

May 7, 2024

(9 pages)

ADDENDUM NO. 1**BID CALL NO. T2024-036****REPLACEMENT OF COMPLETE POWER DISTRIBUTION, ASPHALT PAVEMENT, LIGHT
STANDARD AND ELEVATOR UPGRADE AT PROFESSOR'S LAKE RECREATION
CENTRE**

This Addendum is part of the Bid Document.

1. Schedule of Prices – Separate Price:

Separate Price No. 1 for “Provide New 2-Duct from New Transformer to the Service Entrance Disconnect Locations” has been deleted from Separate Price.

Note: The Separate Price for alternate routing for transformer has been included to Base Price Item No. 2 Asphalt and Lighting Upgrades”.

2. Pertaining to Specifications and Drawings:

Refer to attached Consultant Addendum No. 1 (Total 8 pages).

All other terms & conditions remain unchanged.

If you have any questions, please do not hesitate to contact the undersigned.

Bidders are required to acknowledge all Addenda.

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ADDENDUM

PROJECT NAME: Power distribution, Asphalt and light standard replacement

COMPANY: City of Brampton

ATTENTION: To all bidders

PROJECT NO.: 20257.001.E.001

DATE: 2024-05-06

ADDENDUM NO.: #1

ISSUED BY: Reza Madani

The following amendments are hereby made as part of the Contract Documents. The following revisions and/or additions shall be made to contract documents and the cost shall be included in the Tender Price.

1.0 DRAWINGS

1.1 Refer to E101 - SITE PLAN-NEW (included herein)

1.1.1 The luminaires rated voltage is changed from 120V to 347V. The cat# has been revised as noted.

1.2 Refer to E301-Ground floor mechanical room power and systems (included herein)

1.2.1 The Meter model is changed to PM5563.

1.3 Refer to detail 1, E300

1.3.1 Supply emergency lighting remote head complete with battery pack sized for at least 1.5-hour lighting during shutdown, install in the elevator room and feed through closest emergency feeder.

1.4 Refer to Drawings E200, E300, E301, E601

Review and follow the changes in the bubbled areas.

2.0 CLARIFICATION

2.1.1 **Question:** Please clarify the mechanical scope of work, we have only mechanical specification with no drawings.

Answer: The mechanical scope of work is shown in the Electrical drawings. (Notes N-12 to N-21 of drawings E-300)

2.1.2 **Question:** Drawing E101, Note N-9 states that contractor to allow for (1) week of generator rental and fuel in base bid. Additional generator rental and fuel cost paid through Cash Allowance. Please clarify as it was discuss differently on site visit.

Answer: Please follow the instruction on the drawings.



- 2.1.3 **Question:** Please clarify if scale (1:200) on drawings S.01 to S.04 is correct? On drawings S.03, it provides line painting dimensions, but not the same dimension when using scale 1:200 to do measurement. We need scaled drawings for takeoff.
- Answer:** Scale drawing as shown.
- 2.1.4 **Question:** Who is responsible for Alectra utility fees? And what are the costs?
- Answer:** The Alectra utility fees are paid by owner through the executed Offer to connect (OTC). The building permit fee has been paid. If any other permit is required, it could be covered from cash allowance.
- 2.1.5 **Question:** Note N-10 on drawing E301 noted Separate Price#1 for new duct bank, please advise if need to cut building existing slab on grade? please provide details.
- Answer:** Please refer to detail 08 of S.04. The drawings stated the new secondary duct bank to be separate price but based on change through this addendum, the expenses for this one should be included in base bid and not separate price.
- 2.1.6 **Question:** Drawing E102, Note N-1 noted existing feeder to be removed by hydro and duct bank to be removed by electrical contractor, I asked if to remove existing duct bank during site visit, Smith + Andersen advised the existing duct bank to remain in place, please advise what to do.
- Answer:** Please follow the instruction in the drawings.
- 2.1.7 **Question:** Drawing E102, Note N-1 noted existing feeder to be removed by hydro and duct bank to be removed by electrical contractor, I asked if to remove existing duct bank during site visit, Smith + Andersen advised the existing duct bank to remain in place, please advise what to do.
- Answer:** Please follow the instruction in the drawings.
- 2.1.8 **Question:** Please clarify the new duct bank work shown on drawing E102 to be included in which identified price (#1 or #2)? Please provide ditch work details.
- Answer:** As shown in the Drawings E102, the price for this scope to be included in identified price #2. The detail of duct has been provided in detail 2 of drawings E602. For more details on the duct and also the manholes please refer to Alectra's drawings (provided in tender documents).
- 2.1.9 **Question:** Excavation of trench for installation of new duct bank, backfill and patch asphalt as per drawing E102 – Can you provide me more details on Granular depth, Asphalt thickness, depth of trench to be dug, types of granular to be reinstated, thickness and if there is any concrete work on our behalf for the new duct bank.
- Answer:** Detail 2 of E102 shows the requested information.
- 2.1.10 **Question:** Please provide route and details to show how temporary generator cable to run to existing panel.
- Answer:** Contractor to review site conditions and decide based on site condition. Contractor is fully responsible for securing of generator and cables during construction time.
- 2.1.11 **Question:** As per drawing E300 Note N-12. Who is to supply the 1.5 ton split unit system?
- Answer:** Contractor to supply and install.



2.1.12 **Question:** Please provide the drawings for an elevator upgrade. We have a E300 for electrical connection and upgrades. Who is qualified contractor for an elevator modernization? The name of contractor, who is originally build that elevator.

Answer: The elevator design can be found in specification 232777 rev 04. This specification contains the scope of work for the elevator modernization. There are many qualified elevator contracting companies that are capable of pricing and performing this scope of work. This elevator was originally built by Dover Elevator circa 1980. TK Elevator is the current maintenance contractor. The awarded contractor will have the elevator maintenance starting from contract award to one year after end of warranty period. Please refer to elevator spec for more details.

2.1.13 **Question:** As per drawing E601 detail#1 existing transformer. The new transformer and base will be much larger than the current. Please advise who will be responsible for the costs and re working of the existing fence if required?

Answer: The Fence to be modified as per electrical drawings and also detail 05 of S.04.

2.1.14 **Question:** In the Electrical Specifications it is mentioned that Luminaire is Cash Allowance and there is Luminaire Schedule but this is missing. Please provide Luminaire schedule and confirm that if they are part of the cash allowance.

Answer: The luminaires are not in cash allowance and to be included in pricing. The luminaires are listed in drawings E101 (luminaire schedule).

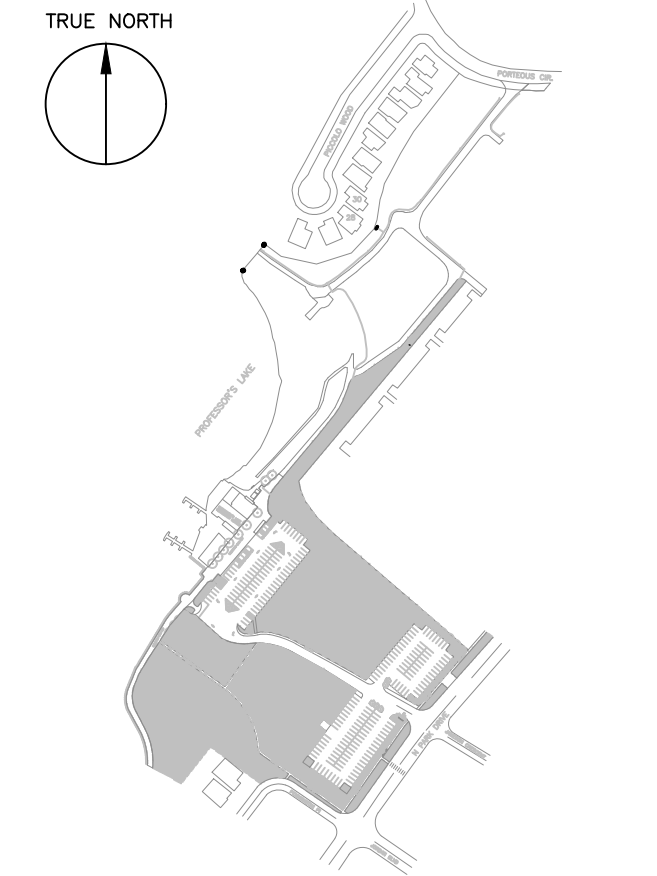
2.1.15 **Clarification:** The cash allowance could be used for the fuel and generator rental expense of emergency generator (if the shutdown time take more than one week). The rental and fuel fee during first week of shutdown to be included in the base price. Building permit fee is already paid. The other permit fees could be compensated by cash allowance.

2.1.16 **Clarification:** The scope of work in separate price #1(alternate routing for transformer secondary duct bank has been moved to the base price (identified price #2). Consequently, the separate price#2 (Elevator scope) has been re-labeled as separate price #1.

- Identified price #1: Asphalt and lighting scope
- Identified price #2: All electrical and power distribution replacement
- Separate price #1: All the scope of work for upgrading elevator

END OF ELECTRICAL ADDENDUM

20257.001.E.001 Addendum#1 2024.05.03.docx



NO.	DATE	DESCRIPTION
12	2024.06.03	ISSUED FOR ADDENDUM#1
11	2024.03.14	RE-ISSUED FOR TENDER
10	2024.02.27	RE-ISSUED FOR TENDER
09	2023.08.01	RE-ISSUED FOR TENDER
08	2023.03.30	ISSUED FOR TENDER
07	2023.01.16	RE-ISSUED TO INCLUDE ELEVATOR SCOPE
06	2022.10.18	ISSUED FOR ESA PLAN REVIEW/PERMIT
05	2022.02.11	ISSUED FOR 100% REVIEW
04	2021.06.02	RE-ISSUED FOR HYDRO COORDINATION
03	2021.01.20	ISSUED FOR HYDRO COORDINATION
02	2020.11.23	ISSUED FOR 50% REVIEW
01	2020.09.28	ISSUED FOR 50% REVIEW

REVISIONS AND ISSUES

PROJECT CONTACT

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THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ELECTRICAL SPECIFICATION SUBMITTED FOR THIS PROJECT.



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PROFESSOR'S LAKE RECREATION CENTRE
1660 NORTH PARK DR., BRAMPTON, ON

POWER DISTRIBUTION, ASPHALT AND LIGHT STANDARD REPLACEMENT

SITE PLAN - NEW

project no.: 2025/001.E.001
scale: 1:500
date: JULY 2020

GENERAL NOTES:

- DO NOT SCALE DRAWINGS. THE LOCATIONS OF ALL ITEMS SHOWN ON THE DRAWINGS OR SPECIFIED THAT ARE NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED BY THE SITE CONDITIONS. REVIEW ALL REVISIONS WITH THE CONSULTANT.
- FLOOR PLANS AND SITE PLAN SHALL BE READ IN CONJUNCTION WITH SCHEMATICS. INFORMATION SHOWN ON PLANS SHALL BE ASSUMED TO BE APPLICABLE TO THE RELATED SYSTEM SCHEMATIC AND VICE-VERSA TO PROVIDE A COMPLETE AND OPERATIONAL SYSTEM.
- ALL PENETRATIONS AND MATERIALS REMOVED TO BE PATCHED AND REPAIRED. CONTRACTOR SHALL SEAL ALL PENETRATIONS AND MAKE GOOD AS NECESSARY TO COMPLY WITH ONTARIO BUILDING CODE. PROVIDE FIRE STOPPING AND WATER SEAL AS REQUIRED. ALL MATERIALS INDICATED TO BE REMOVED SHALL BE DISPOSED OF SITE BY CONTRACTOR UNLESS OTHERWISE NOTED. COORDINATE WITH FACILITY MANAGEMENT FOR THIS WORK.
- ALL EXISTING ELECTRICAL DEVICES, EQUIPMENT AND LIGHTING WITHIN BASE BUILDING ROOMS, STAIRWELLS AND AREAS DEEMED NOT IN SCOPE SHALL REMAIN LIVE AND OPERATIONAL. ELECTRICAL CONTRACTOR TO ENSURE SERVICES TO THESE AREAS ARE ISOLATED AND PROTECTED DURING THE COURSE OF DEMOLITION AND CONSTRUCTION.
- WORK PERFORMED SHALL BE IN CONFORMITY WITH ALL LAWS, BYLAWS, OR REGULATIONS OF THE MUNICIPAL, PROVINCIAL OR OTHER AUTHORITIES HAVING JURISDICTION. NOTHING CONTAINED IN THESE DRAWINGS SHALL BE CONSTRUED AS TO BE IN CONFLICT WITH ANY SUCH LAWS.
- CONTRACTOR SHALL CARRY THE COST FOR REQUIRED CORING, SCANNING AND X-RAY TO COMPLETE THIS WORK. THE X-RAY SHALL BE DONE AFTER HOURS WHEN THE BUILDING IS FULLY EVACUATED. ALL SCANS SHOULD BE PROVIDED FOR ENGINEER AND OWNER FOR REVIEW.
- THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THE STRUCTURAL AND GEOTECHNICAL DRAWINGS FOR COMPLETE SCOPE OF WORK.
- CIRCUITING IN PART IS DIAGRAMMATIC INTENDED TO SHOW GENERAL CIRCUIT ARRANGEMENT AND PANEL DESIGNATION. EXACT ROUTING OF WIRING TO BE DETERMINED ON SITE BY CONTRACTOR.
- COORDINATE ALL WORK WITH STRUCTURAL AND GEOTECHNICAL DIVISIONS ON SITE FOR EXACT EQUIPMENT LOCATION.
- CONTRACTOR TO PROVIDE THE UPDATED TYPED LABELS AND PANEL SCHEDULES ONCE THE INSTALLATION IS COMPLETED. COORDINATE WITH FACILITY MANAGEMENT.
- PROVIDE A DEDICATED NEUTRAL WIRE FOR EACH LIGHTING CIRCUIT.
- ELECTRICAL CONTRACTOR SHALL VISIT THE SITE AND BECOME FULLY FAMILIAR WITH THE SCOPE OF WORK PRIOR TO SUBMITTING THEIR PRICING. NO EXTRAS SHALL BE ENTERTAINED DUE TO MISINTERPRETATION OF THE DESIGN INTENT.
- ELECTRICAL CONTRACTOR TO ENSURE THAT ALL LIGHTING FIXTURES ARE CLEAN AND ILLUMINATED BY END OF THE PROJECT CONSTRUCTION.
- ELECTRICAL CONTRACTOR SHALL PERFORM AND PROVIDE TEST RESULTS FOR ALL NEWLY INSTALLED 1/0 CIRCUITS TO ENSURE THERE IS NO SHORT OR DAMAGE TO THE WIRING INSULATION.
- CONTRACTOR TO PROVIDE THE SCHEDULE FOR PHASING OF THE WORK TO MINIMIZE THE BUILDING'S OPERATION INTERRUPTION.

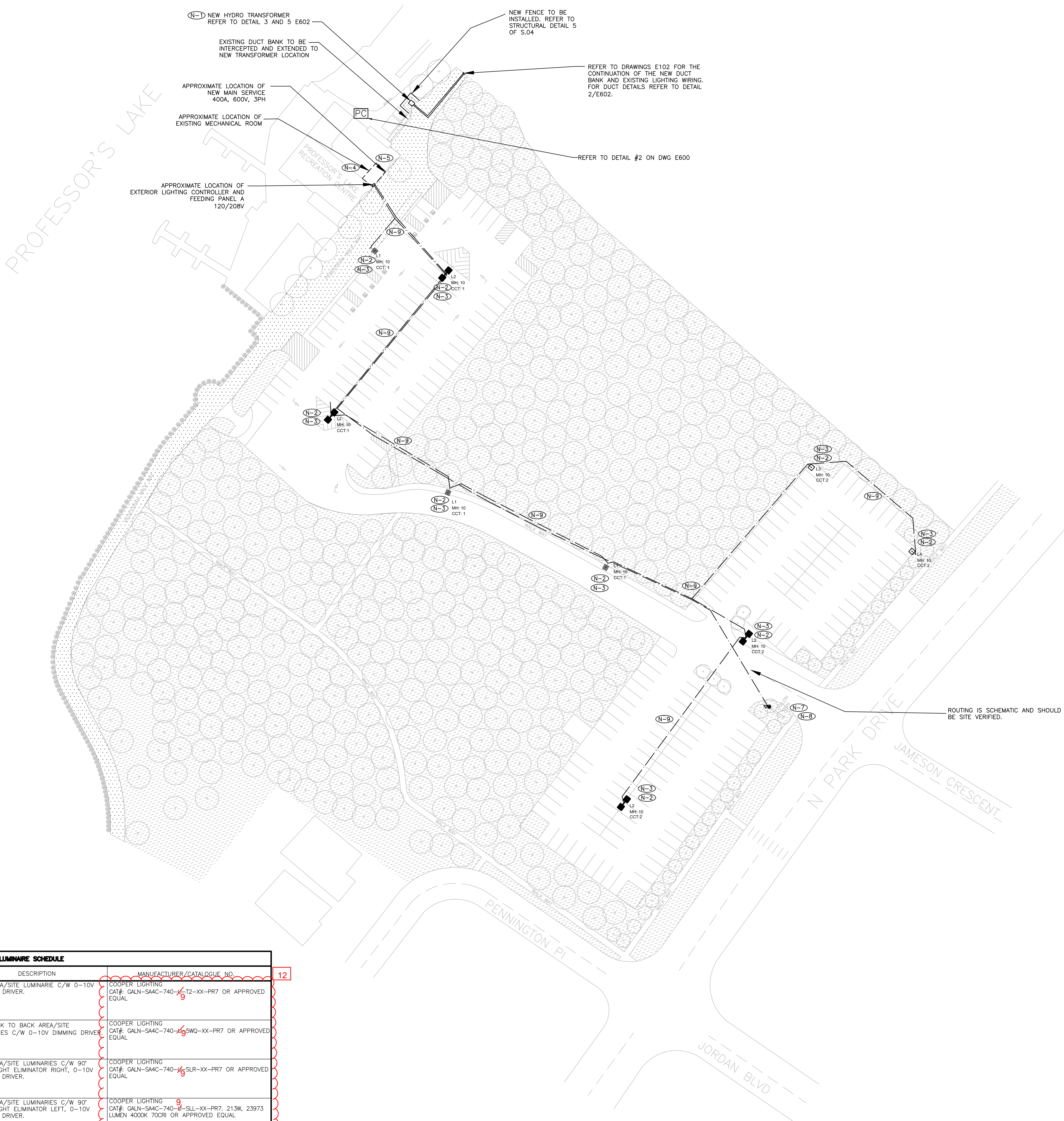
DRAWING NOTES:

- (N-1) NEW OUTDOOR PAD-MOUNTED TAMPER RESISTANT, LIQUID FILLED HYDRO TRANSFORMER, WITH INTERNAL CURRENT LIMITING FUSE AND PRESSURE RELIEF DEVICE, 300KVA, 13.8KV/347/600V, 3PH, 4W, DY AND ITS PRIMARY WIRING TO BE SUPPLIED BY ALECTRA AND INSTALLED BY CONTRACTOR. ELECTRICAL CONTRACTOR TO COORDINATE WITH ALECTRA AND FACILITY MANAGEMENT FOR NEW INSTALLATION WORK. RE-USE EXISTING DUCT BANK FROM EXISTING TRANSFORMER'S LOCATION TO EXISTING DISCONNECT SWITCH LOCATION. PROVIDE TRANSFORMER SECONDARY FEEDERS AND CONNECT TO NEW TRANSFORMER. REFER TO SINGLE LINE DIAGRAM ON DRAWING E200 FOR MORE DETAILS AND DETAIL 2/E301 FOR SEPARATE PRICE ITEM.
- (N-2) SUPPLY AND INSTALL NEW OUTDOOR LED LIGHTING FIXTURES COMPLETE WITH POLES, CONCRETE BASES, ALL ASSOCIATED MOUNTING ACCESSORIES, WIRING AND CONDUITS AND PHOTOCELL AS INDICATED. MOUNTING HEIGHT (MH) OF THE FIXTURES TO BE AS INDICATED ON THE DRAWINGS. WIRING TO BE 2x#8 AWG + #8 AWG GND IN Ø1-1/2" PVC CONDUIT (TWO RUNS AS PER CIRCUIT NUMBER ON THE FIXTURE). REFER TO LUMINAIRE SCHEDULE FOR MORE DETAILS.
- (N-3) REFER TO DETAILS 5/E600 AND 6/E600 FOR REQUIREMENTS OF THE LIGHTING POLE AND CONCRETE BASE.
- (N-4) REFER TO DRAWING E301 FOR THE LOCATION OF EXTERIOR LIGHTING CONTROLLER AND FEEDING PANEL.
- (N-5) REFER TO DETAIL 2/E600 FOR SCHEMATIC DIAGRAM OF THE EXTERIOR LIGHTING CONTROLLER. PROVIDE PHOTOCELL AS REQUIRED.
- (N-6) ELECTRICAL CONTRACTOR SHALL PROVIDE MINIMUM 1.5" RIGID UNDERGROUND RATED PVC CONDUIT/HDPE MINIMUM 750MM BELOW GRADE, COMPLETE WITH PULL STRING FOR DIRECTIONAL BORING BETWEEN EACH POLE AS SHOWN. ALLOW FOR UNDERGROUND SCANNING, LOCATE, EXCAVATING/TRENCHING, BACKFILLING, ETC AND CLEAR ALL EXISTING UNDERGROUND SERVICES. RE-INSTATE THE EXCAVATED AREA TO THE ORIGINAL CONDITIONS WHETHER PAVEMENT, CONCRETE OR GRASS AREA. ELECTRICAL CONTRACTOR SHALL REPORT UNDERGROUND SCANNING.
- (N-7) ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL TWO NEW EMPTY Ø1" PVC CONDUITS FROM PANEL 'A' AND DATA SWITCH LOCATED IN MECHANICAL ROOM TO THE EXISTING Pylon SIGN AT DRIVEWAY ENTRANCE. EXACT ROUTING TO BE DETERMINED ON SITE. PROVIDE WATER SEALING AS REQUIRED. CONDUITS TO BE CAPPED FOR FUTURE USE.
- (N-8) ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL NEW DATA FROM DATA SWITCH IN MECHANICAL ROOM AND NEW 2x#10 AWG + #10 AWG GND WIRING FROM PANEL 'A' LOCATED IN MECHANICAL ROOM TO THE EXISTING Pylon SIGN IN THE PROVIDED NEW Ø1" PVC CONDUITS.
- (N-9) DURING THE COURSE OF CONSTRUCTION, CONTRACTOR SHALL ENSURE THAT THE WHOLE SITE IS PROVIDED WITH TEMPORARY LIGHTING AND POWER. AT NO POINT THE SITE SHALL BE LEFT IN DARK. ALLOW FOR TEMPORARY GENERATOR 100KW, 120/208V, 3PH AND TEMPORARY PANEL 400A, 120/208V, 3PH ALONG WITH THE REQUIRED TEMPORARY CABLING FOR THE DURATION OF SHUTDOWN. CONTRACTOR TO ALLOW FOR A MINIMUM OF ONE (1) WEEK OF GENERATOR FUEL IN BASE CONTRACT. IN CASE WHEN MORE THAN ONE (1) WEEK OF TEMPORARY POWER REQUIRED, EXTRA GENERATOR RENTAL AND FUEL COST WILL BE PAID THRU CASH ALLOWANCE. CONTRACTOR SHALL PROVIDE INVOICES TO SUPPORT THEIR CLAIM, (TO BE CONFIRMED WITH ALECTRA FOR THE REQUIRED SHUTDOWN TIME AND FACILITY MANAGEMENT FOR EXACT TEMPORARY POWER REQUIREMENTS).

IDENTIFIED PRICE #2

IDENTIFIED PRICE #1

IDENTIFIED PRICE #2



(N-1) NEW HYDRO TRANSFORMER REFER TO DETAIL 3 AND 5 E602

EXISTING DUCT BANK TO BE INTERCEPTED AND EXTENDED TO NEW TRANSFORMER LOCATION

APPROXIMATE LOCATION OF NEW MAIN SERVICE 400A, 600V, 3PH

APPROXIMATE LOCATION OF EXISTING MECHANICAL ROOM

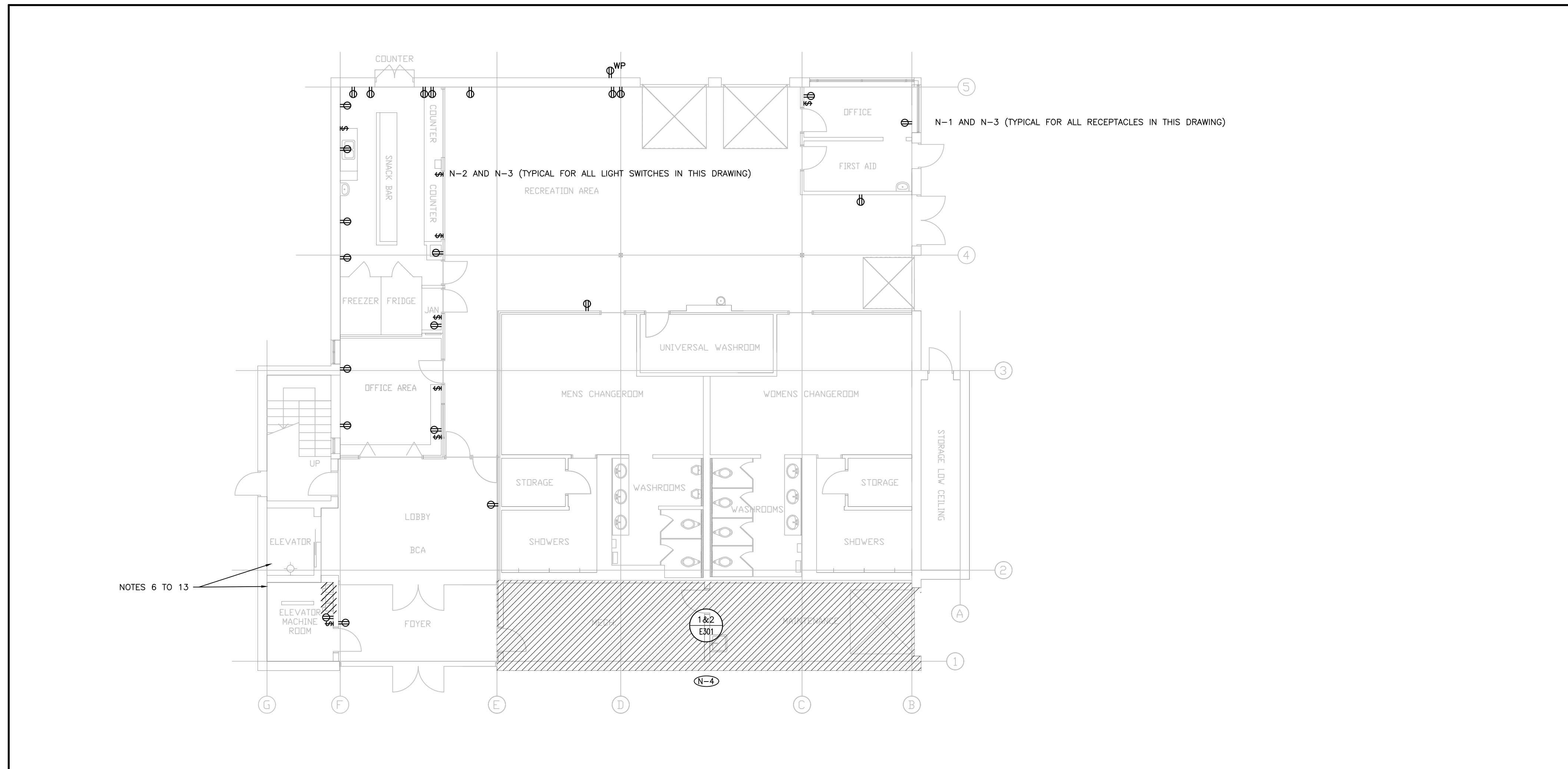
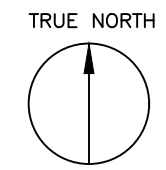
APPROXIMATE LOCATION OF EXTERIOR LIGHTING CONTROLLER AND FEEDING PANEL A 120/208V

NEW FENCE TO BE INSTALLED. REFER TO STRUCTURAL DETAIL 5 OF S.04

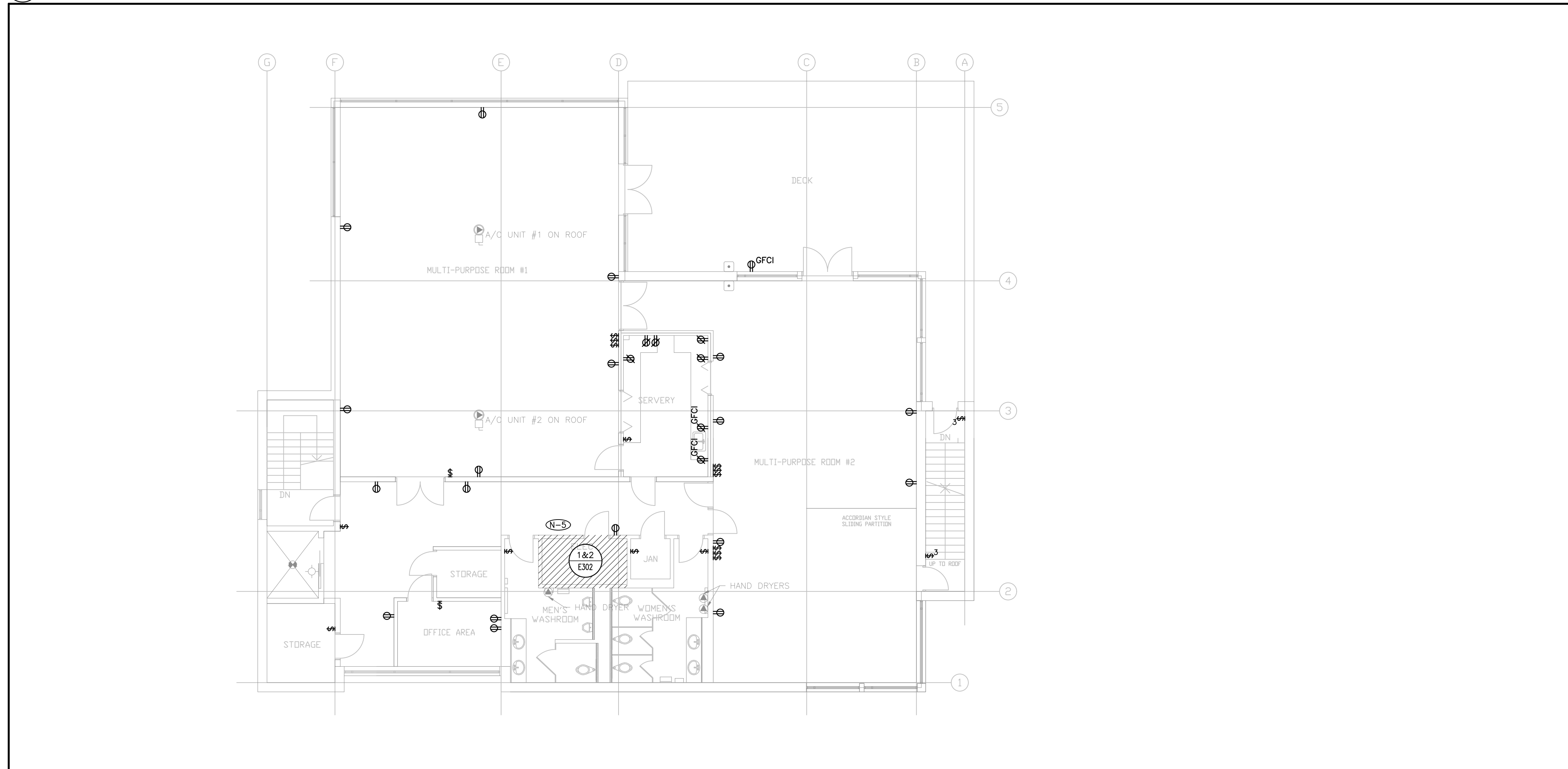
REFER TO DRAWINGS E102 FOR THE CONTINUATION OF THE NEW DUCT BANK AND EXISTING LIGHTING WIRING. FOR DUCT DETAILS REFER TO DETAIL 2/E602.

REFER TO DETAIL #2 ON DWG E600

LUMINAIRE SCHEDULE			
TYPE	LAMP VOLTAGE	DESCRIPTION	MANUFACTURER/CATALOGUE NO.
L1	120V	LED AREA/SITE LUMINAIRE C/W 0-10V DIMMING DRIVER.	COOPER LIGHTING CAT#: GALN-S44C-740-12-XX-PR7 OR APPROVED EQUAL
L2	120V	LED BACK TO BACK AREA/SITE LUMINARIES C/W 0-10V DIMMING DRIVER.	COOPER LIGHTING CAT#: GALN-S44C-740-15-SWQ-XX-PR7 OR APPROVED EQUAL
L3	120V	LED AREA/SITE LUMINARIES C/W 90° SPILL LIGHT ELIMINATOR RIGHT, 0-10V DIMMING DRIVER.	COOPER LIGHTING CAT#: GALN-S44C-740-16-SLR-XX-PR7 OR APPROVED EQUAL
L4	120V	LED AREA/SITE LUMINARIES C/W 90° SPILL LIGHT ELIMINATOR LEFT, 0-10V DIMMING DRIVER.	COOPER LIGHTING CAT#: GALN-S44C-740-16-SLL-XX-PR7, 213W, 23973 LUMEN 4000K 70CRI OR APPROVED EQUAL



1
E300 GROUND FLOOR – POWER AND SYSTEMS



2
E300 SECOND FLOOR – POWER AND SYSTEMS

- GENERAL NOTES:
- ALL GENERAL NOTES IN DRAWINGS E100 AND E101 ARE APPLICABLE TO THIS DRAWING.
 - ELECTRICAL CONTRACTOR IS RESPONSIBLE TO TRACE THE WIRING BEFORE DEMOLITION AND VERIFY THAT THE EXISTING SCHEDULE OF THE FEEDING PANEL IS ACCURATE. IN THE CASE THAT THERE IS ANY CONFLICT, MARKUP THE EQUIPMENT ON THE AS-BUILT DRAWING AND NOTIFY THE CONSULTANT AND THE CLIENT.
 - PROVIDE SUITABLE LABELS ON ALL RECEPTACLES AND LIGHTING SWITCHES. LABELS TO INCLUDE BOTH PANEL AND CIRCUIT DESIGNATION. REVIEW LABEL SIZE AND TYPE WITH CONSULTANT AND FACILITY MANAGEMENT PRIOR TO INSTALLATION.
 - COORDINATE ALL WORK TO SUIT PROJECT PHASE SCHEDULE. COORDINATE PHASING WITH FACILITY MANAGEMENT.

- DRAWING NOTES:
- (N-1) REMOVE AND DISPOSE ALL EXISTING RECEPTACLES ALONG WITH THEIR WIRING AS INDICATED. MAKE SAFE THE CONDUITS FOR NEW INSTALLATION. SUPPLY AND INSTALL NEW 120V RECEPTACLES ALONG WITH NEW WIRING. REUSE EXISTING CONDUITS. MODIFY GROUNDING TO RECEPTACLES TO MEET THE LATEST CODE.
 - (N-2) REMOVE AND DISPOSE ALL EXISTING LIGHT SWITCHES ALONG WITH THEIR WIRING AS INDICATED. MAKE SAFE THE CONDUITS FOR NEW INSTALLATION. SUPPLY AND INSTALL NEW LIGHT SWITCHES ALONG WITH NEW WIRING. REUSE EXISTING CONDUITS.
 - (N-3) LABEL CIRCUIT NUMBERS ON ALL LIGHTING SWITCHES, EQUIPMENT SWITCHES AND RECEPTACLES.
 - (N-4) REFER TO DRAWING E301 FOR EXTENT OF WORK IN THIS AREA.
 - (N-5) REFER TO DRAWING E302 FOR EXTENT OF WORK IN THIS AREA.
 - (N-6) SUPPLY AND INSTALL NEW 15A-1P GFCI BREAKER IN NEW PANEL A LOCATED IN ELECTRICAL ROOM. COMPLETE WITH WIRING IN CONDUIT. DISCONNECT SWITCH IN ELEVATOR ROOM TO BE USED FOR ELEVATOR CABIN GFCI RECEPTACLE. SUPPLY AND INSTALL 20A, 1P BREAKER IN NEW PANEL B LOCATED IN MECHANICAL ROOM AND COMPLETE WITH LOCAL DISCONNECT SWITCH AND WIRING TO ELEVATOR MACHINE ROOM FOR ELEVATOR OIL COOLER.
 - (N-7) REPLACE TWO EXISTING LIGHTING LAMPS IN ELEVATOR PIT AND ELEVATOR ROOM WITH LED LAMPS COMPLETE WITH WIRE GUARDS. REPLACE LIGHTING SWITCH. PROVIDE WIRE GUARDS FOR ALL LIGHTING IN ELEVATOR PIT, HOISTWAY AND ELEVATOR ROOM.
 - (N-8) ALL RECEPTACLES IN ELEVATOR MACHINE ROOM, ELEVATOR PIT AND HOISTWAY TO BE REPLACED WITH GFCI TYPE(TOTAL OF FOUR). USE EXISTING WIRING AND CONDUITS WHERE POSSIBLE.
 - (N-9) PROVIDE CAT6 CABLE IN CONDUIT FROM IT ROOM TO ELEVATOR MACHINE ROOM. PROVIDE JACKS AT BOTH ENDS AND TEST THE CABLE. COORDINATE FINAL REQUIREMENTS WITH THE ELEVATOR CONTRACTOR AND LOCATION OF IT ROOM ON SITE.
 - (N-10) RESERVED
 - (N-11) ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SUPPLY AND INSTALLATION OF CONDUITS AND WIRING FOR ALL POWER CONTROL AND COMMUNICATION REQUIREMENT OF ELEVATOR IN AREAS OUTSIDE HOISTWAY. COORDINATE WITH ELEVATOR CONTRACTOR.
 - (N-12) SUPPLY AND INSTALL A 1.5-TON SPLIT UNIT SYSTEM COMPLETE WITH AN EVAPORATOR UNIT AC-1 AND CONDENSING UNIT CU-1 INCLUDING BUT NOT LIMITED TO ALL REFRIGERANT PIPING, PIPING INSULATION, VALVE, PIPE FITTINGS, CONTROLS AND CONTROLS WIRING, VIBRATION ISOLATION ON MOUNTING BRACKETS, MOUNTING BRACKETS AND THE START UP AND COMMISSIONING OF THE UNIT. ALL REFRIGERANT PIPING AND INSULATION SHALL BE AS PER MECHANICAL SPECIFICATIONS. ALL WALL PENETRATIONS MUST BE FINISHED WITH FIREPROOFING. THE LOCATION OF AC-1 AND CU-1 SHALL BE COORDINATED ON-SITE WITH THE CLIENT OR THE CLIENT'S ENGINEERING REPRESENTATIVES. SUPPLY AND INSTALL 15A, 2P BREAKER IN DISTRIBUTION PANEL DP-2 IN MECHANICAL ROOM COMPLETE WITH WIRING AND CONDUIT AND LOCAL DISCONNECT TO FEED NEW AC UNIT AND CONDENSING UNIT. TERMINATE CONDENSATE TO THE OUTDOORS. INSTALLATION SHALL MEET MANUFACTURER'S AND ESA REQUIREMENTS INCLUDING ALL REQUIRED WIRING AND DISCONNECTS..
 - (N-13) SUPPLY AND INSTALL A THERMOSTAT FULLY INTEGRATED WITH THE SPLIT UNIT SYSTEM.
 - (N-14) REFER TO ENTIRETY OF MECHANICAL SPECIFICATIONS AND AC UNIT SCHEDULE FOR SUPPLY AND INSTALLATION OF THE NEW AIR-CONDITIONING UNIT.
 - (N-15) SUPPLY AND INSTALL WALL-MOUNTED THERMOSTAT MANUFACTURED BY THE A/C MANUFACTURER TO CONTROL THE UNIT LOCALLY. THERMOSTAT SHALL BE LOCATED AWAY FROM A DIRECT HEAT SOURCE AND SHALL BE INSTALLED AT APPROXIMATELY 60 INCHES HEIGHT.
 - (N-16) PROVIDE NECESSARY ELECTRICAL INTERLOCKS TO PREVENT SIMULTANEOUS OPERATION OF THE EXISTING HEATER AND THE NEW AC. MAKE SURE THAT THE EXISTING HEATER INSIDE THE ELEVATOR MACHINE ROOM SHALL REMAIN "OFF" WHILE THE NEW AC UNIT IS "ON".
 - (N-17) SUPPLY AND INSTALL REFRIGERATION PIPING, ELECTRICAL AND SIGNAL WIRING BETWEEN THE INDOOR (EVAPORATOR) UNIT AND THE CONDENSING UNIT (OUTDOOR UNIT) IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 - (N-18) WALL PENETRATIONS FOR THE REFRIGERANT PIPING BETWEEN THE INDOOR & OUTDOOR UNITS, SHALL BE COMPLETELY WATERPROOFED BY USE OF PLIABLE SILICON BASED CAULKING.
 - (N-19) THE ELEVATOR MACHINE ROOM IS LOCATED AT THE SOUTH-WEST CORNER OF THE BUILDING WITH TWO EXPOSED WALLS. LOCATE THE NEW CONDENSING UNIT (OUTDOOR UNIT) AWAY FROM CAR TRAFFIC TO PREVENT ANY RISK OF IMPACT.
 - (N-20) MAKE SURE THERE ARE NO OBSTRUCTIONS DIRECTLY ABOVE THE OUTDOOR UNIT (SUCH AS A SOFFIT) OR IN FRONT OF THE UNIT (SUCH AS A SHRUB) THAT CAN RESTRICT THE AIR FLOW OF THE UNIT. MAINTAIN ALL NECESSARY SERVICING CLEARANCES AS PER THE SPLIT UNIT MANUFACTURER'S INSTRUCTIONS. MAINTAIN MINIMUM 3 FT. CLEARANCE FROM ANY EXISTING UTILITY METER AND VENT OPENING.
 - (N-21) ROUTE THE CONDENSATE DRAIN PIPING ON TO THE ADJACENT PLANTER ON THE SOUTH SIDE OF THE ELEVATOR MACHINE ROOM. MAKE SURE THAT CONDENSATE DRAINAGE WILL NOT SPILL ON WALKWAYS OR A PAVED AREA.

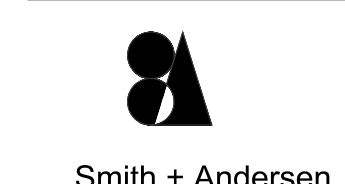
IDENTIFIED PRICE #2
SEPARATE PRICE #1

NO.	DATE	DESCRIPTION
12	2024.08.03	ISSUED FOR ADDENDUM #1
11	2024.03.14	RE-ISSUED FOR TENDER
10	2024.02.27	RE-ISSUED FOR TENDER
09	2023.08.01	RE-ISSUED FOR TENDER
08	2023.03.30	ISSUED FOR TENDER
07	2023.01.16	RE-ISSUED TO INCLUDE ELEVATOR SCOPE
06	2022.10.18	ISSUED FOR ESA PLAN
05	2022.02.11	REVIEW PERMIT
04	2021.06.02	ISSUED FOR 100% REVIEW
03	2021.01.20	ISSUED FOR HYDRO COORDINATION
02	2020.11.23	ISSUED FOR 90% REVIEW
01	2020.09.28	ISSUED FOR 50% REVIEW

PROJECT CONTACT

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EMAIL: Reza.Madani@smithandandersen.com

THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ELECTRICAL SPECIFICATION SUBMITTED FOR THIS PROJECT.



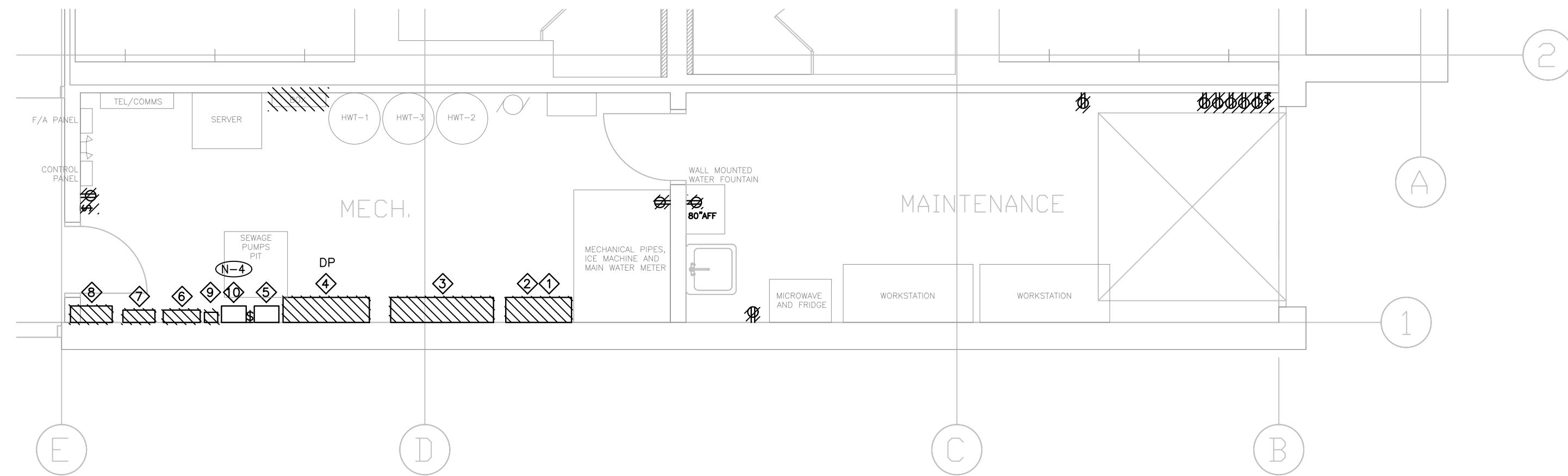
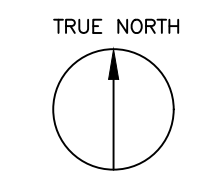
1100 - 100 Sheppard Ave. East, Toronto ON, M2N 6N5
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PROFESSOR'S LAKE RECREATION CENTRE
1660 NORTH PARK DR., BRAMPTON, ON

POWER DISTRIBUTION,
ASPHALT AND LIGHT
STANDARD REPLACEMENT

GROUND AND SECOND FLOOR
POWER AND SYSTEMS

project no.: 20257.001.E.001
scale: 1:100
date: JULY 2020



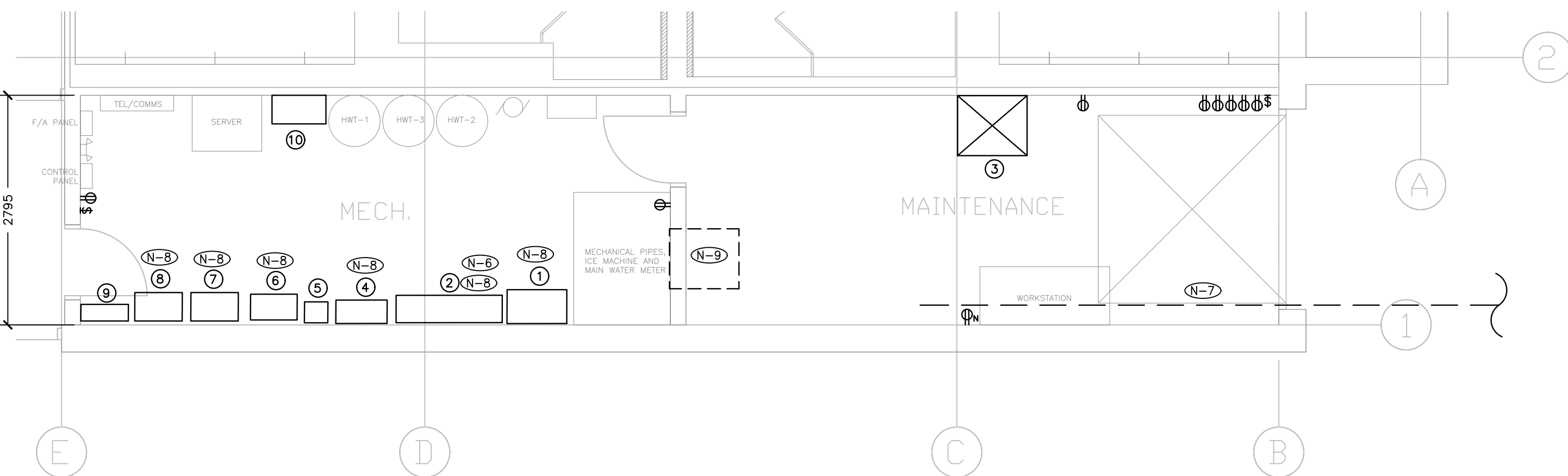
1 GROUND FLOOR PART PLAN - MECHANICAL ROOM - DEMOLITION

DEVICE NUMBER	DESCRIPTION
◇	EXISTING LOCKED SPLITTER (TO BE REMOVED) 800A, 3W
◇	EXISTING MAIN DISCONNECT SWITCH (TO BE REMOVED) 800A, 120/240V, 1PH, FED FROM HYDRO TRANSFORMER
◇	EXISTING METER CABINET (TO BE REMOVED)
◇	EXISTING DISTRIBUTION PANEL 'DP-1' (TO BE REMOVED) 800A, 120/240V, 1PH, 3W, FED FROM MAIN DISCONNECT SWITCH
◇	EXISTING SEWAGE PUMP ALARM AND PIT LIGHTS SWITCH (TO REMAIN)
◇	EXISTING SUB-PANEL A (TO BE REMOVED) 100A, 120/240V, 1PH, 3W, 20 CCTS, FED FROM PANEL A
◇	EXISTING PANEL A (TO BE REMOVED) 225A, 120/240V, 1PH, 3W, 42 CCTS, FED FROM PANEL 'DP-1'
◇	EXISTING PANEL B (TO BE REMOVED) 400A, 120/240V, 1PH, 3W, 42 CCTS, FED FROM PANEL 'DP-1'
◇	EXISTING TIMER AND JUNCTION BOX (TO REMAIN)
◇	EXISTING OUTDOOR LIGHT TIMER (TO BE REMOVED)

- GENERAL NOTES:**
- ALL GENERAL NOTES IN DRAWING E100 IS APPLICABLE TO THIS DRAWING.
 - ELECTRICAL CONTRACTOR IS RESPONSIBLE TO TRACE THE WIRING BEFORE DEMOLITION AND VERIFY THAT THE EXISTING SCHEDULE OF THE FEEDING PANEL IS ACCURATE. IN THE CASE THAT THERE IS ANY CONFLICT, MARKUP THE EQUIPMENT ON THE AS-BUILT DRAWING AND NOTIFY THE CONSULTANT AND THE CLIENT.

- IDENTIFIED PRICE #2
- DEMOLITION NOTES:**
- (N-1) REMOVE AND DISPOSE ALL EXISTING RECEPTACLES ALONG WITH THEIR WIRING AS INDICATED. MAKE SAFE THE CONDUITS FOR NEW INSTALLATION.
 - (N-2) REMOVE AND DISPOSE ALL EXISTING LIGHT SWITCHES ALONG WITH THEIR WIRING AS INDICATED. MAKE SAFE THE CONDUITS FOR NEW INSTALLATION.
 - (N-3) REMOVE/RELOCATE EQUIPMENT AS INDICATED IN THE TABLE.
 - (N-4) EXISTING OUTDOOR LIGHT TIMER TO BE REPLACED WITH NEW EXTERIOR LIGHTING CONTROLLER. REFER TO DETAIL 2/E600.

NO.	DATE	DESCRIPTION
12	2024 08 03	ISSUED FOR ADDENDUM#1
11	2024 03 14	RE-ISSUED FOR TENDER
10	2024 02 27	RE-ISSUED FOR TENDER
09	2023 08 01	RE-ISSUED FOR TENDER
08	2023 03 30	ISSUED FOR TENDER
07	2023 01 16	RE-ISSUED TO INCLUDE ELEVATOR SCOPE
06	2022 10 18	ISSUED FOR ESA PLAN REVIEW/PERMIT
05	2022 02 11	ISSUED FOR 100% REVIEW
04	2021 06 02	RE-ISSUED FOR HYDRO COORDINATION
03	2021 01 20	ISSUED FOR HYDRO COORDINATION
02	2020 11 23	ISSUED FOR 90% REVIEW
01	2020 09 28	ISSUED FOR 50% REVIEW



2 GROUND FLOOR PART PLAN - MECHANICAL ROOM - NEW

DEVICE NUMBER	DESCRIPTION
①	NEW FUSIBLE DISCONNECT SWITCH 400A, 600V, 3PH, 4W, MAKE SCHNEIDER ELECTRIC CAT#: H365N (50.25"Hx27.63"Wx10.13"D) PROVIDE NEW PULL BOX UNDER NEW DISCONNECT TO ALECTRA REQUIREMENTS.
②	NEW METERING CABINET (48"Hx48"Wx12"D) AS PER ALECTRA STANDARDS
③	NEW TRANSFORMER 'TX-1' ON NEW 4" CONCRETE PAD 75KVA, 600V:120/208V, 3PH, DY, CU, (33.5"Hx30"Wx28"D) MANUFACTURER: SCHNEIDER ELECTRIC, CAT#: EXN75165HCU OR APPROVED EQUAL. COORDINATE REMOVAL OF EXISTING CABINETS WITH THE FACILITY TO INSTALL NEW TRANSFORMER.
④	NEW DISTRIBUTION PANEL DP, 400A, 600/347V, 3PH, 4W, NEMA TYPE 1, 42 CCTS MANUFACTURER: SCHNEIDER ELECTRIC, CAT#: INTERIOR:NF442L4, BOX: MH56(56HX20"X5.75"D)
⑤	EXISTING SEWAGE PUMP ALARM AND PIT LIGHTS SWITCH
⑥	NEW DISTRIBUTION PANEL 'DP-1' 400A, 120/208V, 3PH, 4W, 10KA, 42CCTS, CU, (91"Hx32"Wx9.5"D) MANUFACTURER: SCHNEIDER ELECTRIC, CAT#: I-LINE HC3291B OR APPROVED EQUAL
⑦	NEW PANEL A (TO REPLACE EXISTING PANEL "A" AND SUBPANEL "A") 225A, 120/208V, 3PH, 4W, 10KA, 72CCTS, CU, (44"Hx32"Wx6"D) MANUFACTURER: SCHNEIDER ELECTRIC, CAT#: NQ472L2C OR APPROVED EQUAL
⑧	NEW PANEL B (HEATING) 400A, 120/208V, 3PH, 4W, 10KA, CU, 72CCTS (62"Hx20"Wx6"D) MANUFACTURER: SCHNEIDER ELECTRIC, CAT#: NQ472L4C OR APPROVED EQUAL
⑨	NEW EXTERIOR LIGHTING CONTROLLER MANUFACTURER: GE, CAT#: TIMER SWITCH-46537 OR APPROVED EQUAL
⑩	NEW 36"x36" METERING CABINET COMPLETE WITH INSTRUMENT TRANSFORMERS AND DIGITAL METER.

- GENERAL NOTES:**
- ALL GENERAL NOTES IN DRAWING E101 IS APPLICABLE TO THIS DRAWING.
 - PROVIDE SUITABLE LABELS ON ALL RECEPTACLES AND LIGHTING SWITCHES FEEDS. LABELS TO INCLUDE BOTH PANEL AND CIRCUIT DESIGNATION. REVIEW LABEL SIZE AND TYPE WITH CONSULTANT AND FACILITY MANAGEMENT PRIOR TO INSTALLATION.
 - COORDINATE ALL WORK TO SUIT PROJECT PHASE SCHEDULE. COORDINATE PHASING WITH FACILITY MANAGEMENT.

- IDENTIFIED PRICE #2
- DRAWING NOTES:**
- (N-1) SUPPLY AND INSTALL NEW 120V RECEPTACLES ALONG WITH WIRING. REUSE EXISTING CONDUITS. MODIFY GROUNDING TO RECEPTACLES TO MEET THE LATEST CODE REQUIREMENTS.
 - (N-2) SUPPLY AND INSTALL NEW LIGHT SWITCHES ALONG WITH WIRING. REUSE EXISTING CONDUITS. MODIFY GROUNDING TO RECEPTACLES TO MEET THE LATEST CODE REQUIREMENTS.
 - (N-3) ELECTRICAL CONTRACTOR TO SUPPLY AND INSTALL NEW TRANSFORMER, PANELS AND WIRING AS INDICATED. EXISTING CONDUITS TO BE PROPERLY LABELED AND RE-USED FOR NEW INSTALLATIONS. PROVIDE NEW CONDUITS FOR PRIMARY AND SECONDARY OF THE TRANSFORMER 'TX-1'.
 - (N-4) CONNECT THE EXISTING LOADS OF DISTRIBUTION PANEL 'DP-1', SUB-PANEL A, PANEL A AND PANEL B TO THE NEW PANEL 'DP-1', NEW PANEL A AND NEW PANEL B. CONNECT THE LOADS OF THE EXISTING SUB-PANEL A TO THE NEW PANEL A.
 - (N-5) LABEL CIRCUIT NUMBERS ON ALL LIGHTING SWITCHES, EQUIPMENT SWITCHES AND RECEPTACLES.
 - (N-6) PROVIDE METERING CABINET AS INDICATED COMPLETE WITH A MINIMUM OF FOUR FASTENERS AND REMOVABLE CABINET BACK PANEL. PROVIDE A 120V RECEPTACLE INSIDE THE METERING CABINET. PROVIDE A WALL MOUNTED TELEPHONE BOX AS PER ALECTRA STANDARDS. COORDINATE WITH ALECTRA FOR METERING INSTALLATION REQUIREMENTS.
 - (N-7) SUPPLY AND INSTALL NEW INCOMING FEEDERS IN EXISTING 4" INCOMING DUCT BANKS FROM PAD-MOUNTED OUTDOOR 300KVA, 3PH TRANSFORMER TO THE MAIN 400A, 600V, 3PH DISTRIBUTION PANEL AS INDICATED. RE-USE/EXTEND EXISTING 4" DUCT BANK TO SUIT DESIGN.
 - (N-8) INSTALL NEW DEVICES AS CLOSE AS POSSIBLE TO EXISTING DEVICE LOCATION TO MINIMIZE REQUIRED BRANCH CIRCUIT CONDUITS MODIFICATIONS.
 - (N-9) SUPPLY AND INSTALL NEW 36"x36" METERING CABINET WITH THREE METER COMPLETE WITH METERING TRANSFORMERS AND ALL REQUIRED ACCESSORIES. ONE METER WILL MEASURE THE FEEDER OF MAIN DISTRIBUTION PANEL AND TWO OTHER WILL MEASURE THE DISTRIBUTION TRANSFORMERS TX-1 AND TX-2 IN MAIN MECHANICAL ROOM AND SECOND FLOOR ELECTRICAL ROOM. THE METER SHOULD BE SHNEIDER POWER LOGIC PM8000
 - (N-10) PROVIDE NEW 2-DUCT U/G DUCT BANK FROM NEW TRANSFORMER TO THE SERVICE ENTRANCE DISCONNECT LOCATION. CUT FLOOR SLAB AT SHOWN LOCATION NEXT TO THE FOUNDATION WALL. EXCAVATE THE AREA, CORE THROUGH THE FOUNDATION WALL AND RUN DUCTS IN CRAWL SPACE UNDER MECHANICAL ROOM. UTILIZE AND MODIFY EXISTING STUB-UP LOCATION AS REQUIRED TO MAKE CONNECTION TO THE NEW PULL BOX AND DISCONNECT. ALLOW FOR X-RAY REFER TO DETAIL 1/E602 FOR FURTHER DETAIL. REFER TO CIVIL ENGINEER'S DRAWINGS FOR EXTEND OF STRUCTURAL WORK. ALL CITY OF BRAMPTON INSTRUCTIONS FOR WORK IN CRAWL SPACE TO BE FOLLOWED.

12 SEPARATE PRICE #1 IDENTIFIED PRICE #1

PROJECT CONTACT

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Smith + Andersen
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PROFESSOR'S LAKE RECREATION CENTRE
1660 NORTH PARK DR., BRAMPTON, ON

POWER DISTRIBUTION, ASPHALT AND LIGHT STANDARD REPLACEMENT

GROUND FLOOR MECHANICAL ROOM POWER AND SYSTEMS

Project no.: 20257.001.E.001
Scale: 1:50
Date: JULY 2020



7 WATER FOUNTAIN AND SINK IN GROUND FLOOR (TO BE REMOVED)
E601



5 EXISTING PANELS C AND D LOCATED IN 2ND FLOOR - ELEC. ROOM
E601



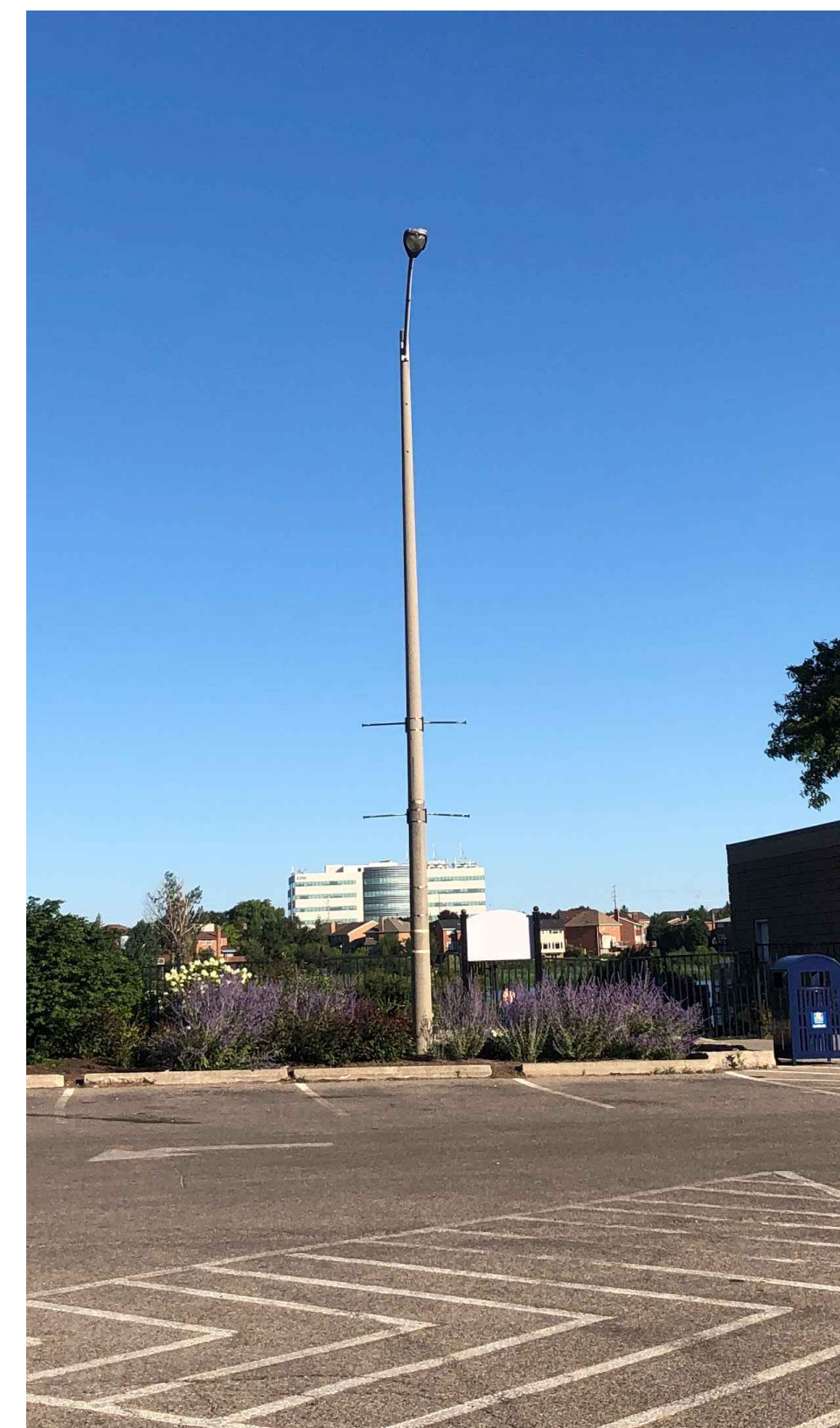
3 EXISTING PANEL "DP-1" LOCATED IN GROUND FLOOR - MECH. ROOM
E601



1 EXISTING HYDRO TRANSFORMER
E601

12
PRICING GUIDE:
SEPARATE PRICE #1: ALTERNATE ROUTE AS PER DETAIL 508 OF DWG S.04
IDENTIFIED PRICE #1: ASPHALT AND LIGHTING SCOPE INCLUDING ALL SCOPE IN DWG S.01 TO S.04 OTHER THAN MARKED AS SEPARATE PRICE #1 PLUS THE SCOPE OF LIGHTING MARKED IN ELECTRICAL DRAWINGS
IDENTIFIED PRICE #2: ALL ELECTRICAL SCOPE OTHER THAN OUTDOOR LIGHTING MARKED IN ELECTRICAL DRAWINGS
SEPARATE PRICE #1: ALL ELEVATOR UPGRADE SCOPE OF WORK MARKED IN ELECTRICAL DRAWINGS.

8 PRICING GUIDE & LEGEND
E601



6 TYPICAL EXISTING LIGHTING POLE
E601



4 EXISTING SUB-PANEL A, PANELS A AND B LOCATED IN MECH. ROOM
E601



2 EXISTING MAIN 800A DISCONNECT SWITCH LOCATED IN MECH. ROOM
E601

NO.	DATE	DESCRIPTION
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11	2024-03-14	RE-ISSUED FOR TENDER
10	2024-02-27	RE-ISSUED FOR TENDER
09	2023-08-01	RE-ISSUED FOR TENDER
08	2023-03-30	ISSUED FOR TENDER
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04	2021-06-02	RE-ISSUED FOR HYDRO COORDINATION
03	2021-01-20	ISSUED FOR HYDRO COORDINATION
02	2020-11-23	ISSUED FOR 90% REVIEW
01	2020-09-28	ISSUED FOR 50% REVIEW
NO.	DATE	DESCRIPTION
REVISIONS AND ISSUES		

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POWER DISTRIBUTION,
ASPHALT AND LIGHT
STANDARD REPLACEMENT

ELECTRICAL DETAILS
PART 2

project no.: 20257.001.E.001
scale: N.T.S.
date: JULY 2020