MANCHESTER-BY-THE-SEA
PUBLIC LIBRARY
GENERATOR PROJECT

Town of Manchester-by-the-Sea
10 Central Street
Manchester-by-the-Sea, MA 01944

DRAWING INDEX:

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Client:

TOWN OF
MANCHESTER-BY-THE-SEA
10 CENTRAL ST
MANCHESTER-BY-THE-SEA, MA 01944

Submission

Bid Documents 10/23/2024

Revision:

Project:

PUBLIC LIBRARY
GENERATOR PROJECT
15 UNION ST
MANCHESTER-BY-THE-SEA, MA 01944

Project No.:	24069
Drawn By:	RG
Checked By:	CM
Scale:	As Noted

Title:

TITLE SHEET

Drawing No.:

TS

GENERAL NOTES

1. LEGEND IS INTENDED TO SHOW DEPICTION OF SYMBOLS. IT DOES NOT IMPLY INTENT OF SCOPE. NOT ALL SYMBOLS SHOWN ON THIS LEGEND WILL BE USED ON THE DWGS.
2. REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR MOUNTING HEIGHTS AND EXACT LOCATIONS OF ALL DEVICES.
3. PERFORM WORK AND PROVIDE MATERIALS AND EQUIPMENT TO MAKE INSTALLATION COMPLETE IN EVERY DETAIL UNDER THIS CONTRACT WHETHER OR NOT SPECIFICALLY SHOWN ON DRAWINGS.
4. ALL EQUIPMENT AND WIRING ON DWGS IS SHOWN DIAGRAMMATICALLY. EXACT LOCATION AND METHOD OF SUPPORT SHALL BE DETERMINED IN THE FIELD, EXCEPT WHERE SPECIFIC DIMENSIONS AND DETAILS ARE SHOWN. ALL CONDUIT RUNS SHALL BE RIGIDLY SUPPORTED.

POWER NOTES

1. ALL CONDUITS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATION AND METHOD OF SUPPORT SHALL BE DETERMINED IN THE FIELD, EXCEPT WHERE SPECIFIC DIMENSIONS AND DETAILS ARE SHOWN. ALL CONDUIT RUNS SHALL BE RIGIDLY SUPPORTED.
2. ELECTRICAL CONTRACTOR SHALL CONFIRM ALL NEMA CONFIGURATIONS AND REQUIRED ELECTRICAL REQUIREMENTS OF ALL EQUIPMENT SPECIFICATIONS PRIOR TO ROUGH-IN.

EXISTING EQUIPMENT DESIGNATIONS

X	EXISTING TO BE REMOVED, REMOVE ALL ASSOCIATE CONDUIT AND CONDUCTORS
XM	EXISTING TO REMAIN
XN	EXISTING EQUIPMENT TO BE REPLACED WITH NEW, CONNECT NEW EQUIPMENT TO EXISTING CIRCUIT
XR	EXISTING EQUIPMENT TO BE RELOCATED, JUNCTION AND EXTEND EXISTING CONDUIT AND CONDUCTORS
XC	NEW EQUIPMENT TO BE CONNECTED TO NEAREST AVAILABLE BRANCH CIRCUIT, PROVIDE NEW BRANCH CIRCUITRY FROM NEAREST EXISTING DEVICE (TO REMAIN) TO NEW DEVICE AS REQUIRED
XL	NEW LOCATION OF EXISTING EQUIPMENT, JUNCTION AND EXTEND CONDUIT AND CONDUCTORS AS REQUIRED

ABBREVIATIONS

A/AMP	AMPERE	IMC	INTERMEDIATE METALLIC CONDUIT
AC	ALTERNATING CURRENT	JB	JUNCTION BOX
AF	AMPERE FRAME	KVA	KILOVOLT-AMPERE
AFF	ABOVE FINISHED FLOOR	KW	KILOWATT
AFG	ABOVE FINISHED GRADE	LTG	LIGHTING
AIC	AMPERE INTERRUPTING CAPACITY	MCB	MAIN CIRCUIT BREAKER
AL	ALUMINUM	MCC	MOTOR CONTROL CENTER
AT	AMPERE TRIP	MEC	MASSACHUSETTS ELECTRICAL CODE
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUGS ONLY
AWG	AMERICAN WIRE GAUGE	MTD	MOUNTED
C	CONDUIT	MTG	MOUNTING
CB	CIRCUIT BREAKER	NEC	NATIONAL ELECTRICAL CODE
CKT	CIRCUIT	No., #	NUMBER
CL	CENTERLINE	NS	NON-SYSTEM
CU	COPPER	NTS	NOT TO SCALE
DC	DIRECT CURRENT	PC	PLUMBING CONTRACTOR
DE	DUAL ELEMENT	PWR	POWER
DWG	DRAWING	RGS	RIGID STEEL CONDUIT
EC	ELECTRICAL CONTRACTOR	RMS	ROOT MEAN SQUARE VALUE
EMH	ELECTRICAL MANHOLE	RPM	REVOLUTIONS PER MINUTE
EMT	ELECTRIC METALLIC CONDUIT	SF	SQUARE FOOT
EWC	ELECTRIC WATER COOLER	SN	SOLID NEUTRAL
G/GND	GROUND	ST	SHUT TRIP CIRCUIT BREAKER
GC	GENERAL CONTRACTOR	SWBD	SWITCHBOARD
GE	GROUND-FAULT PROTECTION FOR EQUIPMENT (GFPE CB)	TYP	TYPICAL
GP	GROUND-FAULT PROTECTION FOR PERSONNEL (GFCI CB)	V	VOLTS
GFCI	GROUND-FAULT CIRCUIT-INTERRUPTER	VA	VOLT-AMPERE
HP	HORSEPOWER	VFD	VARIABLE FREQUENCY DRIVE
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	WP	WEATHERPROOF

ANNOTATIONS

- ECH / 1 — MECHANICAL EQUIPMENT TAG, REFER TO MECHANICAL EQUIPMENT COORDINATION SCHEDULE FOR ELECTRICAL REQUIREMENTS
- 200/4 — FEEDER TAG, NUMBER INDICATES AMPERE RATING OF FEEDER AND NUMBER OF WIRES, REFER TO FEEDER SCHEDULE FOR ADDITIONAL INFORMATION. (2) 5" - EMPTY CONDUIT ONLY SHALL BE PROVIDED WITH PULL STRING
- 112.1 — EQUIPMENT TAG, REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION
- # — SHEET NOTE TAG. "#" INDICATES CALL OUT TO CORRESPONDING SHEET NOTE
- 1 — REVISION TAG
- # / E101 — DETAIL CALLOUT. "#" INDICATES THE DETAIL REFERENCE NUMBER. "E101" INDICATES THE DRAWING ON WHICH THE DETAIL CAN BE FOUND
- A A — SECTION "A-A", REFER TO DUCTBANK OR CONDUIT SECTION DETAIL

SITE SYMBOLS

- UNDERGROUND CONDUIT OR DUCT BANK, REFER TO SITE DETAILS FOR ADDITIONAL INFORMATION
- HH — ELECTRIC MANHOLE (MH) / HANDHOLE (HH), REFER TO DETAIL

MOTORS AND CONTROLS

- (#) — MOTOR, NUMERAL INDICATES HORSEPOWER
- S_M — MANUAL MOTOR STARTER, RATED 20A, 250V, COORDINATE MOUNTING HEIGHT IN FIELD, MOUNTING HEIGHT SHALL NOT EXCEED 6'-7" AFF
- 60A 3R — DISCONNECT SWITCH RATED 30A, 3-POLE, IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED
  - "3R" INDICATES NEMA TYPE 3R ENCLOSURE
  - "2P" INDICATES 2-POLE, SINGLE PHASE DISCONNECT
  - "60A" INDICATES 60A SWITCH
- 60AF 40AT 3R — FUSED DISCONNECT SWITCH RATED 30A, 3-POLE, IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED
  - "3R" INDICATES NEMA TYPE 3R ENCLOSURE
  - "2P" INDICATES 2-POLE, SINGLE PHASE DISCONNECT
  - "60AF" INDICATES 60A FUSE SIZE
  - "40AT" INDICATES 40A TRIP RATING
- 30A ST — ENCLOSED CIRCUIT BREAKER IN NEMA 1 TYPE ENCLOSURE, UNLESS OTHERWISE NOTED
  - "30A" INDICATES BREAKER RATING
  - "3R" INDICATES NEMA TYPE 3R ENCLOSURE
  - "ST" INDICATES SHUNT-TRIP
- CP — CONTROLS
  - "CP" INDICATES CONTROL PANEL
  - "VFD" INDICATES VARIABLE FREQUENCY DRIVE
  - "RGAP" INDICATES REMOTE GENERATOR ANNUNCIATOR PANEL

BRANCH CIRCUIT AND FEEDER SYMBOLS

- PP1-2 / PP1-2,4,6 — HOMERUN TO PANELBOARD "PP1", CIRCUIT NUMBER "2
  REFER TO PANEL SCHEDULE FOR BREAKER SIZE AND NUMBER OF POLES
  CONCEALED UNLESS OTHERWISE NOTED
  NUMBER OF ARROWS INDICATES NUMBER OF INDIVIDUAL HOMERUNS "2", "4", AND "6"
  UNLESS NOTED OTHERWISE, WIRING FOR EACH CIRCUIT SHALL BE:
  - 20A/1P - 2#12,#12G-¾"C
  - 20A/2P - 3#12,#12G-¾"C
  - 20A/3P - 4#12,#12G-¾"C

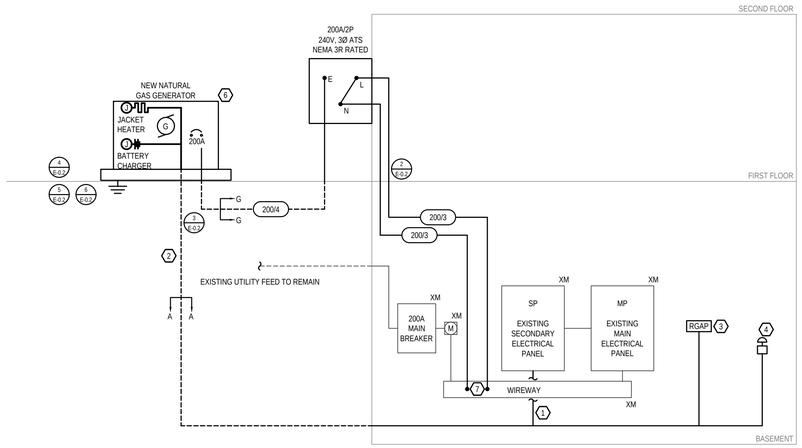
  WIRING FOR MULTIPLE HOMERUNS MAY BE COMBINED IN CONDUIT IN ACCORDANCE WITH NEC REQUIREMENTS
- 4#1,#6G-1½"C — HOMERUN FEEDER / BRANCH CIRCUIT CALLOUT:
  INDICATES (3) #1 AWG (PHASE), (1) #1 AWG (NEUTRAL), (1) #6 GROUND IN A 1½" CONDUIT
- BRANCH CIRCUIT OR FEEDER CONCEALED UNLESS OTHERWISE NOTED. BRANCH CIRCUIT DIAGONAL LINES INDICATE NUMBER OF CONDUCTORS. GROUND WIRE(S) NOT INDICATED. MINIMUM SIZE CONDUCTOR #12 AWG AND 3/4" CONDUIT, UNLESS OTHERWISE NOTED.
- FLEXIBLE CONNECTION TO MOTOR OR EQUIPMENT

MISCELLANEOUS

- UTILITY METER
- MUSHROOM HEAD PUSH BUTTON SWITCH
- PUSH BUTTON SWITCH

PANELBOARD AND TERMINAL CABINET

- 120/208V PANEL, SURFACE MOUNTED, REFER TO PANEL SCHEDULES
- 120/208V PANEL, RECESSED MOUNTED, REFER TO PANEL SCHEDULES



NEW WORK POWER RISER DIAGRAM

N.T.S.

6 NOTES:

* CONTRACTOR SHALL COORDINATE ALL NECESSARY SHUTDOWNS WITH OWNER AND IF NECESSARY, WITH UTILITY COMPANY

1. PROVIDE APPROPRIATE WIRING PER GENERATOR MANUFACTURER'S RECOMMENDATION AND CIRCUIT TO AVAILABLE BREAKER OR NEW CIRCUIT BREAKER IN SECONDARY ELECTRICAL PANEL FOR GENERATOR JACKET HEATER AND BATTERY CHARGER.
2. SAME CONDUIT MAY BE USED TO CARRY CONDUCTORS FOR GENERATOR JACKET HEATER AND BATTERY CHARGER AS WELL AS EMERGENCY POWER OFF BUTTON AND REMOTE GENERATOR ANNUNCIATOR PANEL. APPROPRIATE CONDUCTORS SHALL BE USED AS SPECIFIED BY EQUIPMENT MANUFACTURERS. ALL CONDUCTOR INSULATION SHALL BE RATED FOR THE HIGHEST VOLTAGE OF THE VARIOUS CIRCUITS.
3. ELECTRICAL CONTRACTOR TO COORDINATE LOCATION OF GENERATOR REMOTE ANNUNCIATOR WITH OWNER'S REPRESENTATIVE AND ENGINEER PRIOR TO ROUGHING IN BRANCH CIRCUITRY
4. GENERATOR REMOTE EMERGENCY POWER OFF (EPO) PUSH BUTTON, COORDINATE EXACT LOCATION NEXT TO EXISTING SWITCHGEAR WITH OWNER'S REPRESENTATIVE. PROVIDE CLEAR LABELING TO INDICATE USE
5. ELECTRICAL CONTRACTOR SHALL CONFIRM EXISTING BRANCH CIRCUITRY, IN FIELD, AND MATCH WIRE SIZE ACCORDINGLY
6. 50 KW / 63KVA, 120/240 VOLT NATURAL GAS GENERATOR WITH WEATHERPROOF, LEVEL 2 SOUND ATTENUATED ENCLOSURE BY GENERAC, MODEL NO. SG050NA, ALTERNATOR MODEL NO. K0080124Y21 OR EQUAL.
7. THE EXISTING 200AMP SERVICE FEEDER SHALL BE TAPPED AND NEW CONDUCTORS PROVIDED TO THE PROPOSED ATS AND CONNECTED TO THE NORMAL-FEEDER LUGS.

LEGEND OF FEEDER SIZES-COPPER CONDUCTORS (75°C)

FEEDER SYMBOL	CONDUCTORS (3Ø, 3W) WITH GROUND	RACEWAY SIZE	CONDUCTORS (3Ø, 4W) WITH GROUND	RACEWAY SIZE	NOMINAL AMPERE RATING
60/3	3#6 & 1#10 GND	3/4"C			60
60/4			4#6 & 1#10 GND	1"C	
100/3	3#3 & 1#8 GND	1¼"C			100
100/4			4#3 & 1#8 GND	1¼"C	
125/3	3#1 & 1#6 GND	1¼"C			125
125/4			4#1 & 1#6 GND	1½"C	
150/3	3#1/0 & 1#6 GND	2"C			150
150/4			4#1/0 & 1#6 GND	2"C	
200/3	3#3/0 & 1#6 GND	2"C			200
200/4			4#3/0 & 1#6 GND	2"C	
225/3	3#4/0 & 1#4 GND	2"C			225
225/4			4#4/0 & 1#4 GND	2½"C	
250/3	3-250kCMIL & 1#4 GND	2½"C			250
250/4			4-250kCMIL & 1#4 GND	2½"C	
300/3	3-350kCMIL & 1#4 GND	3"C			300
300/4			4-350kCMIL & 1#4 GND	3"C	
400/3	3-600kCMIL & 1#3 GND	3½"C			400
400/4			4-600kCMIL & 1#3 GND	4"C	
500/3	6-250kCMIL & 2#2 GND	(2) 2½"C			500
500/4			8-250kCMIL & 2#2 GND	(2) 2½"C	
600/3	6-350kCMIL & 2#1 GND	(2) 3"C			600
600/4			8-350kCMIL & 2#1 GND	(2) 3"C	
800/3	6-600kCMIL & 2#1/0 GND	(2) 4"C			800
800/4			8-600kCMIL & 2#1/0 GND	(2) 4"C	
1000/3	9-400kCMIL & 3#2/0 GND	(3) 3"C			1000
1000/4			12-400kCMIL & 3#2/0 GND	(3) 3"C	
1200/3	9-600kCMIL & 3#3/0 GND	(3) 4"C			1200
1200/4			12-600kCMIL & 3#3/0 GND	(3) 4"C	
1600/3	12-600kCMIL & 4#4/0 GND	(4) 4"C			1600
1600/4			16-600kCMIL & 4#4/0 GND	(4) 4"C	
2000/3	15-600kCMIL & 5-250kCMIL GND	(5) 4"C			2000
2000/4			20-600kCMIL & 5-250kCMIL GND	(5) 4"C	
2500/3	18-600kCMIL & 6-350kCMIL GND	(6) 4"C			2500
2500/4			24-600kCMIL & 6-350kCMIL GND	(6) 4"C	
3000/3	24-600kCMIL & 8-400kCMIL GND	(8) 4"C			3000
3000/4			32-600kCMIL & 8-400kCMIL GND	(8) 4"C	
3500/3	24-700kCMIL & 8-500kCMIL GND	(8) 4"C			3500
3500/4			32-700kCMIL & 8-500kCMIL GND	(8) 4"C	
4000/3	24-750kCMIL & 8-500kCMIL GND	(8) 4"C			4000 (NOTE 3)
4000/4			32-750kCMIL & 8-500kCMIL GND	(8) 4"C	

NOTES:

1. ALL FEEDERS GREATER THAN 150 FEET IN LENGTH SHALL INCREASE TO THE NEXT AVAILABLE FEEDER TO ACCOMMODATE FOR VOLTAGE DROP.
2. SERVICE FEEDERS FROM UTILTIY TRANSFORMER TO SERVICE ENTRANCE EQUIPMENT SHALL NOT REQUIRE GROUND CONDUCTOR
3. 4000A SERVICE FEEDERS FROM UTILTIY TRANSFORMER TO SERVICE ENTRANCE EQUIPMENT SHALL BE 90 DEGREE RATED.

PANEL 'MP', 225 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 22,000 AMPS RMS SYM — MAIN: 200A M.C.B. — MOUNTING: SURFACE
CB TYPE: G - INDICATES GFCI, L - INDICATES BREAKER LOCK, GE - INDICATES GFPE, S - INDICATES SHUNT TRIP, A - INDICATES ARC FAULT

LOAD DESCRIPTION	CB/TYPE		CIRC NO.	KVA LOAD A	B	C	CIRC NO.	CB/TYPE		LOAD DESCRIPTION
MAIN		--	1	0.00			2			
			3		0.00		4	--	150	???
			5			0.00	6			
AIR HANDLER - ATTIC	20	--	7	0.00			8	--	20	???
ATTIC EXHAUST FAN	20	--	9		0.00		10	--	20	FIRE ALARM
CLOCK IN REF ROOM - WALL SCONCES	15	--	11			0.00	12	--	20	NEW DUPLEX REC IN LOUNGE
ATTIC GFI PLUG	20	--	13	0.00			14	--	20	NEW DUPLEX REC IN LOUNGE
BOILER LEAD	20	--	15		0.00		16	--	20	COMPUTER DESK OUTLETS
BOILER 2	20	--	17			0.00	18	--	20	FLOOR OUTLETS
SYSTEM PUMPS	20	--	19	0.00			20	--	20	FLOOR OUTLETS
AIR COMPRESSOR - TRANE YARD	40	--	21		0.00		22	--	15	STACK LIGHTS
			23			0.00	24	--	15	STACK LIGHTS
AIR COMPRESSOR - #1 YARD	20	--	25	0.00			26	--	15	LIGHT CONTROL
			27		0.00		28	--	15	LIGHT CONTROL - CHANDALIER
AIR COMPRESSOR - #2 YARD	20	--	29			0.00	30	--	15	LIGHT CONTROL - PADDLE FANS
			31	0.00			32	--	15	LIGHT CONTROL
AIR COMPRESSOR - ROOF/CHILDREN'S ROOM	30	--	33		0.00		34	--	15	OUTDOOR FRONT AND DOOR
			35			0.00	36	--	15	SIGN AND BACK DOOR LIGHT
AIR COMPRESSOR - ROOF	20	--	37	0.00			38	--	15	FOYER
			39		0.00		40	--	15	STACK OUTLETS

PHASE A 0.00 kVA — TOTAL LOAD 0.00 kVA — NOTES: PROVIDE WITH FEED-THRU LUGS
PHASE B 0.00 kVA
PHASE C 0.00 kVA — SECTION 1

PANEL 'SP', 225 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 22,000 AMPS RMS SYM — MAIN: 200A M.C.B. — MOUNTING: SURFACE
CB TYPE: G - INDICATES GFCI, L - INDICATES BREAKER LOCK, GE - INDICATES GFPE, S - INDICATES SHUNT TRIP, A - INDICATES ARC FAULT

LOAD DESCRIPTION	CB/TYPE		CIRC NO.	KVA LOAD A	B	C	CIRC NO.	CB/TYPE		LOAD DESCRIPTION
CHILDREN'S RM/BACK OFFICE/BSMNT STAIR	15	--	1	0.00			2			
	15	--	3		0.00		4	--		MAIN
	15	--	5			0.00	6	--	20	**GENERATOR BATTERY CHARGER**
BOILER ROOM LIGHTS	15	--	7	0.00			8	--	20	MAIN BATHROOM LIGHTS
CRAWLSPACE LIGHTS	15	--	9		0.00		10	--	20	READING ROOM PLUGS
MAIN ROOM PLUGS	15	--	11			0.00	12	--	20	BAR COMPUTER PLUGS
	15	--	13	0.00			14	--	20	MAIN DESK LEFT PLUGS
BASEMENT LIGHTS	15	--	15		0.00		16	--	30	**GENERATOR JACKET HEATER**
	15	--	17			0.00	18			
MAIN PLUGS	15	--	19	0.00			20	--	20	
2ND FLOOR LIGHTS/CLOCK TOWER LIGHTS	15	--	21		0.00		22	--	20	MAIN DESK RIGHT PLUGS
	15	--	23			0.00	24	--		
	15	--	25	0.00			26	--	20	
	15	--	27		0.00		28	--		
QUAD DATA	20	--	29			0.00	30	--	60	SUB PANEL

PHASE A 0.00 kVA — TOTAL LOAD 0.00 kVA — NOTES: PROVIDE WITH FEED-THRU LUGS
PHASE B 0.00 kVA
PHASE C 0.00 kVA — SECTION 1

*REPLACE EXISTING CKT BKR WITH NEW 30A, 208 VOLT, 2-POLE CIRCUIT BREAKER, COMPATIBLE WITH EXISTING PANEL "SP". PANEL "SP" WAS MANUFACTURED BY MURRAY.

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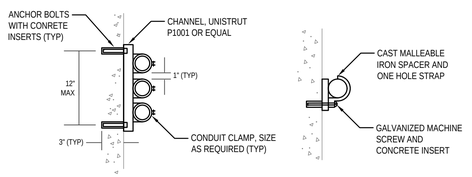
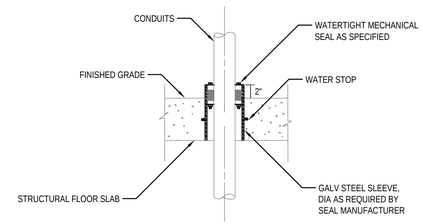
LEGEND, SPECIFICATION, RISERS, PANEL SCHEDULES

Drawing No.:

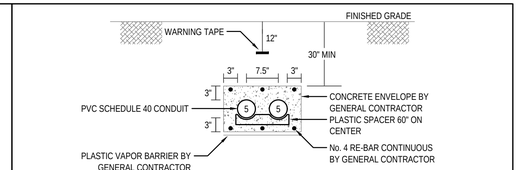
E-0.1



1 CONDUIT MOUNTING DETAIL N.T.S.



2 CONDUIT PENETRATION DETAIL N.T.S.



NOTES:
"#" WITHIN EACH CONDUIT INDICATES THE CONDUIT DIAMETER IN INCHES
SECTION P1-P1 SHOWS ALL TYPICAL DIMENSIONING, DEPTHS AND DUCTBANK SECTION DETAILS.

1. TYIPCAL DEISGNATIONS:
   1.1. P-P PRIMARY, S-S SECONDARY, G-G GENERATOR, A-A GENERATOR ACCESSORY CIRCUIT
2. EXACT ROUTING OF SITE CONDUIT SHALL BE COORDINATED IN THE FIELD BY THE GENERAL CONTRACTOR WITH THE CIVIL ENGINEER & LANDSCAPE ARCHITECTS TO AVOID TREE PLANTINGS AND ALL UNDERGROUND UTILITIES.
3. SECONDARY CONDUITS DO NOT REQUIRE ENCASEMENT IN CONCRETE IF ROUTED UNDER SLAB OR NOT ROUTED UNDER VEHICLE TRAVELED PATHS

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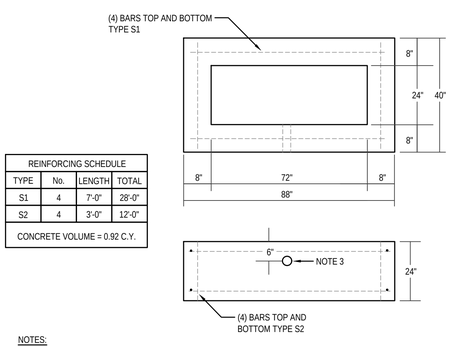
3 DUCTBANK SECTION DETAIL N.T.S.

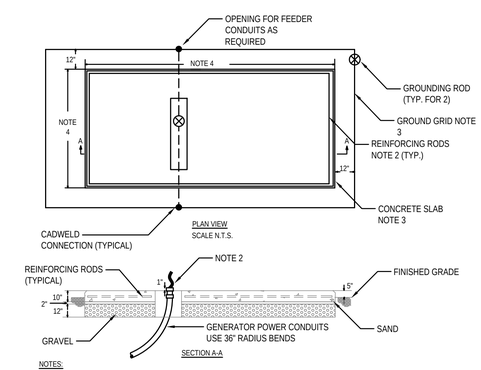


REINFORCING SCHEDULE			
TYPE	No.	LENGTH	TOTAL
S1	4	7'-0"	28'-0"
S2	4	3'-0"	12'-0"
CONCRETE VOLUME = 0.92 C.Y.			

NOTES:

1. REFER TO REQUIREMENTS FOR SLAB DETAILS
2. CONDUIT SHOULD BE PUT IN OPENING AND SURROUNDED WITH SAND
3. 1" PVC CONDUIT FOR GROUND GRID LEADS
4. ALL REBAR SHALL BE #5 TYPE

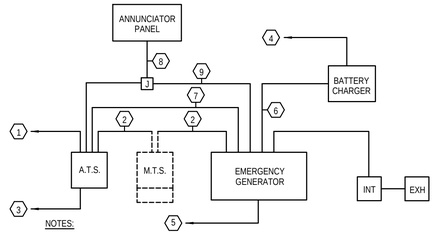
4 CONCRETE PIT FOR PAD DETAIL N.T.S.



NOTES:

1. PROVIDE REBAR STEEL REINFORCING RODS THROUGHOUT NEW PAD.
2. E.C.SHALL INSTALL THREE FEET OF SLACK CABLE ABOVE PAD FOR GROUNDING.
3. E.C. SHALL PROVIDE GROUND GRID - #1/0, 7 STRAND BARE COPPER, 1'-0" BELOW FINISHED GRADE. BOND ALL METALLIC PARTS PER NEC REQUIREMENTS.
4. APPROXIMATE DIMENSIONS 4'-0"X4'-0". ALL DIMENSIONS SHALL BE CONFIRMED WITH MANUFACTURER OF SUBMITTED EQUIPMENT.

5 EMERGENCY GENERATOR PAD DETAIL N.T.S.



NOTES:

1. POWER WIRING, NORMAL SOURCE TO A.T.S.
2. POWER WIRING, GENERATOR OUTPUT TO A.T.S. [VIA 2 WAY MANUAL TRANSFER SWITCH WITH CAMLOCKS, WHERE GENERATOR IS LIFE SAFETY, NEC 700.3 F]
3. POWER WIRING, TO EMERGENCY DISTRIBUTION PANEL
4. POWER WIRING, 120V NORMAL CIRCUIT INPUT TO BATTERY CHARGER (2#12-1/2"C)
5. POWER WIRING, ENGINE JACKET WATER HEATER AND VENT DAMPERS (2#10,2#12-1/2"C)
6. POWER WIRING, BATTERY CHARGER OUTPUT CONNECTION TO BATTERY (2#10-1/2"C)
7. CONTROL WIRING, ENGINE START CIRCUIT (2#14-1/2"C)
8. SIGNAL WIRING TO REMOTE ANNNUNCIATOR (2#10,17#14-3/4"C)
9. SIGNAL WIRING TO REMOTE ANNNUNCIATOR (2#10,14#14-3/4"C)

6 EMERGENCY GENERATOR WIRING DIAGRAM N.T.S.

Seal:

NOT FOR CONSTRUCTION

BLW Engineers, Inc.
311 Great Road, Post Office Box 1551
Littleton, Massachusetts 01460
T: 978.486.4301 F: 978.428.0067
www.blwengineers.com
HVAC * Electrical * Plumbing * Fire Protection

Client:

TOWN OF MANCHESTER-BY-THE-SEA
10 CENTRAL ST
MANCHESTER-BY-THE-SEA, MA 01944

Submission	
Bid Documents	10/23/2024

Revision:

Project:

PUBLIC LIBRARY GENERATOR PROJECT
15 UNION ST
MANCHESTER-BY-THE-SEA, MA 01944

Project No.:	24069
Drawn By:	RG
Checked By:	CM
Scale:	As Noted

Title:

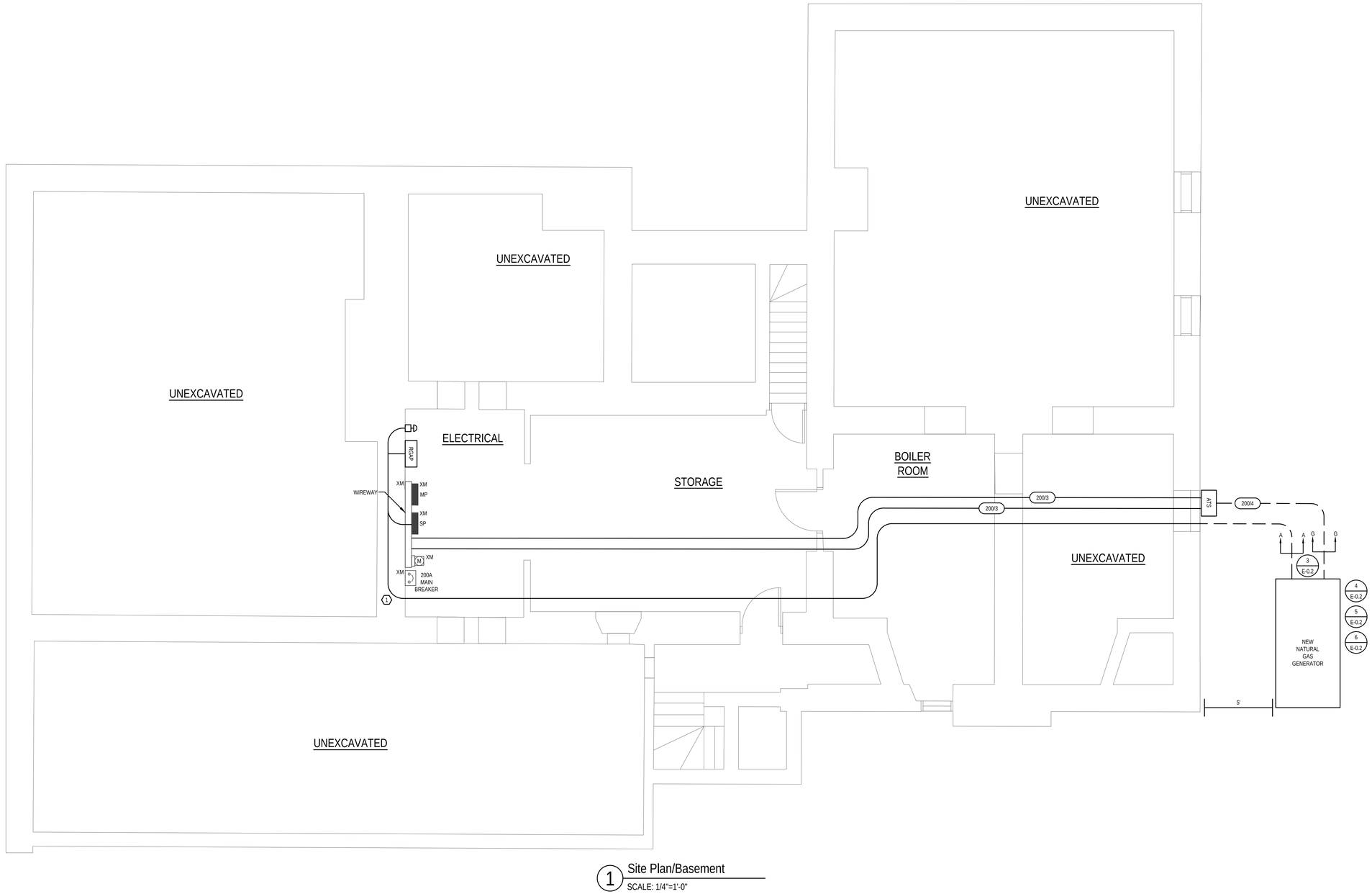
DETAILS

Drawing No.:

E-0.2

NOTES:

1. APPROPRIATE CONDUCTORS FOR GENERATOR BATTERY CHARGER AND JACKET HEATER, EMERGENCY POWER OFF BUTTON, AND REMOTE GENERATOR ANNUNCIATOR PANEL SHALL BE USED AS SPECIFIED BY EQUIPMENT MANUFACTURERS. ALL CONDUCTOR INSULATION SHALL BE RATED FOR THE HIGHEST VOLTAGE OF THE VARIOUS CIRCUITS.



1 Site Plan/Basement
SCALE: 1/4"=1'-0"

Seal:

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SITE PLAN/BASEMENT

Drawing No.:

E-1.0