

**DOCUMENT 00 90 00
ADDENDUM**

ADDENDUM NO. [2] Date: March 4, 2020

**RE: MINERAL POINT UNIFIED SCHOOL DISTRICT
ELEMENTARY SCHOOL
611 COTHERN ST
MINERAL POINT, WI
HSR PROJECT NO. 19001**

**FROM: HSR Associates, Inc
100 Milwaukee Street
La Crosse, WI 54603
(608) 784-1830**

To: Prospective Bidders

This addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated February 2020. Acknowledge receipt of this Addendum in the space provided on the bid form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of [2] pages and [7] 30 x 42 drawings.

CHANGES TO SPECIFICATIONS:

1. Section 06 18 00 GLUED LAMINATED CONSTRUCTION
 - a. 1.05, C: Designer shall determine final member sizes. Sizes indicated on plans are nominal and not based on any selected species or industry design/size format.
 - b. 2.02, A: Change "Western Red Cedar (north)" to "Alaska Cedar for exterior locations. Douglas Fir or Southern Yellow Pine for interior locations".
2. Section 09 64 66 WOOD ATHLETIC FLOORING
 - a. 3.01, B: Change "1/4 inch in 10 feet" to "1/8 inch in 10 feet meeting MFMA standards."
3. Section 11 66 23 GYMNASIUM EQUIPMENT
 - a. Add the following:
WRESTLING MAT LIFT
Stationary Mat Lift
 1. Hoist shall consist of structural integrity for a single mat lift.
 2. Motor as required by manufacturer's standard model.
 3. Housing shall enclose gear drive, motor shaft and related equipment.
 4. Manufacturer:
 - a. Draper: Single Mat Lifter – 502060.
 - b. Porter: 91107000 Ceiling Mounted Stationary Mat Mover.
 5. Substitutions: See Section 01 60 00 - Product Requirements
4. Section 11 66 43 INDOOR SCOREBOARDS AND TIME CLOCKS
 - a. 2.01, D: Delete paragraph 2. Provide manufacturer's standard LED digital technology.
 - b. 2.02, A: Controller's listed shall be wired/wireless. Provide required receivers and any other required accessories.
 - c. 2.02, F, 5: Control cable is for wired operation option.

5. Section 12 66 33 TELESCOPING BLEACHERS

- a. 2.04: Add railings as follows;
 - i. End of Row Guardrails: Self-storing, at both open ends of each portable section beginning at row 2.
 - ii. Top Row Rear Guardrail at Each Section: Non-removable, mounted behind rear seat with tubular supports, running full width of section. Height: 42 inches above adjacent platform or tread.
- b. 2.05: Add the following;
Back of Units: Full width plywood panels, finished to match platforms, up to 8 feet above floor.
- c. Bleachers shall be divided into (5) sections for portability as shown on Drawings in this addendum.

6. Section 28 13 01 AIPHONE DOOR ENTRY INTERCOM SYSTEM

- a. 2.1, B: Change "Sparta" to "A/E".

CHANGES TO DRAWINGS

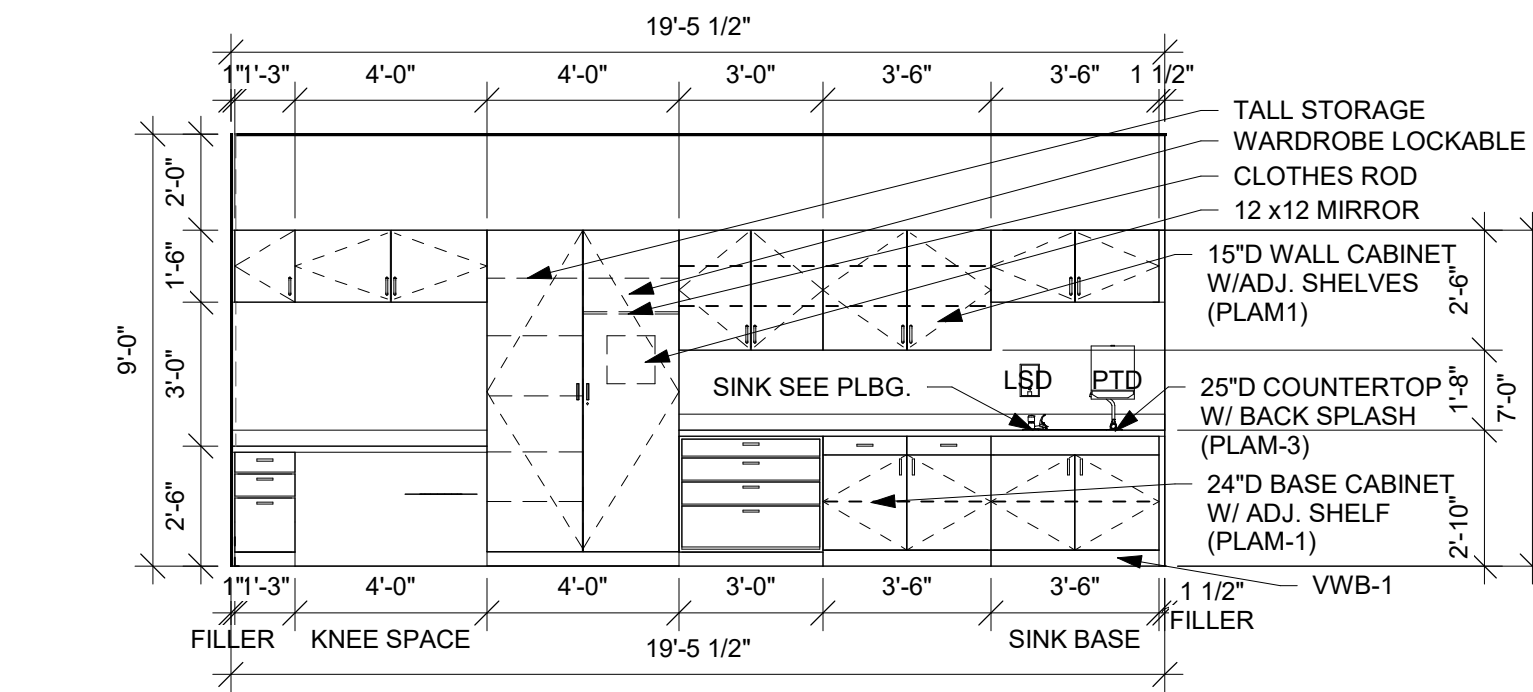
7. Sheet A212 CASEWORK ELEVATIONS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
8. Sheet A401 ENLARGED GYM PLANS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
9. Sheet A401 ENLARGED GYM PLANS-VOLLEYBALL COURT 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
10. Sheet S120 ROOF FRAMING PLAN 30 x 42 attached hereto
 - a. Revisions clouded on Drawing
11. Sheet S820 ROOF FRAMING DETAILS
 - a. Detail 14S820: Delete note referencing radius. There are no arcs on trusses.
12. Sheet M300 HVAC SECTIONS 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
13. Sheet M600 HVAC SCHEDULES 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.
14. Sheet M601 HVAC SCHEDULES 30 x 42 attached hereto
 - a. Revisions clouded on Drawing.

PRIOR APPROVALS

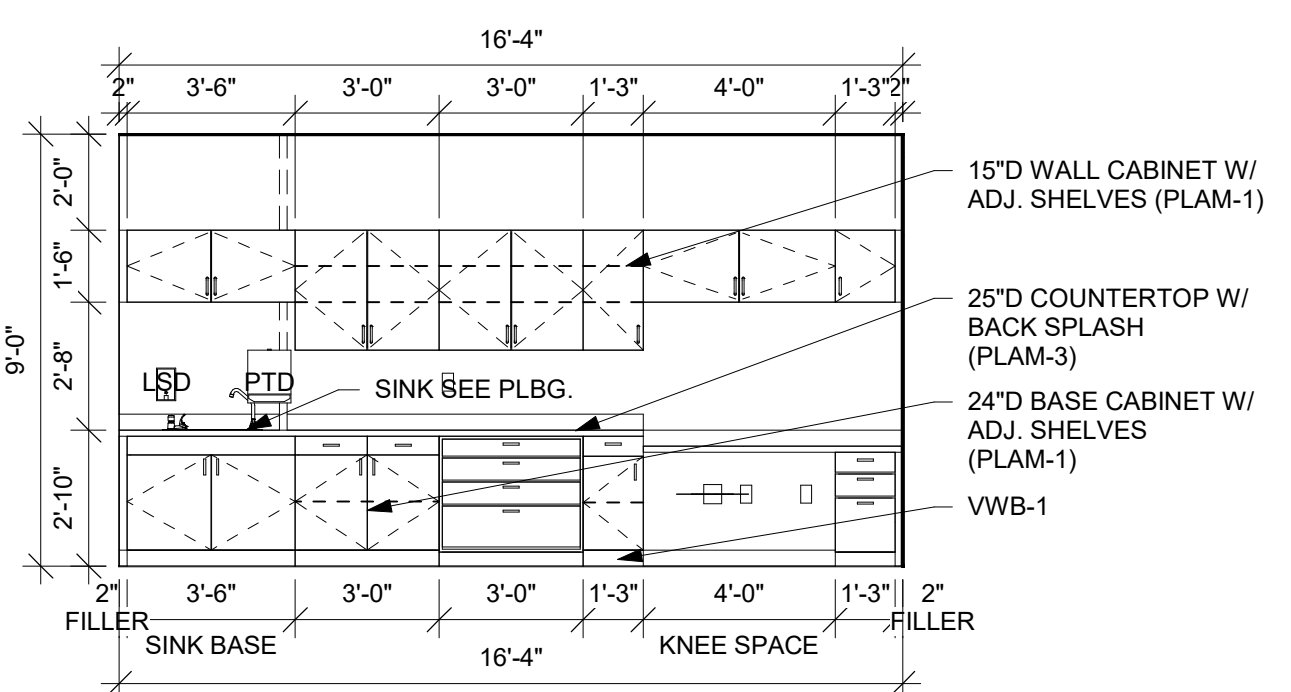
1. Section 08 63 00 UNIT SKYLIGHTS
 - a. Imperial Glass Structures Custom Skylights and Enclosures
2. Section 09 72 00 WALL COVERINGS
 - a. Write Walls: Tackable Wall Covering.

END OF DOCUMENT 00 90 00

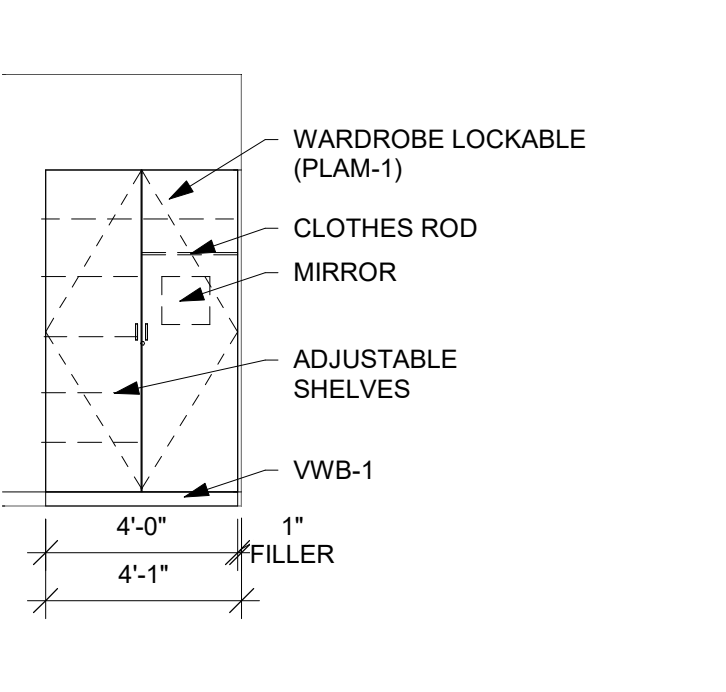
- CASEWORK GENERAL NOTES:**
- A ALL CABINET LOCKS TO BE KEYPED ALIKE.
 - B PROVIDE FINISHED END PANELS AT ALL KNEE SPACE, ALCOVES, AND EXPOSED CABINET ENDS.
 - C CASEWORK MANUFACTURER TO FIELD VERIFY ALL CASEWORK DIMENSIONS & CONDITIONS PRIOR TO FABRICATION OF CASEWORK.
 - D INSTALL 1-1/2" WOOD BLOCKING BETWEEN STUDS FOR CASEWORK ADJUTING AT TOP AND BOTTOM OF ALL WALL CABINETS AND AT TOP OF ALL BASE CABINETS.
 - E ALL BASE CABINET KICKS, ALCOVES, KNEE SPACES AND END PANELS TO RECEIVE BASE UNLESS OTHERWISE NOTED. SEE MASTER COLOR SCHEDULE FOR FINISHES AND COLORS.
 - F TYPICAL FINISH AT ALL HARDWARE: WIRE PULLS, HINGES, ETC SHALL BE BRUSHED S.S.
 - G SEAL EDGE OF COUNTER/BACKSPLASH TO ALL WALL LOCATIONS W/ CLEAR SEALANT.
 - H PROVIDE CORN GROUTMENTS AT ALL WORK STATIONS - REFER TO ARCHITECTURAL PLANS FOR LOCATIONS.
 - I REFER TO MASTER COLOR SCHEDULE ON ID100 FOR PLASTIC LAMINATE SELECTIONS. ALL COUNTERTOPS TO BE PLAM-3. ALL LOWER/UPPER CASEWORK TO BE PLAM-1 UNLESS OTHERWISE NOTED.
 - J INSTALL TWO MAGNETIC CATCHES FOR TALL CABINETS. TOP AND BOTTOM AT EACH DOOR. TALL CABINETS WITH LOCKS SHALL ALSO HAVE AN ELBOW LATCH INSTALLED AT A CENTER FIXED SHELF. ALL OTHER SHELVES SHALL BE ADJUSTABLE.
 - K IN TALL WARDROBE CABINETS THE CENTER AND TOP SHELF ARE FIXED WHILE THE OTHER ARE ADJUSTABLE.



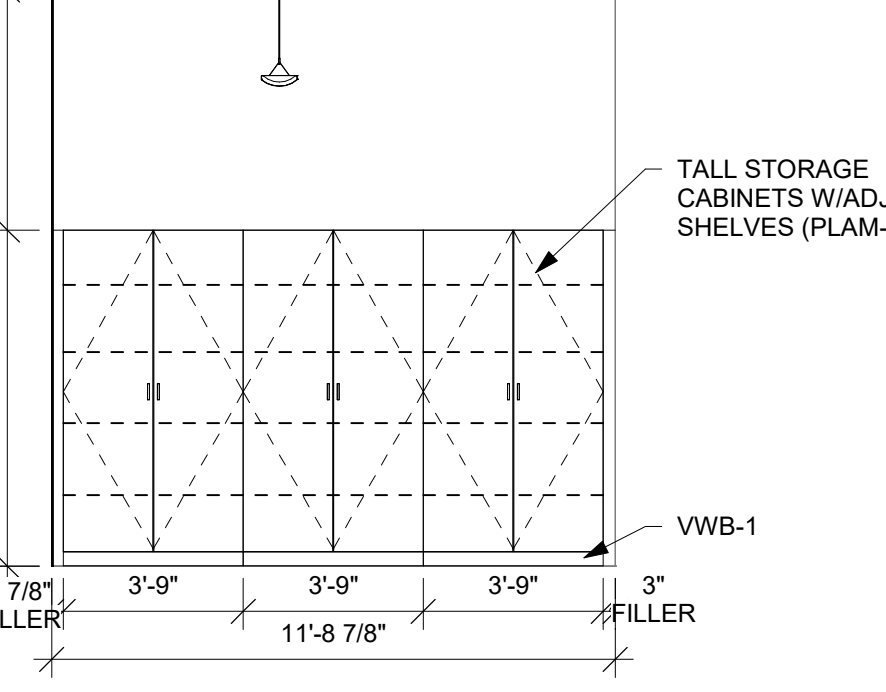
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1/4" = 1'-0"



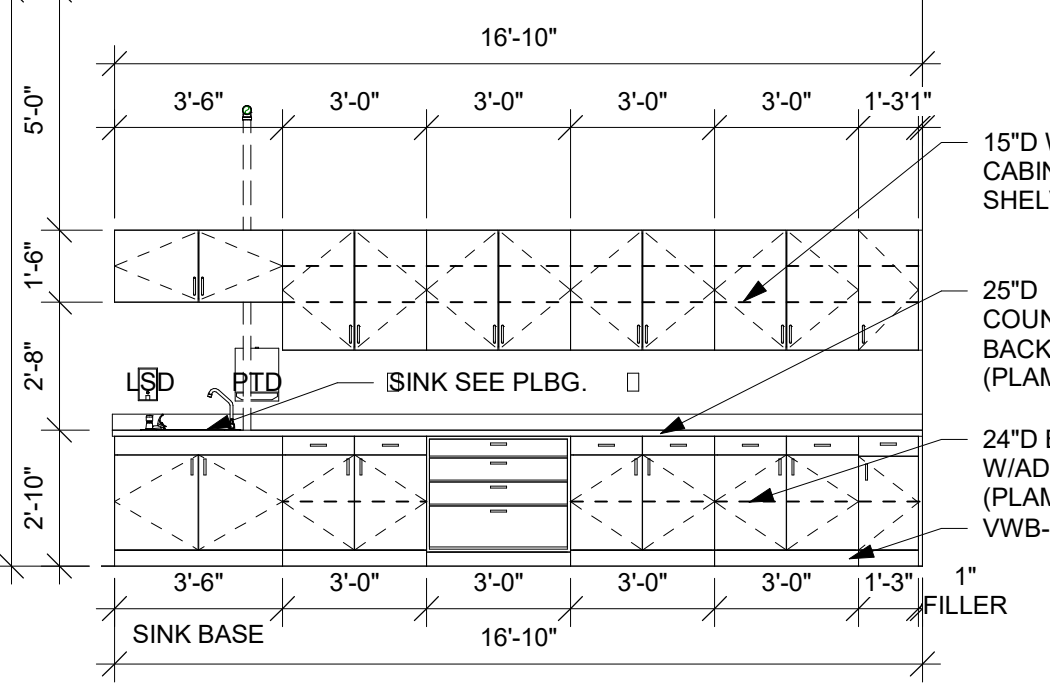
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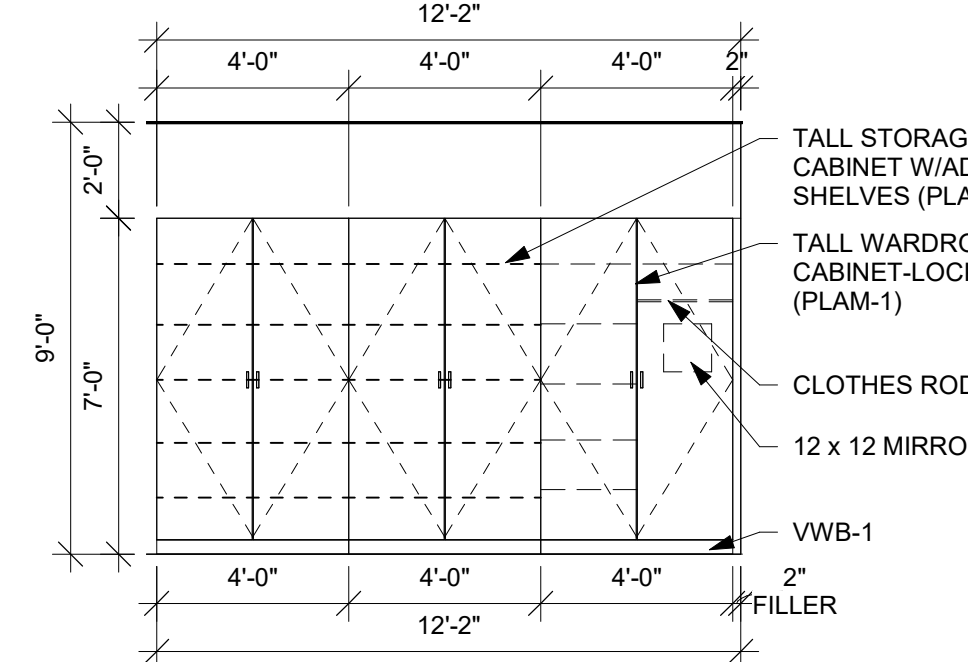
3 STORAGE 215A
1/4" = 1'-0"



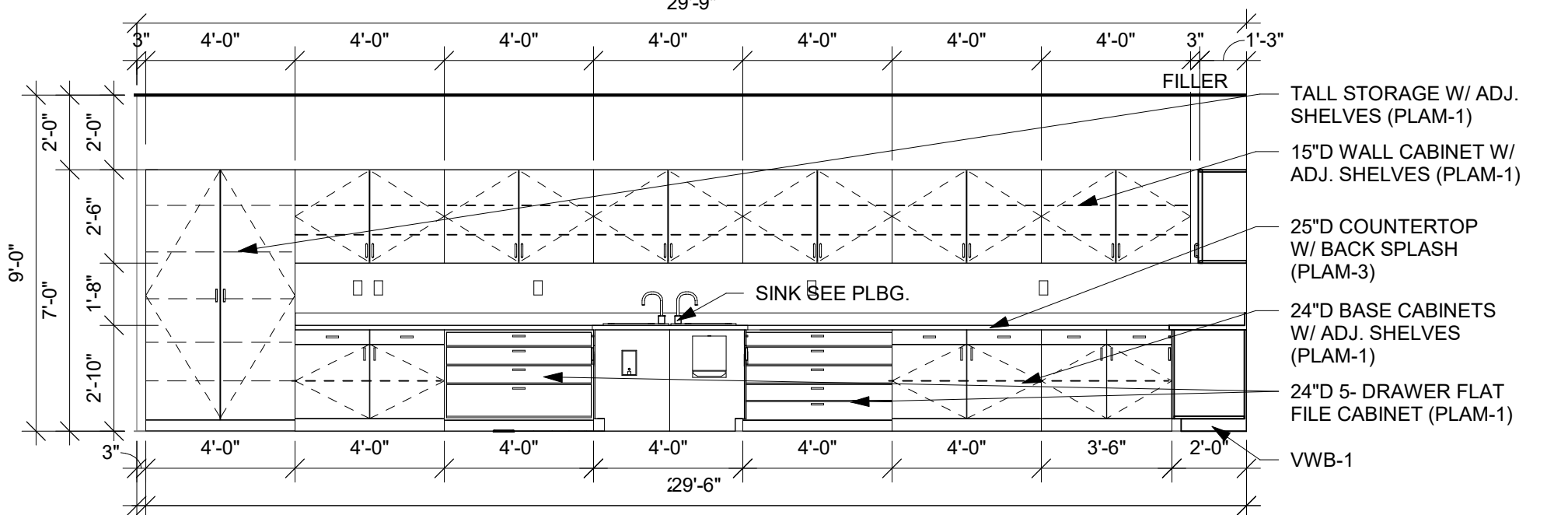
4 MUSIC 211 WEST
1/4" = 1'-0"



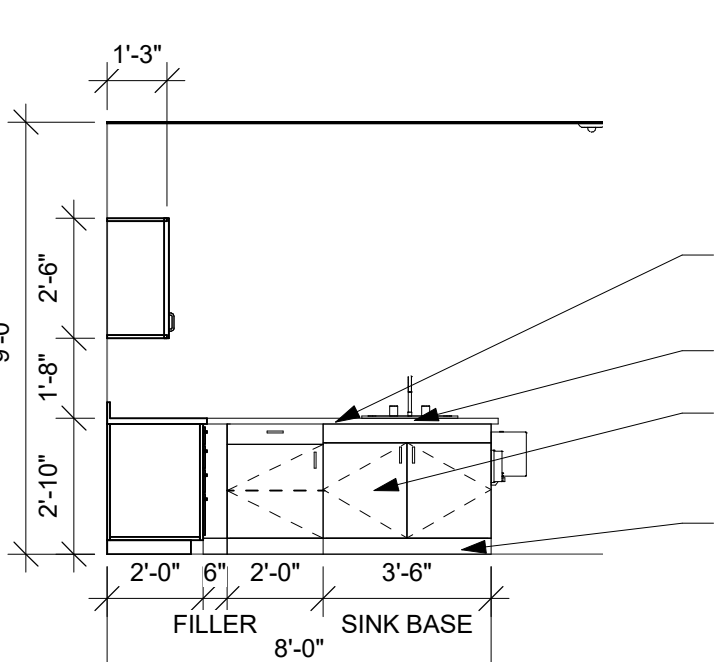
5 MUSIC 211 NORTH
1/4" = 1'-0"



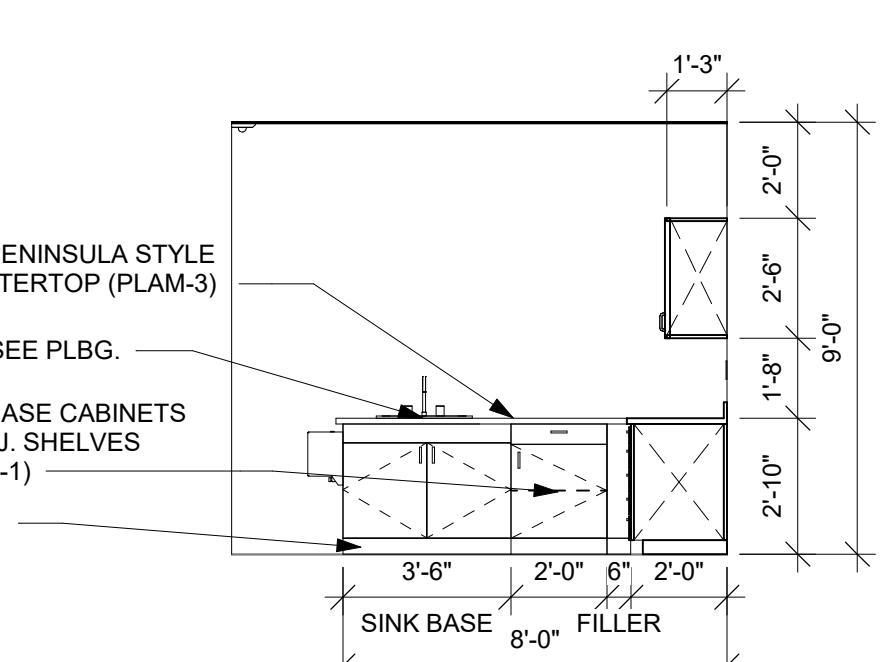
6 ART 1
1/4" = 1'-0" ALTERNATE BID



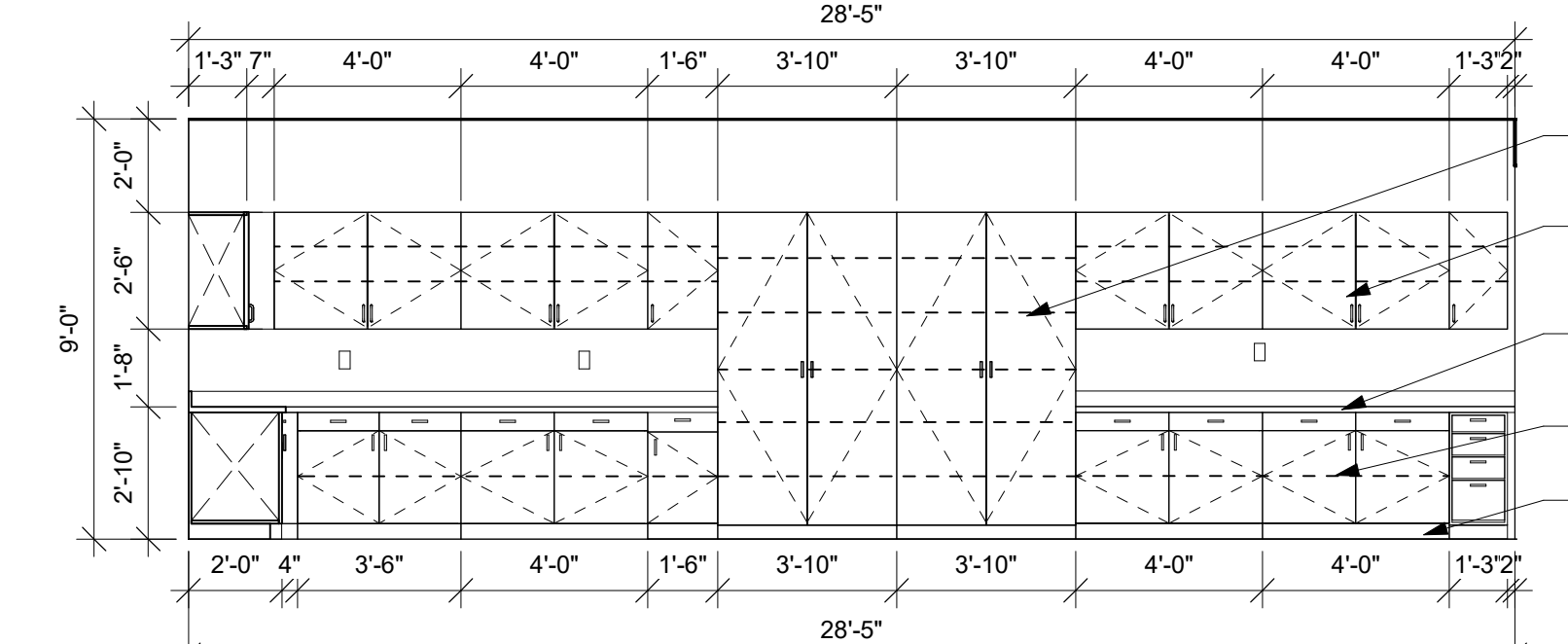
7 ART 2
1/4" = 1'-0" ALTERNATE BID



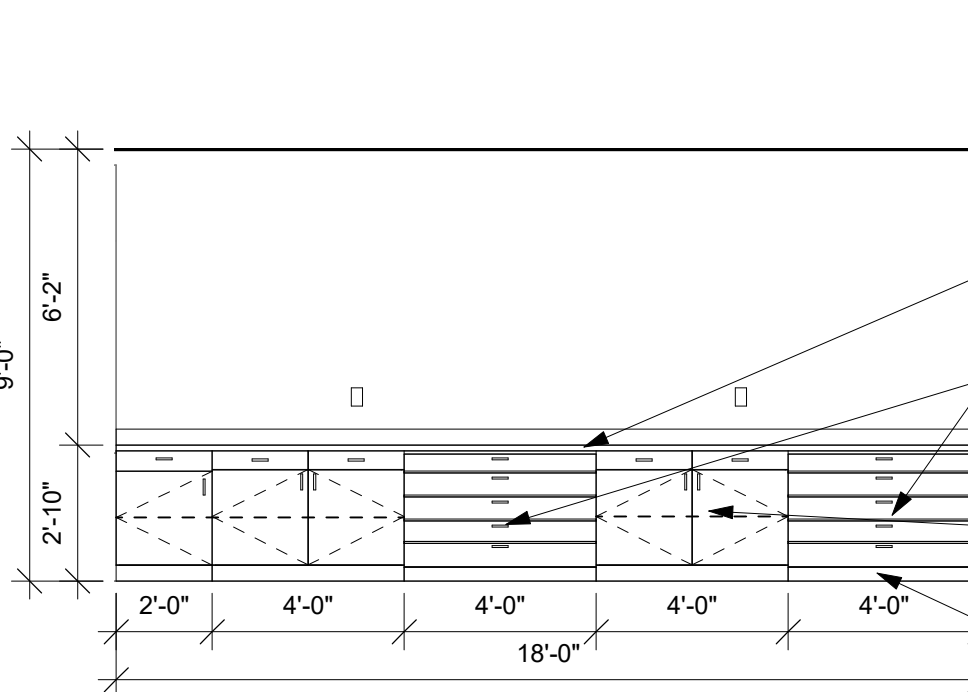
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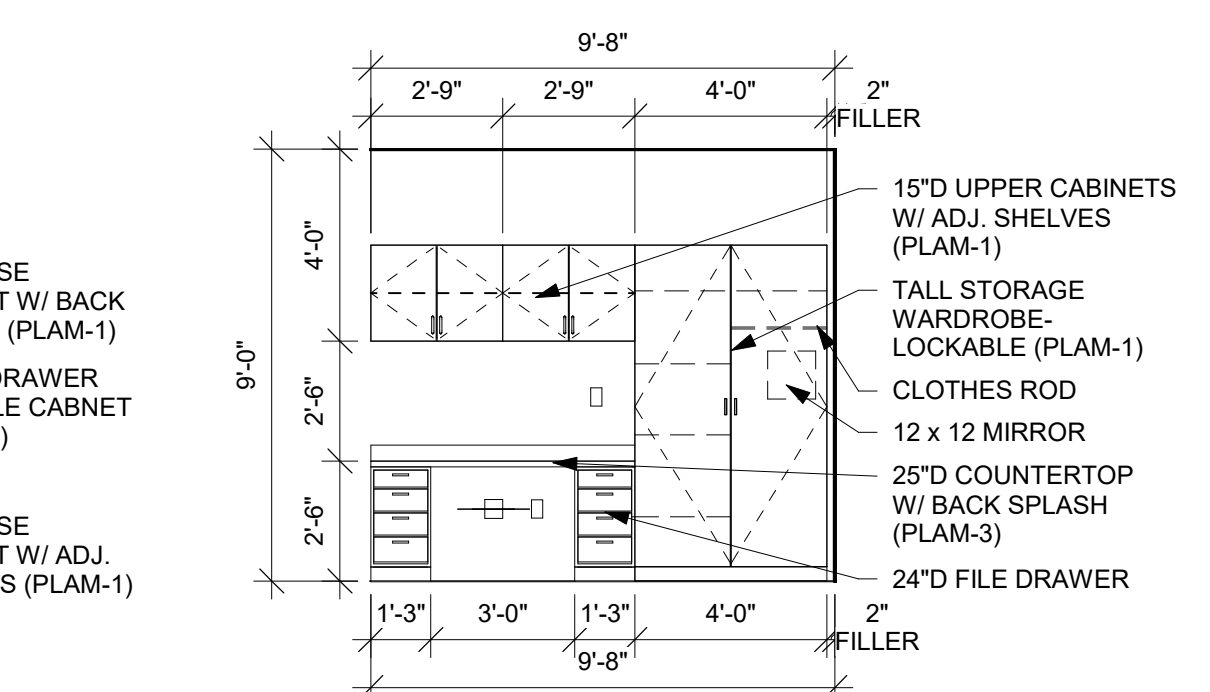
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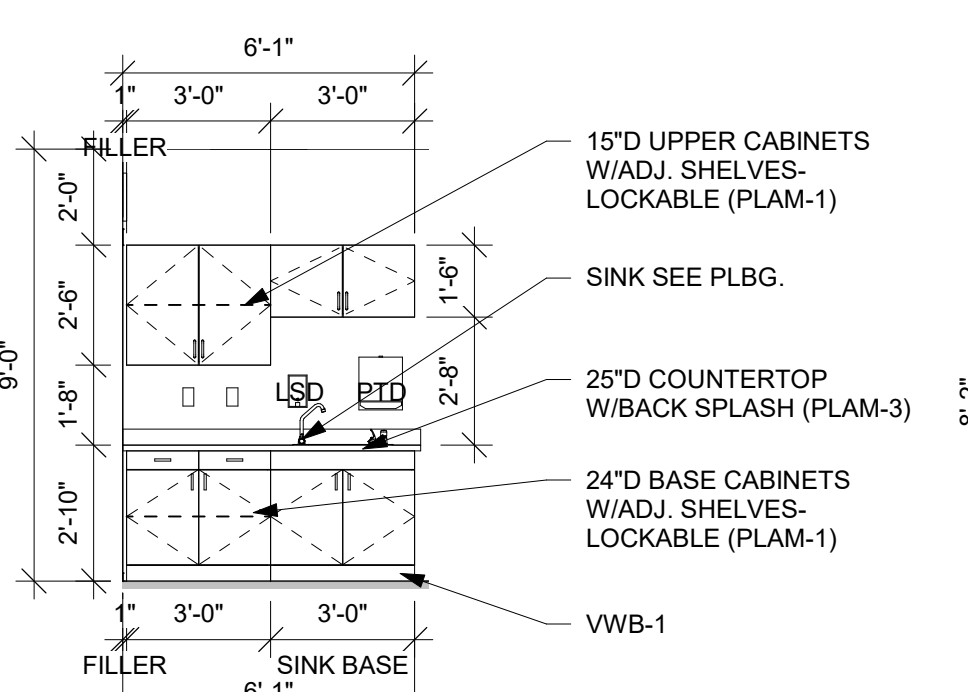
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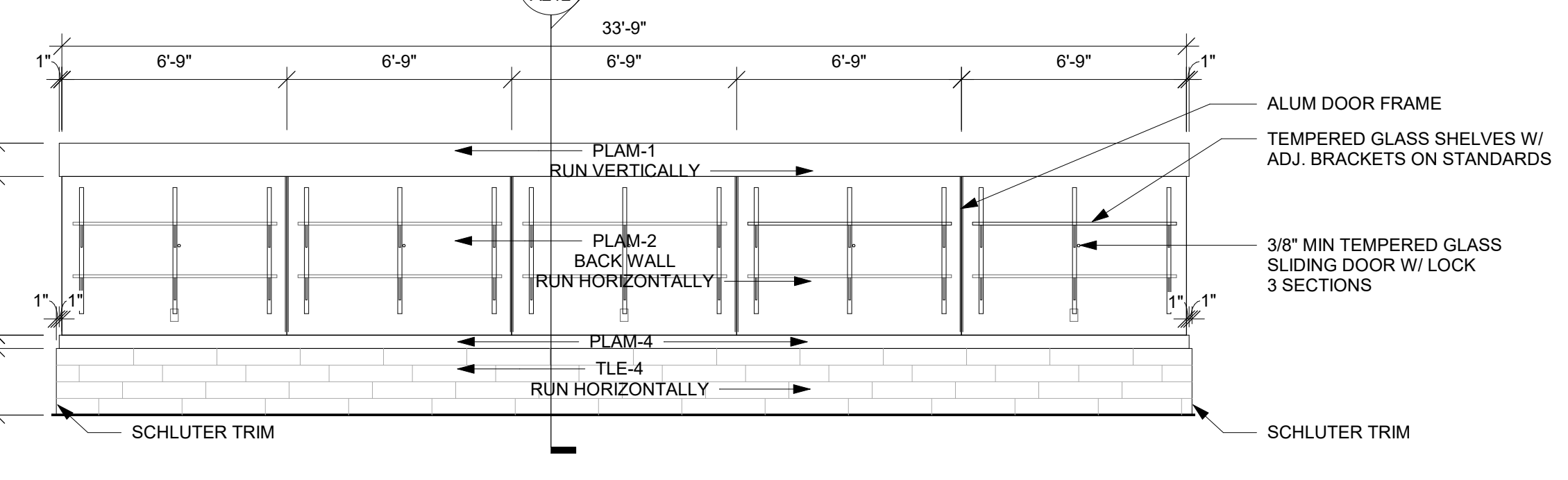
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1/4" = 1'-0" ALTERNATE BID



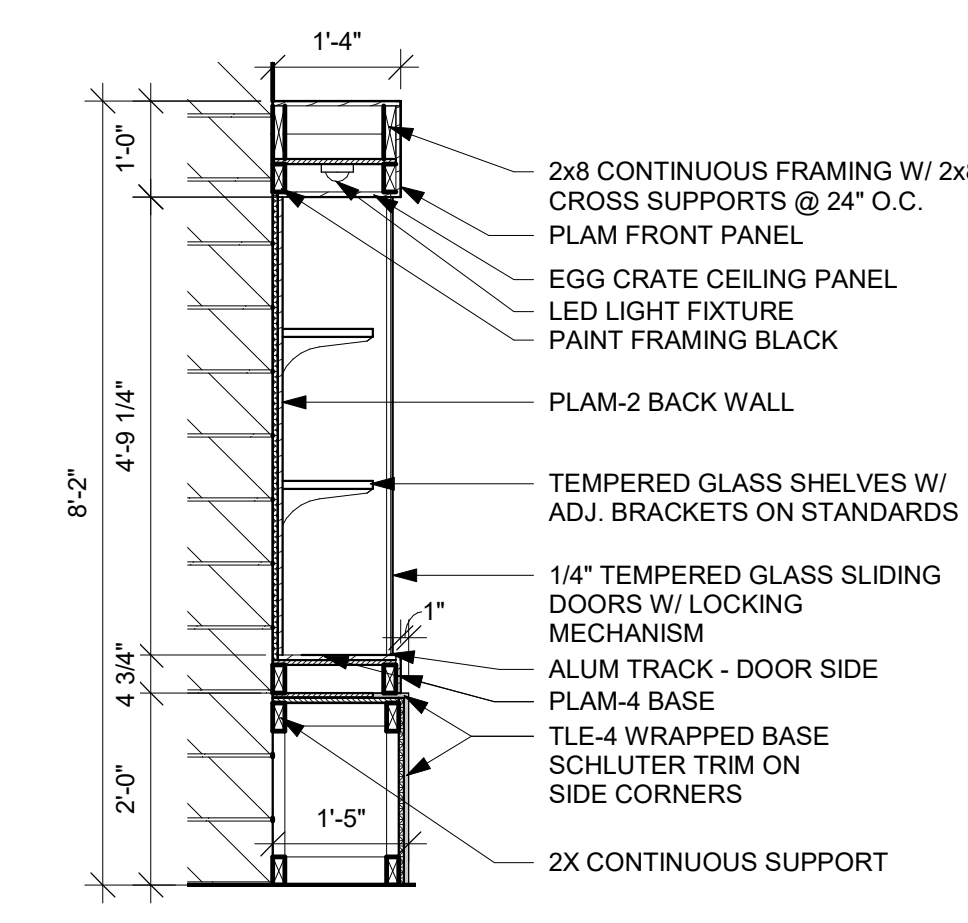
12 READING SPEC. 229
1/4" = 1'-0"



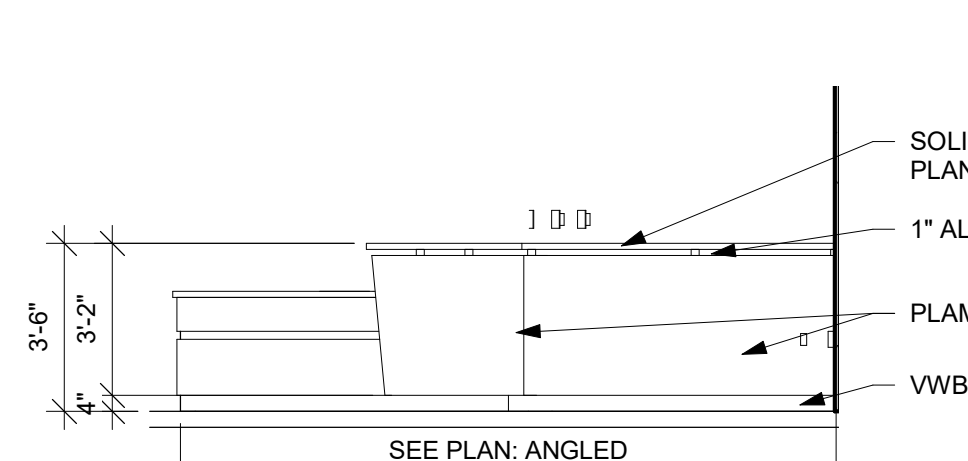
13 PT/OT 205
1/4" = 1'-0"



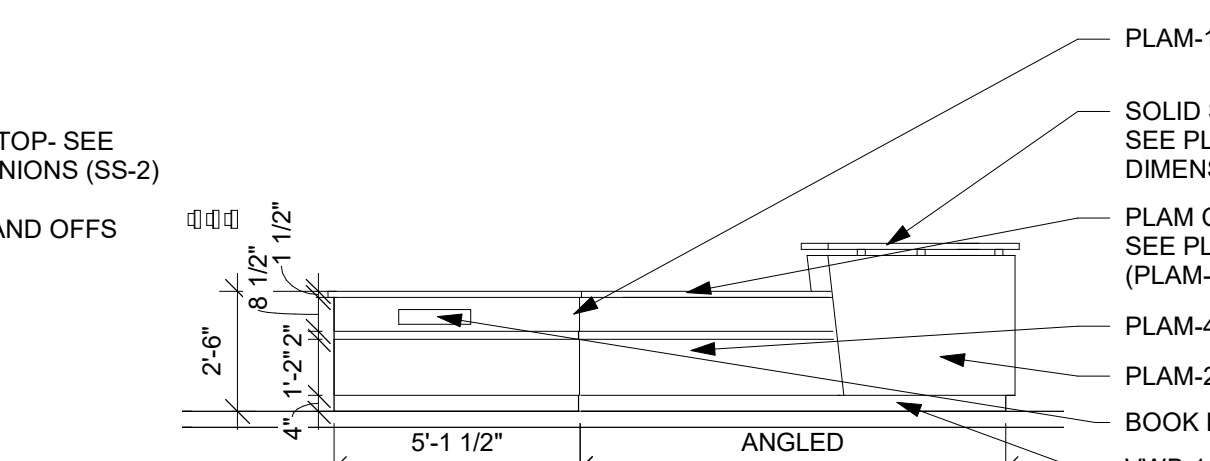
14 MAIN ST. TROPHY CASE
1/4" = 1'-0"



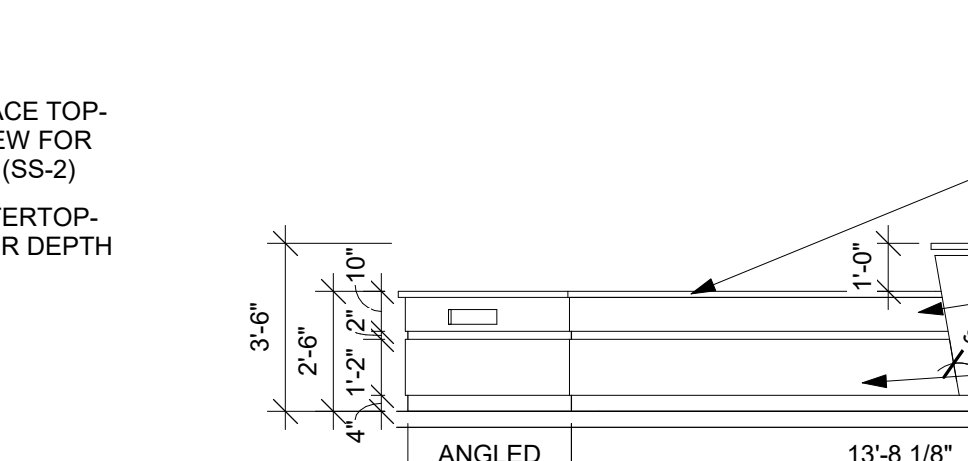
14A CASE SECTION
1/2" = 1'-0"



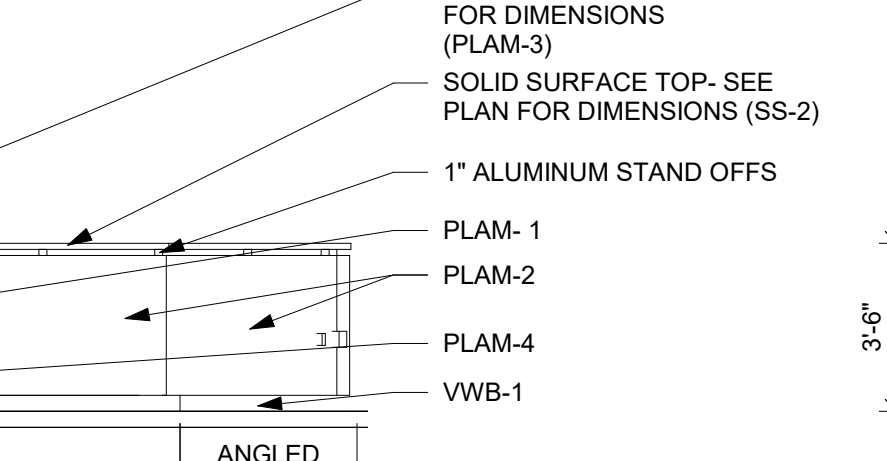
15 CIRC. DESK ELEV.
1/4" = 1'-0"



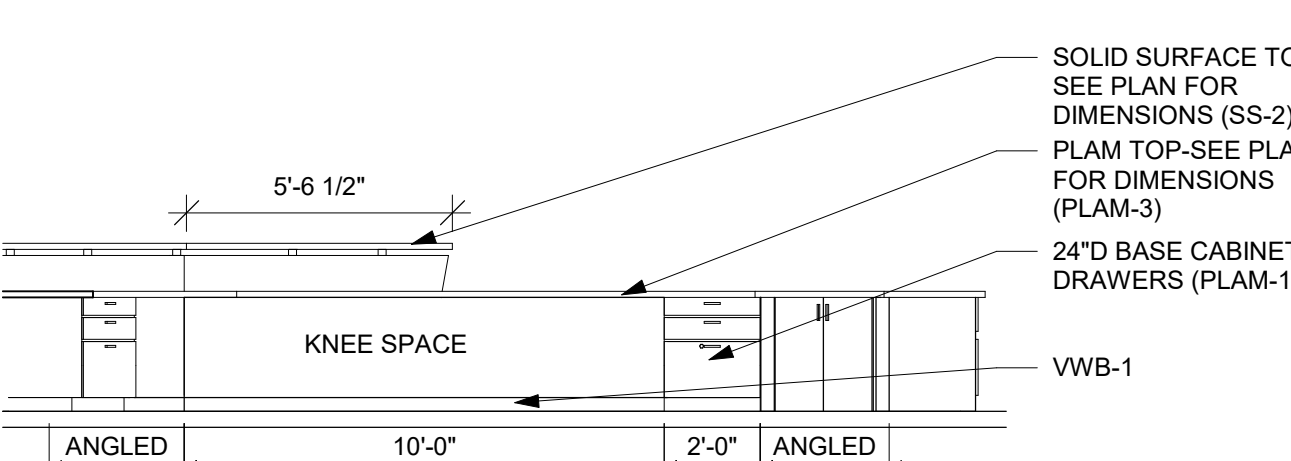
16 CIRC. DESK ELEV.
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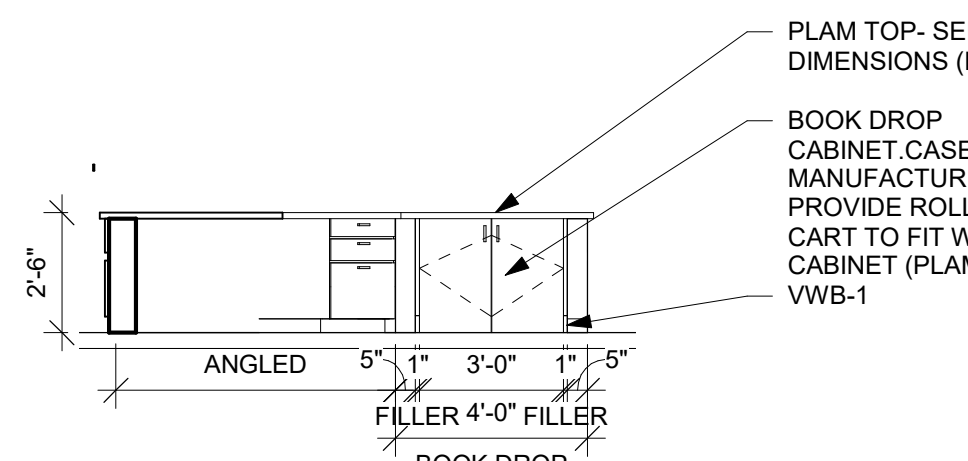
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1/4" = 1'-0"



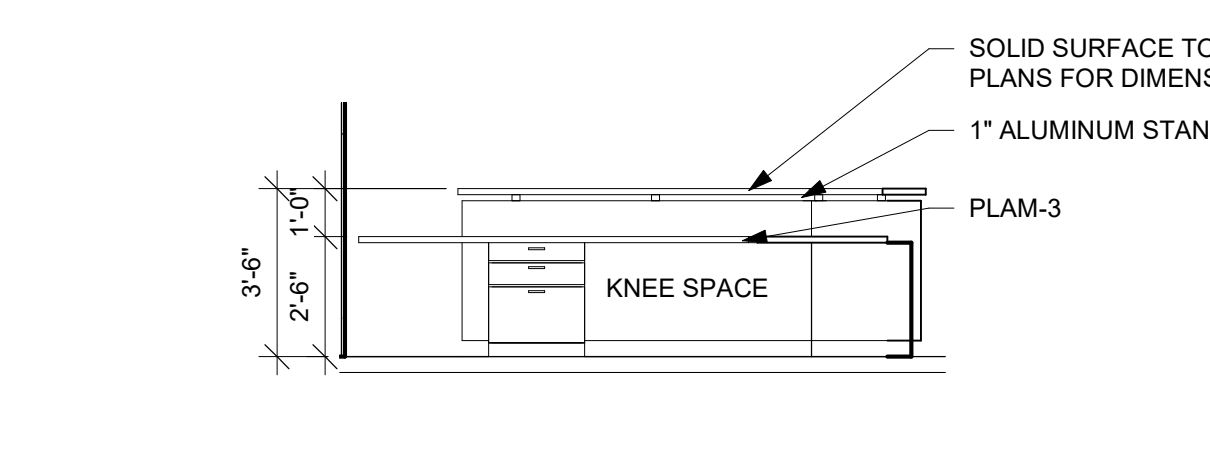
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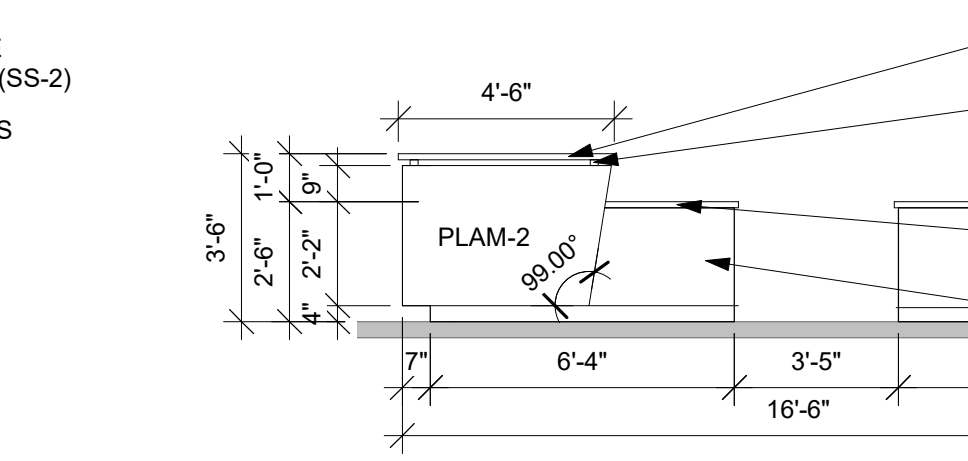
19 CIRCULATION DESK PLAN
1/4" = 1'-0"



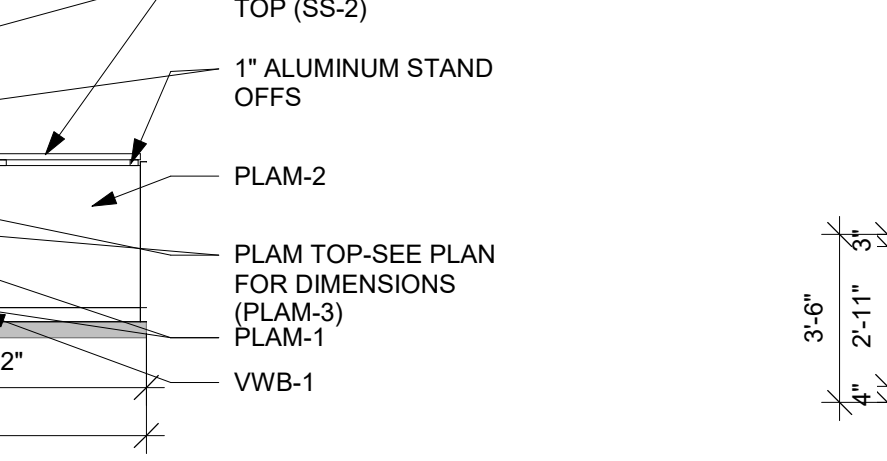
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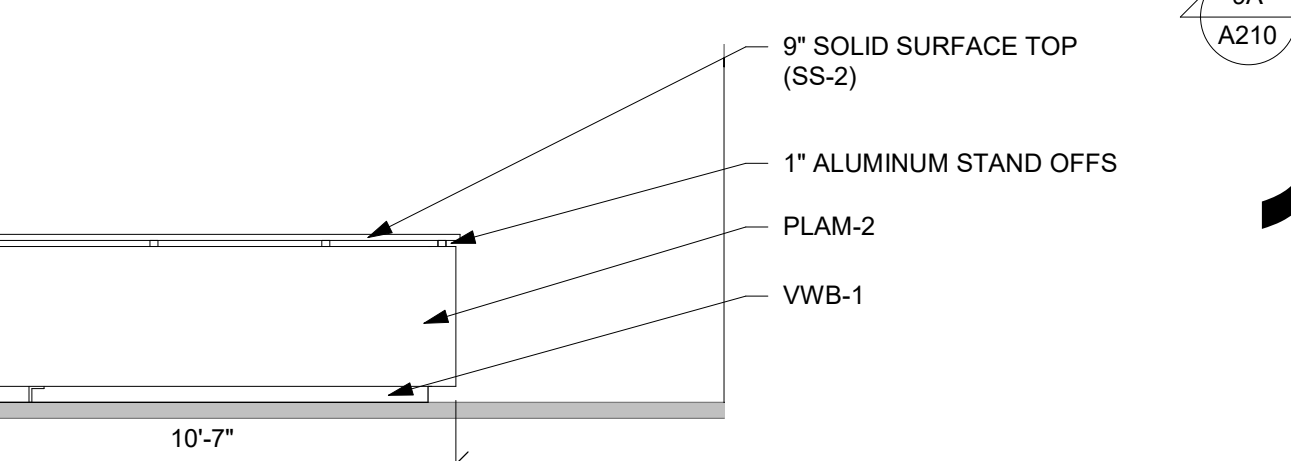
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1/4" = 1'-0"



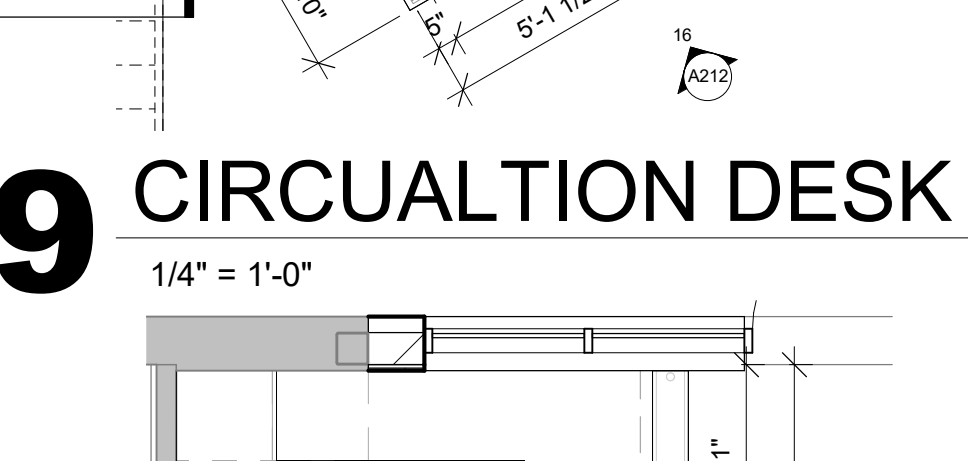
22 RECEP. DESK ELEV.
1/4" = 1'-0"



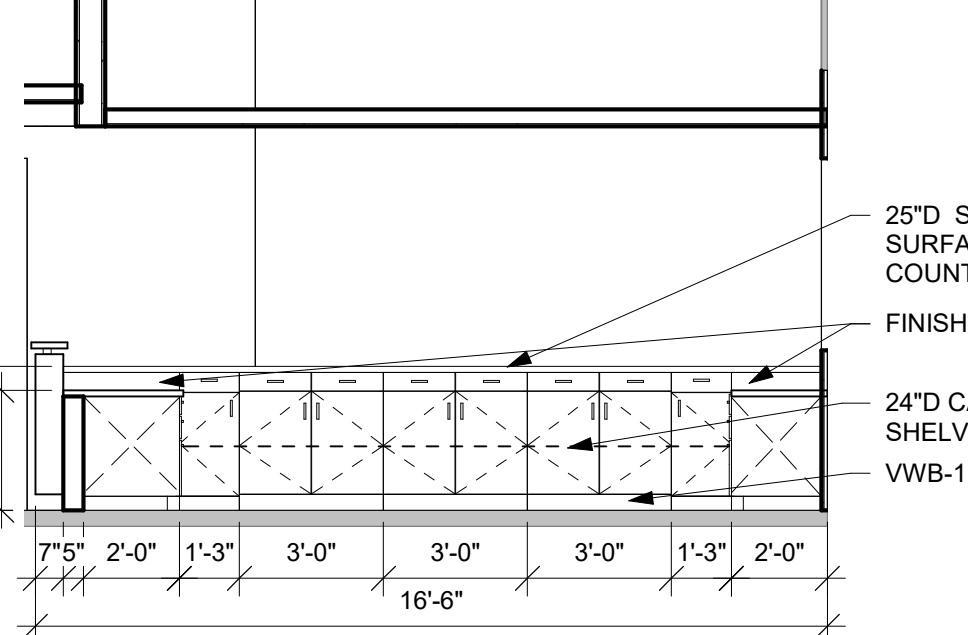
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1/4" = 1'-0"



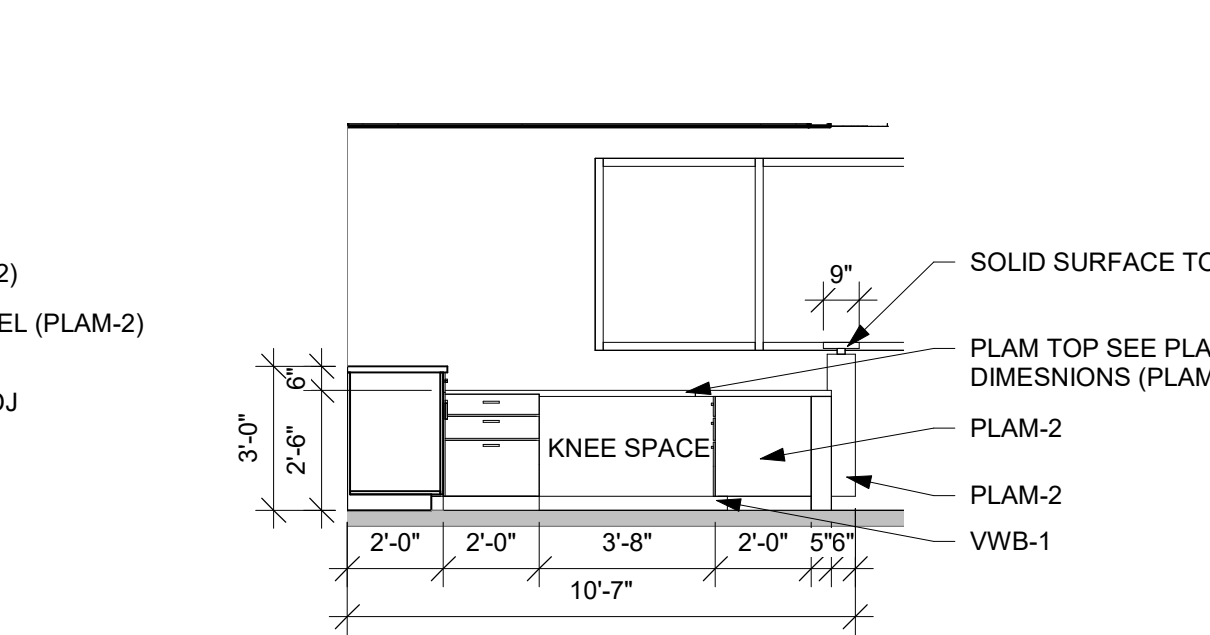
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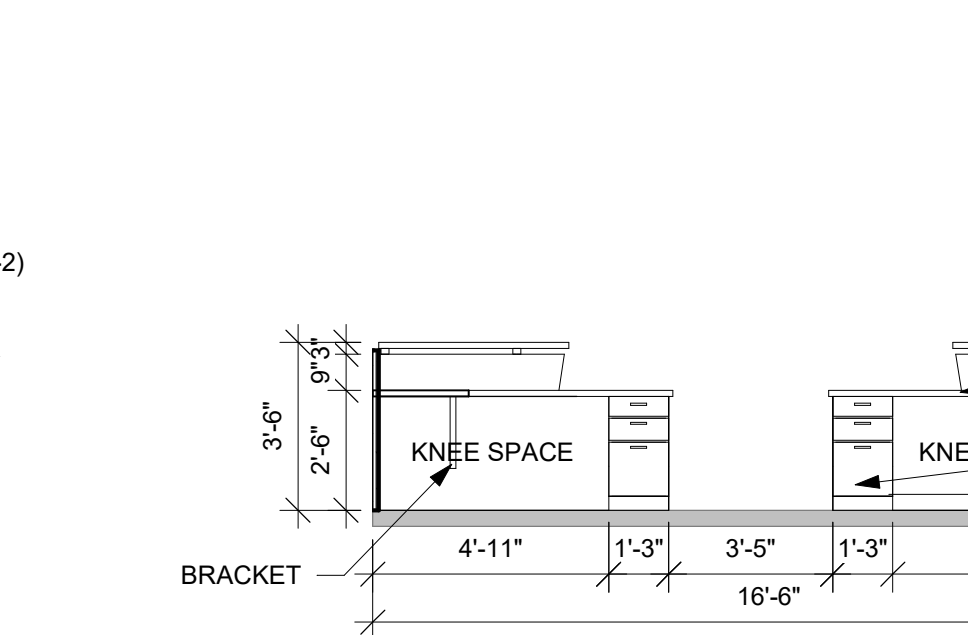
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1/4" = 1'-0"



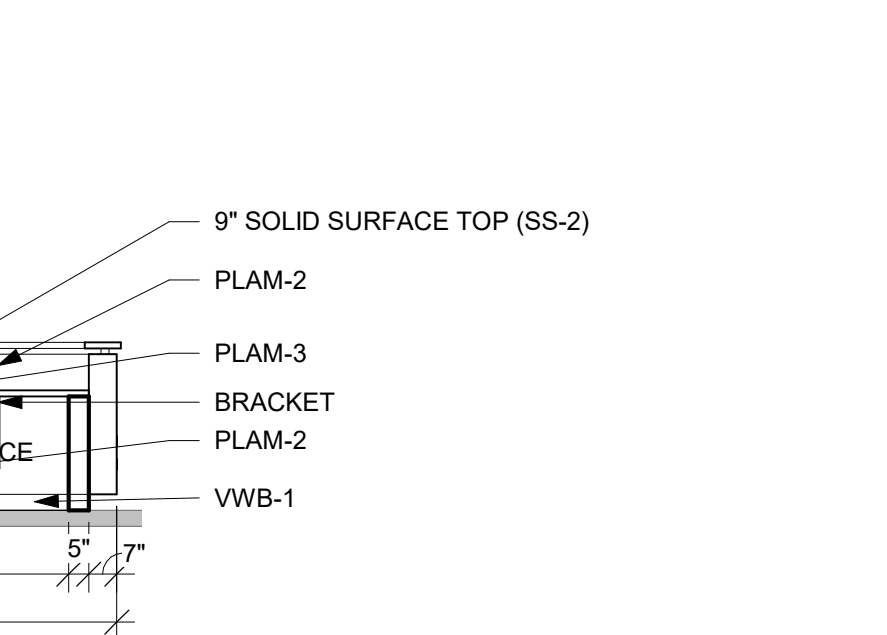
26 RECEP. DESK ELEV.
1/4" = 1'-0"



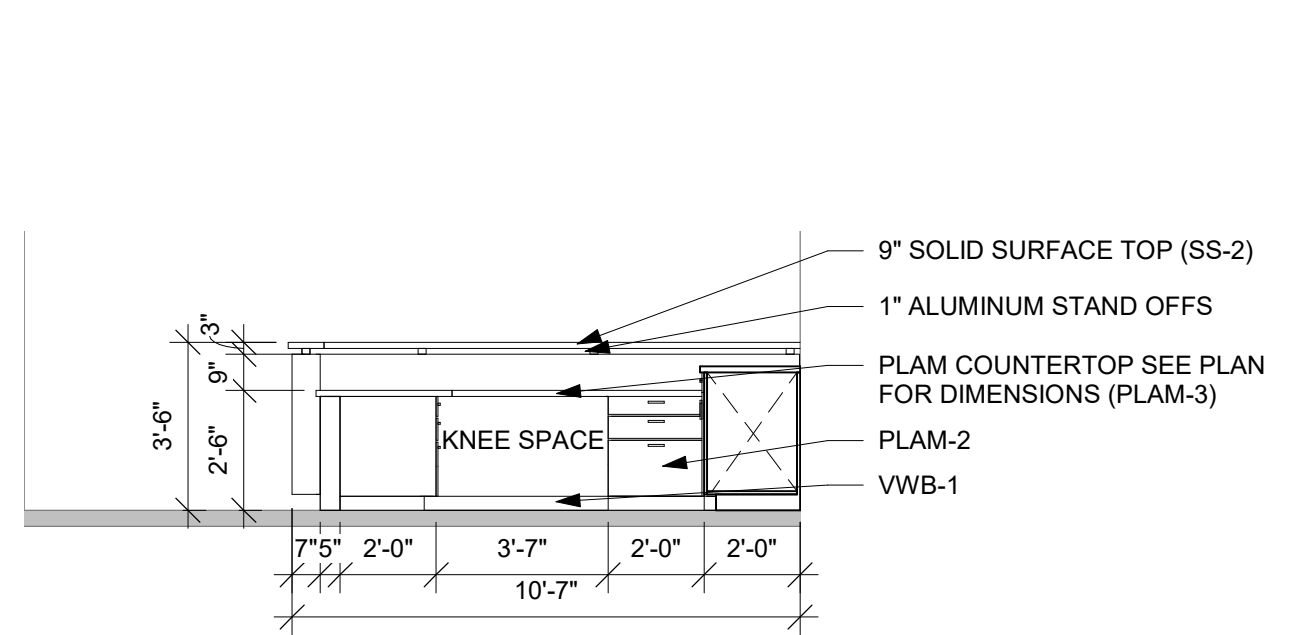
27 RECEP. DESK ELEV.
1/4" = 1'-0"



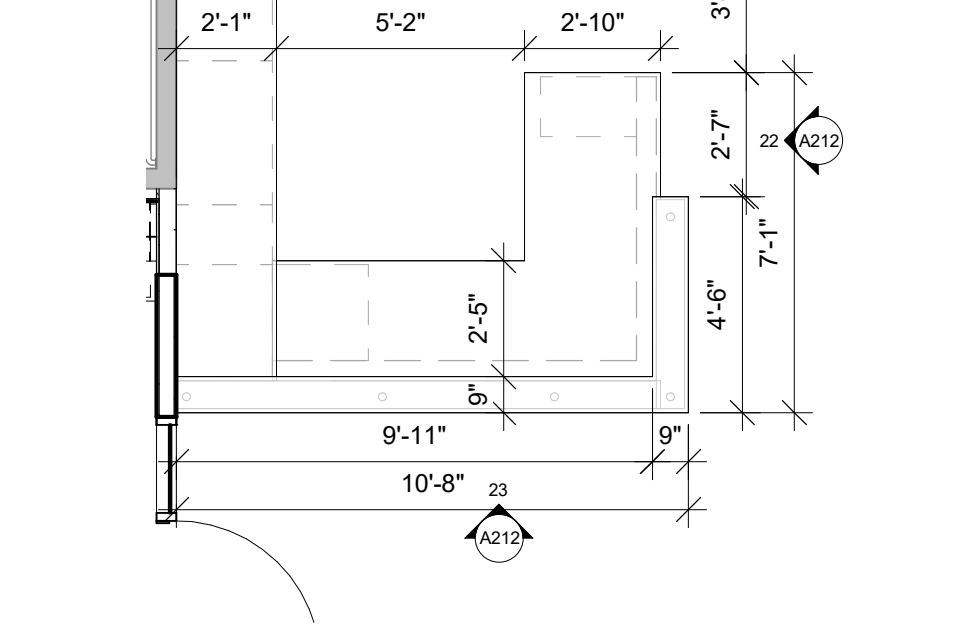
28 RECEPTION DESK PLAN
1/4" = 1'-0"



29 RECEP. DESK ELEV.
1/4" = 1'-0"



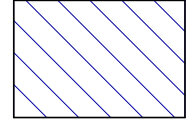

30 RECEP. DESK ELEV.
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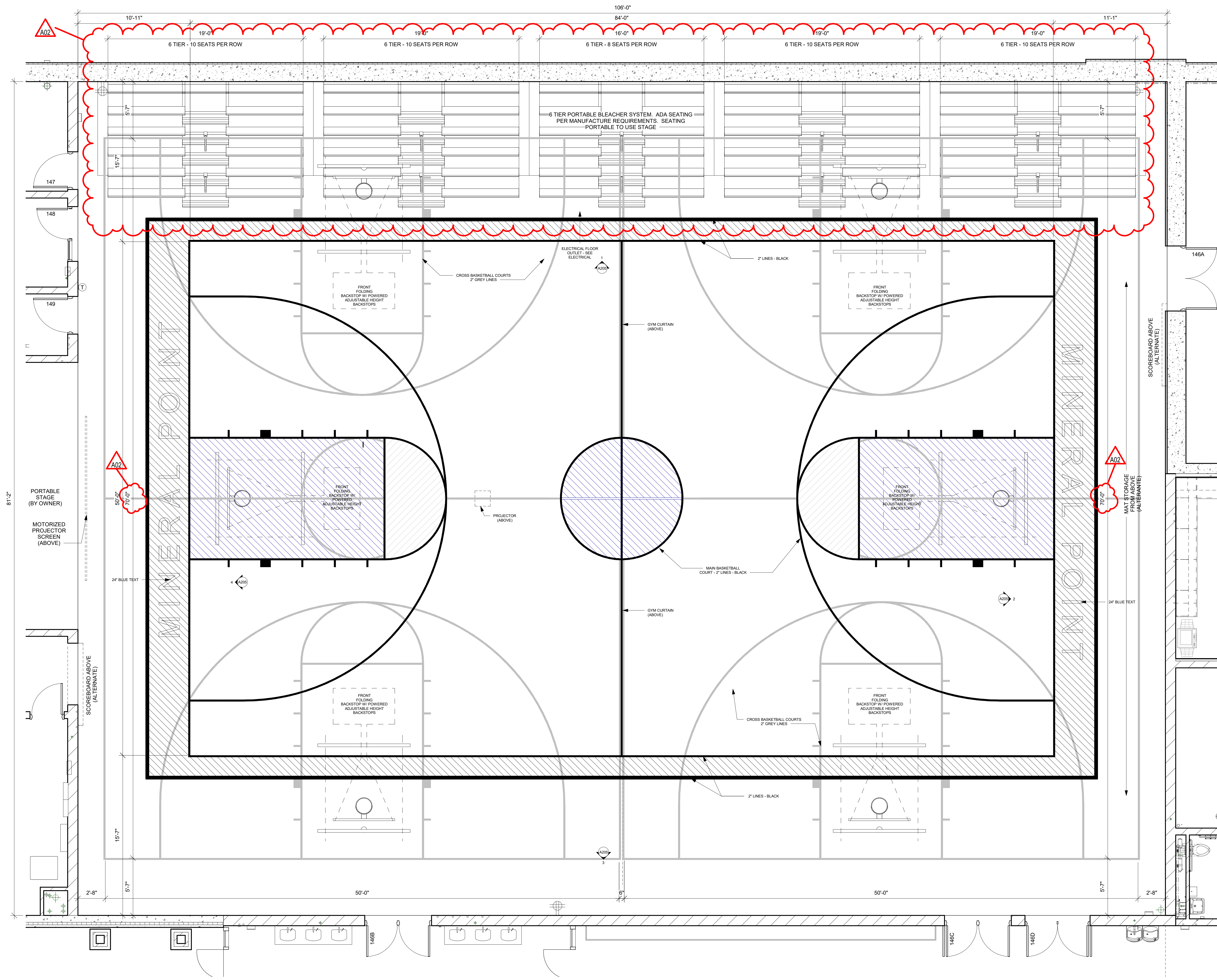


31 RECEP. DESK ELEV.
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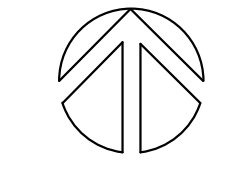


Consultant:

 = BLUE STAINED HARDWOOD GYMNASIUM FLOORING
 = GREY STAINED HARDWOOD GYMNASIUM FLOORING



1 ENLARGED GYM PLAN
1/4" = 1'-0"



Project Title: **MINERAL POINT UNIFIED SCHOOL DISTRICT
ELEMENTARY SCHOOL**
 Project Location: **611 COTHERN STREET
MINERAL POINT, WISCONSIN**
 Sheet Title: **ENLARGED GYM PLANS**

HSR Project Number: **HSR # 19001**
 Project Date: **FEBRUARY, 2020**
 Drawn By: **TR**

Key Plan:

**BID
DOCUMENTS**

No.	Description	Date
A02	ADDENDUM 2	3.3.20

Graphic Scale: **VARIES**

Last Update: **3/3/2020 11:59:51 AM**

A401



Consultant:

Project Title: MINERAL POINT UNIFIED SCHOOL DISTRICT
ELEMENTARY SCHOOL

Project Location: 611 COTHERN STREET
MINERAL POINT, WISCONSIN

Sheet Title: ENLARGED GYM PLANS - VOLLEYBALL COURTS

HSR Project Number: HSR # 19001

Project Date: FEBRUARY, 2020

Drawn By: TR

Key Plan:

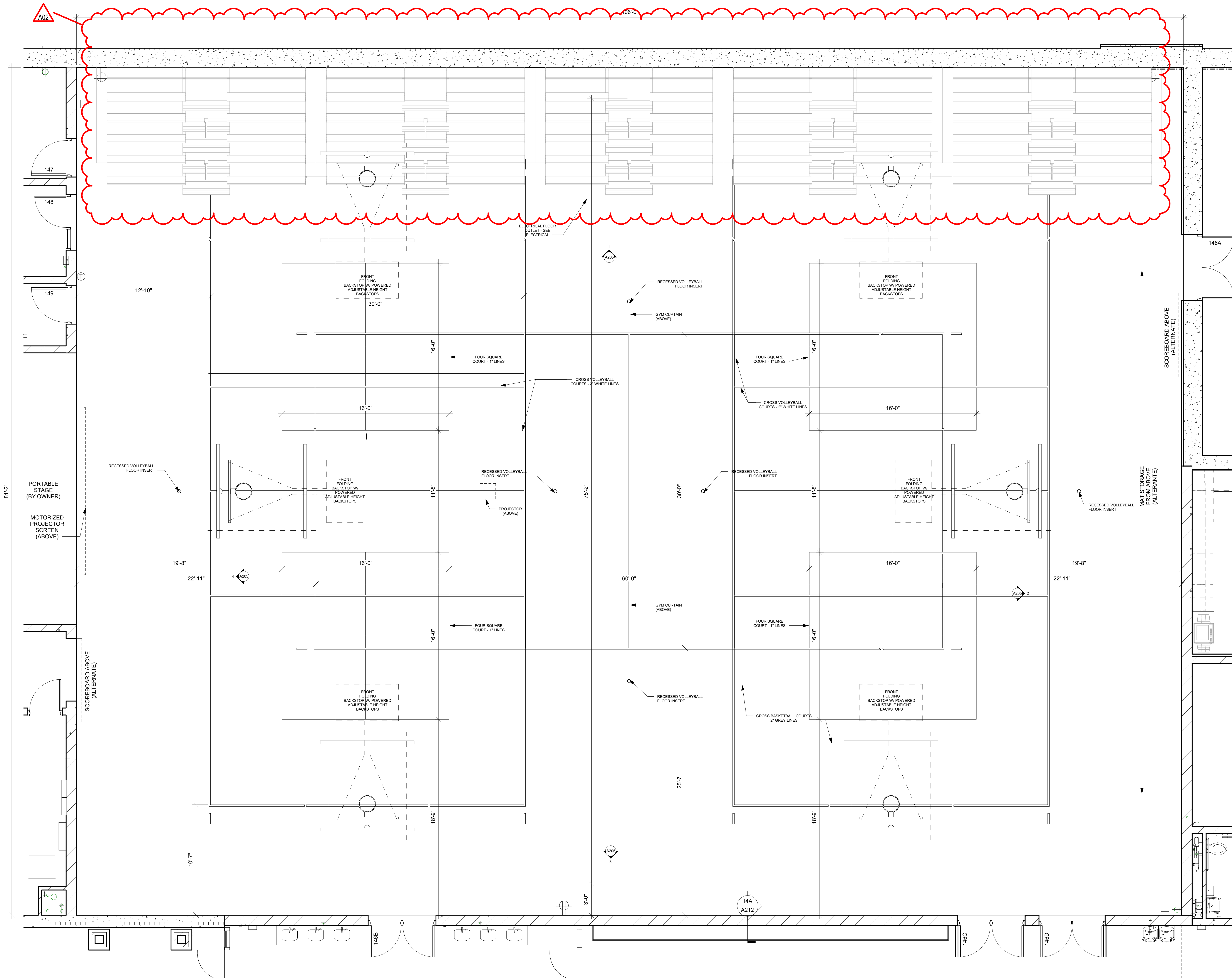
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No.	Description	Date
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Graphic Scale: VARIES

Last Update: 3/3/2020 11:59:53 AM

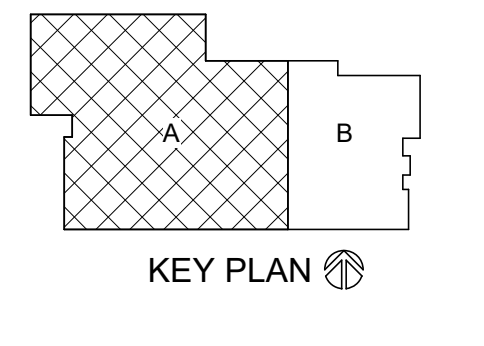
A402



1 ENLARGED GYM PLANS - VOLLEYBALL COURTS

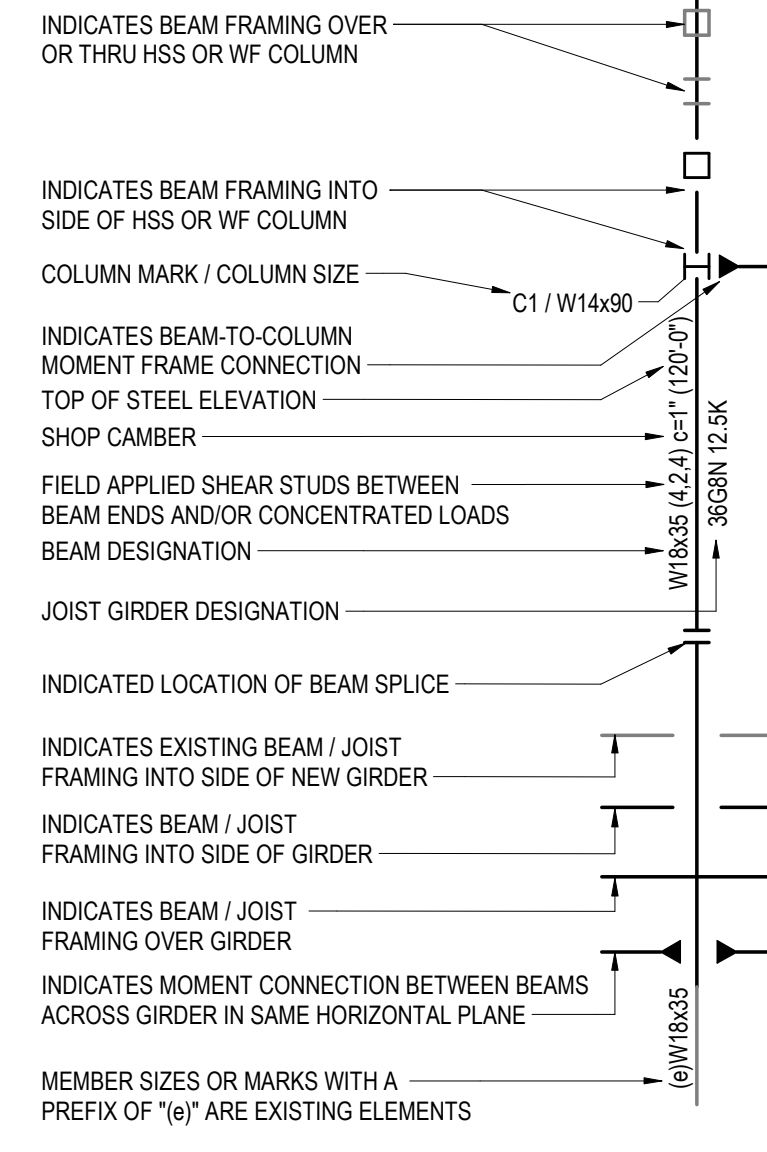
1/4" = 1'-0"





No.	Description	Date
2	ADDENDUM #2	03/03/2020

STRUCTURAL STEEL LEGEND

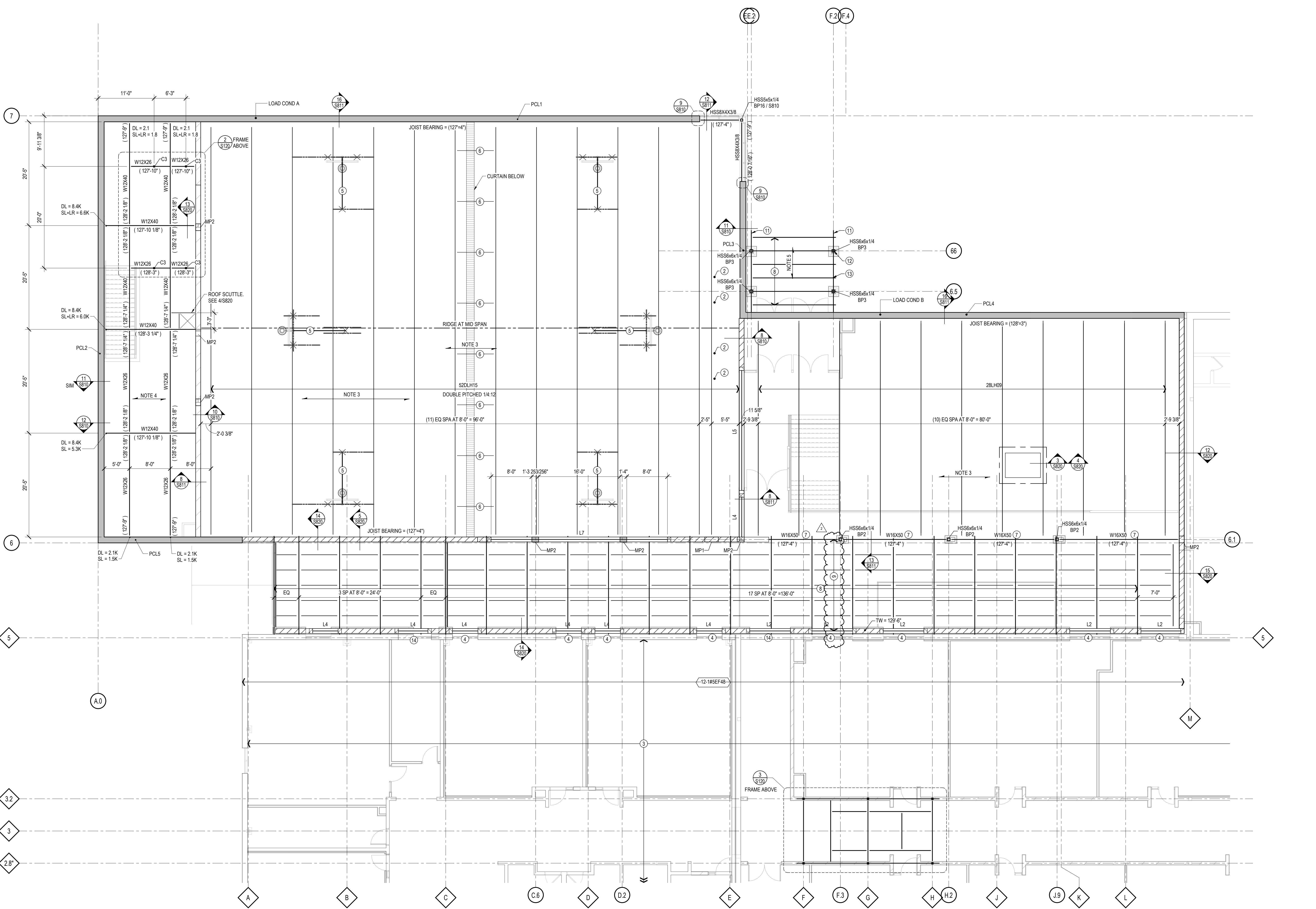


ROOF FRAMING PLAN NOTES

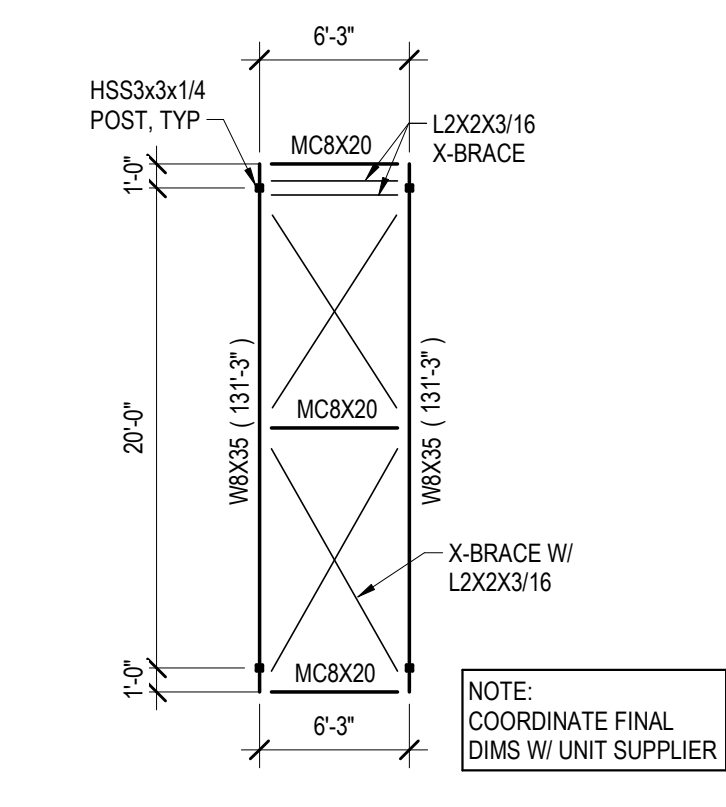
- TOP OF BASE STEEL (JOIST BEARING) ELEVATION = AS NOTED
- ROOF DECKING SHALL BE 1 1/2" x 20GA WIDE RIB PRIME PAINTED METAL ROOF DECK FASTENED TO SUPPORTING STRUCTURE USING 3/8" PATTERN OF ANY OF THE ATTACHMENT METHODS SHOWN IN DETAIL 1/S820 WITH #10 TEK SIDELAP FASTENERS AT 18" OC
- ROOF DECKING SHALL BE 3" x 20GA ACOUSTIC METAL ROOF DECK FASTENED TO SUPPORTING STRUCTURE USING 3/8" PATTERN OF ANY OF THE ATTACHMENT METHODS SHOWN IN DETAIL 1/S820 WITH #10 TEK SIDELAP FASTENERS AT 18" OC
- ROOF DECKING SHALL BE 3" x 20GA WIDE RIB PRIME PAINTED METAL ROOF DECK FASTENED TO SUPPORTING STRUCTURE USING 3/8" PATTERN OF ANY OF THE ATTACHMENT METHODS SHOWN IN DETAIL 1/S820 WITH #10 TEK SIDELAP FASTENERS AT 18" OC
- ROOF SHEATHING IS 3" TG DECKING W/ 153Z (PLYWOOD OR OSB). ATTACH SHEATHING TO W/ 156 NAILS 8" OC AT PANEL EDGES AND 12" OC AT PANEL FIELDS. MIN DIST. FOR NAILS IS 3/8" FROM PANEL EDGE. STAGGER ROOF SHEATHING JOINTS.

ROOF FRAMING KEY NOTES

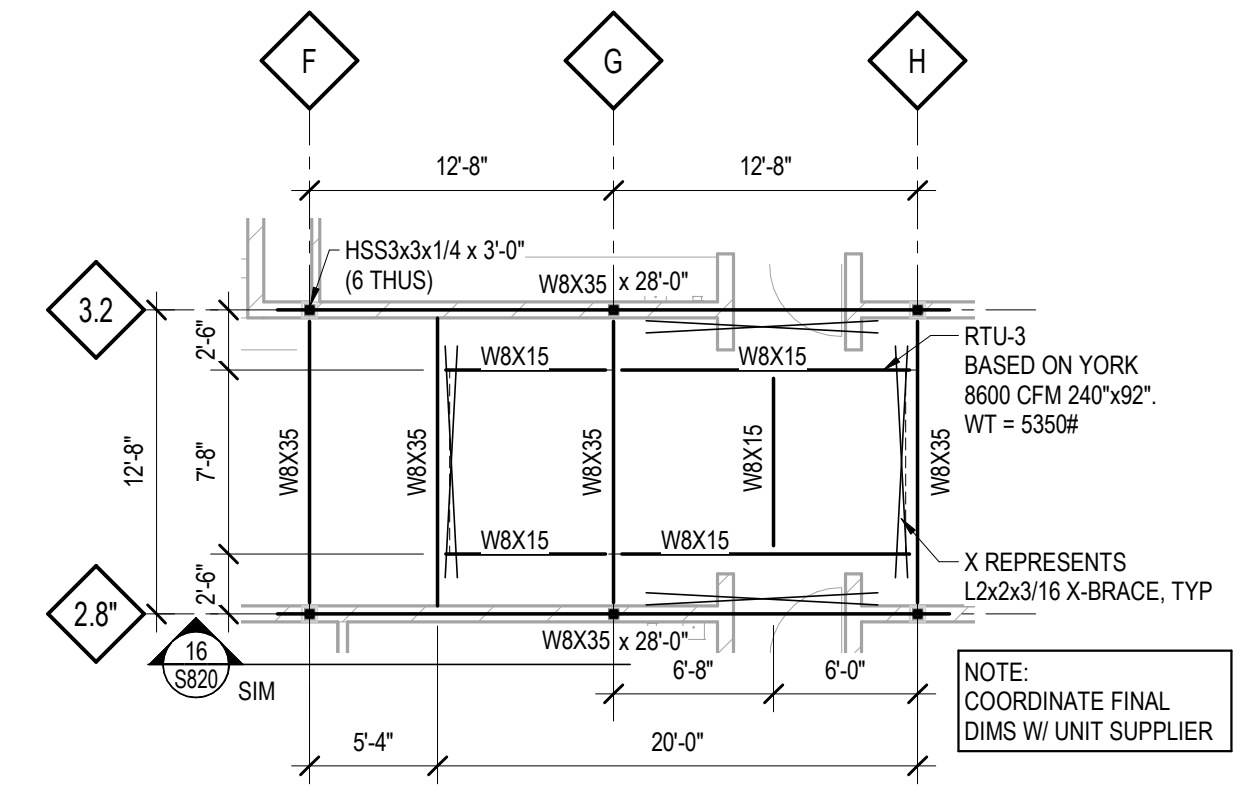
- CONDENSING UNIT - BASED ON YORK-140X38", 5100#
- MAT HOIST SLING SUPPORT WITH LINDAPTOR CLAMPS. ASSUME 1800# PER LOCATION AT 10' SPACING. W6x20x40-0" SPREADER BEAM AS NEEDED.
- NON-BEARING CMU WALLS - REFER TO ARCH FOR LOCATIONS. REFER TO 9/S811 FOR TOP OF WALL DETAIL, MISC LINTEL SCHEDULE (S002) FOR OPENINGS
- EXISTING OPENING
- 4" OD 11 GA TUBING PER HOOP MFR
- MISCELLANEOUS STEEL ANGLES OR UNISTRUT BY HOOP INSTALLER BASED ON MFR REQUIREMENTS. JOIST DESIGNER TO ACCOUNT FOR ADDITIONAL LOADS FROM BASKETBALL GOALS AS FOLLOWS:
PLAYING POSITION: 1K x 1K, 0.5K x 0.5K
STORAGE POSITION: 0.5K x 0.5K, 1K x 1K
- LOADS ARE BASED ON ASSUMED GOAL WEIGHT OF 2,500 LBS IN PLAYING POSITION INCLUDING 750 LBS ALLOWANCE FOR PLAYERS. COORDINATE EXACT LOCATIONS, WEIGHTS AND CONNECTION REQUIREMENTS WITH ARCHITECT AND GOAL SUPPLIER. PROVIDE ADDITIONAL BRIDGING AT EACH GOAL AS REQUIRED TO RESIST LATERAL LOADS IMPOSED UPON JOISTS FROM MOVING GOAL. COORDINATE LOAD MAGNITUDES WITH GOAL SUPPLIER.
- 2" BRACKET ASSEMBLIES OR OTHER ATTACHMENT DESIGNED AND PROVIDED BY MFR. LOAD TO DLH APPROXIMATELY 100 PLF. VERIFY W/ SUPPLIER.
- JOIST DESIGNER TO ACCOUNT FOR WEIGHT OF DIVIDER CURTAIN AND ALL REQUIRED ACCESSORIES FOR COORDINATION WITH CURTAIN SUPPLIER.
- WITH CMU ABOVE. REFER TO DETAIL.
- GLULAM TRUSS W/ 3 1/2x9 TOP CHORDS. COORDINATE SHAPE AND COLLAR TIE WITH ARCHITECT. TRUSS DESIGN BY SUPPLIER.
- 3 1/2x7 1/2" GLULAM PURLINS. TRIMMED AS DETAILS. COORDINATE WITH ARCHITECTURE. SUPPLIER SIZES MAY VARY. BEST MATCH PLAN SIZES THAT MEET LOAD REQUIREMENTS.
- GLULAM TRUSS W/ 3 1/2x9" TOP CHORDS. COORDINATE SHAPE AND COLLAR TIE W/ ARCH. TRUSS DESIGN BY SUPPLIER.
- 5 1/2x9 1/2" GLULAM BEAM. VERIFY SHAPE AT ENDS WITH ARCH (SEE SPECS)
- FASTEN GLULAM BEAM TO HSS COLUMN W/ SIMPSON CCO COLUMN CAP (PER MANUFACTURER SPECIFICATIONS) WELDED TO HSS COLUMN W/ 1/4" WELD ALL AROUND OR APPROVED EQUIVALENT.
- WL REACTIONS AT TRUSS: WL = +/- 2.0K. SEE S001 AND S002 FOR ADDITIONAL LOADING.
- REFER TO MISC LINTEL SCHEDULE



1 ROOF FRAMING PLAN
S120 SCALE: 1/8" = 1'-0"



2 ACC FRAME BASED ON YORK UDC-243-D60
S120 SCALE: 1/8" = 1'-0"



3 RTU-3 FRAME
S120 SCALE: 1/8" = 1'-0"



Consultant:

Project Title: **MINERAL POINT UNIFIED SCHOOL DISTRICT
ELEMENTARY SCHOOL**
Project Location: **611 COTHERN STREET
MINERAL POINT, WISCONSIN**
Sheet Title: **HVAC SECTIONS**

HSR Project Number: **HSR # 19001**

Project Date: **2.13.2020**

Drawn By: **Author**

Key Plan:

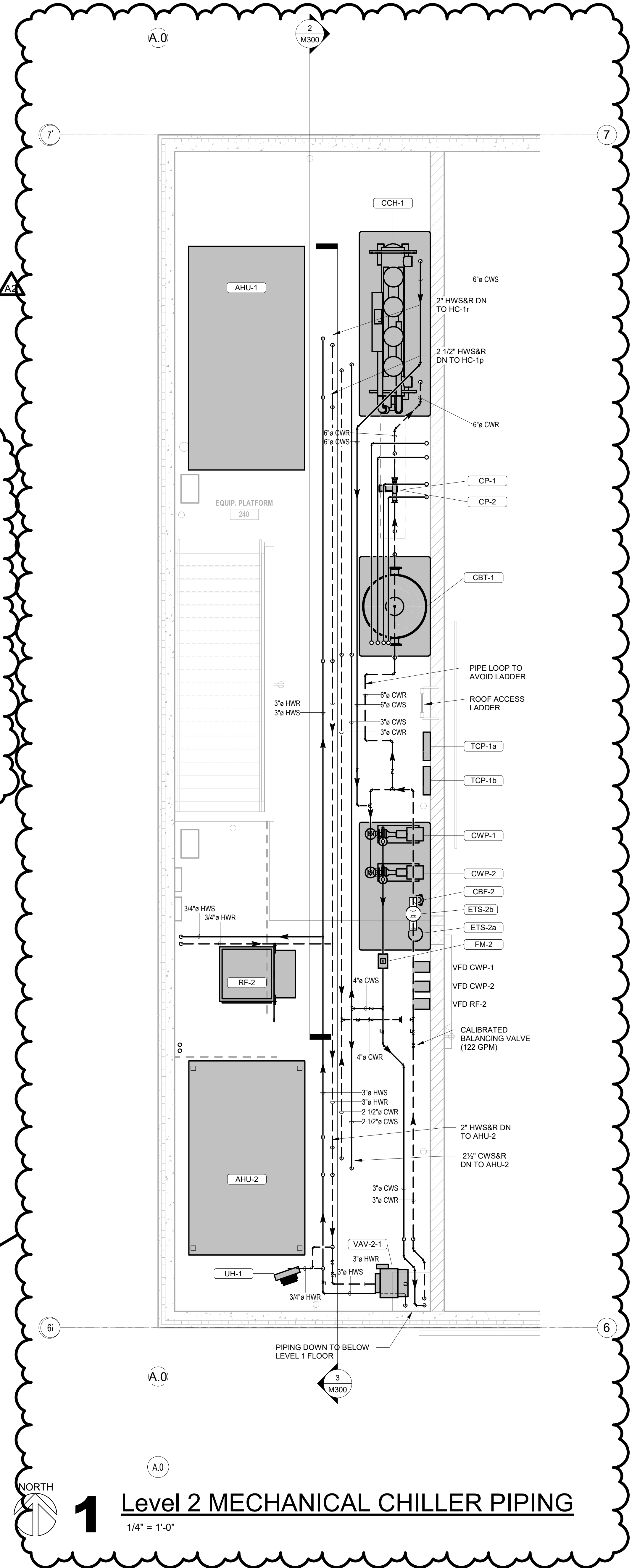
BID DOCUMENTS

No.	Description	Date
A2	ADDENDUM 2	3-3-2020

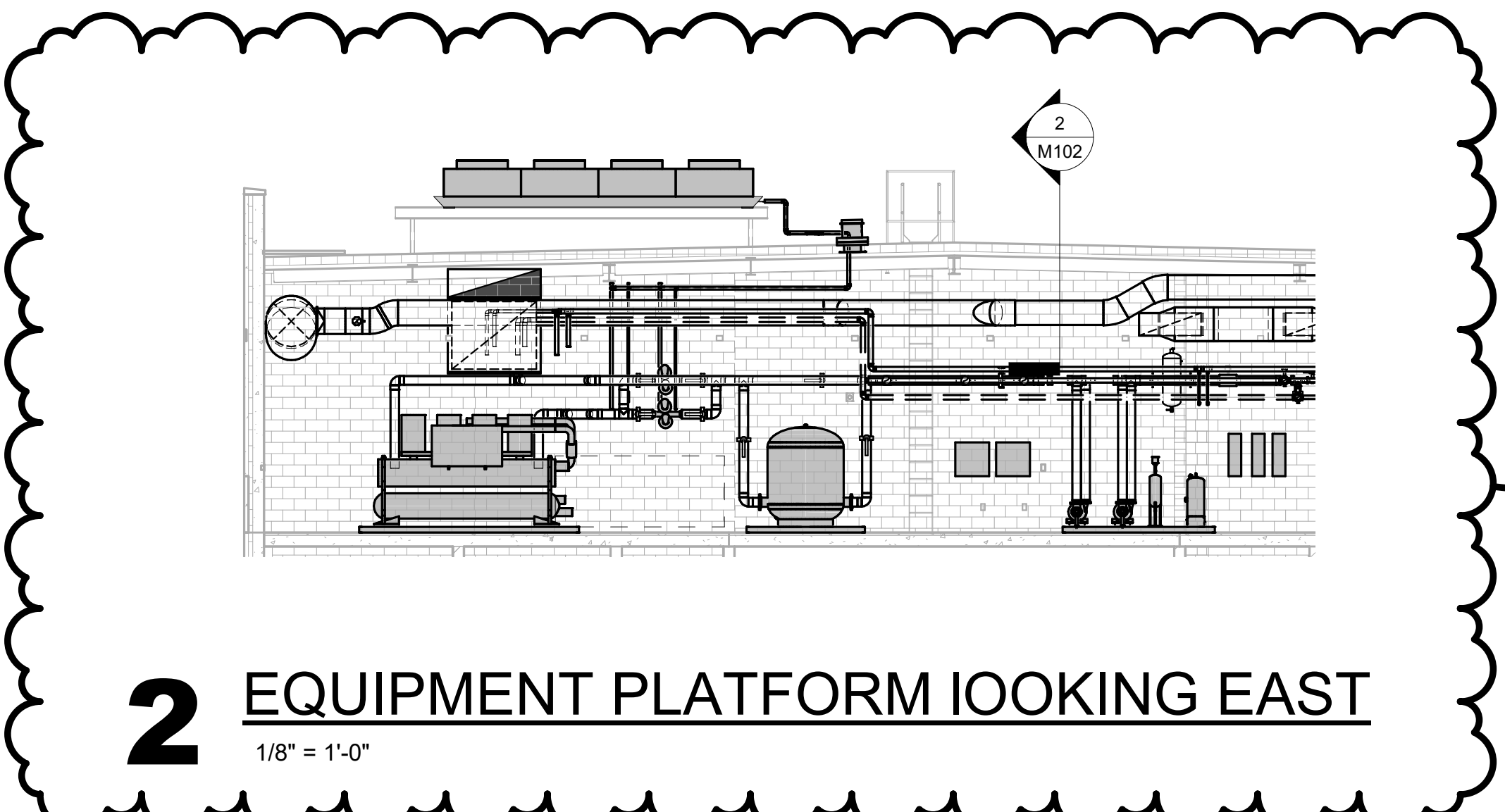
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Last Update: **3/3/2020 11:43:39 AM**

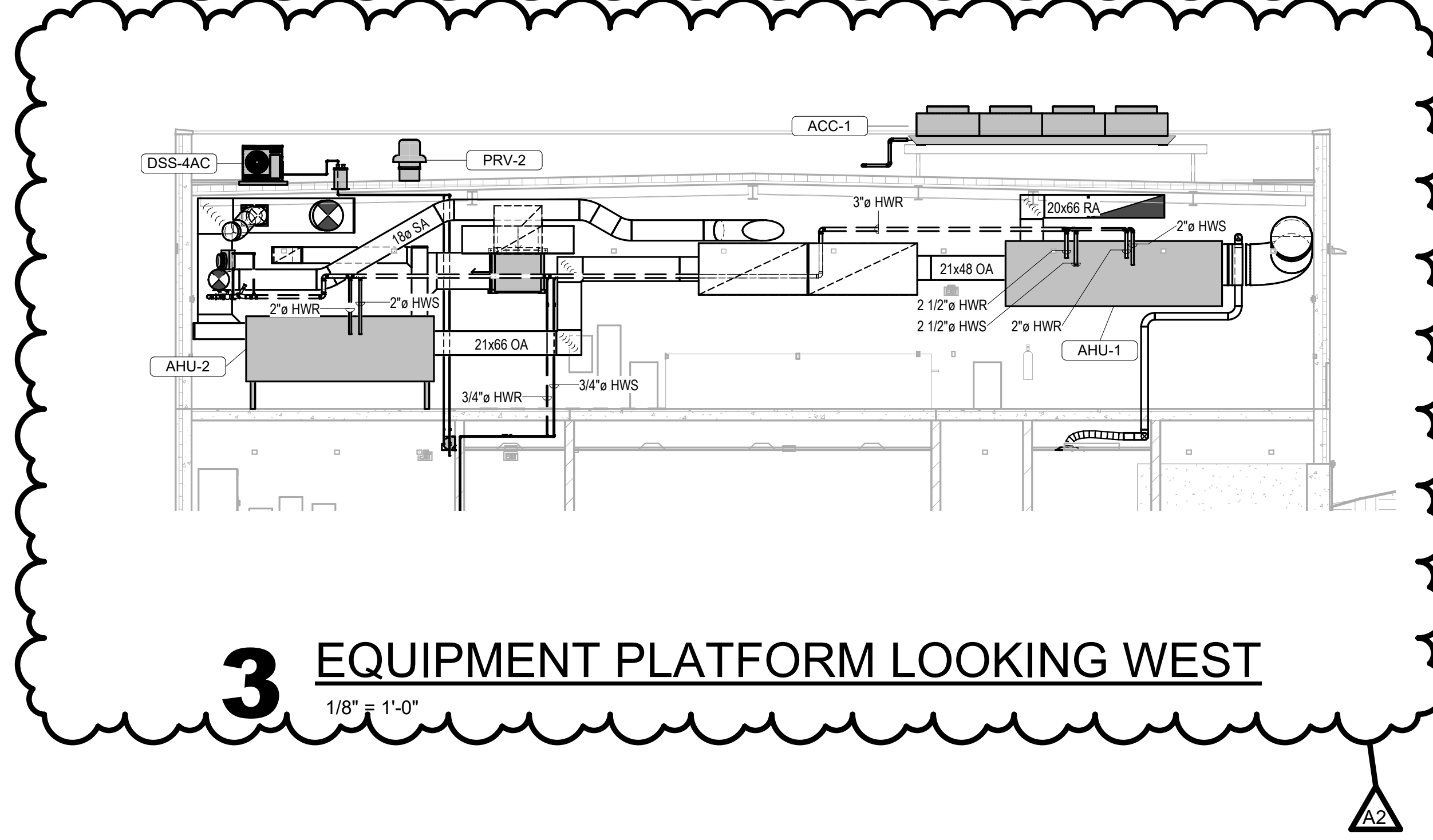
M300



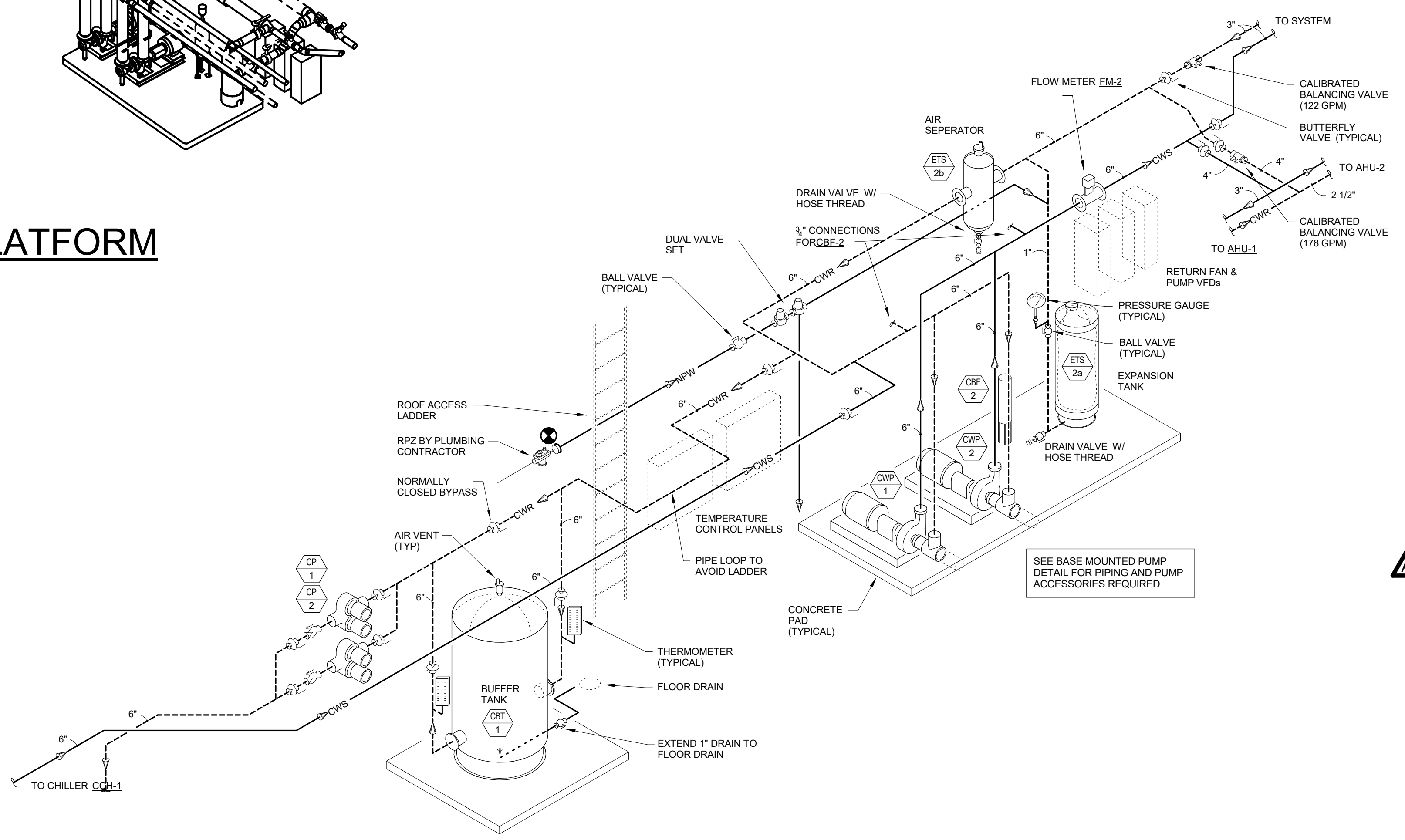
1 Level 2 MECHANICAL CHILLER PIPING
1/4" = 1'-0"



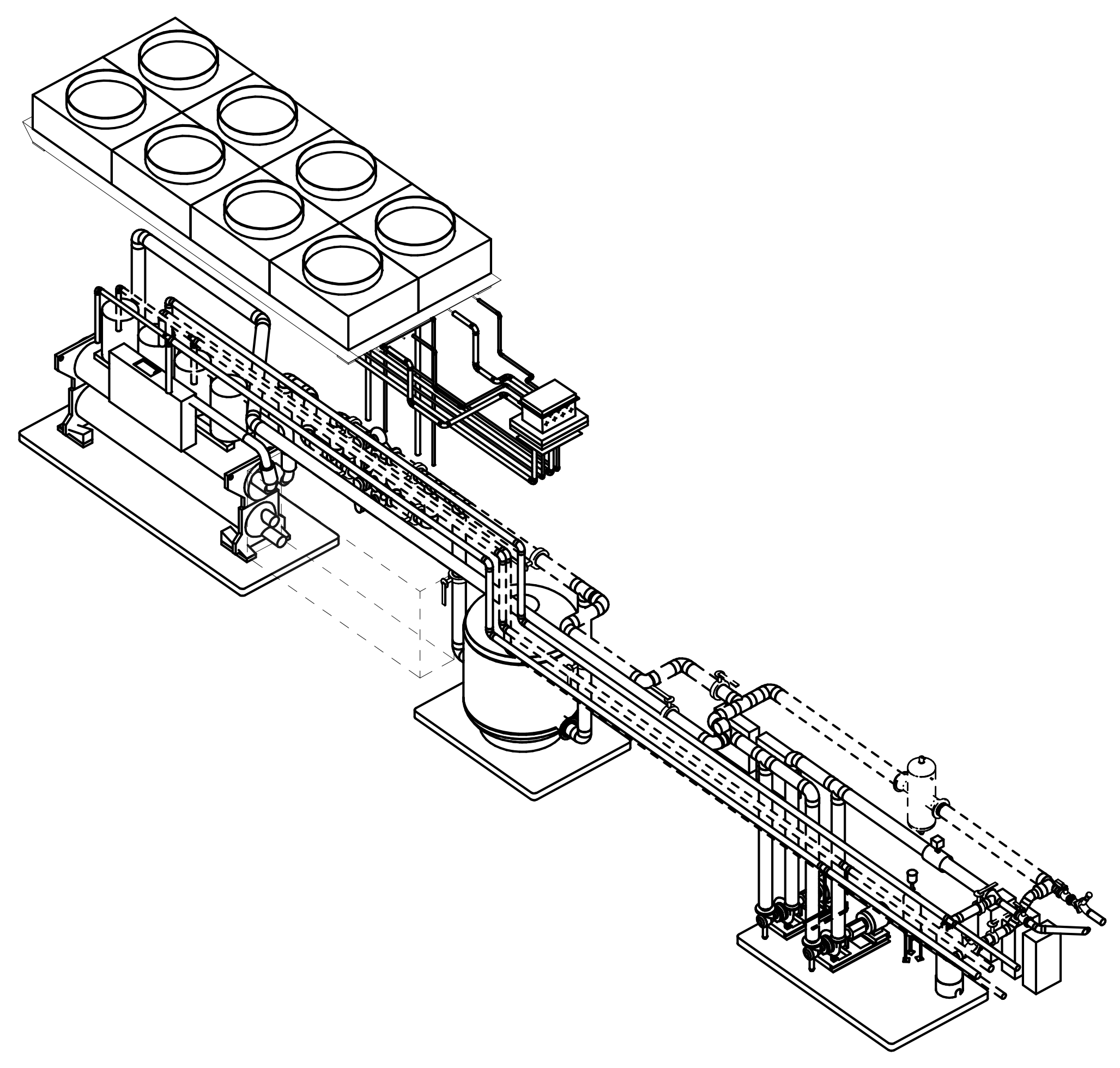
2 EQUIPMENT PLATFORM LOOKING EAST
1/8" = 1'-0"



3 EQUIPMENT PLATFORM LOOKING WEST
1/8" = 1'-0"



4 CHILLER BUFFER TANK SYSTEM
N.T.S.



5 EQUIPMENT PLATFORM
N.T.S.

ROOF HOODS (23 37 23)														
MARK	MANUFACTURER'S MODEL NO.	SERVING	THROAT WID.	HOOD LEN.	THROAT WID.	HOOD LEN.	SF	APPL.	CFM	VELOCITY (FPM)	MAX P.D. "	CONSTR.	ACCESSORIES/OPTIONS	REMARKS
RH-1	Fabra Hood - FGR	AHU-1	54	81	87	26.44	RELIEF	12,480	489	551	0.05	Aluminum	2, 3, 4	A, B
RH-2	Fabra Hood - FGR	AHU-2	48	60	73	87	RELIEF	10,800	448	540	0.05	Aluminum	2, 3, 4	A, C
RH-3	Fabra Hood - FGI	AHU-3	30	66	66	99	INTAKE	8,000	253	582	0.05	Aluminum	1, 3, 4	A, D

Based on products by GREENHECK. 2/10/14/15

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. 1" base, Bird Screen.
 2. 2" base, Bird Screen and 0.5" internal insulation.
 3. 12" Roof Curb.
 4. Motorized insulated damper in throat.

REMARKS:
 A. Ducted.
 B. Approximately 336 lbs.
 C. Approximately 286 lbs.
 D. Approximately 269 lbs.

WALL LOUVERS (23 37 50)													
MARK	MANUFACTURER'S MODEL NO.	SERVING	WIDTH	HGT.	DEPTH	F.A.	APPL.	CFM	MAX P.D. "	CONSTR.	ACCESSORIES/OPTIONS	REMARKS	
IL-1	ESD-635	AHU-1	95	45	6	17.18	Intake	12,400	0.08	ALUM.	1, 3, 4, 5	A, B	
IL-2	ESD-635	AHU-2	95	45	6	17.18	Intake	10,800	0.06	ALUM.	1, 3, 4, 5	A, B	

Based on products by GREENHECK. 1/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Bird Screen.
 2. Flange Frame.
 3. Channel Frame.
 4. Finish to be 2-coat 70% Kynar 500 in a standard color palette.
 5. Weather proof with downspouts and gutters.

REMARKS:
 A. Color selected by Owner/Architect.
 B. Plus 12% additional pressure drop for 1/2" birdscreen on intake louvers.

WATER BOILERS - ULTRA HIGH EFFICIENCY (23 52 16)													
MARK	MANUFACTURER MODEL NO.	TOTAL MBH	MINIMUM INPUT	MAX. RET. TEMP.	% EFF.	PIPE CONN. SIZE	VENT SIZE	GAS PRESSURE	ACCESS/J.	REMARKS			
BLR-1	KS 850	850.0	813.0	54	95	2" 2"	6" 6"	5" 13"	Stainless	1 - 9 A, B, C			
BLR-2	KS 850	850.0	813.0	54	95	2" 2"	6" 6"	5" 13"	Stainless	1 - 9 A, B, C			
BLR-3	KS 850	850.0	813.0	54	95	2" 2"	6" 6"	5" 13"	Stainless	1 - 9 A, B, C			

Based on products by TRIANGLE TUBE. 2/10/14/15

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Welded Stainless Steel Fire-tube heat exchanger.
 2. Pre-mix Stainless Steel Burner.
 3. 5 to 1 shutdown ratio.
 4. Temperature/Pressure gauge.
 5. IR gas train.
 6. ASME "H" stamp.
 7. Basket interface.
 8. Condensate neutralizer kit.

REMARKS:
 A. Burner gas train and control wiring shall be the responsibility of the Mechanical Contractor.
 B. 120V, 15 amp electrical power required. Max 7.4 FLA pump connection.
 C. 24.5" W x 55" D x 38" H.

AIR COOLED CONDENSERS (23 63 13)													
MARK	MODEL No.	SERVING SYSTEM	HEAT REJECT MBH	REFRIG TYPE	MAX. SDT	O.A.T. TEMP.	NUM. CIRC.	CONNECTIONS GAS LIQ.	MOCP	MCA	VOL/TPH	ACCESSORIES/OPTIONS	REMARKS
ACC-1	VDC-243D60	CCH-1	1823.6	R-410a	95	2	1.98	1.98	35	31	4803	1, 2, 3	A, B, C

Based on products by YORK. 1/10/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Provide mounting rails roof support.
 2. Liquid line solenoid valves.
 3. Single point power connection.

REMARKS:
 A. 218.5" L x 88.0" W x 53.8" H, weight, 2635 LBS.
 B. Coil volume 3.7 Cu Ft, not including lines.
 C. 8 Fans @ 2 HP each, total 6.400 CFM, 94 dBA.

CHILLERS - CONDENSERLESS SCROLL (23 64 23)																
MARK	MANU. MODEL NO.	MIN. TONS	REFRIG TYPE	NUM. COMP.	NUM. STEPS	MIN. STEP	FULL LOAD EER	EVAPORATOR EWT	LWT	P.D.F.T.	GPM	MCA	MOCP	VOL/TPH	ACCESSORIES/OPTIONS	REMARKS
CCH-1	YCR1-0156HE46	123	R-410a	6	6	20%	10.53	55	45	8.33	300	257	300	4903	1 thru 9	A, B, C, D, E

Based on products by YORK. 1/10/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Controller capable of interfacing with Building Automation System.
 2. Control Transformer, Phase Loss/Voltage Protection.
 3. Single Point Power and Neutral Disconnect.
 4. Two refrigerant circuits.
 5. 5 Year Extended Compressor Warranty.
 6. 2" refrigerant isolators.
 7. Evaporator flow switches.
 8. Factory Start-up.
 9. Hot Gas By-Pass on one circuit to permit capacities lower than the minimum step.

REMARKS:
 A. Evaporator 77 Gallon volume.
 B. Mounted on nominal 4" inch concrete pad.
 C. Double discharge items required.
 D. Refrigerant charge, 63 LBS each in 2 circuits, total 126 LBS.
 E. Operating weight, 5439 LBS, 140.8" L x 38.0" W x 64.5" H.
 F. AHR 575 Sound Pressure Level at full load 78.0 dBA.
 G. REV-1 17.87
 H. Air cooled condenser (ACC-1) located on roof.

PACKAGED GAS/ELECTRIC ROOFTOP UNIT (23 74 13)															
MARK	MANUFACTURER'S MODEL NO.	SERVING/LOCATION	CFM	E.S.P.	HP	COOLING MBH	HEATING MBH	CFM	ELECT.	ACCESSORIES/OPTIONS	REMARKS				
RTU-1	J077N12G489GDD2A1	Office	2,500	1.25	3	79/96	62.6	86.3	51	120	96	800	24.8	4603	1,2,3,7
RTU-2	(not used)														
RTU-3	JY30S3G4L1CF312E1	Core Classrooms	8,600	1.5	10	79/96	204.3	318.6	40	533	426	2,400	76.0	4603	4,6,8

Based on products by YORK. 3/10/11/14

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Ultra High Efficiency, three Stage Cooling, hot gas by pass.
 2. Aluminum panel, two stage gas heat.
 3. Barometric relief with hoods.
 4. Four Stage cooling.
 5. Power Exhaust Kit with Barometric relief and exhaust hoods.
 6. Modulating control gas heat.
 7. Single wall unit cabinet, with foil faced insulation.
 8. Double wall insulated cabinet.

COMMON FEATURES:
 R-410A refrigerant. Meets IECC 2015, ASHRAE 90.1 and AMCA 511.
 Dry coil low back Economizer with Economizer Fault Detection & Diagnostic.
 Unit mounted disconnect, single point power connection, Convenience outlet, Powered Separately.
 Hinged Access Panels & 2" MERV 8 filters.
 BACom Communications Interface.
 Supply air smoke detector. Unit mounted CO2 detector.
 14" Roof Curb for RTU-1.
 Belt driven VAV supply fan with VFD.

REMARKS:
 IEER rated in accordance with AHR Standard 540/360.
 RTU-1 - 13.1 EER/0.5 IEER, 1478 Lbs, 80" L x 99" W x 31" H, MOCP 30 amps, 85 dBA(A).
 RTU-2 (not used).
 RTU-3 - 10.8 EER/14.6 IEER, 4857 Lbs, 180" L x 90" W x 31" H, MOCP 90 amps, 89 dBA(A).
 Coordinate new unit selection with structural and electrical.

FANS - CABINET/CEILING EXHAUST (23 34 16)													
MARK	MANUFACTURER'S MODEL NO.	SERVING	CFM	TOT. S.P.	TYPE	SONES	CONTROL/ INTERLOCK	FAN RPM	DRIVE	ELECT.	ACCESSORIES/OPTIONS	REMARKS	
CE-1	CSP-B110	New Mems 127	95	0.38	Cabinet	1.5	RTU-3	931	Direct	84	1151	1,2,3,5,6,7	A
CE-2	SP-A200	Toilet 140	65	0.38	Ceiling	2	AHU-2	722	Direct	24	1151	1,2,3,4,5,6,8	B
CE-3	CSP-B200	Toilet 105A	150	0.38	Cabinet	1.3	RTU-1	929	Direct	105	1151	1,2,3,5,6,7	B
CE-4	SP-A200	Toilet 111A	95	0.50	Ceiling	3	RTU-1	806	Direct	33	1151	1,2,3,4,5,6,8	C
CE-5	CSP-A300	Staff Work 111	200	0.50	Cabinet	2	RTU-1	1015	Direct	48	1151	1,2,3,4,5,6,8	C
CE-6	CSP-B200	LMC Work 144	150	0.50	Cabinet	1.5	AHU-2	950	Direct	112	1151	1,2,3,5,6,8	D

Based on products by GREENHECK. 1/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Integral Plug-In Disconnect & Backdraft Damper.
 2. Rubber Isolators.
 3. Galvanized Steel Housing.
 4. Housing Lined with 1/2" Acoustical Insulation.
 5. AMCA Certified Sound and Air Performance, UL Listed.
 6. Speed Controller.
 7. Wall Cap.
 8. Roof Jack.

REMARKS:
 A. Located above Second Grade 128 ceiling, with wall discharge.
 B. Located above Toilet 105A ceiling, with wall discharge.
 C. Located above Hallway 112 ceiling, with roof discharge.
 D. Located above LMC Work 144 ceiling, with roof discharge.

FANS - DESTRATIFICATION (23 34 16)															
MARK	MANUFACTURER'S MODEL NO.	SERVING	CEILING ZONE	ROOM	MOUNT HEIGHT	AREA SQ FT	CFM	FAN ØBA	DRIVE	DUCE	ELECT.	ACCESSORIES/OPTIONS	REMARKS		
1	H25 EC HI EFF	Open	1	Gymnasium 146	25	1,444	655	53.4	EC Direct	n/a	57	0.50	208-230V1	1, 2, 3, 6	A, C, E
2	H25 EC HI EFF														
3	H25 EC HI EFF														
4	H25 EC HI EFF														
5	H25 EC HI EFF	Open	2	Entry 136	30	655	655	51.8	EC Direct	n/a	57	0.50	208-230V1	1, 2, 3, 6	A, C, F
6	H25 EC HI EFF														
7	H25 EC HI EFF														
8	H25 EC HI EFF														
9	H25 EC HI EFF	Suspended	3	LMC 142	-22	1,273	530	-	Direct	Ø dia.	100	1.00	1151	1, 3, 4, 5, 7	B, C, D, F
10	ICS Silent AC														
11	IC30 Silent AC														

Based on products by ZOO FANS. 1/10/12/13

See the specifications for detailed product requirements.

ACCESSORIES/OPTIONS:
 1. Suspension cables, vibration cable and attachment hardware.
 2. Intake and exhaust safety grilles.
 3. 24V power hard wired from transformer to controller.
 4. 8" Jet Ball supply diffuser and support bracket.
 5. Insulated flex duct with Flex-90 elbows.
 6. AVS-EC Controller.
 7. AVST Power Pack and controller.

REMARKS:
 A. 50w, 2018, 18" dia x 21" long
 B. Leave return duct open above duct ceiling.
 C. (1) Wall Mount Control, (2) Sensor (In Truss & 12" AFF), Controller In Secured Space, in single gang box.
 D. Auto transformer for silent operation.
 E. Controller located in Gym Office.
 F. Controller located in LMC Room 144.

FANS - IN-LINE CENTRIFUGAL (23 34 23)														
MARK	MANUFACTURER'S MODEL NO.	SERVING/LOCATION	CFM	TOT. S.P.	TYPE	CONFIG.	FAN RPM	DIA.	DRIVE	ØBA	H.P.	ELECT.	ACCESSORIES/OPTIONS	REMARKS
RF-2	BSQ-300-30	AHU-2	10,800	0.5	Square		677	30.5	Belt	70	3	4603	1, 2, 3, 4	A, B

Based on products by GREENHECK. 1/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Disconnect switch.
 2. Hanging spring isolators.
 3. Inlet and outlet guards.
 4. UL Listed.

REMARKS:
 A. 40" x 46" x 38", Approximately 558 lbs.
 B. Interlock with AHU-2, 42" x 42" duct connections.
 C.

FANS - POWER ROOF VENTILATORS (23 34 23)														
MARK	MANUFACTURER'S MODEL NO.	SERVING/LOCATION	CFM	TOT. S.P.	TYPE	OPENING SIZE	FAN RPM	DIA.	DRIVE	ØBA	H.P.	ELECT.	ACCESSORIES/OPTIONS	REMARKS
PRV-1	G-085-VG	T1 T23 & 138	800	0.5	Cent. Roof	10.8" Sq.	1088	10.8"	Direct	57	185	1151	1,2,3,4	A, D
PRV-2	G-133-VG	Equip. Flat- 219	2,000	0.375	Cent. Roof	14.5" Sq.	Variable	13.13"	Direct	67	12	1151	1,2,3,4	B
PRV-3	G-070-VG	Jan 220	200	0.375	Cent. Roof	10.5" Sq.	Variable	8.13"	Direct	59	1/15	1151	1,2,3,4	C
PRV-4	CUE-089-VG	Dishwasher	600	0.375	Cent. Upblast	14.5" Sq.	Variable	11.19"	Direct	52	1/4	1151	1,2,3,5	D, E
PRV-5	G-080-VG	Equipment 113A	600	0.625	Cent. Roof	12.5" Sq.	Variable	10.88"	Direct	56	1/10	1151	1,2,3,4	F
PRV-6	CUE-089-VG	General Kitchen	600	0.375	Cent. Upblast	14.5" Sq.	Variable	11.19"	Direct	52	1/4	1151	1,2,3,5	D
PRV-7	G-070-VG	Jan 206 & T8 203	200	0.375	Cent. Roof	10.5" Sq.	Variable	8.13"	Direct	59	1/15	1151	1,2,3,4	G

Based on products by GREENHECK. 1/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. 16" flat roof curb.
 2. Disconnect switch.
 3. Vari-Speed speed control for balancing.
 4. Gravity backdraft damper.
 5. Aluminum motorized backdraft damper.

REMARKS:
 A. Fan speed 1541 RPM, Interlock with AHU-1, Approximately 69 lbs.
 B. Fan speed 1546 RPM, Interlock with reverse acting Thermostat, Approximately 69 lbs.
 C. Fan speed 1565 RPM, Interlock with RTU-3, Approximately 59 lbs.
 D. Fan speed 1160 RPM, Interlock with wall switch, Approximately 68 lbs.
 E. Dishwasher loading end = 200 CFM, unloading end = 400 CFM.
 F. Fan speed 1650 RPM, reverse acting thermostat, Approximately 47 lbs.
 G. Fan speed 1565 RPM, Interlock with RTU-2, Approximately 59 lbs.

VAV AIR TERMINAL UNITS (23 36 00)																		
MARK	AREA SERVED	PLAN (CFM)	DUCT SIZE	INLET SIZE	TERMINAL UNIT COOLING CFM*	MAX. MBH	COIL DATA (based on PLAN CFM)	L.A.T.	PIPING RUNOUT	CONTROL VALVE	ZONE LOSS	ACCESS/REMARKS						
1-1	Office 102	110	6	4	0.25	110	2.7	1 kW	1151	n/a	n/a	n/a	2.45	A, D				
1-2	Principal 103	360	8	6	0.25	360	145	6.6	2 kW	208V1	n/a	n/a	65	82	n/a	n/a	6.73	A, D, E
1-3	Office 101 & Wait.	450	10	7	0.25	450	180	7.1	2.5 kW	208V1	n/a	n/a	65	80	n/a	n/a	6.07	A, D, E
1-4	Nurse 105	515	10	7	0.25	515	205	9.7	3 kW	208V1	n/a	n/a	65	82	n/a	n/a	9.57	A, D, E
1-5	Hallway	600	8	4	0.25	600	40	1.5	0.5 kW	1151	n/a	n/a	65	79	n/a	n/a	0.00	A, D
1-6	Entry 100	500	10	7	0.25	500	200	3.1	1 kW	1151	n/a	n/a	65	71	n/a	n/a	5.20	A, D, E
1-7	Conf 108	230	8	5	0.25	230	90	5.5	2 kW	208V1	n/a	n/a	65	87	n/a	n/a	5.01	A, D
1-8	109 8110	175	8	5	0.25	175	70	3.1	1 kW	1151	n/a	n/a	65	81	n/a	n/a	0.00	A, D
1-9	Staff Work 111	200	8	5	0.25	200	80	3.1	1 kW	1151	n/a	n/a	65	79	n/a	n/a	1.60	A, D

Based on products by YORK. 1/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. 16" flat roof curb.
 2. Disconnect switch.
 3. Vari-Speed speed control for balancing.
 4. Gravity backdraft damper.
 5. Aluminum motorized backdraft damper.

REMARKS:
 A. Fan speed 1541 RPM, Interlock with AHU-1, Approximately 69 lbs.
 B. Fan speed 1546 RPM, Interlock with reverse acting Thermostat, Approximately 69 lbs.
 C. Fan speed 1565 RPM, Interlock with RTU-3, Approximately 59 lbs.
 D. Fan speed 1160 RPM, Interlock with wall switch, Approximately 68 lbs.
 E. Dishwasher loading end = 200 CFM, unloading end = 400 CFM.
 F. Fan speed 1650 RPM, reverse acting thermostat, Approximately 47 lbs.
 G. Fan speed 1565 RPM, Interlock with RTU-2, Approximately 59 lbs.

ELECTRONIC FLOW METERS (23 09 00)													
MARK	DESCRIPTION	MODEL NO.	SYSTEM	MATERIAL	NOMINAL DIAMETER	TEMPERATURE MINIMUM	TEMPERATURE MAXIMUM	MAXIMUM FLOW	GLYCOL TYPE	%	ACCESSORIES/OPTIONS	REMARKS	
FM-1	Electromagnetic Flow Meter	F-3200	Heating Water	STAINLESS	4"	60	180	240 GPM	PROPYLENE	30	1	A, C	
FM-2	Electromagnetic Flow Meter	F-3200	Chilled Water	STAINLESS	6"	40	100	300 GPM	n/a	n/a	1	B, C	

Based on products by Onicon Corporation. 1/10/12/13

See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
 1. Remote Mount Transmitter.

REMARKS:
 A. Located in Mechanical Room 124A.
 B. Located on Equipment Platform 240.
 C. Provided by Controls Contractor, installed by Mechanical Contractor.

CHILLED WATER BUFFER TANK (23 21 16)													
MARK	MODEL No.	GALLON Cap.	SIZE, INCHES W x D	HEIGHT	IN								



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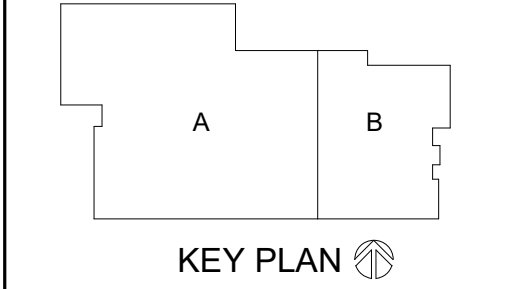
MINERAL POINT UNIFIED SCHOOL DISTRICT
ELEMENTARY SCHOOL
Project Location: 611 COTHERN STREET
MINERAL POINT, WISCONSIN
HVAC SCHEDULES

Project Title:
HSR Project Number:
HSR # 19001

Project Date:
2.13.2020

Drawn By:
SJK/MSB

Key Plan:



KEY PLAN

BID DOCUMENTS

Revisions:
No. Description Date
A2 ADDENDUM 2 3-3-2020

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LARGE AIR COOLED CONDENSING UNITS (23 62 13)

MARK	MODEL No.	SERVING SYSTEM	TOTAL MBH*	O.A.T. TEMP.	STEPS/ SPEEDS	NO. COMP	REFRIG. TYPE	MIN. IER	SEER	IEER	KW	MCA	MCCP	VOLTPH	ACCESSORIES/ OPTIONS	REMARKS
CU-3	J25YCO0AJAB4	AHU-3	269.8	95	2	2	R-410a	10.2	11.4	12.2	23.65	48.3	60	4603	1 thru 9	A, B, C, D

Based on products by YORK.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. Scroll Compressor(s)
2. Croncase heater
3. Time delay timer on compressor start
4. Low ambient kit to allow operation down to 40 deg. F.
5. ...
6. Separate insulated compressor compartment
7. 15 amp convenience outlet, powered separately
8. Disconnect.

REMARKS:
A. One refrigerant circuit.
B. Unit mounted on equipment rails on roof.
C. Weight 845 lb, 59L x 64T x 50 1/4
D. Rooftop refrigerant circuit piping up through roof through RPH-2.

UNIT ACOUSTICS: Sound Power Levels (dB), Octave Band (Hz)

	63	125	250	500	1000	2000	4000	8000
a.	93	93	96	93	90	89	84	77

DECENTRALIZED VERTICAL UNITS - CHILLED/HOT WATER (23 82 23)

MARK	MODEL NO.	SUPPLY FAN				COOLING COIL				HEATING COIL**				WHEEL MBH	MN	O.A.	ELECTRICAL			ACCESS./ OPTIONS	REMARKS	
		CFM	ESP	EAT	GPM	WPD	R	TOT	SENS	EAT	GPM	WPD	R				MBH	SUM.	WINT.			MCA
CAH-1	Freshman HCW IQ	1000	0.25	7965.8	8.0	1.5	4	32.7	24.5	50.337	5.0	0.51	2	34.3	9.30	21.46	250	9.55	15	208-230/3	1.2, 5	A, B
CAH-2	Freshman HCW IQ	1000	0.25	7965.8	8.0	1.5	4	32.7	24.5	50.337	5.0	0.85	2	40.0	9.30	21.46	250	9.55	15	208-230/3	1.2, 5	A, B
CAH-3	Freshman HCW IQ	1400	0.25	78,485.4	9.0	2.0	5	45.0	34.1	53,459.4	5.0	0.85	2	59.1	10.88	25.18	300	9.55	15	208-230/3	1.2, 5	A, B
CAH-4	Freshman HCW IQ	1200	0.25	7965.8	8.0	1.7	5	41.0	30.1	50.337	5.0	0.85	2	54.8	10.88	25.18	300	9.55	15	208-230/3	1.2, 5	A, B
CAH-5	Freshman HCW IQ	1600	0.25	7865.1	10.0	2.4	5	48.7	37.9	55,741.3	6.0	0.66	2	46.0	10.88	25.18	300	14.43	20	208-230/3	1.2, 5	A, C
CAH-6	Freshman HCW IQ	1400	0.25	77,965.8	8.0	1.5	4	35.8	30.5	56,541.9	4.0	0.38	2	38.8	9.30	21.46	250	9.55	15	208-230/3	1.2, 5	A, B
CAH-7	Freshman HCW IQ	1400	0.25	78,485.4	9.0	2.0	5	45.0	34.1	53,459.4	5.0	0.85	2	59.1	10.88	25.18	300	9.55	15	208-230/3	1.2, 5	A, B
CAH-8	Freshman HCW IQ	850	0.25	79,766.2	6.0	1.0	4	28.3	21.0	46,434	4.0	0.61	2	42.7	9.30	21.46	250	9.55	15	208-230/3	1.2, 6	A, B
CAH-9	Freshman HCW IQ	1400	0.25	77,965.8	8.0	1.7	5	42.7	33.2	56,541.9	5.0	0.51	2	40.5	9.30	21.46	250	9.55	15	208-230/3	1.2, 6	A, B
CAH-10	Freshman HCW IQ	1000	0.25	7965.8	8.0	1.7	5	37.1	26.4	50.337	5.0	0.85	2	40.0	9.30	21.46	250	9.55	15	208-230/3	1.2, 6	A, B
CAH-11	Freshman HCW IQ	1000	0.25	7965.8	8.0	1.7	5	37.1	26.4	50.337	5.0	0.85	2	40.0	9.30	21.46	250	9.55	15	208-230/3	1.2, 6	A, B
CAH-12	Freshman HCW IQ	1100	0.25	78,665.5	8.0	1.7	5	38.6	29.2	52,238.5	5.0	0.85	2	51.8	9.30	21.46	250	9.55	15	208-230/3	1.2, 6	A, B
CAH-13	Freshman HCW IQ	1750	0.25	77,384.6	10.0	2.4	5	49.2	40.0	59,644.3	6.0	1.1	2	68.5	9.30	21.46	250	14.43	20	208-230/3	1.2, 6	A, C
CAH-14	Freshman HCW IQ	1400	0.25	77,965.8	8.0	1.5	4	35.8	30.5	56,541.9	4.0	0.61	2	54.6	9.30	21.46	250	9.55	15	208-230/3	1.2, 6	A, B

Based on products by CHANGESAIR.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
Common Items
1. Top Duct Cover with removable front access panel and 1" non-fluorobutadiene insulation.
2. Hot water coil position - Post Heat.
3. (not used)
4. (not used)
5. Top piping connections.
6. Bottom piping connections.

REMARKS:
A. Standard color selected by Architect.
B. Size B-Cabinet, 91 7/8" x 39 7/8" x 25 1/4".
C. Size C-Cabinet, 91 7/8" x 46 7/8" x 25 1/4".

CENTRAL STATION AIR HANDLING UNITS (23 73 23)

MARK	MANUFACTURER'S MODEL NO.	SERVING/ LOCATION	CFM	S.P.	CFM	FAN TYPE	DRIVE	PRE-HEAT	COOL	HEAT	HP	VOLTPH	ACCESSORIES/ OPTIONS	REMARKS	
AHU-1	XT1-5198 Solution	Gym	12,400	1.5	4250	1.873	Airfoil	Direct	HC-1p	CC-1	15	4603	1 - 9	A, a	
AHU-2	XT1-5164 Solution	LMC	10,800	2	3370	1.747	Airfoil	Direct	HC-2p	CC-2	10	4603	1.2, 3, 4, 5	B, b, c	
AHU-3	XT1-48x72 Solution	Cafeteria	8,000	1.5	2100	2.214	Airfoil	Direct	---	DX-3	HC-3	10	4603	1, 2, 4, 5, 6, 7, 8, 9	C

Based on products by YORK.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. Angled filterbank with 2" pleated MERV 8 filters.
2. Air Blender section.
3. Heating coil section.
4. Access section.
5. Heating and Cooling coil section.
6. Plenum fan section.
7. VAV fan with VFD.
8. Disconnect.
9. 6" Base Rail.

REMARKS:
A. Horizontal Unit, Top Front Fan discharge, 22.4 MCA, MCOCP 40 A.
Weight 4,742 lbs, 189" L x 96" W x 5" H. Suspended from roof structure.
B. Horizontal Unit, Top Front Fan discharge, 14.6 MCA, MCOCP 29 A.
Weight 3,647 lbs, 160" L x 84" W x 5" H.
Mounted on stand above floor.
C. Horizontal Unit, Front Top Fan discharge, OA in top, RA in bottom of mixing box.
Weight 3,330 lbs, 172" L x 72" W x 54" H, 11.3 MCA, MCOCP 20 A.
Mounted on stand above floor.

UNIT ACOUSTICS: dB @ Supply Discharge, Octave Band (Hz)

	63	125	250	500	1000	2000	4000	8000
a.	82	82	93	88	86	85	82	71
b.	80	80	91	86	83	82	78	68

AHU CHILLED WATER COILS (23 73 13)

MARK	COL SIZE	AIR UNIT	CFM	MAX. PG. **	MAX. FV	EAT	LAT	TOT.	MBH CAPACITY	% PG / WATER	PD. FT	TYPE	FFI	ROWS	ACCESSORIES	REMARKS		
CC-1	42.5"x84"	AHU-1	12,400	0.92	500	80.5	66.7	61.1	50.6	573	385	114	45	55	13.7	11	8	A
CC-2	42.5"x72"	AHU-2	10,800	0.47	507	77.3	64.0	55.5	53.6	324	249	64	45	55	19.9	10	5	B

Based on products by YORK.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. Single circuit.

REMARKS:
A. Dry Weight 498 lbs, fluid 183 lbs.
B. Dry Weight 273 lbs, fluid 102 lbs.

AHU WATER HEATING COILS (23 73 13)

MARK	COL SIZE	UNIT	CFM	MAX. PG. **	MAX. FV	EAT	LAT	TOT.	MBH CAPACITY	% PG / WATER	PD. FT	TYPE	FFI	ROWS	ACCESSORIES	REMARKS
HC-1p	42.5"x84"	AHU-1	12,400	0.17	500	38.9	30.7	73.4	140	120	3.6	12	2	2	1	A
HC-1r	42.5"x84"	AHU-1	12,400	0.05	500	50.0	70.3	277.0	29	140	120	16.8	10	1	2	B
HC-2p	42.5"x72"	AHU-2	10,800	0.11	507	59.0	89.1	351.0	35	140	120	5.6	8	2	1	C
HC-3r	37.5"x60"	AHU-3	8,000	0.14	515	47.6	89.9	379.0	39	140	120	7.5	10	2	2	D

Based on products by YORK.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. Located in the preheat position.
2. Located in the reheat position.

REMARKS:
A. Dry Weight 194 lbs, fluid 64 lbs.
B. Dry Weight 107 lbs, fluid 39 lbs.
C. Dry Weight 134 lbs, fluid 46 lbs.

CABINET HEATER - HOT WATER (23 81 01)

MARK	MANUFACTURER'S MODEL NO.	LOCATION	STYLE	CFM	HI SPEED	MBH	EAT	LAT	EWT	HEATING COIL	PD. FT.	AMPS	VOLTPH	ACCESSORIES/ OPTIONS	REMARKS
CUH-1	RC-04	Vest 200	Horiz. Recessed	430	19.5	65	107	140	121	2	0.4	65	115/1	2, 3, 4, 5	A, B, C
CUH-2	RC-03	Vest 100	Horiz. Recessed	335	10.5	65	94	140	119	1	0.1	45	115/1	1, 3, 4, 5	A, B, E
CUH-3	WH-3	Hallway 151	Wall Invented	335	10.2	65	93	140	120	1	0.1	45	115/1	1, 3, 4, 5	A, B, D

Based on products by STERLING.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. 1-row Hot Water coil.
2. 2-row Hot Water coil.
3. Piping Package.
4. Free Discharge ECM Motor.
5. Unit Mounted Disconnect Switch.

REMARKS:
A. Sized at MEDIUM fan speed.
B. Color selected by Architect from printed color chart.
C. Style 1200, 135 lbs, 29"x47"
D. Style 1100, 115 lbs, 29"x45"
E. Style 1200, 121 lbs, 29"x43"

RADIANT CEILING PANELS (23 81 01)

MARK	MANUFACTURER'S MODEL NO.	LOCATION	QUANTITY	SIZE	PANEL TYPE	ROOM TEMP	BTUH EACH	MIN. GPM	WATER	PD. FT.	ACCESSORIES/ OPTIONS	REMARKS
RCP-1	Modular Radiant Panel	Tl 111A	1	24"x24"	Tegular	70	470	0.5	140	138	1, 2, 3, 4	A, B
RCP-2	Modular Radiant Panel	Tl 105A	1	24"x24"	Tegular	70	470	0.5	140	138	1, 2, 3, 4	A, B
RCP-3	Modular Radiant Panel	Gris 137	2	24"x24"	Tegular	70	470	0.5	140	136	1, 2, 3, 4	A, B
RCP-4	Modular Radiant Panel	Nurse 105	2	24"x24"	Tegular	70	470	0.5	140	136	1, 2, 3, 4	A, B
RCP-5	Modular Radiant Panel	Principid 103	2	24"x24"	Tegular	70	470	0.5	140	136	1, 2, 3, 4	A, B

Based on products by STERLING.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. Provide isolation valves, P/T plugs on each circuit.
2. Provide control valve and calibrated balancing valve on each circuit.
3. Backs of all panels shall be covered with 1" of 3/4 inch density fiberglass insulation.
4. Silkscreen panel to match adjacent acoustic tile.

REMARKS:
A. Sized at MEDIUM fan speed.
B. See piping detail on plans.

FAN COILS - HOT WATER (23 81 02)

MARK	MANUFACTURER'S MODEL NO.	LOCATION	STYLE	CFM	ESP	MBH	EAT	LAT	EWT	HEATING COIL	PD	FAN ELECT.	ACCESSORIES/ OPTIONS	REMARKS	
FC-1	FN09	Gym Stor 146A	Ceiling Exposed	600	0.15	15.40	73	94	140	2	1.4	103	208/1	1, 2, 3, 4, 5	A

Based on products by YORK/JCI.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. Double deflection supply grille, return air collar.
2. Closed call from insulation.
3. Disconnect Switch.
4. 1" broodway filters.
5. ECM motor.

REMARKS:
A. Sized at MEDIUM fan speed.
B. 31W x 32D x 19H

DUCTLESS SPLIT SYSTEM AC (23 81 26)

MARK	DSS-	SERVING	HALL MOUNTED EVAPORATOR SECTION				CONDENSING UNIT				ELECTRICAL	ACCESS./ OPTIONS	REMARKS			
			MANUFACTURER'S MODEL NO.	CFM	COOLING BTUH**	HEATING MBH**	MANUFACTURER'S MODEL NO.	SEER	ELECTRICAL	HP						
1	IT 135	AC018MNAACHAA	265	336	406	18,000	N/A	N/A	208/230/1	27	AC018MNAACHAA	18.8	208/230/1	13.0	1, 2, 3, 4, 5	A, B, C
2	IT 20A	AC018MNAACHAA	265	336	406	18,000	N/A	N/A	208/230/1	27	AC018MNAACHAA	18.8	208/230/1	13.0	1, 2, 3, 4, 5	A, B, C
3	IT 145	AC018MNAACHAA	265	336	406	18,000	N/A	N/A	208/230/1	27	AC018MNAACHAA	18.8	208/230/1	13.0	1, 2, 3, 4, 5	A, B, C
4	Elec 148	AC020MNAACHAA	410	477	551	24,000	N/A	N/A	208/230/1	27	AC020MNAACHAA	18.3	208/230/1	16.0	1, 2, 3, 4, 5	A, D, E
5	Elec 1138	AC030MNAACHAA	699	752	830	36,000	N/A	N/A	208/230/1	58	AC030MNAACHAA	18.0	208/230/1	24.0	1, 2, 3, 4, 5	A, F, G

Based on products by SAMSUNG.
See the specifications for detailed product and installation requirements.

ACCESSORIES/OPTIONS:
1. Backlit,