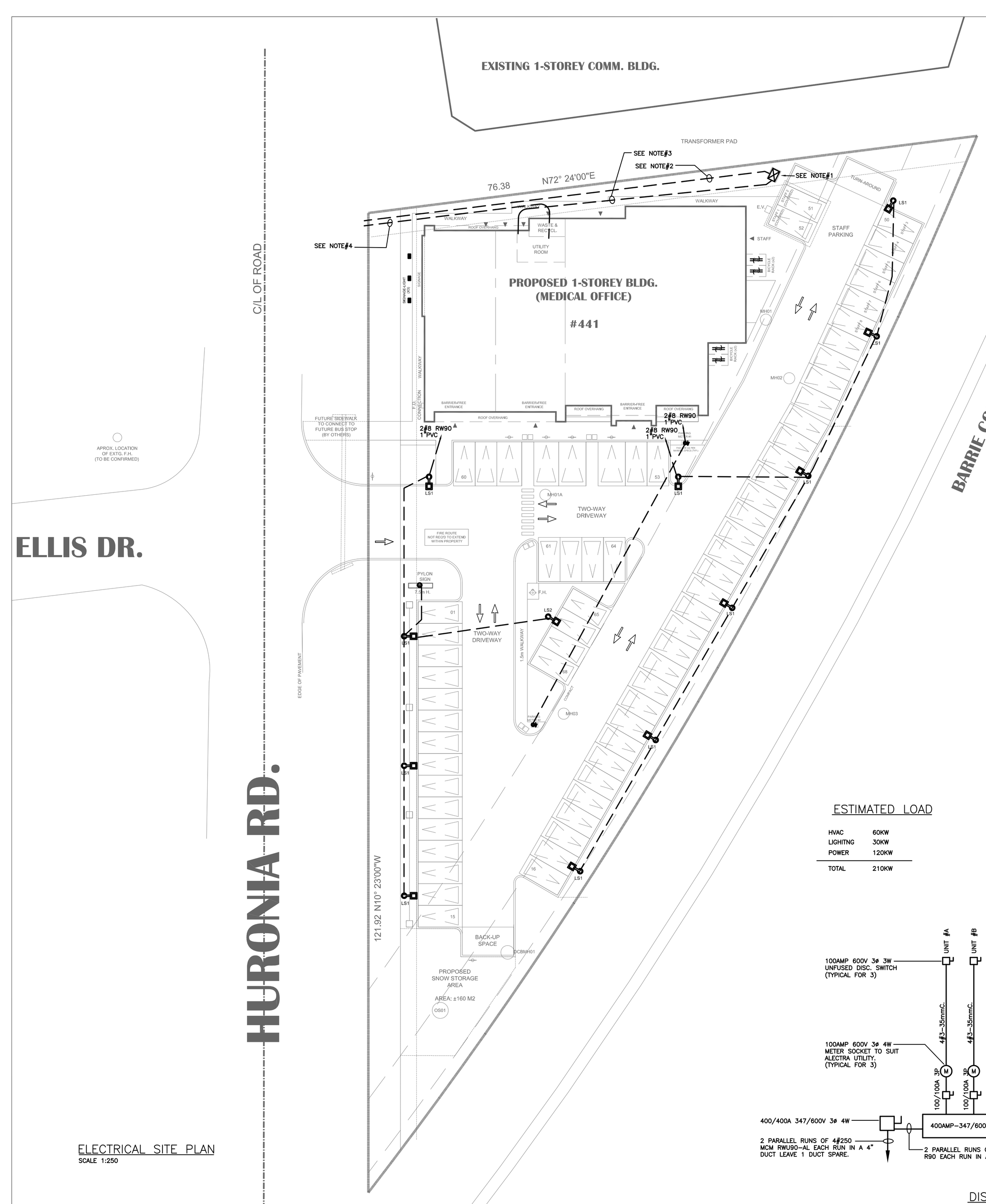
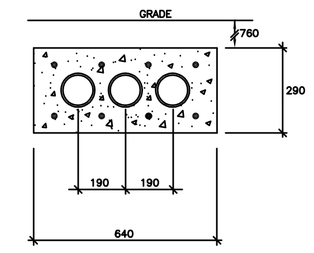


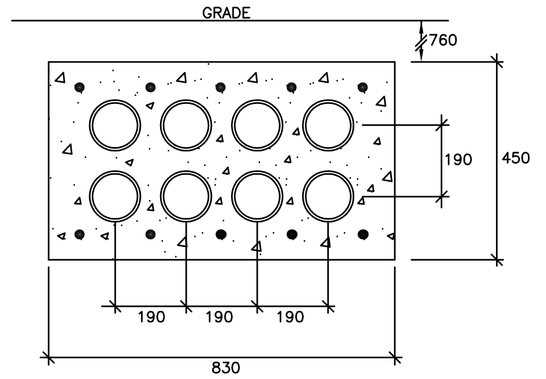

ELECTRICAL SITE PLAN
SCALE 1:250

## SERVICE NOTES

1. TRANSFORMER PAD SUPPLIED & INSTALLED BY ELECTRICAL CONTRACTOR TO SUIT ALECTRA UTILITY, INCLUDING ALL GROUNDING, CABLE LUGS ETC. TRANSFORMER & FINAL CONNECTIONS BY ALECTRA UTILITY.
2. 8–103mm PVC TYPE II DUCTS IN 78mm RE–INFORCED CONCRETE ENVELOPE BURIED MIN. 760mm BELOW GRADE. EXACT ROUTING AND TERMINATION TO SUIT ALECTRA UTILITY. DUCT BANK CONSTRUCTION SEE POWER STREAM 3 PHASE TRANSFORMER CONSTRUCTION DETAILS.
3. 3–103mm PVC TYPE II DUCTS IN 78mm RE–INFORCED CONCRETE ENVELOPE BURIED MIN. 760mm BELOW GRADE. EXACT ROUTING AND TERMINATION TO SUIT ALECTRA UTILITY
4. 2–103mm PVC TYPE II DUCTS BURIED MIN 610mm BELOW GRADE FOR TELEPHONE SERVICE. EXACT ROUTING & TERMINATION TO BE VERIFIED WITH LOCAL TELEPHONE/DATA SUPPLIER PRIOR TO INSTALLATION.



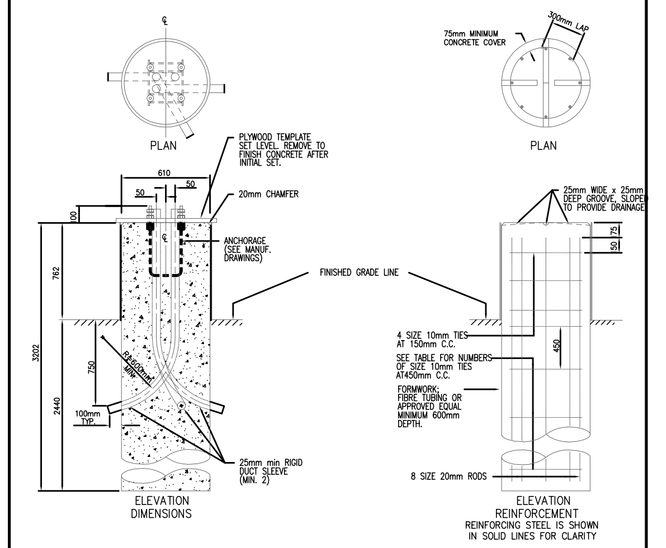

DUCT BANK DETAIL
(3 DUCTS AS PER NOTE #2)




DUCT BANK DETAIL
(8 DUCTS AS PER NOTE #2)

## NOTES:

- CLASS OF CONCRETE . . . . . .30MPa.
- REINFORCING STEEL SHALL BE GRADE 400.
- CLEAR COVER TO REINFORCING STEEL SHALL BE 80mm ± 20mm EXCEPT AS NOTED.
- EXCAVATION FOR PLACEMENT OF ELECTRICAL CONDUITS NOT TO EXCEED 1.2m BELOW TOP OF FOOTING. CONDUIT LOCATION TO BE SUITABLY MARKED ON TOP OF FOOTING.
- POLE ANCHOR BOLTS SHALL BE VERTICALLY INSTALLED IN THE CORRECT LOCATIONS. NO ADJUSTMENT SHALL BE ALLOWED AFTER CONCRETE PLACEMENT.
- CONCRETE TO BE PLACED AGAINST UNDISTURBED SOIL. THE FOUNDATION MAY BE CONSTRUCTED BY DRIVING AN OPEN END STEEL LINER TO THE ELEVATION OF THE BASE, AND EXCAVATING BY AUGERING OR OTHER SUITABLE METHOD. THE LINER MAY BE WITHDRAWN AS THE CONCRETE IS POURED.
- THE CONTRACTOR SHALL CHECK NUMBER OF ANCHOR BOLTS, AND BOLT CIRCLE DIAMETER FOR THE POLE PRIOR TO PLACING CONCRETE.
- ANCHORAGE ASSEMBLY SHALL BE PROVIDED WITH WOODEN OR STEEL TEMPLATES.
- ANCHOR RODS ARE ROUND BARS QUENCHED AND TEMPERED MEDIUM CARBON STEEL WITH MINIMUM YIELD OF 517MPa (MINIMUM TENSILE STRENGTH 725MPa) AND SHALL SATISFY CHARPY V–NOTCH REQUIREMENTS FOR 20 JOULES AT MINUS 40°C.
- WATER SHALL BE REMOVED PRIOR TO CONCRETE PLACEMENT.
- CONTRACTOR SHALL MAINTAIN THE STABILITY OF THE CAISSON BASE AND SIDEWALLS FROM THE TIME OF DRILLING THE CAISSON HOLE TO PLACING THE CONCRETE.
- MINIMUM OF TWO (2) SLEEVES REQUIRED FOR EACH CONCRETE FOOTING.

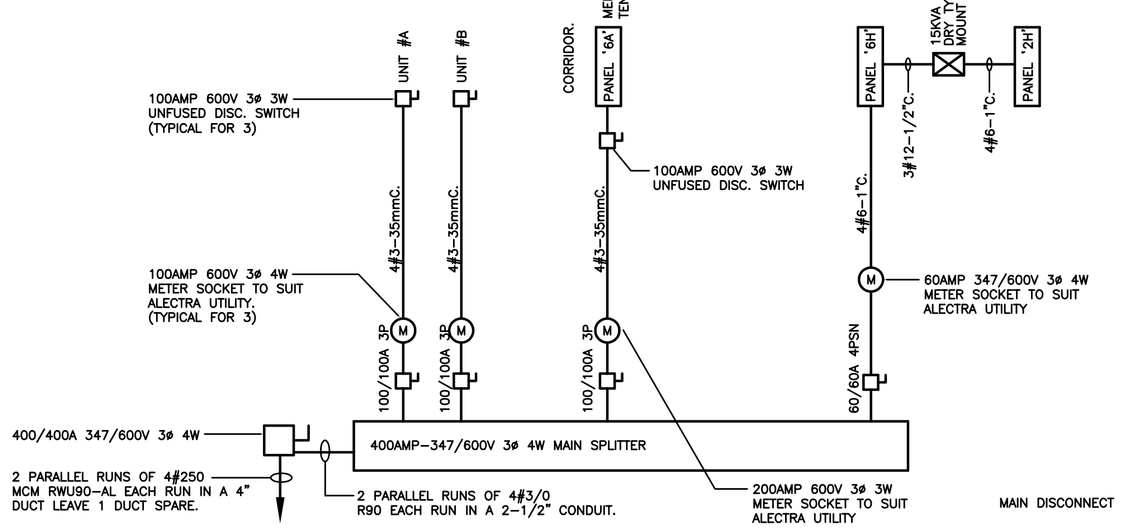



| | FOOTING DEPTH "H" (m) | FOOTING DIAMETER "D" (m) | FOOTING DEPTH "L" (m) | BOLT CIRCLE DIA. (B.C.D.) (mm) | TIES AT 150mm C.C. | | | TIES AT 450mm C.C. | | | REINFORCING BARS | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | DEVELP. LENGTH | SIZE | # REQ'D | DEVELP. LENGTH | SIZE | # REQ'D | LENGTH | SIZE | # REQ'D |
| HIGH FOOTING 762 mm ABOVE GRADE | 2440 | 610 | 3202 | TO SUIT | 300mm | 10 | 4 | 300mm | 10 | 6 | 3000 | 20 | 8 |

ANCHORAGE ASSEMBLY FOR MEDIUM MAST LIGHTING POLE (VERIFY WITH STRUCTURAL ENGINEER PRIOR TO INSTALLATION
N.T.S.

## ESTIMATED LOAD

| | |
|---|---|
| HVAC | 60KW |
| LIGHITNG | 30KW |
| POWER | 120KW |
| TOTAL | 210KW |

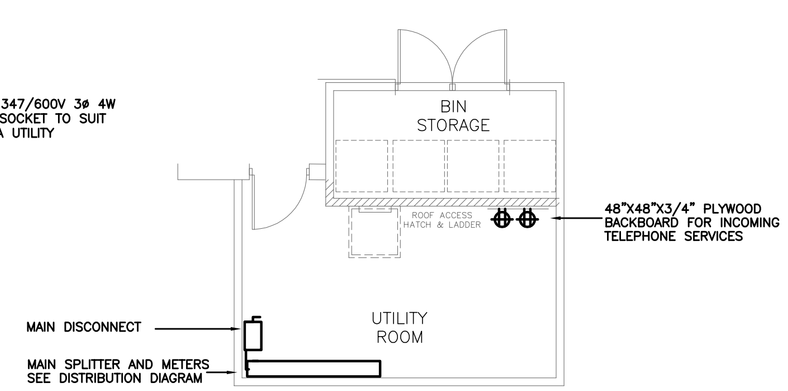



DISTRIBUTION DIAGRAM

## LIGHTING FIXTURE SCHEDULE

LS1–U.S. ARCHITECTURAL CAT#VLL–LED–PLED–4–80LED–700MA–NW

LS2–U.S. ARCHITECTURAL CAT#VLL–LED–PLED–5–80LED–700MA–NW




SERVICE ROOM
1:75

Contractor shall verify and check all dimensions and conditions on site prior to starting any of the work and report any discrepancy to the Architect and consultants before proceeding. Construction must conform to all applicable Codes and Requirements of Authorities having Jurisdiction pertaining to this application.

No investigation has been undertaken or reported on by this office in regards to the environmental condition or pollution of this site.

This drawing is not to be scaled.

All dimensions and areas to be confirmed on site by Ontario Land Surveyor.

| no. | date | issued | by |
|---|---|---|---|
| 1 | 11.17.20 | ISSUED FOR SITE PLAN APPROVAL | DP |

LICENSED PROFESSIONAL ENGINEER
A. A. OBERFELD
11.17.20
PROVINCE OF ONTARIO

TRISTAR ENGINEERING
Division of 1041549 Ontario Limited
8901 Woodbine Avenue, Unit #116
Markham, Ontario
Canada, L3R 9Y4
(905) 604–3801
Fax (905) 604–3954

PROJECT TITLE

# 441 HURONIA RD.
## COMMERCIAL DEVELOPMENT

441 HURONIA RD., BARRIE, ON

SHEET TITLE

ELECTRICAL SITE PLAN

| | |
|---|---|
| DATE | NOV. 2020 |
| DATE PLOTTED | |
| PROJECT NO. | 220–119 |
| DRAWN BY | D.P. |
| CHECKED BY | J.P. |
| SCALE | 1:250 |
| DRAWING NO. | E–1 |