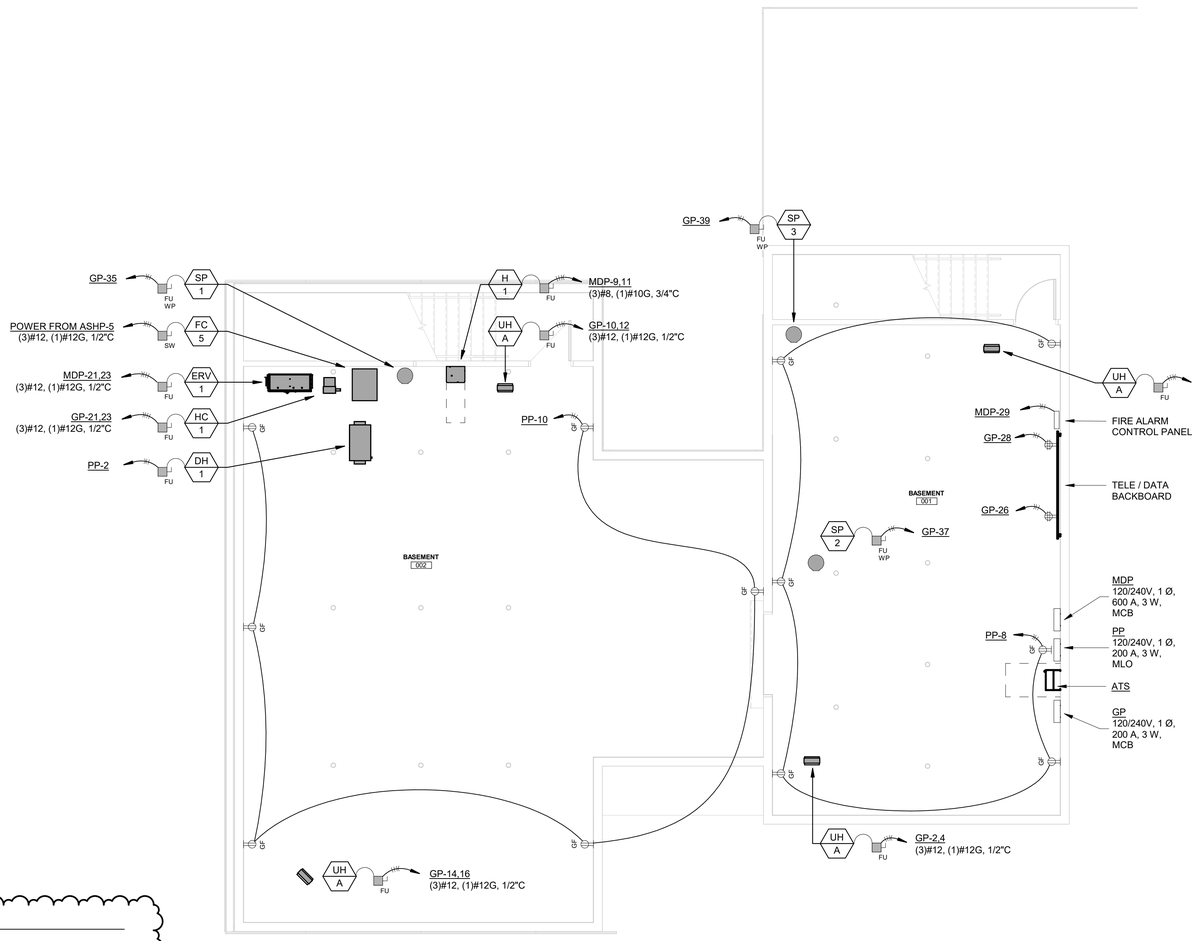


1 ELECTRICAL BASEMENT POWER & DATA PLAN
3/16" = 1'-0"

REVISION #4

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.

2.) CIRCUIT BREAKERS, WIRES, & CONDUITS FOR ASHP SYSTEMS HAVE BEEN MODIFIED TO ACCOMODATE ASHP REVISION.

3.) EXISTING GENERATOR IS NO LONGER ADEQUATELY SIZED FOR ALTERNATIVE ASHP EQUIPMENT. PROVIDE 48kW GENERATOR IN LIEU OF RE-USING EXISTING.

4.) GENERATOR PANEL GP HAS BEEN INCREASED TO 200 AMP TO ACCOMODATE ASHP REVISION.

5.) SECONDARY TRENCH SECTION DETAIL HAS BEEN ADDED TO SHOW TELEPHONE AND DATA CONDUITS TO BUILDING PER RFI #24.

4

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREEET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE
RICHARD A. [illegible]
15873
LICENSED PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

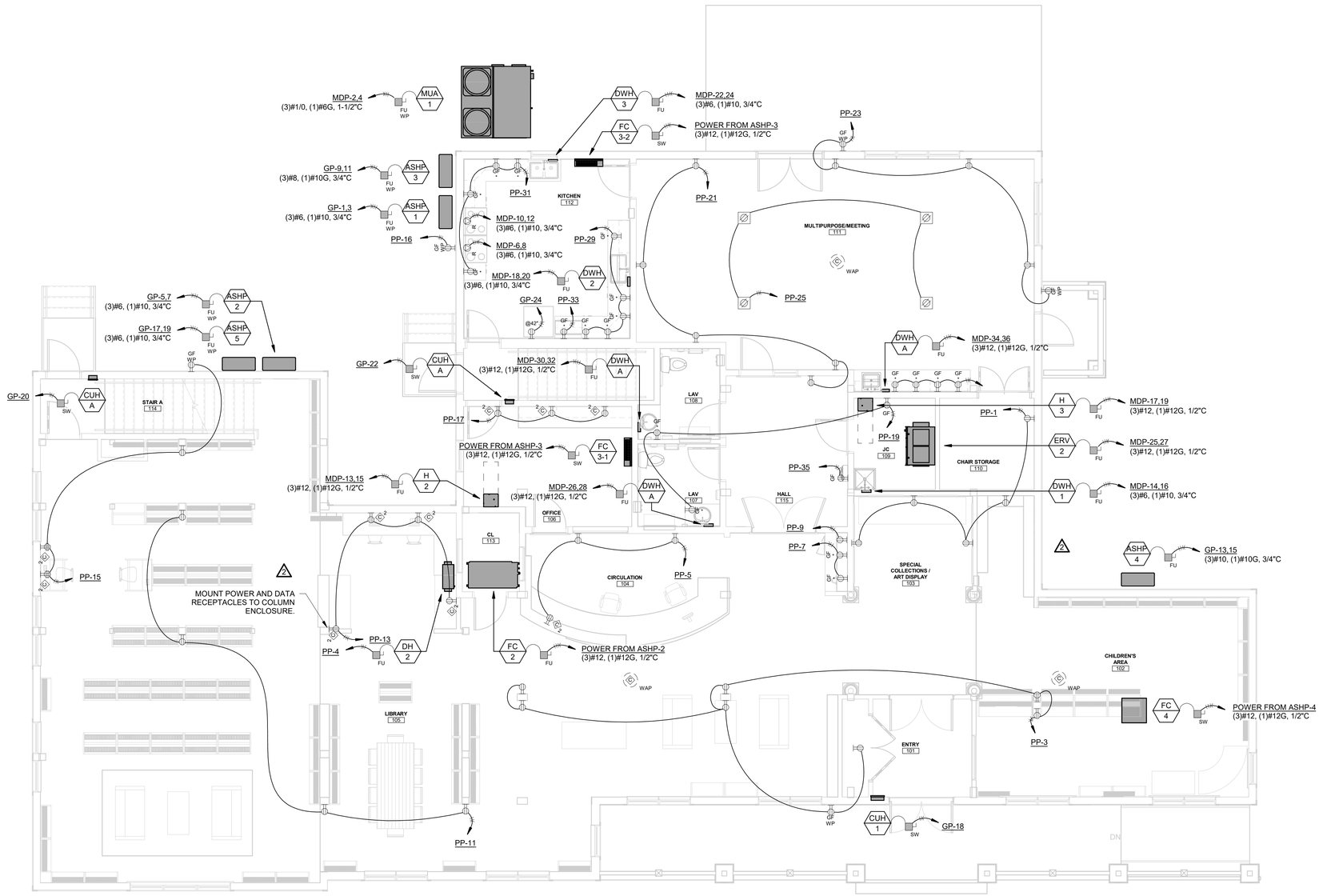
ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
ELECTRICAL BASEMENT POWER & DATA PLAN

PROJECT NO: 23121 | DATE: 6/24/24

SHEET NUMBER:
E-2

C:\Users\jparks\Documents\23121 MEP_parksN5Z3D.rvt
2/3/2026 5:11:57 PM



1 ELECTRICAL FIRST FLOOR POWER & DATA PLAN
3/16" = 1'-0"

REVISION #4

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.

2.) CIRCUIT BREAKERS, WIRES, & CONDUITS FOR ASHP SYSTEMS HAVE BEEN MODIFIED TO ACCOMODATE ASHP REVISION.

3.) EXISTING GENERATOR IS NO LONGER ADEQUATELY SIZED FOR ALTERNATIVE ASHP EQUIPMENT. PROVIDE 48kW GENERATOR IN LIEU OF RE-USING EXISTING.

4.) GENERATOR PANEL GP HAS BEEN INCREASED TO 200 AMP TO ACCOMODATE ASHP REVISION.

5.) SECONDARY TRENCH SECTION DETAIL HAS BEEN ADDED TO SHOW TELEPHONE AND DATA CONDUITS TO BUILDING PER RFI #24.

4

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE RICHARD A. WOOD 19870 LICENSED PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
2	06/18/25	REVISION #2
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

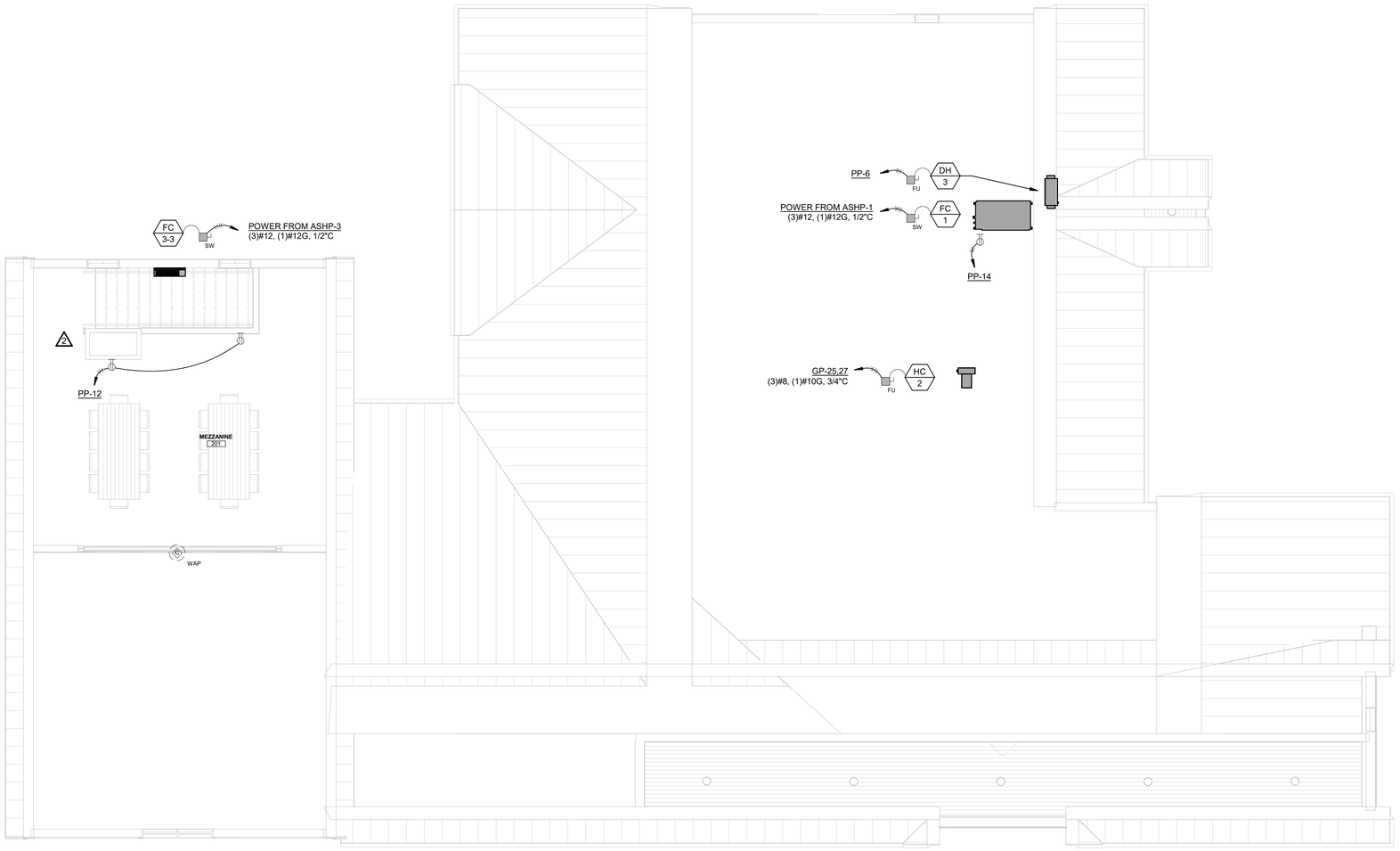
ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
ELECTRICAL FIRST FLOOR POWER & DATA PLAN

PROJECT NO: 23121 DATE: 6/24/24

SHEET NUMBER:
E-3

C:\Users\rparks\Documents\23121 MEP_rparksNEZ3D.rvt
2/3/2026 5:12:05 PM



1 ELECTRICAL SECOND FLOOR POWER & DATA PLAN
3/16" = 1'-0"

REVISION #4

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.

2.) CIRCUIT BREAKERS, WIRES, & CONDUITS FOR ASHP SYSTEMS HAVE BEEN MODIFIED TO ACCOMODATE ASHP REVISION.

3.) EXISTING GENERATOR IS NO LONGER ADEQUATELY SIZED FOR ALTERNATIVE ASHP EQUIPMENT. PROVIDE 48kW GENERATOR IN LIEU OF RE-USING EXISTING.

4.) GENERATOR PANEL GP HAS BEEN INCREASED TO 200 AMP TO ACCOMODATE ASHP REVISION.

5.) SECONDARY TRENCH SECTION DETAIL HAS BEEN ADDED TO SHOW TELEPHONE AND DATA CONDUITS TO BUILDING PER RFI #24.

4

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE
RICHARD W. BANWELL
13873
LICENSED
PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
2	06/18/25	REVISION #2
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

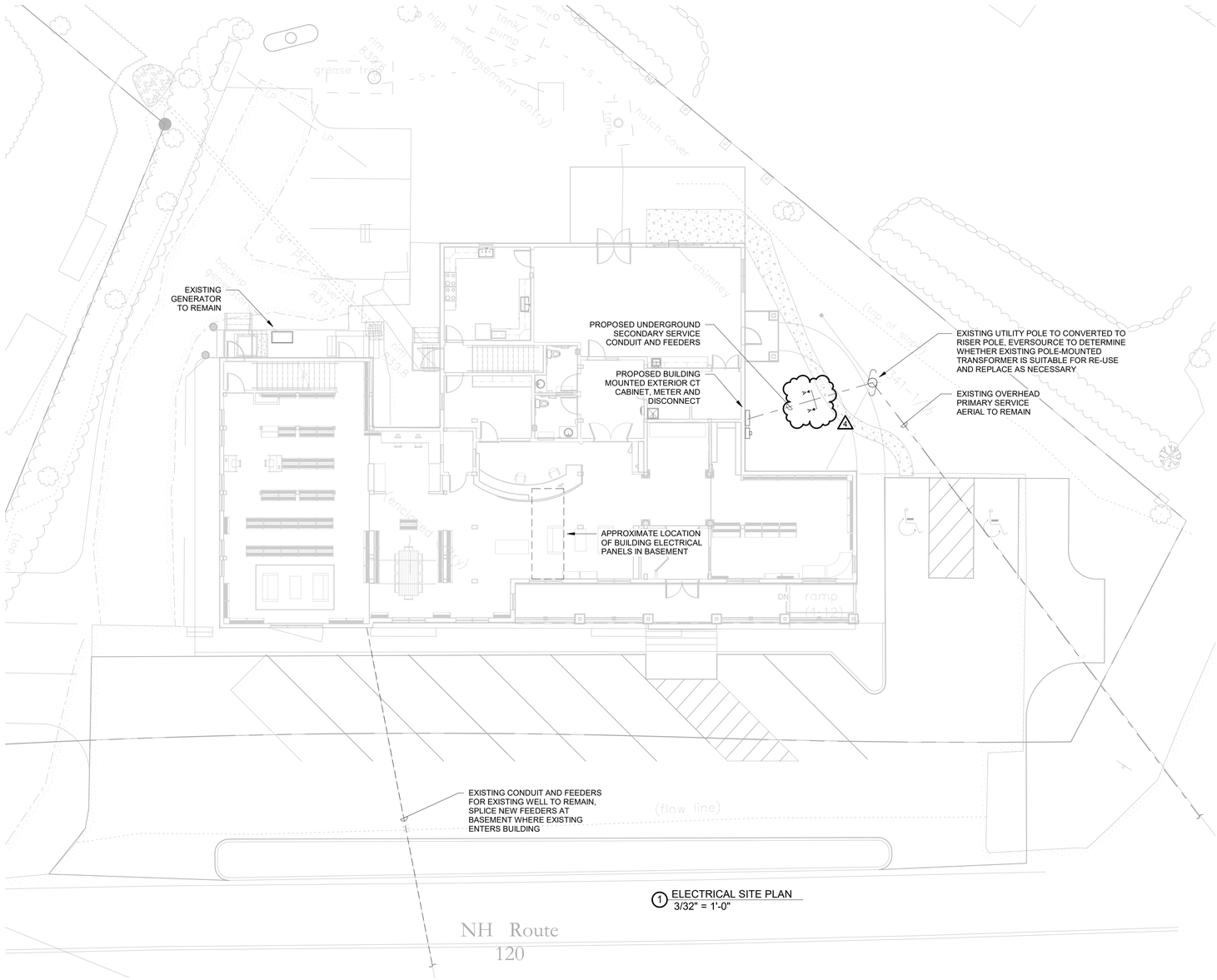
ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
ELECTRICAL SECOND FLOOR POWER & DATA PLAN

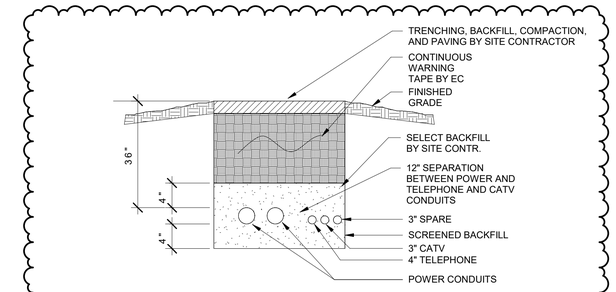
PROJECT NO: 23121 DATE: 6/24/24

SHEET NUMBER:
E-4

2/3/2026 5:12:06 PM C:\Users\rparks\Documents\23121 MEP_rparksNGZ3D.rvt



1 ELECTRICAL SITE PLAN
3/32" = 1'-0"



SECTION A-A
SECONDARY CONDUIT TRENCH DETAIL
NOT TO SCALE

REFER TO POWER RISER DIAGRAM FOR POWER CONDUIT SIZE AND QUANTITIES

REVISION #4

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.

2.) CIRCUIT BREAKERS, WIRES, & CONDUITS FOR ASHP SYSTEMS HAVE BEEN MODIFIED TO ACCOMODATE ASHP REVISION.

3.) EXISTING GENERATOR IS NO LONGER ADEQUATELY SIZED FOR ALTERNATIVE ASHP EQUIPMENT. PROVIDE 48kW GENERATOR IN LIEU OF RE-USING EXISTING.

4.) GENERATOR PANEL GP HAS BEEN INCREASED TO 200 AMP TO ACCOMODATE ASHP REVISION.

5.) SECONDARY TRENCH SECTION DETAIL HAS BEEN ADDED TO SHOW TELEPHONE AND DATA CONDUITS TO BUILDING PER RFI #24.

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE · RICHARD A. BANWELL · 10873 · LICENSED PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
ELECTRICAL SITE PLAN

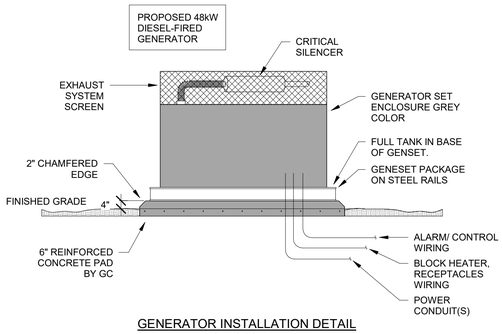
PROJECT NO: 23121 DATE: 6/24/24

SHEET NUMBER:
E-11

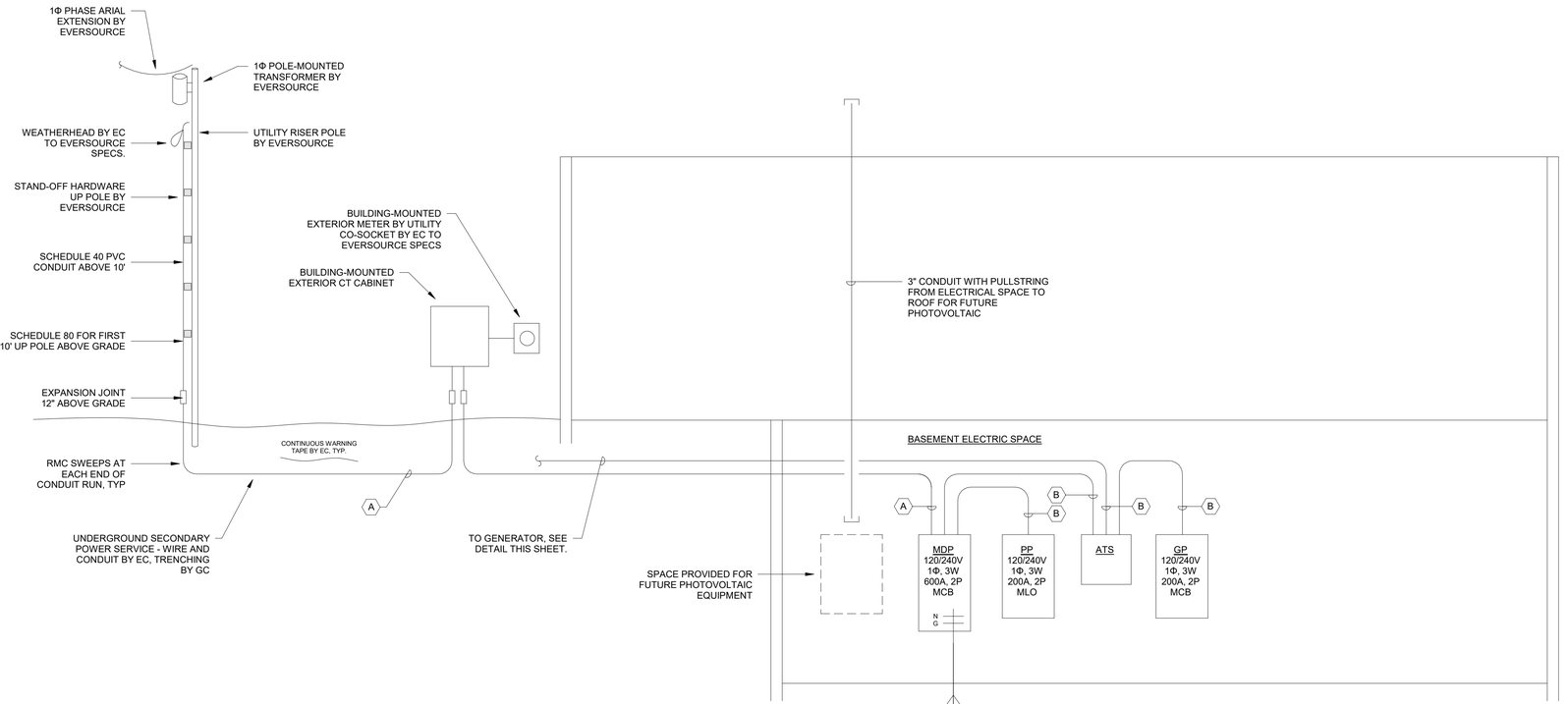
C:\Users\rparks\Documents\23121 MEP_rparksNSZ3D.rvt
2/3/2026 5:12:14 PM

FEEDER SCHEDULE

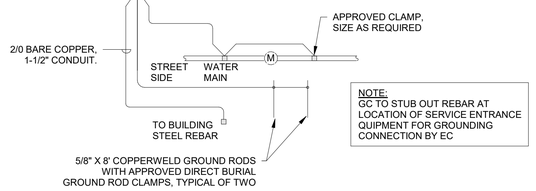
A	600A	COPPER:	(2) PARALLEL SETS OF (4) 350 MCM, EACH IN 3" C
		ALUMINUM:	(2) PARALLEL SETS OF (4) 500 MCM, EACH IN 4" C
B	200A	COPPER:	(4) 3/0, (1) #6 G, 2" C
		ALUMINUM:	(4) 250 MCM, (1) #4 G, 3" C
C	100A	COPPER:	(4) #1, (1) #8 G, 1-1/2" C



GENERATOR INSTALLATION DETAIL
NOT TO SCALE



ELECTRICAL POWER RISER DIAGRAM
NOT TO SCALE



NOTE:
GC TO STUB OUT REBAR AT LOCATION OF SERVICE ENTRANCE QUIPMENT FOR GROUNDING CONNECTION BY EC

REVISION #4

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.
2.) CIRCUIT BREAKERS, WIRES, & CONDUITS FOR ASHP SYSTEMS HAVE BEEN MODIFIED TO ACCOMODATE ASHP REVISION.
3.) EXISTING GENERATOR IS NO LONGER ADEQUATELY SIZED FOR ALTERNATIVE ASHP EQUIPMENT. PROVIDE 48kW GENERATOR IN LIEU OF RE-USING EXISTING.
4.) GENERATOR PANEL GP HAS BEEN INCREASED TO 200 AMP TO ACCOMODATE ASHP REVISION.
5.) SECONDARY TRENCH SECTION DETAIL HAS BEEN ADDED TO SHOW TELEPHONE AND DATA CONDUITS TO BUILDING PER RFI #24.

⚠5

PANEL: MDP VOLTAGE: 120/240V PHASE: 1 MAIN: 600 A MLO: ☐ MCB: X
TYPE: PANELBOARD: X LOADCENTER: ☐ PLUG IN: ☐ BOLT ON: X FAULT RATING:
LOCATION: BASEMENT 001 MOUNTING: Surface

DIRECTORY	TRIP	CKT	A	B	CKT	TRIP	DIRECTORY
PP	200 A/2	1	12975	10100	2	125 A/2	MUA-1
--	--	3	13459	10100	4	--	--
GP	200 A/2	5	33387	4000	6	50 A/2	(ST) 112 KITCHEN RANGE
--	--	7	31023	4000	8	--	--
HUMIDIFIER H-1	40 A/2	9	3750	4000	10	50 A/2	(ST) 112 KITCHEN RANGE
--	--	11	3750	4000	12	--	--
HUMIDIFIER H-2	20 A/2	13	1850	4750	14	50 A/2	109 JAN. CL. DWH-1
--	--	15	1850	4750	16	--	--
HUMIDIFIER H-3	20 A/2	17	1850	4750	18	50 A/2	112 KITCH. DWH-2
--	--	19	1850	4750	20	--	--
ERV-1	20 A/2	21	320	4750	22	50 A/2	112 KITCHEN DWH-3
--	--	23	320	4750	24	--	--
ERV-2	20 A/2	25	750	1750	26	20 A/2	107 LAV. DWH-A
--	--	27	750	1750	28	--	--
(BL) FIRE ALARM CONTROL PANEL	20 A/1	29	500	1750	30	20 A/2	108 LAV. DWH-A
SPARE	20 A/1	31	0	1750	32	--	--
SPARE	20 A/1	33	0	1750	34	20 A/2	111 MEETING DWH-A
SPARE	20 A/1	35	0	1750	36	--	--
SPARE	20 A/1	37	0	0	38	20 A/1	SPARE
SPARE	20 A/1	39	0	0	40	20 A/1	SPARE
SPARE	20 A/1	41	0	0	42	20 A/1	SPARE

CONNECTED LOAD		78645 VA	76178 VA
DEMAND LOAD	70%	55051 VA	53325 VA
TOTAL DEMAND LOAD		100466 VA	

NOTES:
(ST) SHUNT TRIP BREAKER
(BL) BREAKER LOCK KIT
(GF) GROUND FAULT CIRCUIT INTERUPT BREAKER

PANEL: PP VOLTAGE: 120/240V PHASE: 1 MAIN: 200 A MLO: X MCB: ☐
TYPE: PANELBOARD: X LOADCENTER: ☐ PLUG IN: ☐ BOLT ON: X FAULT RATING:
LOCATION: BASEMENT 001 MOUNTING: Surface

DIRECTORY	TRIP	CKT	A	B	CKT	TRIP	DIRECTORY
103 ART RECEPTACLES	20 A/1	1	900	500	2	20 A/1	DEHUMIDIFIER DH-1
101 ENTRY & 102 CHILD RECEPTACLES	20 A/1	3	1440	500	4	20 A/1	DEHUMIDIFIER DH-2
104 CIRCULATION RECEPTACLES	20 A/1	5	540	500	6	20 A/1	DEHUMIDIFIER DH-3
104 CIRCULATION COFFEE RECEPTACLES	20 A/1	7	360	1080	8	20 A/1	001 BSMT RECEPTACLES
104 CIRCULATION REFRIGERATOR	20 A/1	9	1000	1080	10	20 A/1	002 BSMT RECEPTACLES
105 STACKS RECEPTACLES	20 A/1	11	720	360	12	20 A/1	201 MEZZ. RECEPTACLES
105 COMPUTER RECEPTACLES	20 A/1	13	720	180	14	20 A/1	ATTIC RECEPTACLE
105 LIBRARY RECEPTACLES	20 A/1	15	1080	180	16	20 A/1	EXTERIOR RECEPTACLE
106 OFFICE RECEPTACLES	20 A/1	17	540	1500	18	20 A/1	GENERATOR BLOCK HEATER
107/108 LAV. & 109 JAN. RECEPTACLES	20 A/1	19	1360	180	20	20 A/1	GENERATOR RECEPTACLE
111 MEETING RECEPTACLES	20 A/1	21	900	756	22	20 A/1	BASEMENT LIGHTING
111 MEETING RECEPTACLES	20 A/1	23	900	1299	24	20 A/1	STACKS LIGHTING
111 MEETING FLOOR RECEPTACLES	20 A/1	25	720	1323	26	20 A/1	KITCH / MP RM LIGHTING
111 MEETING CTR RECEPTACLES	20 A/1	27	720	1080	28	20 A/1	CHANDELIER LIGHTING "a"
112 KITCHEN CTR RECEPTACLES	20 A/1	29	900	0	30	20 A/1	MEZZ. / CLOUD RECESSED CAN LIGHTING "b"
112 KITCHEN CTR RECEPTACLES	20 A/1	31	720	200	32	20 A/1	CEILING FANS "c"
112 MICROWAVE	20 A/1	33	180	336	34	20 A/1	ATTIC LIGHTING
115 HALL DRINKING FOUNTAIN	20 A/1	35	1000	280	36	20 A/1	EXT. BLDG. MTD. LIGHTING
BLANK	/1	37	--	500	38	20 A/1	FUTURE SITE LIGHTING
BLANK	/1	39	--	0	40	20 A/1	SPARE
BLANK	/1	41	--	0	42	20 A/1	SPARE

CONNECTED LOAD		12975 VA	13459 VA
DEMAND LOAD	70%	9083 VA	9421 VA
TOTAL DEMAND LOAD		15848 VA	

(ST) SHUNT TRIP BREAKER
(BL) BREAKER LOCK KIT
(GF) GROUND FAULT CIRCUIT INTERUPT BREAKER

PANEL: GP VOLTAGE: 120/240V PHASE: 1 MAIN: 200 A MLO: ☐ MCB: X
TYPE: PANELBOARD: X LOADCENTER: ☐ PLUG IN: ☐ BOLT ON: X FAULT RATING:
LOCATION: BASEMENT 001 MOUNTING: Surface

DIRECTORY	TRIP	CKT	A	B	CKT	TRIP	DIRECTORY
ASHP-1	50 A/2	1	3713	1500	2	20 A/2	001 BSMT UH-A
--	--	3		3713	1500	4	--	--
ASHP-2	50 A/2	5	4154	1500	6	20 A/2	001 BSMT UH-A
--	--	7		4154	1500	8	--	--
ASHP-3	40 A/2	9	3089	1500	10	20 A/2	002 BSMT UH-A
--	--	11		3089	1500	12	--	--
ASHP-4	30 A/2	13	2756	1500	14	20 A/2	002 BSMT UH-A
--	--	15		2756	1500	16	--	--
ASHP-5	50 A/2	17	4497	1500	18	20 A/1	101 ENTRY CUH-1
--	--	19		4497	500	20	20 A/1	114 STAIR CUH-A
HEATING COIL HC-1	20 A/2	21	1000	500	22	20 A/1	STAIR CUH-A
--	--	23		1000	1000	24	20 A/1	(GF) 112 KITCHEN REFRIGERATOR
HEATING COIL HC-2	40 A/2	25	4000	360	26	20 A/1	TELE / DATA BACKBOARD RECEPTACLE
--	--	27		4000	360	28	20 A/1	TELE / DATA BACKBOARD RECEPTACLE
EX. WELL PUMP	20 A/2	29	500	0	30	20 A/1	SPARE
--	--	31		500	0	32	20 A/1	SPARE
EX. SEPTIC TANK PUMP	30 A/1	33	2500	0	34	20 A/1	SPARE
SUMP PUMP SP-1	20 A/1	35		500	0	36	20 A/1	SPARE
SUMP PUMP SP-2	20 A/1	37	500	0	38	20 A/1	SPARE
SUMP PUMP SP-3	20 A/1	39		500	0	40	20 A/1	SPARE
SPARE	20 A/1	41	0	0	42	20 A/1	SPARE

CONNECTED LOAD		33387 VA	31023 VA
DEMAND LOAD	70%	23371 VA	21716 VA
TOTAL DEMAND LOAD		45083 VA	

(ST) SHUNT TRIP BREAKER
(BL) BREAKER LOCK KIT
(GF) GROUND FAULT CIRCUIT INTERUPT BREAKER

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.



REVISION	DATE	COMMENTS
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

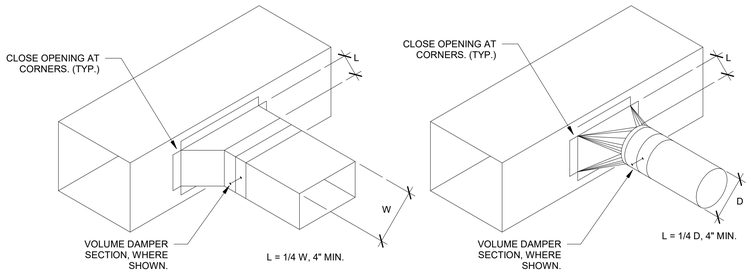
ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
ELECTRICAL POWER RISER & PANEL SCHEDULES

PROJECT NO: 23121 DATE: 6/24/24

SHEET NUMBER:
E-12

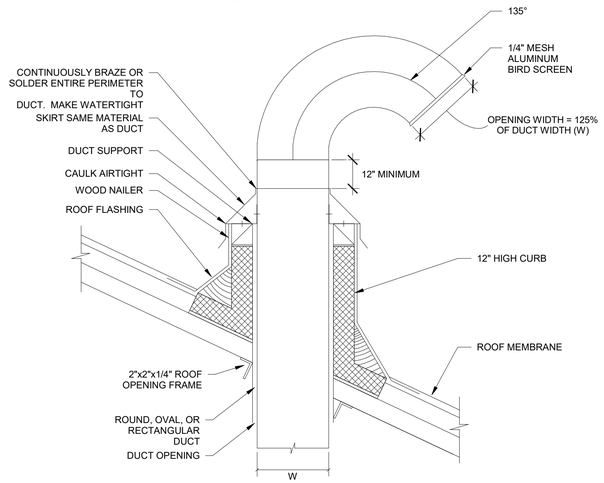
C:\Users\rparks\Documents\23121 MEP_rparksNSZ3D.rvt
2/3/2026 5:12:16 PM



SQUARE/RECTANGULAR ROUND/OVAL

TYPICAL BRANCH CONNECTION DETAIL

NO SCALE



GOOSENECK VENT DETAIL

NO SCALE

NOTES:

1. G.C. TO PROVIDE ROOF OPENING, FRAMING AND FLASHING. LOCATION, SETTINGS AND SECURING OF CURB BY HVAC.
2. PROVIDE SHIMS WHERE REQUIRED TO LEVEL SUPPORT.

△1 REVISION #4:

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.

HUMIDIFIER SCHEDULE - ELECTRIC - 25% RH

UNIT NO.	LOCATION	SERVICE	CFM	MAX CAPACITY BTU/HR	WATTS	VOLTS	PHASE	DESIGN EQUIPMENT
H-1	AS SHOWN	HUMIDITY	--	20.0	7500	240	1 Φ	CONDAIR EL 020
H-2	AS SHOWN	HUMIDITY	--	10.0	3700	240	1 Φ	CONDAIR EL 010
H-3	AS SHOWN	HUMIDITY	--	10.0	3700	240	1 Φ	CONDAIR EL 010

*PROVIDE WITH BLOWER PACK.

DE-HUMIDIFIER SCHEDULE - ELECTRIC - 60% RH

UNIT NO.	LOCATION	SERVICE	CFM	MAX CAPACITY BTU/HR	WATTS	VOLTS	PHASE	DESIGN EQUIPMENT
DH-1	AS SHOWN	DE-HUMID.	--	5.2	--	120	1 Φ	APRILAIRE E130
DH-2	AS SHOWN	DE-HUMID.	--	3.0	--	120	1 Φ	APRILAIRE E070
DH-3	AS SHOWN	DE-HUMID.	--	3.0	--	120	1 Φ	APRILAIRE E070

△4 BRANCH BOX REMOVED FROM PROJECT

HEATING COIL SCHEDULE - ELECTRIC

UNIT NO.	LOCATION	SERVICE	CFM	KW	MBH	PHASE	VOLTS	LENGTH IN	HEIGHT IN	DEPTH IN	DESIGN EQUIPMENT
HC-1	AS SHOWN	ERV-1	330	2.0	6.4	1 Φ	240	11.0	10.0	6.0	RENEWAIRE EK-1008002FCC
HC-2	AS SHOWN	ERV-2	970	8.0	27.3	1 Φ	240	15.0	14.0	6.0	RENEWAIRE EK-1412008FCC

UNIT HEATER SCHEDULE - ELECTRIC

UNIT NO.	LOCATION	SERVICE	TYPE	CFM	MBH	KW	VOLTS	PHASE	E.A.T. °F	L.A.T. °F	FAN MOTOR RPM	FAN MOTOR HP	FAN MOTOR VOLTS	FAN MOTOR PHASE	DESIGN EQUIPMENT
CUH-A	AS SHOWN	HEAT	WALL	65	1.7	0.5	120	1 Φ	50.0	74.3	--	--	120	1 Φ	QMARK CWH1101DSF
CUH-1	AS SHOWN	HEAT	WALL	100	5.1	1.5	120	1 Φ	60.0	104.4	--	--	120	1 Φ	QMARK AWH3150F
UH-A	AS SHOWN	HEAT	HORZ.	350	10.2	3.0	240	1 Φ	50.0	77.1	--	--	240	1 Φ	QMARK MUH0321-PRO-SSP

AIR TO AIR HEAT RECOVERY UNIT SCHEDULE

90° F AMBIENT AIR

UNIT NO.	LOCATION	SERVICE	SUMMER VENT. E.A.T.	SUMMER VENT. L.A.T.	SUMMER EXHAUST E.A.T.	SUMMER EXHAUST L.A.T.	WINTER VENT. E.A.T.	WINTER VENT. L.A.T.	WINTER EXHAUST E.A.T.	WINTER EXHAUST L.A.T.	SUPPLY / EXHAUST FAN S.P. IN W.G. EXT	S.P. IN W.G. TOTAL	CFM	RPM	FAN HP	VOLTS	PHASE	STARTER	DESIGN EQUIPMENT
ERV-1	AS SHOWN	VENTILATION	90.0 / 72.0	78.6 / 66.6	75.0 / 62.5	-- / --	-12.0	50.1	70.0	--	0.5 / 0.5	-- / --	330 / 330	2089	330W / 330W	230	1 Φ	MAG. / MAG.	RENEWAIRE HE07-JINH-S15AA
ERV-2	AS SHOWN	VENTILATION	90.0 / 72.0	79.2 / 67.1	75.0 / 62.5	-- / --	-12.0	47.0	70.0	--	0.8 / 0.8	-- / --	970 / 970	1661	480W / 480W	240	1 Φ	MAG. / MAG.	RENEWAIRE HE-1.5JINH-S15EE

△2

DUCTLESS AIR CONDITIONING UNIT SCHEDULE - HEAT PUMP

90° F / -12° F AMBIENT AIR

CONDENSER UNIT NO.	LOCATION	SUBMITTAL SYSTEM	CAPACITY TONS	CONDENSER NO. OF FANS	CONDENSER FAN MOTOR	CONDENSER REFRIG. TYPE	COMPRESSOR COOLING MBH	COMPRESSOR HEATING MBH	COMPRESSOR VOLTS	COMPRESSOR PHASE	COMPRESSOR MCA	EVAPORATORS @ AHRI UNIT #	TYPE	COOLING (MBH)	HEATING (MBH)	CFM	OA CFM	FAN POWER	VOLTS	PHASE	MCA	DESIGN EQUIPMENT	EVAPORATOR MODEL	CONDENSER MODEL
ASHP-1	AS SHOWN	SYSTEM 1	4.0	2	--	R32	38.0	45.1	240	1 Φ	40.9	FC-1	DUCT	38.0	45.1	955	535	--	240	1 Φ	1.9	HISENSE	AVD-48H3DH	AVW-48F3DAH2
ASHP-2	AS SHOWN	SYSTEM 2	4.0	2	--	R32	38.0	45.1	240	1 Φ	40.9	FC-2	DUCT	38.0	45.1	955	295	--	240	1 Φ	1.9	HISENSE	AVD-48H3DH	AVW-48F3DAH2
ASHP-3	AS SHOWN	SYSTEM 3	3.0	2	--	R32	28.5	35.1	240	1 Φ	30.3	FC 3-1	WALL	6.6	8.1	288	-	--	240	1 Φ	0.5	HISENSE	AVS-07H3DTD2	AVW-36F3DAH2
												FC 3-2	WALL	8.4	10.7	288	-	--	240	1 Φ	0.5	HISENSE	AVS-09H3DTD2	
												FC 3-3	WALL	13.6	16.3	318	-	--	240	1 Φ	0.5	HISENSE	AVS-15H3DTD2	
ASHP-4	AS SHOWN	SYSTEM 4	2.0	2	--	R32	12.3	14.3	240	1 Φ	20.9	FC-4	CEILING	12.3	14.3	230	-	--	240	1 Φ	0.5	HISENSE	AVC-12H3DBA2	AVW-24H3DH2H1
ASHP-5	AS SHOWN	SYSTEM 5	4.0	2	--	R32	38.0	45.1	240	1 Φ	40.9	FC-5	VERT.	37.6	44.9	955	330	--	240	1 Φ	5.94	HISENSE	AVU-42H3DKHA	AVW-48F3DAH2

*PROVIDE EVAPORATOR WITH INTEGRAL CONDENSATE PUMP, PIPE CONDENSATE TO NEAREST INDIRECT WASTE CONNECTION.
**PROVIDE LOW AMBIEN WIND BAFFLES, ELEVATED SUPPORT FRAME AND PAN HEATER

MAKE-UP AIR UNIT SCHEDULE - DX/GAS

UNIT NO.	LOCATION	SERVICE	MAX O.A. CFM	MIN O.A. CFM	S.P. IN W.G. EXT	S.P. IN W.G. TOTAL	FAN RPM	FAN NO. AND MIN. DIA.	MOTOR RPM	MOTOR HP	MOTOR VOLTS	MOTOR PHASE	MOTOR STARTER	MOTOR MCA	COOLING COIL E.A.T. DB °F	COOLING COIL E.A.T. WB °F	COOLING COIL L.A.T. DB °F	COOLING COIL L.A.T. WB °F	COOLING COIL TOTAL TONS	COOLING COIL FACE VEL. FPM	COOLING COIL ROWS & CIRCUITS	RE-HEAT PERFORMANCE EAT °F	RE-HEAT PERFORMANCE LAT °F	RE-HEAT PERFORMANCE CAPACITY DESIRED MBH	RE-HEAT PERFORMANCE CAPACITY MAX MBH	HEATING COIL EAT °F	HEATING COIL LAT °F	HEATING COIL TYPE	HEATING COIL INPUT MBH	HEATING COIL INLET PRES W.C.	DESIGN EQUIPMENT
MUA-1	AS SHOWN	KITCHEN	2100	1650	1.0	--	1411	--	ECM	2	240	1 Φ	VFD	105.2	90	72	50.4	50.4	12.5	--	--	50.4	70.0	45.2	101.0	-12	80	S.S.	295.3	10"	CAPTIVEAIRE CASRTU3-I.300-15-12.5T

HVAC SYMBOL LIST

ALL SYMBOLS ARE NOT NECESSARILY USED

LPS	LOW PRESSURE STEAM
LPC	LOW PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MPC	MEDIUM PRESSURE CONDENSATE
HPS	HIGH PRESSURE STEAM
HPC	HIGH PRESSURE CONDENSATE
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN
HPWS	HEAT PUMP WATER SUPPLY
HPWR	HEAT PUMP WATER RETURN
CWS	CHILLED WATER SUPPLY
CWR	CHILLED WATER RETURN
GS	GLYCOL SUPPLY
GR	GLYCOL RETURN
CS	CONDENSER WATER SUPPLY
CR	CONDENSER WATER RETURN
PC	PUMPED CONDENSATE
BF	BOILER FEED
BBD	BOILER BLOW DOWN
D	DRAIN
ATV	ATMOSPHERIC VENT
VAC	VACUUM
RD	REFRIGERANT DISCHARGE
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
RHG	REFRIGERANT HOT GAS
A	COMPRESSED AIR
G	GAS
FOS	FUEL OIL SUPPLY
FOR	FUEL OIL RETURN
FOV	FUEL OIL VENT
FOF	FUEL OIL FILL
FOG	FUEL OIL GAUGE
	DOMESTIC COLD WATER (CW)
	DIRECTION OF FLOW
	REDUCER
	CAP OR PLUG
	BOTTOM CONNECTION/TURN AWAY
	TOP CONNECTION/TURN TOWARDS
	UNION (OR FLANGE)
	VALVE (SHUT OFF)
	GLOBE VALVE
	CHECK VALVE
	CONTROL VALVE (2-WAY)
	PRESSURE RELIEF VALVE
	CONTROL VALVE (3-WAY)
	TRIPLE DUTY VALVE
	PRESSURE REDUCING VALVE
	BALANCING COCK
	FLOW BALANCER
	STRAINER
	THERMOSTATIC TRAP ASSEMBLY
	FLOAT & THERMOSTIC TRAP ASSEMBLY
	BUCKET TRAP ASSEMBLY
	THERMODYNAMIC TRAP
	THERMOMETER
	PRESSURE GAUGE
	AIR VENT
	TEMPERATURE SENSOR WELL
	BUTTERFLY VALVE
	PIPE PITCH UP/INCLINE RISE
	PIPE PITCH DOWN/INCLINE DROP
	FINNED TUBE RADIATION ELEMENT
W/W ENCL.	WALL TO WALL FIN TUBE ENCLOSURE
	TRANSITION-SQUARE TO ROUND
UP DN	SUPPLY DUCT SECTION
UP DN	RETURN OR EXHAUST DUCT SECTION
UP DN	ROUND DUCT SECTION
FD	FIRE DAMPER
SD	SMOKE DAMPER
FSD	COMBINATION FIRE AND SMOKE DAMPER
BD	BACKDRAFT DAMPER
	VOLUME DAMPER
MD	MANUAL DAMPER
MOD	MOTOR OPERATED DAMPER

CFM	CUBIC FEET/MINUTE	RA	RETURN AIR
FPM	FEET/MINUTE	EA	EXHAUST AIR
NTS	NOT TO SCALE	OA	OUTSIDE AIR
DSD	DUCT SMOKE DETECTOR	OED	OPEN ENDED DUCT
MBH	THOUSAND BTU/HOUR	AFF	ABOVE FINISH FLOOR
(e)	EXISTING	BFC	BELOW FINISH CEILING
SA	SUPPLY AIR	AFS	AIR FLOW STATION

P	PRESSURE SENSOR
T	THERMOSTAT
T_E	ELECTRIC THERMOSTAT
T_2	WITH MULTIPLE SET POINTS
T_G	WITH A GUARD
T_S	TEMPERATURE SENSOR
S_S	SLAB SENSOR
S	STATIC PRESSURE SENSOR
H	HUMIDISTAT
UCD	UNDERCUT DOOR (1" BY THE G.C.)
L Φ	LOUVERED DOOR, INDICATES SQ. FT. FREE AREA
	AIR FLOW
	SHEET METAL CAP ON EXISTING DUCT
AD ACCESS	ACCESS DOOR, MIN 1.0 SQ.FT.
	ACOUSTIC THERMAL LINING
	SOUND ATTENUATOR
	WORK TO BE REMOVED
	NEW TO EXISTING CONNECTION
	NEW TO FUTURE CONNECTION
	DIFFUSER W/ FLEX. DUCT CONNECTION (REG. SIMILAR)
	DIFFUSER W/ RIGID DUCT CONNECTION (REG. SIMILAR)
TYPE / CFM / SIZE	REGISTER, DIFFUSER, OR GRILLE DESIGNATION
X" BRANCH	DUCT SIZE SERVING REGISTER, DIFFUSER, OR GRILLE

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE RICHARD A. JOHNSON 15873 LICENSED PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
MECHANICAL SCHEDULES & DETAILS

PROJECT NO: 23121 DATE: 6/24/24

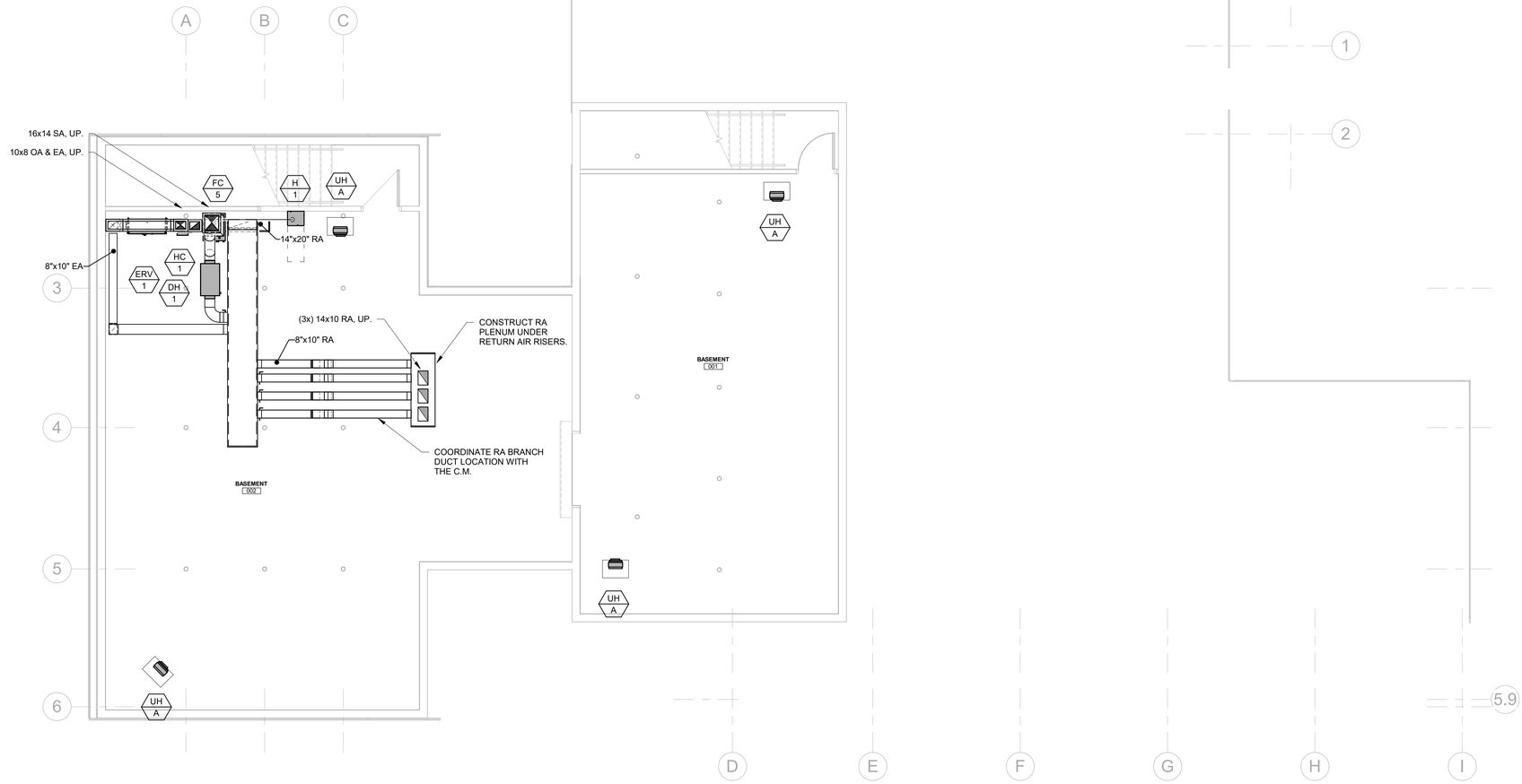
SHEET NUMBER:
M-1

C:\Users\jparks\Documents\23121 MEP_jparksN5Z3D.rvt
2/3/2026 5:12:17 PM

4

REVISION #4:

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.



1 MECHANICAL BASEMENT PLAN
3/16" = 1'-0"

banwell ARCHITECTS

THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE · RICHARD A. PARKS · 15873 · LICENSED PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
MECHANICAL BASEMENT PLAN

PROJECT NO: 23121 | DATE: 6/24/24

SHEET NUMBER:
M-2

2/3/2026 5:12:19 PM C:\Users\rparks\Documents\23121 MEP_rparksN523D.rvt

4

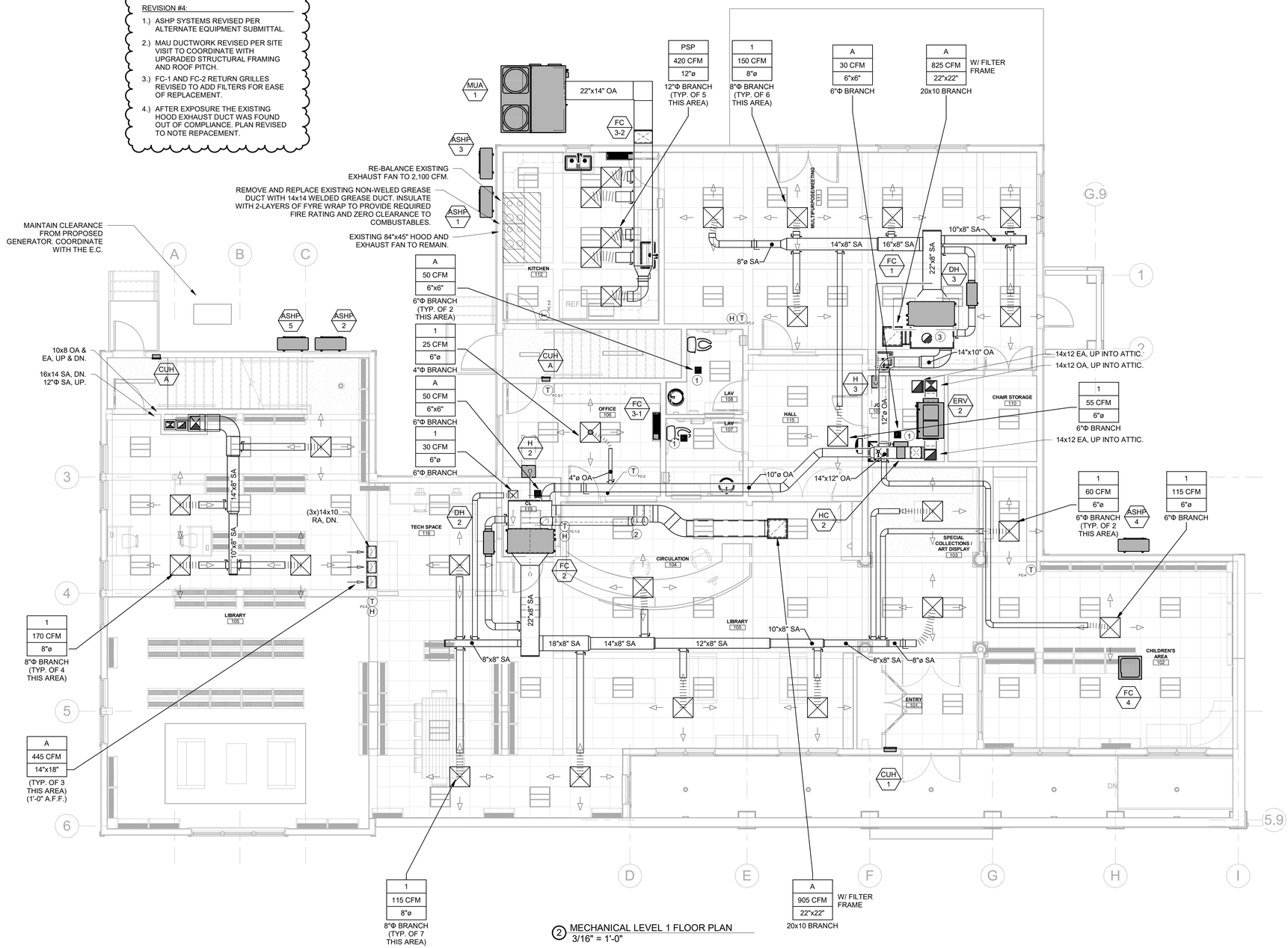
REVISION #4:

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.

2.) MAU DUCTWORK REVISED PER SITE VISIT TO COORDINATE WITH UPGRADED STRUCTURAL FRAMING AND ROOF PITCH.

3.) FC-1 AND FC-2 RETURN GRILLES REVISED TO ADD FILTERS FOR EASE OF REPLACEMENT.

4.) AFTER EXPOSURE THE EXISTING HOOD EXHAUST DUCT WAS FOUND OUT OF COMPLIANCE. PLAN REVISED TO NOTE REPACEMENT.



2 MECHANICAL LEVEL 1 FLOOR PLAN
3/16" = 1'-0"

DRAWING NOTES:

1. 6"Φ EA, UP INTO ATTIC.
2. 10"Φ EA, UP INTO ATTIC.
3. 12"Φ EA, UP INTO ATTIC.

banwell ARCHITECTS
THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE — RICHARD A. [illegible] — LICENSED PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
MECHANICAL LEVEL 1 FLOOR PLAN

PROJECT NO: 23121 | DATE: 6/24/24

SHEET NUMBER:
M-3

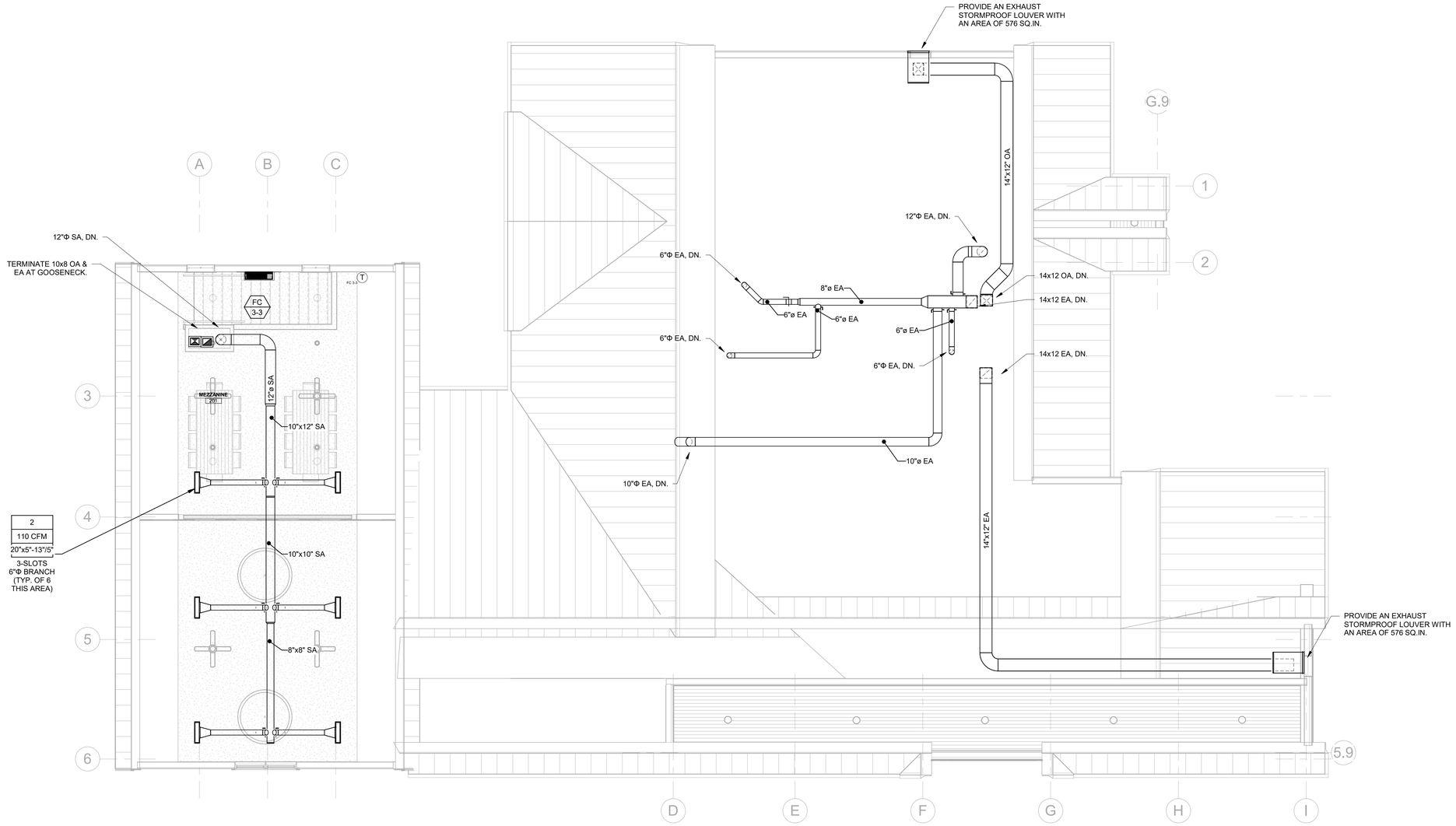
C:\Users\rparks\Documents\23121 MEP_rparksNSZ3D.rvt
2/3/2026 5:12:29 PM

4

REVISION #4:

1.) ASHP SYSTEMS REVISED PER ALTERNATE EQUIPMENT SUBMITTAL.

2.) FC-5 SUPPLY DIFFUSER LENGHTS REDUCED TO COORDINATE WITH EXISTING STRUCTURE.



2 MECHANICAL LEVEL 2 FLOOR PLAN
3/16" = 1'-0"

banwell ARCHITECTS

THE CARRIAGE HOUSE
6 SOUTH PARK STREET
LEBANON, NH 03766
T: 603 448 3778

COPYRIGHT © 2020 BANWELL ARCHITECTS ALL RIGHTS RESERVED.
NO REPRODUCTION WITHOUT PRIOR WRITTEN PERMISSION

CONSULTANTS / DESIGN TEAM:

OWNER:
CORNISH COMMUNITY INITIATIVE
226 NH-120
CORNISH FLAT, NH 03746

CONSTRUCTION MANAGER:
TRUMBULL-NELSON CONTRUCTION
19 PLAZA HEIGHTS ROAD
WEST LEBANON, NH 03784
T: (603) 643-3658

CIVIL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7031

STRUCTURAL:
ENGINEERING VENTURES, PC
85 MECHANIC STREET
LEBANON, NH 03766
T: (603) 727-7034

ARCHITECT:
BANWELL ARCHITECTS, NH
6 SOUTH PARK STREET
LEBANON, NH 03766
T: (603) 448-3778

MEP/FP:
WV ENGINEERING ASSOCIATES
11 KING COURT
KEENE, NH 03431
T: (603) 352-7007

VITAL INFORMATION REQUIRED FOR THE SUCCESSFUL COMPLETION OF THE WORK IS CONTAINED IN THE PROJECT MANUAL PREPARED FOR THIS PROJECT.

STATE OF NEW HAMPSHIRE
RICHARD A. WATSON
No. 13972
LICENSED
PROFESSIONAL ENGINEER

REVISION	DATE	COMMENTS
4	02/03/26	CONTRACTOR REVISIONS

KEY PLAN & NORTH ARROW:

PROJECT:
CORNISH LIBRARY & COMMUNITY CENTER
226 NH-120
CORNISH FLAT, NH 03746

ISSUED:
CONSTRUCTION DOCUMENTS

DRAWING TITLE:
MECHANICAL LEVEL 2 FLOOR PLAN

PROJECT NO: 23121 | DATE: 6/24/24

SHEET NUMBER:

M-4

2/3/2026 5:12:32 PM C:\Users\rparks\Documents\23121 MEP_rparksNSZ3D.rvt