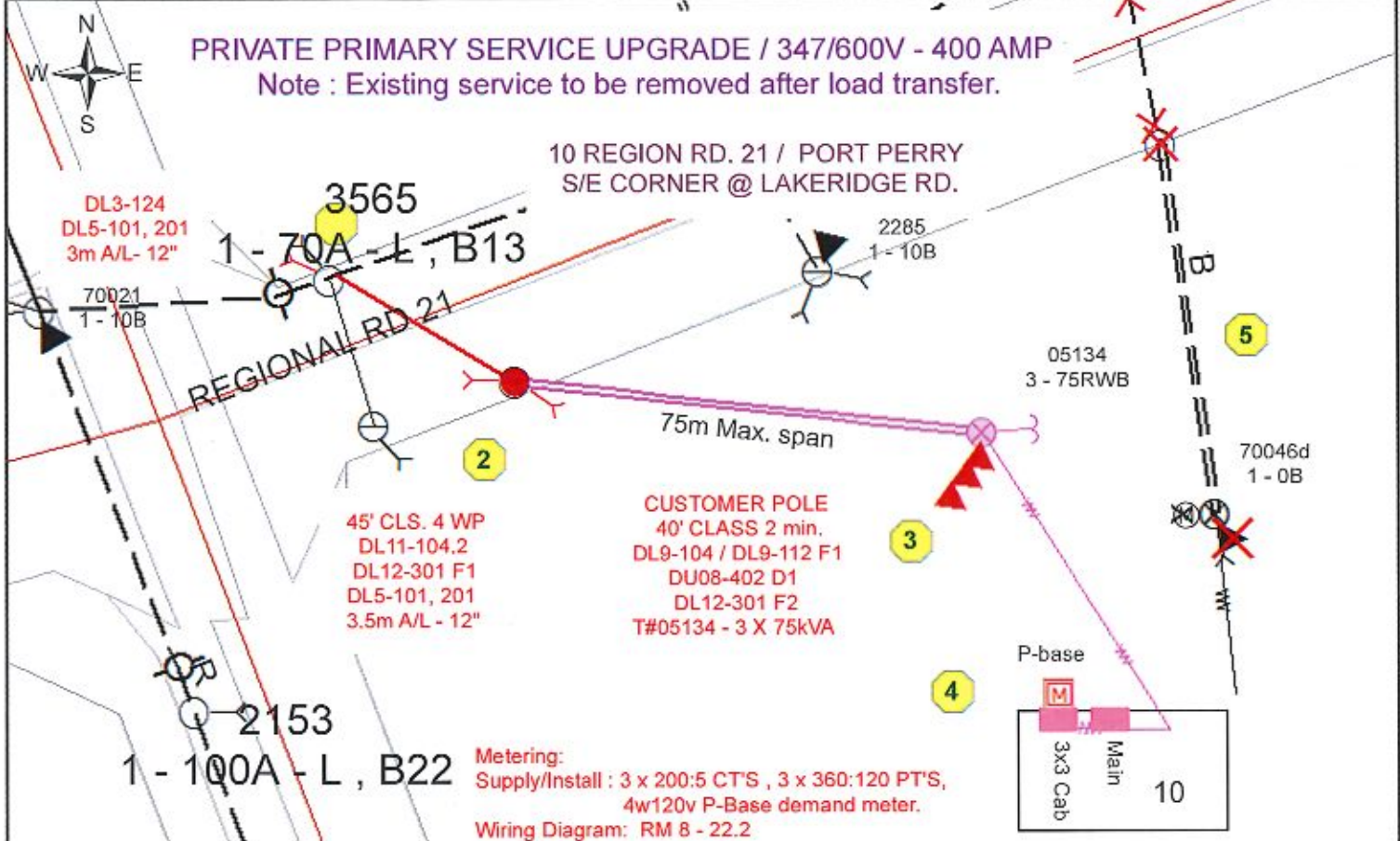


T-1038-2019 Addendum 2 - Hydro One Primary Service Upgrade Layout

T-1038-2019 Addendum 2 - 02-E01-00-01_Elec Site Plan

T-1038-2019 Addendum 2 - 02-E10-00-0_Single Line Diagram

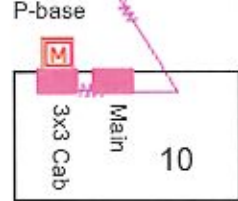
Customer Information	Service Location & Contractor Information	General Information
Customer: Region Of Durham	911 Address: 10 REGIONAL-RD-21	Preparation Date: 4/15/2019
Address: 605 Rossland Rd E Whitby ON	Lot: Concession: Township: Reach	Rate Class: General Service - Non Urban Demand D.S.: Durham
Primary # 905-6687711 Ext 2237	RP#: Sublot:	Customer Cable: Yes Feeder: F2
Bus.: Fax:	Contractor: Tony Ph #: 416-679-1930 Fax:	Service Size: 400 Amps Switch: 2069 Acct #: Transformer: 05134



45' CLS. 4 WP
DL11-104.2
DL12-301 F1
DL5-101, 201
3.5m A/L - 12"

CUSTOMER POLE
40' CLASS 2 min.
DL9-104 / DL9-112 F1
DU08-402 D1
DL12-301 F2
T#05134 - 3 X 75kVA

Metering:
Supply/Install : 3 x 200:5 CT'S , 3 x 360:120 PT'S,
4w120v P-Base demand meter.
Wiring Diagram: RM 8 - 22.2



Hydro One
Provide Traffic Control - Suggested drawing # TL- 8
Install 45' class 4 wood pole + 1 span 3 phase #2 Al. o/h rxing (50m) + Anchors / back guys + 3 x 75kVA - 8.32kV - 347/600V polemount transformer bank + Pull up and connect customer o/h primary service + Terminate customer 347/600V service @ transformer pole (customer to leave coils @ weatherhead)

Customer :
Install transformer pole c/w grd. (dead end framing , 3.2m space to neutral) + Terminate o/h H/V conductors and leave coils for Hydro One to connect @ new Hydro One pole + Install u/g 347/600V service and leave coil @ weatherhead on transformer pole for connection + 3' x 3' meter cabinet on load side of main disconnect c/w 1-1/4" conduit from cabinet to outside P-base + Pole to be within 15' of driveway(for truck access) + Obtain ESA connection Authorization + Hydro One to supply P-base cabinet and CT'S - Customer to install.

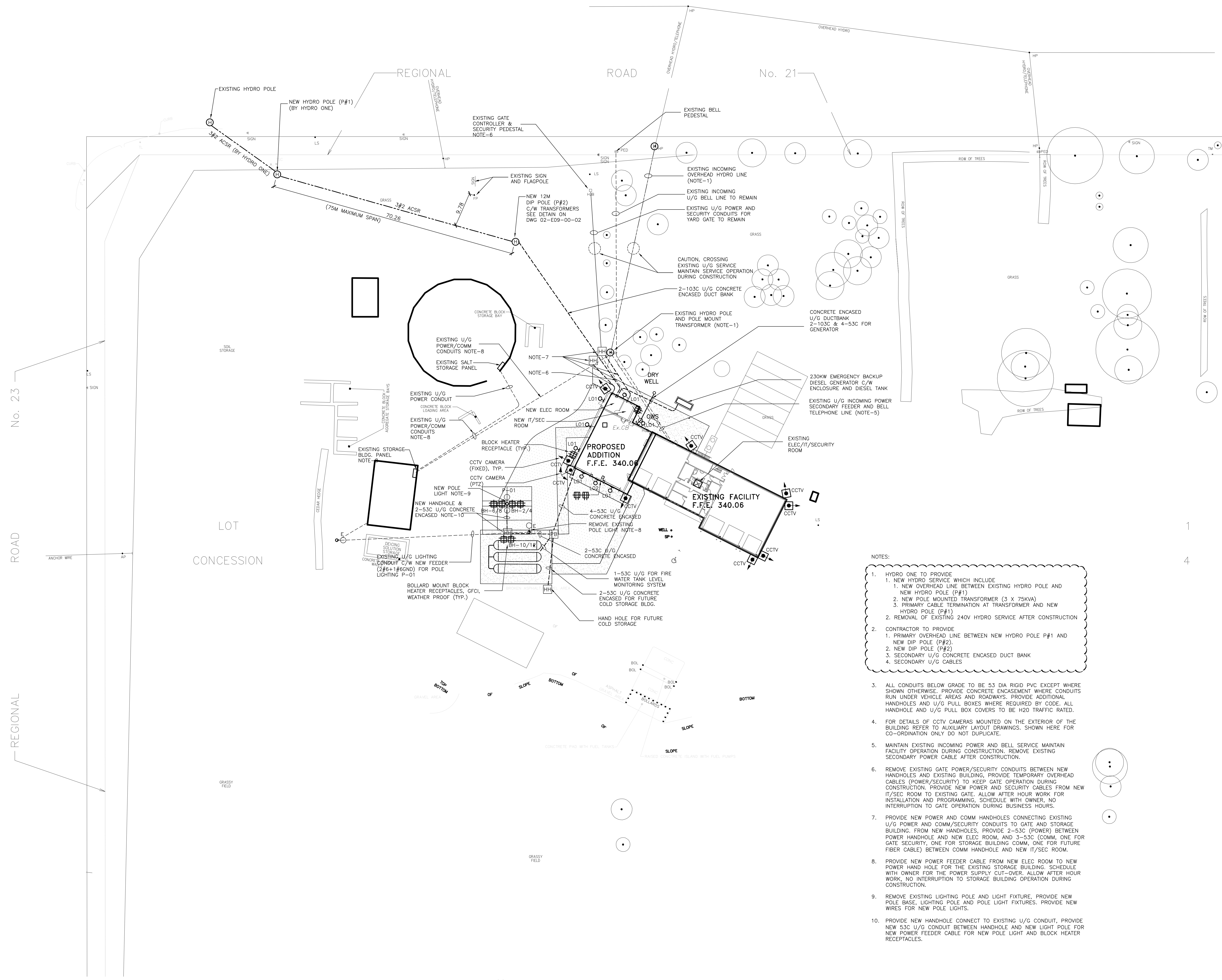
Note : Customer to contact Hydro One Business Office @ 1-888-871-3514 with any questions and to schedule work.

Notes: The Customer has 180 days to execute the Customer Service Contract ("Contract") with Hydro One and pay all amounts payable under the Contract. This layout is valid until the earlier of either: (a) 180 days from the date of Contract execution and receipt of Customer payment; or (b) 360 days from the "Preparation Date" identified on the layout. The Customer may have to pay for a re-design (which means the Customer will receive a new layout) should the Customer: (a) not execute the Contract with Hydro One and pay all amounts payable under the Contract within the 180 day timeframe referenced in the Contract; and/or (b) make changes to their requirements which requires Hydro One to make revisions to the work that needs to be performed by Hydro One or the Customer.
- All work to be done to Electrical Safety Code

Existing	Hydro One or Contractor Section 3.0	Work by Customer
Hydro One Only Section 2.0	Work by Others (Bell or LDC)	
X Remove - Hydro One or Contractor Section 3.0	X Remove - Hydro One Only - Section 2.0	
X Remove - By Customer	X Remove - By Others (Bell or LDC)	

Order 301926370_REACH_Region_Of_Durham	Service Centre Name: Newmarket	Secondary Voltage: 347/600
Hydro One Phone #: 888-871-3514	Prepared By: Tom Williams	SAP Order #: - 62168927
Hydro One Fax #: 705-743-0471	Departure Date & Time: 03/29/2019 02:15:00 PM	CM Number: - 319512
Electrical Safety Authority: 877-372-7233	Arrival Date & Time: 03/29/2019 01:00:00 PM	Customer #: -

User Name: Tony Shen, Plot Date/Time: Monday, September 30, 2018 7:06:03 PM, Path and File Name: I:\24rx\2.0113_durbanham_region_02.dwg, Drawing: I:\24rx\2.0113_durbanham_region_02.dwg, Plot Date/Time: Monday, September 30, 2018 7:06:03 PM, Path and File Name: I:\24rx\2.0113_durbanham_region_02.dwg



- NOTES:
- HYDRO ONE TO PROVIDE
 - NEW HYDRO SERVICE WHICH INCLUDE
 - NEW OVERHEAD LINE BETWEEN EXISTING HYDRO POLE AND NEW HYDRO POLE (P#1)
 - NEW POLE MOUNTED TRANSFORMER (3 X 75KVA)
 - PRIMARY CABLE TERMINATION AT TRANSFORMER AND NEW HYDRO POLE (P#1)
 - REMOVAL OF EXISTING 240V HYDRO SERVICE AFTER CONSTRUCTION
 - CONTRACTOR TO PROVIDE
 - PRIMARY OVERHEAD LINE BETWEEN NEW HYDRO POLE P#1 AND NEW DIP POLE (P#2)
 - NEW DIP POLE (P#2)
 - SECONDARY U/G CONCRETE ENCASED DUCT BANK
 - SECONDARY U/G CABLES
 - ALL CONDUITS BELOW GRADE TO BE 53 DIA RIGID PVC EXCEPT WHERE SHOWN OTHERWISE. PROVIDE CONCRETE ENCASEMENT WHERE CONDUITS RUN UNDER VEHICLE AREAS AND ROADWAYS. PROVIDE ADDITIONAL HANDHOLES AND U/G PULL BOXES WHERE REQUIRED BY CODE. ALL HANDHOLE AND U/G PULL BOX COVERS TO BE H20 TRAFFIC RATED.
 - FOR DETAILS OF CCTV CAMERAS MOUNTED ON THE EXTERIOR OF THE BUILDING REFER TO AUXILIARY LAYOUT DRAWINGS. SHOWN HERE FOR CO-ORDINATION ONLY DO NOT DUPLICATE.
 - MAINTAIN EXISTING INCOMING POWER AND BELL SERVICE MAINTAIN FACILITY OPERATION DURING CONSTRUCTION. REMOVE EXISTING SECONDARY POWER CABLE AFTER CONSTRUCTION.
 - REMOVE EXISTING GATE POWER/SECURITY CONDUITS BETWEEN NEW HANDHOLES AND EXISTING BUILDING. PROVIDE TEMPORARY OVERHEAD CABLES (POWER/SECURITY) TO KEEP GATE OPERATION DURING CONSTRUCTION. PROVIDE NEW POWER AND SECURITY CABLES FROM NEW IT/SEC ROOM TO EXISTING GATE. ALLOW AFTER HOUR WORK FOR INSTALLATION AND PROGRAMMING. SCHEDULE WITH OWNER. NO INTERRUPTION TO GATE OPERATION DURING BUSINESS HOURS.
 - PROVIDE NEW POWER AND COMM/SECURITY CONDUITS CONNECTING EXISTING U/G POWER AND COMM/SECURITY CONDUITS TO GATE AND STORAGE BUILDING. FROM NEW HANDHOLES, PROVIDE 2-53C (POWER) BETWEEN POWER HANDHOLE AND NEW ELEC ROOM, AND 3-53C (COMM. ONE FOR GATE SECURITY, ONE FOR STORAGE BUILDING COMM. ONE FOR FUTURE FIBER CABLE) BETWEEN COMM HANDHOLE AND NEW IT/SEC ROOM.
 - PROVIDE NEW POWER FEEDER CABLE FROM NEW ELEC ROOM TO NEW POWER HAND HOLE FOR THE EXISTING STORAGE BUILDING. SCHEDULE WITH OWNER FOR THE POWER SUPPLY CUT-OVER. ALLOW AFTER HOUR WORK. NO INTERRUPTION TO STORAGE BUILDING OPERATION DURING CONSTRUCTION.
 - REMOVE EXISTING LIGHTING POLE AND LIGHT FIXTURE. PROVIDE NEW POLE, BASE, LIGHTING POLE AND POLE LIGHT FIXTURES. PROVIDE NEW WIRES FOR NEW POLE LIGHTS.
 - PROVIDE NEW HANDHOLE CONNECT TO EXISTING U/G CONDUIT. PROVIDE NEW 53C U/G CONDUIT BETWEEN HANDHOLE AND NEW LIGHT POLE FOR NEW POWER FEEDER CABLE FOR NEW POLE LIGHT AND BLOCK HEATER RECEPTACLES.

N
SITE ELECTRICAL PLAN
SCALE 1:400

DATE (mm/dd/yyyy)	ISSUED FOR	REV
APR 25 2018	TENDER	0
SEPT 30 2018	ADDENDUM-01	1

KEY PLAN
CONSULTANTS

IBI GROUP
100-175 Galaxay Boulevard
Toronto ON M9W 0C9 Canada
tel 416 679 1930 fax 416 675 4620
ibi@ibi.com

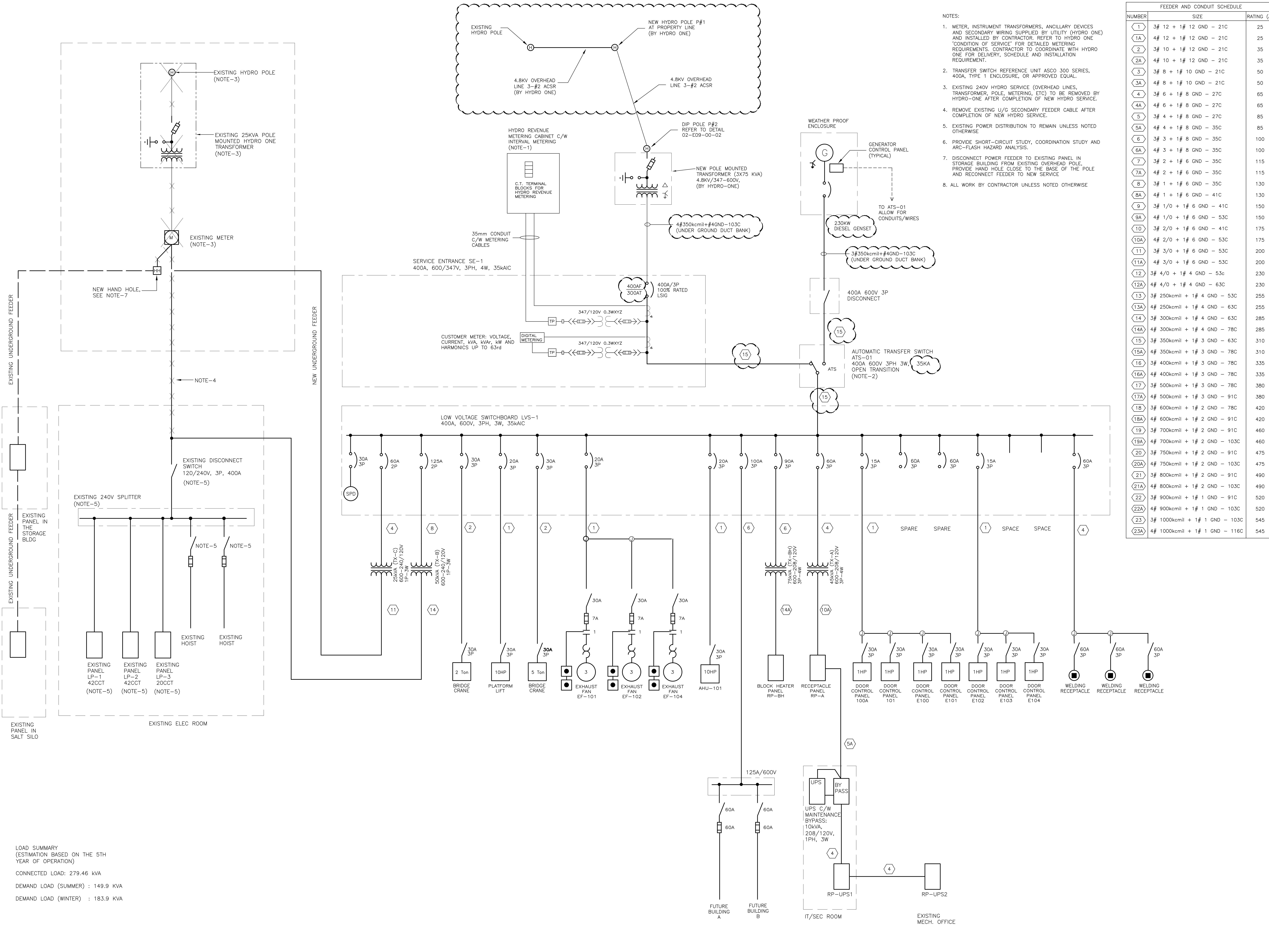
This drawing has been prepared solely for the use of the Regional Municipality of Durham and there are no representations of any kind made by IBI Group to any party with whom IBI Group has not entered into a contract

North Arrow
Detail Symbol
LOCATION OR DETAIL NUMBER

Project Manager A. VAN VEEN	Architect/Engineer T. SHEN
Project Leader T. SHEN	Drawn A. ZHU
Date JAN 2013	Checked C. SANTON
Client THE REGIONAL MUNICIPALITY OF DURHAM WORKS DEPARTMENT ONTARIO	
Project EXPAND GARAGE SCUGOG DEPOT 10 REGIONAL RD. 21, R.R.#14, PORT PERRY	
Drawing Title ELECTRICAL SITE PLAN	
Check Scale (may be photo-reduced) 0 1 inch 0 10mm	
Project No. 24RX12.0113	Drawing No. 02-E01-00-01

ROD Contract No.
T-1038-2019

User Name: Tony Shen, Proj. Date/Time: Monday, September 30, 2019 7:08:47 PM, Path and File Name: I:\24rx\22.0113\durham region arena & scoping depot\3.8 drawing\electrical\layouts\02-e10-00-01.dwg



- NOTES:
- METER, INSTRUMENT TRANSFORMERS, ANCILLARY DEVICES AND SECONDARY WIRING SUPPLIED BY UTILITY (HYDRO ONE) AND INSTALLED BY CONTRACTOR. REFER TO HYDRO ONE 'CONDITION OF SERVICE' FOR DETAILED METERING REQUIREMENTS. CONTRACTOR TO COORDINATE WITH HYDRO ONE FOR DELIVERY, SCHEDULE AND INSTALLATION REQUIREMENT.
 - TRANSFER SWITCH REFERENCE UNIT ASCO 300 SERIES, 400A, TYPE 1 ENCLOSURE, OR APPROVED EQUAL.
 - EXISTING 240V HYDRO SERVICE (OVERHEAD LINES, TRANSFORMER, POLE, METERING, ETC) TO BE REMOVED BY HYDRO-ONE AFTER COMPLETION OF NEW HYDRO SERVICE.
 - REMOVE EXISTING U/G SECONDARY FEEDER CABLE AFTER COMPLETION OF NEW HYDRO SERVICE.
 - EXISTING POWER DISTRIBUTION TO REMAIN UNLESS NOTED OTHERWISE.
 - PROVIDE SHORT-CIRCUIT STUDY, COORDINATION STUDY AND ARC-FLASH HAZARD ANALYSIS.
 - DISCONNECT POWER FEEDER TO EXISTING PANEL IN STORAGE BUILDING FROM EXISTING OVERHEAD POLE. PROVIDE HAND HOLE CLOSE TO THE BASE OF THE POLE AND RECONNECT FEEDER TO NEW SERVICE.
 - ALL WORK BY CONTRACTOR UNLESS NOTED OTHERWISE.

FEEDER AND CONDUIT SCHEDULE		
NUMBER	SIZE	RATING (A)
1	3# 12 + 1# 12 GND - 21C	25
1A	4# 12 + 1# 12 GND - 21C	25
2	3# 10 + 1# 12 GND - 21C	35
2A	4# 10 + 1# 12 GND - 21C	35
3	3# 8 + 1# 10 GND - 21C	50
3A	4# 8 + 1# 10 GND - 21C	50
4	3# 6 + 1# 8 GND - 27C	65
4A	4# 6 + 1# 8 GND - 27C	65
5	3# 4 + 1# 8 GND - 27C	85
5A	4# 4 + 1# 8 GND - 27C	85
6	3# 3 + 1# 8 GND - 35C	100
6A	4# 3 + 1# 8 GND - 35C	100
7	3# 2 + 1# 6 GND - 35C	115
7A	4# 2 + 1# 6 GND - 35C	115
8	3# 1 + 1# 6 GND - 35C	130
8A	4# 1 + 1# 6 GND - 41C	130
9	3# 1/0 + 1# 6 GND - 41C	150
9A	4# 1/0 + 1# 6 GND - 53C	150
10	3# 2/0 + 1# 6 GND - 41C	175
10A	4# 2/0 + 1# 6 GND - 53C	175
11	3# 3/0 + 1# 6 GND - 53C	200
11A	4# 3/0 + 1# 6 GND - 53C	200
12	3# 4/0 + 1# 4 GND - 53C	230
12A	4# 4/0 + 1# 4 GND - 63C	230
13	3# 250kcmil + 1# 4 GND - 53C	255
13A	4# 250kcmil + 1# 4 GND - 63C	255
14	3# 300kcmil + 1# 4 GND - 63C	285
14A	4# 300kcmil + 1# 4 GND - 78C	285
15	3# 350kcmil + 1# 3 GND - 63C	310
15A	4# 350kcmil + 1# 3 GND - 78C	310
16	3# 400kcmil + 1# 3 GND - 78C	335
16A	4# 400kcmil + 1# 3 GND - 78C	335
17	3# 500kcmil + 1# 3 GND - 78C	380
17A	4# 500kcmil + 1# 3 GND - 91C	380
18	3# 600kcmil + 1# 2 GND - 78C	420
18A	4# 600kcmil + 1# 2 GND - 91C	420
19	3# 700kcmil + 1# 2 GND - 91C	460
19A	4# 700kcmil + 1# 2 GND - 103C	460
20	3# 750kcmil + 1# 2 GND - 91C	475
20A	4# 750kcmil + 1# 2 GND - 103C	475
21	3# 800kcmil + 1# 2 GND - 91C	490
21A	4# 800kcmil + 1# 2 GND - 103C	490
22	3# 900kcmil + 1# 1 GND - 91C	520
22A	4# 900kcmil + 1# 1 GND - 103C	520
23	3# 1000kcmil + 1# 1 GND - 103C	545
23A	4# 1000kcmil + 1# 1 GND - 116C	545

LOAD SUMMARY
(ESTIMATION BASED ON THE 5TH YEAR OF OPERATION)

CONNECTED LOAD: 279.46 kVA

DEMAND LOAD (SUMMER) : 149.9 kVA

DEMAND LOAD (WINTER) : 183.9 kVA

DATE (mm/dd/yyyy)	ISSUED FOR	REV
APR 25 2018	TENDER	0
SEPT 30 2018	ADDENDUM-01	1

KEY PLAN

CONSULTANTS

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100-175 Galaxay Boulevard
Toronto ON M9W 0C9 Canada
tel 416 679 1830 fax 416 675 4620
ibi@ibi.com

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Project
EXPAND GARAGE SCUGOG DEPOT
10 REGIONAL RD. 21, R.R.#14, PORT PERRY

Drawing Title
SINGLE LINE DIAGRAM

Check Scale (may be photo-reduced)	0 1 inch 0 10mm
Project No. 24RX12.0113	Drawing No. 02-E10-00-01

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