LOWELL HOUSING AUTHORITY
SOUTH COMMON VILLAGE
ELECTRICAL REDISTRIBUTION

Lowell Housing Authority
350 Moody Street
Lowell, Massachusetts 01854

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Seal:

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*HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION*

Client:

LOWELL HOUSING
AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
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PHASE 2
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Project No.:	21002.00
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Title:

TITLE
SHEET

Drawing No.:

T0.1

DEMOLITION NOTES

1. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE FULL EXTENT OF THE SCOPE OF DEMOLITION. DISCONNECT AND MAKE SAFE ALL ELECTRICAL EQUIPMENT IDENTIFIED FOR REMOVAL ON THE HVAC, PLUMBING AND FIRE PROTECTION PLANS. THE ELECTRICAL SCOPE MAY EXTEND BEYOND THE AREA DEFINED BY THE ARCHITECTURAL DEMOLITION LIMITS TO FULLY COMPLY WITH VARIOUS REQUIREMENTS DEFINED BY THESE NOTES.

2. THE ELECTRICAL DEMOLITION PLANS AND DETAILS INDICATE THE GENERAL INTENT AND ARE NOT INTENDED TO SHOW ALL ITEMS TO BE REMOVED OR RETAINED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO THE SUBMISSION OF BIDS TO BECOME FAMILIAR WITH THE ACTUAL CONDITIONS AND EXTENT OF WORK. DEVICES AND EQUIPMENT LOCATED ON WALLS AND/OR CEILINGS TO BE REMOVED SHALL BE DISCONNECTED AND MADE SAFE. THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UNANTICIPATED HIDDEN CONDITIONS ENCOUNTERED DURING DEMOLITION.

3. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ALL SYSTEMS OR BUILDING COMPONENTS DAMAGED DURING THE EXECUTION OF THE WORK. DAMAGE SHALL INCLUDE BUT NOT BE LIMITED TO DESTRUCTION OR DISPOSAL OF ITEMS INTENDED TO REMAIN OR TO BE SALVAGED.

4. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING BRANCH CIRCUITS AND FEEDERS WITHIN THE AREA OF DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION. ALL CIRCUITS WITHIN PANELBOARDS IDENTIFIED FOR REMOVAL SHALL BE TRACED AND LABELED TO ENSURE THAT NO AREA OUTSIDE THE DEMOLITION SCOPE LIMIT IS AFFECTED.

5. THE ELECTRICAL CONTRACTOR SHALL IDENTIFY ALL BRANCH CIRCUITS, FEEDERS AND SYSTEM COMPONENTS, WHICH ARE TO REMAIN WITHIN THE AREA OF DEMOLITION SCOPE. THERE SHALL BE NO INTERRUPTION OF SERVICE TO ANY AREA OUTSIDE THE SCOPE LIMITS WITHOUT APPROVAL FROM THE OWNER'S REPRESENTATIVE. EXISTING EQUIPMENT TO REMAIN SHALL BE LEFT IN A CODE COMPLIANT MANNER.

6. THE ELECTRICAL CONTRACTOR SHALL DE-ENERGIZE AND REMOVE ALL CONDUCTORS AND RACEWAYS TO THEIR POINTS OF ORIGIN WITHIN THE AREA OF DEMOLITION SCOPE. ITEMS IDENTIFIED FOR DEMOLITION SHALL NOT BE ABANDONED IN PLACE. RACEWAYS THAT ENTER MASONRY WALLS AND FLOORS SHALL BE CUT FLUSH AT THE SURFACE FOR PATCHING BY OTHERS. ALL CIRCUIT BREAKERS ASSOCIATED WITH THE DEMOLITION SCOPE SHALL BE DE-ENERGIZED AND LABELED SPARE.

7. THE ELECTRICAL CONTRACTOR SHALL TEMPORARILY SUPPORT ALL ITEMS TO REMAIN THAT ARE AFFECTED BY THE DEMOLITION OF BUILDING STRUCTURAL COMPONENTS (WALLS, CEILINGS, ETC.). TEMPORARILY SUPPORTED ITEMS SHALL BE PERMANENTLY SUPPORTED AND INSTALLED WHEN FINALIZED STRUCTURES ARE IN PLACE.

8. ALL REMOVED ITEMS SHALL BE LEGALLY DISPOSED OF UNLESS IDENTIFIED FOR REUSE. THE OWNER'S REPRESENTATIVE SHALL INSPECT ALL RETAINED ITEMS PRIOR TO PLACEMENT IN THE IDENTIFIED STORAGE LOCATION BY THE ELECTRICAL CONTRACTOR.

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
FLMT	FLEXIBLE LIQUID TIGHT METALLIC TUBING	ST	SHUT TRIP CIRCUIT BREAKER
GC	GENERAL CONTRACTOR	SWBD	SWITCHBOARD
GF	GROUND FAULT CIRCUIT BREAKER	TYP	TYPICAL
GFI	GROUND FAULT INTERRUPTING	V	VOLTS
GND	GROUND	VA	VOLT-AMPERE
HP	HORSEPOWER	VFD	VARIABLE FREQUENCY DRIVE
HVAC	HEATING, VENTILATION AND AIR CONDITIONING	WP	WEATHERPROOF

MOTORS AND CONTROLS

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

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

SITE SYMBOLS

UNDERGROUND CONDUIT OR DUCT BANK, REFER TO SITE DETAILS FOR ADDITIONAL INFORMATION

T — PAD MOUNTED TRANSFORMER

MISCELLANEOUS

UTILITY METER

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 TO NEW EQUIPMENT CIRCUIT
XR	EXISTING EQUIPMENT TO BE RELOCATED, JUNCTION AND EXTEND EXISTING CONDUIT AND CONDUCTORS
XC	EXISTING EQUIPMENT TO REMAIN, PROVIDE NEW BRANCH CIRCUITRY
XL	NEW LOCATION OF EXISTING EQUIPMENT, JUNCTION AND EXTEND CONDUIT AND CONDUCTORS AS REQUIRED

BRANCH CIRCUIT AND FEEDER SYMBOLS

FLEXIBLE CONNECTION TO MOTOR OR EQUIPMENT

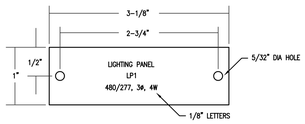
PANELBOARD AND TERMINAL CABINET

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

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

277/480V PANEL, SURFACE MOUNTED, REFER TO PANEL SCHEDULES

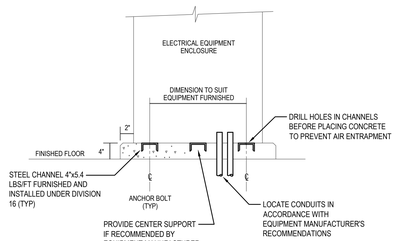
277/480V PANEL, RECESSED MOUNTED, REFER TO PANEL SCHEDULES



NOTES:

1. NAMEPLATE TO BE CONSTRUCTED OF 1/16" THICK WHITE SURFACE WITH LETTER ENGRAVED INTO BLACK LAMINATIONS.
2. ALL NAMEPLATES SHALL BE SECURED BY MACHINE SCREWS.
3. NO NAMEPLATES SHALL BE PASTED ON.

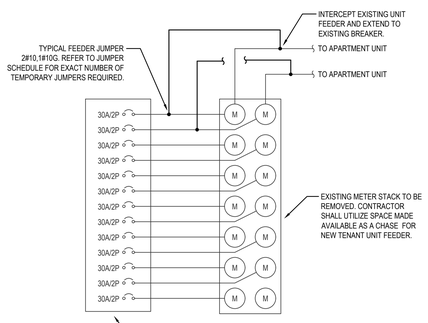
1 TYPICAL NAMEPLATE DETAIL — N.T.S.



NOTES:

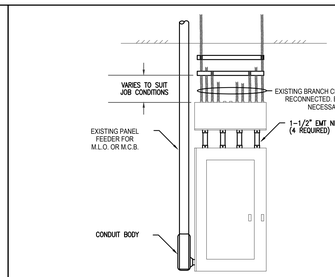
1. POUR PAD TO WALL FOR AGAINST-THE-WALL INSTALLATIONS.

2 ELECTRICAL EQUIPMENT PAD DETAIL — N.T.S.

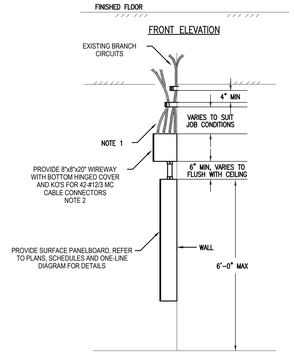


JUMPER SCHEDULE	
BUILDING #4	**# OF TAPS**
BASEMENT DISTRIBUTION PANEL	3
2ND FLOOR DISTRIBUTION PANEL	13
3rd FLOOR DISTRIBUTION PANEL	16
6th FLOOR DISTRIBUTION PANEL	24
BUILDING #5	**# OF TAPS**
BASEMENT DISTRIBUTION PANEL	3
2ND FLOOR DISTRIBUTION PANEL	13
3rd FLOOR DISTRIBUTION PANEL	16
6th FLOOR DISTRIBUTION PANEL	16
BUILDING #6	**# OF TAPS**
BASEMENT DISTRIBUTION PANEL	2
2ND FLOOR DISTRIBUTION PANEL	14
3rd FLOOR DISTRIBUTION PANEL	16
5th FLOOR DISTRIBUTION PANEL	16
BUILDING #7	**# OF TAPS**
BASEMENT DISTRIBUTION PANEL	2
2ND FLOOR DISTRIBUTION PANEL	14
3rd FLOOR DISTRIBUTION PANEL	16
5th FLOOR DISTRIBUTION PANEL	16
BUILDING #8	**# OF TAPS**
BASEMENT DISTRIBUTION PANEL	2
2ND FLOOR DISTRIBUTION PANEL	14
3rd FLOOR DISTRIBUTION PANEL	16
5th FLOOR DISTRIBUTION PANEL	16
BUILDING #9	**# OF TAPS**
BASEMENT DISTRIBUTION PANEL	4
2ND FLOOR DISTRIBUTION PANEL	12
3rd FLOOR DISTRIBUTION PANEL	16
5th FLOOR DISTRIBUTION PANEL	16

3 TYPICAL UNIT TEMPORARY FEED - PHASING PLAN — N.T.S.



FRONT ELEVATION

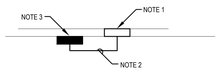


SIDE ELEVATION

NOTES:

1. INSTALL MARKER TAPE INDICATING CIRCUIT NUMBERS FOR EACH CABLE RUN.
2. CUT BACK CABLE ARMOR JACKET SUFFICIENT TO RUN CONDUCTORS THRU WIREWAY AND NIPPLES TO EACH CIRCUIT BREAKER. WITHOUT SPLICES.
3. CONDUCTORS RUN IN PANELBOARDS, NIPPLES AND WIREWAY SHALL BE GROUPED WITH 3 PHASES AND NEUTRALS IN EACH BUNDLED CONDITION TO AVOID INDUCTIVE HEATING IN METALLIC ENCLOSURES.

5 TYPICAL SURFACE MOUNTED PANELBOARD REPLACEMENT DETAIL — N.T.S.



NOTES:

1. ELECTRICAL CONTRACTOR SHALL REMOVE EXISTING APARTMENT PANELBOARD AND INSTALL AN ACCESS PANEL IN ITS PLACE. E.C. SHALL MAINTAIN BRANCH CIRCUITS EMANATING FROM APARTMENT PANELBOARD.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE 3/4" SURFACE MOUNTED CONDUIT FOR BRANCH CIRCUIT EXTENSION FROM NEW ACCESS PANEL TO NEW APARTMENT PANELBOARD.
   CONTRACTOR SHALL INTERCEPT THE FOLLOWING CIRCUITS:
   - (2) 15A/1P - 2#12,1#12G-3/4"C
   - (1) 20A/1P - 2#12,1#12G-3/4"C
3. ELECTRICAL CONTRACTOR JUNCTION AND EXTEND EXISTING BRANCH CIRCUIT EMANATING FROM NEW ACCESS PANEL TO NEW APARTMENT PANELBOARD.

6 TYPICAL UNIT ACCESS PANEL & PANELBOARD INSTALLATION — N.T.S.

LIGHTING FIXTURE SCHEDULE

FIXTURE TYPE	DESCRIPTION	MANUFACTURER AND CATALOG NUMBER	LIGHT SOURCE			VOLTAGE
			No.	WATTAGE	TYPE	
S1	UTILITY LIGHT	DAY-BRITE# FSW430L835-UNV-DIM	1	31	LED	120
EM	WALL MOUNTED EMERGENCY BATTERY UNIT WITH TWO (2) HEADS	EXITRONIX # NFT-W-G2	2	2.7	LED	120

LIGHTING FIXTURE NOTES:

1. ALL RECESSED FIXTURE TRIMS TO BE PAINTED TO MATCH CEILING.
2. PROVIDE A COMPLETE AND OPERABLE SYSTEM INCLUDING ALL NECESSARY MOUNTING HARDWARE, POWER FEEDS, WIRING CONNECTIONS, DRIVERS, AND CONTROL INTERFACES.
3. PAINT ALL FLANGES INSTALLED IN DRYWALL TO MATCH ADJACENT CEILING FINISH. FLANGES SHALL BE REMOVED FROM CEILING PRIOR TO PAINTING, OR RAZOR CUT AFTER PAINTING TO ALLOW FOR REMOVAL OF THE TRIM FROM THE CEILING.

* ELECTRICAL CONTRACTOR SHALL PROVIDE DIMMABLE LED REPLACEMENT LAMPS, LAMP COLOR TEMPERATURE 2700K, AS INDICATED ON THE LIGHTING FIXTURE SCHEDULE.

** ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND OPERATIONAL SYSTEM.

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LEGEND, NOTES, AND DETAILS

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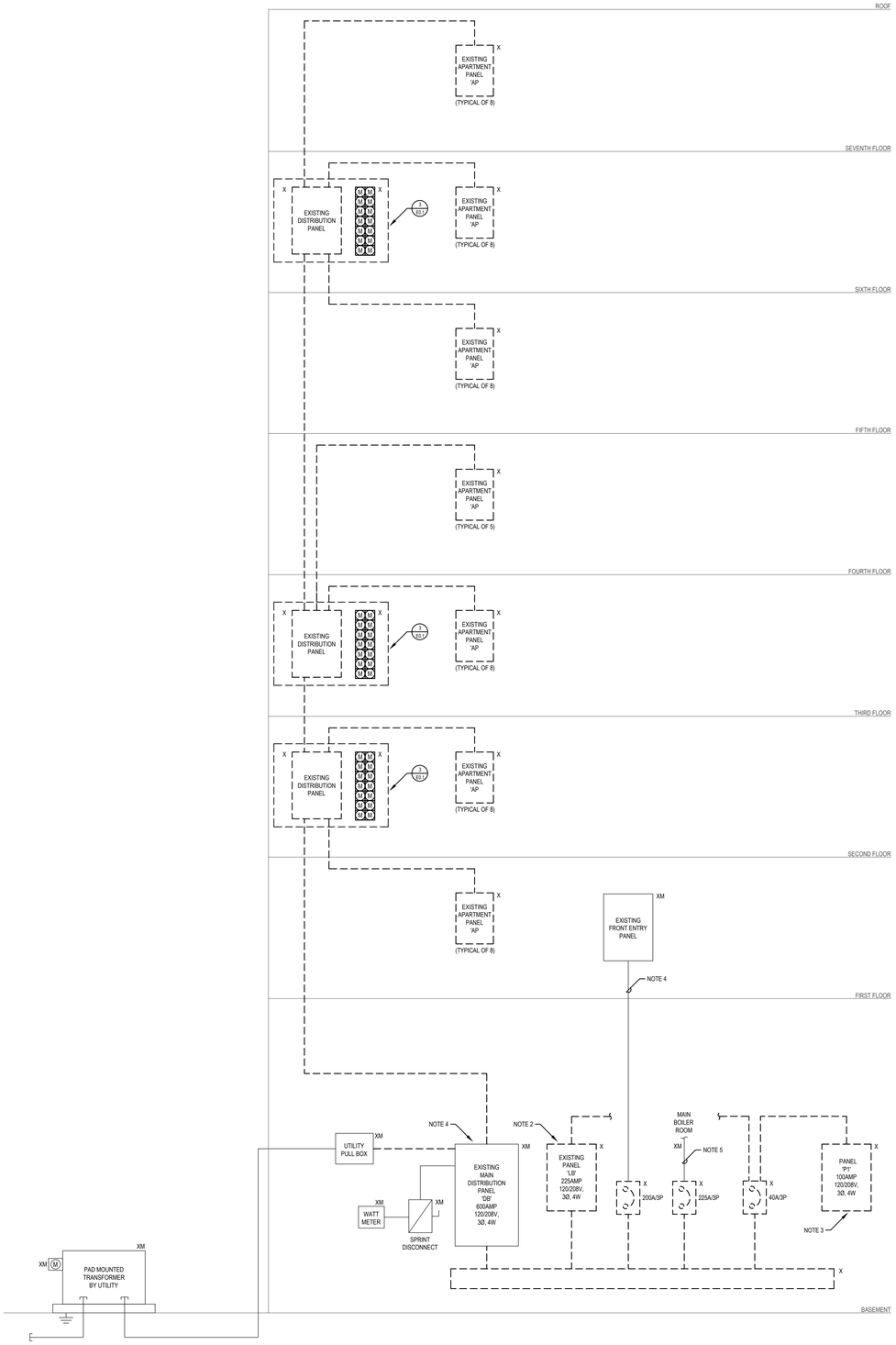
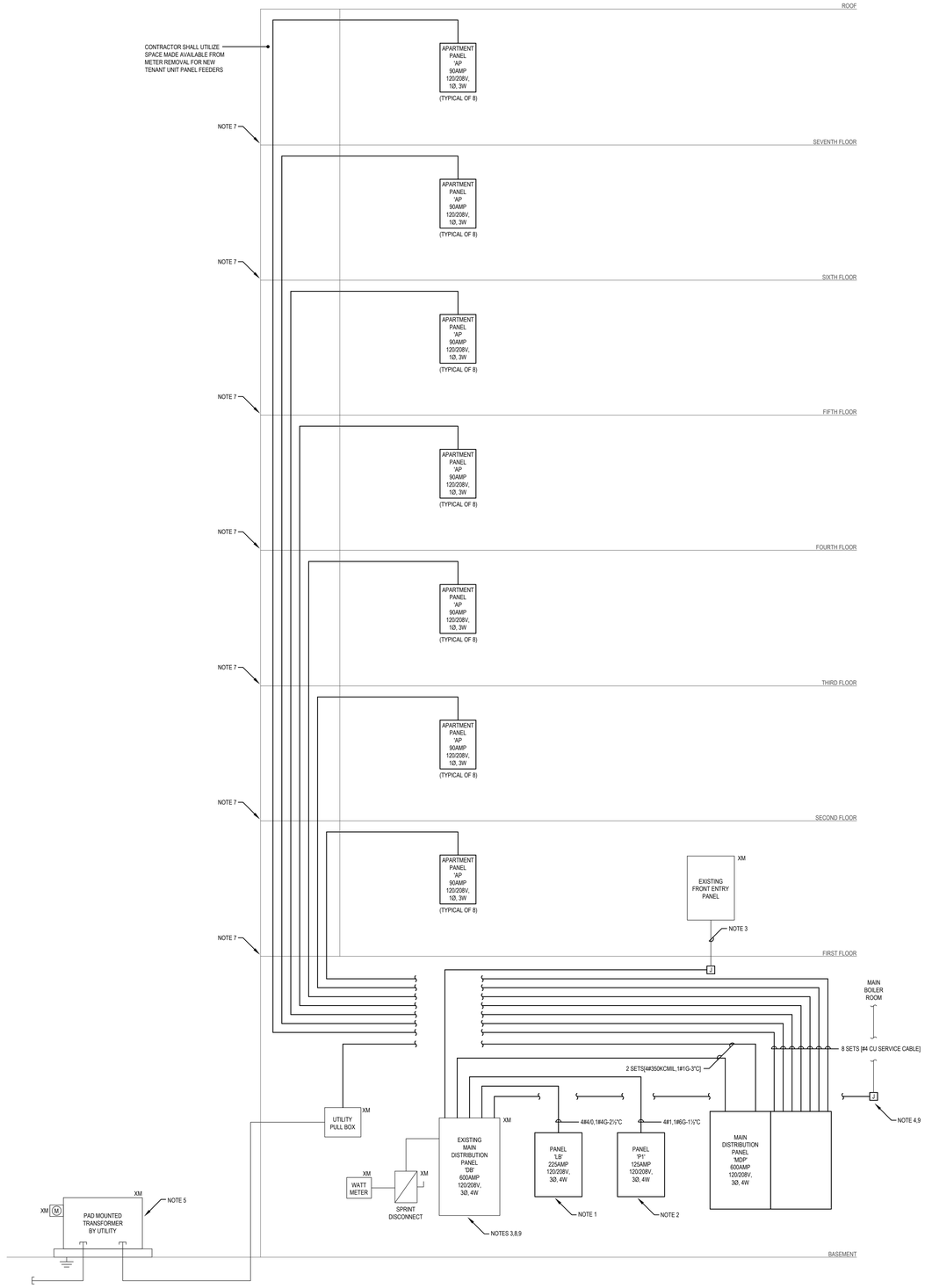


BUILDING 4 EXISTING POWER RISER DIAGRAM

N.T.S.

NOTES:

1. RISER DIAGRAM IS FOR REFERENCE ONLY, ALL EQUIPMENT IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING CIRCUITS AND FEEDERS WITHIN THE DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION.
2. EXISTING BRANCH CIRCUITS EMANATING FROM PANEL SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING BRANCH CIRCUITS EMANATING FROM PANEL SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'P1'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO NEW 100A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. EXISTING FEEDER SERVING MAIN BOILER ROOM SHALL REMAIN AND BE CONNECTED TO NEW 225A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.



BUILDING 4 NEW POWER RISER DIAGRAM

N.T.S.

NOTES:

1. EXISTING BRANCH CIRCUITS EMANATING FROM PANEL SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
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3. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO NEW 100A/3P BREAKER LABELED WITHIN EXISTING DISTRIBUTION BOARD . E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING MAIN BOILER ROOM SHALL REMAIN AND BE CONNECTED TO NEW 225A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. CONTRACTOR SHALL COORDINATE ALL NECESSARY SHUTDOWNS WITH OWNER AND UTILITY COMPANY PRIOR TO COMMENCING CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE PROPOSED PHASING SCHEDULE FOR ALL SHUTDOWNS PRIOR TO COMMENCING CONSTRUCTION. ALL SHUTDOWNS SHALL BE APPROVED BY OWNER.
7. CONTRACTOR SHALL PROVIDE CORING NECESSARY TO COMPLETE CHASE.
8. ELECTRICAL CONTRACTOR SHALL REPLACE 200A/3P BREAKER LABELED "HOUSE" WITH A 100A/3P BREAKER TO FEED EXISTING 'FRONT ENTRY PANEL'.
9. ELECTRICAL CONTRACTOR SHALL REPLACE 200A/3P BREAKER LABELED "BOILER ROOM" WITH A 225A/3P BREAKER TO FEED EXISTING EXISTING BOILER ROOM.

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Project No.:	21002.00
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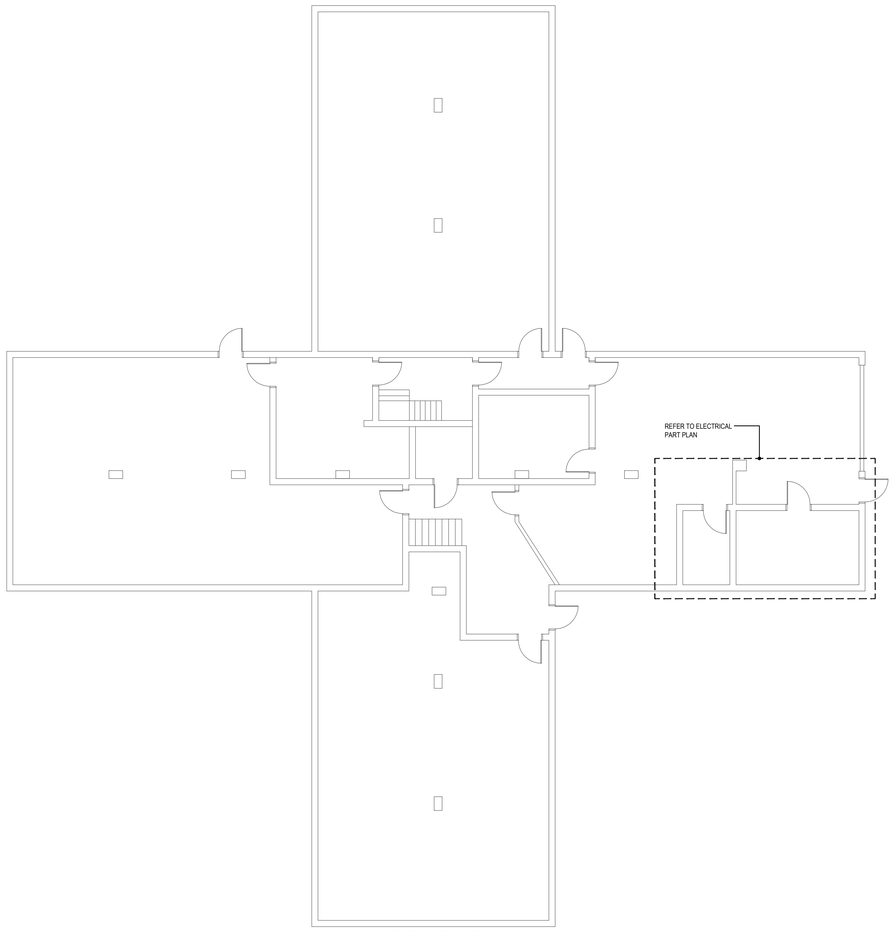
Title:

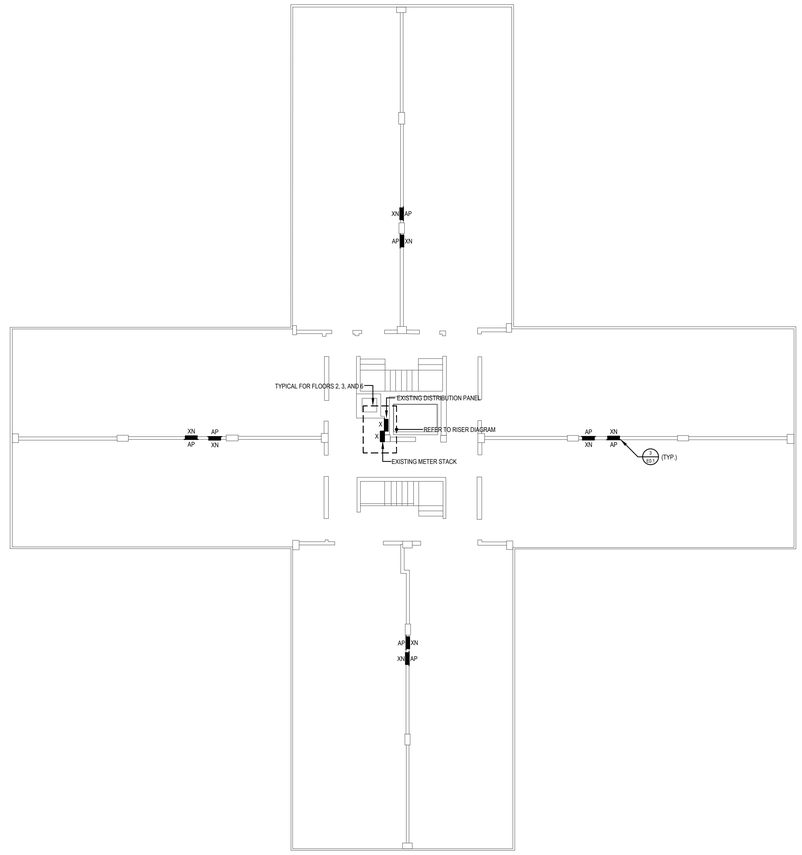
POWER RISERS
50 SUMMER ST
(BUILDING 4)

Drawing No.:

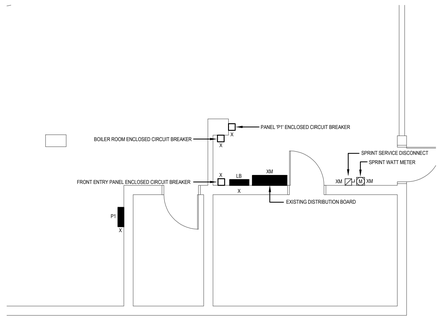
E1.0



1 BUILDING 4 - BASEMENT DEMOLITION PLAN
SCALE: 1/8"= 1'-0"



2 BUILDING 4 - DEMOLITON Plan (Floors 1-7)
SCALE: 1/8"= 1'-0"



3 ELECTRICAL PART PLAN
SCALE: 1/4"= 1'-0"

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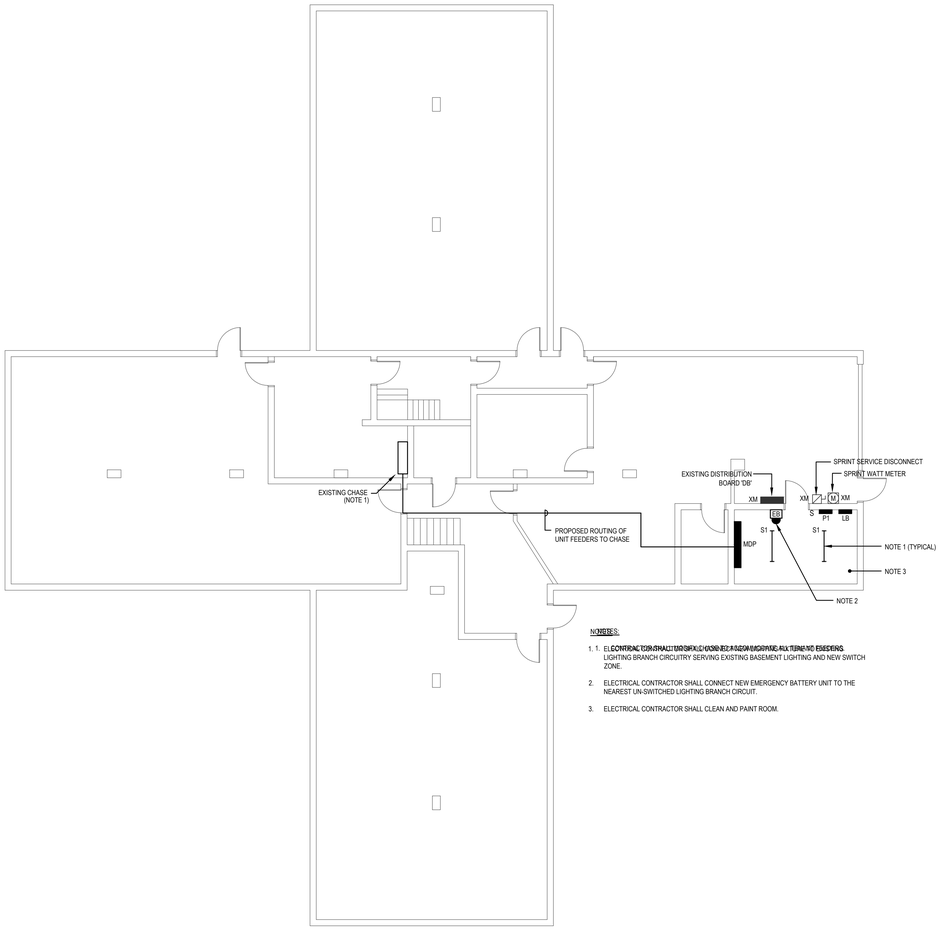
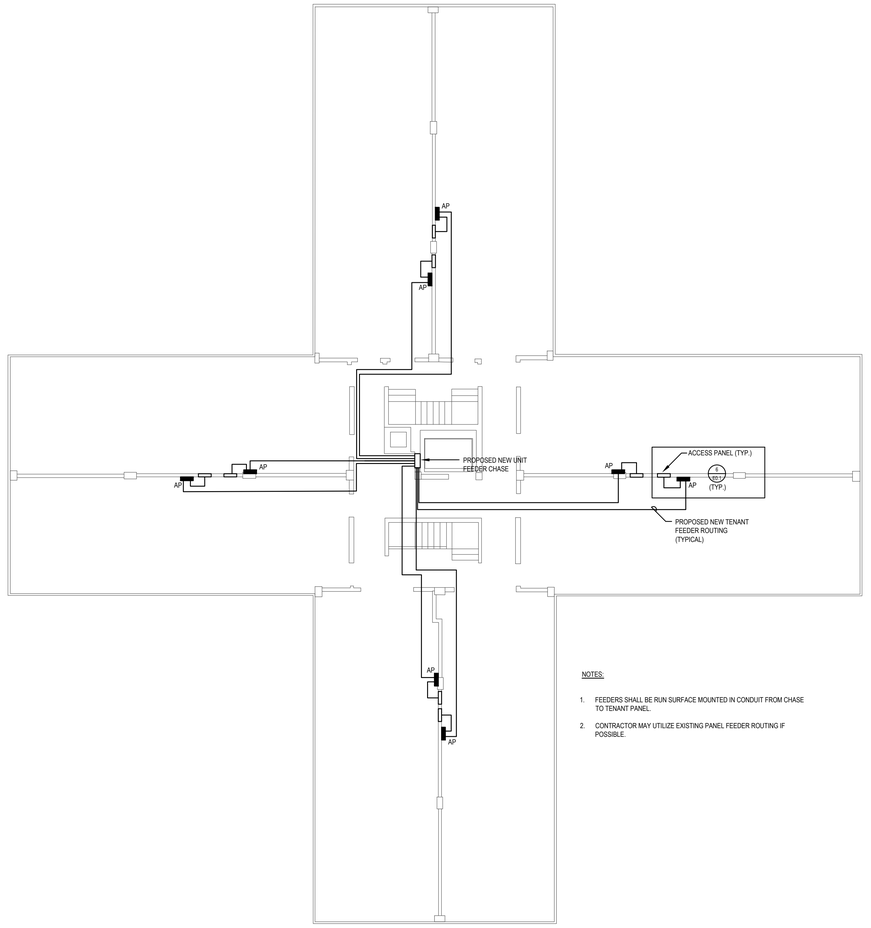


NOTES:

1. 1. ELECTRICAL CONTRACTOR SHALL DEMOLISH AND REMOVE ALL EXISTING FEEDERS.
   LIGHTING BRANCH CIRCUITRY SERVING EXISTING BASEMENT LIGHTING AND NEW SWITCH ZONE.
2. ELECTRICAL CONTRACTOR SHALL CONNECT NEW EMERGENCY BATTERY UNIT TO THE NEAREST UN-SWITCHED LIGHTING BRANCH CIRCUIT.
3. ELECTRICAL CONTRACTOR SHALL CLEAN AND PAINT ROOM.

1 BUILDING 4 - BASEMENT NEW WORK PLAN
SCALE: 1/8"= 1'-0"



NOTES:

1. FEEDERS SHALL BE RUN SURFACE MOUNTED IN CONDUIT FROM CHASE TO TENANT PANEL.
2. CONTRACTOR MAY UTILIZE EXISTING PANEL FEEDER ROUTING IF POSSIBLE.

2 BUILDING 4 - NEW WORK Floor Plan (Floors 1-7)
SCALE: 1/8"= 1'-0"

SWITCHBOARD 'MDP', 600 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 600A M.C.B. | NEUTRAL: 600A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
2	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
3	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
4	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
5	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
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32	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
33	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
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54	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
55	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
56	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
57	EXISTING BOARD	0.00	600	600	3	

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

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 225A M.C.B. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
		1	0.00			0.00			2		
EXISTING LOAD	50	3		0.00			0.00		4	50	EXISTING LOAD
		5			0.00			0.00	6		
		7	0.00			0.00			8		
EXISTING LOAD	30	9		0.00			0.00		10	50	EXISTING LOAD
		11			0.00			0.00	12		
EXISTING LOAD	20	13	0.00			0.00			14		
EXISTING LOAD	20	15		0.00			0.00		16	30	EXISTING LOAD
EXISTING LOAD	20	17			0.00			0.00	18		
EXISTING LOAD	70	19	0.00			0.00			20	50	EXISTING LOAD
		21		0.00			0.00		22		
EXISTING LOAD	20	23			0.00			0.00	24	40	EXISTING LOAD
		25	0.00			0.00			26		
EXISTING LOAD	20	27		0.00			0.00		28	20	EXISTING LOAD
EXISTING LOAD	20	29			0.00			0.00	30		
EXISTING LOAD	20	31	0.00			0.00			32	20	EXISTING LOAD
EXISTING LOAD	20	33		0.00			0.00		34	20	EXISTING LOAD
EXISTING LOAD	20	35			0.00			0.00	36	20	EXISTING LOAD
		37	0.00			0.00			38	20	EXISTING LOAD
EXISTING LOAD	20	39		0.00			0.00		40	20	EXISTING LOAD
		41			0.00			0.00	42	20	EXISTING LOAD

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

PANEL 'P1', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.C.B. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	20	1	0.00			0.00			2	20	EXISTING LOAD
EXISTING LOAD	20	3		0.00			0.00		4	20	EXISTING LOAD
EXISTING LOAD	20	5			0.00			0.00	6	20	EXISTING LOAD
EXISTING LOAD	20	7	0.00			0.00			8	20	EXISTING LOAD
EXISTING LOAD	20	9		0.00			0.00		10	15	EXISTING LOAD
EXISTING LOAD	15	11			0.00			0.00	12		
SPACE AND HARDWARE	-	13	0.00			0.00			14	15	EXISTING LOAD
SPACE AND HARDWARE	-	15		0.00			0.00		16		
SPACE AND HARDWARE	-	17			0.00			0.00	18	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	19	0.00			0.00			20	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	21		0.00			0.00		22	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	23			0.00			0.00	24	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	25	0.00			0.00			26	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	27		0.00			0.00		28	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	29			0.00			0.00	30	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

EXISTING BOARD 'DB', 600 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 600A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	PANEL P1	0.00	250	125	3	
2	SPARE	0.00	250	200	3	
3	SPRINT METER	0.00	250	200	2	
4	BOILER ROOM	0.00	250	200	3	
5	FRONT ENTRY PANEL	0.00	250	100	3	NEW BREAKER
6	HOUSE PANEL	0.00	250	225	3	
7	BOILER ROOM	0.00	400	400	3	

LOADCENTER 'AP', 100 AMP, 120/208 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 10,000 AMPS RMS SYM | MAIN: 90A M.C.B. | MOUNTING: SURFACE

	LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B		A	B	CIRC NO.	CB	LOAD DESCRIPTION	
1	EXISTING LOAD	15	1						2	15	EXISTING LOAD	1
1	EXISTING LOAD	20	3						4	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	5						6	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	7						8	-	SPACE AND HARDWARE	
	SURGE PROTECTIVE DEVICE	20	9						10	-	SPACE AND HARDWARE	
			11						12	-	SPACE AND HARDWARE	

PHASE A 0.00 kVA | PHASE B 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

1 ELECTRICAL CONTRACTOR SHALL PROVIDE ARC-FAULT TYPE CIRCUIT BREAKER

Seal:

BLW Engineers, Inc.
311 Great Road, Post Office Box 1551
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T: 978.486.4301 F: 978.428.0067
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HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:

SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY
ELECTRICAL REDISTRIBUTION
PHASE 2
350 Moody Street
Lowell, Massachusetts 01854

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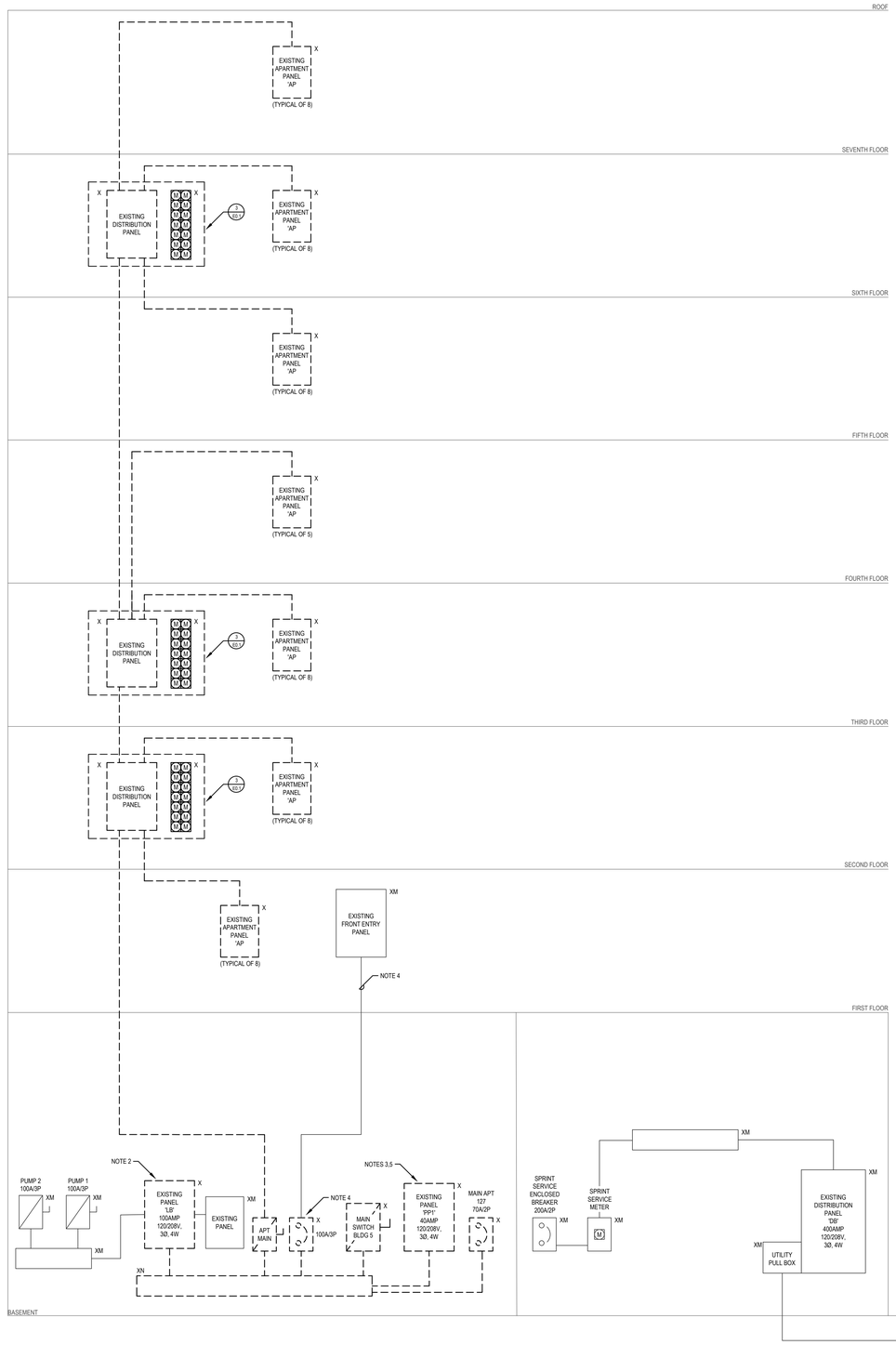
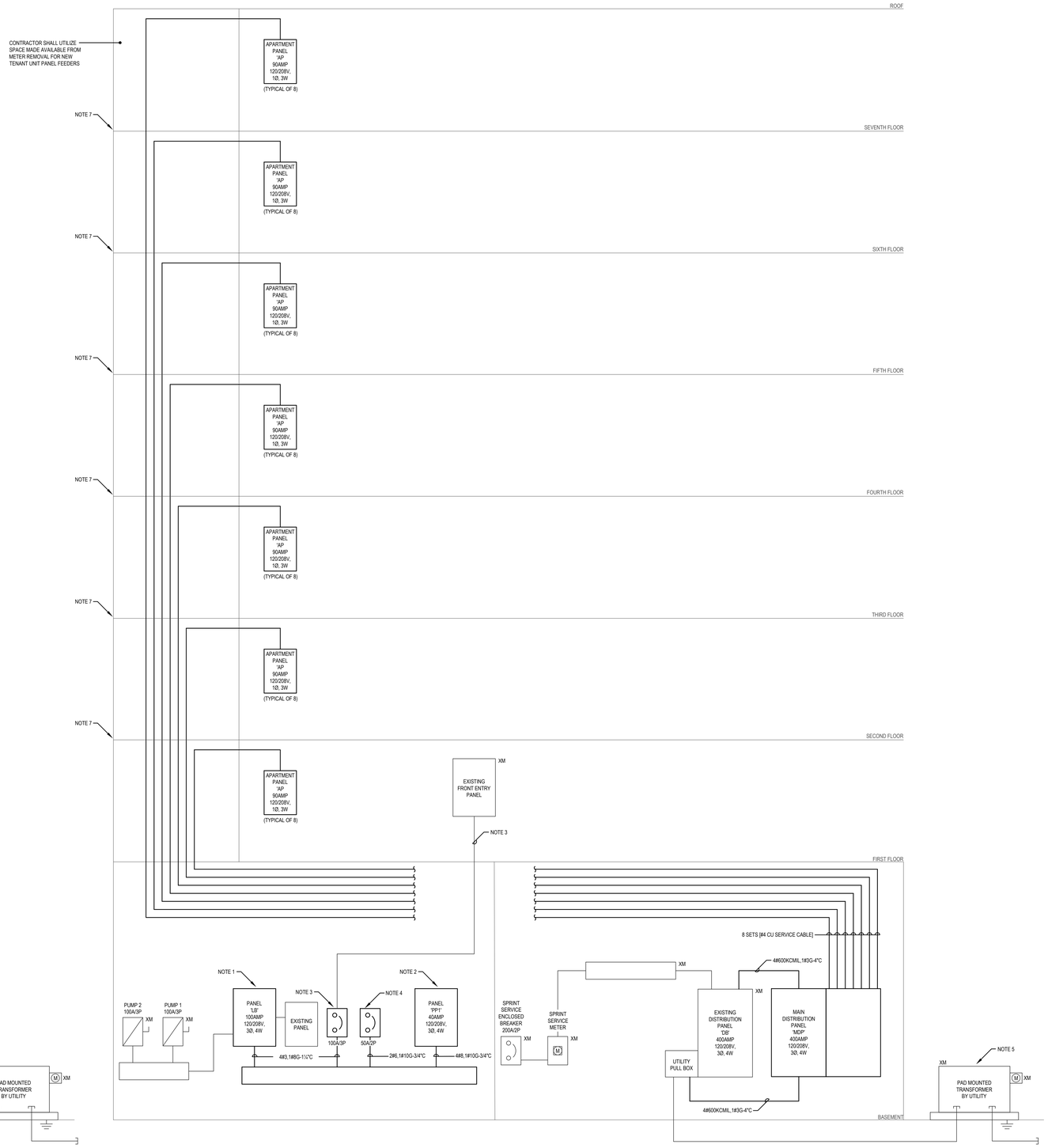
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:
NEW WORK PLANS
50 SUMMER ST
(BUILDING 4)

Drawing No.:
E1.2





65 SUMMER STREET EXISTING POWER RISER DIAGRAM

N.T.S.

NOTES:

1. RISER DIAGRAM IS FOR REFERENCE ONLY, ALL EQUIPMENT IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING CIRCUITS AND FEEDERS WITHIN THE DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION.
2. EXISTING BRANCH CIRCUITS EMANATING FROM 'EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'PP1' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'PP1'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING 'FRONT PANEL' SHALL REMAIN AND BE CONNECTED TO NEW ENCLOSED CIRCUIT BREAKER. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. ELECTRICAL CONTRACTOR SHALL JUNCTION AND EXTEND BRANCH CIRCUIT FEEDING WELDER RECEPTACLE FROM EXISTING PANEL 'PP1' TO NEW ENCLOSED CIRCUIT BREAKER.

65 SUMMER STREET NEW POWER RISER DIAGRAM

N.T.S.

NOTES:

1. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'PP1' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'PP1'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING FEEDER SERVING 'FRONT PANEL' SHALL REMAIN AND BE CONNECTED TO NEW ENCLOSED CIRCUIT BREAKER. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. ELECTRICAL CONTRACTOR SHALL JUNCTION AND EXTEND BRANCH CIRCUIT FEEDING WELDER RECEPTACLE FROM EXISTING PANEL 'PP1' TO NEW ENCLOSED CIRCUIT BREAKER.
5. CONTRACTOR SHALL COORDINATE ALL NECESSARY SHUTDOWNS WITH OWNER AND UTILITY COMPANY PRIOR TO COMMENCING CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE PROPOSED PHASING SCHEDULE FOR ALL SHUTDOWNS PRIOR TO COMMENCING CONSTRUCTION. ALL SHUTDOWNS SHALL BE APPROVED BY OWNER.
7. CONTRACTOR SHALL PROVIDE CORING NECESSARY TO COMPLETE CHASE.

Seal:

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HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY ELECTRICAL REDISTRIBUTION PHASE 2

350 Moody Street
Lowell, Massachusetts 01854

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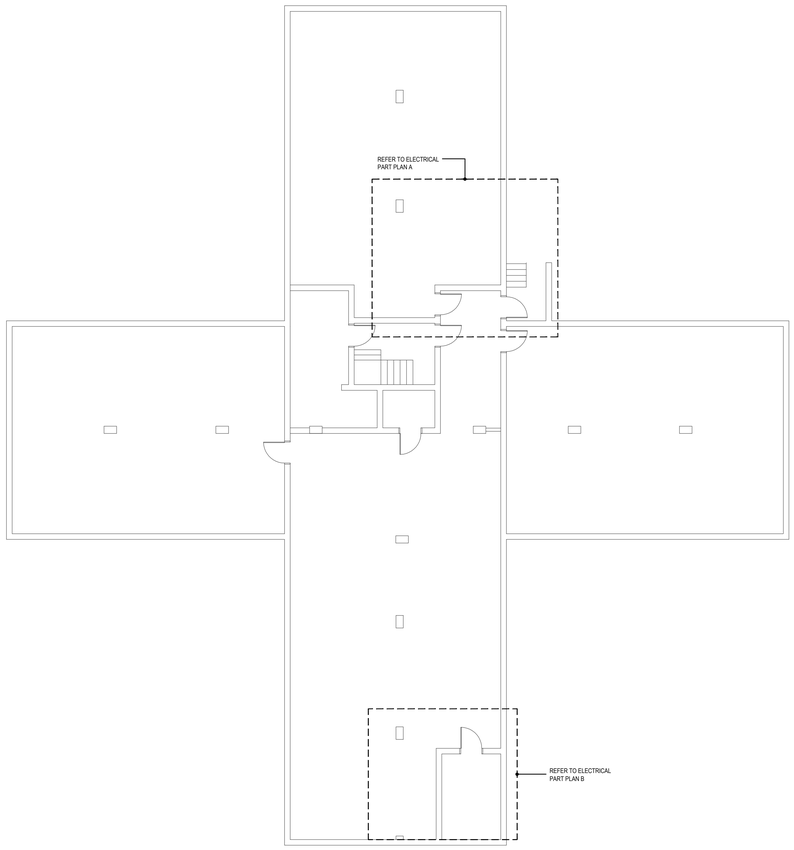
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:

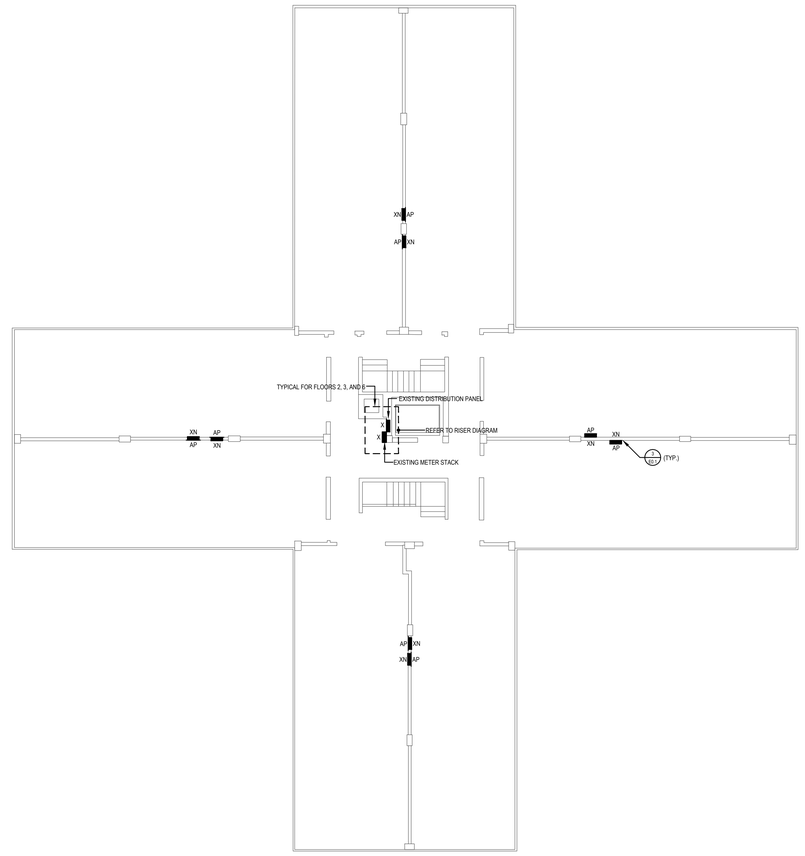
POWER RISERS
65 SUMMER ST
(BUILDING 5)

Drawing No.:

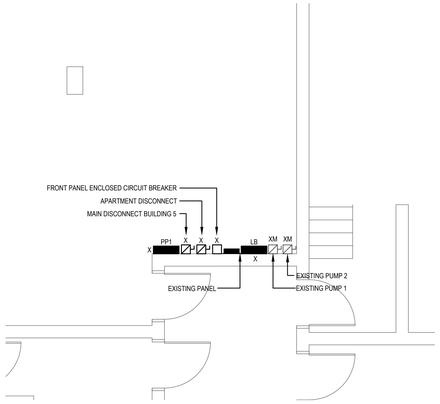
E2.0



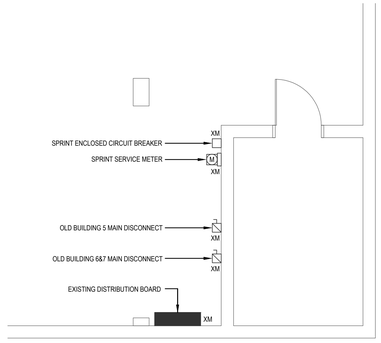
1 BASEMENT DEMOLITION PLAN
SCALE: 1/8"= 1'-0"



2 DEMOLITION Plan (Floors 1-7)
SCALE: 1/8"= 1'-0"



3 ELECTRICAL PART PLAN A
SCALE: 1/4"= 1'-0"



4 ELECTRICAL PART PLAN B
SCALE: 1/4"= 1'-0"

Seal:

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*HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION*

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY ELECTRICAL REDISTRIBUTION PHASE 2

350 Moody Street
Lowell, Massachusetts 01854

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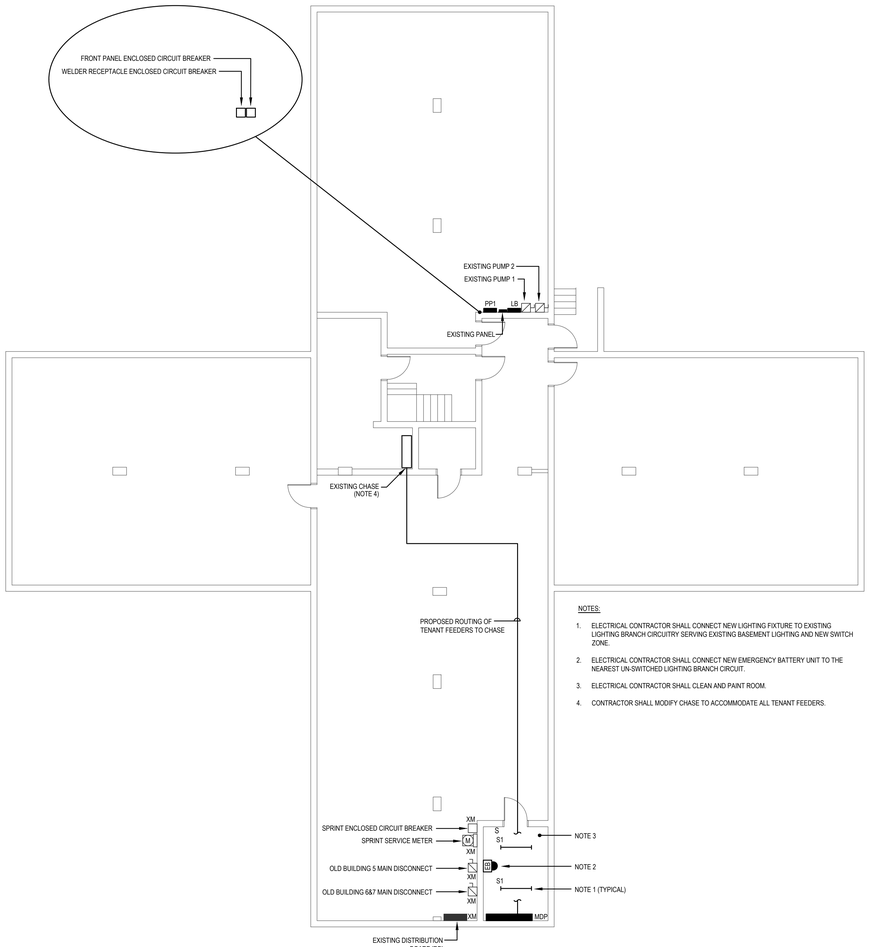
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:
DEMOLITION PLANS
65 SUMMER ST (BUILDING 5)

Drawing No.:
E2.1

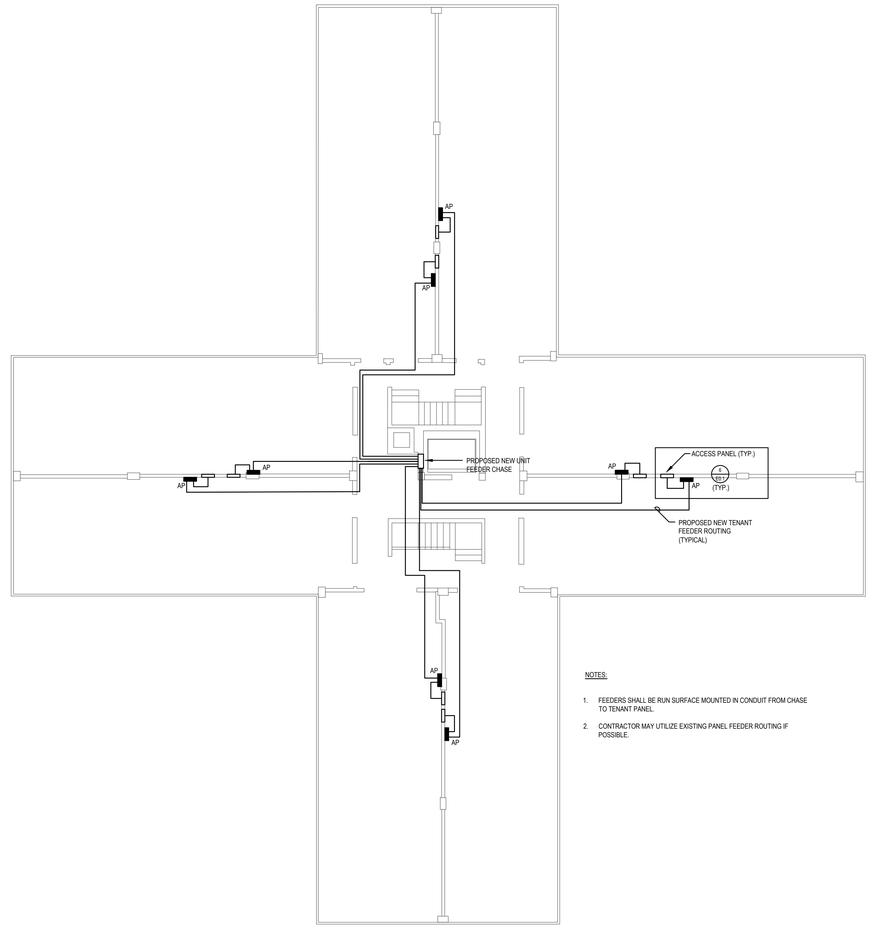


1 BASEMENT NEW WORK PLAN

SCALE: 1/8"= 1'-0"

NOTES:

1. ELECTRICAL CONTRACTOR SHALL CONNECT NEW LIGHTING FIXTURE TO EXISTING LIGHTING BRANCH CIRCUITRY SERVING EXISTING BASEMENT LIGHTING AND NEW SWITCH ZONE.
2. ELECTRICAL CONTRACTOR SHALL CONNECT NEW EMERGENCY BATTERY UNIT TO THE NEAREST UN-SWITCHED LIGHTING BRANCH CIRCUIT.
3. ELECTRICAL CONTRACTOR SHALL CLEAN AND PAINT ROOM.
4. CONTRACTOR SHALL MODIFY CHASE TO ACCOMMODATE ALL TENANT FEEDERS.



2 NEW WORK Floor Plan (Floors 1-7)

SCALE: 1/8"= 1'-0"

NOTES:

1. FEEDERS SHALL BE RUN SURFACE MOUNTED IN CONDUIT FROM CHASE TO TENANT PANEL.
2. CONTRACTOR MAY UTILIZE EXISTING PANEL FEEDER ROUTING IF POSSIBLE.

SWITCHBOARD 'MDP', 600 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
2	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
3	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
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42	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
43	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
44	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
45	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
46	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
47	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
48	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
49	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
50	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
51	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
52	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
53	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
54	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
55	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
56	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
57	APRTMENT UNIT PANEL - AP1	0.00	400	400	3	

PANEL 'LB', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.C.B. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
		1	0.00		0.00	2		
EXISTING LOAD	50	3		0.00		4	30	EXISTING LOAD
		5			0.00	6		
		7	0.00		0.00	8		
EXISTING LOAD	30	9		0.00		10	30	EXISTING LOAD
		11			0.00	12		
		13	0.00		0.00	14	20	EXISTING LOAD
EXISTING LOAD	20	15		0.00		16	20	EXISTING LOAD
EXISTING LOAD	20	17			0.00	18	15	EXISTING LOAD
EXISTING LOAD	20	19	0.00			20	15	EXISTING LOAD
EXISTING LOAD	15	21		0.00		22	15	EXISTING LOAD
EXISTING LOAD	15	23			0.00	24	15	EXISTING LOAD
EXISTING LOAD	15	25	0.00			26	15	EXISTING LOAD
EXISTING LOAD	15	27		0.00		28	15	EXISTING LOAD
EXISTING LOAD	15	29			0.00	30	15	EXISTING LOAD
SPACE AND HARDWARE	-	31	0.00			32	15	EXISTING LOAD
SPACE AND HARDWARE	-	33		0.00		34	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	35			0.00	36	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	37	0.00			38	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	39		0.00		40	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	41			0.00	42	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

PANEL 'PP1', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.L.O. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
		1	0.00		0.00	2	20	EXISTING LOAD
MAIN BREAKER	40	3		0.00		4	20	EXISTING LOAD
		5			0.00	6	20	EXISTING LOAD
EXISTING LOAD	20	7	0.00		0.00	8	20	EXISTING LOAD
EXISTING LOAD	20	9		0.00		10		
EXISTING LOAD	20	11			0.00	12	20	EXISTING LOAD
EXISTING LOAD	15	13	0.00		0.00	14		
EXISTING LOAD	15	15		0.00		16	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	17			0.00	18	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	19	0.00			20	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	21		0.00		22	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	23			0.00	24	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	25	0.00			26	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	27		0.00		28	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	29			0.00	30	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

EXISTING BOARD 'DB', 400 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	SPACE AND HARDWARE	0.00	100		3	
2	SPACE AND HARDWARE	0.00	100		3	
3	SPARE	0.00	100	100	2	
4	SPARE	0.00	100	100	2	
5	SPARE	0.00	100	100	2	
6	SPACE AND HARDWARE	0.00	100		3	
7	SPACE AND HARDWARE	0.00	100		3	
8	SPACE AND HARDWARE	0.00	100		3	
9	SPRINT METER	0.00	250	200	3	
10	SPARE	0.00	250	200	3	
11	SPARE	0.00	250	200	3	
12	SPACE AND HARDWARE	0.00	250		3	

LOADCENTER 'AP', 100 AMP, 120/208 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 10,000 AMPS RMS SYM | MAIN: 90A M.C.B. | MOUNTING: SURFACE

	LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B		CIRC NO.	CB	LOAD DESCRIPTION	
1	EXISTING LOAD	15	1				2	15	EXISTING LOAD	1
1	EXISTING LOAD	20	3				4	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	5				6	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	7				8	-	SPACE AND HARDWARE	
	SURGE PROTECTIVE DEVICE	20	9				10	-	SPACE AND HARDWARE	
			11				12	-	SPACE AND HARDWARE	

PHASE A 0.00 kVA | PHASE B 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

1 ELECTRICAL CONTRACTOR SHALL PROVIDE ARC-FAULT TYPE CIRCUIT BREAKER

Seal:

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Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:

SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY
ELECTRICAL REDISTRIBUTION
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Lowell, Massachusetts 01854

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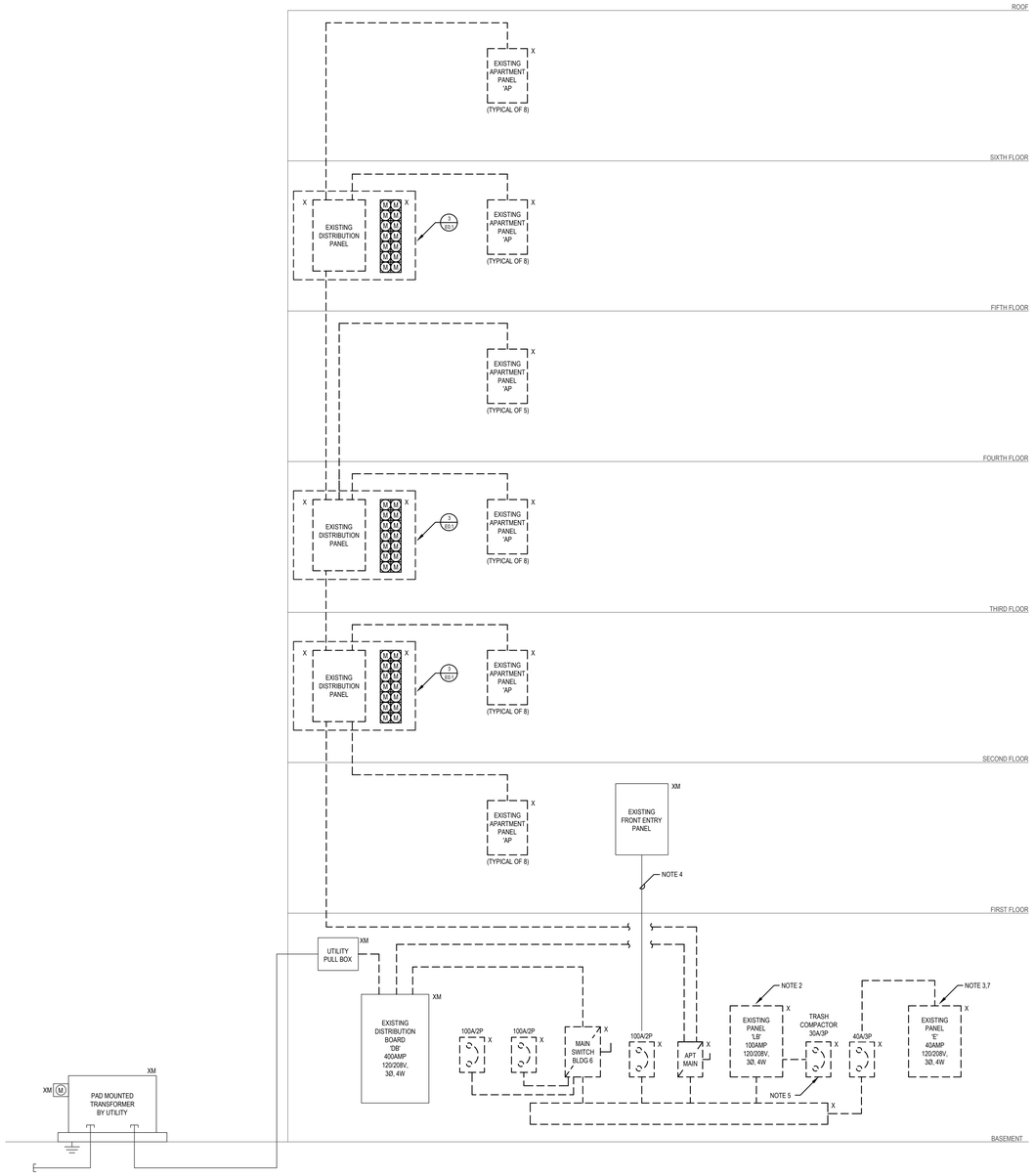
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:

NEW WORK PLANS
65 SUMMER ST (BUILDING 5)

Drawing No.:

E2.2

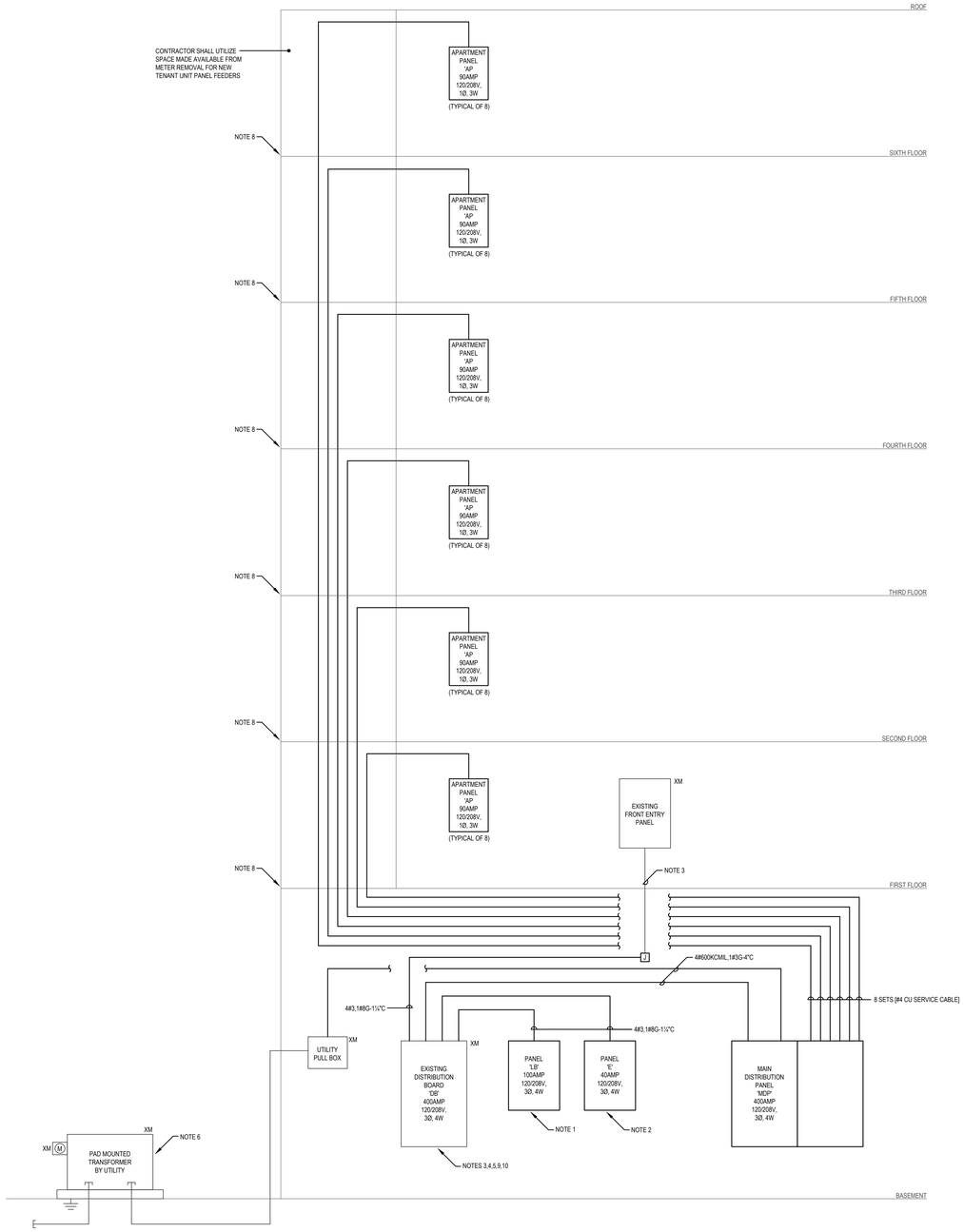


43 SUMMER STREET EXISTING POWER RISER DIAGRAM

N.T.S.

NOTES:

1. RISER DIAGRAM IS FOR REFERENCE ONLY. ALL EQUIPMENT IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING CIRCUITS AND FEEDERS WITHIN THE DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'E' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'E'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO EXISTING 100A/3P BREAKER LABELED "HOUSE PANEL' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. EXISTING FEEDER SERVING 'TRASH COMPACTOR' SHALL REMAIN AND BE CONNECTED TO NEW 30A/2P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
6. ELECTRICAL CONTRACTOR SHALL JUNCTION AND EXTEND BRANCH CIRCUIT FEEDING WELDER RECEPTACLE FROM EXISTING PANEL 'E' TO EXISTING DISTRIBUTION BOARD AS REQUIRED. REFER TO PANEL SCHEDULE FOR DETAILS.



43 SUMMER STREET NEW POWER RISER DIAGRAM

N.T.S.

NOTES:

1. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'E' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'E'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO EXISTING 100A/3P BREAKER LABELED "HOUSE PANEL' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING 'TRASH COMPACTOR' SHALL REMAIN AND BE CONNECTED TO NEW 30A/2P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. ELECTRICAL CONTRACTOR SHALL JUNCTION AND EXTEND BRANCH CIRCUIT FEEDING WELDER RECEPTACLE FROM EXISTING PANEL 'E' TO EXISTING DISTRIBUTION BOARD AS REQUIRED. REFER TO PANEL SCHEDULE FOR DETAILS.
6. CONTRACTOR SHALL COORDINATE ALL NECESSARY SHUTDOWNS WITH OWNER AND UTILITY COMPANY PRIOR TO COMMENCING CONSTRUCTION.
7. CONTRACTOR SHALL PROVIDE PROPOSED PHASING SCHEDULE FOR ALL SHUTDOWNS PRIOR TO COMMENCING CONSTRUCTION. ALL SHUTDOWNS SHALL BE APPROVED BY OWNER.
8. CONTRACTOR SHALL PROVIDE CORING NECESSARY TO COMPLETE CHASE.
9. ELECTRICAL CONTRACTOR SHALL PROVIDE A 50A/2P BREAKER TO FEED WELDER RECEPTACLE.
10. ELECTRICAL CONTRACTOR SHALL PROVIDE A 30A/3P BREAKER TO FEED EXISTING TRASH COMPACTOR.

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Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

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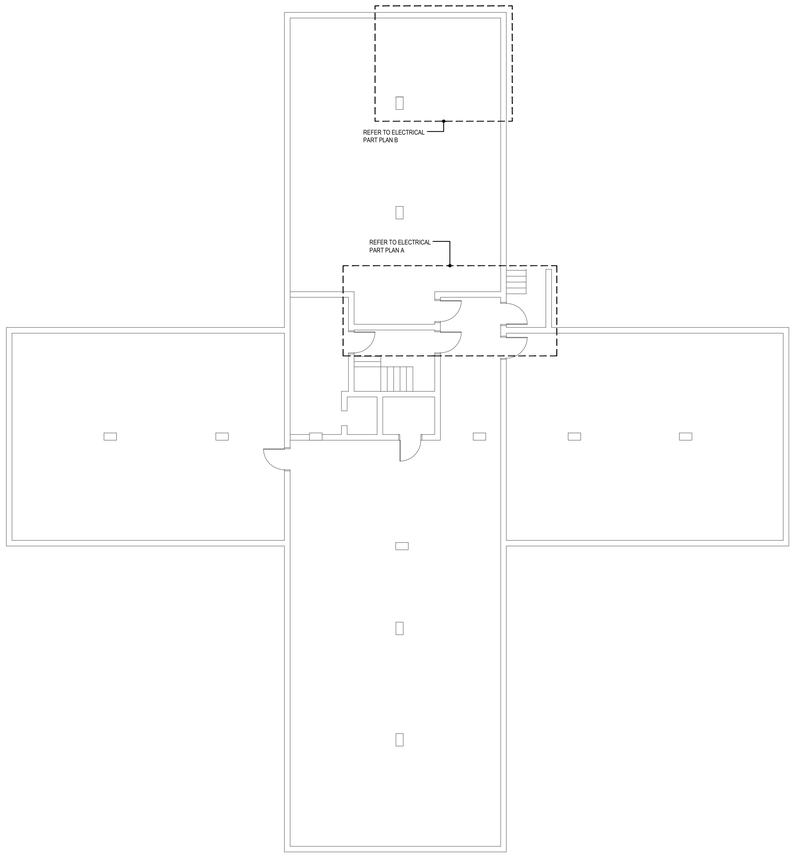
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:

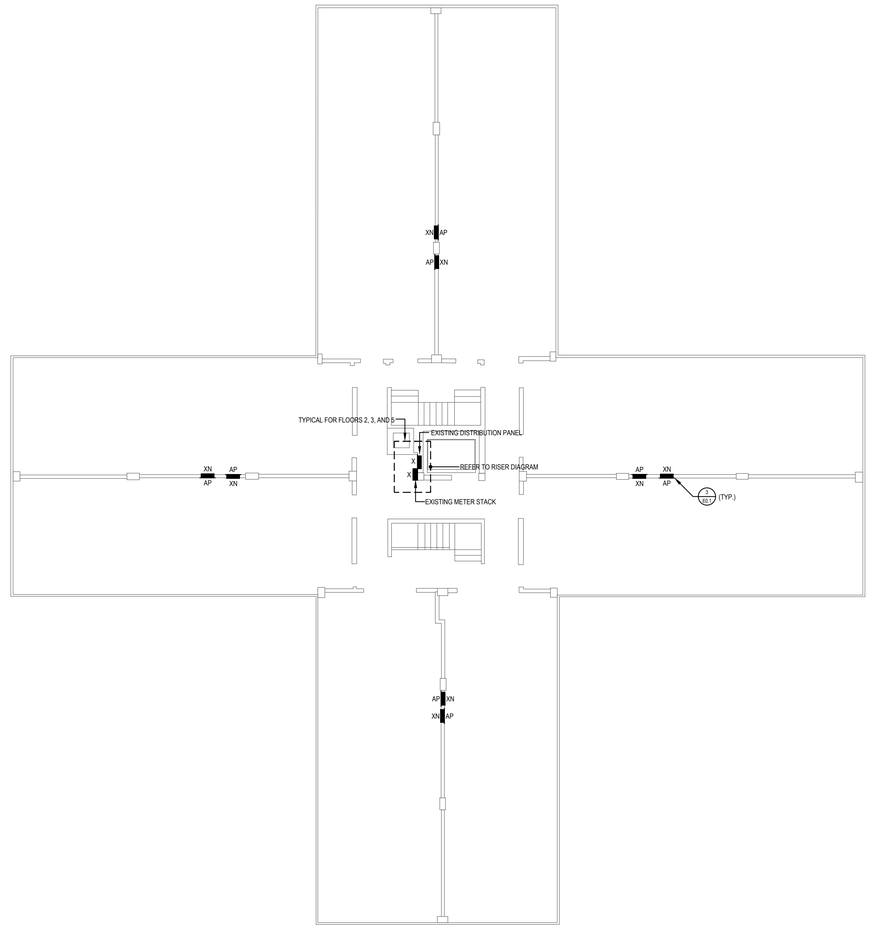
POWER RISERS
43 SUMMER ST
(BUILDING 6)

Drawing No.:

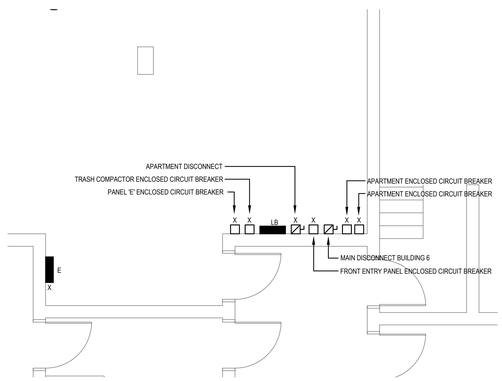
E3.0



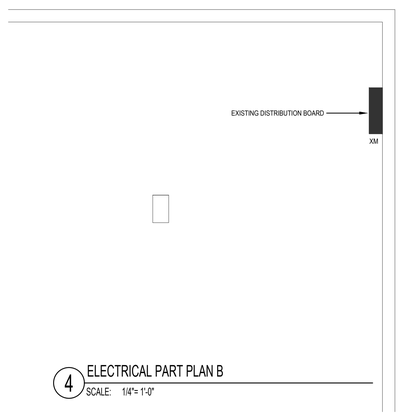
1 BASEMENT DEMOLITION PLAN
SCALE: 1/8"= 1'-0"



2 DEMOLITION Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"



3 ELECTRICAL PART PLAN A
SCALE: 1/4"= 1'-0"



4 ELECTRICAL PART PLAN B
SCALE: 1/4"= 1'-0"

Seal:

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35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

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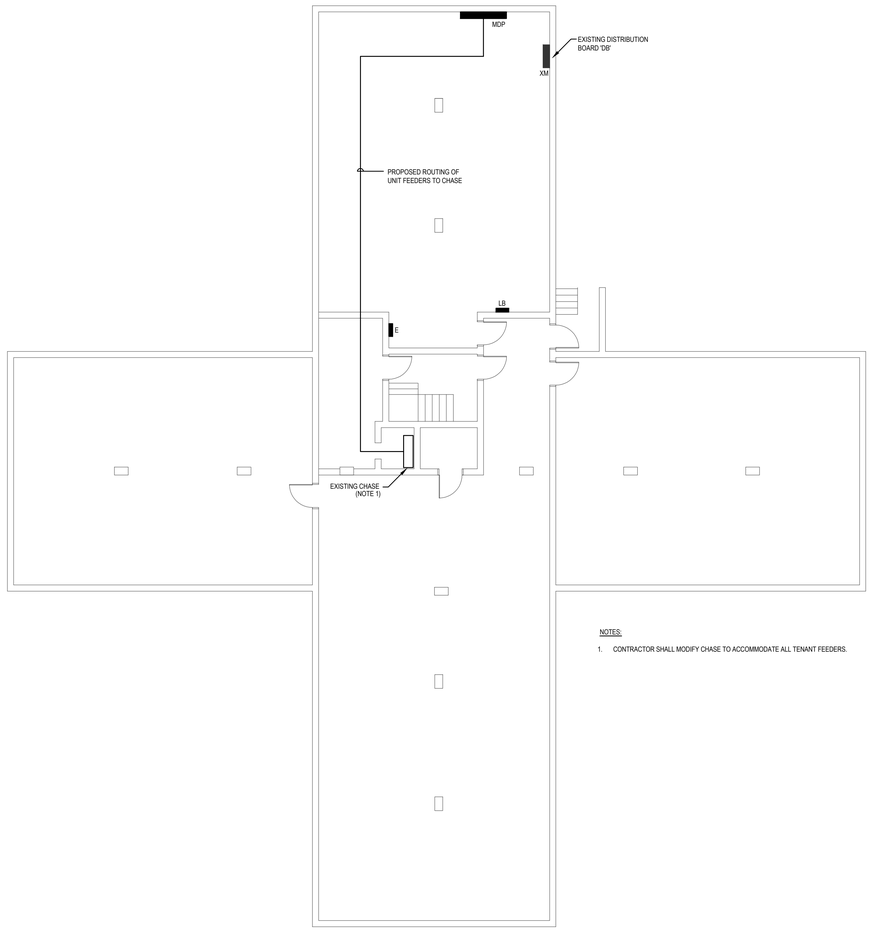
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:
DEMOLITION PLANS
43 SUMMER ST
(BUILDING 6)

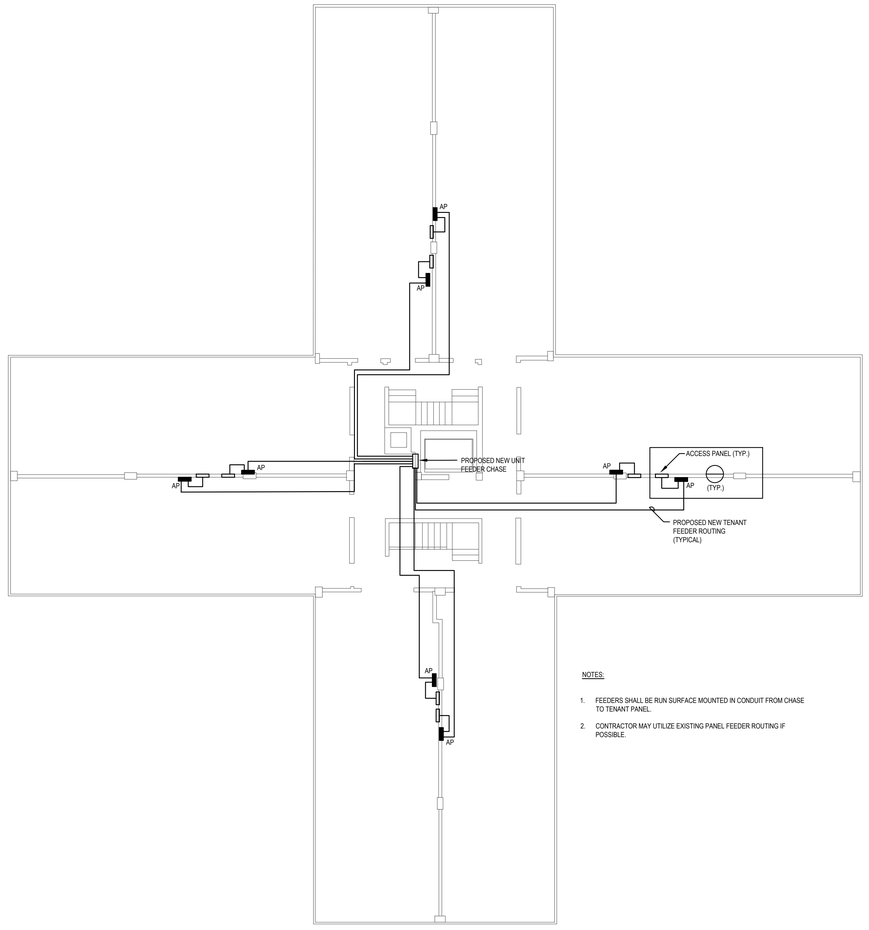
Drawing No.:
E3.1



NOTES:

1. CONTRACTOR SHALL MODIFY CHASE TO ACCOMMODATE ALL TENANT FEEDERS.

1 BASEMENT NEW WORK PLAN
SCALE: 1/8"= 1'-0"



NOTES:

1. FEEDERS SHALL BE RUN SURFACE MOUNTED IN CONDUIT FROM CHASE TO TENANT PANEL.
2. CONTRACTOR MAY UTILIZE EXISTING PANEL FEEDER ROUTING IF POSSIBLE.

2 NEW WORK Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"

SWITCHBOARD 'MDP', 600 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
2	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
3	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
4	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
5	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
6	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
7	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
8	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
9	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
10	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
11	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
12	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
13	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
14	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
15	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
16	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
17	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
18	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
19	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
20	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
21	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
22	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
23	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
24	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
25	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
26	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
27	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
28	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
29	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
30	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
31	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
32	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
33	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
34	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
35	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
36	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
37	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
38	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
39	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
40	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
41	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
42	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
43	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
44	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
45	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
46	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
47	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
48	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
49	DISTRIBUTION BOARD 'DP'	0.00	400	400	3	
50	SPACE AND HARDWARE	0.00	100		3	

PANEL 'LB', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.C.B. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	20	1	0.00			2	40	EXISTING LOAD
EXISTING LOAD	20	3		0.00		4		
EXISTING LOAD	20	5			0.00	6	30	EXISTING LOAD
EXISTING LOAD	20	7	0.00			8		
EXISTING LOAD	20	9		0.00		10		
EXISTING LOAD	20	11			0.00	12	30	EXISTING LOAD
EXISTING LOAD	20	13	0.00			14		
EXISTING LOAD	15	15		0.00		16		
EXISTING LOAD	15	17			0.00	18	20	EXISTING LOAD
EXISTING LOAD	15	19	0.00			20	15	EXISTING LOAD
EXISTING LOAD	20	21		0.00		22	15	EXISTING LOAD
EXISTING LOAD	15	23			0.00	24	15	EXISTING LOAD
EXISTING LOAD	15	25	0.00			26	15	EXISTING LOAD
EXISTING LOAD	15	27		0.00		28	15	EXISTING LOAD
SPACE AND HARDWARE	-	29			0.00	30		
SPACE AND HARDWARE	-	31	0.00			32	50	EXISTING LOAD
SPACE AND HARDWARE	-	33		0.00		34		
SPACE AND HARDWARE	-	35			0.00	36	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	37	0.00			38	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	39		0.00		40	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	41			0.00	42	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

PANEL 'E', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.L.O. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	20	1	0.00			2	20	EXISTING LOAD
EXISTING LOAD	20	3		0.00		4	15	EXISTING LOAD
EXISTING LOAD	20	5			0.00	6	20	EXISTING LOAD
EXISTING LOAD	20	7	0.00			8	20	EXISTING LOAD
EXISTING LOAD	20	9		0.00		10	20	EXISTING LOAD
EXISTING LOAD	15	11			0.00	12	20	EXISTING LOAD
SPACE AND HARDWARE	-	13	0.00			14	15	EXISTING LOAD
SPACE AND HARDWARE	-	15		0.00		16	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	17			0.00	18	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	19	0.00			20	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	21		0.00		22	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	23			0.00	24	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	25	0.00			26	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	27		0.00		28	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	29			0.00	30	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

EXISTING BOARD 'DB', 400 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	FRONT ENTRY PANEL	0.00	100	100	3	
2	HOUSE PANEL 'LB'	0.00	100	100	3	
3	SPARE	0.00	100	100	2	
4	PANEL 'E'	0.00	100	40	3	
5	SPARE	0.00	100	100	2	
6	WELDER RECEPTACLE	0.00	100	50	2	NEW CIRCUIT BREAKER
7	COMPACTOR	0.00	100	30	3	NEW CIRCUIT BREAKER
8	SPACE AND HARDWARE	0.00	100		3	
9	SPACE AND HARDWARE	0.00	100		3	
10	SPACE AND HARDWARE	0.00	100		3	
11	SPARE	0.00	250	200	3	
12	SPARE	0.00	250	200	3	

LOADCENTER 'AP', 100 AMP, 120/208 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 10,000 AMPS RMS SYM | MAIN: 90A M.C.B. | MOUNTING: SURFACE

	LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	CIRC NO.	CB	LOAD DESCRIPTION	
1	EXISTING LOAD	15	1			2	15	EXISTING LOAD	1
1	EXISTING LOAD	20	3			4	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	5			6	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	7			8	-	SPACE AND HARDWARE	
	SURGE PROTECTIVE DEVICE	20	9			10	-	SPACE AND HARDWARE	
			11			12	-	SPACE AND HARDWARE	

PHASE A 0.00 kVA | PHASE B 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

1 ELECTRICAL CONTRACTOR SHALL PROVIDE ARC-FAULT TYPE CIRCUIT BREAKER

Seal:

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HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:

SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY
ELECTRICAL REDISTRIBUTION
PHASE 2
350 Moody Street
Lowell, Massachusetts 01864

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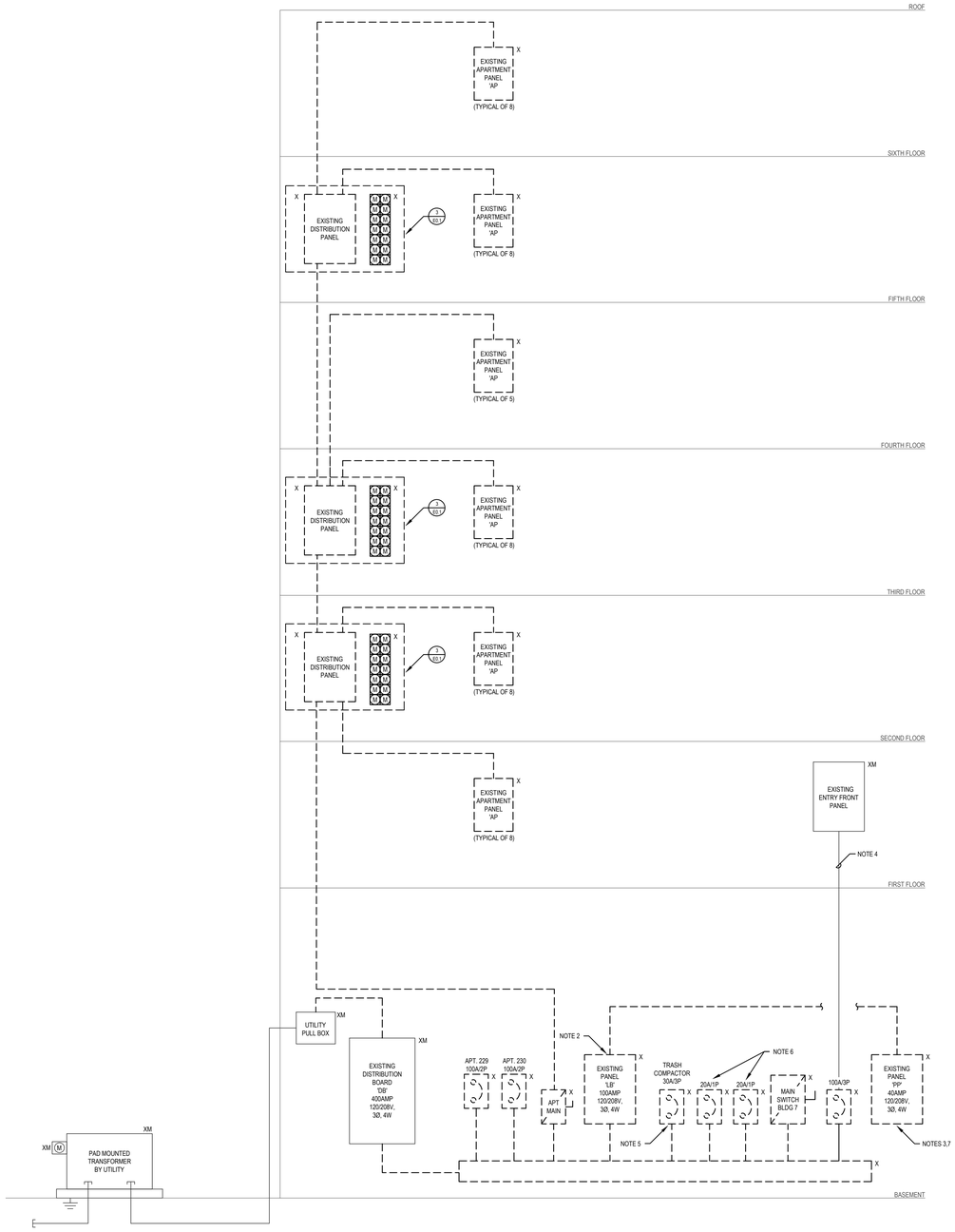
Project No.: 21002.00
Drawn By: JSG
Checked By: MG
Scale: As Noted

Title:
NEW WORK PLANS
43 SUMMER ST
(BUILDING 6)

Drawing No.:
E3.2

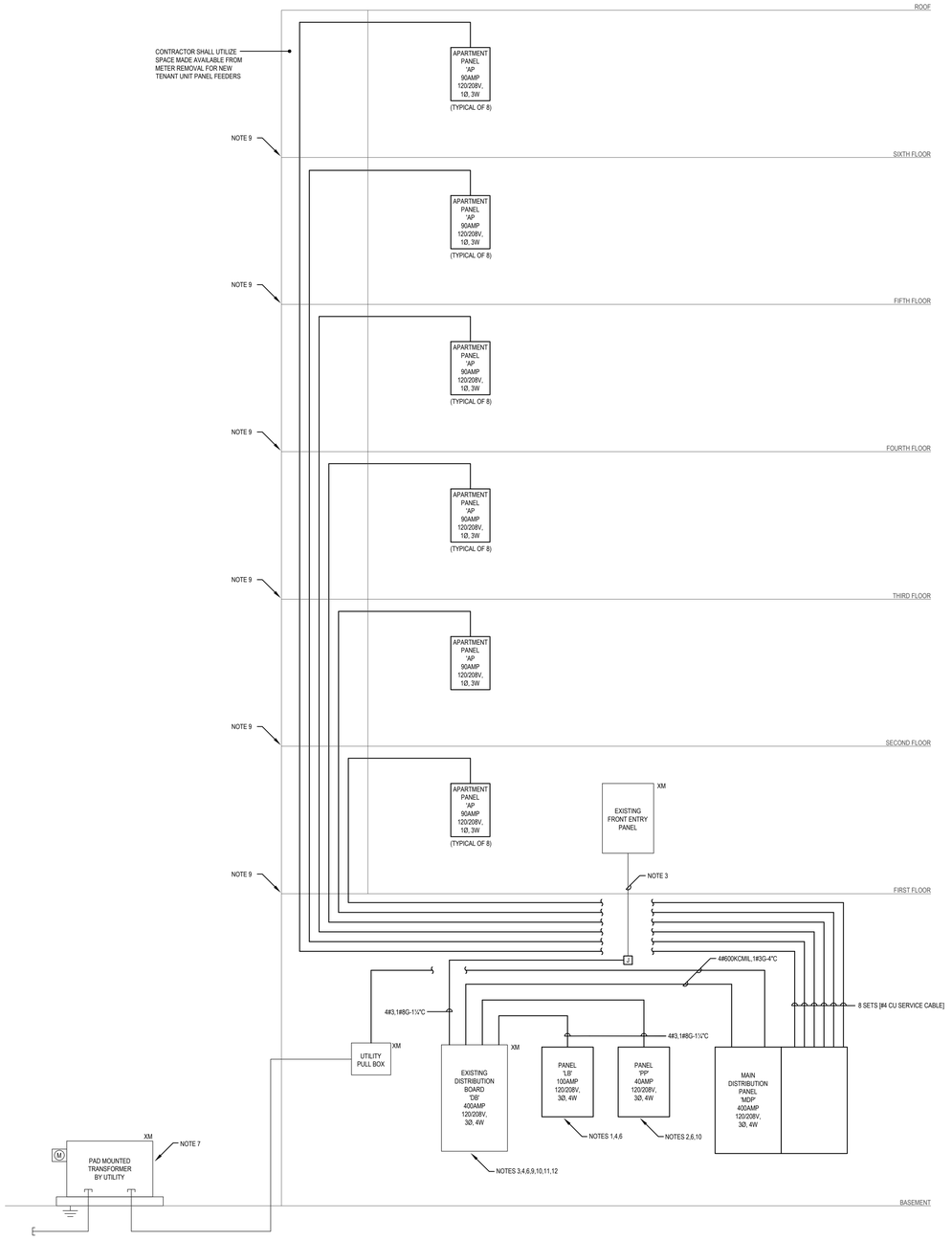


145 GORHAM STREET EXISTING POWER RISER DIAGRAM

N.T.S.

NOTES:

1. RISER DIAGRAM IS FOR REFERENCE ONLY. ALL EQUIPMENT IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING CIRCUITS AND FEEDERS WITHIN THE DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL '1B' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL '1B'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'PP' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'PP'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO EXISTING 100A/3P BREAKER LABELED "FRONT ENTRY PANEL' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. EXISTING FEEDER SERVING ' TRASH COMPACTOR ' ENCLOSED CIRCUIT BREAKER SHALL REMAIN AND BE CONNECTED TO NEW 30A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
6. EXISTING FEEDER SERVING ' ENCLOSED BREAKER ' SHALL REMAIN AND BE CONNECTED TO NEW BREAKER WITHIN NEW PANELBOARD '1B'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
7. ELECTRICAL CONTRACTOR SHALL JUNCTION AND EXTEND BRANCH CIRCUIT FEEDING WELDER RECEPTACLE FROM EXISTING PANEL 'PP' TO EXISTING DISTRIBUTION BOARD AS REQUIRED. REFER TO PANEL SCHEDULE FOR DETAILS.



145 GORHAM STREET NEW POWER RISER DIAGRAM

N.T.S.

NOTES:

1. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL '1B' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL '1B'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'PP' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'PP'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO EXISTING 100A/3P BREAKER LABELED "FRONT ENTRY PANEL' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING ' TRASH COMPACTOR ' ENCLOSED CIRCUIT BREAKER SHALL REMAIN AND BE CONNECTED TO NEW 30A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. EXISTING FEEDER SERVING ' ENCLOSED BREAKER ' SHALL REMAIN AND BE CONNECTED TO NEW BREAKER WITHIN NEW PANELBOARD '1B'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
6. ELECTRICAL CONTRACTOR SHALL JUNCTION AND EXTEND BRANCH CIRCUIT FEEDING WELDER RECEPTACLE FROM EXISTING PANEL 'PP' TO EXISTING DISTRIBUTION BOARD AS REQUIRED. REFER TO PANEL SCHEDULE FOR DETAILS.
7. CONTRACTOR SHALL COORDINATE ALL NECESSARY SHUTDOWNS WITH OWNER AND UTILITY COMPANY PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE PROPOSED PHASING SCHEDULE FOR ALL SHUTDOWNS PRIOR TO COMMENCING CONSTRUCTION. ALL SHUTDOWNS SHALL BE APPROVED BY OWNER.
9. CONTRACTOR SHALL PROVIDE CORING NECESSARY TO COMPLETE CHASE.
10. ELECTRICAL CONTRACTOR SHALL PROVIDE A 40A/3P BREAKER TO FEED NEW PANEL 'PP'.
11. ELECTRICAL CONTRACTOR SHALL PROVIDE A 30A/3P BREAKER TO FEED EXISTING TRASH COMPACTOR.
12. ELECTRICAL CONTRACTOR SHALL REPLACE (1) 100A/2P BREAKER USED TO FEED 'APT ENCLOSED BREAKER' WITH A 50A/2P BREAKER TO FEED WELDER RECEPTACLE.

Seal:

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*HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION*

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

LOWELL HOUSING AUTHORITY ELECTRICAL REDISTRIBUTION PHASE 2

360 Moody Street
Lowell, Massachusetts 01854

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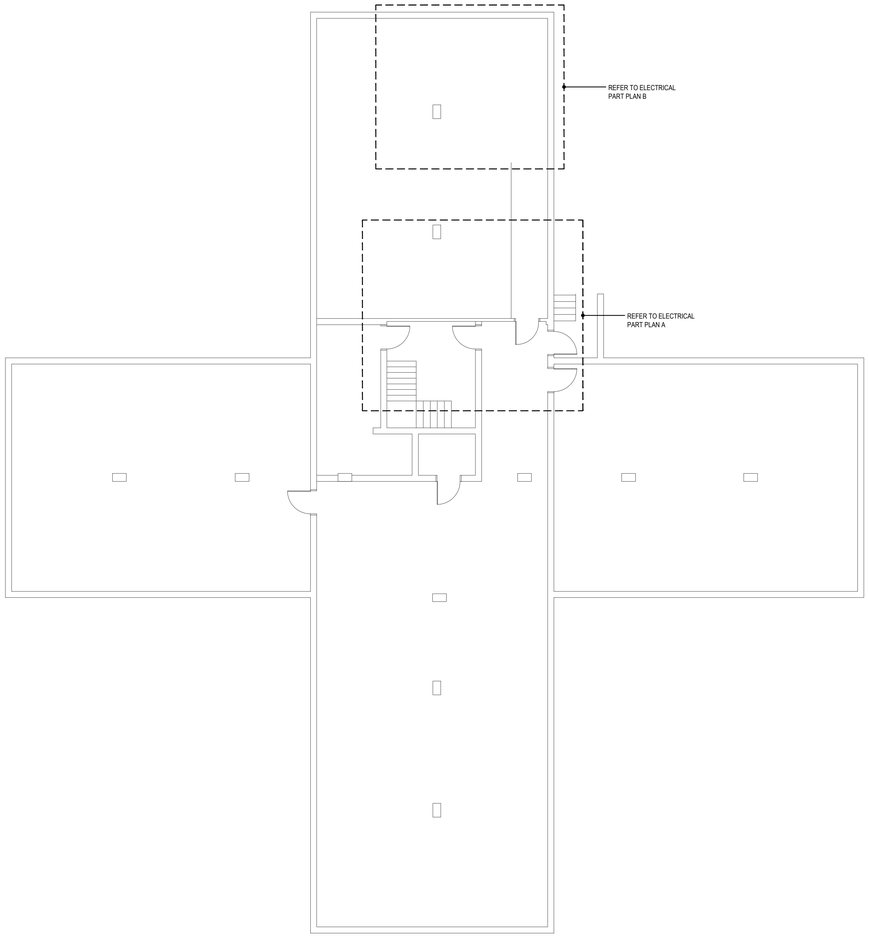
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:

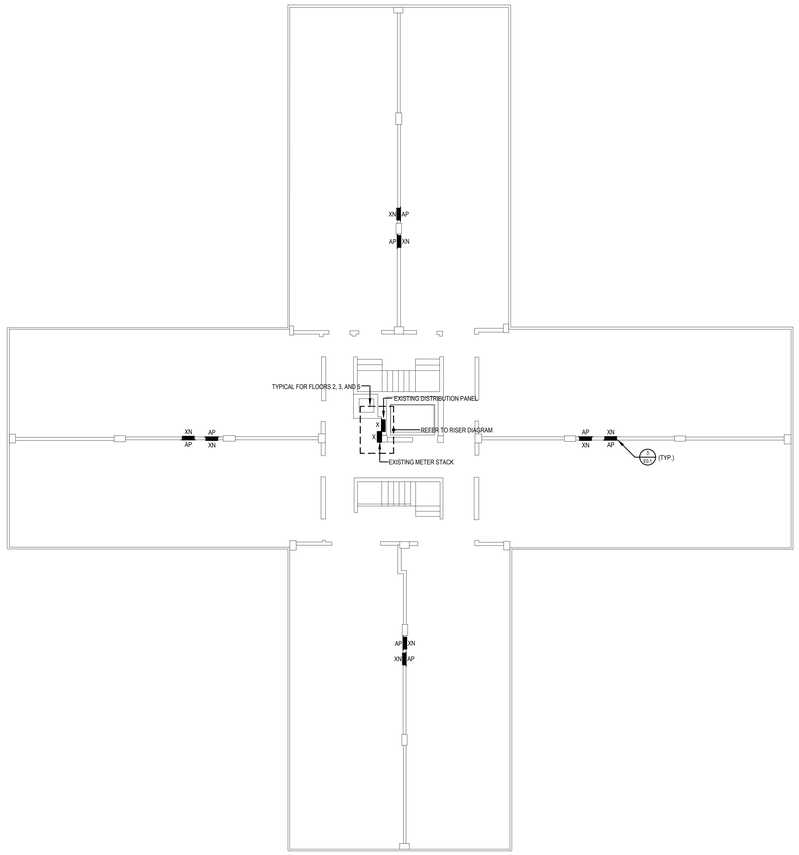
POWER RISER
145 GORHAM ST
(BUILDING 7)

Drawing No.:

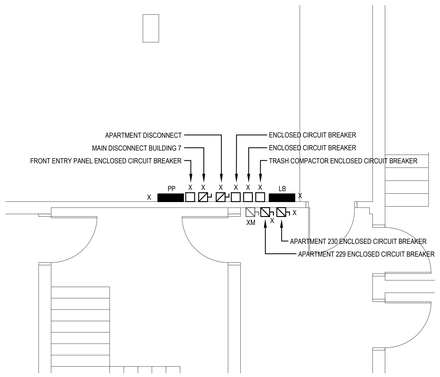
E4.0



1 BASEMENT DEMOLITION PLAN
SCALE: 1/8"= 1'-0"



2 DEMOLITION Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"



3 ELECTRICAL PART PLAN A
SCALE: 1/4"= 1'-0"

4 ELECTRICAL PART PLAN B
SCALE: 1/4"= 1'-0"

Seal:

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Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY
ELECTRICAL REDISTRIBUTION
PHASE 2
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Lowell, Massachusetts 01854

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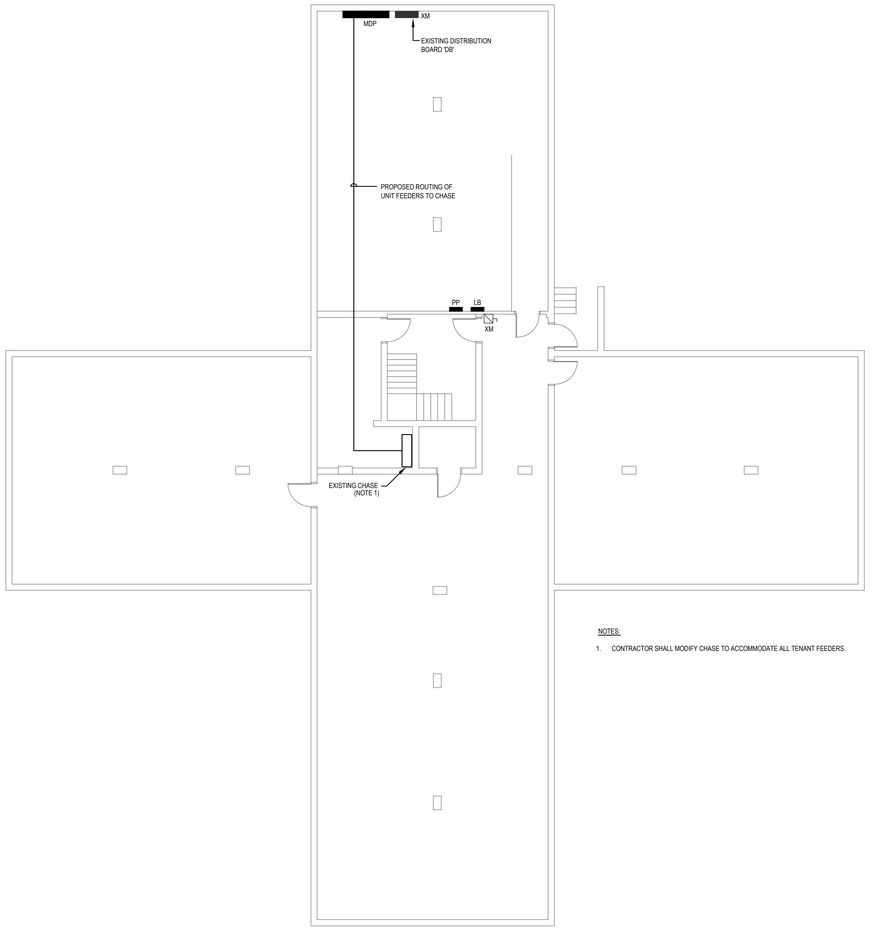
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:
DEMOLITION
PLANS
145 GORHAM ST
(BUILDING 7)

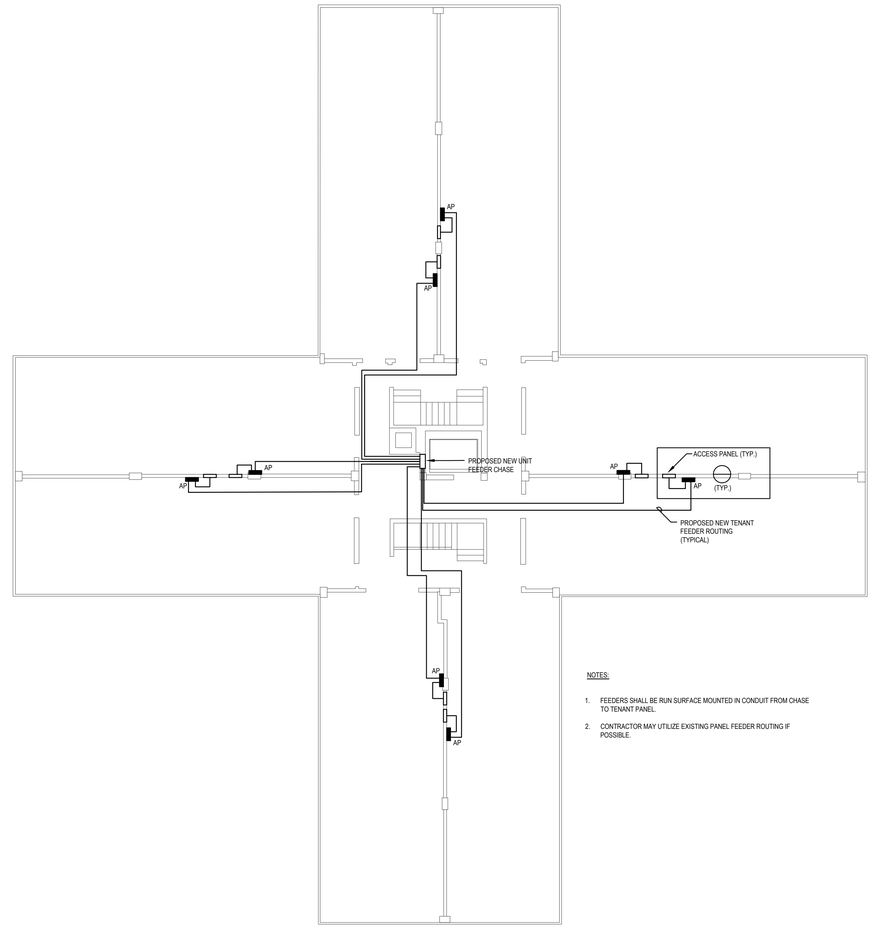
Drawing No.:
E4.1



1 BASEMENT NEW WORK PLAN
SCALE: 1/8"= 1'-0"

NOTES:

1. CONTRACTOR SHALL MODIFY CHASE TO ACCOMMODATE ALL TENANT FEEDERS.



2 NEW WORK Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"

NOTES:

1. FEEDERS SHALL BE RUN SURFACE MOUNTED IN CONDUIT FROM CHASE TO TENANT PANEL.
2. CONTRACTOR MAY UTILIZE EXISTING PANEL FEEDER ROUTING IF POSSIBLE.

SWITCHBOARD 'MDP', 600 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
2	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
3	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
4	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
5	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
6	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
7	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
8	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
9	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
10	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
11	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
12	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
13	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
14	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
15	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
16	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
17	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
18	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
19	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
20	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
21	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
22	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
23	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
24	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
25	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
26	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
27	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
28	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
29	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
30	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
31	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
32	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
33	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
34	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
35	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
36	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
37	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
38	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
39	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
40	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
41	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
42	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
43	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
44	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
45	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
46	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
47	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
48	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
49	DISTRIBUTION BOARD 'DP'	0.00	400	400	3	
50	SPACE AND HARDWARE	0.00	100		3	

PANEL 'LB', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.C.B. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	15	1	0.00			2	15	EXISTING LOAD
EXISTING LOAD	15	3		0.00		4	15	EXISTING LOAD
EXISTING LOAD	15	5			0.00	6	15	EXISTING LOAD
EXISTING LOAD	15	7	0.00			8	15	EXISTING LOAD
EXISTING LOAD	15	9		0.00		10		
EXISTING LOAD	15	11			0.00	12	30	EXISTING LOAD
EXISTING LOAD	15	13	0.00			14		
EXISTING LOAD	15	15		0.00		16	15	EXISTING LOAD
EXISTING LOAD	20	17			0.00	18		
EXISTING LOAD		19	0.00			20		
EXISTING LOAD	20	21		0.00		22	30	EXISTING LOAD
		23			0.00	24		
EXISTING LOAD	20	25	0.00			26		
		27		0.00		28	50	EXISTING LOAD
SPACE AND HARDWARE	-	29			0.00	30		
SPACE AND HARDWARE	-	31	0.00			32	-	EXISTING LOAD
SPACE AND HARDWARE	-	33		0.00		34	-	EXISTING LOAD
SPACE AND HARDWARE	-	35			0.00	36	-	EXISTING LOAD
SPACE AND HARDWARE	-	37	0.00			38	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	39		0.00		40	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	41			0.00	42	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

PANEL 'PP', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.L.O. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	20	1	0.00			2	20	EXISTING LOAD
EXISTING LOAD	20	3		0.00		4	20	EXISTING LOAD
EXISTING LOAD	20	5			0.00	6	20	EXISTING LOAD
		7	0.00			8	20	EXISTING LOAD
EXISTING LOAD	20	9		0.00		10	20	EXISTING LOAD
		11			0.00	12	20	EXISTING LOAD
EXISTING LOAD	-	13	0.00			14	15	EXISTING LOAD
EXISTING LOAD	-	15		0.00		16	-	EXISTING LOAD
EXISTING LOAD	-	17			0.00	18	-	EXISTING LOAD
SPACE AND HARDWARE	-	19	0.00			20	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	21		0.00		22	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	23			0.00	24	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	25	0.00			26	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	27		0.00		28	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	29			0.00	30	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

EXISTING BOARD 'DB', 400 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	FRONT ENTRY PANEL	0.00	100	100	3	
2	HOUSE PANEL 'LB'	0.00	100	100	3	
3	PANEL 'PP'	0.00	100	40	3	NEW CIRCUIT BREAKER
4	TRASH COMPACTOR	0.00	100	30	2	NEW CIRCUIT BREAKER
5	WELDER RECEPTACLE	0.00	100	50	2	NEW CIRCUIT BREAKER
6	SPARE	0.00	100	100	2	
7	SPARE	0.00	250	200	3	
8	SPARE	0.00	250		3	
9	SPACE AND HARDWARE	0.00	250		3	
10	SPACE AND HARDWARE	0.00	250		3	

LOADCENTER 'AP', 100 AMP, 120/208 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 10,000 AMPS RMS SYM | MAIN: 90A M.C.B. | MOUNTING: SURFACE

	LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	CIRC NO.	CB	LOAD DESCRIPTION	
1	EXISTING LOAD	15	1			2	15	EXISTING LOAD	1
1	EXISTING LOAD	20	3			4	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	5			6	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	7			8	-	SPACE AND HARDWARE	
	SURGE PROTECTIVE DEVICE	20	9			10	-	SPACE AND HARDWARE	
			11			12	-	SPACE AND HARDWARE	

PHASE A 0.00 kVA | PHASE B 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

1 ELECTRICAL CONTRACTOR SHALL PROVIDE ARC-FAULT TYPE CIRCUIT BREAKER

Seal:

BLW Engineers, Inc.
311 Great Road, Post Office Box 1551
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T: 978.486.4301 F: 978.428.0067
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HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:

SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY
ELECTRICAL REDISTRIBUTION
PHASE 2
360 Moody Street
Lowell, Massachusetts 01854

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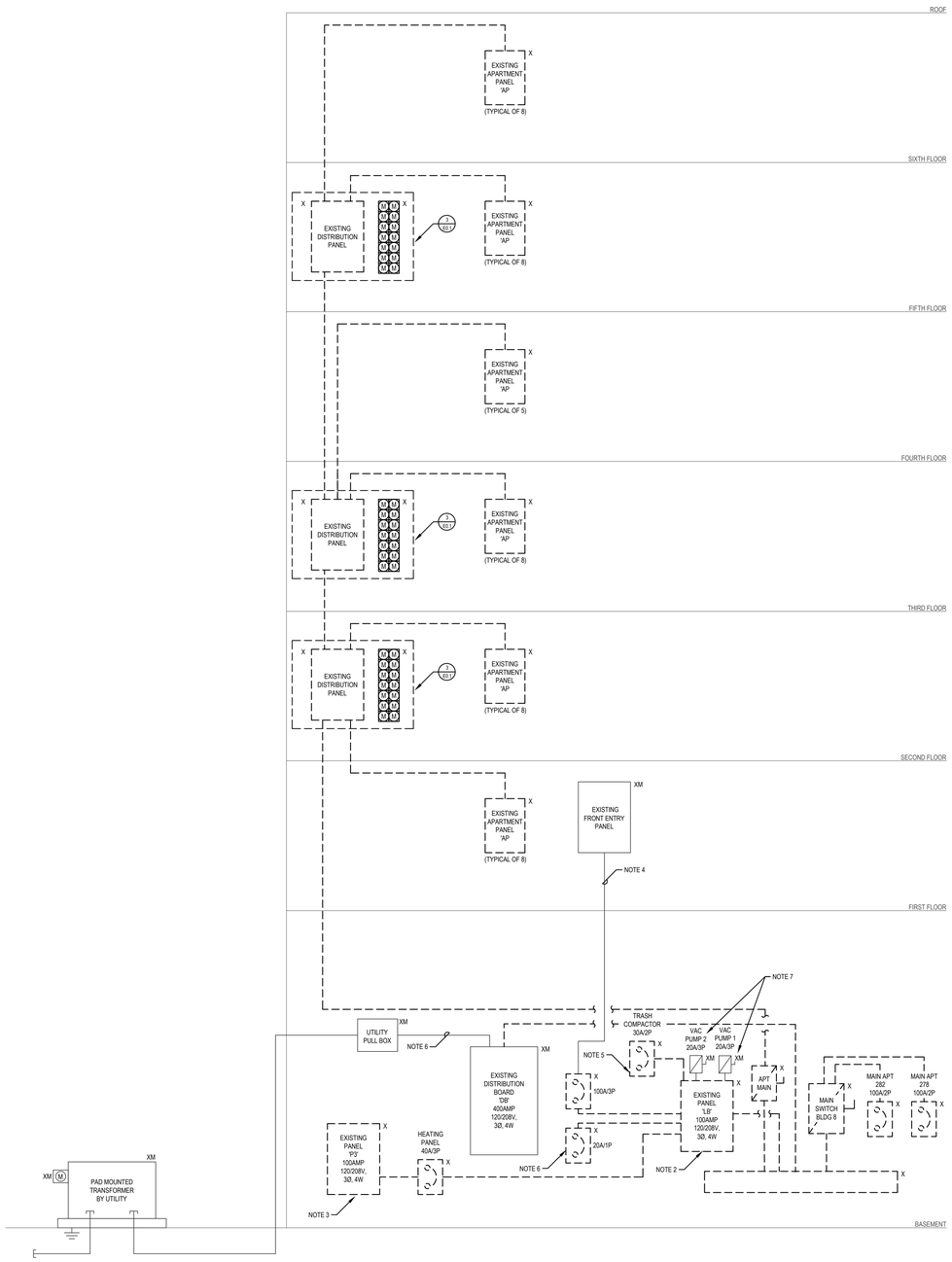
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

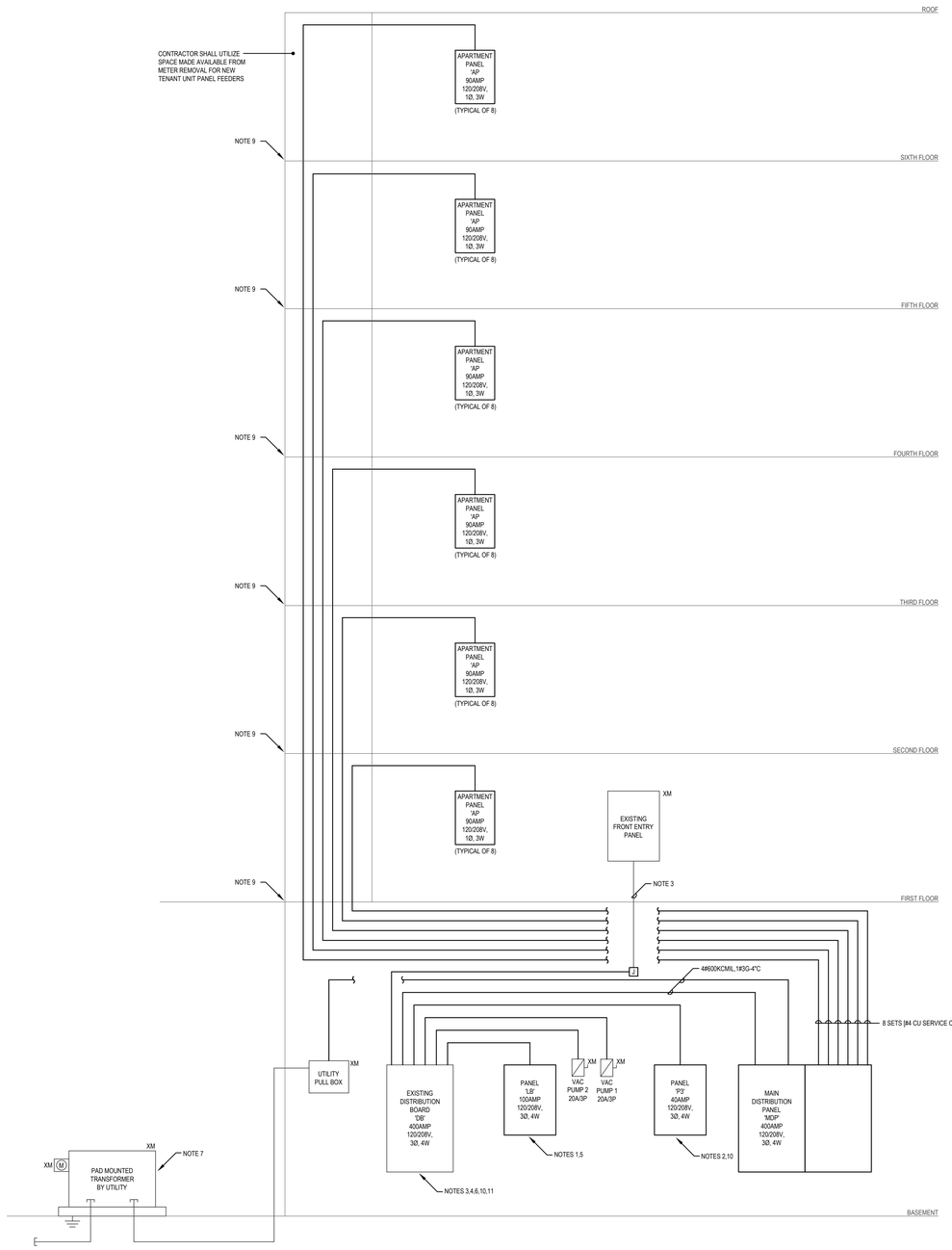
Title:

NEW WORK PLANS
145 GORHAM ST (BUILDING 7)

Drawing No.:

E4.2





183 GORHAM STREET EXISTING POWER RISER DIAGRAM

N.T.S.

NOTES:

1. RISER DIAGRAM IS FOR REFERENCE ONLY. ALL EQUIPMENT IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING CIRCUITS AND FEEDERS WITHIN THE DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'P3' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'P3'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO EXISTING 100A/3P BREAKER LABELED "FRONT ENTRY PANEL' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. EXISTING FEEDER SERVING ' TRASH COMPACTOR ' ENCLOSED CIRCUIT BREAKER SHALL REMAIN AND BE CONNECTED TO NEW 30A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
6. EXISTING FEEDER SERVING ' ENCLOSED BREAKER ' SHALL REMAIN AND BE CONNECTED TO NEW BREAKER WITHIN NEW PANELBOARD 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
7. EXISTING VACUUM PUMP DISCONNECTS SHALL REMAIN, AND BE RE-FED FROM EXISTING 20A/3P BREAKERS LABAELED 'P1' & 'P2' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.

183 GORHAM STREET NEW POWER RISER DIAGRAM

N.T.S.

NOTES:

1. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'P3' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'P3'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING FEEDER SERVING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO EXISTING 100A/3P BREAKER LABELED "FRONT ENTRY PANEL' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING ' TRASH COMPACTOR ' ENCLOSED CIRCUIT BREAKER SHALL REMAIN AND BE CONNECTED TO NEW 30A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. EXISTING FEEDER SERVING ' ENCLOSED BREAKER ' SHALL REMAIN AND BE CONNECTED TO NEW BREAKER WITHIN NEW PANELBOARD 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
6. EXISTING VACUUM PUMP DISCONNECTS SHALL REMAIN, AND BE RE-FED FROM EXISTING 20A/3P BREAKERS LABAELED 'P1' & 'P2' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
7. CONTRACTOR SHALL COORDINATE ALL NECESSARY SHUTDOWNS WITH OWNER AND UTILITY COMPANY PRIOR TO COMMENCING CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE PROPOSED PHASING SCHEDULE FOR ALL SHUTDOWNS PRIOR TO COMMENCING CONSTRUCTION. ALL SHUTDOWNS SHALL BE APPROVED BY OWNER.
9. CONTRACTOR SHALL PROVIDE CORING NECESSARY TO COMPLETE CHASE.
10. ELECTRICAL CONTRACTOR SHALL REPLACE (1) 100A/2P BREAKER USED TO FEED 'APT DISCONNECT' WITH A 40A/3P BREAKER TO FEED NEW PANEL 'P3'.
11. ELECTRICAL CONTRACTOR SHALL REPLACE (1) 100A/2P BREAKER USED TO FEED 'APT DISCONNECT' WITH A 30A/3P BREAKER TO FEED EXISTING TRASH COMPACTOR.

Seal:

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HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY ELECTRICAL REDISTRIBUTION PHASE 2

350 Moody Street
Lowell, Massachusetts 01854

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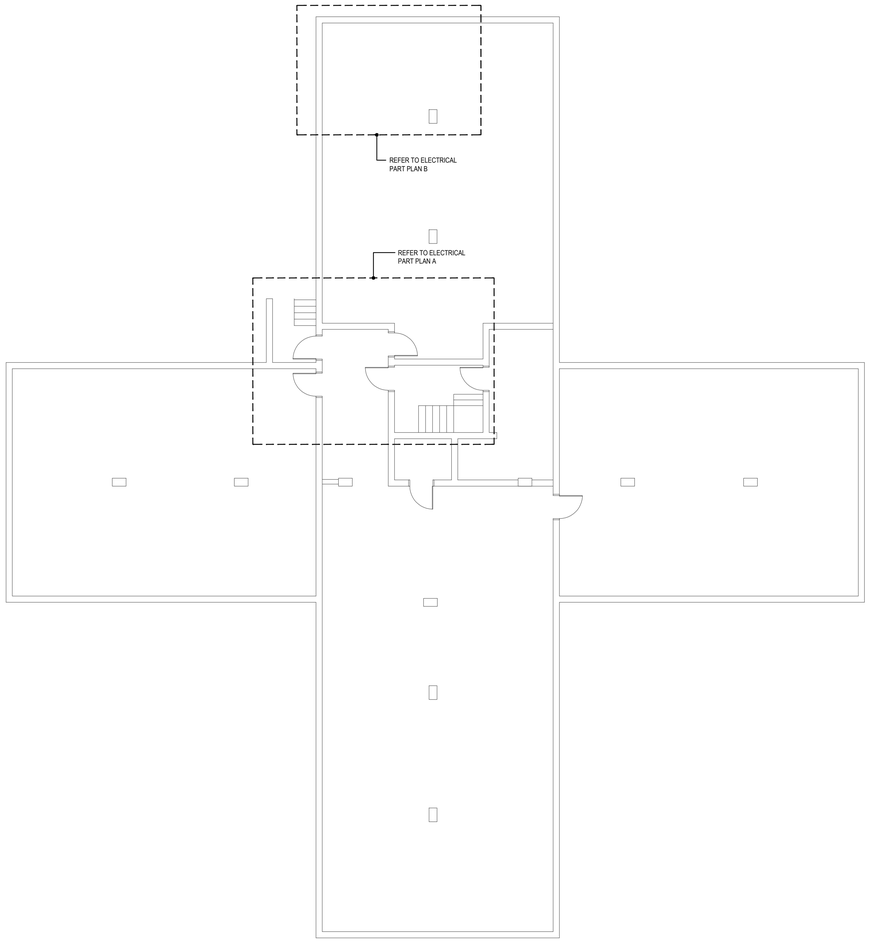
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:

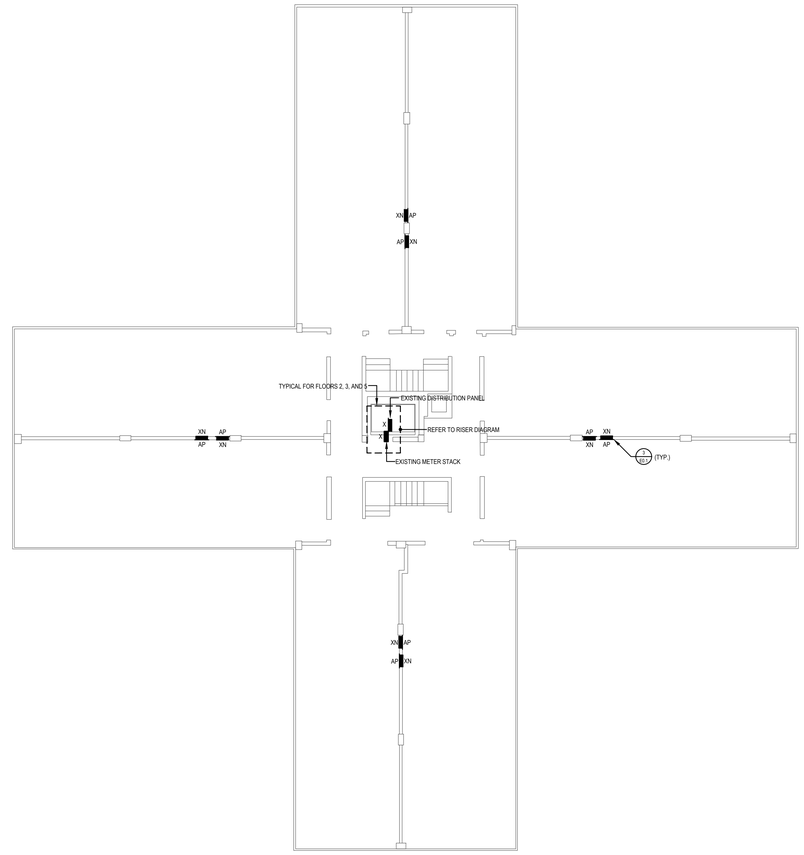
POWER RISERS
183 GORHAM ST
(BUILDING 8)

Drawing No.:

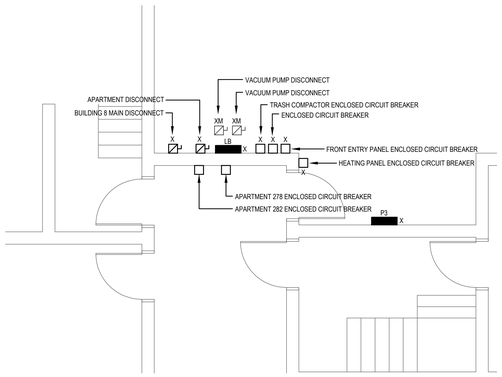
E5.0



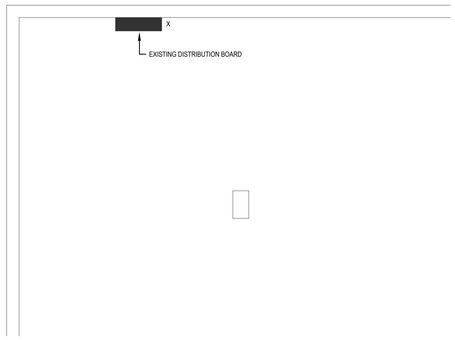
1 BASEMENT DEMOLITION PLAN
SCALE: 1/8"= 1'-0"



2 DEMOLITION Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"



3 ELECTRICAL PART PLAN A
SCALE: 1/4"= 1'-0"



4 ELECTRICAL PART PLAN B
SCALE: 1/4"= 1'-0"

Seal:

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HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
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LOWELL HOUSING AUTHORITY
ELECTRICAL REDISTRIBUTION
PHASE 2
350 Moody Street
Lowell, Massachusetts 01854

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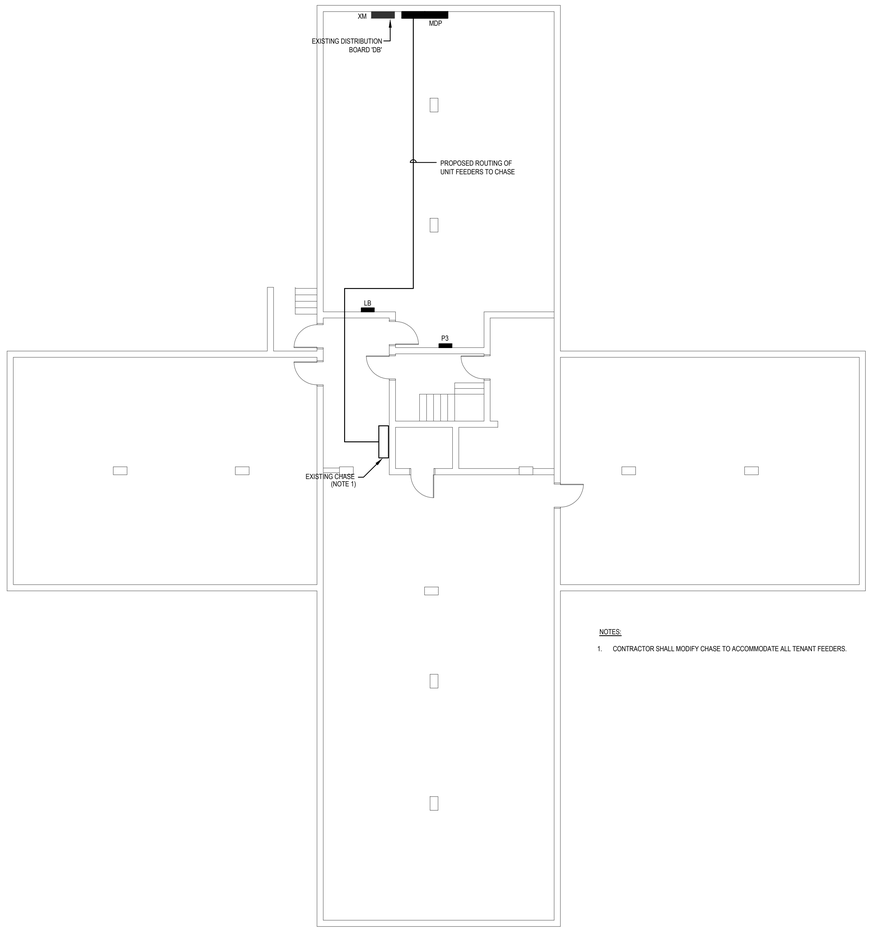
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:
DEMOLITION
PLANS
183 GORHAM ST
(BUILDING 8)

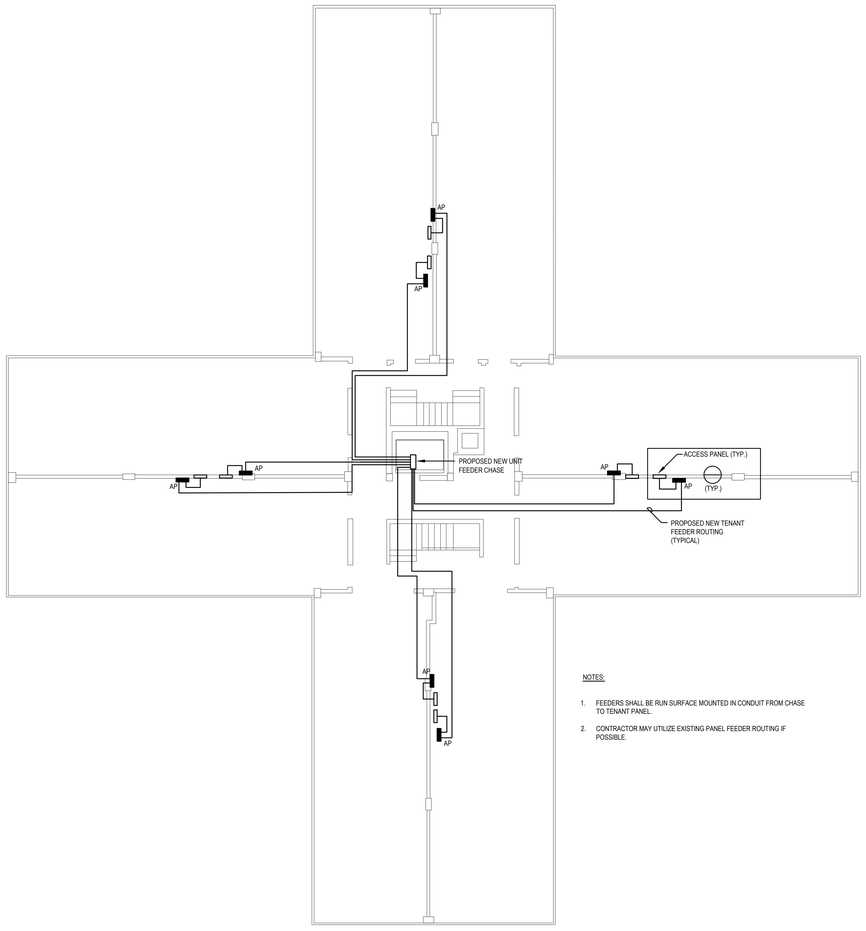
Drawing No.:
E5.1



NOTES:

1. CONTRACTOR SHALL MODIFY CHASE TO ACCOMMODATE ALL TENANT FEEDERS.

1 BASEMENT NEW WORK PLAN
SCALE: 1/8"= 1'-0"



NOTES:

1. FEEDERS SHALL BE RUN SURFACE MOUNTED IN CONDUIT FROM CHASE TO TENANT PANEL.
2. CONTRACTOR MAY UTILIZE EXISTING PANEL FEEDER ROUTING IF POSSIBLE.

2 NEW WORK Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"

SWITCHBOARD 'MDP', 600 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
2	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
3	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
4	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
5	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
6	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
7	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
8	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
9	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
10	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
11	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
12	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
13	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
14	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
15	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
16	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
17	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
18	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
19	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
20	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
21	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
22	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
23	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
24	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
25	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
26	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
27	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
28	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
29	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
30	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
31	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
32	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
33	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
34	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
35	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
36	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
37	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
38	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
39	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
40	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
41	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
42	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
43	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
44	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
45	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
46	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
47	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
48	APRTMENT UNIT PANEL - AP1	0.00	100	90	2	
49	DISTRIBUTION BOARD 'DP'	0.00	400	400	3	
50	SPACE AND HARDWARE	0.00	100		3	

PANEL 'LB', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.C.B. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	20	1	0.00			0.00			2	20	EXISTING LOAD
EXISTING LOAD	20	3		0.00			0.00		4	20	EXISTING LOAD
EXISTING LOAD	20	5			0.00			0.00	6	20	EXISTING LOAD
EXISTING LOAD	20	7	0.00			0.00			8	20	EXISTING LOAD
EXISTING LOAD	20	9		0.00			0.00		10	20	EXISTING LOAD
EXISTING LOAD	20	11			0.00			0.00	12	20	EXISTING LOAD
EXISTING LOAD	20	13	0.00			0.00			14	20	EXISTING LOAD
EXISTING LOAD	20	15		0.00			0.00		16	20	EXISTING LOAD
		17			0.00			0.00	18		
EXISTING LOAD	30	19	0.00			0.00			20	30	EXISTING LOAD
		21		0.00			0.00		22		
		23			0.00			0.00	24	15	EXISTING LOAD
SPACE AND HARDWARE	-	25	0.00			0.00			26		
SPACE AND HARDWARE	-	27		0.00			0.00		28	60	EXISTING LOAD
SPACE AND HARDWARE	-	29			0.00			0.00	30		
SPACE AND HARDWARE	-	31	0.00			0.00			32	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	33		0.00			0.00		34	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	35			0.00			0.00	36	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	37	0.00			0.00			38	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	39		0.00			0.00		40	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	41			0.00			0.00	42	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

PANEL 'P3', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.L.O. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	15	1	0.00			0.00			2	20	EXISTING LOAD
		3		0.00			0.00		4	20	EXISTING LOAD
EXISTING LOAD	15	5			0.00			0.00	6	20	EXISTING LOAD
		7	0.00			0.00			8	20	EXISTING LOAD
EXISTING LOAD	20	9		0.00			0.00		10	20	EXISTING LOAD
SPACE AND HARDWARE	-	11			0.00			0.00	12	20	EXISTING LOAD
SPACE AND HARDWARE	-	13	0.00			0.00			14	15	EXISTING LOAD
SPACE AND HARDWARE	-	15		0.00			0.00		16	15	EXISTING LOAD
SPACE AND HARDWARE	-	17			0.00			0.00	18		
SPACE AND HARDWARE	-	19	0.00			0.00			20	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	21		0.00			0.00		22	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	23			0.00			0.00	24	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	25	0.00			0.00			26	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	27		0.00			0.00		28	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	29			0.00			0.00	30	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

EXISTING BOARD 'DB', 400 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	P-1	0.00	100	20	3	
2	P-2	0.00	100	20	3	
3	PANEL 'P3'	0.00	100	40	2	NEW CIRCUIT BREAKER
4	TRASH COMPACTOR	0.00	100	30	2	NEW CIRCUIT BREAKER
5	FRONT ENTRY PANEL	0.00	100	100	3	
6	PANEL 'LB'	0.00	100	100	3	
7	SPARE	0.00	250	200	3	
8	SPARE	0.00	250	200	3	
9	SPACE AND HARDWARE	0.00	250		3	
10	SPACE AND HARDWARE	0.00	250		3	

LOADCENTER 'AP', 100 AMP, 120/208 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 10,000 AMPS RMS SYM | MAIN: 90A M.C.B. | MOUNTING: SURFACE

	LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	CIRC NO.	CB	LOAD DESCRIPTION	
1	EXISTING LOAD	15	1			2	15	EXISTING LOAD	1
1	EXISTING LOAD	20	3			4	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	5			6	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	7			8	-	SPACE AND HARDWARE	
	SURGE PROTECTIVE DEVICE	20	9			10	-	SPACE AND HARDWARE	
			11			12	-	SPACE AND HARDWARE	

PHASE A 0.00 kVA | PHASE B 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

1 ELECTRICAL CONTRACTOR SHALL PROVIDE ARC-FAULT TYPE CIRCUIT BREAKER

Seal:

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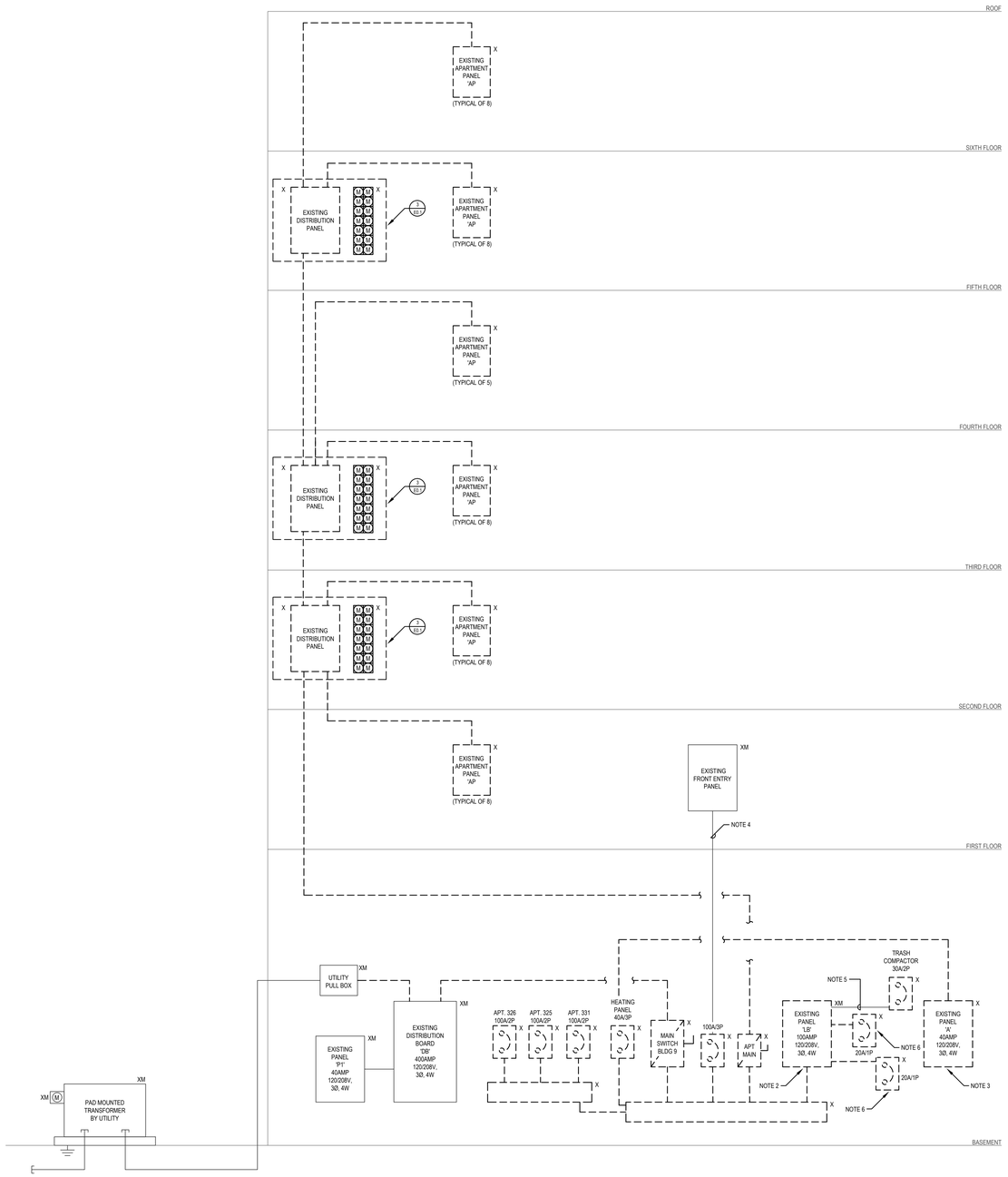
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:
NEW WORK PLANS
183 GORHAM ST (BUILDING 8)

Drawing No.:
E5.2

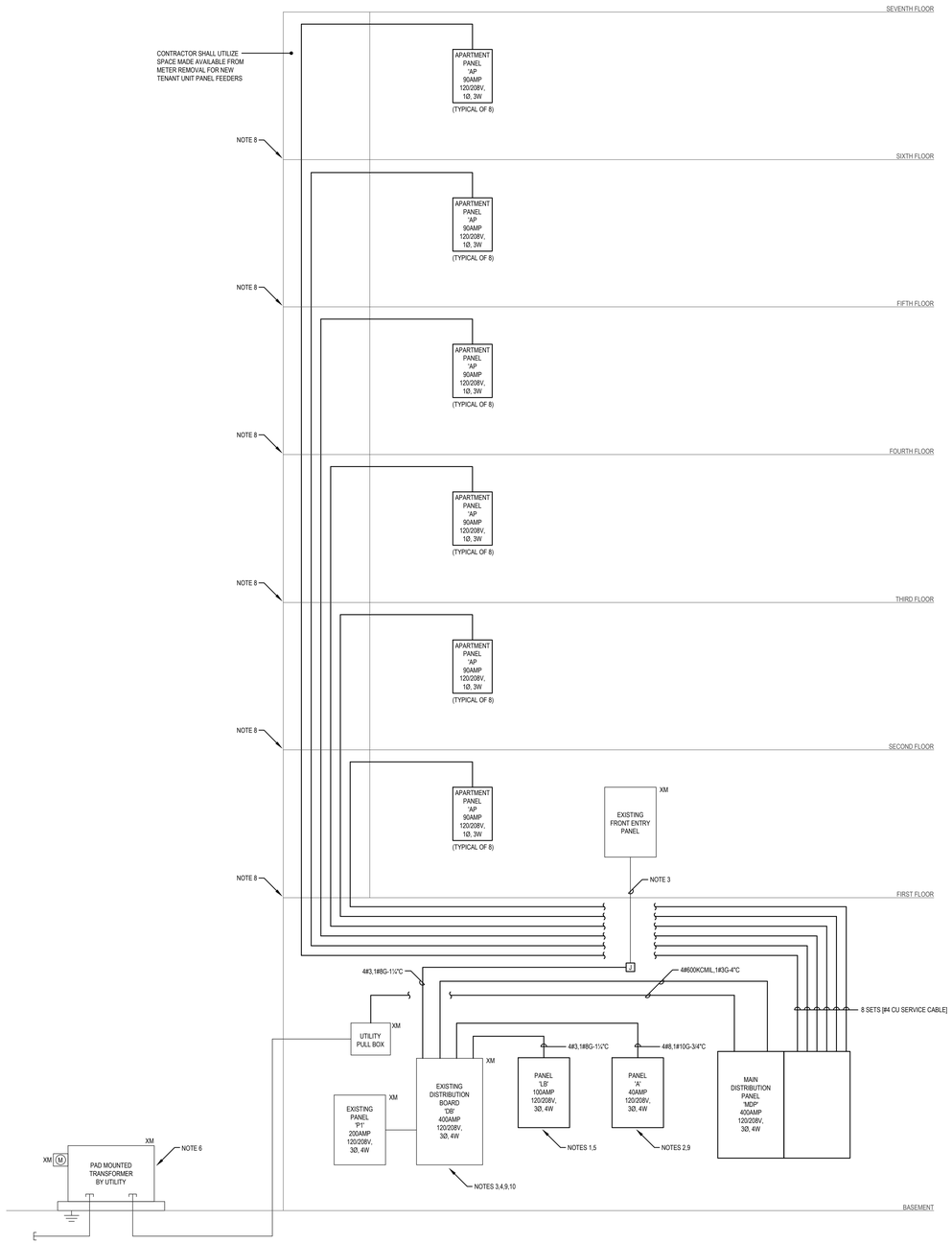


227 GORHAM STREET EXISTING POWER RISER DIAGRAM

N.T.S.

NOTES:

1. RISER DIAGRAM IS FOR REFERENCE ONLY. ALL EQUIPMENT IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL CIRCUIT TRACE AND LABEL ALL EXISTING CIRCUITS AND FEEDERS WITHIN THE DEMOLITION SCOPE PRIOR TO DE-ENERGIZING AND DISCONNECTION.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKER WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
3. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL SHALL 'A' REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'A'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
4. EXISTING FEEDER SERVING EXISTING 'FRONT ENTRY PANEL' SHALL REMAIN AND BE CONNECTED TO EXISTING 100A/3P BREAKER LABELED 'FRONT ENTRY PANEL' WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
5. EXISTING FEEDER SERVING ' TRASH COMPACTOR ' ENCLOSED CIRCUIT BREAKER SHALL REMAIN AND BE CONNECTED TO NEW 30A/3P BREAKER WITHIN EXISTING DISTRIBUTION BOARD. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
6. EXISTING FEEDER SERVING ' ENCLOSED CIRCUIT BREAKERS ' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.



227 GORHAM STREET NEW POWER RISER DIAGRAM

N.T.S.

NOTES:

1. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL 'LB' SHALL REMAIN AND BE CONNECTED TO NEW BREAKER WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
2. EXISTING BRANCH CIRCUITS EMANATING FROM EXISTING PANEL SHALL 'A' REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'A'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
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5. EXISTING FEEDER SERVING 'ENCLOSED CIRCUIT BREAKERS' SHALL REMAIN AND BE CONNECTED TO NEW BREAKERS WITHIN NEW PANEL 'LB'. E.C. SHALL JUNCTION AND EXTEND ALL WIRING AS REQUIRED. REFER TO PANELBOARD SCHEDULE FOR DETAILS.
6. CONTRACTOR SHALL COORDINATE ALL NECESSARY SHUTDOWNS WITH OWNER AND UTILITY COMPANY PRIOR TO COMMENCING CONSTRUCTION.
7. CONTRACTOR SHALL PROVIDE PROPOSED PHASING SCHEDULE FOR ALL SHUTDOWNS PRIOR TO COMMENCING CONSTRUCTION. ALL SHUTDOWNS SHALL BE APPROVED BY OWNER.
8. CONTRACTOR SHALL PROVIDE CORING NECESSARY TO COMPLETE CHASE.
9. ELECTRICAL CONTRACTOR SHALL REPLACE (1) 100A/2P BREAKER USED TO FEED 'APT ENCLOSED BREAKER' WITH A 40A/3P BREAKER TO FEED NEW PANEL 'A'.
10. ELECTRICAL CONTRACTOR SHALL REPLACE EXISTING 100A/3P BREAKER LABELED 'COMPACTOR' WITH A 30A/3P BREAKER TO FEED EXISTING TRASH COMPACTOR.

Seal:

BLW Engineers, Inc.
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Littleton, Massachusetts 01460
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HVAC * ELECTRICAL * PLUMBING * FIRE PROTECTION

Client:

LOWELL HOUSING AUTHORITY
35 MOODY ST
LOWELL MA

Submission:	
SD SET	02/17/21
DD SET	03/16/21
BID	06/18/21

Revision:

Project:

LOWELL HOUSING AUTHORITY ELECTRICAL REDISTRIBUTION PHASE 2

350 Moody Street
Lowell, Massachusetts 01854

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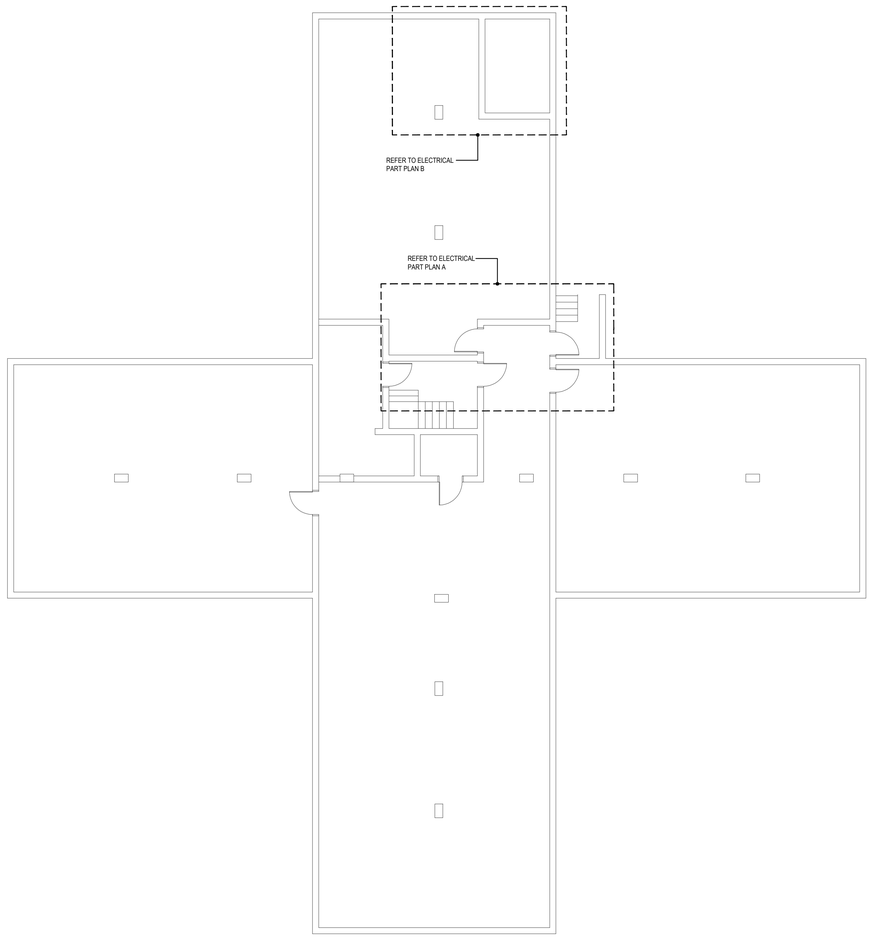
Project No.:	21002.00
Drawn By:	JSG
Checked By:	MG
Scale:	As Noted

Title:

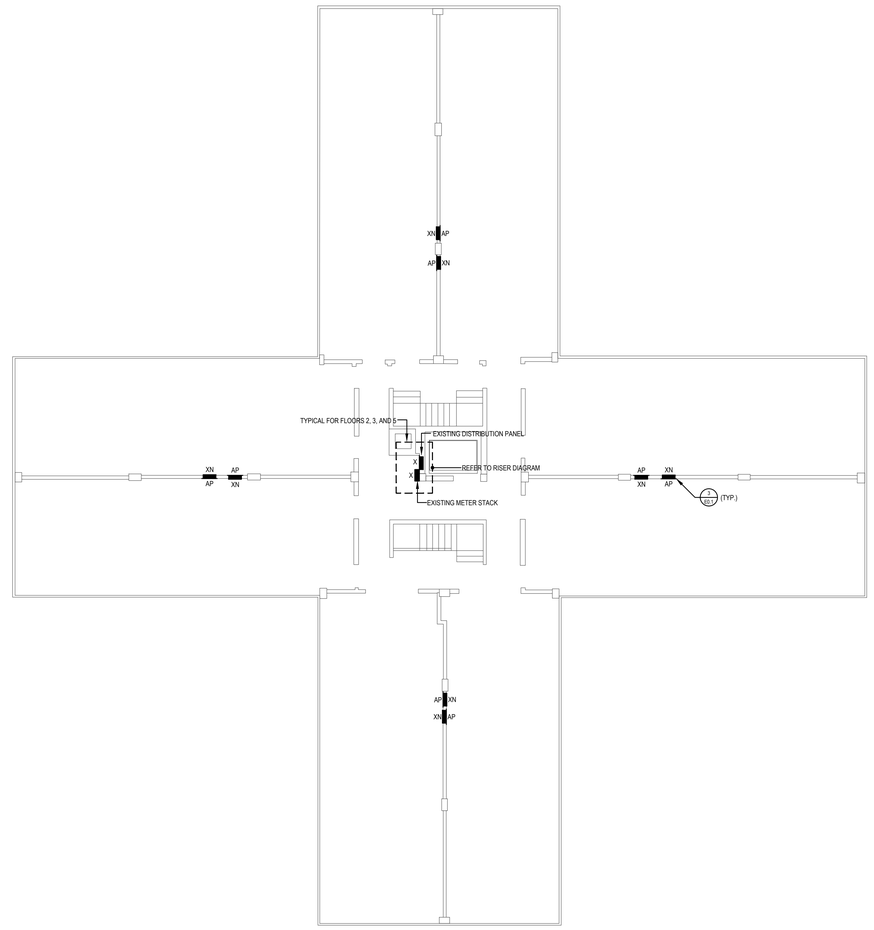
POWER RISERS
227 GORHAM ST
(BUILDING 9)

Drawing No.:

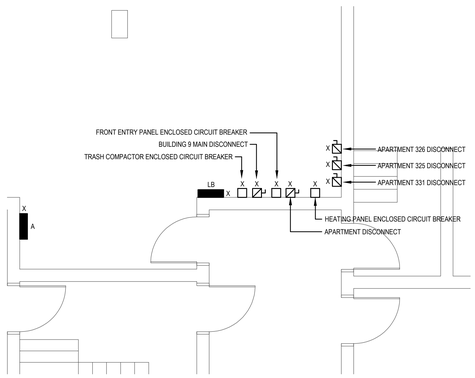
E6.0



1 BASEMENT DEMOLITION PLAN
SCALE: 1/8"= 1'-0"



2 DEMOLITION Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"



3 ELECTRICAL PART PLAN A
SCALE: 1/4"= 1'-0"

4 ELECTRICAL PART PLAN B
SCALE: 1/4"= 1'-0"

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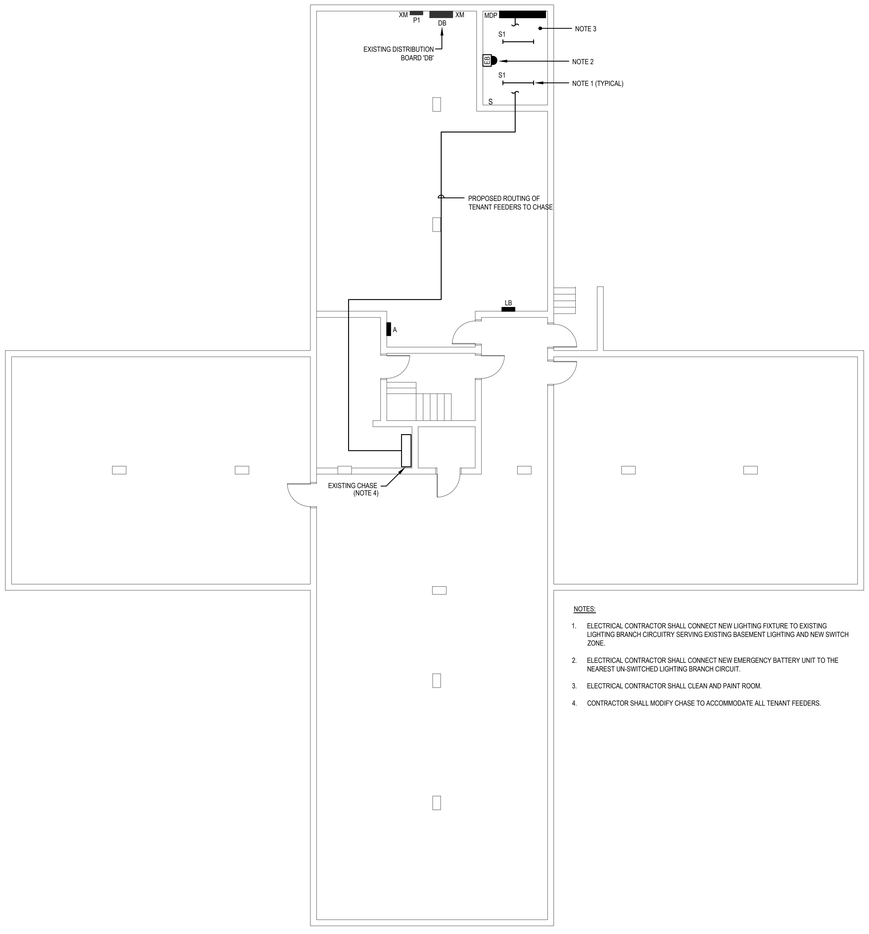
Scale:	As Noted

Title:
DEMOLITION PLANS
227 GORHAM ST (BUILDING 9)

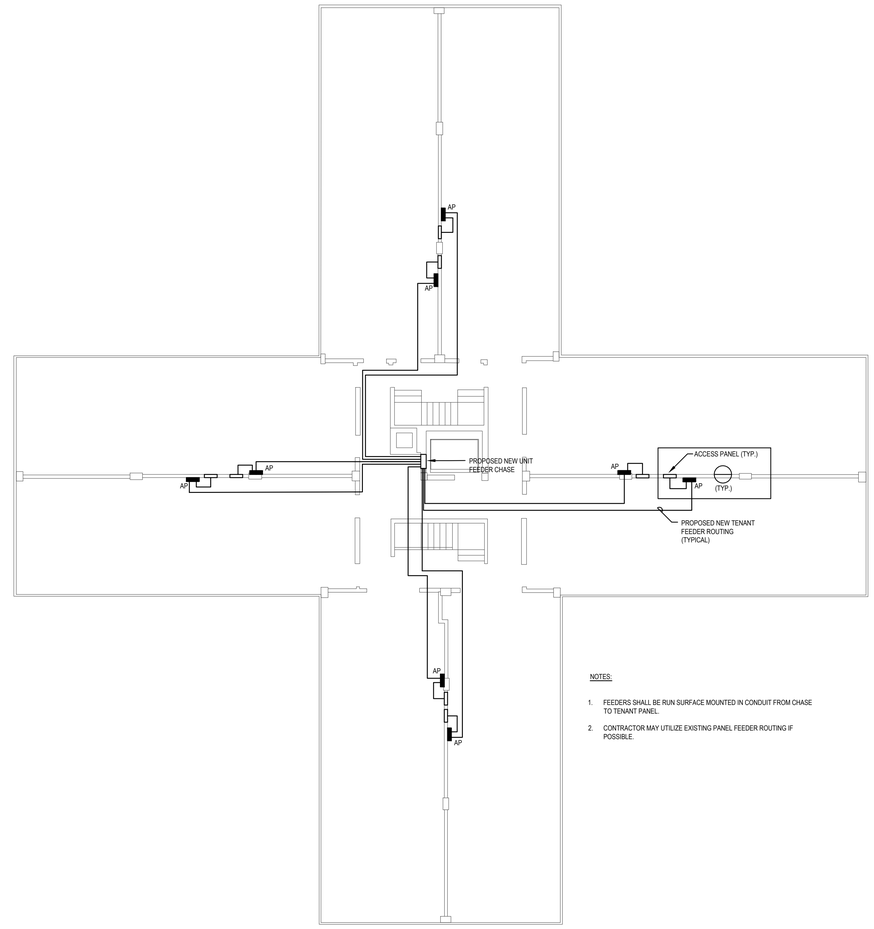
Drawing No.:
E6.1



NOTES:

1. ELECTRICAL CONTRACTOR SHALL CONNECT NEW LIGHTING FIXTURE TO EXISTING LIGHTING BRANCH CIRCUITRY SERVING EXISTING BASEMENT LIGHTING AND NEW SWITCH ZONE.
2. ELECTRICAL CONTRACTOR SHALL CONNECT NEW EMERGENCY BATTERY UNIT TO THE NEAREST UN-SWITCHED LIGHTING BRANCH CIRCUIT.
3. ELECTRICAL CONTRACTOR SHALL CLEAN AND PAINT ROOM.
4. CONTRACTOR SHALL MODIFY CHASE TO ACCOMMODATE ALL TENANT FEEDERS.

1 BASEMENT NEW WORK PLAN
SCALE: 1/8"= 1'-0"



NOTES:

1. FEEDERS SHALL BE RUN SURFACE MOUNTED IN CONDUIT FROM CHASE TO TENANT PANEL.
2. CONTRACTOR MAY UTILIZE EXISTING PANEL FEEDER ROUTING IF POSSIBLE.

2 NEW WORK Floor Plan (Floors 1-6)
SCALE: 1/8"= 1'-0"

SWITCHBOARD 'MDP', 600 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	APARTMENT UNIT PANEL - AP1	0.00	100	60	2	
2	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
3	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
4	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
5	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
6	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
7	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
8	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
9	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
10	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
11	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
12	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
13	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
14	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
15	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
16	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
17	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
18	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
19	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
20	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
21	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
22	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
23	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
24	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
25	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
26	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
27	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
28	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
29	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
30	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
31	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
32	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
33	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
34	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
35	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
36	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
37	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
38	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
39	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
40	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
41	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
42	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
43	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
44	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
45	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
46	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
47	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
48	APARTMENT UNIT PANEL - AP1	0.00	100	90	2	
49	DISTRIBUTION BOARD 'DP'	0.00	400	400	3	
50	SPACE AND HARDWARE	0.00	100		3	

PANEL 'LB', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.C.B. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	15	1	0.00			0.00			2	15	EXISTING LOAD
EXISTING LOAD	15	3		0.00			0.00		4	20	EXISTING LOAD
EXISTING LOAD	15	5			0.00			0.00	6	15	EXISTING LOAD
EXISTING LOAD		7	0.00			0.00			8	15	EXISTING LOAD
EXISTING LOAD	30	9		0.00			0.00		10	15	EXISTING LOAD
EXISTING LOAD		11			0.00			0.00	12	15	EXISTING LOAD
EXISTING LOAD		13	0.00			0.00			14	15	EXISTING LOAD
EXISTING LOAD	30	15		0.00			0.00		16	15	EXISTING LOAD
EXISTING LOAD		17			0.00			0.00	18	15	EXISTING LOAD
EXISTING LOAD		19	0.00			0.00			20	20	NEW LOAD
	50	21		0.00			0.00		22	20	NEW LOAD
		23			0.00			0.00	24	20	SPARE
SPARE	20	25	0.00			0.00			26	20	SPARE
SPARE	20	27		0.00			0.00		28	20	SPARE
SPARE	20	29			0.00			0.00	30	20	SPARE
SPACE AND HARDWARE	-	31	0.00			0.00			32	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	33		0.00			0.00		34	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	35			0.00			0.00	36	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	37	0.00			0.00			38	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	39		0.00			0.00		40	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	41			0.00			0.00	42	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

PANEL 'A', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.L.O. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	20	1	0.00			0.00			2	20	EXISTING LOAD
EXISTING LOAD	20	3		0.00			0.00		4	20	EXISTING LOAD
EXISTING LOAD	20	5			0.00			0.00	6	20	EXISTING LOAD
EXISTING LOAD	15	7	0.00			0.00			8	20	EXISTING LOAD
EXISTING LOAD	15	9		0.00			0.00		10	20	EXISTING LOAD
SPACE AND HARDWARE	-	11			0.00			0.00	12	20	EXISTING LOAD
SPACE AND HARDWARE	-	13	0.00			0.00			14	15	EXISTING LOAD
SPACE AND HARDWARE	-	15		0.00			0.00		16	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	17			0.00			0.00	18	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	19	0.00			0.00			20	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	21		0.00			0.00		22	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	23			0.00			0.00	24	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	25	0.00			0.00			26	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	27		0.00			0.00		28	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	29			0.00			0.00	30	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	31	0.00			0.00			32	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	33		0.00			0.00		34	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	35			0.00			0.00	36	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	37	0.00			0.00			38	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	39		0.00			0.00		40	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	41			0.00			0.00	42	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

EXISTING PANEL 'P1', 100 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 42,000 AMPS RMS SYM | MAIN: 100A M.L.O. | MOUNTING: SURFACE

LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	C	A	B	C	CIRC NO.	CB	LOAD DESCRIPTION
EXISTING LOAD	20	1	0.00			0.00			2		
EXISTING LOAD	20	3		0.00			0.00		4	20	EXISTING LOAD
EXISTING LOAD	20	5			0.00			0.00	6		
EXISTING LOAD	20	7	0.00			0.00			8		
EXISTING LOAD	20	9		0.00			0.00		10	20	EXISTING LOAD
EXISTING LOAD	20	11			0.00			0.00	12		
EXISTING LOAD	20	13	0.00			0.00			14	20	EXISTING LOAD
		15		0.00			0.00		16	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	17			0.00			0.00	18	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	19	0.00			0.00			20	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	21		0.00			0.00		22	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	23			0.00			0.00	24	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	25	0.00			0.00			26	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	27		0.00			0.00		28	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	29			0.00			0.00	30	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	31	0.00			0.00			32	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	33		0.00			0.00		34	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	35			0.00			0.00	36	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	37	0.00			0.00			38	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	39		0.00			0.00		40	-	SPACE AND HARDWARE
SPACE AND HARDWARE	-	41			0.00			0.00	42	-	SPACE AND HARDWARE

PHASE A 0.00 kVA | PHASE B 0.00 kVA | PHASE C 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

EXISTING BOARD 'DB', 400 AMP, 120/208 VOLT, 3-PHASE, 4-WIRE & GND

INTERRUPTING CAPACITY: 65,000 AMPS RMS SYM | MAIN: 400A M.C.B. | NEUTRAL: 400A | MOUNTING: SURFACE

CIRCUIT No.	DESCRIPTION	LOAD kVA	OVERCURRENT DEVICE FRAME	TRIP	POLE	REMARKS
1	FRONT ENTRY PANEL	0.00	100	100	3	
2	HOUSE PANEL 'LB'	0.00	100	100	3	
3	PANEL 'A'	0.00	100	40	3	NEW CIRCUIT BREAKER
4	COMPACTOR	0.00	100	30	3	NEW CIRCUIT BREAKER
5	SPARE	0.00	100	100	2	
6	SPARE	0.00	100	100	2	
7	PANEL 'P1'	0.00	250	200	3	
8	SPARE	0.00	250		3	
9	SPACE AND HARDWARE	0.00	250		3	
10	SPACE AND HARDWARE	0.00	250		3	

PANEL 'AP', 100 AMP, 120/208 VOLT, 1-PHASE, 3-WIRE & GND

INTERRUPTING CAPACITY: 10,000 AMPS RMS SYM | MAIN: 90A M.C.B. | MOUNTING: SURFACE

	LOAD DESCRIPTION	CB	CIRC NO.	kVA LOAD A	B	A	B	CIRC NO.	CB	LOAD DESCRIPTION	
1	EXISTING LOAD	15	1					2	15	EXISTING LOAD	1
1	EXISTING LOAD	20	3					4	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	5					6	-	SPACE AND HARDWARE	
	SPACE AND HARDWARE	-	7					8	-	SPACE AND HARDWARE	
	SURGE PROTECTIVE DEVICE	20	9					10	-	SPACE AND HARDWARE	
			11					12	-	SPACE AND HARDWARE	

PHASE A 0.00 kVA | PHASE B 0.00 kVA | TOTAL LOAD 0.00 kVA | NOTES:

1 ELECTRICAL CONTRACTOR SHALL PROVIDE ARC-FAULT TYPE CIRCUIT BREAKER

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NEW WORK PLANS
227 GORHAM ST (BUILDING 9)

Drawing No.:
E6.2