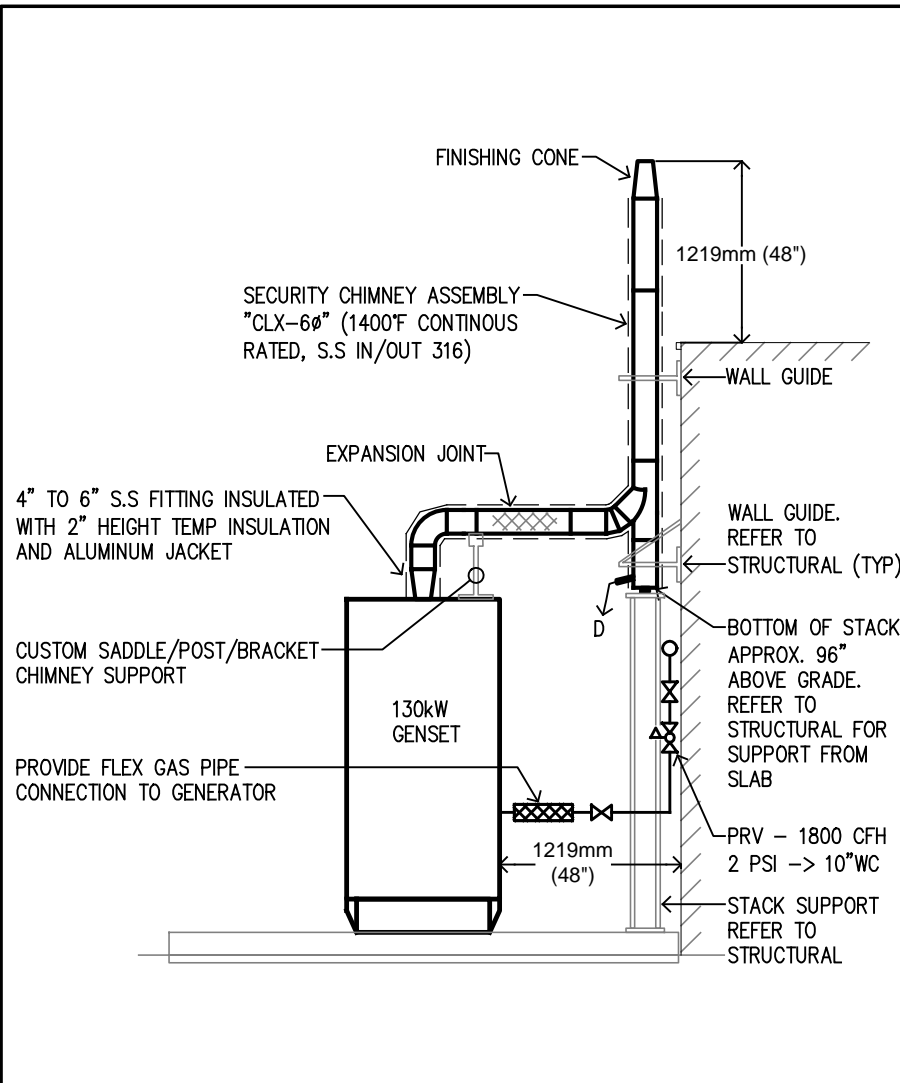


**SITE PLAN GENERAL NOTES:**

- ALL ELECTRICAL WORK SHOWN IS BY ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED.
- SECONDARY DUCTS TO BE INSTALLED AS PER OESC DIAGRAM D11 DETAIL 2.
- PROVIDE CONTINUOUS RED PLASTIC MARKER TAPE(S) WITH BLACK LETTERS IDENTIFYING THE POWER LINES UNDERGROUND INSTALLATION WITH THE FOLLOWING CRITERIA: PLACED APPROXIMATELY HALF WAY BETWEEN THE INSTALLATION AND GRADE LEVEL, INSTALLED COVERING THE WIDTH OF THE INSTALLATION AND WHERE MULTIPLE MARKER TAPES ARE REQUIRED TO COVER THE WIDTH OF THE INSTALLATION MARKER TAPES SHALL BE PERMITTED TO BE PLACED A MAXIMUM OF 600mm APART.

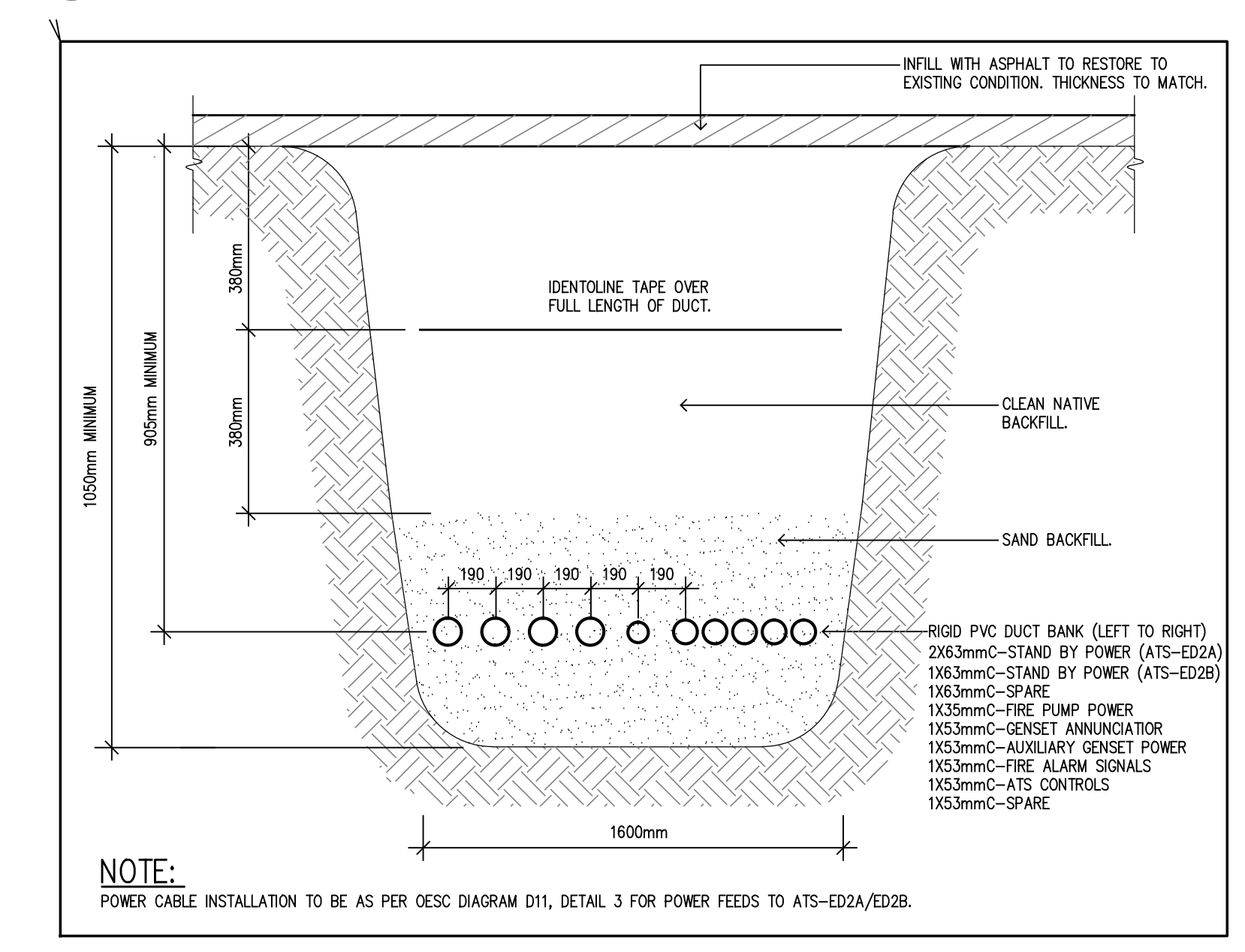
**SITE PLAN DRAWING NOTES:**

- CONDUIT TO BE STUBBED UP INSIDE GENERATOR ENCLOSURE. SEE GENERATOR SHOP DRAWINGS FOR EXACT LOCATION & DIMENSIONS OF STUB UP AREAS.
- ALL FENCING TO BE BONDED TO GENERATOR GROUND. BOND MAIN GATE TO MAIN DOOR FRAME WITH CLAMPED COPPER BRAID OR FLEXIBLE COPPER CONDUCTOR #1 AWG.
- CORE THRU FOUNDATION AND BREAK UP FLOOR INSIDE GENERATOR ROOM TO BRING CONDUIT UP INTO ROOM. POUR NEW FLOOR IN AREA OF DEMOLITION. REFER TO STRUCTURAL DRAWING.

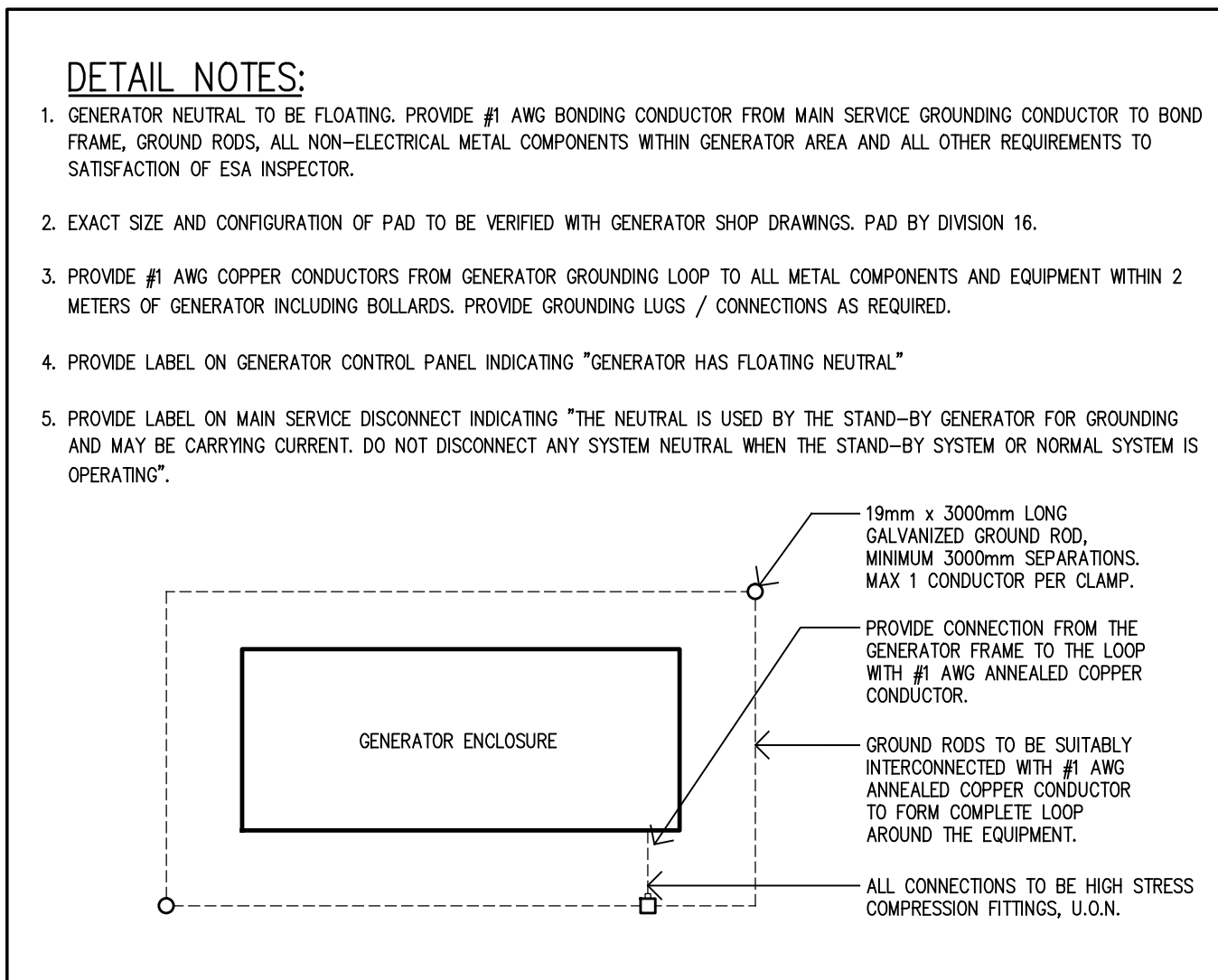


**2 Generator Exhaust Detail**  
ME101 N.T.S.

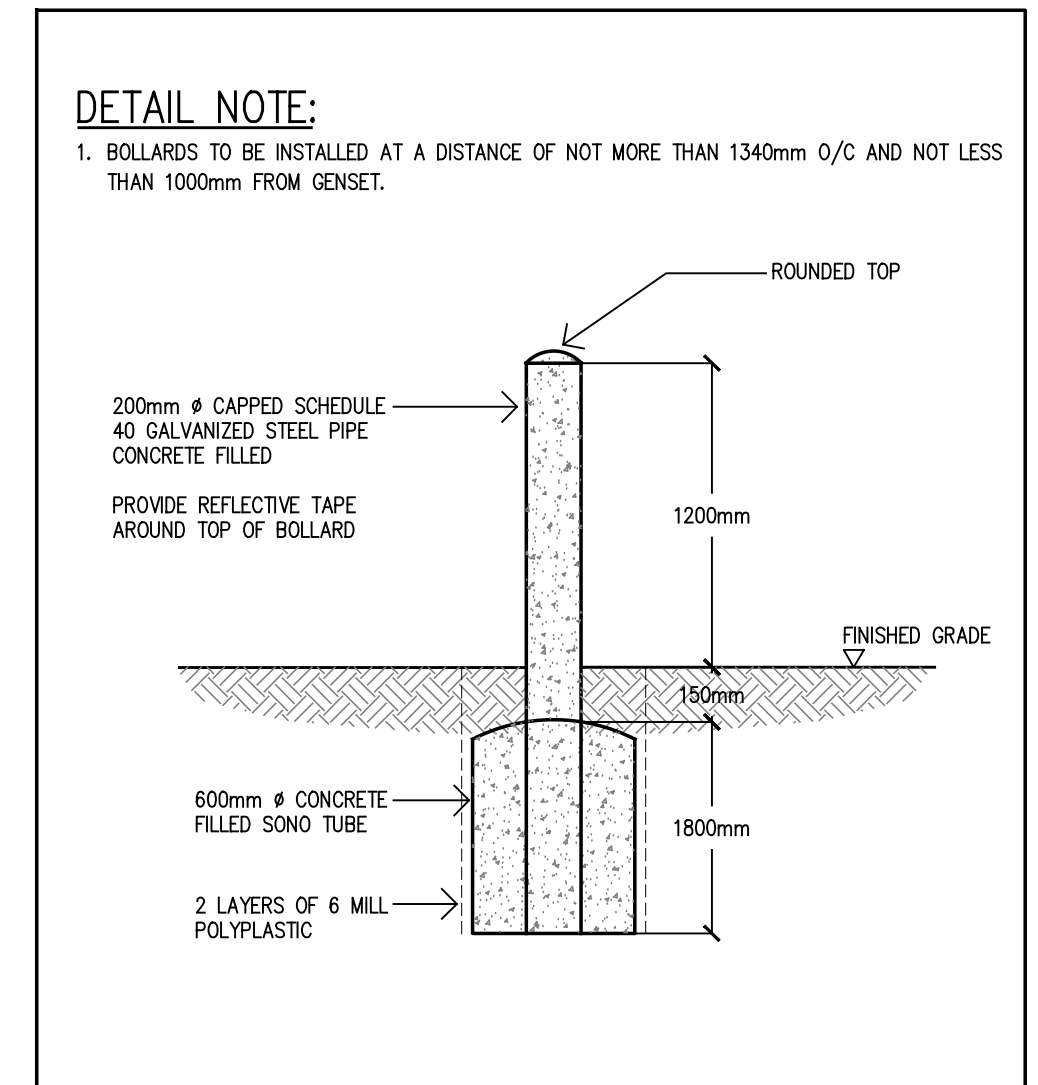
**1 Power - Site Plan**  
ME101 1:200



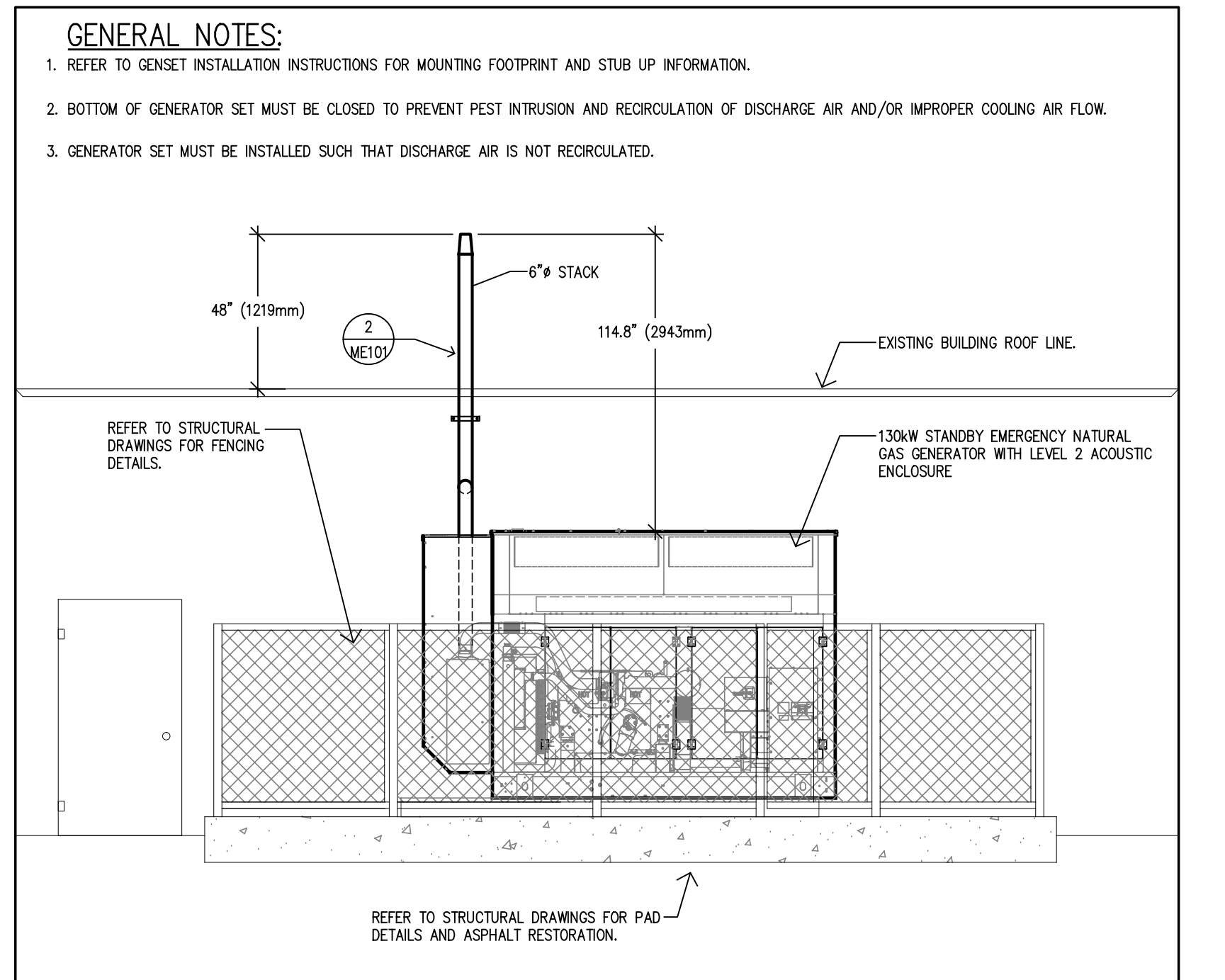
**3 Generator Duct Bank Detail**  
ME101 N.T.S.



**4 Generator Grounding Detail**  
ME101 N.T.S.



**5 Bollard Detail**  
ME101 N.T.S.



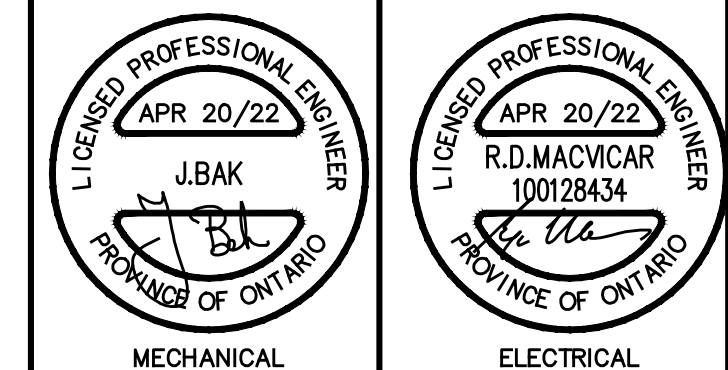
**6 Emergency Generator - Elevation**  
ME101 N.T.S.

1. ISSUED FOR TENDER	APRIL 20, 2022
revision	date

the Contractor shall check and verify all dimensions before proceeding with the work

A detail no.  
B sheet no. where detailed

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Consultants Limited  
1820 Bond St. North Bay, Ontario, P1B 4V6  
Ph. 705-472-2536 Fx. 705-476-5105  
Email - pd@piotrowskiconsultants.ca

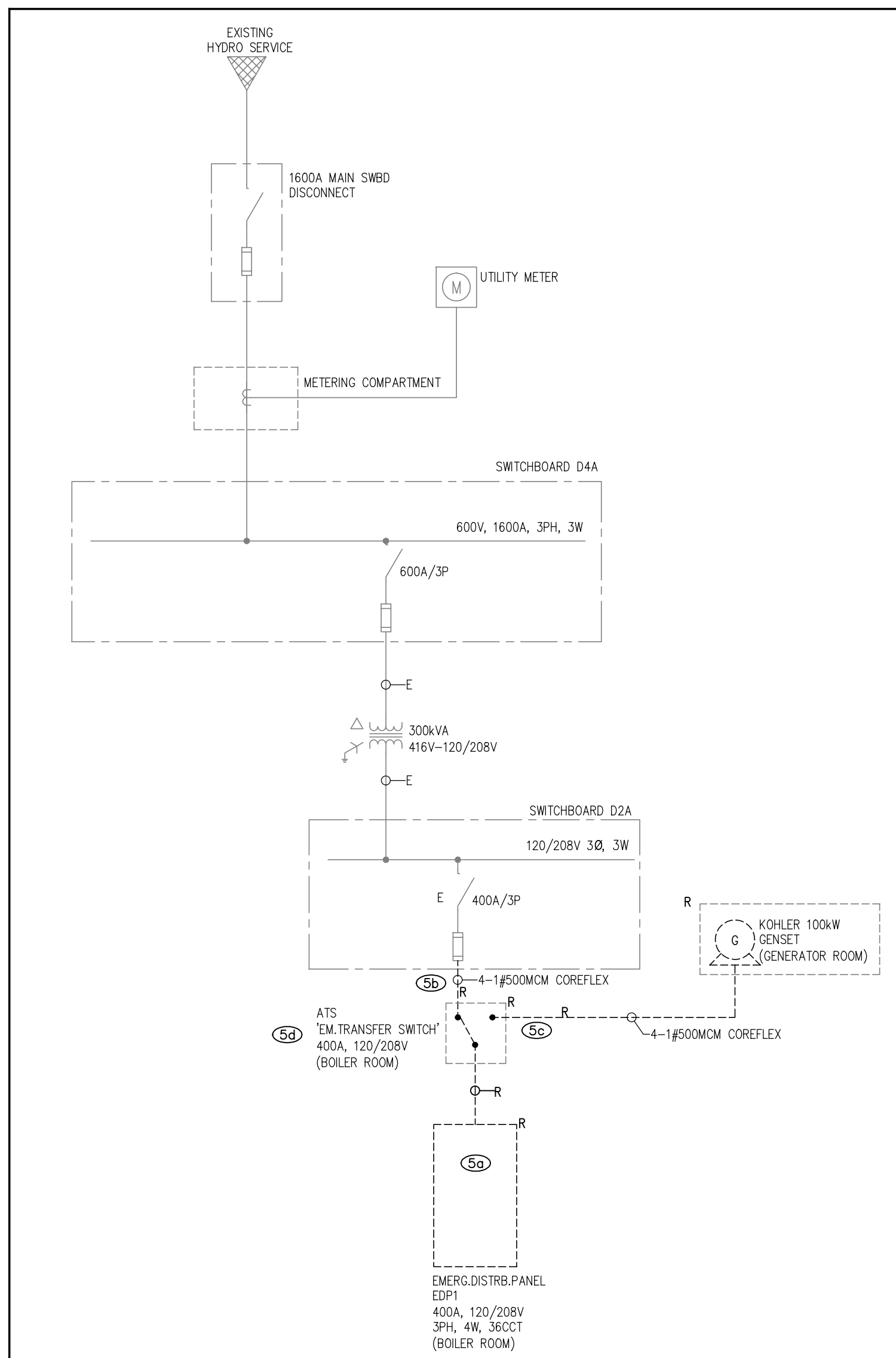
project  
RFTND22-06  
GOLDEN AGE APPARTMENTS  
135 WORTHINGTON ST. W.  
EMERGENCY GENERATOR UPGRADE

NORTH BAY ONTARIO

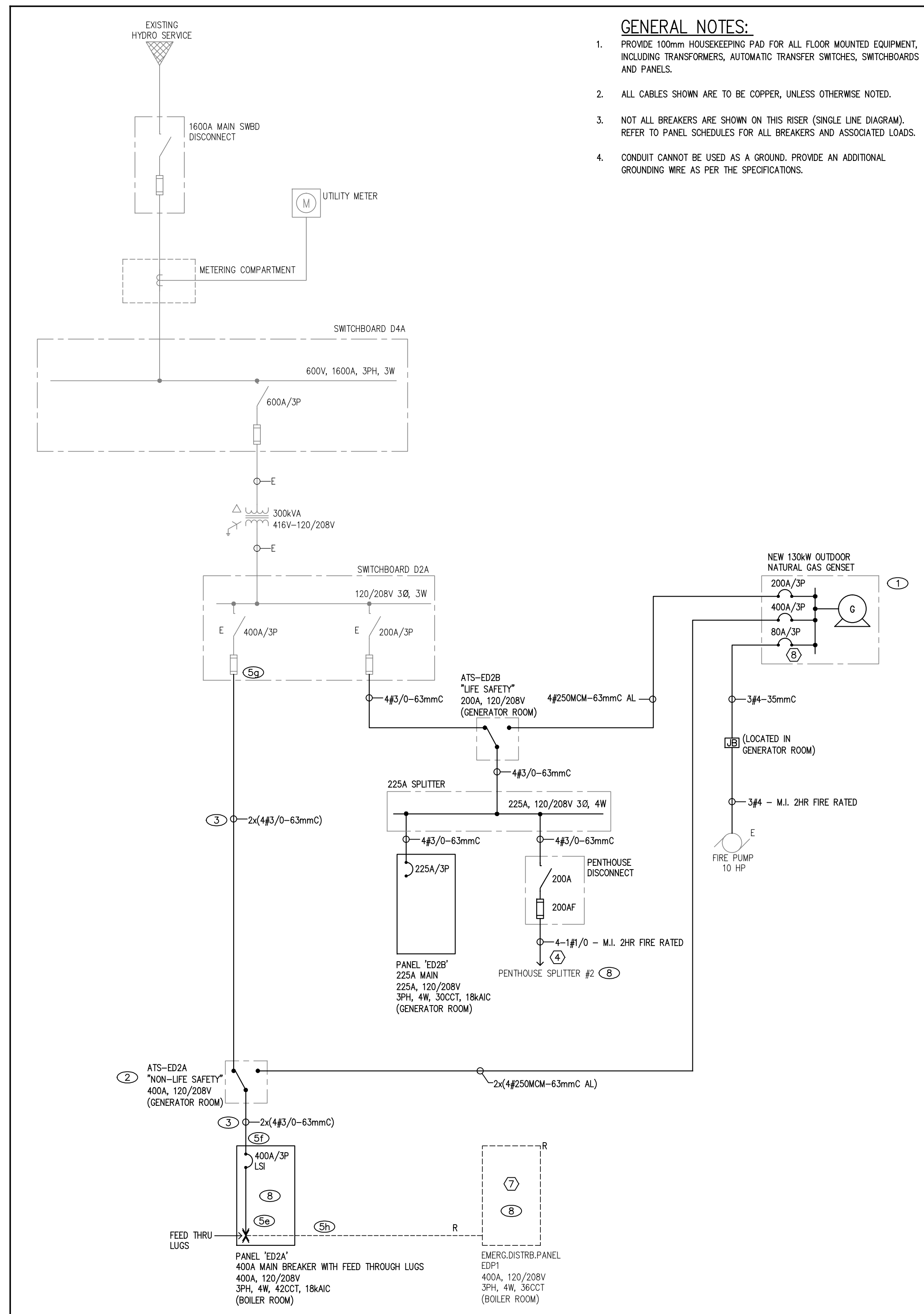
title  
ELECTRICAL  
POWER  
SITE PLAN

drawn by: EH	date: MARCH 2022
checked by: RM	project no: 6503B
scale: AS NOTED	dwg no: <b>ME101</b>
plotted: April 20, 2022	





**1** Electrical Single Line - Removals  
ME102 N.T.S.



**2** Electrical Single Line - Proposed  
ME102 N.T.S.

- GENERAL NOTES:**
- PROVIDE 100mm<sup>2</sup> HOUSEKEEPING PAD FOR ALL FLOOR MOUNTED EQUIPMENT, INCLUDING TRANSFORMERS, AUTOMATIC TRANSFER SWITCHES, SWITCHBOARDS AND PANELS.
  - ALL CABLES SHOWN ARE TO BE COPPER, UNLESS OTHERWISE NOTED.
  - NOT ALL BREAKERS ARE SHOWN ON THIS RISER (SINGLE LINE DIAGRAM). REFER TO PANEL SCHEDULES FOR ALL BREAKERS AND ASSOCIATED LOADS.
  - CONDUIT CANNOT BE USED AS A GROUND. PROVIDE AN ADDITIONAL GROUNDING WIRE AS PER THE SPECIFICATIONS.

**ELECTRICAL LEGEND**

	STRIP LIGHTING FIXTURE (TYPE AS INDICATED)
	120V WALL MOUNTED SWITCH UNLESS OTHERWISE SPECIFIED
	MOTOR RATED SWITCH WITH PILOT LIGHT
	EMERGENCY BATTERY PACK WITH DUAL HEADS (NUMBER AS SHOWN)
	INDOOR HORN
	FIRE ALARM PULL STATION
	HEAT DETECTOR- 57C AND R.O.R.
	HEAT DETECTOR- 88C AND R.O.R.
	DEVICE WITH WIRE GUARD
	FIRE ALARM CONTROL PANEL
	DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER
	ELECTRICAL PANEL, SURFACE MOUNTED (DESIGNATION AS SHOWN)
	TRANSFORMER
	SAFETY DISCONNECT SWITCH
	DIRECT CONNECTION FOR EQUIPMENT
	THERMOSTAT
	ELECTRIC BASEBOARD HEATER
	ELECTRICAL CONDUIT RISER
	ELECTRICAL CONDUIT DROP
	MINERAL INSULATED
	EXISTING DEVICE TO BE REMOVED
	EXISTING DEVICE TO BE RELOCATED
	EXISTING DEVICE TO REMAIN
	EXISTING DEVICE TO BE REPLACED WITH NEW

- METHOD OF PROCEDURE:**
- \*\*\* REFER TO SINGLE LINE DIAGRAMS 1/E101 AND 2/E101 FOR CROSS REFERENCES\*\*\*
- INSTALL NEW OUTDOOR NATURAL GAS GENERATOR.
  - INSTALL NEW ATS-ED2A AND ATS-ED2B IN EXISTING GENERATOR ROOM. PULL ALL CABLES INTO BUILDING AND TERMINATE AT BOTH ENDS.
  - INSTALL NEW NORMAL POWER FEEDS AND LOAD FEEDS. TERMINATE AT ATS END ONLY.
  - COMMISSION NEW GENERATOR WITH PORTABLE LOAD BANK.
  - PROVIDE PORTABLE GENSET TO TEMPORARILY POWER EMERGENCY LOADS:
    - PRIOR TO SHUTDOWN, DISCONNECT 'EDP1' FROM EXISTING ATS AND ENERGIZE FROM 60kW PORTABLE STANDBY GENERATOR FOR DURATION OF SHUTDOWN.
    - ISOLATE NORMAL POWER TO EXISTING ATS AND DISCONNECT FEEDER AT 'D2A' AND ATS.
    - ISOLATE EMERGENCY POWER TO EXISTING ATS AND DISCONNECT FEEDER AT ATS.
    - REMOVE EXISTING ATS.
    - INSTALL NEW PANEL 'ED2A' IN PLACE OF EXISTING ATS. INSTALL NEW PANEL 'ED2B'.
    - TERMINATE FEEDERS FROM NEW ATS'S TO NEW EMERGENCY PANELS.
    - DISCONNECT PORTABLE GENERATOR FROM EXISTING 'EDP1'.
    - BACKFEED EXISTING 'EDP1' FROM NEW EMERGENCY PANEL 'ED2A' UTILIZING FEED THRU LUGS AND EXISTING CABLE (FROM EXISTING ATS).
  - RETURN NORMAL POWER TO ALL EMERGENCY LOADS.
  - COMMISSION ATS-ED2A AND ATS-ED2B WITH NEW GENERATOR.
  - MOVE SPECIFIED "NON-LIFE SAFETY" CIRCUITS IN EXISTING PANEL 'EDP1' OVER TO NEW PANEL 'ED2A'. EXTEND WIRING AS REQUIRED. MOVE FEED TO PENTHOUSE SPLITTER #2 FROM EXISTING PANEL 'EDP1' TO NEW DISCONNECT AS SHOWN. M.I. 2HR FIRE RATED CABLE REQUIRED FOR PENTHOUSE SPLITTER FEED. REFER TO ELECTRICAL DRAWING NOTE 4 PERTAINING TO REPLACEMENT OF EXISTING WIRING ONLY.

- ELECTRICAL GENERAL NOTES:**
- ENTIRE INSTALLATION SHALL BE IN ACCORDANCE WITH THE ONTARIO ELECTRICAL SAFETY CODE.
  - ELECTRICAL CONTRACTOR IS TO OBTAIN ALL APPROVALS FROM LOCAL ELECTRICAL SAFETY AUTHORITY PRIOR TO COMMENCING WORK.
  - THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH NORTHSORE ENGINEERING DRAWINGS. ENSURE ALL REQUIREMENTS ARE COORDINATED AND CARRIED.
  - ALL DEVICES SHOWN ARE NEW, UNLESS OTHERWISE NOTED.
  - FIRE STOP ALL PENETRATIONS THRU FIRE RATED ASSEMBLIES.
  - ALL UNUSED WIRING SHALL BE PROPERLY TERMINATED, OR REMOVED. WIRING THAT CANNOT BE REMOVED AND IS CONCEALED AND INACCESSIBLE MUST BE CUT OFF WHERE EXPOSED (SO AS TO BE TOO SHORT TO BE REUSED) AND BE MADE SAFE.
  - REFER TO DESIGNATED SUBSTANCE SURVEY IN PROJECT FRONT END FOR ALL POTENTIAL HAZARDOUS BUILDING MATERIALS. ENSURE ALL APPLICABLE SAFETY PROCEDURES ARE EXECUTED AND MAINTAINED.
- POWER GENERAL NOTES:**
- PROVIDE BONDING CONDUCTOR AND CONNECTION (AS PER GESS) FOR ALL PERMANENTLY CONNECTED EQUIPMENT. COORDINATE EXACT REQUIREMENTS ON SITE.
  - BRANCH CIRCUIT WIRING IN CONCEALED SPACES TO BE INSTALLED IN CONDUIT. REFER TO THE SPECIFICATIONS ON THE MAXIMUM LENGTH OF ARMoured CABLES THAT CAN BE USED.
  - ENSURE A MINIMUM OF 1M CLEARANCE IS MAINTAINED IN FRONT OF ALL PANELS AND DISCONNECT SWITCHES.
- LIGHTING GENERAL NOTES:**
- EMERGENCY BATTERY PACK TO BE NEW 12 VOLT, COMPLETE WITH TWO 6W LED HEADS, EQUAL TO STANPRO-SLC-1200X-25-6WLA W-A-T-D SERIES TO BE COMPLETE WITH AUTO-TEST, LAMP DISCONNECT, BATTERY DISCONNECT AND TIME DELAY. WAITAGE TO MATCH EXISTING.
- FIRE ALARM GENERAL NOTES:**
- FIRE ALARM WIRING IN CONCEALED SPACES TO BE INSTALLED IN CONDUIT. REFER TO SPECIFICATIONS FOR ALL INSTALLATION AND WIRING REQUIREMENTS.
  - PROVIDE FIRE ALARM DEVICES AS SHOWN AND PROVIDE PARTIAL FIRE ALARM SYSTEM VERIFICATION (TO CAN/ULC-5537 STANDARDS) UPON COMPLETION.
  - ALL FIELD WIRING SHALL BE IN ACCORDANCE WITH CSA C22.1, CANADIAN ELECTRICAL CODE, PART 1, SECTION 12 & 32, THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THE REQUIREMENTS OF CAN/ULC-5524, CLAUSE 4.4.

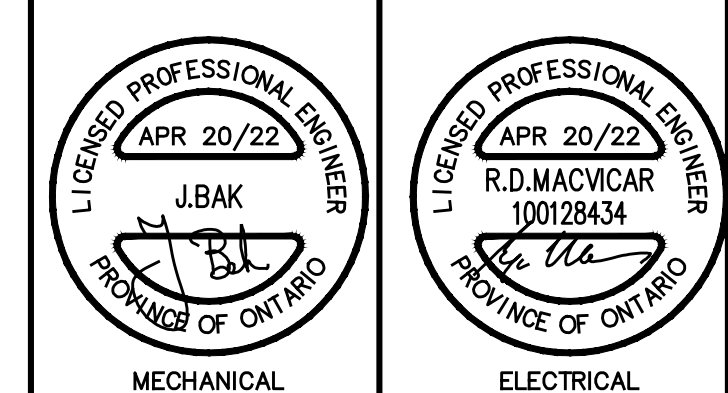
- ELECTRICAL DRAWING NOTES:**
- DISCONNECT AND REMOVE EXISTING DUCTS, ACTUATORS AND ALL SUPPORT BRACKETS FOR GENERATOR INTAKE AND VENTILATION.
  - FUEL TANK SHALL BE REMOVED AND DISPOSED IN A MANNER THAT SATISFIES TSSA AND MCE. REMOVE ALL UNUSED PIPING. PENETRATIONS THROUGH EXTERIOR WALL FROM VENTING AND TELLING PIPES SHALL BE PATCHED WITH MASONRY TO MATCH EXISTING. RESTORE EXTERIOR TO MATCH EXISTING.
  - REMOVE ALL UNUSED CONDUITS, TRAY, WIRING, AND SUPPORT BRACKETS.
  - A CASH ALLOWANCE SHALL BE PROVIDED TO COVER COSTS ASSOCIATED WITH CONVERTING EXISTING BRANCH WIRING TO M.I. 2HR FIRE RATED CABLE WHERE REQUIRED. COSTS ASSOCIATED WITH ADDITIONAL LENGTH TO EXTEND CABLE TO NEW DISCONNECT SHALL BE CARRIED.
  - MODIFY EXISTING UNISTRUT RACK TO SUIT NEW PANEL 'ED2A'.
  - RESTORE ALL REQUIRED CONNECTIONS TO ELEVATOR CONTROLLERS AND RELATED SYSTEMS.
  - A CASH ALLOWANCE SHALL BE PROVIDED TO COVER COSTS ASSOCIATED WITH MOVING OTHER POSSIBLE LIFE SAFETY CIRCUITS CURRENTLY FED FROM SUBPANELS ON EXISTING PANEL 'EDP1'.
  - COORDINATE BREAKER SIZE WITH OVERCURRENT PROTECTION ON FIRE PUMP CONTROLLER.

1. ISSUED FOR TENDER	APRIL 20, 2022
revision	date

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detail no.  
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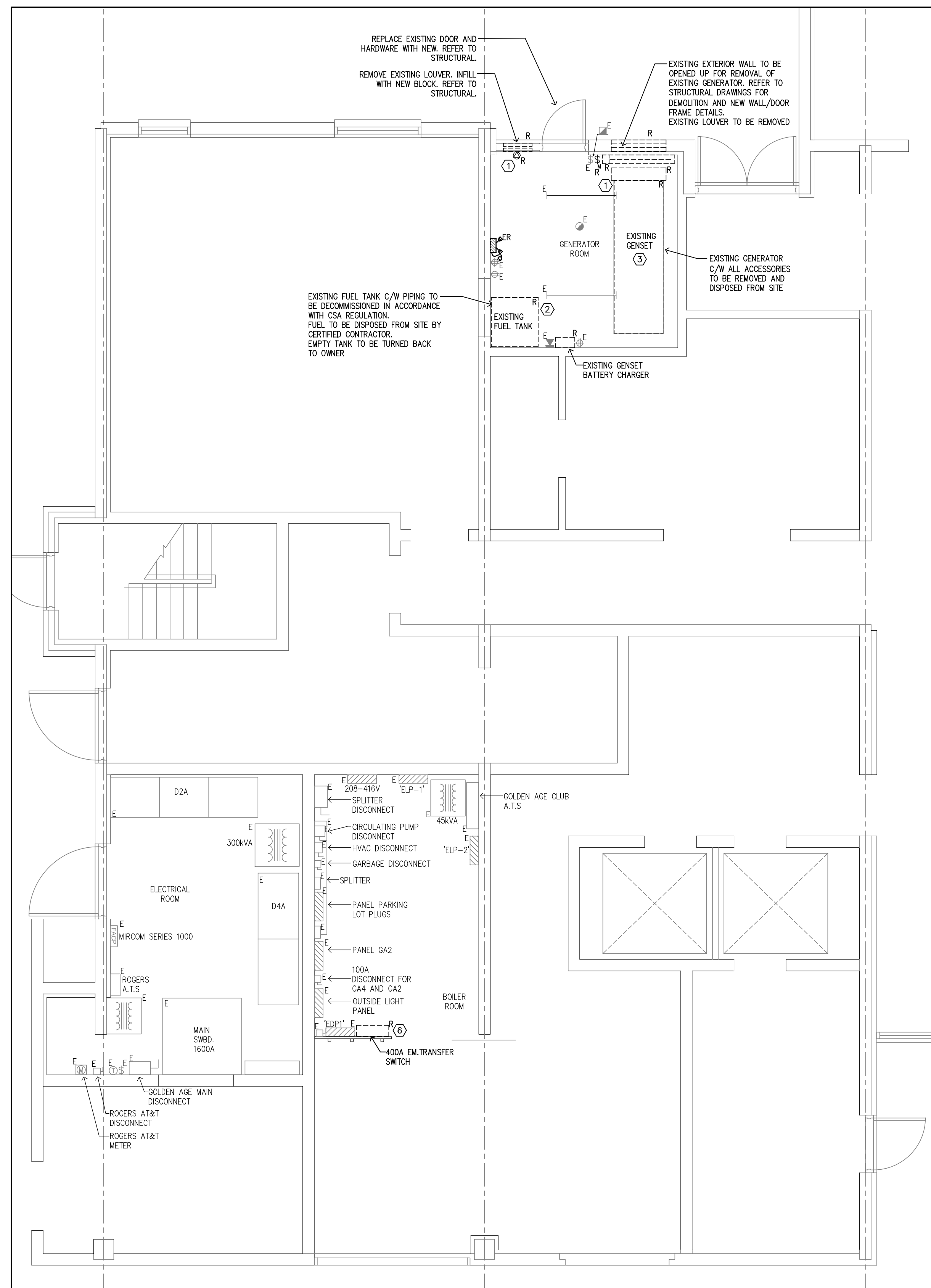
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Consultants Limited  
1820 Bond St. North Bay, Ontario, P1B 4V6  
Ph. 705-472-2536 Fx. 705-476-5105  
Email - pci@piotrowskiconsultants.ca

project  
RFTND22-06  
GOLDEN AGE APPARTMENTS  
135 WORTHINGTON ST. W.  
EMERGENCY GENERATOR UPGRADE

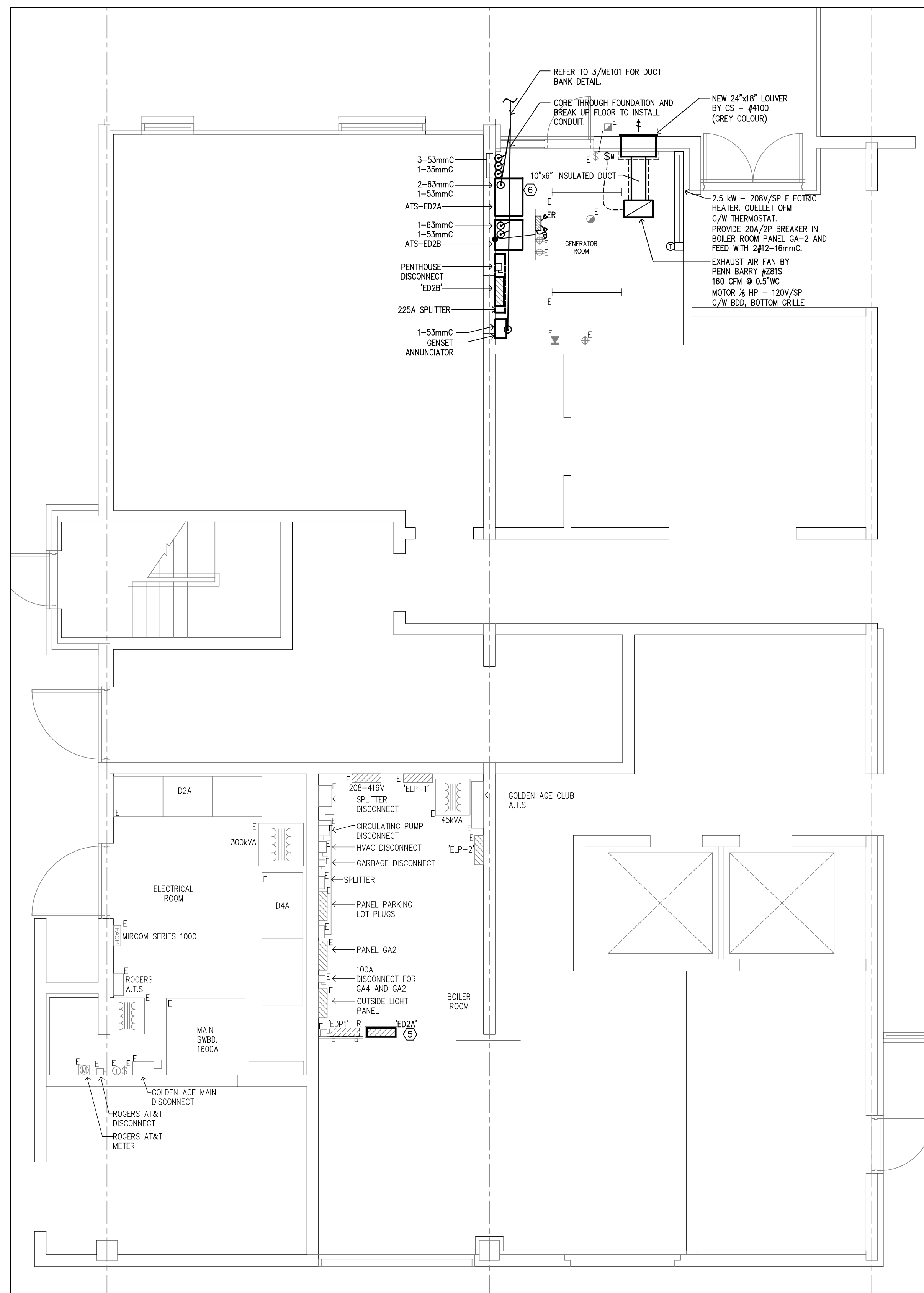
NORTH BAY ONTARIO

title  
ELECTRICAL  
POWER  
SINGLE LINE DIAGRAMS  
LEGEND AND NOTES

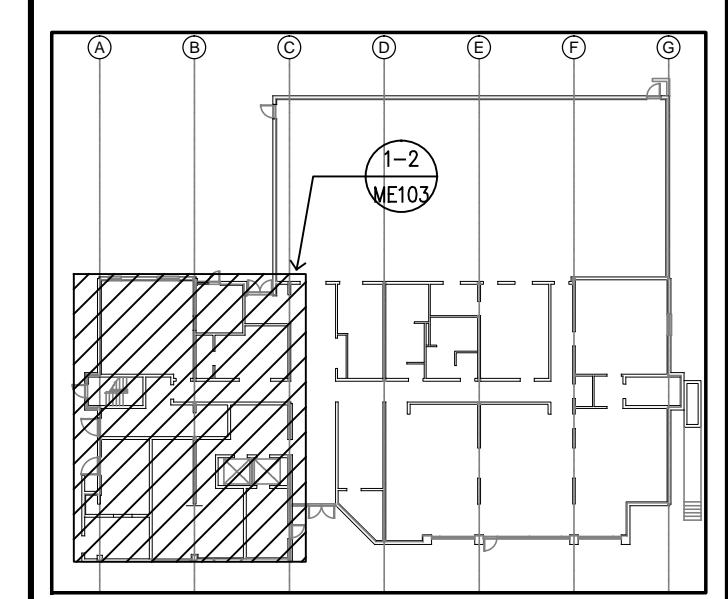
drawn by: EH	date: MARCH 2022
checked by: RM	project no: 6503B
scale: AS NOTED	dwg no: <b>ME102</b>
plotted: April 20, 2022	



**1** Power & Ventilation - Partial First Floor Plan - Demolition  
 ME103 1:50



**2** Power & Ventilation - Partial First Floor Plan - Proposed  
 ME103 1:50



**KEY PLAN - FIRST FLOOR**

N.T.S

1. ISSUED FOR TENDER	APRIL 20, 2022
revision	date

the Contractor shall check and verify all dimensions before proceeding with the work

(A) detail no.  
 (B) sheet no. where detailed

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 Consultants Limited  
 1820 Bond St. North Bay, Ontario, P1B 4V6  
 Ph. 705-472-2536 Fx. 705-476-5105  
 Email - pci@piotrowskiconsultants.ca

project  
 RFTND22-06  
 GOLDEN AGE APARTMENTS  
 135 WORTHINGTON ST. W.  
 EMERGENCY GENERATOR UPGRADE

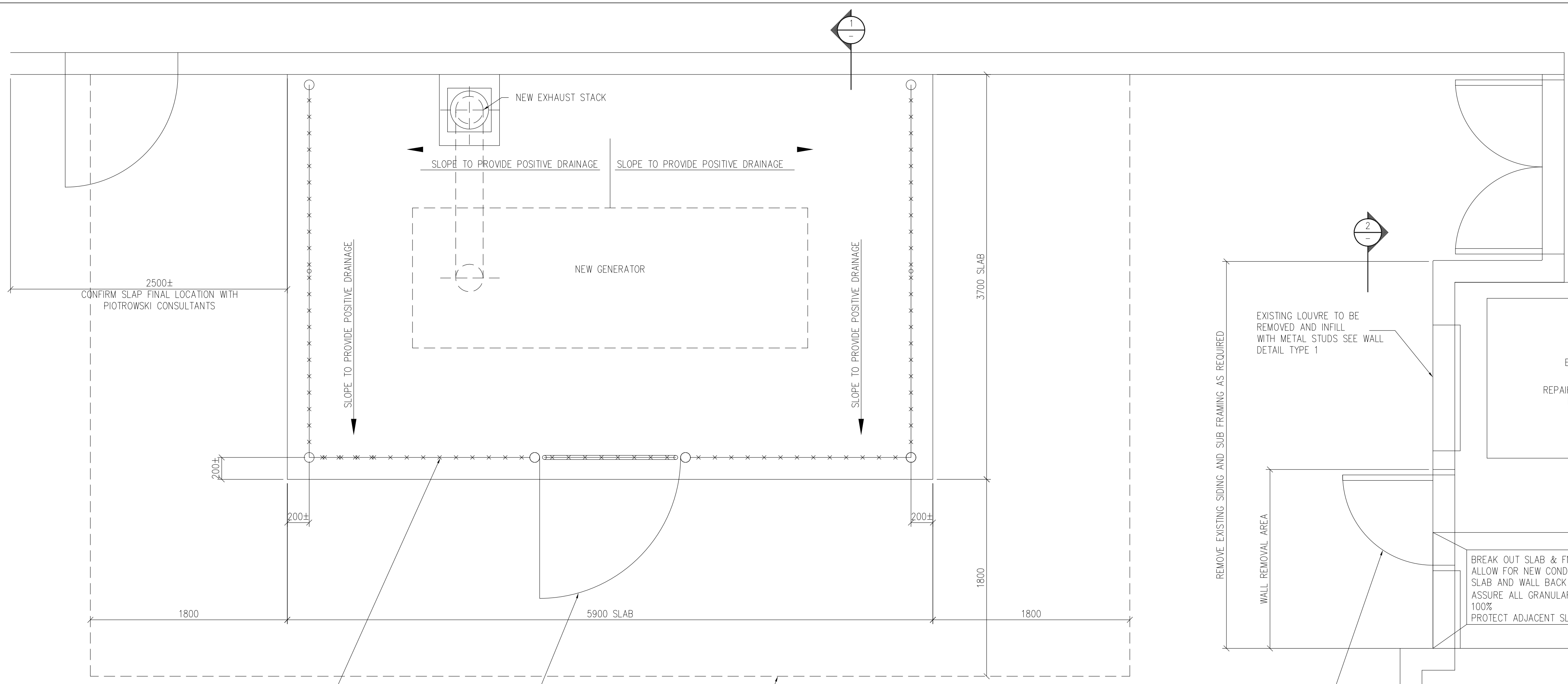
NORTH BAY ONTARIO

title  
 ELECTRICAL & MECHANICAL  
 POWER & VENTILATION  
 PARTIAL FIRST FLOOR PLAN

drawn by: EH	date: MARCH 2022
checked by: RM	project no: 6503B
scale: AS NOTED	dwg no: <b>ME103</b>
plotted: April 20, 2022	

SHEET SIZE = A3 (841 x 1189) mm





- WALL TYPE 1**
- EXTERIOR SIDING TO MATCH EXISTING
  - 18 x25mm HORIZONTAL Z-BARS @ 600 O.C
  - TYPAR AIR BARRIER
  - EXTERIOR 16mm GLASGLAD SHEETING
  - 18 GA 152mm METAL STUD AT 400 O.C. C/W BOTTOM TRACK AND TOP DEFLECTION TRACK(CONTRACTOR TO PROVIDED ENGINEERED SHOP DRAWING FOR STUD FRAMING)
  - INSULATE CAVITY WITH FIBRE GLASS BATTS R22
  - 6mil POLY VAPOUR BARRIER
  - 16mm GYPSUM BOARD INTERIOR (TAPED AND MUDDED READY FOR PAINT)
- WALL TYPE 1 NOTE** PROVIDE ADDITIONAL STUD FRAMING AT INTERIOR TO ALL INTERIOR SURFACES
- WALL TYPE 2 (AT EXISTING WALL)**
- EXTERIOR SIDING TO MATCH EXISTING
  - PROVIDE NEW/MODIFIED SUB-FRAMING ARE REQUIRED
- WALL TYPE 2 NOTE** WALL TO BE REVIEW AT TIME OF CONSTRUCTION TO DETERMINE WHAT NEW FRAMING IS REQUIRED. CONTRACT TO ALLOW FOR MODIFIED/NEW FRAMING IN BASE PRICE.
- GENERAL WALL NOTES**
- CONTRACTOR TO ALLOW FOR ALL FLASHING, FASTENER SILL GASKET, CAULKING, SEALING AND ALL OTHER ITEMS TO MAKE WORK COMPLETE.
- PAINTING AND FINISHING
- ALL WALLS AND CEILING IN NEW STORAGE ROOM TO BE PATCHED AS REQUIRED AND RECEIVE ONE COAT FOR PRIMER AND 2 TOP COATS OF PAINT
- NEW DOOR & FRAME TO RECEIVE ONE COAT FOR PRIMER AND 2 TOP COATS OF PAINT
- PATCH AND REPAIR CONCRETE FLOOR AND EPOXY PAINT

NEW 1800mm (6") HIGH STANDARD GALVANIZED STEEL CHAIN LINK FENCE MOUNTED ON NEW CONCRETE SLAB

-FENCE SUPPLIER/INSTALLER TO PROVIDE DESIGN AND SHOP DETAILS FOR FENCING

NEW 1200±WIDE GATE TO MATCH FENCING C/W LOCKABLE LATCH LOCK BY NDHA

EXTENT OF SLAB INSULATION

EXISTING DOOR, WALL, AND LOUVRE TO BE REMOVED TO UNDERSIDE OF EXISTING LINTEL TO ALLOW FOR REMOVAL OF GENERATOR AND HOUSEKEEPING SLAB. INFILL FRAME WITH METAL STUDS SEE WALL FOR DETAIL TYPE 1

EXISTING LOUVRE TO BE REMOVED AND INFILL WITH METAL STUDS SEE WALL DETAIL TYPE 1

EXISTING GENERATOR AND HOUSE KEEPING SLAB TO BE REMOVED REPAIR EXISTING SLAB AS REQUIRED AFTER REMOVING HOUSE KEEPING SLAB

EXISTING GENERATOR ROOM/ NEW STORAGE ROOM

BREAK OUT SLAB & FND WALL AS REQ'D TO ALLOW FOR NEW CONDUIT INSTALLATION, REINSTATE SLAB AND WALL BACK TO ORIGINAL CONDITION ASSURE ALL GRANULAR MATL ARE COMPACTED TO 100% PROTECT ADJACENT SLAB FOR UNDERMINING

**-GENERAL REPAIR NOTE**

- MATCH AND ALL EFFECTED AREAS BACK TO ORIGINAL CONDITION INCLUDING ASPHALT, SIDE WALKS AND OTHER EFFECTED ITEM.
- ASSURE ALL GRANULAR MATERIAL ARE COMPACTED TO 100%
- PROVIDE POSITIVE DRAINAGE AND MATCH SLOPES TO EXISTING
- SAW CUT ALL EXISTING ASPHALT AND CONCRETE WHERE EXISTING IS TO MATE WITH NEW.

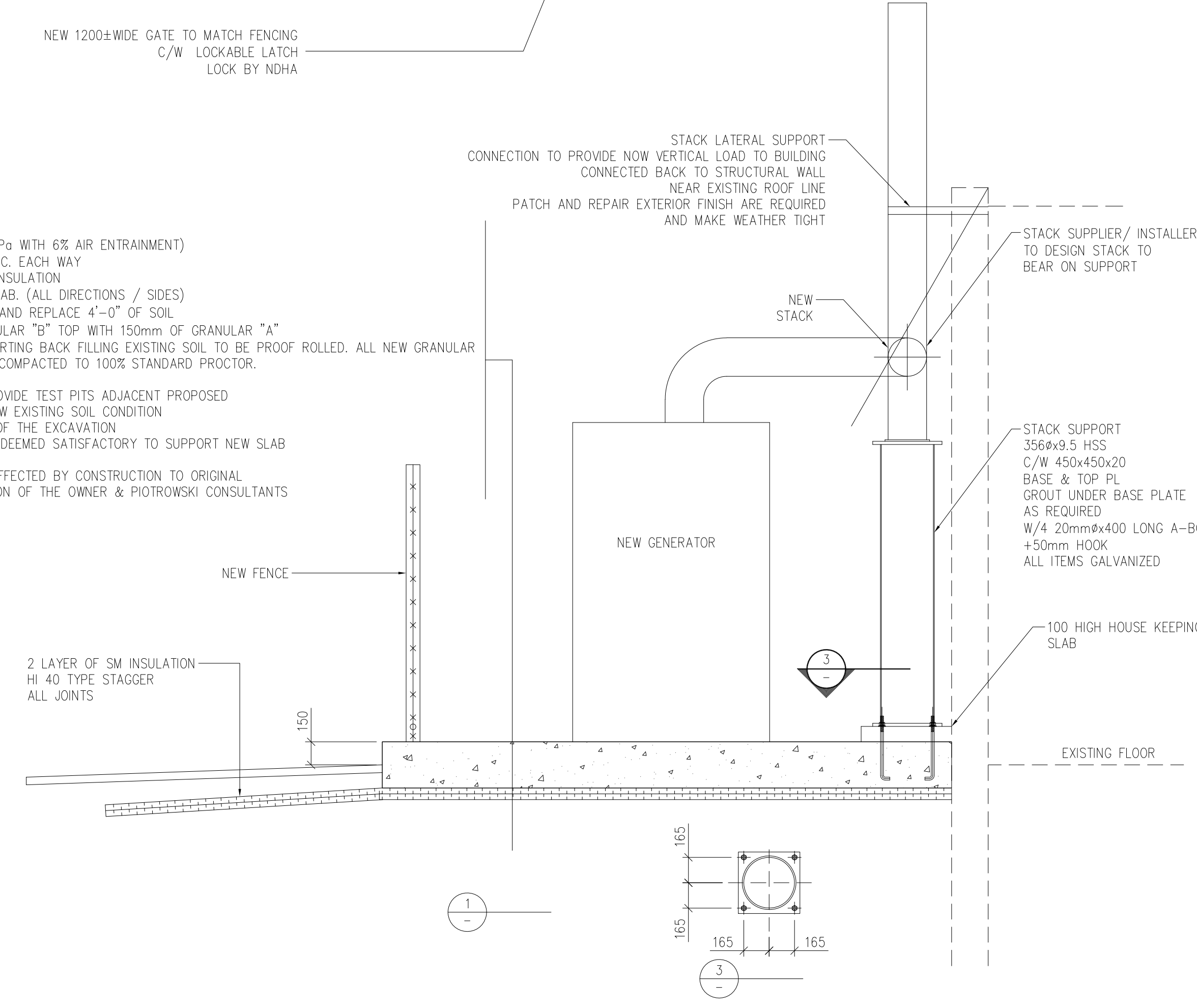
**SLAB AND SITE PREPARATION NOTE**

300mm THICK CONCRETE SLAB (32MPa WITH 6% AIR ENTRAINMENT) REINFORCED WITH 15M REBAR 200 O.C. EACH WAY ON 2-38mm LAYER OF H140 FOAM INSULATION

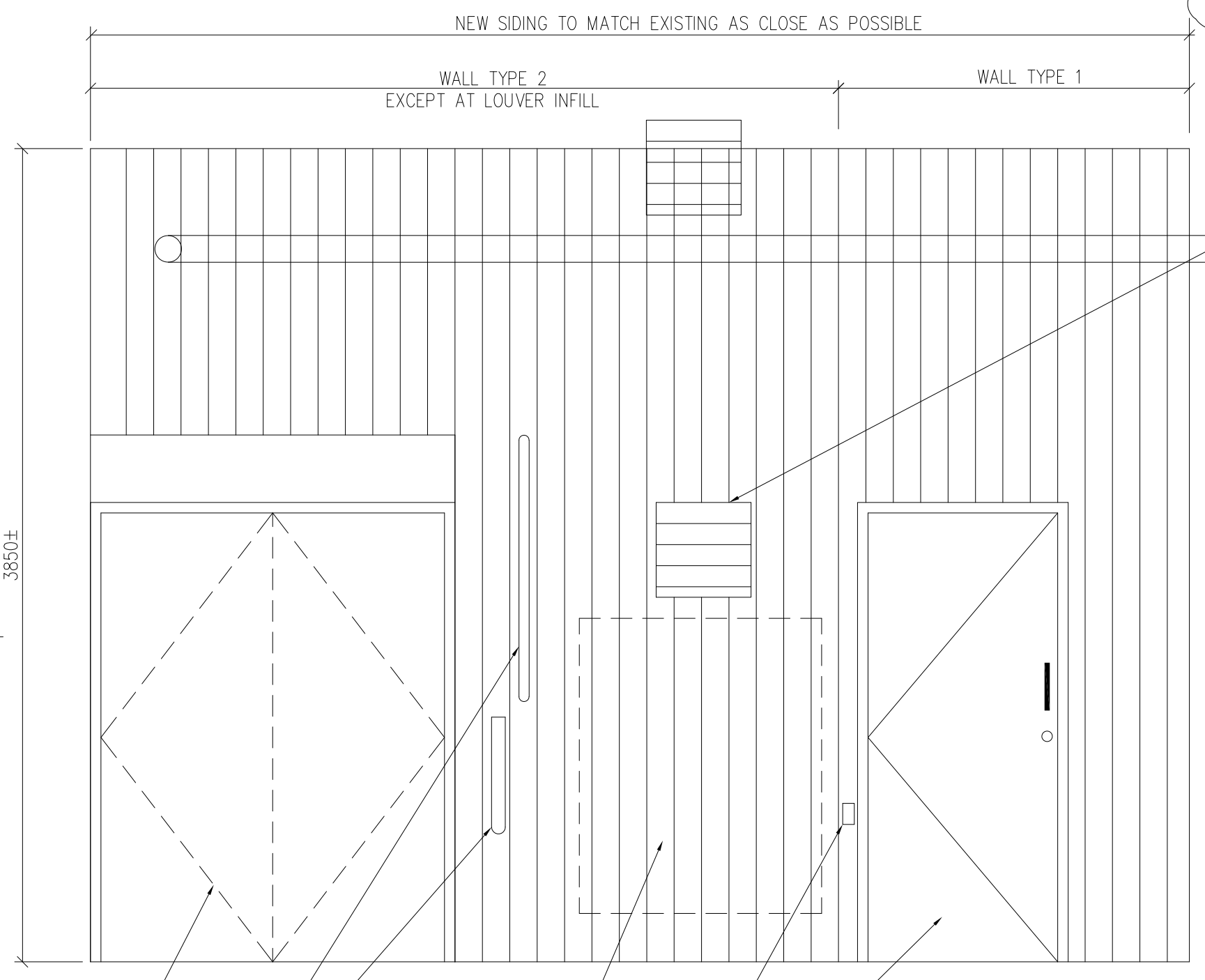
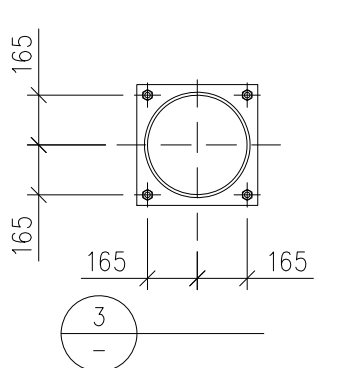
EXTEND INSULATION 1800 BEYOND SLAB. (ALL DIRECTIONS / SIDES) CONTRACTOR TO ALLOW TO REMOVE AND REPLACE 4'-0" OF SOIL & REPLACED WITH 900mm OF GRANULAR "B" TOP WITH 150mm OF GRANULAR "A" AFTER EXCAVATION AND BEFORE STARTING BACK FILLING EXISTING SOIL TO BE PROOF ROLLED. ALL NEW GRANULAR TO BE INSTALLED IN 150 LIFTS AND COMPACTED TO 100% STANDARD PROCTOR.

**SPECIAL NOTE** CONTRACTOR MAY PROVIDE TEST PITS ADJACENT PROPOSED EXCAVATION FOR ENGINEER TO REVIEW EXISTING SOIL CONDITION ENGINEER MAY WAVE SOME OR ALL OF THE EXCAVATION AND BACKFILL IF EXISTING SOIL ARE DEEMED SATISFACTORY TO SUPPORT NEW SLAB

CONTRACTOR RESTORE ALL AREAS AFFECTED BY CONSTRUCTION TO ORIGINAL CONDITIONS AND TO THE SATISFACTION OF THE OWNER & PIOTROWSKI CONSULTANTS



1



2

NO.	DATE:	REVISION & DESCRIPTION:
1	MAR 29 22	FOR CLIENT REVIEW AND TENDER

**FIELD NOTES:**

**STAMP**

LICENSED PROFESSIONAL ENGINEER  
 W.T. THERRIAULT  
 Mar 29, 22  
 PROVINCE OF ONTARIO

**NORTHSHORE ENGINEERING & DRAFTING SERVICES**

184 McNaughton Ave.  
 NORTH BAY ONT.  
 TEL: 705-495-0981  
 FAX: 705-497-7425  
 EMAIL: ns@northshore-eng.com

**CLIENT**

NIPISSING DISTRICT HOUSING CORPORATION

**PROJECT**

GOLDEN AGE APARTMENTS  
 135 WORTHINGTON ST W.  
 EMERGENCY GENERATOR DESIGN

**STRUCTURAL / ARCHITECTURAL DETAILS**

DRAWN BY: TIM T	CHECKED BY: --	DATE: 22-03-25
PROJECT NO. 211719	FILE NO. 211719-S01-R0-22-03-25	SCALE: N.T.S.
DRAWING NO. S01	REVISION: 0	PLOTTED: 21-03-29