

VALLEY CENTRAL SCHOOL DISTRICT

BEREA ELEMENTARY SCHOOL

2023 CAPITAL PROJECT - PHASE 1

ISSUED FOR BID: 10/18/24

CSARCH - ARCHITECTS
BLAKE ENGINEERING, PLLC - M.E.P. ENGINEERS
PASSERO ASSOCIATES - SITE/CIVIL AND STRUCTURAL ENGINEERS
AECC ENVIRONMENTAL CONSULTING - HAZARDOUS MATERIALS DESIGNERS

STATE EDUCATION DEPARTMENT PROJECT CONTROL NUMBER:
2023 CAPITAL PROJECT - PHASE 1 44-13-01-06-0-017-014
THE DESIGN OF THIS PROJECT CONFORMS TO APPLICABLE PROVISIONS OF THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE, AND THE MANUAL OF PLANNING STANDARDS OF THE NEW YORK STATE EDUCATION DEPARTMENT.

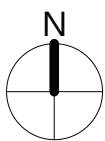
CSArch PROJECT NO. 187-2302.01



Berea Elementary School

VICINITY MAP

NTS



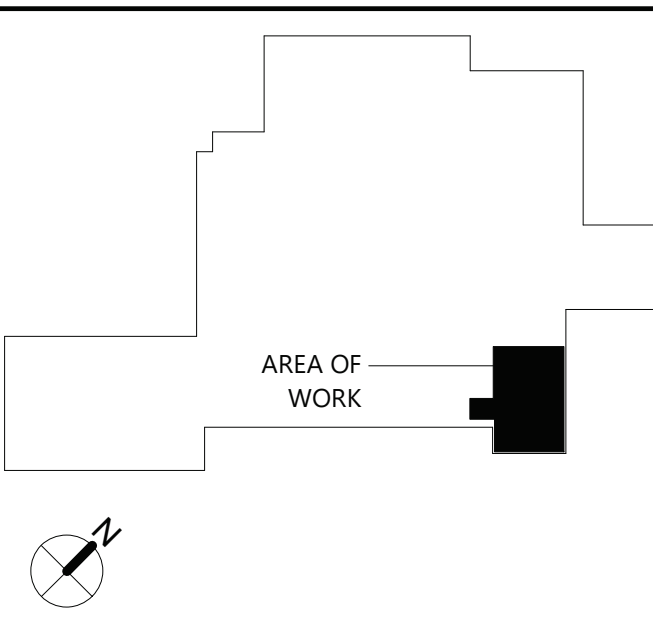
DRAWING LIST			
GENERAL DRAWINGS BES G000 COVER & SHEET INDEX BES G001 SYMBOLS, ABBREVIATIONS, MISC. AND PARTITION TYPES BES G111 OVERALL FLOOR PLAN - FIRST FLOOR		PLUMBING GENERAL DRAWINGS BES P001 PLUMBING NOTES, SCHEDULE, LEGEND, & DETAILS	
LIFE SAFETY DRAWINGS BES LS111 LIFE SAFETY PLANS - FIRST FLOOR BES LS112 SMOKE ZONE PLANS		PLUMBING DEMOLITION DRAWINGS BES PD111 PLUMBING DEMOLITION PLAN - PART 1 BES PD112 PLUMBING DEMOLITION PLAN - PART 2	
CIVIL DRAWINGS BES C100 KEY PLAN BES C130 SITE, GRADING AND ESC PLAN BES C530 DETAILS		PLUMBING DRAWINGS BES P111 PLUMBING PLAN - PART 1 BES P112 PLUMBING PLAN - PART 2	
ARCHITECTURAL DEMOLITION DRAWINGS BES AD111 REMOVALS PLAN - FIRST FLOOR - AREA A BES AD121 REMOVALS PLAN - FIRST FLOOR - AREA B BES AD811 REFLECTED CEILING DEMO PLAN - FIRST FLOOR AREA A BES AD812 REFLECTED CEILING DEMO PLAN - FIRST FLOOR AREA B		MECHANICAL GENERAL DRAWINGS BES M001 MECHANICAL NOTES, LEGENDS, SCHEDULES & DETAILS BES M002 MECHANICAL SCHEDULES & DETAILS	
ARCHITECTURAL DRAWINGS BES A111 ENLARGED FLOOR PLAN - FIRST FLOOR - AREA A BES A112 ENLARGED FLOOR PLAN - FIRST FLOOR - AREA B BES A201 EXTERIOR ELEVATIONS BES A202 EXTERIOR ELEVATIONS BES A351 PLAN AND SECTION DETAILS BES A601 ENLARGED PLAN AND INTERIOR ELEVATIONS BES A602 ENLARGED PLAN AND INTERIOR ELEVATIONS BES A651 CASEWORK DETAILS BES A811 REFLECTED CEILING PLAN - FIRST FLOOR AREA A BES A812 REFLECTED CEILING PLAN - FIRST FLOOR AREA B BES A901 DOOR, WINDOW, & STOREFRONT DETAILS		MECHANICAL DEMOLITION DRAWINGS BES MD111 MECHANICAL DEMOLITION PLAN - PART 1 BES MD112 MECHANICAL DEMOLITION PLAN - PART 2	
ARCHITECTURAL FINISH DRAWINGS BES AF001 MATERIAL SCHEDULE BES AF002 SIGNAGE TYPES AND SCHEDULE BES AF111 ENLARGED FLOOR FINISHES PLAN - FIRST FLOOR - AREA A BES AF112 ENLARGED FLOOR FINISHES PLAN - FIRST FLOOR - AREA B		MECHANICAL DRAWINGS BES M111 MECHANICAL PLAN - PART 1 BES M112 MECHANICAL PLAN - PART 2	
FURNITURE DRAWINGS BES FE111 FLOOR FURNITURE PLAN - FIRST FLOOR - AREA A		ELECTRICAL GENERAL DRAWINGS BES E001 ELECTRICAL NOTES, LEGENDS, SCHEDULES & DETAILS	
		ELECTRICAL DEMOLITION DRAWINGS BES ED111 ELECTRICAL DEMOLITION PLAN - PART 1 BES ED112 ELECTRICAL DEMOLITION PLAN - PART 2	
		ELECTRICAL DRAWINGS BES E111 ELECTRICAL PLAN - PART 1 BES E112 ELECTRICAL PLAN - PART 2 BES E211 LIGHTING PLAN - PART 1 BES E212 LIGHTING PLAN - PART 2	



EXPIRATION DATE: 02/28/2025



KEY PLAN




VALLEY CENTRAL SCHOOL DISTRICT
BEREA ELEMENTARY SCHOOL
2023 CAPITAL PROJECT - PHASE 1

Project Title



EXPIRATION DATE: 02/28/2025

2	11/1/24	BID ADDENDUM #2
1	10/25/24	BID ADDENDUM #1
	DATE	DESCRIPTION

Drawn By:	Auth
Checked By:	Check
Proj. #:	44-13-01-06-0-017-0
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Issued for Bid:	10/18/2

Sheet Title

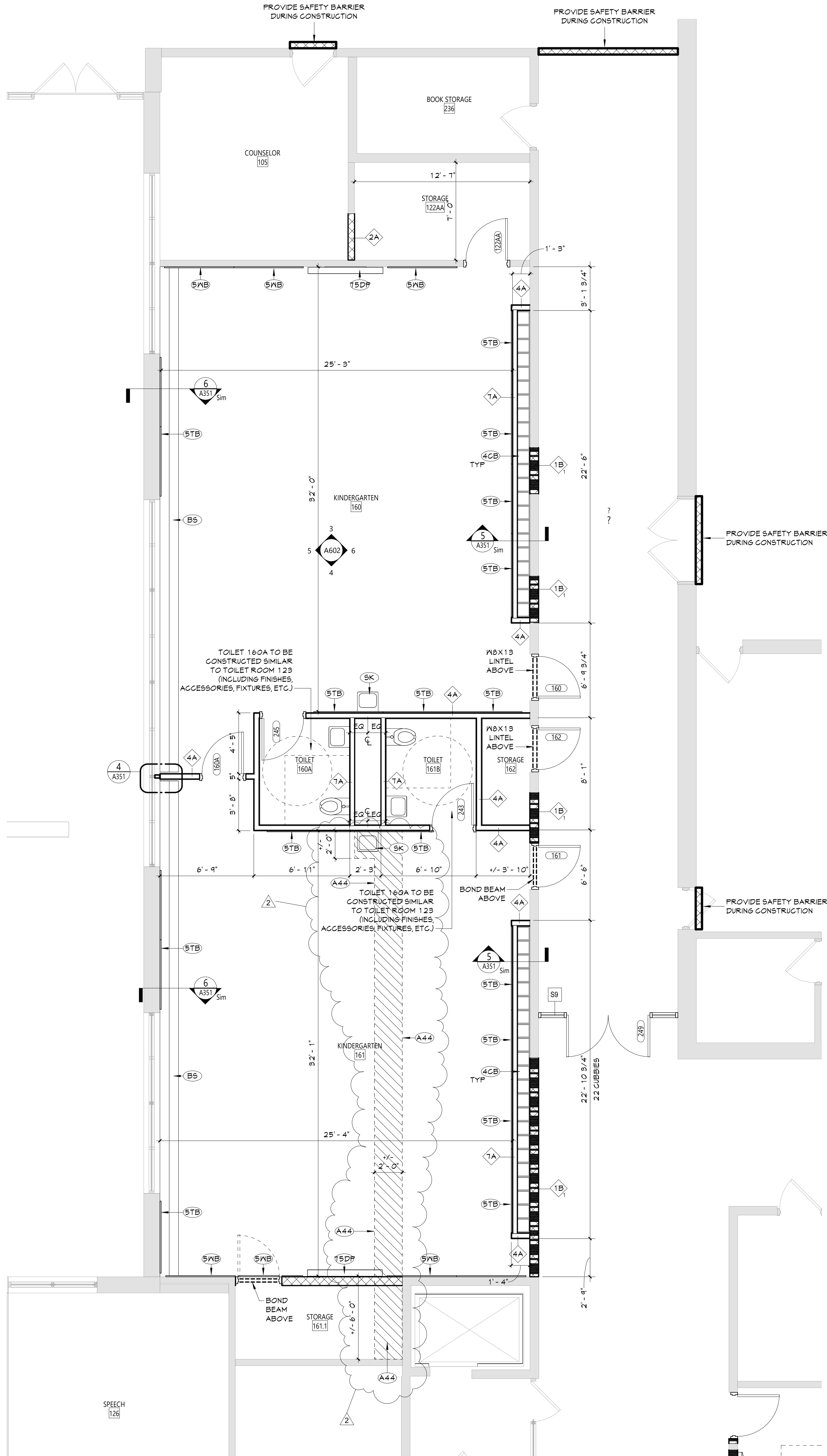
ENLARGED
FLOOR PLAN -
FIRST FLOOR -
AREA A

Sheet No.

BES
A111

CONSTRUCTION DOCUMENTS

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1 AREA B - PARTIAL FIRST FLOOR PLAN
1/4" = 1'-0"

GENERAL NOTES	
1. REFER TO SHEET 6001 FOR ADDITIONAL GENERAL NOTES.	
2. REFER TO A600 SERIES DRAWINGS FOR ADDITIONAL DIMENSIONS AND DETAILED INFORMATION OF CABINETRY.	
3. REFER TO A900 SERIES DRAWINGS FOR DOOR, STOREFRONT, CURTAINWALL, WINDOW AND LOUVER SCHEDULES, DETAILS AND NOTES.	
4. REFER TO SHEET A101 FOR PARTITION TYPES AND ADDITIONAL NOTES.	
NEW WORK KEYNOTES	
#	Description
4CB	CUBBIE, 4"
5TB	TACKABLE SURFACE BOARD, 5'
5WB	WHITEBOARD, 5'
75DP	75" FR DISPLAY MONITOR
A44	PROVIDING TRENCHING OF FLOOR SLAB TO ACCOMMODATE PIPING WORK. PATCH CONCRETE SLAB AFTER COMPLETION OF PIPING WORK. COORDINATE EXTENT OF TRENCHING WITH PLUMBING DRAWINGS.
BS	BOOK SHELVES
SK	SINK, REFER TO PLUMBING DRAWINGS

KEY PLAN	
AREA OF WORK	
ENLARGED FLOOR PLAN - FIRST FLOOR - AREA B	
BES A112	

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CSARCH

Valley Central School District
Berea Elementary School
2023 Capital Project - Phase 1

Project Title

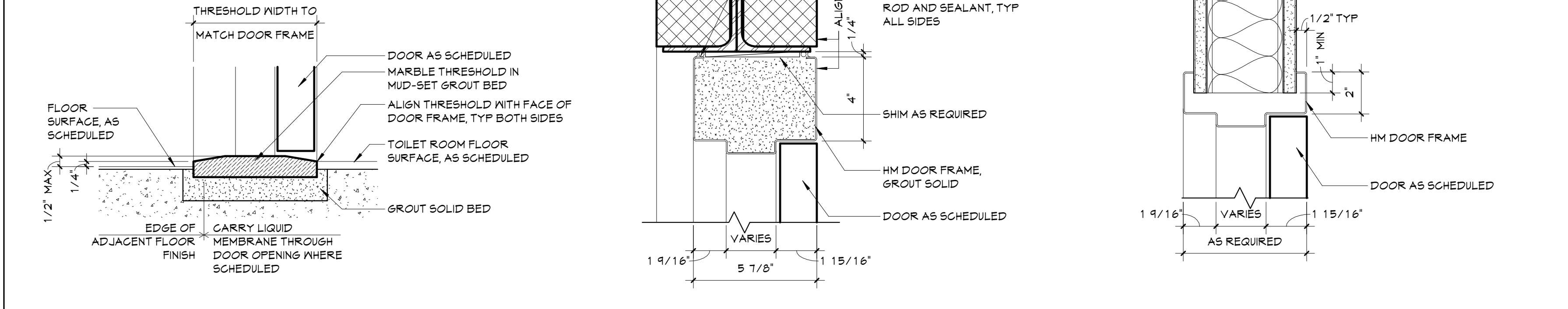
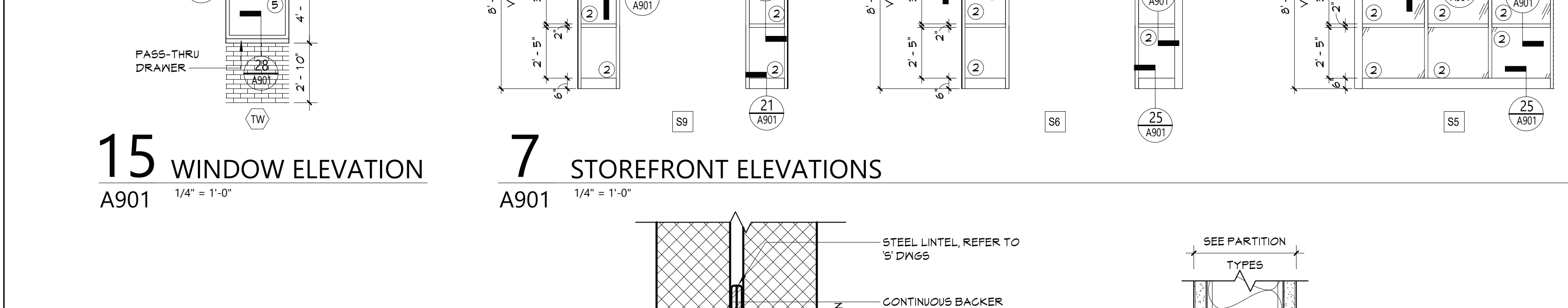
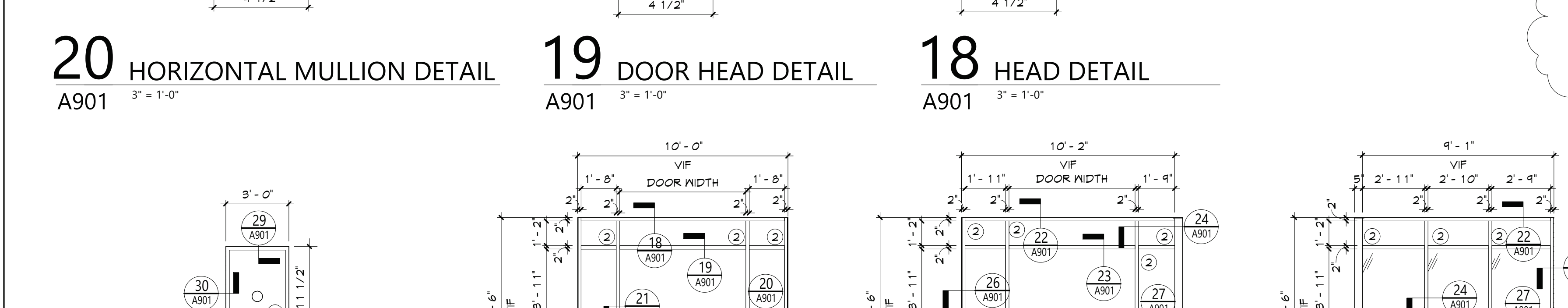
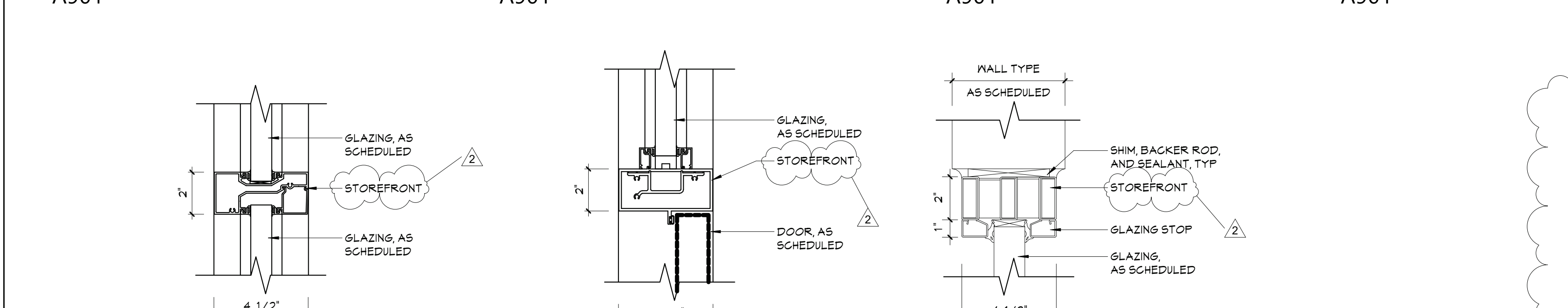
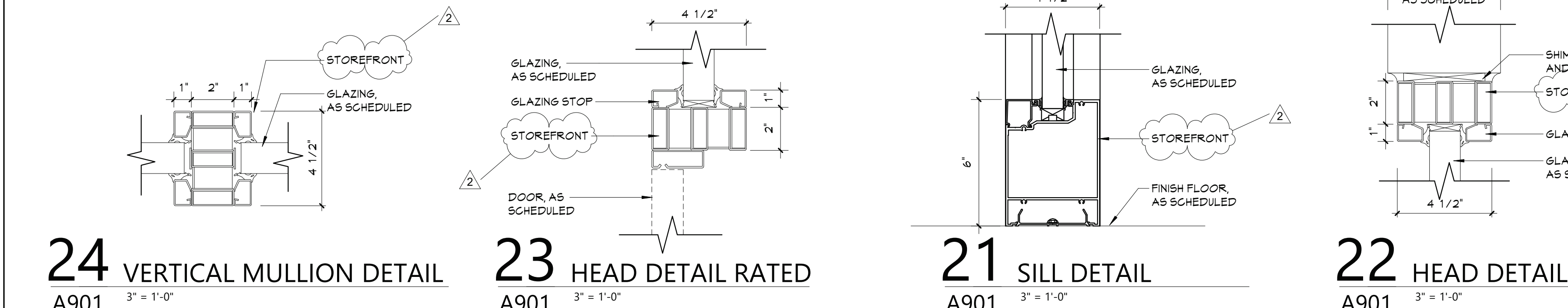
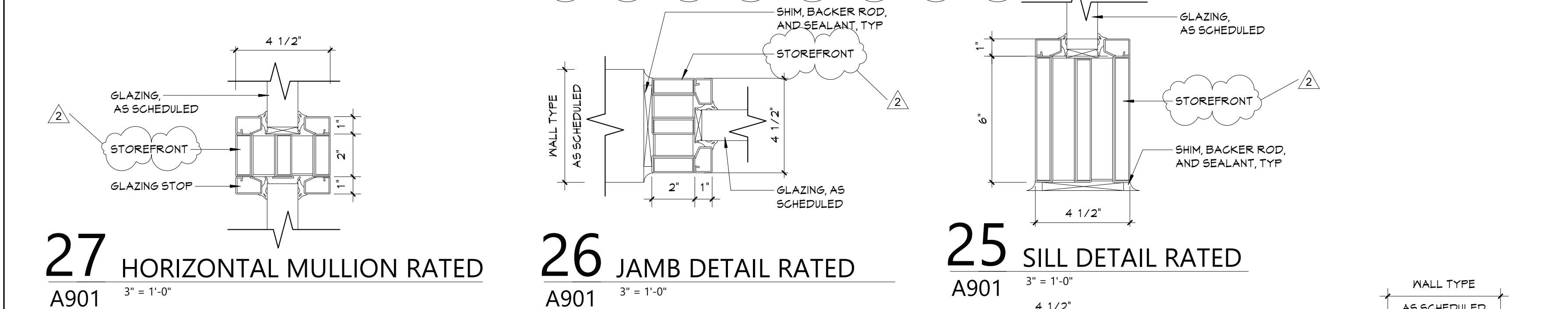
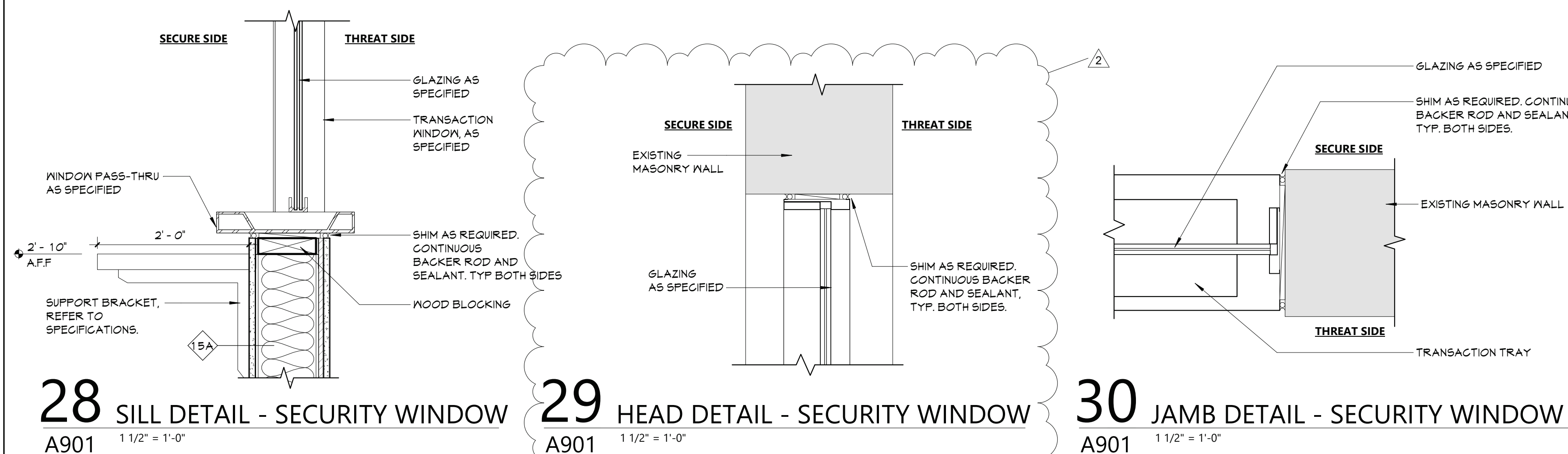
EXPIRATION DATE: 02/28/2025

2	11/1/24	BID ADDENDUM #2
3	DATE	DESCRIPTION

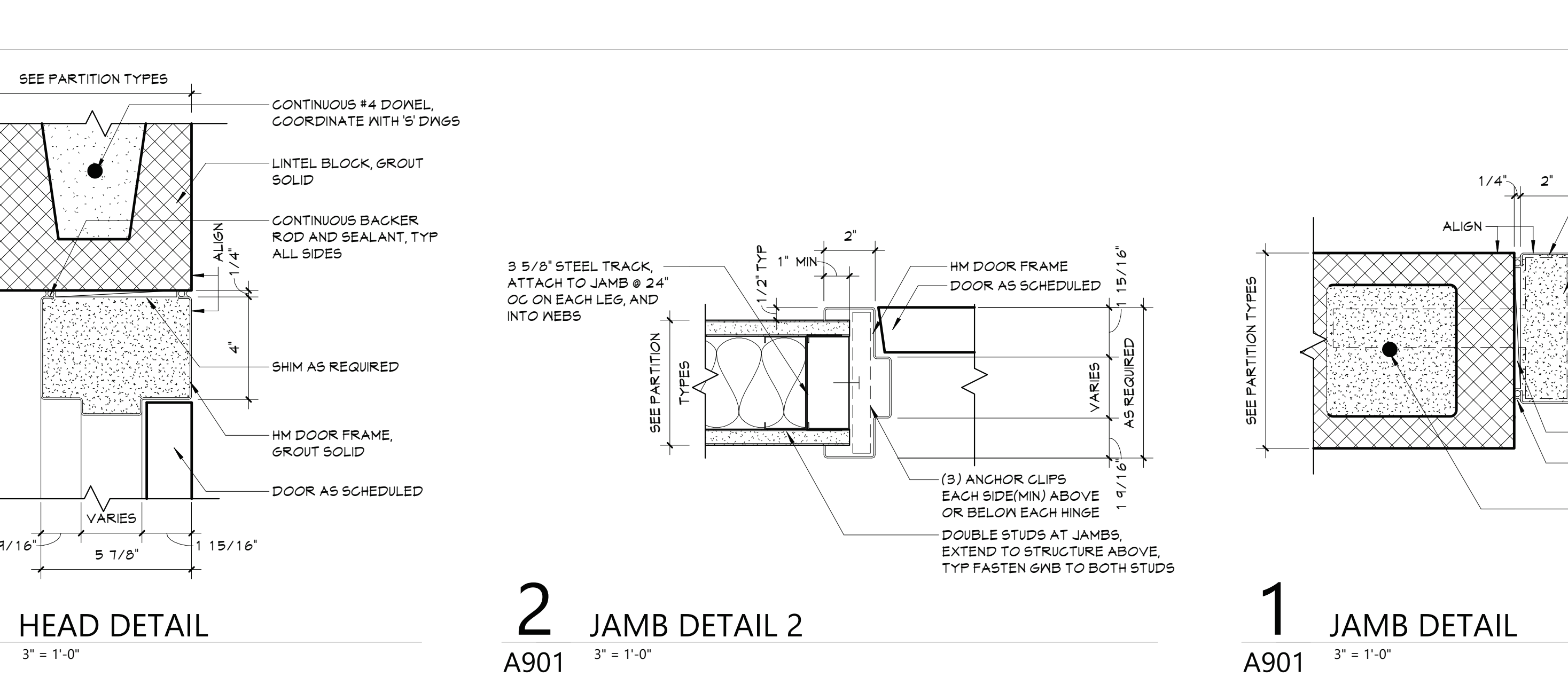
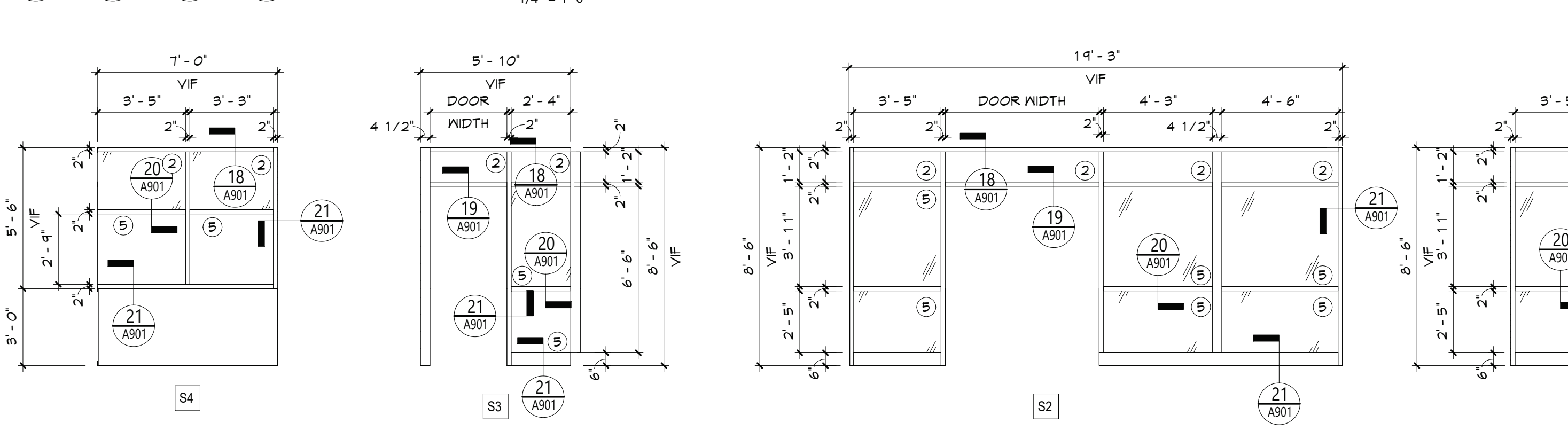
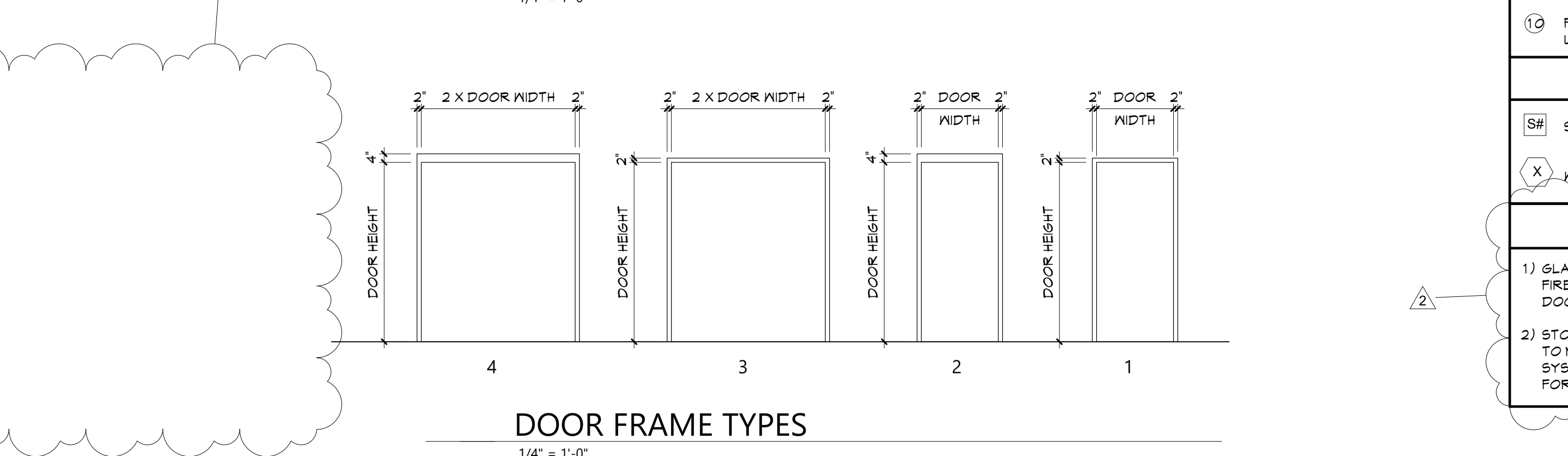
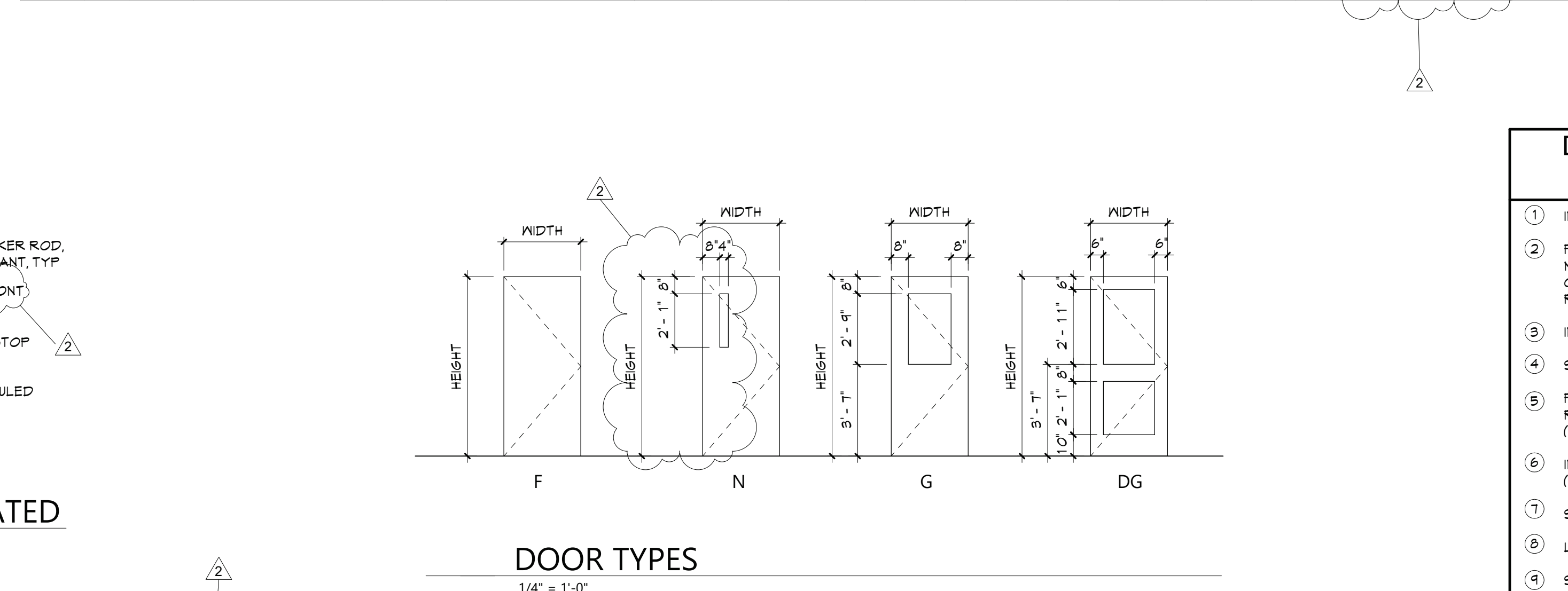
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Sheet No.
BES A112

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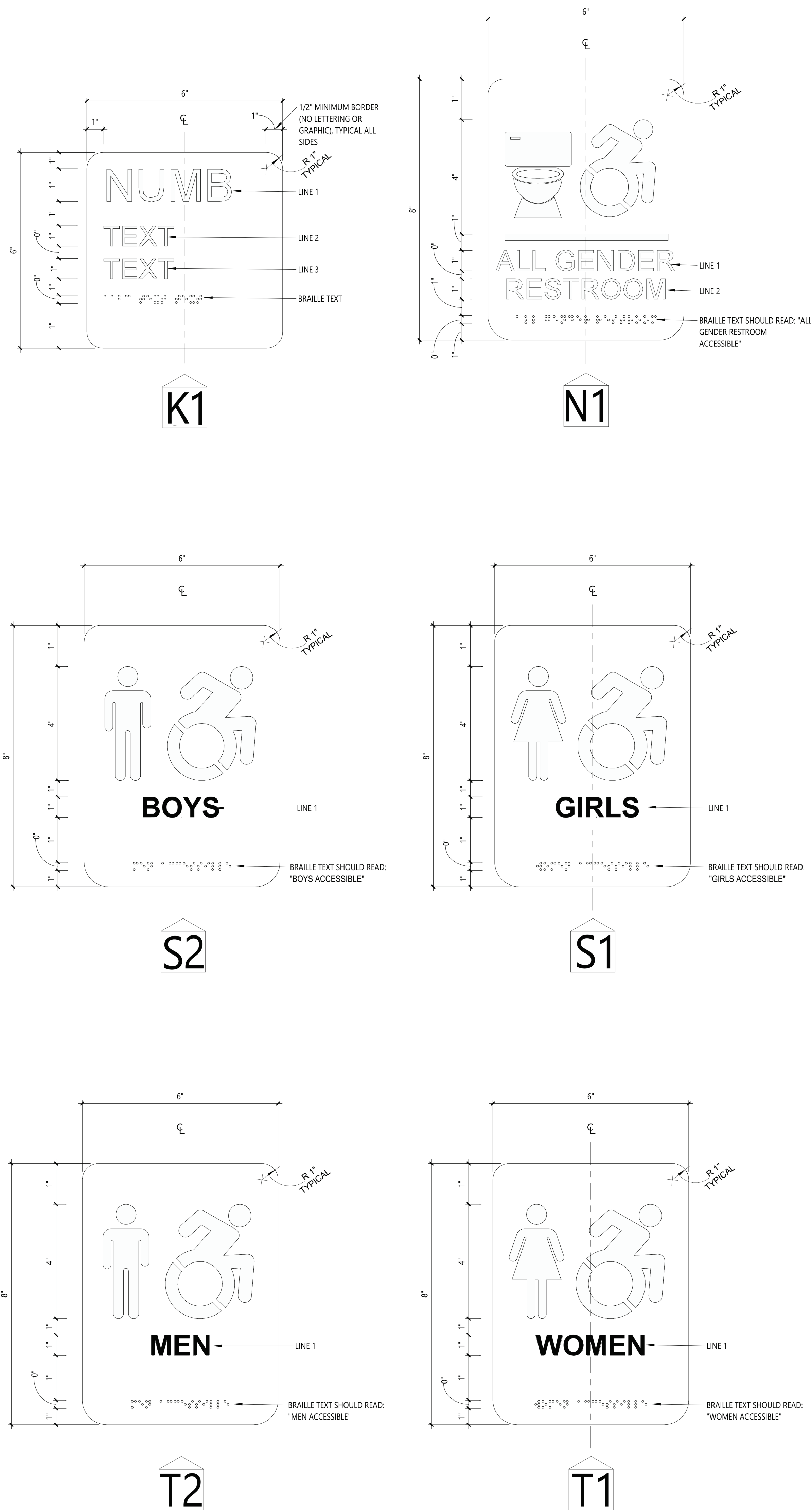
DOOR SCHEDULE																															
DOOR NUMBER	QUANTITY	DOOR										FRAME				GLAZING	HARDWARE	MAG HOLD-OPEN	ACCESS CONTROL	REMARKS	DOOR NUMBER										
		FROM						TO				WIDTH	HEIGHT	THICKNESS	TYPE							MATERIAL	FINISH	MATERIAL	FINISH	LABEL (MIN)					
121.1	1	121						NURSE'S SUITE	121A				TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT								4" FRAME HEAD	121.1	
121A	1	144B						PASSAGE	121				NURSE'S SUITE	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	HM	PT		8							4" FRAME HEAD	121A
121B	1	C100						CORRIDOR	121				NURSE'S SUITE	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	HM	PT	20	2							4" FRAME HEAD	121B
122A	122A							MAIN OFFICE	V001				SECURITY VESTIBULE	3' - 0"	7' - 0"	1 3/4"	N	ALUM	ANOD	ALUM	ANOD	20	2								122A
122AA	1	160						KINDERGARTEN	122AA				STORAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122AA
122B	1	122A						MAIN OFFICE	122B				ASSIST. PRINCIPAL	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122B
122C	1	122D						OFFICE	122C				PRINCIPAL	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122C
122C.1	1	122C						PRINCIPAL	122A				MAIN OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122C.1
122D	1	122D						OFFICE	122K				RECEPTION	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122D
122E	1	122A						MAIN OFFICE	122E				SECURITY OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122E
122F	1	122F						STORAGE	122A				MAIN OFFICE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122F
122G	1	122A						MAIN OFFICE	122G				TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122G
122J	1	122J						MTG/PT RM	144B				PASSAGE	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	122J
144B		C100						CORRIDOR	144C				PASSAGE	3' - 0"	7' - 0"	1 3/4"	N	ALUM	ANOD	ALUM	ANOD	20	2								144B
144B.1	1	122A						MAIN OFFICE	144B				PASSAGE	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	HM	PT		4							4" FRAME HEAD	144B.1
160	1	23B						CORRIDOR	160				KINDERGARTEN	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	HM	PT	20	2							4" FRAME HEAD	160
160A	1	161						KINDERGARTEN	160				KINDERGARTEN	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	HM	PT	20	2							4" FRAME HEAD	160A
161	1	161						KINDERGARTEN	23B				CORRIDOR	3' - 0"	7' - 0"	1 3/4"	N	WD	FF	HM	PT	20	2							4" FRAME HEAD	161
162	1	162						STORAGE	23B				CORRIDOR	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT	20	-							4" FRAME HEAD	162
243	1	161						KINDERGARTEN	161B				TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	243
245	1	160						KINDERGARTEN	160A				TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	245
249	23B							CORRIDOR	C100				CORRIDOR	3' - 0"	7' - 0"	1 3/4"	N	ALUM	ANOD	ALUM	ANOD	45	2							4" FRAME HEAD	249
250	1	C100						CORRIDOR	123				TOILET	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT	20	-							4" FRAME HEAD	250
374	1	161.1						STORAGE	161				KINDERGARTEN	3' - 0"	7' - 0"	1 3/4"	F	WD	FF	HM	PT									4" FRAME HEAD	374
S1		C100						CORRIDOR	NIC				STAIR	3' - 0"	7' - 0"	1 3/4"	N	ALUM	ANOD	ALUM	ANOD	90	2								S1
V001		V001						SECURITY VESTIBULE						3' - 0"	7' - 0"	1 3/4"	DG	ALUM	ANOD	ALUM	ANOD		7								V001
V001A		C100						CORRIDOR	V001				SECURITY VESTIBULE	3' - 0"	7' - 0"	1 3/4"	F	ALUM	ANOD	ALUM	ANOD	45	5								V001A



ROOM NUMBER	ROOM NAME	SIGNAGE TYPE	QUANTITY	REMARKS
202	SPECIAL ED.	K1	1	SECOND FLOOR
203	AIS READING	K1	1	SECOND FLOOR
204	5TH GRADE	K1	1	SECOND FLOOR
205	5TH GRADE	K1	1	SECOND FLOOR
206	5TH GRADE	K1	1	SECOND FLOOR
207	SPECIAL ED.	K1	1	SECOND FLOOR
209	CLASSROOM	K1	1	SECOND FLOOR
216	FACULTY ROOM	K1	1	SECOND FLOOR
218	4TH GRADE	K1	1	SECOND FLOOR
219	4TH GRADE	K1	1	SECOND FLOOR
220	4TH GRADE	K1	1	SECOND FLOOR
221	3RD GRADE	K1	1	SECOND FLOOR
222	3RD GRADE	K1	1	SECOND FLOOR
223	3RD GRADE	K1	1	SECOND FLOOR
224	AIS	K1	1	SECOND FLOOR
E200	ELEVATOR VESTIBULE	K1	1	SECOND FLOOR
S200	STORAGE	K1	1	SECOND FLOOR
S201	STORAGE	K1	1	SECOND FLOOR
S202	STORAGE	K1	1	SECOND FLOOR
T200	TOILET	N1	1	SECOND FLOOR
T201	TOILET	N1	1	SECOND FLOOR
T202	BOYS TOILET	S2	1	SECOND FLOOR
T203	GIRLS TOILET	S1	1	SECOND FLOOR

NOTES:

- 1) REFER TO PANEL SIGNAGE ELEVATIONS FOR SIGNAGE TYPES.
- 2) REFER TO SPECIFICATION SECTION 101423 - "INTERIOR PANEL SIGNAGE" FOR ADDITIONAL INFORMATION.
- 3) ALL EXISTING PANEL SIGNAGE FOR ROOMS NOTED ABOVE SHALL BE REMOVED AND REPLACED WITH NEW.
- 4) FINAL NUMBERING AND NAMING OF ROOMS TO BE DETERMINED BY OWNER DURING THE SUBMITTAL AND SHOP DRAWING REVIEW.



1 PANEL SIGNAGE ELEVATIONS

ENERGY RECOVERY VENTILATOR SCHEDULE																													
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	FRESH AIR FLOW RATE (CFM)	EXHAUST AIR FLOW RATE (CFM)	ROOM EXH. AIR (°F)				OUTSIDE AIR (°F)				SUPPLY AIR (°F)				RECOVERY EFFECTIVENESS				ELECTRICAL DATA						WEIGHT (LB)	NOTES	
					WINTER		SUMMER		WINTER		SUMMER		WINTER		SUMMER		SENSIBLE		TOTAL		MOTOR		VOLT, PHASE		Hz	MCA			MOCP
					DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	WINTER	SUMMER	WINTER	SUMMER	W	FLA	W	FLA							
ERV-1	RENEWAIRE	HE07-JRTV-D11AA-DGNTF-L	300	300	70.0	54.4	75.0	62.6	0.0	-2.0	95.0	75.0	53.8	44.1	79.4	68.0	76.8%	76.8%	75.1%	59.9%	357 (2)	5.4	120	1	60	12.2	15	218-373	FURNISH W/ MERV 8 FILTERS, ECM MOTOR, DISCONNECT SWITCH, 24" INSULATED ROOF CURB & BACKDRAFT DAMPERS.

DUCTED HOT WATER COIL SCHEDULE																		
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIRFLOW (CFM)	AIR PRESS. DROP (IN. W.C.)	EFT (°F)	LFT (°F)	CAPACITY (MBH)	E.A.T. DB (°F)	L.A.T. DB (°F)	FPD (FT)	FLOW RATE (GPM)	ROWS	FIN HEIGHT (IN)	FIN LENGTH (IN)	COIL HEIGHT (IN)	COIL LENGTH (IN)	OVERALL LENGTH (IN)	NOTES
HWC-1	TRANE	D5WB12012G0AA142EABA00A	300	0.35	180	160	11.78	53.8	90	0.02	1.18	1	12	12	13.5	13.375	26	-

INDOOR MINI-SPLIT UNIT SCHEDULE																			
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	MINI-SPLIT UNIT TYPE	AREA OF BUILDING SERVED	AIRFLOW (CFM)	COOLING			HEATING			PAIRED OUTDOOR UNIT	EXTERNAL STATIC PRESSURE (IN. W.C.)	ELECTRICAL POWER REQUIREMENTS				WEIGHT (LB)	NOTES
						CAPACITY (MBH)	EDB (°F)	EWB (°F)	CAPACITY (MBH)	EDB (°F)	EWB (°F)			VOLT.	PHASE	HZ.	W		
FCU-1	TRANE	TPLFYP008FM104A	CEILING RECESSED UNIT	NURSE'S SUITE	315	8	80.0	67.0	9	70.0	60.0	HP-1	-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-2	TRANE	TPLFYP008FM104A	CEILING RECESSED UNIT	CONFERENCE ROOM	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-3	TRANE	TPLFYP008FM104A	CEILING RECESSED UNIT	ASSISTANT PRINCIPAL	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-4	TRANE	TPLFYP012FM140A	CEILING RECESSED UNIT	MAIN OFFICE	335	12	81.0	66.0	13.5	68.0	60.0		-	208	1	60	50	31.3	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-5	TRANE	TPLFYP008FM104A	CEILING RECESSED UNIT	SECURITY OFFICE	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-6	TRANE	TPLFYP008FM104A	CEILING RECESSED UNIT	OFFICE	315	8	80.0	67.0	9	70.0	60.0		-	208	1	60	50	28.9	PROVIDE W/ BUILT IN CONDENSATE PUMP
FCU-7	TRANE	TPLFYP012FM140A	CEILING RECESSED UNIT	PRINCIPAL	335	12	81.0	66.0	13.5	68.0	60.0		-	208	1	60	50	31.3	PROVIDE W/ BUILT IN CONDENSATE PUMP

AIR-COOLED HEAT PUMP SCHEDULE																				
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	INDOOR UNITS SERVED	COMPRESSOR TYPE	NOM. COOL CAPACITY (MBH)	NOM. HEAT CAPACITY (MBH)	OUTDOOR OPERATING TEMP. RANGE (°F)		AHR1 EFFICIENCY RATINGS			REFRIGERANT	SOUND PRESSURE LEVEL COOLING/ HEATING (SBA)	ELECTRICAL POWER REQUIREMENTS					WEIGHT (LB)	NOTES
							COOLING	HEATING	EER	IEER	COP			VOLT	PHASE	HZ	MCA	MOCP		
HP-1	TRANE	TUHYH0723AN40AN	FCU-1 THRU FCU-7	INVERTER SCROLL HEMETIC	72	80	23 TO 126	-22 TO 60	13.1	27.2	4.39	R410A	55/57	208	3	60	38	60	609	FURNISH W/ REQUIRED PIPING ACCESSORIES

NOTES:
 1. FAN GUARD FROM TRANE IS TO BE USED IN COMBINATION WITH THIS DEVICE, MUST BE MOUNTED 12" OF GROUND OR 12" ABOVE HIGHEST AVERAGE SNOW DEPTH, WHICHEVER IS GREATER

AIR GRILLE/DIFFUSER SCHEDULE														
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AIR DEVICE TYPE	AIRFLOW (CFM)		MAX AIR PRESS. DROP (IN. W.C.)	MOUNTING	PANEL/FRAME SIZE (IN.)	NECK SIZE (IN.)	MAX NC	DAMPER	FINISH	NOTES	
				MIN.	MAX.									
D-1	KRUEGER	PLQ-8-F23-24x24-PR10-IB-44	SQUARE PLAQUE FACE DIFFUSER	50	175	0.10	LAY-IN	24"x24"	6"Ø	20	OBD	WHITE	PROVIDE W/ INSULATED BLANKET ON BACKPAN	
D-2	KRUEGER	PLQ-8-F23-24x24-PR10-IB-44	SQUARE PLAQUE FACE DIFFUSER	176	300	0.10	LAY-IN	24"x24"	8"Ø	20	OBD	WHITE	PROVIDE W/ INSULATED BLANKET ON BACKPAN	
R-1	KRUEGER	S80P-20x20-F23-24x24-00-00-00-44	PERFORATED FACE RETURN GRILLE	0	1,600	0.10	LAY-IN	24"x24"	20"x20"	25	-	WHITE	FURNISH & INSTALL FULL-SIZE SHEET METAL PLENUM BOX ON REAR OF GRILLE, PAINT INSIDE FLAT BLACK	

FINNED TUBE SCHEDULE														
EQUIPMENT TAG	MANUFACTURER (OR ACCEPT. EQUAL)	MODEL	AVG WATER TEMP (°F)	BTU/FT	ELEMENT TUBE SIZE (IN)	ELEMENT TUBE MATERIAL	ELEMENT FIN SIZE (IN)	FINS PER FT	ACTIVE FIN LENGTH	ROW QUANTITY	ENCLOSURE MATERIAL	FINISH	COLOR	NOTES
FT-1	STERLING	JVB-S 24	150	860	3/4	COPPER	4-1/4 X 3-5/8	40	(2) 7/FT SECTIONS	1	18 GAUGE STEEL	STANDARD PRIME FINISH	SELECTED BY ARCHITECT	PROVIDE W/ REMOVE 12" ACCESS PANEL AT EACH END PROVIDE W/ FULL SIZE BACK PLATE AND MOUNTING BRACKETS

FAN SCHEDULE												
EQUIPMENT TAG	MANUFACTURER	MODEL	SERVICE	FAN C.F.M.	R.P.M.	EXTERNAL STATIC PRESSURE INCH H ₂ O	MOTOR					REMARKS
							POWER (HP)	FLA	VOLT.	PHASE	HZ.	
EF-1	GREENHECK	G-133-VG	CLASSROOM	500 (1,500)	818	0.25	1/4	3.7	120	1	60	PROVIDE W/ FAN SPEED CONTROLLER, 24" HIGH INSULATED ROOF CURB & BACKDRAFT DAMPER
EF-2	GREENHECK	G-133-VG	CLASSROOM	500 (1,500)	818	0.25	1/4	3.7	120	1	60	PROVIDE W/ FAN SPEED CONTROLLER, 24" HIGH INSULATED ROOF CURB & BACKDRAFT DAMPER
EF-3	GREENHECK	G-090-VG	TOILET ROOM	150	1,336	0.25	1/4	2.6	120	1	60	PROVIDE W/ FAN SPEED CONTROLLER, 24" HIGH INSULATED ROOF CURB & BACKDRAFT DAMPER

VENTILATION SCHEDULE														
SYSTEM	SPACE SERVED	SPACE TYPE	SPACE AREA (SQ. FT.)	OCCUPANTS PER 1000 SQ. FT.	# OF OCCUPANTS (NOTE 1)	CFM PER PERSON	CFM PER SQ. FT.	CALCULATED VENTILATION RATE (CFM)	ZONE AIR DISTRIBUTION EFFECTIVENESS	ADJUSTED VENTILATION RATE (CFM)	PROVIDED VENTILATION RATE (CFM)	EA CFM PER FIXTURE	EA CFM PER SQ. FT.	MIN. EA PROVIDED (CFM)
ERV-1	NURSE'S SUITE 121	OFFICE/ SICKROOM	435	10	5	10	0.18	128	0.8	180	160	-	-	-
	MGT/PT ROOM 122J	CONFERENCE ROOM	194	10	50	5	0.06	62	0.8	77	80	-	-	-
	ASSISTENT PRINCIPAL'S 122B	OFFICE	204	5	2	5	0.06	22	0.8	28	30	-	-	-
	MAIN OFFICE 122A	RECEPTION AREA	522	30	16	5	0.06	111	0.8	139	140	-	-	-
	SECURITY OFFICE 122E	OFFICE	73	5	1	5	0.06	9	0.8	12	15	-	-	-
	OFFICE 122D	OFFICE	114	5	1	5	0.06	12	0.8	15	15	-	-	-
	PRINCIPALS' OFFICE 122C	OFFICE	266	5	2	5	0.06	26	0.8	32	35	-	-	-
EXISTING RTU	KINDERGARTEN 160	CLASSROOM (AGES 5-8)	876	25	30	10	0.12	325	0.8	507	510	-	-	-
	KINDERGARTEN 161	CLASSROOM (AGES 5-8)	872	25	30	10	0.12	325	0.8	507	510	-	-	-
	COUNSELOR	OFFICE	198	5	1	5	0.06	17	0.8	21	25	-	-	-
	COPY ROOM	COPY, PRINTING	299	4	2	5	0.06	28	0.8	35	35	-	-	-

NOTES:
 1. QUANTITY OF OCCUPANTS FOR STANDARD CLASSROOMS ARE 25 TO 30 OCCUPANTS BASED ON NYSED STATISTICAL DATA. ALL OTHER OCCUPANCIES ARE BASED UPON OCCUPANT DENSITIES FROM THE 2015 INTERNATIONAL MECHANICAL CODE

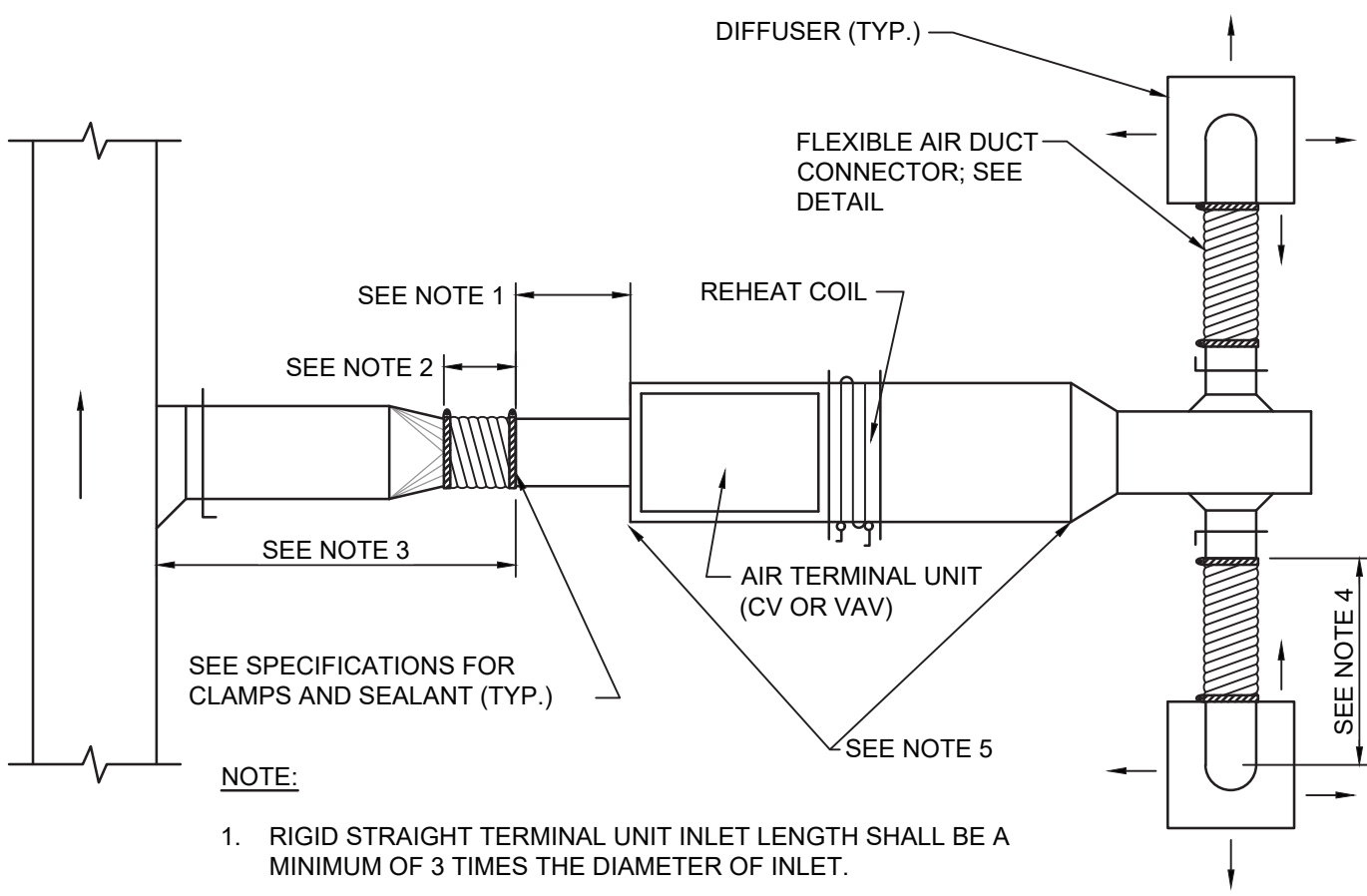
AIR TERMINAL UNIT SCHEDULE																
EQUIPMENT TAG	MANUFACTURER	MODEL	MAXIMUM PRIMARY CFM	MINIMUM PRIMARY CFM	SENSOR SP IN. W.C.	HYDRONIC REHEAT COIL										NOTES
						HEAT CFM	EAT DEG F	LAT DEG F	CAPACITY MBH	EWT DEG F	LWT DEG F	COIL APD FT. W.G.	WATER GPM	COIL ROWS	WPD FT. W.G.	
VAV-1	KRUEGER	LMHS	1,500	510	-	1,125	55	90	42.5	180	160	0.23	4.0	2	1.17	1-4
VAV-2	KRUEGER	LMHS	1,500	510	-	1,125	55	90	42.5	180	160	0.23	4.0	2	1.17	1-4
1. PROVIDE WITH HOT WATER REHEAT COIL OF SIZE & CAPACITY SPECIFIED 2. PROVIDE W/ FACTORY INSTALLED AIRFLOW MEASURING SENSOR 3. PROVIDE W/ BAGNET COMPATIBLE DDC CONTROLLER 4. PROVIDE W/ FACTORY INSTALLED TOGGLE DISCONNECT SWITCH																

1. PROVIDE WITH HOT WATER REHEAT COIL OF SIZE & CAPACITY SPECIFIED
 2. PROVIDE W/ FACTORY INSTALLED AIRFLOW MEASURING SENSOR
 3. PROVIDE W/ BACNET COMPATIBLE DDC CONTROLLER
 4. PROVIDE W/ FACTORY INSTALLED TOGGLE DISCONNECT SWITCH

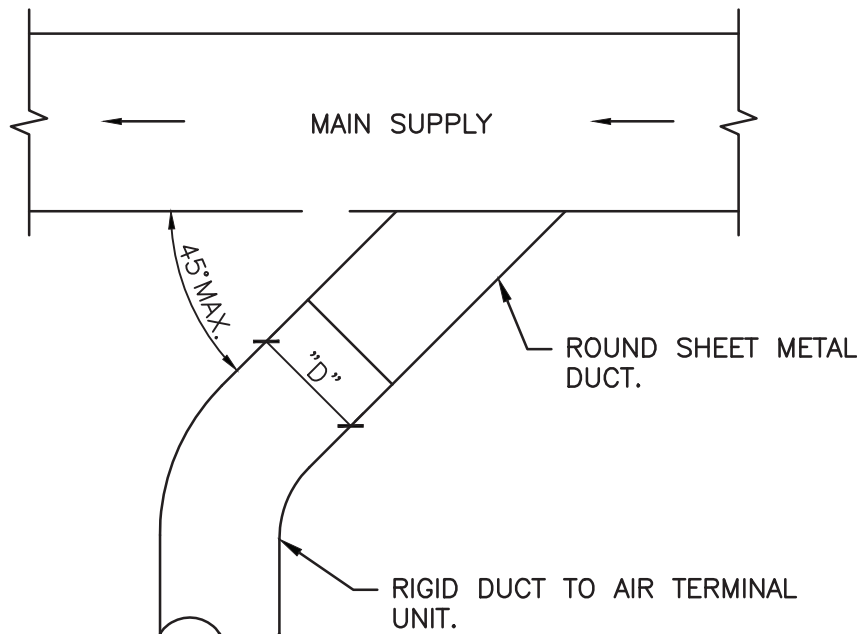
ENERGY RECOVERY VENTILATOR, HOT WATER COIL & VRF SYSTEM FURNISHED BY OWNER, INSTALLED BY CONTRACTOR. CONTRACTOR IS RESPONSIBLE TO RECEIVE THE EQUIPMENT DELIVERY AT THE PROJECT SITE, MOVE EQUIPMENT FROM TRUCK(S) TO A DESIGNATED STORAGE LOCATION ON THE SITE & RIG THE UNIT INTO THE FINAL INSTALLATION LOCATION. CONTRACTOR IS TO PROVIDE ALL ASSOCIATED COMPONENTS, I.E., DUCTWORK, PIPING, CONTROLS, ACCESSORIES, ETC. UNLESS OTHERWISE NOTED IN THE PROJECT DOCUMENTS; REFER TO FRONT END DOCUMENTS FOR ADDITIONAL INFORMATION

VRF System Notes:

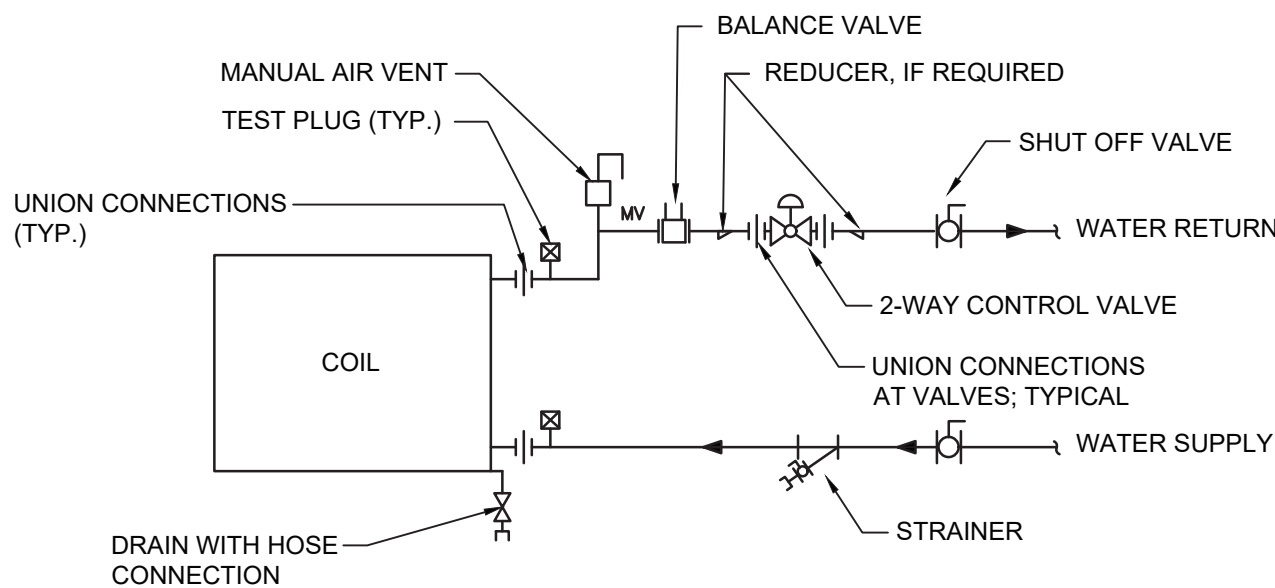
- WIRED 7 DAY PROGRAMMABLE THERMOSTAT SHALL BE FURNISHED BY OWNER FOR EACH INDOOR UNIT. THERMOSTATS SHIP LOOSE FOR FIELD INSTALLATION AND WIRING BY THE MECHANICAL CONTRACTOR.
- OWNER TO FURNISH CENTRAL CONTROLLER FOR LOCAL SET POINT CONTROL AND SYSTEM VIEWING. CONTROLLER TO BE INSTALLED AND WIRING BY MECHANICAL CONTRACTOR. 24W POWER BY ELECTRICAL CONTRACTOR.
- DISCONNECT SWITCHES FOR CONDENSING UNITS AND INDOOR UNITS SHALL BE FURNISHED BY THE OWNER AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- EXTERNAL SUPPORTS FOR INDOOR AND CONDENSING UNITS SHALL BE FURNISHED BY OWNER AND INSTALLED BY THE MECHANICAL CONTRACTOR.
- FILTER RACK AND 2" PLEATED MERV-13 FILTERS FOR DUCTED UNITS SHALL FURNISHED BY OWNER AND INSTALLED BY THE MECHANICAL CONTRACTOR. FILTER RACK SHALL BE GALVANIZED STEEL, FULLY INSULATED & FACTORY ASSEMBLED. TYPICAL OF FLT-H SERIES OR EQUAL.
- CONDENSATE PUMPS SHIP FOR FIELD INSTALLATION BY MECHANICAL CONTRACTOR FOR WALL MOUNTED UNITS. DUCTED UNITS FURNISHED WITH FACTORY MOUNTED CONDENSATE PUMP. MECHANICAL CONTRACTOR TO PROVIDE CONDENSATE PIPING FROM ALL UNITS TO SANITARY DRAIN. FIELD VERIFY EXACT ROUTING AND TERMINATION POINT IN BUILDING.
- PROVIDE REFRIGERANT ISOLATION VALVES ON LIQUID AND GAS LINES AT EVERY FAN COIL UNIT.



1
M002
VAV Air Terminal Unit Duct Connection Detail
N.T.S.



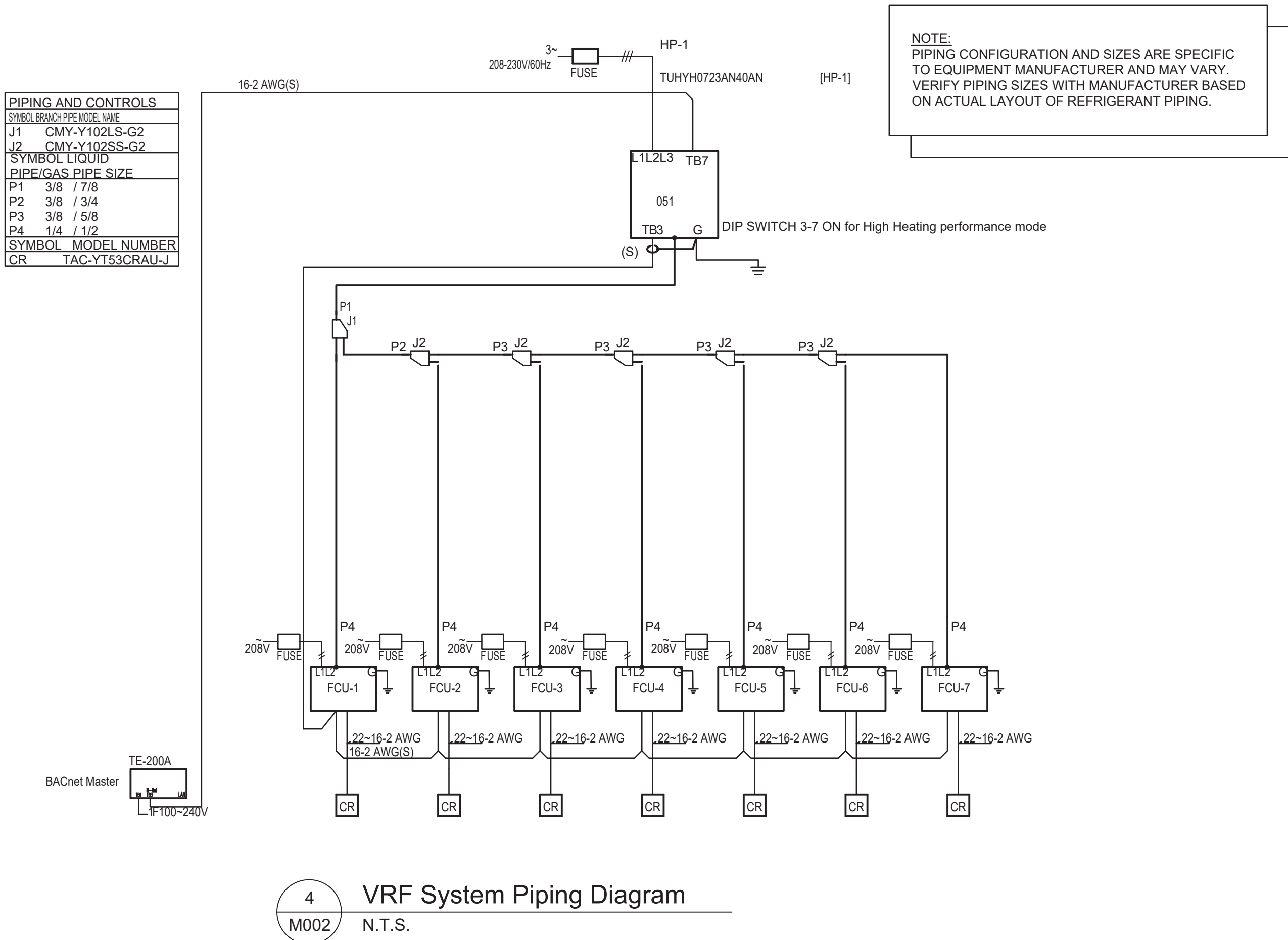
3
M002
Supply Duct Takeoff for Air Terminal Unit
N.T.S.









2
M002
Coil Piping Connection Detail
Scale: None

DDC Temperature Control Notes:

- HVAC CONTROLS SHALL BE FURNISHED & INSTALLED BY THE OWNER TO MATCH THE EXISTING BUILDING AUTOMATION SYSTEM IN EACH BUILDING (SIEMENS AT BEREA ELEMENTARY). ALL HARDWARE, WIRING AND PROGRAMMING TO BE PROVIDED BY OWNER. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNERS VENDOR THROUGHOUT THE PROJECT TO SUPPORT INSTALLATION, TESTING AND COMMISSIONING. MECHANICAL CONTRACTOR TO INSTALL ALL DEVICES MOUNTED IN OR ON THE PIPING AND/OR DUCTWORK INCLUDING BUT NOT LIMITED TO HYDRONIC CONTROL VALVES, TEMPERATURE SENSORS, FLOW SENSORS, ETC. MECHANICAL CONTRACTOR TO PROVIDE ALL NECESSARY PORTS/THERMOWELLS FOR SENSORS, GAUGES, ETC. COORDINATE WITH OWNERS VENDOR FOR QUANTITY AND LOCATIONS.
- OWNER SHALL EXPAND EXISTING BUILDING AUTOMATION SYSTEM TO PROVIDE THE CONTROL SEQUENCES SPECIFIED ON THE DRAWINGS AND IN THE SPECIFICATIONS. THE SYSTEM SHALL PROVIDE CONTROL AND MONITORING OF THE EQUIPMENT INDICATED.
- OWNER SHALL PROVIDE CONTROLLERS AND COMMUNICATIONS INFRASTRUCTURE TO MATCH EXISTING CAMPUS-WIDE BUILDING AUTOMATION SYSTEM. PROVIDE SEAMLESS INTEGRATION WITH EXISTING CONTROL NETWORK AND USER INTERFACES. NETWORK GATEWAYS AND PROTOCOL INTERFACE EQUIPMENT ARE NOT ACCEPTABLE UNLESS OTHERWISE NOTED.
- OWNER SHALL PROVIDE INSTRUMENTATION, SENSORS, VALVES, DAMPERS, ACTUATORS AND WIRING AS REQUIRED TO PROVIDE SPECIFIED OPERATING SEQUENCES.
- OWNER SHALL MODIFY EXISTING GRAPHIC USER INTERFACES TO INCLUDE ALL EQUIPMENT AND SYSTEMS INCLUDED IN THIS PROJECT.
- OWNER SHALL REPLACE THE EXISTING BAS SERVER HARDWARE AND UPGRADE THE SOFTWARE TO THE LATEST VERSION OF WEB-ENABLED GRAPHICAL USER INTERFACE WITH A SEAMLESS INTEGRATION OF THE NEW AND EXISTING CONTROL POINTS.
- OWNER SHALL BE RESPONSIBLE FOR POWER THAT IS NOT SHOWN ON THE ELECTRICAL DRAWINGS, TO CONTROLS FURNISHED BY THIS CONTRACTOR. IF POWER CIRCUITS ARE SHOWN ON THE ELECTRICAL DRAWINGS, OWNER SHALL CONTINUE THE POWER RUN TO THE CONTROL DEVICE. IF POWER CIRCUITS ARE NOT SHOWN, OWNER SHALL PROVIDE BREAKERS AT DISTRIBUTION PANELS FOR POWER TO CONTROLS AND PROVIDE POWER FROM THE DISTRIBUTION PANEL TO THE CONTROL DEVICES.
- OWNER SHALL FURNISH & INSTALL ALL REQUIRED END DEVICES, POWER SUPPLY, LOW VOLTAGE TRANSFORMERS, CONTROL WIRING & CONDUITS, ETC. FOR A COMPLETE & OPERATIONAL DDC CONTROL SYSTEM.
- NEW WIRING & CONDUITS SHALL BE RUN CONCEALED ABOVE CEILING. ALL EXPOSED WIRING & CONDUITS SHALL BE RUN CONCEALED IN EMT IN UTILITY SPACES AND WIREMOLD IN FINISHED AREAS.
- OWNER TO FIELD INSTALL SENSORS, CONTROLLERS, ETC. WHICH ARE NOT FACTORY-INSTALLED BY EQUIPMENT MANUFACTURERS.
- ANY EQUIPMENT FURNISHED WITH FACTORY CONTROLS SHALL BE PROVIDED WITH BACNET MSTP INTEGRATION CAPABILITIES AND INCLUDE ON-SITE FACTORY CONTROLS INTEGRATION START-UP IN COORDINATION WITH OWNER'S BUILDING AUTOMATION SYSTEM.



LIGHTING FIXTURE SCHEDULE										
TAG	SYMBOL	MANUFACTURER & MODEL	TYPE	VOLTAGE	# OF LAMPS	LAMP WATTS	FIXTURE WATTS	MOUNTING	SIZE	NOTES
A		HE WILLIAMS RECESSED DIRECT/INDIRECT DIG-S22-L32/840-AD-DIM-UNV	LED	120	1	25.8	25.8	RECESSED	2'x2'	4000K COLOR TEMPERATURE
B-EM		HE WILLIAMS VOLTAIRE ARCHITECTURAL WALL PACK VWPH-L30/740-T3-DB2-SDGL-EM/10WC-DIM-UNV	LED	120	1	36	36	SURFACE WALL MOUNT	12"x12"	VANDAL RESISTANT; 4000K COLOR TEMPERATURE; W/ LED EMERGENCY 90 MINUTE LOW TEMPERATURE BATTERY BACKUP; UL 924 LISTED FIXTURE
C		HE WILLIAMS 6" LED DOWNLIGHT - ROUND 6DR-TL-L15/840-DIM-UNV-LW-OF-WH-R	LED	120	1	13.8	13.8	RECESSED	6"Ø	4000K COLOR TEMPERATURE; REMODEL KIT
-		HE WILLIAMS LED EMERGENCY LIGHT EMER/LED-WHT-SDT-D	LED	120	2	1.0	2.0	UNIVERSAL	-	UL 924 LISTED FIXTURE; 90-MINUTE BATTERY BACKUP
-		HE WILLIAMS LED EXIT & EMERGENCY LIGHT EXIT/EM/LED-R-WHT-RC-SDT-D	LED	120	2	1.5	3.4	UNIVERSAL	-	UL 924 LISTED FIXTURE; 90-MINUTE BATTERY BACKUP; PROVIDE W/ REMOTE HEAD MODEL WETRHL-T-WHT-HL-MV
-		HE WILLIAMS LED EXIT LIGHT EXIT-R-EM-WHT-SDT-D	LED	120	1	3.8	3.8	UNIVERSAL	-	90-MINUTE BATTERY BACKUP

120/208V 3Ø 4W+G BUS RATING: 225A										MLO
CONNECTED LOAD	CONDUCTORS	CKT. BREAKER CAPACITY	POSITION	L1 KVA	L2 KVA	L3 KVA	POSITION	CKT. BREAKER CAPACITY	CONDUCTORS	CONNECTED LOAD
EXISTING LOAD	EXISTING WIRING	20	1	-	-	-	2	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	3	-	-	-	4	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	5	-	-	-	6	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	7	-	-	-	8	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	9	-	-	-	10	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	11	-	-	-	12	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	13	-	-	-	14	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	15	-	-	-	16	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	17	-	-	-	18	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	19	-	-	-	20	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	21	-	-	-	22	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	23	-	-	-	24	20	EXISTING WIRING	EXISTING LOAD
ACCESS CONTROL	(2) #12 CU & (1) #12 GND.	20	25	-	-	-	26	20	(2) #12 CU & (1) #12 GND.	BATHROOM RECEPTACLES
DOOR OPERATORS	(2) #12 CU & (1) #12 GND.	20	27	-	-	-	28	20	(2) #12 CU & (1) #12 GND.	WATER FOUNTAIN
REFRIGERATOR	(2) #12 CU & (1) #12 GND.	20	29	-	-	-	30	20	(2) #12 CU & (1) #12 GND.	KITCHEN RECEPTACLES
SPARE	-	20	31	-	-	-	32	20	-	SPARE
SPARE	-	20	33	-	-	-	34	20	-	SPARE
SPARE	-	20	35	-	-	-	36	20	(2) #12 CU & (1) #12 GND.	KITCHEN RECEPTACLES
KITCHEN RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	37	-	-	-	38	20	-	SPARE
EXHAUST FANS	(2) #12 CU & (1) #12 GND.	20	39	-	-	-	40	20	(2) #12 CU & (1) #12 GND.	BATHROOM RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	41	-	-	-	42	20	(2) #12 CU & (1) #12 GND.	VAV BOXES
EXISTING PANEL	-	-	-	-	-	-	-	-	-	-
- KVA TOTAL										

- PROVIDE NEW CIRCUIT BREAKERS FOR ALL NEW OR MODIFIED CIRCUITS. BREAKERS SHALL MATCH EXISTING TYPE AND RATING
- PANEL SCHEDULE SHOWN BASED ON EXISTING DIRECTORY. CONTRACTOR SHALL VERIFY IN FIELD & ADJUST CIRCUIT LAYOUT AS NEEDED BASED ON AVAILABLE POSITIONS













1 Panelboard C Section 1
E001 Scale: None

120/208V 3Ø 4W+G BUS RATING: 200A 200A MAIN CIRCUIT BREAKER										
CONNECTED LOAD	CONDUCTORS	CKT. BREAKER CAPACITY	POSITION	L1 KVA	L2 KVA	L3 KVA	POSITION	CKT. BREAKER CAPACITY	CONDUCTORS	CONNECTED LOAD
EXISTING LOAD	EXISTING WIRING	20	1	-	-	-	2	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	3	-	-	-	4	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	5	-	-	-	6	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	7	-	-	-	8	20	EXISTING WIRING	EXISTING LOAD
EXISTING LOAD	EXISTING WIRING	20	9	-	-	-	10	20	EXISTING WIRING	EXISTING LOAD
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	11	-	-	-	12	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	13	-	-	-	14	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	15	-	-	-	16	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	17	-	-	-	18	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	19	-	-	-	20	20	(2) #12 CU & (1) #12 GND.	RECEPTACLES
RECEPTACLES	(2) #12 CU & (1) #12 GND.	20	21	-	-	-	22	-	-	SPACE
SPACE	-	-	23	-	-	-	24	-	-	SPACE
SPACE	-	-	25	-	-	-	26	-	-	SPACE
SPACE	-	-	27	-	-	-	28	-	-	SPACE
SPACE	-	-	29	-	-	-	30	-	-	SPACE
SPACE	-	-	31	-	-	-	32	-	-	SPACE
SPACE	-	-	33	-	-	-	34	-	-	SPACE
SPACE	-	-	35	-	-	-	36	-	-	SPACE
SPACE	-	-	37	-	-	-	38	-	-	SPACE
SPACE	-	-	39	-	-	-	40	-	-	SPACE
SPACE	-	-	41	-	-	-	42	-	-	SPACE
EXISTING SIEMENS S1 PANEL	-	-	-	-	-	-	-	-	-	-
- KVA TOTAL										









- PROVIDE NEW CIRCUIT BREAKERS FOR ALL NEW OR MODIFIED CIRCUITS. BREAKERS SHALL MATCH EXISTING TYPE AND RATING
- PANEL SCHEDULE SHOWN BASED ON EXISTING DIRECTORY. CONTRACTOR SHALL VERIFY IN FIELD & ADJUST CIRCUIT LAYOUT AS NEEDED BASED ON AVAILABLE POSITIONS

3 Existing Panelboard CP-2
E001 Scale: None































FIRE ALARM LEGEND:

-  HORN/STROBE DEVICE, ONE ASSEMBLY; MTD. 80" A.F.F. UNLESS OTHERWISE NOTED; 15 CANDELA UNLESS OTHERWISE NOTED
-  STROBE DEVICE; MTD. 80" A.F.F. UNLESS OTHERWISE NOTED; 15 CANDELA UNLESS OTHERWISE NOTED
-  MANUAL PULL STATION; MTD. 48" A.F.F.
-  WATER FLOW SWITCH
-  VALVE TAMPER SWITCH
-  DETECTOR; LETTER INDICATES AS FOLLOWS:
BLANK = SMOKE DETECTOR
P = PHOTOELECTRIC SMOKE
M = MULTIPLE STATION SMOKE ALARM
D = PHOTOELECTRIC DUCT SMOKE DETECTOR
FSD = DUCT SMOKE DETECTOR FOR FIRE SMOKE DAMPER
-  RATE OF RISE HEAT DETECTOR; 135°F
-  CARBON MONOXIDE DETECTOR; MTD. 60" A.F.F.
-  ADDRESSABLE FIRE ALARM CONTROL PANEL
-  FIRE ALARM ANNUNCIATOR PANEL
-  REMOTE TEST SWITCH & LED FOR DUCT SMOKE DETECTORS
-  FIRE ALARM RELAY

SECURITY LEGEND:

-  PANIC BUTTON - 18/4 SHIELDED
-  INTERCOM
-  DOOR RELEASE BUTTON - 16/2 SHIELDED
-  WORKSTATION FOR CARD ACCESS & VIDEO SYSTEM
-  CARD READER - 22/6 SHIELDED
-  REQUEST TO EXIT - 18/4 SHIELDED
-  MAGNETIC DOOR CONTACT - 16/2 SHIELDED
-  ELECTRIC LOCK - 16/2 SHIELDED

ELECTRICAL LEGEND:

-  MOTOR
-  EARTH GROUND
-  JUNCTION BOX
-  EMERGENCY POWER OFF BUTTON
-  FUSE WITH RATING
-  MOLDED CASE CIRCUIT BREAKER
-  DISCONNECT SWITCH, FUSED
-  DISCONNECT SWITCH, UNFUSED
-  STARTER, COMBINATION WITH DISCONNECT SWITCH
-  STARTER OR MOTOR CONTROLLER
-  METER
-  20A 120V DUPLEX CEILING MOUNTED RECEPTACLE
-  20A 120V DUPLEX WALL MOUNTED RECEPTACLE; 18" A.F.F. UNLESS OTHERWISE NOTED
-  20A 120V DUPLEX WALL MOUNTED RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER
-  20A 120V QUADRAPLEX RECEPTACLE
-  WALL MOUNTED SPECIAL PURPOSE RECEPTACLE
-  20A 120V WALL MOUNTED USB CHARGER RECEPTACLE TYPICAL OF HUBBELL USB20X OR ACCEPTABLE EQUAL
-  FLOOR MOUNTED BOX W/ DUPLEX RECEPTACLE; FLUSH MOUNTED
-  FLOOR MOUNTED BOX W/ DUPLEX RECEPTACLE & 2 PORT ETHERNET OUTLET; FLUSH MOUNTED
-  FLOOR MOUNTED BOX W/ QUAD RECEPTACLE & 2 PORT ETHERNET OUTLET; FLUSH MOUNTED
-  WALL PHONE OUTLET MTD. 48" A.F.F.; 3/4" EMT CDT. IN WALL TO ABOVE CEILING; PROVIDE 1 PORT ETHERNET WALL PLATE; PROVIDE (1) CAT 6E CABLES FROM WALL PLATE TO NEAREST IT CLOSET
-  WALL BOX FOR TELEVISION CONNECTION; 1-1/4" EMT CDT. IN WALL TO ABOVE CEILING W/ PULL CORD
-  TELEPHONE/DATA COMMUNICATION BOX W/ (2) 3/4" EMT CDT. IN WALL TO ABOVE CEILING; PROVIDE 2 PORT ETHERNET WALL PLATE; GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN; NOT SHOWN
-  BRANCH CIRCUIT HOMERUN; LINES INDICATE NUMBER OF CIRCUITS, NEUTRAL, AND SWITCH LEG CONDUCTORS. ONE SEPARATE GROUNDING CONDUCTOR SHALL BE PROVIDED FOR EACH HOMERUN; NOT SHOWN
-  SWITCH
BLANK = SINGLE POLE
3 = THREE-WAY
D = DIMMER
P = WITH PILOT LIGHT
T = TIMER OPERATED
X = EXPLOSION PROOF
-  DUAL TECHNOLOGY OCCUPANCY SENSOR
-  DAYLIGHT SENSOR
-  MULTIMEDIA BOX. PROVIDE DEVICE BOX AT 60" ABOVE FINISHED FLOOR WITH (2) DUPLEX RECEPTACLES & (2) CAT6E PORTS. PROVIDE FACEPLATES AND (2) 1-1/4" CONDUITS STUBBED ABOVE CEILING. (1) W/ CAT6E CABLES RUN TO NEAREST IT CLOSET & (1) W/ PULL CORD FOR FUTURE HDMI. RECESS MOUNT BOX TYPICAL OF WIREMOLD EVOLUTION SERIES WITH CONCEALED CONDUITS IN EXISTING FRAMED WALLS AND ALL NEW WALLS. PROVIDE SURFACE MOUNT BOXES WITH DUAL CHANNEL SURFACE MOUNT RACEWAY (LEGRAUD WIREMOLD 5400 SERIES) WHERE INSTALLED ON EXISTING MASONRY WALLS.
-  WIRELESS ACCESS POINT PROVIDED BY OWNER; CONTRACTOR TO PROVIDE CAT6E CABLE AT CEILING DEVICE & RUN CABLEING TO NEAREST DATA CLOSET
-  COMBINATION WALL MOUNTED CLOCK/SPEAKER UNIT PROVIDED BY OWNER. CONTRACTOR TO PROVIDE CAT6E CABLE TO DEVICE & RUN CABLEING TO NEAREST DATA CLOSET

- WIRELESS ACCESS POINT PROVIDED BY OWNER; CONTRACTOR TO PROVIDE CAT6E CABLE AT CEILING DEVICE & RUN CABLEING TO NEAREST DATA CLOSET
- COMBINATION WALL MOUNTED CLOCK/SPEAKER UNIT PROVIDED BY OWNER. CONTRACTOR TO PROVIDE CAT6E CABLE TO DEVICE & RUN CABLEING TO NEAREST DATA CLOSET

ELECTRICAL NOTES:

- ALL MATERIALS AND EQUIPMENT ARE TO BE NEW, UNUSED, AND FREE FROM DEFECTS OF ANY KIND. THE BASIS OF QUALITY SHALL BE THE LATEST REVISION OF ASTM, ANSI, OR OTHER ACCEPTABLE STANDARDS.
- THESE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE GENERAL ARRANGEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO HAVE REVIEWED THE SITE FOR HIS WORK PRIOR TO HAVING SUBMITTED HIS PROPOSAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CONDITIONS FOUND DURING THE COURSE OF THE CONTRACT.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ALL OTHER TRADES.
- ALL WORK INCLUDING LABOR AND MATERIALS SHALL BE FULLY GUARANTEED FOR ONE (1) YEAR FROM THE DATE OF PAYMENT AND FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
- ALL CUTTING, PATCHING, FIRE-STOPPING, AND SURFACE RESTORATION IN CONNECTION WITH THIS TRADE SHALL BE COMPLETED BY THIS CONTRACTOR.
- A MINIMUM OF FOUR (4) COPIES OF SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO ORDERING AND INSTALLATION OF THE EQUIPMENT AND/OR MATERIALS. BY SUBMITTING SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT ACTUAL FIELD CONDITIONS ARE VERIFIED BY HIM AND ARE REFLECTED ON HIS SUBMITTALS.
- THIS CONTRACTOR SHALL PAY ALL FEES, GIVE ALL NOTICES, FILE ALL NECESSARY DRAWINGS, AND OBTAIN ALL PERMITS, INSPECTIONS AND CERTIFICATES OF APPROVAL REQUIRED IN CONNECTION WITH WORK UNDER THIS CONTRACT.
- EQUIPMENT AND MATERIALS FOR WHICH UNDERWRITERS LABORATORIES, INC. (UL) PROVIDES PRODUCT LISTING SERVICE SHALL BE LISTED AND BEAR THE LISTING MARK.
- ALL WORK IN ASSOCIATION WITH THIS CONTRACT SHALL BE COMPLETED IN STRICT COMPLIANCE WITH THE 2017 NATIONAL ELECTRIC CODE, 2020 BUILDING CODE OF NEW YORK STATE, 2020 FIRE CODE OF NEW YORK STATE & 2020 ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.
- ALL NEW LIGHTING FIXTURES SHALL BE INSTALLED FULLY LAMPED AND OPERABLE. THE CONTRACTOR SHALL TURN OVER TO THE OWNER SPARE LAMPS OF EVERY TYPE ON THE PROJECT IN AN AMOUNT NOT LESS THAN 20% OF THE TOTAL NUMBER OF EACH TYPE (MINIMUM 1 PER TYPE).
- THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION, APPLICATIONS AND FEES OF ALL WORK ASSOCIATED WITH THE LOCAL UTILITY COMPANY AND/OR THE TELEPHONE COMPANY. ALL WORK INVOLVING THE UTILITY COMPANY SHALL BE COMPLETED IN ACCORDANCE WITH THEIR REGULATIONS AND GUIDELINES.
- ALL CONDUCTORS SHALL BE COPPER, SHALL NOT BE LESS THAN #12 AWG, AND SHALL NOT EXCEED 70 FEET FROM PANEL BOARD TO FURTHEST CONNECTION UNLESS OTHERWISE NOTED ON PLANS.
- LIGHTING LOADS SHALL NOT BE COMBINED ON THE SAME CIRCUIT AS ANY OTHER ELECTRICAL LOADS.
- CONTRACTOR SHALL BE RESPONSIBLE TO FURNISH & INSTALL ALL SMALL DETAILS AND INCIDENTAL WORK NOT SHOWN OR SPECIFIED, BUT WHICH CAN BE REASONABLY INFERRED AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM OF HIGH QUALITY MEETING ALL APPLICABLE CODES AND REGULATIONS.
- FOR EACH NEW OR MODIFIED ELECTRICAL PANEL, THE CONTRACTOR SHALL PROVIDE A TYPE WRITTEN DIRECTORY CARD TO REFLECT ALL CIRCUITING. ADDITIONALLY, THE CONTRACTOR SHALL LABEL (WITH A PERMANENT MARKER OR LABEL) EACH RECEPTACLE ON THE INSIDE OF EACH FACE PLATE WITH PANEL AND CIRCUIT NUMBER DESIGNATION.
- MINIMUM REQUIREMENT FOR EQUIPMENT GROUNDING SHALL BE GOVERNED BY THE NEC. ALL GROUNDS, BONDING, ETC. SHALL MEET THESE REQUIREMENTS. THE CONTRACTOR SHALL FURNISH AND INSTALL ANY AND ALL ITEMS NECESSARY TO MEET THESE REQUIREMENTS AT NO EXTRA COST, EVEN IF SUCH ITEMS ARE NOT DETAILED ON THE DRAWINGS.
- ALL CONDUIT AND CABLE SHALL BE PROPERLY SUPPORTED AND ROUTED PARALLEL OR PERPENDICULAR TO BUILDING WALLS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPLY HANGERS AND MISCELLANEOUS METALS REQUIRED FOR PROPER INSTALLATION OF WORK.
- THE CONTRACTOR IS RESPONSIBLE TO TEST ALL EQUIPMENT, WIRING, DEVICES, AND SYSTEMS INSTALLED UNDER THIS CONTRACT TO ENSURE PROPER OPERATION PRIOR TO FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE TO DETERMINE WHETHER SPECIAL LICENSING IS REQUIRED IN ORDER TO PERFORM THE REQUIRED WORK IN THE MUNICIPALITY WHERE THE PROJECT IS LOCATED. IF THE CONTRACTOR CANNOT OBTAIN THE REQUIRED LICENSING TO COMPLETE THE WORK WITHIN THE PROJECT SCHEDULE, THEN THE CONTRACTOR SHALL NOT BE PERMITTED TO BID ON THIS PROJECT.

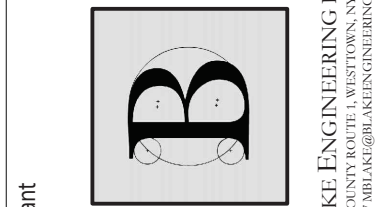
WIRE COLOR CODING TABLE							
PHASE	WIRES	VOLTAGE	L1	L2	L3	NEUTRAL	GROUND
1	2 (1)	120	BLACK	-	-	WHITE	-
1	3	120	BLACK	-	-	WHITE	GREEN (2)
1	3	208	BLACK	RED	-	-	GREEN (2)
3	4	208	BLACK	RED	BLUE	-	GREEN (2)
3	5	208	BLACK	RED	BLUE	WHITE	GREEN (2)
1	3	277	BROWN	-	-	GRAY	GREEN (2)
1	3	480	BROWN	ORANGE	-	-	GREEN (2)
3	4	480	BROWN	ORANGE	YELLOW	-	GREEN (2)
3	5	480	BROWN	ORANGE	YELLOW	GRAY	GREEN (2)

- NOTES:
1. FOR DOUBLE INSULATED EQUIPMENT ONLY.
2. GREEN/YELLOW MAY BE USED:
- GREEN/YELLOW SHALL BE GREEN WITH ONE OR MORE YELLOW STRIPES.
- GREEN = 50 TO 70%, YELLOW = 50 TO 30%.
- GREEN/YELLOW IS THE ONLY COLOR INTERNATIONALLY ACCEPTED FOR USE AS AN EQUIPMENT GROUNDING CONDUCTOR.
- GREEN OR GREEN/YELLOW MUST ONLY BE USED FOR GROUNDING CONDUCTORS.

DEVICE MOUNTING HEIGHTS	
POWER RECEPTACLES (INTERIOR)	18" A.F.F.
POWER RECEPTACLES (EXTERIOR)	36" A.F.F.
POWER RECEPTACLES (@ COUNTER)	44" A.F.F.
LIGHT SWITCHES	44" A.F.F. TO TOP OF DEVICE
DISCONNECT SWITCHES	SEE NEC 404.8(A)
TELEPHONE/DATA RECEPTACLES	18" A.F.F.
TELEPHONE/DATA RECEPTACLES (@ COUNTER)	44" A.F.F.
WALL TELEPHONE RECEPTACLES	48" A.F.F. TO TOP OF DEVICE
FIRE ALARM PULL STATIONS	42" A.F.F. MIN./44" A.F.F. MAX.
FIRE ALARM AUDIO/VISUAL DEVICES	80" A.F.F. MIN./96" A.F.F. MAX.
EXIT LIGHTS (WALL MOUNTED)	12" ABOVE DOOR
EMERGENCY LIGHTS (WALL MOUNTED)	90" A.F.F.
TV & A/V OUTLETS	18" A.F.F.
NOTE: ALL DIMENSIONS ARE TO CENTER OF DEVICE UNLESS OTHERWISE NOTED	

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VALLEY CENTRAL SCHOOL DISTRICT
BEREA ELEMENTARY SCHOOL
2023 CAPITAL PROJECT - PHASE 1

Project Title

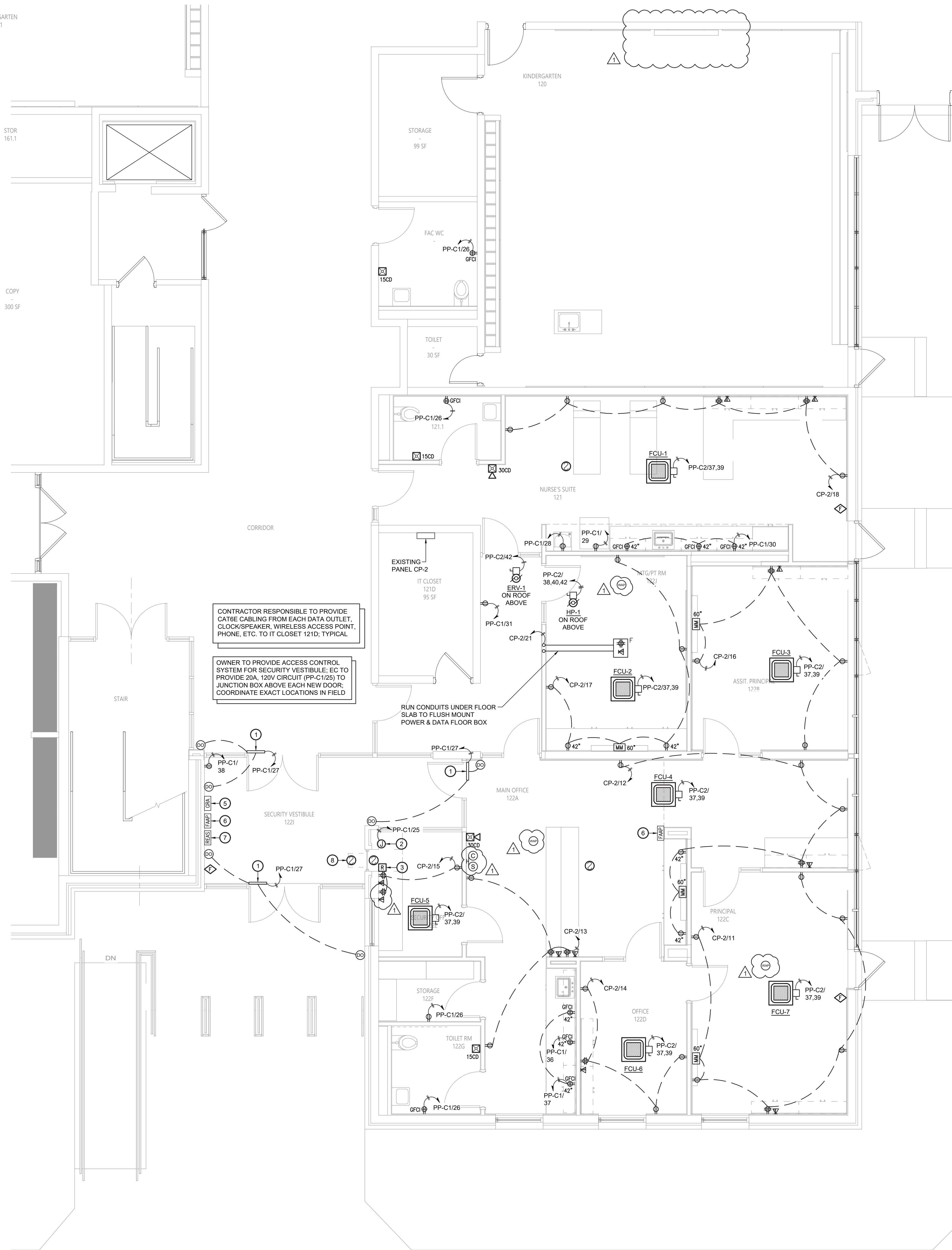


1	10/24	BID ADDENDUM #2
	DATE	DESCRIPTION
Drawn By: BJK		
Checked By: BJK		
Proj. #: 44-13-01-06-0-017-014		
CSArch Proj. #: 187-2302.0		
Issued for Bid: 10/18/24		

KINDERGARTEN
161

STOR
161.1

COPY
300 SF



CONTRACTOR RESPONSIBLE TO PROVIDE CAT6E CABLING FROM EACH DATA OUTLET, CLOCK/SPEAKER, WIRELESS ACCESS POINT, PHONE, ETC. TO IT CLOSET 121D, TYPICAL

OWNER TO PROVIDE ACCESS CONTROL SYSTEM FOR SECURITY VESTIBULE; EC TO PROVIDE 20A, 120V CIRCUIT (PP-C1/25) TO JUNCTION BOX ABOVE EACH NEW DOOR; COORDINATE EXACT LOCATIONS IN FIELD

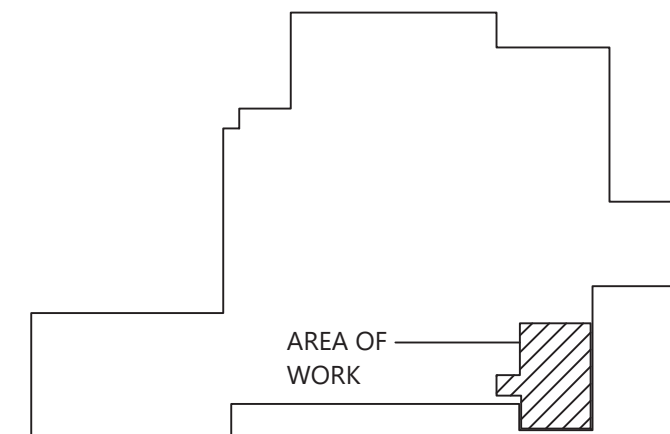
RUN CONDUITS UNDER FLOOR SLAB TO FLUSH MOUNT POWER & DATA FLOOR BOX

1 Electrical Plan - Part 1
Scale: 1/4" = 1'-0"

Key Notes:

- 1 ADA DOOR OPERATORS PROVIDED BY GC; EC TO PROVIDE ALL 120V LINE VOLTAGE POWER TO OPERATOR & CONTROL DEVICES; GC TO PROVIDE ALL LOW VOLTAGE CONTROLS
- 2 PROVIDE NEW 120V ELECTRICAL CONNECTION FOR FIRE SHUTTER
- 3 FIRE ALARM RELAY; FIRE SHUTTER TO CLOSE UPON ACTIVATION OF FIRE ALARM
- 4 REINSTALL EXISTING WIRELESS ACCESS POINT; CONNECT TO EXISTING DATA CABLING
- 5 EXISTING FIRE ALARM GRAPHIC DISPLAY TO REMAIN; TEMPORARILY REMOVE, PROTECT & STORE DURING CONSTRUCTION; REINSTALL AFTER COMPLETION OF VESTIBULE
- 6 EXISTING FIRE ALARM ANNUNCIATOR PANEL TO REMAIN; TEMPORARILY REMOVE, PROTECT & STORE DURING CONSTRUCTION; REINSTALL IN A NEW LOCATION AFTER COMPLETION OF VESTIBULE, RELOCATE/EXTEND WIRING & CONDUIT AS NEEDED
- 7 EXISTING RESCUE ASSISTANCE PANEL TO REMAIN; TEMPORARILY REMOVE, PROTECT & STORE DURING CONSTRUCTION; REINSTALL IN A NEW LOCATION AFTER COMPLETION OF VESTIBULE, RELOCATE/EXTEND WIRING & CONDUIT AS NEEDED
- 8 PROVIDE SMOKE DETECTORS ON BOTH SIDES OF THE AUTOMATIC FIRE SHUTTER AT THE TRANSACTION WINDOW, CONNECT TO THE EXISTING BUILDING FIRE ALARM SYSTEM

KEY PLAN



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VALLEY CENTRAL SCHOOL DISTRICT BEREA ELEMENTARY SCHOOL 2023 CAPITAL PROJECT - PHASE 1

Project Title



DATE	DESCRIPTION
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Checked By: BJK
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Sheet Title

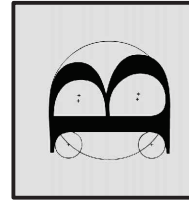
ELECTRICAL
PLAN - PART 1

Sheet No.

BES
E111

CONSTRUCTION DOCUMENTS

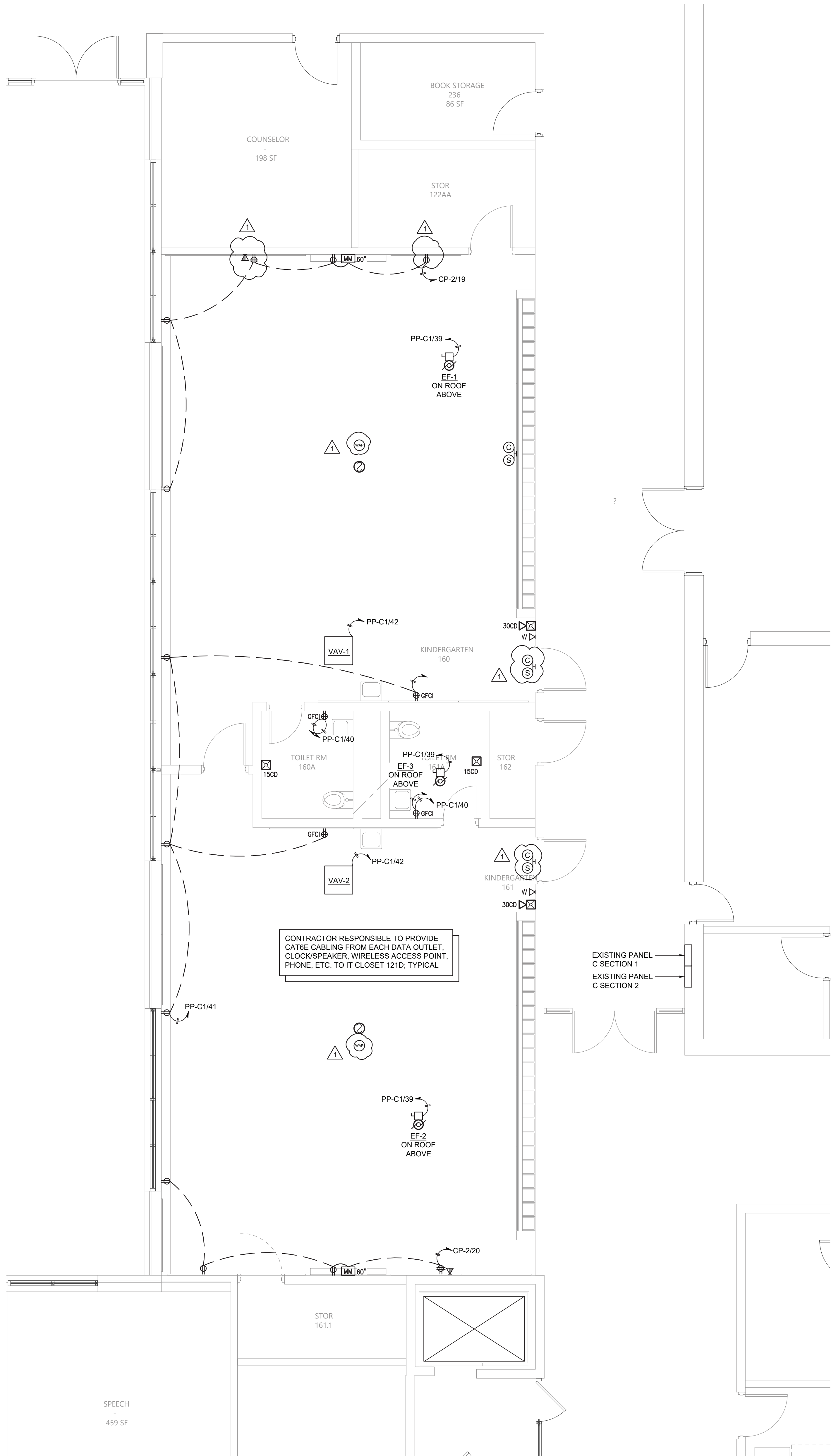
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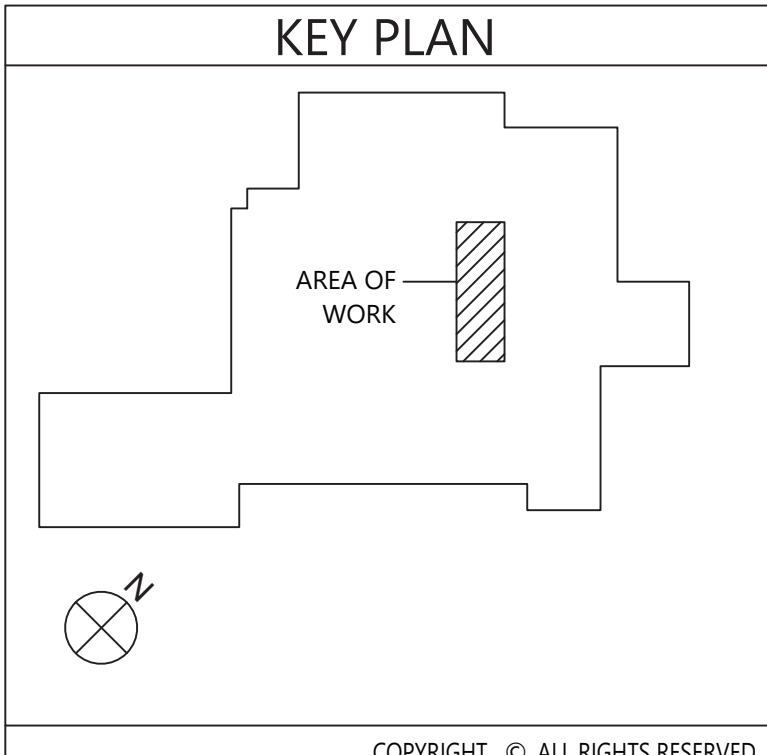
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Key Notes:

① REINSTALL EXISTING WIRELESS ACCESS POINT; CONNECT TO EXISTING DATA CABLING

1 Electrical Plan - Part 2
E112 Scale: 1/4" = 1'-0"



VALLEY CENTRAL SCHOOL DISTRICT
BEREA ELEMENTARY SCHOOL
2023 CAPITAL PROJECT - PHASE 1

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Consultant

B

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Project Title



DATE	DESCRIPTION
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Sheet Title

ELECTRICAL
PLAN - PART 2

Sheet No.

BES
E112

CONSTRUCTION DOCUMENTS

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