

ELECTRICAL DRAWING LIST	
E0.00	COVER SHEET
E0.01	LEAD SHEET
E0.02	ELECTRICAL DEMOLITION SITE PLAN
E0.03	ELECTRICAL SITE PLAN - PHASE 1A
E1.01	BASEMENT DEMOLITION LIGHTING AND FIRE ALARM PLAN - PHASE 1A & 1B
E1.02	BASEMENT DEMOLITION POWER AND COMMUNICATION PLAN - PHASE 1A & 1B
E1.03	LEVEL 1 DEMOLITION LIGHTING AND FIRE ALARM PLAN - PHASE 1A & 1B
E1.04	LEVEL 1 DEMOLITION POWER AND COMMUNICATION PLAN - PHASE 1A & 1B
E2.01	BASEMENT PROPOSED LIGHTING AND FIRE ALARM PLAN - PHASE 1A & 1B
E2.02	BASEMENT PROPOSED POWER AND COMMUNICATION PLAN - PHASE 1A & 1B
E2.03	LEVEL 1 PROPOSED LIGHTING AND FIRE ALARM PLAN - PHASE 1A & 1B
E2.04	LEVEL 1 PROPOSED POWER AND COMMUNICATION PLAN - PHASE 1A & 1B
E2.05	ATTIC LEVEL PROPOSED LIGHTING AND FIRE ALARM PLAN - PHASE 1A & 1B
E2.06	ATTIC LEVEL PROPOSED POWER AND COMMUNICATION PLAN - PHASE 1A & 1B
E3.00	FIRE ALARM RISER DIAGRAM
E4.00	SINGLE LINE DIAGRAM
E5.00	ELECTRICAL DETAILS
E5.01	TORONTO HYDRO DETAILS (SHEET 1 OF 2)
E5.02	TORONTO HYDRO DETAILS (SHEET 2 OF 2)
E6.00	PANEL SCHEDULE



Project

Issue

Issue Date

HIGH PARK NATURE AND VISITOR'S CENTER

ISSUED FOR TENDER

2025-02-25

Owner

Project Address

Project Number

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

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






































STRUCTURAL MECHANICAL PROCESS ELECTRICAL CIVIL  
ENGINEERS AND PROJECT MANAGERS


















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








GENERAL NOTES
1. DO NOT SCALE DRAWINGS FOR INSTALLATION PURPOSES. OBTAIN ALL DIMENSIONS FROM THE ARCHITECTURAL PLANS, MANUFACTURER'S SHOP DRAWINGS, AND ON SITE INSPECTIONS.
2. PRIOR TO INSTALLATION OF BOXES IN WALLS, VERIFY THAT NO INTERFERENCES EXIST. CHECK ARCHITECTURAL PLANS AND ELEVATIONS.
3. MECHANICAL AND ELECTRICAL TRADES SHALL WORK IN CONJUNCTION WITH EACH OTHER SO AS TO AVOID INTERFERENCES BETWEEN PIPING, DUCTWORK, CONDUIT, LIGHTING FIXTURES, ETC.
4. WORK IN CONJUNCTION WITH THE ARCHITECTURAL REFLECTED CEILING PLAN WHEN LOCATING LIGHT FIXTURES.
5. REVIEW ARCHITECTURAL, MECHANICAL, AND STRUCTURAL DRAWINGS AND PROVIDE ON SITE INSPECTIONS TO DETERMINE FULL EXTENT OF PROJECT PRIOR TO SUBMITTING BID.
6. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE (OBC), ONTARIO ELECTRICAL SAFETY CODE (OESC) AND THE LOCAL AUTHORITIES REQUIREMENTS.
7. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION WITH THE WORK OF OTHER TRADES. PROVIDE HORIZONTAL AND/OR VERTICAL OFFSETS AS REQUIRED TO SUIT THIS COORDINATION.
8. REFER TO THE ARCHITECTURAL DRAWINGS FOR ALL WIRING DEVICE FINAL HEIGHT AND LOCATION.
9. ALL WIRING SHALL BE A MINIMUM #12 AWG IN CONDUIT SUITABLE FOR THE APPLICATION.
10. AC90 (BX) SHALL ONLY BE ALLOWED FOR SHORT RUNS OF LESS THAN 5 FEET IN LENGTH, UNLESS OTHERWISE NOTED.
11. ALL MATERIALS SHALL BEAR A CSA (CANADIAN STANDARDS ASSOCIATION LABEL.
12. ALL INTERIOR LIGHT SWITCHES, RECEPTACLES, AND DATA OUTLETS, INCLUDING CONDUITS SHALL BE "CONCEALED" WITHIN THE WALL STRUCTURE.
13. ELECTRICAL SWITCHES, OUTLETS, PUSH-BUTTONS ETC. SHALL COMPLY WITH ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT (AODA) FOR MOUNTING HEIGHTS AND LOCATION WHERE APPLICABLE.
14. EXIT SIGNS SHALL BE GREEN, EDGE-LIT, "RUNNING-MAN" PICTOGRAM C/W LED LIGHT SOURCE, ALUMINUM HOUSING, AND UNIVERSAL MOUNTING, WHERE HIGH CEILING EXIST PROVIDE A PENDANT MOUNT TYPE SUSPENDED FROM A THREADED ROD OR EMT CONDUIT AT THE HEIGHT SPECIFIED.
15. BATTERY PACKS SHALL C/W 20% SPARE CAPACITY, 12VOLT, ALUMINUM HOUSING C/W TWO (2) 4-WATT, LED, MR-16, DIE CAST HEADS AND WHITE FINISH. PROVIDE MATCHING REMOTE HEADS.
16. ALL UNIVERSAL WASHROOM HARDWARE DEVICES TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR C/W WIRING AND CONDUIT FOR A COMPLETE INSTALLATION, UNLESS OTHERWISE NOTED.
17. ALL SECURITY DOOR ACCESS HARDWARE DEVICES SHALL BE SUPPLIED "BY OTHERS". THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRING AND CONDUIT ROUGH-IN FOR A COMPLETE INSTALLATION, UNLESS OTHERWISE NOTED.
18. ALL COMMUNICATION CABLEING TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR C/W CONDUIT, OUTLET JACKS, AND FACE PLATES FOR A COMPLETE INSTALLATION, UNLESS OTHERWISE NOTED. MAXIMUM LENGTH OF ETHERNET CABLES SHALL BE 300 FEET.
19. ALL AUDIO/VISUAL DEVICES SHALL BE SUPPLIED "BY OTHERS". THE ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT ROUGH-IN ONLY, UNLESS OTHERWISE NOTED.
20. POWER AND CONTROL WIRING FOR MECHANICAL EQUIPMENT ON THE ROOF MUST RISE WITHIN THE CURB UNLESS OTHERWISE NOTED.
21. ALL EXTERIOR OUTLET BOXES TO BE "CONCEALED" AND SHALL C/W A VAPOUR BARRIER CHAMBER TO PREVENT AIR LEAKAGE.
22. THE ELECTRICAL CONTRACTOR SHALL PROVIDE BALANCED PHASING (A,B,C) FOR ALL EQUIPMENT PANEL LOADS. ADJUST BREAKER SCHEDULES AS REQUIRED.
23. PROVIDE FIRE-STOP MATERIAL AS REQUIRED FOR ALL WALL AND FLOOR PENETRATIONS TO MAINTAIN THE SMOKE SEAL AND FIRE RATING. FOR RECESSED JUNCTION BOXES USE HULTI - FIRE BLOK.
24. PROVIDE ALL MATERIALS AND ACCESSORIES REQUIRED FOR A COMPLETE GROUNDING SYSTEM AS REQUIRED BY THE GOVERNING AUTHORITIES. GROUND ALL EQUIPMENT AND DEVICES AS REQUIRED AND IN ACCORDANCE WITH THE OESC.
25. UPON THE COMPLETION OF THE CONTRACT, ISSUE A FORMAL CERTIFICATE INDICATING THE DATE OF COMPLETION OF WORK. REPAIR OR REPLACE ANY DEFECTS WHICH MAY APPEAR IN ANY OF THE WORK WITHIN ONE (1) YEAR.
NOTE: READ IN CONJUNCTION WITH ALL SPECIFICATIONS.

















LEGEND - LIGHTING SYSTEM	
THIS LEGEND OF SYMBOLS REPRESENTS MANTECON PARTNERS INC. STANDARD LEGEND. ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	
SYMBOL	DESCRIPTION
	2'x2' FIXTURE
	2'x4' FIXTURE
	1'x4' FIXTURE
	2' STRIP FIXTURE
	4' STRIP FIXTURE
	8' STRIP FIXTURE
	POLE MOUNTED LIGHT
	4' STRIP FIXTURE - WALL
	EXTERIOR SOFFIT MOUNT LED FIXTURE
	POT LIGHT
	PENDANT
	WALL SCONCE
	TRACK LIGHT
	BOLLARD LIGHT
	1-GANG SWITCH
	2-GANG SWITCH
	DIMMER SWITCH
	2-GANG DIMMER SWITCH
	3-WAY SWITCH
	KEY SWITCH
	LOW VOLTAGE SWITCH
	SWITCH WITH OCCUPANCY SENSOR
	TIME CLOCK
	PHOTOCELL
	2'x2' EMERGENCY FIXTURE
	2'x4' EMERGENCY FIXTURE
	1'x4' EMERGENCY FIXTURE
	EMERGENCY POT LIGHT
	LIGHTING CONTROLS - OCCUPANCY SENSOR (PIR) (CEILING MOUNTED TYPE)
	DAY-LIGHT SENSOR

LEGEND - EMERGENCY SYSTEM	
THIS LEGEND OF SYMBOLS REPRESENTS MANTECON PARTNERS INC. STANDARD LEGEND. ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	
REFER	DESCRIPTION
	EXIT SIGN - SINGLE FACE - CEILING
	EXIT SIGN - SINGLE FACE - WALL
	EXIT SIGN - SINGLE FACE DIRECTIONAL - CEILING
	EXIT SIGN - DOUBLE FACE DIRECTIONAL - CEILING
	EXIT SIGN SELF-POWERED W/ REMOTE HEADS - WALL
	SINGLE REMOTE HEAD - CEILING
	DOUBLE REMOTE HEADS - CEILING
	SINGLE REMOTE HEAD - WALL
	DOUBLE REMOTE HEADS - WALL
	BATTERY PACK W/ DOUBLE REMOTE HEADS (EBST) - WALL
























LEGEND - FIRE ALARM SYSTEM	
THIS LEGEND OF SYMBOLS REPRESENTS MANTECON PARTNERS INC. STANDARD LEGEND. ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	
REFER	DESCRIPTION
	BELL - WALL
	BELL AND STROBE - WALL
	HORN - WALL
	HORN & STROBE - WALL
	HORN AND STROBE - CEILING
	STROBE - CEILING
	STROBE - WALL
	FIRE ALARM PULLSTATION
	SMOKE DETECTOR - CEILING
	DUCT SMOKE DETECTOR
	HEAT DETECTOR - CEILING
	CARBON MONOXIDE - CEILING
	FIRE ALARM/ANNUNCIATOR PANEL
	PRESSURE SWITCH
	FLOW SWITCH
	SUPERVISORY VALVE
	SMOKE DETECTOR C/W RELAY BASE

LEGEND - ABBREVIATION	
THIS LEGEND OF SYMBOLS REPRESENTS MANTECON PARTNERS INC. STANDARD LEGEND. ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	
REFER	DESCRIPTION
R	REMOVE
ER	EXISTING TO BE RELOCATED
EX	EXISTING TO REMAIN
NL	NIGHT LIGHT
WP	WEATHER-PROOF
ADO	AUTOMATIC DOOR OPENER
WG	WIRE GUARD
FACP	FIRE ALARM CONTROL PANEL
ANNU	ANNUNCIATOR
PTO	PUSH TO OPEN
PTL	PUSH TO LOCK
EP	EMERGENCY PUSH BUTTON
ARS	ASSISTANCE REQUIRED SOUNDER
C/W	COMPLETE WITH
AFF	ABOVE FINISHED FLOOR
RC	RECALL
U/G	UNDERGROUND
O/H	OVERHEAD

LEGEND - COMMUNICATIONS	
THIS LEGEND OF SYMBOLS REPRESENTS MANTECON PARTNERS INC. STANDARD LEGEND. ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	
REFER	DESCRIPTION
	DATA OUTLET
	TELEPHONE OUTLET
	DATA OUTLET - CEILING
	TELEPHONE AND DATA OUTLET
	COAXIAL OUTLET
	PUBLIC ADDRESS SPEAKER
	PUBLIC ADDRESS SPEAKER AND CALL SWITCH
	PUBLIC ADDRESS PAGING SPEAKER AND HANDSET
	WIRELESS ACCESS POINT - WIFI

LEGEND - SECURITY SYSTEM	
THIS LEGEND OF SYMBOLS REPRESENTS MANTECON PARTNERS INC. STANDARD LEGEND. ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	
REFER	DESCRIPTION
	ELECTRIC STRIKE
	CARD READER
	DOOR CONTACT
	MAGLOCK
	WAVE STYLE ADO
	MOTION SENSOR - CEILING
	SECURITY JUNCTION BOX
	SECURITY PANEL
	SECURITY INTERCOM
	SECURITY CAMERA - WALL MOUNT
	360 SECURITY CAMERA - CEILING MOUNT
	MOTION SENSOR (INTRUSION)
	MOTION SENSOR (LONG RANGE INTRUSION)
	SECURITY SYSTEM KEY PAD
	DOOR HOLD OPEN
	AUTOMATIC DOOR OPENER

LIGHT FIXTURE SCHEDULE			
NOTES: 1. CONTRACTOR AND FIXTURE SUPPLIER ARE RESPONSIBLE TO PROVIDE ALL PLASTER AND FINISHING FRAMES, MOUNTING HARDWARE, AND ACCESSORIES TO SUIT ARCHITECTURAL CEILING SCHEDULE.			
TYPE	DESCRIPTION	LAMPS	MTG
L1	609MM UPLIGHT WALL MOUNT LIGHT ENS-CONCE #5403-S-18-C-02-M-00-J-TWH-ZX	LED @ 16W	REFER TO ARCH DETAILS
L2	50MM LINEAR WALL MOUNT LIGHT FASE1 #F50-W-2-RA-OP-DN-35-ST-UN-OS1-01	LED	REFER TO ARCH DETAILS
L2A	50MM LINEAR SURFACE MOUNT CEILING LIGHT 4FT FASE1 #F50-C-4-RA-OP-DN-35-ST-UN-OS1-01	LED	REFER TO ARCH DETAILS
L2B	50MM LINEAR SURFACE MOUNT CEILING LIGHT 2FT FASE1 #F50-C-2-RA-OP-DN-35-ST-UN-OS1-01	LED	REFER TO ARCH DETAILS
L2C	50MM LINEAR SURFACE MOUNT CEILING LIGHT 8FT FASE1 #F50-C-8-RA-OP-DN-35-ST-UN-OS1-01	LED	REFER TO ARCH DETAILS
L3	305*1200 SURFACE MOUNT LIGHT NPDBL #NPDBL-E14/334-W-MS	LED @ 30W	REFER TO ARCH DETAILS
L4	914MM DIA PENDANT LIGHT FULLMOON #3601-A-CS-35-DU36-I-D	LED @ 26W	REFER TO ARCH DETAILS
L4A	457MM DIA PENDANT LIGHT FULLMOON #1801-A-CS-35-DU18-I-D	LED @ 68W	REFER TO ARCH DETAILS
L5	EXTERIOR WALL LIGHT - ADJUSTABLE LUMENS AND COLOUR - 2700 LM, 3000K ASWPLED1S-20W-3000K	LED @ 20W	REFER TO ARCH DETAILS
L6	EXTERIOR PENDANT LIGHT - ADJUSTABLE LUMENS AND COLOUR - 5000 LM, 3000K LITHONIA #CNY-LED-ALO-UVOLVT-DD8	LED @ 34W	REFER TO ARCH DETAILS
L7	LED VAPORPROOF WALL FIXTURE CANLET #01-20W-L-W-F-OG-09	LED @ 20W	REFER TO ARCH DETAILS
L8	EXTERIOR FLOODLIGHTS - ADJUSTABLE LUMENS AND COLOUR - 8500 LM, 3000K LITHONIA #ESXF3-ALO-SWW2-DD8	LED @ 53W	REFER TO ARCH DETAILS

LEGEND - POWER SYSTEM	
THIS LEGEND OF SYMBOLS REPRESENTS MANTECON PARTNERS INC. STANDARD LEGEND. ALL SYMBOLS MAY NOT APPEAR ON DRAWINGS.	
REFER	DESCRIPTION
	DUPLEX RECEPTACLE
	GFCI RECEPTACLE
	SPLIT RECEPTACLE
	SINGLE RECEPTACLE
	QUAD RECEPTACLE
	DUPLEX RECEPTACLE - FLOOR MOUNTED
	QUAD RECEPTACLE - FLOOR MOUNTED
	DUPLEX RECEPTACLE - CEILING MOUNTED
	DIRECT CONNECTION
	NON FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	NON-FUSED DIRECT CONNECTION
	MOTOR CONNECTION (DISCONNECT BY ELECTRICAL)
	MOTOR CONNECTION (COMBINATION STARTER BY ELECTRICAL)
	MOTOR CONNECTION (UNIT MOUNTED DISCONNECT BY MECHANICAL)
	POWER JUNCTION BOX
	POWER PACK
	SPEED SWITCH
	RELAY
	ELECTRICAL PANEL
	GROUND BAR
	DIGITAL MULTI METER
	GROUND ROD
	TRANSFORMER
	POLE-MOUNTED TRANSFORMER
	UTILITY METER
	PULL BOX

SEPERATION OF RESPONSIBILITIES - MAIN ELECTRICAL SERVICE UPGRADE			
SCOPE	CONTRACTOR	HYDRO	OWNER
NEW HYDRO POLES AND NEW POLE-MOUNTED HYDRO TRANSFORMER	COORDINATION WITH HYDRO; PAY HYDRO CONNECTION COSTS.	PROVIDE NEW HYDRO POLES; PROVIDE NEW POLE-MOUNTED HYDRO TRANSFORMER ON P375-2.	REIMBURSE HYDRO CONNECTION COSTS.
HV WIRING BETWEEN NEW HYDRO POLE P403 AND NEW HYDRO TRANSFORMER ON POLE 375-2	COORDINATION WITH HYDRO; PAY HYDRO CONNECTION COSTS.	SUPPLY NEW O/H PRIMARY BETWEEN HYDRO POLE 403 AND NEW HYDRO TRANSFORMER; TERMINATE ON HYDRO TRANSFORMER PRIMARY BUSHINGS.	REIMBURSE HYDRO CONNECTION COSTS.
LV WIRING AND DUCTBANK BETWEEN NEW HYDRO TRANSFORMER ON NEW HYDRO POLE 375-2 AND LV PANEL 2P-1	PROVIDE NEW CONCRETE ENCASED DUCT BANK TO OESC AND TORONTO HYDRO REQUIREMENTS; PROVIDE SECONDARY FEEDER BETWEEN TRANSFORMER AND PANEL MAINS; RUN ALL SECONDARY CONDUCTORS TO HYDRO TRANSFORMER BUSHINGS; PAY HYDRO CONNECTION COSTS.	COORDINATE WITH CONTRACTOR AND TERMINATE WIRING ON TRANSFORMER SECONDARY BUSHINGS.	REIMBURSE HYDRO CONNECTION COSTS.
LV MAIN PANELBOARD 2P-1 HYDRO METERING	PROVIDE NEW LV MAIN PANELBOARD; PROVIDE NEW HYDRO METERING CABINET TO HYDRO REQUIREMENTS. INSTALL HYDRO PROVIDED CTS AND METER IN CABINET; COORDINATE WITH HYDRO; PAY HYDRO CONNECTION COSTS.	REVIEW/ACCEPTANCE OF METERING LOCATION PROVIDE CTS TO CONTACTOR; INSTALL HYDRO METER AFTER ESA AUTHORIZATION TO CONENCT.	REIMBURSE HYDRO CONNECTION COSTS.
REMOVAL OF EXISTING HYDRO POLES AND HYDRO TRANSFORMER	COORDINATION WITH HYDRO; PAY HYDRO FEES; ARRANGE DISCONNECTION OF POWER WITH HYDRO; DISCONNECT EXISTING SECONDARY WIRING.	COORDINATE WITH CONTRACTOR FOR DISCONNECTION OF EXISTING SERVICE. REMOVE EXISTING TRANSFORMER. DEMOLISH EXISTING PRIMARY WIRING. REMOVE EXISTING HYDRO POLES.	REIMBURSE HYDRO FEES.
REMOVAL OF EXISTING HYDRO METERING EQUIPMENT	COORDINATION WITH HYDRO; PAY HYDRO FEES; ARRANGE DISCONNECTION OF POWER TO EXISTING MAIN PANEL;	COORDINATE WITH CONTRACTOR FOR DISCONNECTION OF EXISTING SERVICE.	REIMBURSE HYDRO FEES.

REVIEW ALL DRAWINGS AND VERIFY ALL DIMENSIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION OR SHOP FABRICATION. ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF "MANTECON PARTNERS" AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR WHOLE IS FORBIDDEN WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION

LIGHTING NARRATIVE	
ROOM TYPE	DESCRIPTION
SERVICE ROOMS/STORAGE /OFFICE/VISITORS' CENTRE	LIGHTS AUTOMATICALLY TURN ON TO 100% WHEN OCCUPANCY IS DETECTED. MANUAL CONTROL OF EACH ROOM VIA ON/OFF WALL SWITCHES AT ENTRANCE. AUTOMATICALLY TURN OFF AFTER 20 MINUTES OF VACANCY.
WASHROOM	LIGHTS AUTOMATICALLY TURN ON TO 100% WHEN OCCUPANCY IS DETECTED AND TURN OFF AFTER 20 MINUTES OF VACANCY.
CIRCULATION/VES TIBULE/STAIR	LIGHTS AUTOMATICALLY TURN ON TO 100% WHEN OCCUPANCY IS DETECTED AND DIM TO 20% AFTER 20 MINUTES OF VACANCY. MANUAL CONTROL VIA ON/OFF 3 WAY SWITCHES ON THE WALL.
HPNC PROGRAM SPACE	LIGHTS AUTOMATICALLY TURN ON TO 100% WHEN OCCUPANCY IS DETECTED AND TURN OFF AFTER 20 MINUTES OF VACANCY. MANUAL CONTROL OF THE SPACE VIA ON/OFF WALL SWITCHES AT THE ENTRANCE. DAYLIGHT HARVESTING IS PROVIDED VIA CEILING MOUNTED DAYLIGHT SENSORS, WHERE APPLICABLE AND SHOWN ON DRAWINGS. DAYLIGHT SENSORS SHALL DIM THE GENERAL PENDANT FIXTURES WITHIN THE ROOM BASED ON THE AMOUNT OF NATURAL LIGHTING ENTERING THROUGH THE WINDOWS.

EMERGENCY LIGHTING SCHEDULE			
NOTES: 1. CONTRACTOR AND FIXTURE SUPPLIER ARE RESPONSIBLE TO PROVIDE ALL PLASTER AND FINISHING FRAMES, MOUNTING HARDWARE, AND ACCESSORIES TO SUIT ARCHITECTURAL CEILING SCHEDULE.			
TYPE	DESCRIPTION	LAMPS	MTG
E1	EDGE/LIT RUNNING MAN SIGN CAT: RMEA-BA-UDC MANUFACTURER: STANPRO	LED	REFER TO ARCH DETAILS
R1	MR16 SURFACE MOUNT DOUBLE REMOTE HEADS CAT: MR16-M2-12-24V-6W-LA-WH MAUFACTURER: STANPRO	LED	REFER TO ARCH DETAILS
BU1 BU2 BU3	COMBINATION STEEL COMBO WITH DUAL REMOTES CAT: SLD24720-2M-6LA-WH MANUFACTURER STANPRO	LED	REFER TO ARCH DETAILS

10	ISSUED FOR TENDER	2025-02-25
9	RE-ISSUED FOR TORONTO HYDRO	2025-02-24
7	RE-ISSUED FOR TORONTO HYDRO	2024-10-18
6	ISSUED FOR TORONTO HYDRO	2024-08-12
5	RE-ISSUED FOR COSTING	2024-02-20
4	RE-ISSUED FOR PERMIT	2024-02-20
3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev #	Description	Date

Consultants

**MANTECON PARTNERS**  
STRUCTURAL, MECHANICAL PROCESS ELECTRICAL CIVIL ENGINEERS AND PROJECT MANAGERS  
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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
LEAD SHEET

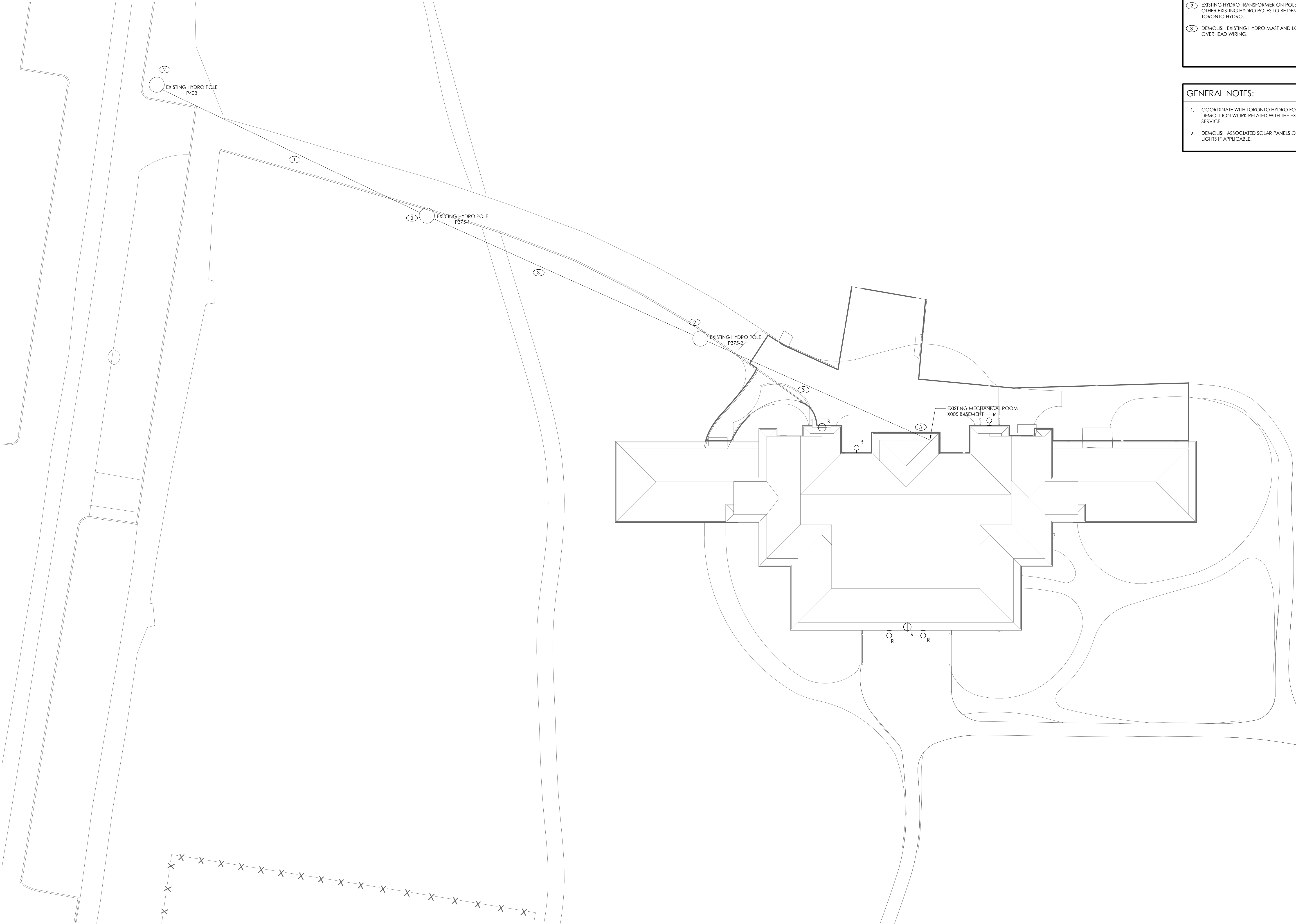
Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



E0.01





**DRAWING NOTES:**

- 1 EXISTING OVERHEAD MEDIUM VOLTAGE FEED TO BE DEMOLISHED BY TORONTO HYDRO.
- 2 EXISTING HYDRO TRANSFORMER ON POLE P375-1 AND OTHER EXISTING HYDRO POLES TO BE DEMOLISHED BY TORONTO HYDRO.
- 3 DEMOLISH EXISTING HYDRO MAST AND LOW VOLTAGE OVERHEAD WIRING.

**GENERAL NOTES:**

- 1. COORDINATE WITH TORONTO HYDRO FOR ALL DEMOLITION WORK RELATED WITH THE EXISTING MAIN SERVICE.
- 2. DEMOLISH ASSOCIATED SOLAR PANELS OF DEMOLISHED LIGHTS IF APPLICABLE.

**NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION**

10	ISSUED FOR TENDER	2025-02-25
9	RE-ISSUED FOR TORONTO HYDRO	2025-02-24
7	RE-ISSUED FOR TORONTO HYDRO	2024-10-18
6	ISSUED FOR TORONTO HYDRO	2024-08-12
5	RE-ISSUED FOR COSTING	2024-02-20
4	RE-ISSUED FOR PERMIT	2024-02-20
3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev. #	Description	Date

Consultants

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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
ELECTRICAL DEMOLITION SITE PLAN

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



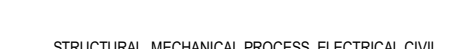
- ① TORONTO HYDRO TO PROVIDE NEW TRANSFORMER ON NEW POLE FOR UPGRADED MAIN SERVICE.
- ② NEW OVERHEAD MEDIUM VOLTAGE FEED PROVIDED AND INSTALLED BY TORONTO HYDRO FOR UPGRADED MAIN SERVICE.
- ③ PROVIDE UNDERGROUND CONCRETE ENCASED DUCTBANK, AND WIRING FROM TRANSFORMER TO MAIN DISCONNECT. ENTIRE RUN OF DUCTBANK SHALL REMAIN UNDERNEATH ASPHALT.
- ④ WIRING FROM DUCT BANK SHALL PENETRATE WALL INTO PULL BOX LOCATED IN MAIN ELECTRICAL ROOM. REFER TO DRAWING E2.02 FOR PULL BOX LOCATION.
- ⑤ EXTERIOR LIGHTS SHALL BE CONTROLLED BY PHOTOCELL IN BASEMENT ELECTRICAL ROOM.

- \_\_\_\_\_

1. COORDINATE WITH TORONTO HYDRO FOR ALL MAIN SERVICE UPGRADE WORK. ALL INSTALLATIONS SHALL MEET TORONTO HYDRO STANDARDS/REQUIREMENTS. REFER TO DRAWING E50.1.
2. CONTRACTOR TO ALLOW/PRICE FOR INSTALLATION OF MAIN INCOMING DUCT BANK AT 1.5 METERS DEEP AND PROVIDING AN IEEE-846 CALCULATION TO SHOW CONFIRMATION THAT NEW DEPTH ALLOWS FOR REQUIRED INCOMING CABLE RATING/AMPCACITY.
3. NEW HYDRO POLES SHALL BE SUPPLIED AND INSTALLED BY TORONTO HYDRO.

- 

NOTE: REFER TO ARCHITECTURAL  
DRAWINGS FOR PHASING INFORMATION



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Drawing Scale: As Indicated

File Name:

Drawn By: M.Z.

Reviewed By: M.A.

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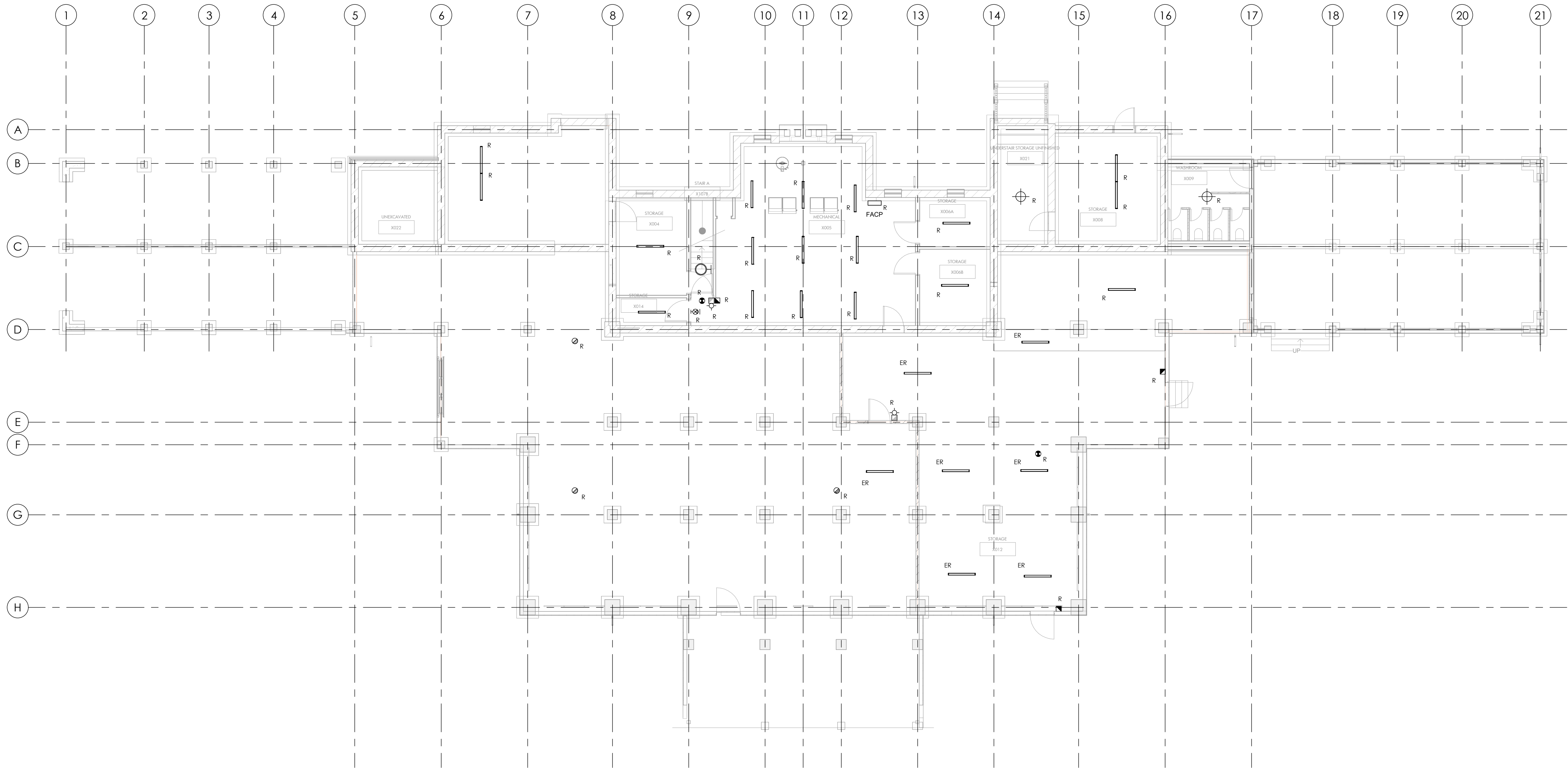


GENERAL NOTES:

- EXISTING LIGHTING FIXTURES LOCATED UNDER GRIDLINE D IN BASEMENT STORAGE RM 012 TO BE DISCONNECTED AND RETAINED FOR RE-USE DURING NEW CEILING AND INSULATION WORK. REINSTALL EXISTING ELECTRICAL IN APPROX. THE SAME POSITIONS WITH POWER FROM PANEL 2-LP-1 AND NEW FIRE ALARM DEVICES CONNECTED TO NEW FACP AS REQUIRED.
- ALL DEMOLITION WORK SHALL BE INCLUDED IN THE BASE CONTRACT.
- SINCE ALL EXISTING DEVICES ARE NOT SHOWN ON THE PLANS, THE BASE CONTRACT SCOPE SHALL INCLUDE DEMOLITION OF EMERGENCY REMOTE HEADS, LIGHT SWITCHES AND SMOKE DETECTORS SPACED 20 FEET APART AND/OR IN EACH ROOM.
- DEMOLISH ALL CONDUIT, WIRING, BOXES SUPPORTS AND ACCESSORIES FOR EACH DEVICE ALL THE WAY BACK TO THE SOURCE EQUIPMENT.
- THE DEMOLITION SHALL INCLUDE ALL EQUIPMENT AND DEVICES RELATED TO POWER, DATA, SECURITY, ACCESS CONTROL AND OTHER COMMUNICATION SYSTEMS.

REVIEW ALL DRAWINGS AND VERIFY ALL DIMENSIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION OR SHOP FABRICATION. ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF "MANTECON PARTNERS" AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR WHOLE IS FORBIDDEN WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



10	ISSUED FOR TENDER	2025-02-25
9	RE-ISSUED FOR TORONTO HYDRO	2025-02-24
5	RE-ISSUED FOR COSTING	2024-02-20
4	RE-ISSUED FOR PERMIT	2024-02-20
3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev.#	Description	Date

Consultants



STRUCTURAL MECHANICAL PROCESS ELECTRICAL CIVIL  
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Phone: (905) 645-0272 www.mantecopartners.com

Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND  
VISITOR'S CENTER

Drawing Name:  
**BASEMENT DEMOLITION  
LIGHTING AND FIRE ALARM PLAN  
- PHASE 1A & 1B**

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



E1.01



DRAWING NOTES:

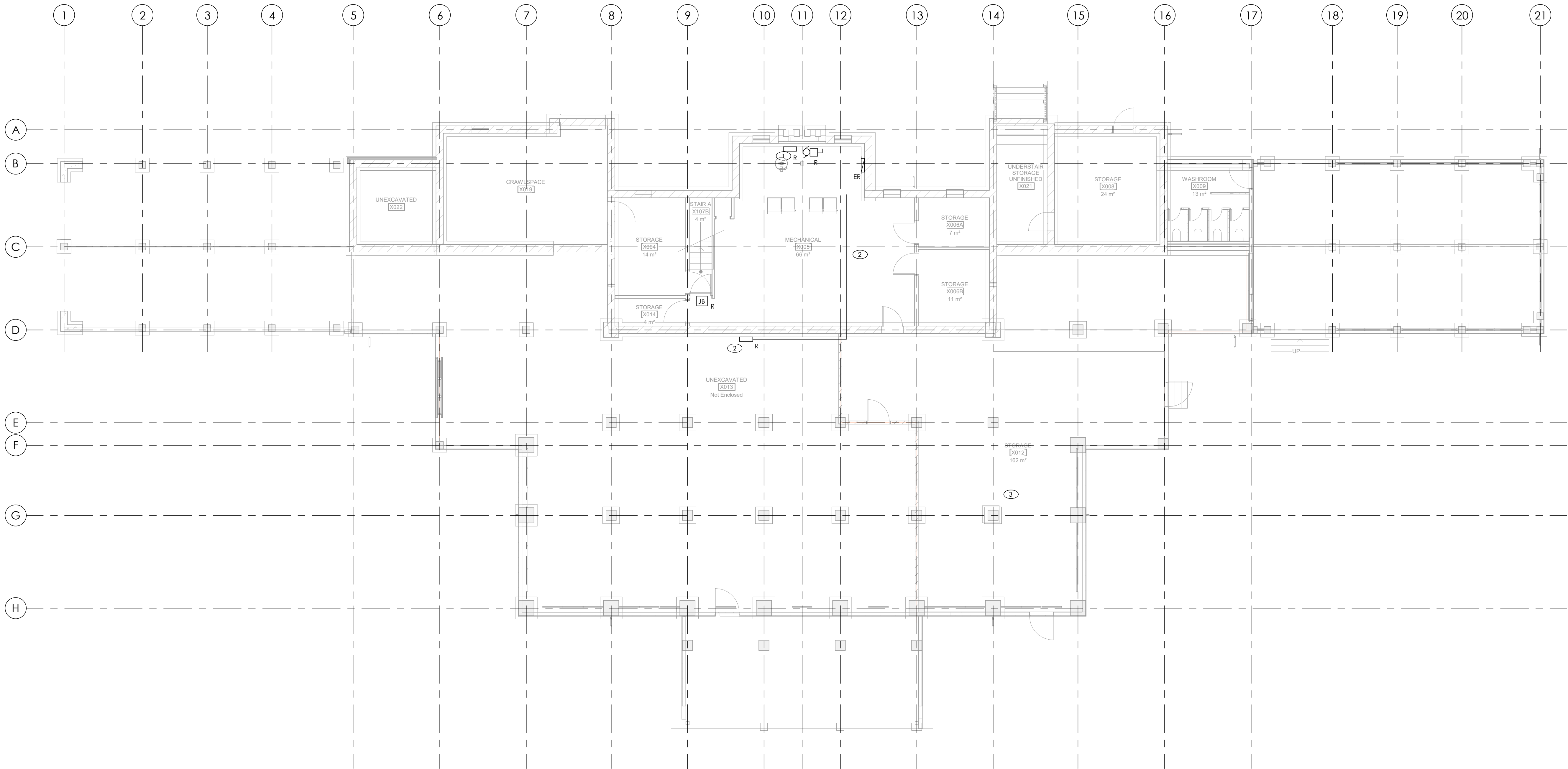
- 1 DEMOLISH EXISTING MAIN PANEL. REMOVE ALL DOWNSTREAM WIRING/CONDUIT BACK TO SOURCE.
- 2 DEMOLISH DISCONNECT, SPLITTER, AND ASSOCIATED WIRING/CONDUIT BACK TO EXISTING MAIN ELECTRICAL SPACE AND TO LOADS/ FLOOD LIGHTS. DEMOLISH EXISTING FLOOD LIGHTS.
- 3 ELECTRICAL IN STORAGE ROOM UNDER GRIDLINE D TO REMAIN UNTIL PHASE 2.

GENERAL NOTES:

1. ALL DEMOLITION WORK SHALL BE INCLUDED IN THE BASE CONTRACT.
2. SINCE ALL EXISTING DEVICES ARE NOT SHOWN ON THE PLANS, THE BASE CONTRACT SCOPE SHALL INCLUDE DEMOLITION OF DEVICES SPACED 6 FEET WALL LENGTH ON AVERAGE.
3. DEMOLISH ALL CONDUIT, WIRING, BOXES SUPPORTS AND ACCESSORIES FOR EACH DEVICE ALL THE WAY BACK TO THE SOURCE EQUIPMENT.
4. THE DEMOLITION SHALL INCLUDE ALL EQUIPMENT AND DEVICES RELATED TO POWER, DATA, SECURITY, ACCESS CONTROL AND OTHER COMMUNICATION SYSTEMS.

REVIEW ALL DRAWINGS AND VERIFY ALL DIMENSIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION OR SHOP FABRICATION. ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF "MANTECON PARTNERS" AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR WHOLE IS FORBIDDEN WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



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4	RE-ISSUED FOR PERMIT	2024-02-20
3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev. #	Description	Date

Consultants



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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND  
VISITOR'S CENTER

Drawing Name:  
BASEMENT DEMOLITION POWER  
AND COMMUNICATION PLAN -  
PHASE 1A & 1B

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



NORTH ARROW

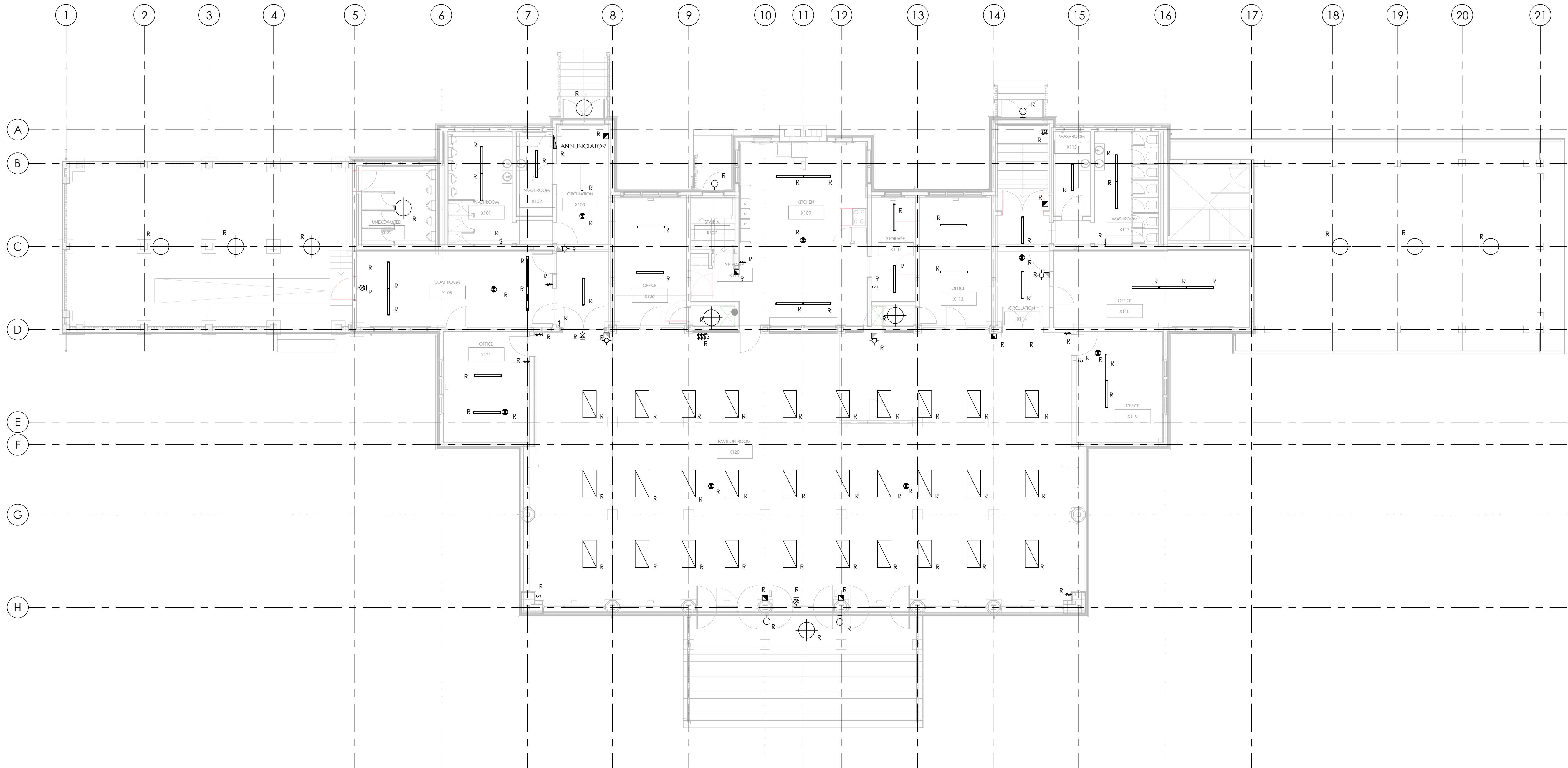


GENERAL NOTES:

- DEMOLISH ASSOCIATED SOLAR PANELS OF DEMOLISHED LIGHTS IF APPLICABLE.
- ALL DEMOLITION WORK SHALL BE INCLUDED IN THE BASE CONTRACT.
- SINCE ALL EXISTING DEVICES ARE NOT SHOWN ON THE PLANS, THE BASE CONTRACT SCOPE SHALL INCLUDE DEMOLITION OF EMERGENCY REMOTE HEADS, LIGHT SWITCHES AND SMOKE DETECTORS SPACED 20 FEET APART AND/OR IN EACH ROOM.
- DEMOLISH ALL CONDUIT, WIRING, BOXES SUPPORTS AND ACCESSORIES FOR EACH DEVICE ALL THE WAY BACK TO THE SOURCE EQUIPMENT.
- THE DEMOLITION SHALL INCLUDE ALL EQUIPMENT AND DEVICES RELATED TO POWER, DATA, SECURITY, ACCESS CONTROL AND OTHER COMMUNICATION SYSTEMS.

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NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



10	ISSUED FOR TENDER	2025-02-25
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2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev.#	Description	Date

Consultants



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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND  
VISITOR'S CENTER

Drawing Name:  
LEVEL 1 DEMOLITION LIGHTING  
AND FIRE ALARM PLAN - PHASE  
1A & 1B

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



E1.03



DRAWING NOTES:

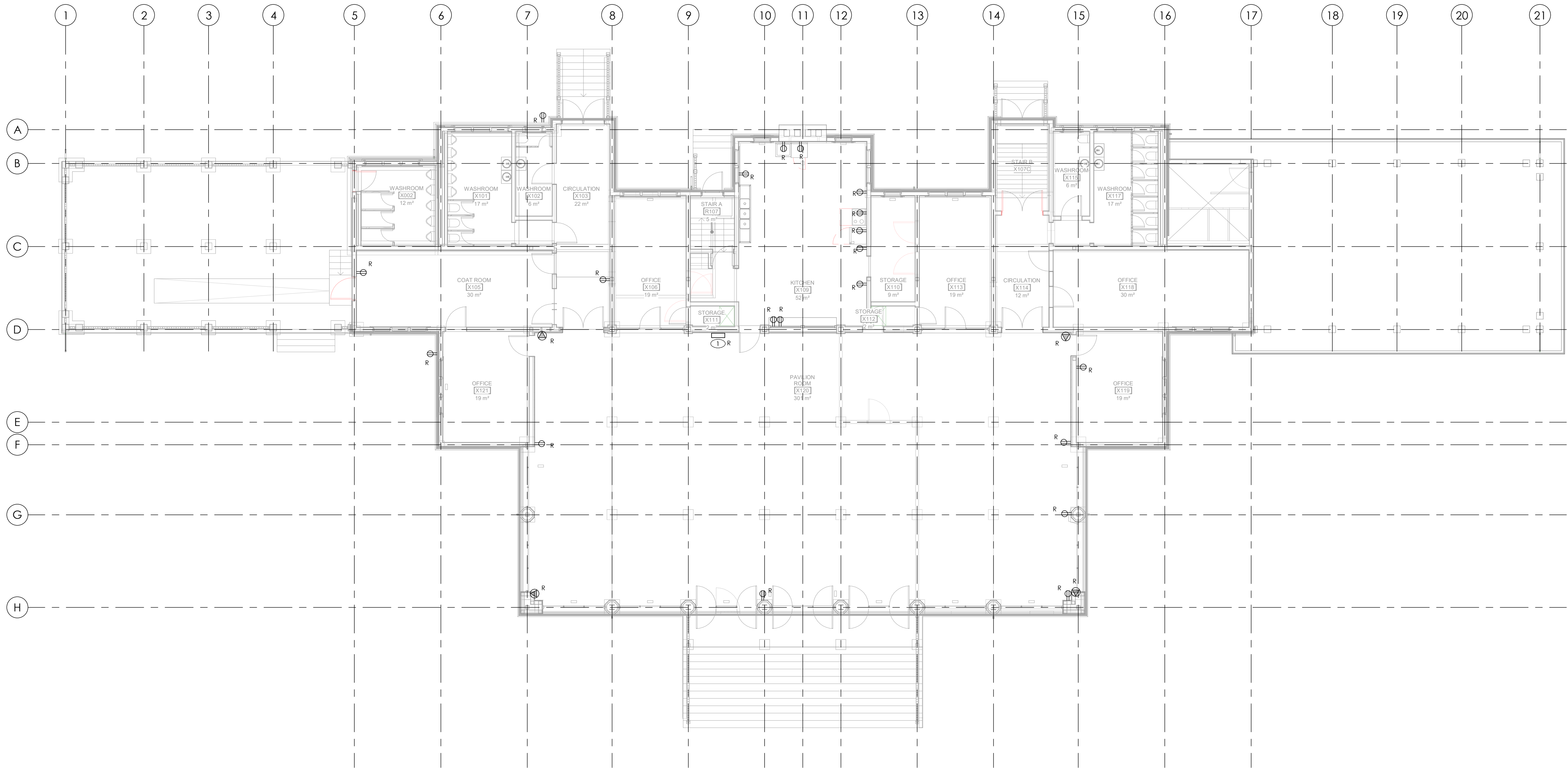
- 1 EXISTING PANEL AND ASSOCIATED WIRING/CONDUIT TO AND FROM PANEL SHALL BE DEMOLISHED.

GENERAL NOTES:

- ALL DEMOLITION WORK SHALL BE INCLUDED IN THE BASE CONTRACT.
- SINCE ALL EXISTING DEVICES ARE NOT SHOWN ON THE PLANS, THE BASE CONTRACT SCOPE SHALL INCLUDE DEMOLITION OF DEVICES SPACED 6 FEET WALL LENGTH ON AVERAGE.
- DEMOLISH ALL CONDUIT, WIRING, BOXES SUPPORTS AND ACCESSORIES FOR EACH DEVICE ALL THE WAY BACK TO THE SOURCE EQUIPMENT.
- THE DEMOLITION SHALL INCLUDE ALL EQUIPMENT AND DEVICES RELATED TO POWER, DATA, SECURITY, ACCESS CONTROL, AND OTHER COMMUNICATION SYSTEMS.

REVIEW ALL DRAWINGS AND VERIFY ALL DIMENSIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION OR SHOP FABRICATION. ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF "MANTECON PARTNERS" AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR WHOLE IS FORBIDDEN WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



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2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev. #	Description	Date

Consultants



STRUCTURAL, MECHANICAL, PROCESS, ELECTRICAL, CIVIL,  
ENGINEERS AND PROJECT MANAGERS  
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Phone: (905) 645-0272 www.manteconpartners.com

Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
LEVEL 1 DEMOLITION POWER AND COMMUNICATION PLAN - PHASE 1A & 1B

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



E1.04

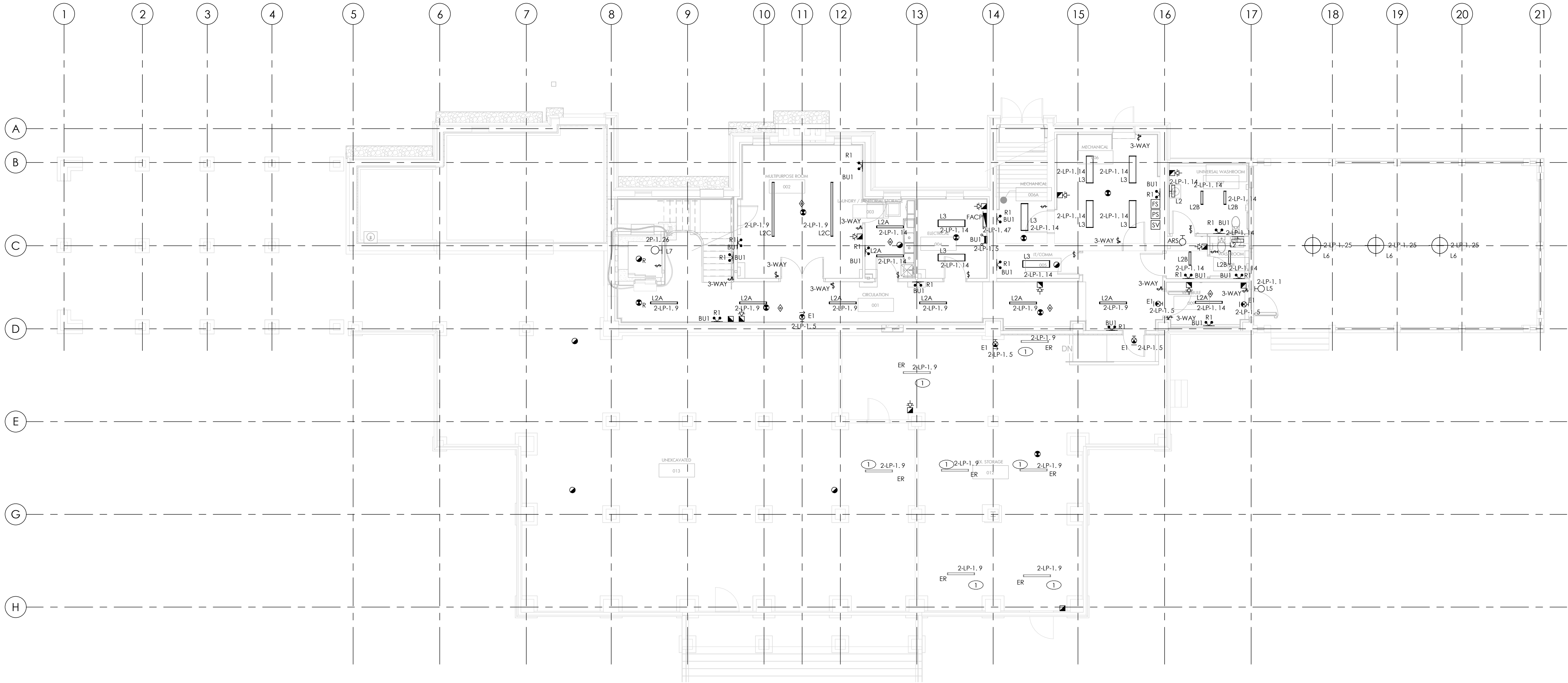


DRAWING NOTES:

- 1 REINSTALL ALL EXISTING LIGHT FIXTURES AND ASSOCIATED WIRING UNDER GRIDLINE D.  
REFER TO DEMOLITION PLAN E1.01 GENERAL NOTES.

REVIEW ALL DRAWINGS AND VERIFY ALL DIMENSIONS AT THE SITE. DO NOT SCALE THE DRAWINGS. REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION OR SHOP FABRICATION. ALL DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS ARE THE COPYRIGHT PROPERTY OF "MANTECON PARTNERS" AND MUST BE RETURNED UPON REQUEST. REPRODUCTION OF DRAWINGS, SPECIFICATIONS AND RELATED DOCUMENTS IN PART OR WHOLE IS FORBIDDEN WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



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3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev.#	Description	Date

Consultants



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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
BASEMENT PROPOSED  
LIGHTING AND FIRE ALARM PLAN  
- PHASE 1A & 1B

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



NORTH ARROW

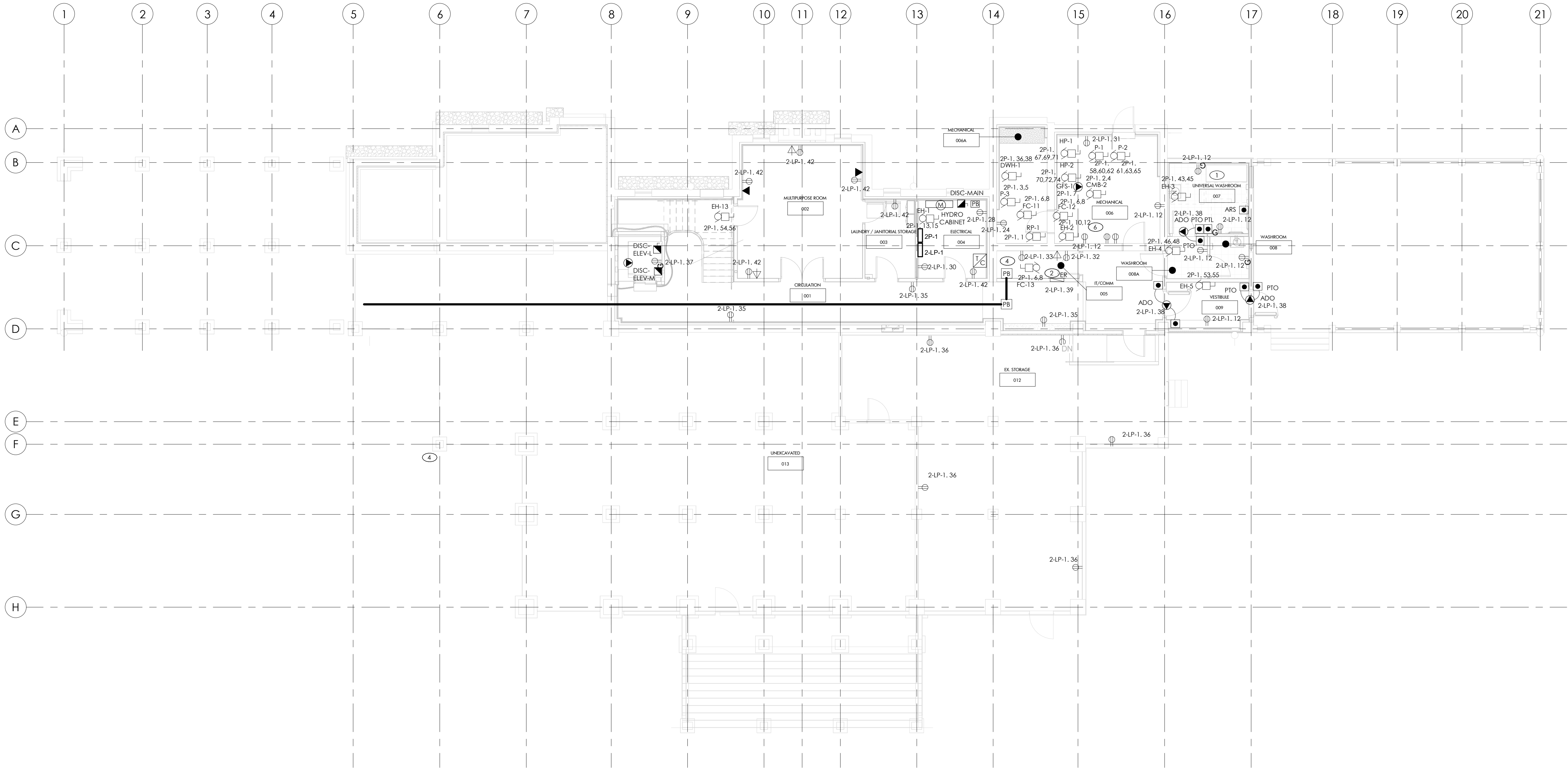


DRAWING NOTES:

- REFER TO UNIVERSAL WASHROOM DETAIL IN E5.00 FOR DEVICE LAYOUT.
- RELOCATE EXISTING SECURITY CONTROL PANEL.
- CONNECT EXISTING RECEPTACLES IN STORAGE ROOM TO 2-LP-1.19.
- PROVIDE EMPTY 1.5" CONDUIT, JUNCTION BOXES, AND PULL STRING IN CONDUIT FROM IT ROOM 005 TO BUILDING EXTERIOR FOR INCOMING DATA WIRING THROUGH UNEXCAVATED SPACE/ PROVIDE WEATHERPROOF 3"X3" BOX ON EXTERIOR OF BUILDING FOR FUTURE DATA SERVICE TO BUILDING AND 3"X3".
- INSTALLATION SHALL MEET TORONTO HYDRO REQUIREMENTS, REFER TO DRAWING **E5.01** FOR APPLICABLE TORONTO HYDRO DETAILS. PROVIDE PULL BOX IN MAIN ELECTRICAL ROOM OF DIMENSIONS 20"X30"X10".
- SEPARATE PRICE #1: PROVIDE WIRING/CONDUIT AND RECEPTACLES ON DEDICATED CIRCUITS FOR SUMP PUMP 1 AND 2.

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NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



10	ISSUED FOR TENDER	2025-02-25
9	RE-ISSUED FOR TORONTO HYDRO	2025-02-24
8	RE-ISSUED FOR TORONTO HYDRO	2024-12-19
5	RE-ISSUED FOR COSTING	2024-02-20
4	RE-ISSUED FOR PERMIT	2024-02-20
3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev.#	Description	Date

Consultants



STRUCTURAL MECHANICAL PROCESS ELECTRICAL CIVIL  
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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
**BASEMENT PROPOSED POWER AND COMMUNICATIONS PLAN - PHASE 1A & 1B**

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

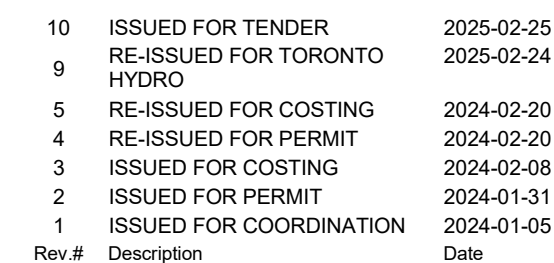
Drawing No.:



E2.02

① LIGHTS SHALL BE MOUNTED AT TOP OF EXTERIOR OVERHANG. SEE E2.01 BASMENT PROPOSED LIGHTING AND FIRE ALARM PLAN.

NOTE: REFER TO ARCHITECTURAL  
DRAWINGS FOR PHASING INFORMATION



MANTECON  
PARTNERS

Seals

## HIGH PARK NATURE AND VISITOR'S CENTER

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.



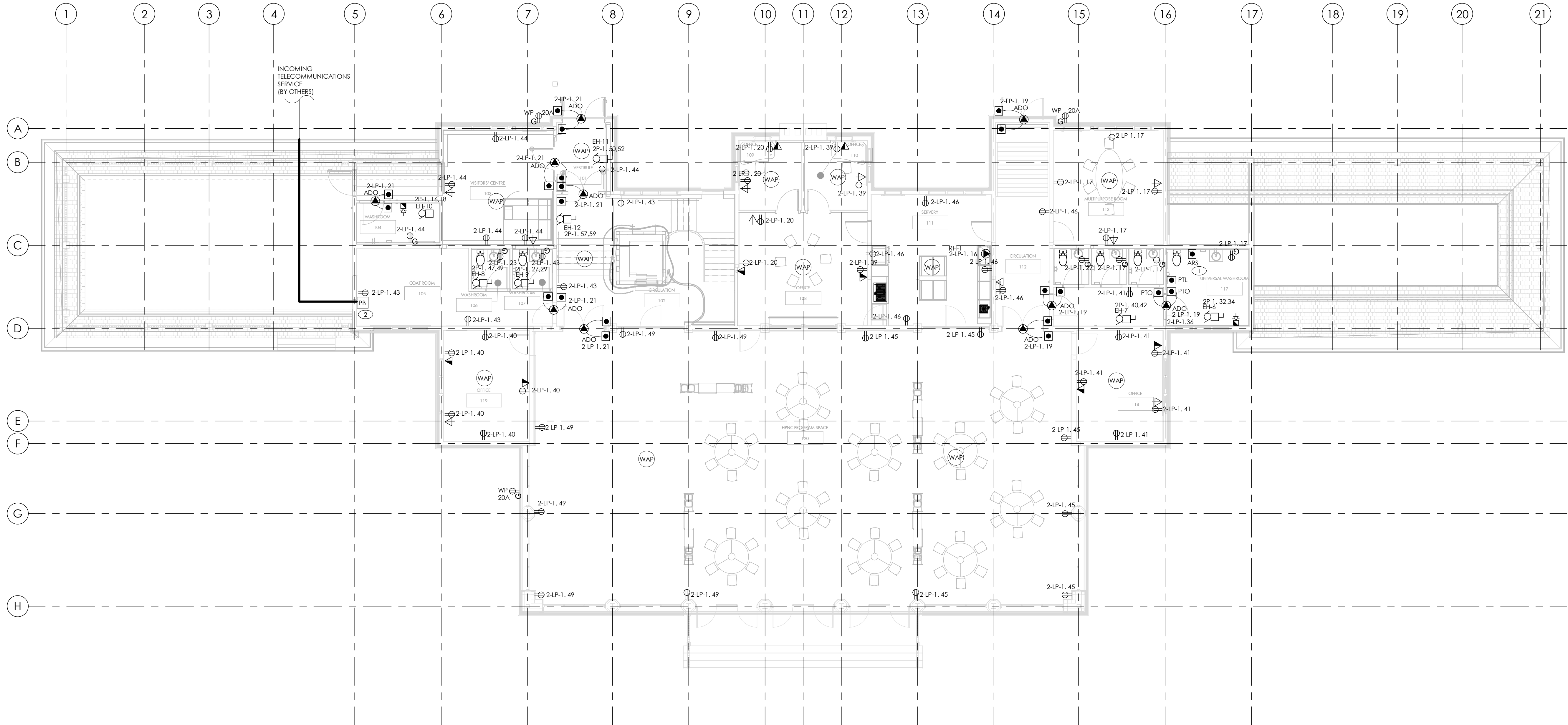


DRAWING NOTES:

- 1 REFER TO UNIVERSAL WASHROOM DETAIL IN E5.00 FOR DEVICE LAYOUT.
- 2 PROVIDE EMPTY CONDUIT AND PULL CORDS AS REQUIRED TO ACCOMMODATE INCOMING OVERHEAD TELECOMMUNICATIONS SERVICE. CONDUIT ON BUILDING EXTERIOR SHALL BE RIGID METAL. CONDUIT WITHIN BUILDING SHALL BE EMT. CONDUIT SHALL PENETRATE EXTERIOR WALL AT INDICATED PULLBOX. TRANSITION TO EMT AND RUN DOWN TO BASEMENT LEVEL UNEXCAVATED SPACE. REFER TO DRAWING E2.02.

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3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
1	ISSUED FOR COORDINATION	2024-01-05
Rev.#	Description	Date

Consultants



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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND  
VISITOR'S CENTER

Drawing Name:  
LEVEL 1 PROPOSED POWER AND  
COMMUNICATION PLAN - PHASE  
1A & 1B

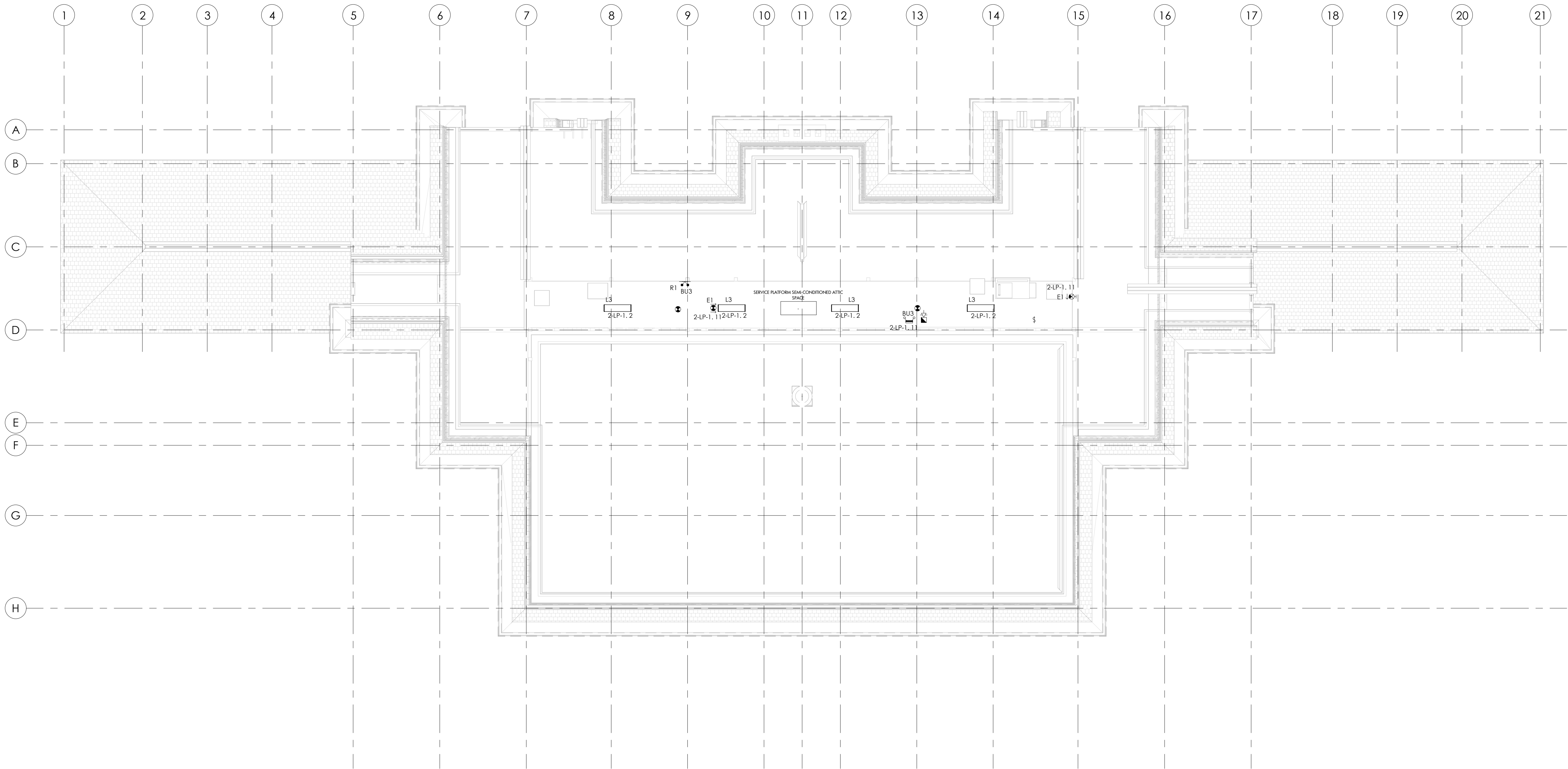
Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:



NORTH ARROW

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



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Rev.#	Description	Date

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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND  
VISITOR'S CENTER

Drawing Name:  
ATTIC LEVEL PROPOSED  
LIGHTING AND FIRE ALARM PLAN  
- PHASE 1A & 1B

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

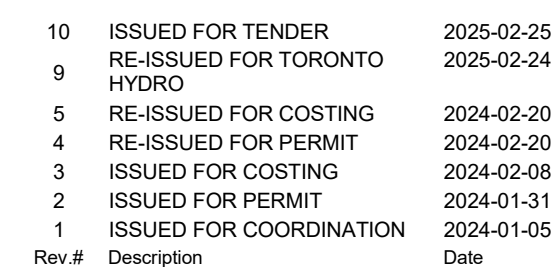
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NORTH ARROW



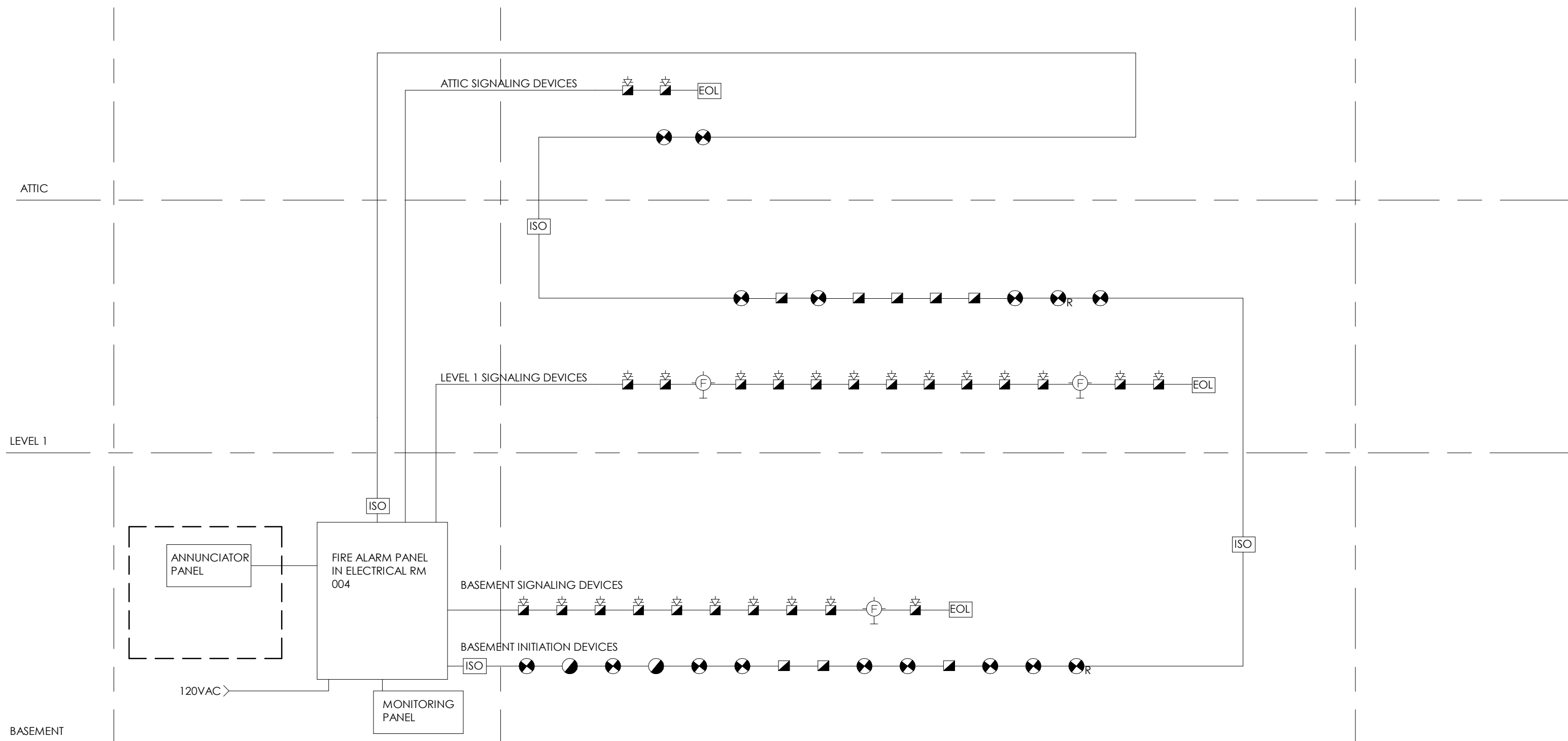
NOTE: REFER TO ARCHITECTURAL  
DRAWINGS FOR PHASING INFORMATION



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Phone: (905) 648-0373 [www.mantecpartners.com](http://www.mantecpartners.com)

NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION



FIRE ALARM ZONE SCHEDULE			
ZONE	DESCRIPTION	ALARM	TROUBLE
Z1	FIRE ALARM ZONE 1 - BASEMENT	●	
Z2	FIRE ALARM ZONE 2 - LEVEL 1	●	
Z3	FIRE ALARM ZONE 3 - ATTIC	●	
Z4	SPRINKLER SYSTEM SUPERVISED VALVE		●
Z5	SPRINKLER FLOW SWITCH		●
Z6	SPRINKLER PRESSURE SWITCH		●

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Rev. #	Description	Date

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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
FIRE ALARM RISER DIAGRAM

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.



Drawing No.:

E3.00

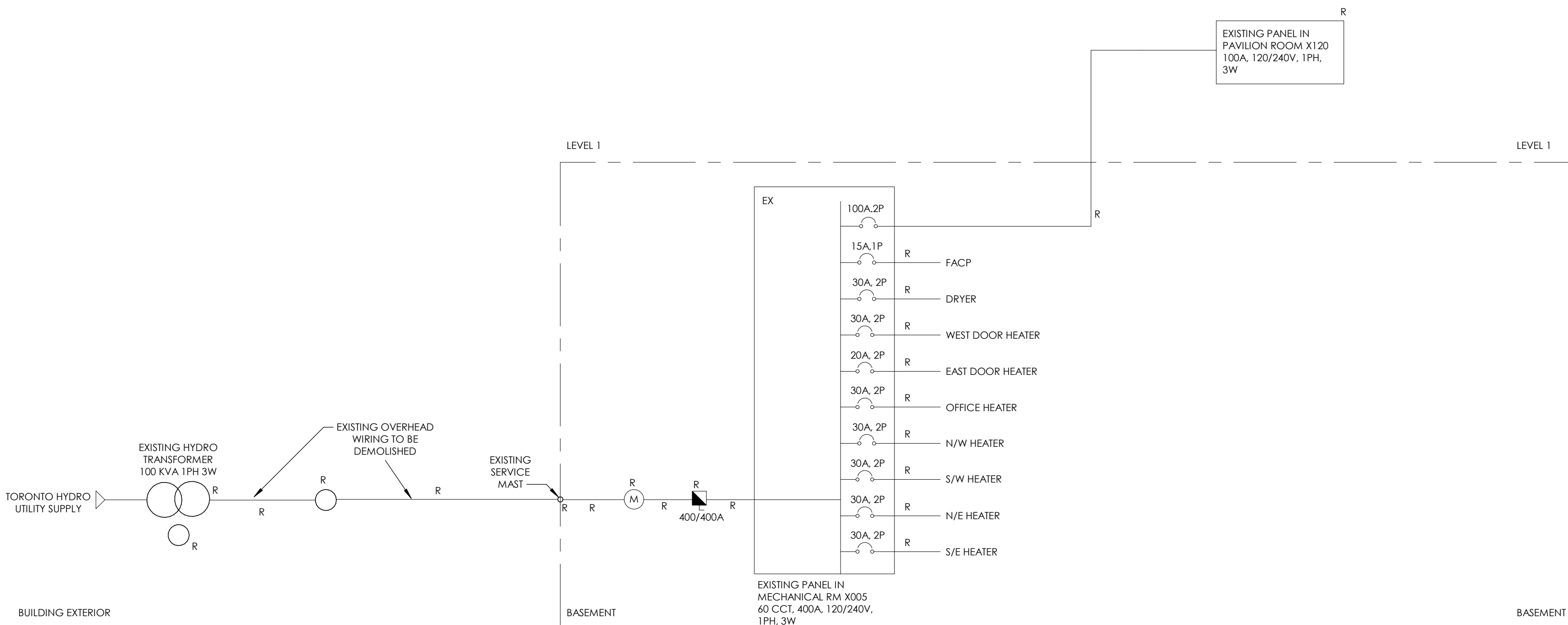


NOTE: REFER TO ARCHITECTURAL DRAWINGS FOR PHASING INFORMATION

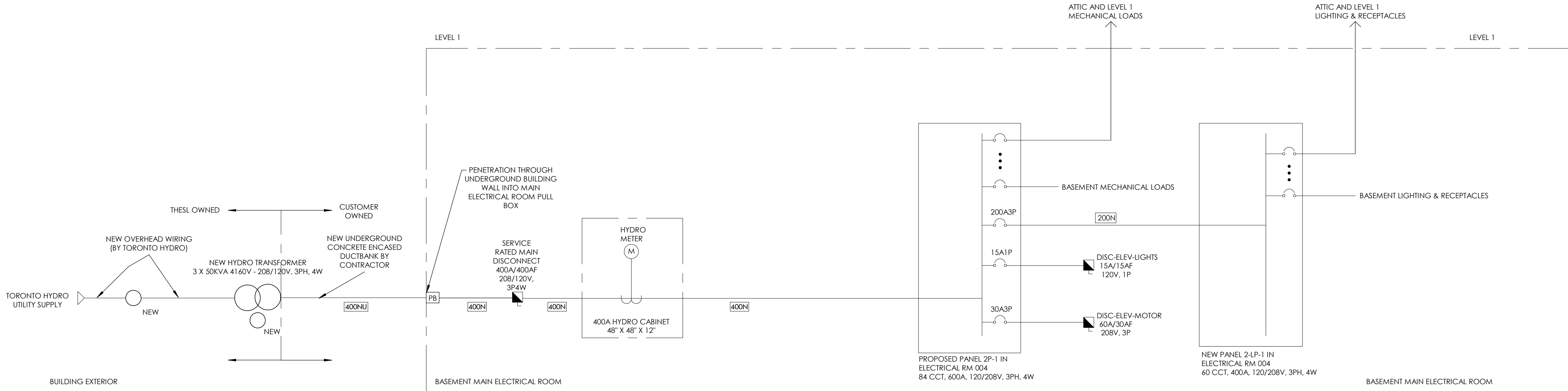
GENERAL NOTES:

1. AT EACH DISTRIBUTION POINT, CIRCUIT BREAKERS, FUSES AND SWITCHES SHALL BE MARKED, ADJACENT THERE TO, IN A CONSPICUOUS AND LEGIBLE MANNER TO INDICATE CLEARLY WHICH INSTALLATION OR PORTION OF INSTALLATION THEY PROTECT OR CONTROL AND THE MAXIMUM RATING OF OVERCURRENT DEVICE THAT IS PERMITTED AS PER OESC.
2. CONTRACTOR SHALL COORDINATE WITH TORONTO HYDRO FOR A TEMPORARY SERVICE FOR POWER DURING CONSTRUCTION.

WIRE AND CONDUIT SCHEDULE		
TYPE/SYMBOL	FEEDER DESCRIPTION	CONDUIT DESCRIPTION
125	3 COND. #1 AWG R90 CU + #6 BOND	IN 1-1/2" EMT CONDUIT
125N	4 COND. #1 AWG R90 CU + #6 BOND	IN 2" EMT CONDUIT
200	3 COND. #3/0 AWG R90 CU + #4 BOND	IN 2" EMT CONDUIT
200N	4 COND. #3/0 AWG R90 CU + #4 BOND	IN 2-1/2" EMT CONDUIT
400NU	4 COND. 600 MCM AWG RWU90 CU	IN 4" CONDUIT WITH 1X(ONE) SPARE #4" CIRCUIT, CONCRETE ENCASED
400N	4 COND. 600 MCM R90 CU + #2 BOND	IN 3-1/2" EMT CONDUIT



1 SINGLE LINE DIAGRAM DEMOLITION  
E4.00 N.T.S.



2 SINGLE LINE DIAGRAM  
E4.00 N.T.S.

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7	RE-ISSUED FOR TORONTO HYDRO	2024-10-18
6	ISSUED FOR TORONTO HYDRO	2024-08-12
5	RE-ISSUED FOR COSTING	2024-02-20
4	RE-ISSUED FOR PERMIT	2024-02-20
3	ISSUED FOR COSTING	2024-02-08
2	ISSUED FOR PERMIT	2024-01-31
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Rev. #	Description	Date

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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

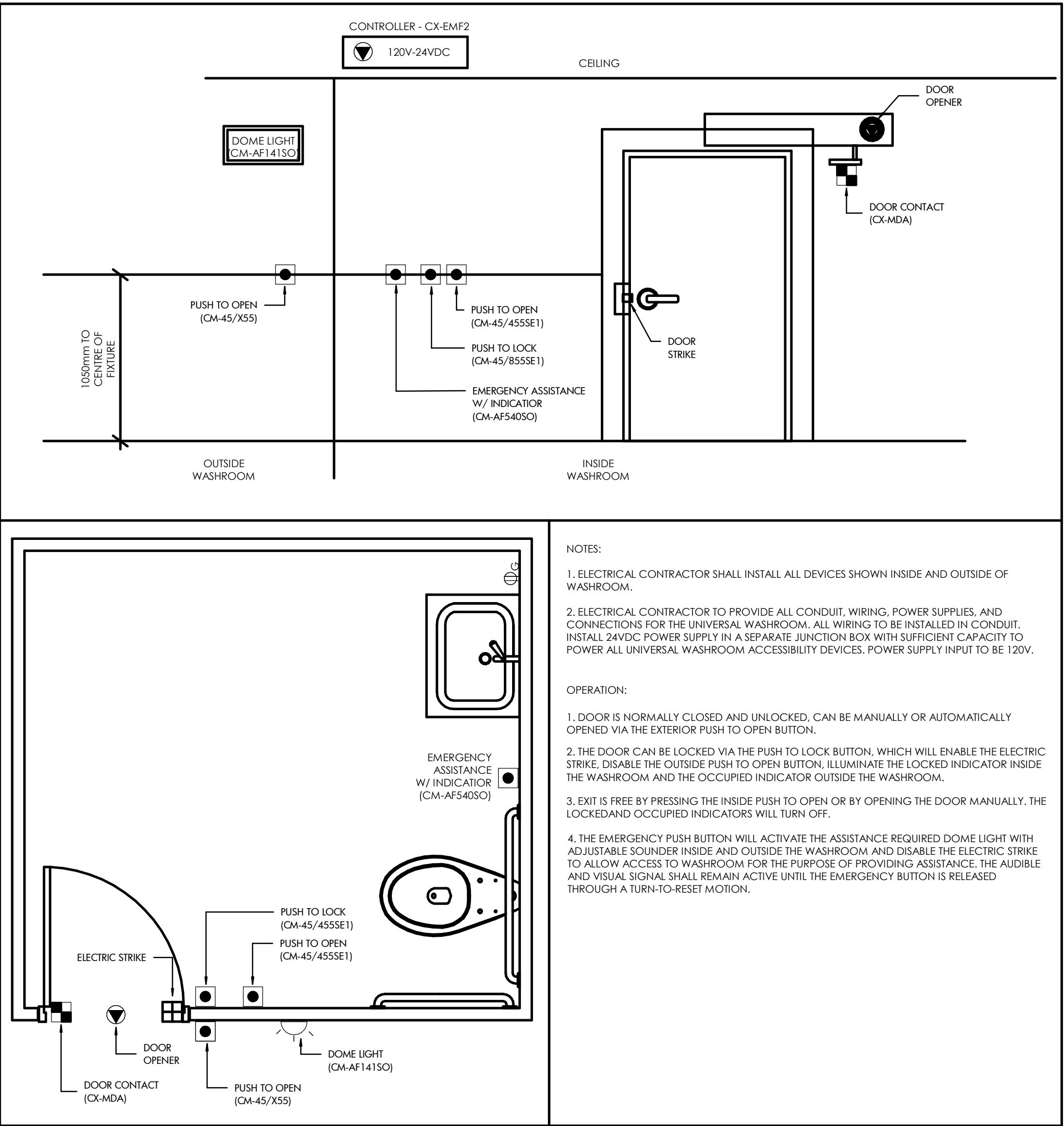
Drawing Name:  
SINGLE LINE DIAGRAM

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

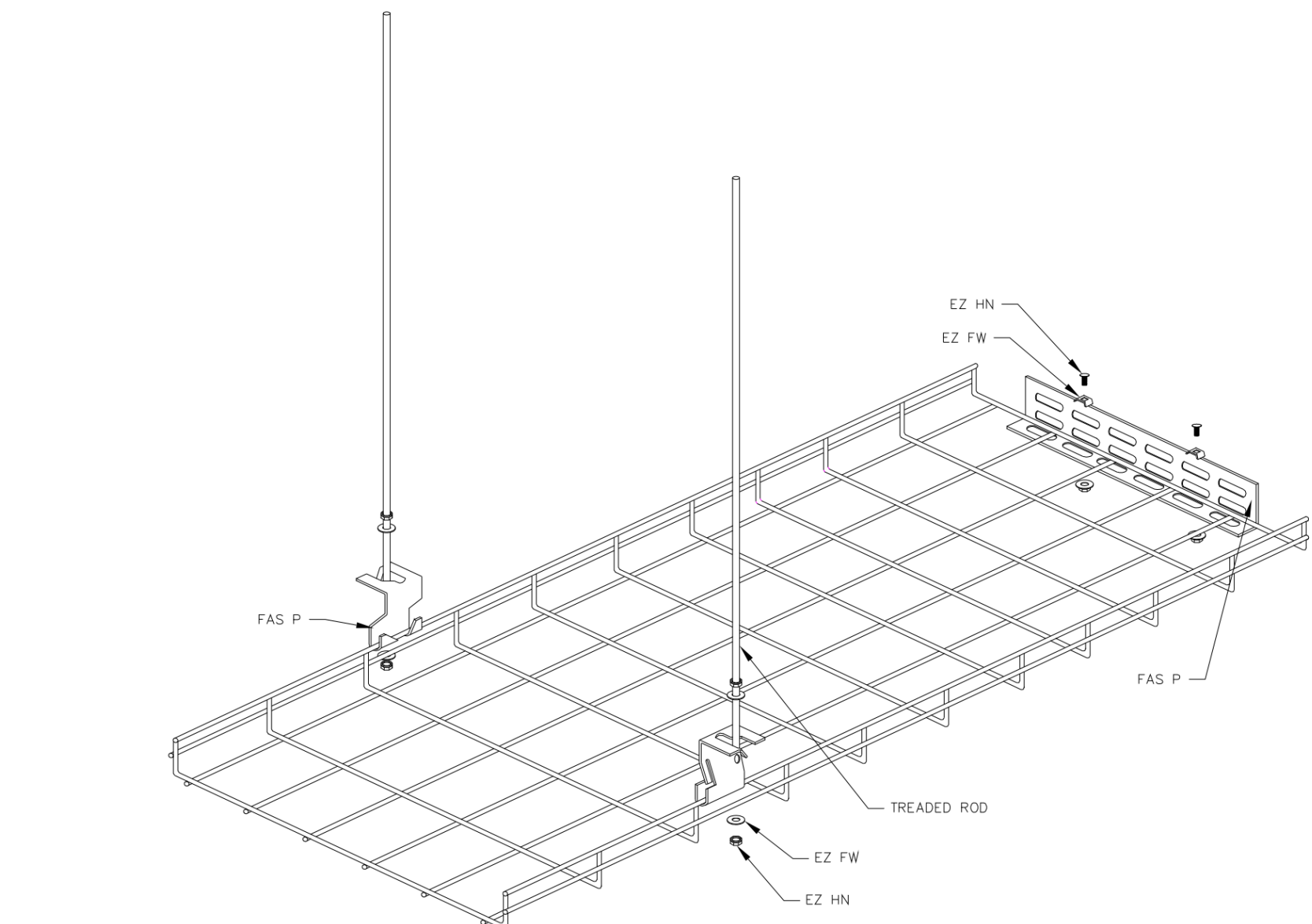
Drawing No.:



E4.00



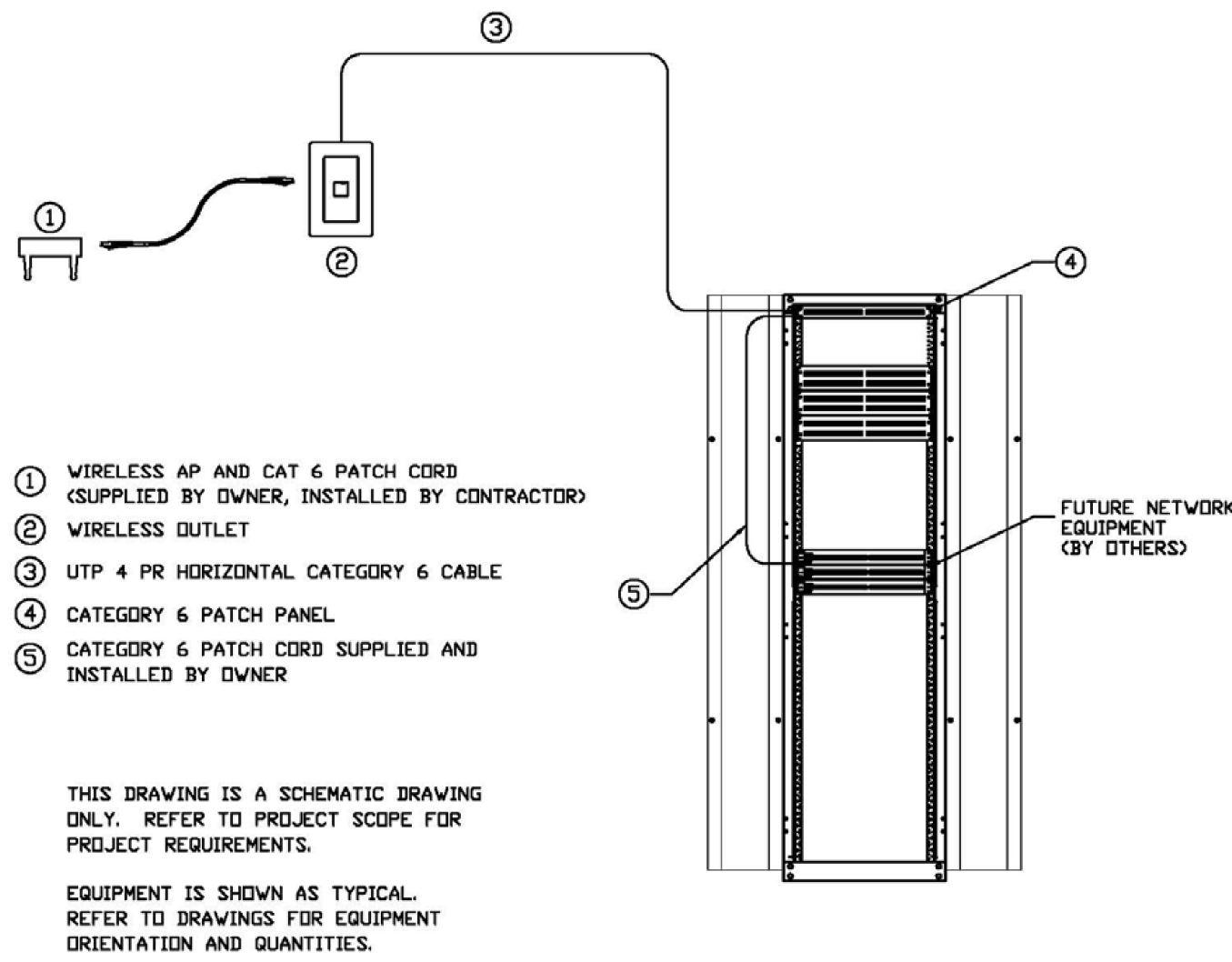
1 UNIVERSAL WASHROOM TYPICAL DETAIL  
ES.00 N.T.S.



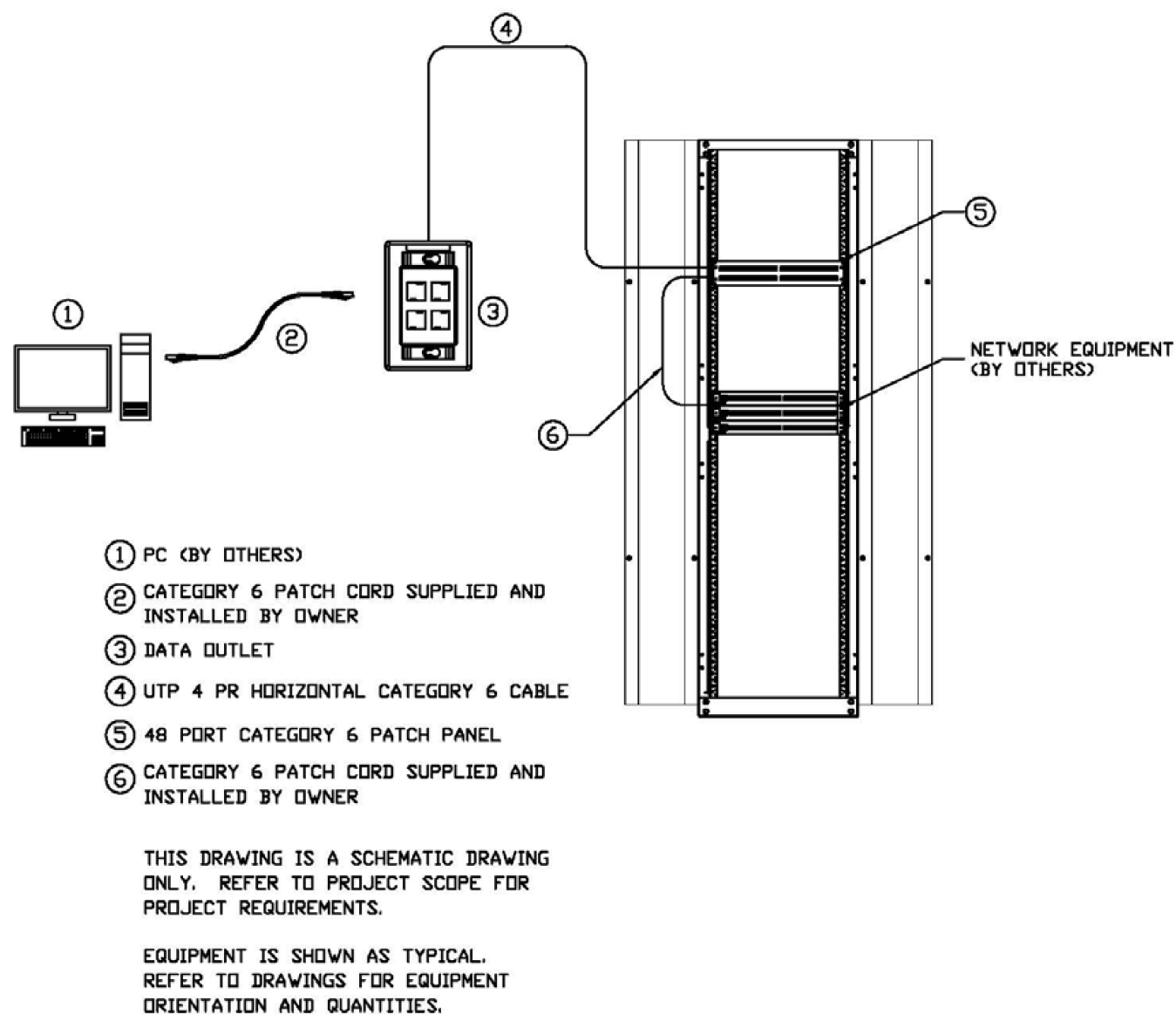
6 CABLE TRAY FASTENING DETAIL  
ES.00 N.T.S.

- NOTES:
1. ELECTRICAL CONTRACTOR SHALL INSTALL ALL DEVICES SHOWN INSIDE AND OUTSIDE OF WASHROOM.
  2. ELECTRICAL CONTRACTOR TO PROVIDE ALL CONDUIT, WIRING, POWER SUPPLIES, AND CONNECTIONS FOR THE UNIVERSAL WASHROOM. ALL WIRING TO BE INSTALLED IN CONDUIT. INSTALL 24VDC POWER SUPPLY IN A SEPARATE JUNCTION BOX WITH SUFFICIENT CAPACITY TO POWER ALL UNIVERSAL WASHROOM ACCESSIBILITY DEVICES. POWER SUPPLY INPUT TO BE 120V.
- OPERATION:
1. DOOR IS NORMALLY CLOSED AND UNLOCKED. CAN BE MANUALLY OR AUTOMATICALLY OPENED VIA THE EXTERIOR PUSH TO OPEN BUTTON.
  2. THE DOOR CAN BE LOCKED VIA THE PUSH TO LOCK BUTTON, WHICH WILL ENABLE THE ELECTRIC STRIKE. DISABLE THE OUTSIDE PUSH TO OPEN BUTTON, ILLUMINATE THE LOCKED INDICATOR INSIDE THE WASHROOM AND THE OCCUPIED INDICATOR OUTSIDE THE WASHROOM.
  3. EXIT IS FREE BY PRESSING THE INSIDE PUSH TO OPEN OR BY OPENING THE DOOR MANUALLY. THE LOCKED AND OCCUPIED INDICATORS WILL TURN OFF.
  4. THE EMERGENCY PUSH BUTTON WILL ACTIVATE THE ASSISTANCE REQUIRED DOME LIGHT WITH ADJUSTABLE SOUNDER INSIDE AND OUTSIDE THE WASHROOM AND DISABLE THE ELECTRIC STRIKE TO ALLOW ACCESS TO WASHROOM FOR THE PURPOSE OF PROVIDING ASSISTANCE. THE AUDIBLE AND VISUAL SIGNAL SHALL REMAIN ACTIVE UNTIL THE EMERGENCY BUTTON IS RELEASED THROUGH A TURN-TO-RESET MOTION.

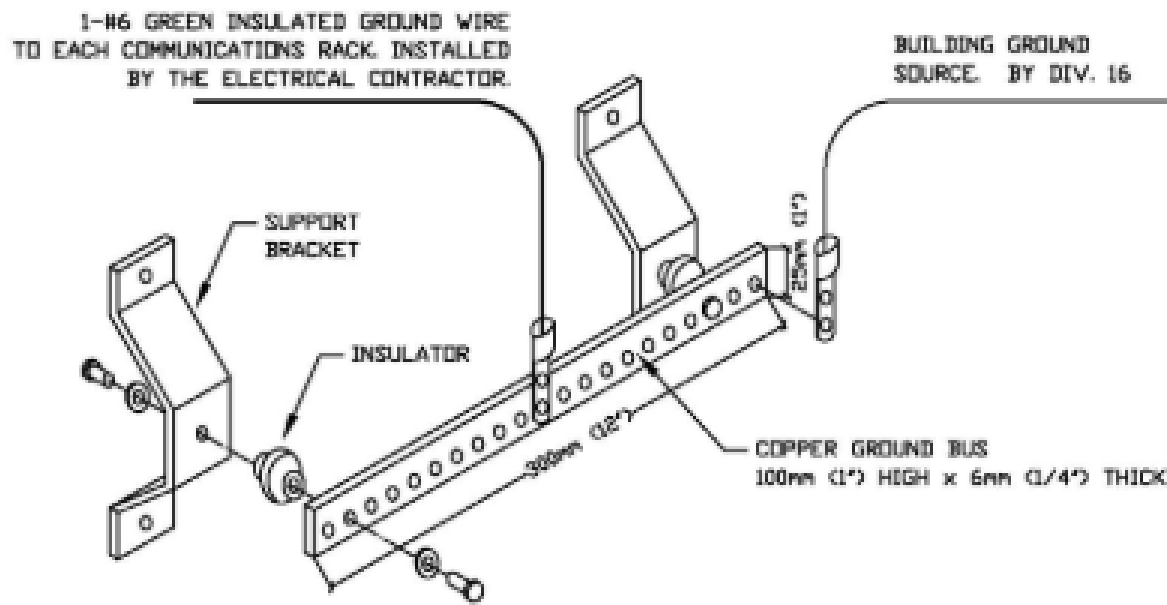
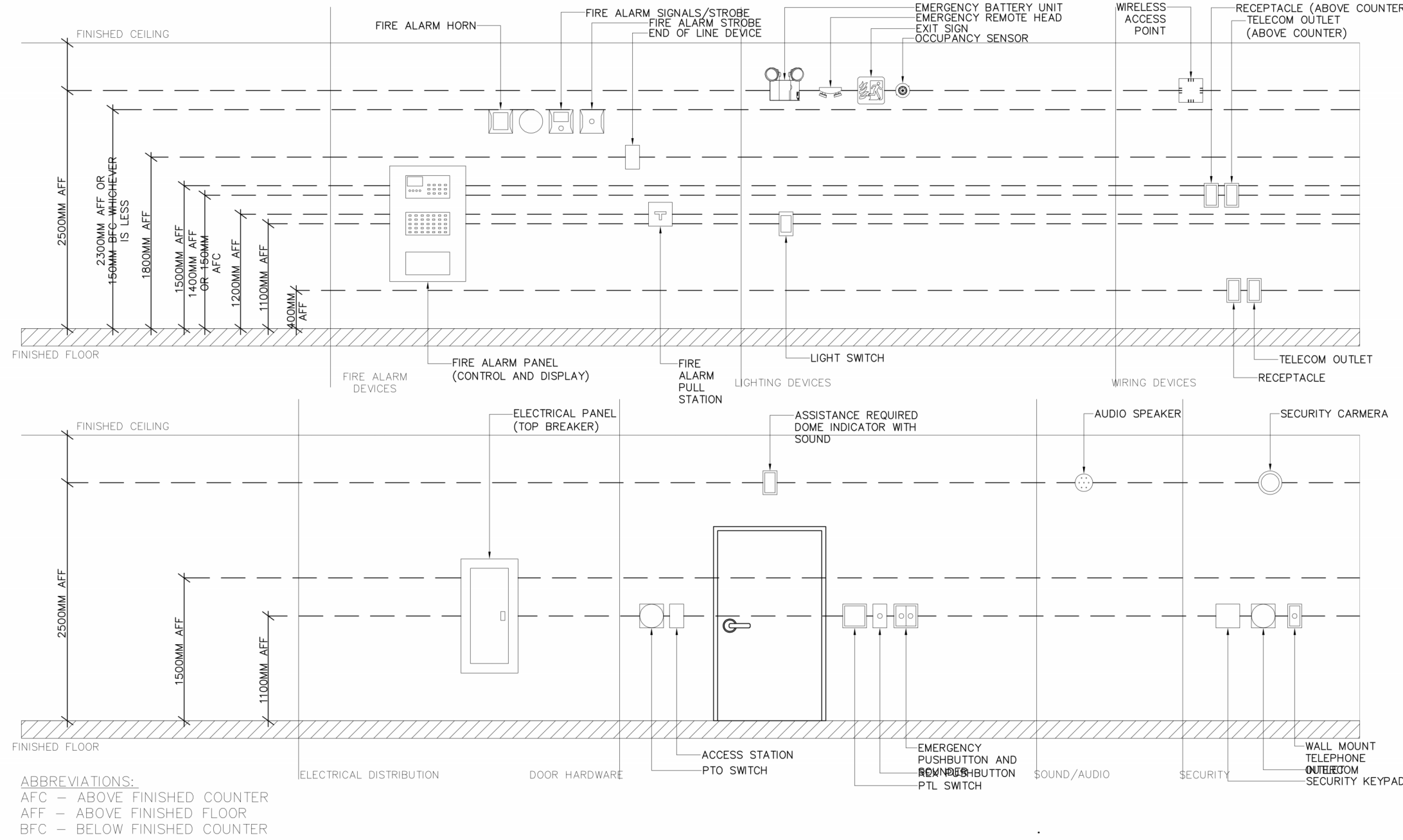
2 ELECTRICAL STANDARD WALL MOUNTING HEIGHT DETAIL  
ES.00 N.T.S.



4 CONNECTIVITY SCHEMATIC - WIRELESS  
ES.00 N.T.S.

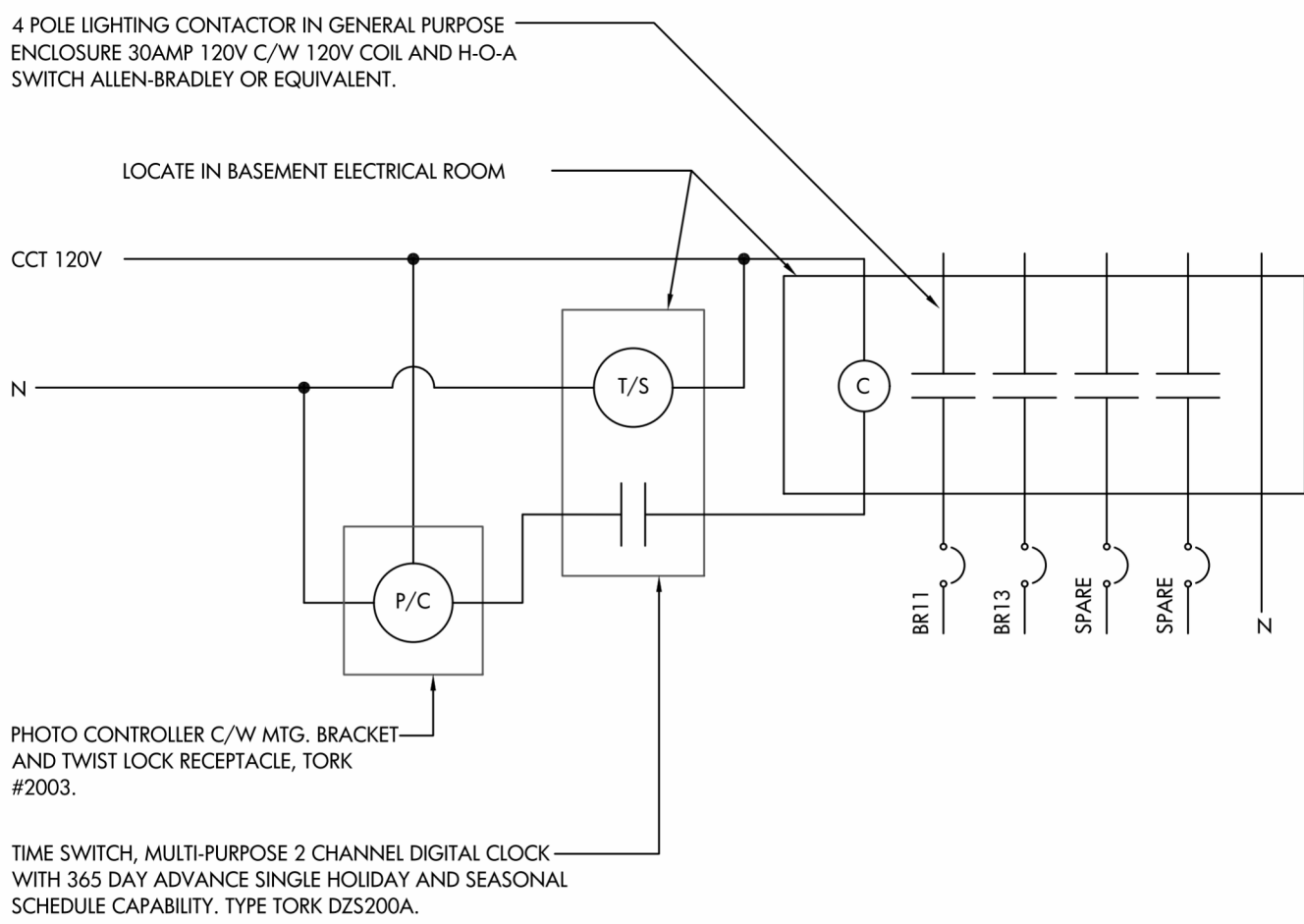


5 CONNECTIVITY SCHEMATIC - DATA  
ES.00 N.T.S.



- NOTES:
1. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ONE MOUNTED GROUND BUS AT EACH VOICE/DATA EQUIPMENT ROOM.
  2. GROUND BUS BAR SHALL BE INSTALLED 18" (300mm) AFF.
  3. ALL BRANCH GROUNDING WITHIN THE MDF AND IDF ROOMS SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
  4. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A GROUND CONNECTION BETWEEN THE BASE BUILDING SERVICE ENTRANCE GROUNDING ELECTRODE AND THE MDF GROUND BUS. ALSO PROVIDE A GROUND CONNECTION BETWEEN THE MDF AND IDF GROUND BUSES (WHERE REQUIRED).
  5. ALL GROUNDING TERMINATIONS SHALL BE DONE WITH UL LISTED HYPRESS LUGS AND GROUNDING CLAMP.
  6. ALL CABLE TRAY IS TO BE GROUND TO MOF, IDF BUS BAR.

3 COPPER GROUND BUS DETAIL  
ES.00 N.T.S.



7 EXTERIOR LIGHTING CONTROL DETAIL  
ES.00 1:1

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Rev.#	Description	Date

Consultants



Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
ELECTRICAL DETAILS


Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:

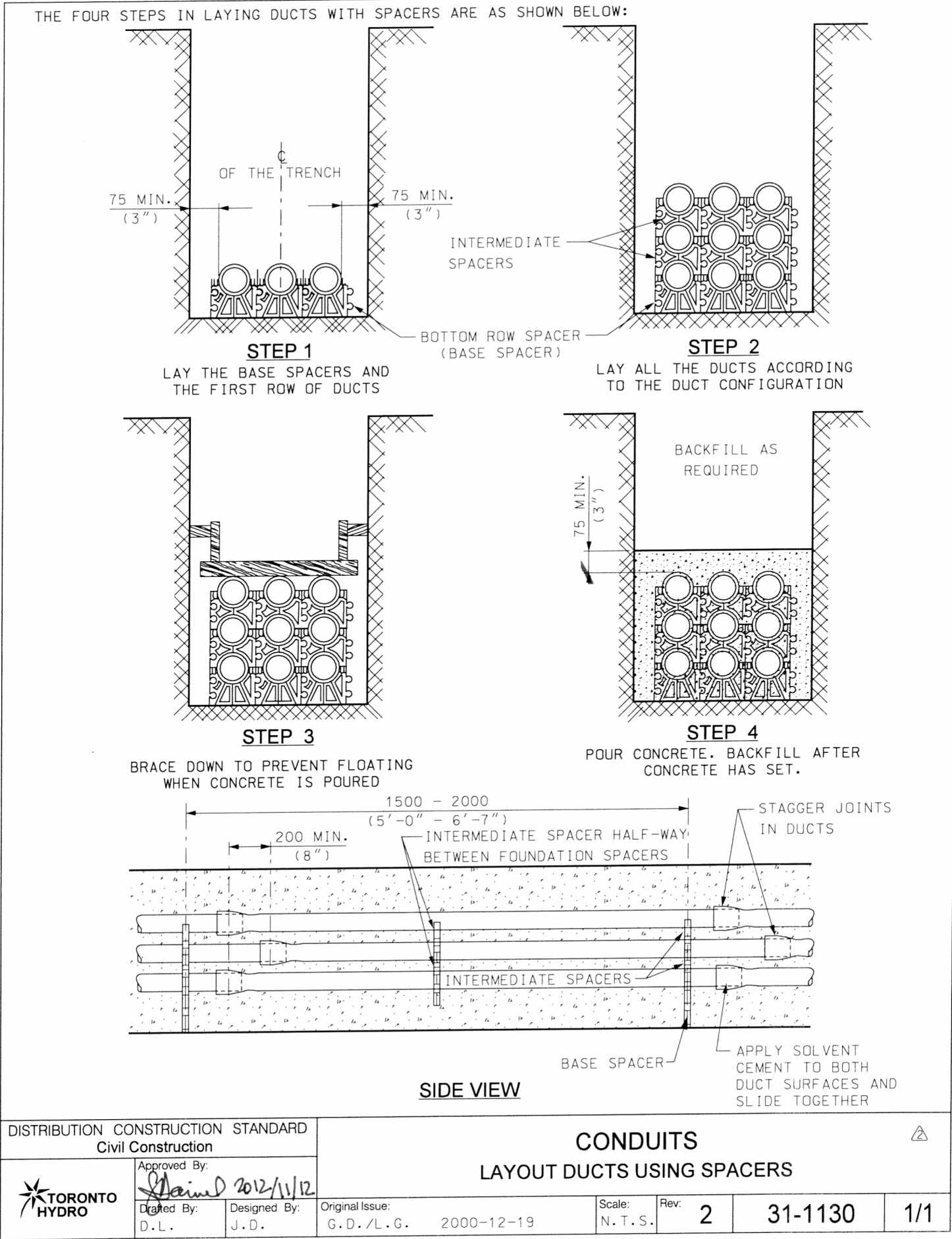


E5.00



MINIMUM UNDERGROUND CLEARANCES AS PER CITY OF TORONTO MCR (EDGE TO EDGE)						
Utilities or Plant			Vertical mm (feet)	Horizontal mm (feet)		
Railways	Heavy Rail (CN/CP/GO)		Refer to STD. 31-1310			
	Light Rail (TTC/LRT/Metrolinx)		Refer to STD. 31-1200			
Hydro One	All Infrastructure		1000 (3'-4")	1000 (3'-4")		
Communication	Bell Canada	Manholes	1000 (3'-4")	1000 (3'-4")		
		Concrete Encased Ducts	600 (2'-0")	600 (2'-0")		
		Direct Buried Ducts	300 (1'-0")	600 (2'-0")		
	Others	All Infrastructure	300 (1'-0")	600 (2'-0")		
Enwave Energy Corporation	Steam Pipes		600 (2'-0")	600 (2'-0")		
	Chilled Water Pipes		300 (1'-0")	300 (1'-0")		
	≤ NPS 300 mm (12") (Open Trench)		300 (1'-0")	600 (2'-0")		
Enbridge Gas National Energy Board	CER Regulated Pipelines and Vital Mains (Open Trench)		600 (2'-0")	1000 (3'-4")		
	ALL Pipelines Directional Drilling/Boring		1000 (3'-4")	1000 (3'-4")		
	Regulator Stations		Consult with City	1000 (3'-4")		
City of Toronto	Trees		See Note 1 and Std. 31-0400			
	Catch Basins		Consult with City		500 (1'-8")	
	Traffic Signal Ducts		300 (1'-0")	600 (2'-0")		
	Storm Sewer	< 150 (6") Dia.	150 (6")	600 (2'-0")		
		150 (6") < 750 (2'-6") Dia.	300 (1'-0")	750 (2'-6")		
		≥ 750 (2'-6") Dia.	500 (1'-8")	900 (3'-0")		
		Maintenance Hole	-	600 (2'-0")		
	Sanitary/ Combined Sewer	< 100 (4") Dia.	150 (6")	600 (2'-0")		
		100 (4") < 375 (1'-3") Dia.	300 (1'-0")	750 (2'-6")		
		≥ 375 (1'-3") Dia.	500 (1'-8")	900 (3'-0")		
		Maintenance Hole	-	600 (2'-0")		
	Water Mains	< 100 (4") Dia.	150 (6")	600 (2'-0")		
		≥ 100 (4") < 400 (1'-4") Dia.	300 (1'-0")	750 (2'-6")		
		≥ 400 (1'-4") Dia.	500 (1'-8")	900 (3'-0")		
		Water Valve Chamber	See Note 5	600 (2'-0")		
	Fire Hydrant	400 (1'-4")	1500 (4'-11")			
Toronto Hydro (This to be used when other Utilities are installing their plant close to THESL infrastructure)	Poles (Direct Buried)		See Std's. 03-2400, 04-4100 and 04-5100			
	Base Mounted Poles/ Reinforced Sidewalk Bays		See Note 3			
	Cable Chamber/Vault/Tap Boxes (No Grounding Outside Structures)		-	600 (2'-0")		
	Padmounts/Sub Vaults/Splice Vaults (Grounding Outside Structure)		Refer to STD. 31-4100			
	Ducts/Duct Banks		300 (1'-0")	600 (2'-0")		
DISTRIBUTION CONSTRUCTION STANDARD			UNDERGROUND CLEARANCES			
Civil Construction						
Approved by:						
	Drafted by:	Designed by:	Original Issue:	Scale:	Rev.	
	J.D.	B.D.	J.D. 2000-12-28	N.T.S.	9	31-0100 1/2





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1	ISSUED FOR COORDINATION	2024-01-05
Rev. #	Description	Date

Consultants



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Seals

375 COLBORNE LODGE DR, TORONTO, ON M6R 2Z3

HIGH PARK NATURE AND VISITOR'S CENTER

Drawing Name:  
TORONTO HYDRO DETAILS  
(SHEET 2 OF 2)

Project Number: 22-142  
Drawing Scale: As Indicated  
Date: 2025-02-25  
File Name:  
Drawn By: M.Z.  
Reviewed By: N.A.

Drawing No.:





Notes:	
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### Consultants



NORTH ARROW