ELECTRICAL LEGEND

POWER & DISTRIBUTION SYSTEMS

	UTILITY DISCONNECT.
	DELTA STAR POWER TRANSFORMER.
	CIRCUIT BREAKER.
	CIRCUIT BREAKER. (DRAW OUT TYPE).
	CIRCUIT BREAKER. (DRAW OUT TYPE) WITH MICROPROCESSOR BASED TRIP UNIT.
	FUSED DISCONNECT.
	NON FUSED DISCONNECT.
	HI OR LOW VOLTAGE FUSE.
M	CUSTOMER OR UTILITY ENERGY METER.
	ELECTRICAL GROUNDING SYSTEM.
3–LA	LIGHTNING, ARRESTORS(03) AND GROUNDING.
▬	PANELBOARD (SURFACE MOUNT).
▬	PANELBOARD (RECESSED MOUNT).
	ENCLOSED BUS ASSEMBLY.
	CABLE LADDER OR TRAY.

RECEPTACLE/DIRECT CONNECTIONS

	120V, 2P, 3W, 15A DUPLEX RECEPTACLE (CSA #5 SERIES).
	120V, 2P, 3W, 15A SPLIT TYPE DUPLEX RECEPTACLE.
	120V, 2P, 3W, 15/20A T–SLOT TYPE DUPLEX RECEPTACLE. CSA#5 SERIES FOR OFFICE AND GENERAL AREAS.
	120V, 2P, 3W, 15A FOUR PLEX RECEPTACLE 2. DUPLEXES UNDER COMMON PLATE).
	120V, 2P, 3W SINGLE RECEPTACLE (CSA #5 SERIES).
	250V, 2P, 3W SINGLE RECEPTACLE (CSA #6 SERIES).
	125/250V, 3P, 4W SINGLE RECEPTACLE (CSA #14 SERIES).
	250VDC/600VAC, 3P, 4W SINGLE RECEPTACLE (CSA #L17 SERIES).
	1 PHASE, 3W DIRECT CONNECTION (L, N, G) OR (L1, L2, G).
	3 PHASE, 4W DIRECT CONNECTION (L1, L2, L3, G).
	3 PHASE, 5W DIRECT CONNECTION (L1, L2, L3, N, G).
	1 PHASE, 4W DIRECT CONNECTION (L1, L2, N, G).
	FLOOR FLUSH MOUNTED OUTLET BOX C/W ONE(1) 120V, 2P, 3W, 15A DUPLEX RECEPTACLE, ONE(1) DATA OUTLET AND ONE(1) CABLE TV OUTLET.
	FLOOR MOUNTED STATIC GROUNDING RECEPTACLE
TV	MULTI–SERVICE OUTLET BOX
HD	ELECTRIC HAND DRYER. NOVA CAT. No. 780–000 WHITE RECESSED UNIT 9.6 AMPS, 208V. 1 PHASE, 2000 WATTS COMPLETE WITH FIXED NOZZEL AND HEAVY DUTY VANDAL–RESISTANT GRILLE. MOUNT 2'–8" (0.91m) AFF. TO BOTTOM OF UNIT. UNLESS OTHER WISE NOTED. PANELBOARD BREAKERS (15A.2P.) TO BE GROUND FAULT TYPE.
HD	DIV 16 TO PROVIDE ELECTRIC HAND DRYER AS FOLLOWING: BLAST BY COMAC CORPORATION, 1450W, 120V, 1PH. COORDINATE COLOR/FINISH WITH ARCHITECT.
T	THERMOSTAT.
NOTES	1. DIRECT CONNECTION VOLTAGE INFORMATION INDICATION BY CIRCUIT No. 2. UNLESS NOTED OTHERWISE MOUNTING HEIGHT OF ALL OUTLETS IS 455mm (18") A.F.F. 3. UNLESS NOTED OTHERWISE (IE: 30A, 20A) ALL RECEPTACLES/DIRECT CONNECTIONS RATED FOR 15A.

KITCHEN/LAUNDRY APPLICANCES

D	15A, 120V–1ø DUPLEX RECEPTACLE FOR DISHWASHER, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
F	15A, 120V–1ø DUPLEX RECEPTACLE FOR FRIDGE, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
U/F	15A, 120V–1ø DUPLEX RECEPTACLE FOR UNDER–COUNTER FRIDGE, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
H	15A, 120V–1ø DUPLEX RECEPTACLE FOR KITCHEN HOOD, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
X	30A, 120V/208V–1ø(14–30R) RECEPTACLE FOR DRYER, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
W	15A, 120V–1ø DUPLEX RECEPTACLE FOR WASHER, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
W/D	15A, 120V–1ø DUPLEX RECEPTACLE FOR WASHER, AND 30A, 120/280V–1ø(14–30R) RECEPTACLE FOR DRYER. LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
S	50A, 120V/208V–1ø(14–50R) RECEPTACLE FOR STOVE, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
M	20A, 120V–1ø DUPLEX RECEPTACLE FOR MICROWAVE, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
O	20A, 120V–1ø DIRECT CONNECTION FOR BUILT–IN OVEN, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
E	15A, 120V/208V–1ø DUPLEX RECEPTACLE FOR EXHAUST FAN, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.
CT	40A, 120V/208V–1ø DIRECT CONNECTION FOR BUILT–IN COOKTOP, LOCATED AS SHOWN ON INTERIOR DESIGN DRAWINGS.

COMMUNICATION SYSTEMS

W◀1F–2	COMBINATION DATA/TELEPHONE OUTLET. SECOND DIGIT (NUMBER 2.") INDICATES QUANTITY OF TELEPHONE CABLES AND TELEPHONE JACKS IN OUTLET. FIRST DIGIT (NUMBER 1.") INDICATES QUANTITY OF DATA CABLES AND DATA JACKS IN OUTLET. IF FIRST DIGIT INCLUDES A SUFFIX "F", IT INDICATES "FITLINXX" DATA CABLE AND OUTLET. ALL JACKS UNDER ONE(1) COMMON PLATE. REFER TO FLOOR PLANS FOR CABLE AND JACKS QUANTITIES. SUBSCRIPT "W" INDICATES C/W VOICE JACK FOR WALL MOUNTED TELEPHONE AT 1500mm A.F.F. SUBSCRIPT "P" INDICATES PAY TELEPHONE.
◁	DATA OUTLET – COMPUTER OR PRINTER.
◀	TELEPHONE – SUBSCRIPT "P" INDICATES PAY TELEPHONE.
	WALL MOUNTED COMBINATION MULTI–FUNCTION COMMUNICATION OUTLET.
W	WIRELESS ACCESS POINT
WIFI	WIFI

INTERCOM SYSTEM

S	CEILING MOUNTED SPEAKER.
	INTERCOM MASTER STATION
	INTERCOM STATION

PAGING AND SOUND SYSTEM

P	RECESSED CEILING MOUNTED SPEAKER.
P	COMBINATION WALL MOUNTED SPEAKER AND TALK–LISTEN PRIVACY SWITCH.
1	SPEAKER MOUNTED IN ROOM MODULAR CONTROL PANEL.
2	RECESSED WALL MOUNTED SPEAKER.
3	RECESSED CEILING MOUNTED SPEAKER COMPLETE WITH HANDSFREE MIC. AND INTERCONNECTED TO WALL MOUNTED EMERGENCY PULLCORD ALARM DEVICE.
4	SURFACE WALL MOUNTED SPEAKER.
5	SURFACE CEILING MOUNTED SPEAKER.
CS	P.A. CALL SWITCH OR HANDSET.
A	ADMINISTRATIVE CONSOLE UNIT OUTLET.
1	PUBLIC ADDRESS SPEAKER, TYPE '1' AS SPECIFIED.
V	LOCAL VOLUME CONTROLLER.
AMP	AMPLIFIER.
M	MICROPHONE OUTLET – DEVICE AND COVERPLATE BY OTHERS. PROVIDE 2–GANG FLUSH BACKBOX AND CONCEALED EMPTY CONDUIT.

FIRE ALARM SYSTEM

	MANUAL PULL STATION C/W PROTECTIVE 9VDC BATTERY OPERATED LEXAN COVER.
X	HEAT DETECTOR. COMBINATION, FIXED 57°C AND RATE OF RISE. SUBSCRIPT 'X' INDICATES 88°C FIXED TEMPERATURE.
X	HEAT DETECTOR. FIXED ONLY (57°C) SUBSCRIPT 'X' INDICATES 88°C RATING.
R	SMOKE DETECTOR. IONIZATION TYPE. SUBSCRIPT "R" INDICATES RELAY BASE.
	120V LOCAL SMOKE ALARM CEILING MOUNTED. IONIZATION TYPE.
	120V LOCAL SMOKE ALARM WITH STROBE.
	CARBON MONOXIDE.
	COMBINATION SMOKE/CARBON MONOXIDE/STROBE.
	AIR DUCT TYPE SMOKE DETECTOR.
R	AIR DUCT TYPE SMOKE DETECTOR REMOTE INDICATING LIGHT. SUBSCRIPT INDICATES FAN SYSTEM.
	FIRE ALARM HORN.
	FIRE ALARM BELL.
S	FIRE ALARM STROBE
S	VOICE COMMUNICATION SPEAKER (CEILING MOUNTED)
F	COMBINATION FIRE HORN/STROBE LIGHT.
SV	SUPERVISED VALVE – SPRINKLER. SUBSCRIPT 'P' DENOTES STANDPIPE.
FS	SPRINKLER FLOW SWITCH.
PS	SPRINKLER LOW PRESSURE SWITCH.
D	MAGNETIC DOOR HOLD OPEN DEVICE.
F	RECESSED FIRE ALARM SPEAKER (CEILING MOUNTED).
F	RECESSED FIRE ALARM SPEAKER AND STROBE (CEILING MOUNTED).
F	FIRE ALARM SPEAKER (WALL MOUNTED).
F	FIRE ALARM SPEAKER AND STROBE (WALL MOUNTED).
F	SURFACE FIRE ALARM SPEAKER (CEILING MOUNTED).
F	SURFACE FIRE ALARM SPEAKER AND STROBE (CEILING MOUNTED).
FH	FIRE ALARM HANDSET.
⊠	FIRE ALARM HANDSET.
▬ ▬ ▬ ▬	FIRE ALARM SPEAKER AND SILENCE SWITCH.
F.A.Z.1.	FIRE ALARM ZONE. NUMBER INDICATES ZONE NUMBER.

ELECTRICAL CAR CHARGING STATION

EV1	PROVIDE SINGLE GANG BOX, 21mmC CONDUIT AND 20A, 120V–1ø (5–20R) RECEPTACLE FOR 'TYPE 1' ELECTRICAL CAR CHARGE STATION. LOCATED AS SHOWN ON FLOOR PLANS.
EV2	PROVIDE TWO GANG BOX, 27mmC CONDUIT AND 50A, 208V–1ø (5–60R) RECEPTACLE FOR 'TYPE 2' ELECTRICAL CAR CHARGE STATION. LOCATED AS SHOWN ON FLOOR PLANS.
EV3	PROVIDE SINGLE GANG BOX, 21mmC CONDUIT AND BLANK COVER FOR 'TYPE 1' ELECTRICAL CAR CHARGE STATION ROUGH–IN. LOCATED AS SHOWN ON FLOOR PLANS.
EV4	PROVIDE TWO GANG BOX, 27mmC CONDUIT AND 20A, 120V–1ø (5–20R) RECEPTACLE FOR 'TYPE 1' MODIFIED TO ACCOMMODATE 'TYPE 2' ELECTRICAL CAR CHARGE STATION IN FUTURE. LOCATED AS SHOWN ON FLOOR PLANS.

SECURITY SYSTEM

ES	ELECTRIC DOOR STRIKE.
CP	SECURITY SYSTEM CONTROL PANEL
EB	REQUEST TO EXIT BUTTON
DO	AUTOMATIC DOOR OPERATOR.
ML	MAGNETIC DOOR LOCK.
PD	LOW VOLTAGE POWER SUPPLY FOR THE DOOR STRIKE.
PB	PUSH BUTTON.
DA	DOOR ACTUATOR
KP	KEY PAD.
CR	CARD READER.
IR	INFRA RED READER.
EM	EGRESS MOTION DETECTOR.
PL	POWER LOCK
AA	AUDIBLE ALARM
GB	GLASS BREAK DETECTOR
M	SECURITY SYSTEM MONITOR
S	ALARM SOUNDER
PA	PANIC ALARM
SA	SECURITY ALARM FOR MECHANICAL EQUIPMENT
	MOTION DETECTOR.
C	DOOR/WINDOW CONTACT.
	CCTV CAMERA
	CEILING MOUNTED DOME CAMERA
L	DOME LIGHT
EC	EMERGENCY CALL ASSISTANCE HORN
◆	DOOR CONTACT

MECHANICAL WIRING SYSTEMS

	MECHANICAL EQUIPMENT/MOTOR.
	DISCONNECT SWITCH (UNFUSED). SUBSCRIPT INDICATES SIZE. SUBSCRIPT 'N' INDICATES COMPLETE WITH SOLID NEUTRAL.
	DISCONNECT SWITCH (FUSED). SUBSCRIPT INDICATES FUSE RATING. SUBSCRIPT 'N' INDICATES COMPLETE WITH SOLID NEUTRAL.
$ P	MANUAL STARTER COMPLETE WITH PILOT LIGHT.
⊠	MAGNETIC STARTER.
	COMBINATION MAGNETIC STARTER.
TS	TIME SWITCH.
P	FAN STARTER WITH PILOT LIGHT AND TIMER.

TELEVISION AND A.V.

TV	TELEVISION OUTLET.
AV	AUDIO/VIDEO BACK BOX

CLOCK SYSTEM

	CLOCK, SINGLE FACE WALL MOUNTED.

MISCELLANEOUS

	ROOM MODULAR CONTROL PANEL.
NM	NURSE CALL MASTER CONTROL WITH HANDSET
N	FIRE ALARM SPEAKER AND STROBE (WALL MOUNTED).
	2" (53mm) CONDUIT SLEEVE. SHOWN ON PLAN. SEE SPEC. FOR DETAILS.
	ELECTRIC BASEBOARD HEATER
T	THERMOSTAT
•	PUSH BUTTON
⋮	OPEN–STOP–CLOSE PUSH BUTTON
	TRAFFIC LIGHT

EMERGENCY CALL ASSISTANCE

ANN	ANNUNCIATOR PANEL COMPLETE WITH DUTY STATION.
⊙	EMERGENCY CALL BUTTON.
EC	EMERGENCY CALL ASSISTANCE HORN.
L	CEILING MOUNTED DOME LIGHT.
L	WALL MOUNTED DOME LIGHT.
PL	"PUSH TO LOCK" PUSH BUTTON.
WL	"WAVE TO LOCK" BUTTON.

MISCELLANEOUS ABBREVIATIONS/SUBSCRIPTS/SYMBOLS

SUBSCRIPTS

A – MOUNTING HEIGHT FOR DEVICES ABOVE COUNTER/SINK MILLWORK TO BE 1020mm FROM TOP OF DEVICE TO A.F.F. (UNLESS NOTED OTHERWISE).
1–3 – TYPICAL NORMAL POWER CIRCUIT NUMBER EG. PANELBOARD LP–1 CIRCUIT NUMBER 3.
E1–3 – TYPICAL ESSENTIAL POWER CIRCUIT NUMBER EG. PANELBOARD LPE–1 CIRCUIT NUMBER 3.
1A–3 – TYPICAL CONTROL PANEL CIRCUIT NUMBER EG. PANELBOARD LP–1A CIRCUIT NUMBER 3.
3P+N – 3 POLE & UNSWITCHED NEUTRAL.
AFF – ABOVE FINISHED FLOOR.
B – BENCH MOUNTED.
C – CEILING SPACE MOUNTED.
D/I – WITH DISCONNECT AND VISIBLE ISOLATION.
EXP/EP – EXPLOSION PROOF.
E – EXISTING TO REMAIN
ER – EXISTING TO BE RELOCATED
F – FLOOR MOUNTED.
GF – GROUND FAULT CIRCUIT INTERUPTER.
IG – ISOLATED GROUND TYPE.
MH – MOUNTING HEIGHT.
N – EXISTING TO BE REPLACED WITH NEW
NL – NIGHT LIGHT
R – EXISTING TO BE REMOVED
RE – EXISTING RELOCATED AT THE NEW LOCATION
S – SURGE SUPRESSION TYPE DEVICE.
T – LOCKING TYPE (TWISTLOCK).
V – MOUNT IN VERTICAL FACE.
WG – WIREGUARD.
WP – WEATHERPROOF TYPE.
Z – MOUNT 42" (1065mm) A.F.F.
PTZ – PAN, TILT, ZOOM

IDENTIFICATIONS

ACB – AIR CIRCUIT BREAKER.
ARMS – ARCFLASH REDUCTION MAINTENANCE MODE
ATS – AUTOMATIC TRANSFER SWITCH.
AV – AUDIO VISUAL.
CO – CARBON MONOXIDE
CM – COFFEE MAKER.
CR – CASH REGISTER.
CS – COMMUNICATION STATION.
DP – DISTRIBUTION PANEL.
EVR – ELECTRONIC VOLTAGE REGULATOR.
FACP – FIRE ALARM CONTROL PANEL
FAAP – FIRE ALARM ANNUNCIATOR PANEL
FR – FRIDGE.
GEN – ELECTRICAL GENERATOR.
HP – HYDRO POLE
HWD – HOT WATER DISPENSER
IM – ICE MACHINE
LS – LIFE SAFETY.
MCB – MINIATURE CIRCUIT BREAKER.
MCCB – MOULDED CASE CIRCUIT BREAKER.
MSB – MAIN SWITCH BOARD (SERVICE ENTRANCE RATED).
NLS – NON LIFE SAFETY.
PC – PHOTOCOPIER.
PF – POWER FACTOR CORRECTION CAPACITOR BANKS.
PR – PRINTER.
SB – SMARTBOARD.
SP – SPLITTER.
SPD – SURGE PROTECTIVE DEVICE.
TR – LOW VOLTAGE TRANSFORMER.
TV – TELEVISION.
TVSS – TRANSIENT VOLTAGE SURGE SUPPRESSOR.
UPS – UNINTERRUPTIBLE POWER SUPPLY.
VM – VENDING MACHINE.
XFMER – UTILITY TRANSFORMER.

ABBREVIATIONS

ABV	ABOVE
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
ADJ	ADJUSTABLE
ARCH	ARCHITECTURAL
BLDG	BUILDING
BO	BY OTHERS
BOT	BOTTOM
BEL	BELOW
CLG	CEILING
CONSTR	CONSTRUCTION
CONTR	CONTRACTOR
CONT	CONTINUOUS
E	EAST
EL	ELEVATION
ELEC	ELECTRICAL
EQ	EQUAL
EXT	EXTERIOR
FL	FLOOR
FLUOR	FLUORESCENT
FT	FOOT OR FEET
GC	GENERAL CONTRACTOR
GND	GROUND
GR	GRADE
HGT	HEIGHT
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
IN	INCH
INFO	INFORMATION
INT	INTERIOR
L	LENGTH
LT	LIGHT
MFG	MANUFACTURER
N	NORTH
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFOI	OWNER FURNISHED OWNER INSTALLED
OPP	OPPOSITE
OVHD	OVERHEAD
REV	REVISION
RCP	REFLECTED CEILING PLAN
S	SOUTH
SCHED	SCHEDULE
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SPEC	SPECIFICATION
STD	NORMAL
STR	STRUCTURE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
W	WEST, WIDTH, OR WOOD
W/	WITH
W/O	WITHOUT
WP	WATERPROOF
XFMR	TRANSFORMER
"	SAME AS ABOVE
--	NOT REQUIRED / NOT APPLICABLE

LUMINAIRE ABBREVIATION

A	ACCENT / AIMABLE
B	BOLLARD / PATH / STEP
C	CHARACTER
D	DOWNLIGHT
E	EFFECT / EXISTING
F	FLOODLIGHT / SPOTLIGHT
G	INGRADE
H	HAZARDOUS / HERITAGE / HIGHBAY
I	INDIRECT
J	JUNCTION BOX
K	C(K)LEAN / GASKETED
L	LINEAR
M	MULTILAMP / MILLWORK
N	NICHE OR COVE
O	[NOT USED]
P	POLE / PARKING
Q	[NOT USED]
R	TROFFER
S	SURFACE/STRIPLIGHT
T	TRACK
U	UNDERWATER
V	VANDAL
W	WORKLIGHT / WALLPACK
X	EXIT / EMERGENCY
Y	REMOTE EMERGENCY HEAD
Z	[USED IN ZONING]

CHARACTER ABBREVIATION

B	BOLLARD OR SHORT PEDESTAL BASE
C	CLOSE CEILING
F	FAN
G	GAS FLAME FOR LUMINAIRE
L	LAMPPOST
M	MULTILAMP OR FESTOON LIGHTS
P	PENDANT
R	RECEPTACLE FOR LUMINAIRE PLUG
S	SURFACE
T	TABLE LAMP
W	WALL MOUNTED

LIGHTING LEGEND

CONTROLS

J DS	DAYLIGHT SENSOR.
J PC	PHOTOCELL (OUTDOOR DAYLIGHT SENSOR).
M	CEILING MOUNTED OCCUPANCY SENSOR.
M	WALL/CORNER MOUNTED OCCUPANCY SENSOR.
$	LINE VOLTAGE SWITCH. SUBSCRIPTS: 3 = 3-WAY, 4 = 4-WAY, D = DIMMING, P = PILOT LIGHT, M=MOTION SENSOR, T = TIME SWITCH.
$ abc	MULTIPLE SWITCHES UNDER COMMON PLATE. LETTER DESIGNATES SWITCHLEG.
S	SWITCHING TYPE WALL STATION
D	DIMMING TYPE WALL STATION
▸◂ PTN	PARTITION SENSORS

TAGS

MH:0000 LIGHTING FIXTURE MOUNTING HEIGHT TAG. DENOTES MOUNTING HEIGHT FROM FINISHED FLOOR TO UNDERSIDE OF FIXTURE. FIXTURE MOUNTING HEIGHTS TO BE DETERMINED ON SITE ARE DENOTED 'DOS'.

A 1 0
FIXTURE TYPE INDICATOR (SEE FIXTURE SCHEDULE)
VARIATION
PRODUCT
TYPE CATEGORY

OL z1.1(a)
CONTROL ZONE TAG
GROUP
SPACE
ZONE
AREA
OL - OUTDOOR LIGHTING
A - AREA 'A'

1A r1
CONTROL CIRCUIT TAG
RELAY (I.E. CONTROL CIRCUIT) NUMBER. FOR DALI SYSTEMS 'b' IS USED TO DENOTE 'BUS'.
CONTROL PANEL

LCP-1A
LIGHTING CONTROL PANELS
PANEL (A, B, C, D, E, ETC.)
FLOOR LEVEL (0=BASEMENT, 1=FIRST FLOOR, 2=SECOND FLOOR, ETC.).
LIGHTING CONTROL PANEL (LCP).

JUNCTION BOX / CONTROL DEVICE

J	SURFACE/RECESSED MOUNTED.
J	WALL MOUNTED.

SUBSCRIPT DENOTES TYPE.
REFER TO LIGHTING FIXTURE SCHEDULE.

REMOTE POWER SUPPLY

PS	NON-ESSENTIAL
PS	ESSENTIAL.

FIXTURES

SEE LIGHTING FIXTURE SCHEDULE FOR SPECIFIC PRODUCT REQUIREMENTS. LIGHTING FIXTURE CUT SHEETS HAVE ALSO BEEN PROVIDED FOR REFERENCE. SHADED SYMBOLS DENOTE LIGHT FIXTURES CONNECTED TO ESSENTIAL POWER.

ACCENT

- SURFACE MOUNTED
- WALL MOUNTED
- TRACK/STRUT/PIPE MOUNTED
- PLUG-IN SURFACE MOUNTED

DOWNLIGHT

- ROUND RECESSED MOUNTED
- ROUND SURFACE MOUNTED
- SQUARE RECESSED MOUNTED
- SQUARE SURFACE MOUNTED
- ROUND ADJUSTABLE RECESSED MOUNTED
- SQUARE ADJUSTABLE RECESSED MOUNTED

CHARACTER

- SURFACE MOUNTED
- PENDANT MOUNTED
- WALL MOUNTED
- BASE MOUNTED
- BASE MOUNTED ONE HEAD
- BASE MOUNTED TWO HEAD

EMERGENCY / GENERIC

- EMERGENCY BATTERY UNIT. SYMBOL IS GENERIC, REFER TO SPECIFICATIONS FOR TYPES.
- WALL MOUNT LUMINAIRE OR REMOTE EMERGENCY HEAD

IN-GRADE

- IN-GRADE
- IN-GRADE DIRECTIONAL

POLE / PATH

- BOLLARD
- STEPLIGHT SURFACE MOUNTED
- STEPLIGHT RECESSED MOUNTED
- POLE - SINGLE HEAD
- POLE - DOUBLE HEAD

MODULAR

- 2x2
- 2x2 VOLUMETRIC
- 2x4
- 2x4 VOLUMETRIC
- 1x4
- 1x4 VOLUMETRIC

FAN

- SURFACE MOUNTED
- PENDANT MOUNTED
- WALL MOUNTED
- CEILING MOUNTED LIGHT

NICHE

—LED—LED—LED—LED—	LED
—F/O—F/O—F/O—F/O—	FIBER OPTIC
-o-o-o-o-o-o-o-o-o-o-o-o-o-	MULTILAMP STRING

ARCHITECTURAL LINEAR / STRIP

- CEILING / UNDERCABINET
- SUSPENDED INDIRECT/DIRECT
- WALL

THEATRICAL

- LEKO
- FOLLOW SPOT
- MOVING MIRROR
- PAR
- FRESNEL
- BEAM PROJECTOR
- SCOOP
- MOVING YOKE SPOT
- MOVING YOKE WASH

SPECIALTY

	SURFACE MOUNTED
	WALL MOUNTED
	TRACK/STRUT/PIPE MOUNTED
	PLUG-IN SURFACE MOUNTED
	MOVING PENDANT MOUNTED
	UNDERWATER NICHE
	UNDERWATER SURFACE MOUNTED
FO	FIBER OPTIC GENERAL MOUNTED
	FIBER OPTIC ENDPOINT

EXIT SIGNS

ARROWS INDICATE DIRECTION

- CEILING MOUNT, SINGLE FACE
- CEILING MOUNT, DOUBLE FACE
- WALL MOUNT, SINGLE FACE
- WALL MOUNT, DOUBLE FACE
- END WALL MOUNT, DOUBLE FACE

GENERAL NOTES

1. ALL INFORMATION PROVIDED ON THIS SHEET MAY NOT BE IMPLEMENTED INTO THE PROJECT.
2. REFER TO FIXTURE SPECIFICATIONS FOR COMPLETE FIXTURE INFORMATION.
3. REFER TO FIXTURE MOUNTING DETAIL SHEETS FOR SPECIFIC MOUNTING CONDITIONS.
4. CONTRACTOR TO PROVIDE POWER SUPPLIES AND/OR DRIVERS FOR ALL FIXTURES SPECIFIED WITH REMOTE CONTROL GEAR. ALL REMOTE MOUNTED CONTROL GEAR SHALL BE MOUNTED OUT OF VIEW OF GUESTS.
5. CONTRACTOR TO CONFIRM ALL REMOTE CONTROL GEAR LOCATIONS WITH LANDSCAPE OR FACILITY ARCHITECT.
6. CONTRACTOR TO VERIFY EXACT MOUNTING LOCATION OF ALL ACCENT LIGHTS IN FIELD WITH LIGHTING DESIGNER.
7. UNLESS OTHERWISE INDICATED, ALL MOUNTING BOXES FOR LIGHTING FIXTURES MOUNTED TO FACADES TO BE RECESSED INTO STRUCTURE. COORDINATE JBOX LOCATION WITH OTHER TRADES.
8. INFORM CONSTRUCTION MANAGER IN WRITING IN A TIMELY WAY OF ANY DISCREPANCIES DISCOVERED.
9. CONTRACTOR TO VERIFY CONDITIONS ON WHICH THIS WORK DEPENDS IN OTHER ISSUED CONSTRUCTION DRAWINGS AND ON SITE SUCH AS BUT NOT LIMITED TO:
   - DIMENSIONS
   - LEVELS
   - MATERIALS
   - DETAILS
   - AVAILABILITY OF REQUIRED UTILITIES

DRAWING LIST

DWG No.	DRAWING TITLE
E–001	ELECTRICAL & LIGHTING LEGEND AND DRAWING LIST
E–002	ELECTRICAL SITE PLAN
E–003	ELECTRICAL SITE DETAILS
E–004	PHOTOMETRIC LIGHTING SITE PLAN

Montgomery Sisam Architects Inc.
197 Spadina Avenue, Toronto, Ontario M5T 2C8 montgomerysisam.com
Tel 416.364.8079 Fax 416.364.7723

MontgomerySisam

exp Services Inc.
t: +1.905.525.6069 f: +1.905.528.7310
1266 South Service Road, Unit C1-1
Stoney Creek, ON L8E 5R9
CANADA

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#	date:	revision:	by:
1	FEB. 17/23	ISSUED FOR SITE PLAN APPLICATION	CB

revisions

C. J. BREDIN
100219748
2023/02/17

All drawing and specifications are the property of the architect. The contractor shall verify all dimensions and information on site and report any discrepancy to architect before proceeding.

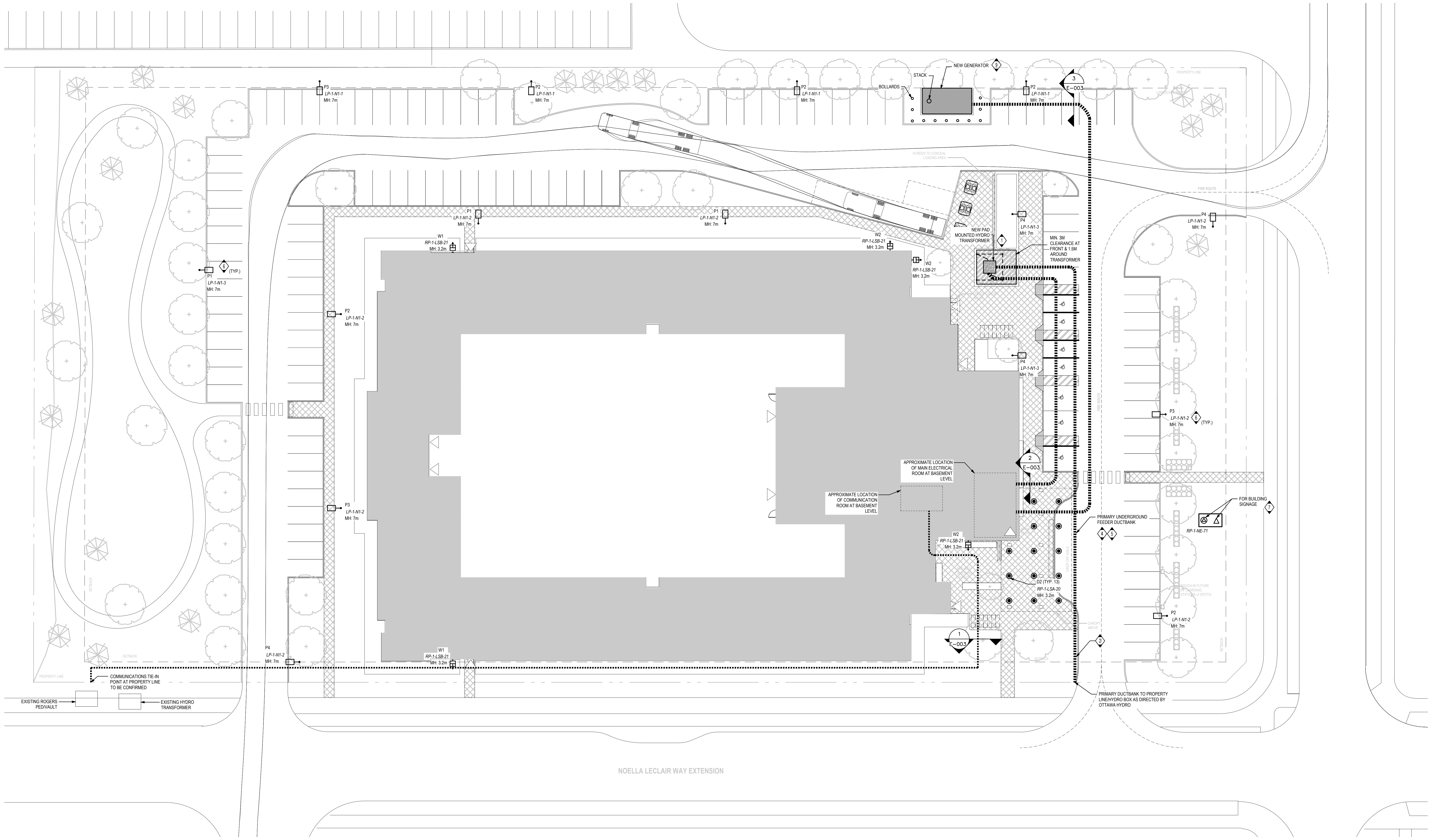
EC ORLEANS

Enter address here

ELECTRICAL & LIGHTING
LEGEND AND DRAWING
LIST

scale: As Noted
drawn by: ABS
reviewed by: CB
job number: All-22018422-A0
plot date:

drawing number:
E-001



1
E-002

ELECTRICAL SITE PLAN

1:250

GENERAL NOTES

A. CONTRACTOR SHALL BE GENERALLY RESPONSIBLE FOR SUPPLY AND INSTALLATION OF THE FOLLOWING, INCLUDING BUT NOT LIMITED TO:

- CONCRETE-ENCASED PRIMARY DUCTBANK FROM PAD-MOUNTED SERVICE TRANSFORMER TO PROPERTY LINE/EXISTING HYDRO BOX (HIGH VOLTAGE CABLES TO BE PROVIDED BY OTTAWA HYDRO AS PART OF UTILITIES),
- PRIMARY DUCTBANK MANHOLE,
- TRANSFORMER VAULT INCLUDING GROUNDING GRID, PROTECTIVE BOLLARDS, ETC., (TRANSFORMER TO BE PROVIDED BY OTTAWA HYDRO, PRIMARY AND SECONDARY TERMINATIONS BY OTTAWA HYDRO),
- CONCRETE-ENCASED SECONDARY DUCTBANK AND SERVICE CONDUCTORS FROM PAD-MOUNTED SERVICE TRANSFORMER INTO BUILDING.

DRAWING NOTES

1 PROVIDE 3 PHASE TRANSFORMER FOUNDATION AS PER OTTAWA HYDRO STANDARD. CONFIRM FOUNDATION SPECIFICATION WITH OTTAWA HYDRO UTILITIES PRIOR TO PURCHASE/INSTALLATION. PROVIDE TRANSFORMER GROUND GRID USING 2/0 BARE STRANDED COPPER & 4-10FT x 3/4" STEEL GALVANIZED GROUND RODS AS PER OTTAWA HYDRO STANDARD. ENSURE 2 GROUNDING TAILS ARE LEFT IN THE FOUNDATION WITH SUFFICIENT LENGTH OF 2/0 BARE COPPER WIRE FOR FROST LOOP & THE CONNECTION TO THE GROUNDING BAR ON OTTAWA HYDRO UTILITIES INSTALLED TRANSFORMER. REFER TO DETAILS ON E-003 FOR PROTECTIVE BOLLARDS, GROUNDING REQUIREMENTS.

2 REFER TO OTTAWA HYDRO STANDARD FOR CONCRETE ENCASED DUCT BANK & 12-403 FOR DIRECT BURRIED CONCRETE ENCASEMENT OF DUCTS TO BE STOPPED 3' FROM TRANSFORMER FOUNDATION. COORDINATE INSTALLATION OF PRIMARY DUCTS & FOUNDATION WITH OTTAWA HYDRO UTILITIES AND GIVE MINIMUM 5 BUSINESS DAYS FOR INSPECTION PRIOR TO BACKFILLING.

3 CONTRACTOR SHALL PROVIDE SECONDARY CABLES FROM THE TRANSFORMER TO THE MSB. PROVIDE SUFFICIENT LENGTH OF WIRE IN THE TRANSFORMER BASE FOR A PROPER FROST LOOP AND INSTALL TO THE SECONDARY SPADES.

4 PRIMARY CABLES SUPPLIED & INSTALLED BY OTTAWA HYDRO UTILITIES. REFER TO OTC IN SPECIFICATION 26 24 01.01 APPENDIX FOR SCOPE DELINEATION.

5 CONTRACTOR SHALL PROVIDE THE ENTIRE PRIMARY & SECONDARY DUCT BANKS IN CONCRETE ENCASEMENT UP TO THE PROPERTY LINE. REFER TO DETAIL IN DRAWING E-003.

6 POLE MOUNTED LIGHTING WITH PHOTOCELLS. REFER TO EXTERIOR LIGHTING CONTROL WIRING DIAGRAM ON E-003 FOR DETAILS.

7 PROVIDE 15A,120V, DIRECT CONNECTION VIA CONTROL CIRCUIT INDICATED FOR PERMANENT BUILDING SIGNAGE. ALSO INCLUDE FOR 1" EMPTY PVC CONDUIT BACK TO COMMUNICATIONS ROOM FOR FUTURE DATA CABLING. (TYPICAL 1 LOCATION).

8 USE DIRECT BURIED "CABLE IN CONDUIT" INSTALLATION FOR THE INSTALLATION OF POWER AND CONTROL WIRING FOR OUTDOOR SIGNAGES. REFER TO DETAIL 4 ON DRAWING E1.02.

9 APPROXIMATE LOCATION OF NEW GENERATOR. REFER TO SPECIFICATIONS. PROTECTIVE BOLLARDS FOR GENERATOR WILL BE PROVIDED UNDER ARCHITECTURAL SCOPE. REFER TO ARCHITECTURAL DRAWINGS AND COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. ENSURE MIN. 1M AWAY FROM TANKS, SPACED NO MORE THAN 1350MM APART AND ENSURE CORNER COVERAGE.

10 LIGHTING CONDUIT IN RACEWAY (PVC CONDUIT) TO BE 600MM DEPTH (NO CONCRETE); CROSS OTHER SERVICES PERPENDICULAR AND MAINTAIN 300MM CLEARANCE. ARBITRARY GROUPING SHOWN FOR POLE FIXTURES; PRESUME EACH FEED FROM THE BUILDING CAN HANDLE LOAD AND VOLTAGE DROP BUT WILL NEED TO BE CHECKED/ADJUSTED AS REQUIRED.

11 ONE CIRCUIT FOR EACH RECEPTACLE, AND GROUP OF BOLLARDS TO CLOSEST PANEL. TRENCH DETAIL FOR COURTYARD BELOW, 450MM DEPTH.

Montgomery Sisam Architects Inc.

197 Spadina Avenue, Toronto, Ontario M5T 2C8 montgomerysisam.com
Tel 416.364.8079 Fax 416.364.7723

MontgomerySisam

exp Services Inc.

t: +1.905.525.6069 f: +1.905.528.7310
1266 South Service Road, Unit C1-1
Stoney Creek, ON L8E 5R9
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100219748
2023/02/17

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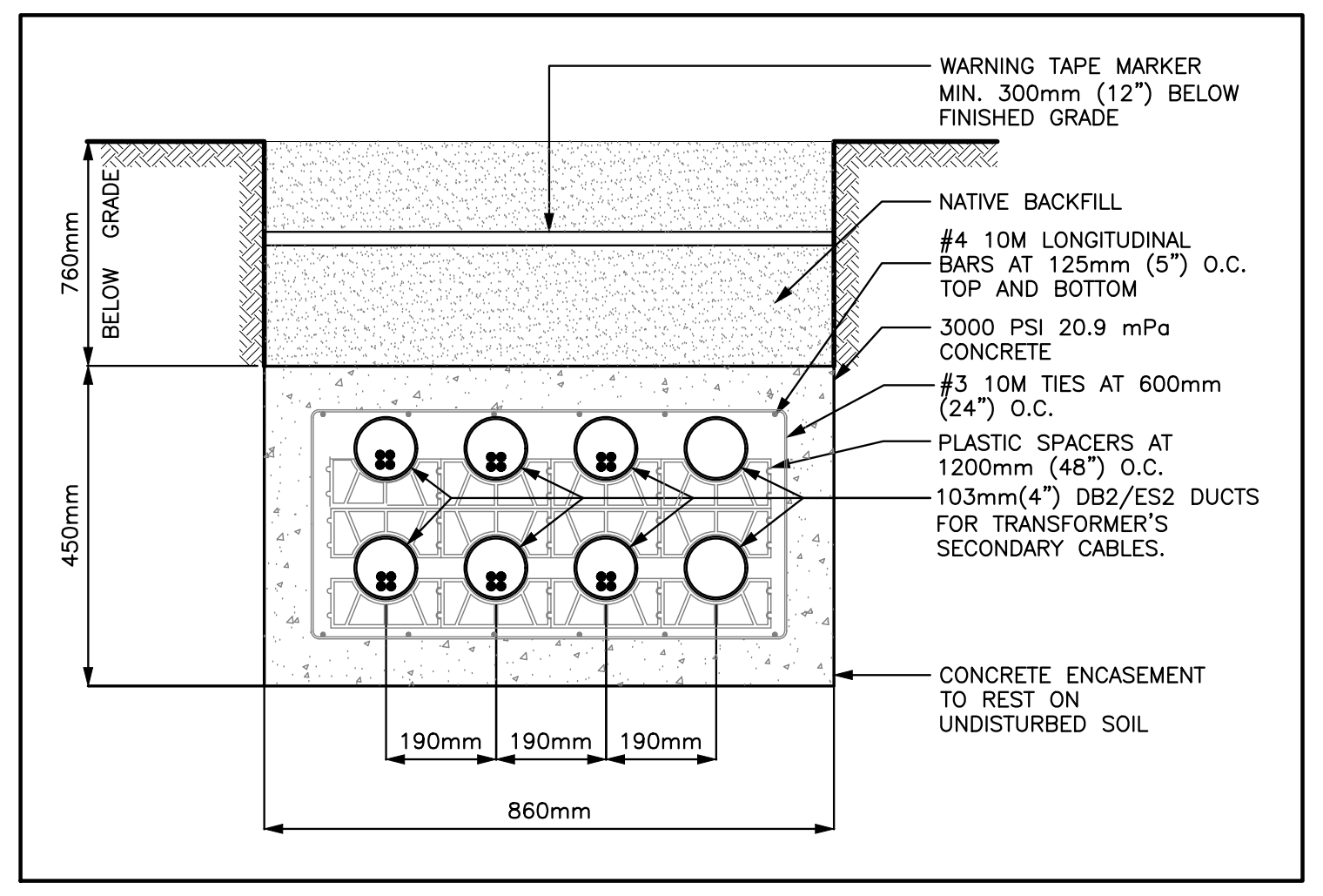
ELECTRICAL & LIGHTING
LEGEND AND DRAWING
LIST

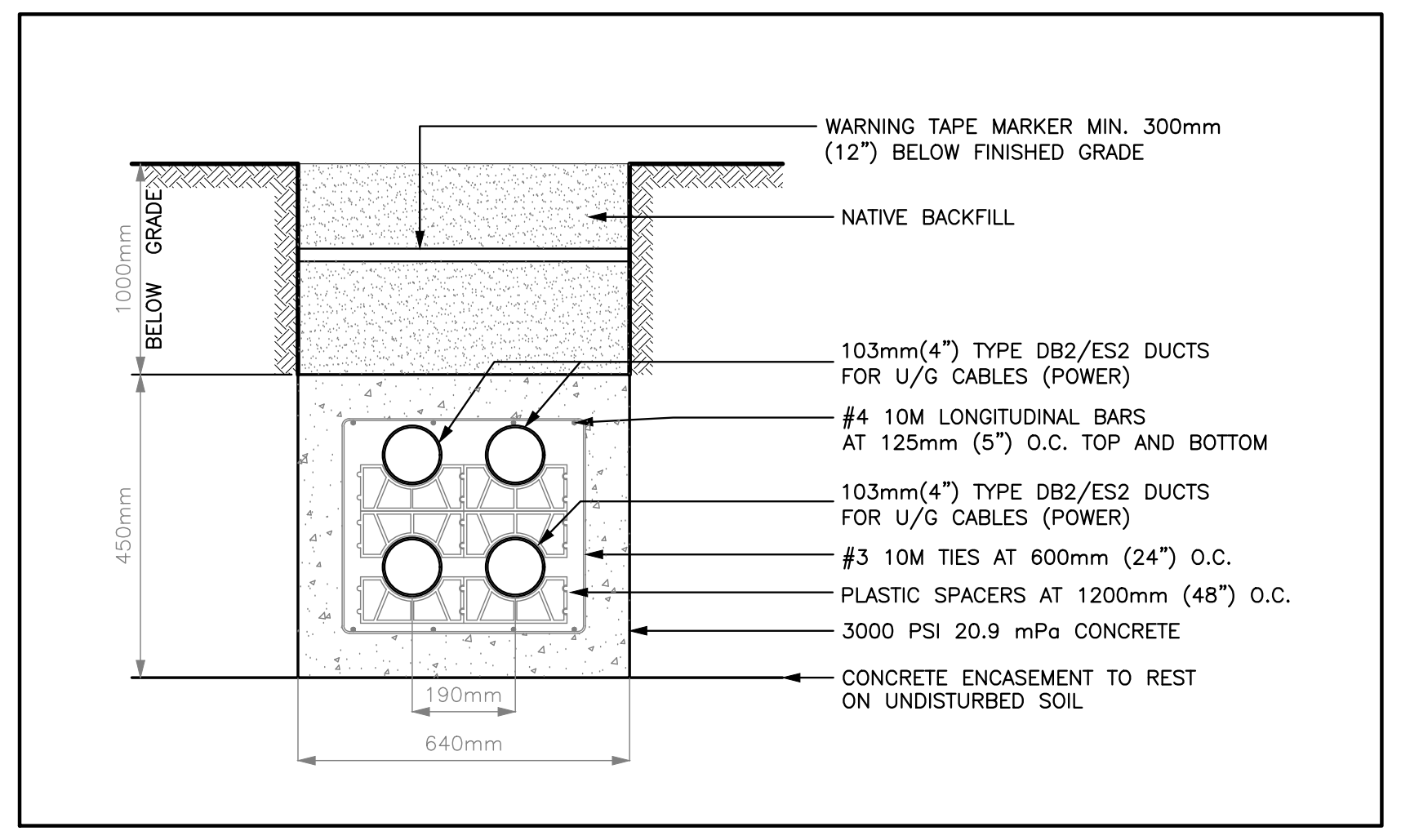
scale: As Noted
drawn by: ABS
reviewed by: CB
job number: AII-22018422-A0
plot date:

drawing number:

E-001



2 SECONDARY POWER DUCT BANK
E-003 N.T.S.



11 PRIMARY POWER DUCT BANK
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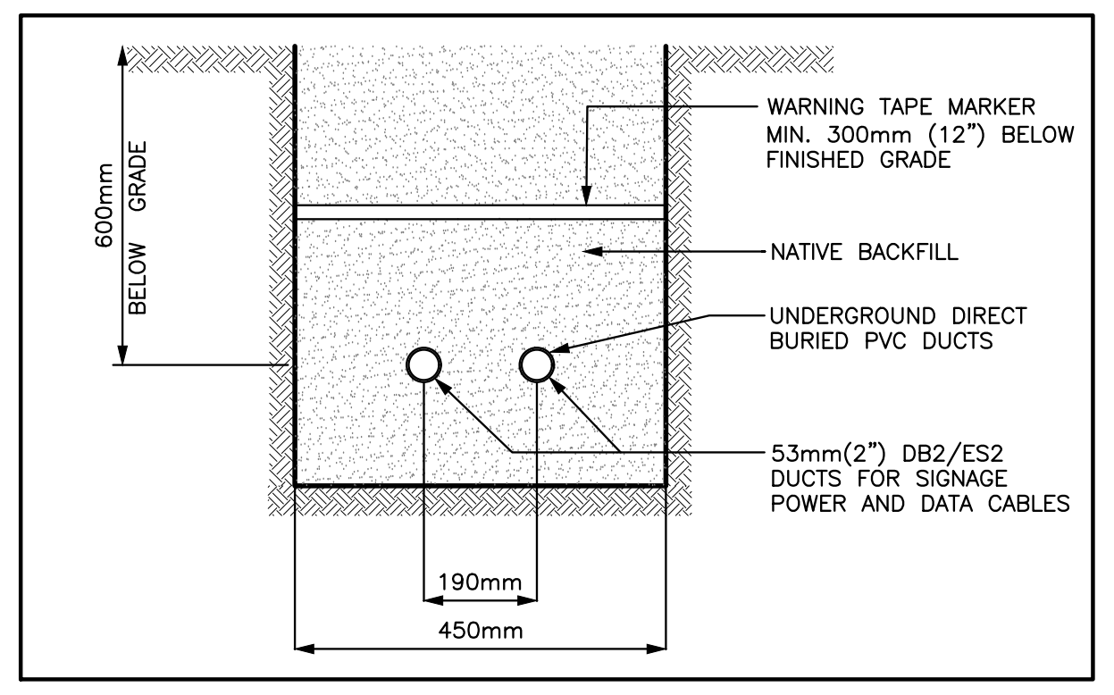
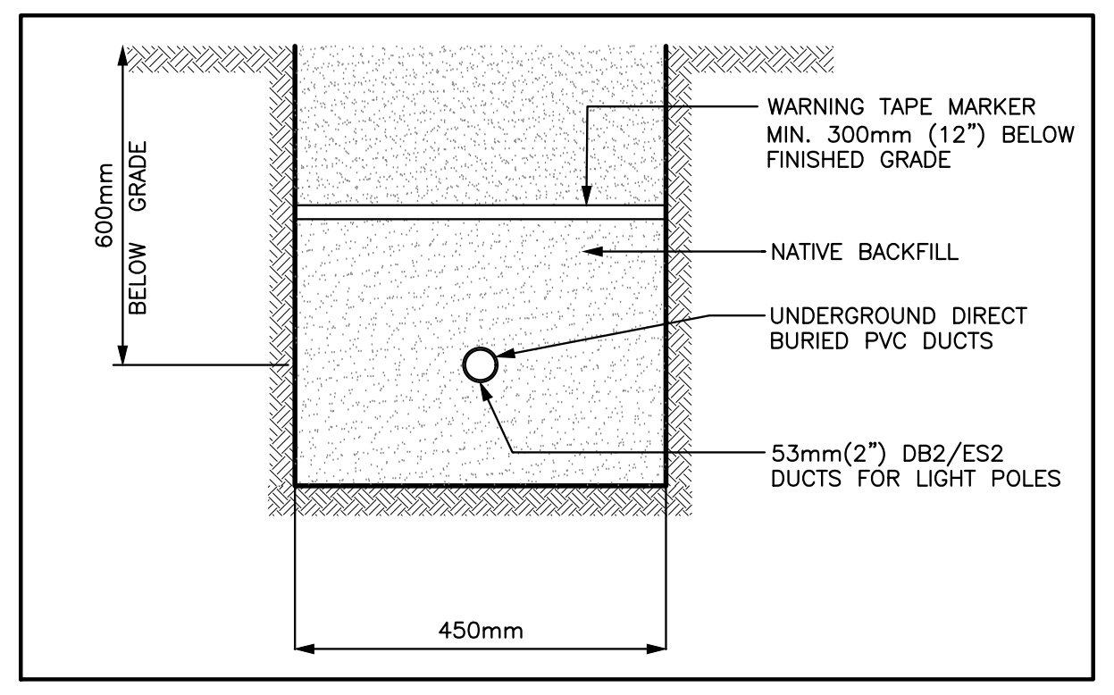
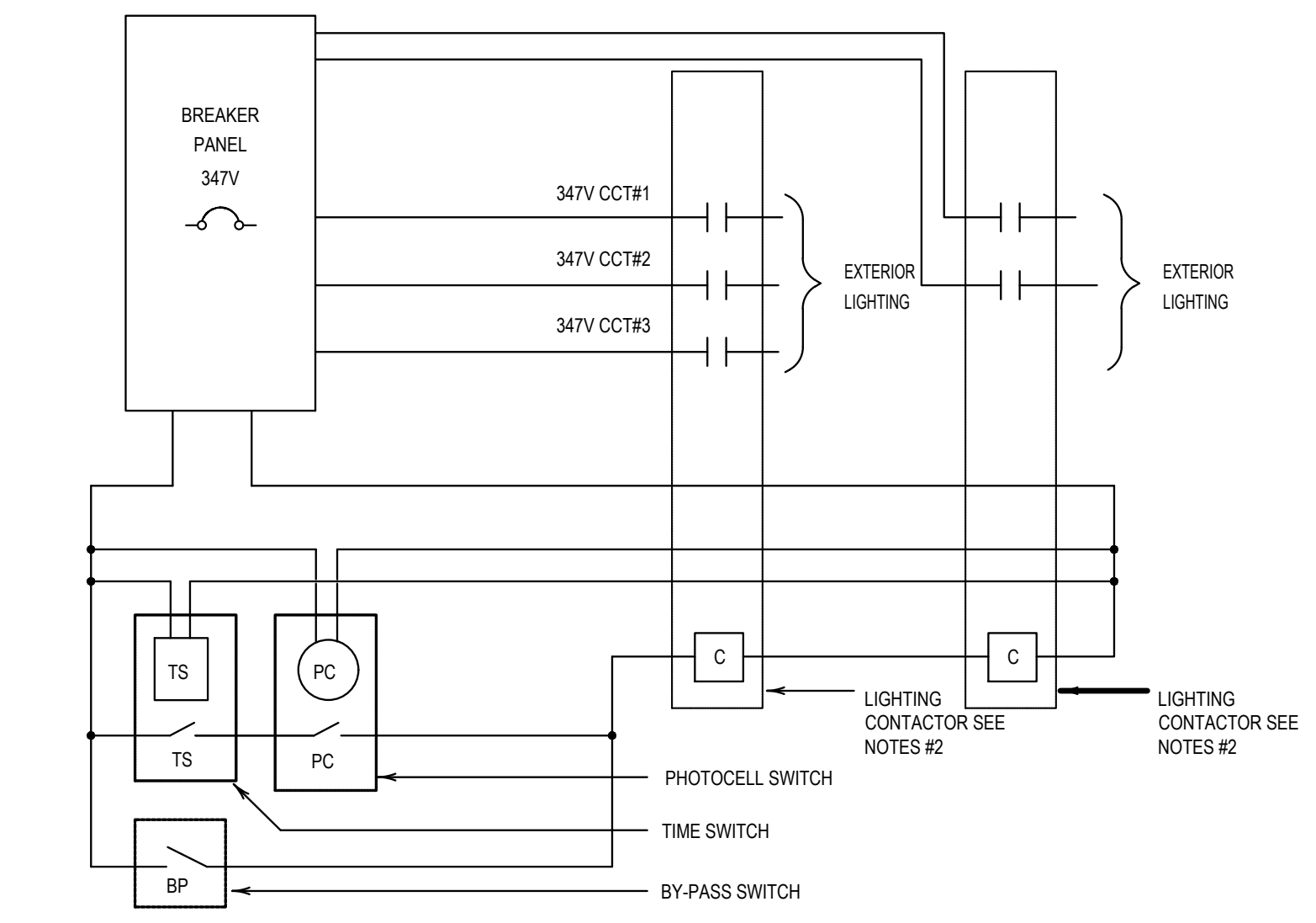


4 UNDERGROUND DUCKBANK DETAIL
E-003 N.T.S.



10 UNDERGROUND DUCKBANK DETAIL
E-003 N.T.S.

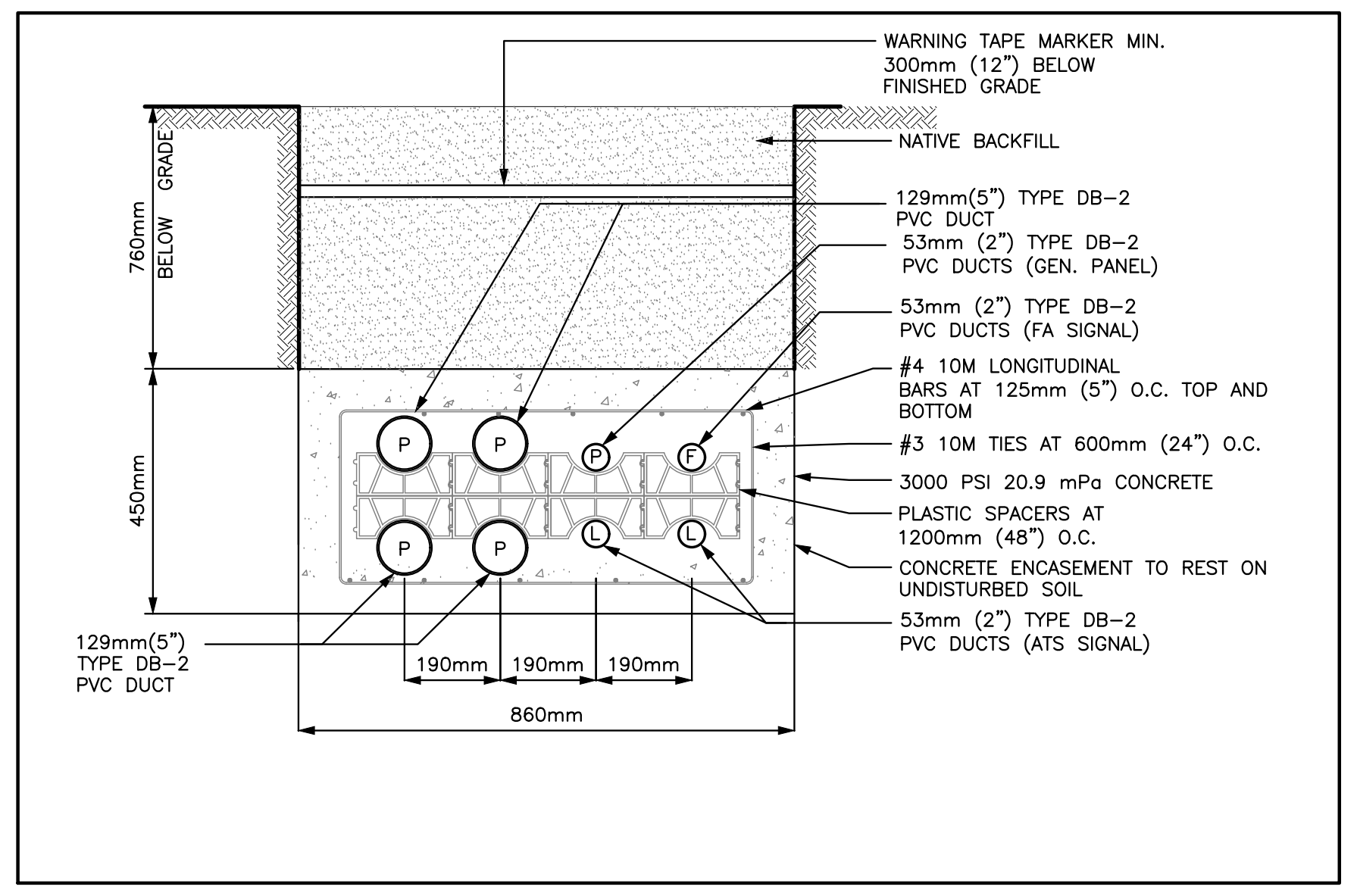
NOTE: IN COURTYARDS (NON-DRIVING AREA) 450MM DEPTH



NOTES

1. INSTALL LIGHTING CONTACTOR, AND BY-PASS SWITCH ADJACENT TO THE BREAKER PANEL. WIRE NEW TIMER AND NEW PHOTOCELL TO CONTACTOR & SET TIMER TO TURN ON LIGHT AS DIRECTED BY OWNER.
2. LIGHTING CONTACTOR SHALL BE MECHANICAL HELD TYPE, 20A MULTI-POLE LIGHTING CONTACT WITH 347VAC COIL AND TYPE 1 ENCLOSURE.

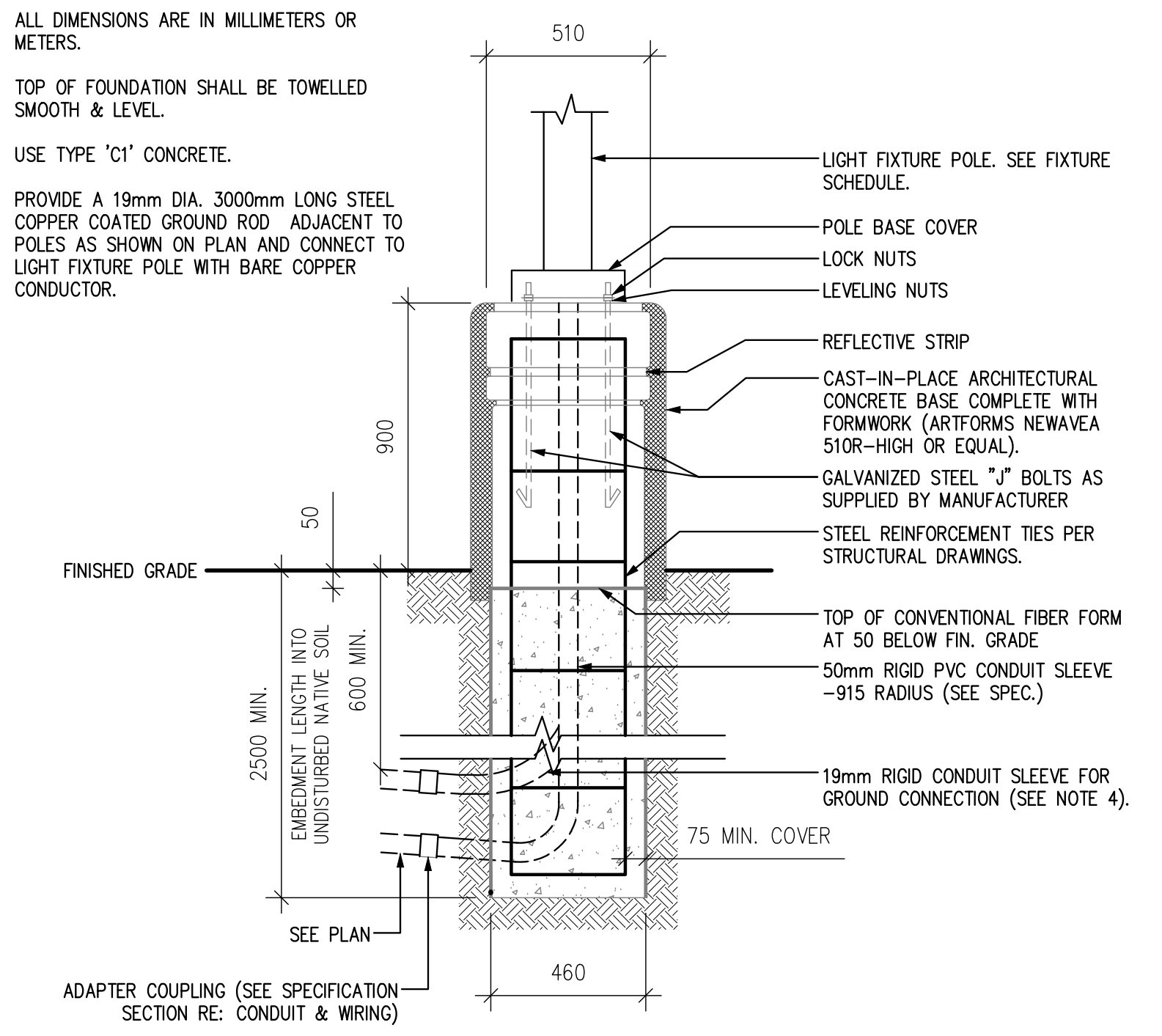
12 EXTERIOR LIGHTING CONTROL WIRING DIAGRAM
E-003 N.T.S.



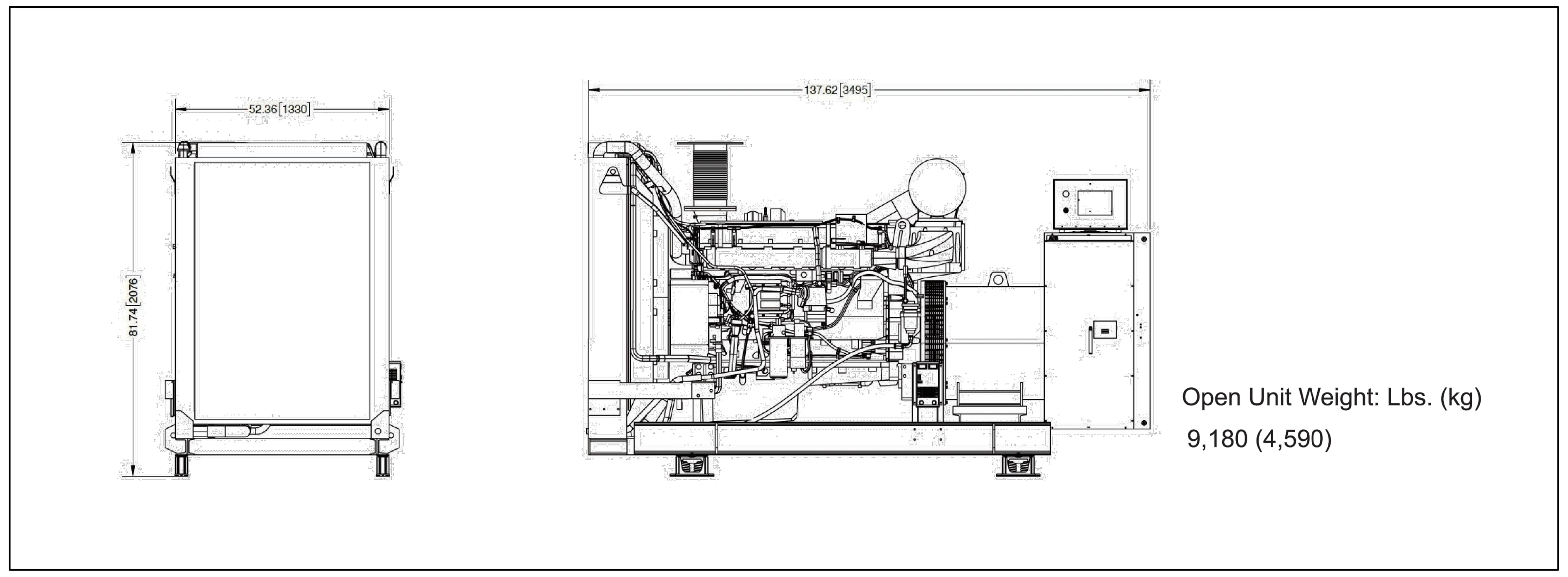
3 GENERATOR POWER DUCT BANK
E-003 N.T.S.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS OR METERS.
2. TOP OF FOUNDATION SHALL BE TOWELLED SMOOTH & LEVEL.
3. USE TYPE 'C1' CONCRETE.
4. PROVIDE A 19mm DIA. 3000mm LONG STEEL COPPER COATED GROUND ROD ADJACENT TO POLES AS SHOWN ON PLAN AND CONNECT TO LIGHT FIXTURE POLE WITH BARE COPPER CONDUCTOR.

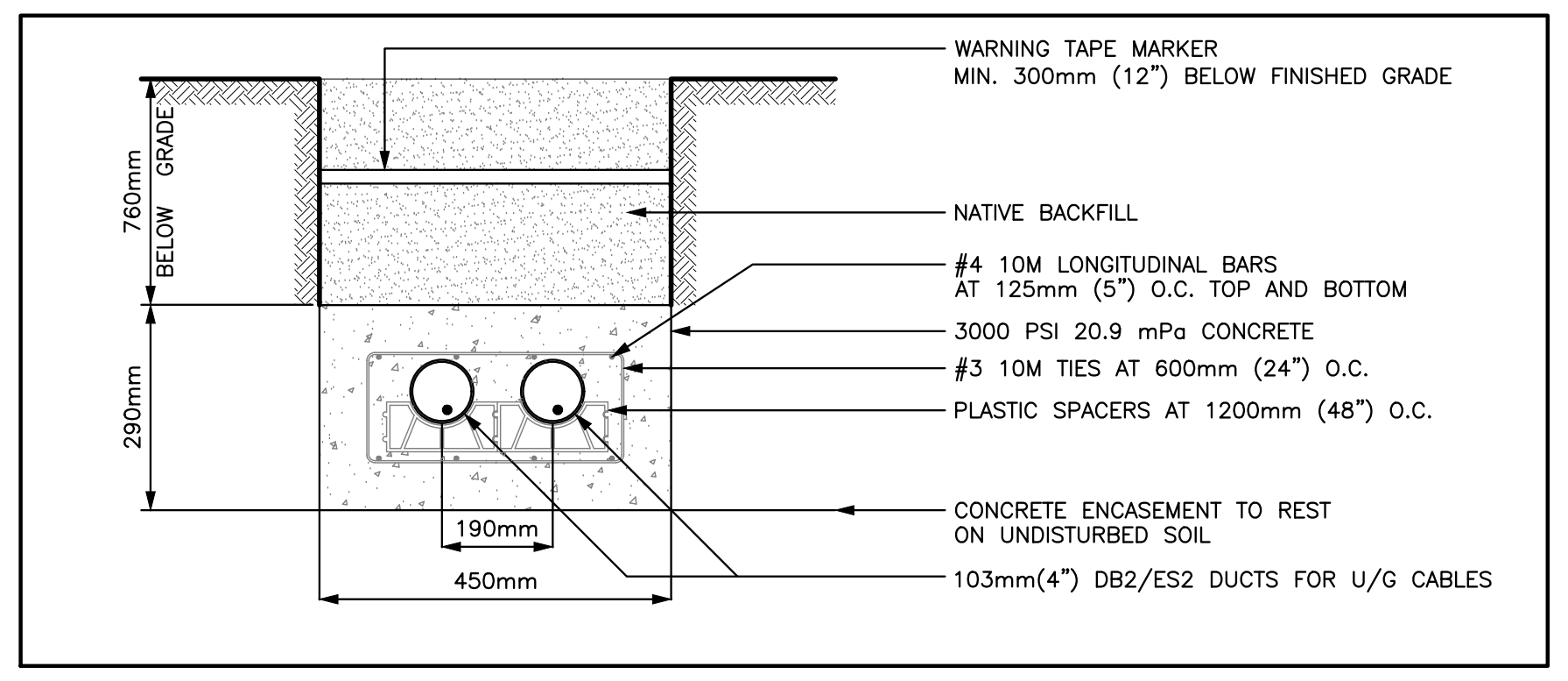


POLE BASE DETAIL
N.T.S.

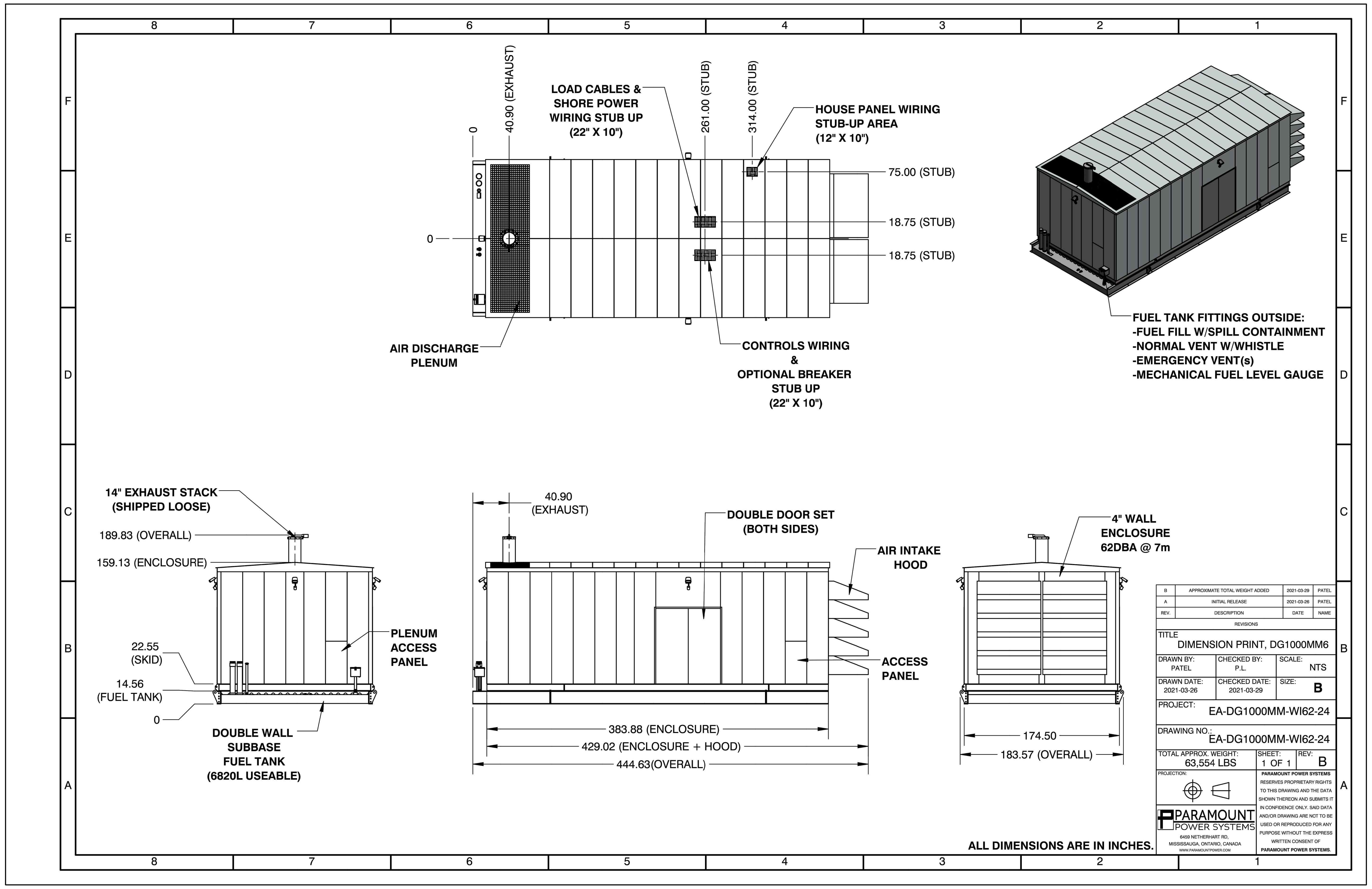


Open Unit Weight: Lbs. (kg)
9,180 (4,590)

7 OUTDOOR DIESEL GENERATOR SET
E-003 N.T.S.



1 SITE COMMUNICATIONS DUCT BANK
E-003 N.T.S.



REV.	DESCRIPTION	DATE	NAME
B	APPROXIMATE TOTAL WEIGHT ADDED	2021-03-29	PATEL
A	INITIAL RELEASE	2021-03-26	PATEL

REVISIONS

TITLE DIMENSION PRINT, DG1000MM6		
DRAWN BY: PATEL	CHECKED BY: P.L.	SCALE: NTS
DRAWN DATE: 2021-03-26	CHECKED DATE: 2021-03-29	SIZE: B
PROJECT: EA-DG1000MM-WI62-24		
DRAWING NO.: EA-DG1000MM-WI62-24		
TOTAL APPROX. WEIGHT: 63,554 LBS	SHEET: 1 OF 1	REV: B

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6459 NETHERHART RD,
MISSISSAUGA, ONTARIO, CANADA
WWW.PARAMOUNTPOWER.COM

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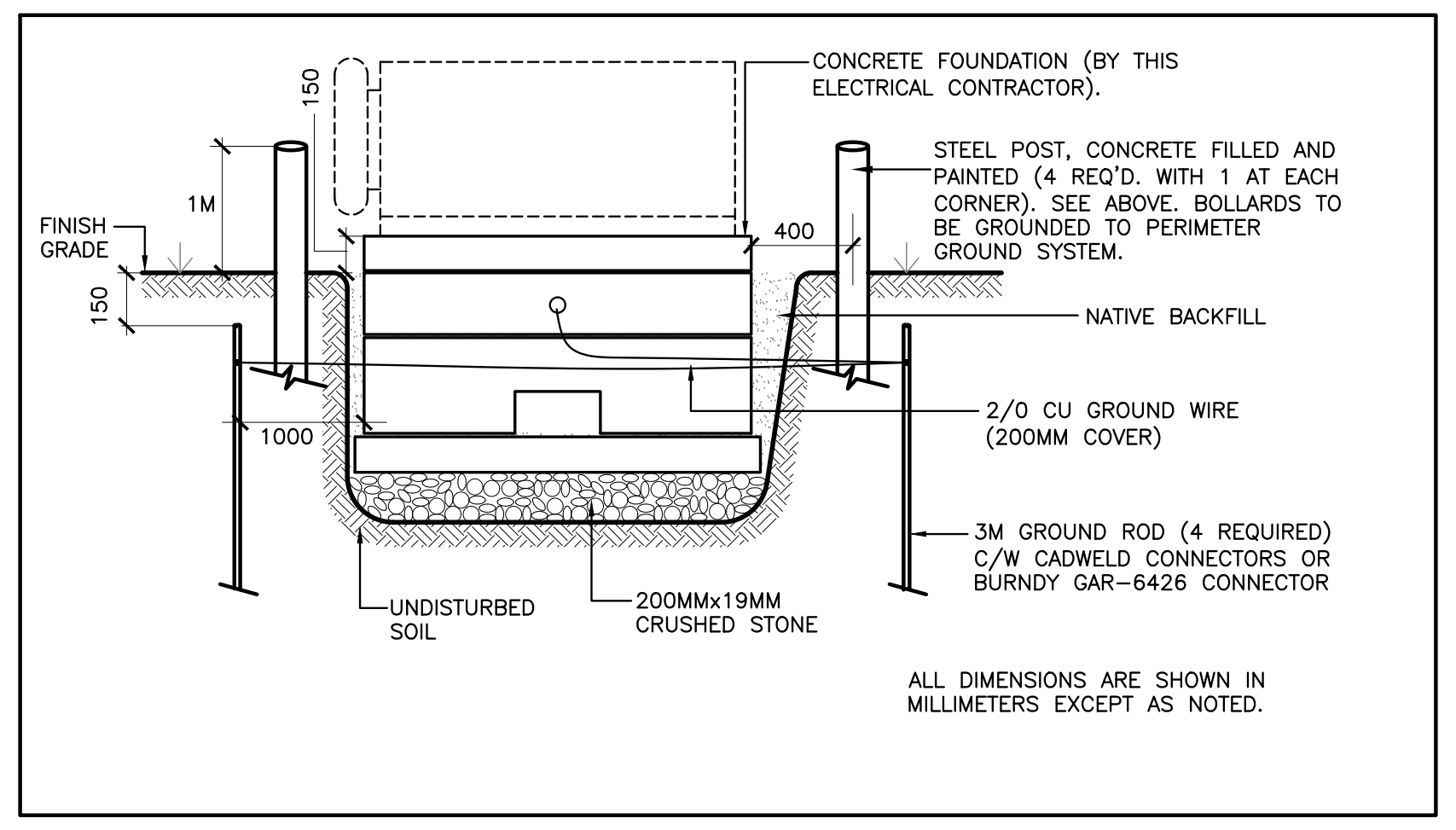
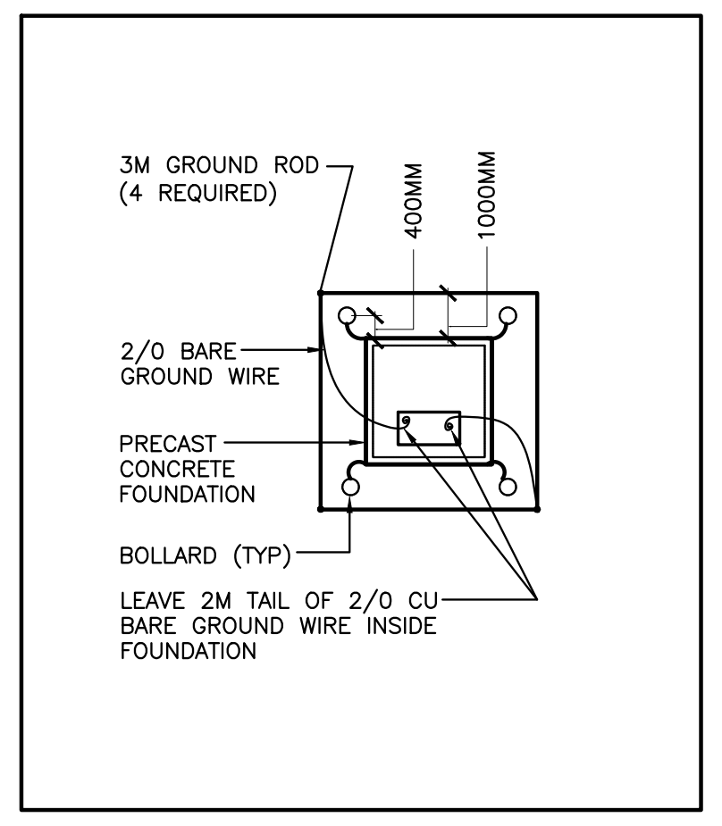
8 GENERATOR WALK-IN ENCLOSURE
E-003 N.T.S.



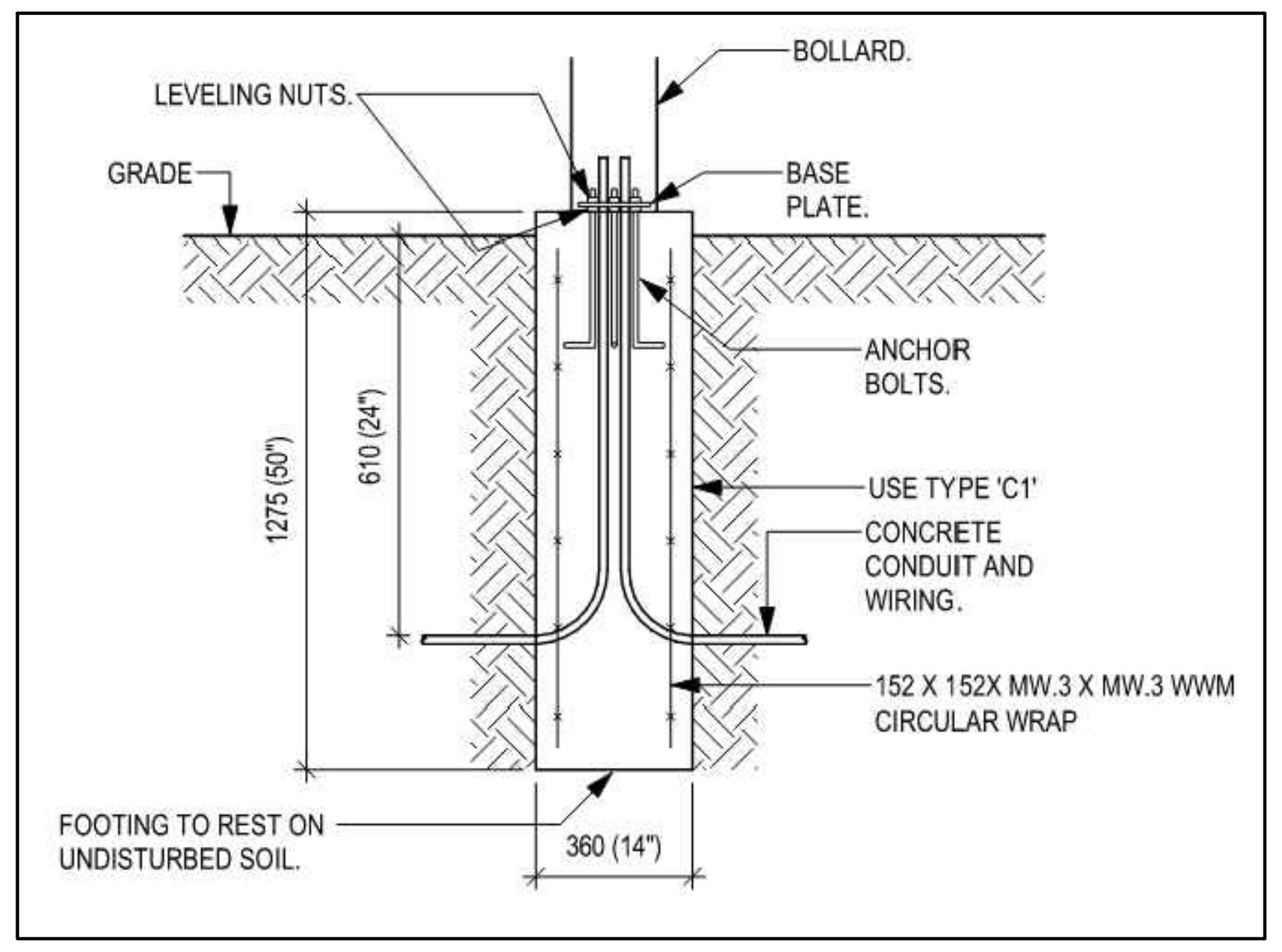
ALL DIMENSIONS ARE SHOWN IN MILLIMETERS EXCEPT AS NOTED.

5 3Ø PAD MOUNTED TRANSFORMER FOUNDATION
E-003 N.T.S.

TRANSFORMER PAD AND SUBSTRUCTURE TO BE CONSTRUCTED TO CONFORM TO HYDRO STANDARDS.



6 GROUNDING DETAIL
E-003 N.T.S.



9 TYPICAL BOLLARD BASE DETAIL
E-003 N.T.S.

NOTE: FOR BOLLARD LIGHTING TYPE B1 ONLY; SEE ARCHITECTUAL PLANS FOR PROTECTIVE BOLLARD DETAILS.

Montgomery Sisam Architects Inc.
197 Spadina Avenue, Toronto, Ontario M5T 2C8 montgomerysisam.com
Tel 416.364.8079 Fax 416.364.7723

MontgomerySisam

exp Services Inc.
t: +1.905.525.6069 f: +1.905.528.7310
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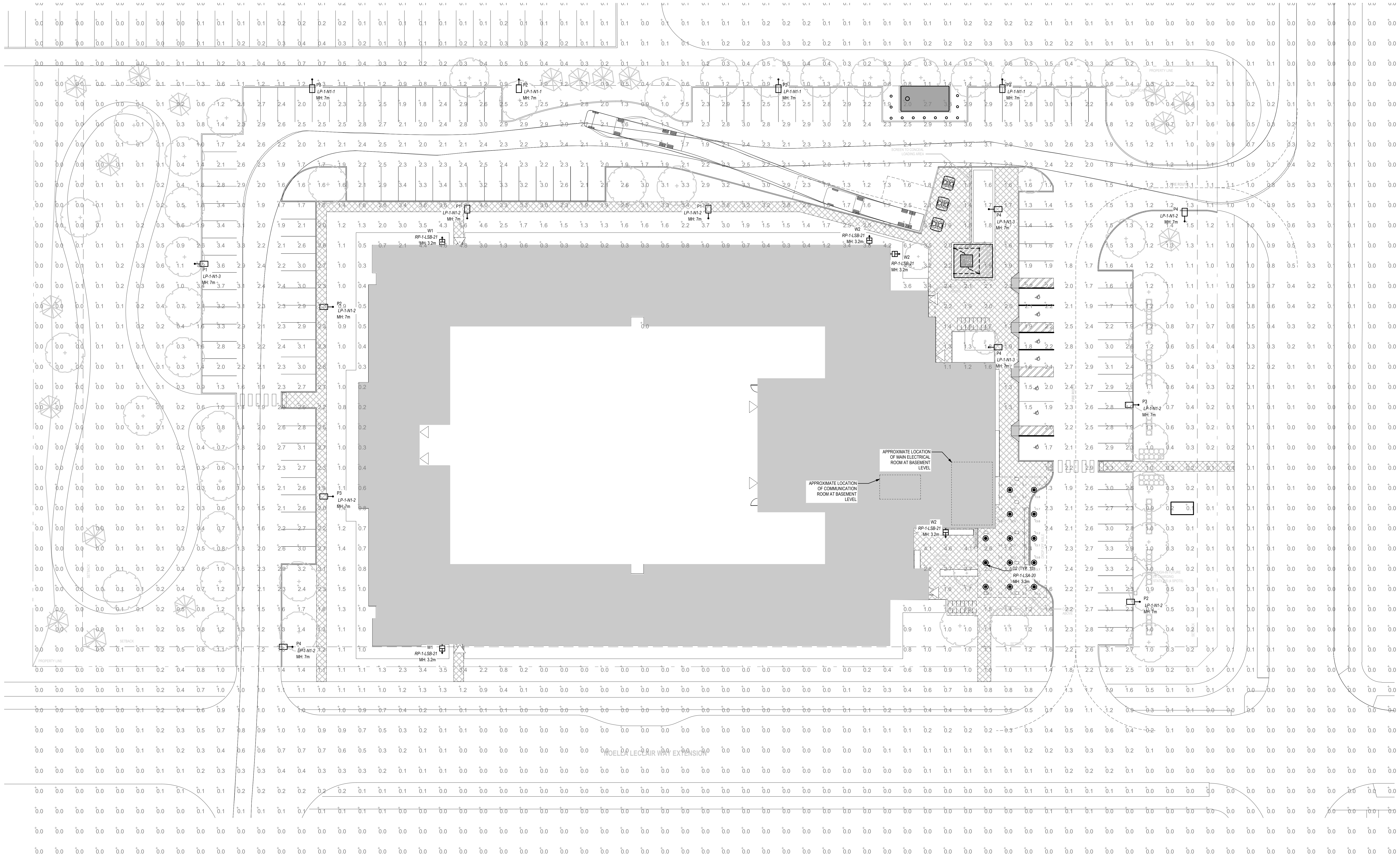

1 E-004 PHOTOMETRIC LIGHTING SITE PLAN

1:250

Luminaire Schedule								
Qty	**Label**	**Arrangement**	**Description**	**LLF**	**Luminaire Lumens**	**Luminaire Watts**	**Arrangement Watts**	**Total Watts**
13	D1	Single	LFR-4RD-M-15L40K8MD-DM1_LFR-4RD-T-S	0.850	1497	11.8	11.8	129.8
2	W1	Single	RWL1-48L-25-4K7-3	0.850	3731	28	28	56
3	W2	Single	RWL1-48L-25-4K7-4W	0.850	3679	28	28	84
3	P1	Single	VP-1-160L-100-4K7-2	0.850	13963	97.2	97.2	291.6
5	P2	Single	VP-1-160L-100-4K7-3	0.850	14109	97.2	97.2	486
3	P3	Single	VP-1-160L-100-4K7-4W	0.850	13847	97.2	97.2	291.6
4	P4	Single	VP-1-160L-100-4K7-5QW	0.850	14178	97.2	97.2	486

Calculation Summary								
Label	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**	**PtSpcLr**	**PtSpcTb**
All CalcPts Extending Out To Zero Foot-Candles	Fc	0.74	6.1	0.0	N.A.	N.A.	10	10
Main Canopy	Fc	9.85	17.3	4.9	2.01	3.53	6	6
StatArea - Parking Areas	Fc	2.28	4.0	1.0	2.28	4.00		

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