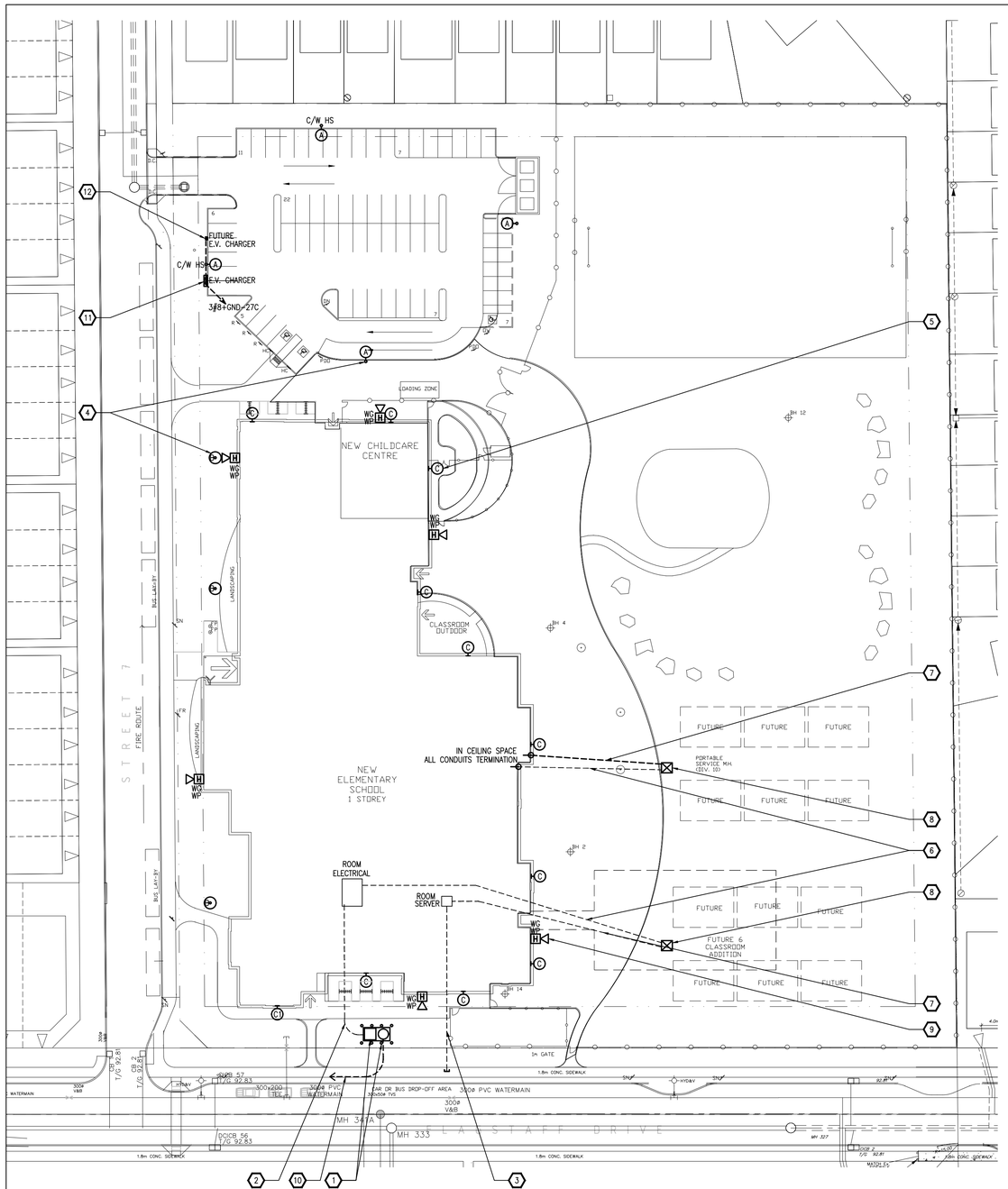


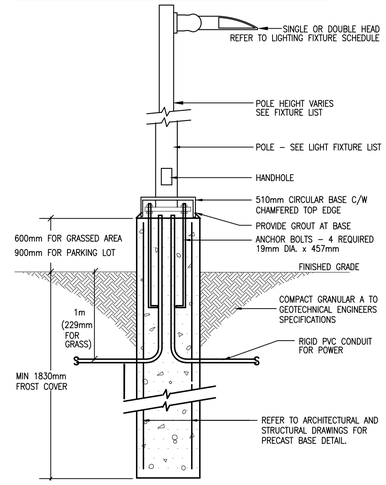
1 E002 ELECTRICAL SITE PLAN
1:500

DRAWING NOTES

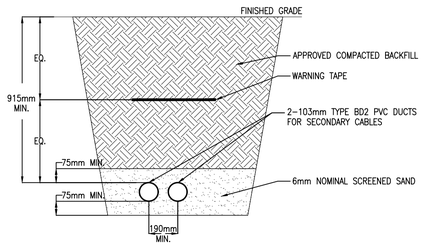
1. PROPOSED LOCATION FOR 500KVA PADMOUNT TRANSFORMER SUPPLIED BY HYDRO OTTAWA. SECONDARY: 347/600V, 3ø, 4W. GENERAL CONTRACTOR TO PROVIDE PAD C/W MANHOLE, CONCRETE BASE AND PAD. PROVIDE GROUNDING C/W BOLLARDS AS PER HYDRO OTTAWA STANDARD. TRANSFORMER SHALL BE MIN. 2M AWAY FROM THE CURB. CONTACT AND COORDINATE HYDRO OTTAWA PROJECT MANAGER AND HYDRO OTTAWA CIVIL INSPECTOR AT START OF THE CIVIL WORK.
2. DIRECT BURIED SECONDARY FEEDERS IN PVC DUCTS. REFER TO RISER DIAGRAM DRAWING E003 AND DETAIL 3/E002. SECONDARY FEEDERS REQUIRE COMPRESSION TYPE CONNECTORS AT THE PADMOUNT TRANSFORMER.
3. 2-100MM DIRECT BURIED PVC DUCT FOR TELEPHONE SERVICE FROM EXISTING BELL/ROGERS PEDESTAL AND 1-100MM DIRECT BURIED PVC DUCT FOR FIBRE OPTIC SERVICE FROM NEW ROGERS (ATRIA NETWORK) PEDESTAL TO BACKBOARD IN GROUND FLOOR TELECOM ROOM. SEE DETAIL 4/E002. COORDINATE WORK WITH SERVICE PROVIDER.
4. TYPICAL
EXTERIOR LIGHT STANDARDS. SEE DETAIL 2/E002 AND LIGHT FIXTURE SCHEDULE. PROVIDE RELAY AND CONTROL BY BAS.
5. TYPICAL :
BUILDING WALL MOUNTED EXTERIOR FULL CUT-OFF LIGHT FIXTURE. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT. PROVIDE RELAY AND CONTROL BY BAS.
6. RUN DIRECT BURIED 3-100MM PVC CONDUITS, CAPPED AND C/W PULL CORDS FOR POWER FROM MAIN ELECTRICAL ROOM TO SERVICE MANHOLE C/W COVER FOR FUTURE PORTABLES AS SHOWN. SEE DETAIL 5/E002.
7. RUN DIRECT BURIED 2-100MM PVC CONDUITS C/W PULL CORDS AND TERMINATE IN MANHOLE C/W COVER, FOR SECURITY, DATA, PA/INTERCOM AND FIRE ALARM FROM SERVICE ROOM TO SERVICE MANHOLE FOR FUTURE PORTABLES. SEE DETAIL 6/E002.
8. PORTABLE SERVICE MANHOLES EQUAL TO USI E1B+E3 COMBO C/W COVER BY GENERAL TRADES. ONE FOR POWER AND ONE FOR DATA/SECURITY/FIRE ALARM. ELECTRICAL CONTRACTOR TO COORDINATE ALL CONDUIT KNOCK OUTS.
9. TYPICAL
OUTDOOR P.A. HORN C/W WIREGUARD. PROVIDE 21MM CONDUIT TO ACCESSIBLE CEILING SPACE. WIRING BY P.A. SYSTEM CONTRACTOR.
10. PROVIDE 3 CELL PRIMARY CONCRETE ENCASED DUCTBANK C/W PULL ROPE TO HYDRO OTTAWA STANDARDS. ALLOW FOR 12 METERS LENGTH. COORDINATE EXACT RUN WITH HYDRO OTTAWA.
11. PROVIDE TWO ELECTRIC VEHICLE CHARGING STATION AS CORE+ C/W WEATHERPROOF NEMA 4 ENCLOSURE C/W AND PEDESTAL. PROVIDE 30A-2P BREAKERS C/W 3#8+GND-27MM C/W UNDERGROUND PVC CONDUIT AND CONNECT TO 120/208V PANEL. CCT # AS INDICATED. REFER TO ARCHITECTURAL DRAWINGS FOR BASE DETAIL. PROVIDE SIGNAGE ON PEDESTAL "EV CHARGING STATION".
12. PROVIDE 30A-2P BREAKER C/W 3#8+GND-27MM C/W UNDERGROUND PVC CONDUIT FROM 120/208V PANEL AND TERMINATE IN WEATHERPROOF JUNCTION BOX FOR FUTURE VEHICLE CHARGING STATION.

GENERAL NOTES:

1. COORDINATE BURIED SERVICES WITH ALL OTHER SERVICES (WATER, SEWER, GAS, HYDRO, TELEPHONE, CABLE, ETC.) REFER TO RELATED SITE SERVICES DRAWINGS.
2. COORDINATE WITH UTILITY AND TELEPHONE/CATV SERVICES FOR LOCATION AND FINAL CONDUIT REQUIREMENTS.
3. COORDINATE LOCATION OF LIGHTING FIXTURES WITH LANDSCAPE PLANS.
4. EXCAVATION, BACKFILL AND CONCRETE, REINFORCING ASSOCIATED WITH ELECTRICAL WORK TO BE BY GENERAL CONTRACTOR.
5. USE PVC FOR UNDERGROUND ONLY. CHANGE TO EMT INSIDE BUILDING.
6. PROVIDE PVC/EMT TRANSITION ADAPTORS AT EXTERIOR TO INTERIOR CONDUITS.



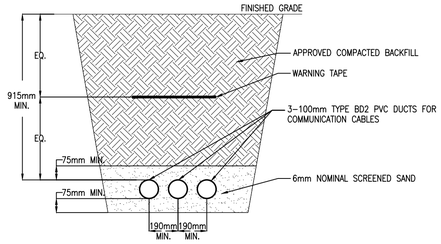
2 E002 TYPICAL BASE DETAIL FOR EXTERIOR LIGHT STANDARD
N.T.S.



NOTES:

1. TRENCH AND DUCTS TO BE INSPECTED PRIOR TO SAND FILL BEING PLACED.
2. MAKE PROVISIONS FOR WORKING IN SANDY TERRAIN.
3. DUCT JOINTS TO BE GLUED USING AN APPROVED PVC SOLVENT, WHEN APPLICABLE.
4. ALL DUCTS MUST BE CLEANED AND RODDED, AND A NYLON ROPE TO BE LEFT IN EACH DUCT.

3 E002 SECONDARY DUCT
N.T.S.



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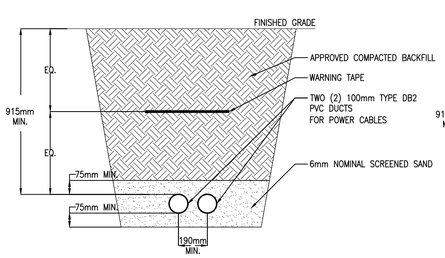
4 E002 COMMUNICATION DUCT
N.T.S.



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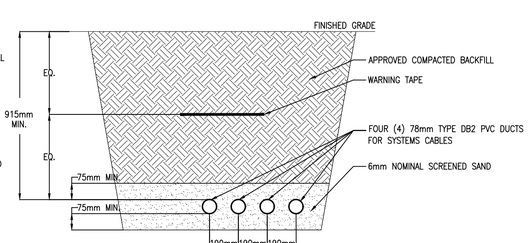
5. ALL DUCTS SHALL BE TERMINATED IN MANHOLE, USI-E22 C/W COVER. EACH DUCT.

5 E002 DIRECT BURRIED SEVICES TO FUTURE PORTABLES
N.T.S.



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6 E002 DIRECT BURRIED SEVICES TO FUTURE PORTABLES
N.T.S.

EXTERIOR LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	CATALOG NUMBER	LAMPS PER FIXTURE QTY	TYPE	WATTS	COLOUR	VOLT	MOUNTING	REMARKS
A	EXTERIOR	LITHONIA #	–	LED	150	4000	120	POLE	(25') 5" ROUND POLE C/W SNOW GUARD, TWO FIXTURES C/W HOUSE SHIELD
	25' POLE LIGHT	RSX2 LED P3 40K R4 MVOLT							C/W BUILT-IN SENSOR TO REDUCE LIGHTING TO 50% IF UNOCCUPIED FOR MORE THAN 30 MINUTES.
B	EXTERIOR	LITHONIA #	–	LED	38	4000	120	POLE	(13') 5" ROUND POLE C/W SNOW GUARD AND ACCESSORIES
	SINGLE POST TOP SPIDER MOUNT LIGHT	RADPT LED P2 40K MVOLT PATH R90							C/W BUILT-IN SENSOR TO REDUCE LIGHTING TO 50% IF UNOCCUPIED FOR MORE THAN 30 MINUTES.
C	EXTERIOR	LITHONIA #	–	LED	73.2	4000	120	WALL	MOUNTED AT 3800mm A.F.F. REFER TO ARCHITECT ELEVATION DRAWINGS
	LED WALL PACK	DSXW1 LED 20C 1000 40K T4M MVOLT							C/W BUILT-IN SENSOR TO REDUCE LIGHTING TO 50% IF UNOCCUPIED FOR MORE THAN 30 MINUTES.
C1	EXTERIOR	LITHONIA #	–	LED	38.8	4000	120	RECESSED	MOUNTED AT 3800mm A.F.F. REFER TO ARCHITECT ELEVATION DRAWINGS
	LED WALL PACK	DSXW1 LED 10C 1000 40K T2M MVOLT							C/W BUILT-IN SENSOR TO REDUCE LIGHTING TO 50% IF UNOCCUPIED FOR MORE THAN 30 MINUTES.
D	CANOPY LIGHT	LITHONIA #	–	LED	25.15	4000	120	RECESSED	
	6" DOWN LIGHT	LBR6-ALO2-SWW1-AR-LSS-MWD-80CR1							C/W BUILT-IN SENSOR TO REDUCE LIGHTING TO 50% IF UNOCCUPIED FOR MORE THAN 30 MINUTES.

OTTAWA CATHOLIC SCHOOL BOARD
Client

DATE	REVISION	REF
2021-11-23	ISSUED FOR SITE PLAN CONTROL	–

Goodkey Weedmark
Consulting Engineers
GOODKEY WEEDMARK & ASSOCIATES LIMITED
1688 Woodward Dr. 613 727-5111 Voice
Ottawa Ontario 613 727-5115 Fax
Canada K2C 3R8 www.gwal.com Web

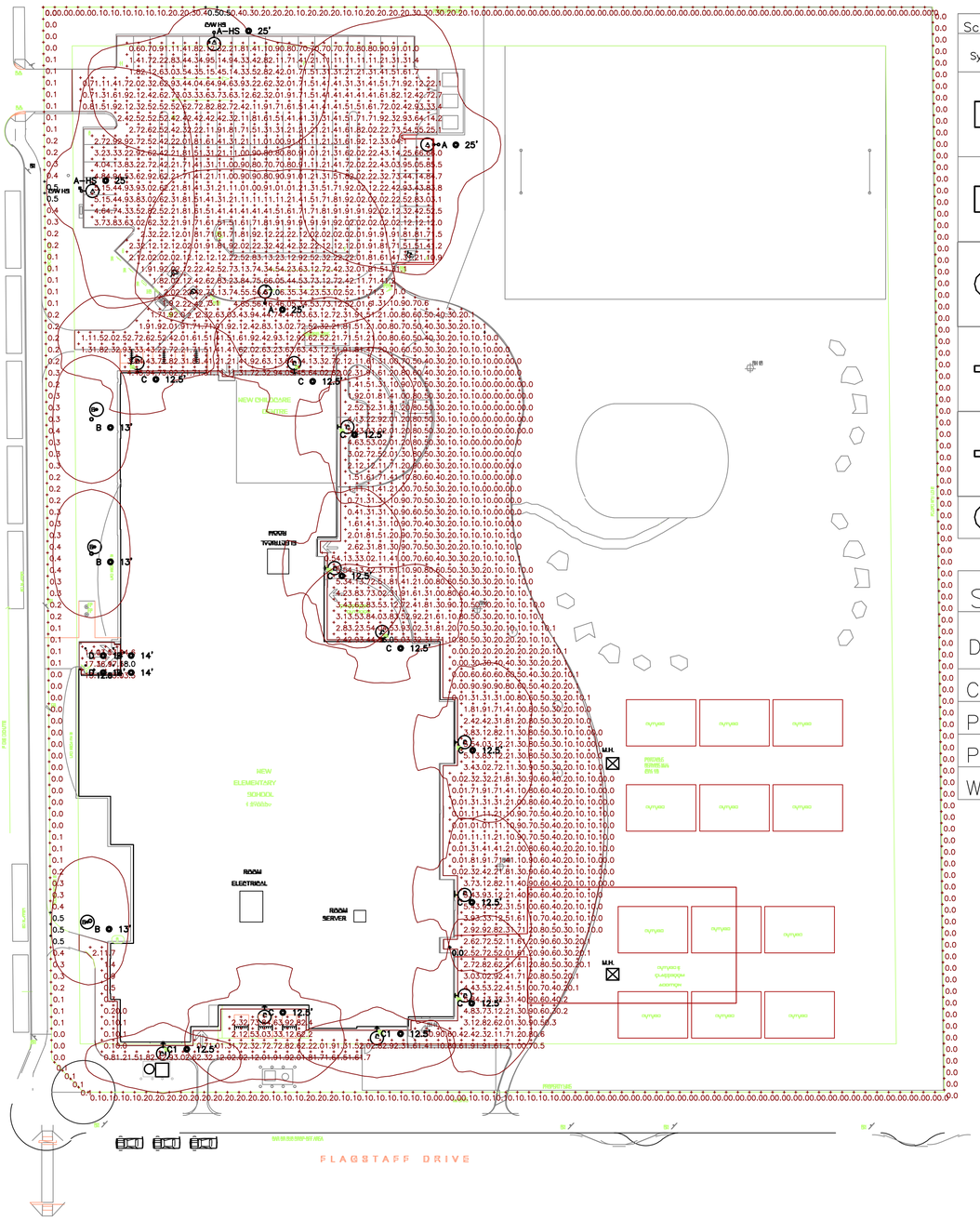
Project north
Nord du projet

Seal/Sceau
LICENSED PROFESSIONAL ENGINEER
D.B. VYAS
100133120
NOV 23, 2021
PROVINCE OF ONTARIO

Project/Projet
OCSB BARRHAVEN #1 ELEMENTARY SCHOOL

Drawing title/Titre du dessin
ELECTRICAL SITE PLAN

Scale / Échelle	AS NOTED	Project no./No. du projet	2021-123-1
Design by / Conçu par	J. GUAN	Drawing/Dessin	E002
Drawn by / Dessiné par	J. GUAN		
Reviewed by / Examiné par	D. VYAS		OF 12
Date	November 21	Revision no:	0
Date		Acad file/Fichier:	Z:\2021-123-1\ELEC



1 E002.1 SITE LIGHTING CALCULATION
NTS

Schedule

Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Lumens Per Lamp	Light Loss Factor	Wattage
	A		2	Lithonia Lighting	RSX2 LED P3 40K R4	RSX Area Fixture Size 2 P3 Lumen Package 4000K CCT Type R4 Distribution	22020	0.9	149.98
	A–HS		2	Lithonia Lighting	RSX2 LED P3 40K R4 HS	RSX Area Fixture Size 2 P3 Lumen Package 4000K CCT Type R4 Distribution with HS Shield	16334	0.9	149.9762
	B		3	Lithonia Lighting	RADPT P2 40K PATH R4	RADEAN Post–Top with P2 4000K Pathway distribution with right rotated optics	4146	0.9	38.0107
	C		9	Lithonia Lighting	DSXW1 LED 20C 1000 40K T4M MVOLT	DSXW1 LED WITH (2) 10 LED LIGHT ENGINES, TYPE T4M OPTIC, 4000K, @ 1000mA.	7420	0.9	73.2
	C1		2	Lithonia Lighting	DSXW1 LED 10C 1000 40K T2M MVOLT	DSXW1 LED WITH (1) 10 LED LIGHT ENGINES, TYPE T2M OPTIC, 4000K, @ 1000mA.	3771	0.9	38.8
	D		4	Lithonia Lighting	LBR6 ALO2 (2000LM) SWW1 (4000K) AR LSS MWD 80CRI	6IN LBR Retrofit 2000LM 4000K Clear Series –Specular Medium Wide 80CRI	2541	0.9	25.15

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Canopy	+	14.8 fc	18.0 fc	12.8 fc	1.4:1	1.2:1
Parking Lot	+	2.3 fc	7.0 fc	0.6 fc	11.7:1	3.8:1
Property Line	+	0.1 fc	0.5 fc	0.0 fc	N/A	N/A
Walkways Around Building	+	1.2 fc	6.0 fc	0.0 fc	N/A	N/A

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Design by / Conçu par	J. GUAN	Drawing/Dessin	E002.1
Drawn by / Dessiné par	J. GUAN		OF 12
Reviewed by / Examiné par	D. VYAS		
Date / Date	November 21	Revision no: 0	Acad file/Fichier: Z:\2021–123–1\ELEC