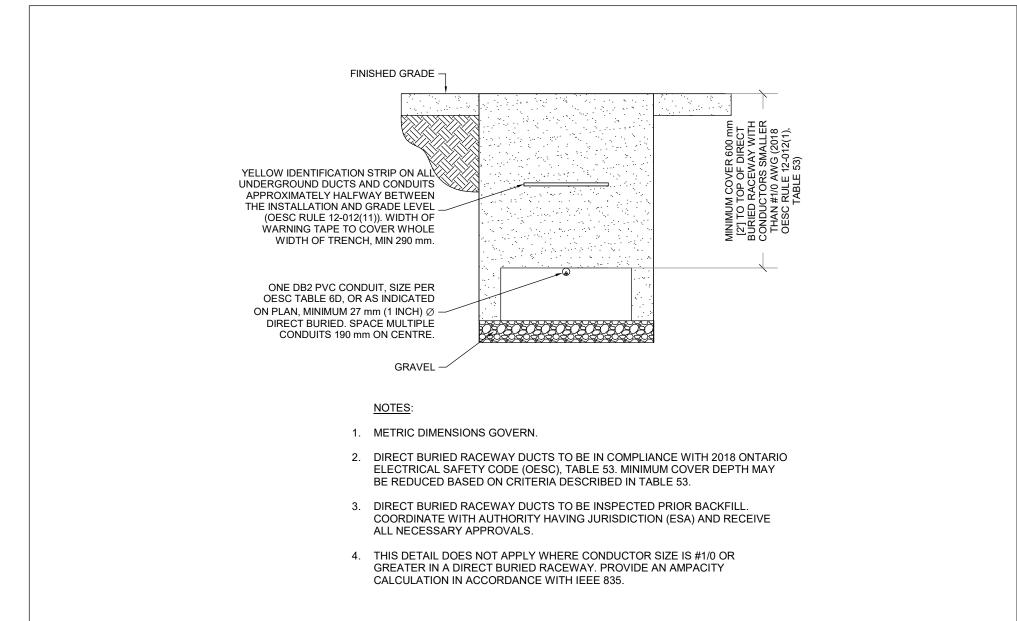


LIGHTING STANDARD ARCHITECTURAL BASE

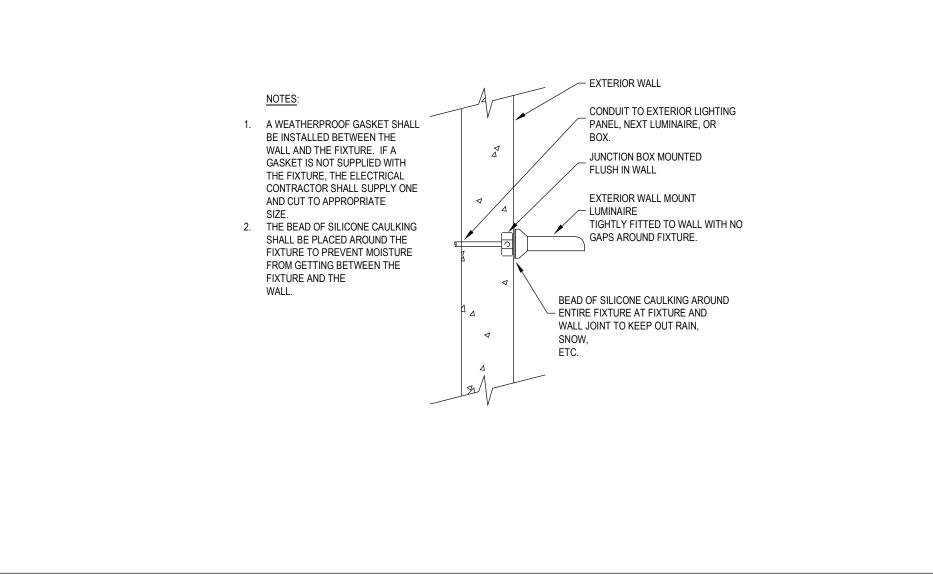


FINISHED GRADE -YELLOW IDENTIFICATION STRIP ON ALL UNDERGROUND DUCTS AND CONDUITS APPROXIMATELY HALFWAY BETWEEN THE INSTALLATION AND GRADE LEVEL (OESC RULE 12-012(11)), WIDTH OF WARNING TAPE 450 mm TO COVER WHOLE WIDTH OF INSTALLATION MOLDED PLASTIC INTERLOCKING DUCT SPACERS AT 1525 mm INTERVALS ALONG ENTIRE LENGTH OF DUCT BANK. SIX x 103 mm (4")Ø RIGID PVC TYPE 2, **CONDUITS ENCASED IN 30** MPa CONCRETE. REINFORCING STEEL RODS, -TYPICAL GRAVEL — 450 mm [1'-6"] — **DETAIL NOTES**: DUCT BANK TO BE INSPECTED PRIOR TO POURING OF CONCRETE AND PRIOR TO BACKFILL. COORDINATE WITH AUTHORITY HAVING JURISDICTION AND RECEIVE ALL NECESSARY APPROVALS. 3x2 ALTERNATE DUCT BANK CONFIGURATION MAY ALSO BE USED.

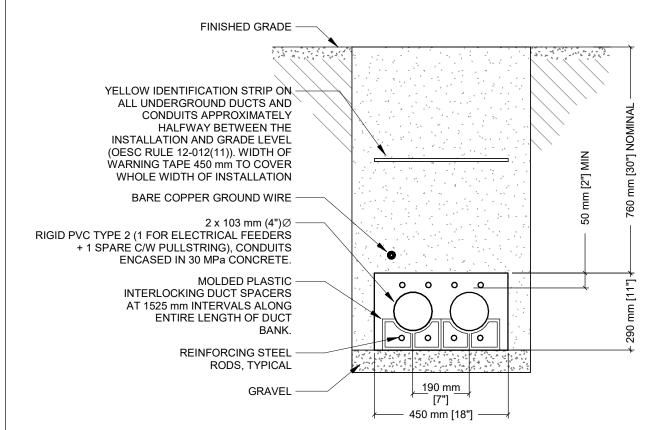
6-WAY COMMUNICATIONS DUCT BANK DETAIL SCALE: N.T.S.



SINGLE DIRECT BURIED RACEWAY SCALE: N.T.S.

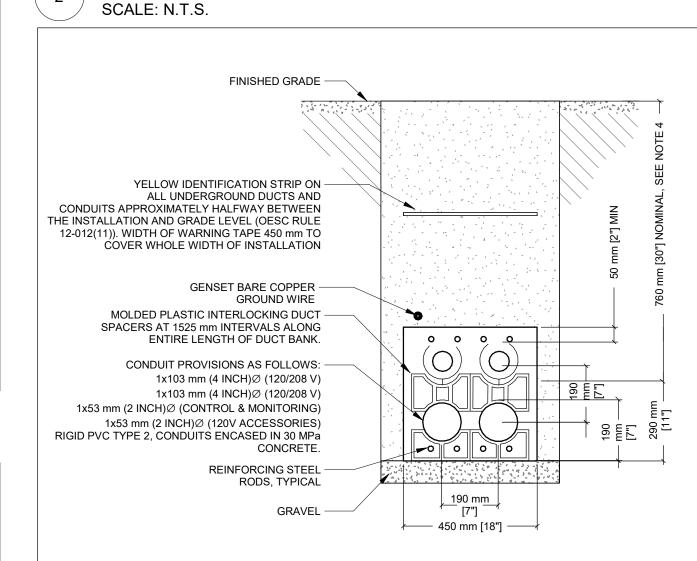


SEALING OF WALL MOUNTED EXTERIOR LUMINAIRES SCALE: N.T.S.



- 1. DUCT BANK TO BE IN COMPLIANCE WITH 2018 ONTARIO ELECTRICAL SAFETY CODE (OESC), DIAGRAM D11, OR LATEST EDITION. WHERE ANY CONTRADICTION EXISTS BETWEEN THIS DETAIL AND THE OESC, THE OESC DIMENSIONS GOVERN.
- 2. DUCT BANK TO BE INSPECTED PRIOR TO POURING OF CONCRETE AND PRIOR TO BACKFILL. COORDINATE WITH AUTHORITY HAVING JURISDICTION AND RECEIVE ALL NECESSARY APPROVALS.
- AMPACITY OF COPPER FEEDER BASED ON 2018 OESC TABLES LISTED BELOW, LOWER OF THE TWO VALUES. REQUIRED: 200 A CAPACITY (NOT INCLUDING VOLTAGE DROP) FEEDER: ONE (1) CONDUCTOR PER PHASE (3 PHASE), PLUS GROUND. 3.1 TABLE D11A - "1/PHASE", SIZE 2/0 MCM = 233 A 3.2 TABLE 2 - SIZE 4/0 MCM = 230 A
- 4. ALTERNATE DUCT BANK CONFIGURATION MAY ONLY BE CONSIDERED BY THE CONSULTANT IF THE SAME FEEDER METHODOLOGY ABOVE IS CONSIDERED, OR AN AMPACITY CALCULATION IS PROVIDED IN ACCORDANCE WITH IEEE 835.
- GREATER DEPTH THAN THE NOTED DIMENSION WILL RESULT IN A DECREASE IN THE DUCT BANK AMPACITY. REDUCTION IN THE DEPTH REQUIRES COORDINATION WITH OESC TABLE 53.
- 6. CONDUIT FILL IN ACCORDANCE WITH 2018 OESC TABLE 6D.
- 7. PROVIDE PULLSTRING IN SPARE CONDUIT.

2-WAY LOW VOLTAGE DUCT BANK SECTION



- 1. DUCT BANK TO BE IN COMPLIANCE WITH 2018 ONTARIO ELECTRICAL SAFETY CODE (OESC), DIAGRAM D11, OR LATEST EDITION. WHERE ANY CONTRADICTION EXISTS BETWEEN THIS DETAIL AND THE OESC, THE OESC DIMENSIONS GOVERN.
- 2. DUCT BANK TO BE INSPECTED PRIOR TO POURING OF CONCRETE AND PRIOR TO BACKFILL. COORDINATE WITH AUTHORITY HAVING JURISDICTION AND RECEIVE ALL NECESSARY APPROVALS.
- 3. AMPACITY OF COPPER FEEDER BASED ON 2018 OESC TABLES LISTED BELOW, LOWER OF THE TWO VALUES: REQUIRED: 200 A CAPACITY (NOT INCLUDING VOLTAGE DROP) FEEDER: ONE (1) CONDUCTOR PER PHASE (3 PHASE), PLUS GROUND 3.1 TABLE D11À - "1/PHASE", SIZE 2/0 MCM = 233 A 3.2 TABLE 2 - SIZE 4/0 MCM = 230 A
- 4. UPPER TWO DUCTS (120 VOLT ACCESSORIES, AND MONITORING/CONTROL) INSTALLATION PER OESC RULE 12-012(3)(d).
- 5. ALTERNATE DUCT BANK CONFIGURATION MAY ONLY BE CONSIDERED BY THE CONSULTANT IF THE SAME FEEDER METHODOLOGY ABOVE IS CONSIDERED, OR AN AMPACITY CALCULATION IS PROVIDED IN ACCORDANCE WITH IEEE 835.
- 6. GREATER DEPTH THAN THE NOTED DIMENSION WILL RESULT IN A DECREASE IN THE DUCT BANK AMPACITY. REDUCTION IN THE DEPTH REQUIRES COORDINATION WITH OESC TABLE 53.
- 7. CONDUIT FILL IN ACCORDANCE WITH 2018 OESC TABLE 6D

GENERATOR DUCT BANK SECTION

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM ISSUED FOR CONSTRUCTION ISSUED FOR TENDER 2021-08-12 ISSUED FOR BUILDING PERMI 2021-07-27 B 90% CD
A SITE PLAN RESUBMISSION 2021-05-03

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Project Information

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City of Brampton Fire & Emergency Services

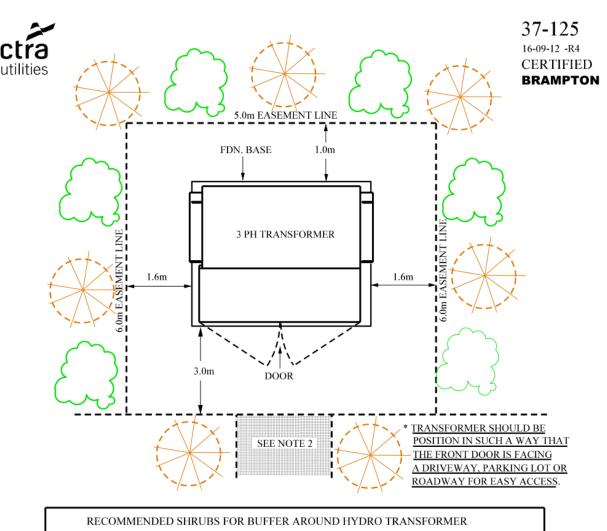
Drawing Title **ELECTRICAL SITE PLAN**

DETAILS Project No Drawing No 2021-12-20

Scale As indicated

SCALE: N.T.S.

SCALE: N.T.S.



RECOMMENDED SHRUBS FOR BUFFE	R AROUND HYDRO TRANSFORMER
ANTHONY WATERER SPIREA	WINTER BEAUTY KOREAN BOXWOOD
SPIREA JAPONICA 'ANTHONY WATERER'	BUXUS MICROPHYLLA KOREANA 'WINTER BEAUTY
GOLDFLAME SPIREA	LITTLE GIANT GLOBE CEDAR
SPIREA JAPONICA 'GOLDFLAME'	THUJA OCCIDENTALIS 'LITTLE GIANTS'
CORAL BEAUTY COTONEASTER	SARCOXIE EUONYMUS
COTONEASTER DAMMERI 'CORAL BEAUTY'	EUONYMUS FORTUNEI 'SARCOXIE'
DWARF JAPANESE YEW	DWARF BURNING BUSH
TAXUS CUSPIDATA 'NANA'	EUONYMUS ALATUS COMPACTA
GREEN VELVET BOXWOOD BUXUS MIC. VAR. INSULARIS 'GREEN VELVET'	

- 1. FINAL GRADE WITHIN THE RESTRICTED LANDSCAPE ZONE MUST NOT BE ALTERED.
- 2. PROVIDE 3.0m CLEARANCE FOR ACCESS.
- 3. REFER TO STDS. 37-217, 37-380 AND 41-25 FOR GUARD POST INSTALLATION AND GROUNDING WHEN REQUIRED.

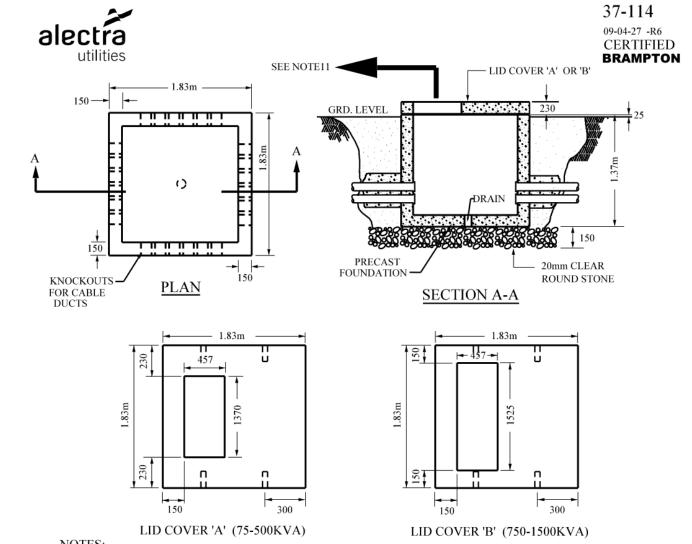
APPROVED IN ACCORDANCE WITH REGULATION 22/04 REVISION - CHGD FRONT CLEARANCE FROM 2.4m 16-09-12 TO 3.0m AS PER CSA C22.3 NO.7-10

ORIGINAL ISSUE: AUGUST 06, 2002

3 PH PADMOUNT TRANSFORMER

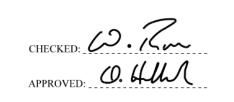
CLEARANCES FROM VEGETATION

HOB STD. 37-125 - 3PH PAD-MOUNT TRASFORMER CLEARANCES SCALE: N.T.S.



1. ALL DIMENSIONS ARE SHOWN IN MILLIMETRES UNLESS OTHERWISE SPECIFIED. 2. FOUNDATION TO BE PRECAST CONCRETE PAD. MANUFACTURER WILL DELIVER THE UNIT TO THE SITE.

- 3. COMPLETE THE EXCAVATION AND PROVIDE BEDDING CONSISTING OF MINIMUM 150mm LAYER OF 20mm CLEAR ROUND STONE. 4. PLACE BACKFILL CONSISTING OF CLEAN EARTH, SAND, OR PEA GRAVEL IN THOROUGHLY COMPACTED
- 5. PAD LOCATION TO BE KEPT CLEAR OF OBSTRUCTIONS FOR ACCESS BY ALECTRA UTILITIES
- 6. TIE CABLE DUCTS INTO WALL OF FOUNDATION AT KNOCKOUTS AS SPECIFIED BY ALECTRA UTILITIES PERSONNEL. INSTALL BELL ENDS ON PVC DUCTS.
- 7. REMOVE KNOCKOUT IN FLOOR TO ALLOW FOR DRAINAGE. 8. INSTALL 4-20mm X 3.0m GROUND RODS AND MIN. #2/0 STRANDED COPPER GROUND WIRE.
- 9. REFER TO STD. 41-11 FOR GROUNDING DETAIL. 10. CONTRACTOR WILL BE RESPONSIBLE FOR SEALING DUCT ENDS.
- 11. POSITION LID OPENING SO THAT TRANSFORMER DOOR IS FACING BUILDING OR PARKING LOT. MAKE SURE DOOR IS NOT FACING ANY WALL STRUCTURE.
- 12. REFER TO STD. 37-217, STD. 37-380 AND STD. 41-25 FOR GROUND POST INSTALLATION.



ORIGINAL ISSUE: OCTOBER 6, 1989

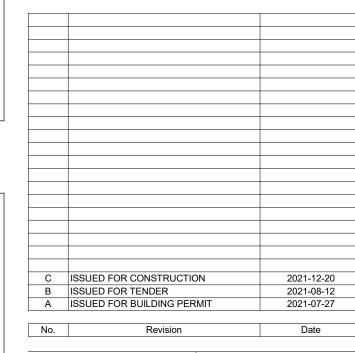
09-04-27 SHOWED 25mm OF FOUNDATION BASE ABOVE FIN. GRD. LINE INSTALLATION OF PRECAST FOUNDATION FOR 3PH PADMOUNT

REVISION

TRANSFORMER (75-1500 KVA)

ALECTRA BRAMPTON 37-114 - 75 TO 1500 kVA PAD MOUNT FOUNDATION SCALE: N.T.S.

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE



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Project Information

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27 Rutherford Rd. S., Brampton, ON, L6W 3J3

City of Brampton Fire & Emergency Services Drawing Title

ELECTRICAL SITE PLAN -ALECTRA DETAILS

2021-12-20

NOTE: 1. GROUNDING SHALL COMPLY WITH ONTARIO ELECTRICAL SAFETY CODE

2. LEAVE 2.4 METRES OF GROUND CONDUCTOR WIRE COILED

3. GROUND GRID RESISTANCE MUST NOT EXCEED 10 OHMS.

TYPICAL WALL OPENING FOR DUCT/CABLE INSTALLATION.

CONNECTION TO GROUNDING BAR IN TRANSFORMER

CONCENTRIC NEUTRAL TO TX NEUTRAL

2/0 CU. STRANDED BARE, GROUND GRID (610mm BELOW GRADE).

GROUND ROD 20mm(3/4") x 3.0m (10 ') LONG (610 mm BELOW GRADE) .

GROUNDING SCHEMATIC

PRECAST CONCRETE FOUNDATION FOR 3 PHASE PADMOUNT TRANSFORMER AS PER

SUITABLE GROUNDING CONNECTORS FOR 2/0 STR. CU TO 3/4" ROD: AMPACT WEDGE CONNECTOR

- LATEST REVISION .

IN TRANSFORMER BASE.

ALECTRA UTILITIES STD. 37-114.

OUTLINE OF PROPOSED TRANSFORMER.

TRANSFORMER H0 / X0 GROUNDING.

ORIGINAL ISSUE: OCTOBER 6, 1989

610mm TO FIN. GRD.

BARE GRD. WIRE

CONNECTOR (C116) OR AMP WRENCH-LOK

AMP WRENCH-LOK

MOVED GRD. GRID CONNECTION TO THE RIGHT SIDE OF GROUNDING BAR

O GROUNDING GRID

3 PHASE PADMOUNT TRANSFORMER

GROUNDING DETAIL

- SEE DETAIL 'A' FOR

CM-20-063 **E201**

DTH

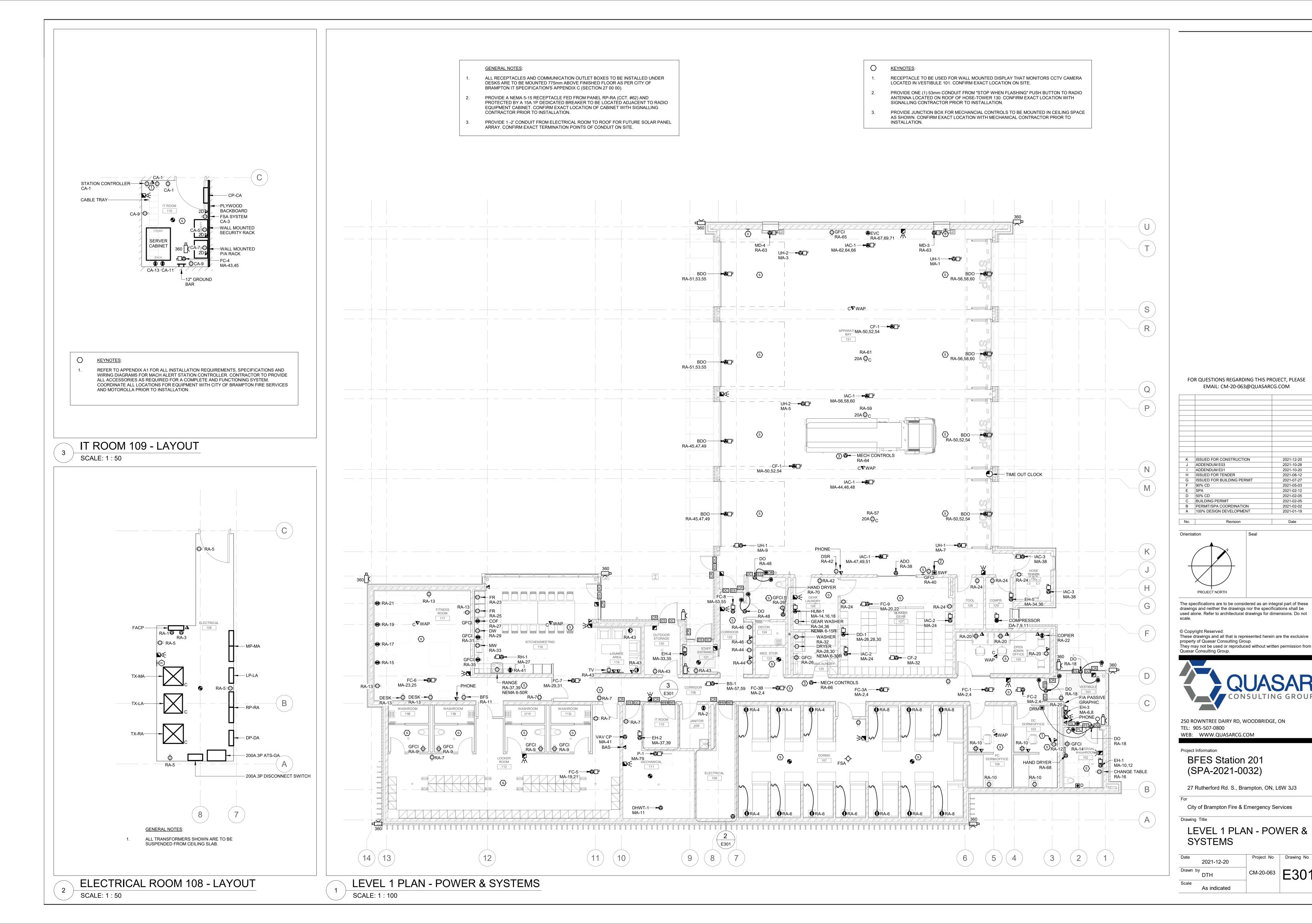
1:100

Scale

LEVEL 1 - LIGHTING PLAN

SCALE: 1:100





2021-10-28

2021-08-12

2021-02-12 2021-02-05

2021-02-05

2021-02-02

2021-01-19

Date

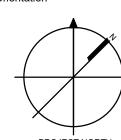
Project No Drawing No

CM-20-063 **E301**

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

ISSUED FOR CONSTRUCTION	2021-12-20
	2021-08-12
	2021-07-2
	2021-05-03
SPA	2021-02-12
50% CD	2021-02-05
BUILDING PERMIT	2021-02-05
PERMIT/SPA COORDINATION	2021-02-02
1	
Revision	Date
	50% CD BUILDING PERMIT PERMIT/SPA COORDINATION

ntation



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WEB: WWW.QUASARCG.COM

Project Information

BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

For O'the (December 5 in 1) 5 in 10 for a second of the control o

City of Brampton Fire & Emergency Services

Drawing Title

ROOF PLAN - POWER & SYSTEMS

Date 2021-12-20

Drawn by Author

Scale

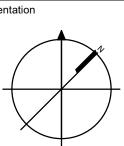
Project No Drawing No Dra

1:100

ROOF PLAN - POWER & SYSTEMS
SCALE: 1:100



	EMAIL: CM-20-063@QUASA	ARCG.COM
	I	
Н	ISSUED FOR CONSTRUCTION	2021-12-20
G	ISSUED FOR TENDER	2021-08-12
F	ISSUED FOR BUILDING PERMIT	2021-07-27
Е	90% CD	2021-05-03
D	SPA	2021-02-12
С	50% CD	2021-02-05
В	BUILDING PERMIT	2021-02-05
Α	PERMIT/SPA COORDINATION	2021-02-02
No.	Revision	Date



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Project Information

BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

City of Brampton Fire & Emergency Services

1:100

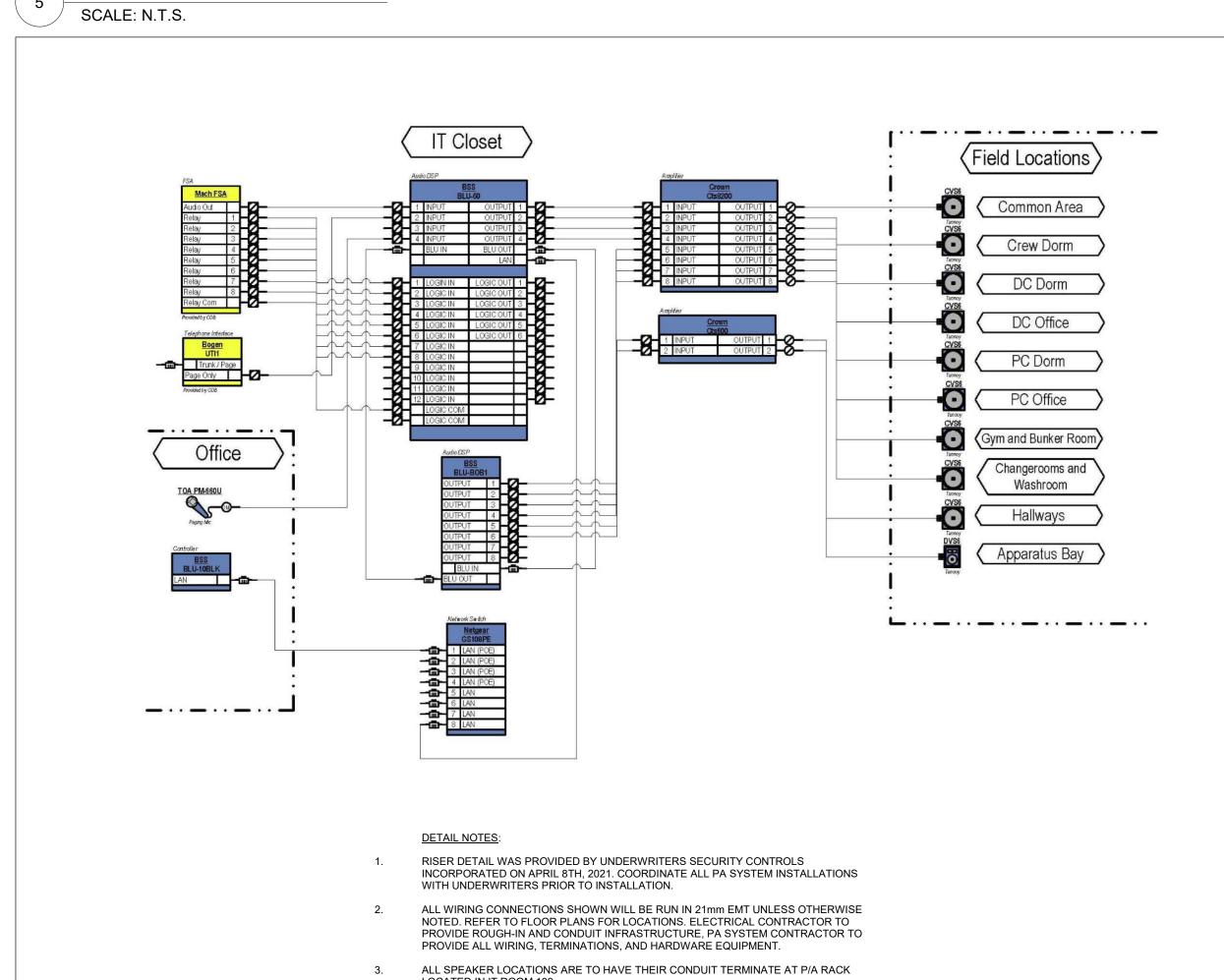
FIRE ALARM KEY PLAN

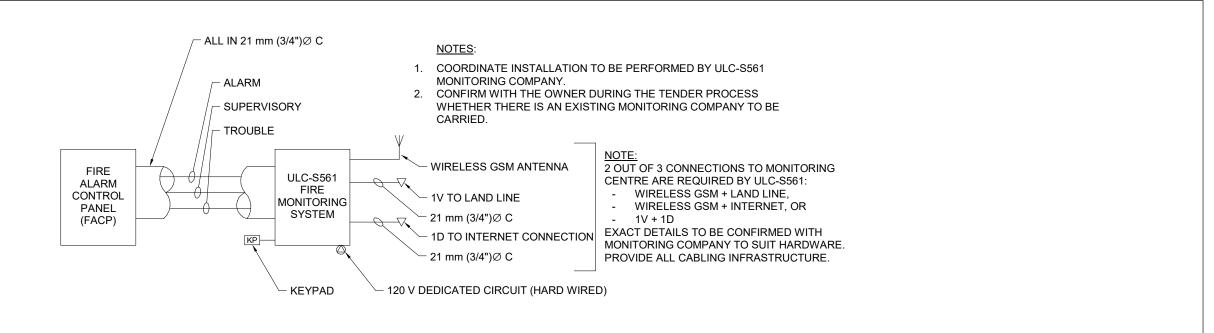
Project No Drawing No 2021-12-20 CM-20-063 **E401** Scale

LEVEL 1 PLAN - FIRE ALARM KEY PLAN SCALE: 1:100

	SD - SMOKE DETECTOR DSD - DUCT SMOKE DETECTOR HD - HEAT DETECTOR	STATION FS - FLOV	ANUAL PULL W SWITCH ERVISED VALVE	PS - P SWIT	RESSUI CH	RE					FAZ - ALARM FSZ-SUPERVISOR' FAR - RELAY
ZONE (2012 OBC 3.2.4.9)	DESCRIPTION	ALARM	ANNUNCIATOR A - ALARM S - SUPERVISORY R - RELAY OUTPUT	SD	DSD	F <i>A</i> HD	A DEVIC	ES FS	SV	PS	REMARKS
	POWER ON		GREEN								
	COMMON TROUBLE		YELLOW								
FAZ-1	SECTION 01		А	Х			Х				
FAZ-2	SECTION 02		А				Х				
FAZ-3	FS-1 - SECTION 1 FLOW SWITCH		А					Χ			
FAZ- 4 TO X	SPARE ALARM ZONES										
FSZ-1	SV-1 - SPRINKLER DOUBLE CHECK ISOLATION		S						Х		
FSZ-2	SV-2 - SPRINKLER DOUBLE CHECK ISOLATION		S						Х		
FSZ-3	SV-3 - EXCESS PRESSURE PUMP CONTROL VALVE		S						Х		
FSZ-4	SV-4 - CHECK ISOLATION		S						Х		
FSZ-5	SV-5 - EXCESS PRESSURE PUMP CONTROL VALVE		S						Х		
FSZ-6	SV-6 - CHECK ISOLATION		S						Х		
FSZ-7	SV-7 - GROUND CONTROL VALVE (WET ZONE 1)		S						Х		
FSZ-8 TO X	SPARE SUPERVISORY ZONES										
FAR-1	MAKEUP AIR UNIT MAU-1, SHUTDOWN ON SPRINKLER FLOW		R								
FAR-2	DEDICATED OUTSIDE AIR SYSTEM DOAS-1, SHUTDOWN ON SPRINKLER FLOW		R								
FAR-3 TO X	SPARE OUTPUT RELAY ZONES										

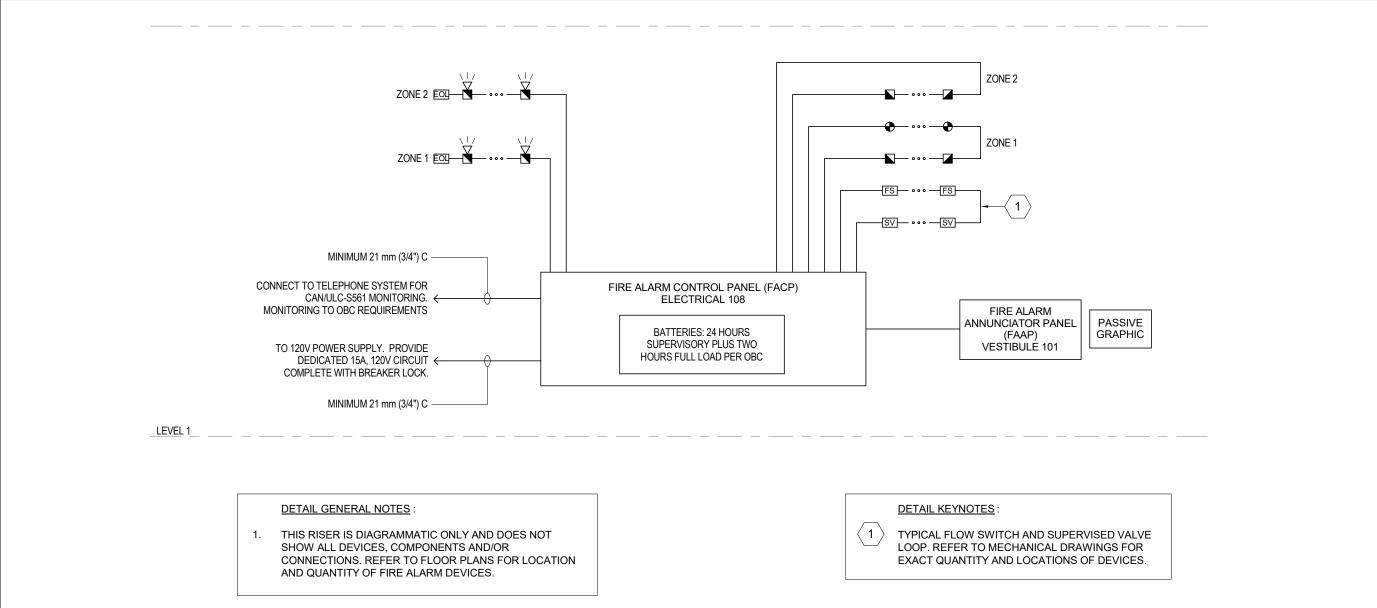
FIRE ALARM SCHEDULE



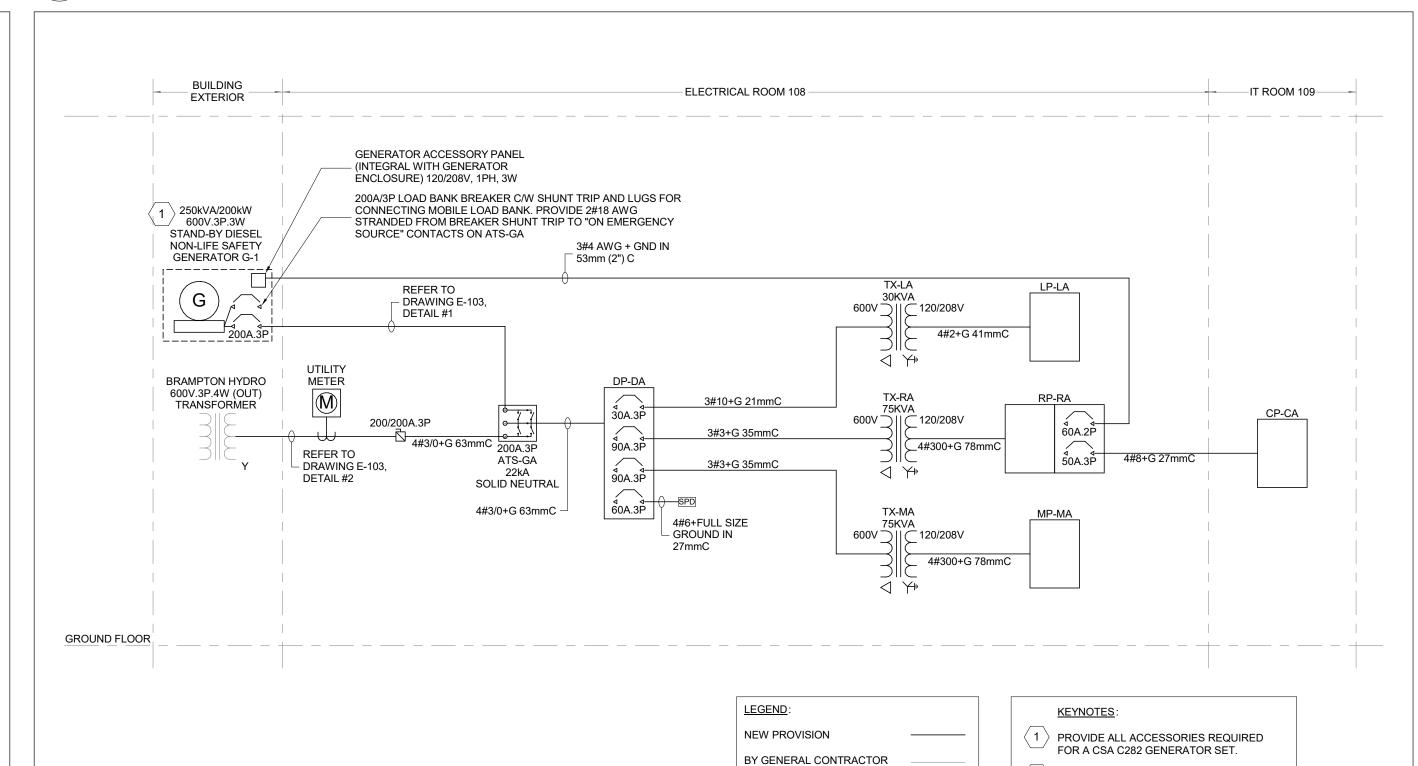


FIRE ALARM INTERFACE TO ULC-S561 MONITORING

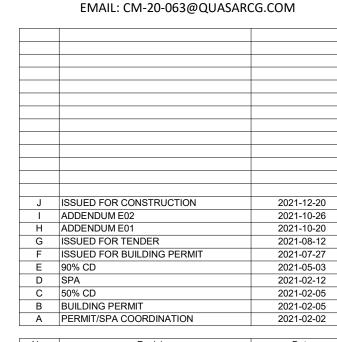
SCALE: N.T.S.



FIRE ALARM RISER DIAGRAM SCALE: N.T.S.



FOR QUESTIONS REGARDING THIS PROJECT, PLEASE



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Project Information

PROVIDE 2#18 AWG STRANDED FROM ATS "START/STOP" SIGNAL TO GENERATOR G-1 BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

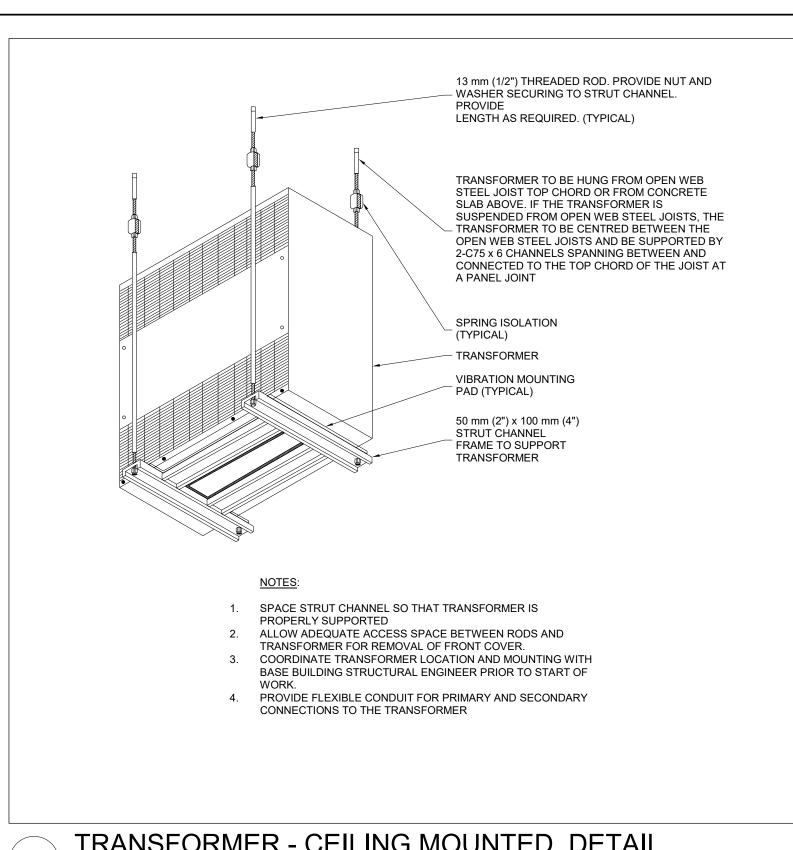
City of Brampton Fire & Emergency Services

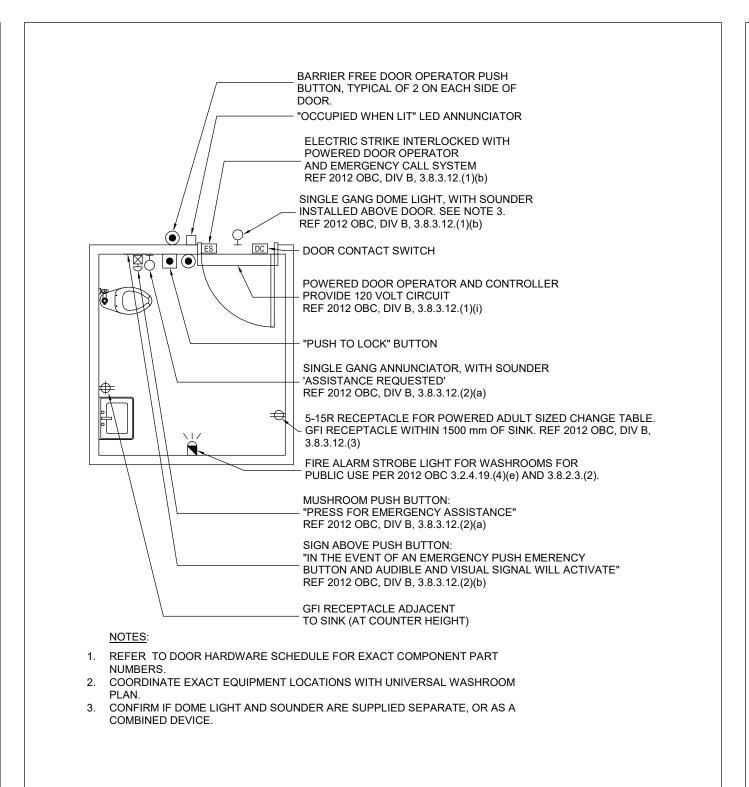
Drawing Title ELECTRICAL DETAILS (1)

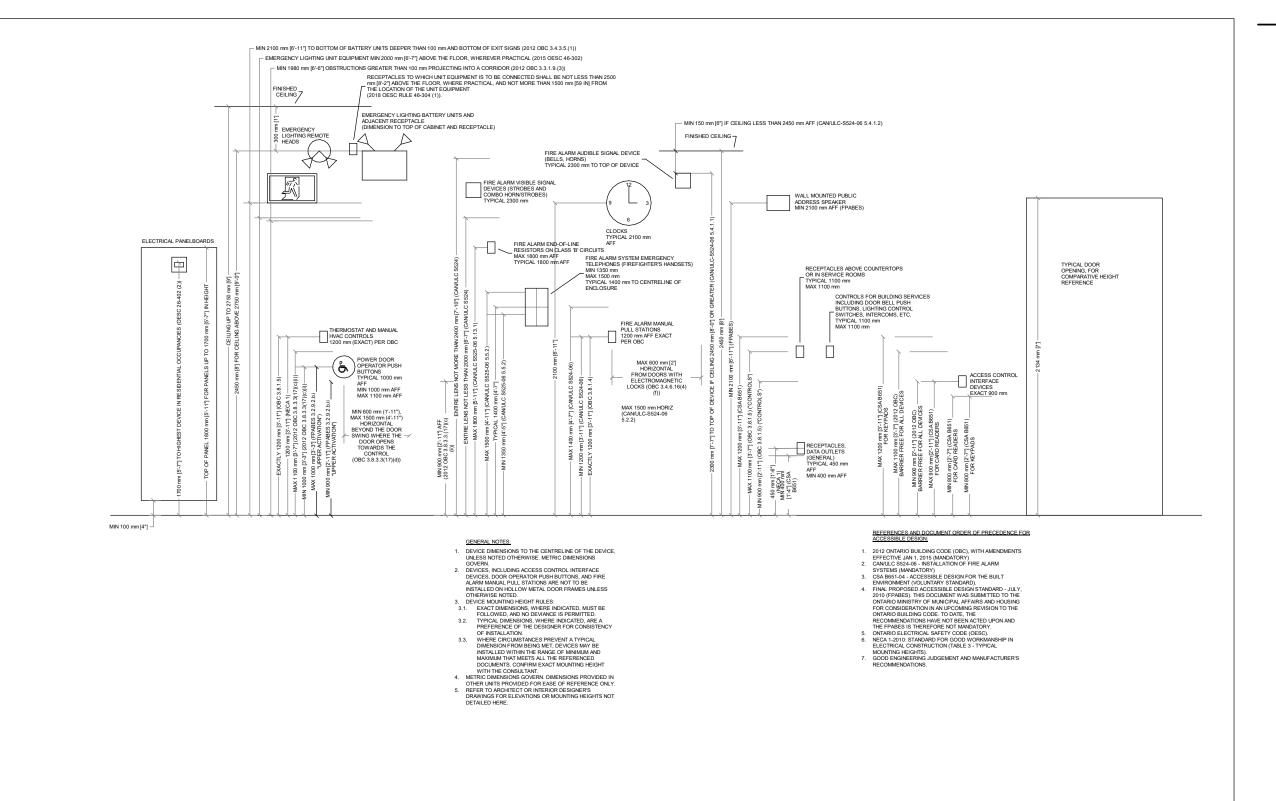
2021-12-20 Scale As indicated

SINGLE LINE DISTRIBUTION DIAGRAM SCALE: N.T.S.

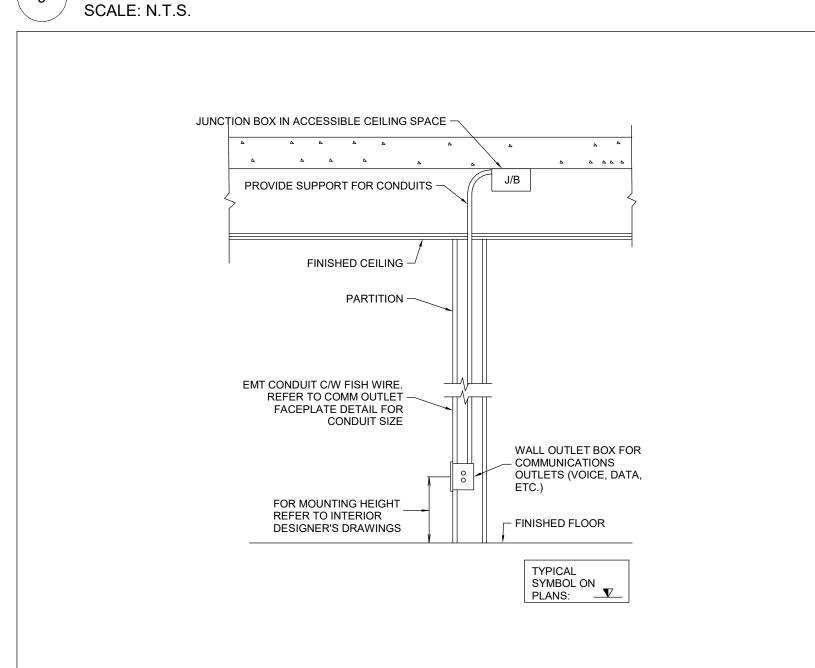












TYPICAL DC POWERED

EMERGENCY REMOTE

TYPICAL

INTERNALLY

ILLUMINATE

EXIT SIGNS

DETAIL NOTES:

- AC NORMAL FEED

1. DIAGRAM IS SCHEMATIC ONLY.

REFER TO FACILITY SINGLE LINE DIAGRAM FOR SPECIFICS

OF ELECTRICAL DISTRIBUTION,

INCLUDING CIRCUIT BREAKER

TRANSFORMERS. DIAGRAM IS

SPECIFIC TO LIGHTING AND

ELECTRICAL DISTRIBUTION

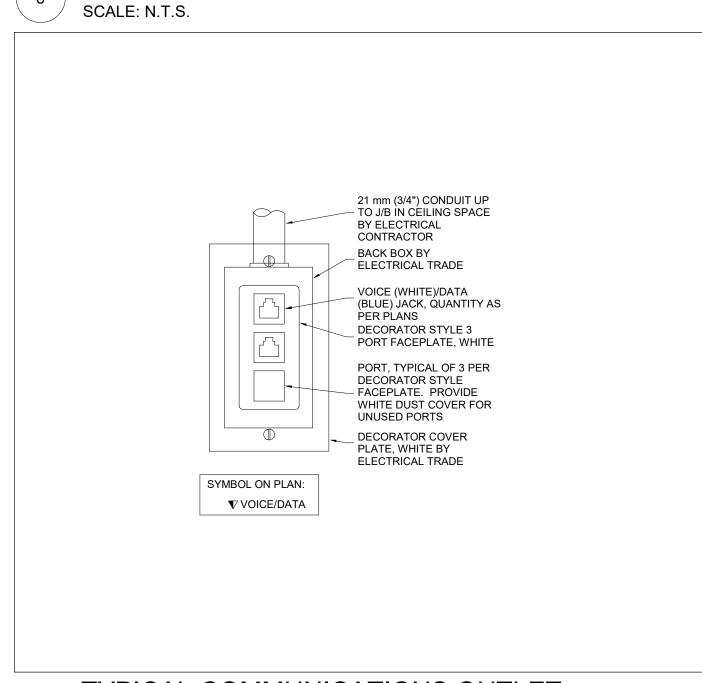
NOR RELATED TO SAME.

DOES NOT INDICATE

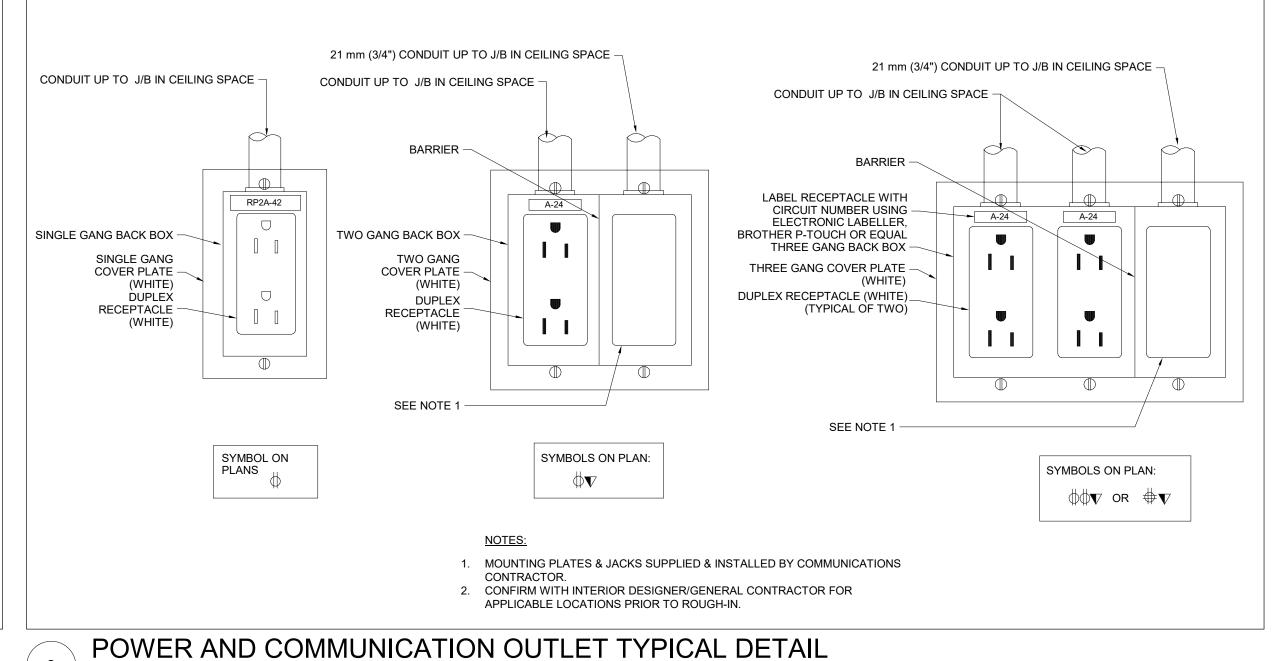
AND FEEDER SIZES, AND

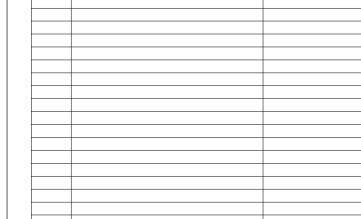
DC EMERGENCY FEED





TYPICAL DEVICE MOUNTING HEIGHTS SCALE: N.T.S.





2021-08-12

2021-07-27

2021-05-03

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

ISSUED FOR BUILDING PERMIT A 90% CD

ISSUED FOR TENDER

ISSUED FOR CONSTRUCTION

Orientation

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MINIMUM 2 x CABLE DIAMETER ON CENTRE

SPACING OF SINGLE

CONDUCTOR CABLES

- FOR AIR RATED

ELECTRICAL — CONDUIT OR

THOMAS & BETTS SUPER STRUT METAL FRAMING

CHANNEL SERIES A1200 ALUMINUM, OR EQUAL

CORFLEX CABLE

Project Information **BFES Station 201** (SPA-2021-0032)

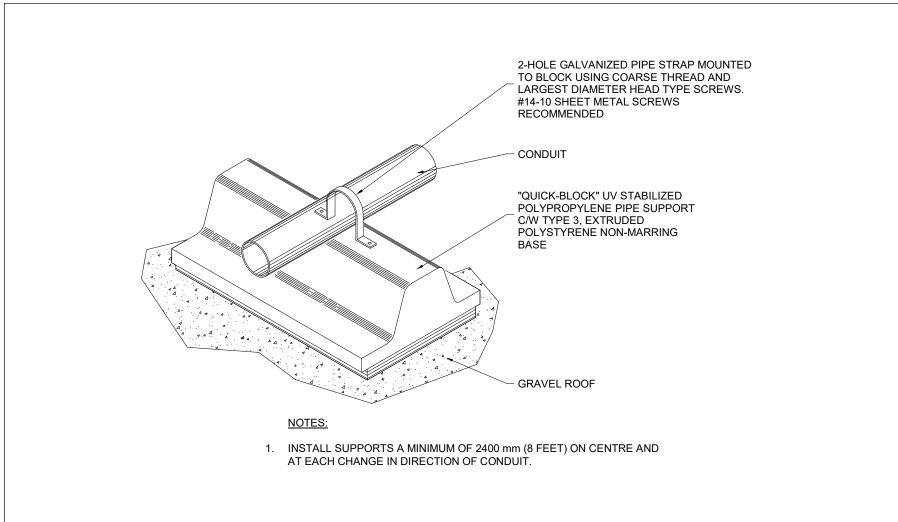
27 Rutherford Rd. S., Brampton, ON, L6W 3J3

City of Brampton Fire & Emergency Services

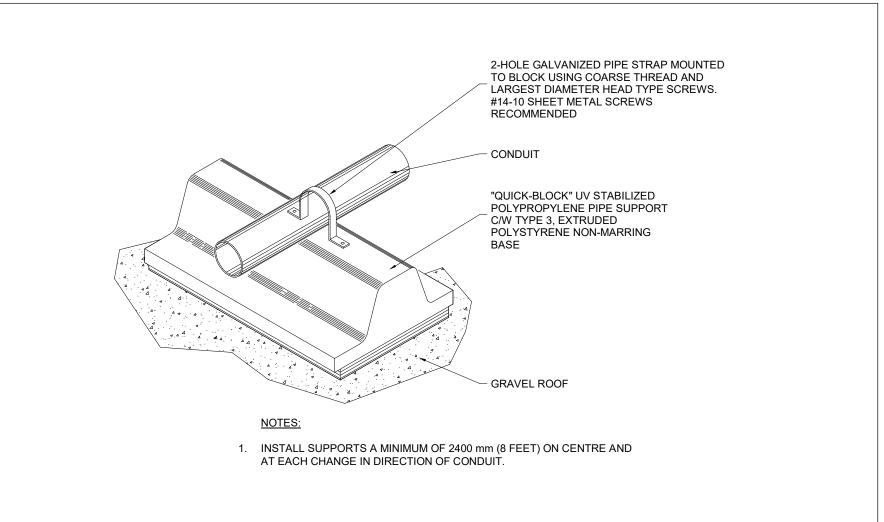
Drawing Title ELECTRICAL DETAILS (2)

2021-12-20 CM-20-063 DTH Scale As indicated

TYPICAL COMMUNICATIONS OUTLET COMMUNICATIONS WALL OUTLET BOX TYPICAL DETAIL SCALE: N.T.S.



ROOF SUPPORT FOR CONDUIT SCALE: N.T.S. SCALE: N.T.S.



EMERGENCY AND EXIT LIGHTING DETAIL SCALE: N.T.S.

TYPICAL NORMAL

LIGHTING PANELBOARD

PROVIDE RECEPTACLE AT BATTERY BATTERY UNITS CONNECTED TO 120

CIRCUITS, TYPICAL. PROVIDE

CONNECTION TO 347 VOLT UNITS

HARDWIRED

EM. LTG BATTERY

- FEEDS

NORMAL

LIGHTING

TO CSA C22.2 NO. 141

SCALE: N.T.S.

FED FROM UTILITY -NORMAL

STRUT CHANNEL SUSPENSION FOR CONDUIT AND CABLES

TYPICAL CABLE CLAMP

CH118-SUPERSTRUT

THOMAS & BETTS SUPER

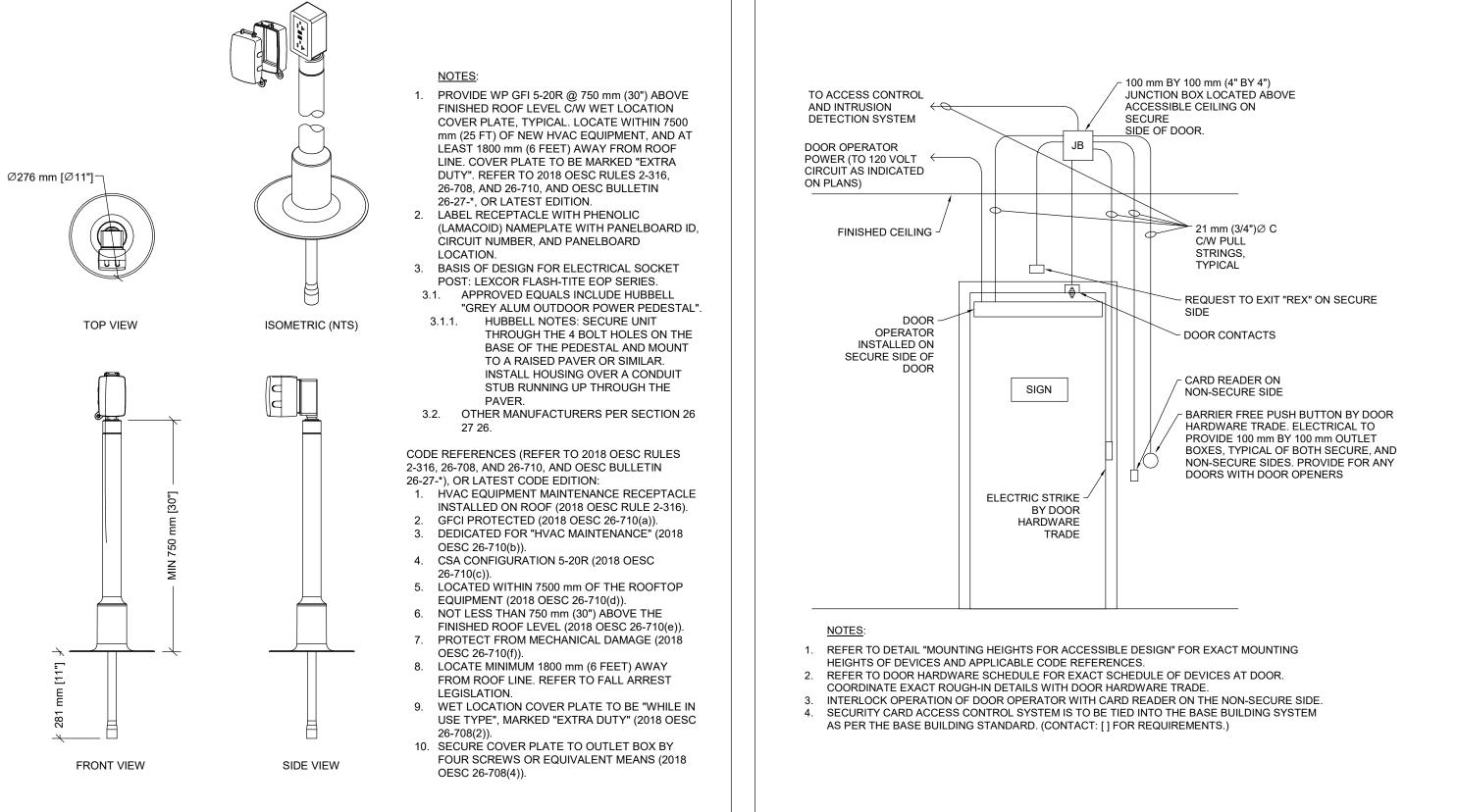
STRUT END CAP, TYPE -

A804EG

THOMAS & BETTS SERIES

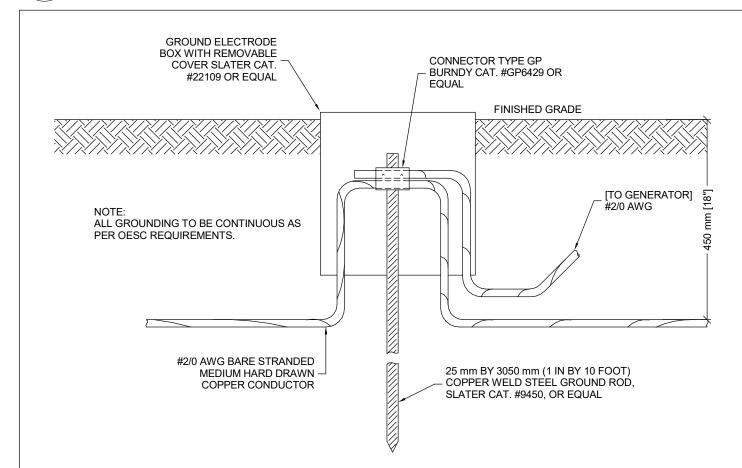
ALUMINUM OR EQUIVALENT





SCALE: N.T.S.

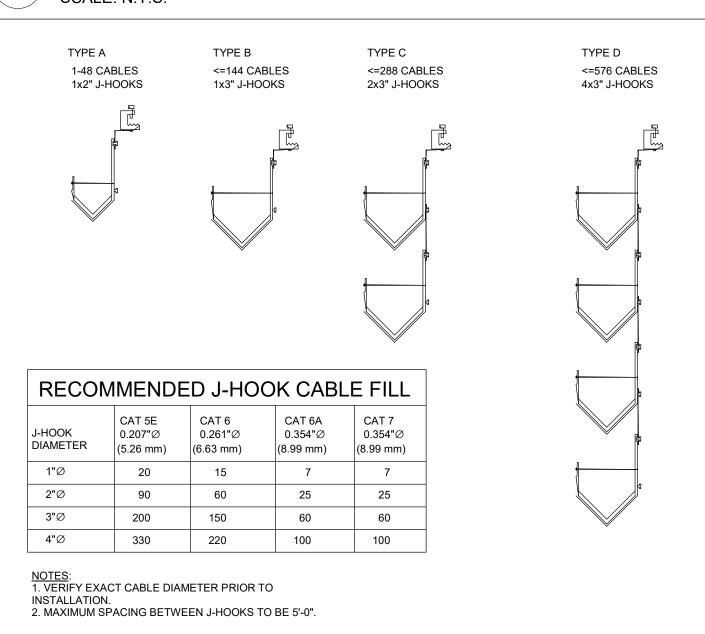
RECEPTACLE FOR ROOF HVAC EQUIPMENT DETAIL SCALE: N.T.S.



ELECTRIC STRIKE - SINGLE DOOR, TYPICAL DETAIL

GROUND ROD DETAIL

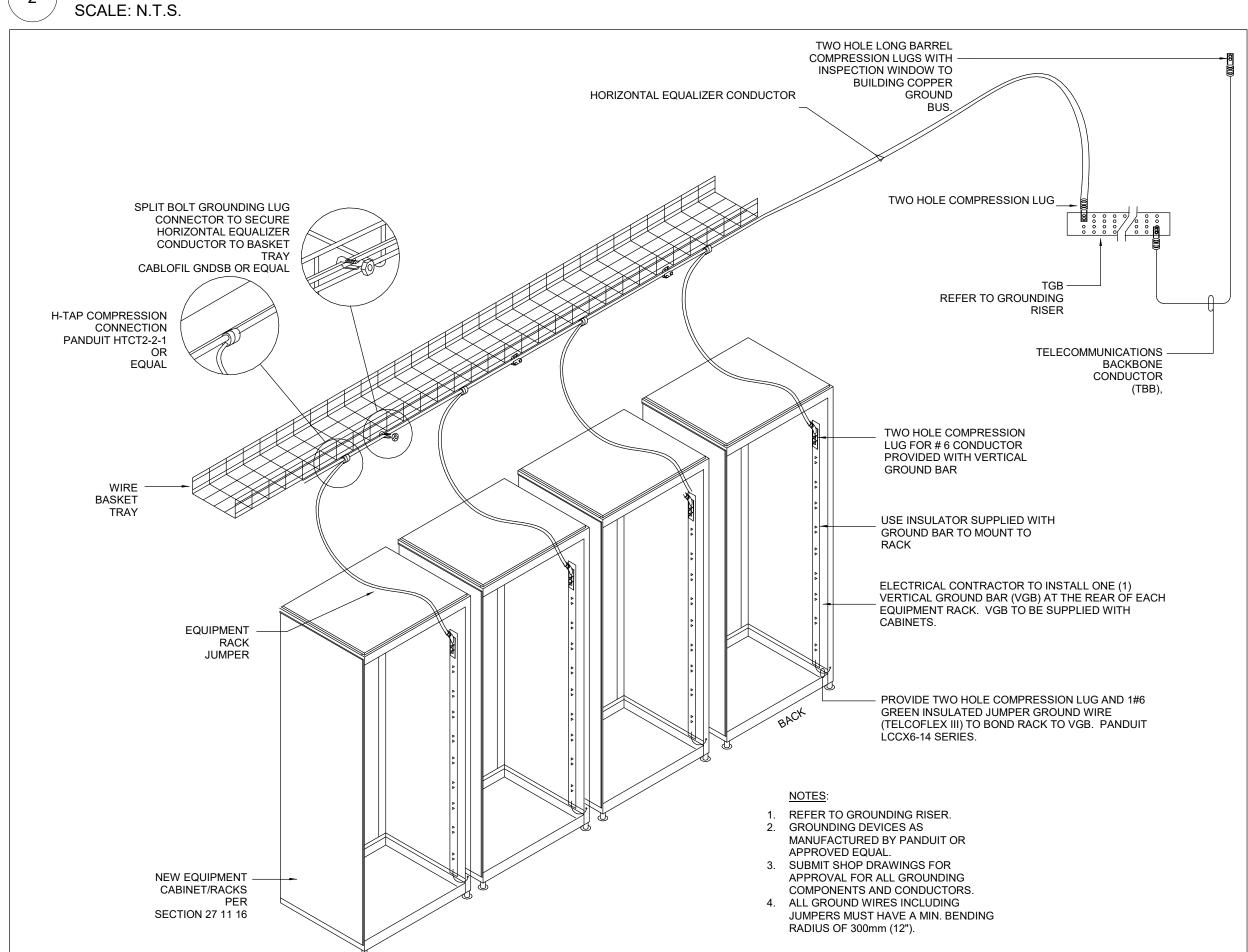
SET SCREW ON SLOPED SIDE -CADDY CAT32HP C/W RETAINER OR B-LINE **EQUIVALENT** BUNDLE CABLES AT SECURE THREADED ROD - MAXIMUM 12 CABLES PER BUNDLE STRUCTURE WITH CADDY BCISN375 OR EQUIVALENT "HOOK AND LOOP" CABLE TIES, TYPICAL CADDY CATHPA6 **1** ≠ 50 mm [2"]Ø BRACKET OR B-LINE **EQUIVALENT** CADDY CAT48HP C/W CABLE RETAINER OR B-LINE **EQUIVALENT** / ____75 mm [3"]Ø───/



SCALE: N.T.S.

NOTES: COLUMN/WALL (A) COPPER GROUND BAR (B) INSULATORS - NEWTON CAT. #3061-4 (C) 5/8" LOCKWASHERS - NEWTON CAT. #3015-B (D) WALL MOUNTING BRACKET - NEWTON CAT. #A-6056 (E) 5/8 = 11x1" HHCS BOLT - NEWTON CAT. #3012-1 PROVIDE APPROPRIATE EXPANSION SHIELDS & (F) BOLTS PLAN VIEW FOR MOUNTING ON CONCRETE STRUCTURE 3" FOR UP TO 18" LONG GROUND COLUMN / WALL 6" FOR UP TO 48" LONG GROUND HOLES FOR 5/8" MOUNTING BOLTS SEE NOTE 1 BELOW \circ CE 4"H X 1/4" THICK ⊢ **GROUNDING BUSHING** \triangle \circ FRONT VIEW LAY-IN GROUND LUGS STRANDED **GROUND WIRE** ── EMT CONDUIT SIDE VIEW **GENERAL NOTES**: 1. PROVIDE THREE HOLES SUITABLE FOR NEMA SPACING FOR BOTH #2/0 AND 750MCM TWO-HOLE 2. UNCHOKE ALL METALLIC CONDUITS AS SHOWN.

GROUNDING BAR DETAIL



CABINET AND CABLE TRAY GROUNDING DETAIL SCALE: N.T.S.

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE ISSUED FOR TENDER 2021-08-12 ISSUED FOR BUILDING PERMIT 2021-07-27 A 90% CD

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Project Information

BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

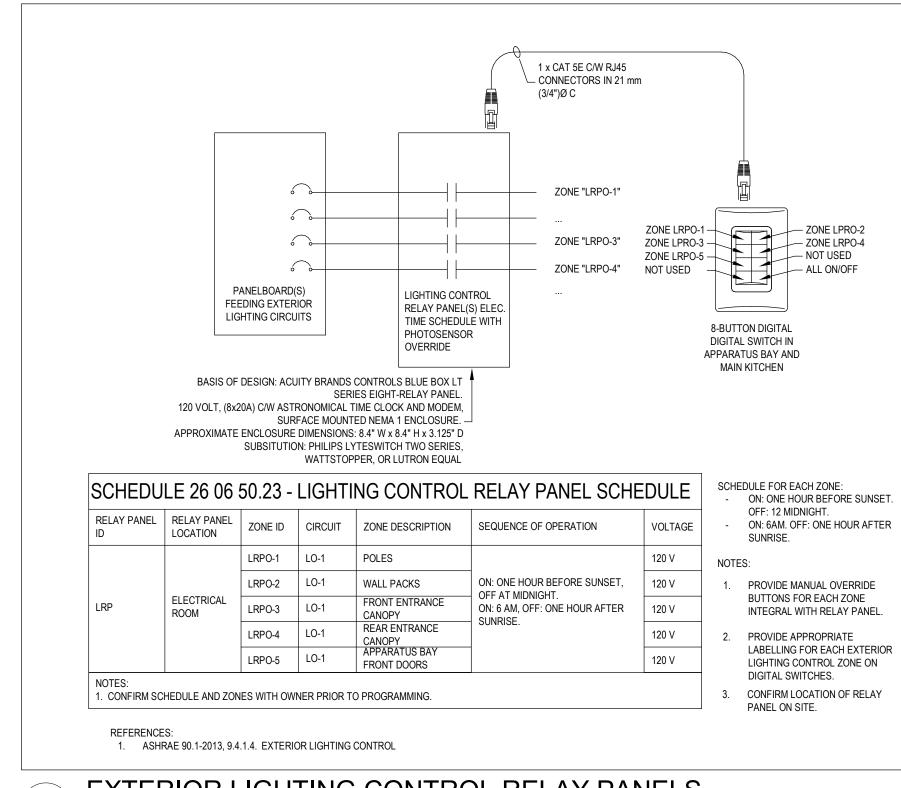
City of Brampton Fire & Emergency Services

Drawing Title

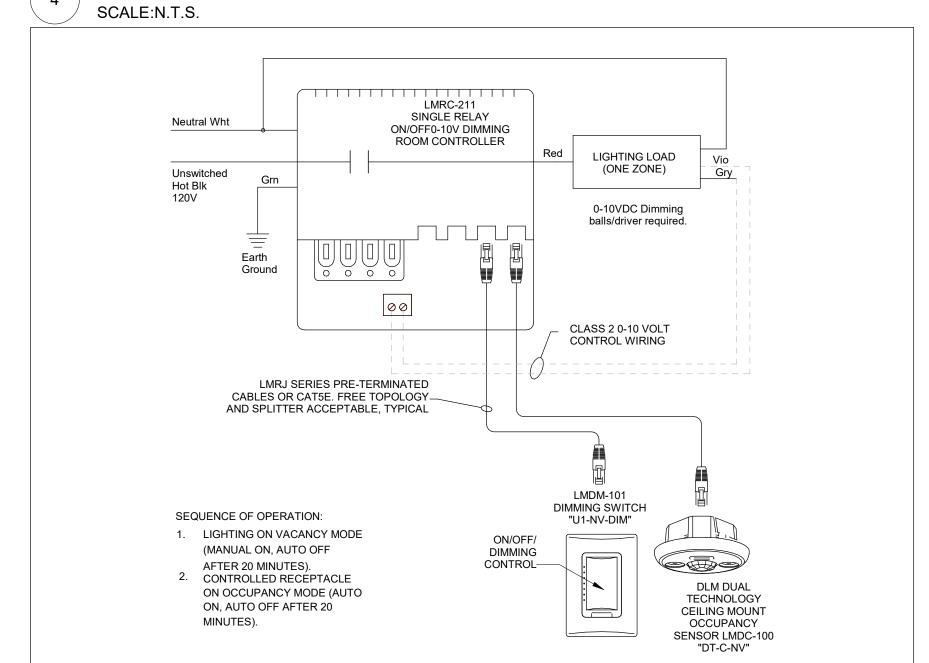
ELECTRICAL DETAILS (3)

Project No Drawing No 2021-12-20 Scale As indicated

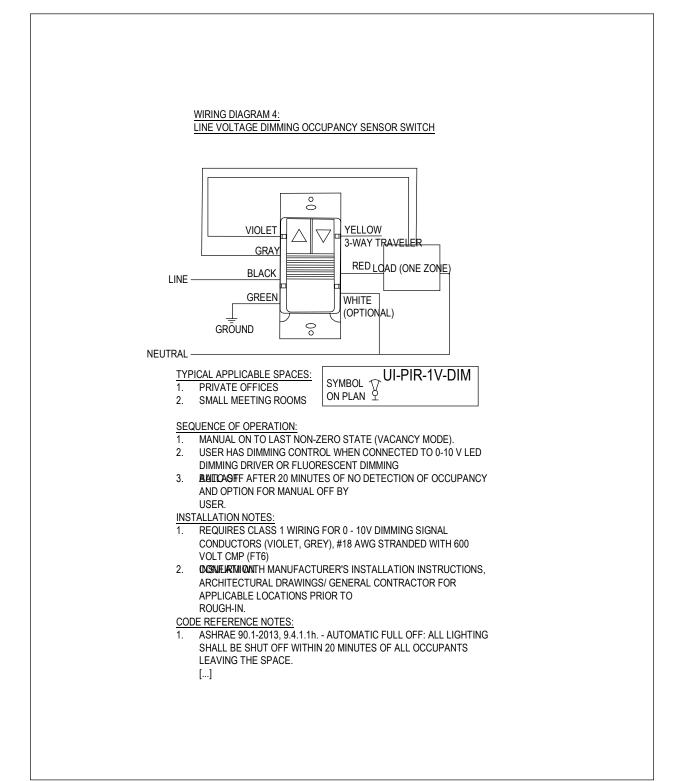
J-HOOK HORIZONTAL CABLING SUPPORT DETAIL



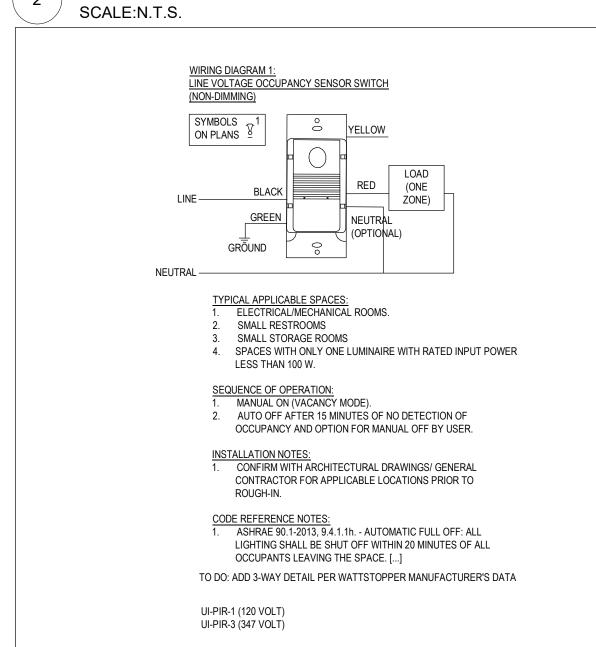
EXTERIOR LIGHTING CONTROL RELAY PANELS



1 ZONE ROOM CONTROLLER
SCALE:N.T.S.



WALL MOUNTED 0-10V DIMMING SENSOR

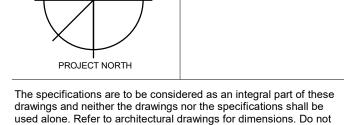


WALL MOUNTED SENSOR SWITCH WIRING
SCALE:N.T.S.

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В	ISSUED FOR CONSTRUCTION	2021-12-2
A	ISSUED FOR TENDER	2021-08-
No.	Revision	Date

entation



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BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S. Brampton, ON L6W 3.1

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

or

ELECTRICAL DETAILS (4)

City of Brampton Fire & Emergency Services

Drawing Title

Date Project No Drawing No 2021-12-20

Drawn by DTH

Scale

N.T.S.

Project No Drawing No Draw

	EMERGENCY LIGHTING SCHEDULE												
FIXTURE TAG	DESCRIPTION	BASIS OF DESIGN MANUFACTURER AND CAT. NO.	VOLTAGE (V)	LAMP	WATTS (W)	COLOUR TEMPERATURE	LUMENS	CRI	DRIVER	MOUNTING			
X1	GREEN RUNNING-MAN EXIT SIGN	REFER TO SPECIFICATIONS SECTION 26 52 13.16	120	LED	3	N/A	N/A	N/A	N/A	RECESSED - CEILING			
X2	GREEN RUNNING-MAN EXIT SIGN	REFER TO SPECIFICATIONS SECTION 26 52 13.16	120	LED	3	N/A	N/A	N/A	N/A	SURFACE - WALL			
Х3	DOUBLE-HEAD EMERGENCY REMOTE LUMINAIRE	REFER TO SPECIFICATIONS SECTION 26 52 13.13	120	LED	12	N/A	N/A	N/A	N/A	SURFACE - WALL			
X4	SINGLE-HEAD EMERGENCY REMOTE LUMINAIRE	REFER TO SPECIFICATIONS SECTION 26 52 13.13	120	LED	6	N/A	N/A	N/A	N/A	SURFACE - WALL			
ХВ	DOUBLE-HEAD EMERGENCY REMOTE LUMINAIRE COMPLETE WITH BATTERY PACK	REFER TO SPECIFICATIONS SECTION 26 52 13.13	120	LED	12	N/A	N/A	N/A	N/A	SURFACE - WALL			

	LIGHTING CONTROL DEVICE SCHEDULE															
SYMBOL	DESCRIPTION	BASIS OF DESIGN MANUFACTURERS AND PRODUCT SERIES	CONTROL WIRING	VOLTAGE OUTPUT	MOUNTING	FITNESS KITCHEN/ MEETING	OUTDOOR STORAGE CORRIDOR/ VEST./ STAF ENTRANCE	F DECON	MD STOR.	APPRATUS BAY	LUANDRY	WAHSROOM ROOM	SERVICE ROOMS IT	ROOM J	JANITUR TOOL/ COMPR./ HOSE TOWER	OFFICES DORMS BUNKER GEAR
¥	WALL SWITCH OCCUPANCY SENSOR, SINGLE ZONE CONTROL (ON/OFF), 120 VOLT, DUAL TECHNOLOGY SENSOR	ACUITY BRANDS CONTROLS/SENSOR SWITCH WSX-SERIES LEGRAND/WATTSTOPPER PW-301 SERIES LUTRON MAESTRO SERIES MS-OPS2 LEVITON EQUAL		120 V	WALL	х	х	Х				х	:	<	х	
§ 8B	EIGHT BUTTON WALL STATION.	ACUITY BRANDS CONTROLS/nLIGHT, nPODM SERIES LEGRAND/WATTSTOPPER LMSW-108 SERIES LEVITON LUTRON EQUAL	DIGITAL	120 V	WALL					Х						
₽DIM	DIMMING OCCUPANCY WALL SWITCH, 0-10 VOLT DIMMING CONTROL, 120 VOLT, PASSIVE INFRARED SENSOR	ACUITY BRANDS CONTROLS/SENSOR SWITCH WSX-D-SA SERIES LEGRAND/WATTSTOPPER PW-311 SERIES LEVITON OSD10-I0 SERIES LUTRON MAESTRO SERIES MS-Z101	0-10 ∨ DIMMIN	G 120 V	WALL						Х					X
\$	ONE BUTTON WALL STATION, ONE BUTTON ON-OFF TOGGLE.	ACUITY BRANDS CONTROLS/SENSOR SWITCH WSX-PDT SERIES LEGRAND/WATTSTOPPER DSW-301 SERIES LUTRON MAESTRO SERIES MS-A102 LEVITON EQUAL		120 V	WALL				x				х		X	
\$ DIM	DIMMING WALL STATION FOR ONE ZONE CONTROL, MULTI-BUTTON WALL INTERFACE CONTROL C/W ENGRAVED BUTTONS.	ACUITY BRANDS CONTROLS PODM-1SB SERIES LEGRAND/WATTSTOPPER LMSW-101 LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	WALL	X X										X
(c)	CEILING MOUNTED OCCUPANCY SENSOR, NETWORKED, DUAL TECHNOLOGY SENSOR, 12 FOOT, 360 DEGREE COVERAGE PATTERN	ACUITY BRANDS CONTROLS NPODM SERIES LEGRAND/WATTSTOPPER EQUAL LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	WALL	x	x					x				X X
HDT	WALL MOUNT DUAL TECHNOLOGY SENSOR, NETWORKED	ACUITY BRANDS CONTROLS/nLIGHT, nPODM SERIES LEGRAND/WATTSTOPPER LMSW-108 SERIES LEVITON LUTRON EQUAL	DIGITAL	120 V	WALL					х						
⊢ເ⊡LR	WALL MOUNT DUAL TECHNOLOGY SENSOR, NETWORKED, COMPLETE WITH LONG RANGE LENS	ACUITY BRANDS CONTROLS CM-PDT-9-RJB SERIES LEGRAND/WATTSTOPPER EQUAL LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	CEILING					X						
<u>ұ</u> 3	WALL SWITCH OCCUPANCY SENSOR, SINGLE ZONE CONTROL (ON/OFF), SWITCH 3-WAY, 120 VOLT, PASSIVE INFRARED SENSOR	LEGRAND/WATTSTOPPER LMDX-100 SERIES ACUITY EQUAL LUTRON EQUAL LEVITON EQUAL	DIGITAL	120 V	WALL						х	x				x

LIGHTING CONTROLS SCHEDULE NOTES: 1. LIGHTING CONTROLS OF ONE MANUFACTURER THROUGH PROJECT TO ENSURE PRODUCT COMPATIBILITY.

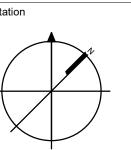
2. DUAL TECHNOLOGY SENSORS: PASSIVE INFRARED/ULTRASONIC, OR PASSIVE INFRARED/MICROPHONIC, DEPENDING ON MANUFACTURER. MICROPHONIC SENSORS ACCEPTABLE IN LIEU OF ULTRASONIC. 3. POSITION CEILING MOUNTED OCCUPANCY SENSORS A MINIMUM 1200 mm (4'-0") FROM NEAREST AIR DIFFUSER, HVAC OUTLETS, HEATING BLOWERS, ETC.

4. CONFIRM INSTALLATION REQUIREMENTS, WIRING DIAGRAMS, ETC. WITH MANUFACTURER'S DETAILS.

5. SUBMIT SHOP DRAWINGS FOR CONSULTANT'S REVIEW PRIOR TO PLACING ANY ORDER. 6. CONFIRM FINISH COLOUR WITH CONSULTANT DURING SUBMITTAL REVIEW.

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE FMAII: CM-20-063@QUASARCG.COM

Е	ISSUED FOR CONSTRUCTION	2021-12-2
D	ADDENDUM E01	2021-10-2
С	ISSUED FOR TENDER	2021-08-1
В	ISSUED FOR BUILDING PERMIT	2021-07-2
Α	90% CD	2021-05-0
NI.	Davidation	D :
No.	Revision	Date



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Project Information

BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

City of Brampton Fire & Emergency Services

Drawing Title

1:1

ELECTRICAL SCHEDULES

Project No Drawing No 2021-12-20 Drawn by DTH Scale

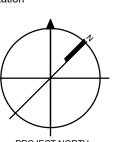
Notes: 80 CIRC	Branch Panel: CP-CA Location: IT ROOM 110 Supply From: RP-RA Mounting: SURFACE Enclosure: SPRINKLERE	Volts: 120/208 Wye Phases: 3 Wires: 4									A.I.C. Rating: 10 kA Mains Type: Cu Mains Rating: 100 A MCB Rating: 1 A			
СКТ	Circuit Description	Trip	Poles	A	В	С	A	В	С	Poles	Trip	Circuit D	escription	СК
CA-1	STATION CONTROLLER RECEPTACLES	15 A	1	900 VA			0 VA			1	15 A	SPARE	•	CA
CA-3	FSA SYSTEM	15 A	1		500 VA			0 VA		1	15 A	SPARE		CA
CA-5	SECURITY RACK	15 A	1			1000 VA			0 VA	1	15 A	SPARE		CA
CA-7	P/A RACK	15 A	1	500 VA	400.1/4		0 VA	0.144				SPACE		CA
CA-9	RECEPTACLES	15 A	1		400 VA	1400 \/A		0 VA	0.1/4			SPACE		CA
	NEMA 5-20R - IT RACK NEMA 5-20R - IT RACK	15 A 15 A	1	1400 VA		1400 VA	0 VA		0 VA			SPACE SPACE		CA CA
	SPARE	15 A	1	1400 VA	0 VA		UVA	0 VA				SPACE		CA
	SPARE	15 A	1		UVA	0 VA		UVA	0 VA			SPACE		CA
	SPACE			0 VA		0 7/1	0 VA		0 771			SPACE		CA
	SPACE				0 VA			0 VA				SPACE		CA-
CA-23	SPACE					0 VA			0 VA			SPACE		CA-
CA-25	SPACE			0 VA			0 VA					SPACE		CA
	SPACE				0 VA			0 VA				SPACE		CA-
CA-29	SPACE					0 VA			0 VA			SPACE		CA-
			tal Load:			900		2400	O VA ? A					
_egend:	:	100	al Amps:	25	, A	8 /	Α		. A					
												Pane	l Totals	
												Total Conn. Load:	6100 VA	
												Total Est. Demand:		
												Total Conn.:		
												Total Est. Demand:	17 A	

						MECHANICAL E	EQUIPMENT S	<u>CHEDULE</u>				
EQUIPMENT	EQUIPMENT TAG	QUANTITY	VOLTAGE (V)	AMPERAGE (A)	PHASE	CONNECTED LOAD (kVA)	DIVERSITY	DEMAND LOAD (kVA)	BREAKER	CONDUCTOR (Cu, AWG)	CONDUIT (mm)	NOTES
VARIABLE REFRIGERANT FLOW AIR-COOLED CONDENSING UNIT	CU-1	1	575	24.8	3	24.70	100%	24.70	40A.3P	3#8+G	27	40A.3P MOCP AS PER MECHANICAL
	FC-1	1	208	0.8	1	0.17	80%	0.13	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
	FC-2	1	208	0.8	1	0.17	80%	0.13	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
	FC-3A	1	208	0.8	1	0.17	80%	0.13	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
	FC-3B	1	208	0.8	1	0.17	80%	0.13	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
VARIABLE REFRIGERANT FLOW CASSETTE	FC-5	1	208	1.6	1	0.33	80%	0.27	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
	FC-6	1	208	1.8	1	0.37	80%	0.30	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
	FC-7	1	208	2.5	1	0.52	80%	0.42	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
	FC-8	1	208	0.8	1	0.17	80%	0.13	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
	FC-9	1	208	1.4	1	0.29	80%	0.23	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
EDICATED OUTSIDE AIR SYSTEM	DOAS-1	1	575	8	3	7.97	100%	7.97	15A.3P	3#12+G	21	15A.3P MOCP AS PER MECHANICAL
CAC FIRED MANGELID AID LINIT	MAU-1A	1	115	15.2	1	1.75	100%	1.75	30A.1P	2#10+G	21	30A.1P MOCP AS PER MECHANICAL
GAS FIRED MAKEUP AIR UNIT	MAU-1B	1	208	11.2	1	2.33	100%	2.33	20A.2P	2#12+G	21	20A.2P MOCP AS PER MECHANICAL
AIR-COOLED CONDENSING UNIT	CU-2	1	208	10.4	1	2.16	100%	2.16	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
FAN COIL CASSETTE	FC-4	1	208	13.6	1	2.83	80%	2.26	20A.2P	2#12+G	21	20A.2P MOCP AS PER MECHANICAL
EXHAUST FAN	EF-1	1	115	1.7	1	0.20	80%	0.16	15A.1P	2#12+G	21	0.19kW UNIT
	EF-2	1	115	1.7	1	0.20	80%	0.16	15A.1P	2#12+G	21	0.19kW UNIT
	EF-3	1	115	3.2	1	0.37	80%	0.29	15A.1P	2#12+G	21	0.37kW UNIT
	EF-4	1	208	11.4	3	4.11	80%	3.29	20A.3P	3#12+G	21	4.10kW UNIT
	EF-5	1	115	4.9	1	0.56	80%	0.45	15A.1P	2#12+G	21	0.56kW UNIT
GAS FIRED HOT WATER TANK HEATER	DHWT-1	1	120	3	1	0.36	100%	0.36	15A.1P	2#12+G	21	
KITCHEN RANGE HOOD	RH-1	1	120	4.5	1	0.54	100%	0.54	15A.1P	2#12+G	21	
VARIABLE REFRIGERANT FLOW HEAT RECOVERY BRANCH SELECTOR	BS-1	1	208	0.4	1	0.08	100%	0.08	15A.2P	2#12+G	21	15A.2P MOCP AS PER MECHANICAL
25072475047044544	CF-1	2	208	2.1	3	1.51	80%	1.21	15A.3P	3#12+G	21	0.75kW UNIT
DESTRATIFICATION FAN	CF-2	1	115	1.6	1	0.18	80%	0.15	15A.1P	2#12+G	21	0.18kW UNIT
	EH-1	1	208	4.8	1	1.00	50%	0.50	15A.2P	2#12+G	21	1kW UNIT
	EH-2	1	208	4.8	1	1.00	50%	0.50	15A.2P	2#12+G	21	1kW UNIT
ELECTRIC HEATER	EH-3	1	208	9.6	1	2.00	50%	1.00	15A.2P	2#12+G	21	2kW UNIT
	EH-4	1	208	9.6	1	2.00	50%	1.00	15A.2P	2#12+G	21	2kW UNIT
	EH-5	1	208	9.6	1	2.00	50%	1.00	15A.2P	2#12+G	21	2kW UNIT
PUMP	P-1	1	115	0.6	1	0.07	50%	0.03	15A.1P	2#12+G	21	75W UNIT
	UH-1	4	115	4.4	1	2.02	50%	1.01	15A.1P	2#12+G	21	
GAS-FIRED UNIT HEATER	UH-2	2	115	4.4	1	1.01	50%	0.51	15A.1P	2#12+G	21	
ELECTRIC HUMIDIFIER	HUM-1	1	208	33.3	3	12.00	80%	9.60	60A.3P	3#6+G	27	
DESICCANT DEHUMIDFIER	DD-1	1	208	33.1	3	11.92	80%	9.54	60A.3P	3#6+G	27	
	IAC-1	1	208	7.5	3	2.70	75%	2.03	15A.3P	3#12+G	21	
INDUSTRIAL AIR CLEANERS	IAC-2	2	120	2.4	1	0.58	75%	0.43	15A.1P	2#12+G	21	
	IAC-3	2	120	2.4	1	0.58	75%	0.43	15A.1P	2#12+G	21	
COMPRESSOR		1	600	22	3	22.86	50%	11.43	40A.3P	3#8+G	27	

	Location: ELECTRICAL 1 Supply From: Mounting: SURFACE Enclosure: SPRINKLERPR		Volts: 600V Phases: 3 Wires: 3								A.I.C. Rating: 22kA Mains Type: Cu Mains Rating: 225 A MCB Rating: 1 A			
otes: 2 CIRC	JIT SINGLE-TUB PANEL.													
СКТ	Circuit Description	Trip	Poles	A	В	С	Α	В	С	Poles	Trip	Circuit Description	скт	
DA-1	Circuit Description	тпр	Poles	5822 VA			32947			Poles	тпр	Circuit Description	DA-2	
DA-1 DA-3	TX-LA	30 A	3	3022 VA	3903 VA		32947	27567		3	οο Λ	TX-RA	DA-2	
DA-3 DA-5	1A-LA	30 A	٥			3188 VA		21301	28997	٥	90 A	17-174	DA-4 DA-6	
DA-3 DA-7				7621 VA			21612		20331				DA-8	
)A-9	COMPRESSOR	40 A	3		7621 VA		£ 10 12	22762		3	90 A	TX-MA	DA-0	
A-11		70 /			7 02 1 V/1	7621 VA		<i>LL</i> 1 0 <i>L</i>	23810		50 A		DA-1	
A-13				8233 VA		. 52 . 7/1	0 VA						DA-14	
A-15	CU-1	40 A	3	120 171	8233 VA			0 VA		3	30 A	SPD	DA-10	
A-17						8233 VA			0 VA				DA-1	
A-19				2657 VA			0 VA					SPACE	DA-20	
	DOAS-1	15 A	3		2657 VA			0 VA				SPACE	DA-2	
A-23						2657 VA			0 VA			SPACE	DA-2	
۹-25	SPACE			0 VA			0 VA					SPACE	DA-2	
4-27	SPACE				0 VA			0 VA				SPACE	DA-2	
	SPACE					0 VA			0 VA			SPACE	DA-3	
	SPACE			0 VA			0 VA					SPACE	DA-32	
4-33	SPACE				0 VA			0 VA				SPACE	DA-3	
	SPACE					0 VA			0 VA			SPACE	DA-36	
	SPACE			0 VA			0 VA					SPACE	DA-38	
	SPACE				0 VA			0 VA				SPACE	DA-4	
1 -41	SPACE					0 VA			0 VA			SPACE	DA-42	
			otal Load:			7266			21 VA					
gend:		То	tal Amps:	22	3 A	210) A	21	6 A					
												Panel Totals		
											-	Total Conn. Load: 225807 VA		
											-	Total Est. Demand: 212283 VA		
											-	Total Conn.: 217 A Total Est. Demand: 204 A		
											+	TOTAL EST. Dellialia. 204 A		

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

	В	ISSUED FOR CONSTRUCTION	2021-12-20
	Α	ISSUED FOR TENDER	2021-08-12
_			
	No.	Revision	Date



The specifications are to be considered as an integral part of these drawings and neither the drawings nor the specifications shall be used alone. Refer to architectural drawings for dimensions. Do not

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Project Information BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

City of Brampton Fire & Emergency Services

Drawing Title

ELECTRICAL SCHEDULES

Project No Drawing No 2021-12-20 Drawn by DTH Scale

1:1

Branch Panel: MP-MA

Location: ELECTRICAL 108 Supply From: TX-MA Mounting: SURFACE
Enclosure: SPRINKLERPROOF

Volts: 120/208 Wye Phases: 3 Wires: 4

A.I.C. Rating: 10kA Mains Type: Cu
Mains Rating: 225 A
MCB Rating: 1 A

60 CIRCUIT DOUBLE-TUB PANEL (TOTAL 120 CIRCUITS).

			Α	В	С	A	В	С					
CKT Circuit Description	Trip	Poles	^				Б		Poles	Trip	Circuit De	escription	СКТ
MA-1 UH-1	15 A	1	510 VA	540.\/A		300 VA	000) (A		2	15 A	FC-1, FC-2, FC-3A, FC-3B		MA-2
MA-3 UH-2 MA-5 UH-2	15 A 15 A	1		510 VA	510 VA		300 VA	1000 VA					MA-4 MA-6
MA-7 UH-1	15 A	1	510 VA		0.0.7.	1000 VA		1000 171	2	15 A	EH-3		MA-8
MA-9 UH-1	15 A	1		510 VA			500 VA		2	15 A	EH-1		MA-10
MA-11 DHWT-1 MA-13 (200) ENGED (1917)	15 A	1	1165 VA		360 VA	4000 VA		500 VA					MA-12 MA-14
MA-15 MAU-1B (CONDENSER UNIT)	20 A	2	1105 VA	1165 VA		4000 VA	4000 VA		3	60 A	HUM-1		MA-16
MA-17 MAU-1A	30 A	1			2330 VA			4000 VA					MA-18
MA-19 FC-5	15 A	2	167 VA			145 VA	=		2	15 A	FC-9		MA-20
MA-21 MA-23 FO 0				167 VA	185 VA		145 VA	1160 VA	1	15 A	IAC-2 (2)		MA-22 MA-24
MA-25 FC-6	15 A	2	185 VA		105 VA	3973 VA		1100 VA	ı	15 A	IAC-2 (2)		MA-26
MA-27 RH-1	15 A	1		540 VA			3973 VA		3	60 A	DD-1		MA-28
MA-29 FC-7	15 A	2			260 VA			3973 VA					MA-30
MA-31			260 VA	1000 VA		180 VA	1000 VA		1	15 A	CF-2		MA-32 MA-34
MA-35 EH-4	15 A	2		1000 VA	1000 VA		1000 VA	1000 VA	2	15 A	EH-5		MA-36
MA-37	15 A	2	500 VA			580 VA			1	15 A	IAC-3 (2)		MA-38
MA-39 EH-2		2		500 VA			400 VA		1	20 A	NEMA 5-20 MAINTENANCE	RECEPTACLE	MA-40
MA-41 VAV CONTROL PANEL MA-43	15 A	1	1415 VA		250 VA	900 VA		560 VA	1	15 A	EF-5		MA-42 MA-44
MA-43 MA-45 FC-4	20 A	2	1415 VA	1415 VA		JUU VA	900 VA		3	15 A	IAC-1		MA-44
MA-47					900 VA			900 VA					MA-48
MA-49 IAC-1	15 A	3	900 VA			507 VA							MA-50
MA-51				900 VA	85 VA		507 VA	507 VA	3	15 A	CF-1 (2)		MA-52 MA-54
MA-53 MA-55 FC-8	15 A	2	85 VA		85 VA	900 VA		507 VA					MA-56
MA-57 BS-1	15.0	2	00 171	40 VA		333 111	900 VA		3	15 A	IAC-1		MA-58
MA-59	15 A	2			40 VA			900 VA					MA-60
MA-61 EF-3	15 A 15 A	1	370 VA	400 \/A		900 VA	000 \/A		2	15 1	1001		MA-62
MA-63 EF-2 MA-65 NEMA 5-20 MAINTENANCE RECEPTACLE	20 A	1		400 VA	400 VA		900 VA	900 VA	3	15 A	IAC-1		MA-64 MA-66
MA-67		-	720 VA			0 VA			1	15 A	SPARE		MA-68
MA-69 CU-2	15 A	3		720 VA			0 VA		1	15 A	SPARE		MA-70
MA-71 MA-73			1370 VA		720 VA	0 VA		0 VA	1	15 A	SPARE SPACE		MA-72 MA-74
MA-75 EF-4	20 A	3	1370 VA	1370 VA		UVA	0 VA				SPACE		MA-76
MA-77		-			1370 VA		-	0 VA			SPACE		MA-78
MA-79 P-1	15 A	1	70 VA			0 VA					SPACE		MA-80
MA-81 SPARE MA-83 SPARE	15 A 15 A	1		0 VA	0 VA		0 VA	0 VA			SPACE SPACE		MA-82 MA-84
MA-85 SPACE			0 VA		OVA	0 VA		UVA			SPACE		MA-86
MA-87 SPACE				0 VA			0 VA				SPACE		MA-88
MA-89 SPACE					0 VA			0 VA			SPACE		MA-90
MA-91 SPACE MA-93 SPACE			0 VA	0 VA		0 VA	0 VA				SPACE SPACE		MA-92 MA-94
MA-95 SPACE MA-95 SPACE				JVA	0 VA		UVA	0 VA			SPACE		MA-96
MA-97 SPACE			0 VA			0 VA					SPACE		MA-98
MA-99 SPACE				0 VA	0.1.1		0 VA				SPACE		MA-100
MA-101 SPACE MA-103 SPACE			0 VA		0 VA	0 VA		0 VA			SPACE SPACE		MA-102 MA-104
MA-105 SPACE			UVA	0 VA		UVA	0 VA				SPACE		MA-104
MA-107 SPACE					0 VA			0 VA			SPACE	_	MA-108
MA-109 SPACE			0 VA	0.1		0 VA	0.1				SPACE		MA-110
MA-111 SPACE MA-113 SPACE				0 VA	0 VA		0 VA	0 VA			SPACE SPACE		MA-112 MA-114
MA-115 SPACE			0 VA		UVA	0 VA		UVA			SPACE		MA-114
MA-117 SPACE				0 VA			0 VA				SPACE		MA-118
MA-119 SPACE				0.11	0 VA	20.144		0 VA			SPACE		MA-120
Legend:		tal Load: al Amps:	2161 18			62 VA 1 A		0 VA 0 A					
											Panel	Totals	
											Total Conn. Load:		
											Total Est. Demand:		
											Total Conn.: Total Est. Demand:		
											i Otai Lat. Dellialia.	100 /1	

Branch Panel: RP-RA

Location: ELECTRICAL 108 Supply From: TX-RA Mounting: SURFACE
Enclosure: SPRINKLERPROOF

Volts: 120/208 Wye Phases: 3 Wires: 4

A.I.C. Rating: 10kA Mains Type: Cu
Mains Rating: 225 A
MCB Rating: 1 A

60 CIRCUIT DOUBLE-TUB PANEL (TOTAL 120 CIRCUITS).

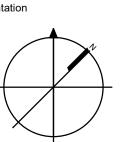
				A	В	С	A	В	С				
СКТ	Circuit Description	Trip	Poles							Poles	Trip	Circuit Description	СКТ
RA-1	FIRE ALARM PANEL	20 A	1	500 VA	500.1/4		400 VA	7001/4		1	20 A	RECEPTACLE - NEMA 5-20	RA-2
RA-3 RA-5	FIRE ALARM PANEL RECEPTACLES	20 A 15 A	1		500 VA	800 VA		720 VA	900 VA	1	15 A 15 A	RECEPTACLES RECEPTACLES	RA-4 RA-6
RA-7	RECEPTACLES	15 A	1	1000 VA		000 VA	720 VA		900 VA	1	15 A	RECEPTACLES	RA-8
RA-9	GFCI RECEPTACLES	15 A	1	1000 171	800 VA		120 171	1200 VA		1	15 A	RECEPTACLES	RA-10
RA-11	BFS RECEPTACLE	15 A	1			400 VA			350 VA	1	15 A	SECURITY MONITOR RECEPTACLE	RA-12
RA-13	RECEPTACLES	15 A	1	1000 VA			200 VA			1	15 A	GFCI RECEPTACLE	RA-14
RA-15	RECEPTACLE - NEMA 5-20	20 A	1		500 VA			500 VA		1	15 A	CHANGE TABLE RECEPTACLE	RA-16
RA-17	RECEPTACLE - NEMA 5-20	20 A	1			500 VA			1200 VA	1	15 A	DOOR OPERATORS (3)	RA-18
RA-19	RECEPTACLE - NEMA 5-20	20 A	1	500 VA			1200 VA			1	15 A	RECEPTACLES	RA-20
RA-21	RECEPTACLE - NEMA 5-20	20 A	1		500 VA	4000 \ / 4		1200 VA	4000 \ / 4	1	20 A	COPIER RECEPTACLE, NEMA 5-20	RA-22
RA-23 RA-25	FRIDGE FRIDGE	15 A 15 A	1	1000 VA		1000 VA	400 VA		1000 VA	1	15 A 15 A	RECEPTACLES GFCI RECEPTACLES	RA-24 RA-26
RA-25	COFFEE	20 A	1	1000 VA	1000 VA		400 VA	1000 VA		-	15 A	GFCIRECEPTACLES	RA-28
	DISHWASHER	15 A	1		1000 VA	1000 VA		1000 VA	1000 VA	2	15 A	DRYER - NEMA 6-30R	RA-30
RA-31	RECEPTACLE - NEMA 5-20	20 A	1	200 VA		1000 171	1000 VA		1000 171	1	15 A	WASHER	RA-32
RA-33	MICROWAVE	15 A	1		1000 VA			1000 VA					RA-34
RA-35	RECEPTACLE - NEMA 5-20	20 A	1			200 VA			1000 VA	2	15 A	GEAR WASHER - NEMA 6-15R	RA-36
RA-37	RANGE (NEMA 6-50R, 2#8+G)	50 A	2	1000 VA			500 VA			1	15 A	DOOR OPERATOR	RA-38
RA-39	RANGE (NEIVIA 0-30R, 2#6+G)	50 A			1000 VA			200 VA		1	15 A	GFCI RECEPTACLE	RA-40
RA-41	RECEPTACLE - NEMA 5-20R	20 A	1			200 VA			400 VA	1	15 A	RECEPTACLES, DSR	RA-42
	TV, RECEPTACLES	15 A	1	1160 VA			400 VA			1	15 A	RECEPTACLES	RA-44
RA-45					373 VA			400 VA	1000111	1	15 A	RECEPTACLES	RA-46
RA-47	BAY DOOR OPERATOR (2)	15 A	3	272.1/4		373 VA	272.1/4		1000 VA	1	15 A	DOOR OPERATORS (2)	RA-48
RA-49 RA-51				373 VA	373 VA		373 VA	373 VA		3	15 A	BAY DOOR OPERATOR (2)	RA-50 RA-52
RA-53	BAY DOOR OPERATOR (2)	15 A	3		3/3 VA	373 VA		3/3 VA	373 VA	3	15 A	BAT DOOR OPERATOR (2)	RA-52 RA-54
RA-55	DAT BOOK OF ERATOR (2)	10 /		373 VA		373 VA	373 VA		373 VA				RA-56
RA-57	NEMA 5-20R, CEILING MOUNTED	20 A	1	0.0.0.	1000 VA		0.0.0.	373 VA		3	15 A	BAY DOOR OPERATOR (2)	RA-58
	NEMA 5-20R, CEILING MOUNTED	20 A	1			1000 VA			373 VA				RA-60
RA-61	NEMA 5-20R, CEILING MOUNTED	20 A	1	1000 VA			400 VA			1	15 A	RADIO EQUIPMENT CABINET	RA-62
RA-63	MOTORIZED DAMPER, MD-3, MD-4	15 A	1		200 VA			500 VA		1	15 A	MECHANICAL CONTROLS	RA-64
RA-65	GFCI RECEPTACLE	15 A	1			200 VA			500 VA	1	15 A	MECHANICAL CONTROLS	RA-66
RA-67				8333 VA			500 VA			1	20 A	HAND DRYER UNIV WR 102 (GFI)	RA-68
-	EV CHARGING STATION (3#3+G, 35mmC)	90 A	3		8333 VA	0000144		500 VA	4000 \ (4	1	20 A	HAND DRYER DECON 124 (GFI)	RA-70
RA-71 RA-73				3120 VA		8333 VA	1000 VA		1000 VA	2	60 A	GENERATOR ACCESSORY PANEL	RA-72 RA-74
RA-75	EXTERIOR EV CHARGING STATION (2#8+G)	40 A	2	3120 VA	3120 VA		1000 VA	0 VA				SPACE	RA-74 RA-76
RA-77					3120 VA	3120 VA		UVA	0 VA			SPACE	RA-78
RA-79	EXTERIOR EV CHARGING STATION (2#8+G)	40 A	2	3120 VA		0120 171	0 VA		0 771			SPACE	RA-80
	SPARE	15 A	1		0 VA			0 VA				SPACE	RA-82
RA-83	SPARE	15 A	1			0 VA			0 VA			SPACE	RA-84
RA-85	SPARE	15 A	1	0 VA			0 VA					SPACE	RA-86
	SPARE	15 A	1		0 VA			0 VA				SPACE	RA-88
	SPARE	15 A	1			0 VA			0 VA			SPACE	RA-90
RA-91	SPARE	15 A	1	0 VA	6.143		0 VA	6341				SPACE	RA-92
RA-93	SPARE	15 A	1		0 VA	0.1/4		0 VA	0.1/4			SPACE	RA-94
	SPARE	20 A	1	0.1/4		0 VA	0.1/4		0 VA			SPACE SPACE	RA-96 RA-98
	SPARE SPARE	20 A 20 A	1	0 VA	0 VA		0 VA	0 VA				SPACE	RA-98 RA-100
RA-101		20 A			UVA	0 VA		UVA	0 VA			SPACE	RA-100
RA-103				0 VA		3 7/1	0 VA		3 77			SPACE	RA-104
RA-105				2.7.	0 VA		2.,,	0 VA				SPACE	RA-106
RA-107						0 VA			0 VA			SPACE	RA-108
RA-109	SPACE			0 VA			0 VA					SPACE	RA-110
RA-111	SPACE				0 VA			0 VA				SPACE	RA-112
RA-113						0 VA			0 VA			SPACE	RA-114
RA-115				0 VA			2800 VA						RA-116
RA-117					0 VA			900 VA		3	50 A	CP-CA	RA-118
RA-119	SPACE					0 VA	27.11		2400 VA				RA-120
			tal Load:		17 VA		67 VA		97 VA				
l egend:		Tot	al Amps:	27	6 A	23	80 A	243	ა A				

		Panel Totals	
		Total Conn. Load: 89510 VA	
		Total Est. Demand: 76385 VA	
		Total Conn.: 248 A	
		Total Est. Demand: 212 A	

FOR QUESTIONS REGARDING THIS PROJECT, PLEASE EMAIL: CM-20-063@QUASARCG.COM

D	ISSUED FOR CONSTRUCTION	2021-12-20
С	ADDENDUM E02	2021-10-26
В	ADDENDUM E01	2021-10-20
Α	ISSUED FOR TENDER	2021-08-12
No.	Revision	Date

No.



The specifications are to be considered as an integral part of these drawings and neither the drawings nor the specifications shall be used alone. Refer to architectural drawings for dimensions. Do not

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Project Information

Scale

BFES Station 201 (SPA-2021-0032)

27 Rutherford Rd. S., Brampton, ON, L6W 3J3

City of Brampton Fire & Emergency Services

Drawing Title

ELECTRICAL SCHEDULES

Project No Drawing No 2021-12-20 Drawn by DTH CM-20-063 **E603**