

NORTH POINT LIBRARY HVAC RENOVATION

1716 MERRITT BLVD DUNDALK, MD 21222

BALTIMORE COUNTY PROPERTY MANAGEMENT 12200 A LONG GREEN PIKE GLEN ARM, MARYLAND 21057 (410) 887-4535





MEP ENGINEER TOWSON, MD 21204

ARCHITECT BALTIMORE, MD 21224

STRUCTURAL ENGINEER

BALTIMORE, MD 21224

FINAL CONSTRUCTION DOCUMENTS DATE: OCTOBER 15, 2024

SUBDIVISION: DUNDALK

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS





	DRAWING LIST								
SHEET DESIGNATION	DWG NUMBER	DRAWING TITLE	SHEET DESIGNATION	DWG NUMBER	DRAWING TITLE	SHEET DESIGNATION	DWG NUMBER	DRAWING TITLE	
GENERAL			MECHANICAL			ELECTRICAL			
G-1	2024-2439	COVER SHEET	M-1	2024-2462	MECHANICAL COVER SHEET	E-1	2024-2489	ELECTRICAL COVER SHEET	
G-2	2024-2440	CODE REVIEW	M-2	2024-2463	FIRST FLOOR PLAN - AREA A - DUCTWORK - DEMOLITION	E-2	2024-2490	ELECTRICAL COVER SHEET	
G-3	2024-2441	PHASING PLAN	M-3	2024-2464	FIRST FLOOR PLAN - AREA B - DUCTWORK - DEMOLITION	E-3	2024-2491	FIRST FLOOR PLAN - AREA A - LIGHTING - DEMOLITION	
			M-4	2024-2465	ENLARGED PLANS - DUCTWORK - DEMOLITION	E-4	2024-2492	FIRST FLOOR PLAN - AREA B - LIGHTING - DEMOLITION	
ARCHITECTURAL	0004.0440	FIRST FLOOR RIANL AREA A REMOUTION	M-5	2024-2466	FIRST FLOOR PLAN - AREA A - MECHANICAL PIPING - DEMOLITION	E-5	2024-2493	FIRST FLOOR PLAN - AREA A - POWER - DEMOLITION	
A-1	2024-2442	FIRST FLOOR PLAN - AREA A - DEMOLITION	M-6	2024-2467	FIRST FLOOR PLAN - AREA B - MECHANICAL PIPING - DEMOLITION	E-6	2024-2494	FIRST FLOOR PLAN - AREA B - POWER - DEMOLITION	
A-2	2024-2443	FIRST FLOOR PLAN - AREA B - DEMOLITION	M-7	2024-2468	ENLARGED PLANS - MECHANICAL PIPING - DEMOLITION	E-7	2024-2495	FIRST FLOOR PLAN - ENLARGED POWER - DEMOLITION	
A-3	2024-2444	FIRST FLOOR REFLECTED CEILING PLAN - AREA A - DEMOLITION	M-8	2024-2469	ROOF PLAN - AREA A - MECHANICAL - DEMOLITION	E-8	2024-2496	FIRST FLOOR PLAN - AREA A - LIGHTING - NEW WORK	
A-4	2024-2445	FIRST FLOOR REFLECTED CEILING PLAN - AREA B - DEMOLITION	M-9	2024-2470	ROOF PLAN - AREA B - MECHANICAL - DEMOLITION	E-9	2024-2497	FIRST FLOOR PLAN - AREA B - LIGHTING - NEW WORK	
A-5	2024-2446	ROOF PLAN - AREA A - DEMOLITION	M-10	2024-2471	FIRST FLOOR PLAN - AREA A - DUCTWORK - NEW WORK	E-10	2024-2498	FIRST FLOOR PLAN - AREA A - POWER - NEW WORK	
A-6	2024-2447	ROOF PLAN - AREA B - DEMOLITION	M-11	2024-2472	FIRST FLOOR PLAN - AREA B - DUCTWORK - NEW WORK	E-11	2024-2499	FIRST FLOOR PLAN - AREA B - POWER - NEW WORK	
A-7	2024-2448	FIRST FLOOR PLAN - AREA A	M-12	2024-2473	ENLARGED PLANS - DUCTWORK - NEW WORK	E-12	2024-2500	ROOF PLAN - POWER - NEW WORK	
A-8	2024-2449	FIRST FLOOR PLAN - AREA B	M-13	2024-2474	ENLARGED PLANS - DUCTWORK - NEW WORK	E-13	2024-2501	ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION	
A-9	2024-2450	FIRST FLOOR REFLECTED CEILING PLAN - AREA A	M-14	2024-2475	MECHANICAL SECTIONS - DUCTWORK	E-14	2024-2502	ELECTRICAL ONE-LINE DIAGRAM - NEW WORK	
A-10	2024-2451	FIRST FLOOR REFLECTED CEILING PLAN - AREA B	M-15	2024-2476	FIRST FLOOR PLAN - AREA A - MECHANICAL PIPING - NEW WORK	E-15	2024-2503	ELECTRICAL SCHEDULES	
A-11	2024-2452	ROOF PLAN - AREA A	M-16	2024-2477	FIRST FLOOR PLAN - AREA B - MECHANICAL PIPING - NEW WORK	E-16	2024-2504	PANELBOARD SCHEDULES	
A-12	2024-2453	ROOF PLAN - AREA B	M-17	2024-2478	ROOF PLAN - AREA A - MECHANICAL - NEW WORK	E-17	2024-2505	PANELBOARD SCHEDULES	
A-13	2024-2454	ROOF SCREEN VIEWS	M-18	2024-2479	MECHANICAL ISOMETRIC VIEWS	E-18	2024-2506	PANELBOARD SCHEDULES	
A-14	2024-2455	ROOF DETAILS	M-19	2024-2480	MECHANICAL DETAILS	E-19	2024-2507	PANELBOARD SCHEDULES	
A-15	2024-2456	ROOF DETAILS	M-20	2024-2481	MECHANICAL DETAILS	E-20	2024-2508	PANELBOARD SCHEDULES	
A-16	2024-2457	SCHEDULES	M-21	2024-2482	AUTOMATIC TEMPERATURE CONTROLS	E-21	2024-2509	PANELBOARD ELEVATIONS & SCHEDULE	
			M-22	2024-2483	AUTOMATIC TEMPERATURE CONTROLS	E-22	2024-2510	PANELBOARD ELEVATIONS	
STRUCTURAL			M-23	2024-2484	MECHANICAL SCHEDULES				
S-1	2024-2458	STRUCTURAL NOTES				FIRE ALARM			
S-2	2024-2459	ROOF PLAN	PLUMBING			FA-1		FIRE ALARM COVER SHEET	
S-3		STRUCTURAL DETAILS	P-1		PLUMBING COVER SHEET	FA-2		FIRST FLOOR PLAN - AREA A - FIRE ALARM - NEW WORK	
S-4	2024-2461	STRUCTURAL DETAILS	P-2		FIRST FLOOR PLAN - AREA A - PLUMBING - DEMOLITION	FA-3	2024-2513	FIRST FLOOR PLAN - AREA B - FIRE ALARM - NEW WORK	
			P-3		FIRST FLOOR PLAN - AREA A - PLUMBING - NEW WORK				
			P-4	2024-2488	FIRST FLOOR PLAN - AREA B - PLUMBING - NEW WORK				
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HENRY ADAMS Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024

ELECTION DIST. NO.: 12c7

SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

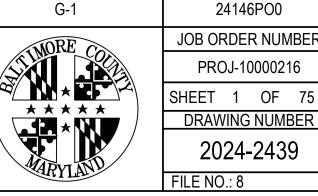
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SEAL OF MA PARTIES SACK BUS SA
DATE: <u>10/15/2024</u>

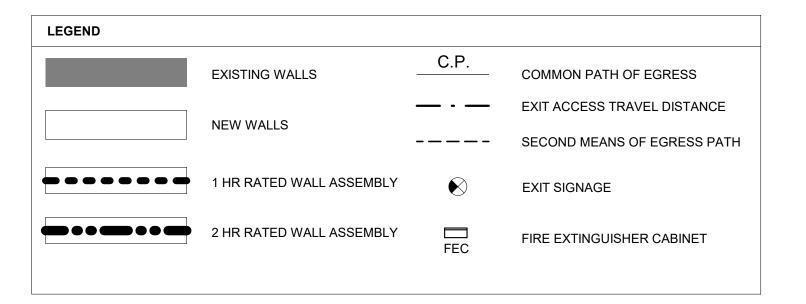
PROFESSIONAL CERTIFIC	ATION	AS-BUILT / REV	ISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PRO	PERTY MANAGEMENT
I HEREBY CERTIFY THAT THESE DOCUMENTS WE APPROVED BY ME, AND THAT I AM A DULY LICEN						DOW NO	5 OW	11 SE 21.	PLAN SCALE:		APPROVED BY:	Angela Doss
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.						R.O.W. NO.	E SW	11 SE 22			1	PROPERTY MANAGER April 24, 2025
LICENSE NO. 200470 EXPIRATION DA	CONTRACT COMPLETION	N BOX						PROFILE SCALE:		DATE:	Αριίί 24, 2029	
ENGINEER: <u>PETER PUSZCZ</u>	DGN BY:DJV	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	IWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
AS-BUILT PER RECORD PRINT	DWN BY: DJV	REVIEWED BY:										
BY: DATE:	CHKD BY: PJP	DATE REVIEWED:										

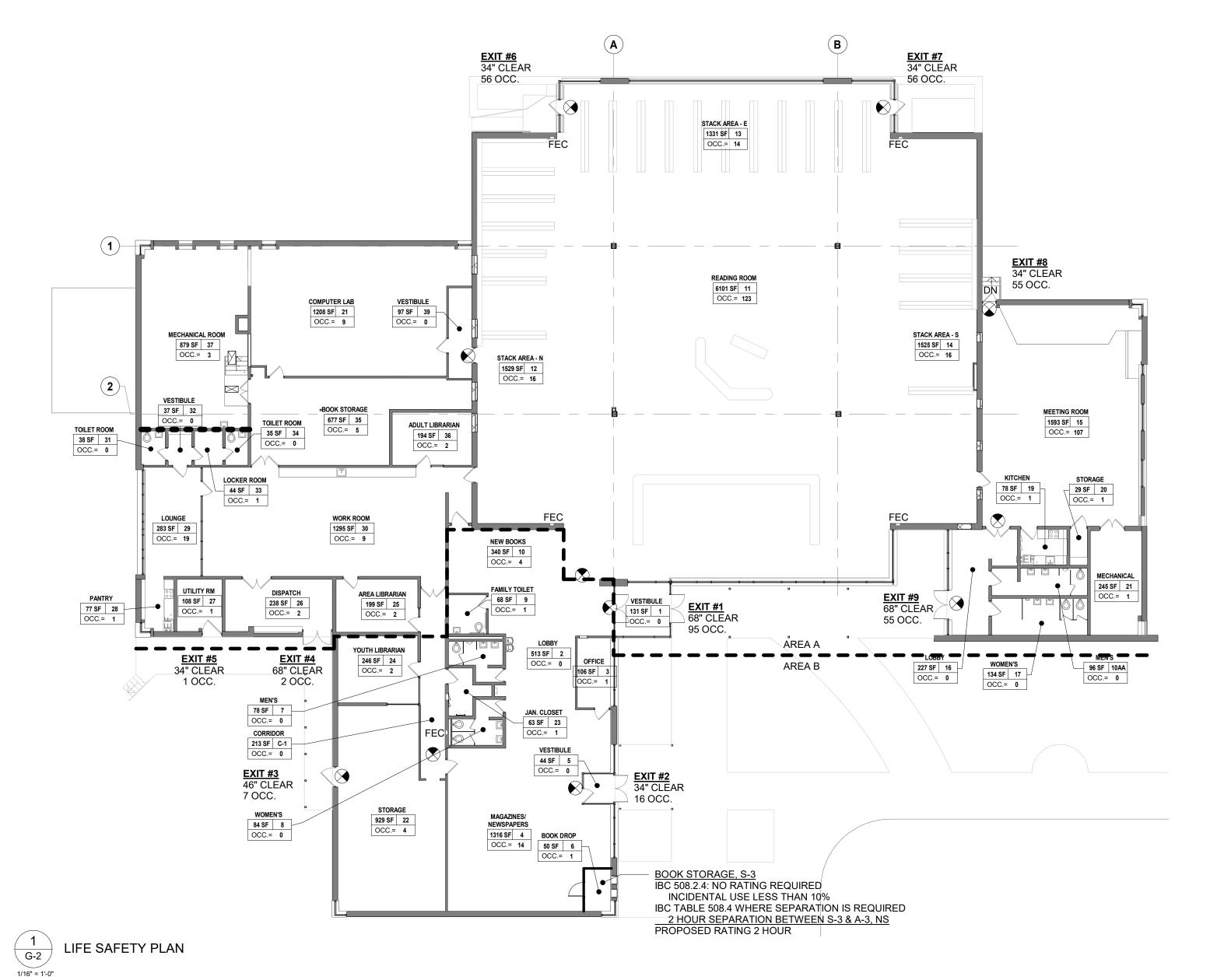
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY **COVER SHEET**

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222







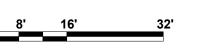
SEAL	PROFESSIONAL CERTIFICATION			ISION	BY DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	IG SCALE	PROP	PERTY MANAGEMENT
OF MARY	I HEREBY CERTIFY THAT THESE DOCUMENTS W APPROVED BY ME, AND THAT I AM A DULY LICEN							11 SE 21,	PLAN SCALE:	As indicated	APPROVED BY:	
	ARCHITECT UNDER THE LAWS OF THE STATE OF					R.O.W. NO.	E SW	11 SE 21,				PROPERTY MANAGER
I I I NO SERVICE	LICENSE NO. 16057 EXPIRATION D	ATE02/26/2026	CONTRACT COMPLETIO	N BOX				11 3L 22	PROFILE SCALE:		DATE:	
	ARCHITECT: ASHUTOSH BELGI	DGN BY: RMR	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
Jegst.	AS-BUILT PER RECORD PRINT	DWN BY: STAFF	REVIEWED BY:									
DATE:09/09/2024	BY: DATE:	CHKD BY: AB	DATE REVIEWED:									

CODE SUMMARY

BUILDING:	2021 INTERNATIONAL BUILDIN	IG CODE, IN	CLUDIN	NG APPENDI	CES C, G &	F		
	COMAR 09.12.58, MARYLAND I	BUILDING RE	EHABIL	ITATION COI	DE			
	2021 INTERNATIONAL EXISTIN			(EFFECTIVE	03/06/2024)		
MECHANICAL:	2021 INTERNATIONAL MECHA	NICAL CODE						
ENERGY:	2021 INTERNATIONAL ENERGY			CODE				
ELECTRICAL:	2023 NFPA 70, NATIONAL ELEC							
FIRE:	2019 NFPA 72, NATIONAL FIRE							
LIFE SAFETY:	2018 NFPA 101, ADOPTED AND							
ACCESSIBILITY:	COMAR 05.02.02 STATE OF MA	ARYLAND AD	OPTS	"ADAAG"201	0 ED.			
			0.5.0					
B. BUILD	NG USE, CONSTRUCTIO							
			OWED		PROVIDED			
BUILDING USE (MBLY,	A-3	N/A			
TYPE OF CONST		I	IB		N/A			
	ORIES (TABLE 504.4)		1		NO CHANG			
	HT ALLOWABLE (TABLE 504.3)		55'		NO CHANG			
FULLY SPRINKL	=RED BUILDING		NO		NO CHANG) <u> </u>		
C. BUILD	INC ADEAS							
	ING AREAS	EVI	CINIC		DENOVAT	ED		
FIRST F	AL GROSS AREAS		STING 50 SQ. I	ET	RENOVAT TBD	⊏ט		
FIRST F ALLOWABLE AR		24,25	,u JU. I	1.	עסו			
A-3, NS, IIB	<u></u>	9,500						
	CUPANCY/ONE STORY 1	<u> </u>	00 ± /0	500 X 0.75) =	16 625 90	FT		
	DWABLE AREA	26,125	•		10, 020 34.			
BUILDING AREA	-	26,125 N/A	∪ ų. r1.					
POILDING MKEA	, L. I. L. IVATIONO	14/74						
F. OCCUI	PANT LOAD CALCULATION	ONS (IRC	SFCI	ION 1004)			
JSE	ANT LOAD GALOGLATIC	TOTAL FLO		OL FACTO		NA/A DI E	ACTUAL	
JOL		AREA (SQ.		(S.F. / OCC	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ACTUAL OCC.	
UNOCCUPIED		2390		0		0	0	
	FIXED SEATS-UNCONCEN.	1876		15		26	126	
LIBRARY - STAC		4385		100		14	44	
LIBRARY - READ		7757		50		56	156	
BUSINESS		3641		150		25	22	
LOCKER		44		50		1	1	
STORAGE, S-3		1685		300		6	6	
MECHANICAL		1972		300	7		6	
IVIECHANICAL		1972		300		,	0	
TOTALS		23,750					361	
E. EGRES	SS WIDTH							
			IBC	2021	LIF	E SAFET	Y CODE	
					TABLE - 7.3.3.1			
EGRESS WIDTH	AT STAIRS (SECT. 1005.3.1)			N/A		N/A		
EGRESS WIDTH	AT DOORS	0.2	2" PER	OCCUPANT	0.2" PER OCCUPANT			
2 222								
	PANCY LOADS AND EGR		•					
OCATION (SPA	CES)	CORRID	•	MENTS GRESS / DO	OR			
LOCATION (SPA	CES) R OCCUPANT (NFPA 7.3.3.1)	CORRID	OR / E	GRESS / DO				
OCATION (SPACE) ALLOWANCE PE	CES) R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1)	0.2" 0.2" x 3	OOR / E	GRESS / DO	TAL WIDTH	l		
OCATION (SPACE) ALLOWANCE PE EGRESS WIDTH EGRESS WIDTH	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES)	0.2" 0.2" x 3 386" TO	OOR / E	GRESS / DO C = 72.2" TO) 34", (2) 68",	TAL WIDTH			
OCATION (SPACE) ALLOWANCE PE EGRESS WIDTH EGRESS WIDTH	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES)	0.2" 0.2" x 3 386" TO REQUIR	OOR / E	GRESS / DO C = 72.2" TC) 34", (2) 68", 6 PER NFP	TAL WIDTH (1) 46" A 101 29.2.4	& 7.4.1.1	- 7.4.1.2	
OCATION (SPACE) ALLOWANCE PE EGRESS WIDTH EGRESS WIDTH	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES)	0.2" 0.2" x 3 386" TO	OOR / E	GRESS / DO C = 72.2" TO) 34", (2) 68",	TAL WIDTH (1) 46" A 101 29.2.4	& 7.4.1.1	- 7.4.1.2	
OCATION (SPACE) ALLOWANCE PEEGRESS WIDTH EGRESS WIDTH NUMBER OF EXI	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS	0.2" 0.2" x 3 386" TO REQUIR	661 OC TAL [(6	GRESS / DO C = 72.2" TC) 34", (2) 68", 6 PER NFP, 9 - EXISTIN	TAL WIDTH (1) 46" A 101 29.2.4	& 7.4.1.1	- 7.4.1.2	
OCATION (SPACE OCATIO	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES)	0.2" 0.2" x 3 386" TO REQUIR	661 OC TAL [(6	GRESS / DO C = 72.2" TC) 34", (2) 68", 6 PER NFP, 9 - EXISTIN	TAL WIDTH (1) 46" A 101 29.2.4 G TO REMA	& 7.4.1.1	- 7.4.1.2	
OCATION (SPACE) EGRESS WIDTH EGRESS WIDTH NUMBER OF EXI	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS	0.2" 0.2" x 3 386" TO REQUIREM	661 OC TAL [(6	GRESS / DO C = 72.2" TC) 34", (2) 68", 6 PER NFP, 9 - EXISTIN	TAL WIDTH (1) 46" A 101 29.2.4	& 7.4.1.1		
OCATION (SPACE ALLOWANCE PER EGRESS WIDTH NUMBER OF EXI	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RE	0.2" 0.2" x 3 386" TO REQUIREM	661 OC TAL [(6 ED ED	GRESS / DO C = 72.2" TC) 34", (2) 68", 6 PER NFP, 9 - EXISTIN	TAL WIDTH (1) 46" A 101 29.2.4 G TO REMA	& 7.4.1.1 ·		
OCATION (SPACE ALLOWANCE PERFORMED P	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RE	0.2" 0.2" x 3 386" TO REQUIR PROVID	DOR / E 661 OC TAL [(6 ED ED ENTS	GRESS / DO C = 72.2" TC) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED	TAL WIDTH (1) 46" A 101 29.2.4 G TO REMA IBC 2021 LEVEL 1 703.1	& 7.4.1.1 - IN NFPA 10		
ALLOWANCE PEEGRESS WIDTH EGRESS WIDTH NUMBER OF EXI H. FIRE P	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RESIDENT SYSTEM RESIDENT SYSTEM	O.2" 0.2" x 3 386" TO REQUIR PROVID	ENTS	GRESS / DO C = 72.2" TO) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED N	IBC 2021 LEVEL 1 703.1	& 7.4.1.1 - IN NFPA 10	01, 2018	
ALLOWANCE PE EGRESS WIDTH EGRESS WIDTH NUMBER OF EXI H. FIRE P AUTOMATIC SPE FIRE EXTINGUIS PORTABLE FIRE	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RESIDENT SYSTEM RESIDENT SYSTEM EXTINGUISHERS	O.2" 0.2" x 3 386" TO REQUIR PROVID EQUIREM REQ. E	ENTS EXIST N N Y	GRESS / DO C = 72.2" TO) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED N N Y	IBC 2021 LEVEL 1 703.1 703.1	& 7.4.1.1 - IN NFPA 10 NFPA 1,	01, 2018 13.6	
ALLOWANCE PE EGRESS WIDTH EGRESS WIDTH NUMBER OF EXI H. FIRE P AUTOMATIC SPE FIRE EXTINGUIS PORTABLE FIRE	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RE RINKLERS HER SYSTEM EXTINGUISHERS STEM	CORRID 0.2" 0.2" x 3 386" TO REQUIR PROVID EQUIREM REQ. E N N Y Y	ENTS EXIST N N Y	GRESS / DO C = 72.2" TO) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED N N Y Y	IBC 2021 LEVEL 1 703.1 703.1 703.1	& 7.4.1.1 - IN NFPA 10 NFPA 1, NFPA 10	01, 2018 13.6	
ALLOWANCE PEEGRESS WIDTH EGRESS WIDTH NUMBER OF EXI H. FIRE P AUTOMATIC SPEEGRE EXTINGUIS PORTABLE FIRE	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RE RINKLERS HER SYSTEM EXTINGUISHERS STEM	O.2" 0.2" x 3 386" TO REQUIR PROVID EQUIREM REQ. E	ENTS EXIST N N Y	GRESS / DO C = 72.2" TO) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED N N Y	IBC 2021 LEVEL 1 703.1 703.1	& 7.4.1.1 - IN NFPA 10 NFPA 1,	01, 2018 13.6	
ALLOWANCE PEEGRESS WIDTH EGRESS WIDTH NUMBER OF EXI AUTOMATIC SPEEGRE EXTINGUIS PORTABLE FIRE FIRE ALARM SYS	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RE RINKLERS HER SYSTEM EXTINGUISHERS STEM DL SYSTEM	CORRID 0.2" 0.2" x 3 386" TO REQUIR PROVID EQUIREMI REQ. E N N Y Y N	ENTS EXIST N N Y	GRESS / DO C = 72.2" TO) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED N N Y Y	IBC 2021 LEVEL 1 703.1 703.1 703.1	& 7.4.1.1 - IN NFPA 10 NFPA 1, NFPA 10	01, 2018 13.6	
ALLOWANCE PEEGRESS WIDTH EGRESS WIDTH NUMBER OF EXI H. FIRE P AUTOMATIC SPEEGRE EXTINGUIS PORTABLE FIRE FIRE ALARM SYS	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RE RINKLERS HER SYSTEM EXTINGUISHERS STEM DL SYSTEM	CORRID 0.2" 0.2" x 3 386" TO REQUIR PROVID EQUIREMI REQ. E N N Y Y N	ENTS EXIST N N Y	GRESS / DO C = 72.2" TO) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED N N Y Y	IBC 2021 LEVEL 1 703.1 703.1 703.1 703.1	& 7.4.1.1 - IN NFPA 10 NFPA 1, NFPA 10	01, 2018 13.6	
ALLOWANCE PEEGRESS WIDTH EGRESS WIDTH NUMBER OF EXI H. FIRE P AUTOMATIC SPEERE EXTINGUIS PORTABLE FIRE FIRE ALARM SYSTEM SYSTEM SECONTRO	R OCCUPANT (NFPA 7.3.3.1) REQUIRED (NFPA 7.3.3.1) PROVIDED (IN INCHES) TS ROTECTION SYSTEM RE RINKLERS HER SYSTEM EXTINGUISHERS STEM DL SYSTEM P	CORRID 0.2" 0.2" x 3 386" TO REQUIR PROVID EQUIREMI REQ. E N N Y Y N	ENTS EXIST N N Y	GRESS / DO C = 72.2" TO) 34", (2) 68", 6 PER NFP, 9 - EXISTIN PROVIDED N N Y Y N	IBC 2021 LEVEL 1 703.1 703.1 703.1	& 7.4.1.1 - IN NFPA 10 NFPA 1, NFPA 10	01, 2018	

		IBC - 2021	(TABLE	- 803.13)				
EXIT PASAGEWAYS								
CORRIDORS			A A					
ROOMS AND ENCLOSED SPACE	ES		С					
K. MAXIMUM TRAVEL	DISTANCE 1	ΓΟ ΕΧΙΤ						
ACTUAL		SHOW ON	LIFE SA	FETY PLAN				
PROVIDED LESS THA	N 400'	IB	C - 2021		NFPA	101 - 2018		
		(TABL	E - 1017	.2)	(29	0.2.6.3.2)		
ALLOWABLE			200'			X'		
L. COMMON PATH OF	EGRESS TR	RAVEL (IB	C SEC	TION 10	30.8)			
ASSEMBLY, A-3						30'		
EXCEPTION #1 - AREAS	HAN 50 OCC				75'			
M. CORRIDOR FIRE-R	ESISTANCE	RATING						
OCCUPANCY		REQU	IRED			DRU//וחבה		
	IBC 2021 TABL	E 1020.2	NF	18 PROVIDED				
ASSEMBLY A (>30 OCC.)				?		0		
M. MINIMUM CORRIDO	OR WIDTH EX	XIT						
OCCUPANCY		REQU			F	PROVIDED		
IBC 2021 TAB		F 1020 3	NF	FPA 101, 20	18			
ASSEMBLY A	REQUIRE			· · · · · · · · · · · · · · · · · · ·		60"		
ASSEMBLY A						60"		
ASSEMBLY A						60"		
ASSEMBLY A P. BUILDING FIRE RAT	REQUIRE					60"		
	REQUIRE				NFPA 101,			
	REQUIRE	ED 44"	021		NFPA 101, (CHAPTEI	2018		
P. BUILDING FIRE RAT	REQUIRE	ED 44"	021			2018 R 8)		
P. BUILDING FIRE RAT	REQUIRE	IBC - 20 (T601 - T	021		(CHAPTEI	2018 R 8)		
P. BUILDING FIRE RAT	REQUIRE	IBC - 20 (T601 - T	021		(CHAPTEI	2018 R 8)		
P. BUILDING FIRE RAT STRUCTURAL FRAME INCLUDING COLUMNS, GIRDER	REQUIRE	IBC - 20 (T601 - T	021		(CHAPTEI N/A (39.1	2018 R 8)		
P. BUILDING FIRE RAT STRUCTURAL FRAME INCLUDING COLUMNS, GIRDEF EXTERIOR BEARING WALL EXTERIOR NON - BEARING WALL INTERIOR BEARING WALL	REQUIRE	IBC - 20 (T601 - T 0	021		(CHAPTEI N/A (39.1	2018 R 8)		
P. BUILDING FIRE RAT STRUCTURAL FRAME INCLUDING COLUMNS, GIRDER EXTERIOR BEARING WALL EXTERIOR NON - BEARING WALL INTERIOR BEARING WALL INTERIOR NON - BEARING WALL	REQUIRE	IBC - 20 (T601 - T 0 0 0	021		(CHAPTEI N/A (39.1	2018 R 8)		
P. BUILDING FIRE RAT STRUCTURAL FRAME INCLUDING COLUMNS, GIRDER EXTERIOR BEARING WALL EXTERIOR NON - BEARING WALL INTERIOR BEARING WALL INTERIOR NON - BEARING WALL FLOOR CONSTRUCTION	REQUIRE TINGS RS, TRUSSES	IBC - 20 (T601 - T 0 0	021		(CHAPTEI N/A (39.1	2018 R 8)		
P. BUILDING FIRE RAT STRUCTURAL FRAME INCLUDING COLUMNS, GIRDEF EXTERIOR BEARING WALL EXTERIOR BEARING WALL INTERIOR BEARING WALL INTERIOR NON - BEARING WALL FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAR	REQUIRE TINGS RS, TRUSSES	IBC - 20 (T601 - T 0 0 0 0	021		(CHAPTEI N/A (39.1	2018 R 8)		
P. BUILDING FIRE RAT STRUCTURAL FRAME INCLUDING COLUMNS, GIRDER EXTERIOR BEARING WALL EXTERIOR NON - BEARING WALL INTERIOR BEARING WALL INTERIOR NON - BEARING WALL FLOOR CONSTRUCTION	REQUIRE TINGS RS, TRUSSES	IBC - 20 (T601 - T 0 0 0	021		(CHAPTEI N/A (39.1	2018 R 8)		
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P. BUILDING FIRE RAT STRUCTURAL FRAME INCLUDING COLUMNS, GIRDEF EXTERIOR BEARING WALL EXTERIOR NON - BEARING WALL INTERIOR BEARING WALL INTERIOR NON - BEARING WALL FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAR ROOF CONSTRUCTION R. PLUMBING FIXTUR	REQUIRE TINGS RS, TRUSSES MS / JOISTS RE COUNT (IE	IBC - 20 (T601 - T 0 0 0 0 0	D21		(CHAPTEI N/A (39.1 2 HOUF - - - -	2018 R 8) I.6)		
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COLIMORE ARCHITECTS



DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER



24146PO0 JOB ORDER NUMBER SHEET 2 OF 75 DRAWING NUMBER 2024-2440

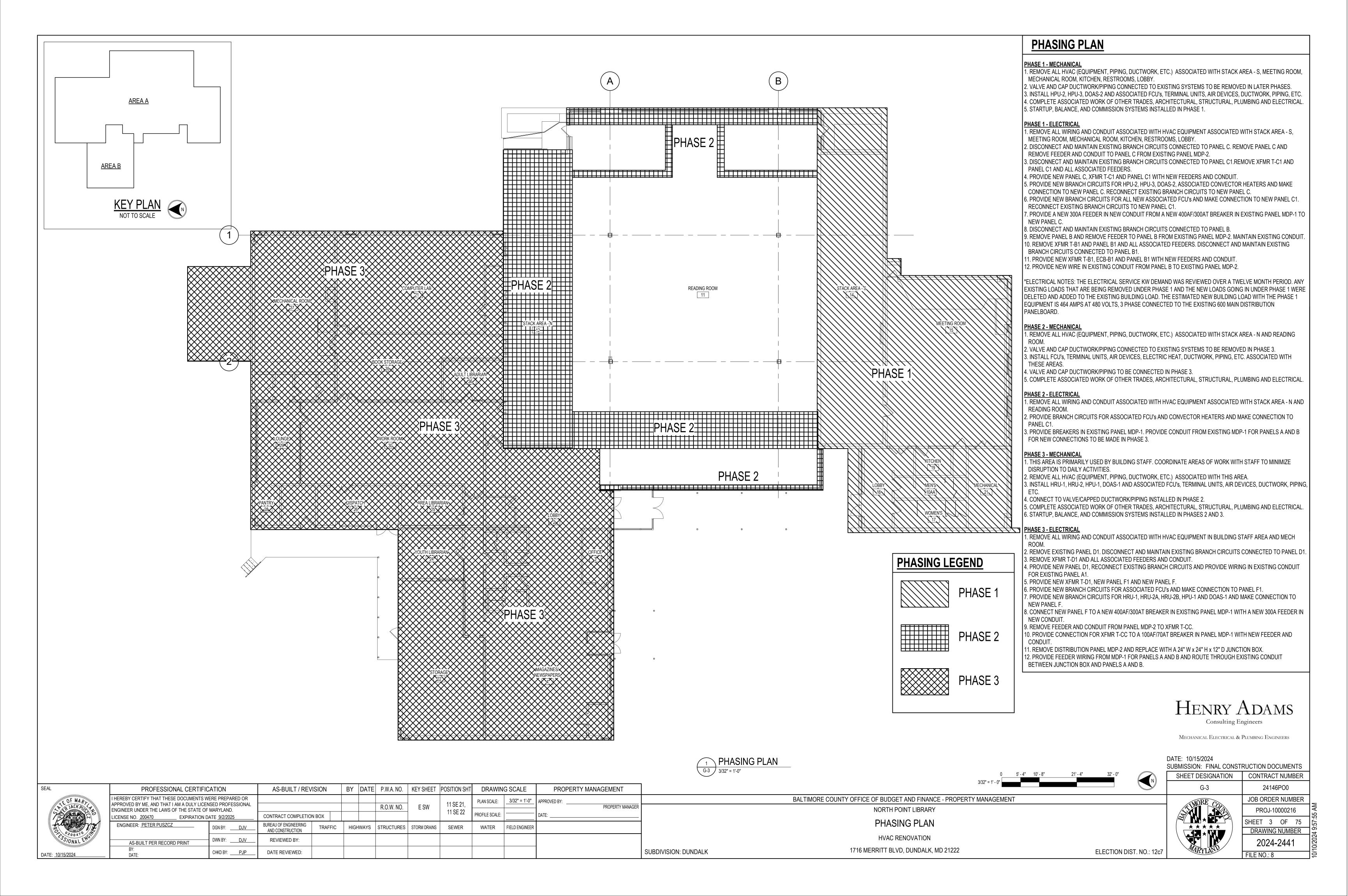
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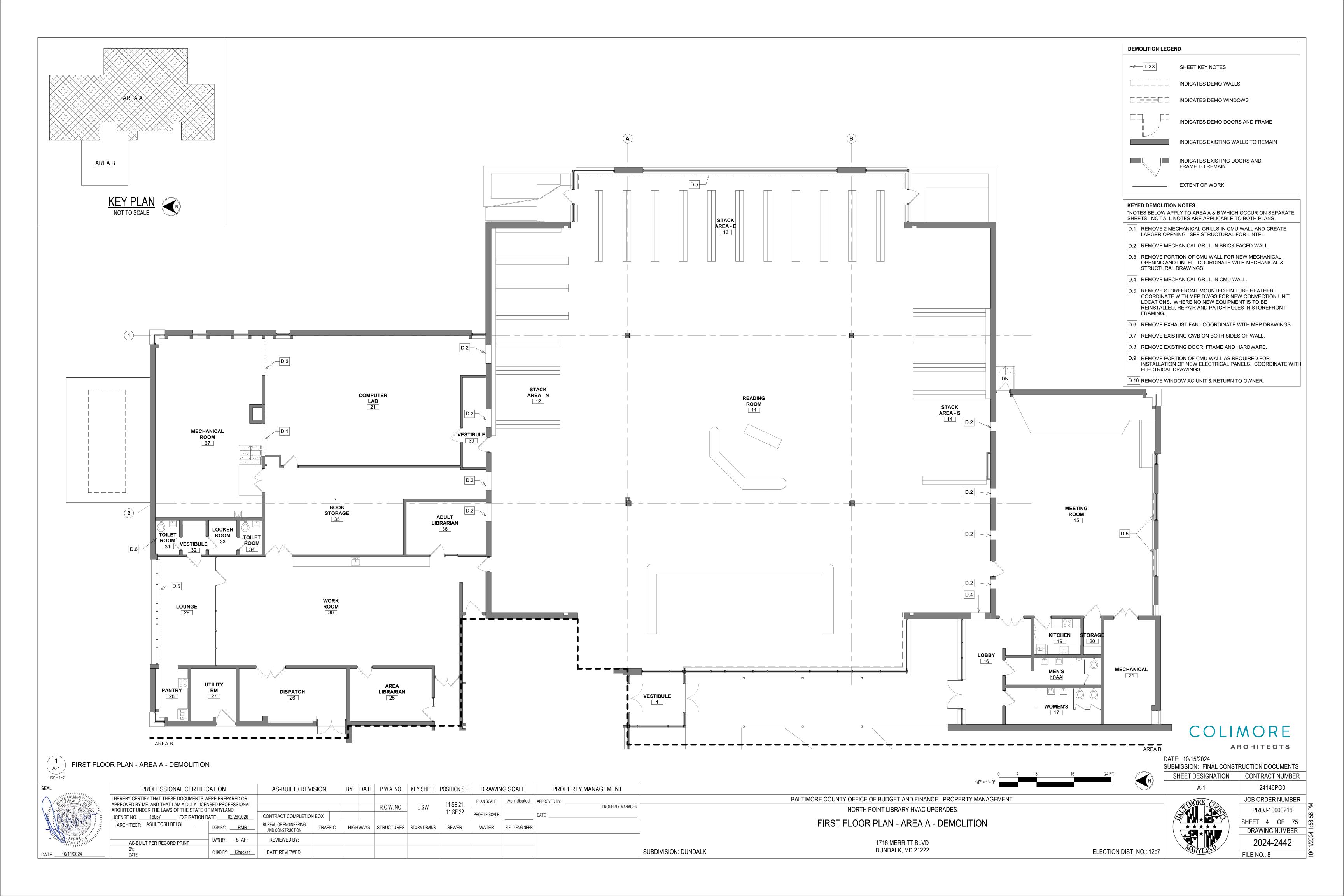
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY HVAC UPGRADES

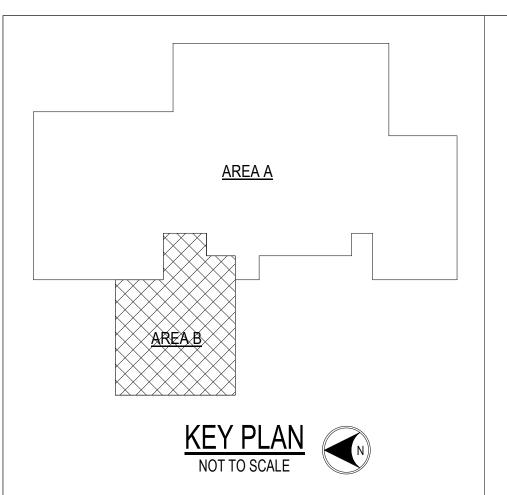
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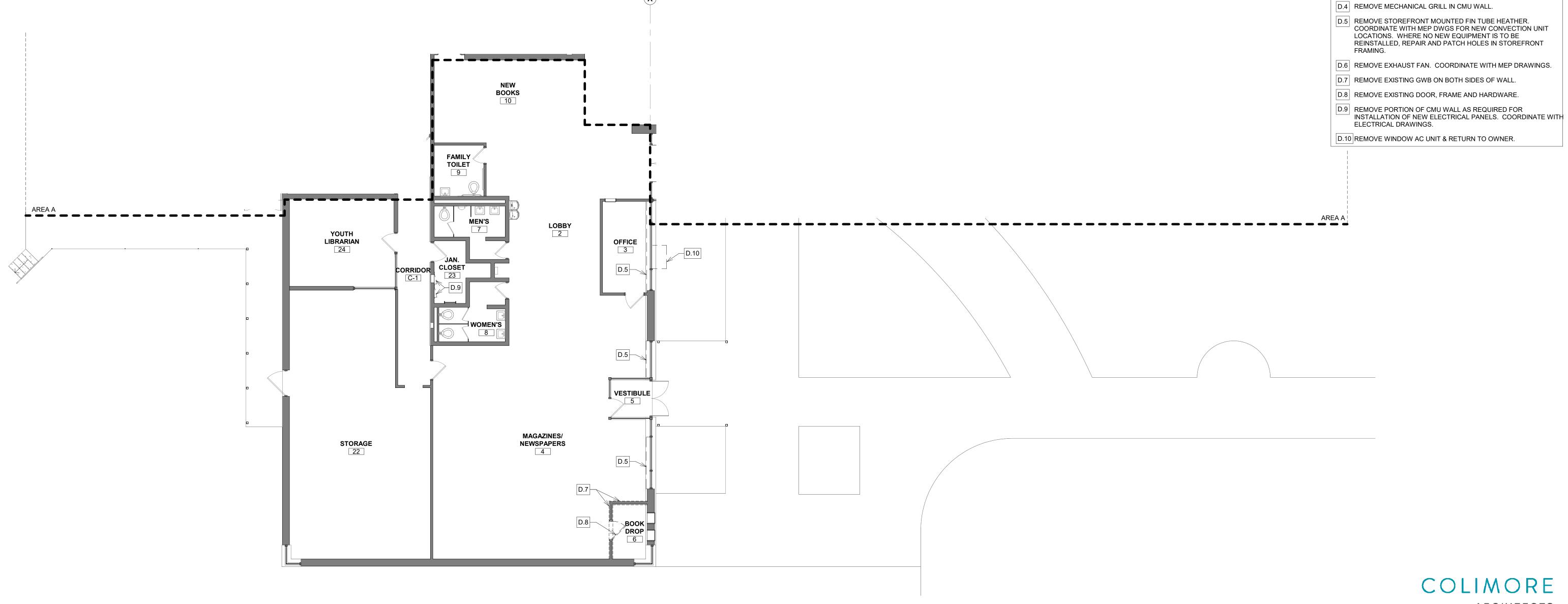
1716 MERRITT BLVD DUNDALK, MD 21222











COLIMORE ARCHITECTS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

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FIRST FLOOR PLAN - AREA B - DEMOLITION

,	SEAL	PROFESSIONAL CERTIFIC	CATION	AS-BUILT / REVISION		BY DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY MA	ANAGEMENT
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BALTIMORE COUNTY OFFICE OF BUDGET AND F NORTH POINT LIBRARY HVAC UPGR FIRST FLOOR PLAN - AREA B - DEMOLITION

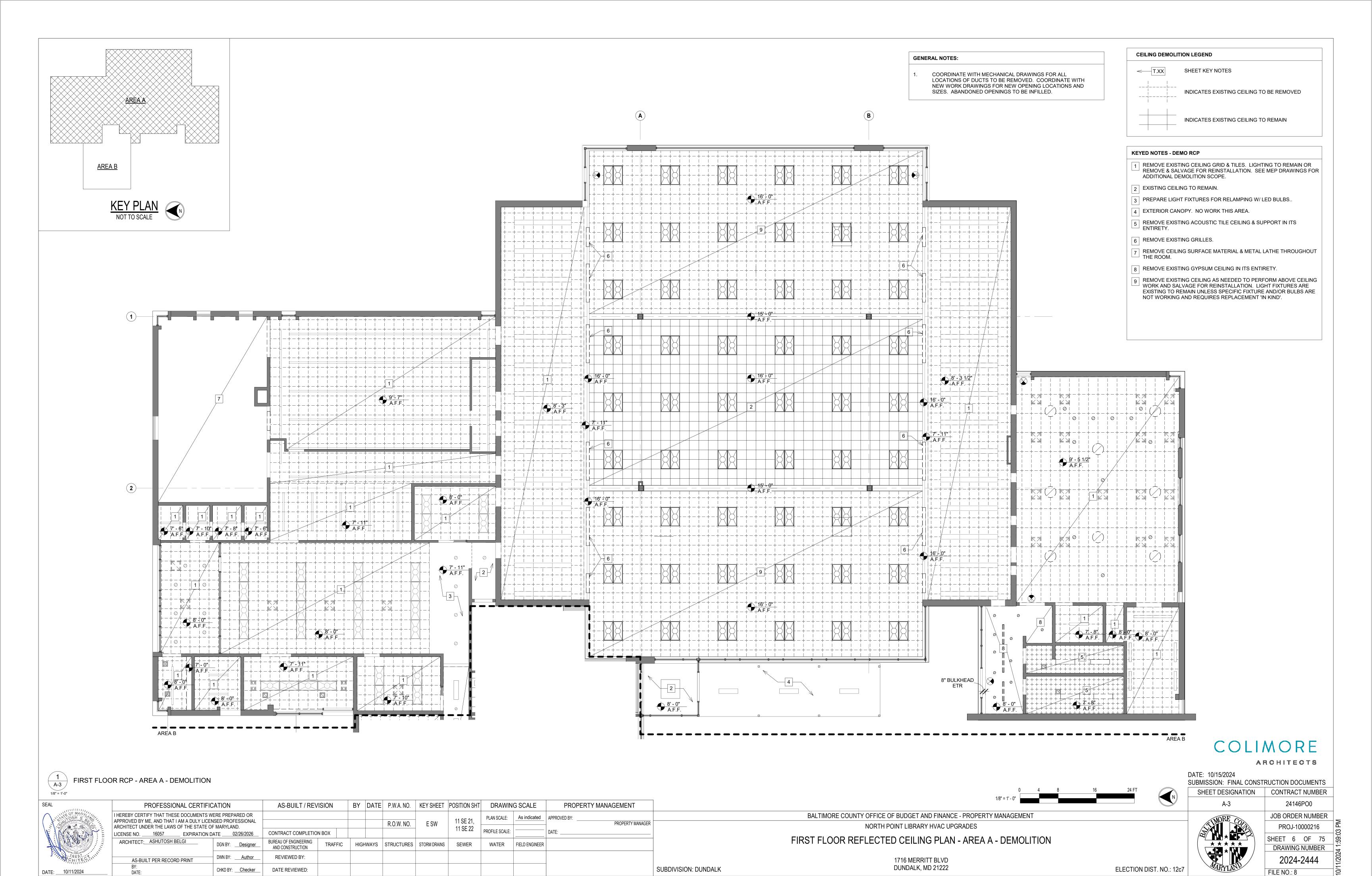
1716 MERRITT BLVD DUNDALK, MD 21222

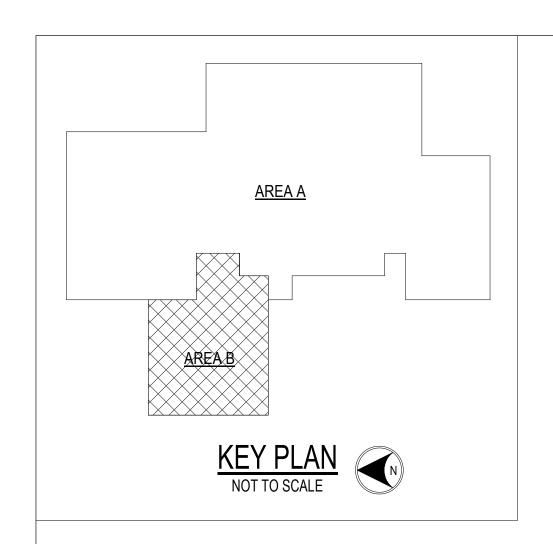
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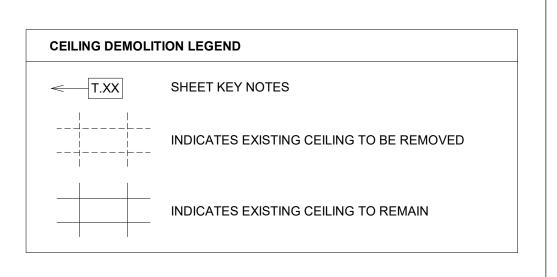
DEMOLITION LEGEND

SHEET KEY NOTES

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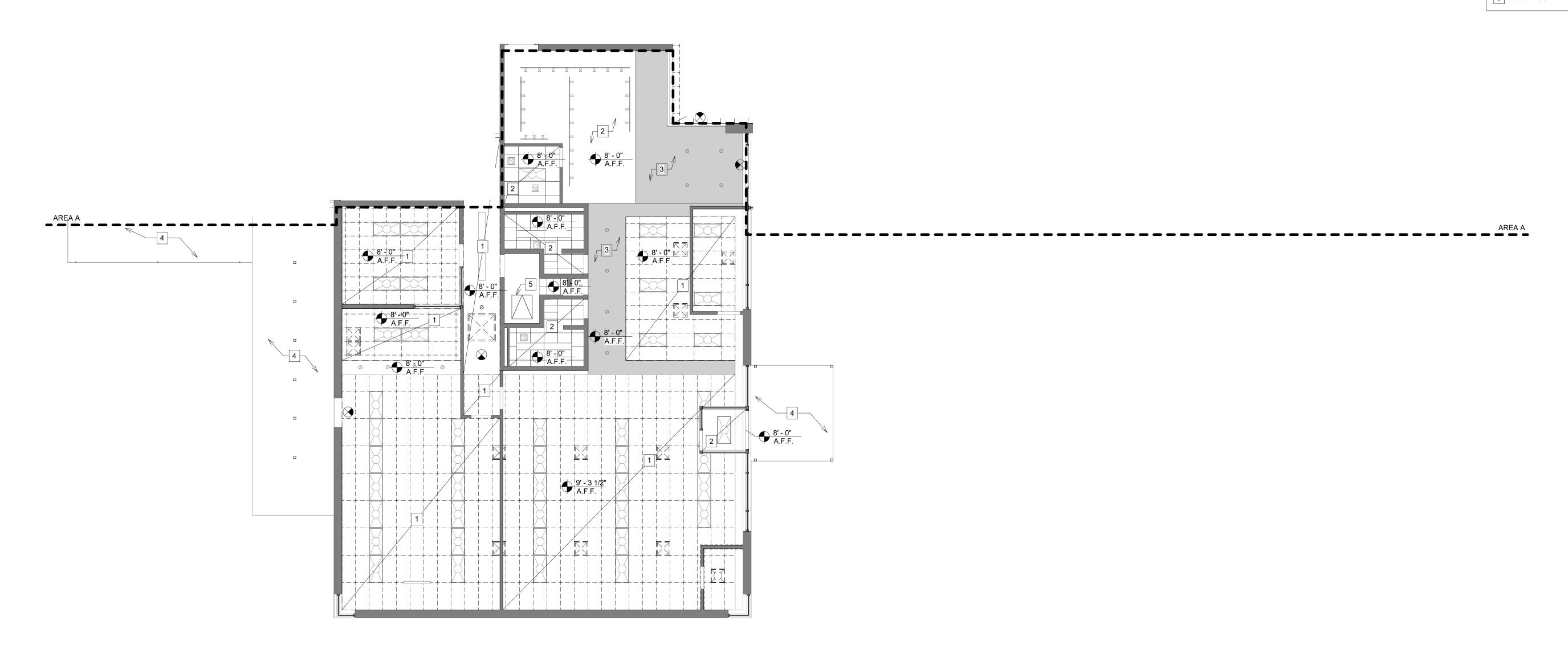


GENERAL NOTES:

COORDINATE WITH MECHANICAL DRAWINGS FOR ALL LOCATIONS OF DUCTS TO BE REMOVED. COORDINATE WITH NEW WORK DRAWINGS FOR NEW OPENING LOCATIONS AND SIZES. ABANDONED OPENINGS TO BE INFILLED.

KEYED NOTES - DEMO RCP

- 1 REMOVE EXISTING CEILING GRID & TILES. LIGHTING TO REMAIN OR REMOVE & SALVAGE FOR REINSTALLATION. SEE MEP DRAWINGS FOR ADDITIONAL DEMOLITION SCOPE.
- 2 EXISTING CEILING TO REMAIN.
- 3 REMOVE PORTION OF CEILING AS NEEDED FOR ABOVE CEILING ─ WORK. COORDINATE WITH MEP DRAWINGS. LIGHTING PER NOTE #1.
- 4 EXTERIOR CANOPY. NO WORK THIS AREA.
- 5 ROOF ACCESS LADDER & HATCH.



SUBDIVISION: DUNDALK

COLIMORE

ARCHITECTS

DATE: 10/15/2024

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FIRST FLOOR RCP - AREA B - DEMOLITION

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	ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO16057 EXPIRATION DATE02/26/2026		CONTRACT COMPLETION	N BOX	R.O.W. NO.		E 244	11 SE 22	PROFILE SCALE:		DATE:
	ARCHITECT: ASHUTOSH BELGI	DGN BY: <u>Designer</u>	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
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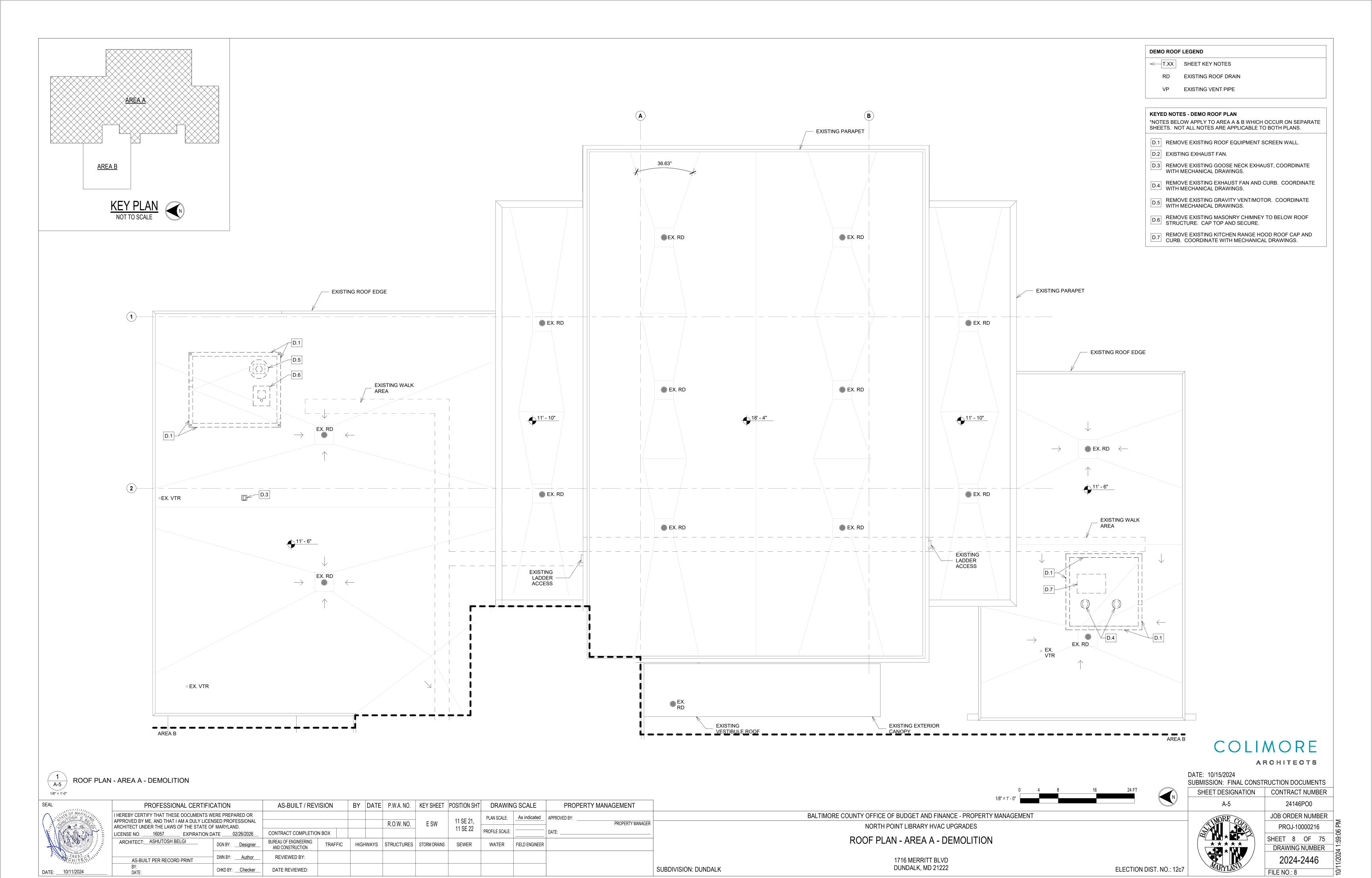
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY HVAC UPGRADES

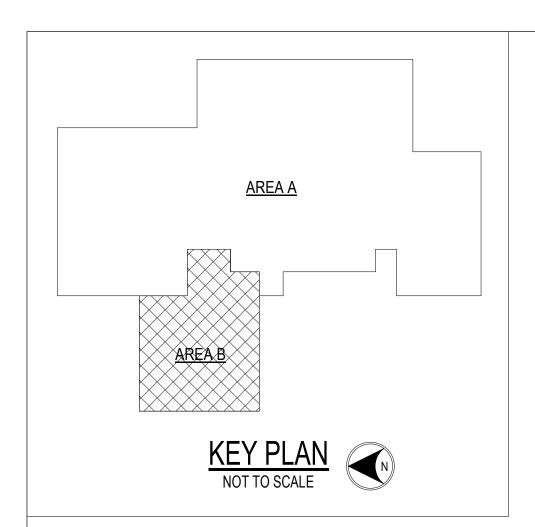
FIRST FLOOR REFLECTED CEILING PLAN - AREA B - DEMOLITION

1716 MERRITT BLVD DUNDALK, MD 21222

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DEMO ROOF LEGEND

T.XX SHEET KEY NOTES

RD EXISTING ROOF DRAIN

VP EXISTING VENT PIPE

KEYED NOTES - DEMO ROOF PLAN

*NOTES BELOW APPLY TO AREA A & B WHICH OCCUR ON SEPARATE SHEETS. NOT ALL NOTES ARE APPLICABLE TO BOTH PLANS.

D.1 REMOVE EXISTING ROOF EQUIPMENT SCREEN WALL.

D.2 EXISTING EXHAUST FAN.

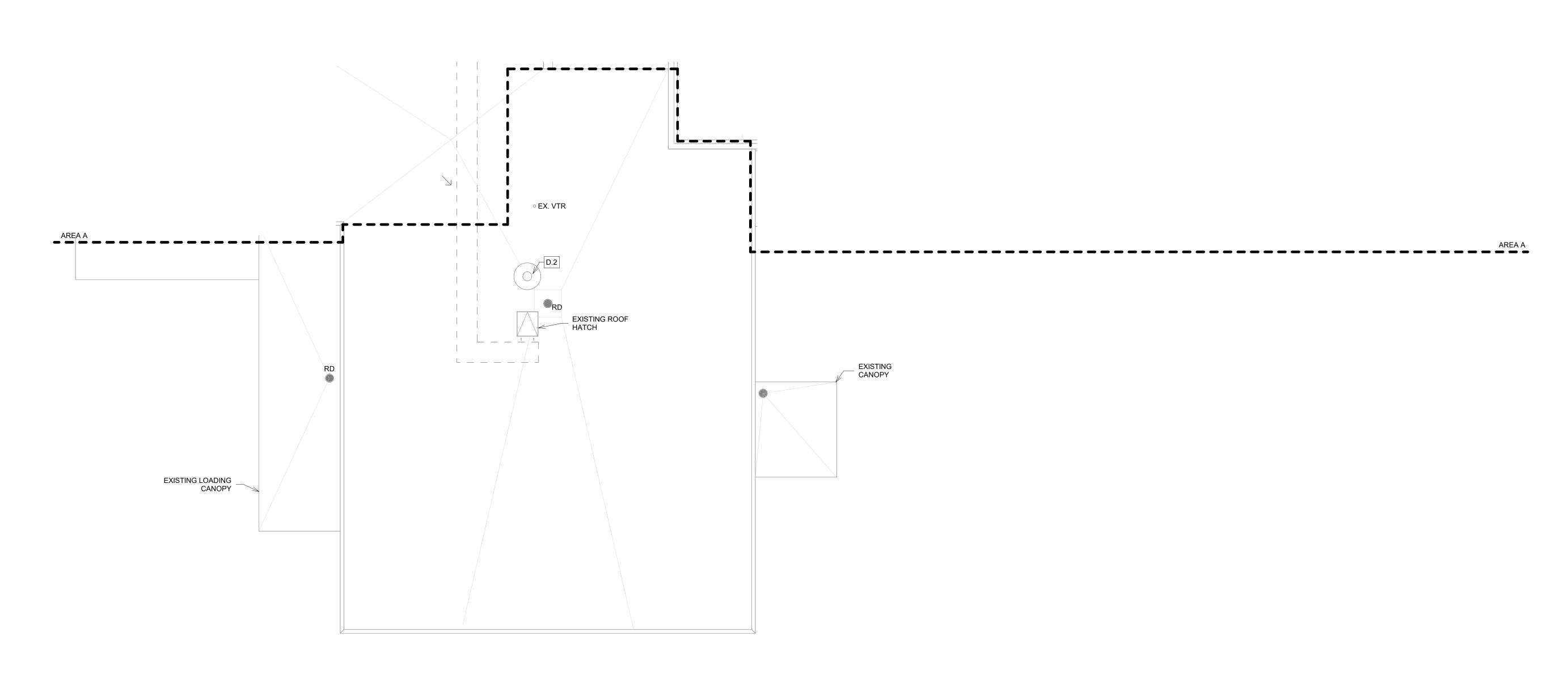
D.3 REMOVE EXISTING GOOSE NECK EXHAUST, COORDINATE WITH MECHANICAL DRAWINGS.

D.4 REMOVE EXISTING EXHAUST FAN AND CURB. COORDINATE WITH MECHANICAL DRAWINGS.

D.5 REMOVE EXISTING GRAVITY VENT/MOTOR. COORDINATE WITH MECHANICAL DRAWINGS.

D.6 REMOVE EXISTING MASONRY CHIMNEY TO BELOW ROOF STRUCTURE. CAP TOP AND SECURE.

D.7 REMOVE EXISTING KITCHEN RANGE HOOD ROOF CAP AND CURB. COORDINATE WITH MECHANICAL DRAWINGS.



COLIMORE

DATE: 10/15/2024 SUBMISSION: FINAL CONS

DATE: 10/15/2024
SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

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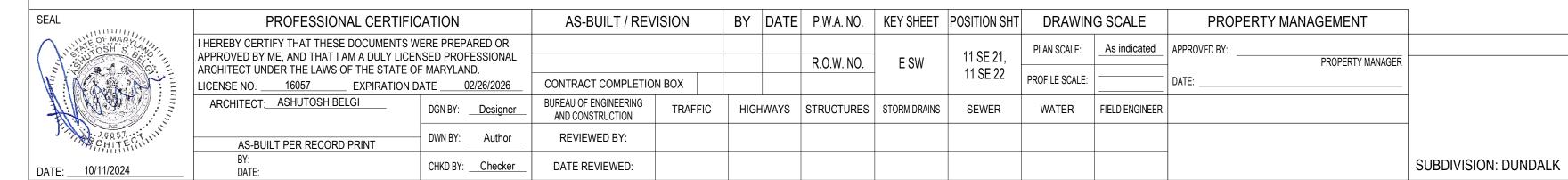
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ROOF PLAN - AREA B - DEMOLITION

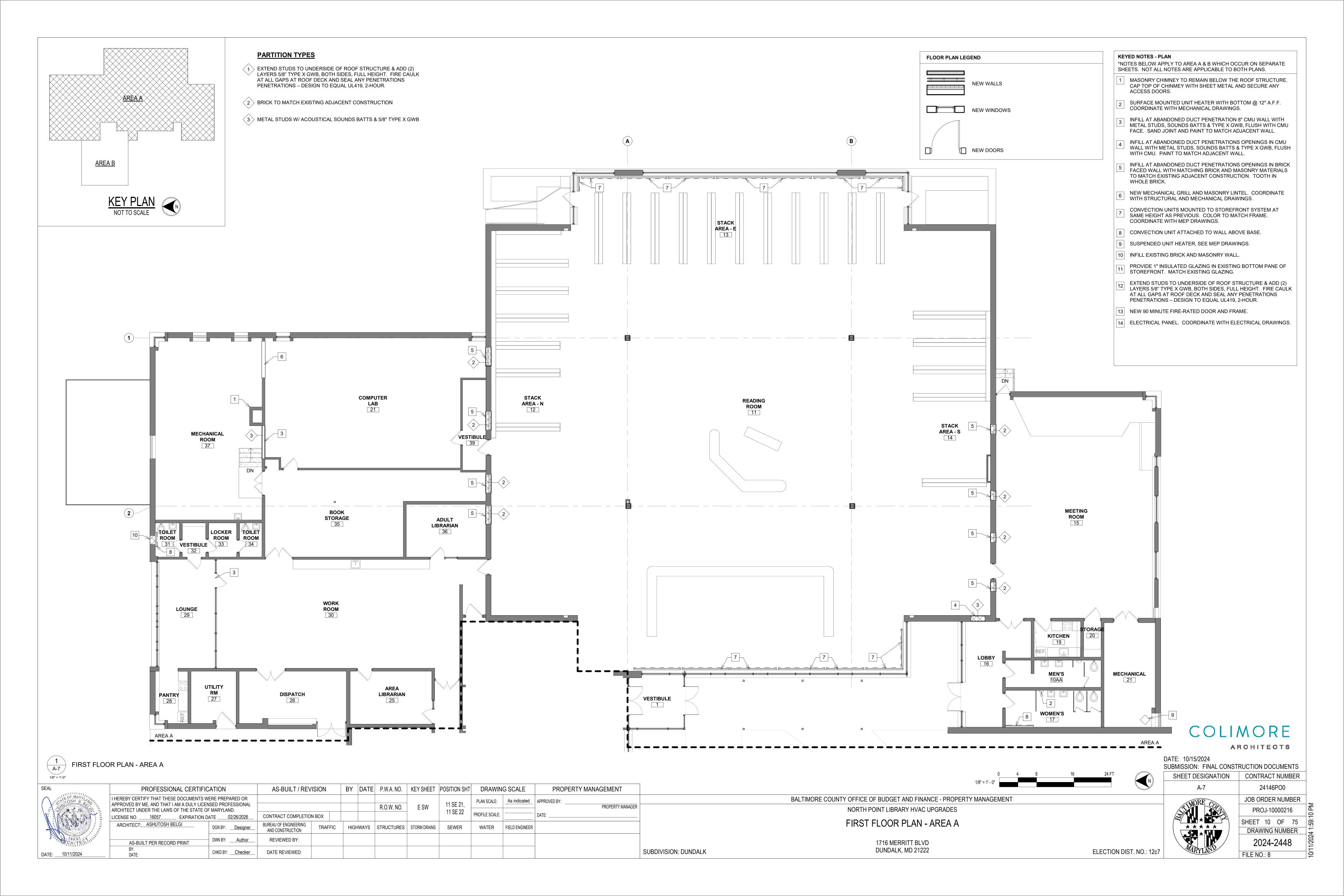


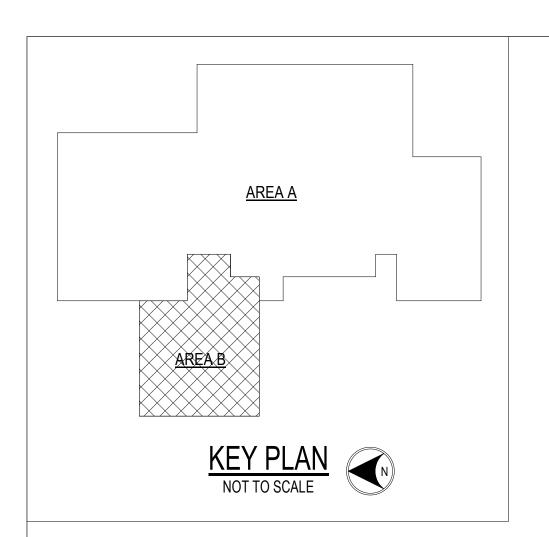
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

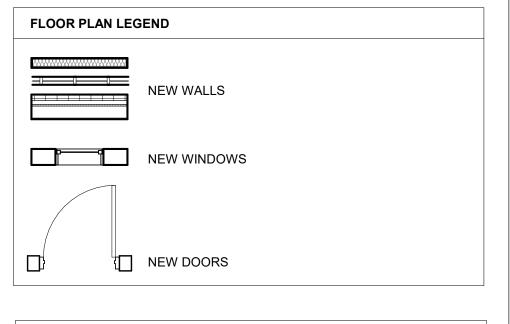
NORTH POINT LIBRARY HVAC UPGRADES

ROOF PLAN - AREA B - DEMOLITION

1716 MERRITT BLVD DUNDALK, MD 21222





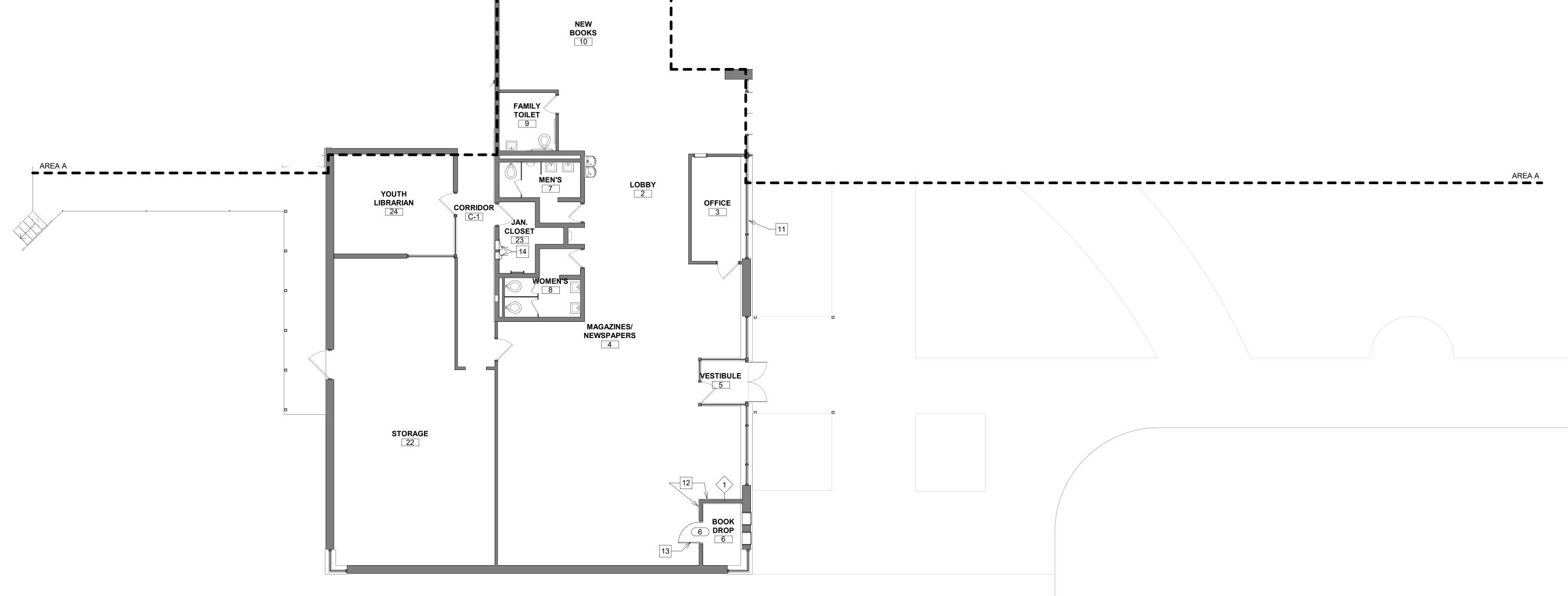


KEYED NOTES - PLAN

- *NOTES BELOW APPLY TO AREA A & B WHICH OCCUR ON SEPARATE SHEETS. NOT ALL NOTES ARE APPLICABLE TO BOTH PLANS.
- MASONRY CHIMNEY TO REMAIN BELOW THE ROOF STRUCTURE. CAP TOP OF CHINMEY WITH SHEET METAL AND SECURE ANY ACCESS DOORS.
- SURFACE MOUNTED UNIT HEATER WITH BOTTOM @ 12" A.F.F. COORDINATE WITH MECHANICAL DRAWINGS.
- INFILL AT ABANDONED DUCT PENETRATION 8" CMU WALL WITH METAL STUDS, SOUNDS BATTS & TYPE X GWB, FLUSH WITH CMU FACE. SAND JOINT AND PAINT TO MATCH ADJACENT WALL.
- INFILL AT ABANDONED DUCT PENETRATIONS OPENINGS IN CMU WALL WITH METAL STUDS, SOUNDS BATTS & TYPE X GWB, FLUSH WITH CMU. PAINT TO MATCH ADJACENT WALL.
- INFILL AT ABANDONED DUCT PENETRATIONS OPENINGS IN BRICK FACED WALL WITH MATCHING BRICK AND MASONRY MATERIALS TO MATCH EXISTING ADJACENT CONSTRUCTION. TOOTH IN WHOLE BRICK.
- NEW MECHANICAL GRILL AND MASONRY LINTEL. COORDINATE WITH STRUCTURAL AND MECHANICAL DRAWINGS.
- CONVECTION UNITS MOUNTED TO STOREFRONT SYSTEM AT SAME HEIGHT AS PREVIOUS. COLOR TO MATCH FRAME. COORDINATE WITH MEP DRAWINGS.
- 8 CONVECTION UNIT ATTACHED TO WALL ABOVE BASE.
- 9 SUSPENDED UNIT HEATER, SEE MEP DRAWINGS.
- 10 INFILL EXISTING BRICK AND MASONRY WALL.
- PROVIDE 1" INSULATED GLAZING IN EXISTING BOTTOM PANE OF 11 STOREFRONT. MATCH EXISTING GLAZING.

PENETRATIONS – DESIGN TO EQUAL UL419, 2-HOUR.

- EXTEND STUDS TO UNDERSIDE OF ROOF STRUCTURE & ADD (2) LAYERS 5/8" TYPE X GWB, BOTH SIDES, FULL HEIGHT. FIRE CAULK AT ALL GAPS AT ROOF DECK AND SEAL ANY PENETRATIONS
- 13 NEW 90 MINUTE FIRE-RATED DOOR AND FRAME.
- 14 ELECTRICAL PANEL. COORDINATE WITH ELECTRICAL DRAWINGS.



COLIMORE

ARCHITECTS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS ESIGNATION CONTRACT NUMBER

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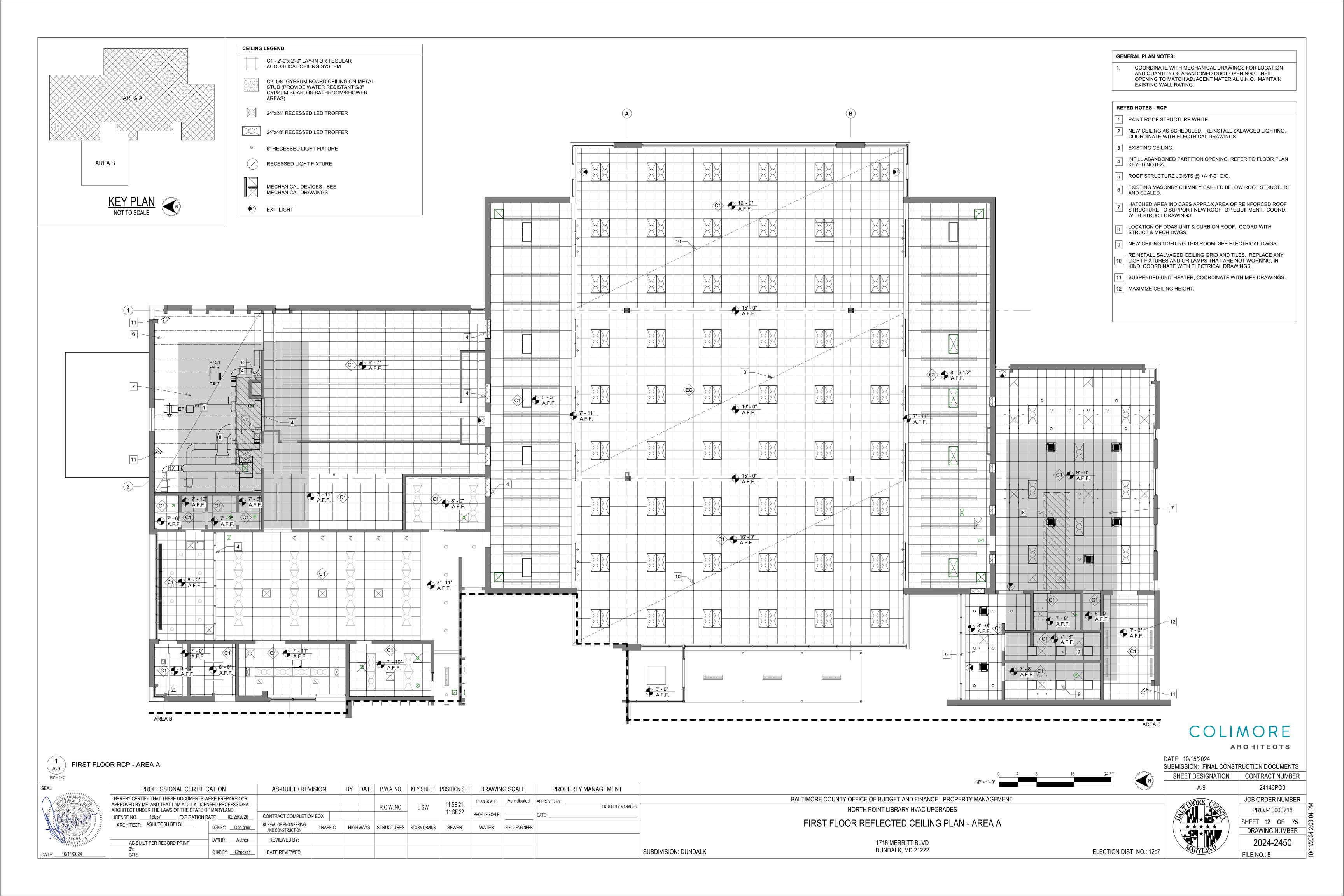
FIRST FLOOR PLAN - AREA B

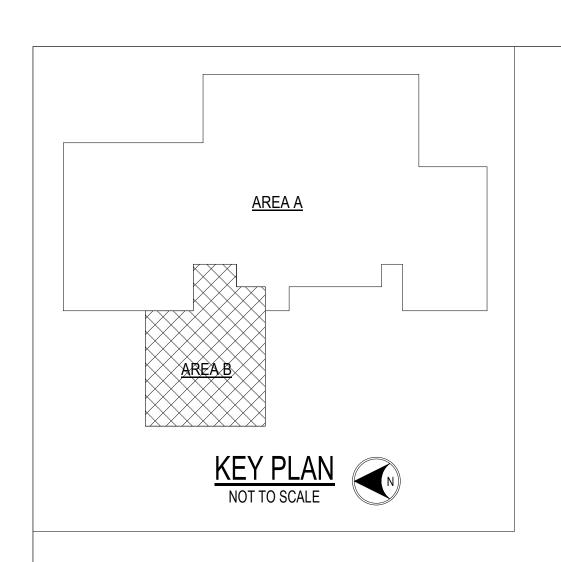
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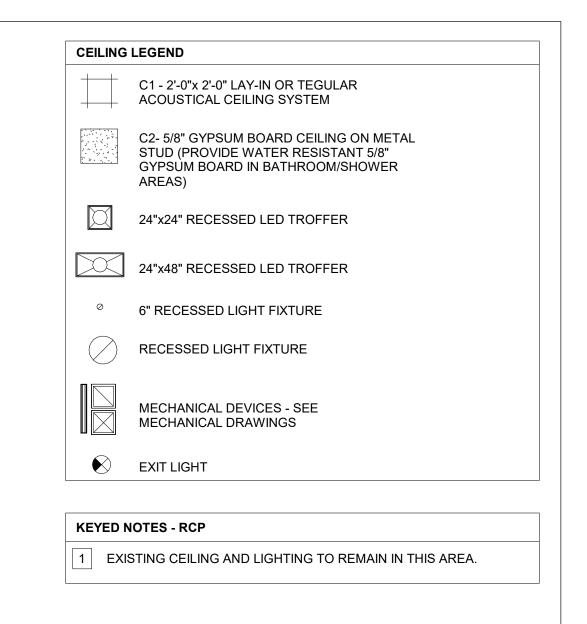
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY HVAC UPGRADES

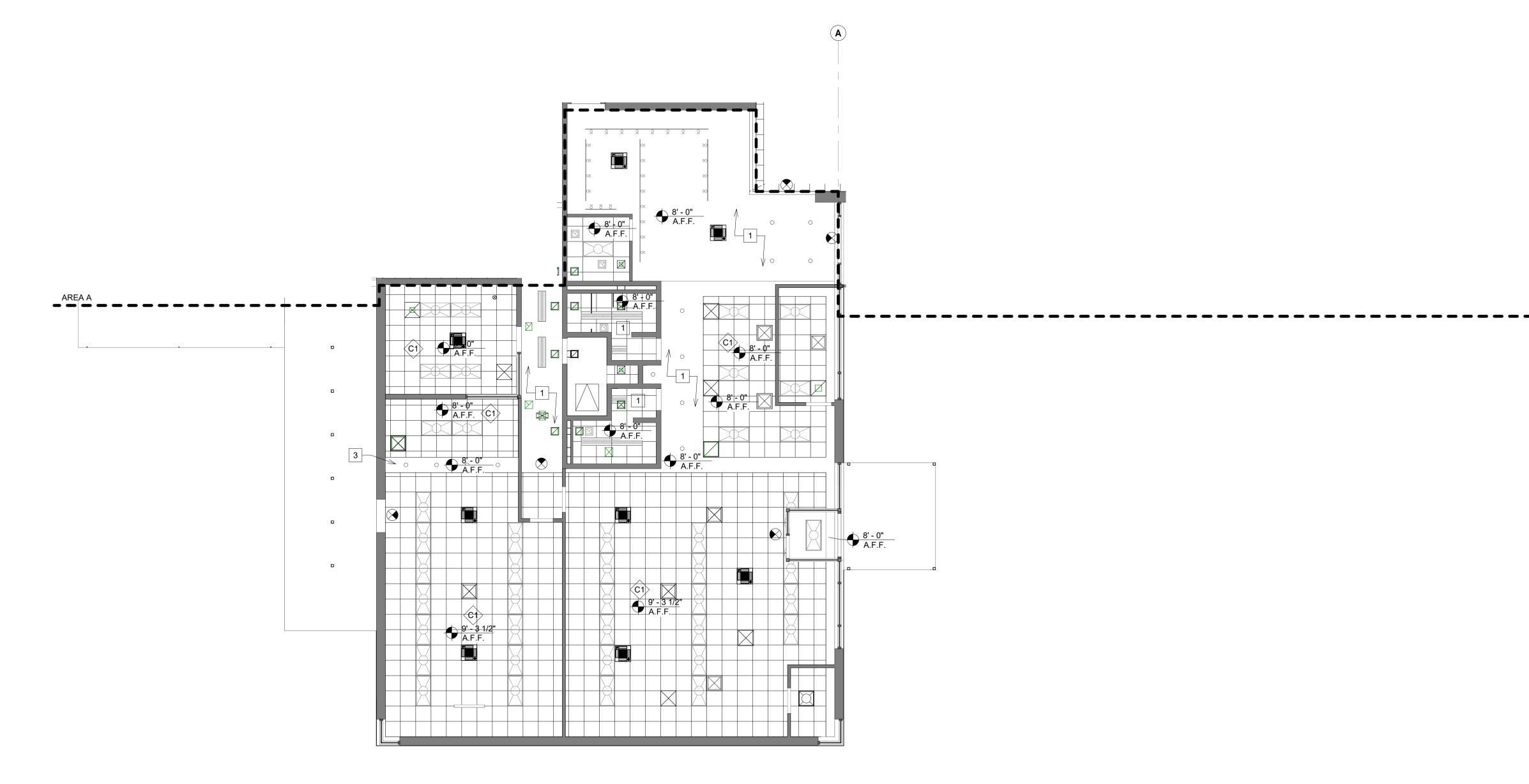
FIRST FLOOR PLAN - AREA B

1716 MERRITT BLVD DUNDALK, MD 21222









COLIMORE

ARCHITECTS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

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FIRST FLOOR RCP - AREA B

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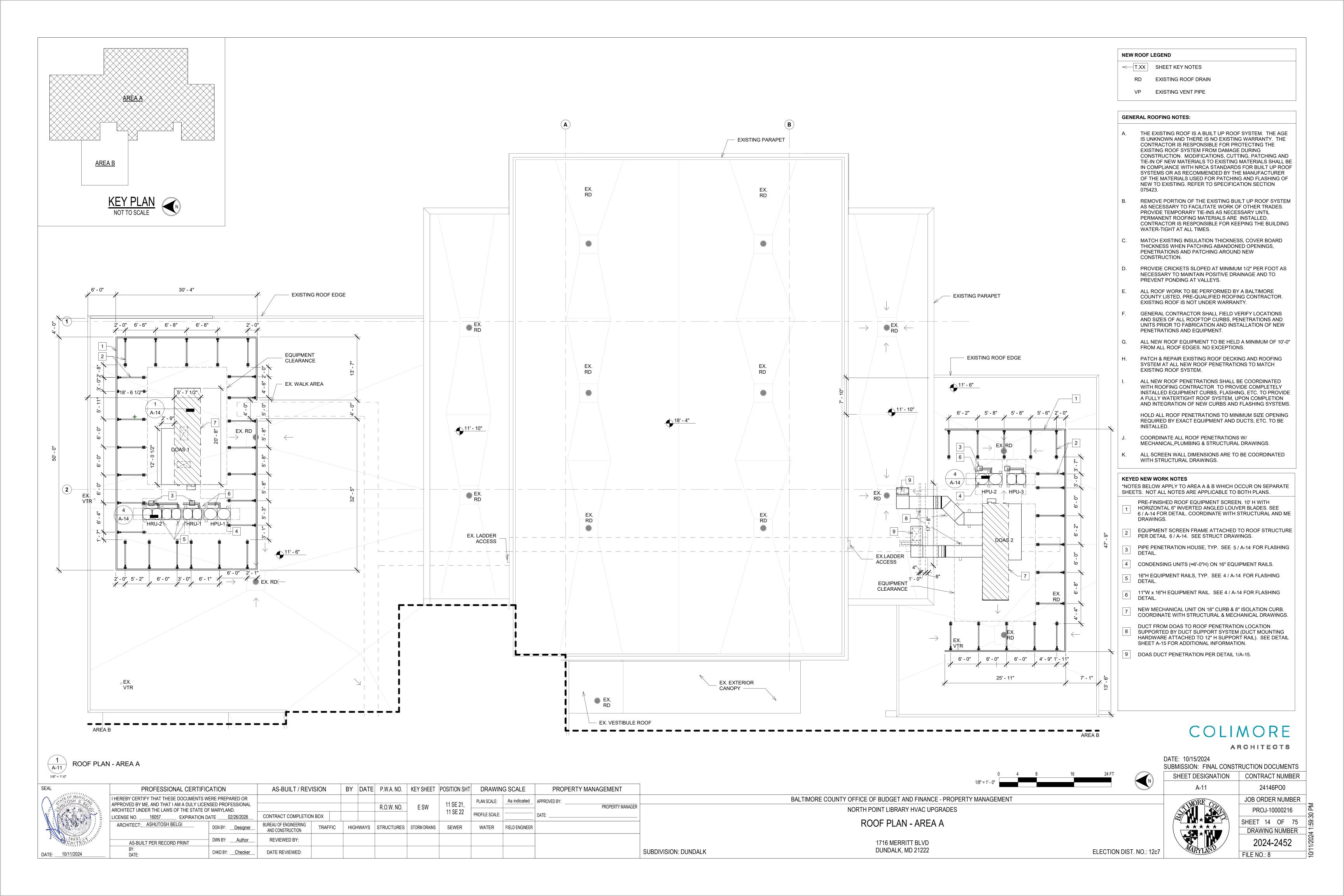
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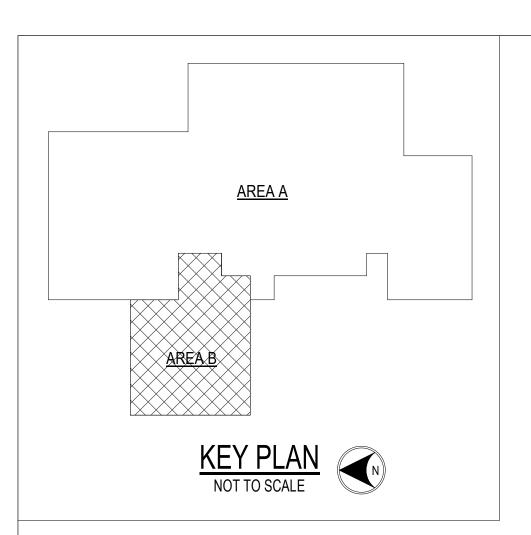
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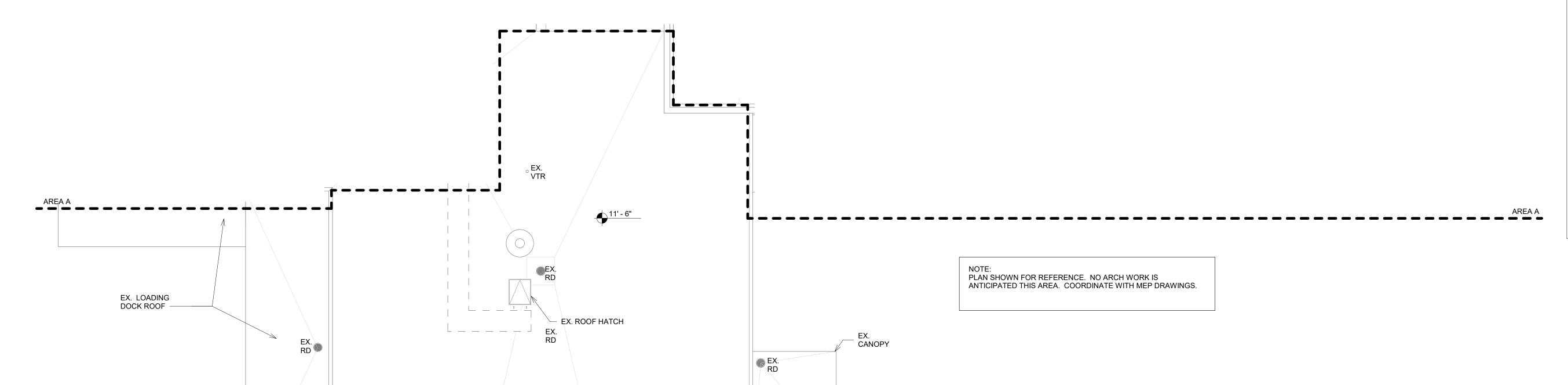
1716 MERRITT BLVD DUNDALK, MD 21222

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NEW ROOF LEGEND

<-- T.XX SHEET KEY NOTES

RD EXISTING ROOF DRAIN

VP EXISTING VENT PIPE

GENERAL ROOFING NOTES:

- A. THE EXISTING ROOF IS A BUILT UP ROOF SYSTEM. THE AGE IS UNKNOWN AND THERE IS NO EXISTING WARRANTY. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING ROOF SYSTEM FROM DAMAGE DURING CONSTRUCTION. MODIFICATIONS, CUTTING, PATCHING AND TIE-IN OF NEW MATERIALS TO EXISTING MATERIALS SHALL BE IN COMPLIANCE WITH NRCA STANDARDS FOR BUILT UP ROOF SYSTEMS OR AS RECOMMENDED BY THE MANUFACTURER OF THE MATERIALS USED FOR PATCHING AND FLASHING OF NEW TO EXISTING. REFER TO SPECIFICATION SECTION 075423.
- REMOVE PORTION OF THE EXISTING BUILT UP ROOF SYSTEM AS NECESSARY TO FACILITATE WORK OF OTHER TRADES. PROVIDE TEMPORARY TIE-INS AS NECESSARY UNTIL PERMANENT ROOFING MATERIALS ARE INSTALLED. CONTRACTOR IS RESPONSIBLE FOR KEEPING THE BUILDING WATER-TIGHT AT ALL TIMES.
- MATCH EXISTING INSULATION THICKNESS, COVER BOARD THICKNESS WHEN PATCHING ABANDONED OPENINGS, PENETRATIONS AND PATCHING AROUND NEW CONSTRUCTION.
- PROVIDE CRICKETS SLOPED AT MINIMUM 1/2" PER FOOT AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE AND TO PREVENT PONDING AT VALLEYS.
- E. ALL ROOF WORK TO BE PERFORMED BY A BALTIMORE COUNTY LISTED, PRE-QUALIFIED ROOFING CONTRACTOR. EXISTING ROOF IS NOT UNDER WARRANTY.
- GENERAL CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL ROOFTOP CURBS, PENETRATIONS AND UNITS PRIOR TO FABRICATION AND INSTALLATION OF NEW PENETRATIONS AND EQUIPMENT.
- ALL NEW ROOF EQUIPMENT TO BE HELD A MINIMUM OF 10'-0" FROM ALL ROOF EDGES. NO EXCEPTIONS.
- PATCH & REPAIR EXISTING ROOF DECKING AND ROOFING SYSTEM AT ALL NEW ROOF PENETRATIONS TO MATCH EXISTING ROOF SYSTEM.
 - ALL NEW ROOF PENETRATIONS SHALL BE COORDINATED WITH ROOFING CONTRACTOR TO PROVIDE COMPLETELY INSTALLED EQUIPMENT CURBS, FLASHING, ETC. TO PROVIDE A FULLY WATERTIGHT ROOF SYSTEM, UPON COMPLETION AND INTEGRATION OF NEW CURBS AND FLASHING SYSTEMS.
 - HOLD ALL ROOF PENETRATIONS TO MINIMUM SIZE OPENING REQUIRED BY EXACT EQUIPMENT AND DUCTS, ETC. TO BE
- COORDINATE ALL ROOF PENETRATIONS W/ MECHANICAL, PLUMBING & STRUCTURAL DRAWINGS.
- ALL SCREEN WALL DIMENSIONS ARE TO BE COORDINATED WITH STRUCTURAL DRAWINGS.

COLIMORE ARCHITECTS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY HVAC UPGRADES

ROOF PLAN - AREA B

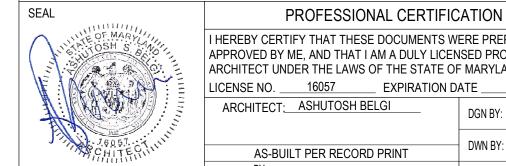
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JOB ORDER NUMBER DRAWING NUMBER 2024-2453 FILE NO.: 8

24146PO0



AS-BUILT / REVISION BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PLAN SCALE: As indicated 11 SE 21, APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL R.O.W. NO. PROPERTY MANAGER 11 SE 22 ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. PROFILE SCALE: CONTRACT COMPLETION BOX LICENSE NO. _____16057 ____ EXPIRATION DATE _____02/26/2026 BUREAU OF ENGINEERING AND CONSTRUCTION ARCHITECT: ASHUTOSH BELGI HIGHWAYS STRUCTURES STORM DRAINS SEWER REVIEWED BY: AS-BUILT PER RECORD PRINT DATE REVIEWED:

AS-BUILT / REVISION BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. PLAN SCALE: 1" = 30'-0" APPROVED BY: 11 SE 21, R.O.W. NO. PROPERTY MANAGER PROFILE SCALE: CONTRACT COMPLETION BOX LICENSE NO. _____16057 EXPIRATION DATE _____02/26/2026 ARCHITECT: ASHUTOSH BELGI BUREAU OF ENGINEERING AND CONSTRUCTION HIGHWAYS STRUCTURES STORM DRAINS SEWER REVIEWED BY: AS-BUILT PER RECORD PRINT DATE REVIEWED: DATE: ____10/11/2024

NORTH POINT LIBRARY HVAC UPGRADES ROOF SCREEN VIEWS 1716 MERRITT BLVD DUNDALK, MD 21222

24146PO0 JOB ORDER NUMBER SHEET 16 OF 75
DRAWING NUMBER 2024-2454

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

SHEET DESIGNATION CONTRACT NUMBER

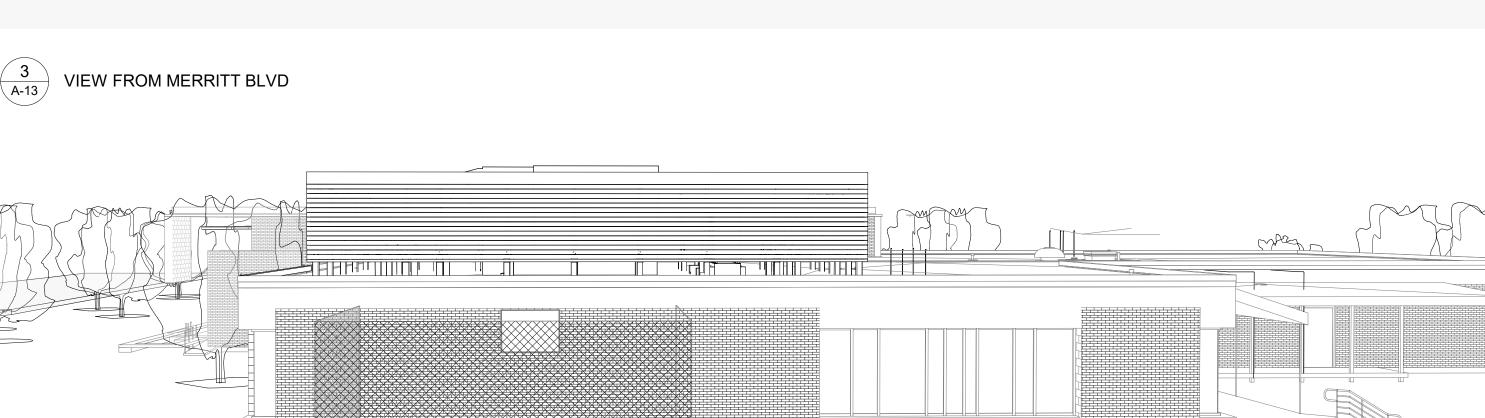
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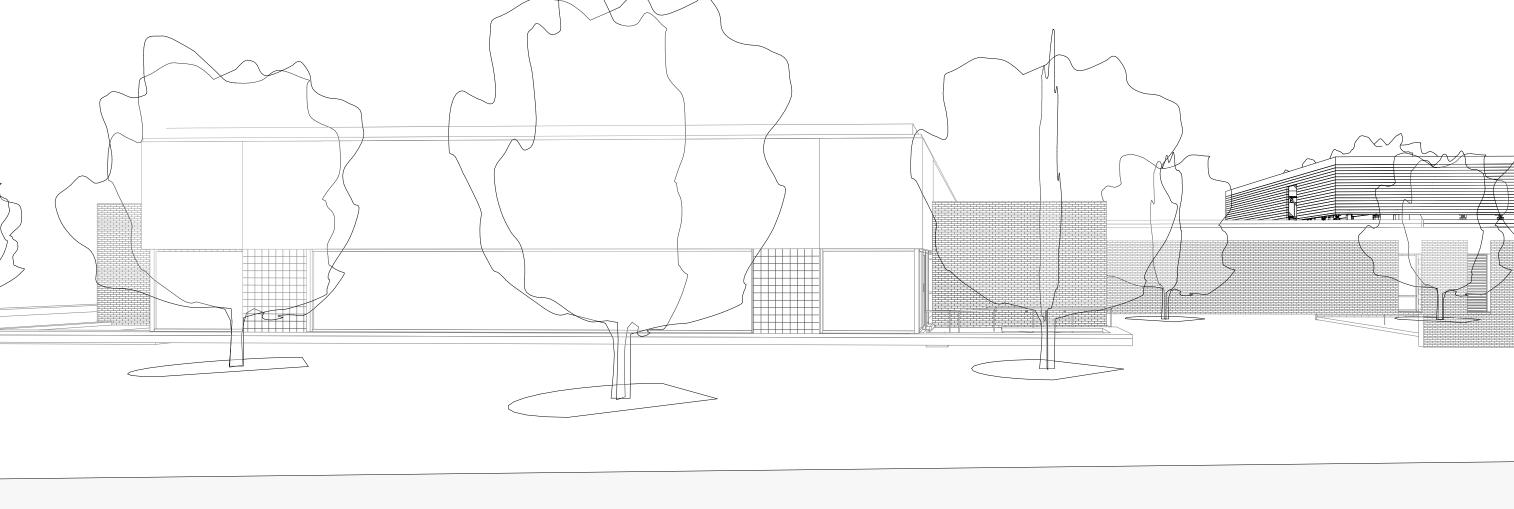
CO	LIMORE
	ARCHITECT

COL	IMORE
	ARCHITECT

COL	IMORE
	ARCHITECTS

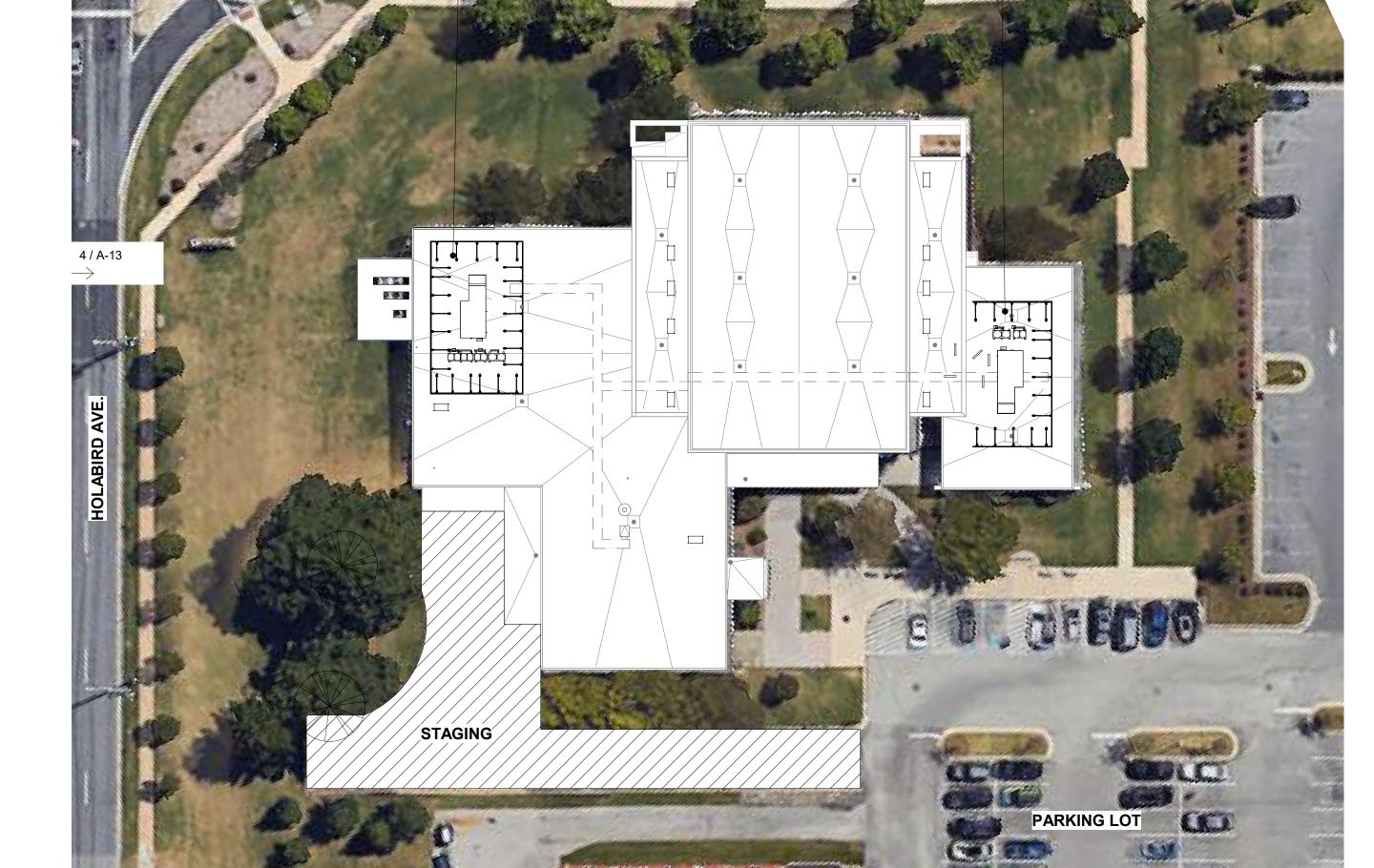
3 VIEW FROM MERRITT BLVD	





2 A-13	VIEW FROM PARKING LOT	

- 10' H, 3-SIDED ROOF EQUIPMENT SCREEN



10' H, 4-SIDED ROOF EQUIPMENT SCREEN WITH ACCESS DOOR/OPENING

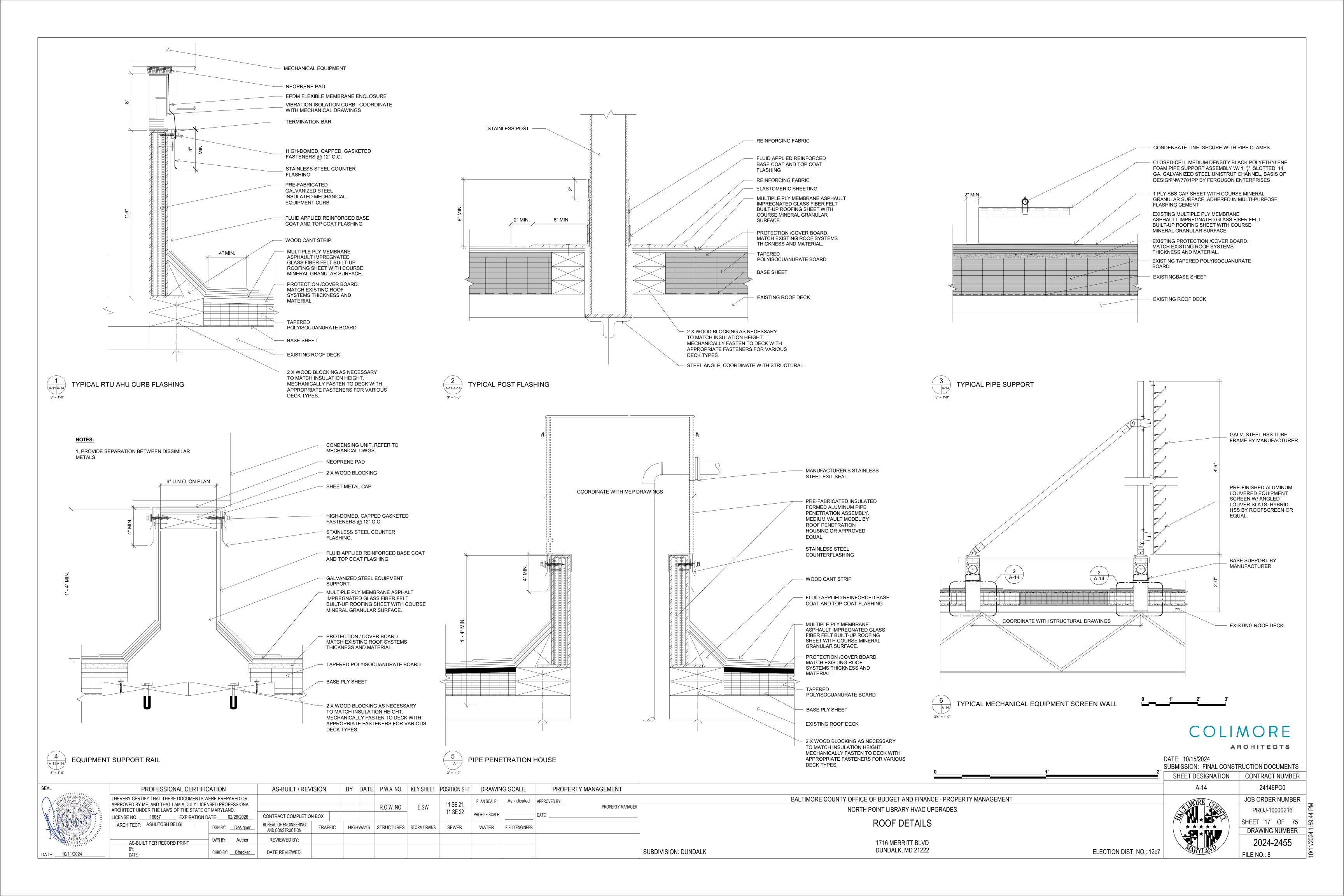
MERRITT BLVD

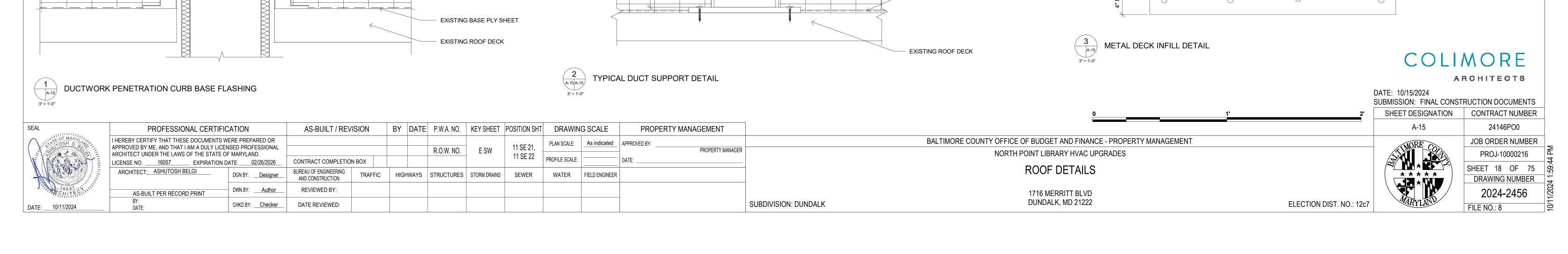
PERSPECTIVE VIEW KEY PLAN

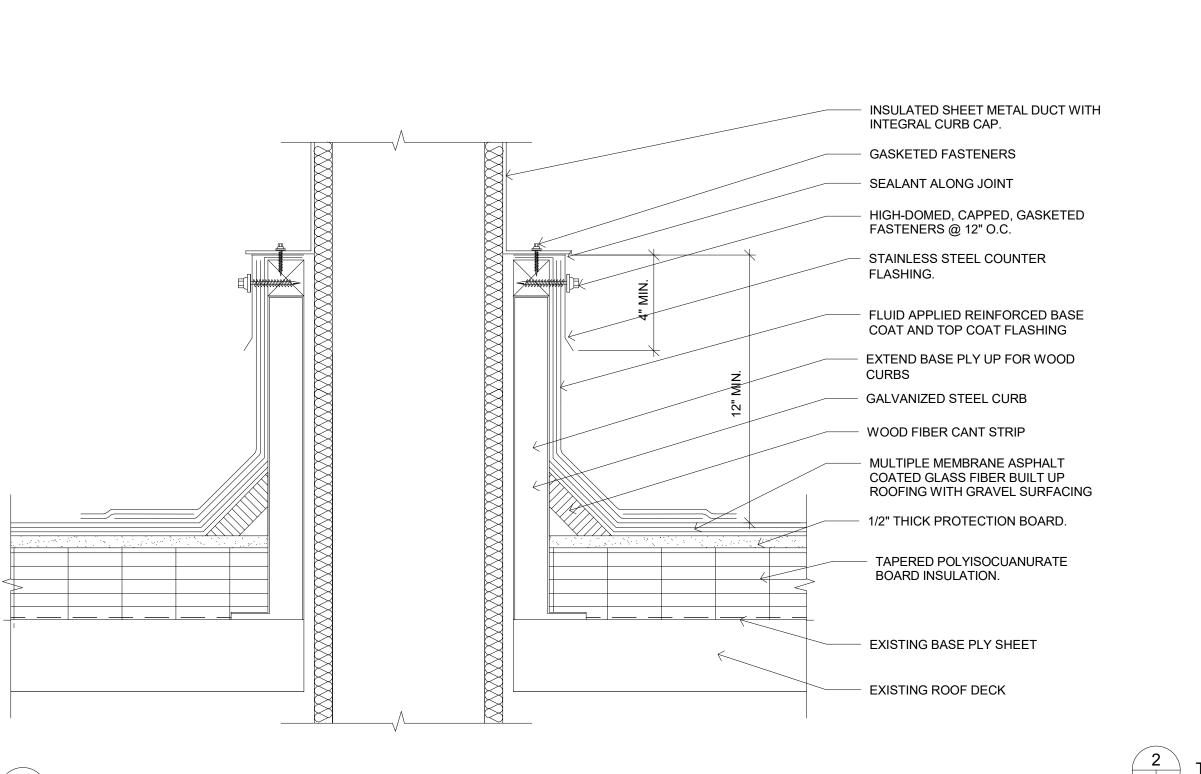
SUBDIVISION: DUNDALK

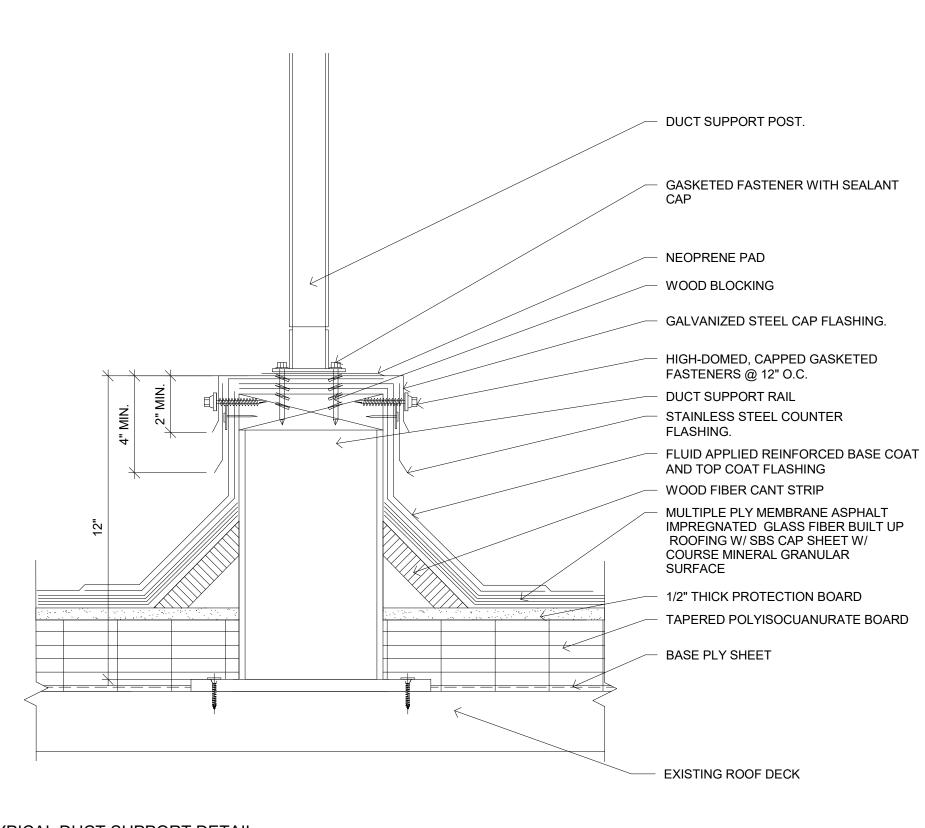
4 VIEW FROM HOLABIRD AVE

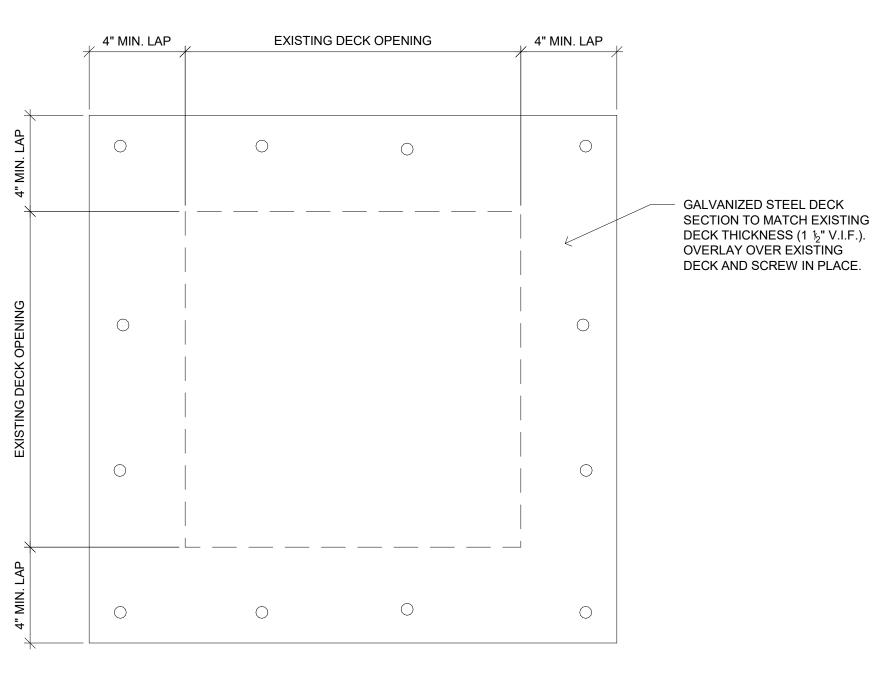
ELECTION DIST. NO.: 12c7

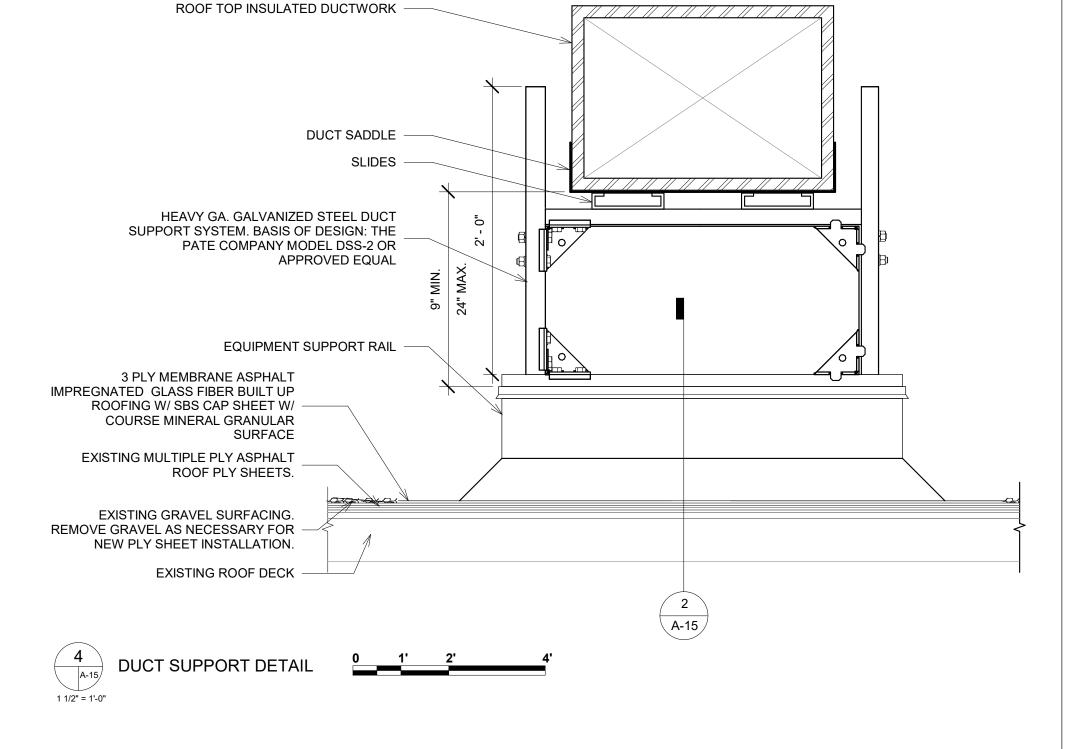








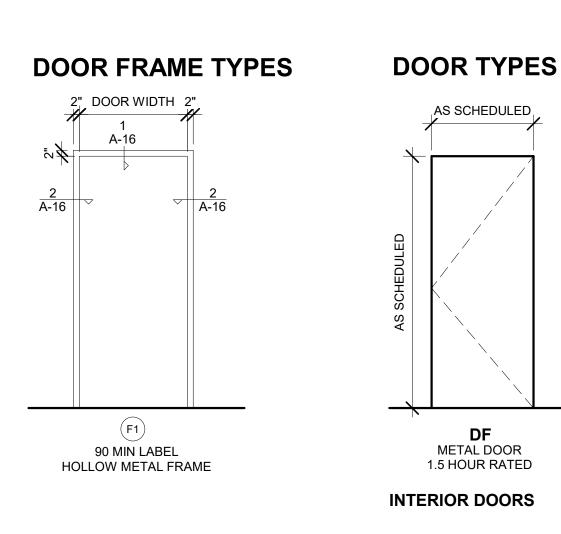




ROOM FINISH SCHEDULE								
ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	WALL FINISH	CEILING FINISH	COMMENTS		
1	VESTIBULE	FE-1	BE-1	PE-1	CE-3			
2	LOBBY	FE-1	BE-1	PE-1	CE-3 / C-1			
3	OFFICE	FE-1	BE-1	PE-1	C-4			
4	PERIODICALS	FE-1	BE-1	PE-1	C-1			
5	VESTIBULE	FE-1	BE-1	PE-1	EC-1			
6	BOOK DROP	FE-1	B-1	P-1	C-4			
7	WOMEN'S	FE-1	BE-1	PE-1	C-1			
8	MEN'S	FE-1	BE-1	PE-1	C-1			
9	FAMILY TOILET	FE-1	BE-1	PE-1	CE-1			
10	NEW BOOKS	FE-1	BE-1	PE-1	C-1			
11	READING ROOM	FE-1	BE-1	PE-1	CE-1 / C-1			
12	STACK AREA	FE-1	BE-1	PE-1	C-1			
13	STACK AREA	FE-1	BE-1	PE-1	C-1			
14	STACK AREA	FE-1	BE-1	PE-1	C-1			
15	MEETING ROOM	FE-1	BE-1	PE-1	C-1			
16	LOBBY	FE-1	BE-1	PE-1	C-3			
17	WOMEN'S	FE-1	BE-1	PE-1	C-2			
18	MEN'S	FE-1	BE-1	PE-1	C-2			
19	KITCHEN	FE-1	BE-1	PE-1	C-2			
20	STORAGE	FE-1	BE-1	PE-1	C-4			
21	MECHANICAL	FE-1	BE-1	PE-1	C-4			
22	STORAGE	FE-1	BE-1	PE-1	C-4			
23	JAN. CLOSET	FE-1	BE-1	PE-1	-			
24	YOUTH LIBRARIAN	FE-1	BE-1	PE-1	C-1			
25	AREA LIBRARIAN	FE-1	BE-1	PE-1	C-1			
26	DISPATCH	FE-1	BE-1	PE-1	C-4			
27	STORAGE	FE-1	BE-1	PE-1	C-4			
28	PANTRY	FE-1	BE-1	PE-1	C-1			
29	LOUNGE	FE-1	BE-1	PE-1	C-1			
30	WORK ROOM	FE-1	BE-1	PE-1	C-1			
31	TOILET ROOM	FE-1	BE-1	PE-1	C-2			
32	VESTIBULE	FE-1	BE-1	PE-1	C-2			
33	LOCKER ROOM	FE-1	BE-1	PE-1	C-2			
34	TOILET ROOM	FE-1	BE-1	PE-1	C-2			
35	BOOK STORAGE	FE-1	BE-1	PE-1	C-1			
36	ADULT LIBRARIAN	FE-1	BE-1	PE-1	C-1			
37	MECHANICAL ROOM	FE-1	BE-1	PE-1	-			
38	COMPUTER LAB	FE-1	BE-1	PE-1	- C-1			
C-1	CORRIDOR	FE-1	BE-1	PE-1	C-1			

	FINISH KEY SCHEDULE							
FINISH NOTE	FINISH TYPE	MANUFACTURER	COLLECTION	STYLE	COLOR	COMMENT		
				-				
FE-1	EXIST. FLOORING							
BE-1	EXIST. WALL BASE - VINYL							
B-1	WALL BASE - VINYL							
P-1	WALL PAINT							
PE-1	EXIST.WALL PAINT							
CE-1	EXIST. CEILING - 2x2 ACT							
CE-2	EXIST. CEILING - 2x4 ACT							
CE-3	EXIST. CEILING - PAINTED GYPSUM							
C-1	CEILING - 24" X 24" ACT	ARMSTRONG	ULTIMA HIGH NRC	SQUARE LAY-IN, FINE TEXTURE, PRELUDE 15/16 SUSPENSION GRID	WHITE			
C-2	CEILING - 24" x 24" ACT	ARMSTRONG	ULTIMA HEALTH ZONE HIGH NRC	SQUARE LAY-IN, FINE TEXTURE, PRELUDE 15/16 SUSPENSION GRID	WHITE			
C-3	CEILING - PAINTED GYPSUM							
C-4	CEILING - 24" x 24" ACT	ARMSTRONG	DUNE	SQUARE LAY-IN, FINE TEXTURE, PRELUDE 15/16 SUSPENSION GRID	WHITE			
MP-2	HM DOOR & FRAME PAINT							

DOOR SCHEDULE															
				DOOR				FRAME				FIRE			
NO.	TYPE	WIDTH	HEIGHT	THICKNESS	MATERIAL	FINISH	TYPE	MATERIAL	FINISH	HEAD	JAMB	RATING	GLAZING	HARDWARE	COMMENTS
6	DF	3' - 0"	7' - 0"	1 3/4"	HM	PT	F1	НМ	PT	1/A-16	2/A-16	90 MIN	-	1	



DOOR SCHEDULE NOTES:

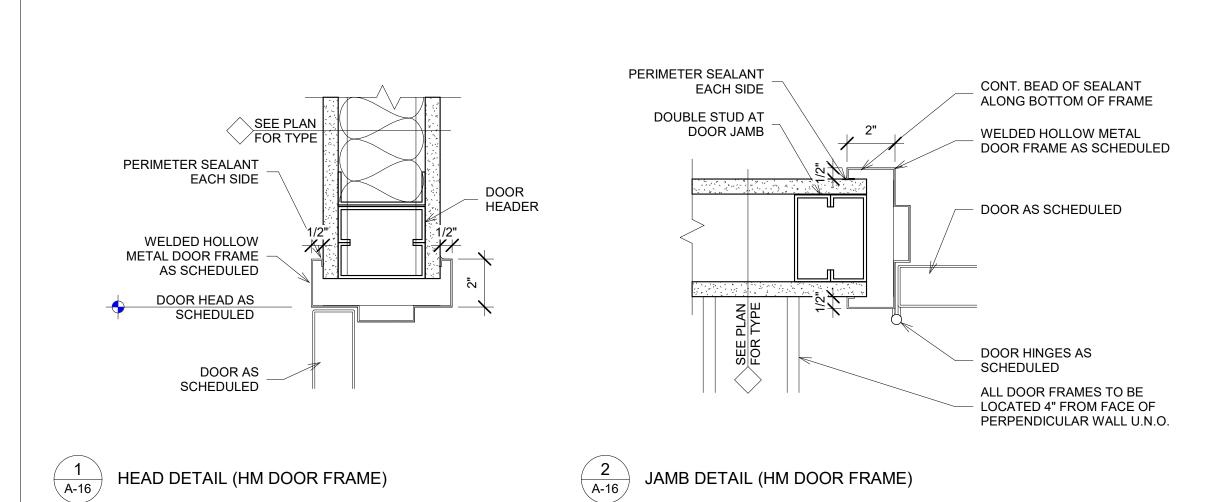
- 1. ALL NEW EXTERIOR DOORS MUST HAVE THRESHOLD AND WEATHERSTRIPPING.
- 2. REFER TO SPEC SECTION 0871 FOR DOOR HARDWARE
- 3. ALL FIRE DOOR SHALL BE SELF CLOSING OR AUTOMATIC CLOSING.
- 4. ALL NEW DOORS SHALL MEET SAFETY GLAZING REQUIREMENTS.
- 5. ALL EGRESS DOOR HARDWARE SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

ABBREVIATIONS:

HM 16 GA GALVANIZED HOLLOW METAL, PRIME AND PAINT PAINT

HARDWARE SET 1:

- 4 1/2" x 4 1/2" HD FIVE KNUCKLE BUTT HINGE STOREROOM LOCKSET
- INTERCHANGEABLE CORE
- SILENCERS SURFACE MOUNTED CLOSER
- WALL STOP
- FIRE-SMOKE GASKETING AUTOMATIC BOTTOM SEAL



COLIMORE ARCHITECTS

24146PO0

2024-2457

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

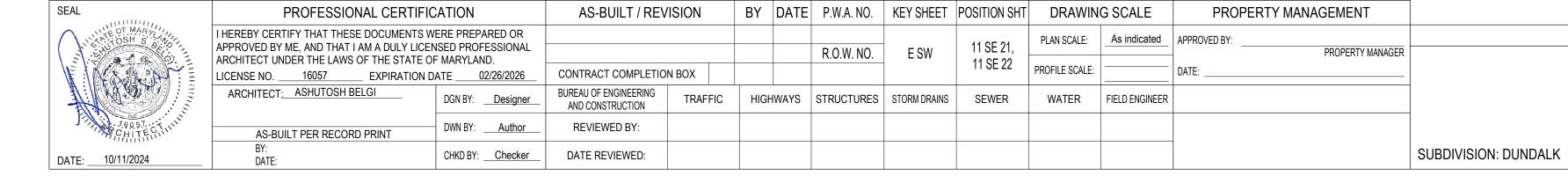
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY HVAC UPGRADES

SCHEDULES

1716 MERRITT BLVD DUNDALK, MD 21222

ELECTION DIST. NO.: 12c7

JOB ORDER NUMBER SHEET 19 OF 75 DRAWING NUMBER FILE NO.: 8



ALL ELEVATIONS ARE REFERENCED TO MSL. SEE CIVIL DRAWINGS FOR FINISHED FLOOR ELEVATIONS. ALL ELEVATIONS

- SHOWN ON PLANS ARE REFERENCED TO THIS DATUM UNLESS NOTED. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OR START OF CONSTRUCTION. NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE REDUCED IN STRENGTH WITHOUT THE PRIOR
- NOTIFICATION OF THE STRUCTURAL ENGINEER. THE GENERAL CONTRACTOR SHALL COORDINATE ALL OTHER DISCIPLINES FOR ANY ITEMS WHICH AFFECT THE STRUCTURAL
- THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, GUY WIRES, ETC., WHERE NECESSARY TO ADEQUATELY RESIST ALL CONSTRUCTION LOADS.

- STRUCTURAL DESIGN SHALL BE IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE FOLLOWING CODE.
- STANDARDS AND SPECIFICATIONS: INTERNATIONAL BUILDING CODE (IBC) 2021.
- ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
- AISC 360-16 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS. AWS D1.1 STRUCTURAL WELDING CODE - STEEL.
- SUPERIMPOSED DESIGN LOADS:
 - DEAD LOADS:
 - LIVE LOADS (MIN):
 - ROOFS, NON-REDUCIBLE: 30 PSF MECHANICAL EQUIPMENT: AS NOTED
 - ASCE 7-16 RISK CATEGORY = II
 - WIND LOADS: ULTIMATE DESIGN SPEED: 115 MPH
 - NOMINAL DESIGN SPEED: 90 MPH
 - EXPOSURE: B EARTHQUAKE DESIGN DATA:
 - SEISMIC IMPORTANCE FACTOR: le=1.0 MAPPED SPECTRAL RESPONSE ACCELERATION: Ss=0.14
 - MAPPED SPECTRAL RESPONSE ACCELERATION: S1=0.043 DESIGN SPECTRAL RESPONSE ACCELERATION: SdS=0.15
 - DESIGN SPECTRAL RESPONSE ACCELERATION: Sd1=0.069 SOIL SITE CLASSIFICATION: TYPE D ASSUMED
 - SEISMIC DESIGN CATEGORY: B
 - SNOW LOADS: GROUND SNOW LOAD (Pg): 25 PSF FLAT ROOF SNOW LOAD (Pf): 20 PSF
 - SNOW EXPOSURE FACTOR (Ce): 1.0
 - SNOW THERMAL FACTOR (Ct): 1.0 SNOW LOAD IMPORTANCE FACTOR (Is): 1.0

ALL MEMBER SIZES AND DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES SHOWN ON THE DRAWINGS ARE OBTAINED FROM AVAILABLE SOURCES AND ARE NOT GUARANTEED TO BE TRUE AND EXACT. THE CONTRACTOR SHALL VERIFY THESE DIMENSIONS AND ELEVATIONS BY ACTUAL FIELD MEASUREMENTS PRIOR TO FABRICATION OF ANY MATERIALS AND START OF WORK, AND REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER.

THE CONTRACTOR SHALL PROVIDE ALL SHORING, NEEDLING AND BRACING AS REQUIRED TO SUPPORT THE EXISTING STRUCTURE. THE CONTRACTOR SHALL EXAMINE THE EXISTING STRUCTURE TO DETERMINE THE EXTENT OF THE NECESSARY SHORING, NEEDLING. AND UNDERPINNING. THE CAPACITY AND METHOD FOR SHORING AND NEEDLING SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

- REMOVE EXISTING CONSTRUCTION AS SHOWN ON PLANS. SEE PLANS, SECTIONS, AND DETAILS FOR EXTENT OF STRUCTURE
- TO BE REMOVED. EXISTING STRUCTURAL FRAMING SHALL REMAIN UNLESS SPECIFICALLY NOTED ON PLAN TO BE REMOVED.
- IF FIELD CONDITIONS DIFFER FROM THOSE SHOWN ON DRAWINGS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE THE EXISTING BUILDING DURING THE COURSE OF CONSTRUCTION AND IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY AREAS WHERE THE STRUCTURE EXHIBITS
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO SATISFY THEMSELVES AS TO THE LOCATION OF ANY UTILITIES IN THE IMMEDIATE VICINITY OF CONSTRUCTION SO AS TO PREVENT DAMAGE TO THEM. SHOULD ANY DAMAGE TO SUCH UTILITIES OCCUR THE CONTRACTOR SHALL BE REQUIRED TO REPAIR SUCH DAMAGE AT THEIR OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER.

- ALL STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF
- STRUCTURAL STEEL FOR BUILDINGS
- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS: W-SHAPES: A992, Fy = 50 KSI.
- CHANNELS, ANGLES, BARS & PLATES: A36, Fy = 36 KSI. SQUARE AND RECTANGULAR HSS: A500, GRADE C, Fy = 50 KSI.
- ROUND HSS: A500, GRADE C, Fy = 46 KSI ROUND PIPE: A53, GRADE B, Fy = 35 KSI.
- BOLTS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
- HIGH STRENGTH BOLTS: ASTM F3125 GRADE 325 STAINLESS STEEL HIGH STRENGTH BOLTS: (SS) F593
- ANCHOR BOLTS: ASTM F1554 GRADE 36 ALL BOLTS SHALL BE 3/4" DIAMETER, OPEN HOLES 13/16" DIAMETER, UNLESS OTHERWISE SHOWN OR NOTED.
- WELDING SHALL BE IN ACCORDANCE WITH AWS STRUCTURAL WELDING CODE (AWS D1.1) AND SHALL BE PERFORMED BY CERTIFIED WELDERS. ALL WELDS SHALL BE MADE WITH AWS A5.1 E-70XX ELECTRODES.
- ALL SHOP CONNECTIONS SHALL BE HIGH STRENGTH BOLTED OR WELDED.
- ALL FIELD CONNECTIONS SHALL BE HIGH STRENGTH BOLTED EXCEPT WHERE DETAILS INDICATE WELDING. NO PENETRATIONS ARE PERMITTED THROUGH STRUCTURAL STEEL MEMBERS UNLESS INDICATED ON STRUCTURAL
- DRAWINGS OR APPROVED BY ARCHITECT/ENGINEER. APPROVAL OF THE ARCHITECT/ENGINEER SHALL BE MANDATORY FOR THE USE OF CUTTING TORCH IN THE FIELD.

CHKD BY: RLA

DATE REVIEWED:

- ALL GROUT UNDER STEEL PLATES SHALL BE NON-SHRINK "PRE-MIX" TYPE AND SHALL HAVE A MINIMUM COMPRESSIVE
- STRENGTH OF 5000 PSI. FOR ALL MISCELLANEOUS STEEL CONSTRUCTION NOT SHOWN ON STRUCTURAL DRAWINGS, SEE THE ARCHITECTURAL AND MECHANICAL DRAWINGS.
- ALL STEEL & CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED ACCORDING TO ASTM A123. ALL STEEL DESIGNATED AS "STAINLESS STEEL" SHALL BE IN ACCORDANCE WITH ASTM A276, TYPE 304.
- REFER TO SPECIFICATIONS FOR PAINTING AND COATING REQUIREMENTS.

- THE CONTRACTOR IS RESPONSIBLE FOR THE ENGINEERING OF THE FOLLOWING DELEGATED DESIGN ITEMS: ROOF SCREEN FRAMING
- DELEGATED DESIGN ITEMS SHALL BE DESIGNED TO ALL APPLICABLE BUILDING CODE STANDARDS INCLUDING STATE AND
- SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR THESE ITEMS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MARYLAND.

- SUBMISSIONS AND SHOP DRAWINGS SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN IN THE CONTRACT DOCUMENTS. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS.
- BEFORE SUBMISSION OF SHOP DRAWINGS, THE CONTRACTOR SHALL HAVE DETERMINED AND VERIFIED ALL QUANTITIES, DIMENSIONS, SPECIFIED PERFORMANCE CRITERIA, INSTALLATION REQUIREMENTS, MATERIALS, CATALOG NUMBERS AND SIMILAR DATA AND SHALL HAVE COORDINATED EACH SHOP DRAWING WITH OTHER SHOP DRAWINGS AND THE REQUIREMENTS
- PRIOR TO SUBMISSIONS, THE CONTRACTOR SHALL STAMP OR PROVIDE A SIMILAR WRITTEN INDICATION THAT THE CONTRACTOR HAS REVIEWED THE SUBMISSION AND IS SATISFIED THE CONTENTS ARE IN COMPLIANCE WITH THE CONTRACT
- DRAWINGS. REPRINTS OF THE CONTRACT DRAWINGS WILL NOT BE ACCEPTED.
- NO DIMENSIONAL INFORMATION MAY BE OBTAINED BY DIRECT SCALING OF THE DRAWINGS.

ENGAGE AN INDEPENDENT SPECIAL INSPECTION AGENCY. CONTRACTOR SHALL NOTIFY INSPECTOR OF CONSTRUCTION PROGRESS AND PROVIDE ACCESS TO THE SITE AND WORK TO COMPLETE INSPECTIONS.

1705.2

- INSPECTION SHALL BE ACCORDING TO THE FOLLOWING IBC 2021 SECTIONS: 1704.2
- SPECIAL INSPECTIONS STEEL CONSTRUCTION

∠	ANGLE
@	AT
¢.	CENTERLINE
Ø	DIAMETER
~ Φ	PLATE
ADD'L	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
ALUM	ALUMINUM
ARCH	ARCHITECTURAL
BOT	BOTTOM
BRG	BEARING
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONT	CONTINUOUS
COORD DEG	COORDINATE DEGREE
DIA	DIAMETER
DIM	DIMENSION
DTL	DETAIL
DWG(S)	DRAWING(S)
EA	EACH
EE	EACH END
EF	EACH FACE
ELEV	ELEVATION
EMBED	EMBED(MENT)
EQ	EQUAL
EX	EXISTING
EW EXP	EACH WAY EXPANSION
FF	FINISHED FLOOR
FTG	FOOTING
FV	FIELD VERIFY
FRP	FIBER REINFORCED PLASTIC
0411/	CALVANIZED

GALVANIZED HOT-DIPPED GALVANIZED HD GALV HORIZONTAL HORIZ

HSS HOLLOW STRUCTURAL SECTION KSI KIPS/SQUARE INCH LLH LONG LEG HORIZONTAL LONG LONGITUDINAL MANUF MANUFACTURER

MAX MAXIMUM MECH MECHANICAL MIN MINIMUM MISC MISCELLANEOUS

MRWR MID RANGE WATER REDUCER NUMBER OC ON CENTER PCF POUNDS/CUBIC FOOT

PLWD PLYWOOD PSF POUNDS/SQUARE FOOT POUNDS/SQUARE INCH REINF REINFORCEMENT RTU **ROOF TOP UNIT** SCH SCHEDULE SECT SECTION

SQUARE FOOT SIM SIMII AR SQUARE STAINLESS STEEL STANDARD **TOP & BOTTOM** T&G TONGUE & GROOVE TOS TOP OF SLAE TUBE STEEL

TRANSV TRANSVERSE TYP TYPICAL T/RET WALL TOP OF RETAINING WALL T/WALL TOP OF WALL UNLESS NOTED OTHERWISE UNO **VERT** VERTICAL

VERIFY IN FIELD WATER TO CEMENT RATIO W/IN WITHIN W/O WITHOUT WELDED WIRE FABRIC

ENGINEERING INC

3500 BOSTON STREET PARK DRIVE BALTIMORE, MARYLAND 21224 410-522-5870

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION

24146PO0 JOB ORDER NUMBER PROJ-10000216 SHEET 20 OF 75 DRAWING NUMBER

2024-2458

FILE NO.: 8

CONTRACT NUMBER

STRUCTURAL NOTES **HVAC RENOVATION**

PROFESSIONAL CERTIFICATION AS-BUILT / REVISION BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PLAN SCALE: APPROVED BY: APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL 11 SE 21, R.O.W. NO. E SW PROPERTY MANAGER ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX LICENSE NO. _____23393 _____ EXPIRATION DATE ___8/25/2026 ENGINEER: RACHEL ALBRECHT GAGER BUREAU OF ENGINEERING TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS | SEWER WATER FIELD ENGINEER AND CONSTRUCTION DWN BY: NM REVIEWED BY: AS-BUILT PER RECORD PRINT

SUBDIVISION: DUNDALK

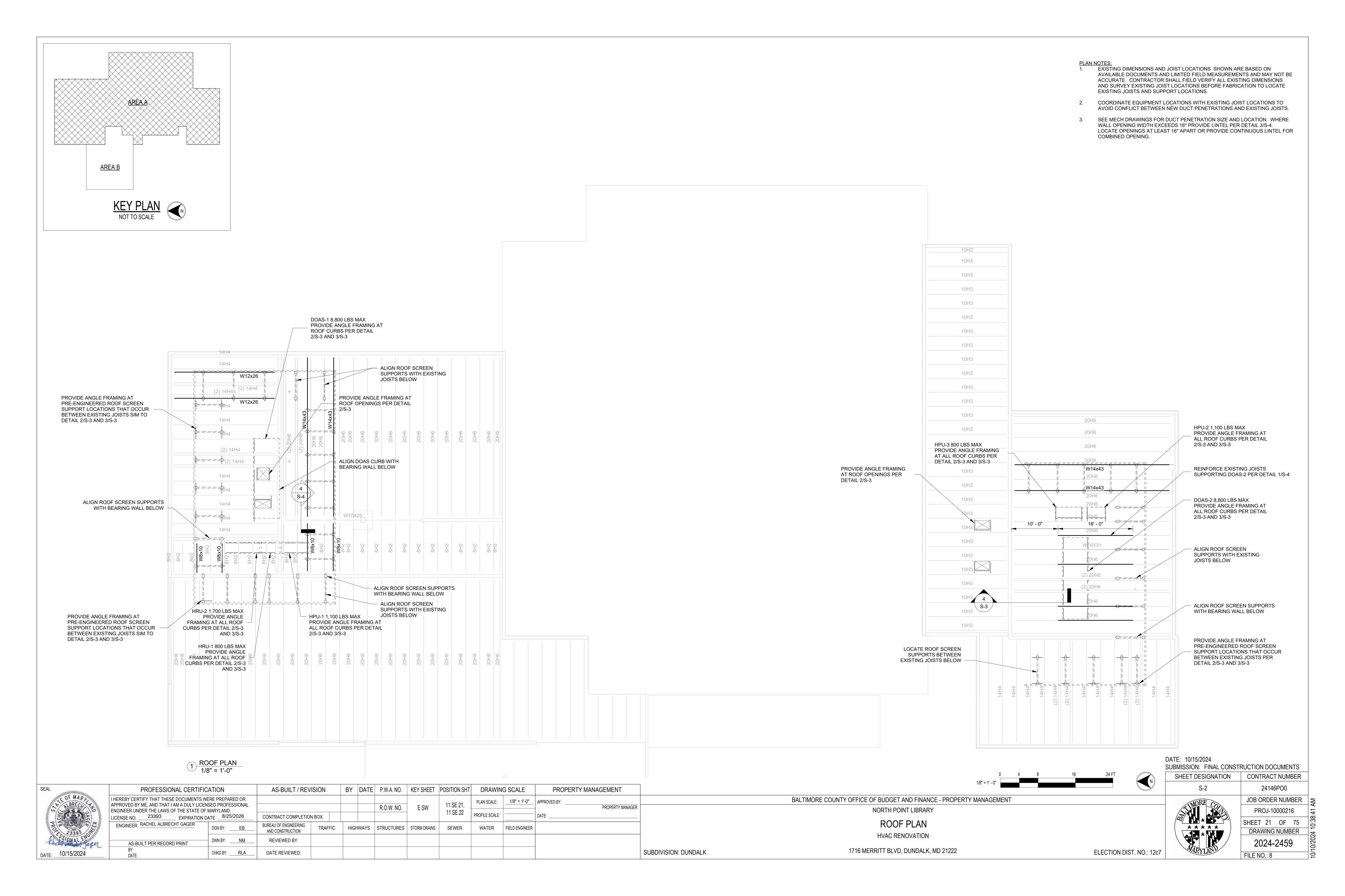
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

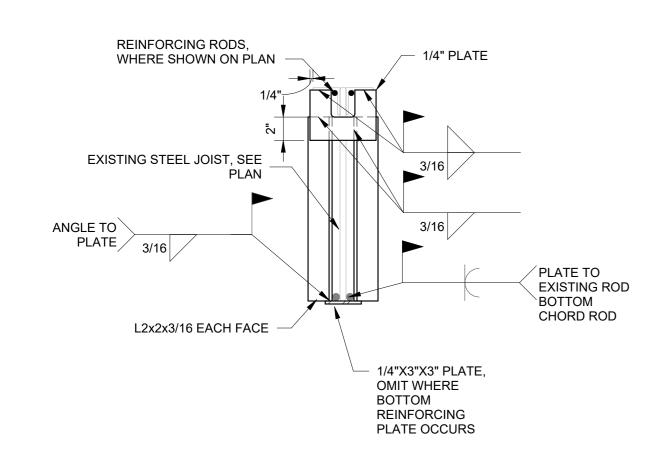
NORTH POINT LIBRARY

ELECTION DIST. NO.: 12c7

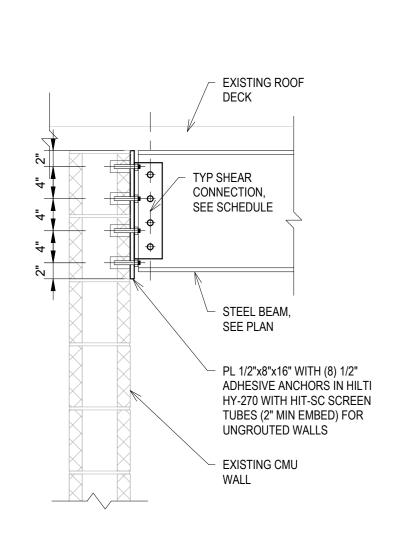
10/15/2024

1716 MERRITT BLVD, DUNDALK, MD 21222



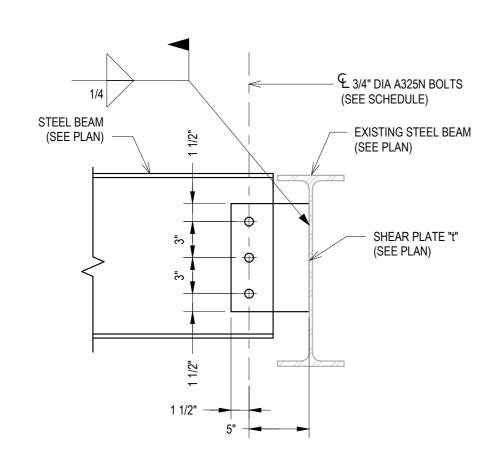


JOIST WEB REINFORCING S-3 SCALE: NONE



WF BEAM TO CMU WALL CONNECTION

AS-BUILT PER RECORD PRINT



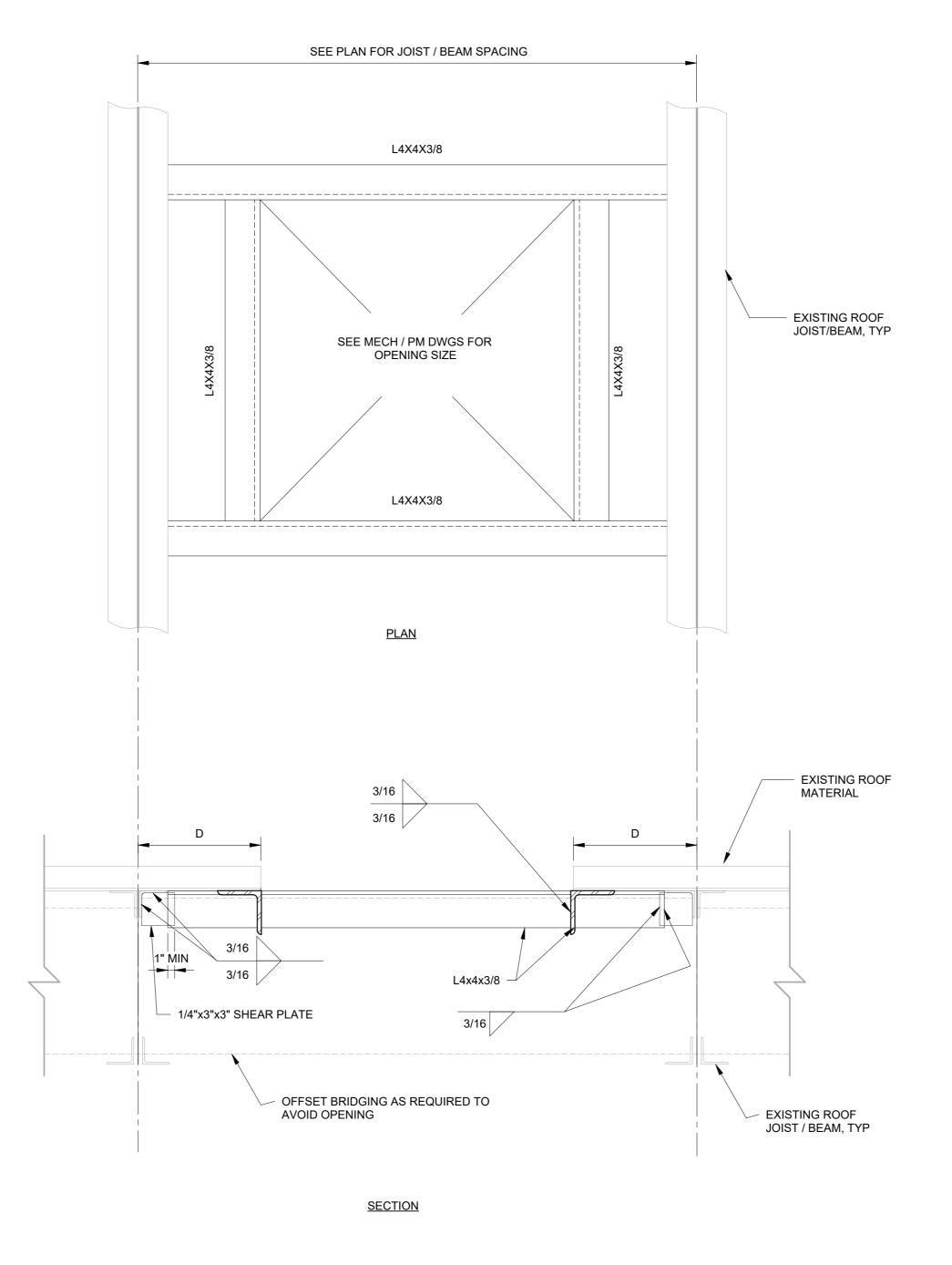
	CONNECTION SCHEDU	LE
BEAM SIZE	# OF BOLTS	SHEAR PLATE "t"
W8, W10	2	3/8"
W12, W14	3	3/8"
W16, W18	4	1/2"
W21 W24	5	1/2"

WF BEAM TO BEAM CONNECTION S-3 SCALE: NONE

PROFESSIONAL CERTIFICATION

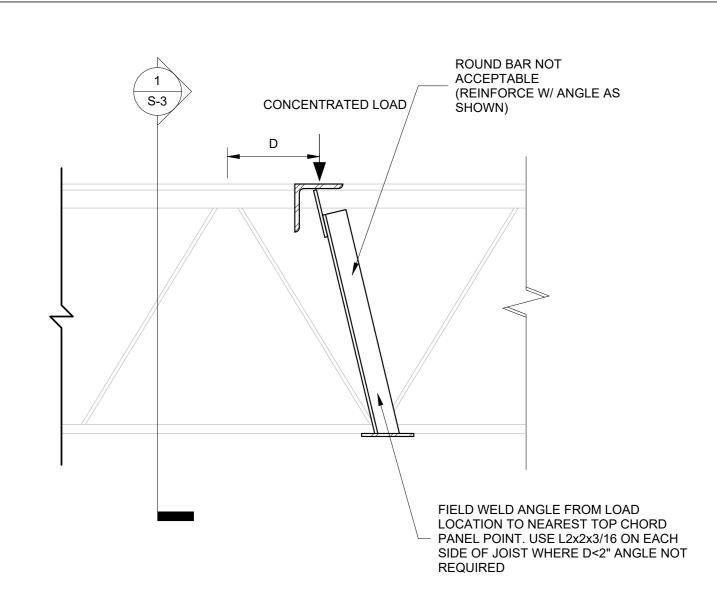
DWN BY: NM

CHKD BY: RLA



COORDINATE OPENING SIZE AND LOCATIONS WITH MECHANICAL DRAWINGS. INSTALL OPENING FRAME TIGHT UNDER EXISTING ROOF DECK. ROOF OPENING CAN BE MADE AFTER SUPPORT FRAME IS COMPLETELY INSTALLED. IF DISTANCE D IS LESS THAN 6" ANGLE MAY BE OMITTED.

OPENING IN ROOF DECK S-3 SCALE: NONE



MODIFICATION IS TYPICAL FOR ALL JOISTS SUPPORTING LOAD FROM TOP CHORD BETWEEN PANEL POINTS. VERIFY LOCATION AND NUMBER OF LOADS WITH STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS. ROOF DECK NOT SHOWN FOR CLARITY.

JOIST REINFORCING DETAIL S-3 SCALE: NONE

ROOF SCREEN AND FRAMING SYSTEM DESIGNED BY MANUFACTURER **EXISTING ROOF** DECK PROVIDE L4X4X3/8 WHERE ROOF SCREEN SUPPORT OCCURS BETWEEN JOISTS , COORDINATE LOCATIONS WITH MANUFACTURER

SECTION AT ROOF SCREEN S-3 SCALE: NONE

> DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

PROVIDE REINFORCING ANGLES PER DETAIL 3/S-3
WHERE ROOF PANEL

BETWEEN PANEL POINTS

SUPPORT OCCURS

- EXISTING ROOF JOIST

SHEET DESIGNATION CONTRACT NUMBER 24146PO0 JOB ORDER NUMBER PROJ-10000216 SHEET 22 OF 75 DRAWING NUMBER 2024-2460 FILE NO.: 8

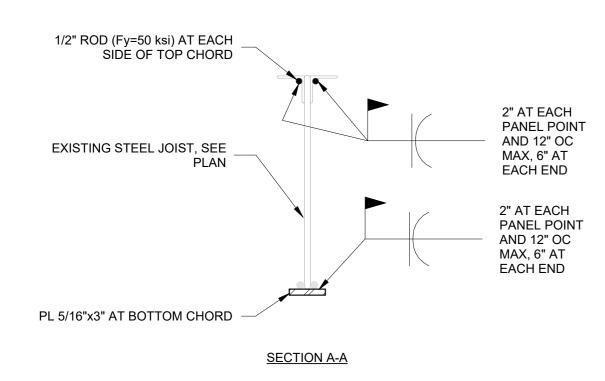
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY STRUCTURAL DETAILS **HVAC RENOVATION**

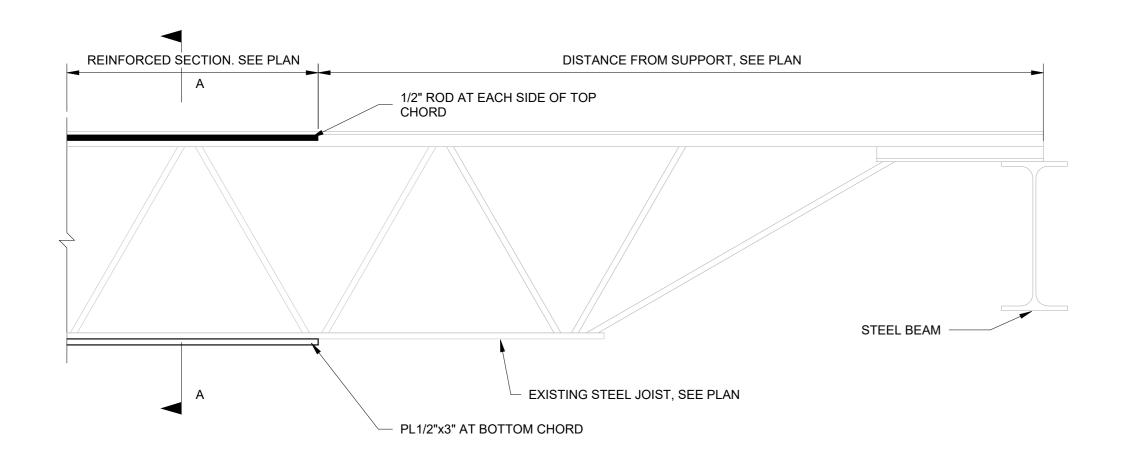
S-3 SCALE: NONE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 23393 EXPIRATION DATE 8/25/2026 ENGINEER: RACHEL ALBRECHT GAGER

AS-BUILT / REVISION BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT PLAN SCALE: As indicated APPROVED BY: 11 SE 21, 11 SE 22 E SW R.O.W. NO. PROPERTY MANAGER PROFILE SCALE: CONTRACT COMPLETION BOX BUREAU OF ENGINEERING TRAFFIC HIGHWAYS STRUCTURES STORM DRAINS SEWER WATER FIELD ENGINEER AND CONSTRUCTION REVIEWED BY: DATE REVIEWED:

SUBDIVISION: DUNDALK

1716 MERRITT BLVD, DUNDALK, MD 21222 ELECTION DIST. NO.: 12c7





NOTES:

1. PROVIDE ANGLE SUPPORT AT ROOF CURBS PER TYPICAL DETAIL 2/S-3.

2. WHERE CURB ANGLE SUPPORTS OCCUR BETWEEN PANEL POINTS, PROVIDE WEB ANGLES PER DETAIL 3/S-3.

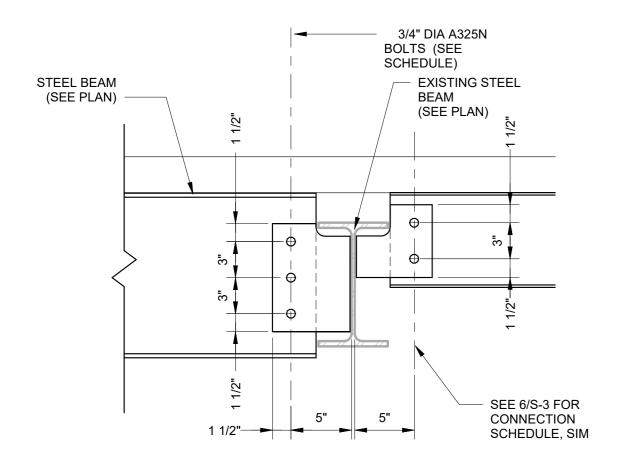
3. COORDINATE UNIT LOCATIONS WITH MECHANICAL DRAWINGS.

4. THIS DETAIL IS BASED ON LOADS INDICATED ON PLAN. CONTACT ENGINEER IF LOADS VARY.

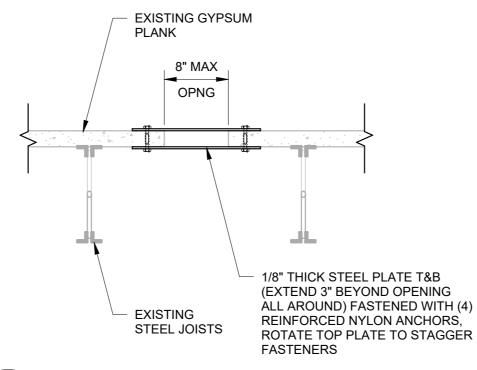
5. REMOVE AND REPLACE BRIDGING AS NECESSARY TO INSTALL REINFORCING BARS.

1 JOIST CHORD REINFORCING

S-4 SCALE: NONE

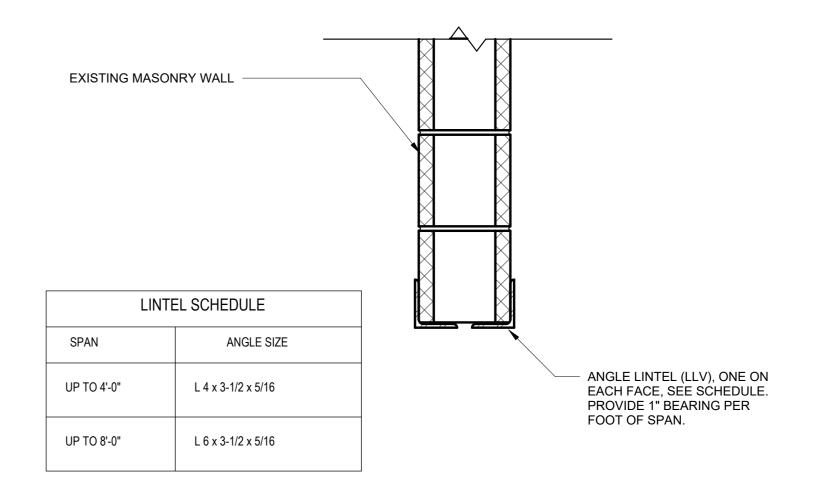






2 INFILL PENETRATION IN GYPSUM PLANK
S-4 SCALE: NONE

SUBDIVISION: DUNDALK



SUGGESTED SEQUENCE:

CHASE OUT MASONRY ON ONE SIDE FOR 1/2 WALL THICKNESS

AND INSTALL LINES OF BOULEDING.

AND INSTALL LINTELS PER SCHEDULE.
2. PACK SOLID WITH MASONRY AND GROUT AROUND BEARING.

3. AFTER GROUT HAS SET REPEAT STEPS 1 AND 2 FOR OPPOSITE FACE OF WALL.

4. REMOVE WALL BELOW ONCE LINTEL INSTALLATION IS COMPLETE.

3 ANGLE LINTEL IN EXISTING CMU WALL
S-4 SCALE: NONE

SEAL PROFESSIONAL CE		ATION	AS-BUILT / REVISIO		AS-BUILT / REVISION		SION BY DA		P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT	
OF MARY	I HEREBY CERTIFY THAT THESE DOCUMENTS WI APPROVED BY ME, AND THAT I AM A DULY LICEN					R.O.W. NO.	E SW	11 SE 21, 11 SE 22	PLAN SCALE:	_As indicated	APPROVED BY: PROPERTY MANAGER				
GAG A GAG		/S OF THE STATE OF MARYLAND EXPIRATION DATE8/25/2026		N BOX			1.0.11.110.		2011	PROFILE SCALE:		DATE:			
23393 C	ENGINEER: RACHEL ALBRECHT GAGER	DGN BY: EB	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHW	VAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER				
Parke Day ALE	AS-BUILT PER RECORD PRINT	DWN BY: NM	REVIEWED BY:												
DATE: 10/15/2024	BY: DATF [.]	CHKD BY: RLA	DATE REVIEWED:												

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

NORTH POINT LIBRARY

STRUCTURAL DETAILS

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222

ELECTION DIST. NO.: 12c7

DATE: 10/15/2024
SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION

S-4

24146P00

JOB ORDER NUMBER

PROJ-10000216

SHEET 23 OF 75

DRAWING NUMBER

2024-2461

FILE NO.: 8

MECHANICAL ABBREVIATIONS (APPLICABLE TO ALL MECHANICAL DRAWINGS) AIR COOLED CHILLER / AIR COOLED CONDENSER SANITARY / SECONDS / SOIL / SOUTH / SWITCH AHU AIR HANDLING UNIT SA SUPPLY AIR SENS SENSIBLE COOLING BAS SQUARE FEET / SQUARE FOOT BUILDING AUTOMATION SYSTEM SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION BRANCH CONTROLLER BDD BACKDRAFT DAMPER BHP TΑ TRANSFER AIR BRAKE HORSEPOWER BLR **BOILER** TOTAL STATIC PRESSURE CFM **CUBIC FEET PER MINUTE** UNIT HEATER CHILLED WATER RETURN CHS CHILLED WATER SUPPLY UNDERWRITERS LABORATORIES CONV CONVECTOR COP COEFFICIENT OF PERFORMANCE VACUUM / VALVE / VENT / VOLTS VARIABLE AIR VOLUME VD DAMPER / DEPTH / DIAMETER / DIFFUSER / DRAIN / DROP VOLUME DAMPER VFD DB VARIABLE FREQUENCY DRIVE DECIBEL / DRY BULB VARIABLE REFRIGERANT FLOW DIAMETER DIA DOAS DEDICATED OUTDOOR AIR SYSTEM WASTE / WATER / WATT / WEST / WIDTH DN DOMESTIC WATER HEATER DWH WET BULB EAST / ELECTRICAL EACH / EXHAUST AIR EΑ ENTERING AIR TEMPERATURE ENERGY EFFICIENCY RATIO EXHAUST FAN **EFFICIENCY** EFF ELECTRIC / ELECTRICAL ERW **ENERGY RECOVERY WHEEL** EXTERNAL STATIC PRESSURE ESS **EMERGENCY SHUTDOWN SWITCH EXPANSION TANK** ΕV EXHAUST VALVE EX EXISTING TO REMAIN FAHRENHEIT / FREEZESTAT FCU FAN COIL UNIT FIRE DAMPER FEET / FOOT GAS / GRILLE HEIGHT / HIGH / HUMIDISTAT / HUMIDITY SENSOR HAND-OFF-AUTOMATIC SWITCH HEAT PUMP / HIGH PRESSURE / HORSEPOWER HEAT PUMP UNIT HOT WATER HEATING RETURN / HOUR HEAT RECOVERY UNIT HOT WATER HEATING SUPPLY HEATING, VENTILATING AND AIR CONDITIONING KW **KILOWATTS** LENGTH / LOUVER LEAVING AIR TEMPERATURE LBS POUNDS

LLS

MAX

MCA

MECH

MIN

MOCP

MOD

OED

RA

RM

DATE: <u>10/15/2024</u>

RPM

RCP

LIQUID LEVEL SENSOR

THOUSAND BTU PER HOUR

MINIMUM CIRCUIT AMPACITY

MOTOR-OPERATED DAMPER

MAXIMUM OVER-CURRENT PROTECTION

RADIUS / REFRIGERANT / REGISTER / RISE / RISER

MECHANICAL

MECHANICAL

MINIMUM

NORTH

PUMP PHASE

ROOM

OUTDOOR AIR

RETURN AIR

REINFORCED CONCRETE REFRIGERANT LIQUID

REVOLUTIONS PER MINUTE REFRIGERANT SUCTION

REMOVE EXISTING

OPEN-END DUCT

MAXIMUM

	MECHANICAL LEGEND (APPLICABLE TO ALL MECHANICAL DRAWINGS)
SYMBOL	DESCRIPTION
———CHR———	CHILLED WATER RETURN
CHS	CHILLED WATER SUPPLY
HR	HOT WATER HEATING RETURN
——HS——	HOT WATER HEATING SUPPLY
RL	REFRIGERANT LIQUID
RS	REFRIGERANT SUCTION
•	CONNECT TO EXISTING
•	END POINT OF REMOVAL OF EXISTING
1 M-101	PLAN/ SECTION DESIGNATION TOP - PLAN/ SECTION REFERENCE, BOTTOM - REFERENCED DRAWING
	CAP (PIPE OR DUCT)
	SHUTOFF VALVE
——X——	TWO WAY AUTOMATIC CONTROL VALVE
	THREE-WAY AUTOMATIC CONTROL VALVE
	EXHAUST AIR DUCT
	OUTDOOR AIR OR SUPPLY AIR DUCT
	RETURN AIR DUCT
T	THERMOSTAT/TEMPERATURE SENSOR
S	DUCT MOUNTED SMOKE DETECTOR
D	DROP IN DUCTWORK
R	RISE IN DUCTWORK
—— ø	COMBINATION FIRE AND SMOKE DAMPER
	FIRE DAMPER
	MOTOR OPERATED DAMPER
	VOLUME DAMPER
SPSS —	STATIC PRESSURE SENSING STATION
XXXXX	FLEXIBLE CONNECTION
	SINGLE DUCT AIR CONDITIONING TERMINAL UNIT
8x8 D-1 250	DIFFUSER TAG: TOP- NECK SIZE CENTER- SPECIFICATION TYPE BOTTOM- AIRFLOW IN CFM
→	DIFFUSER / VRF CASSETTE BLOW PATTERN
©	CARBON DIOXIDE SENSOR

SUBDIVISION: DUNDALK

GENERAL MECHANICAL NOTES

(APPLICABLE TO ALL MECHANICAL DRAWINGS)

- 1. ALL PIPING, DUCTWORK, EQUIPMENT, AND MATERIALS SHOWN "LIGHT" (————) ARE EXISTING TO REMAIN. DEMOLISH ALL PIPING, DUCTWORK, EQUIPMENT, AND MATERIALS SHOWN "HEAVY AND DASHED" (----) ON DEMOLITION DRAWINGS. PROVIDE ALL PIPING, DUCTWORK, EQUIPMENT, AND MATERIALS SHOWN "HEAVY AND SOLID" (——) ON NEW WORK DRAWINGS.
- 2. COORDINATE ALL MECHANICAL WORK WITH PLUMBING WORK, ELECTRICAL WORK, AND WORK OF OTHER TRADES. SEE DRAWING G-3 PHASING PLAN.
- 3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. REPAIR ALL DAMAGES OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 4. ELEVATIONS NOTED ARE TO CENTERLINES OF PIPES FOR ALL PRESSURE LINES AND TO INVERT FOR ALL GRAVITY FLOW LINES.
- 5. INSTALL PIPING AND DUCTWORK SO THAT ALL VALVES AND DAMPERS ARE ACCESSIBLE.
- 6. UNLESS OTHERWISE NOTED, ROUTE ALL PIPING AND DUCTWORK OVERHEAD, TIGHT TO UNDERSIDE OF SLAB, WITH SPACE FOR INSULATION IF REQUIRED.
- 7. MAINTAIN MINIMUM 6'-8" CLEARANCE TO UNDERSIDE OF PIPES, DUCTS, CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL AND ELECTRICAL ROOMS. ACCESS ROUTE SHALL BE CLEAR A MINIMUM 36" WIDE.
- 8. CERTAIN ITEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN DUCTWORK AND PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.
- 9. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRES CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., CHECK FOR THE PRESENCE OF EXISTING MECHANICAL, PLUMBING AND ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION. EXERCISE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE SERVICES OR INJURY TO PERSONNEL DUE TO CONTACT WITH SAME. TEMPORARILY DISCONNECT SERVICES DURING THE CUTTING OPERATION. SCHEDULE SERVICE OUTAGES IN ADVANCE WITH THE COUNTY.
- 10. FLOW SCHEMATIC AND RISER DIAGRAMS INDICATE FLOW AND OPERATION CONCEPTS AS WELL AS GENERAL ARRANGEMENT OF EQUIPMENT. VALVES, PRESSURE GAUGES, ETC. ARE INDICATED FOR THIS PURPOSE. PROVIDE ADDITIONAL VALVES, PRESSURE GAUGES, ETC. AS SHOWN ON VARIOUS EQUIPMENT DETAILS. SEE PLANS AND DETAILS FOR PIPE SIZES NOT INDICATED ON FLOW SCHEDULES AND RISER DIAGRAMS.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR RESEARCHING ALL SYSTEMS THAT A PARTICULAR OUTAGE WILL AFFECT AS WELL AS LOCATING ALL SHUTOFF POINTS. INCLUDE THIS INFORMATION IN THE OUTAGE PLAN AND SUBMIT TO THE COUNTY FOR APPROVAL
- 12. EXCEPT AS OTHERWISE NOTED, LOCATE ALL ROOM THERMOSTATS/TEMPERATURE SENSORS 48 INCHES ABOVE FINISHED FLOOR ON SAME HORIZONTAL CENTERLINE AS LIGHT SWITCH. WHERE LIGHT SWITCH AND THERMOSTAT/TEMPERATURE SENSOR ARE ADJACENT TO EACH OTHER, LIGHT SWITCH SHALL BE CLOSEST TO THE DOOR. COORDINATE WITH ELECTRICAL CONTRACTOR. NOTIFY THE ENGINEER OF ROOMS WHERE THE ABOVE LOCATION CANNOT BE MAINTAINED OR WHERE THERE IS A QUESTION ON LOCATION.
- 13. IN CORRIDORS WHERE CEILING SPEAKERS AND AIR DIFFUSERS ARE INDICATED BETWEEN THE SAME LIGHTING FIXTURES, RELOCATE BOTH DEVICES TO QUARTER POINTS BETWEEN THE SAME FIXTURE.
- 14. RECOVER REFRIGERANTS FROM REFRIGERATION EQUIPMENT IN ACCORDANCE WITH AHRI AND EPA STANDARDS. PLACE RECOVERED REFRIGERANT IN CONTAINERS LABELED IN ACCORDANCE WITH ARI AND EPA STANDARDS AND TURNED OVER TO THE COUNTY.
- 15. RECYCLE MERCURY SWITCH THERMOSTATS THAT ARE REMOVED. DELIVER RECYCLED THERMOSTATS TO PARTICIPATING WHOLESALERS.
- 16. INFORMATION SHOWN ON THE MECHANICAL DRAWINGS PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO DEMOLITION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, OR THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.
- 17. REMOVE ALL EXISTING PIPING, DUCTWORK, EQUIPMENT, AND MATERIALS NOT REQUIRED FOR RE-USE OR RE-INSTALLATION (SHOWN OR OTHERWISE). ALL EXISTING MATERIALS AND EQUIPMENT WHICH ARE REMOVED AND ARE DESIRED BY THE COUNTY, OR ARE INDICATED TO REMAIN THE PROPERTY OF THE COUNTY SHALL BE DELIVERED BY THE CONTRACTOR WHERE DIRECTED BY THE COUNTY. ALL OTHER MATERIALS AND EQUIPMENT WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY THE CONTRACTOR FROM THE PREMISES.
- 18. DISCONNECT EXISTING PIPING NO LONGER REQUIRED TO REMAIN IN SERVICE (SHOWN OR OTHERWISE) AND REMOVE PIPING BACK TO SERVICE MAINS UNLESS OTHERWISE INDICATED OR NOTED ON PLANS. REMOVE EXISTING PIPE HANGERS, SUPPORTS, VALVES, ETC. CAP, PLUG, OR SEAL EXISTING PIPING INDICATED OR REQUIRED TO REMAIN IN SERVICE OR IN PLACE. NO EXISTING PIPING SHALL BE LEFT UNSEALED. VALVE ALL TERMINATED PRESSURE PIPE.
- 19. EXISTING MECHANICAL PIPING, DUCTWORK, EQUIPMENT, AND MATERIALS AFFECTED BY DEMOLITION OR NEW WORK INSTALLATION AND REQUIRED TO REMAIN IN SERVICE SHALL BE RE-INSTALLED OR SUPPORTED AS REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE COUNTY AND AT NO ADDITIONAL CONTRACT COST.
- 20. REMOVE ALL ACCESSORIES, CONTROLS, ENCLOSURES, SUPPORTS, HANGERS, PADS, ETC. ASSOCIATED WITH ALL EQUIPMENT SHOWN TO BE REMOVED. REPAIR AND PAINT DAMAGED SURFACES AND ALL SURFACES BEHIND ALL EQUIPMENT SHOWN TO BE DEMOLISHED TO MATCH EXISTING ADJACENT SURFACES.

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION | CONTRACT NUMBER

M-1	24146PO0
NORE C	JOB ORDER NUM
	PROJ-1000021

RDER NUMBER)J-10000216 * EFT SHEET 1 OF 75 DRAWING NUMBER 2024-2462

FILE NO.: 8

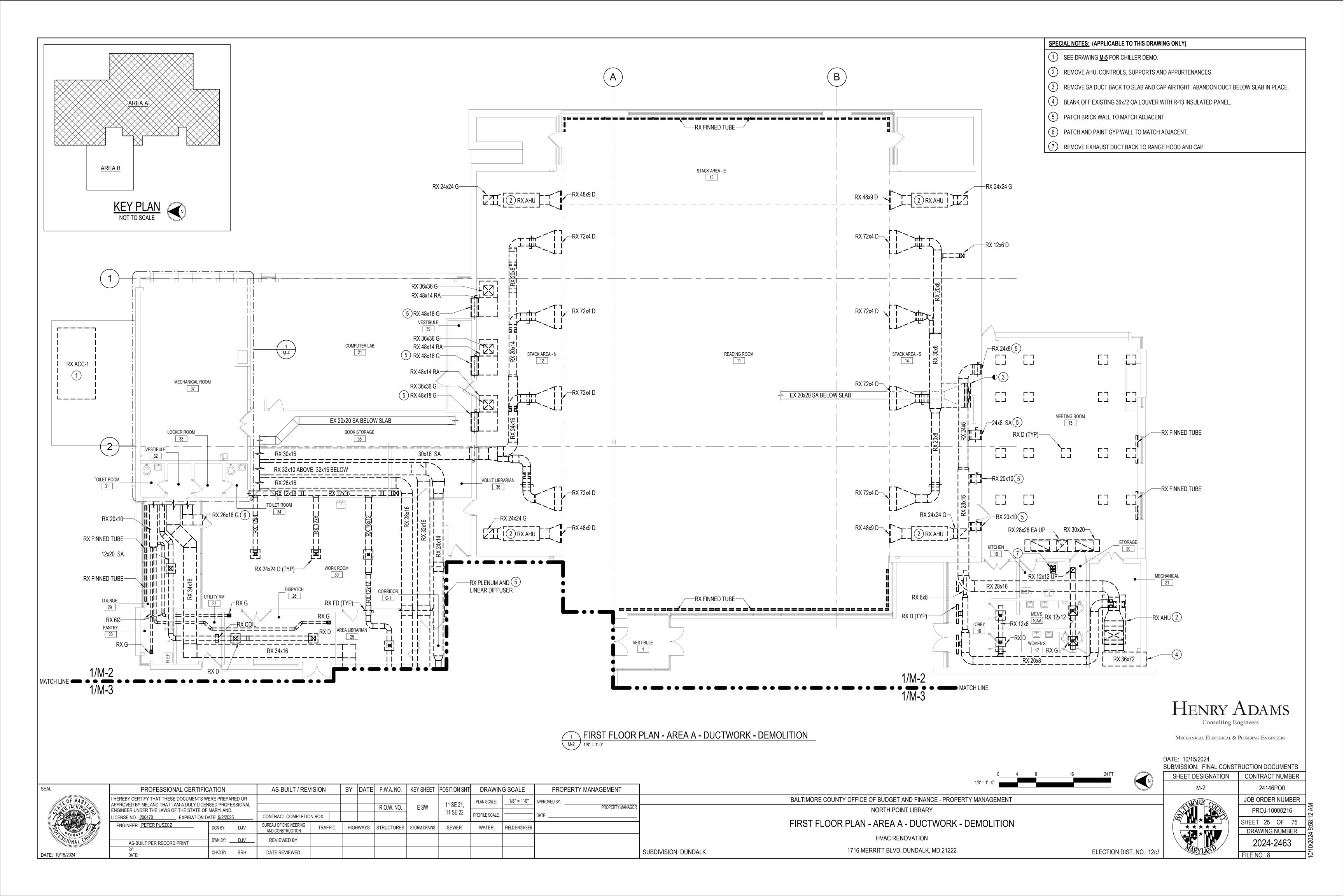
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S. Z.Z	ENGINEER UNDER THE LAWS OF THE STATE OF LICENSE NO. 200470 EXPIRATION DA	CONTRACT COMPLETION	N BOX		11.0.11.110.			PROFILE SCALE:		DATE:	
NO.	ENGINEER: PETER PUSZCZ	DGN BY: DJV	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWA'	YS STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
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	BY: DATE:	CHKD BY: SRH	DATE REVIEWED:								

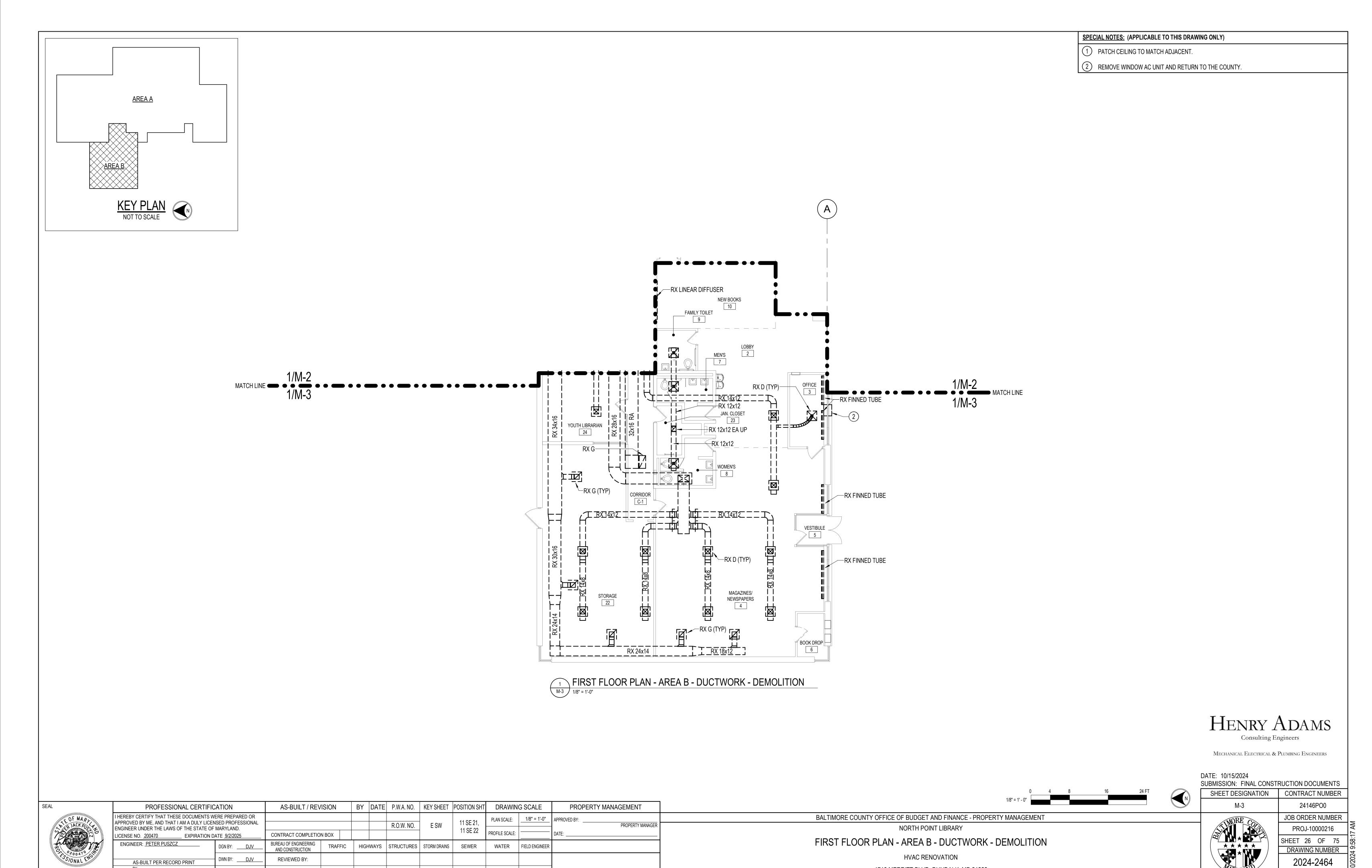
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY

MECHANICAL COVER SHEET

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222



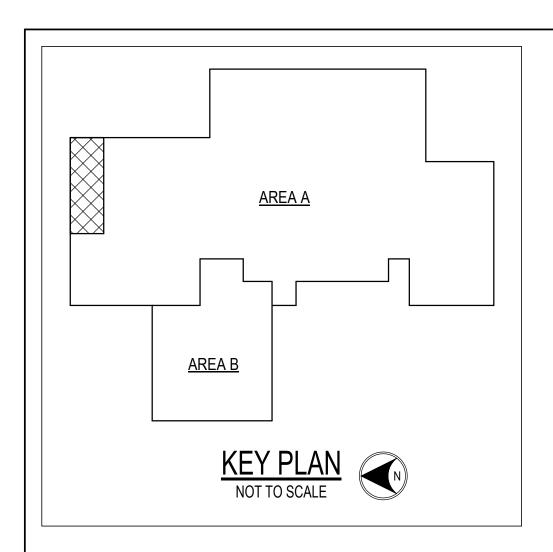


DATE REVIEWED:

DATE: 10/15/2024

1716 MERRITT BLVD, DUNDALK, MD 21222

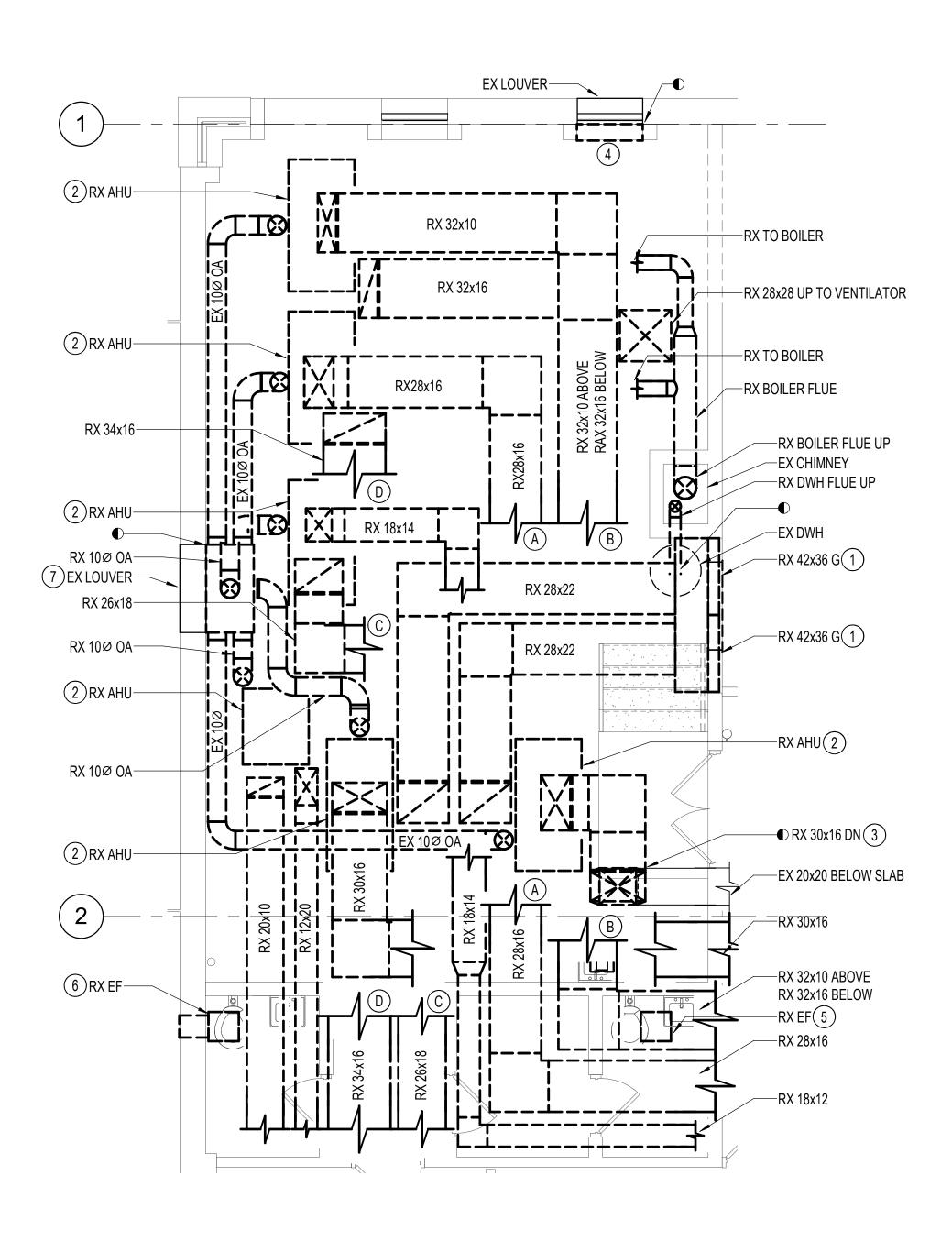
ELECTION DIST. NO.: 12c7



DATE: 10/15/2024



- 1 PATCH AND PAINT CMU WALL TO MATCH ADJACENT.
- 2 REMOVE AHU AND ASSOCIATED DUCT, PIPING, EQUIPMENT PAD, CONTROLS, ETC.
- 3 REMOVE DUCT TO BELOW SLAB, CAP, AND REPAIR FLOOR TO MATCH ADJACENT.
- 4 REMOVE COMBUSTION AIR INTAKE DAMPERS. LOUVER EXISTING TO REMAIN.
- (5) REMOVE FAN AND ASSOCIATED DUCTWORK AND AIR DEVICES. PATCH ROOF TO MATCH ADJACENT.
- (6) REMOVE FAN AND ASSOCIATED DUCTWORK AND AIR DEVICES BACK TO EXISTING BRICK VENT. CAP AND SEAL DUCT AIR TIGHT.
- 7 REMOVE DUCT BACK TO LOUVER. LOUVER SHALL REMAIN TO BE RE-USED.



ENLARGED PLAN - MECHANICAL ROOM - DUCTWORK - DEMOLITION

SUBDIVISION: DUNDALK

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

					SUBMISSION: FIN
0	2	4	8	12 FT	SHEET DESIGN
1/4" = 1' - 0"					M-4

DATE: 10/15/2024 FINAL CONSTRUCTION DOCUMENTS CONTRACT NUMBER

	* MORE
CTION DIST. NO.: 12c7	* * * ARYL

24146PO0											
JOB ORDER NUMBER											
PROJ-10000216											
SHEET 27 OF 75											
DRAWING NUMBER											
2024-2465											
FILE NO.: 8											

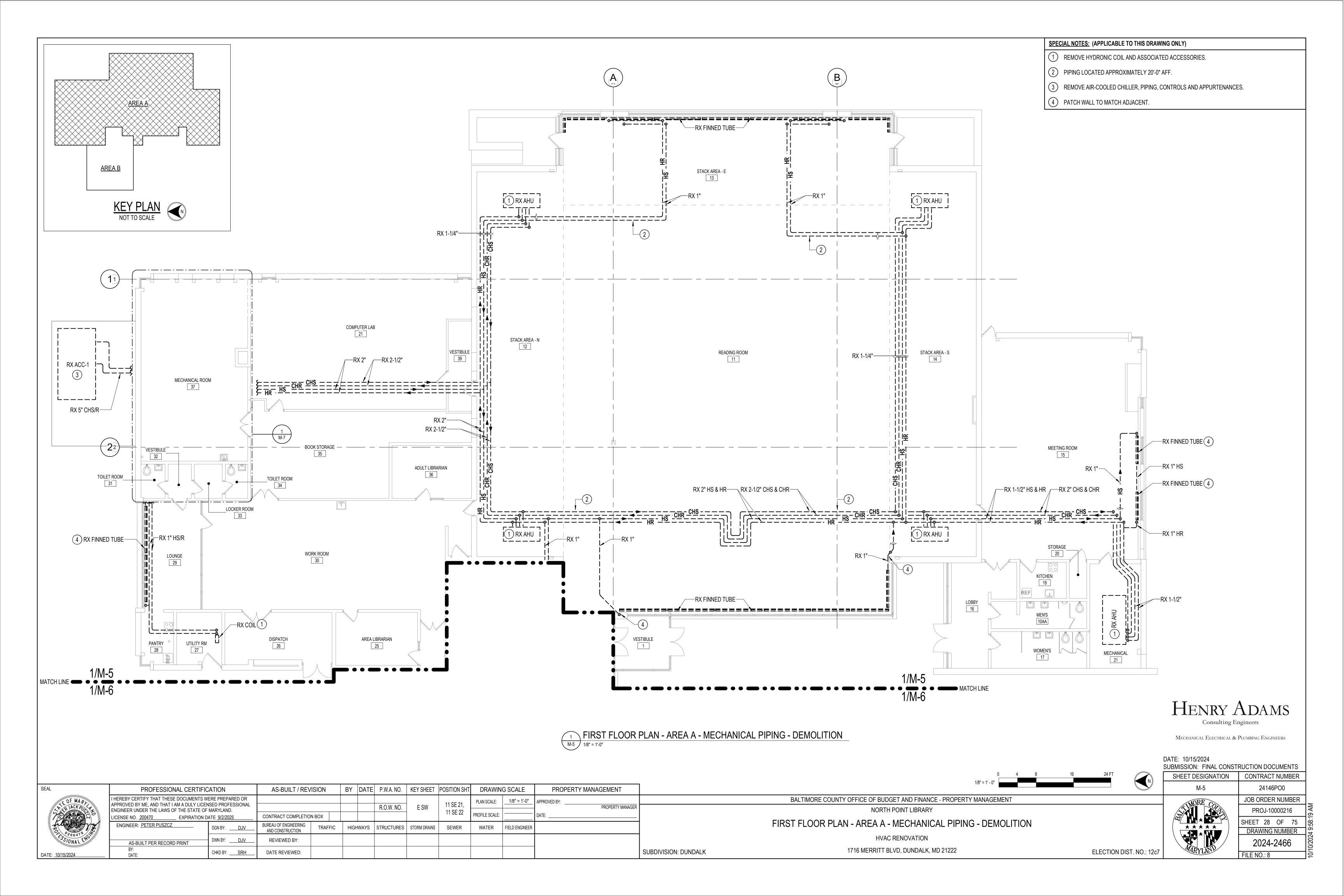
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	I HEREBY CERTIFY THAT THESE DOCUMENTS W APPROVED BY ME, AND THAT I AM A DULY LICEN	_					E SW	11 SE 21,	PLAN SCALE:	1/4" = 1'-0"	APPROVED BY: PROPERTY MANAGER		
	ENGINEER UNDER THE LAWS OF THE STATE OF					R.O.W. NO.							
)=	LICENSE NO. 200470 EXPIRATION D	CONTRACT COMPLETION BOX					11 SE 22	PROFILE SCALE:		DATE:			
	ENGINEER: <u>PETER PUSZCZ</u>	DGN BY:DJV	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHV	NAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
	AS-BUILT PER RECORD PRINT	DWN BY: <u>DJV</u>	REVIEWED BY:										
	BY: DATE:	CHKD BY: SRH	DATE REVIEWED:			·							

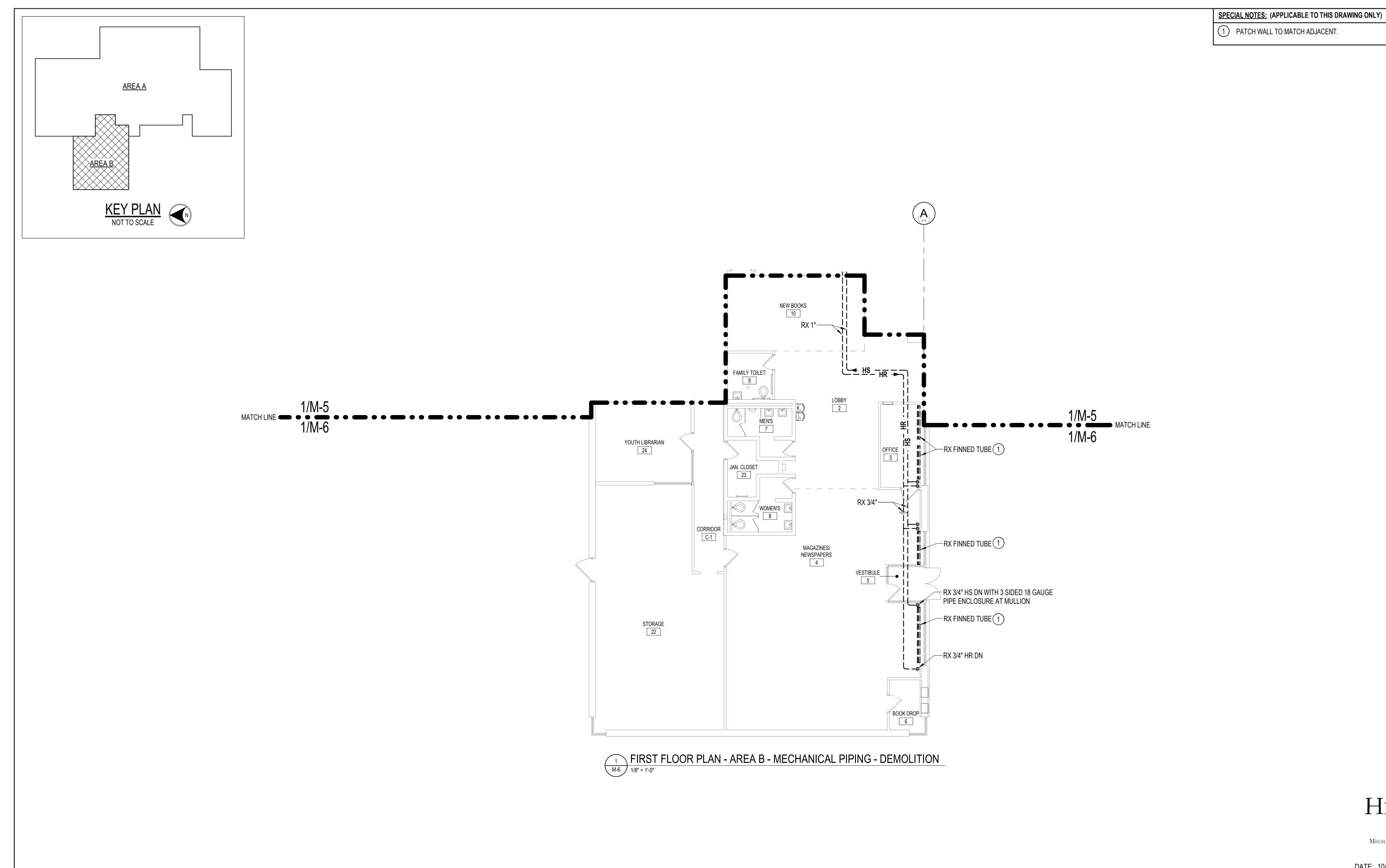
ENLARGED PLANS - DUCTWORK - DEMOLITION

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY

> **HVAC RENOVATION** 1716 MERRITT BLVD, DUNDALK, MD 21222

ELECT





DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

ELECTION DIST. NO.: 12c7

SHEET DESIGNATION CONTRACT NUMBER 24146PO0

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS



PROFESSIONAL CERTIFIC	AS-BUILT / REV	BY DA	ATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY MANAGEMENT		
I HEREBY CERTIFY THAT THESE DOCUMENTS WE APPROVED BY ME, AND THAT I AM A DULY LICEN						D O W NO	L C/W	11 SE 21,	PLAN SCALE:	1/8" = 1'-0"	APPROVED BY:
ENGINEER UNDER THE LAWS OF THE STATE OF						R.O.W. NO.	E SW	11 SE 22		PROPERTY MANAGER	
LICENSE NO. 200470 EXPIRATION DA	ATE <u>9/2/2025</u>	CONTRACT COMPLETION BOX						11 32 22	PROFILE SCALE:		DATE:
ENGINEER: PETER PUSZCZ DGN BY: DJV		BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWA	AYS S	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
AS-BUILT PER RECORD PRINT	DWN BY:DJV	REVIEWED BY:									

CHKD BY: SRH

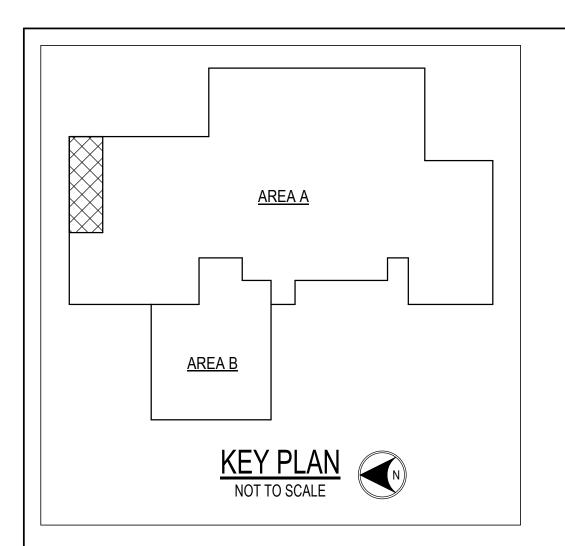
DATE REVIEWED:

FIRST FLOOR PLAN - AREA B - MECHANICAL PIPING - DEMOLITION **HVAC RENOVATION**

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

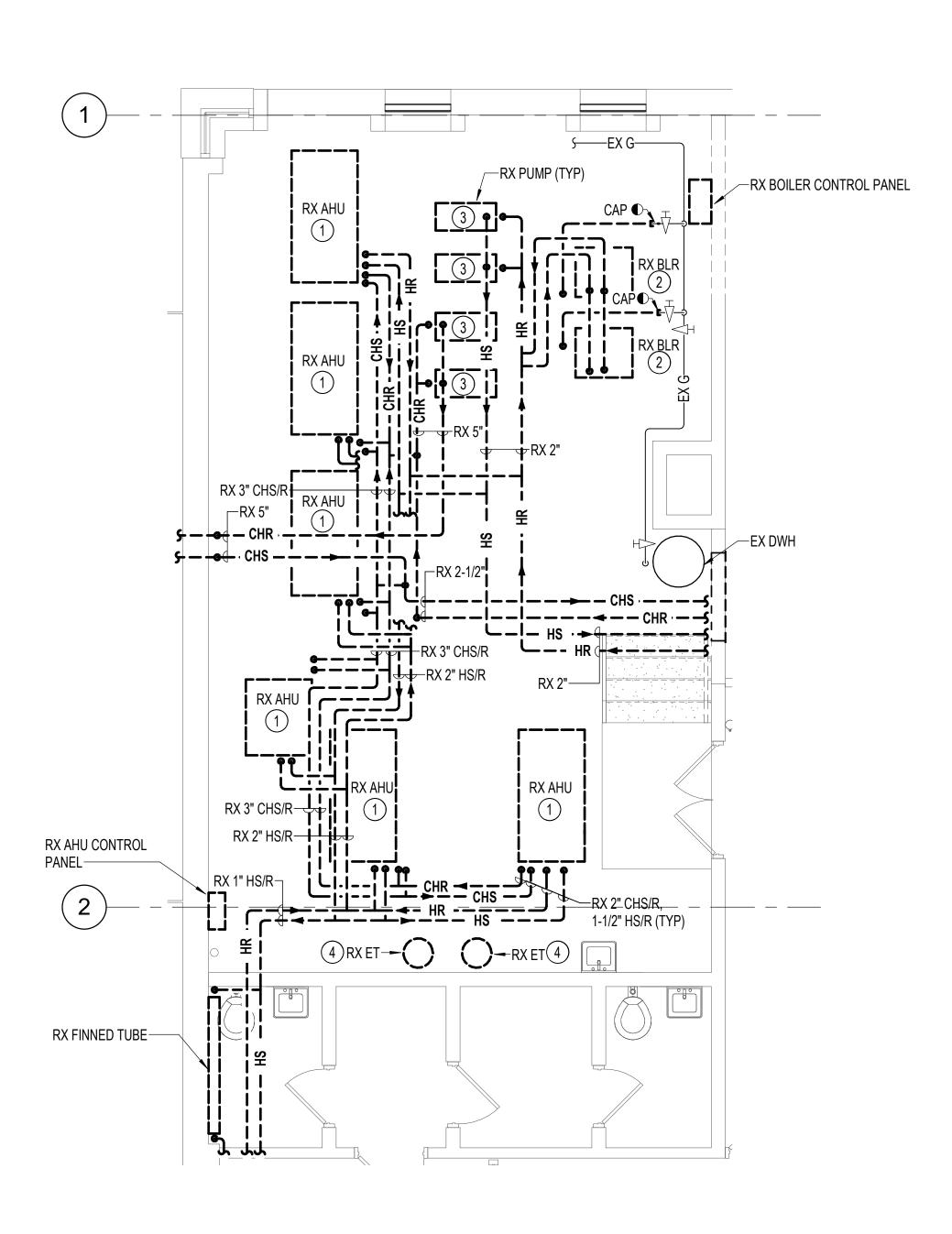
NORTH POINT LIBRARY

1716 MERRITT BLVD, DUNDALK, MD 21222





- 1 SEE DRAWING <u>M-4</u> FOR AHU REMOVAL.
- 2 REMOVE BOILER, CIRCULATOR PUMP, EXHAUST FLUE, CONTROLS, EQUIPMENT PAD, PIPING, ETC.
- 3 REMOVE PUMP, CONTROLS, EQUIPMENT PAD, PIPING, ETC.
- 4 REMOVE EXPANSION TANK, AIR SEPARATOR, BYPASS WATER FILTER, CHEMICAL FEED TANK, GLYCOL FED TANK, ETC. REMOVE MAKE-UP WATER BACK TO MAIN CONNECTION AND VALVE AND CAP.



ENLARGED PLAN - MECHANICAL ROOM - MECHANICAL PIPING - DEMOLITION

1/4" = 1'-0"

SUBDIVISION: DUNDALK

HENRY ADAMS
Consulting Engineers

Consulting Lingineers

JOB ORDER NUMBER

DRAWING NUMBER

2024-2468

FILE NO.: 8

Mechanical Electrical & Plumbing Engineers

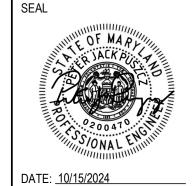
DATE: 10/15/2024
SUBMISSION: FINAL

8 12 FT SHEET DESIGNA

SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION CONTRACT NUMBER

M-7 24146P00

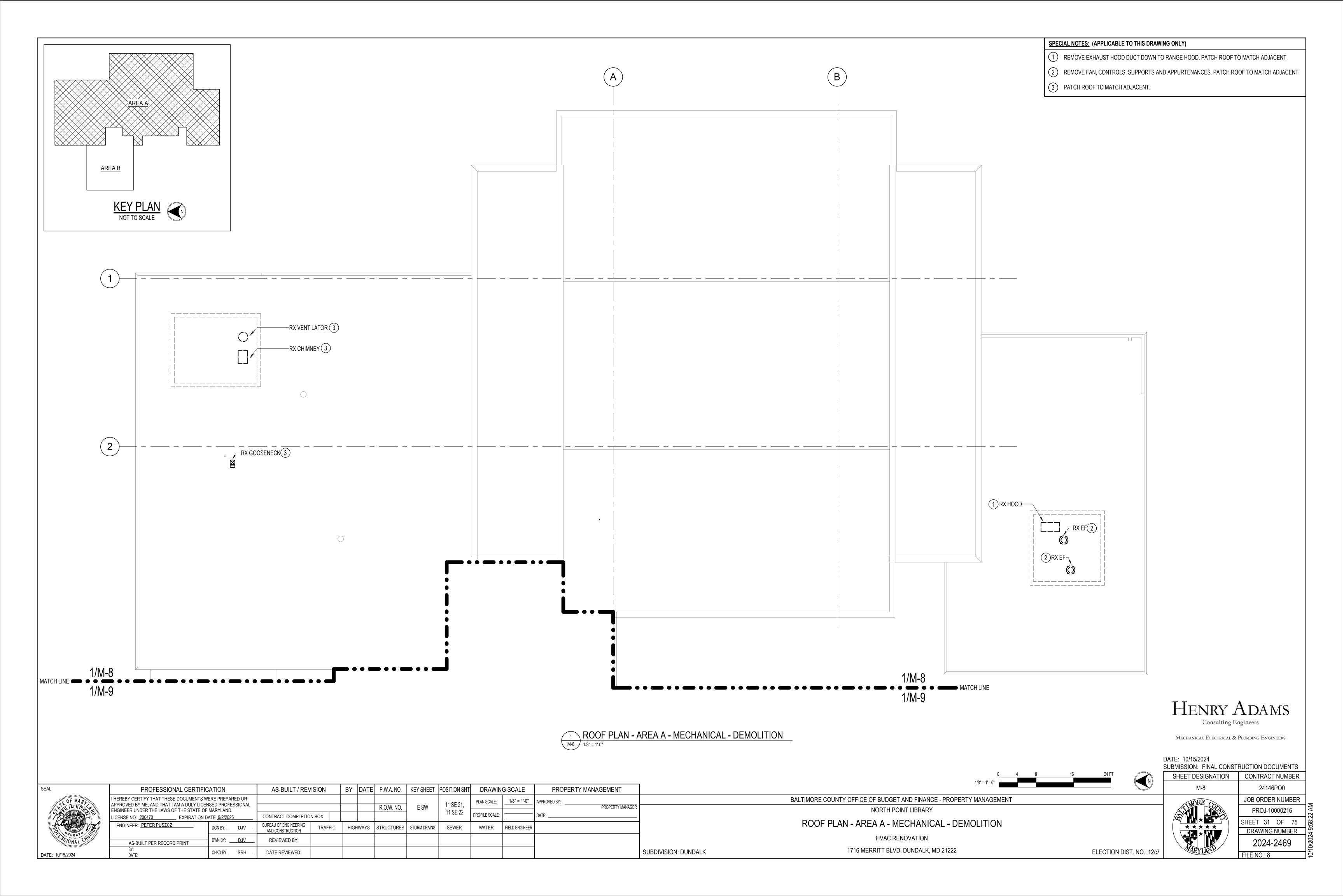


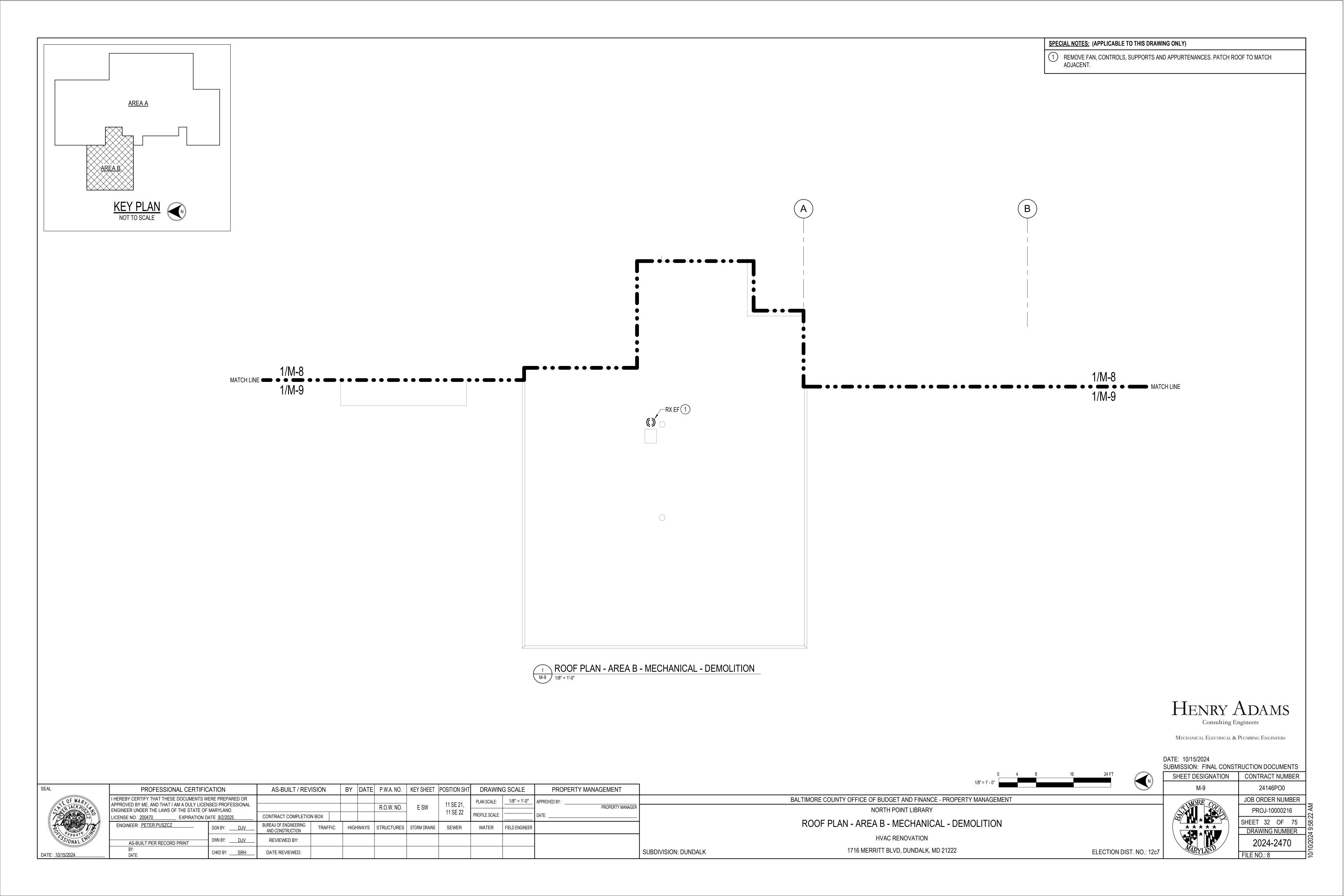
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I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL						R.O.W. NO.	E SW	11 SE 21,	PLAN SCALE:	1/4" = 1'-0"	APPROVED BY: PROPERTY MANAGER	
	ENGINEER UNDER THE LAWS OF THE STATE OF LICENSE NO. 200470 EXPIRATION DA		CONTRACT COMPLETION BOX				14.0.11.110.	2011	11 SE 22	PROFILE SCALE:		ATE:
	ENGINEER: <u>PETER PUSZCZ</u>	DGN BY:DJV	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	WAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
AS-BUILT PER RECORD PRINT		DWN BY:DJV	REVIEWED BY:									
_	BY: DATE:	CHKD BY: SRH	DATE REVIEWED:									

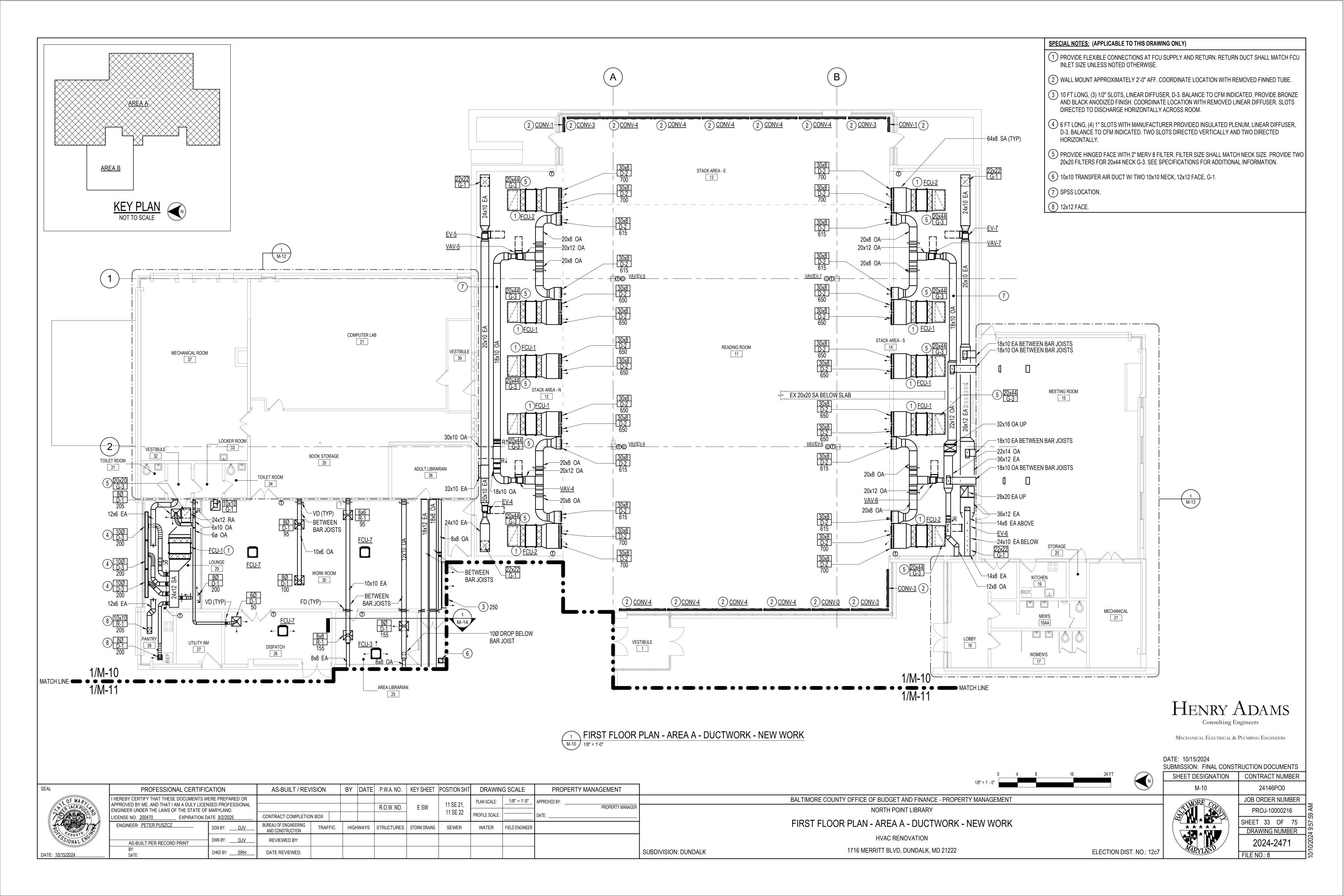
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ENLARGED PLANS - MECHANICAL PIPING - DEMOLITION

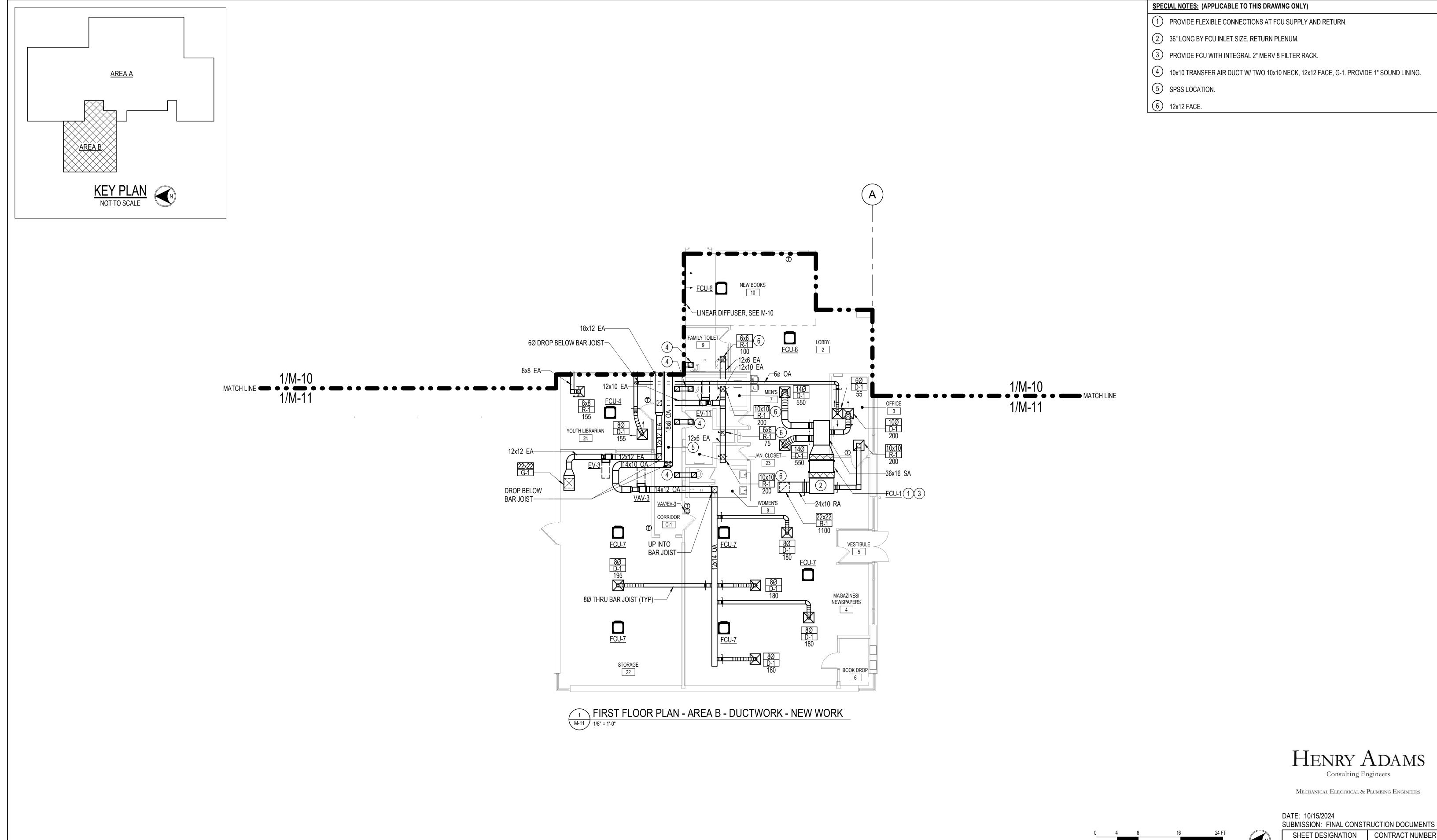
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

HVAC RENOVATION 1716 MERRITT BLVD, DUNDALK, MD 21222









BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROFESSIONAL CERTIFICATION AS-BUILT / REVISION PROPERTY MANAGEMENT I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT PLAN SCALE: 1/8" = 1'-0" APPROVED BY: APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 21, E SW R.O.W. NO. PROPERTY MANAGER NORTH POINT LIBRARY 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX ICENSE NO. 200470 __ EXPIRATION DATE <u>9/2/2025</u> FIRST FLOOR PLAN - AREA B - DUCTWORK - NEW WORK BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: PETER PUSZCZ TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS | WATER FIELD ENGINEER **HVAC RENOVATION** REVIEWED BY: AS-BUILT PER RECORD PRINT 1716 MERRITT BLVD, DUNDALK, MD 21222 ELECTION DIST. NO.: 12c7 SUBDIVISION: DUNDALK DATE REVIEWED:

CONTRACT NUMBER

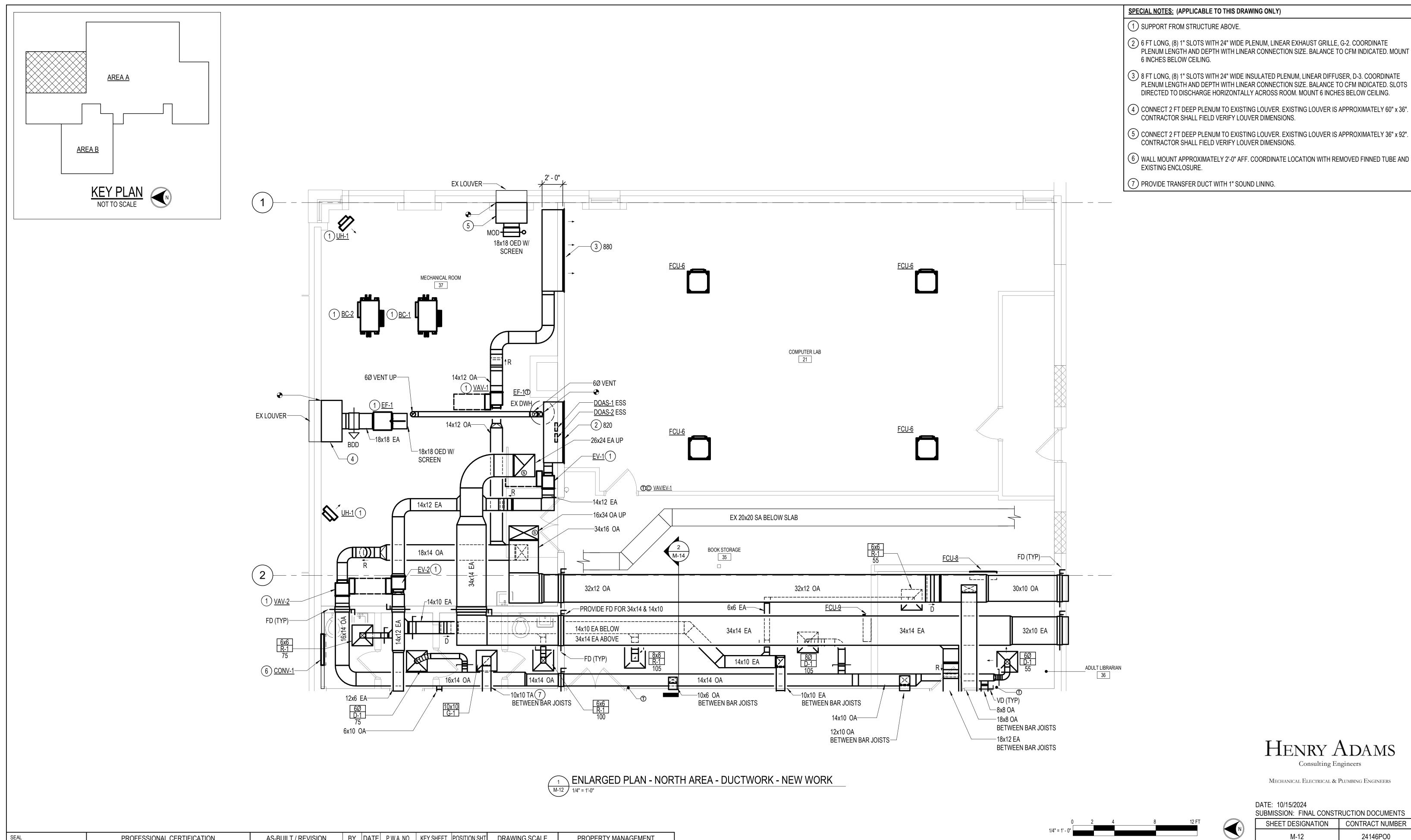
24146PO0

JOB ORDER NUMBER

SHEET 34 OF 75

DRAWING NUMBER

2024-2472



BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT PROFESSIONAL CERTIFICATION AS-BUILT / REVISION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT PLAN SCALE: 1/4" = 1'-0" APPROVED BY: 11 SE 21, APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL E SW PROPERTY MANAGER R.O.W. NO. NORTH POINT LIBRARY 11 SE 22 NGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. PROFILE SCALE: CONTRACT COMPLETION BOX ICENSE NO. 200470 _ EXPIRATION DATE <u>9/2/2025</u> ENLARGED PLANS - DUCTWORK - NEW WORK BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: PETER PUSZCZ TRAFFIC HIGHWAYS STRUCTURES STORM DRAINS **HVAC RENOVATION** REVIEWED BY: AS-BUILT PER RECORD PRINT 1716 MERRITT BLVD, DUNDALK, MD 21222 SUBDIVISION: DUNDALK ELECTION DIST. NO.: 12c7 CHKD BY: SRH DATE REVIEWED: DATE: <u>10/15/2024</u>

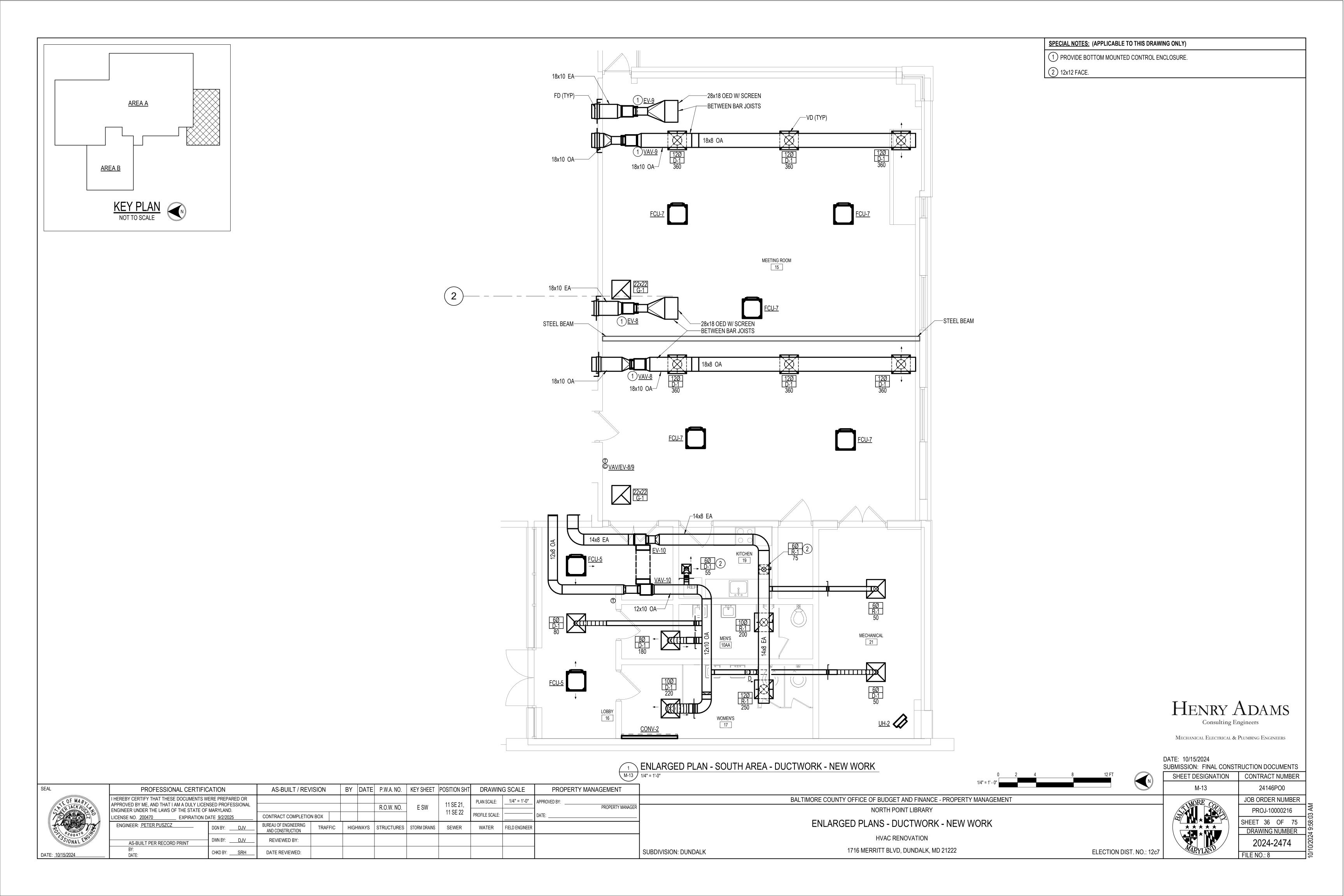
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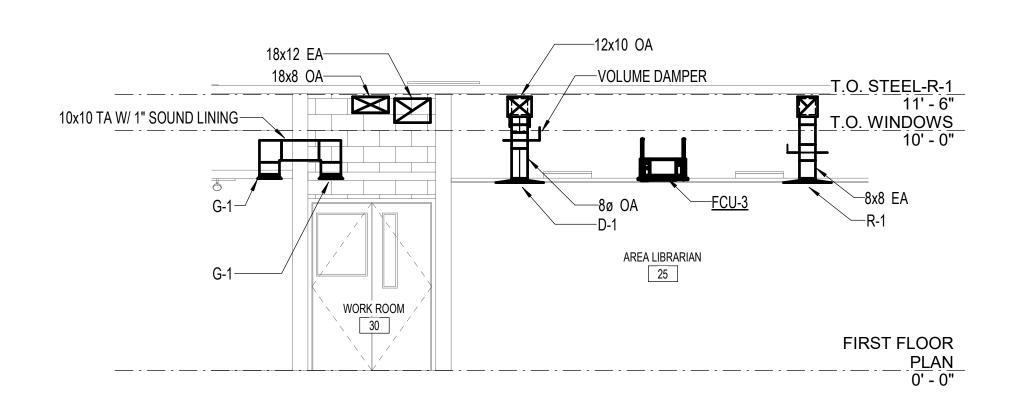
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SHEET 35 OF 75

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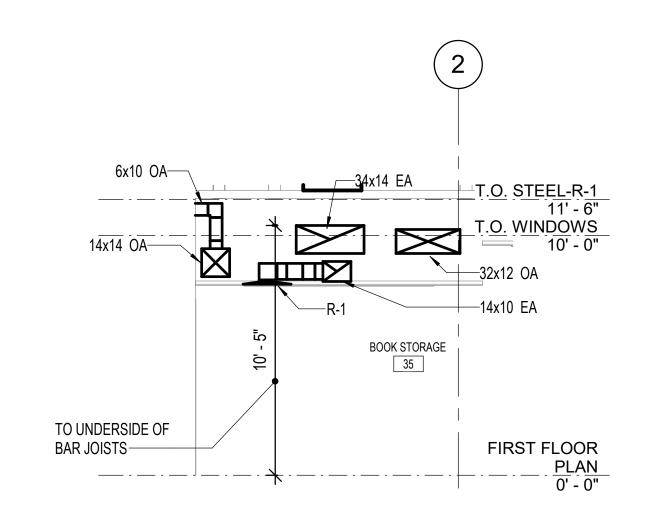
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DUCTWORK SECTION - AREA LIBRARIAN / WORK ROOM

1/4" = 1'-0"



DUCTWORK SECTION - WORK ROOM / BOOK STORAGE

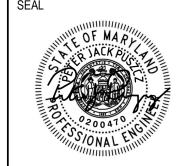
1/4" = 1'-0"

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER



PROFESSIONAL CERTIFIC	ATION	AS-BUILT / REV	ISION	BY D	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY MANAGEMENT	
I HEREBY CERTIFY THAT THESE DOCUMENTS WE APPROVED BY ME, AND THAT I AM A DULY LICEN						D O W NO	E OW	11 SE 21.	PLAN SCALE:	1/4" = 1'-0"	APPROVED BY:	NA OED
ENGINEER UNDER THE LAWS OF THE STATE OF ILICENSE NO. 200470 EXPIRATION DA	CONTRACT COMPLETION			R.O.W. NO.	E SW	11 SE 22	PROFILE SCALE:		PROPERTY MANAGER			
ENGINEER: PETER PUSZCZ	DGN BY: DJV	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHW	/AYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
AS-BUILT PER RECORD PRINT	DWN BY: DJV	REVIEWED BY:										
 BY: DATE:	CHKD BY: SRH	DATE REVIEWED:										

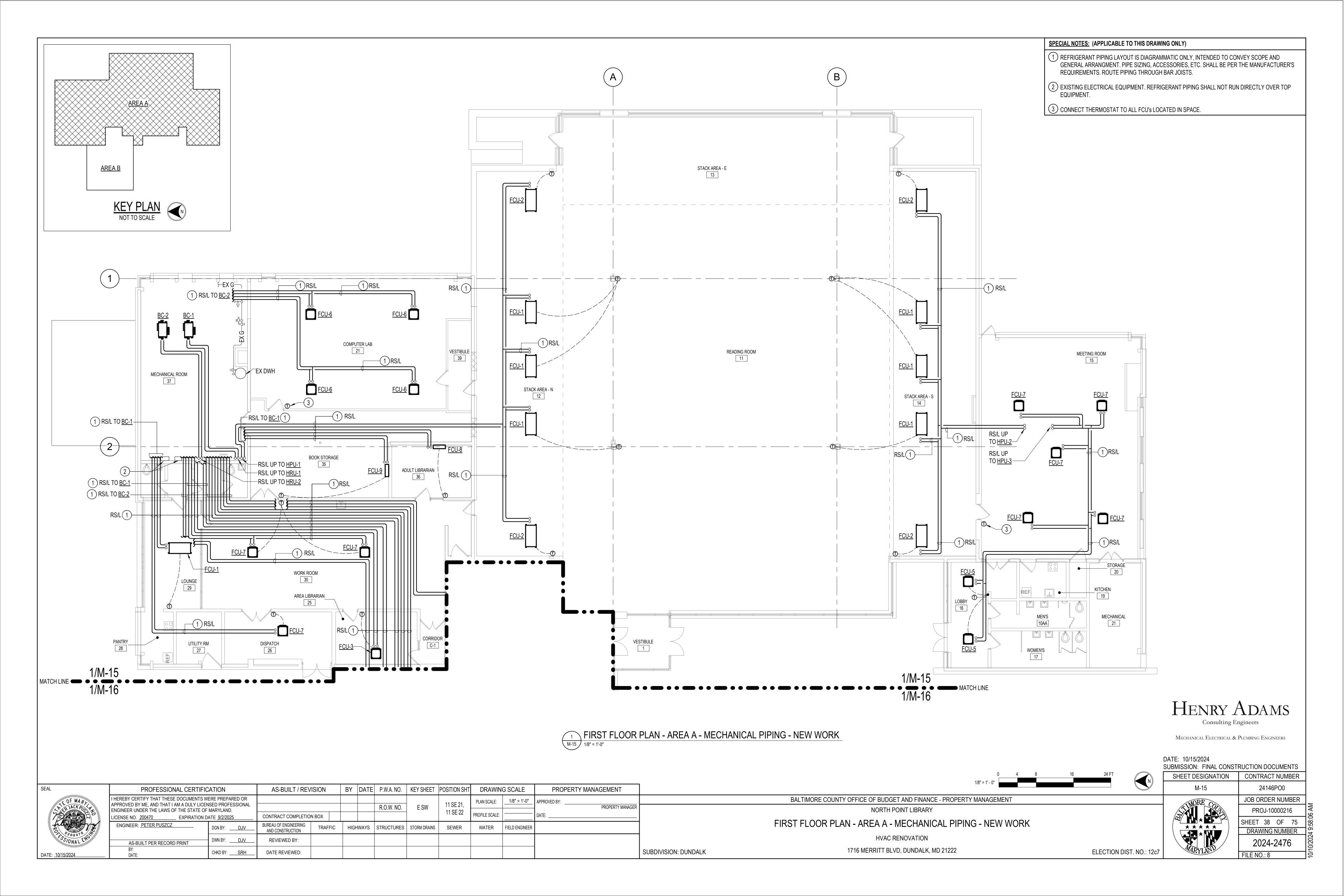
NORTH POINT LIBRARY MECHANICAL SECTIONS - DUCTWORK **HVAC RENOVATION**

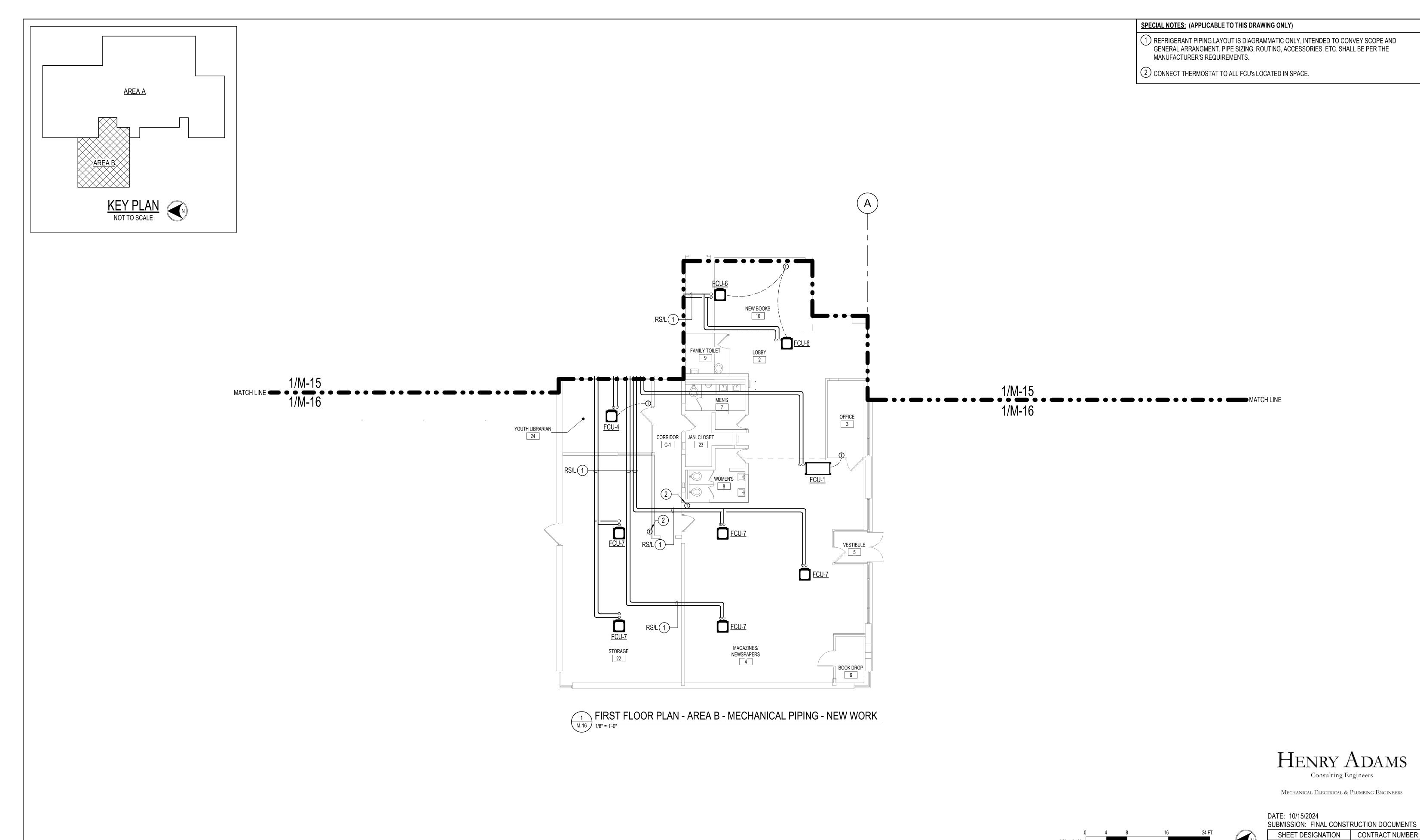
1716 MERRITT BLVD, DUNDALK, MD 21222

SUBDIVISION: DUNDALK

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

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BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROFESSIONAL CERTIFICATION AS-BUILT / REVISION PROPERTY MANAGEMENT I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT PLAN SCALE: 1/8" = 1'-0" APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 21, E SW R.O.W. NO. PROPERTY MANAGER NORTH POINT LIBRARY 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX ICENSE NO. 200470 __ EXPIRATION DATE <u>9/2/2025</u> FIRST FLOOR PLAN - AREA B - MECHANICAL PIPING - NEW WORK BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: PETER PUSZCZ TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS | WATER FIELD ENGINEER **HVAC RENOVATION** REVIEWED BY: AS-BUILT PER RECORD PRINT 1716 MERRITT BLVD, DUNDALK, MD 21222 SUBDIVISION: DUNDALK ELECTION DIST. NO.: 12c7 DATE REVIEWED:

24146PO0

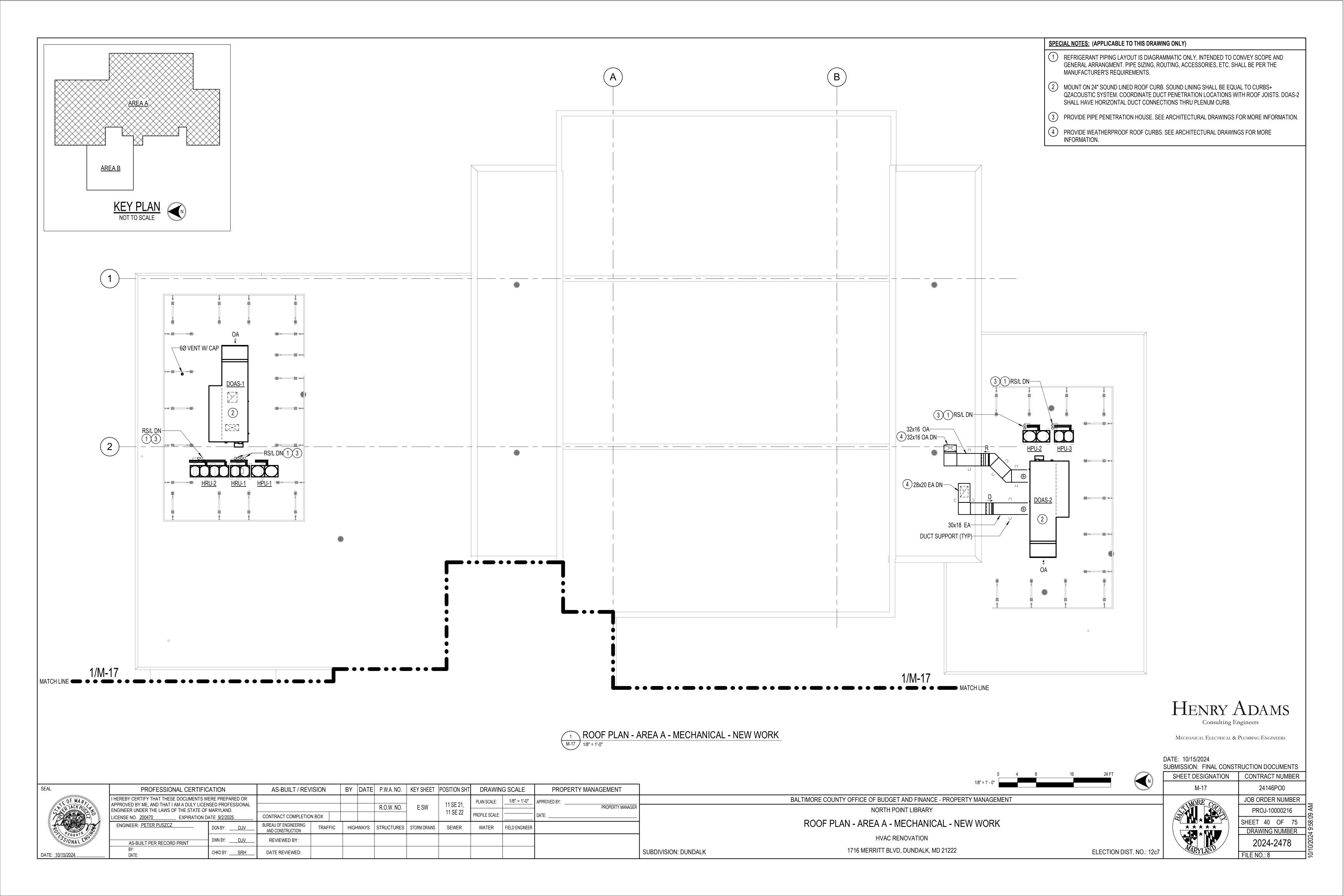
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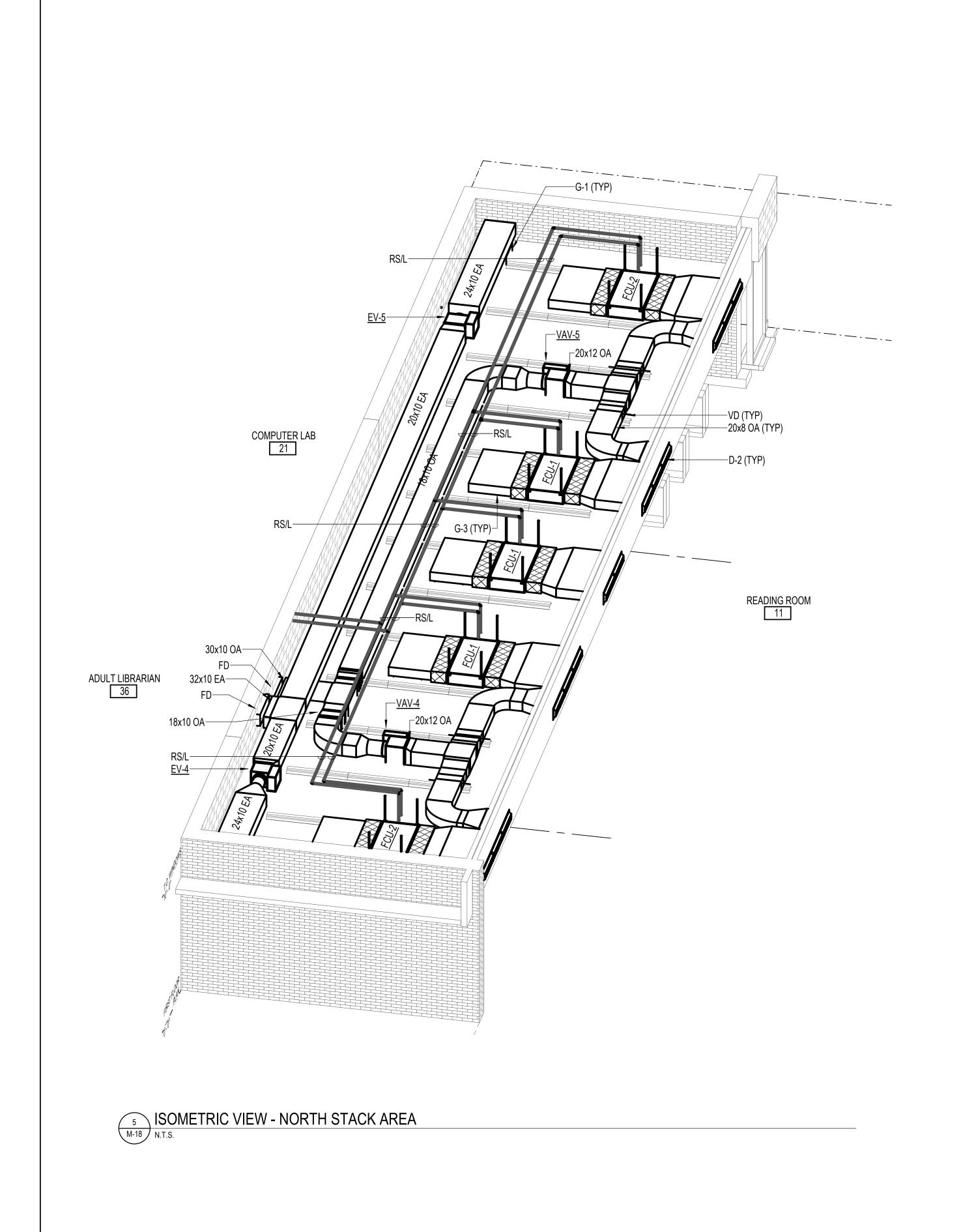
SHEET 39 OF 75

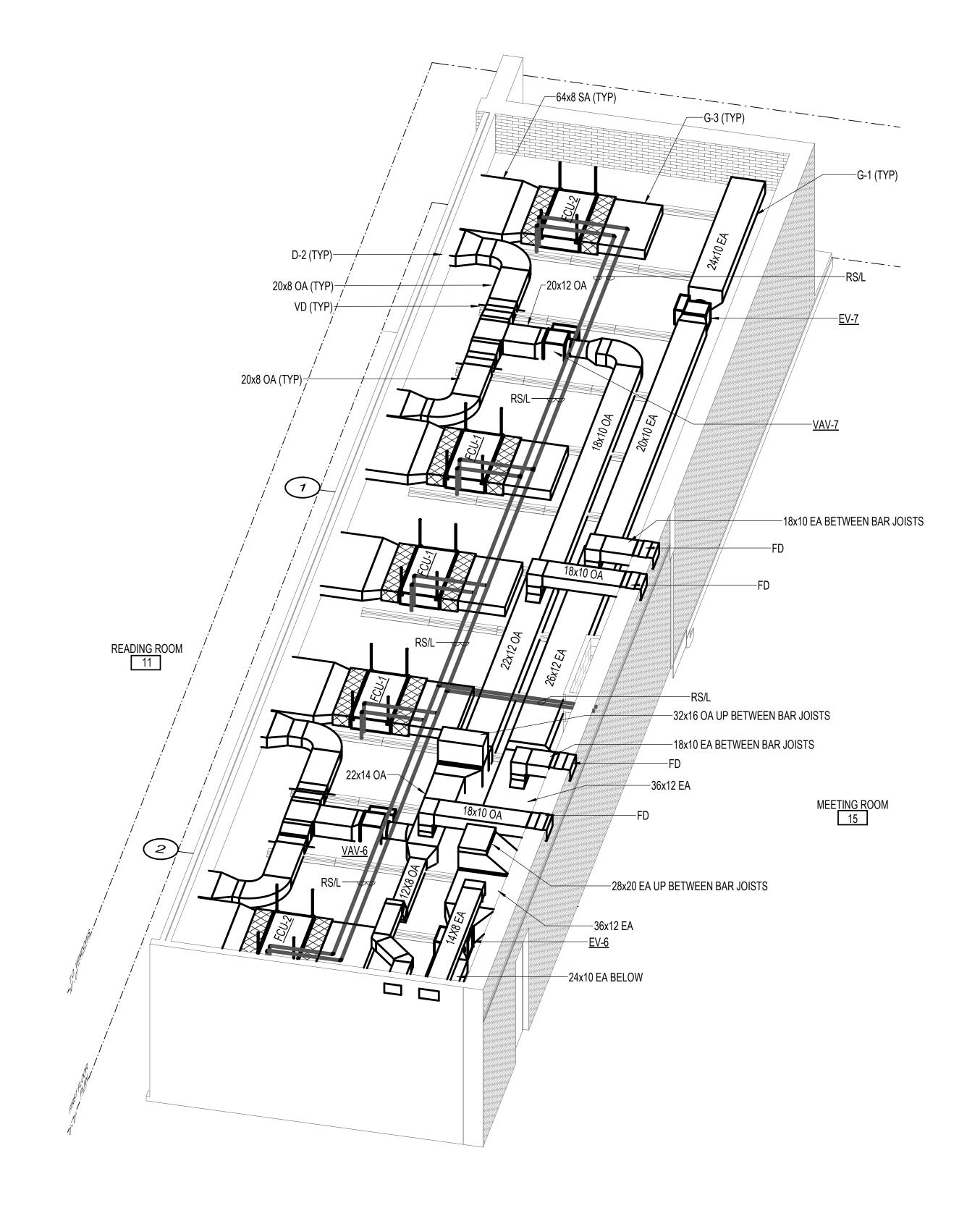
DRAWING NUMBER

2024-2477

FILE NO.: 8







3 ISOMETRIC VIEW - SOUTH STACK AREA N.T.S.

HENRY ADAMS Consulting Engineers

Mechanical Electrical & Plumbing Engineers

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

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MECHANICAL ISOMETRIC VIEWS **HVAC RENOVATION** 1716 MERRITT BLVD, DUNDALK, MD 21222

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

NORTH POINT LIBRARY

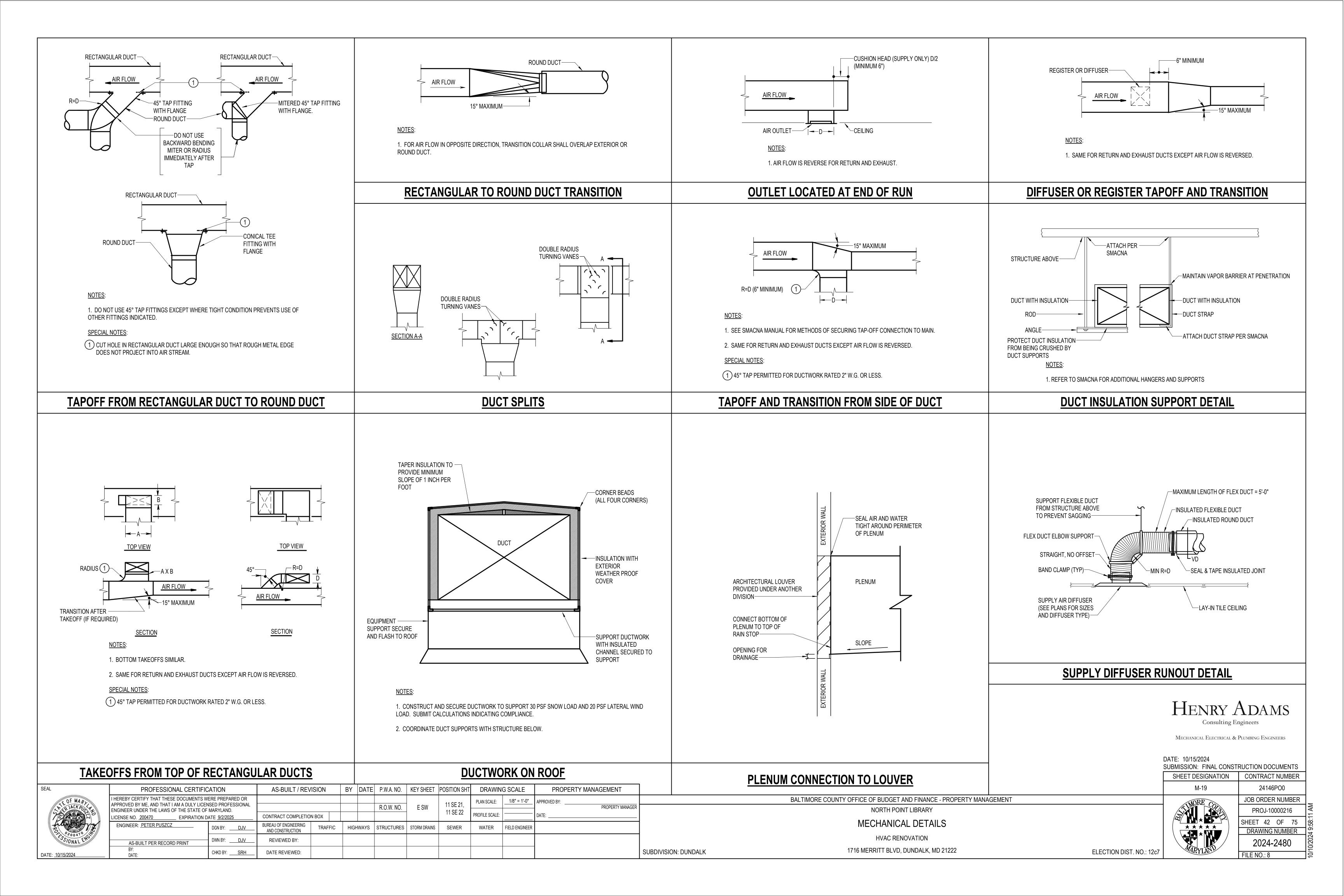
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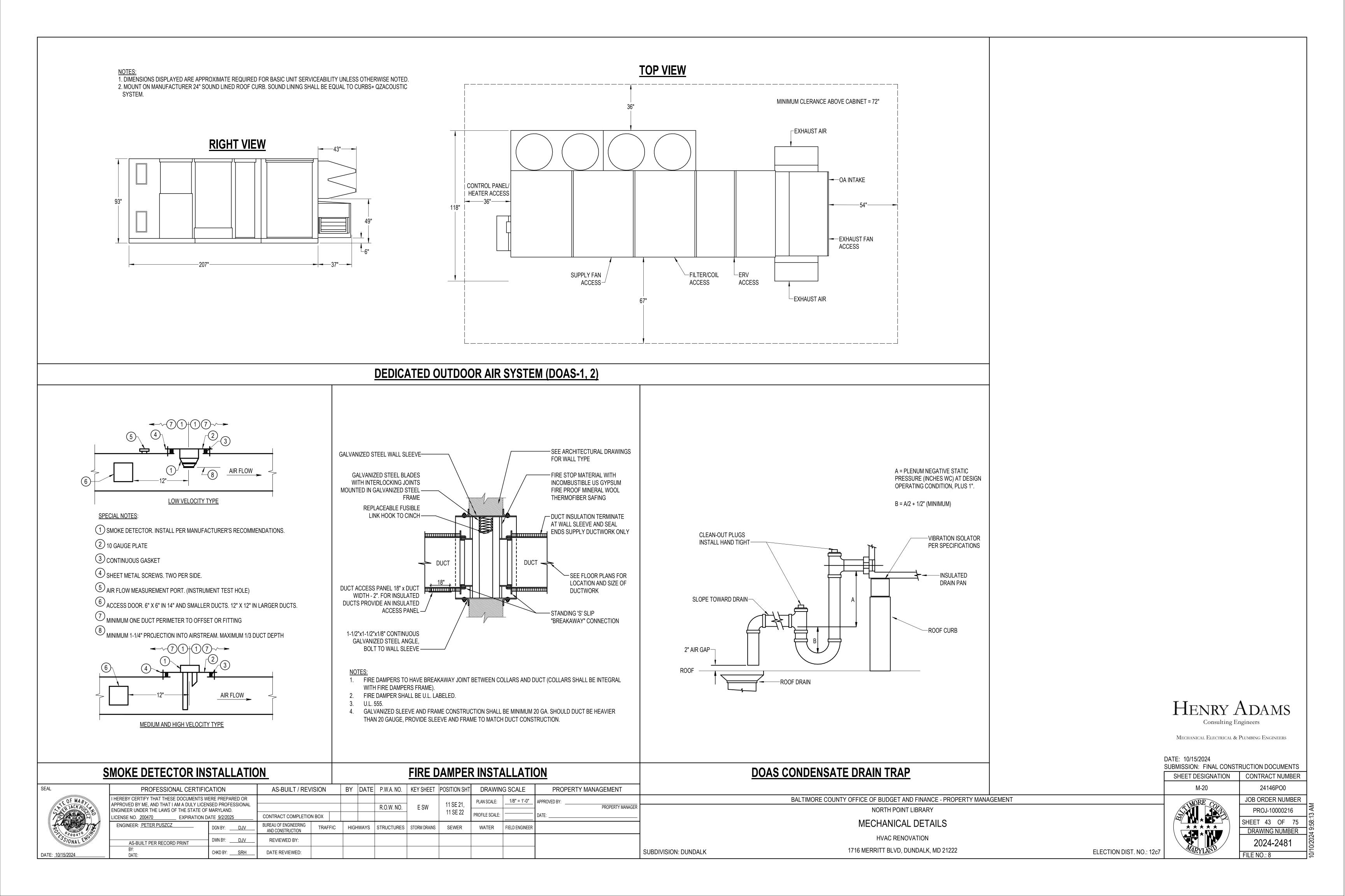
BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT PROFESSIONAL CERTIFICATION AS-BUILT / REVISION PLAN SCALE: APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 21, E SW R.O.W. NO. PROPERTY MANAGER PROFILE SCALE: CONTRACT COMPLETION BOX ___ EXPIRATION DATE <u>9/2/2025</u> BUREAU OF ENGINEERING AND CONSTRUCTION TRAFFIC HIGHWAYS STRUCTURES STORM DRAINS REVIEWED BY: DATE REVIEWED:

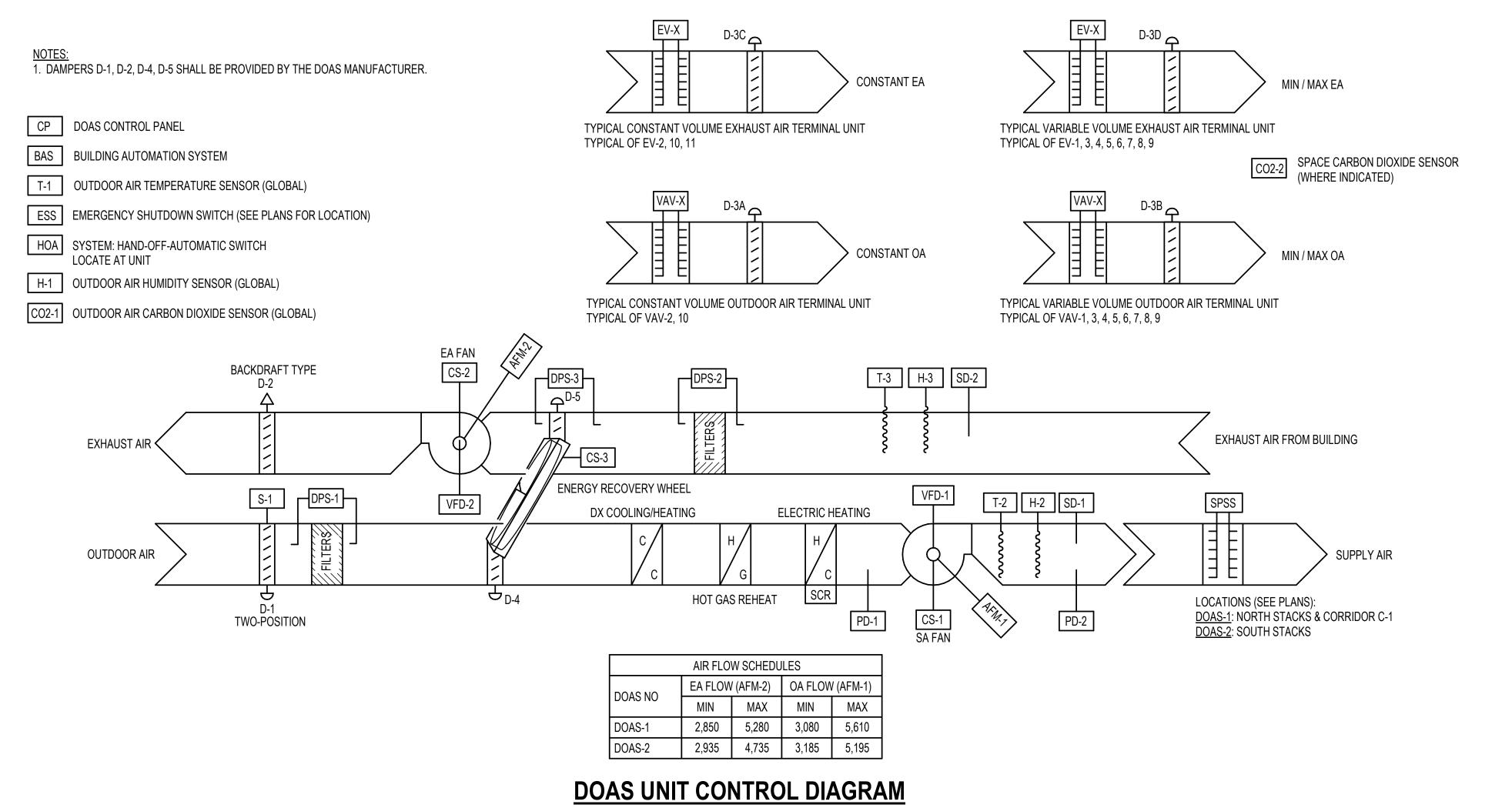
SUBDIVISION: DUNDALK

ELECTION DIST. NO.: 12c7

DRAWING NUMBER 2024-2479 FILE NO.: 8







	INPUT/OUTPUT SUMMARY																					
SYSTEM						NDIC	ATIOI	N					ALARM				CONTROL					
DOAS-1, 2 EV/VAV-X		STATUS	TEMPERATURE	RELATIVE HUNIDITY	РРМ	CFM	STATIC PRESSURE	DIFFERENTIAL PRESSURE	СРМ	POSITION	RUN TIME	HERTZ	MOT	HIGH	CRITICAL	MAINTENANCE	PROGRAM START/STOP	HAND-OFF-AUTO	MODULATE	MIN/MAX	OPEN/CLOSED	REMARKS
DOAS SYSTEM	Χ	Χ								Χ					Χ		Χ	Χ				BAS, HOA, CP
SUPPLY AIR FAN		Χ				Χ	Χ				Х	Χ			Χ		Χ		Χ			CS-1, AFM-1, VFD-1, SPSS
EXHAUST AIR FAN		Χ				Χ					Х	Χ			Χ		Χ		Χ			CS-2, AFM-2, VFD-2
OUTDOOR AIR			Х	Х	Х																	T-1, H-1, C02-1
RETURN AIR			Х	Х																		T-3, H-3
SUPPLY AIR			Х	Х																		T-2, H-2
SMOKE DETECTOR															Х							SD-1, SD-2
EMERGENCY SHUTDOWN										Χ					Χ							ESS
FILTERS								Х						Χ		Χ						DPS-1, DPS-2
DAMPERS										Χ											Χ	D-1, S-1
PRESSURE SWITCH							Χ						Χ	Χ								PD-1, PD-2
ENERGY RECOVERY WHEEL		Χ						Χ							Χ							CS-3, DPS-3
ELECTRIC HEATING COIL		Χ													Χ				Χ			SCR
TERMINAL UNITS	Χ					Χ				Χ							Χ		Χ			BAS, D-3X
SPACE					Χ																	C02-2

DRAWING SCALE

WATER FIELD ENGINEE

1/8" = 1'-0"

APPROVED BY:

PLAN SCALE:

PROFILE SCALE:

11 SE 21,

11 SE 22

SEWER

PROPERTY MANAGEMENT

PROPERTY MANAGER

BY DATE P.W.A. NO. KEY SHEET POSITION SHT

E SW

R.O.W. NO.

HIGHWAYS | STRUCTURES | STORM DRAINS

PROFESSIONAL CERTIFICATION

APPROVED BY ME. AND THAT I AM A DULY LICENSED PROFESSIONAL

EXPIRATION DATE 9/2/2025

CHKD BY: SRH

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR

ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

ICENSE NO. 200470

DATE: 10/15/2024

ENGINEER: PETER PUSZCZ

AS-BUILT PER RECORD PRINT

AS-BUILT / REVISION

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION

REVIEWED BY:

DATE REVIEWED:

<u>GENERAL</u>:

- 1. THE DEDICATED OUTDOOR AIR SYSTEM SHALL BE STARTED AND STOPPED THROUGH A SYSTEM HAND-OFF-AUTOMATIC (HOA) SWITCH. WHEN INDEXED TO "HAND", THE SYSTEM SHALL BE DE-ENERGIZED. WHEN INDEXED TO "AUTOMATIC", THE SYSTEM SHALL BE STARTED AND STOPPED THROUGH THE BUILDING AUTOMATION SYSTEM (BAS). THE H-O-A SWITCH POSITION SHALL BE MONITORED THROUGH THE BAS.
- 2. ALL SAFETIES AND ASSOCIATED CONTROL INTERLOCKS SHALL REMAIN ACTIVE IN ALL H-O-A SWITCH POSITIONS.
- 3. ALL ALARMS SHALL BE HARD WIRED CONNECTIONS AND SHALL BE SENT THROUGH THE BAS.
- 4. PROVIDE A REMOTE EMERGENCY SHUTDOWN SWITCH (ESS) FOR SYSTEM SHUTDOWN. SWITCH SHALL BE INSTALLED AT A LOCATION APPROVED BY THE FIRE INSPECTOR. TYPICALLY INSTALL ADJACENT TO THE FIRE ALARM ANNUNCIATOR PANEL.
- 5. PRESSURE SWITCH PD-1 STOPS SA FAN, EA FAN AND ENERGY RECOVERY WHEEL SHOULD PLENUM PRESSURE RISE ABOVE MINUS 4" WG.
- 6. PRESSURE SWITCH PD-2 STOPS SA FAN, EA FAN AND ENERGY RECOVERY WHEEL SHOULD DUCT PRESSURE RISE ABOVE 4" WG.
- 7. COORDINATE VARIABLE FREQUENCY DRIVE (VFD) INTERFACE REQUIREMENTS WITH VFD MANUFACTURER.

STARTING AND STOPPING:

- 1. WHEN SYSTEM OPERATION IS STARTED BY THE H-O-A SWITCH OR BAS, D-1 OPENS, WHEN D-1 IS OPEN, END SWITCH S-1 SHALL START THE SA AND EA FANS. LOCKOUT RELAY ACTUATED BY THE FAN STARTER PREVENTS S-1 FROM STOPPING SA AND EA FANS. DAMPER D-3 IS OPEN TO MINIMUM POSITION FOR ALL OPERATING TERMINAL UNITS.
- 2. WHENEVER SA FAN IS STOPPED, EA FAN STOPS, ENERGY RECOVERY WHEEL STOPS, AND D-1 CLOSES AFTER 2 MINUTE DELAY (ADJUSTABLE).

OCCUPIED (0700 TO 2200 ADJUSTABLE):

- 1. SA FAN AND EA FAN ARE ON. D-1 IS OPEN.
- 2. THROUGH MANUFACTURER PROVIDED CONTROLLER, SYSTEM SHALL SUPPLY 72 DEGREE F AT T-2.
- 3. WHEN HUMIDITY AT H-3 IS AT OR ABOVE 60%, THE UNIT SHALL BE IN DEHUMIDIFICATION MODEL

ECONOMIZER:

1. WHEN OUTDOOR AIR CONDITIONS (TEMPERATURE AND HUMIDITY) AT T-1 AND H-1 ARE CAPABLE OF PROVIDING SUPPLY AIR SETPOINTS, THE SYSTEM SHALL UTILIZE ECONOMIZER CONTROLS.

FROST CONTROL:

1. WHEN PRESSURE DROP ACROSS WHEEL, AS SENSED BY DPS-3, EXCEEDS MANUFACTURER LIMITS, DAMPER D-5 IS CLOSED. DAMPER D-4 SHALL OPEN, BYPASS THE WHEEL FOR 10 MINUTES TO ALLOW EXHAUST AIR TO DEFROST THE WHEEL

FAN CAPACITY CONTROL:

- 1. STATIC PRESSURE SENSING STATION (SPSS) SHALL MODULATE THE SUPPLY AIR FAN SPEED THROUGH THE ASSOCIATED VARIABLE FREQUENCEY DRIVE (VFD-1). AFM-1 SHALL RESET AIR FLOW MEASURING STATION AFM-2. AFM-2 SHALL MODULATE EXHAUST AIR FAN SPEED THROUGH ASSOCIATED VFD-2 TO LINEARLY TRACK SUPPLY AIR PER THE AIRFLOW SCHEDULE IN THE CONTROL DIAGRAM.
- 2. THE BAS SHALL POLE THE POSITION OF ALL D-3 DAMPERS AND RESET SPSS SETPOINT UNTIL ONE D-3 DAMPERS IS OPEN TO 90 PERCENT OF FULL AIR FLOW.

SMOKE DETECTORS:

1. WHEN SMOKE IS SENSED BY EITHER SMOKE DETECTOR SD-1 OR SD-2, SA FAN, EA FAN AND ENERGY RECOVERY WHEEL STOP AND DAMPER D-1 CLOSES. DOAS SHALL RETURN TO NORMAL OPERATION WHEN SD-1 AND SD-2 ARE MANUALLY RESET.

TERMINAL UNITS:

- 1. CONSTANT VOLUME OA AND EA TERMINAL UNIT DAMPERS (D-3A & D-3C) SHALL MODULATE TO MAINTAIN CONSTANT AIRFLOW.
- 2. VARIABLE VOLUME OA AND EA TERMINAL UNIT DAMPERS (D-3B & D-3D) SHALL START AT MINIMUM POSITION. IF THE CARBON DIOXIDE DIFFERENTIAL BETWEEN ANY SPACE SENSOR C02-2 AND THE OUTDOOR AIR SENSOR C02-1 EXCEEDS 700 PPM, THE ASSOCIATED OA & EA TERMINAL UNIT DAMPERS MODULATE TO MAXIMUM POSITION UNTIL DIFFERENTIAL FALLS BELOW 500 PPM.

DOAS UNIT SEQUENCE OF OPERATION



MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION CONTRACT NUMBER 24146PO0



JOB ORDER NUMBER SHEET 44 OF 75 DRAWING NUMBER 2024-2482

FILE NO.: 8

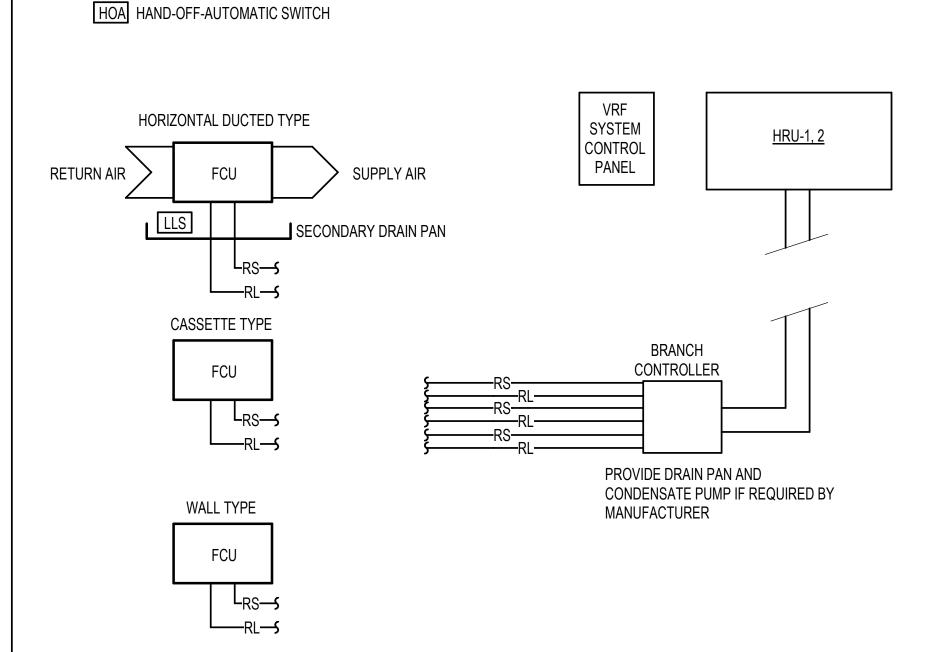
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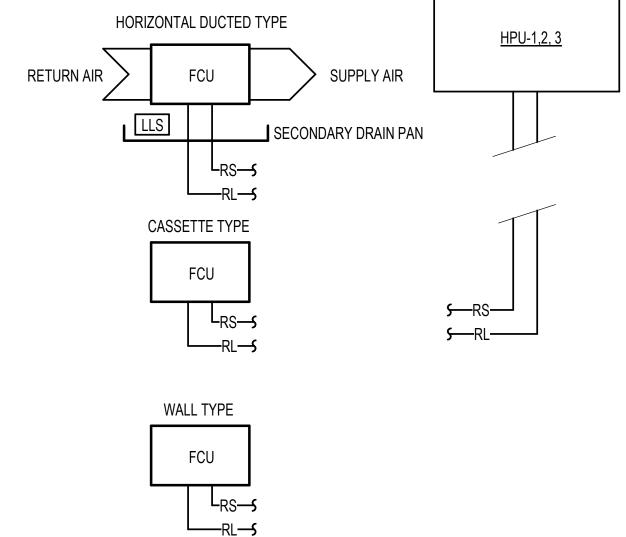
AUTOMATIC TEMPERATURE CONTROLS

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222

SUBDIVISION: DUNDALK





BAS BUILDING AUTOMATION SYSTEM

T-1 SPACE TEMPERATURE SENSOR WITH OVERRIDE (TYPICAL)

1. THE VARIABLE REFRIGERANT SYSTEM SHALL BE STARTED AND STOPPED THROUGH A SYSTEM CONTROL PANEL PROVIDED BY

2. ALL SAFETIES AND ASSOCIATED CONTROL INTERLOCKS SHALL BE HARDWIRED AND SHALL REMAIN ACTIVE IN ALL HOA SWITCH POSITIONS.

3. ALL TEMPERATURE SENSORS SHALL PERMIT SYSTEM OVERRIDE DURING THE UNOCCUPIED MODE AND SHALL ALLOW SYSTEM TO OPERATE FOR ONE HOUR (ADJUSTABLE 0-4 HOURS) IN THE OCCUPIED MODE.

4. IF A HIGH WATER LEVEL IS SENSED BY THE LIQUID LEVEL SENSOR (LLS) INSTALLED IN THE FCU (AND BRANCH CONTROLLER IF REQUIRED BY MANUFACTURER) SECONDARY DRAIN PAN, THE UNIT SHALL SHUTDOWN.

5. IF A CONDENSATE PUMP SENSES FAILURE THROUGH ITS SECURITY SWITCH, FCU SHALL SHUTDOWN.

STARTING AND STOPPING:

1. WHEN THE SYSTEM IS ENERGIZED TO OPERATE, FAN COIL UNITS START AND ASSOCIATED AIR-COOLED CONDENSING UNITS ARE ENERGIZED. SYSTEM OPERATES THROUGH MANUFACTURER'S SUPPLIED SYSTEM CONTROL PANEL.

2. WHEN SYSTEM IS DE-ENERGIZED, FAN COIL UNITS STOP AND ASSOCIATED AIR-COOLED CONDENSING UNIT STOPS.

OCCUPIED MODE:

1. FAN COIL UNITS ARE ON AND ASSOCIATED CONDENSING UNITS ARE ENERGIZED.

2. SPACE TEMPERATURE SENSOR, T-1 CONTROLS IT'S RESPECTIVE FAN COIL UNIT THROUGH MANUFACTURER'S SUPPLIED CONTROLS TO MAINTAIN SPACE TEMPERATURE OF 75 DEGREES F IN COOLING SEASON AND 72 DEGREES F IN HEATING SEASON (ADJUSTABLE).

UNOCCUPIED MODE:

DATE: <u>10/15/2024</u>

1. FAN COIL UNITS ARE OFF AND CONDENSING UNITS ARE DE-ENERGIZED.

2. WINTER NIGHT SETBACK TEMPERATURE OF 55 DEGREES F (ADJUSTABLE) SHALL BE MAINTAINED BY CYCLING THE FAN COIL UNITS AND ASSOCIATED CONDENSING UNIT INITIATED BY THE SPACE TEMPERATURE SENSOR WITH THE GREATEST NEED, UNTIL ALL SPACE TEMPERATURE SENSORS ASSOCIATED WITH A PARTICULAR CONDENSING UNIT ARE SATISFIED.

3. SUMMER NIGHT SETBACK TEMPERATURE OF 85 DEGREES F (ADJUSTABLE) SHALL BE MAINTAINED BY CYCLING THE FAN COIL UNITS AND ASSOCIATED CONDENSING UNIT INITIATED BY THE SPACE TEMPERATURE SENSOR WITH THE GREATEST NEED, UNTIL ALL SPACE TEMPERATURE SENSORS ASSOCIATED WITH A PARTICULAR CONDENSING UNIT ARE SATISFIED.

VARIABLE REFRIGERANT SYSTEM SEQUENCE OF OPERATION

CHKD BY: SRH

DATE REVIEWED:

VRF SYSTEM: HRU-1
SPACES SERVED
ADULT LIBRARIAN
BOOK STORAGE
LOUNGE
WORK ROOM
DISPATCH
AREA LIBRARIAN
YOUTH LIBRARIAN

SP	ACES SERVED
СО	MPUTER LAB
NE	W BOOKS / LOBBY
STO	ORAGE
OFI	FICE / LOBBY
MA	GAZINES / NEWSPAPERS

VRF SYSTEM: HPU-1	
SPACES SERVED	
STACK AREA - N, E, W	
READING ROOM	

VRF SYSTEM: HPU-2								
SPACES SERVED								
STACK AREA - S, E, W								
READING ROOM								

SUBDIVISION: DUNDALK

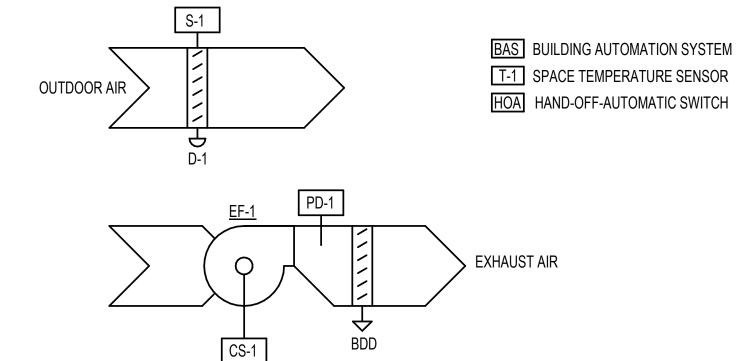
VRF SYSTEM: HPU-3 SPACES SERVED MEETING ROOM



1. WHEN SPACE TEMPERATURE AS SENSED BY THERMOSTAT, T-1 IS AT OR BELOW 65 DEGREES F, UNIT HEATER SHALL

2. WHEN SPACE TEMPERATURE RISES ABOVE 70 DEGREES F, UNIT HEATER SHALL DE-ENERGIZE.

ELECTRIC UNIT HEATER/CONVECTOR CONTROLS



1. SYSTEM SHALL BE STARTED AND STOPPED THROUGH THE HAND-OFF-AUTOMATIC (HOA) SWITCH.

2. SYSTEM IN "HAND" POSITION: D-1 IS OPEN AND EXHAUST FAN SHALL START.

3. SYSTEM IN "AUTOMATIC" POSITION: WHEN SPACE TEMPERATURE AT T-1 RISES ABOVE 85 DEGREES F (ADJUSTABLE), D-1 OPENS. WHEN D-1 IS OPEN, END SWITCH, S-1, SHALL START <u>EF-1</u>. WHEN TEMPERATURE FALLS TO 80 DEGREES F (ADJUSTABLE), FAN STOPS AND D-1 CLOSES. PRESSURE SWITCH PD-1 STOPS EA FAN SHOULD PLENUM PRESSURE RISE ABOVE 2" WG

4. SYSTEM IN "OFF" POSITION: FAN IS OFF. D-1 AND D-2 ARE CLOSED.

MECHANICAL ROOM VENTILATION

						IN	۱P۱	JT.	/Ol	JT	PU	T S	SU	M۱	ΛAI	₹Y						
SYSTEM			INDICATION									ALARM			CONTROL							
VRF SYSTEM MECHANICAL ROOM VENTILATION		STATUS	TEMPERATURE	RELATIVE HUNIDITY	PPM	CFM	STATIC PRESSURE	DIFFERENTIAL PRESSURE	СРМ	POSITION	RUN TIME	HERTZ	TOW	HOH	CRITICAL	MAINTENANCE	PROGRAM START/STOP	HAND-OFF-AUTO	MODULATE	MIN/MAX	OPEN/CLOSED	REMARKS
VRF SYSTEM	Х	Χ								Χ					Χ		Χ	Χ				BAS, HOA, VRF CP
SPACE			Х																			T-1
LLS															Х							
CONDENSATE PUMP															Х							
MECHANICAL ROOM VENTILATION	Х									Χ							Х	Χ				BAS, HOA
EAF-1		Х													Χ							CS-1
DAMPER										Χ											Χ	D-1, S-1
SPACE			Χ																			T-1
PRESSURE SWITCH							Х							Х								PD-1

VRF / MECHANICAL ROOM VENTILATION I/O SUMMARY



Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION | CONTRACT NUMBER

24146PO0 JOB ORDER NUMBER SHEET 45 OF 75 DRAWING NUMBER 2024-2483

FILE NO.: 8

BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT PROFESSIONAL CERTIFICATION AS-BUILT / REVISION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PLAN SCALE: 1/8" = 1'-0" APPROVED BY: 11 SE 21, E SW R.O.W. NO. PROPERTY MANAGER NGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX ICENSE NO. 200470 EXPIRATION DATE 9/2/2025 ENGINEER: PETER PUSZCZ BUREAU OF ENGINEERING AND CONSTRUCTION TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS | SEWER WATER FIELD ENGINEE REVIEWED BY: AS-BUILT PER RECORD PRINT

NORTH POINT LIBRARY

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

AUTOMATIC TEMPERATURE CONTROLS

HVAC RENOVATION 1716 MERRITT BLVD, DUNDALK, MD 21222

	VARIABLE REFRIGERANT HEAT RECOVERY UNITS														
			CAPA	ACITY				ELECTRICAL							
	COOLING HEATING		TING	MAX ALLOWABLE											
			CONDENSER		CONDENSER	REFRIGERANT									
UNIT NO	LOCATION	TOTAL MBH	EAT	TOTAL MBH	EAT	CHARGE (LBS)	MCA	MOCP	V/PH	MIN EER	MIN COP	NOTES	BASIS OF DESIGN		
HRU-1	ROOF	96	95	60	0	45	26	40	460/3	10.4	3.7	1,2	MITSUBISHI		
HRU-2	ROOF	156	95	122	0	95	20+20	30+30	460/3	11.0	3.6	1,2	MITSUBISHI		

NOTES FOR VARIABLE REFRIGERANT HEAT RECOVERY UNITS:

1. REFRIGERANT PIPE SIZES AND ROUTING, REFRIGERANT CHARGE, ETC., SHALL BE PROVIDED BY THE MANUFACTURER. 2. CAPACITY INDICATED IS MINIMUM REQUIRED AFTER CORRECTIONS FOR DESIGN CONDITIONS, REFRIGERANT PIPE SIZES AND

LENGTHS, AND OTHER CORRECTIONS HAVE BEEN TAKEN INTO ACCOUNT.

	VARIABLE REFRIGERANT HEAT PUMP UNITS														
			CAPA	ACITY				ELECTRICAL							
		COO	LING	HEA	TING	MAX ALLOWABLE									
			CONDENSER		CONDENSER	REFRIGERANT									
UNIT NO	LOCATION	TOTAL MBH	EAT	TOTAL MBH	EAT	CHARGE (LBS)	MCA	MOCP	V/PH	MIN EER	MIN COP	NOTES	BASIS OF DESIGN		
HPU-1	ROOF	170	95	115	0	100	40	60	460/3	11.0	3.3	1,2	MITSUBISHI		
HPU-2	ROOF	170	95	120	0	100	40	60	460/3	11.0	3.3	1,2	MITSUBISHI		
HPU-3	ROOF	90	95	70	0	45	20	30	460/3	11.9	4.0	1,2	MITSUBISHI		

NOTES FOR VARIABLE REFRIGERANT HEAT PUMP UNITS:

1. REFRIGERANT PIPE SIZES AND ROUTING, REFRIGERANT CHARGE, ETC., SHALL BE PROVIDED BY THE MANUFACTURER.

2. CAPACITY INDICATED IS MINIMUM REQUIRED AFTER CORRECTIONS FOR DESIGN CONDITIONS, REFRIGERANT PIPE SIZES

AND LENGTHS, AND OTHER CORRECTIONS HAVE BEEN TAKEN INTO ACCOUNT.

VARIABLE REFRIGERANT BRANCH CONTROLLER BOXES													
UNIT NO	LOCATION	NO OF PORTS	SERVICE	V/PH	BASIS OF DESIGN								
BC-1	MECH ROOM	8	HRU-1	208-230/1	MITSUBISHI								
BC-2	MECH ROOM	8	HRU-2	208-230/1	MITSUBISHI								

	CONVECTORS														
	APPROX UNIT SIZE TOTAL														
UNIT SYMBOL	TYPE	LOCATION	L	D	Н	WATTS/FT	KW	V/PH	NOTES						
CONV-1	SILL	SEE FLOOR PLANS	36	3	6	250	0.75	277/1	1, 2, 3						
CONV-2	PEDESTAL	SEE FLOOR PLANS	72	3	6	250	1.5	277/1	1, 3						
CONV-3	SILL	SEE FLOOR PLANS	96	3	6	250	2.0	277/1	1, 2, 3						
CONV-4	SILL	SEE FLOOR PLANS	120	3	6	250	2.5	277/1	1, 2, 3						

NOTES FOR CONVECTORS:

1. BASIS OF DESIGN: QMARK

2. PROVIDE CORNERS, FILLERS, END CAPS, ETC. TO MAKE CONTINUOUS SYSTEM.

3. PROVIDE INTEGRAL THERMOSTAT AND DISCONNECT SWITCH.

	UNIT HEATERS - ELECTRIC													
			AP	PROX UNIT	SIZE									
UNIT SYMBOL	TYPE	LOCATION	W	Н	D	CFM	ELEC KW	V/PH	NOTES					
UH-1	HORIZONTAL	MECH ROOM 37	14	12	18	270	5.0	208/1	1, 2					
UH-2	HORIZONTAL	MECH ROOM 21	14	12	18	270	3.3	208/1	1, 2					

NOTES FOR UNIT HEATERS: 1. BASIS OF DESIGN: QMARK

2. PROVIDE INTEGRAL DISCONNECT AND THERMOSTAT.

	FANS														
ı	UNIT NO	TYPE	LOCATION	SERVICE	CFM	DRIVE TYPE	WHEEL DIA	ESP	HP	RPM	V/PH	NOTES			
	EF-1	INLINE	MECH ROOM	EXHAUST	2,000	DIRECT	16	0.50	3/4	945	208/1	1, 2			

NOTES FOR FANS: 1. BASIS OF DESIGN: GREENHECK SQ 2. PROVIDE EC MOTOR.

AS-BUILT / REVISION

	VARIABLE REFRIGERANT FAN COIL UNITS													
			SUPPL	Y FAN		COOLING COIL		HEATIN	G COIL					
					TOTAL	E	AT						1	
UNIT SYMBOL	QUANTITY	UNIT TYPE	CFM	ESP	NOMINAL COOLING MBH	DB	WB	NOMINAL HEATING MBH	EAT DB	MCA	MOCP	V/PH	NOTES	
FCU-1	8	CONCEALED DUCTED	1270	0.50	36	75	63	40	70	4.3	15.0	208-230/1	1, 2	
FCU-2	4	CONCEALED DUCTED	1410	0.50	54	75	63	60	70	4.4	15.0	208-230/1	1, 2	
FCU-3	1	2x2 CASSETTE	280	-	5	75	63	5.6	70	0.24	15.0	208-230/1	1, 2	
FCU-4	1	2x2 CASSETTE	315	-	8	75	63	9	70	0.28	15.0	208-230/1	1, 2	
FCU-5	2	2x2 CASSETTE	335	-	12	75	63	13.5	70	0.29	15.0	208-230/1	1, 2	
FCU-6	6	2x2 CASSETTE	390	-	15	75	63	17	70	0.35	15.0	208-230/1	1, 2	
FCU-7	13	2x2 CASSETTE	460	-	18	75	63	20	70	0.50	15.0	208-230/1	1, 2	
FCU-8	1	WALL	190	-	6	75	63	6.7	70	0.24	15.0	208-230/1	1, 3	
FCU-9	1	WALL	440	-	18	75	63	20	70	0.24	15.0	208-230/1	1, 3	

NOTES FOR VARIABLE REFRIGERANT FAN COIL UNITS:

1. BASIS OF DESIGN: MITSUBISHI 2. PROVIDE INTEGRAL CONDENSATE PUMP.

3. PROVIDE FIELD MOUNTED CONDENSATE PUMP.

	SUPPLY	AIR T	ERMINA	L UNITS -	SINGLE DUCT
UNIT NO	MAX CFM	MIN CFM	BOX INLET	MAX APD	NOTES
VAV-1	880	350	10	.01	1
VAV-2	1,300	1,300	12	.01	1
VAV-3	970	330	10	.01	1
VAV-4	1,230	550	12	.01	1
VAV-5	1,230	550	12	.01	1
VAV-6	1,230	700	12	.01	1
VAV-7	1,230	700	12	.01	1
VAV-8	1,075	600	10	.01	1, 2
VAV-9	1,075	600	10	.01	1, 2
VAV-10	585	585	8	.01	1

NOTES FOR SUPPLY AIR TERMINAL UNITS:

1. BASIS OF DESIGN: TITUS DESV

2. SEE FLOOR PLAN FOR CONTROL BOX MOUNTING REQUIREMENTS.

INIT NO	MAX CFM	MIN CFM	BOX INLET	MAX APD	NOTES
EV-1	820	330	10	.01	1
EV-2	945	945	10	.01	1
EV-3	700	0	8	.01	1
EV-4	1,120	500	12	.01	1
EV-5	1,120	500	12	.01	1
EV-6	1,110	635	12	.01	1
EV-7	1,110	635	12	.01	1
EV-8	970	545	10	.01	1, 2
EV-9	970	545	10	.01	1, 2
EV-10	575	575	8	.01	1
EV-11	575	575	8	.01	1

GENERAL NOTES: (APPLICABLE TO ALL MECHANICAL SCHEDULES)

3. UNIT TYPES ARE DESCRIBED IN THE SPECIFICATIONS.

6. AIR VELOCITY VALUES ARE LISTED IN FEET PER MINUTE.

4. TEMPERATURE VALUES ARE LISTED IN DEGREES FAHRENHEIT.

5. AIR PRESSURE VALUES ARE LISTED IN INCHES OF WATER COLUMN.

INDIVIDUALLY.

1. UNIT NUMBERS ARE INDICATED WHERE ALL UNITS ARE LISTED AND NUMBERED INDIVIDUALLY

7. DUCT AND PIPE SIZES ARE LISTED IN SINGLE-NUMBER INCHES OF NOMINAL DIAMETER OR MULTIPLE NUMBER INCHES OF INDICATED PARAMETER. CONNECTION SIZES ARE BRANCH SIZES FROM MAINS TO UNIT INLETS. SINGLE PIPE SIZE IS TYPICAL FOR SUPPLY AND RETURN.

2. UNIT SYMBOLS ARE INDICATED WHERE ALL UNITS ARE NOT LISTED AND NUMBERED

NOTES FOR EXHAUST AIR TERMINAL UNITS: 1. BASIS OF DESIGN: TITUS DESV

2. SEE FLOOR PLAN FOR CONTROL BOX MOUNTING REQUIREMENTS.

														DEDICA	TED O	UTDOO	R AIF	R SYST	EM - A	IR SOUR	CE HE	AT PUN	1P																		
						FAN DATA	1						FILTERS						ENERGY	RECOVERY W	HEEL							COOL	ING COIL			Н	OT GAS F	REHEAT		REVERSE CY	CLE HEAT	PUMP	BACKUP I	ELECTRIC HEAT	
				SUPF	PLY				-	XHAUST	Γ					SUMM	IER						WINTE	ER					EAT	LAT			EAT		LAT						1
													7	SUPI	PLY AIR			EXHAUS'	ΓAIR		SUPF	PLY AIR			EXHAUST AIR	ī	TOTAL SE	ENS			Т0	AL									
UNIT NO	LOCATION	MAX CFM	MIN CFM	ESP	TSP	ВНР	HP	MAX CFM	MIN CFM	ESP	TSP BHP	HP	PRE FINAL	EAT DB EAT WE	B LAT DB	LAT WB	EAT DB	EAT WB L	AT DB LA	AT WB EAT DB	EAT WB	LAT DB L	AT WB E	EAT DB E	AT WB LAT DB	LAT WB	MBH ME	BH DB	WB	DB \	VB ME	BH D	B W	B DB	WB	MBH	EAT	LAT	KW	£AT LAT	NOTES
DOAS-1	ROOF	5,610	3,080	1.70	3.1	3.9	5.0	5,280	2,850	1.25	2.40 3.2	5.0	MERV 8 MERV 13	95.0 78.0	80.2	67.8	75.0	63.0	90.3 7	74.7 0.0	0.0	50.1	41.7	70.0	54.0 15.9	15.8	290 18	80 80.2	2 67.8	50.3 5	0.1 15	2.4 50).3 50	.1 72.0	60.0	150	50.1	75.0	40.0	50.1 72.6	1, 2, 3
DOAS-2	ROOF	5,195	3,185	1.40	2.7	3.2	5.0	4,735	2,935	1.0	2.1 2.5	5.0	MERV 8 MERV 13	95.0 78.0	80.2	67.8	75.0	63.0	90.9 7	75.0 0.0	0.0	50.1	41.7	70.0	54.0 14.2	14.1	266 16	64 80.2	2 67.8	50.8 5	0.3 13	7.7 50).8 50	.3 72.0	60.0	141	50.1	75.0	40.0	50.1 74.3	1, 2, 3

NOTES FOR DEDICATED OUTDOOR AIR SYSTEMS: 1. BASIS OF DESIGN: TRANE HORIZON 2. TSP INCLUDES THE FOLLOWING FILTER LOADING: A. SUPPLY: 0.18 IN WG PRIMARY FILTER

B. EXHAUST: 0.24 IN WG ERW FILTER

DATE: <u>10/15/2024</u>

3. PROVIDE SINGLE POINT POWER AND INTEGRAL DISCONNECT.

PROFESSIONAL CERTIFICATION

APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR

HENRY ADAMS Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION	CONTRACT
M-23	24146P
NORE C	JOB ORDER
	DDO I 100

11 SE 21, R.O.W. NO. E SW PROPERTY MANAGER NGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. NORTH POINT LIBRARY 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX ICENSE NO. 200470 EXPIRATION DATE 9/2/2025 MECHANICAL SCHEDULES BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: PETER PUSZCZ TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS | WATER FIELD ENGINEER DGN BY: ____DJV

APPROVED BY:

PROPERTY MANAGEMENT

DRAWING SCALE

PLAN SCALE: 12" = 1'-0"

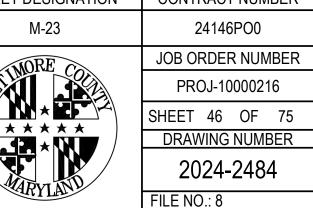
REVIEWED BY: AS-BUILT PER RECORD PRINT CHKD BY: SRH DATE REVIEWED:

BY DATE P.W.A. NO. KEY SHEET POSITION SHT

HVAC RENOVATION 1716 MERRITT BLVD, DUNDALK, MD 21222

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

ELECTION DIST. NO.: 12c7



SUBDIVISION: DUNDALK

ACC AHU	AIR COOLED CHILLER / AIR COOLED CONDENSER AIR HANDLING UNIT	
CO CW	CLEANOUT COLD WATER	
D DN	DRAIN DOWN	
E EX	EAST EXISTING	
FD	FLOOR DRAIN	
HW HWR	HOT WATER HOT WATER RETURN	
N	NORTH	
P PD	PLUMBING PUMPED DISCHARGE	
RM RX	ROOM REMOVE EXISTING	
S SW	SOUTH STORM WATER	
TYP	TYPICAL	
W	WEST	

	PLUMBING LEGEND (APPLICABLE TO ALL PLUMBING DRAWINGS)
SYMBOL	DESCRIPTION
CW	- COLD WATER
——HW——	HOT WATER
——HWR——	HOT WATER RETURN
SW	- STORM WATER
	- SOIL OR WASTE
	- VENT
D	- CONDENSATE DRAIN
•	CONNECT TO EXISTING
•	END POINT OF REMOVAL OF EXISTING
1 M-101	PLAN/ SECTION DESIGNATION TOP - PLAN/ SECTION REFERENCE, BOTTOM - REFERENCED DRAWING
⊢⊙	AIR VENT
×	- ANCHOR
	CAP (PIPE OR DUCT)
	- EXPANSION JOINT
-=	PIPE GUIDE
⊢⊘	PRESSURE GAUGE
1 >1	- STRAINER
Н	THERMOMETER
I I	- UNION
₹	- BALANCING VALVE
•	- CHECK VALVE
<u></u> 5	PRESSURE REDUCING VALVE
 ф	- RELIEF VALVE
₹	- SHUTOFF VALVE

SUBDIVISION: DUNDALK

GENERAL PLUMBING NOTES

(APPLICABLE TO ALL PLUMBING DRAWINGS)

- 2. COORDINATE ALL PLUMBING WORK WITH MECHANICAL WORK, ELECTRICAL WORK, AND WORK OF OTHER TRADES. SEE DRAWING G-3 PHASING PLAN.
- 3. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. REPAIR ALL DAMAGES OCCASIONED BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 4. RUN ALL STORM WATER DRAIN PIPING WITH 2 PERCENT MINIMUM GRADE UNLESS OTHERWISE NOTED. RUN ALL CONDENSATE DRAIN PIPING WITH 1 PERCENT MINIMUM GRADE UNLESS OTHERWISE NOTED.
- 5. ELEVATIONS NOTED ARE TO CENTERLINES OF PIPES FOR ALL PRESSURE LINES AND TO INVERT FOR ALL GRAVITY FLOW LINES.
- 6. INSTALL PIPING SO THAT ALL VALVES ARE ACCESSIBLE.
- 7. UNLESS OTHERWISE NOTED, ROUTE ALL PIPING OVERHEAD, TIGHT TO UNDERSIDE OF SLAB, WITH SPACE FOR INSULATION IF REQUIRED.
- 8. MAINTAIN MINIMUM 6'-8" CLEARANCE TO UNDERSIDE OF PIPES, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL AND ELECTRICAL ROOMS. ACCESS ROUTE SHALL BE CLEAR A MINIMUM 36" WIDE.
- 9. CERTAIN ITEMS SUCH AS ACCESS DOORS, CLEANOUTS, RISE AND DROPS IN DUCTWORK AND PIPING, ETC., ARE INDICATED ON THE DRAWINGS FOR CLARITY OR A SPECIFIC LOCATION REQUIREMENT AND SHALL NOT BE INTERPRETED AS THE EXTENT OF THE REQUIREMENTS FOR THESE ITEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THESE ITEMS AS REQUIRED ELSEWHERE IN THE CONTRACT DOCUMENTS.
- 10. WHERE THE INSTALLATION OF NEW SERVICES OR THE EXTENSION OF EXISTING SERVICES REQUIRES CUTTING OF EXISTING FLOORS, WALLS, PARTITIONS, ETC., CHECK FOR THE PRESENCE OF EXISTING MECHANICAL, PLUMBING AND ELECTRICAL SERVICES WITHIN OR IMMEDIATELY BENEATH CONSTRUCTION. EXERCISE NECESSARY PRECAUTIONS TO PREVENT DAMAGE TO THE SERVICES OR INJURY TO PERSONNEL DUE TO CONTACT WITH SAME. TEMPORARILY DISCONNECT SERVICES DURING THE CUTTING OPERATION. SCHEDULE SERVICE OUTAGES IN ADVANCE WITH THE COUNTY.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR RESEARCHING ALL SYSTEMS THAT A PARTICULAR OUTAGE WILL AFFECT AS WELL AS LOCATING ALL SHUTOFF POINTS. INCLUDE THIS INFORMATION IN THE OUTAGE PLAN AND SUBMIT TO THE COUNTY FOR APPROVAL.
- 12. PROVIDE SHUTOFF VALVES IN DOMESTIC WATER SYSTEMS IN BRANCH LINES SERVING TWO OR MORE FIXTURES.
- 13. REFER TO SPECIFICATION DIVISION 22 FOR PLUMBING SYSTEM PIPING REQUIREMENTS.
- 14. INFORMATION SHOWN ON THE PLUMBING DRAWINGS PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO DEMOLITION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, OR THERE IS A QUESTION REGARDING SCOPE OF WORK OR LIMITS OF DISTURBANCE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.
- 15. REMOVE ALL EXISTING PIPING, EQUIPMENT, AND MATERIALS NOT REQUIRED FOR RE-USE OR RE-INSTALLATION (SHOWN OR OTHERWISE). ALL EXISTING MATERIALS AND EQUIPMENT WHICH ARE REMOVED AND ARE DESIRED BY THE COUNTY, OR ARE INDICATED TO REMAIN THE PROPERTY OF THE COUNTY SHALL BE DELIVERED BY THE CONTRACTOR WHERE DIRECTED BY THE COUNTY. ALL OTHER MATERIALS AND EQUIPMENT WHICH ARE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY THE CONTRACTOR FROM THE PREMISES.
- 16. DISCONNECT EXISTING PIPING NO LONGER REQUIRED TO REMAIN IN SERVICE (SHOWN OR OTHERWISE) AND REMOVE PIPING BACK TO SERVICE MAINS UNLESS OTHERWISE INDICATED OR NOTED ON PLANS. REMOVE EXISTING PIPE HANGERS, SUPPORTS, VALVES, ETC. CAP, PLUG, OR SEAL EXISTING PIPING INDICATED OR REQUIRED TO REMAIN IN SERVICE OR IN PLACE. NO EXISTING PIPING SHALL BE LEFT UNSEALED. VALVE ALL TERMINATED PRESSURE PIPE.
- 17. EXISTING PIPING, EQUIPMENT, AND MATERIALS AFFECTED BY DEMOLITION OR NEW WORK INSTALLATION AND REQUIRED TO REMAIN IN SERVICE SHALL BE RE-INSTALLED OR SUPPORTED AS REQUIRED IN ACCORDANCE WITH THE SPECIFICATIONS. ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE COUNTY AND AT NO ADDITIONAL CONTRACT COST.
- 18. REMOVE ALL ACCESSORIES, CONTROLS, ENCLOSURES, SUPPORTS, HANGERS, PADS, ETC. ASSOCIATED WITH ALL EQUIPMENT SHOWN TO BE REMOVED. REPAIR AND PAINT DAMAGED SURFACES AND ALL SURFACES BEHIND ALL EQUIPMENT SHOWN TO BE DEMOLISHED TO MATCH EXISTING ADJACENT SURFACES.

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024
SUBMISSION: FINAL CONSTRUCTION DOCUMENTS
SHEET DESIGNATION | CONTRACT NUMBER

011221 22010111111011	0011111111011110
P-1	24146PO
NORE	JOB ORDER NU
	DDO I 10000

JOB ORDER NUMBER
PROJ-10000216
SHEET 47 OF 75
DRAWING NUMBER
2024-2485

FILE NO.: 8

L	PROFESSIONAL CERTIFIC	ATION	AS-BUILT / REV	ISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING	G SCALE	PROPERTY MANA	AGEMENT
THE OF MARY	I HEREBY CERTIFY THAT THESE DOCUMENTS WI APPROVED BY ME, AND THAT I AM A DULY LICEN						5.01// 110	- 0.47	11 SE 21,	PLAN SCALE:	12" = 1'-0"	APPROVED BY:	
ACK PUS A	ENGINEER UNDER THE LAWS OF THE STATE OF						R.O.W. NO.	E SW	11 0 = 22	DDOE!! F OOM F			PROPERTY MAN
Z	LICENSE NO. 200470 EXPIRATION DA	ATE <u>9/2/2025</u>	CONTRACT COMPLETIO	N BOX					110222	PROFILE SCALE:		DATE:	
	ENGINEER: PETER PUSZCZ	DGN BY: DJV	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	IWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
O 200470 CHILLIANS SONAL ENGINEER	AS-BUILT PER RECORD PRINT	DWN BY:DJV	REVIEWED BY:										
E: <u>10/15/2024</u>	BY: DATE:	DATE REVIEWED:											

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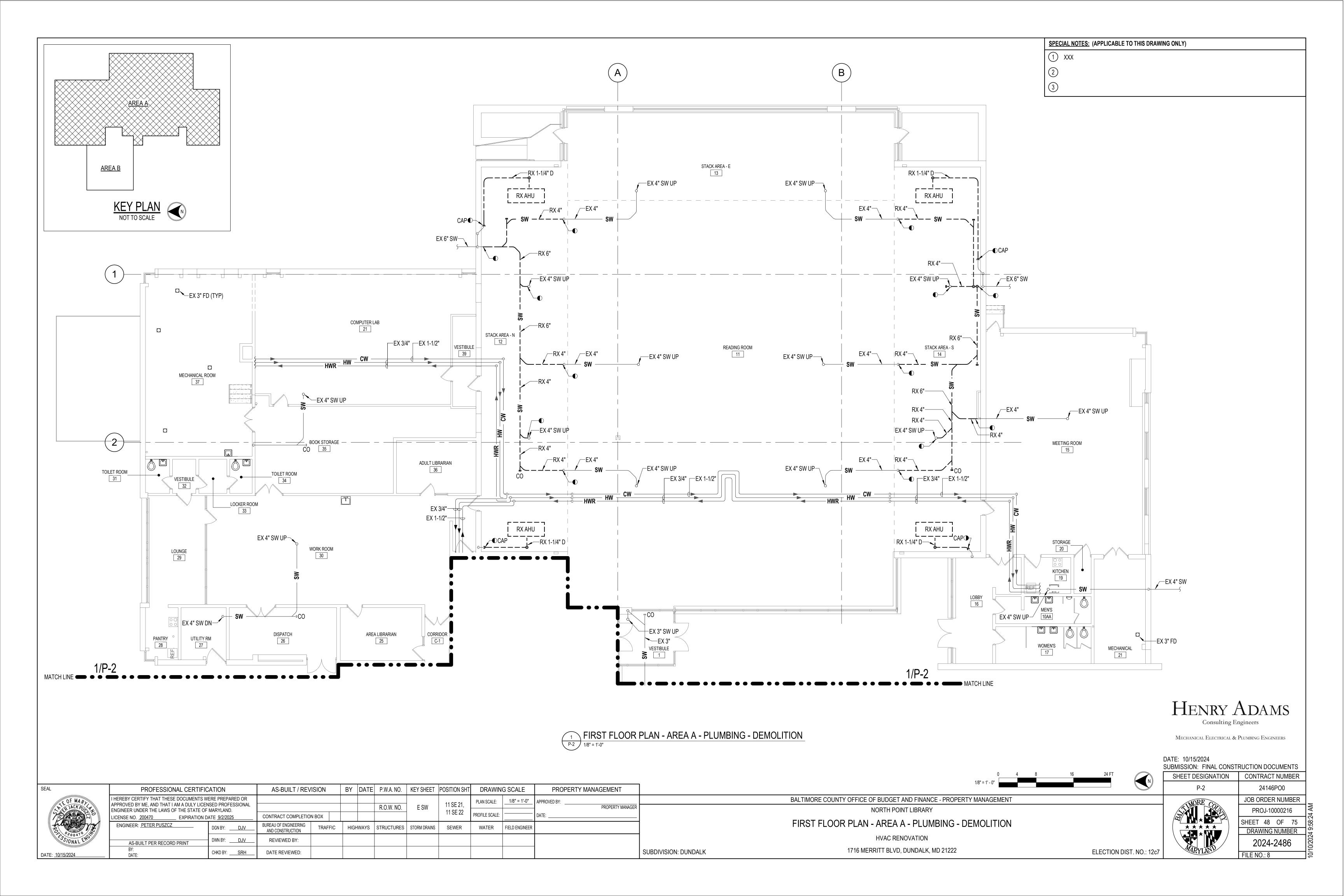
BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

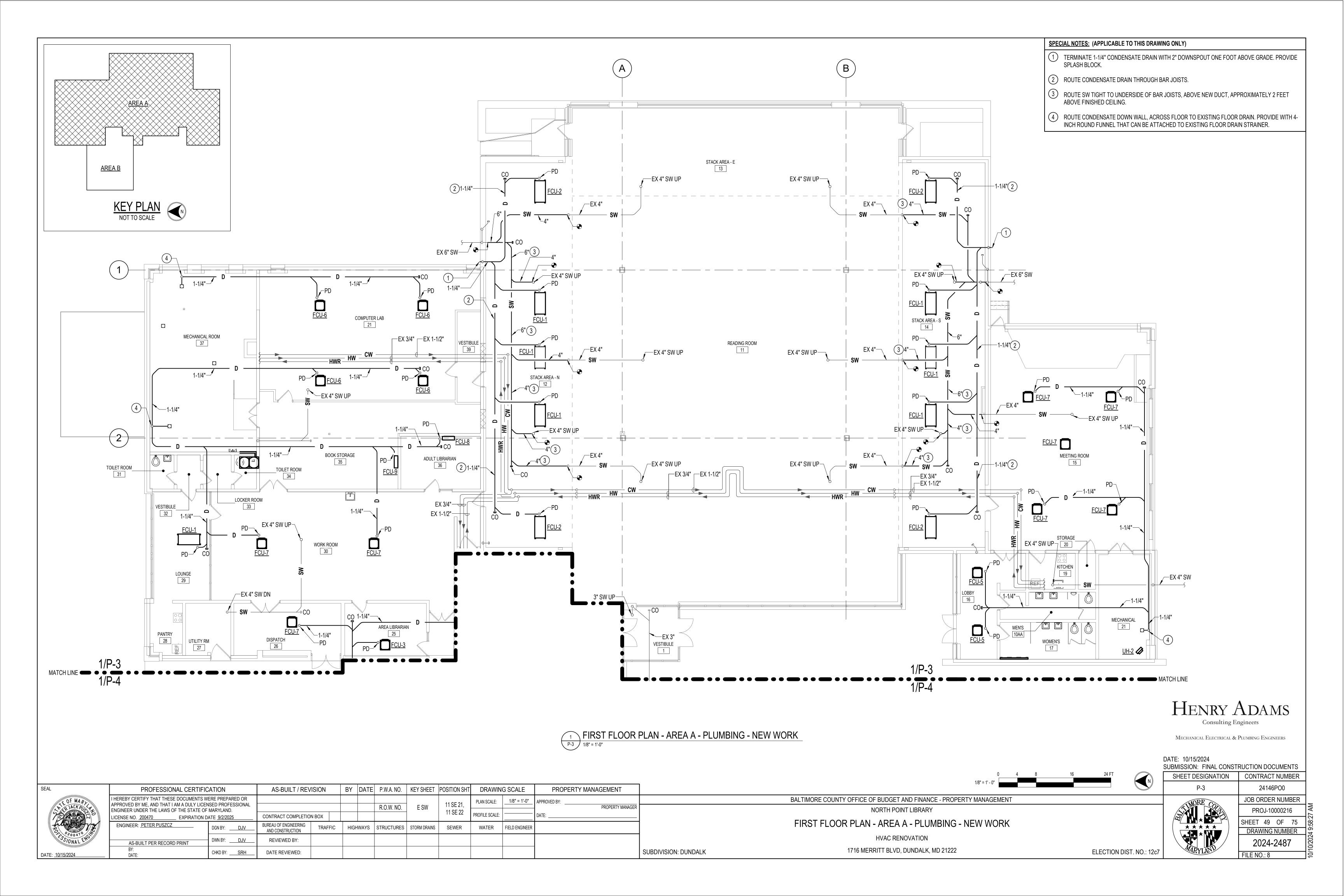
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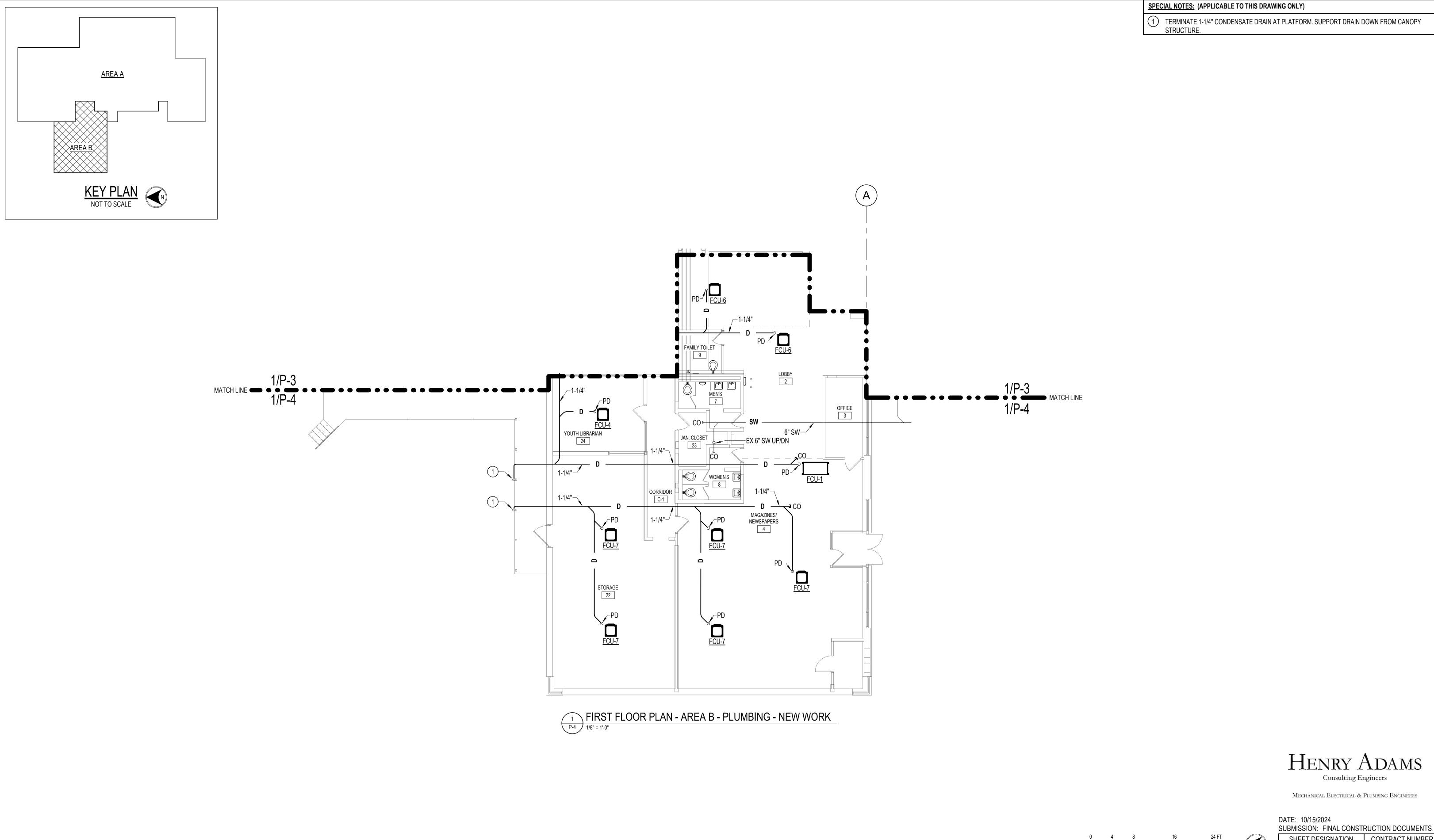
PLUMBING COVER SHEET

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222







BY DATE P.W.A. NO. KEY SHEET POSITION SHT

R.O.W. NO.

TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS |

E SW

AS-BUILT / REVISION

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION

REVIEWED BY:

DATE REVIEWED:

PROFESSIONAL CERTIFICATION

APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

__ EXPIRATION DATE <u>9/2/2025</u>

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR

ICENSE NO. 200470

ENGINEER: PETER PUSZCZ

AS-BUILT PER RECORD PRINT

DRAWING SCALE

WATER FIELD ENGINEER

PROFILE SCALE:

11 SE 21,

11 SE 22

PLAN SCALE: 1/8" = 1'-0" APPROVED BY:

PROPERTY MANAGEMENT

PROPERTY MANAGER

SUBDIVISION: DUNDALK

SHEET DESIGNATION CONTRACT NUMBER BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT FIRST FLOOR PLAN - AREA B - PLUMBING - NEW WORK

ELECTION DIST. NO.: 12c7

NORTH POINT LIBRARY

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222

24146PO0 JOB ORDER NUMBER SHEET 50 OF 75 DRAWING NUMBER 2024-2488 FILE NO.: 8

El	ELECTRICAL CONVENTIONS											
REFERENCE												
1— E-1—	SECTION DESIGNATION											
1	SPECIAL NOTE (APPLIES WHERE INDICATED ON THE DRAWING)											
WIRING												
Ф ⁵ ————————————————————————————————————	INDICATES PANELBOARD CIRCUIT DESIGNATION											
1,3,5(LP-1)	BRANCH CIRCUIT HOMERUN TO PANEL "LP-1", CIRCUITS #1,3,5 NUMBER OF CIRCUITS INDICATED BY QUANTITY OF ARROW HEADS.											
	CONCEALED CONDUIT IN CEILING OR WALLS											
	CONDUIT IN OR UNDER FLOOR											

		FI	ECTRICAL ABBREVIATIONS		
			LOTRIOAL ADDICEVIATIONS		
Α	AMPERE	GND	GROUND	NF	NON-FUSED
ACCU ACU	AIR COOLED CONDENSING UNIT AIR CONDITIONING UNIT	GW	GROUND WIRE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
AF	AMPERE FRAME, AMPERE FUSE	HP	HORSEPOWER	NFSS	NON-FUSED SAFETY SWITCH
AFF	ABOVE FINISHED FLOOR	HPU	HEAT PUMP UNIT	NIC	NOT IN CONTRACT
AFG	ABOVE FINISHED GRADE	HVAC	HEATING VENTILATING AIR	NM	NON-METALLIC
AHJ	AUTHORITY HAVING JURISDICTION		CONDITIONING	NTS	NOT TO SCALE
AHU	AIR HANDLING UNIT	HZ	HERTZ		
AIC	AMPERE INTERRUPTING CAPACITY			OCP	OVERCURRENT PROTECTION
AL	ALUMINUM	IBC	INTERNATIONAL BUILDING CODE	OH	OVERHEAD
AT	AMPERE TRIP	ICCB	INSULATED CASE CIRCUIT BREAKER	OHE	OVERHEAD ELECTRIC
		IEBC	INTERNATIONAL EXISTING BUILDING	OSHA	OCCUPATIONAL SAFETY AND HEALTH
AUX AWG	AUXILIARY AMERICAN WIRE GAUGE		CODE	0011/1	ADMINISTRATION
		IECC	INTERNATIONAL ENERGY CONSERVATION CODE	D	DOLE(4D, 2D, 2D)
BAS	BUILDING AUTOMATION SYSTEM	IEEE	INSTITUTE OF ELECTRICAL AND	P	POLE(1P, 2P, 3P)
BF	BALLAST FACTOR		ELECTRONICS ENGINEERS	PA	PUBLIC ADDRESS
BGE	BALTIMORE GAS AND ELECTRIC	IFC	INTERNATIONAL FIRE CODE	PF	POWER FACTOR
BLDG	BUILDING	IG	ISOLATED GROUND	PH	PHASE
BOD	BASIS OF DESIGN	IG	ISOLATED GROUND	PIR	PASSIVE INFRARED
BS	BRANCH SELECTOR	ID	ILINGTION DOV	PVC	POLYVINYL CHLORIDE
		JB	JUNCTION BOX		
С	CONDUIT	17	ONE THOUGAND LICELY IN	QTY	QUANTITY
СВ	CIRCUIT BREAKER	K	ONE THOUSAND, KELVIN		
CCT	CORRELATED COLOR TEMPERATURE	KAIC	THOUSAND AMPERE INTERRUPTING	R	RACEWAY
CH	CHILLER	LONAU	CAPACITY	REC	RECEPTACLE
CKT	CIRCUIT	KCMIL	THOUSAND CIRCULAR MILS	RFS	RECOMMENDED FUSE SIZE
		KV	KILOVOLTS	RGS	RIGID GALVANIZED STEEL
CLG	CEILING	KVA	KILOVOLT-AMPERES	RLA	RATED LOAD AMPERES
CMS	COMBINATION MOTOR STARTER	KW	KILOWATTS	RM	ROOM
CO	CARBON MONOXIDE			RTU	ROOF TOP UNIT
COMM	COMMUNICATION	LCD	LIQUID CRYSTAL DISPLAY	RX	REMOVE EXISTING
CRI	COLOR RENDERING INDEX	LED	LIGHT EMITTING DIODE	IXX	KLINOVE EXISTING
CT	CURRENT TRANSFORMER	LRA	LOCKED ROTOR AMPS	CE.	OFDVIOR ENTRANCE
CU	COPPER	LS	LIMIT SWITCH, LONG TIME-SHORT TIME	SE	SERVICE ENTRANCE
CX	CONNECT TO EXISTING	LSI	LONG TIME-SHORT	SER	SERVICE ENTRANCE RATED
			TIME-INSTANTANEOUS	SF	SQUARE FEET
DB	DECIBEL	LSIG	LONG TIME-SHORT	SN	SOLID NEUTRAL
DN	DOWN		TIME-INSTANTANEOUS GROUND	SPD	SURGE PROTECTION DEVICE
DOAS	DEDICATED OUTDOOR AIR SYSTEM		FAULT	SS	SAFETY SWITCH
DS	DISCONNECT SWITCH	LTG	LIGHTING	ST	SINGLE-THROW
DWC	DRINKING WATER COOLER	LTS	LIGHTS	SW	SWITCH
DWG	DRAWING	LV	LOW VOLTAGE	SWBD	SWITCHBOARD
5110	DI WWW.			SWGR	SWITCHGEAR
Е	EMERGENCY	MAX	MAXIMUM	SYM	SYMMETRICAL
EF	EXHAUST FAN	MCA	MINIMUM CIRCUIT AMPACITY		
		MCB	MAIN CIRCUIT BREAKER	Т	TRANSFORMER
ELEC	ELECTRICAL	MCCB	MOLDED CASE CIRCUIT BREAKER	TA	TRIP AMPERES
ENCL	ENCLOSURE	MCP	MOTOR CIRCUIT PROTECTOR	TYP	TYPICAL
EQUIP	EQUIPMENT EXISTING TO BEMAIN	MDP	MAIN DISTRIBUTION PANEL		
ETR	EXISTING TO REMAIN	MGB	MAIN GROUND BAR	UG	UNDERGROUND
EX	EXISTING	MH	MANHOLE, METAL HALIDE, MOUNTING	UGE	UNDERGROUND ELECTRIC
		IVIITI	HEIGHT		
FA	FIRE ALARM	MIN	MINIMUM	UH	UNIT HEATER
FAAP	FIRE ALARM ANNUNCIATOR PANEL			UL	UNDERWRITERS LABORATORY
FACP	FIRE ALARM CONTROL PANEL	MLO	MAIN LUGS ONLY	V.	VOLTO
FCU	FAN COIL UNIT	MMS	MANUAL MOTOR STARTER	V	VOLTS
FDR	FEEDER	MOCP	MAXIMUM OVERCURRENT	VA	VOLT-AMPERES
FLA	FULL LOAD AMPERAGE	N/TID	PROTECTION	VFD	VARIABLE FREQUENCY DRIVE
FP	FAN POWERED, FIRE PUMP	MTD	MOUNTED	VRF	VARIABLE REFRIGERANT FLOW
FSS	FUSED SAFETY SWITCH	MV	MEDIUM VOLTAGE	VSD	VARIABLE SPEED DRIVE
FT	FEET	k. 1	NEUTRA		
		N	NEUTRAL	W	WIRE, WATTS
G	GROUND	NAC	NOTIFICATION APPLIANCE CIRCUIT	W/	WITH
GB	GROUND BAR	NC	NORMALLY CLOSED	WP	WEATHERPROOF
		NEC	NATIONAL ELECTRICAL CODE	WR	WEATHER RESISTANT
GD CEC	GENERAL DUTY	NECA	NATIONAL ELECTRICAL		· · · · · · · · · · · · · · · · ·
GEC GROUNDING ELECTRODE CONDUCTOR			CONTRACTORS ASSOCIATION	XFMR	TRANSFORMER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	NEMA	NATIONAL ELECTRICAL	, u 1111 X	
GFI	GROUND FAULT INTERRUPTER		MANUFACTURERS' ASSOCIATION	Υ	WYE
(≟⊑!	Carrio Contraction of Contraction Contract	NESC	NATIONAL ELECTRICAL SAFETY CODE	1	** • -

SUBDIVISION: DUNDALK

SYMBOL	DESCRIPTION	MOUNTING HEIGHT
	LUMINAIRE	
•	LUMINAIRE - WALLWASHER OR ADJUSTABLE DOWNLIGHT	
$\nabla \nabla \nabla$	LUMINAIRE - TRACK AND TRACK HEADS	
Ф (SIMPLEX) Ф (DUPLEX) Ф (QUAD)	RECEPTACLE - NEMA CONFIGURATION 5-20R SUBSCRIPTS: GFI: WITH 5mA GROUND FAULT INTERRUPTER IG: ISOLATED GROUND TYPE SPD: INTEGRAL SURGE PROTECTION AND INDICATOR LIGHT TR: TAMPER-RESISTANT EXP: EXPLOSION PROOF WP: WEATHER-RESISTANT RECEPTACLE WITH WEATHERPROOF WHILE-IN-USE COVER	18"
•\$ ₂	DOUBLE POLE SWITCH	
<i>/</i> /	MOTOR	
	EQUIPMENT, AS NOTED	
40	SAFETY SWITCH	60" TO TO
SURFACE FLUSH	PANELBOARD, SURFACE/FLUSH MOUNT	78" TO TO
—— II	GROUNDING SYSTEM - GROUND CONNECTION	
	MOLDED CASE CIRCUIT BREAKER (600V AND BELOW)	
	FIXED CURRENT TRANSFORMER WITH TURN RATIO	
	CURRENT LIMITING FUSE (600V AND BELOW)	
	DISCONNECT SWITCH (600V AND BELOW)	
KW	KILOWATT METER (KWH = KILOWATT HOURS)	
	TRANSFORMER	
Ţ	GROUNDING SYSTEM WYE GROUNDED NEUTRAL WINDING	
Δ	DELTA WINDING	
S	MOTOR OVERLOAD	
	CONTACT	

NOTES: (APPLICABLE TO ELECTRICAL LEGEND ONLY)

- THE MOUNTING HEIGHTS GIVEN ON THIS SHEET IN THE ELECTRICAL LEGEND ARE GENERAL AND MUST BE USED ONLY WHEN MOUNTING HEIGHTS CANNOT BE ESTABLISHED BY REFERENCE TO DETAILS, ELEVATIONS, AND NOTES ON THE DRAWINGS.
- ALL MOUNTING HEIGHTS, UNLESS OTHERWISE NOTED, MUST BE MEASURED FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE OUTLET OR DEVICE.
- HEIGHTS OF ALL ITEMS NOT COVERED BY THE ELECTRICAL LEGEND AND NOT SHOWN ON THE DRAWINGS MUST BE AS DIRECTED BY THE ARCHITECT OR ENGINEER.
- WHERE PLACING ANY ITEM AT THE HEIGHTS LISTED OR NOTED WILL CAUSE INTERFERENCE WITH THE WORK OF OTHER TRADES, OR IS NOT PHYSICALLY POSSIBLE OR DESIRABLE FOR ONE REASON OR ANOTHER, THE ITEM MUST BE INSTALLED AT A LOCATION APPROVED BY THE ARCHITECT OR ENGINEER.
- 5. PANELBOARDS MUST BE MOUNTED SO THAT IT IS 78" TO TOP OF HIGHEST OPERABLE PART.

HENRY ADAMS

Consulting Engineers

Mechanical Electrical & Plumbing Engineers

DATE: 10/15/2024

SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

24146PO0 JOB ORDER NUMBER SHEET 51 OF 75 DRAWING NUMBER 2024-2489

FILE NO.: 8

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T Ž		PROFESSIONAL CERTIFIC	CATION	AS-BUILT / REV	ISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY MANAGEMENT	
•		I HEREBY CERTIFY THAT THESE DOCUMENTS W APPROVED BY ME, AND THAT I AM A DULY LICEN	ISED PROFESSIONAL					R.O.W. NO.	E SW	11 SE 21,	PLAN SCALE:	1/8" = 1'-0"	APPROVED BY: PROPERTY MAN	JAGEE
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•	KER	ENGINEER: JOHN DOUGLAS TEBERA	DGN BY: <u>NTS</u>	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	IWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
33° 1		AS-BUILT PER RECORD PRINT	DWN BY: NTS	REVIEWED BY:										
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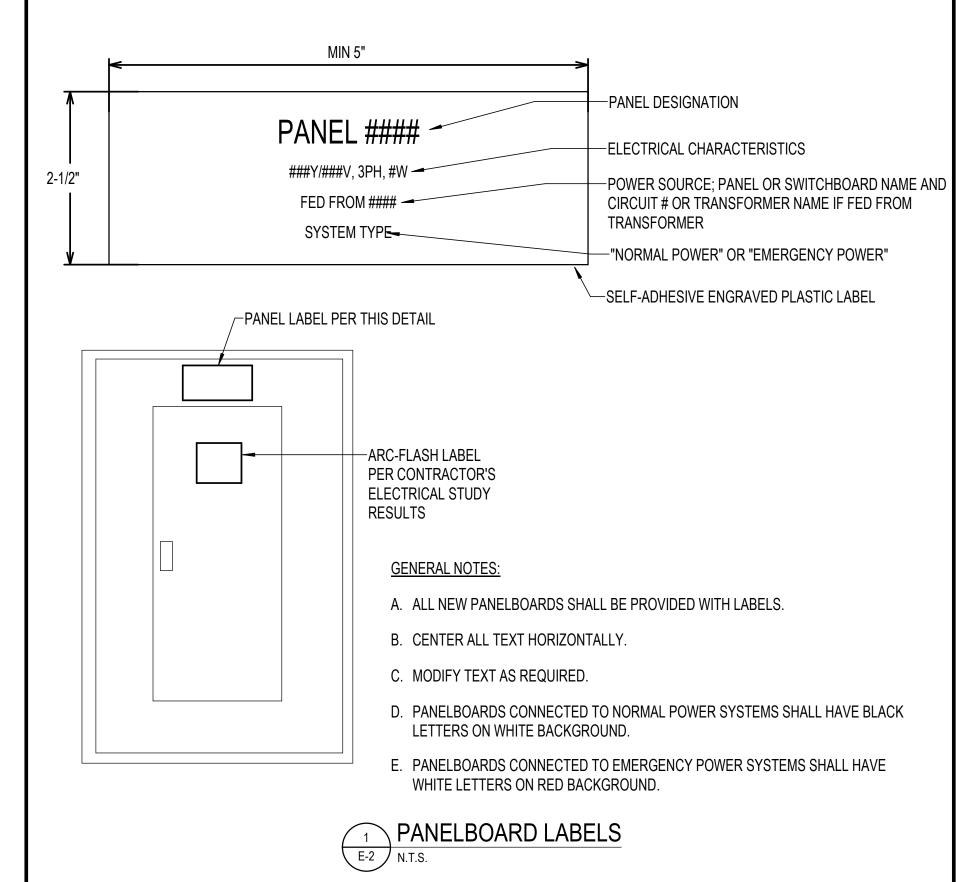
ELECTRICAL COVER SHEET

HVAC RENOVATION 1716 MERRITT BLVD, DUNDALK, MD 21222

PANELBOARD REPLACEMENT NOTES

- 1. PROVIDE LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, DELEGATED DESIGN AND INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
 PANELBOARDS MAY BE EITHER REPLACED IN THEIR ENTIRETY OR RETROFITT WITH A RETROFIT KIT TO RETAIN THE EXISTING BACKBOX. THE DECISION IS AT THE DISCRETION
 OF THE CONTRACTOR AND CONSIDERED MEANS AND METHODS. ONLY THE BACKBOX MAY BE REUSED. THE ENTIRE PANELBOARD INTERIOR, BUS BARS, CIRCUIT BREAKERS,
 ACCESSORIES, TRIM COVER, ETC. SHALL BE NEW.
- 2. PANELBOARD INTERIORS SHALL BE UL RECOGNIZED UNDER UL67, PANELBOARD STANDARD.
- 3. RETROFIT PANELBOARDS SHALL BE FIELD MEASURED BY THE CONTRACTOR TO VERIFY EXISTING DIMENSIONS. DIMENSIONS PROVIDED WITHIN THESE DRAWINGS ARE MEANT TO CONVEY APPROXIMATE DIMENSIONS ONLY. CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR MEASURING PANELBOARDS AND SURROUNDING EXISTING CONDITIONS TO VERIFY PRIOR TO ORDERING RETROFIT KITS.
- USE LOCKOUT/TAG-OUT PRECAUTIONS AS PRESCRIBED IN OSHA, NFPA 70E AND OTHER SAFETY MANUALS WHEN PERFORMING WORK ON PANELBOARDS.
- 5. RETROFIT PANELBOARDS SHALL BE CONSTRUCTED AND MOUNTED IN A WAY THAT PROVIDES ALLIGNED, LEVEL AND FIRMLY MOUNTED COMPONENTS INCLUDING BUT NOT LIMITED TO THE TRIM COVER AND INTERIOR. THERE SHALL NOT BE HOLES OR GAPS BETWEEN THE DEAD-FRONT PANEL AND THE TRIM COVER WHICH COULD LEAVE THE PANEL INTERIOR EXPOSED WHEN OPENING THE INNER PANEL TRIM DOOR.
- PRIOR TO ENERGIZING A REPLACED/RETROFITTED PANELBOARD, PERFORM A MEGGER OR DC TEST OF THE PANELBOARD'S INSULATION WITH THE NEUTRAL ISOLATED FROM THE GROUND AND THE CIRCUIT BREAKERS OPEN, CONDUCT ELECTRICAL INSULATION RESISTANCE TESTS FROM PHASE TO PHASE, PHASE TO GROUND, PHASE TO NEUTRAL, AND NEUTRAL TO GROUND. PRIOR TO TESTING, REMOVE ALL CONTROL POWER FUSING AND CONNECTIONS TO SURGE PROTECTIVE DEVICES (SPDs) TO AVOID DAMAGE TO SUCH COMPONENTS, AND RECONNECT AFTER TESTING IS COMPLETED. TESTS RESULTING IN READINGS AT OR ABOVE 1 MEGAOHM IS SATISFACTORY. IF LESS THAN 1 MEGAOHM, PROVIDE CORRECTIVE ACTION AND RETEST.
- 7. REPLACEMENT AND RETROFIT PANELBOARDS SHALL BE PROVIDED WITH DOOR-IN-DOOR FRONT TRIM.
- B. REPLACEMENT AND RETROFIT PANELBOARDS SHALL BE PROVIDED WITH ENGRAVED NAMEPLATES PER DETAIL 1/E-2.
- . REPLACEMENT AND RETROFIT PANELBOARDS SHALL BE PROVIDED WITH TYPE WRITTEN CIRCUIT DIRECTORY
- 10. MAXIMUM DIMENSIONS INDICATED IN PANEL SCHEDULE ARE THE BASIS OF DESIGN WHERE DIMENSIONS ARE KNOWN TO BE A LIMITING FACTOR OF THE INSTALLATION.

 WHERE A VALUE OF "##" IS INDICATED, THE LIMITING FACTORS SHALL BE CONFIRMED BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS WHICH SHALL
 BE CONFIRMED AND CORRELATED AT THE JOB SITE BY THE CONTRACTOR PRIOR TO THE SUBMITTAL/SHOP DRAWING REVIEW PROCESS.
- 11. ALL NECESSARY WORK REQUIRED TO RECONNECT EXISTING FEEDERS AND BRANCH CIRCUITS SHALL BE INCLUDED IN THE BID.



SUBDIVISION: DUNDALK

GENERAL ELECTRICAL NOTES

- 1. PROVIDE LABOR, MATERIALS, TOOLS, EQUIPMENT, COORDINATION, DELEGATED DESIGN AND INCIDENTALS NECESSARY TO PROVIDE A COMPLETE AND OPERABLE SYSTEM.
- 2. PERFORM WORK AS REQUIRED BY APPLICABLE CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION.
- 3. MATERIAL AND EQUIPMENT SHALL BE LISTED AND LABELED BY NATIONALLY RECOGNIZED TESTING LABORATORIES FOR INTENDED SERVICE.
- 4. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION
- 5. MAINTAIN RECORD DRAWINGS ON SITE. RECORD SET SHALL BE COMPLETE, CURRENT, AND AVAILABLE UPON REQUEST.
- 6. SUBMIT FOR APPROVAL, SHOP DRAWINGS FOR EQUIPMENT AND MATERIALS USED ON PROJECT. OBTAIN APPROVAL BY ENGINEER PRIOR TO PURCHASE OF EQUIPMENT AND
- 7. REPAIR OR REPLACE DAMAGE TO FACILITIES AND EQUIPMENT AT NO ADDITIONAL EXPENSE TO OWNER.
- 8. PATCH AND REPAIR DISTURBED AREAS TO MATCH ADJACENT SURFACES AND FINISHES.
- 9. PROVIDE TEMPORARY POWER AND LIGHTING FOR OTHER TRADES AS REQUIRED TO COMPLETE PROJECT IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS.
- 10. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. PROVIDE COMPONENTS INDICATED ON RISER DIAGRAMS WHETHER OR NOT INDICATED ON PLANS, AND VICE VERSA.
- 11. LOCATIONS SHOWN ON PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH OTHER TRADES. ROUTING OF CONDUIT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW REQUIRED OFFSETS AND DETAILS. OBTAIN DRAWINGS AND SPECIFICATIONS FROM OTHER TRADES AND COORDINATE WITH OTHER TRADES.
- 12. COORDINATE ELECTRICAL INSTALLATION WITH FIELD CONDITIONS. LOCATIONS SHOWN ARE DIAGRAMMATIC AND MAY REQUIRE ADJUSTMENT IN FIELD.
- 13 DEEED TO MECHANICAL DRAWINGS FOR EVACT LOCATION OF MECHANICAL FOLLIDMENT DECLIDING ELECTRICAL CONNECTIONS
- 13. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS.
- 14. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALLS REQUIRING SPECIAL CONSTRUCTION.
- 15. PERMANENTLY LABEL NEW ELECTRICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO, DEVICE DESIGNATION AND SUPPLY CIRCUIT DESIGNATION.
 16. PROVIDE EACH CIRCUIT WITH A DEDICATED NEUTRAL UNLESS NOTED OTHERWISE.
- 17. CONDUIT HOMERUNS SHOWN ON DRAWINGS WITH MORE THAN 3 CURRENT CARRYING CONDUCTORS ARE SHOWN DIAGRAMMATICALLY. DO NOT INSTALL MORE THAN 3
- CURRENT CARRYING CONDUCTORS IN A SINGLE RACEWAY UNLESS INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
- 18. PROVIDE FIRESTOPPING FOR ELECTRICAL PENETRATIONS IN FIRE RATED ASSEMBLIES.
- 19. INSTALL ELECTRICAL WORK IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE. INSTALL RACEWAYS TIGHT TO STRUCTURAL CEILING AND AS HIGH AS POSSIBLE WITHIN CEILING SPACES TO MAINTAIN MAXIMUM AMOUNT OF CLEAR SPACE BELOW RACEWAY.
- 20. INSTALL RACEWAYS CONCEALED IN BUILDING FINISHES FOR ALL EXTERIOR MOUNTED DEVICES. DO NOT ROUTE EXPOSED ON BUILDING EXTERIOR.
- 21. INSTALL RACEWAYS CONCEALED IN WALLS, UNDER FLOORS, ABOVE CEILINGS, ETC., EXCEPT AS FOLLOWS:
- WHERE SUSPENDED CEILINGS ARE NOT PROVIDED
- IN VERTICAL SHAFTS, ELECTRICAL CLOSETS, ETC., MECHANICAL AND ELECTRICAL EQUIPMENT SPACES WHERE CONCEALMENT IS NOT PRACTICAL.
- AT SURFACE-MOUNT PANELBOARDS IN OTHERWISE FINISHED SPACES LIMITED TO VERTICAL RUNS ABOVE AND BELOW PANEL
- WHERE REQUIRED FOR EQUIPMENT CONNECTIONS
 WHERE SPECIFICALLY INDICATED ON DRAWINGS
- WHERE SPECIFICALLY INDICATED ON DRAWINGS
- 22. OWNER-FURNISHED EQUIPMENT: VERIFY AND COORDINATE ELECTRICAL ROUGH-IN REQUIREMENTS FOR OWNER-FURNISHED EQUIPMENT WITH OWNER PRIOR TO PULLING CONDUCTORS AND MAKING FINAL CONNECTIONS. LACK OF COORDINATION SHALL NOT JUSTIFY CHANGE ORDERS.
- 23. WHERE SUBMITTED EQUIPMENT REQUIRES REVISION TO OVERCURRENT PROTECTION, CONDUIT, AND WIRING, COORDINATE AND MAKE CHANGE TO PROVIDE A COMPLETE INSTALLATION IN ACCORDANCE WITH APPLICABLE CODES.
- 24. PROVIDE NECESSARY SUPPORTING STRUT CHANNEL AND ALL MISCELLANEOUS HARDWARE FOR MOUNTING ELECTRICAL EQUIPMENT. MAINTAIN NEC WORKING CLEARANCES. COORDINATE EXACT LOCATION IN FIELD. DO NOT MOUNT ON EQUIPMENT ACCESS PANELS OR IN EQUIPMENT MANUFACTURER'S RECOMMENDED MAINTENANCE CLEARANCES.
- 25. FIRE ALARM BRANCH CIRCUIT IDENTIFICATION MUST COMPLY WITH NFPA 70 AND NFPA 72:
- PROVIDE APPROVED RED CIRCUIT BREAKER LOCKOUT DEVICE FOR EACH CIRCUIT BREAKER SERVING A FIRE ALARM CIRCUIT.
- IDENTIFY EACH FIRE ALARM CIRCUIT WITH A RED PHENOLIC NAMEPLATE WITH WHITE LETTERING. NAMEPLATE MUST READ "FIRE ALARM CIRCUIT". FASTEN NAMEPLATE IN PANELBOARD ADJACENT TO CIRCUIT BREAKER.
- 26. COORDINATE WORK WITH PHASES INDICATED ON DRAWINGS OF OTHER TRADES.
- 27. AIR SEAL AROUND ALL ELECTRICAL WIRING AND ELECTRICAL BOXES INSTALLED THROUGH WALLS, CEILINGS, AND FLOORINGS TO PREVENT AIR LEAKAGE AND MOISTURE
- MOVEMENT. PROVIDE LISTED SEALANTS COMPATIBLE WITH ALL ADJOINING SURFACES.
- 28. SEAL CONDUIT AND WIRING PENETRATIONS

HENRY ADAMS
Consulting Engineers

Mechanical Electrical & Plumbing Engineers

DATE: 10/15/2024
SUBMISSION: FINAL CONSTRUCTION DOCUMENTS
SHEET DESIGNATION CONTRACT NUMBER

NORE CO

JOB ORDER NUMBER

PROJ-10000216

SHEET 52 OF 75

DRAWING NUMBER

2024-2490

FILE NO.: 8

24146PO0

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4	OUG AS	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 18042 EXPIRATION DATE 11/13/2024					R.O.W. NO.	E SW	11 SE 21, 11 SE 22	PLAN SCALE:	1/8" = 1'-0"	APPROVED BY: PROPERTY MANA	ΜΔΝ	
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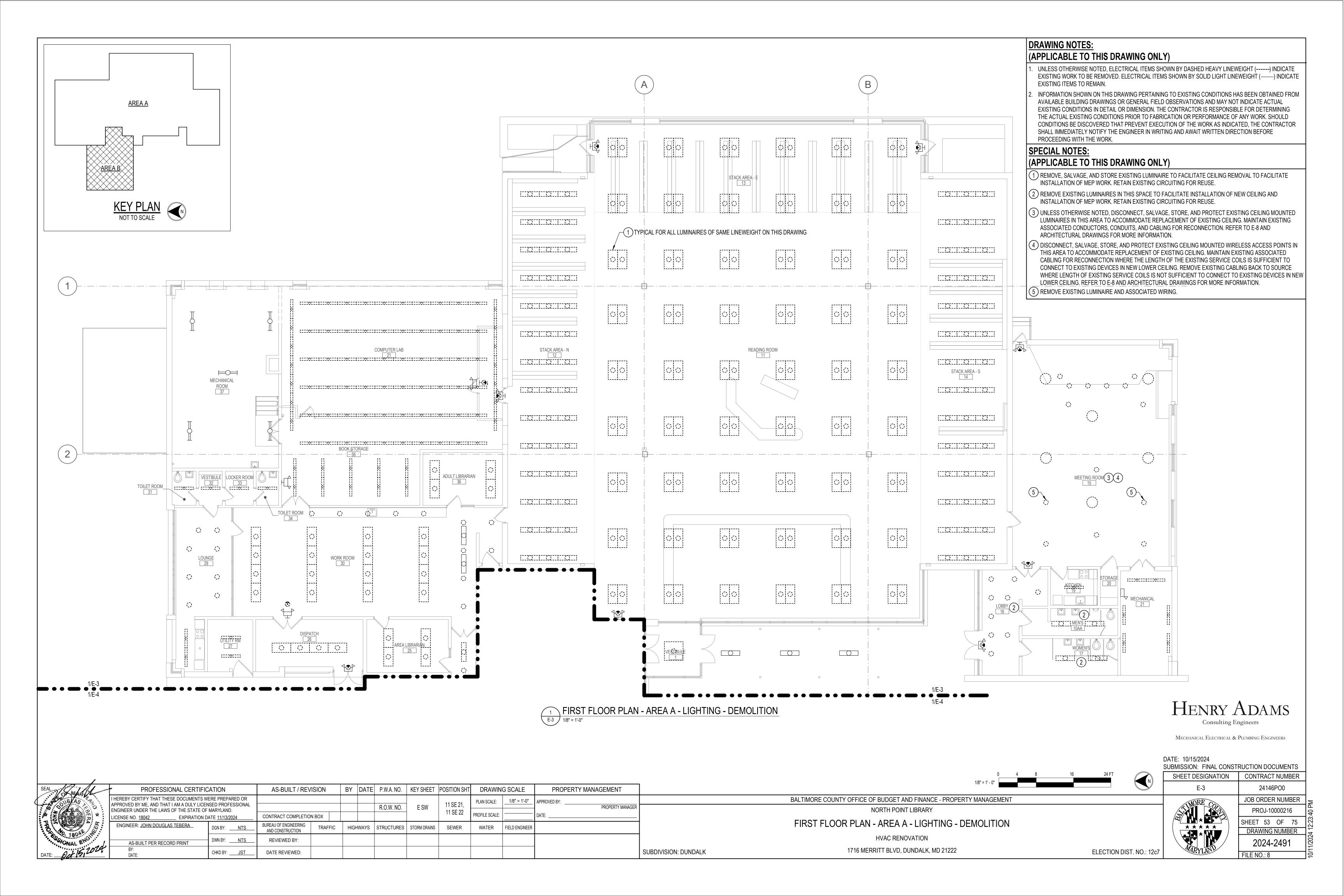
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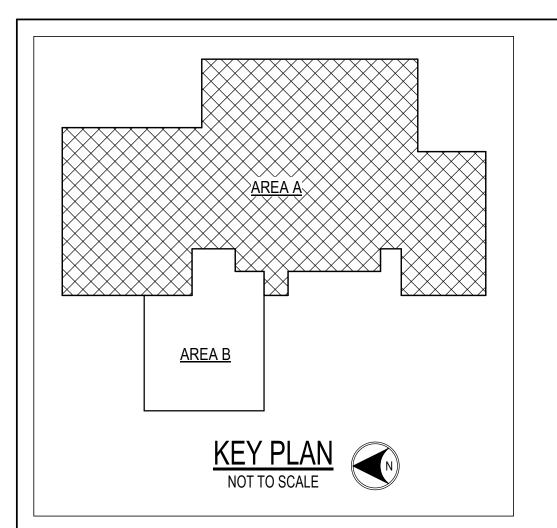
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ELECTRICAL COVER SHEET

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222





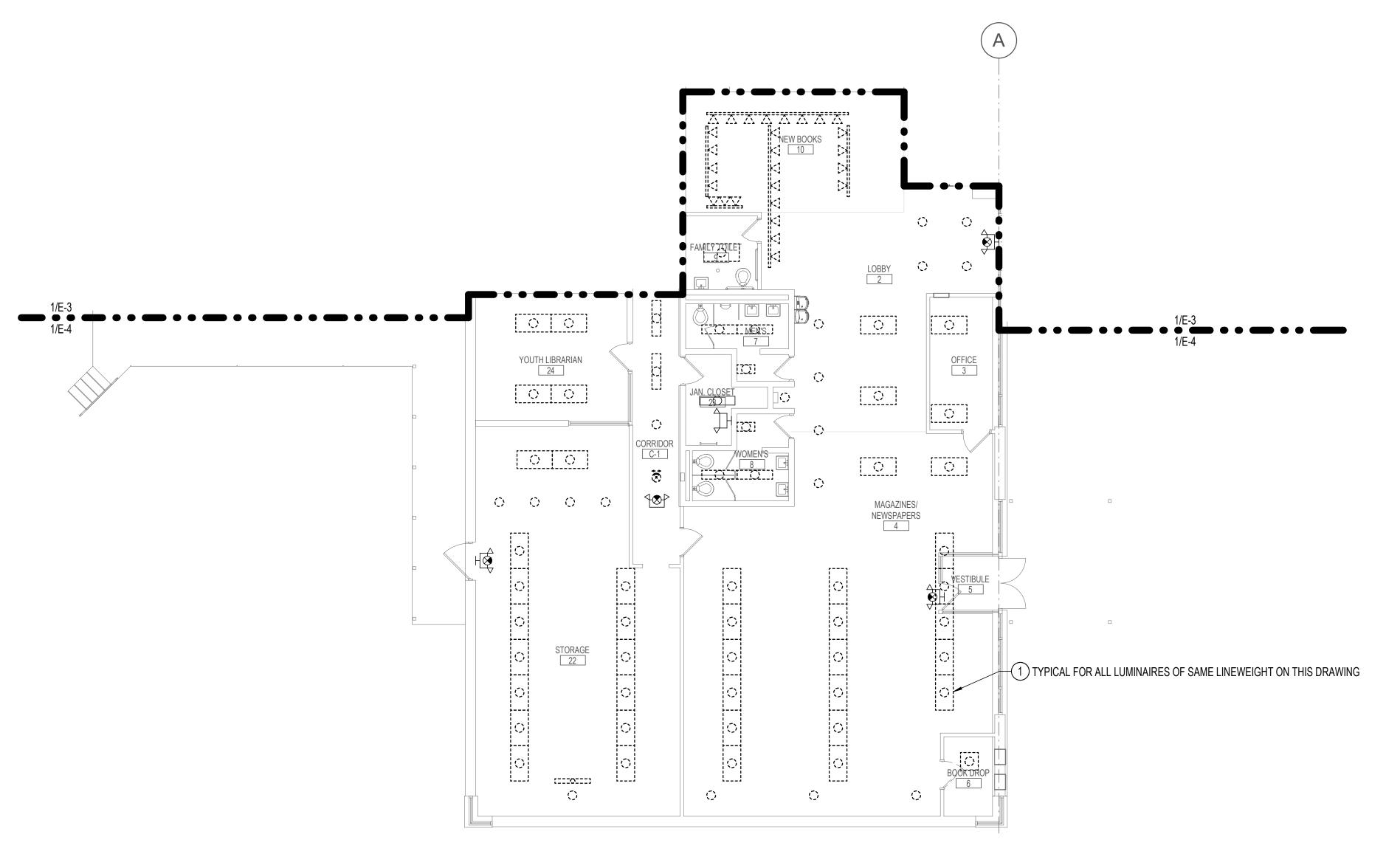
(APPLICABLE TO THIS DRAWING ONLY)

- . UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY DASHED HEAVY LINEWEIGHT (-----) INDICATE EXISTING WORK TO BE REMOVED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (-----) INDICATE EXISTING ITEMS TO REMAIN.
- 2. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE PROCEEDING WITH THE WORK.

SPECIAL NOTES:

(APPLICABLE TO THIS DRAWING ONLY)

1) REMOVE, SALVAGE, AND STORE EXISTING LUMINAIRE TO FACILITATE CEILING REMOVAL TO FACILITATE INSTALLATION OF MEP WORK. RETAIN EXISTING CIRCUITING FOR REUSE.



1 FIRST FLOOR PLAN - AREA B - LIGHTING - DEMOLITION
1/8" = 1'-0"

SUBDIVISION: DUNDALK

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

0 4 8 16 24 FT 1/8" = 1' - 0" DATE: 10/15/2024
SUBMISSION: FINAL CONSTRUCTION DOCUMENTS
SHEET DESIGNATION | CONTRACT NUMBER

SHEET DESIGNATION CONTRACT NUMBER

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	SHEET 54 OF 75							
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18042	A. C. C.	ENGINEER: JOHN DOUGLAS TEBERA	DGN BY: NTS	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAY	S STRU	ICTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
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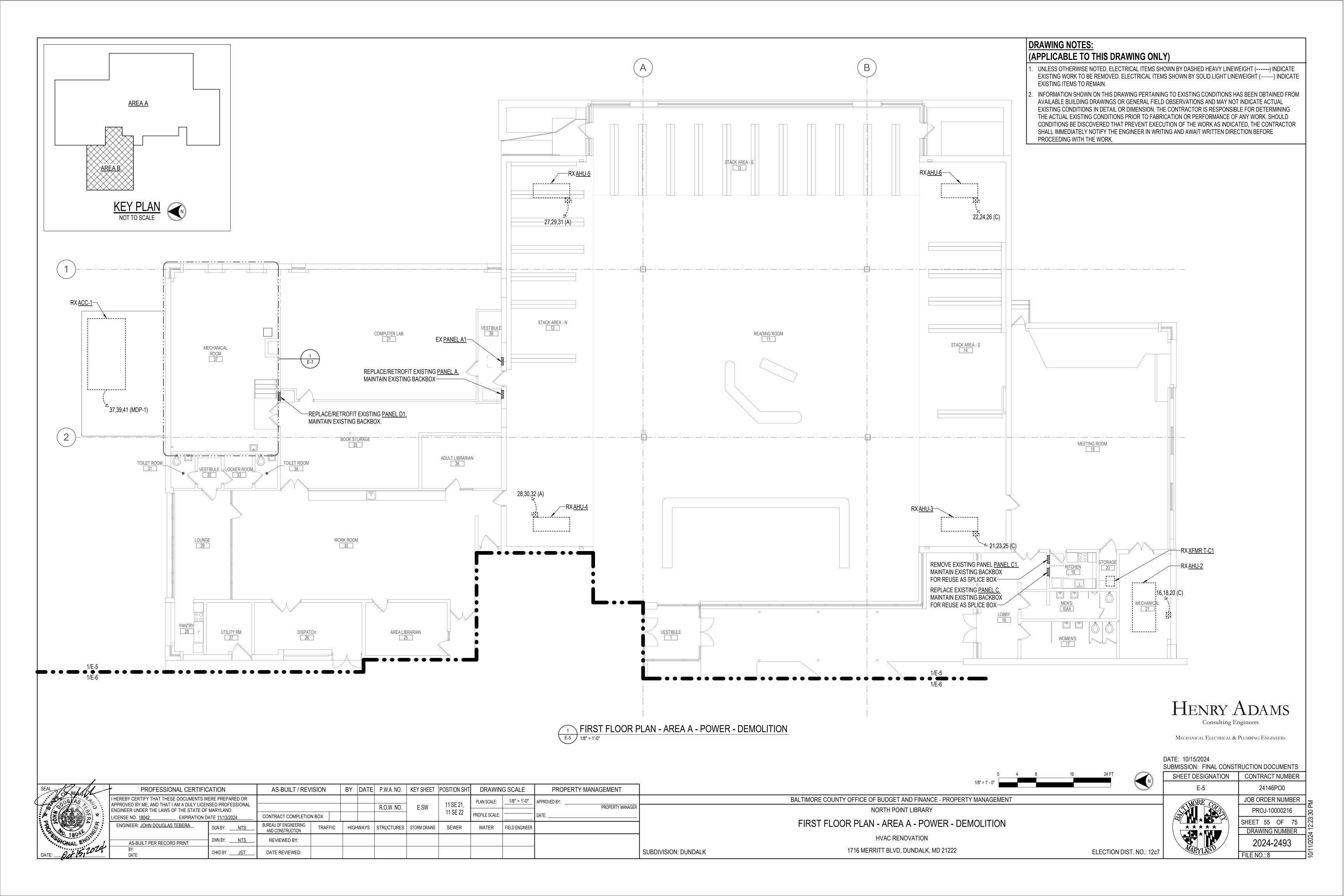
FIRST FLOOR PLAN - AREA B - LIGHTING - DEMOLITION

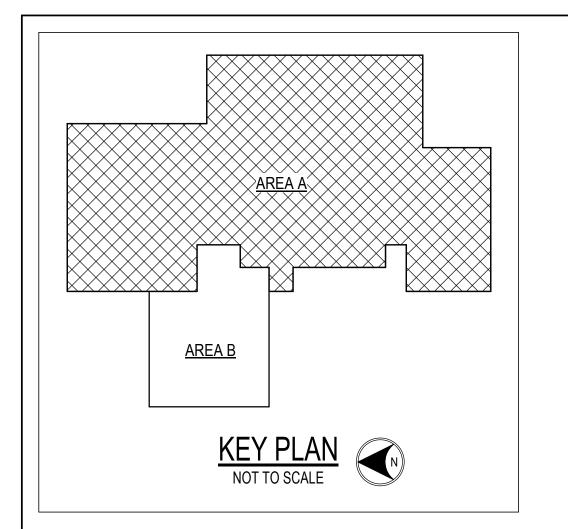
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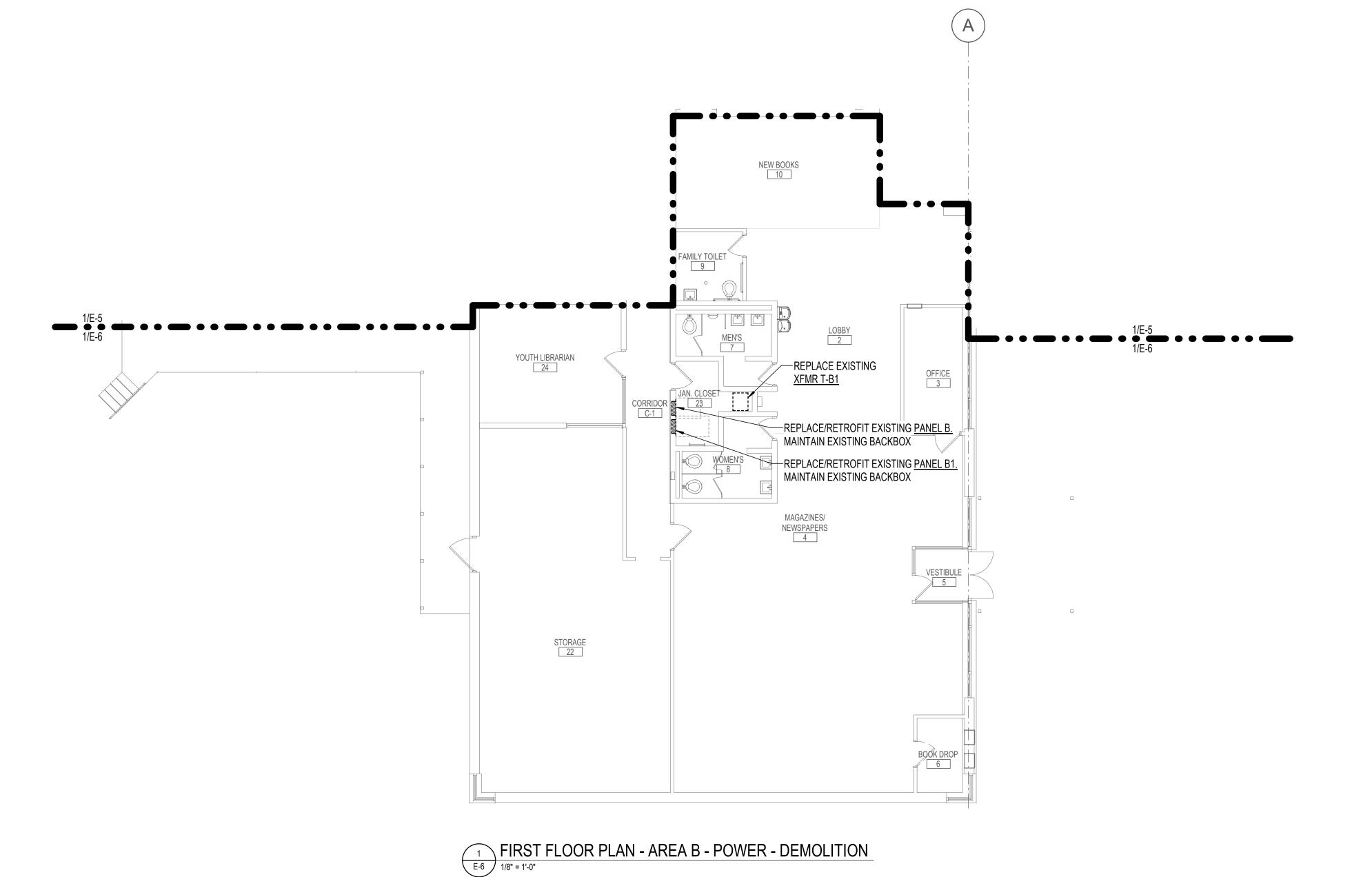
1716 MERRITT BLVD, DUNDALK, MD 21222





(APPLICABLE TO THIS DRAWING ONLY)

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SUBDIVISION: DUNDALK

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

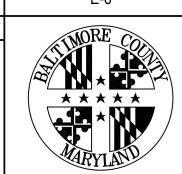
DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION CONTRACT NUMBER 24146PO0 JOB ORDER NUMBER

DRAWING NUMBER

2024-2494

FILE NO.: 8



	PROFESSIONAL CERTIFIC	PROFESSIONAL CERTIFICATION					P.W.A. NO.	KEY SHEET	KEY SHEET POSITION SHT		N SHT DRAWING SCALE		ERTY MANAGEMENT
	I HEREBY CERTIFY THAT THESE DOCUMENTS W APPROVED BY ME, AND THAT I AM A DULY LICEN								11 SE 21,	PLAN SCALE:	1/8" = 1'-0"	APPROVED BY:	
*	ENGINEER UNDER THE LAWS OF THE STATE OF LICENSE NO. 18042 EXPIRATION D	MARYLAND.	CONTRACT COMPLETION	N BOX			R.O.W. NO.	E SW	11 SE 22	PROFILE SCALE:		DATE:	PROPERTY MANAGER
	ENGINEER: JOHN DOUGLAS TEBERA	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	HWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER			
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024	BY: DATE:	CHKD BY:JST	DATE REVIEWED:										

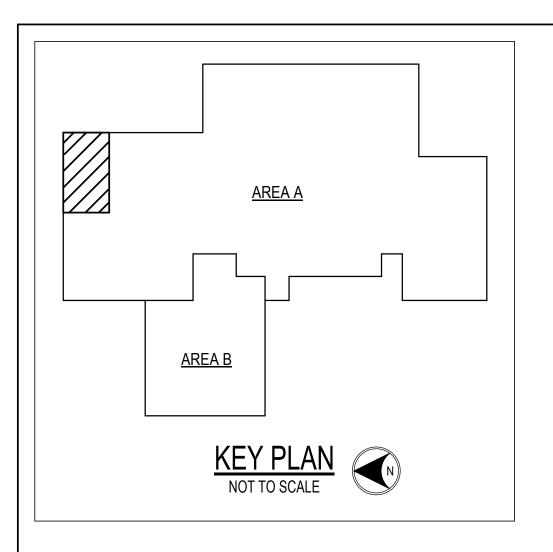
FIRST FLOOR PLAN- AREA B - POWER - DEMOLITION

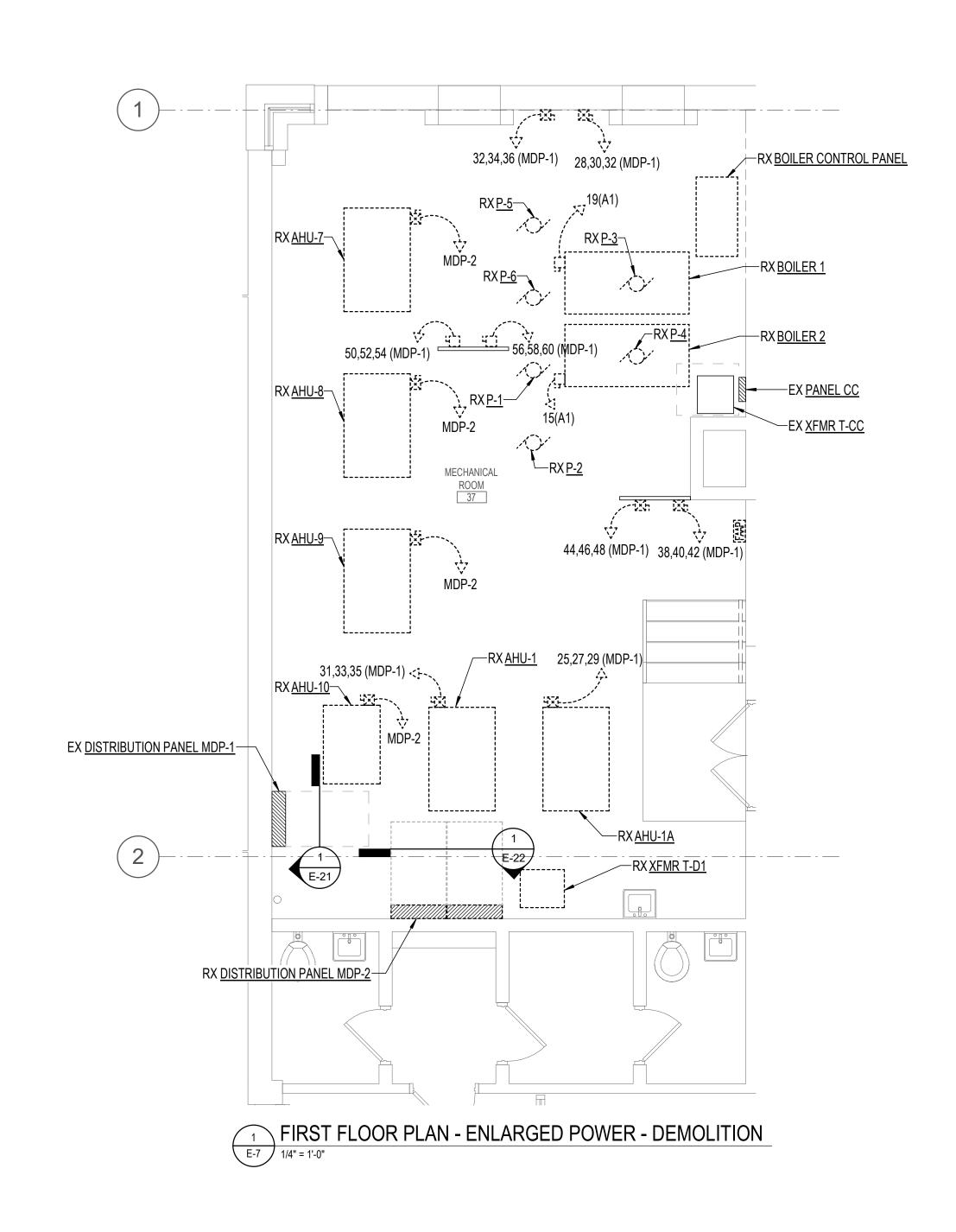
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SUBDIVISION: DUNDALK

HENRY ADAMS

Consulting Engineers

Mechanical Electrical & Plumbing Engineers

SUBMISSION

4 8 12 FT SHEET DI

DRAWING NOTES:

EXISTING ITEMS TO REMAIN.

PROCEEDING WITH THE WORK.

(APPLICABLE TO THIS DRAWING ONLY)

UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY DASHED HEAVY LINEWEIGHT (-----) INDICATE EXISTING WORK TO BE REMOVED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (-----) INDICATE

INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM

AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL

SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT WRITTEN DIRECTION BEFORE

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DATE: 10/15/2024
SUBMISSION: FINAL CONSTRUCTION DOCUMENTS
SHEET DESIGNATION CONTRACT NUMBER



JOB ORDER NUMBE	R	≥								
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2024-2495										
FILE NO.: 8										

24146PO0

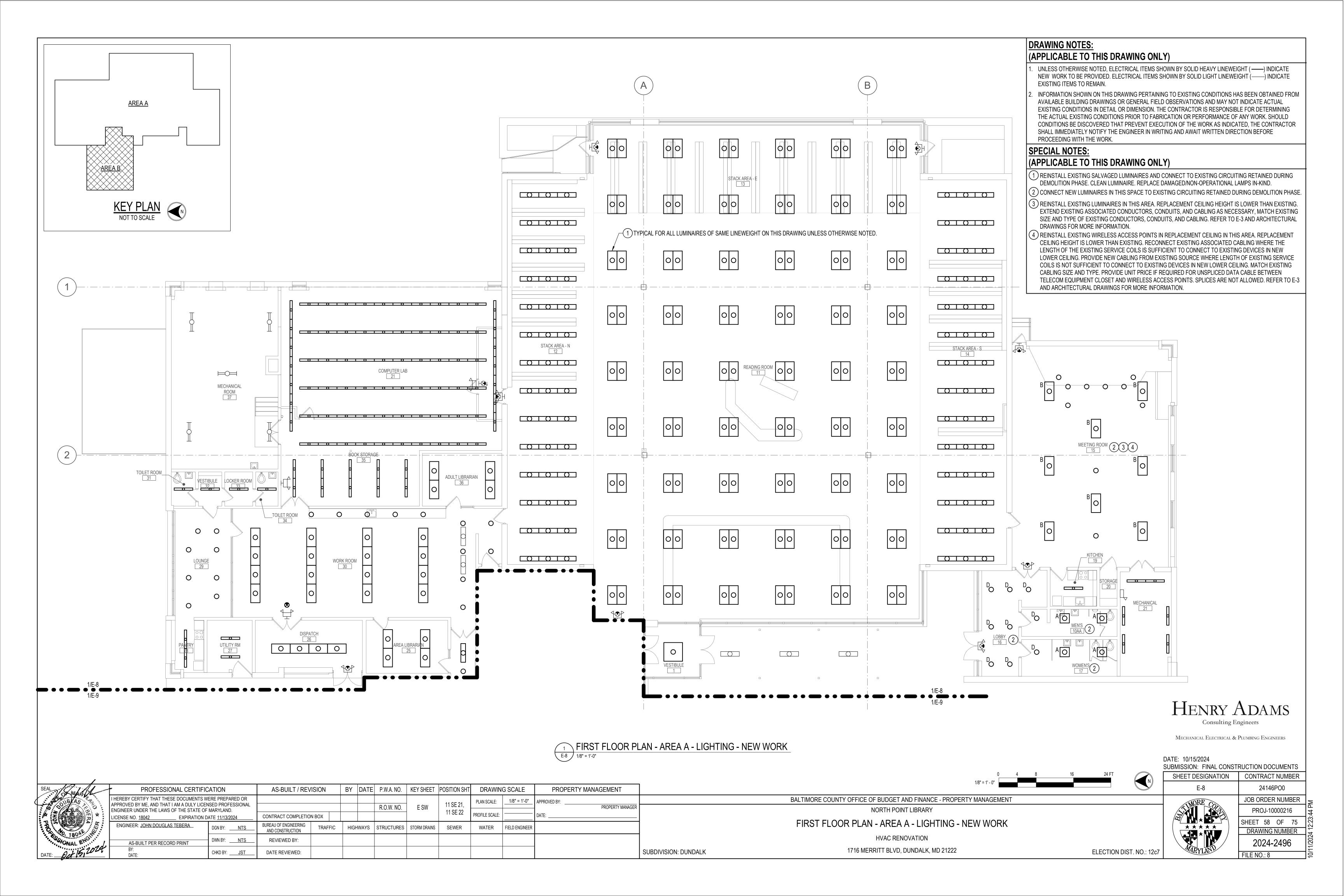
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SEAL SEAL	PROFESSIONAL CERTIFICATION		AS-BUILT / REV	ISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROP	PERTY MANAGEMENT
A STORY AS	I HEREBY CERTIFY THAT THESE DOCUMENTS WI APPROVED BY ME, AND THAT I AM A DULY LICEN								11 SE 21,	PLAN SCALE:	1/4" = 1'-0"	APPROVED BY: _	
* Electrical *	ENGINEER UNDER THE LAWS OF THE STATE OF						R.O.W. NO.	E SW	11 SE 21,				PROPERTY MANAGER
E E E	LICENSE NO. <u>18042</u> EXPIRATION DA	OATE <u>11/13/2024</u>	CONTRACT COMPLETIO	N BOX					11 02 22	PROFILE SCALE:		DATE:	
3	ENGINEER: JOHN DOUGLAS TEBERA	DGN BY: NTS	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	HWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
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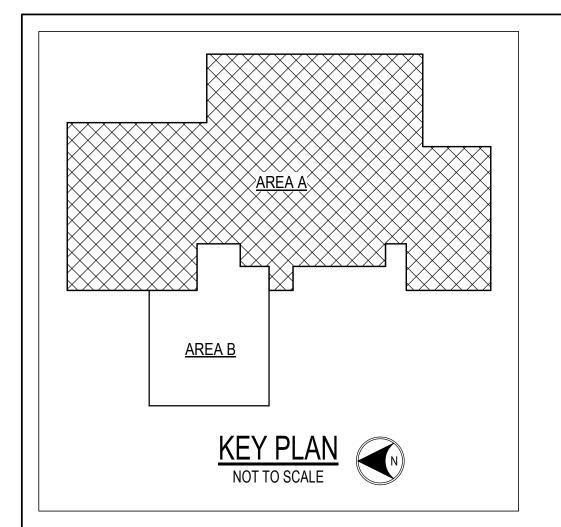
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FIRST FLOOR PLAN - ENLARGED POWER - DEMOLITION

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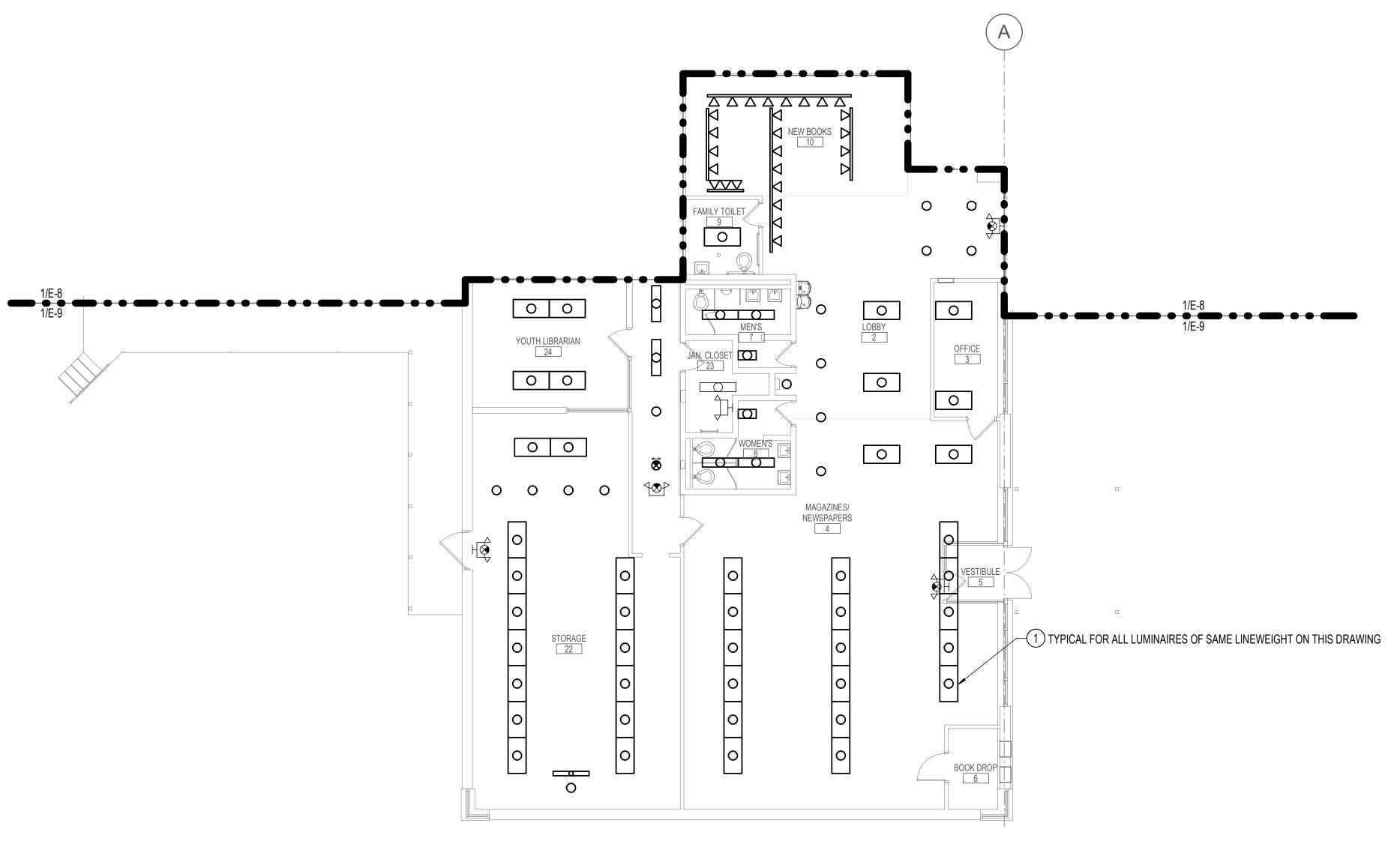
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SPECIAL NOTES:

(APPLICABLE TO THIS DRAWING ONLY)

(1) REINSTALL EXISTING SALVAGED LUMINAIRES AND CONNECT TO EXISTING CIRCUITING RETAINED DURING DEMOLITION PHASE. CLEAN LUMINAIRE. REPLACE DAMAGED/NON-OPERATIONAL LAMPS IN-KIND.



FIRST FLOOR PLAN - AREA B - LIGHTING - NEW WORK

SUBDIVISION: DUNDALK

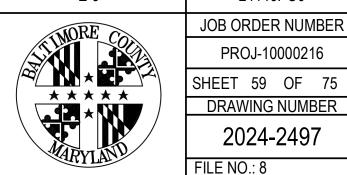
HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION CONTRACT NUMBER 24146PO0



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VIII.	<u></u>	PROFESSIONAL CERTIFIC	AS-BUILT / REV	ISION	BY DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY MAN	IAGEMENT	
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Z WWW Z	a a	LICENSE NO. 18042 EXPIRATION DA	ATE <u>11/13/2024</u>		N BOX							DATE:	
1		ENGINEER: JOHN DOUGLAS TEBERA	DGN BY: <u>NTS</u>	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
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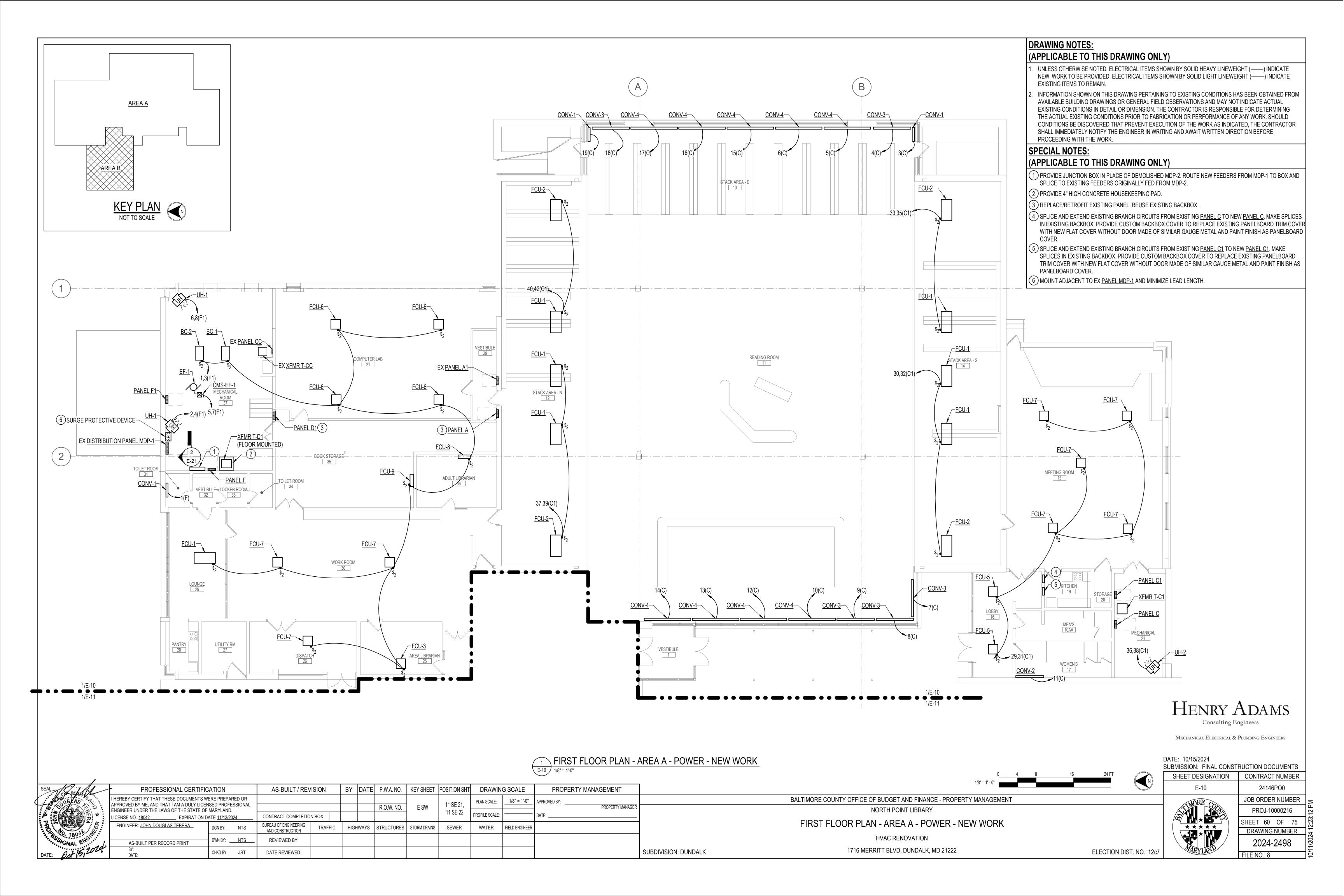
FIRST FLOOR PLAN - AREA B - LIGHTING - NEW WORK

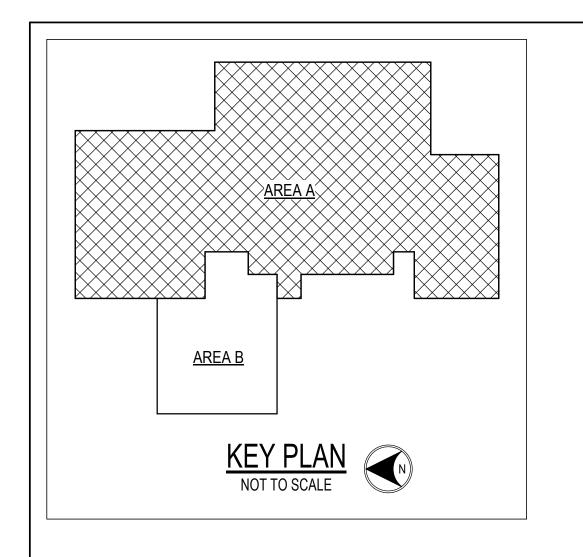
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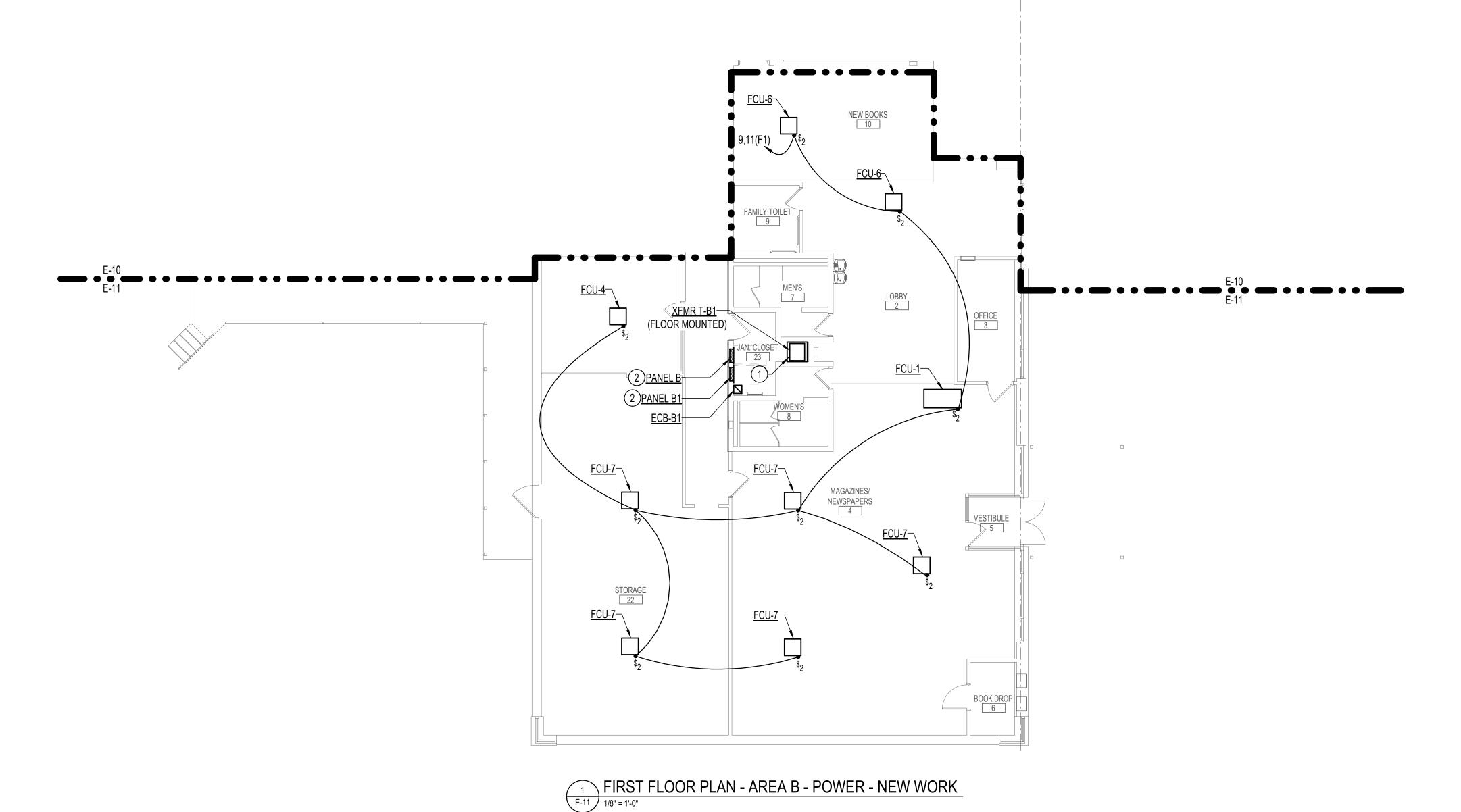
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SPECIAL NOTES:

(APPLICABLE TO THIS DRAWING ONLY)

- 1) PROVIDE 4" HIGH CONCRETE HOUSEKEEPING PAD.
- 2 REPLACE/RETROFIT EXISTING PANEL. REUSE EXISTING BACKBOX.



SUBDIVISION: DUNDALK

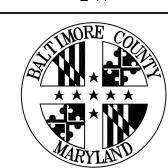
HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION CONTRACT NUMBER



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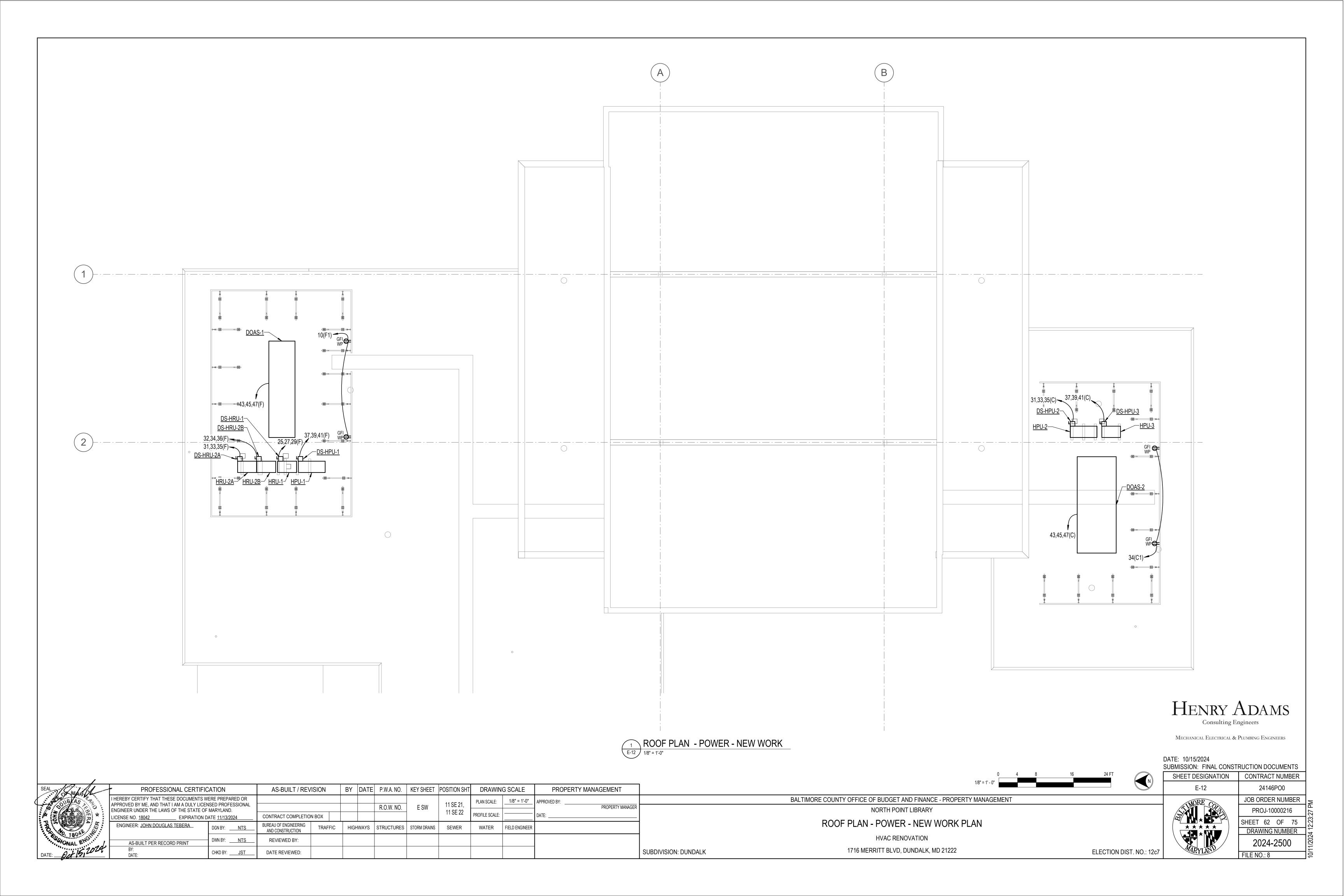
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≯ ;	CER	ENGINEER: <u>JOHN DOUGLAS TEBERA</u>	DGN BY: _	NTS	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	HWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
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FIRST FLOOR PLAN - AREA B - POWER - NEW WORK

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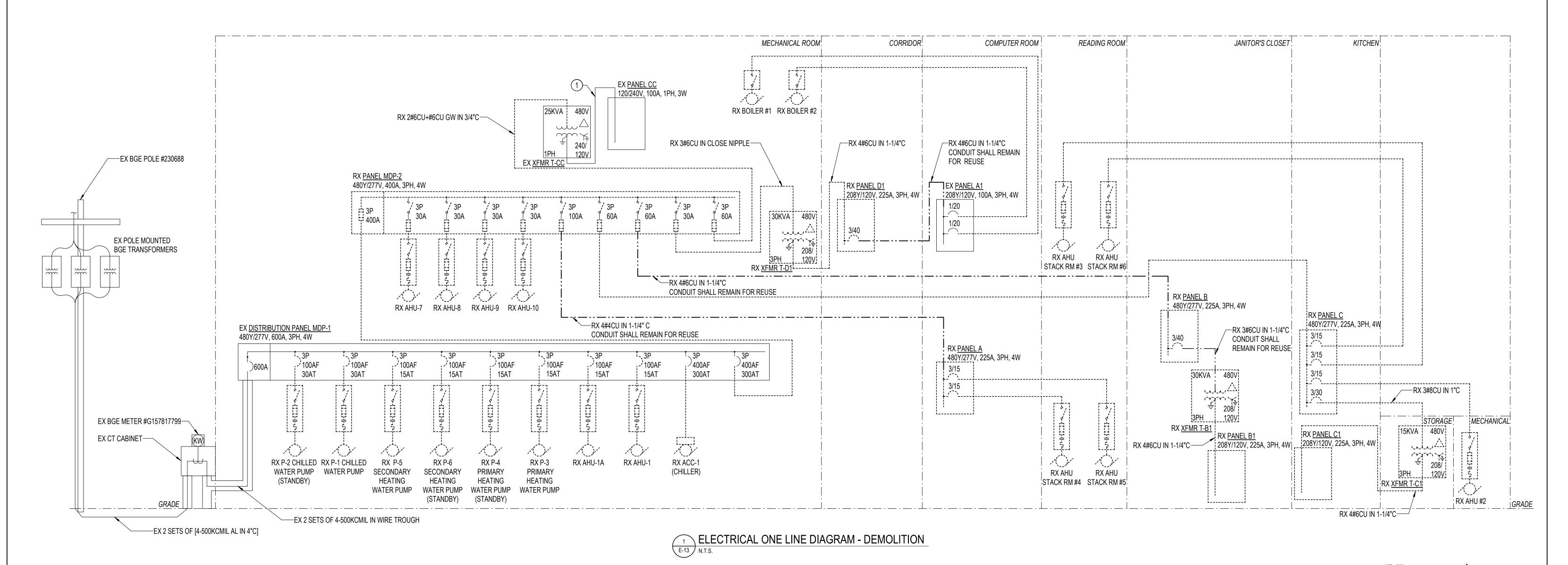
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- SEE SHEET G003 FOR INSTRUCTIONS ON THE PHASING OF DEMOLITION WORK.

SPECIAL NOTES:

(APPLICABLE TO THIS DRAWING ONLY)

(1) EXISTING TO REMAIN WIRE AND CONDUIT.



SUBDIVISION: DUNDALK

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION CONTRACT NUMBER 24146PO0



	JOB ORDER NUMBER]։
	PROJ-10000216	
	SHEET 63 OF 75	
,)	DRAWING NUMBER];
	2024-2501	1,1000
	FILE NO.: 8	;

BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT PROFESSIONAL CERTIFICATION AS-BUILT / REVISION HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PLAN SCALE: 1/8" = 1'-0" 11 SE 21, PPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL E SW R.O.W. NO. PROPERTY MANAGER ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX EXPIRATION DATE 11/13/2024 ICENSE NO. <u>18042</u> BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: JOHN DOUGLAS TEBERA

DGN BY: NTS

DWN BY: <u>NTS</u>

CHKD BY: _____JST__

AS-BUILT PER RECORD PRINT

REVIEWED BY:

DATE REVIEWED:

HIGHWAYS | STRUCTURES | STORM DRAINS

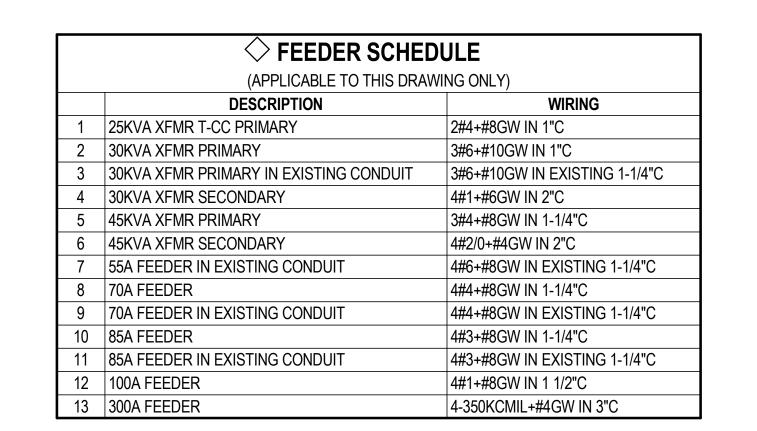
ELECTRICAL ONE-LINE DIAGRAM - DEMOLITION

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SPECIAL NOTES:

(APPLICABLE TO THIS DRAWING ONLY)

(1) EXISTING TO REMAIN WIRE AND CONDUIT.

(2) REFER TO MECHANICAL EQUIPMENT ELETRICAL CONNECTION SCHEDULE FOR WIRE AND CONDUIT SIZE.

3 <u>DS-HPU-1</u>.

4 <u>DS-HRU-1</u>.

5 <u>DS-HRU-2A</u>.

6 <u>DS-HRU-2B.</u> 7 <u>DS-HPU-2</u>.

8 <u>DS-HPU-3</u>.

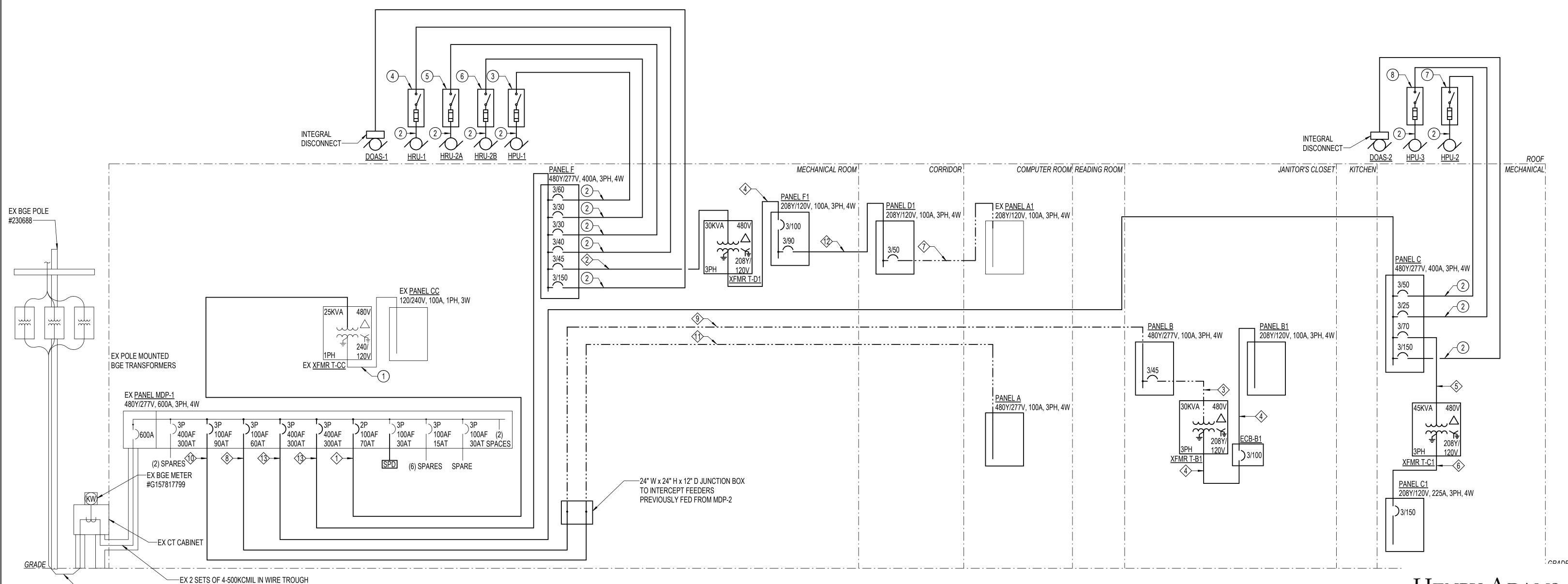
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SEE SHEET G003 FOR INSTRUCTIONS ON THE PHASING OF NEW WORK.



ELECTRICAL ONE LINE DIAGRAM - NEW WORK

PROPERTY MANAGER

PROPERTY MANAGEMENT

BY DATE P.W.A. NO. | KEY SHEET | POSITION SHT

R.O.W. NO.

HIGHWAYS | STRUCTURES | STORM DRAINS

E SW

AS-BUILT / REVISION

CONTRACT COMPLETION BOX

BUREAU OF ENGINEERING AND CONSTRUCTION

REVIEWED BY:

DATE REVIEWED:

DRAWING SCALE

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

PROFILE SCALE:

11 SE 21,

11 SE 22

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

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ELECTRICAL ONE-LINE DIAGRAM - NEW WORK

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ELECTION DIST. NO.: 12c7

-EX 2 SETS OF [4-500KCMIL AL IN 4"C]

PROFESSIONAL CERTIFICATION

EXPIRATION DATE 11/13/2024

DWN BY: <u>NTS</u>

CHKD BY: _____JST__

HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR

NGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

ENGINEER: JOHN DOUGLAS TEBERA

AS-BUILT PER RECORD PRINT

SUBDIVISION: DUNDALK

				С	OMBIN	NATION	MOTO	R STA	RTER [DISCONNE	ECT SCHE	EDULE						
	VOLT		NEMA	DISC	ONNECT	SWITCH			MOTOR S	TARTER		CONTROLS						
DESIGNATION	I VOLT I NEMA							NEMA SIZE	COIL VOLTS	AUXILIARY CONTACTS	OVERLOAD HEATERS	TRANSFORMER	PUSH BUTTON	PILOT LIGHT	SELECTOR SWITCH	NOTES		
CMS-EF-1	240	3	1	30	15	RK1	FVNR	0	120 VAC	2 NC + 2 NO	SEE NOTE 1	SEE NOTE 2	SEE NOTE 3	SEE NOTE 4	SEE NOTE 5			

NOTES: (APPLICABLE TO COMBINATION MOTOR STARTER DISCONNECT SWITCH SCHEDULE ONLY)

- 1. ELECTRICAL CONTRACTOR SHALL SIZE OVERLOAD HEATERS IN FIELD PER ACTUAL MOTOR NAMEPLATE DATA.
- 2. UNIT SHALL BE EQUIPPED WITH CONTROL TRANSFORMER WITH 480V PRIMARY AND 120V FUSED SECONDARY.
- 3. UNIT SHALL BE EQUIPPED WITH RED "RUN" AND GREEN "STOP" PUSHBUTTONS.
- 4. UNIT SHALL BE EQUIPPED WITH RED "RUN" AND GREEN "OFF" PUSH TO TEST TYPE PILOT LIGHTS.
- 5. UNIT SHALL BE EQUIPPED WITH HOA SELECTOR SWITCH.

			ENC	LOSE	CIRCL	JIT BREAK	KER SCHE	DULE	
DESIGNATION	AMP FRAME	AMP TRIP	POLES	VOLT RATING	SCCR RATING KAIC		PE ELECTRONIC TRIP UNIT	NEMA ENCLOSURE	REMARKS
ECB-B1	100	100	3	240	10	Х		1	

	DISCO	NNEC	CT SWIT	CH S	CHED	JLE	
DESIGNATION	AMP RATING	POLES	VOLT RATING	FUSE AMPS	FUSE CLASS	NEMA ENCLOSURE	NOTES
DS-HPU-1	60	3	600	40	RK1	3R	1,2,3,4
DS-HPU-2	60	3	600	40	RK1	3R	1,2,3,4
DS-HPU-3	30	3	600	20	RK1	3R	1,2,3,4
DS-HRU-1	30	3	600	30	RK1	3R	1,2,3,4
DS-HRU-2A	30	3	600	20	RK1	3R	1,2,3,4
DS-HRU-2B	30	3	600	20	RK1	3R	1,2,3,4

NOTES: (APPLICABLE TO DISCONNECT SWITCH SCHEDULE ONLY)

- 1. PROVIDE FUSE AND COORDINATE EXACT EQUIPMENT FUSE SIZE WITH MOTOR OR EQUIPMENT NAMEPLATE DATA DURING
- CONSTRUCTION.
- 2. ALL DISCONNECT SWITCHES SHALL BE HEAVY DUTY TYPE WITH GROUND LUG.
- 3. PROVIDE ALL FUSIBLE DISCONNECT SWITCHES WITH CLASS R FUSE KIT.
- 4. LABEL DISCONNECT SWITCHES WITH THE DESIGNATION IDENTIFIED IN THIS SCHEDULE AND THE CIRCUIT NUMBER AND
- PANELBOARD FROM WHICH IT IS FED, INCLUDING VOLTAGE AND PHASE.

					DR	Y-TY	PE TRAN	ISFORMER	SCHED	ULE					
SIZE	ZE SPECIAL PRIMARY PRIMARY CIRCUIT PRIMARY CB SECONDARY SECONDARY CIRCUIT SECONDARY CB NOTES														
(KVA)	RATING	VOLTAGE	NUMBER	SIZE (PH&N,GW)	CONDUIT	POLE	TRIP AMPS	VOLTAGE	NUMBER	SIZE (PH&N,GW)	CONDUIT	POLE	TRIP AMPS	NOTES	
30	-	480V-3PH	3+GW	#6 + #10	1"	3	45A	208Y/120V-3PH	4+GW	#1 + #6	2"	3	100A	-	
45	-	480V-3PH	3+GW	#4 + #8	1-1/4"	3	70A	208Y/120V-3PH	4+GW	#2/0 + #4	2"	3	150A	-	

					MEC	HAN	ICAL EG	UIPME	NT ELEC	RICAL CONNECTI	ON SCHEDULE		
EQUIPMENT DESIGNATION	KW	НР	MCA	MOC P	RFS	FLA	VOLTAGE	PHASE	LOAD (kVA)	WIRING	DISCONNECTING MEANS	CONTROL MEANS	NOTES
BC-1	-	-	0.7	15	-	0.6	208	1	0.12	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2
BC-2	-	-	0.7	15	-	0.6	208	1	0.12	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2
CONV-1	0.75	-	-	-	-	2.7	277	1	0.75	2#12+#12GW IN 3/4"C	INTEGRAL	INTEGRAL	1,2,3
CONV-2	1.5	1	-	-	-	5.4	277	1	1.50	2#12+#12GW IN 3/4"C	INTEGRAL	INTEGRAL	1,2,3
CONV-3	2	-	-	-	-	7.2	277	1	2.00	2#12+#12GW IN 3/4"C	INTEGRAL	INTEGRAL	1,2,3
CONV-4	2.5	-	-	-	-	9.0	277	1	2.50	2#12+#12GW IN 3/4"C	INTEGRAL	INTEGRAL	1,2,3
DOAS-1	-	-	129.8	150	-	111.5	480	3	92.70	3#1/0+#4GW IN 2"C	INTEGRAL	INTEGRAL	1,2
DOAS-2	-	-	129.8	150	-	111.5	480	3	92.70	3#1/0+#4GW IN 2"C	INTEGRAL	INTEGRAL	1,2
EF-1	-	3/4	-	15	-	7.6	208	1	1.58	2#12+#12GW IN 3/4"C	CMS-EF-1	CMS-EF-1	1,2
FCU-1	-	-	4.3	15	-	3.4	208	1	0.71	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2,3
FCU-2	-	-	4.4	15	-	3.5	208	1	0.73	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2,3
FCU-3	-	-	0.24	15	-	0.2	208	1	0.05	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2
FCU-4	-	-	0.28	15	-	0.2	208	1	0.05	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2
FCU-5	-	-	0.23	15	-	0.2	208	1	0.05	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2,3
FCU-6	-	-	0.22	15	-	0.2	208	1	0.05	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2,3
FCU-7	-	-	0.5	15	-	0.4	208	1	0.08	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2,3
FCU-8	-	-	0.2	15	-	0.2	208	1	0.04	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2
FCU-9	-	-	0.2	15	-	0.2	208	1	0.04	2#12+#12GW IN 3/4"C	2-POLE TOGGLE SWITCH	INTEGRAL	1,2
HPU-1	-	-	40	60	40	32.0	480	3	26.60	3#8+#10GW IN 3/4"C	DS-HPU-1	INTEGRAL	1,2
HPU-2	-	-	40	60	40	32.0	480	3	26.60	3#8+#10GW IN 3/4"C	DS-HPU-2	INTEGRAL	1,2
HPU-3	-	-	20	30	25	16.0	480	3	13.30	3#10+#12GW IN 3/4"C	DS-HPU-3	INTEGRAL	1,2
HRU-1	-	-	26	40	30	20.8	480	3	17.29	3#10+#12GW IN 3/4"C	DS-HRU-1	INTEGRAL	1,2
HRU-2A	-	-	20	30	35	16.0	480	3	13.30	3#12+#12GW IN 3/4"C	DS-HRU-1A	INTEGRAL	1,2
HRU-2B	-	-	20	30	35	16.0	480	3	13.30	3#12+#12GW IN 3/4"C	DS-HRU-1B	INTEGRAL	1,2
UH-1	5	-	-	-	-	24.0	208	1	5.00	2#8+#10GW IN 3/4"C	INTEGRAL	INTEGRAL	1,2,3
UH-2	3.3	-	-	-	-	15.9	208	1	3.30	2#12+#12GW IN 3/4"C	INTEGRAL	INTEGRAL	1,2

NOTES: (APPLICABLE TO MECHANICAL EQUIPMENT ELECTRICAL CONNECTION SCHEDULE ONLY)

- 1. REVIEW EQUIPMENT SUBMITTALS FROM OTHER TRADES PRIOR TO ORDERING OR INSTALLING ASSOCIATED ELECTRICAL WORK. ELECTRICAL CONTRACTOR SHALL MODIFY COMPONENTS OF THE ELECTRICAL CONNECTIONS AS NECESSARY TO MATCH NAMEPLATE DATA OF APPROVED EQUIPMENT AND PROVIDE A CODE COMPLIANT INSTALLATION, INCLUDING BUT NOT LIMITED TO CIRCUIT BREAKERS, WIRE, CONDUITS, CONNECTION TYPES, SWITCHES, AND FUSES. CHANGE ORDERS AND EXTRAS WILL NOT BE AWARDED FOR FAILURE TO COORDINATE WITH OTHER TRADES' EQUIPMENT SUBMITTALS.
- 2. PROVIDE NECESSARY SUPPORTING STRUT CHANNEL AND ALL MISCELLANEOUS HARDWARE FOR MOUNTING ELECTRICAL EQUIPMENT. MAINTAIN NEC WORKING CLEARANCES. FIELD COORDINATE EXACT LOCATIONS. DO NOT MOUNT ON EQUIPMENT ACCESS PANELS OR IN EQUIPMENT MANUFACTURERS' RECOMMENDED MAINTENANCE CLEARANCES. COORDINATE EXACT LOCATION OF SAFETY SWITCHES WITH MECHANICAL EQUIPMENT/CONTRACTOR.
- 3. TYPICAL OF MULTIPLE INSTANCES WITH THE SAME DESIGNATION. REFER TO PLANS FOR QUANTITY AND LOCATION.

				LUMINA	IRE SCHE	DULE										
							LA	MP			DRIVER	R / BALLAST			INPUT	
TYPE	MOUNTING	LUMINAIRE DESCRIPTION	MANUFACTURER	CATALOG NUMBER	TYPE	CRI	ССТ	QTY	WATTS / LAMP	LUMENS / LAMP	ТҮРЕ	QTY	BALLAST FACTOR	VOLTAGE	WATTS	NOTES
Α	RECESSED	2' X 2' LED EDGE-LIT FLAT PANEL	LITHONIA	EPANL-2X2-2000LM-80CRI-40K-MVOLT	LED	80	4000	1	19	2000	CONSTANT OUTPUT	1	-	120-277V	19	-
В	RECESSED	2' X 4' LED EDGE-LIT FLAT PANEL	LITHONIA	EPANL-2X4-4800LM-80CRI-40K-MVOLT	LED	80	4000	1	45	4800	CONSTANT OUTPUT	1	-	120-277V	45	-
D	RECESSED	4" ROUND SHALLOW RECESSED DOWNLIGHT WITH WHITE TRIM	GOTHAM	IVO4S-D-07LM-40K-80CRI-MWD-MVOLT-P-WR-LSS	LED	80	4000	1	7.8	750	CONSTANT OUTPUT	1	-	120-277V	7.8	-

SUBDIVISION: DUNDALK

NOTES: (APPLICABLE TO LUMINAIRE SCHEDULE ONLY)

CHKD BY: _____JST__

DATE REVIEWED:

- 1. LAMP TYPES ARE INDICATED BY INDUSTRY GENERIC DESIGNATIONS; SEE SPECIFICATIONS FOR APPROVED MANUFACTURERS.
- 2. CATALOG NUMBERS FOR LUMINAIRES INDICATE THE TYPE AND QUALITY OF THE LUMINAIRE TO BE PROVIDED BY THE CONTRACTOR AND ARE GENERAL IN NATURE. THE CATALOG NUMBERS ARE NOT INTENDED TO INDICATE AN ACTUAL ORDER MODEL NUMBER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE LUMINAIRES WITH THE TYPE OF LAMP, BALLAST, LENS OR DIFFUSER, AND CONSTRUCTION FEATURES AS INDICATED IN THE SPECIFICATIONS.
- 3. WHERE A LUMINAIRE IS NOTED AS "NO EQUAL," SUBSTITUTIONS WILL NOT BE ACCEPTED. EQUIVALENT LUMINAIRES WILL BE ACCEPTED PROVIDED THEY ARE PROVEN TO BE EQUAL TO, OR BETTER THAN, THE SPECIFIED LUMINAIRE IN ALL RESPECTS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, CONSTRUCTION FEATURES, APPEARANCE, AND PERFORMANCE. SUBMIT THE FOLLOWING FOR EACH PROPOSED SUBSTITUTION:
 - A. SAMPLE OF PROPOSED EQUIVALENT LUMINAIRE FOR TABLE-TOP EVALUATION. SAMPLE SHALL BE AN EXACT MATCH TO THE PROPOSED SUBSTITUTION INCLUDING ALL FEATURES, FINISHES, LAMPING, OPTIONS, ACCESSORIES, MOUNTING BRACKETS, ETC. SAMPLE SHALL INCLUDE 120V CORD AND NEMA 5-20P PLUG FOR OPERATIONAL TEST DURING TABLE-TOP EVALUATION.
 - B. POINT-BY-POINT LIGHT LEVEL CALCULATIONS IN 3-DIMENSIONAL LIGHTING CALCULATION SOFTWARE TO ILLUSTRATE GUARANTEED ILLUMINATION LEVELS. EACH SPACE AFFECTED BY A SUBSTITUTION SHALL BE MODELED AND CALCULATED USING INDUSTRY STANDARD VALUES FOR REFLECTANCES, LIGHT LOSS FACTOR, ETC. ENGINEER WILL COMPARE TO BASIS OF DESIGN LUMINAIRE AND ENGINEER'S CALCULATIONS TO APPROVE OR REJECT SUBSTITUTE LUMINAIRE. PROVIDE IES FILE TO ENGINEER FOR PROPOSED SUBSTITUTE ALONG WITH CALCULATION RESULTS.
 - C. POINT-BY-POINT COMPARATIVE DATA IN SIDE-BY-SIDE FORMAT COMPARING FEATURES OF SUBSTITUTE LUMINAIRE TO BASIS-OF-DESIGN LUMINAIRE.
 - D. ALL REQUIREMENTS OF DIVISION 1 SECTION "SUBSTITUTION PROCEDURES."
- 4. COORDINATE CONTROL COMPATIBILITY BETWEEN BALLAST/DRIVER TYPES FOR ALL DIMMED LUMINAIRES WITH MANUFACTURER AND MODEL OF DIMMING CONTROL DEVICES.
- 5. PROVIDE EXIT SIGNS WITH SINGLE FACE OR DOUBLE FACE AND WITH OR WITHOUT CHEVRONS AS INDICATED ON THE DRAWINGS. PROVIDE RED OR GREEN LETTERING AS REQUIRED BY AHJ.
- 6. ALL MOUNTING HEIGHTS SHALL BE AS INDICATED ON THE DRAWINGS OR AS DIRECTED BY THE ARCHITECT OR ENGINEER. MOUNTING HEIGHTS OF WALL MOUNTED LUMINAIRES SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE CENTERLINE OF THE LUMINAIRE. MOUNTING HEIGHTS OF CEILING SUSPENDED LUMINAIRES SHALL BE MEASURED FROM THE FINISHED FLOOR TO THE BOTTOM OF THE LUMINAIRE.

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024

SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION | CONTRACT NUMBER

24146PO0 JOB ORDER NUMBER PROJ-10000216 SHEET 65 OF 75 DRAWING NUMBER 2024-2503

FILE NO.: 8

PROFESSIONAL CERTIFICATION AS-BUILT / REVISION BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PLAN SCALE: 1/8" = 1'-0" APPROVED BY: 11 SE 21, APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL R.O.W. NO. E SW PROPERTY MANAGER ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX EXPIRATION DATE 11/13/2024 LICENSE NO. <u>18042</u> BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: JOHN DOUGLAS TEBERA TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS | WATER FIELD ENGINEER DGN BY: <u>NTS</u> DWN BY: <u>NTS</u> REVIEWED BY: AS-BUILT PER RECORD PRINT

NORTH POINT LIBRARY

ELECTRICAL SCHEDULES

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222

PANEL SCHEDULE NOTES

(APPLICABLE TO PANEL SCHEDULES NOTE COLUMN ON THIS DRAWING ONLY):

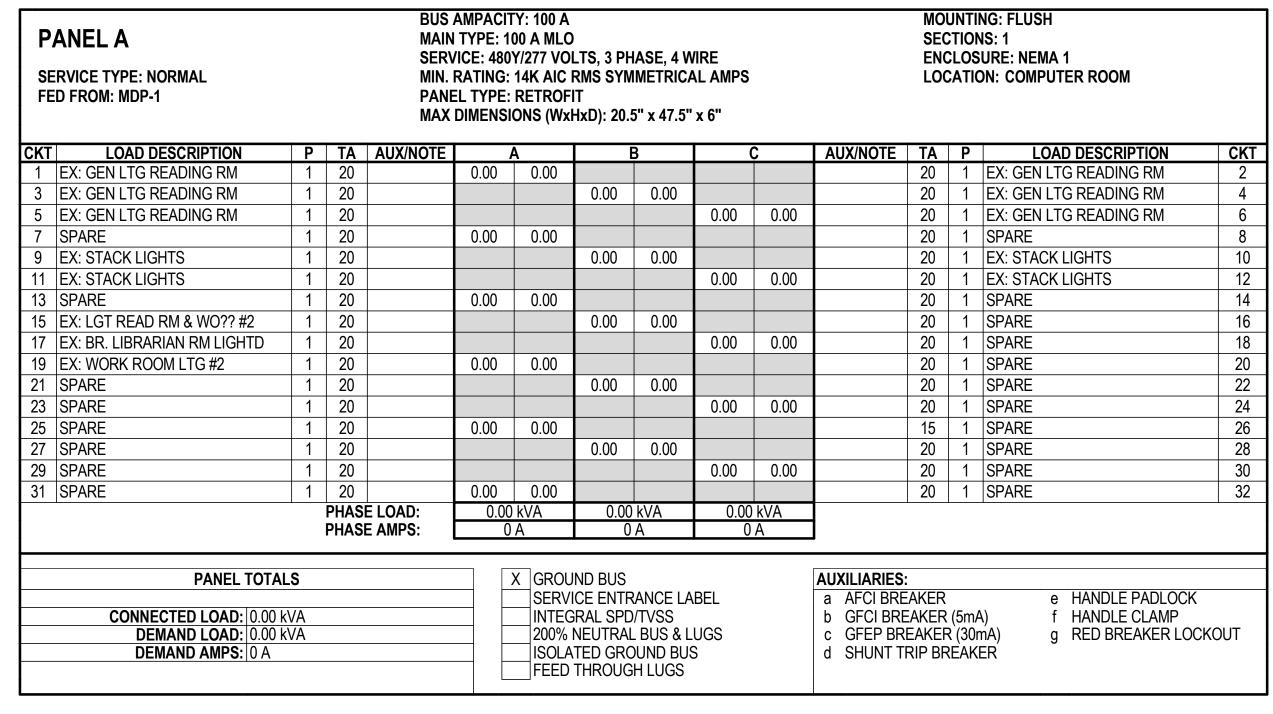
- . PROVIDE NEW CIRCUIT BREAKER IN EXISTING AVAILABLE SPACE. MATCH PANELBOARD MANUFACTURER, TYPE, AND AIC RATING. 2. REMOVE EXISTING CIRCUIT BREAKER AND PROVIDE NEW IN SAME LOCATION. MATCH PANELBOARD MANUFACTURER, TYPE, AND AIC RATING. TURN OVER EXISTING CIRCUIT BREAKER TO OWNER FOR USE AS SPARE.
- 3. CONNECT NEW LOAD TO EXISTING SPARE CIRCUIT BREAKER.
- 4. CONNECT NEW LOAD TO EXISTING CIRCUIT BREAKER MADE SPARE AFTER DEMOLITION.
- 5. REMOVE EXISTING LOAD AND RELABEL EXISTING CIRCUIT BREAKER AS "SPARE".
- 6. ZERO LOAD INDICATES EXISTING LOAD WITHOUT MODIFICATION.

SE M/ TY D/	X PANEL A ERVICE TYPE: NORMAL ANUFACTURER: ZINSCO ELECTRIC YPE: - ATE OF MANUFACTURE: 1964 MENSIONS (WxHxD): 20.5" x 47.5" x		RODUC	MAIN SERV MIN. F	TYPE: 22 ICE: 480	Y: 225 A 25 A MLO Y/277 VOI ?K AIC R	LTS, 3 PH	•				SEC	TIO	NG: FLUSH NS: 1 SURE: NEMA 1 ON: COMPUTER ROOM	
CKT	LOAD DESCRIPTION	. P	TA	AUX/NOTE				 B	!	 C	AUX/NOTE	ΤΔ		LOAD DESCRIPTION	CK
	EX: GEN LTG READING RM	∔- <u>-</u> : 1	20	AUMNOIL	0.00	0.00		J		Ĭ	AUX/NOTE	20		EX: GEN LTG READING RM	2
	EX: GEN LTG READING RM	÷;	20			0.00	0.00	0.00			+	20		EX: GEN LTG READING RM	 -
	EX: GEN LTG READING RM	÷	20				0.00	0.00	0.00	0.00		20	<u>'</u> 1	EX: GEN LTG READING RM	
	ISPARE	 	20	<u></u>	0.00	0.00			0.00	1-0.00	†	20	<u>'</u> 1	SPARE	8
	EX: STACK LIGHTS	 	20			0.00	0.00	0.00			+	20		EX: STACK LIGHTS	10
	EX: STACK LIGHTS	1	20						0.00	0.00		20	<u>:</u> 1	EX: STACK LIGHTS	12
	SPARE	1	20		0.00	0.00				1	†	20	:	SPARE	14
	EX: LGT READ RM & WO?? #2	1	20				0.00	0.00			+	20	<u>:</u>	SPARE	16
	EX: BR. LIBRARIAN RM LIGHTD	1	20						0.00	0.00	+	20	:	SPARE	18
	EX: WORK ROOM LTG #2	† 1	20	+ 	0.00	0.00					†	20	<u>-</u>	SPARE	20
	SPARE	† 1	20				0.00	0.00				20	1	SPARE	22
	SPARE	† 1	20						0.00	0.00		20	1	SPARE	24
	SPARE	† 1	20	+ 	0.00	0.00					ļ	15	1	SPARE	26
27	 	+ ¦	+ ¦				0.00	0.00						 	28
	RX: AHU STACK RM #5	3	15	5					0.00	0.00	5	15	3	RX: AHU STACK RM #4	30
31	1		!		0.00	0.00									32
	*		PHAS	E LOAD:	0.00	kVA	0.00	kVA	0.00	kVA	ļ				-+
			PHASI	E AMPS:	0	Α	0	Α	0	<u>A</u>	j				
	PANEL TOTAL	.S				X GROU					AUXILIARIES:				
	CONNECTED LOAD: 0.00 k DEMAND LOAD: 0.00 k DEMAND AMPS: 0 A		SERVICE ENTRANCE LABEL INTEGRAL SPD/TVSS 200% NEUTRAL BUS & LUGS ISOLATED GROUND BUS FEED THROUGH LUGS						a AFCI BREAKER e HANDLE PADLOCK b GFCI BREAKER (5mA) f HANDLE CLAMP c GFEP BREAKER (30mA) g RED BREAKER LOCKOUT d SHUNT TRIP BREAKER						

EXISTING CONDITIONS / DEMOLITION

SERV MANU TYPE DATE	PANEL B VICE TYPE: NORMAL UFACTURER: ZINSCO ELECTR E: - E OF MANUFACTURE: 1964 ENSIONS (WxHxD): 20" x 41" x 6		RODUC	MAIN SERV MIN. F	TYPE: 22 ICE: 480		LTS, 3 PH	IASE, 4 W METRICA				SE(CTIOS CLOS	ING: FLUSH NS: 1 SURE: NEMA 1 ON: JANITOR'S CLOSET	
KT	LOAD DESCRIPTION	P	TA	AUX/NOTE		.	 	 B	(}	AUX/NOTE	TA	P	LOAD DESCRIPTION	CKT
+	X: PERIODICAL AREA	1	20		0.00	0.00		Ī			T	20	+	SPARE	2
3 E	X: PERIODICAL AREA	1	20				0.00	0.00			T	20	1	SPARE	4
5 E	X: PERIODICAL AREA	1	20						0.00	0.00	<u> </u>	20	1	EX: JANITOR CL & REST RM.	6
7 E	X: BAD BREAKER	1	20	+	0.00	0.00		†			†	20	1	EX: TIME CL. #2 CANOPY LTS.	8
9 E	X: WORK RM #1		20				0.00	0.00			†	20	† 1	SPARE	10
11 E)	X: FLOOD LIGHTS EAST	1	20					İ	0.00	0.00	 	20	† 1	-+	12
13 E	X: LIBRARIAN OFF # 1&2	1	20		0.00	0.00		<u> </u>			†	20	1	SPARE	14
15 SF	 PARE		20				0.00	0.00			†	20	† 1	-+	16
17 SF	 PARE	1	20					ļ	0.00	0.00	 	 ¦	 	+	18
19 SF	 PARE		20		0.00	0.00		†			2	40	3	RX: XFMR T-B1	20
21 SF	 PARE	1	15				0.00	0.00			1				22
		4	PHASE	E LOAD:	0.00	kVA	0.00	kVA	0.00	kVA	!	L			4
			PHASE	E AMPS:	0	A	0	A	0	A]				
	PANEL TOTAL	ALS				X GROU	IND BUS				AUXILIARIES	 :			,
							-	RANCE LA	BEL		a AFCI BRE			e HANDLE PADLOCK	,
	CONNECTED LOAD: 0.00				}		RAL SPD		1100		b GFCI BRE				OUT
	DEMAND AMPS: 0.00 kVA							L BUS & L DUND BUS			c GFEP BR				UUI
	DEMAND AMPS: 0 A						SH LUGS	٥		i a suomi l	ו/ונ סו	/EHN	LΠ		

EXISTING CONDITIONS / DEMOLITION



NEW WORK

PANEL B SERVICE TYPE: NORMAL FED FROM: MDP-1			MAIN SERV MIN. PANE	TYPE: 1 /ICE: 480 RATING: EL TYPE:	TY: 100 A 00 A MLO Y/277 VOI 14K AIC I RETROF ONS (WxI) LTS, 3 PH RMS SYN IT	IMETRICA	AL AMPS			SEC ENC	CLOS	NG: FLUSH NS: 1 BURE: NEMA 1 ON: JANITOR'S CLOSET	
KT LOAD DESCRIPTION	Р	TA	AUX/NOTE		A		<u></u> В	I (C	AUX/NOTE	TA	Р	LOAD DESCRIPTION	СКТ
1 EX: PERIODICAL AREA	1	20	7107411012	0.00	0.00					7.074.10.12	20	1	SPARE	2
3 EX: PERIODICAL AREA	1	20				0.00	0.00				20	1	SPARE	4
EX: PERIODICAL AREA	1	20						0.00	0.00		20	1	EX: JANITOR CL & REST RM.	6
7 EX: BAD BREAKER	1	20		0.00	0.00						20	1	EX: TIME CL. #2 CANOPY LTS.	8
EX: WORK RM #1	1	20				0.00	0.00				20	1	SPARE	10
1 EX: FLOOD LIGHTS EAST	1	20						0.00	0.00		20	1	SPARE	12
3 EX: LIBRARIAN OFF # 1&2	1	20		0.00	0.00						20	1	SPARE	14
5 SPARE	1	20				0.00	0.00				20	1	SPARE	16
7 SPARE	1	20						0.00	0.00]				18
19 SPARE	1	20		0.00	0.00					1	45	3	XFMR T-B1	20
21 SPARE	1	15				0.00	0.00							22
		_	E LOAD: E AMPS:		kVA A		kVA A		kVA A					
CONNECTED LOAD: 0.00 DEMAND LOAD: 0.00 DEMAND AMPS: 0 A				INTEG 200% ISOLA	ICE ENTR BRAL SPD NEUTRAL	_ BUS & L DUND BUS	.UGS		a AFCI BRE b GFCI BRE c GFEP BR d SHUNT T	AKER AKER EAKER	(5m/ (30) R	$ m m^{'}A)$ g RED BREAKER LOCK	COUT	

NEW WORK

1716 MERRITT BLVD, DUNDALK, MD 21222

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY PANELBOARD SCHEDULES **HVAC RENOVATION**

BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROFESSIONAL CERTIFICATION AS-BUILT / REVISION HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PLAN SCALE: 1/8" = 1'-0" 11 SE 21, APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL E SW R.O.W. NO. ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. PROFILE SCALE: CONTRACT COMPLETION BOX **EXPIRATION DATE** <u>11/13/2024</u> ICENSE NO. <u>18042</u> BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: JOHN DOUGLAS TEBERA TRAFFIC | HIGHWAYS | STRUCTURES | STORM DRAINS | WATER FIELD ENGINEER DGN BY: NTS DWN BY: <u>NTS</u> REVIEWED BY: AS-BUILT PER RECORD PRINT DATE REVIEWED:

REPLACE EXISTING

PANEL WITH NEW

REPLACE EXISTING PANEL WITH NEW

PROPERTY MANAGEMENT

PROPERTY MANAGER

SUBDIVISION: DUNDALK

ELECTION DIST. NO.: 12c7

24146PO0 JOB ORDER NUMBER DRAWING NUMBER 2024-2504 FILE NO.: 8

RX PANEL B1 SERVICE TYPE: NORI MANUFACTURER: ZIN TYPE: - DATE OF MANUFACT DIMENSIONS (WxHxD	ISCO ELECTRIC <i>A</i> URE: 1964		RODU	MAIN SERV MIN. I	TYPE: 22 ICE: 208		LTS, 3 PH MS SYMN	•				SE(CTION	NG: FLUSH NS: 1 SURE: NEMA 1 DN: JANITOR'S CLOSET	
CKT LOAD DESC	RIPTION	P	TA	AUX/NOTE		4	E	}	[(]	AUX/NOTE	TA	P	LOAD DESCRIPTION	CKT
1 EX: TC#3 OUTSIDE	LIGHTS	1	20	T	0.00	0.00					I	20	1	EX: WOW MACHINE	2
3 EX: SECURITY GA	TE RECPT	1	20				0.00	0.00				15	1	EX: POS RETURN RECPT	4
5 EX:ACCENT LGTS	LOBBY AREA	1	20						0.00	0.00		15	1	EX: ?	6
7 EX: (NOT LABELED))	1	20		0.00	0.00						15	1	EX: LOBBY LIGHTS	8
9 EX: PUBLIC BATH	RM & SECUR	1	20				0.00	0.00				20	1	EX: OUTSIDE ? RM RECEPT	10
11 EX: LOBBY LGTS		1	20						0.00	0.00		20	1	EX: COPY MACHINE CHECK OUT	12
13 EX: WORK RM #1 (COMP RECP	1	20		0.00	0.00						20	1	EX: (NOT LABELED)	14
15 EX: TOILET FANS I	OBBY	1	20				0.00	0.00				20	1	EX: WATER COOLER	16
17 EX: CANOPY LTS	!	1	20						0.00	0.00	!	20	1	EX: (NOT LABELED)	18
19 EX: AC RETURN		1	20		0.00	0.00						20	1	EX: CHECK OUT COUNTER RECPT	20
21 EX: TC MOTOR #2	#1 LOBBY	1	20				0.00	0.00				20	1	EX: SIGN FL. LTS OUTSIDE	22
23 EX: OUTSIDE REC	PT	1	20						0.00	0.00		20	1	EX: POS RECPT	24
25 EX: (NOT LABELED))	1	20		0.00	0.00						20	1	EX: CORR. LTS. BY JANITOR R	26
27 EX: (NOT LABELED))	1	20				0.00	0.00				15	1	EX: PERIODICAL SIDE WALL R	28
29 SPACE		1											1	SPACE	30
				E LOAD:		kVA	0.00		0.00		! !				
ļ			PHAS	E AMPS:	0	Α	0	<u>A</u>	0	<u>A</u>	<u>:</u> 				
DEMAN	PANEL TOTALS CONNECTED LOAD: 0.00 kVA DEMAND LOAD: 0.00 kVA DEMAND AMPS: 0 A					INTEG 200% ISOLA	ND BUS CE ENTR RAL SPD NEUTRAL TED GRC THROUG	/TVSS . BUS & L OUND BUS	.UGS		a AFCI BRE b GFCI BRE c GFEP BR d SHUNT TI	AKER AKER EAKEI	R (5m <i>)</i> R (30i	$ m m^{'}A)$ g RED BREAKER LOCKO	 DUT

REPLACE EXISTING PANEL WITH NEW

NEW WORK

SUBDIVISION: DUNDALK

EXISTING CONDITIONS / DEMOLITION

SE MA TY DA	X PANEL C ERVICE TYPE: NORMAL ANUFACTURER: ZINSCO ELECTRI PE: - ATE OF MANUFACTURE: 1964 MENSIONS (WxHxD): 20" x 41" x 6		RODU	MAIN SERV MIN. F	TYPE: 2 ICE: 480	TY: 225 A 25 A MLO Y/277 VOI ?K AIC R	LTS, 3 PH	•				SEC ENC	CLOS	NG: FLUSH NS: 1 SURE: NEMA 1 ON: PANTRY	
KT	LOAD DESCRIPTION	Р	; TA	AUX/NOTE		Α :	 I	 3		 C	AUX/NOTE	TA	Р	LOAD DESCRIPTION	СКТ
	EX: FLOOR LTS MEETING RM	1	20	1	0.00	0.00					1	20		EX: TOILET, KITCHEN,& STORAGE	2
3	SPARE	1	20				0.00	0.00				20	1	SPARE	4
5	SPARE	1	20						0.00	0.00		20	1	SPARE	6
7	SPARE	1	20		0.00	0.00						20	1	SPARE	8
9	SPARE	1	20				0.00	0.00					 !		10
11	SPARE	1	20						0.00	0.00		30	3	SPARE	12
13	SPARE	1	20		0.00	0.00]		! !		14
15	!		!				0.00	0.00					 ! !	!	16
17	RX: XFMR T-C1	3	30						0.00	0.00		15	3	RX: AHU #2 STORAGE RM	18
19	1				0.00	0.00]		! !		20
21	!						0.00	0.00					 !	!	22
23	RX: AHU #3 STACK RM	3	15						0.00	0.00		15	3	RX: AHU #6 STACK RM	24
25	7 		-		0.00	0.00							! !		26
	*			E LOAD:		kVA	0.00			kVA	†				
			PHAS	E AMPS:	0	A	0	Α	0	<u>A</u>	<u>:</u> 				
	PANEL TOTA	 \LS] [X GROU	ND BUS				AUXILIARIES:				
	CONNECTED LOAD: 0.00 DEMAND LOAD: 0.00 DEMAND AMPS: 0 A					INTEG 200% I ISOLA	RAL SPO NEUTRAI	BUS & LOUND BUS	UGS		a AFCI BRE b GFCI BRE c GFEP BRI d SHUNT TI	AKER EAKEF	(5m) R (30)	$ m m^{'}A)$ g RED BREAKER LOCKO)UT

EXISTING CONDITIONS / DEMOLITION



(APPLICABLE TO PANEL SCHEDULES NOTE COLUMN ON THIS DRAWING ONLY):

1. RELOCATE EXISTING CIRCUIT TO NEW PANEL.

2. ZERO LOAD INDICATES EXISTING LOAD WITHOUT MODIFICATION.

PANEL B1 SERVICE TYPE: NORMAL FED FROM: T-B1			MAIN SERV MIN. I PANE	TYPE: 10 VICE: 208 RATING: EL TYPE:	TY: 100 A 00 A MCB Y/120 VOI 10K AIC I RETROFI ONS (WxI	LTS, 3 PH RMS SYN IT	IMETRICA	AL AMPS			SEC	TIO	NG: FLUSH NS: 1 SURE: NEMA 1 ON: JANITOR'S CLOSET	
CKT LOAD DESCRIPTION	Р	TA	AUX/NOTE		4		3	(C	AUX/NOTE	TA	Р	LOAD DESCRIPTION	CKT
1 EX: TC#3 OUTSIDE LIGHTS	1	20		0.00	0.00						20	1	EX: WOW MACHINE	2
3 EX: SECURITY GATE RECPT	1	20				0.00	0.00				15	1	EX: POS RETURN RECPT	4
5 EX:ACCENT LGTS LOBBY AREA	1	20						0.00	0.00		15	1	EX: ?	6
7 EX: (NOT LABELED)	1	20		0.00	0.00						15	1	EX: LOBBY LIGHTS	8
9 EX: PUBLIC BATH RM & SECUR	1	20				0.00	0.00				20	1	EX: OUTSIDE ? RM RECEPT	10
11 EX: LOBBY LGTS	1	20						0.00	0.00		20	1	EX: COPY MACHINE CHECK OUT	12
13 EX: WORK RM #1 COMP RECP	1	20		0.00	0.00						20	1	EX: (NOT LABELED)	14
15 EX: TOILET FANS LOBBY	1	20				0.00	0.00				20	1	EX: WATER COOLER	16
17 EX: CANOPY LTS	1	20						0.00	0.00		20	1	EX: (NOT LABELED)	18
19 EX: AC RETURN	1	20		0.00	0.00						20	1	EX: CHECK OUT COUNTER RECPT	20
21 EX: TC MOTOR #2 #1 LOBBY	1	20				0.00	0.00				20	1	EX: SIGN FL. LTS OUTSIDE	22
23 EX: OUTSIDE RECPT	1	20						0.00	0.00		20	1	EX: POS RECPT	24
25 EX: (NOT LABELED)	1	20		0.00	0.00						20	1	EX: CORR. LTS. BY JANITOR R	26
27 EX: (NOT LABELED)	1	20				0.00	0.00				15	1	EX: PERIODICAL SIDE WALL R	28
29 SPACE	1											1	SPACE	30
					kVA A		kVA A		kVA A					
CONNECTED LOAD: 0.00 k	PACE PHASE LOAD: PHASE AMPS: PANEL TOTALS CONNECTED LOAD: 0.00 kVA DEMAND LOAD: 0.00 kVA						RANCE LA I/TVSS BUS & L DUND BUS H LUGS	UGS		AUXILIARIES: a AFCI BREA b GFCI BREA c GFEP BRE d SHUNT TR	AKER AKEF	(5m) (30) R	$ m m^{'}A)$ g RED BREAKER LOCKO	DUT

NEW WORK

SE	ANEL C ERVICE TYPE: NORMAL ED FROM: MDP-1			MAIN SERVI MIN. F PANE	TYPE: 4 CE: 480 ATING: L TYPE:	14K AIC NEW) LTS, 3 PH RMS SYM X ##" X 6	METRICA				SEC ENC	UNTING: SURFACE CTIONS: 1 CLOSURE: NEMA 1 CATION: MECHANICAL 2	?1	
СКТ	LOAD DESCRIPTION	Р	TA	AUX/NOTE		A	İ E	3	İ	С	AUX/NOTE	TA	P LOAD DESC	CRIPTION	CK
	EX: FLOOR LTS MEETING RM	1	20	1	0.00	0.00					1	20	1 EX: TOILET, KITCH	IEN, & STORAGE	
3	CONV-1	1	20				0.75	2.00				20	1 CONV-3	,	4
5	CONV-4	1	20						2.50	2.50		20	1 CONV-4		6
7	CONV-3	1	20		2.00	2.00						20	1 CONV-3		8
9	CONV-3	1	20				2.00	2.50				20	1 CONV-4		1(
11	CONV-2	1	20						1.50	2.50		20	1 CONV-4		12
13	CONV-4	1	20	1	2.50	2.50			1.00	2.00		20	1 CONV-4		14
15	CONV-4	1	20		2.00	2.00	2.50	2.50				20	1 CONV-4		16
17	CONV-4	1	20				2.00	2.00	2.50	2.00		20	1 CONV-3		18
19	CONV-1	1	20		0.75	0.00			2.00	2.00		20	1 SPARE		20
21	SPARE	1	20		0.70	0.00	0.00	0.00				20	1 SPARE		22
23	SPARE	1	20				0.00	0.00	0.00	0.00		20	1 SPARE		24
25	SPARE	1	20		0.00	0.00			0.00	0.00		20	1 SPARE		26
27	SPARE	1	20		0.00	0.00	0.00	0.00				20	1 SPARE		28
29	SPARE	1	20				0.00	0.00	0.00	0.00		20	1 SPARE		30
31	OI / II CL	!	20		8.87	0.00			0.00	0.00		20	1 SPARE		32
33	HPU-2	3	60	H	0.01	0.00	8.87	0.00				20	1 SPARE		34
35	711 0-2			H			0.07	0.00	8.87	0.00	1	20	1 SPARE		36
37					4.43	4.00			0.07	0.00		20	I OI AIL		38
39	HPU-3	3	30	H	т.то	7.00	4.43	2.88			e	70	3 XFMR T-C1	+	4(
41			30	H			7.70	2.00	4.43	4.37	1 ~	10		-	4:
				1	30.90				7.70	7.07					74
45	DOAS-2	3	150	H	30.30		30.90				_				
43 45 47			100	H			30.30		30.90						
"			PHAS	E LOAD:	57.9	5 kVA	59.33	kVA		7 kVA					
				E AMPS:		9 A		4 A		4 A	j				
	PANEL TOTA	LS			LOAI	D CLASSI	FICATION	CON	NECTED	LOAD	DE	EMAN[FACTOR	DEMAND LOA	\D
	T				LIGH				0.00 kVA				00%	0.00 kVA	
	CONNECTED LOAD: 179.3				_	PTACLE			0.36 kVA		1ST 10KVA AT		, REMAINDER AT 50%	0.36 kVA	
	DEMAND LOAD: 179.3					PMENT		ļ ,	0.00 kVA				00%	0.00 kVA	
	DEMAND AMPS: 216 A	٦			MOTO HEAT				100.28 kV 78.70 kV				00%	100.28 kVA 78.70 kVA	
AUX	ILIARIES:				COOL				0.00 kVA)%	0.00 kVA	
	AFCI BREAKER X (GROUN			OTHE	ER .		<u> </u>	0.00 kVA	1		10	00%	0.00 kVA	
	\ / /			TRANCE LABE		HEN EQU	IPMENT		0.00 kVA				ANTITY PER NEC	0.00 kVA	
				PD/TVSS		'ATOR			0.00 kVA	1	BASED C	N QUA	ANTITY PER NEC	0.00 kVA	-
e f	HANDLE PADLOCK I	ISOLAT	TED GF	AL BUS & LUG ROUND BUS JGH LUGS	5										

HENRY ADAMS Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

* * * * *

24146PO0 JOB ORDER NUMBER PROJ-10000216 SHEET 67 OF 75 DRAWING NUMBER 2024-2505

FILE NO.: 8

BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROPERTY MANAGEMENT PROFESSIONAL CERTIFICATION AS-BUILT / REVISION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR PLAN SCALE: 1/8" = 1'-0" APPROVED BY: 11 SE 21, APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. E SW R.O.W. NO. PROPERTY MANAGER 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX LICENSE NO. <u>18042</u> __ EXPIRATION DATE <u>11/13/2024</u> BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: JOHN DOUGLAS TEBERA TRAFFIC HIGHWAYS STRUCTURES STORM DRAINS DGN BY: NTS DWN BY: NTS REVIEWED BY: AS-BUILT PER RECORD PRINT DATE REVIEWED:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

NEW WORK

NORTH POINT LIBRARY

PANELBOARD SCHEDULES

HVAC RENOVATION

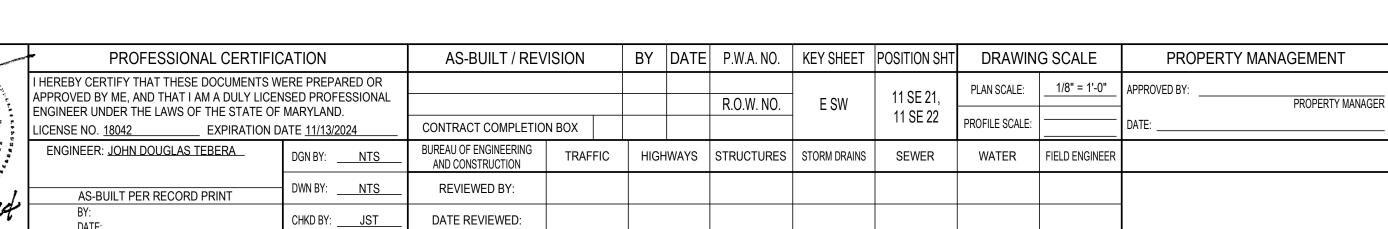
1716 MERRITT BLVD, DUNDALK, MD 21222

SE MA TY DA	X PANEL C1 RVICE TYPE: NORMAL ANUFACTURER: ZINSCO ELECTR PE: - ATE OF MANUFACTURE: 1964 MENSIONS (WxHxD): 20" x 29" x 4		RODU	MAIN SER MIN.	AMPACIT N TYPE: 2: VICE: 208 RATING:	25 A MLC Y/120 VO	LTS, 3 PH	•				SE(CLOS	NG: FLUSH NS: 1 GURE: NEMA 1 ON: PANTRY	
KT			 ! ΤΔ	AUX/NOTE	Ţ	Δ	· · · · · · · · · · · · · · · · · · ·	 R			AUX/NOTE	ΤΔ	P	LOAD DESCRIPTION	CKT
	EX: RANGE GD FAN & LTS.	 	20	1	0.00	0.00	<u> </u>	 !		!	1 1	20		EX: SPOT LTS MEET RM WALL	2
	EX: MEET RM LTS DIMMER		20	1	1-0.00	1	0.00	0.00			1	20		EX: CAROL	1 2
	EX: SPOT IN FRONT STAGE	-	20	1	 	 	0.00	1-0.00	0.00	0.00	†1	20		EX: VESTIBULE LIGHTS	6
	EX: CAROL	 	20	† <u>-</u>	0.00	0.00	†				1	20		EX: VASTIBULE NIGHT LIGHTS	8
	EX: OUTSIDE OUTLET ON	†	20	†1			0.00	0.00			1	20	⊢	EX: EMERG LIGHTS	10
	EX: RECPT IN STOVK ROOM	 1	20	†1	 	†			0.00	0.00	1	20		EX: RECEPTACLE STAGE	12
13	EX: WATER COOLER RECPT	· †	20	† 1	0.00	0.00	 				1	20		EX: ?	14
15	EX: REFRIGERATOR RECPT	1	20	1	<u> </u>		0.00	0.00			1	20	1	EX: EX FAN MEET ROOM	16
17	EX: EX FAN TOILET RM	1	20	1	<u> </u>		 		0.00	0.00	1	20	1	EX: KITCHEN RECPT	18
19	EX: CLOCK RECPT	1	20	1	0.00	0.00					1	20	1	EX: CAROL	20
21	EX: CAROL ?	1	20	1			0.00	0.00			1	20	1	EX: CAROL	22
23	EX: MEET ROOM RECPT	1	20	1					0.00	0.00	!	 !	 !	†	24
25	EX: CAROL ?	1	20	1	0.00	0.00					1	40	3	EX: ELECTRIC RANGE	26
27	EX: CAROL ?	1	20	1			0.00	0.00				!	! !		28
29	SPACE	1		<u> </u>							!		1	SPACE	30
					0.00		+	kVA	0.00		!				
			PHAS	E AMPS: 	<u>i 0</u>	<u>A</u>	<u>: </u>	Α	0	<u>A</u>	<u>;</u> 				
	PANEL TOTA	ALS					JND BUS		DEI		AUXILIARIES			LANDIE DADI COL	
 		PHASE LOAD: PHASE AMPS: PANEL TOTALS CONNECTED LOAD: 0.00 kVA DEMAND LOAD: 0.00 kVA					ICE ENTF GRAL SPD NEUTRAI ATED GRO THROUG)/TVSS L BUS & L)UND BUS	UGS		a AFCI BRE b GFCI BRE c GFEP BR d SHUNT T	EAKER EAKER	(5m/ R (30)	mA) g RED BREAKER LOCK(OUT

EXISTING CONDITIONS / DEMOLITION

RX PANEL D1 SERVICE TYPE: NORMAL MANUFACTURER: ZINSCO ELECTION	RICAL PI	RODUC	MAI SER MIN	AMPACIT N TYPE: 2 VICE: 208 . RATING:	25 A MLC Y/120 VO) LTS, 3 PH				SE EN	CTIC	TING: FLUSH ONS: 1 OSURE: NEMA 1 TION: OUTS MECH ROOM	
TYPE: - DATE OF MANUFACTURE: 1964 DIMENSIONS (WxHxD): 20" x 35" x	4"												
CKT LOAD DESCRIPTION	P	TA	AUX/NOTE		 Д	I	 3			AUX/NOTE TA	F	LOAD DESCRIPTION	CKT
1 EX: (NOT LABELED)	1	20		0.00	0.00					20	1	EX: QUAD	2
3 EX: (NOT LABELED)	1	20				0.00	0.00			20	1	EX: (NOT LABELED)	4
5 EX: (NOT LABELED)	1	20						0.00	0.00	20	1	EX: (NOT LABELED)	6
7 EX: (NOT LABELED)	1	20		0.00	0.00					20	1	EX: (NOT LABELED)	8
9 EX: (NOT LABELED)	1	20				0.00	0.00			20	1	EX: FIRE ALARM PANEL	10
11 EX: (NOT LABELED)	1	20						0.00	0.00	20	1	EX: (NOT LABELED)	12
13 EX: (NOT LABELED)	1	20		0.00	0.00					20	1	EX: (NOT LABELED)	14
15 EX: (NOT LABELED)	1	20				0.00	0.00			20	1	EX: MICROWAVE	16
17 EX: (NOT LABELED) - OFF	1	20						0.00	0.00	20	1	EX: (NOT LABELED)	18
19 EX: (NOT LABELED)	1	20		0.00	0.00					20	1	EX: (NOT LABELED)	20
21 EX: (NOT LABELED)	1	20				0.00	0.00			20	1	EX: (NOT LABELED)	22
23 EX: (NOT LABELED)	1	20						0.00	0.00	20	1	EX: (NOT LABELED)	1 24
25 EX: (NOT LABELED)	1	20		0.00	0.00					20	1	EX: (NOT LABELED)	26
27 EX: (NOT LABELED)	1	20				0.00	0.00			30	1	EX: (NOT LABELED)	28
29 EX: (NOT LABELED)	1	15						0.00	0.00	15	1	EX: (NOT LABELED)	30
31 EX: (NOT LABELED)	1	15		0.00	0.00					1 20	+) IFV. (NOT LABELED)	32
33 EX: (NOT LABELED)	1	15				0.00	0.00			30	2	P EX: (NOT LABELED)	32 34
35		<u></u>						0.00	0.00	!	+		36
37 EX: PANEL A1	3	40		0.00	0.00					40	3	EX: (NOT LABELED)	38
39						0.00	0.00				-		40
41 EX: (NOT LABELED)	1	20						0.00	0.00	20	<u> 1</u>	EX: (NOT LABELED)	42
			LOAD:		ķVA	0.00		+	ķVA	 			
		PHASE	E AMPS:	0	<u>A</u>	<u>. </u>	Α	. 0	<u>A</u>]			
PANEL TO1	ΓALS				X GROU	IND BUS				AUXILIARIES:			
CONNECTED LOAD: 0.0	0 kVA				SERV	ICE ENTR GRAL SPD	RANCE LA TVSS	BEL		a AFCI BREAKER b GFCI BREAKER		e HANDLE PADLOCK mA) f HANDLE CLAMP	
DEMAND LOAD: 0.0 DEMAND AMPS: 0 A	0 kVA				200% ISOLA	NEUTRAI TED GRO THROUG	_ BUS & L OUND BU			c GFEP BREAKE d SHUNT TRIP BI	R`(3	0mA) g RED BREAKER LOC	KOUT

EXISTING CONDITIONS / DEMOLITION



PANEL SCHEDULE NOTES

(APPLICABLE TO PANEL SCHEDULES NOTE COLUMN ON THIS DRAWING ONLY):

1. RELOCATE EXISTING CIRCUIT TO NEW PANEL.

2. ZERO LOAD INDICATES EXISTING LOAD WITHOUT MODIFICATION.

PANEL C1 SERVICE TYPE: NORMAL FED FROM: T-C1			MAIN SERV MIN. PANE	I TYPE: 1 /ICE: 208 RATING: EL TYPE:	TY: 225 A 50 A MCE 3Y/120 VO 10K AIC NEW IONS: 20"	LTS, 3 PH RMS SYM	IMETRIC <i>i</i>				SE(CTION	NG: SURFACE NS: 1 SURE: NEMA 1 ON: MECHANICAL 21	
CKT LOAD DESCRIPTION	Р	TA	AUX/NOTE		A	-	3		C	AUX/NOTE	TA	Р	LOAD DESCRIPTION	CKT
1 EX: RANGE GD FAN & LTS.	1	20	1	0.00	0.00					1	20	1	EX: SPOT LTS MEET RM WALL	2
3 EX: MEET RM LTS DIMMER	1	20	1			0.00	0.00			1	20	1	EX: CAROL	4
5 EX: SPOT IN FRONT STAGE	1	20	1					0.00	0.00	1	20	1	EX: VESTIBULE LIGHTS	6
7 EX: CAROL	1	20	1	0.00	0.00					1	20	1	EX: VESTIBULE NIGHT LIGHTS	8
9 EX: OUTSIDE OUTLET ON	1	20	1			0.00	0.00			1	20	1	EX: EMERG LIGHTS	10
11 EX: RECPT IN STOVK ROOM	1	20	1					0.00	0.00	1	20	1	EX: RECEPTACLE STAGE	12
13 EX: WATER COOLER RECPT	1	20	1	0.00	0.00					1	20	1	EX: ?	14
15 EX: REFRIGERATOR RECPT	1	20	1			0.00	0.00			1	20	1	EX: EX FAN MEET ROOM	16
17 EX: EX FAN TOILET RM	1	20	1					0.00	0.00	1	20	1	EX: KITCHEN RECPT	18
19 EX: CLOCK RECPT	1	20	1	0.00	0.00					1	20	1	EX: CAROL	20
21 EX: CAROL?	1	20	1			0.00	0.00			1	20	1	EX: CAROL	22
23 EX: MEET ROOM RECPT	1	20	1					0.00	0.00					24
25 EX: CAROL ?	1	20	1	0.00	0.00					1	40	3	EX: ELECTRIC RANGE	26
27 EX: CAROL ?	1	20	1			0.00	0.00							28
29 FOLLS FOLL 7 FOLL 12 MEETING		15						0.20	1.08		4.5	_	FOLIA FOLIA CTACK ADEA C	30
31 FCU-6, FCU-7, FCU-12, MEETING	2	15		0.20	1.08					1	15	2	FCU-1, FCU-2 STACK AREA S	32
33 FOLL 1 FOLL 2 STACK AREA S	_	15				0.72	0.36				20	1	REC: ROOFTOP SOUTH	34
FCU-1, FCU-2 STACK AREA S	2	15						0.72	1.65		20	2	11112	36
37 FOLLA FOLLA STACK ADEA N	2	15		1.08	1.65						20	2	UH-2	38
FCU-1, FCU-2 STACK AREA N	2	15				1.08	0.72				15	2	FOLIA FOLIA CTACK ADEA N	40
41 SPARE	1	20						0.00	0.72		15	4	FCU-1, FCU-2 STACK AREA N	42
			E LOAD:) kVA		kVA		kVA	1				
		PHASI	E AMPS:	33	3 A	24	l A] 36	6 A	J				
PANEL TOTAL CONNECTED LOAD: 11.24 DEMAND LOAD: 11.24 DEMAND AMPS: 31 A	kVA				INTEG 200% ISOLA	IND BUS ICE ENTR GRAL SPD NEUTRAL TED GRO THROUG	/TVSS _ BUS & L)UND BUS	.UGS		a AFCI BRE b GFCI BRE c GFEP BR d SHUNT T	AKER AKER EAKER	(5m/ R (30i	m mA) g RED BREAKER LOCK	OUT

NEW WORK

SE	ANEL D1 RVICE TYPE: NORMAL D FROM: F1		MAIN SER' MIN. PAN	AMPACIT N TYPE: 10 VICE: 208 RATING: EL TYPE: DIMENSI	00 A MLO Y/120 VOI 10K AIC I RETROFI	LTS, 3 PH RMS SYN IT	IMETRIC <i>A</i>	AL AMPS			SE(CTIOI CLOS	NG: FLUSH NS: 1 SURE: NEMA 1 ON: OUTS MECH ROOM	
CKT	LOAD DESCRIPTION	Р	TA AUX/NOTE		A		3		Ç	AUX/NOTE	TA	Р	LOAD DESCRIPTION	CKT
	EX: (NOT LABELED)	1	20	0.00	0.00						20	1	EX: QUAD	2
	EX: (NOT LABELED)	1	20			0.00	0.00				20	1	EX: (NOT LABELED)	4
	EX: (NOT LABELED)	1	20					0.00	0.00		20	1	EX: (NOT LABELED)	6
	EX: (NOT LABELED)	1	20	0.00	0.00						20	1	EX: (NOT LABELED)	8
9	EX: (NOT LABELED)	1	20			0.00	0.00				20	1	EX: FIRE ALARM PANEL	10
11	EX: (NOT LABELED)	1	20					0.00	0.00		20	1	EX: (NOT LABELED)	12
13	EX: (NOT LABELED)	1	20	0.00	0.00						20	1	EX: (NOT LABELED)	14
15	EX: (NOT LABELED)	1	20			0.00	0.00				20	1	EX: MICROWAVE	16
17	EX: (NOT LABELED) - OFF	1	20					0.00	0.00		20	1	EX: (NOT LABELED)	18
19	EX: (NOT LABELED)	1	20	0.00	0.00						20	1	EX: (NOT LABELED)	20
21	EX: (NOT LABELED)	1	20			0.00	0.00				20	1	EX: (NOT LABELED)	22
23	EX: (NOT LABELED)	1	20					0.00	0.00		20	1	EX: (NOT LABELED)	24
25	EX: (NOT LABELED)	1	20	0.00	0.00						20	1	EX: (NOT LABELED)	26
27	EX: (NOT LABELED)	1	20			0.00	0.00				30	1	EX: (NOT LABELED)	28
29	EX: (NOT LABELED)	1	15					0.00	0.00		15	1	EX: (NOT LABELED)	30
31	EX: (NOT LABELED)	1	15	0.00	0.00						20		EV. (NOT LADELED)	32
33	EX: (NOT LABELED)	1	15			0.00	0.00			1	30	2	EX: (NOT LABELED)	34
35	, , , , , , , , , , , , , , , , , , ,							0.00	0.00					36
37	EX: PANEL A1	3	50	0.00	0.00					1	40	3	EX: (NOT LABELED)	38
39						0.00	0.00			1				40
41	EX: (NOT LABELED)	1	20					0.00	0.00		20	1	EX: (NOT LABELED)	42
	· · · · · · · · · · · · · · · · · · ·		PHASE LOAD: PHASE AMPS:		kVA A		kVA A		kVA A					
	PANEL TOTAL CONNECTED LOAD: 0.00 k DEMAND LOAD: 0.00 k DEMAND AMPS: 0 A		INTEG 200% ISOLA	CE ENTR RAL SPD NEUTRAL	BUS & LOUND BUS	UGS		a AFCI BRE b GFCI BRE c GFEP BRI d SHUNT TI	AKER AKER EAKEI	? (5m/ ? (30	mA) g RED BREAKER LOC			

NEW WORK

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

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PANELBOARD SCHEDULES

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222

HENRY ADAMS Consulting Engineers

Mechanical Electrical & Plumbing Engineers

DATE: 10/15/2024

SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER 24146PO0

JOB ORDER NUMBER DRAWING NUMBER 2024-2506

FILE NO.: 8

ELECTION DIST. NO.: 12c7

SUBDIVISION: DUNDALK

NEW WORK

REPLACE EXISTING PANEL WITH NEW

PANEL SCHEDULE NOTES

(APPLICABLE TO PANEL SCHEDULES NOTE COLUMN ON THIS DRAWING ONLY):

1. ZERO LOAD INDICATES EXISTING LOAD WITHOUT MODIFICATION.

SEI FEI MA TYI DA	C PANEL A1 (DEMO WOI RVICE TYPE: NORMAL D FROM: D1 NUFACTURER: SQUARE D PE: NQOD TE OF MANUFACTURE: 2001 MENSIONS (WxHxD): 20" x 23" x 4"	RK)		MAIN SERV	TYPE: 10 ICE: 208) LTS, 3 PH	HASE, 4 W				SE(CTION	NG: FLUSH NS: 1 SURE: NEMA 1 ON: COMPUTER ROOM	
CKT	LOAD DESCRIPTION	Р	TA	AUX/NOTE		4		В	(<u> </u>	AUX/NOTE	TA	Р	LOAD DESCRIPTION	СКТ
	EX: LIGHT CONTROL IN J.B.	1	20		0.00	0.00						20	1	EX: INFORM DESK ISO ORANGE	2
3	EX TIME CLOCK NIGHT LIGHTS	1	20				0.00	0.00				20	1	EX: RECPT - RETURN DESK	4
5	EX: RECPT AT EAST COLUMNS	1	20						0.00	0.00		20	1	EX: RECPT AT WEST COL & INFOR	6
7	EX: RECPT W. WALL GLASS QUAD	1	20		0.00	0.00						20	1	EX: RECPT W. WALL QUAD MAIN	8
9	EX: (NOT LABELED)	1	20				0.00	0.00				20	1	EX: RECPT W. WALL QUAD MAIN	10
11	EX: (NOT LABELED)	1	20						0.00	0.00		20	1	EX: DED CIR-CIRREV	12
13	EX: (NOT LABELED)	1	20		0.00	0.00						20	1	EX: CAB MICRO VERO	14
	RX: BOILER #2	1	20	5			0.00	0.00				20	1	EX: (NOT LABELED)	16
17	EX: WATER + REC. PUMP	1	20						0.00	0.00		20	1	EX: (NOT LABELED)	18
19	RX: BOILER #1	1	20	5	0.00	0.00						20	1	EX: (NOT LABELED)	20
21	SPACE	1											1	SPACE	22
23	SPACE	1							1				1	SPACE	24
		1						kVA A		kVA A					
	PANEL TOTALS CONNECTED LOAD: 0.00 kV DEMAND LOAD: 0.00 kV DEMAND AMPS: 0 A	′A				INTEG 200% ISOLA	ICE ENTF BRAL SPE NEUTRAI	L BUS & L DUND BUS	UGS		a AFCI BRE b GFCI BRE c GFEP BRI d SHUNT TR	AKER AKER EAKER	t (5m <i>l</i> R (30r	$\stackrel{\sf m}{\sf A})$ g RED BREAKER LOCK(

DEMO WORK

SEF FED MAI TYF DAT	RVICE TYPE: NORMAL D FROM: XFMR T-CC NUFACTURER: SQUARE D PE: QO LOAD CENTER TE OF MANUFACTURE: 2000 TENSIONS (WxHxD): 14" x 21" x 4"			BUS AMPA MAIN TYPE SERVICE: 1 MIN. RATIN	: 100 A ML 20/240 VO	O LTS, 1 PH <i>I</i>	•				SECT ENCL	NTING: SURFACE IONS: 1 OSURE: NEMA 1 TION: MECHANICAL ROOM	
CKT	LOAD DESCRIPTION	Р	TA	AUX/NOTE		4		3	AUX/NOTE	TA	Р	LOAD DESCRIPTION	СКТ
1	EX: QUAD CLASSRM	1	20		0.00	0.00				20	1	EX: QUAD CLASS	2
3	EX: QUAD CLASSRM	1	20				0.00	0.00		20	1	EX: QUAD CLASS	4
5	EX: QUAD CLASSRM	1	20		0.00	0.00				20	1	EX: QUAD CLASS	6
7	EX: QUAD CLASSRM	1	20				0.00	0.00		20	1	EX: QUAD CLASS	8
9	EX: QUAD CLASSRM	1	20		0.00	0.00				20	0	EV. MI IC DEC. MI IC CEII INC CDADE	10
11	EX: OIT SERVERS	1	20				0.00	0.00]	20	2	EX: MLIS REC, MLIS CEILING SPARE	12
13	SPACE	1									1	SPACE	14
15	SPACE	1									1	SPACE	16
17	SPACE	1									1	SPACE	18
19	SPACE	1									1	SPACE	20
21	SPACE	1									1	SPACE	22
23	SPACE	1									1	SPACE	24
				LOAD: AMPS:	0.00			kVA A					
	PANEL TOTALS CONNECTED LOAD: 0.00 kV/ DEMAND LOAD: 0.00 kV/ DEMAND AMPS: 0 A		SER\ INTE 200%	GRAL SPD 5 NEUTRAI	BUS & LUDUND BUS	JGS	a AFC b GFC c GFE d SHU	I BREAI I BREA EP BRE <i>A</i>	KER (5 AKER (30mA) g RED BREAKER LOCK	COUT		

SE FE MA TY DA	C PANEL A1 (NEW WOR) RVICE TYPE: NORMAL D FROM: D1 NUFACTURER: SQUARE D PE: NQOD TE OF MANUFACTURE: 2001 MENSIONS (WxHxD): 20" x 23" x 4"	K)		MAIN SERV	ICE: 208	00 A MLO Y/120 VO	LTS, 3 PH	IASE, 4 W IMETRICA				SEC ENC	CLOS	NG: FLUSH NS: 1 SURE: NEMA 1 ON: COMPUTER ROOM	
CKT	LOAD DESCRIPTION	Р	TA	AUX/NOTE		4	l l	3		C	AUX/NOTE	TA	Р	LOAD DESCRIPTION	CKT
1	EX: LIGHT CONTROL IN J.B.	1	20		0.00	0.00						20	1	EX: INFORM DESK ISO ORANGE	2
3	EX TIME CLOCK NIGHT LIGHTS	1	20				0.00	0.00				20	1	EX: RECPT - RETURN DESK	4
5	EX: RECPT AT EAST COLUMNS	1	20						0.00	0.00		20	1	EX: RECPT AT WEST COL & INFOR	6
7	EX: RECPT W. WALL GLASS QUAD	1	20		0.00	0.00						20	1	EX: RECPT W. WALL QUAD MAIN	8
ഗ	EX: (NOT LABELED)	1	20				0.00	0.00				20	1	EX: RECPT W. WALL QUAD MAIN	10
11	EX: (NOT LABELED)	1	20						0.00	0.00		20	1	EX: DED CIR-CIRREV	12
13	EX: (NOT LABELED)	1	20		0.00	0.00						20	1	EX: CAB MICRO VERO	14
15	SPARE	1	20				0.00	0.00				20	1	EX: (NOT LABELED)	16
17	EX: WATER + REC. PUMP	1	20						0.00	0.00		20	1	EX: (NOT LABELED)	18
19	SPARE	1	20		0.00	0.00						20	1	EX: (NOT LABELED)	20
21	SPACE	1										-	1	SPACE	22
23	SPACE	1											1	SPACE	24
				E LOAD: E AMPS:		kVA A		kVA A		kVA A					
	PANEL TOTALS CONNECTED LOAD: 0.00 kV DEMAND LOAD: 0.00 kV DEMAND AMPS: 0 A	′A				INTEG 200% ISOLA	CE ENTR GRAL SPD NEUTRAL	BUS & LOUND BUS	UGS		AUXILIARIES: a AFCI BRE b GFCI BRE c GFEP BRI d SHUNT TF	AKER AKER EAKER	(5m/ R (30r	$ m m^{'}A)$ g RED BREAKER LOCKO	DUT
							NEW	WORK	(

HENRY ADAMS

Consulting Engineers

Mechanical Electrical & Plumbing Engineers

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT N

SHEET DESIGNATION	CONTRACT NU
E-19	24146PO
NORE C	JOB ORDER NU
	PROJ-10000

DRAWING NUMBER 2024-2507

FILE NO.: 8

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY

PANELBOARD SCHEDULES

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222

BY DATE P.W.A. NO. KEY SHEET POSITION SHT DRAWING SCALE PROFESSIONAL CERTIFICATION AS-BUILT / REVISION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. PLAN SCALE: 1/8" = 1'-0" APPROVED BY: 11 SE 21, E SW R.O.W. NO. PROFILE SCALE: CONTRACT COMPLETION BOX EXPIRATION DATE <u>11/13/2024</u> LICENSE NO. <u>18042</u> BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: JOHN DOUGLAS TEBERA TRAFFIC HIGHWAYS STRUCTURES STORM DRAINS SEWER WATER FIELD ENGINEER DGN BY: NTS DWN BY: NTS REVIEWED BY: AS-BUILT PER RECORD PRINT DATE REVIEWED:

SUBDIVISION: DUNDALK

PROPERTY MANAGEMENT

PROPERTY MANAGER

NEW WORK

SE	ANEL F1 RVICE TYPE: NORMAL D FROM: T-D1	MAIN 1 SERVIO MIN. R PANEL	YPE: 10 CE: 208 ATING: . TYPE:	10K AIC I NEW	LTS, 3 PH <i>I</i> RMS SYMN X ##" X 6"	METRICA			MOUNTING: SURFACE SECTIONS: 1 ENCLOSURE: NEMA 1 LOCATION: MECHANICAL ROOM 37							
CKT	LOAD DESCRIPTION	Р	TA	AUX/NOTE		4	В			C	AUX/NOTE	TA	Р	LOAD DESCR	RIPTION	CKT
	BC-1, BC-2, FCU-3, FCU-5, FCU-6,	2	15		0.76	2.50						35	2	UH-1		2
	FCU-9, FCU-10, FCU-11		10				0.76	2.50						OTT		4
5	EF-1	2	15						0.79	2.50		35	2	UH-1		6
7			13		0.79	2.50						33		OI I-1		8
9	FCU-4, FCU-6, FCU-8, FCU-12	2	15				0.63	0.36				20	1	REC: ROOFTOP NOF	RTH	10
11	STORAGE, LOBBY, MAGAZINES		13						0.63	0.00		20	1	SPARE		12
13	SPARE	1	20		0.00	0.00						20	1	SPARE		14
15	SPARE	1	20				0.00	0.00				20	1	SPARE		16
17	SPARE	1	20						0.00	0.00		20	1	SPARE		18
19	SPARE	1	20		0.00	0.00						20	1	SPARE		20
	SPARE	1	20				0.00	0.00				20	1	SPARE		22
23	SPARE	1	20						0.00	0.00		20	1	SPARE		24
	SPARE	1	20		0.00	0.00				0.00		20	1	SPARE		26
	SPARE	1	20			0.00	0.00	0.00				20	1	SPARE		28
	SPARE	1	20						0.00	0.00		20	1	SPARE		30
	SPARE	1	20		0.00	0.00			0.00	0.00		20	1	SPARE		32
	SPARE	1	20		0.00	0.00	0.00	0.00				20	1	SPARE		34
35	SPARE	1	20				0.00	0.00	0.00	0.00		20	1	SPARE		36
	SPARE	1	20		0.00	0.00			0.00	0.00			+ •	OI 7 II IL		38
	SPARE	1	20		0.00	0.00	0.00	0.00			ł	90	3	PANEL D1		40
	SPARE	1	20				0.00	0.00	0.00	0.00	1		"	I / INCL D1		42
T 1	OI AIL			E LOAD:	6 55	kVA	4.25 H	ζ\/ Δ		kVA						72
				E AMPS:		5 A	35			3 A						
	PANEL TOTAL	S					FICATION	CON	NECTED		DE	EMANI		CTOR	DEMAND LO	
					LIGHT				0.00 kVA		40T 4010 (1)		00%	MAINIDED AT 5007	0.00 kVA	
	CONNECTED LOAD: 14.72				_	PTACLE			0.36 kVA		1ST 10KVA AT			MAINDER AT 50%	0.36 kVA	
	DEMAND LOAD: 14.72 DEMAND AMPS: 41 A	κνΑ			MOTO	PMENT			0.00 kVA 4.36 kVA				00% 00%		0.00 kVA 4.36 kVA	
	DEIVIAND AIVIPS: 41 A				HEAT				4.30 KVA 10.00 kVA				00% 00%		4.36 KV <i>F</i> 10.00 kV	
UXI	LIARIES:				COOL				0.00 kVA				00 / <u>0</u> 0%		0.00 kVA	
		ROUN	ND BUS	S	OTHE				0.00 kVA				00%		0.00 kVA	
b (GFCI BREAKER (5mA)	ERVI(CE EN	TRANCE LABEL	KITCH	HEN EQUI	PMENT		0.00 kVA	ı	BASED C			TY PER NEC	0.00 kVA	4
c (GFEP BREAKER (30mA)			PD/TVSS	ELEV	ATOR			0.00 kVA		BASED C	N QU	ANTI	TY PER NEC	0.00 kVA	4
e H f H	HANDLE PADLOCK SIS	OLAT	ΓED GF	AL BUS & LUGS ROUND BUS JGH LUGS	5											

SE	ANEL F ERVICE TYPE: NORMAL ED FROM: MDP-1			MAIN SERVI MIN. R PANE	TYPE: 4 ICE: 480 RATING: L TYPE:	14K AIC NEW) LTS, 3 PH RMS SYM X ##" X 6	METRICA				SE(CTIO	NG: SURFACE NS: 1 SURE: NEMA 1 ON: MECHANICAL F	OOM 37	
CKT	LOAD DESCRIPTION	P	TA	AUX/NOTE		4	E	3		С	AUX/NOTE	TA	Р	LOAD DESC	RIPTION	CKT
1	CONV-1	1	20		0.75	0.00						20	1	SPARE		2
3	SPARE	1	20				0.00	0.00				20	1	SPARE		4
5	SPARE	1	20						0.00	0.00		20	1	SPARE		6
7	SPARE	1	20		0.00	0.00						20	1	SPARE		8
9	SPARE	1	20				0.00	0.00				20	1	SPARE		10
11	SPARE	1	20						0.00	0.00		20	1	SPARE		12
13	SPARE	1	20		0.00	0.00			0.00	0.00		20	1	SPARE		14
15	SPARE	1	20		0.00	0.00	0.00	0.00				20	1	SPARE		16
17	SPARE	1	20				0.00	0.00	0.00	0.00		20	1	SPARE		18
19	SPARE	1	20		0.00	0.00			0.00	0.00		20	1	SPARE		20
21	SPARE	1	20		0.00	0.00	0.00	0.00				20	1	SPARE		22
23		1					0.00	0.00	0.00	0.00		20	1	SPARE		24
	SPARE		20		F 7C	0.00			0.00	0.00			1			
25			40		5.76	0.00	F 70	0.00				20	1	SPARE		26
27	HRU-1	3	40				5.76	0.00	F 70	0.00		20	1	SPARE		28
29					1 10	4.40			5.76	0.00		20	1	SPARE		30
31	4				4.43	4.43					1					32
33	HRU-2A	3	30				4.43	4.43				30	3	HRU-2B		34
35									4.43	4.43						36
37					8.87	6.55										38
39	HPU-1	3	60				8.87	4.25			е	45	3	XFMR T-D1		40
41									8.87	3.92						42
43					30.90											
43 45 47	DOAS-1	3	150				30.90									
47									30.90							
				E LOAD: E AMPS:) kVA 3 A	58.65 212			2 kVA 0 A						
	PANEL TO	ΓALS					FICATION	CON	NECTED	_	DE	EMANI		CTOR	DEMAND L	
					LIGH				0.00 kVA		407 1017 :: : =		00%		0.00 kV	
	CONNECTED LOAD: 178	8.66 kVA				PTACLE			0.36 kVA		1ST 10KVA AT			MAINDER AT 50%	0.36 kV	
	DEMAND LOAD: 178 DEMAND AMPS: 219				MOTO	PMENT			0.00 kVA 114.35 kV				00% 00%		0.00 kV/ 114.35 k\	
	DEIVIAND AIVIF3. 213	<i>-</i>			HEAT				63.95 kV				00%		63.95 kV	
AUX	ILIARIES:	,			COOL				0.00 kVA				0%		0.00 kV	
		GROUN	ND BUS	S	OTHE	:R			0.00 kVA	l.		10	00%		0.00 kV	4
	GFCI BREAKER (5mA)			TRANCE LABE		HEN EQU	IPMENT		0.00 kVA			N QU	ANTI [*]	TY PER NEC	0.00 kV	
	GFEP BREAKER (30mA)			PD/TVSS	ELEV	ATOR			0.00 kVA	1	BASED C	ON QU	ANTI	TY PER NEC	0.00 kV	4
e f	SHUNT TRIP BREAKER HANDLE PADLOCK HANDLE CLAMP RED BREAKER LOCKOUT	SOLAT	ED GF	AL BUS & LUG ROUND BUS JGH LUGS	5											



Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

L-20	
WORE CO	
* * * * *	

E-20	24146PO0
NORE C	JOB ORDER NUMBER
	PROJ-10000216
* * * * * *	SHEET 70 OF 75
	DRAWING NUMBER
APVI NO	2024-2508
WIT LINE	FILE NO · 8

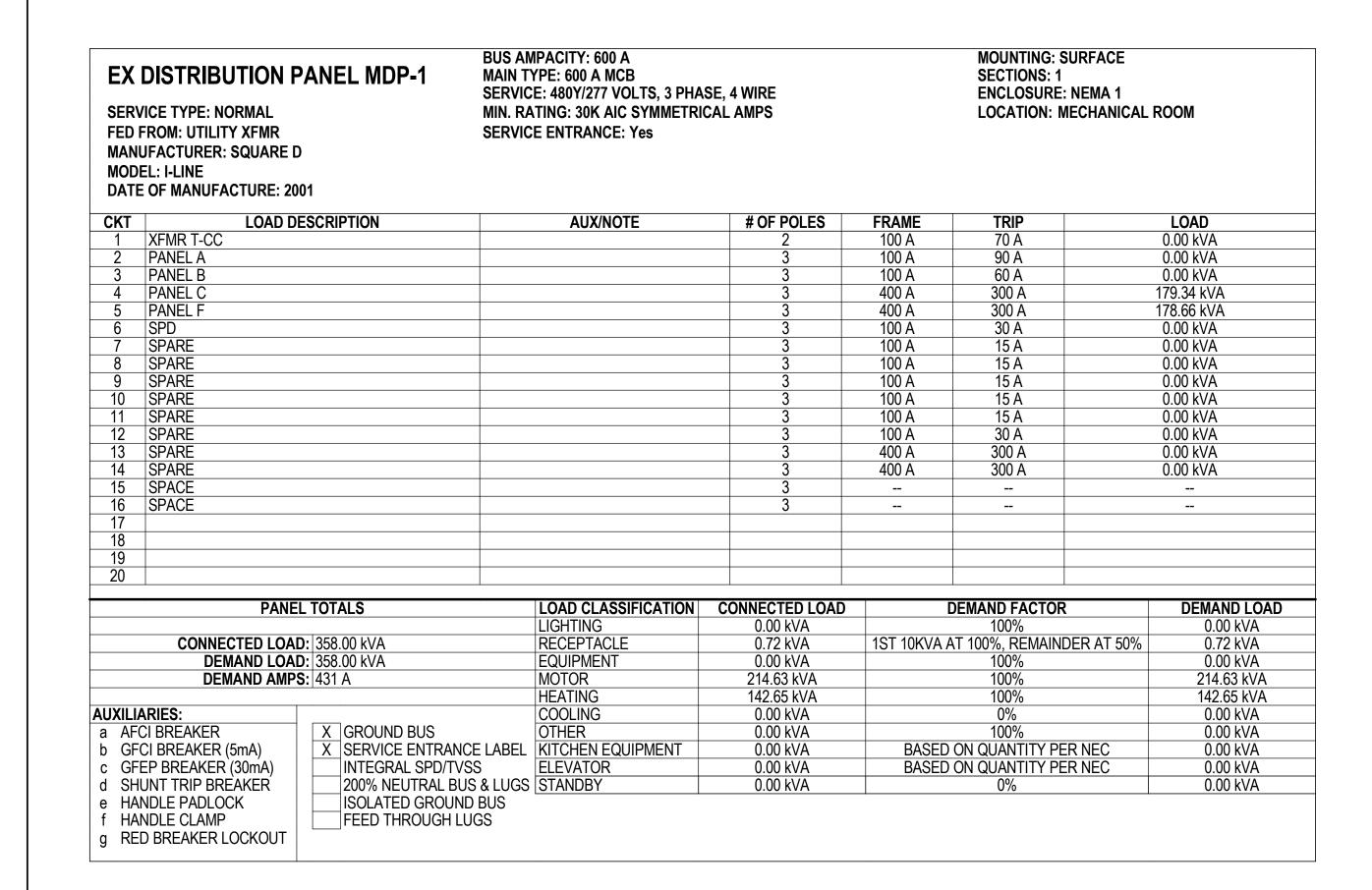
		•													
SEAL	AND A		PROFESSIONAL CERTIFIC	ATION	AS-BUILT / REV	ISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY MANAGE	MENT
	OUG/AS	3 .	I HEREBY CERTIFY THAT THESE DOCUMENTS WI APPROVED BY ME, AND THAT I AM A DULY LICEN	ISED PROFESSIONAL					R.O.W. NO.	E SW	11 SE 21,	PLAN SCALE:		APPROVED BY:	ROPERTY MANA
A E		rates e	ENGINEER UNDER THE LAWS OF THE STATE OF LICENSE NO. <u>18042</u> EXPIRATION DA		CONTRACT COMPLETION	N BOX			K.O.W. NO.	L SVV	11 SE 22	PROFILE SCALE:		DATE:	OI LIVIT IVIANA
8	20 20 3	7	ENGINEER: <u>JOHN DOUGLAS TEBERA</u>	DGN BY: NTS	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	WAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
, col	YONAL ENGIN	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	AS-BUILT PER RECORD PRINT	DWN BY: <u>NTS</u>	REVIEWED BY:										
DATE:	Oct 15,20	Z4	BY: DATE:	CHKD BY: JST	DATE REVIEWED:										

PANELBOARD SCHEDULES **HVAC RENOVATION**

1716 MERRITT BLVD, DUNDALK, MD 21222

SUBDIVISION: DUNDALK

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT NORTH POINT LIBRARY

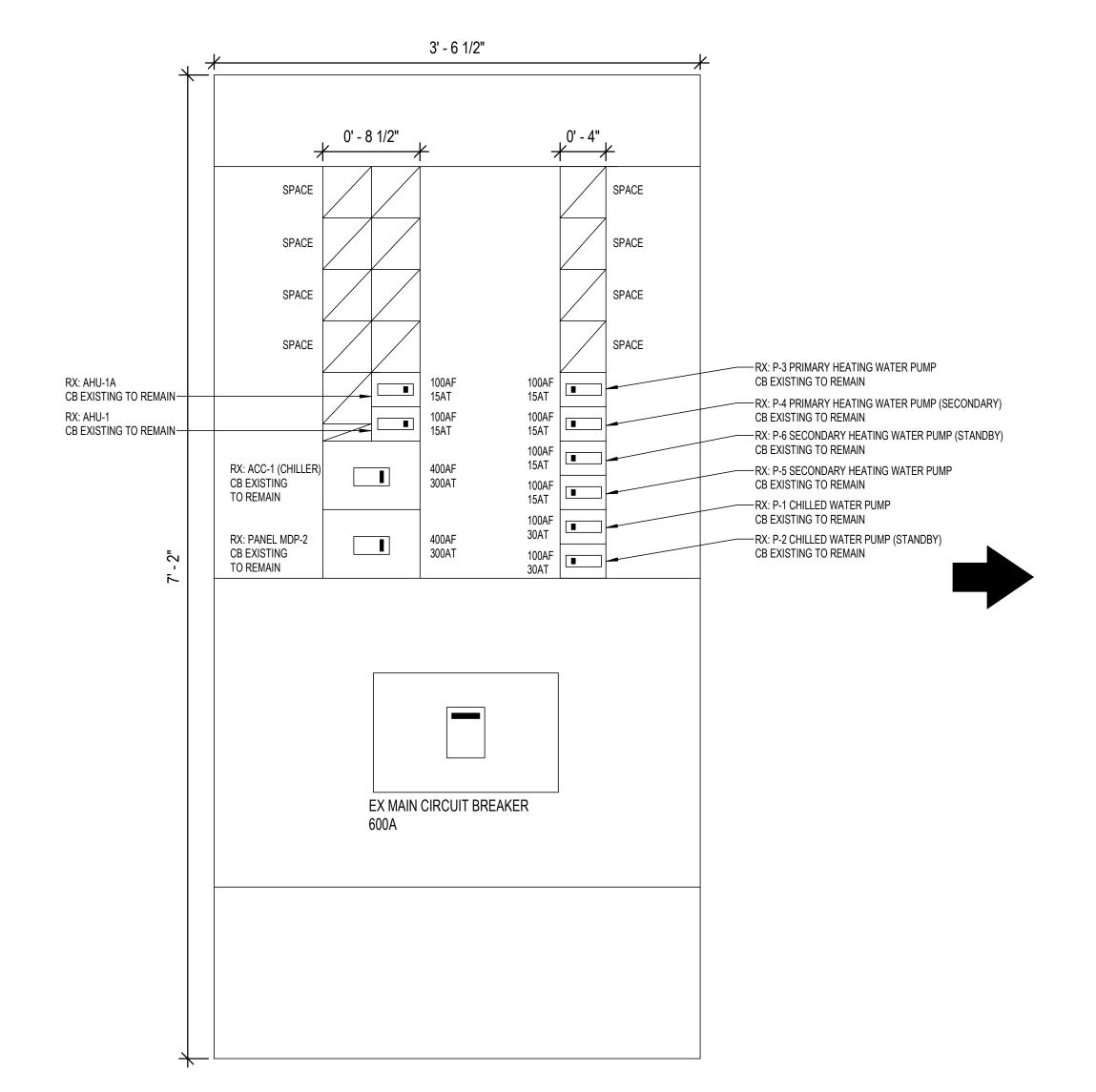


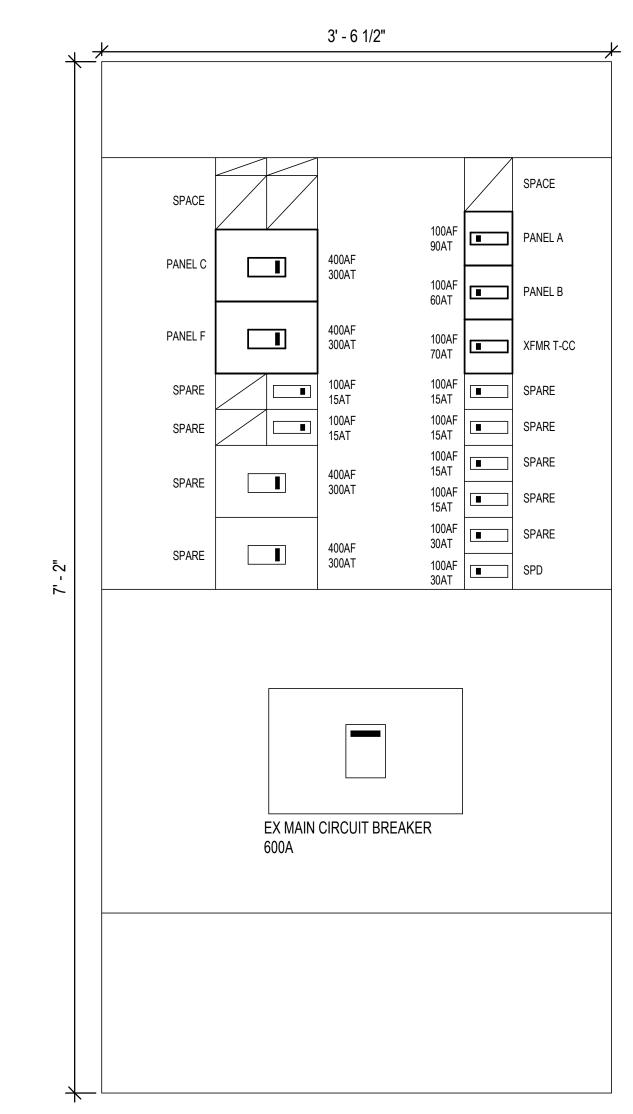
AS-BUILT / REVISION

PROFESSIONAL CERTIFICATION

APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR





EXISTING DISTRIBUTION PANEL MDP-1 - ELEVATION - DEMOLITION

\ EXISTING DISTRIBUTION PANEL MDP-1 - ELEVATION - NEW WORK E-21 1 1/2" = 1'-0"

HENRY ADAMS

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024 SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

SHELL DESIGNATION	CONTRACT NUMBER
E-21	24146PO0
NORE	JOB ORDER NUMBER
	PROJ-10000216
	SHEET 71 OF 75
	DRAWING NUMBER

2024-2509

FILE NO.: 8

PANELBOARD ELEVATIONS & SCHEDULE

1716 MERRITT BLVD, DUNDALK, MD 21222

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

NORTH POINT LIBRARY

HVAC RENOVATION

ELECTION DIST. NO.: 12c7

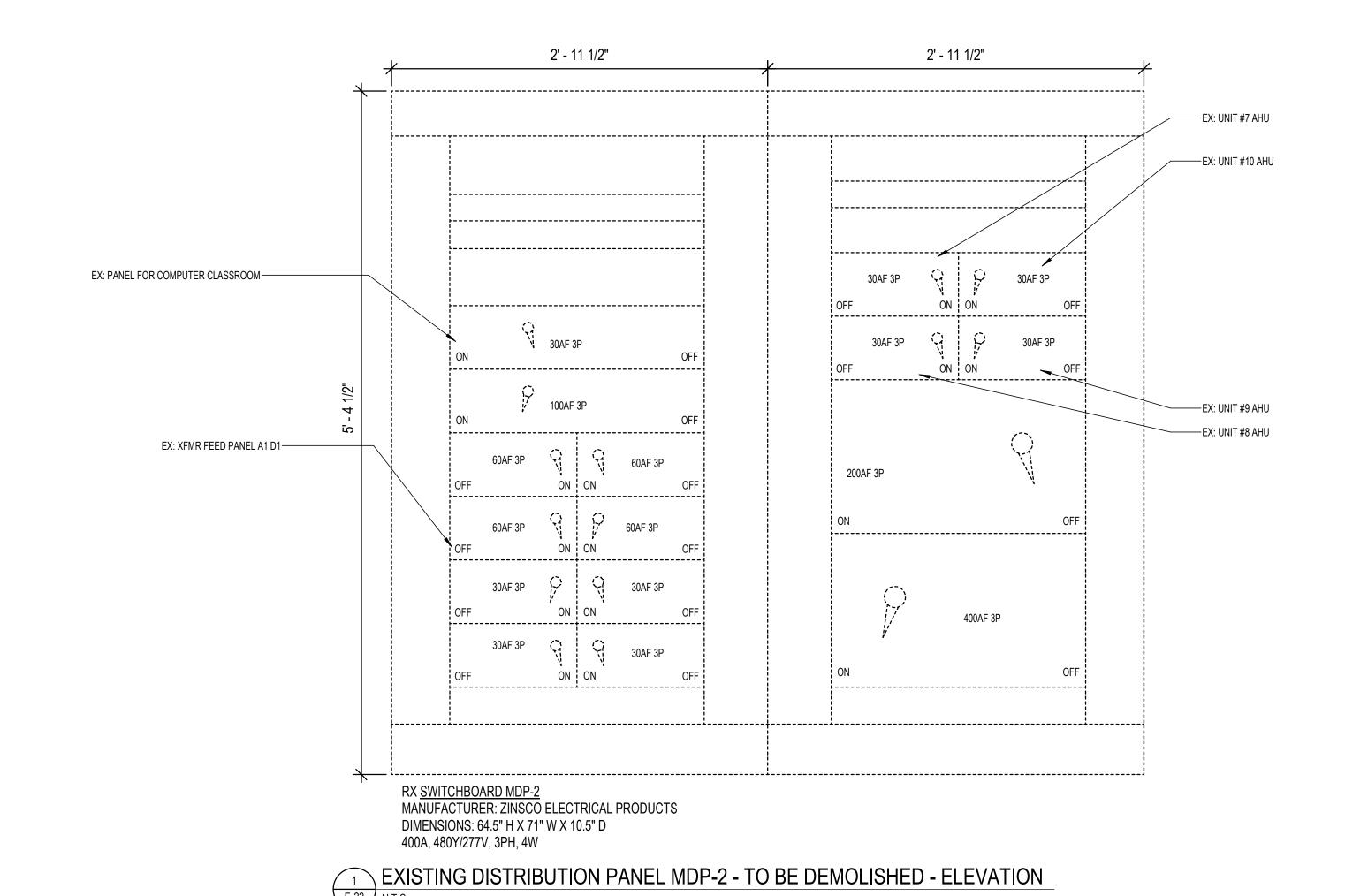
11 SE 21, R.O.W. NO. E SW PROPERTY MANAGER ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 11 SE 22 PROFILE SCALE: CONTRACT COMPLETION BOX LICENSE NO. <u>18042</u> EXPIRATION DATE 11/13/2024 BUREAU OF ENGINEERING AND CONSTRUCTION ENGINEER: JOHN DOUGLAS TEBERA TRAFFIC HIGHWAYS STRUCTURES STORM DRAINS SEWER WATER FIELD ENGINEER DGN BY: NTS DWN BY: <u>NTS</u> REVIEWED BY: AS-BUILT PER RECORD PRINT SUBDIVISION: DUNDALK CHKD BY: _____JST__ DATE REVIEWED:

DRAWING SCALE

PLAN SCALE: 1 1/2" = 1'-0" APPROVED BY:

PROPERTY MANAGEMENT

BY DATE P.W.A. NO. KEY SHEET POSITION SHT



HENRY ADAMS
Consulting Engineers

Consulting Engineers

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024
SUBMISSION: FINAL CONSTRUCTION DOCUMENTS

SHEET DESIGNATION CONTRACT NUMBER
E-22 24146P00

A A A A A

JOB ORDER NUMBER
PROJ-10000216
SHEET 72 OF 75
DRAWING NUMBER
2024-2510
FILE NO.: 8

		/												
	M	<u></u>	PROFESSIONAL CERTIFIC	CATION	AS-BUILT / REV	ISION	BY DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY MAI	NAGEMENT
OUG/	S		I HEREBY CERTIFY THAT THESE DOCUMENTS WE APPROVED BY ME, AND THAT I AM A DULY LICEN					R.O.W. NO.	E SW	11 SE 21,	PLAN SCALE:	1 1/2" = 1'-0"	APPROVED BY:	PROPERTY MANAGI
0.18		*	ENGINEER UNDER THE LAWS OF THE STATE OF LICENSE NO. 18042 EXPIRATION DA		CONTRACT COMPLETION	N BOX		R.O.W. NO.	E 244	11 SE 22	PROFILE SCALE:		DATE:	FROFER I I WANAGI
	₩/ > :	FEFE	ENGINEER: JOHN DOUGLAS TEBERA	DGN BY: NTS	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
"ONAI	E	. J.	AS-BUILT PER RECORD PRINT	DWN BY: <u>NTS</u>	REVIEWED BY:									
Oct	15,20	24	BY: DATE:	CHKD BY: JST	DATE REVIEWED:									

NORTH POINT LIBRARY

PANELBOARD ELEVATIONS

SUBDIVISION: DUNDALK

HVAC RENOVATION 6 MERRITT BLVD. DUNDALK. MD 212

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

1716 MERRITT BLVD, DUNDALK, MD 21222

GENERAL FIRE ALARM NOTES

(APPLICABLE TO ALL FIRE ALARM DRAWINGS)

- DRAWINGS ARE CONCEPTUAL, INTENDED TO SHOW GENERAL SYSTEM CONFIGURATION AND PERFORMANCE. PREPARE SHOP DRAWINGS AND PROVIDE CONDUITS, WIRING,
- SYSTEM COMPONENTS, AND EQUIPMENT FOR A COMPLETE AND OPERATIONAL SYSTEM IN COMPLIANCE WITH NFPA 70, NFPA 72, NFPA 90A, NFPA 101 IBC, THE AUTHORITY HAVING JURISDICTION, AND THE CONTRACT DOCUMENTS.
- COORDINATE FIRE ALARM WORK WITH LOCAL FIRE MARSHAL, FIRE ALARM PLANS REVIEW, AND FIRE DEPARTMENT INSPECTORS.
- OBTAIN AND PAY FOR PERMITS REQUIRED FOR INSTALLATION OF FIRE ALARM SYSTEM. PROVIDE SHOP DRAWING SUBMITTAL DOCUMENTS TO AUTHORITY HAVING JURISDICTION TO OBTAIN PERMIT. SUBMITTAL MUST INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING:
- A. SCALED FLOOR PLANS WITH ROOM NAMES AND NUMBERS WHICH INDICATE USE OF ALL ROOMS.
- B. FIRE ALARM DEVICE AND CABLE SYMBOL LEGEND
- C. FLOOR PLAN LAYOUT SHOWING LOCATIONS OF ALL DEVICES AND CONTROL EQUIPMENT, INCLUDING MOUNTING HEIGHTS OF ALARM INITIATING
- DEVICES AND NOTIFICATION DEVICES.
- D. FIRE ALARM CONTROL PANEL AND ANNUNCIATOR LOCATION.
- E. POWER CONNECTION.
- F. BATTERY CALCULATIONS.
- G. VOLTAGE DROP CALCULATIONS FOR NOTIFICATION APPLIANCE CIRCUITS.
- H. SIZE, TYPE, AND NUMBER OF CONDUCTORS.
- I. MANUFACTURER'S TECHNICAL DATA SHEETS INCLUDING MODEL NUMBERS AND LISTING INFORMATION FOR EQUIPMENT, DEVICES, AND MATERIALS.
- J. DETAILS OF CEILING HEIGHT AND CONSTRUCTION.
- K. INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.
- L. FIRE ALARM SYSTEM RISER.
- M. SEQUENCE OF OPERATIONS INPUT/OUTPUT MATRIX.
- N. DEVICE TO DEVICE WIRING.
- O. LOUDNESS AND CANDELA SETTINGS FOR EVERY NOTIFICATION APPLIANCE.
- FIRE ALARM BRANCH CIRCUIT IDENTIFICATION MUST COMPLY WITH NFPA 70 AND NFPA 72:
- PROVIDE APPROVED RED CIRCUIT BREAKER LOCKOUT DEVICE FOR EACH CIRCUIT BREAKER SERVING A FIRE ALARM CIRCUIT. IDENTIFY EACH FIRE ALARM CIRCUIT WITH A RED PHENOLIC NAMEPLATE WITH WHITE LETTERING. NAMEPLATE MUST READ "FIRE ALARM CIRCUIT".
- FASTEN NAMEPLATE IN PANELBOARD ADJACENT TO CIRCUIT BREAKER.
- IDENTIFY POWER SOURCE AND LOCATION OF BRANCH CIRCUIT DISCONNECTING SERVING FIRE ALARM EQUIPMENT. FASTEN PHENOLIC NAMEPLATE TO FIRE ALARM SYSTEM PANEL(S) INDICATING LOCATION OF DEDICATED BRANCH CIRCUIT DISCONNECTING MEANS. NAMEPLATE MUST READ "THIS PANEL FED FROM PANEL _____, CIRCUIT NO. _____, LOCATED IN _____."
- 6. IDENTIFY EACH FIRE ALARM DEVICE AND EQUIPMENT ENCLOSURE. DEVICE LABELS MUST INDICATE ADDRESS AND ZONE.
- '. IDENTIFY FIRE ALARM CIRCUITS AT TERMINAL AND JUNCTION LOCATIONS WITH PERMANENT LABELS. PAINT FIRE ALARM CIRCUIT JUNCTION BOX
- COVERS RED AND LABEL COVER "FIRE ALARM". PAINT CONDUITS CARRYING FIRE ALARM SYSTEM CIRCUITS RED.

CARBON MONOXIDE DETECTION AND WARNING

- OCCUPANT NOTIFICATION SHALL BE IN ACCORDANCE WITH 2019 NFPA 72 SECTION 23.8.6.1.3. CARBON MONOXIDE ALARM SIGNALS SHALL BE TRANSMITTED TO A CONSTANTLY ATTENDED OFF-PREMISES SUPERVISING STATION.
- SELECTIVE PUBLIC MODE OCCUPANT NOTIFICATION WILL BE LIMITED TO THE NOTIFICATION ZONE ENCOMPASSING THE AREA WHERE THE CARBON MONOXIDE SIGNAL WAS INITIATED. VISUAL NOTIFICATION SHALL BE BY BLUE FLASHING LIGHT TO ALERT OCCUPANTS OF THE

PRESENCE OF CARBON MONOXIDE.

AUDIBLE NOTIFICATION SHALL BE BY FIRE ALARM SYSTEM HORN. HORN SHALL PRODUCE A FOUR-PULSE TEMPORAL PATTERN TO ALERT OCCUPANTS OF THE PRESENCE OF CARBON MONOXIDE.

																				SYSTEM (UTPUTS	6							
												CON	ITROL U	NIT AN	NUNCI						TIFICAT			EMERGEN	CY CON	TROL FUN	ICTION /	SUPPLE	EMENTAR)
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	SYSTEM INPUTS	A	B	C	<u> D</u>	E	<u>∕ </u>	G	H H	 	J	K	L	M	N	0	P	Q	R	S T		V	W						
1	MANUAL FIRE ALARM BOX	•	•						•	•		•		•				•		•			•						
2	AREA SMOKE OR HEAT DETECTOR	•	•						•	•		•		•				•		•	1		•						
3	FIRE ALARM SYSTEM AC POWER FAILURE					•	•		•	•						•							•						
4	FIRE ALARM SYSTEM LOW BATTERY					•	•		•	•						•							•						
5	FIRE ALARM SYSTEM OPEN CIRCUIT					•	•		•	•						•							•						
6	FIRE ALARM SYSTEM GROUND FAULT					•	•		•	•						•							•						
7	FIRE ALARM SYSTEM NOTIFICATION APPLIANCE SHORT CIRCUIT					•	•		•	•						•							•						
8	CARBON MONOXIDE DETECTOR			•	•				•	•			•				•						•						
9	HVAC DUCT SMOKE DETECTOR			•	•									•					•										
		А	В	С	D	Е	F	G	Н	I	J	К	L	М	N	0	Р	Q	R	S T	U	V	W						
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FIRE ALARM INPUT/OUTPUT MATRIX

	FIRE ALARM AB	BREVIATION	NS	$] \lceil$
A	AMPERE	IFC	INTERNATIONAL FIRE CODE	$] \vdash$
ADA	AMERICANS WITH DISIBILITIES ACT	IN	INCH	╽┝
AFC	ABOVE FINISHED CEILING			
AFF	ABOVE FINISHED FLOOR	JB	JUNCTION BOX	
AFG	ABOVE FINISHED GRADE	LOD	LIQUID ODVOTAL DIODI AV	
AGM AHJ	ABSORBED GLASS MAT AUTHORITY HAVING JURISDICTION	LCD LED	LIQUID CRYSTAL DISPLAY LIGHT EMITTING DIODE	\prod^{c}
AHU	AIR HANDLING UNIT	LED	LIGHT EMITTING DIODE	
AIM	ADDRESSABLE INTERFACE MODULE	MAX	MAXIMUM	
ANSI	AMERICAN NATIONAL STANDARDS	MI	MINERAL INSULATED	
	INSTITUTE	MIN	MINIMUM	
AWG	AMERICAN WIRE GAUGE	MNS	MASS NOTIFICATION SYSTEM	
DDA		MTD	MOUNTED	ll
BDA BLDG	BI-DIRECTIONAL AMPLIFIER BUILDING	NAC	NOTIFICATION APPLIANCE CIPCUIT	
BOD	BASIS OF DESIGN	NAC NC	NOTIFICATION APPLIANCE CIRCUIT NORMALLY CLOSED	
202	27.6.6 6. 2.26.6.1	NCP	NETWORK CONTROL PANEL	
С	CONDUIT	NEC	NATIONAL ELECTRICAL CODE	
CB	CIRCUIT BREAKER	NECA	NATIONAL ELECTRICAL	C
CD	CANDELA		CONTRACTORS' ASSOCIATION	
CI	CIRCUIT INTEGRITY	NEMA	NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION	
CLG	CEILING	NESC	NATIONAL ELECTRICAL SAFETY CODE	C
CMU CO	CONCRETE MASONRY UNIT CARBON MONOXIDE	NFPA	NATIONAL FIRE PROTECTION	
COMM	COMMUNICATION		ASSOCIATION	
CX	CONNECT TO EXISTING	NIC	NOT IN CONTRACT	
		NICET	NATIONAL INSTITUTE FOR	
DACT	DIGITAL ALARM COMMUNICATOR		CERTIFICATION IN ENGINEERING TECHNOLOGIES	
540	TRANSMITTER	NO	NUMBER, NORMALLY OPEN	
DAS	DISTRIBUTED ANTENNA SYSTEM	NPLFA	NON-POWER LIMITED FIRE ALARM	
DB DN	DECIBEL DOWN	NTS	NOT TO SCALE	
DOAS	DEDICATED OUTDOOR AIR SYSTEM			
DWG	DRAWING	OC	ON CENTER	
		OEE	OCCUPANT EVACUATION ELEVATOR	
Е	EMERGENCY	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	
ECS	EMERGENCY COMMUNICATIONS			
EMR	SYSTEM ELEVATOR MACHINE ROOM	Р	POLE, PHASE	
EMT	ELECTRICAL METALLIC TUBING	PA	PUBLIC ADDRESS	
ENCL	ENCLOSURE	PC	PERSONAL COMPUTER	
EQUIP	EQUIPMENT	PH	PHASE CIRCUIT	
ERCCS	EMERGENCY RESPONDER	PLC PLFA	POWER LIMITED CIRCUIT POWER-LIMITED FIRE ALARM	
EDDCC	COMMUNICATION COVERAGE SYSTEM	POE	POWER OVER ETHERNET	
ERRCS	EMERGENCY RESPONDER RADIO COVERAGE SYSTEM	PVC	POLYVINYL CHLORIDE	╟
ETR	EXISTING TO REMAIN	PWR	POWER	
EVACS	EMERGENCY VOICE/ALARM			╽┕
	COMMUNICATIONS SYSTEM	QTY	QUANTITY	$I \Gamma$
EX	EXISTING	В	DACEMAN	
FA	FIRE ALARM	R RA	RACEWAY RETURN AIR	
FAAP	FIRE ALARM ANNUNCIATOR PANEL	RM	ROOM	
FACP	FIRE ALARM CONTROL PANEL	RTU	ROOF TOP UNIT	
FACU	FIRE ALARM CONTROL UNIT	RX	REMOVE EXISTING	
FAID	FIRE ALARM INITIATING DEVICE			_ ا
FEO	FIREFIGHTERS' EMERGENCY	SA	SUPPLY AIR	
FMC	OPERATION FLEXIBLE METAL CONDUIT	SF	SQUARE FEET	
FSAE	FIRE SERVICE ACCESS ELEVATOR	SLC SPD	SIGNALING LINE CIRCUIT SURGE PROTECTION DEVICE	$ \cdot$
FT	FEET	SPD	SURGE PROTECTION DEVICE	•
	——————————————————————————————————————	TYP	TYPICAL	
G	GROUND			$ \cdot $
GND	GROUND	UG	UNDERGROUND	11:
GW	GROUND WIRE	UL	UNDERWRITER'S LABORATORY	۱Ľ
шп		UON	UNLESS OTHERWISE NOTED	
HLI HVAC	HIGH LEVEL INTERFACE HEATING VENTILATING AIR	V	VOLTO	
HVAU	CONDITIONING	V VESDA	VOLTS VERY EARLY SMOKE DETECTION	
HVI	HEARING AND VISUALLY IMPAIRED	V LODA	APPARATUS	
HZ	HERTZ	VEWFD	VERY EARLY WARNING FIRE	
15.0	INITERNATIONAL BUMBING COST	\	DETECTION	
IBC	INTERNATIONAL BUILDING CODE	VRLA	VALVE REGULATED LEAD ACID	
IDC IEBC	INITIATING DEVICE CIRCUIT INTERNATIONAL EXISTING BUILDING	W	WIRE, WATTS	
ובטט	CODE	vv W/	WITH	
		WP	WEATHERPROOF	
				J

	FIRE ALARM LEGEND	
SYMBOL	DESCRIPTION	MOUNTING HEIGHT
S S CEILING WALL	FIRE ALARM SYSTEM - SMOKE DETECTOR - AREA - CEILING/WALL MOUNT SUBSCRIPTS: P: PHOTOELECTRIC TYPE (DEFAULT IF NO SUBSCRIPT INDICATED) I: IONIZATION TYPE E: ELEVATOR RECALL FUNCTION DH: DOOR HOLD RELEASE FUNCTION SP: STAIR PRESSURIZATION FUNCTION	/ SEE DETAIL
()	FIRE ALARM SYSTEM - SMOKE DETECTOR, DUCT DETECTOR WITH SAMPLING TUBE. SUBSCRIPT IDENTIFIES EQUIPMENT TO BE CONTROLLED FOR SHUTDOWN	
⊕ #	FIRE ALARM SYSTEM - SMOKE DAMPER WITH DUCT SMOKE DETECTOR WITH 120V POWER CONNECTION TO DAMPER	
(D /H	FIRE ALARM SYSTEM - FIRE/SMOKE DAMPER WITH DUCT SMOKE DETECTOR. WITH 120V POWER CONNECTION TO DAMPER	
© © CEILING WALL	FIRE ALARM SYSTEM - HEAT DETECTOR - CEILING/WALL MOUNT SUBSCRIPTS: F: FIXED TEMPERATURE (DEFAULT IF NO SUBSCRIPT INDICATED) R: RATE OF RISE R/C: RATE COMPENSATION R/F: COMBINATION RATE OF RISE	/ SEE DETAIL
© © CEILING WALL	CARBON MONOXIDE DETECTOR - CEILING/WALL MOUNT	/ SEE DETAIL
❷ <u>¥</u> CEILING WALL	FIRE ALARM SYSTEM - STROBE - CEILING/WALL MOUNT SUBSCRIPTS: C: CO ALARM NOTIFICATION DEVICE WP: WEATHERPROOF WG: WIRE GUARD	/86"
S Z CEILING WALL	FIRE ALARM SYSTEM - LOUDSPEAKER - CEILING/WALL MOUNT SUBSCRIPTS: C: CO ALARM NOTIFICATION DEVICE WP: WEATHERPROOF WG: WIRE GUARD	/ 86"
CEILING WALL	FIRE ALARM SYSTEM - LOUDSPEAKER STROBE - CEILING/WALL MOUNT SUBSCRIPTS: C: CO ALARM NOTIFICATION DEVICE WP: WEATHERPROOF WG: WIRE GUARD	/86"
F	FIRE ALARM SYSTEM - MANUAL FIRE ALARM BOX	46"
FACP	FIRE ALARM SYSTEM - CONTROL PANEL	78" TO TOP
FABP	FIRE ALARM SYSTEM - BOOSTER PANEL	78" TO TOP
FAAP	FIRE ALARM SYSTEM - ANNUNCIATOR PANEL	78" TO TOP
FADC	FIRE ALARM DOCUMENT CABINET	54" TO TOP

FIRE ALARM CONVENTIONS

FIRE ALARM

, 15cd ———CANDELA RATING —DEVICE TYPE

APPLICABLE CODES AND STANDARDS

(APPLICABLE TO ALL FIRE ALARM DRAWINGS)

 2021 INTERNATIONAL BUILDING CODE, AS ADOPTED BY BALTIMORE COUNTY COUNCIL BILL NUMBER 40-1. • 2021 INTERNATIONAL EXISTING BUILDING CODE, AS ADOPTED BY MARYLAND REHABILITATION CODE

• NFPA 1-2018 FIRE CODE, AS ADOPTED BY BALTIMORE COUNTY COUNCIL BILL NO. 14-21 NFPA 13-2019 STANDARD FOR THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS

NFPA 70-2023 NATIONAL ELECTRICAL CODE

 NFPA 72-2019 FIRE ALARM AND SIGNALING CODE • NFPA 101-2018 LIFE SAFETY CODE, AS ADOPTED BY BALTIMORE CITY COUNCIL BILL NO. 14-21

HENRY ADAMS

MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

Consulting Engineers

DATE: 10/15/2024

SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION | CONTRACT NUMBER

24146PO0 JOB ORDER NUMBER SHEET 73 OF 75 DRAWING NUMBER 2024-2511

FILE NO.: 8

-	PROFESSIONAL CERTIFIC	AS-BUILT / REV	ISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWIN	G SCALE	PROPERTY	' MANAGEMENT	
	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL						R.O.W. NO.	E SW	11 SE 21,	PLAN SCALE:	1/8" = 1'-0"	APPROVED BY: PROPERTY MANAG	
	ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 18042 EXPIRATION DATE 11/13/2024		CONTRACT COMPLETION	N BOX	11.0.1		11.0.11.110.	LOW	11 SE 22	PROFILE SCALE:		DATE:	THOI EITH WARREST
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ENGINEER: JOHN DOUGLAS TEBERA	DGN BY: <u>NTS</u>	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGH	HWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
. <i>]</i> ,	AS-BUILT PER RECORD PRINT	DWN BY: <u>NTS</u>	REVIEWED BY:										
مهم	BY: DATE:	CHKD BY:JST	DATE REVIEWED:										

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

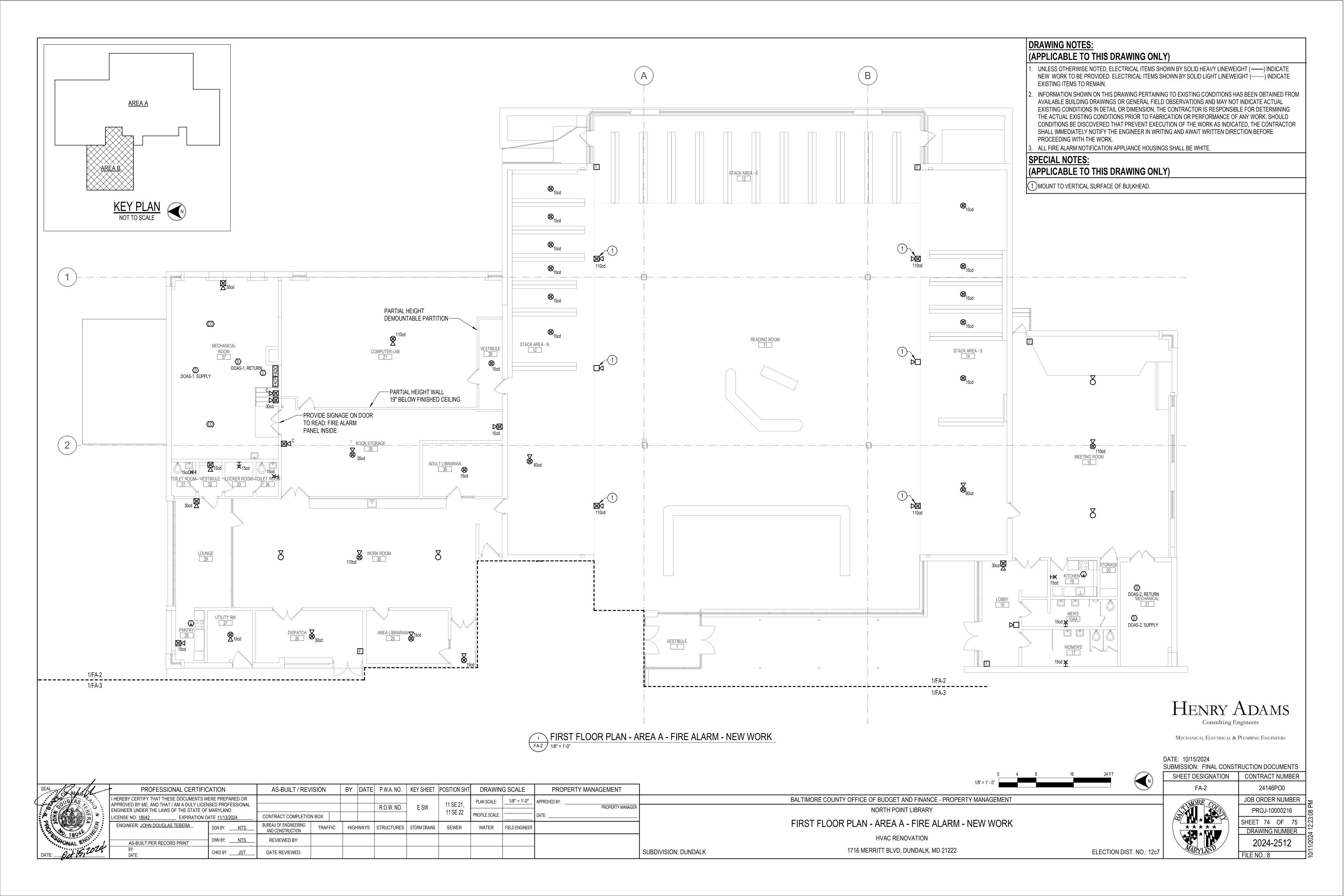
NORTH POINT LIBRARY

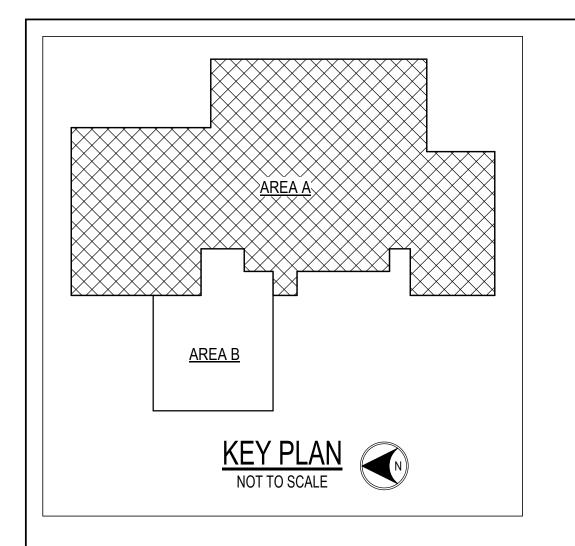
SUBDIVISION: DUNDALK

FIRE ALARM COVER SHEET

HVAC RENOVATION

1716 MERRITT BLVD, DUNDALK, MD 21222





DESCRIPTION

MAGAZINES/NEWSPAPERS

VESTIBULE LOBBY

VESTIBULE

WOMEN'S

MEN'S

FAMILY TOILET NEW BOOKS

READING ROOM

STACK AREA - N

STACK AREA - E

STACK AREA - S

MEETING ROOM

WOMEN'S

MECHANICAL

JAN. CLOSET

YOUTH LIBRARIAN

AREA LIBRARIAN

STORAGE

STORAGE

DISPATCH

STORAGE

PANTRY

LOUNGE

VESTIBULE

WORK ROOM

TOILET ROOM

LOCKER ROOM

TOILET ROOM

BOOK STORAGE

ADULT LIBRARIAN MECHANICAL ROOM COMPUTER LAB

BOOK DROP MEN'S

OFFICE

(APPLICABLE TO THIS DRAWING ONLY)

- UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN BY SOLID HEAVY LINEWEIGHT (-----) INDICATE NEW WORK TO BE PROVIDED. ELECTRICAL ITEMS SHOWN BY SOLID LIGHT LINEWEIGHT (-----) INDICATE EXISTING ITEMS TO REMAIN.
- INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE ACTUAL EXISTING CONDITIONS IN DETAIL OR DIMENSION. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE ACTUAL EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, THE CONTRACTOR PROCEEDING WITH THE WORK.

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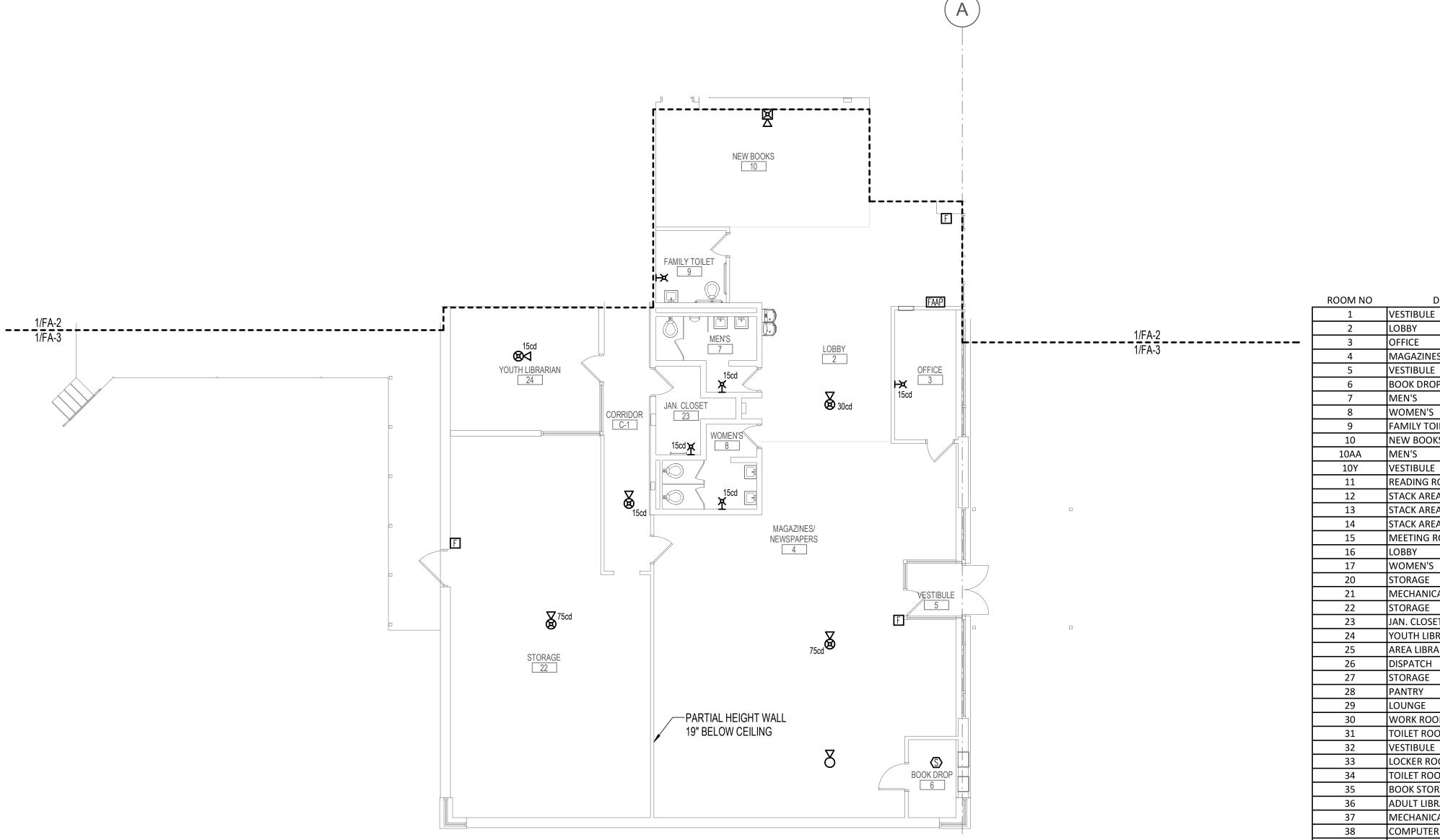
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ALL FIRE ALARM NOTIFICATION APPLIANCE HOUSINGS SHALL BE WHITE.



FIRST FLOOR PLAN - AREA B - FIRE ALARM - NEW WORK

SUBDIVISION: DUNDALK

55 70 75 75 60 70 40 55 C-1 CORRIDOR FIRE ALARM AUDIBLE SIGNALING SCHEDULE N.T.S.

Consulting Engineers

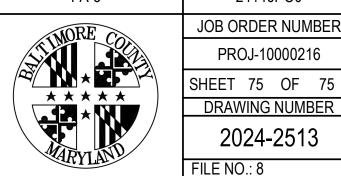
MECHANICAL ELECTRICAL & PLUMBING ENGINEERS

DATE: 10/15/2024

SUBMISSION: FINAL CONSTRUCTION DOCUMENTS SHEET DESIGNATION CONTRACT NUMBER

24146PO0 JOB ORDER NUMBER PROJ-10000216

2024-2513



PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION BY		BY D	DATE	P.W.A. NO.	KEY SHEET POSITION SHT		DRAWING SCALE		PROPERTY MANAGEMENT	
APPROVED BY ME, AND THAT I AM A DULY LICEN	ISED PROFESSIONAL					ROW NO	E SW	11 SE 21,	PLAN SCALE:	1/8" = 1'-0"		MANAG
ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. <u>18042</u> EXPIRATION DATE <u>11/13/2024</u>		CONTRACT COMPLETION BOX			N.O.W. NO.	11.0.77.110.	LOW	11 SE 22	PROFILE SCALE:			
ENGINEER: JOHN DOUGLAS TEBERA	DGN BY: <u>NTS</u>	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWA	'AYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER		
AS-BUILT PER RECORD PRINT	DWN BY: <u>NTS</u>	REVIEWED BY:										
	I HEREBY CERTIFY THAT THESE DOCUMENTS WAPPROVED BY ME, AND THAT I AM A DULY LICEN ENGINEER UNDER THE LAWS OF THE STATE OF LICENSE NO. 18042 EXPIRATION DENGINEER: JOHN DOUGLAS TEBERA	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 18042 EXPIRATION DATE 11/13/2024 ENGINEER: JOHN DOUGLAS TEBERA DGN BY: NTS	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 18042 EXPIRATION DATE 11/13/2024 CONTRACT COMPLETIO ENGINEER: JOHN DOUGLAS TEBERA DGN BY: NTS BUREAU OF ENGINEERING AND CONSTRUCTION DWN BY: NTS DEVIEWED BY:	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 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E SW 11 SE 21, 1	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. 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LICENSE NO. 18042 EXPIRATION DATE 11/13/2024 DGN BY:NTS

CHKD BY: _____JST

DATE REVIEWED:

FIRST FLOOR PLAN - AREA B - FIRE ALARM - NEW WORK

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

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