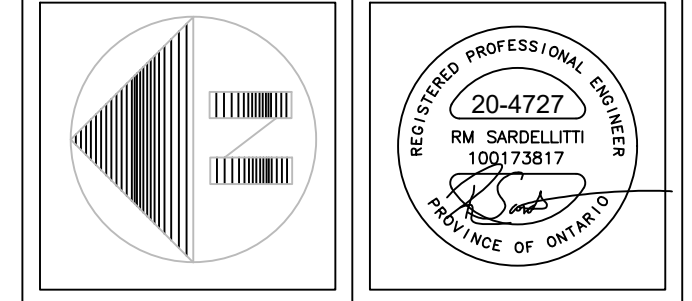


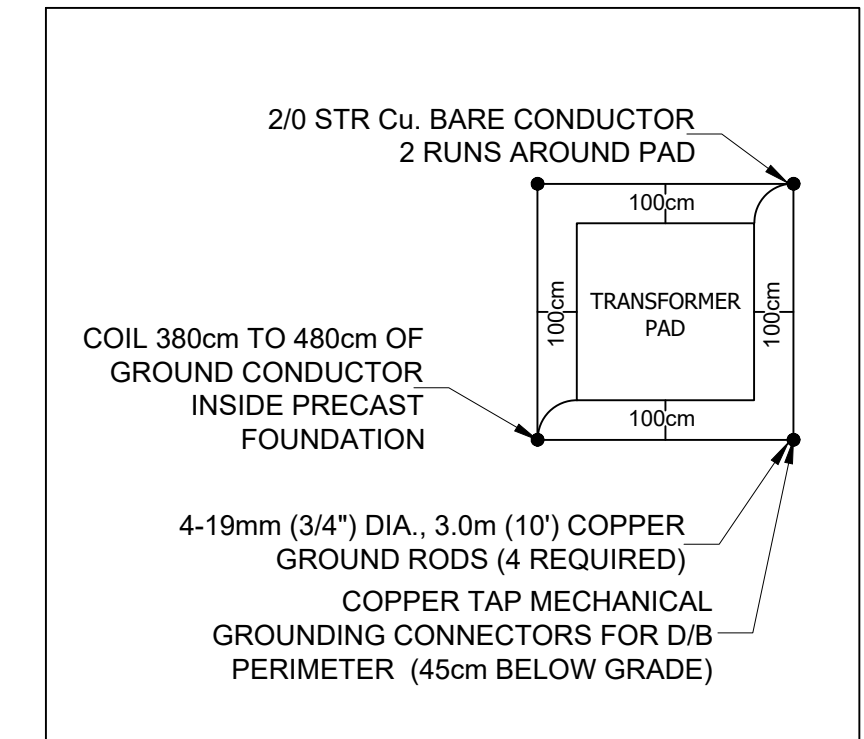
10	FOR TENDER EA#7	07/26/22
9	FOR TENDER EA#6	06/27/22
8	FOR TENDER EA#5	06/08/22
7	FOR TENDER EA#4	05/27/22
6	FOR TENDER EA#3	02/02/22
5	FOR TENDER EA#2	01/19/22
4	FOR TENDER EA#1	12/07/21
3	FOR TENDER	11/5/21
2	FOR PERMIT	10/08/21
1	FOR COORDINATION	10/06/21
NO	REVISION / ISSUED	DATE



Hudson Engineering

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GROUNDING - N.T.S.



Type	Symbol	Qty	Model # (Description)
A	[Symbol]	1	CREE SEC-EDG-4M-WM-06-E-525-40K GREY
B	[Symbol]	1	CREE SEC-EDG-3M-WM-06-E-525-40K GREY
C	[Symbol]	11	CREE SEC-EDG-2S-WM-06-E-525-40K GREY WITH FIELD INSTALLABLE CUT-OFF SHIELD
D	[Symbol]	6	CREE C-CP-BQ-7L-40K, 53W 4000K WHITE

LABEL	Avg	Max	Min	Avg/Min	Max/Min
SITE	0.98 Fc	2.3 Fc	0.0 Fc	N.A.	N.A.
PAVEMENT	1.15 Fc	2.3 Fc	0.3 Fc	3.83	7.67 Fc
SPILL*	0.15 Fc	1.4 Fc	0.0 Fc	N.A.	N.A.

*PHOTOMETRICS DO NOT REPRESENT FULL CUT-OFF SHIELD TYPE B

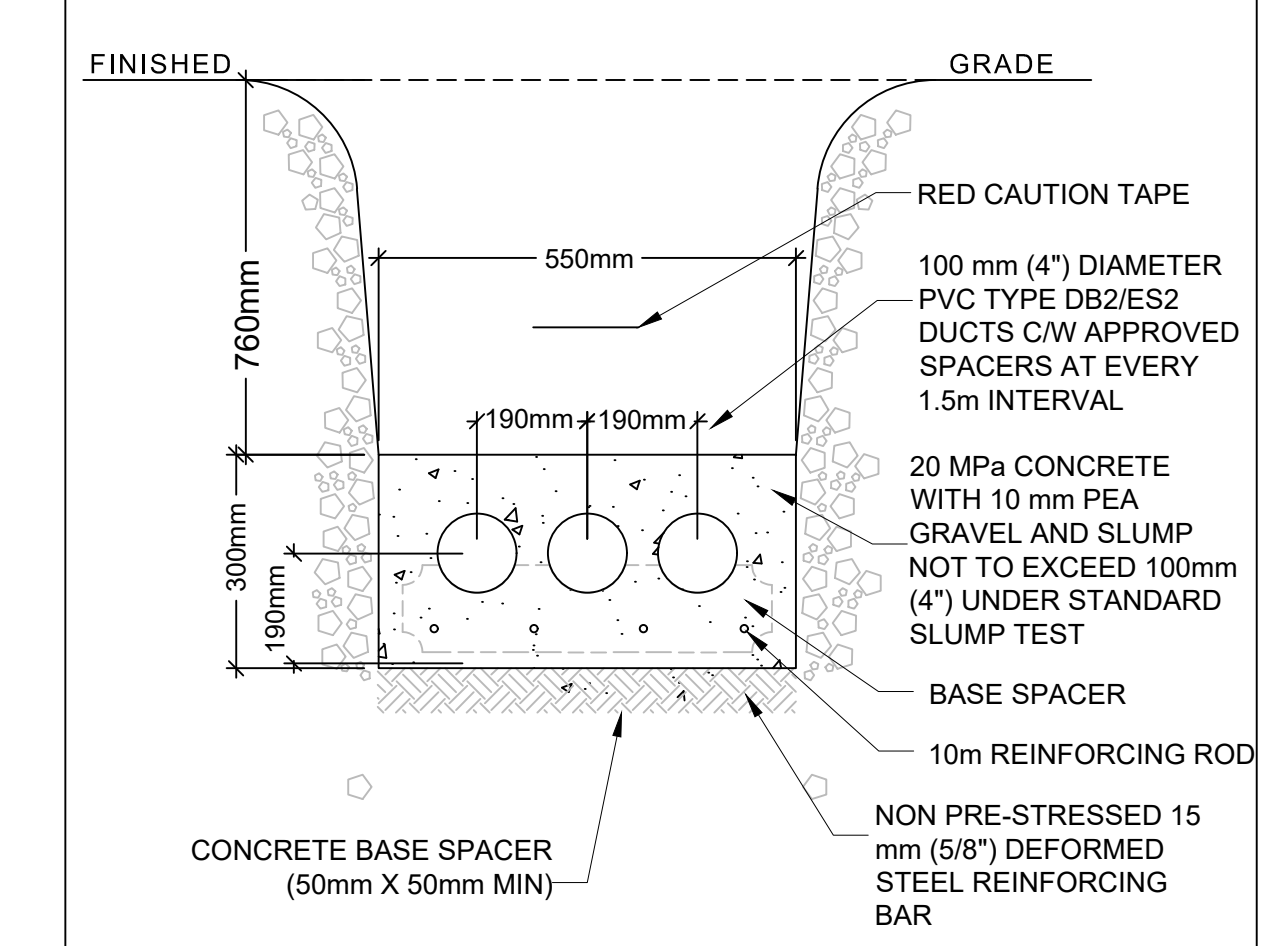
SITE PLAN
SCALE 1 : 250

- SITE PLAN NOTES:**
- USE PVC SHOP MANUFACTURED DUCT SPACERS AT 900mm (36") INTERVALS TO MAINTAIN DUCT ALIGNMENT.
 - SLOPE DUCT MINIMUM 75mm (3") PER 30m (100') TOWARDS STREET.
 - PROVIDE REINFORCING STEEL AS INDICATED 15mm (5/8").
 - PROVIDE (3/8") ONE CONTINUOUS LENGTH OF POLYPROPYLENE FISH ROPE.
 - ALL DUCTS SHALL BE TERMINATED WITH BELL FITTINGS AT EACH END.
 - THE TOP ELEVATION OF THE CONCRETE ENCASMENT SHALL BE A DEPTH OF 1.0m IN ROCK OR HIGH WATER TABLE AREAS. THE TOP OF THE DUCT BANK MAY BE PLACED AT SUB GRADE ELEVATION OR AS OTHERWISE DIRECTED.
 - THE REINFORCING BARS ALONG SIDES AND BOTTOM OF DUCT SHALL BE CONCEALED WITH A MINIMUM OF 25mm CONCRETE COVER.
 - DUCTS SHALL BE ENCASED WITH 20MPa GRADE CONCRETE WITH A MINIMUM COVER FO 75mm FROM EXTERIOR WALLS OF DUCTS ON ALL SIDES. CONCRETE SHALL BE WORKED BELOW AND BETWEEN PIPES TO PRODUCE A HOMOGENEOUS MASS. CONCRETE SHALL BE IN ACCORDANCE WITH CSA STANDARDS CAN3-A23.2, A23.1, A23.4, AS WELL AS HYDRO OTTAWA STANDARDS.
 - WHERE IT IS REQUIRED, CUSTOMER DUCTS SHALL BE LEFT FOR HYDRO OTTAWA WITH THE PROJECTING (MINIMUM 300mm) FROM THEIR CONCRETE ENVELOPE IN A STAGGERED PATTERN. THEY SHALL BE EQUIPPED WITH SUITABLE COUPLINGS AND PLUGGED UNTIL THE JOINTS ARE MADE. THE FACE OF THE CONCRETE ENVELOPE SHALL BE LEFT ROUGH TO KEY WITH THE EXTENSION ENVELOPE AND 15mm (3/8") DIAMETER STEEL REINFORCING BARS 1.8m IN LENGTH SHALL BE ENCASED LONGITUDINALLY IN THE ENVELOPE, 50mm INSIDE THE PERIMETER OF THE BANK AT 100mm CENTRES ALONG THE SIDES AND BOTTOM OF THE BANK. THE RODS SHALL PROJECT 900mm FROM THE CENTRE TO ANCHOR FIRMLY INTO THE CONCRETE OF THE EXTENSION WHEN THE LATTER IS POURED.
 - CONTRACTOR SHALL APPLY TO HYDRO OTTAWA CONSTRUCTION DEPARTMENT 48 HOURS BEFORE DIGGING THE TRENCH.
 - DRILL 4 DRAINAGE HOLES IN BOTTOM OF EACH DUCT 1.3cm DIA. AT 5cm CENTRES. FILL TO TOP OF DUCTS WITH 1.9cm (3/4") CLEAR STONE. TOP OFF WITH A LAYER OF POLY-FILM, OR STYROFOAM, ETC., AND A FINAL LAYER OF CONCRETE.
 - HYDRO DUCT BANK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH HYDRO OTTAWA SPECIFICATIONS.
 - HIGH VOLTAGE DUCT BANK TO BE TERMINATED AT PROPERTY LINE AS SHOWN ON SITE PLAN.
 - SUPPLY AND INSTALL A TWO PIECE PRE-CAST CONCRETE FOUNDATION AS PER HYDRO OTTAWA STD. USC0025 (CONFORMING TO CSA A23)
 - PROVIDE GROUNDING OF TRANSFORMER PAD AS PER HYDRO OTTAWA SPECIFICATIONS.
 - RUN TWO 100MM (4") PVC DB2 DUCT FROM ELECTRICAL ROOM TO PROPERTY LINE AND CAP FOR FUTURE USE.
 - RED CAUTION TAPE TO BE LAID ABOVE DUCT BANK AS PER DETAIL. "CAUTION BURIED ELECTRIC LINE BELOW".
 - GUARD POSTS SHALL ALLOW EQUIPMENT DOORS TO BE OPENED THROUGH THEIR FULL RANGE. THEY SHALL BE PLACED 700mm OUTSIDE THE EDGE OF EQUIPMENT. THE DISTANCE BETWEEN TWO GUARD POSTS SHALL BE MAXIMUM 1800mm. GUARD POSTS TO BE FILLED WITH 20MPa CONCRETE AND SHALL BE PAINTED WITH SAFETY YELLOW PAINT. A REFLECTIVE STRIP TO BE PLACED AT EACH POST. ALL GUARD POSTS SHALL BE GROUNDED (AS PER STANDARD 18-5000).

ESTIMATED LOAD SUMMARY

LIGHTING & RECEPTACLES -	80kW
MECH EQUIPMENT (COOLING) -	380kW
OWNER'S EQUIPMENT* -	35kW
ELEVATOR -	300kW
TOTAL DEMAND	795kW

PRIMARY DUCT BANK DETAIL - N.T.S.



SECONDARY DUCT BANK DETAIL - N.T.S.

