

# WILLOW LAKE SCHOOL ADDITION

WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SOUTH DAKOTA



## DRAWING SHEET INDEX:

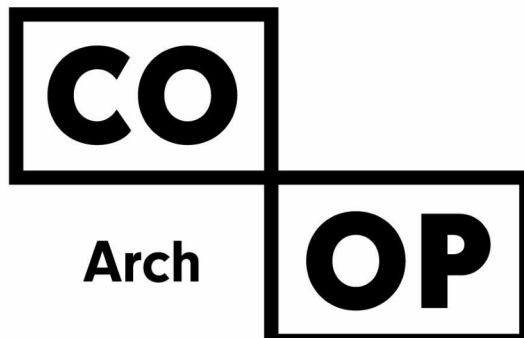
GENERAL		A119	FINISH SCHEDULE & LEGENDS	M400A	AREA A - BELOW GRADE PLUMBING & HYDRONICS PLAN	E404E	AREA E - LIGHTING PLAN
G000	CODE STANDARDS	A120	ENLARGED FINISH PLANS- AREA A	M401B	AREA B - BELOW GRADE PLUMBING & HYDRONICS PLAN	E500A	AREA A - SPECIAL SYSTEMS PLAN
G001	BUILDING CODE SUMMARY & SYMBOLS LEGEND	A121	ENLARGED FINISH PLANS- AREA B	M402C	AREA C - BELOW GRADE PLUMBING & HYDRONICS PLAN	E501B	AREA B - SPECIAL SYSTEMS PLAN
G002	BUILDING CODE PLAN	A122	ENLARGED FINISH PLANS- AREA(S) C & E	M403D	AREA D - BELOW GRADE PLUMBING & HYDRONICS PLAN	E502C	AREA C - SPECIAL SYSTEMS PLAN
G003	TYPICAL ASSEMBLIES & GENERAL NOTES	A123	ENLARGED FINISH PLANS- AREA D	M404E	AREA E - BELOW GRADE PLUMBING & HYDRONICS PLAN	E503D	AREA D - SPECIAL SYSTEMS PLAN
G004	PHASING PLAN	A200	EXTERIOR ELEVATIONS	M500A	AREA A - ABOVE GRADE PLUMBING & HYDRONICS PLAN	E504E	AREA E - SPECIAL SYSTEMS PLAN
SITE PREPARATION		A201	EXTERIOR ELEVATIONS	M501B	AREA B - ABOVE GRADE PLUMBING & HYDRONICS PLAN	E600	ELECTRICAL DETAILS
SP101	SITE DEMOLITION PLAN	A300	BUILDING SECTIONS	M502C	AREA C - ABOVE GRADE PLUMBING & HYDRONICS PLAN	E700	ELECTRICAL SCHEDULES
SP102	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	A301	BUILDING SECTIONS	M503D	AREA D - ABOVE GRADE PLUMBING & HYDRONICS PLAN	E701	ELECTRICAL SCHEDULES - CONTINUED
SP103	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	A302	BUILDING SECTIONS	M504E	AREA E - ABOVE GRADE PLUMBING & HYDRONICS PLAN	E702	ELECTRICAL SCHEDULES - CONTINUED 2
SP201	SITE LAYOUT PLAN	A310	WALL SECTIONS	M600	AREA A - FIRE PROTECTION - LEGENDS & DETAILS	F101	FOOD SERVICE / PLAN VIEW
SP301	SITE GRADING PLAN	A311	WALL SECTIONS	M601C	AREA C - FIRE PROTECTION PLAN	F102	FOOD SERVICE / ELEVATIONS
SP401	UTILITY PLAN & PROFILE	A312	WALL SECTIONS	M602D	AREA D - FIRE PROTECTION PLAN	F103	FOOD SERVICE / SPECIAL CONDITIONS
SP501	SITE DETAILS	A313	WALL SECTIONS	M603E	AREA E - FIRE PROTECTION PLAN	F104	FOOD SERVICE / DETAILS
SP502	SITE DETAILS	A314	WALL SECTIONS	M700A	AREA A - HVAC PLAN	F105	FOOD SERVICE / WALL BACKING
SP503	SITE DETAILS	A315	WALL SECTIONS	M701B	AREA B - HVAC PLAN	F106	FOOD SERVICE / UTILITIES
SP504	STANDARD PLATES	A320	STAIR/RAMP SECTIONS & DETAILS	M702C	AREA C - HVAC PLAN		
SP505	STANDARD PLATES	A400	ENLARGED PLANS & INTERIOR ELEVATIONS	M703D	AREA D - HVAC PLAN		
LANDSCAPING		A401	ENLARGED PLANS & INTERIOR ELEVATIONS	M704E	AREA E - HVAC PLAN		
L101	SITE PLANTING PLAN	A402	ENLARGED PLANS & INTERIOR ELEVATIONS	M705	HVAC TEMPERATURE CONTROL ZONE PLAN		
STRUCTURAL		A403	ENLARGED PLANS & INTERIOR ELEVATIONS	M800	PLUMBING FIXTURE SCHEDULE		
S000	STRUCTURAL GENERAL NOTES	A404	ENLARGED PLANS & INTERIOR ELEVATIONS	M900	MECHANICAL DETAILS		
S001	STRUCTURAL SCHEDULES	A405	ENLARGED PLANS & INTERIOR ELEVATIONS	M901	MECHANICAL DETAILS CONTINUED		
S100A	FOOTING & FOUNDATION PLAN - AREA A	A406	ENLARGED PLANS & INTERIOR ELEVATIONS	M902	MECHANICAL DETAILS & ISOMETRICS		
S100B	FOOTING & FOUNDATION PLAN - AREA B	A407	INTERIOR ELEVATIONS	M903	MECHANICAL SECTIONS		
S100C	FOOTING & FOUNDATION PLAN - AREA C	A408	INTERIOR ELEVATIONS	M904	MECHANICAL SCHEDULES		
S100D	FOOTING & FOUNDATION PLAN - AREA D	A500	EXTERIOR DETAILS			ELECTRICAL	
S200A	ROOF FRAMING PLAN - AREA A	A501	EXTERIOR DETAILS	E200A	AREA A - ELECTRICAL DEMOLITION PLAN		
S200B	ROOF FRAMING PLAN - AREA B	A503	EXTERIOR DETAILS	E201B	AREA B - ELECTRICAL DEMOLITION PLAN		
S200C	ROOF FRAMING PLAN - AREA C	A505	EXTERIOR PLAN DETAILS	E202CD	AREA C - ELECTRICAL DEMOLITION PLAN		
S200D	ROOF FRAMING PLAN - AREA D	A510	INTERIOR DETAILS	E203E	AREA E - ELECTRICAL DEMOLITION PLAN		
S300	STRUCTURAL DETAILS	A511	INTERIOR DETAILS	E300A	AREA A - POWER & DATA PLAN		
S301	STRUCTURAL DETAILS	A600	DOOR SCHEDULE & DETAILS	E301B	AREA B - POWER & DATA PLAN		
S302	BRACED FRAME ELEVATIONS	A601	DOOR & FRAME DETAILS	E302C	AREA C - POWER & DATA PLAN		
S303	WALL SECTIONS	A610	GLAZING ELEVATIONS	E303D	AREA D - POWER & DATA PLAN		
S304	STRUCTURAL DETAILS	A611	GLAZING DETAILS	E304E	AREA E - POWER & DATA PLAN		
		A991	ALTERNATE	E400A	AREA A - LIGHTING PLAN		
DEMOLITION				E401B	AREA B - LIGHTING PLAN		
D100	DEMOLITON PLAN - OVERALL			E402C	AREA C - LIGHTING PLAN		
D101A	DEMOLITION PLAN - AREA A			E403D	AREA D - LIGHTING PLAN		
D101B	DEMOLITION PLAN - AREA B						
D101C	DEMOLITION PLAN - AREA C						
MECHANICAL							
EM100	MOTOR SCHEDULE, LEGENDS & SHEET INDEX						
EM101	ELECTRICAL & MECHANICAL SITE PLAN						
EM102	ENLARGED KITCHEN LAYOUT						
M103	MECHANICAL ROOF PLAN						
M200A	AREA A - PLUMBING & HYDRONICS DEMOLITION PLAN						
M201B	AREA B - PLUMBING & HYDRONICS DEMOLITION PLAN						
M202C	AREA C - PLUMBING & HYDRONICS DEMOLITION PLAN						
M203E	AREA E - PLUMBING & HYDRONICS DEMOLITION PLAN						
M300A	AREA A - HVAC DEMOLITION PLAN						
M301B	AREA B - HVAC DEMOLITION PLAN						
M302C	AREA C - HVAC DEMOLITION PLAN						
M303E	AREA E - HVAC DEMOLITION PLAN						
ARCHITECTURAL							
A100	OVERALL FIRST FLOOR PLAN						
A101A	FIRST FLOOR PLAN - AREA A						
A101B	FIRST FLOOR PLAN - AREA B						
A101C	FIRST FLOOR PLAN - AREA C						
A101D	FIRST FLOOR PLAN - AREA D						
A101E	FIRST FLOOR PLAN - AREA E						
A105	ROOF PLAN OVERALL						
A105A	ROOF PLAN - AREA A						
A105B	ROOF PLAN AREA B						
A105C	ROOF PLAN - AREA C						
A105D	ROOF PLAN - AREA D						
A105E	ROOF PLAN - AREA E						
A110	REFLECTED CLG PLAN - OVERALL						
A110A	REFLECTED CLG PLAN - AREA A						
A110B	REFLECTED CLG PLAN - AREA B						
A110C	REFLECTED CLG PLAN - AREA C						
A110D	REFLECTED CLG PLAN AREA - D						
A110E	REFLECTED CLG PLAN AREA - E						

**OWNER:**



Willow Lake School District 12-3  
400 Garfield Street  
Willow Lake, SD 57278  
Phone: 605-625-5945  
www.willowlake.k12.sd.us

**ARCHITECT:**



CO-OP Architecture  
440 E 8th Street #221  
Sioux Falls, SD 57103  
Phone: 605-334-9999  
www.co-oparch.com

**STRUCTURAL ENGINEER:**



Rise Structural Associates, Inc.  
6909 S Lyncrest Pl #110  
Sioux Falls, SD 57108  
Phone: 605-743-2510  
riseincorp.com

**MECHANICAL & ELECTRICAL ENGINEER:**




Sichmeller Engineering  
801 Railroad Avenue SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
siceng.biz

**LANDSCAPE ARCHITECT:**



Confluence  
440 E 8th Street #121  
Sioux Falls, SD 57103  
Phone: 605-339-1205  
www.thinkconfluence.com

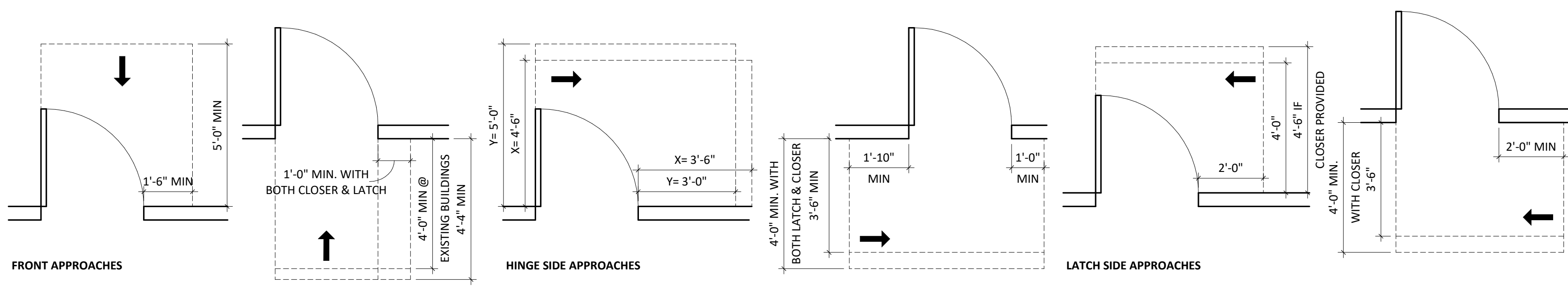
**FOOD SERVICE CONSULTANT:**



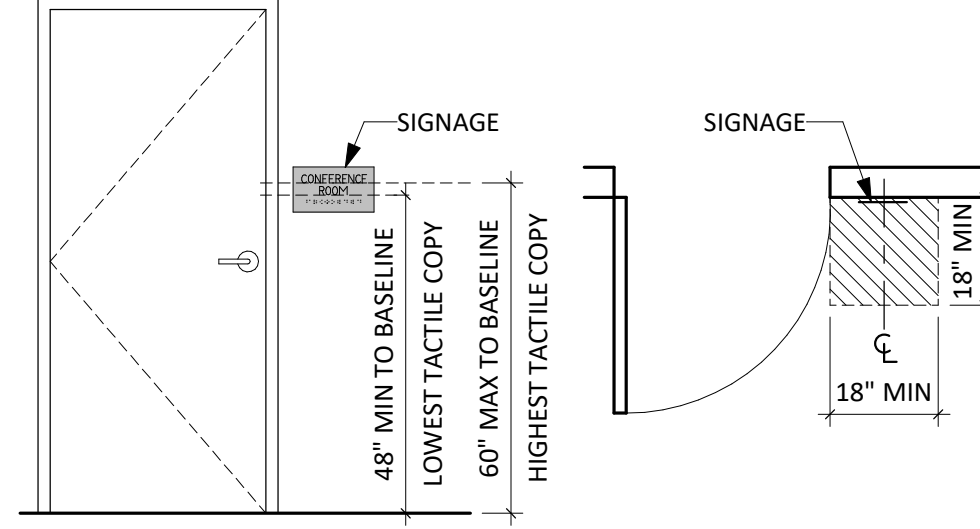
Envision Kitchen  
PO Box 90833  
Sioux Falls, SD 57109  
envisionkitchen.com

**CONSTRUCTION DOCUMENTS  
01/30/2023**

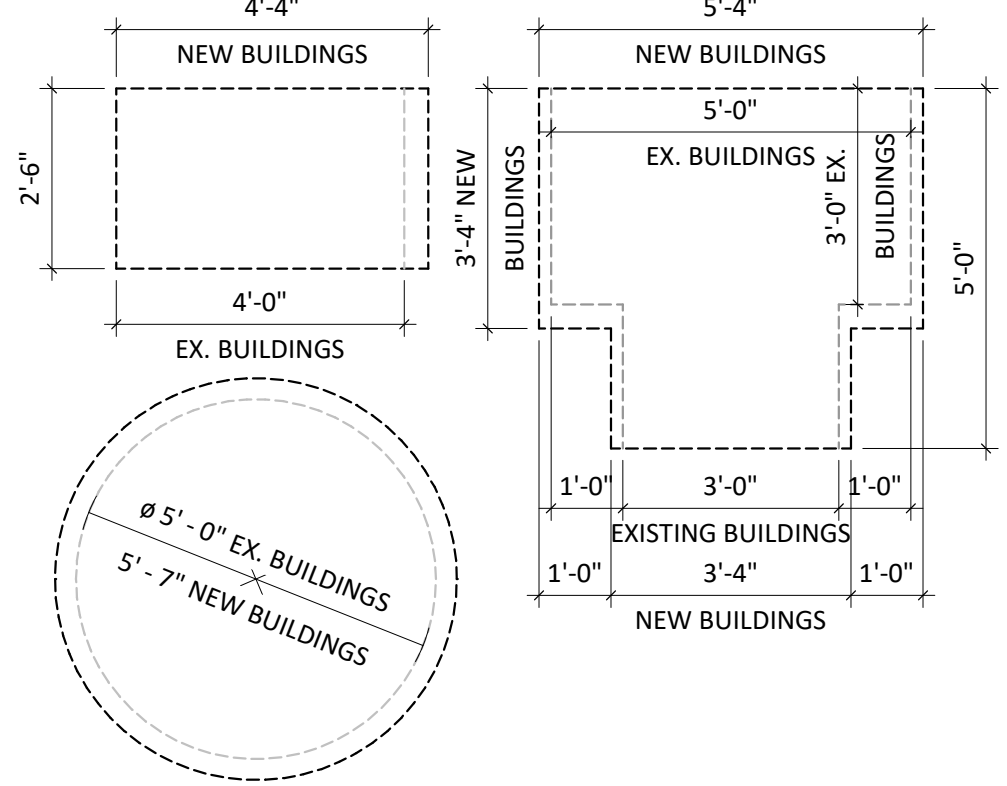
**MANEUVERING CLEARANCES AT DOORS PER ADAAG (4.13.6), ANSI (404.2.4), ICC A117.1-2017 (404.2.3)**



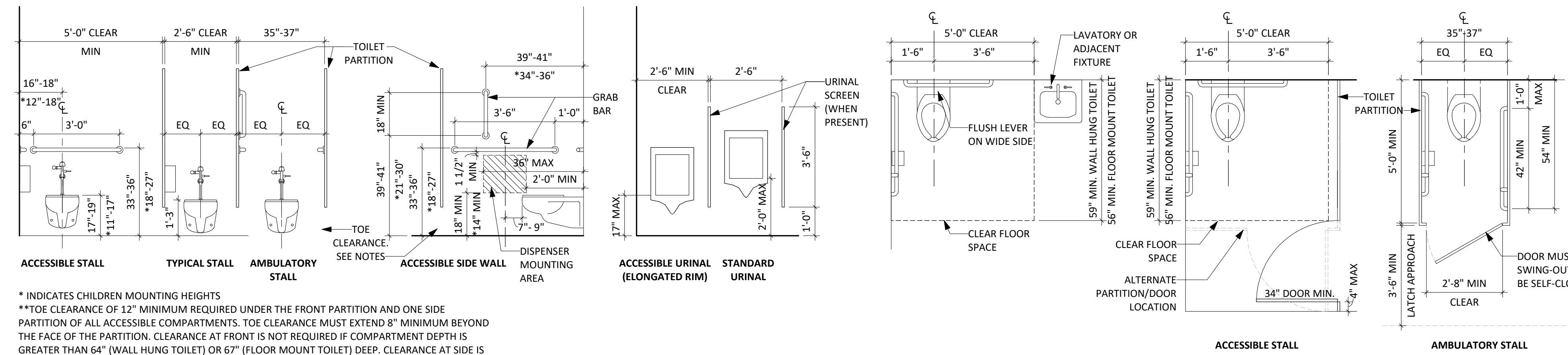
**SIGNAGE PER ADAAG (4.30.6), ANSI (703.4.1), ICC A117.1-2017 (703.3.10)**



**TURNING SPACE PER ANSI (304.1), ICC A117.1-2017 (304.3)**

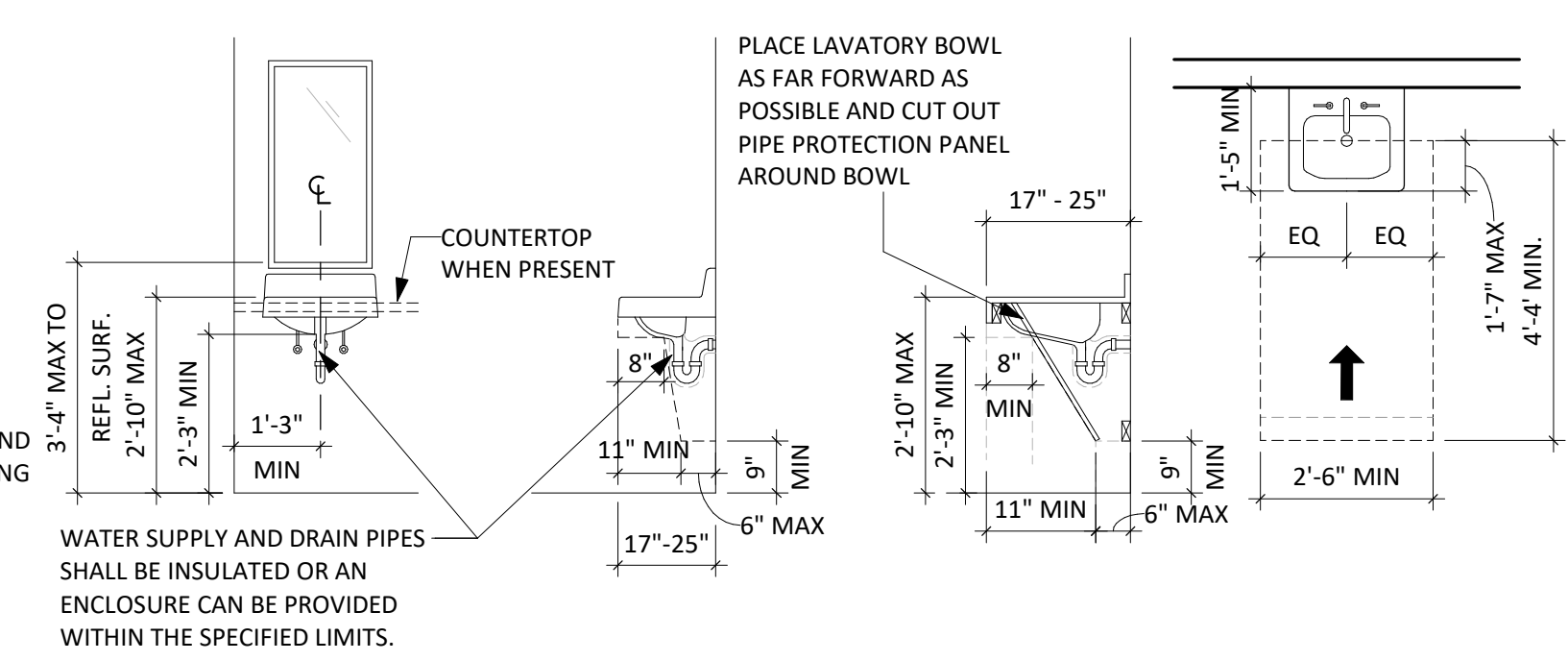


**WATER CLOSET & URINALS - CLEARANCES & MOUNTING HEIGHTS PER ADAAG (4.16-4.18), ANSI (603-605), ICC A117.1-2017(604.2-605.2 & 609.4)**

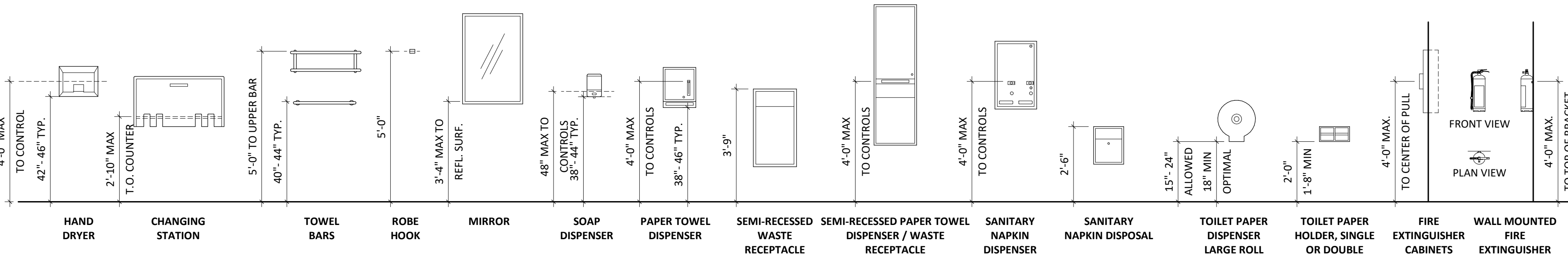


\* INDICATES CHILDREN MOUNTING HEIGHTS  
 \*\* TOE CLEARANCE OF 12" MINIMUM REQUIRED UNDER THE FRONT PARTITION AND ONE SIDE PARTITION OF ALL ACCESSIBLE COMPARTMENTS. TOE CLEARANCE MUST EXTEND 8" MINIMUM BEYOND THE FACE OF THE PARTITION. CLEARANCE AT FRONT IS NOT REQUIRED IF COMPARTMENT DEPTH IS GREATER THAN 64" (WALL HUNG TOILET) OR 67" (FLOOR MOUNT TOILET) DEEP. CLEARANCE AT SIDE IS NOT REQUIRED IF COMPARTMENT IS GREATER THAN 68" WIDE.

**LAVATORIES & SINKS - CLEARANCES & HEIGHTS PER ADAAG (4.19), ANSI (606), ICC A117.1-2009 (606.3)**

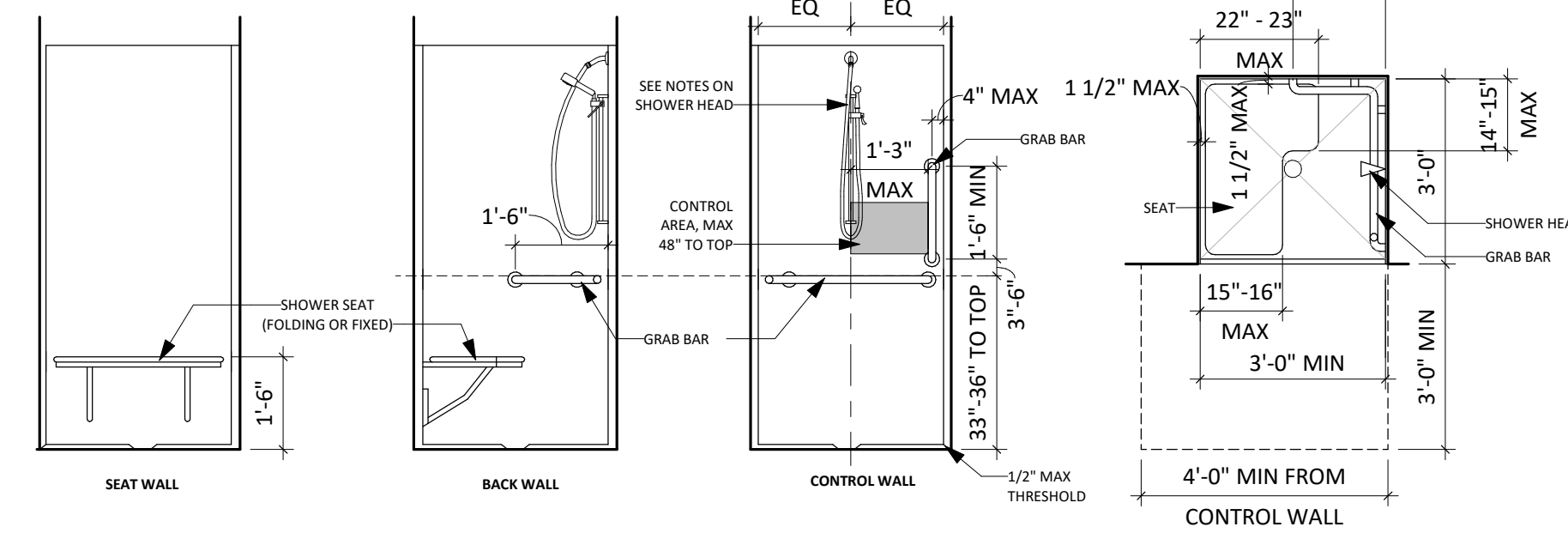
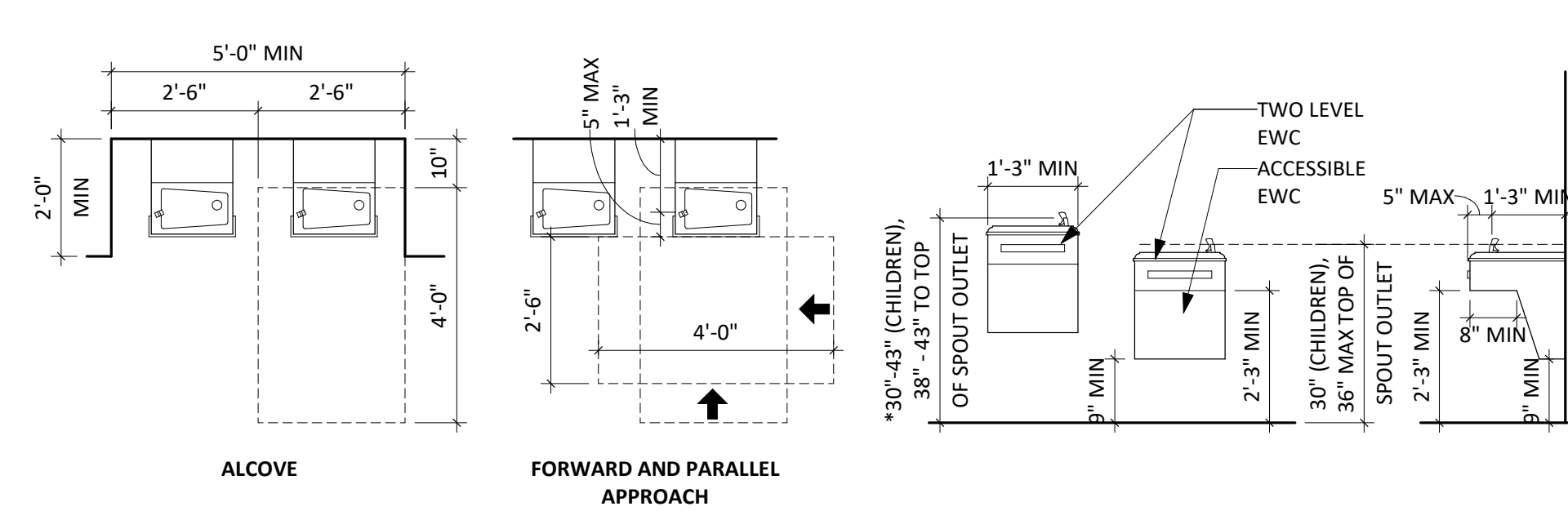


**MISCELLANEOUS MOUNTING HEIGHTS**



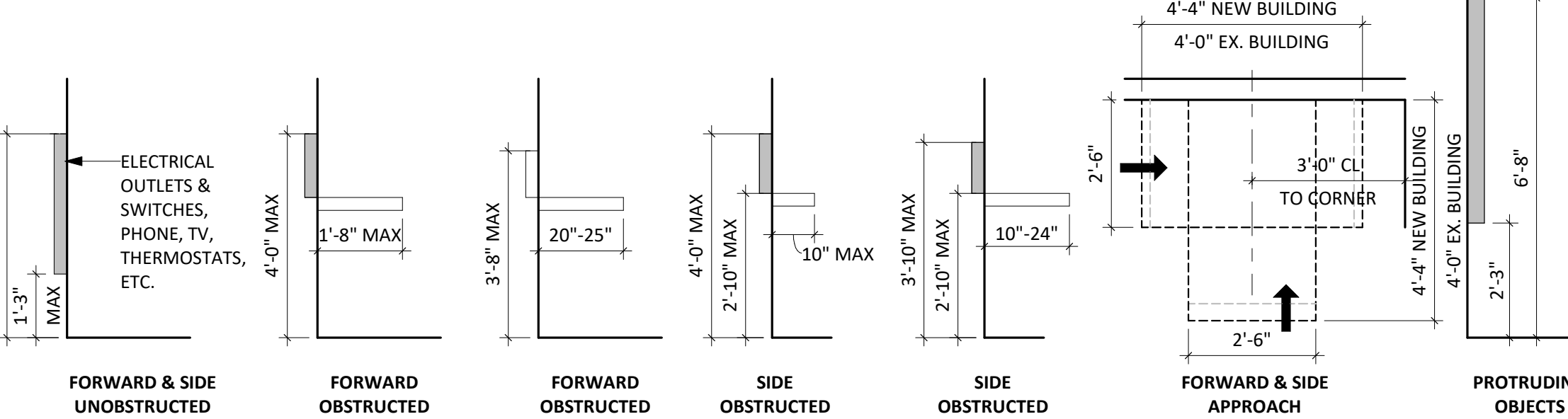
**TRANSFER-TYPE SHOWER REQUIREMENTS PER ADAAG (4.21), ANSI (608), ICC A117.1-2009 (608)**

**DRINKING FOUNTAIN - CLEARANCES & HEIGHTS PER ADAAG (4.15), ANSI (602), ICC A117.1-2017 (602)**

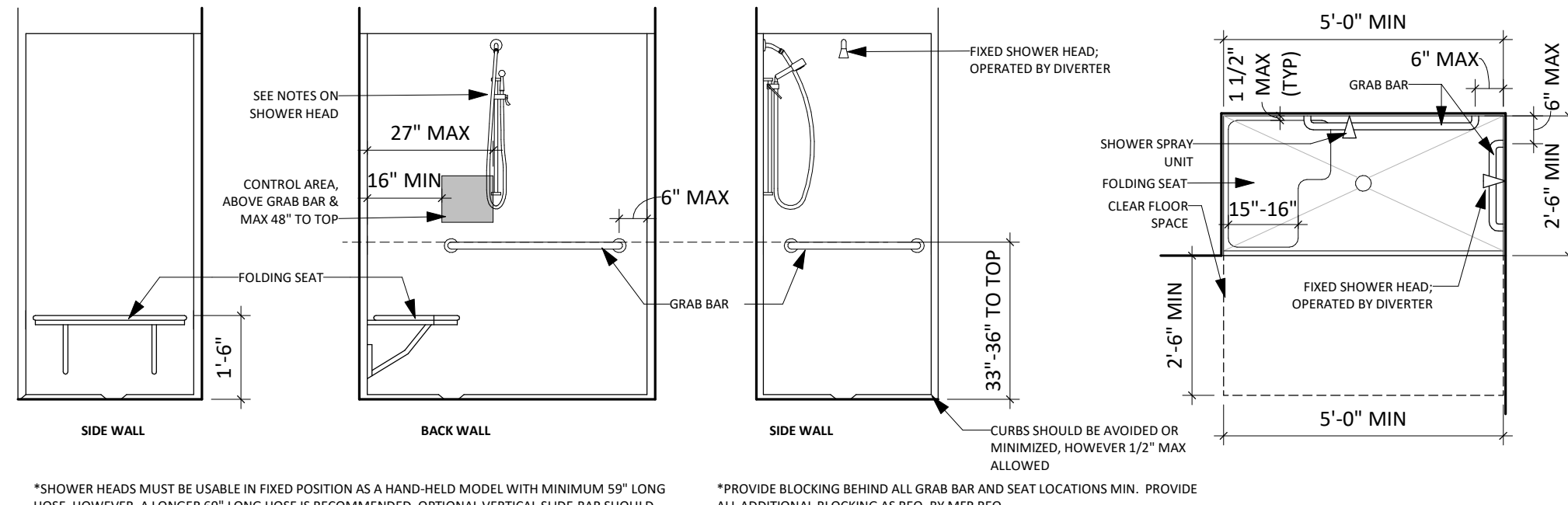


\*SHOWER HEADS MUST BE USABLE IN FIXED POSITION AS A HAND-HELD MODEL WITH MINIMUM 59" LONG HOSE, HOWEVER, A LONGER 69" LONG HOSE IS RECOMMENDED. OPTIONAL VERTICAL SLIDE-BAR SHOULD BE 36"-40" IN LENGTH AND CANNOT OBSTRUCT GRAB BARS.  
 \*\*PROVIDE BLOCKING BEHIND ALL GRAB BAR AND SEAT LOCATIONS MIN. PROVIDE ALL ADDITIONAL BLOCKING AS REQ. BY MFR REQ.

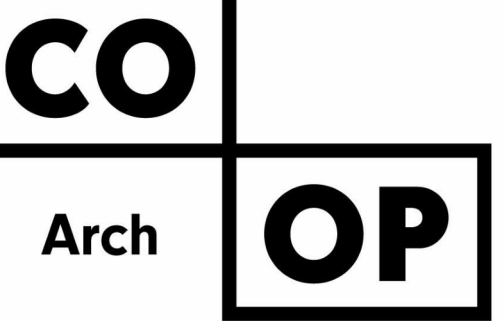
**REACH RANGES PER ADAAG (4.2.5/4.2.6), ANSI (308), ICC A117.1-2017 (308.2/308.3)**



**ROLL-IN-TYPE SHOWER REQUIREMENTS PER ADAAG (4.21), ANSI (608), ICC A117.1-2009 (608)**



\*SHOWER HEADS MUST BE USABLE IN FIXED POSITION AS A HAND-HELD MODEL WITH MINIMUM 59" LONG HOSE, HOWEVER, A LONGER 69" LONG HOSE IS RECOMMENDED. OPTIONAL VERTICAL SLIDE-BAR SHOULD BE 36"-40" IN LENGTH AND CANNOT OBSTRUCT GRAB BARS.  
 \*\*PROVIDE BLOCKING BEHIND ALL GRAB BAR AND SEAT LOCATIONS MIN. PROVIDE ALL ADDITIONAL BLOCKING AS REQ. BY MFR REQ.



1108 S. Main St. 102  
 Aberdeen, SD 57401  
 Phone: 605-725-4852

601 Kansas City St. 7  
 Rapid City, SD 57701  
 Phone: 605-716-3652

440 E. 8th St. 221  
 Sioux Falls, SD 57103  
 Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



ISSUE: 01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. # REV. DSC. REV. DATE

PROJECT: WILLOW LAKE SCHOOL ADDITION

WILLOW LAKE SCHOOL DISTRICT  
 WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE: CODE STANDARDS

G000



OCCUPANT COUNTS BUILDING 1			
NUMBER	NAME	AREA	OCC.
1-101	1ST GRADE	776 SF	39
1-102	KINDERGARTEN	774 SF	39
1-103	2ND GRADE	780 SF	39
1-104	PRESCHOOL	771 SF	39
1-104A	STOR.	27 SF	1
1-105	3RD GRADE	791 SF	40
1-106	1 ON 1	83 SF	4
1-107	4TH GRADE	789 SF	40
1-108	COPIER	131 SF	1
1-109	SPED	380 SF	19
1-109A	STOR.	30 SF	1
1-110	SPED	127 SF	7
1-111	SPED	129 SF	7
1-112	TITLE	238 SF	12
1-112A	STOR.	28 SF	1
1-113	5TH GRADE	793 SF	40
1-114	ELEM. FLEX	813 SF	41
1-115	ELEM. FLEX	808 SF	41
1-116	SM GRP	92 SF	5
1-117	SPEECH	92 SF	5
1-118	S GRP	47 SF	3
1-119	SPEECH	48 SF	3
1-120	OT/PT	48 SF	3
			430

OCCUPANT COUNTS BUILDING 2			
NUMBER	NAME	AREA	OCC.
2-101	STOR.	43 SF	1
2-102	IT/DATA	163 SF	1
2-103	IT/DATA	190 SF	1
2-104	CUST.	199 SF	1
2-105	MECH.	310 SF	2
2-106	MS MATH	738 SF	37
2-107	MS SCI/SOC.	741 SF	38
2-108	MS READ/ENG	726 SF	37
2-109	1 ON 1	109 SF	7
2-110	STOR.	172 SF	1
2-111	PRINC.	370 SF	3
2-112	CONF.	247 SF	2
2-113	SUPER.	203 SF	2
2-114	BUSINESS	184 SF	2
2-115	RECEP.	196 SF	2
2-116	COPY	99 SF	1
2-117	FILE	101 SF	1
2-118X	LIBRARY	1808 SF	37
2-119	WORK	122 SF	7
			183

OCCUPANT COUNTS BUILDING 3			
NUMBER	NAME	AREA	OCC.
3-101	FLEX CLASS	958 SF	49
3-102	MUSIC	1372 SF	64
3-102A	PRACTICE	77 SF	6
3-102B	PRACTICE	77 SF	6
3-102D	STOR.	206 SF	1
3-103	FLEX CLASS	786 SF	48
3-103A	STOR.	53 SF	1
3-104	1 ON 1	82 SF	5
3-105	COUNC.	270 SF	2
3-106	HS SOC.	858 SF	43
3-107	COMPUTER	864 SF	43
3-108	SERVER	129 SF	1
3-109	HS	782 SF	40
			353

OCCUPANT COUNTS BUILDING 4			
NUMBER	NAME	AREA	OCC.
4-101X	GYMNASIUM 1	4256 SF	702
4-102	STOR.	83 SF	1
4-103	STAGE	1170 SF	78
4-104	STOR.	291 SF	1
4-110X	COMMONS	3226 SF	461
4-111	SPED	855 SF	43
4-112	NURSING	899 SF	45
4-113	KITCHEN	1249 SF	6
4-114	CUST.	72 SF	1
4-115	FACS	887 SF	45
4-116	AG CLASS	945 SF	48
4-116A	AG SHOP	2809 SF	57
4-116B	OFFICE	85 SF	1
4-116C	TOOLS	95 SF	1
4-117	WORK RM	187 SF	2
4-118	SCIENCE	933 SF	47
4-118A	SCI PREP	202 SF	2
4A-105	MECH.	386 SF	2
4A-106	STOR.	101 SF	1
4A-107X	BOYS LOCKER	333 SF	7
4A-108X	REF.	90 SF	2
4A-109X	GIRLS LOCKER	330 SF	7
			1560

OCCUPANT COUNTS BUILDING 5			
NUMBER	NAME	AREA	OCC.
5-101X	GYMNASIUM 2	4256 SF	742
5-102A	PANTRY	18 SF	1
5-102X	CONCESSIONS	429 SF	3
5-103X	LOCKER	268 SF	6
5-104X	LOCKER	268 SF	6
5-105	CUST.	42 SF	1
5-201X	WRESTLING	1287 SF	26
			785

OCCUPANT COUNTS BUILDING 6			
NUMBER	NAME	AREA	OCC.
6-101	EXIST. AG	2445 SF	9
6-102	EXIST. AG	832 SF	3
6-102A	EXIST. AG	24 SF	1
6-102B	EXIST. AG	25 SF	1
6-102C	EXIST. AG	56 SF	1
			15

### CODE LEGEND

- LOCATION OF EXISTING FIRE EXTINGUISHER
- LOCATION OF NEW FIRE EXTINGUISHER OR FIRE EXTINGUISHER CABINET
- EGRESS TRAVEL PATH
- # OF OCCUPANTS THAT WILL EGRESS THROUGH DOOR  
REQ'D DOOR WIDTH  
ACTUAL DOOR WIDTH
- +/- 100' LOCATION OF / DISTANCE FROM FURTHEST EXIT
- BUILDING 1
- BUILDING 2
- DESIGNATION OF BUILDING SEPARATION
- 2 HR FIRE WALL
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- HORIZONTAL EXIT
- RENOVATION
- ADDITION
- NO WORK

**BUILDING 1**  
400 OCC. / 5 EXIT DOORS = 80 OCC. PER EXIT DOOR

**BUILDING 2**  
183 OCC. / 5 EXIT DOORS = 37 OCC. PER EXIT DOOR

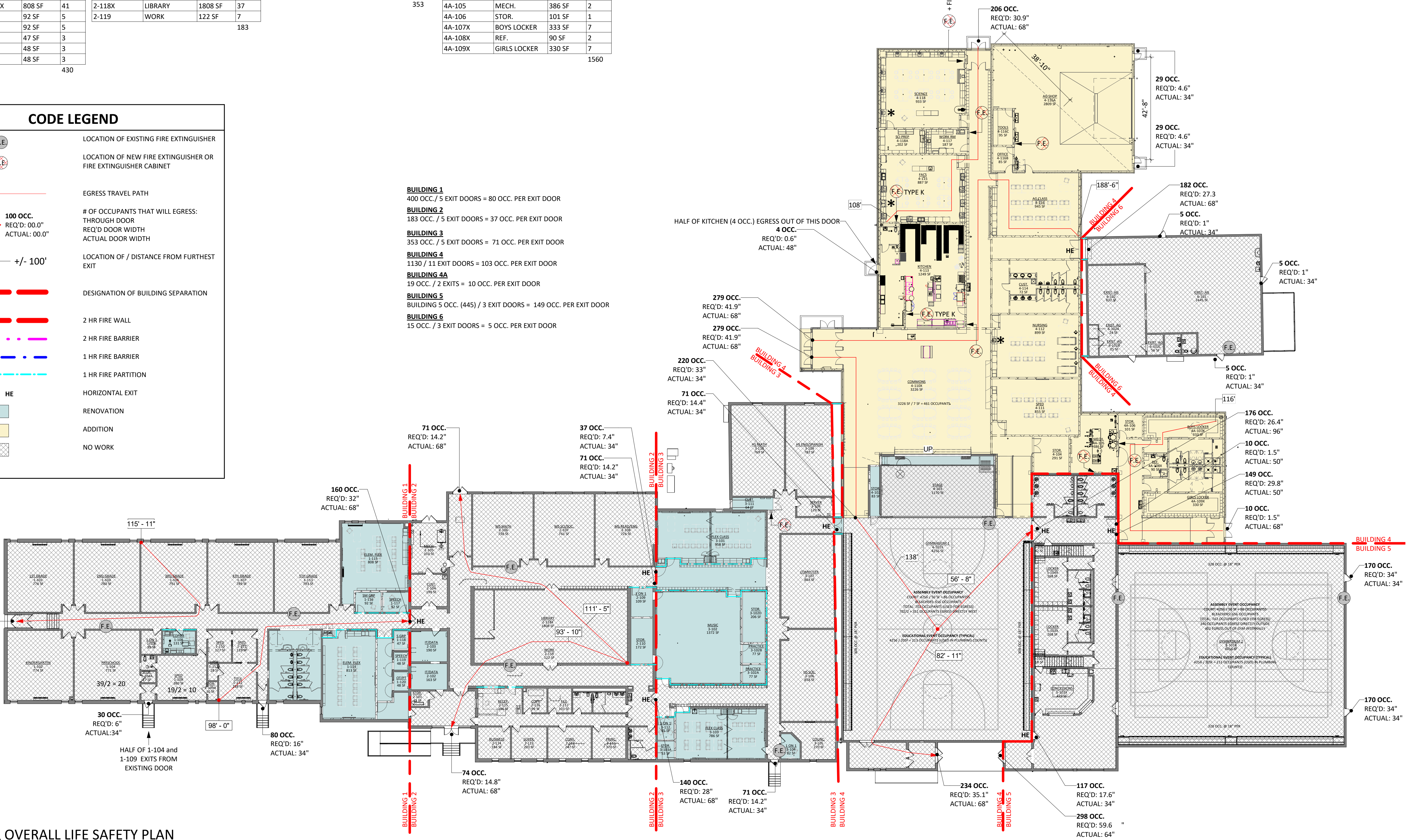
**BUILDING 3**  
353 OCC. / 5 EXIT DOORS = 71 OCC. PER EXIT DOOR

**BUILDING 4**  
1130 / 11 EXIT DOORS = 103 OCC. PER EXIT DOOR

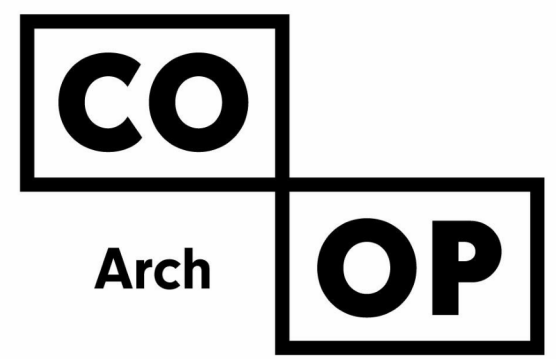
**BUILDING 4A**  
19 OCC. / 2 EXITS = 10 OCC. PER EXIT DOOR

**BUILDING 5**  
BUILDING 5 OCC. (445) / 3 EXIT DOORS = 149 OCC. PER EXIT DOOR

**BUILDING 6**  
15 OCC. / 3 EXIT DOORS = 5 OCC. PER EXIT DOOR



1 OVERALL LIFE SAFETY PLAN  
3/64" = 1'-0"

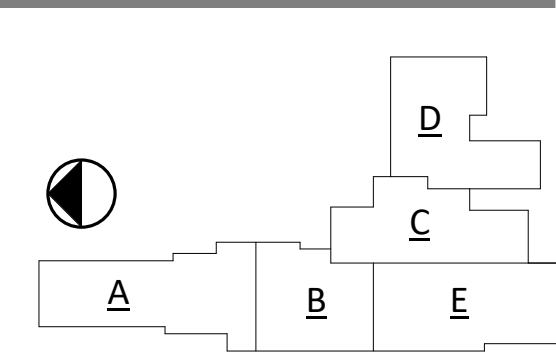


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
BUILDING CODE PLAN

G002

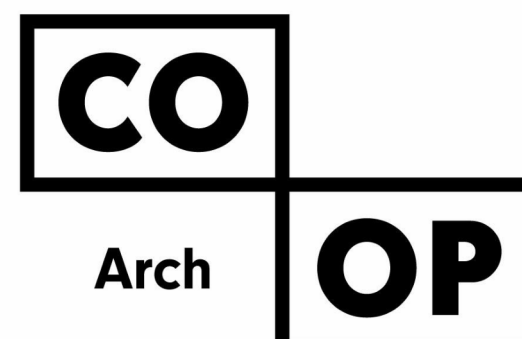
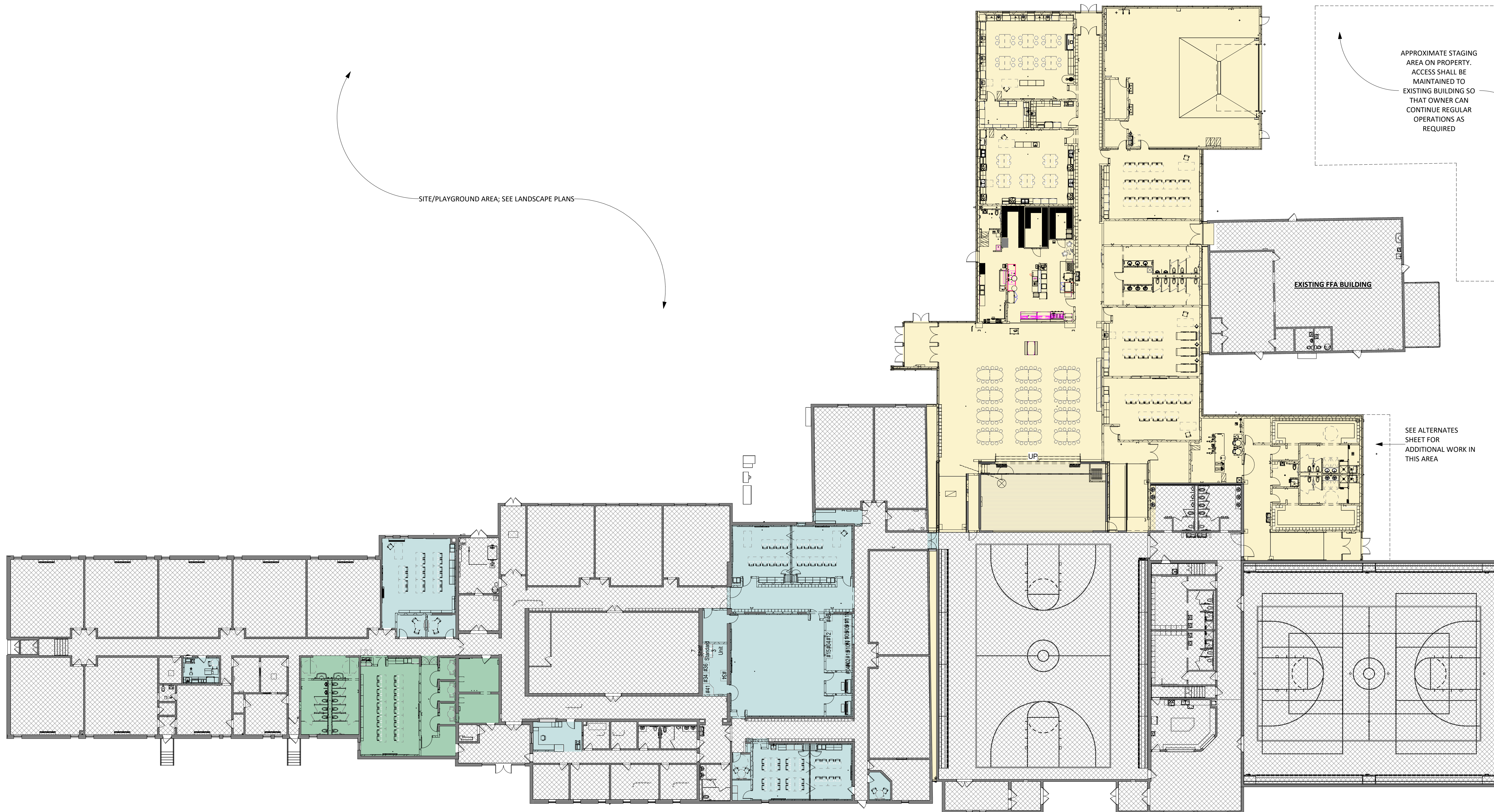


**PHASING PLAN LEGEND**

OWNER SHALL BE ABLE TO CONTINUE REGULAR OPERATIONS DURING THE COURSE OF CONSTRUCTION UNLESS OWNER GIVES PRIOR CONSENT TO CONTRACTOR FOR ANY DISRUPTION TO REGULAR ACTIVITIES.

PROVIDE TEMPORARY WALLS AS REQUIRED TO FACILITATE OWNERS DAILY OPERATIONS AND PROTECT SCHOOL VISITORS, STAFF, AND STUDENTS FROM CONSTRUCTION ACTIVITIES.

- PHASE 1**  
START SPRING 2023  
SUBSTANTIAL COMPLETION AUG 9, 2024  
\*INCLUDES SITE/PLAYGROUND SCOPE
- PHASE 2**  
START FALL 2024  
COMPLETE MAY 16, 2025
- PHASE 3**  
START JUNE 2, 2025  
COMPLETE AUGUST 15, 2025
- NO WORK

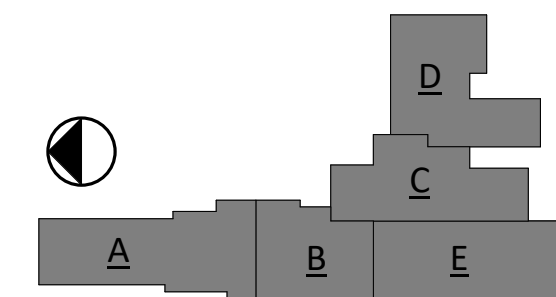


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
PHASING PLAN

**G004**

**DEMOLITION GENERAL NOTES**

PRIOR TO ANY EXCAVATION AT THE SITE, CONTRACTOR SHALL CONSULT WITH OWNER'S PERSONNEL AND UTILITY COMPANIES REPRESENTATIVES TO DETERMINE POSSIBLE UTILITY LOCATIONS AND DEPTHS. NO COMPENSATION WILL BE ALLOWED FOR DAMAGE RESULTING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT. REPORT ANY DAMAGE TO EXISTING UTILITIES PRIOR TO REPAIR. DAMAGE TO UTILITIES AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER OF THE UTILITY.

FIELD VERIFY EXISTING GRADES AND LOCATIONS OF EXISTING UTILITIES, CONDUIT, LINES, POLES, TREES, PAVING, BUILDING AND OTHER SITE STRUCTURES PRIOR TO DEMOLITION OR CONSTRUCTION AND IMMEDIATELY INFORM THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. THE CONTRACTOR SHALL REPORT TO THE OWNER ANY DAMAGE TO OWNER'S PROPERTY PRIOR TO REPAIR.

PROTECT ALL ITEMS WITHIN CONTRACT LIMITS NOT INDICATED TO BE REMOVED. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.

CONTRACTOR TO PROVIDE ADEQUATE BARRICADES AND TRAFFIC CONTROL. COMPLY WITH REQUIREMENTS OF LOCAL JURISDICTION.

CONTRACTOR SHALL SAW CUT ALL ASPHALT TO BE REMOVED. CONCRETE TO BE REMOVED TO THE NEAREST CONTROL JOINT WHERE PRACTICAL.

PROTECT ALL ITEMS WITHIN CONTRACT LIMITS NOT INDICATED TO BE REMOVED. NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES.

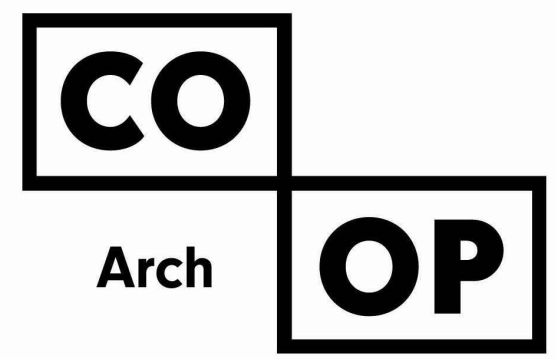
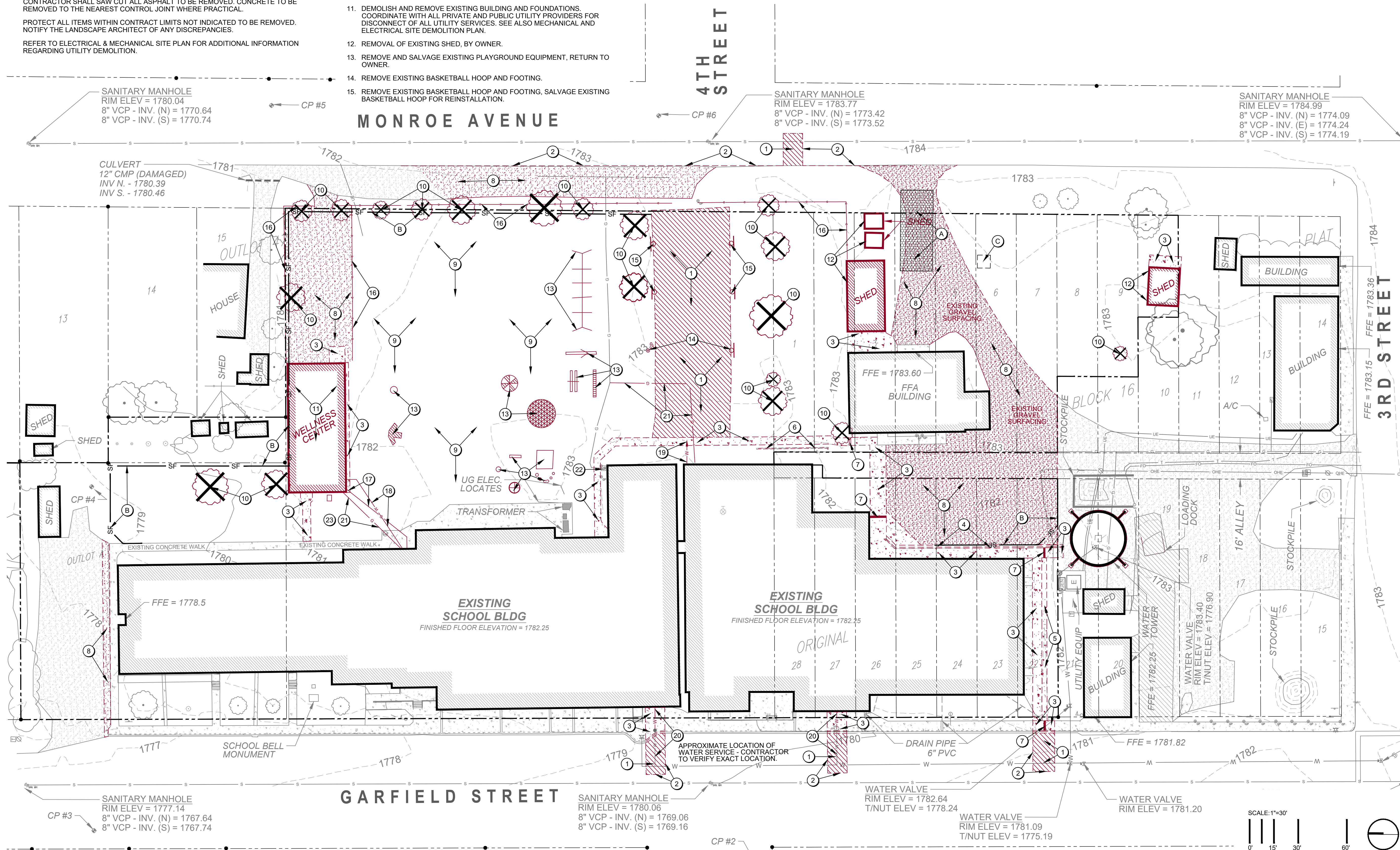
REFER TO ELECTRICAL & MECHANICAL SITE PLAN FOR ADDITIONAL INFORMATION REGARDING UTILITY DEMOLITION.

**KEYNOTES**

1. REMOVE EXISTING ASPHALT PAVEMENT.
2. SAW CUT EDGE OF EXISTING ASPHALT FOR CLEAN TRANSITION TO NEW PAVEMENT.
3. REMOVE EXISTING CONCRETE WALK.
4. REMOVE CONCRETE CURB AND GUTTER.
5. REMOVE EXISTING CONCRETE VALLEY GUTTER.
6. REMOVE EXISTING CMU WALL.
7. REMOVE EXISTING CHANNEL DRAIN AND COVER.
8. REMOVE EXISTING GRAVEL SURFACING.
9. REMOVE EXISTING PEA GRAVEL SURFACING. SALVAGE AMOUNT REQUIRED FOR INFILTRATION TRENCHES, SEE SITE LAYOUT PLAN.
10. REMOVE EXISTING TREE AND STUMP.
11. DEMOLISH AND REMOVE EXISTING BUILDING AND FOUNDATIONS. COORDINATE WITH ALL PRIVATE AND PUBLIC UTILITY PROVIDERS FOR DISCONNECT OF ALL UTILITY SERVICES. SEE ALSO MECHANICAL AND ELECTRICAL SITE DEMOLITION PLAN.
12. REMOVAL OF EXISTING SHED, BY OWNER.
13. REMOVE AND SALVAGE EXISTING PLAYGROUND EQUIPMENT. RETURN TO OWNER.
14. REMOVE EXISTING BASKETBALL HOOP AND FOOTING.
15. REMOVE EXISTING BASKETBALL HOOP AND FOOTING, SALVAGE EXISTING BASKETBALL HOOP FOR REINSTALLATION.

**KEYNOTES - EROSION CONTROL**

- A. PROVIDE VEHICLE TRACKING STATION AT CONSTRUCTION ENTRANCE. SEE STANDARD PLATE, SP505
- B. INSTALL SILT FENCE. SEE STANDARD PLATE, SP505
- C. CONCRETE WASHOUT FACILITY. SEE STANDARD PLATE, SP505



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



LANDSCAPE ARCHITECT  
CONFLUENCE  
440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:



ISSUE:  
01-30-2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

SHEET TITLE:  
SITE DEMOLITION PLAN

SP101







WORKSHEET #1 - SCHEDULE OF GRADING & CONSTRUCTION ACTIVITIES			
INSTRUCTIONS: DESCRIBE THE GRADING & CONSTRUCTION ACTIVITIES THAT TOOK PLACE ON SITE, INCLUDING THE DATES STARTED AND ENDED AND THE DATE STABILIZATION BMP WAS COMPLETED. DEADLINE TO COMPLETE TEMPORARY STABILIZATION - AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 CALENDAR DAYS AFTER INITIATING SOIL STABILIZATION MEASURES, AS STATED IN THE GENERAL PERMIT SECTION 3.18.			
LOCATION	GRADING ACTIVITY CEASED DATE	DATE STABILIZATION INITIATED	DESCRIPTION OF STABILIZATION BMP & LOCATION
NOTE: CONTRACTOR SHALL MAKE ADDITIONAL COPIES OF THIS SHEET AS NEEDED FOR RECORD KEEPING, OR MAINTAIN YOUR OWN RECORDS TO MEET THE GENERAL PERMIT.			

WORKSHEET #2 - INSPECTION AND CORRECTIVE ACTION LOG							
INSTRUCTIONS: NOTE THE DATE OF EACH INSPECTION, ANY DEFICIENCIES IN BMPS, AND THE CORRECTIVE ACTIONS TAKEN TO RESTORE BMPS FUNCTION. A SUMMARY OF YOUR INSPECTION FINDINGS, COVERING, AT A MINIMUM, THE OBSERVATIONS YOU MADE AS REQUIRED IN SECTIONS 4.4. AND 4.5 OF THE GENERAL PERMIT. IF AN INSPECTION DOES NOT IDENTIFY ANY INCIDENTS OF NONCOMPLIANCE, INCLUDE A STATEMENT IN THE REPORT THAT THE SITE IS IN COMPLIANCE WITH THE SWPPP AND THE GENERAL PERMIT.							
INSPECTION DATE & TIME	RAIN FALL AMOUNT	INSPECTOR NAME	DESCRIPTION OF BMP DEFICIENCY	LOCATION	CORRECTIVE ACTION REQUIRED	ACTION CORRECTED	
						DATE	INITIALS
NOTE: CONTRACTOR SHALL MAKE ADDITIONAL COPIES OF THIS SHEET AS NEEDED FOR RECORD KEEPING, OR MAINTAIN YOUR OWN RECORDS TO MEET THE GENERAL PERMIT.							

WORKSHEET #3 - RECORD OF SPILLS AND LEAKS							
INSTRUCTIONS: RECORD BELOW ALL SPILLS AND SIGNIFICANT LEAKS OF TOXIC OR HAZARDOUS POLLUTANTS THAT HAVE OCCURRED ON SITE; SIGNIFICANT SPILLS INCLUDE, BUT ARE NOT LIMITED TO, RELEASES OF OIL OR HAZARDOUS SUBSTANCES IN EXCESS OF REPORTABLE QUANTITIES.							
DATE	LEAK/SPILL	LOCATION	TYPE OF LIQUID	APPROXIMATE AMOUNT	SOURCE & CAUSE	RESPONSE PROCEDURE	PREVENTATIVE MEASURES TAKEN
TO REPORT A RELEASE OR SPILL, CALL SDDENR AT 605-773-3296 DURING REGULAR OFFICE HOURS (8 A.M. TO 5 P.M. CENTRAL STANDARD TIME). TO REPORT THE RELEASE AFTER HOURS, ON WEEKENDS OR HOLIDAYS, CALL SOUTH DAKOTA EMERGENCY MANAGEMENT AT 605-773-3231. REPORTING THE RELEASE TO SDDENR DOES NOT MEET ANY OBLIGATION FOR REPORTING TO OTHER STATE, LOCAL, OR FEDERAL AGENCIES. THEREFORE, YOU MUST ALSO CONTACT LOCAL AUTHORITIES TO DETERMINE THE LOCAL REPORTING REQUIREMENTS FOR RELEASES. A WRITTEN REPORT OF THE UNAUTHORIZED RELEASE OF ANY REGULATED SUBSTANCE, INCLUDING QUANTITY DISCHARGED AND THE LOCATION OF THE DISCHARGE SHALL BE SENT TO SDDENR WITHIN 14 DAYS OF THE DISCHARGE. SPILLS ARE SUBJECT TO THE FEDERAL REPORTING REQUIREMENTS OF 40 CFR PART 110, PART 117, AND PART 302 RELATING TO SPILLS OR OTHER RELEASES OF OILS OR HAZARDOUS SUBSTANCES. YOU MUST REPORT SPILLS IN EXCESS OF THE REPORTABLE QUANTITIES AS REQUIRED IN SECTION 7.1.							

WORKSHEET #4 - SWPPP AMENDMENT LOG				
INSTRUCTIONS: DESCRIBE CHANGES TO THE SWPPP				
AMENDMENT NUMBER	DESCRIPTION	REASON	DATE	AUTHORIZED BY
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
NOTE: CONTRACTOR SHALL MAKE ADDITIONAL COPIES OF THIS SHEET AS NEEDED FOR RECORD KEEPING, OR MAINTAIN YOUR OWN RECORDS TO MEET THE GENERAL PERMIT.				



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999


co-oparch.com



LANDSCAPE ARCHITECT  
CONFLUENCE

440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO: \_\_\_\_\_



ISSUE: \_\_\_\_\_

01-30-2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:

WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

SHEET TITLE:

STORMWATER POLLUTION  
PREVENTION PLAN (SWPPP)

SP103

**GENERAL NOTES**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL PUBLIC AND PRIVATE UTILITIES WHICH LIE WITHIN THE CONSTRUCTION AREA PRIOR TO ANY CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES. SOUTH DAKOTA ONE CALL NOTIFICATION CENTER: 1-800-781-7474.

THE CONTRACTOR SHALL CONSTRUCT ALL ITEMS WITHIN THIS CONTRACT IN ACCORDANCE WITH ALL STATE AND LOCAL CODES AND REGULATIONS.

THE CONTRACTOR IS TO COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT OF WAY OR STREETS WITH THE APPROPRIATE JURISDICTIONS. CONTRACTOR TO PROVIDE ADEQUATE BARRICADES AND TRAFFIC CONTROL. COMPLY WITH REQUIREMENTS OF LOCAL JURISDICTION.

ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.

THE CONTRACTOR SHALL REPORT TO THE OWNER ANY DAMAGE TO OWNER'S PROPERTY AND UTILITIES PRIOR TO REPAIR.

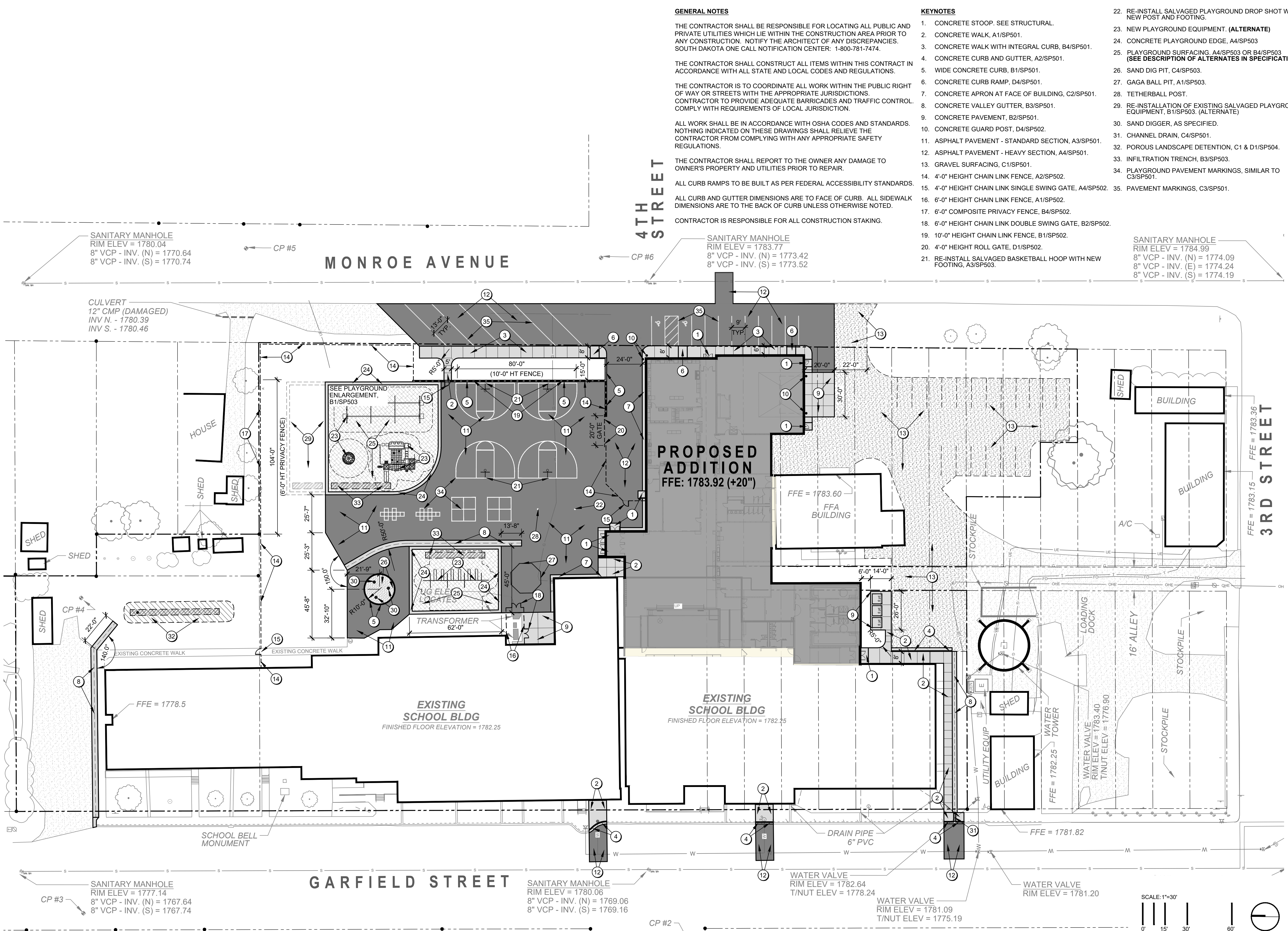
ALL CURB RAMP TO BE BUILT AS PER FEDERAL ACCESSIBILITY STANDARDS.

ALL CURB AND GUTTER DIMENSIONS ARE TO FACE OF CURB. ALL SIDEWALK DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.

**KEYNOTES**

1. CONCRETE STOOP. SEE STRUCTURAL.
2. CONCRETE WALK, A1/SP501.
3. CONCRETE WALK WITH INTEGRAL CURB, B4/SP501.
4. CONCRETE CURB AND GUTTER, A2/SP501.
5. WIDE CONCRETE CURB, B1/SP501.
6. CONCRETE CURB RAMP, D4/SP501.
7. CONCRETE APRON AT FACE OF BUILDING, C2/SP501.
8. CONCRETE VALLEY GUTTER, B3/SP501.
9. CONCRETE PAVEMENT, B2/SP501.
10. CONCRETE GUARD POST, D4/SP502.
11. ASPHALT PAVEMENT - STANDARD SECTION, A3/SP501.
12. ASPHALT PAVEMENT - HEAVY SECTION, A4/SP501.
13. GRAVEL SURFACING, C1/SP501.
14. 4'-0" HEIGHT CHAIN LINK FENCE, A2/SP502.
15. 4'-0" HEIGHT CHAIN LINK SINGLE SWING GATE, A4/SP502.
16. 6'-0" HEIGHT CHAIN LINK FENCE, A1/SP502.
17. 6'-0" COMPOSITE PRIVACY FENCE, B4/SP502.
18. 6'-0" HEIGHT CHAIN LINK DOUBLE SWING GATE, B2/SP502.
19. 10'-0" HEIGHT CHAIN LINK FENCE, B1/SP502.
20. 4'-0" HEIGHT ROLL GATE, D1/SP502.
21. RE-INSTALL SALVAGED BASKETBALL HOOP WITH NEW FOOTING, A3/SP503.
22. RE-INSTALL SALVAGED PLAYGROUND DROP SHOT WITH NEW POST AND FOOTING.
23. NEW PLAYGROUND EQUIPMENT. (ALTERNATE)
24. CONCRETE PLAYGROUND EDGE, A4/SP503
25. PLAYGROUND SURFACING. A4/SP503 OR B4/SP503 (SEE DESCRIPTION OF ALTERNATES IN SPECIFICATIONS)
26. SAND DIG PIT, C4/SP503.
27. GAGA BALL PIT, A1/SP503.
28. TETHERBALL POST.
29. RE-INSTALLATION OF EXISTING SALVAGED PLAYGROUND EQUIPMENT, B1/SP503. (ALTERNATE)
30. SAND DIGGER, AS SPECIFIED.
31. CHANNEL DRAIN, C4/SP501.
32. POROUS LANDSCAPE DETENTION, C1 & D1/SP504.
33. INFILTRATION TRENCH, B3/SP503.
34. PLAYGROUND PAVEMENT MARKINGS, SIMILAR TO C3/SP501.
35. PAVEMENT MARKINGS, C3/SP501.



**CO Arch OP**

1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**CONFLUENCE**

LANDSCAPE ARCHITECT  
CONFLUENCE

440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:

ISSUE:  
01-30-2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

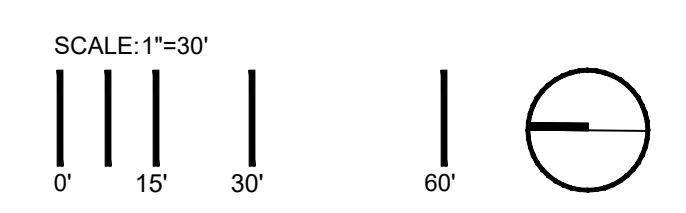
REV. #	REV. DSC.	REV. DATE

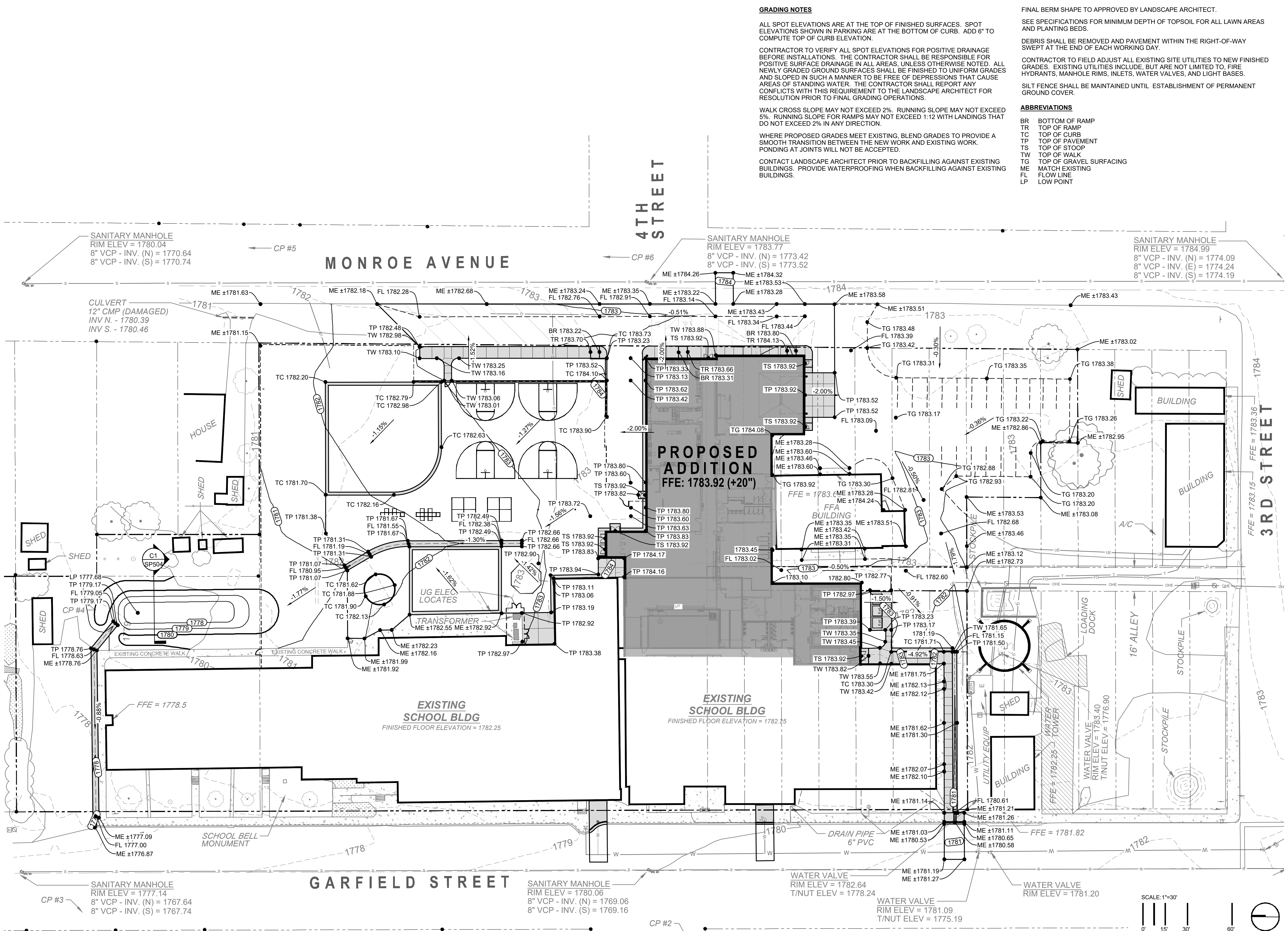
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

SHEET TITLE:  
SITE LAYOUT PLAN

**SP201**





**GRADING NOTES**

ALL SPOT ELEVATIONS ARE AT THE TOP OF FINISHED SURFACES. SPOT ELEVATIONS SHOWN IN PARKING ARE AT THE BOTTOM OF CURB. ADD 6" TO COMPUTE TOP OF CURB ELEVATION.

CONTRACTOR TO VERIFY ALL SPOT ELEVATIONS FOR POSITIVE DRAINAGE BEFORE INSTALLATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR POSITIVE SURFACE DRAINAGE IN ALL AREAS, UNLESS OTHERWISE NOTED. ALL NEWLY GRADED GROUND SURFACES SHALL BE FINISHED TO UNIFORM GRADES AND SLOPED IN SUCH A MANNER TO BE FREE OF DEPRESSIONS THAT CAUSE AREAS OF STANDING WATER. THE CONTRACTOR SHALL REPORT ANY CONFLICTS WITH THIS REQUIREMENT TO THE LANDSCAPE ARCHITECT FOR RESOLUTION PRIOR TO FINAL GRADING OPERATIONS.

WALK CROSS SLOPE MAY NOT EXCEED 2%. RUNNING SLOPE MAY NOT EXCEED 5%. RUNNING SLOPE FOR RAMPS MAY NOT EXCEED 1:12 WITH LANDINGS THAT DO NOT EXCEED 2% IN ANY DIRECTION.

WHERE PROPOSED GRADES MEET EXISTING, BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN THE NEW WORK AND EXISTING WORK. PONDING AT JOINTS WILL NOT BE ACCEPTED.

CONTACT LANDSCAPE ARCHITECT PRIOR TO BACKFILLING AGAINST EXISTING BUILDINGS. PROVIDE WATERPROOFING WHEN BACKFILLING AGAINST EXISTING BUILDINGS.

FINAL BERM SHAPE TO APPROVED BY LANDSCAPE ARCHITECT.

SEE SPECIFICATIONS FOR MINIMUM DEPTH OF TOPSOIL FOR ALL LAWN AREAS AND PLANTING BEDS.

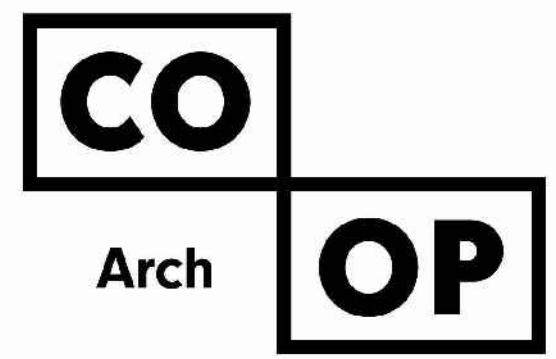
DEBRIS SHALL BE REMOVED AND PAVEMENT WITHIN THE RIGHT-OF-WAY SWEEPED AT THE END OF EACH WORKING DAY.

CONTRACTOR TO FIELD ADJUST ALL EXISTING SITE UTILITIES TO NEW FINISHED GRADES. EXISTING UTILITIES INCLUDE, BUT ARE NOT LIMITED TO, FIRE HYDRANTS, MANHOLE RIMS, INLETS, WATER VALVES, AND LIGHT BASES.

SILT FENCE SHALL BE MAINTAINED UNTIL ESTABLISHMENT OF PERMANENT GROUND COVER.

**ABBREVIATIONS**

- BR BOTTOM OF RAMP
- TR TOP OF RAMP
- TC TOP OF CURB
- TP TOP OF PAVEMENT
- TS TOP OF STOOP
- TW TOP OF WALK
- TG TOP OF GRAVEL SURFACING
- ME MATCH EXISTING
- FL FLOW LINE
- LP LOW POINT



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



**LANDSCAPE ARCHITECT**  
**CONFLUENCE**  
440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:



**ISSUE:**  
01-30-2023 CONSTRUCTION DOCUMENTS

**REVISION SCHEDULE:**

REV. #	REV. DSC.	REV. DATE

**PROJECT:**  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

**SHEET TITLE:**  
SITE GRADING PLAN

**SP301**

**GENERAL NOTES**

**SANITARY SEWER GENERAL**

SANITARY SEWER WORK INCLUDES INSTALLING NEW 6 INCH GRAVITY SEWER SERVICING PROPOSED BUILDING AND CONNECTING TO EXISTING 8 INCH VCP SANITARY SEWER IN MONROE AVENUE.

CONTRACTOR SHALL COORDINATE WITH OWNER ON WATER USAGE DURING THE REMOVAL AND INSTALLATION OF SERVICES. AT NO POINT WILL RAW SEWAGE BE ALLOWED TO DUMP INTO THE TRENCH.

PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SEWER PIPE AND SHALL MEET THE REQUIREMENTS OF ASTM D-3034, TYPE PSM. PIPE AND FITTINGS SHALL BE SDR 35 MINIMUM.

THE CONTRACTOR SHALL OBTAIN A "SOUTH DAKOTA STATE SEWER AND WATER PLUMBING CONTRACTOR'S LICENSE" PRIOR TO CONSTRUCTION.

**WATER MAIN AND APPURTENANCES**

WATER MAIN WORK INCLUDES INSTALLING NEW 6 INCH WATER MAIN SERVICING PROPOSED BUILDING, NECESSARY APPURTENANCES, AND CONNECTION TO EXISTING WATER MAIN IN GARFIELD AVENUE.

ALL WATER DISTRIBUTION MATERIALS SHALL MEET NSF/ANSI 61 - DRINKING WATER COMPONENTS, HEALTH EFFECTS, NSF/ANSI 61, AND NSF/ANSI 372. ALL MATERIALS SHALL BE APPROVED AND COORDINATED WITH THE CITY OF WILLOW LAKE.

PIPE FOR NEW MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE, CONFORMING TO AWWA C900 (PRESSURE CLASS), JOINTS CONFORMING TO ASTM D 3139 WITH ELASTOMERIC SEALS (GASKETS) CONFORMING TO ASTM F477. FITTINGS SHALL CONFORM TO AWWA C110 AND AWWA C111 FOR DUCTILE AND GRAY IRON FITTINGS. ALL DIRECT BURY FITTINGS SHALL BE WRAP POLYETHYLENE ENCASMENTS CONFORMING TO AWWA C-105.

**CONNECTIONS TO EXISTING WATER MAIN**

IT IS ANTICIPATED THAT TRACER WIRE WILL BE ENCOUNTERED ON THE EXISTING WATER MAIN IN GARFIELD AVENUE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY DAMAGED TRACER WIRE FROM CONNECTING TO THE EXISTING WATER MAIN. ALL COSTS AND WORK ASSOCIATED SHALL BE INCIDENTAL TO PIPE INSTALLATION COSTS.

ALL VALVE OPERATIONS WILL BE COORDINATED WITH THE CITY OF WILLOW LAKE.

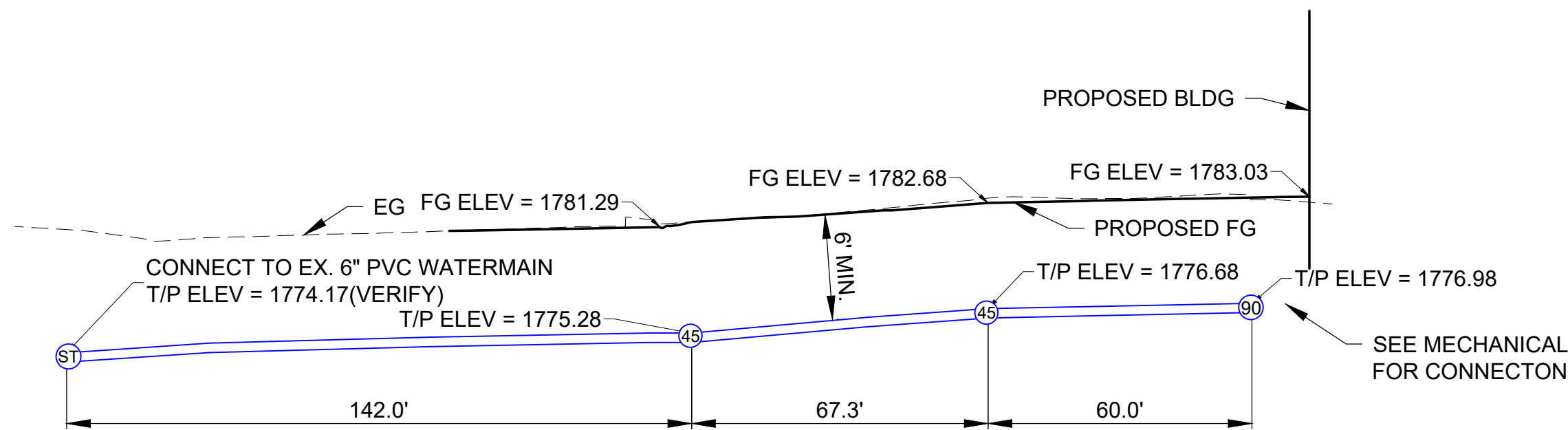
**WATER MAIN DISINFECTION**

WHEN MINOR WATER MAIN WORK OCCURS (I.E. TIE-IN CONNECTIONS OF NEW WATER MAIN TO EXISTING WATER MAIN, WATER MAIN ADJUSTMENTS, INSTALLATION OF NEW VALVES ON EXISTING MAIN OR ANY OTHER WORK DEEMED MINOR BY THE ENGINEER) THE EXISTING MAIN, PRIOR TO THE COMPLETION OF THE BACTERIA TESTING, MAY BE RETURNED TO SERVICE ONCE THE LINE HAS BEEN FLUSHED AND A BOIL ORDER HAS BEEN ISSUED. THE BOIL ORDER WILL BE RESCINDED WITH THE PASSING OF THE BACTERIA TEST.

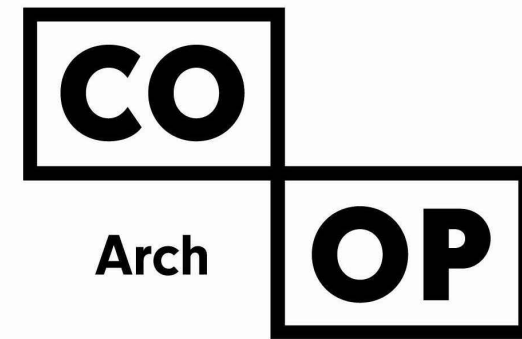
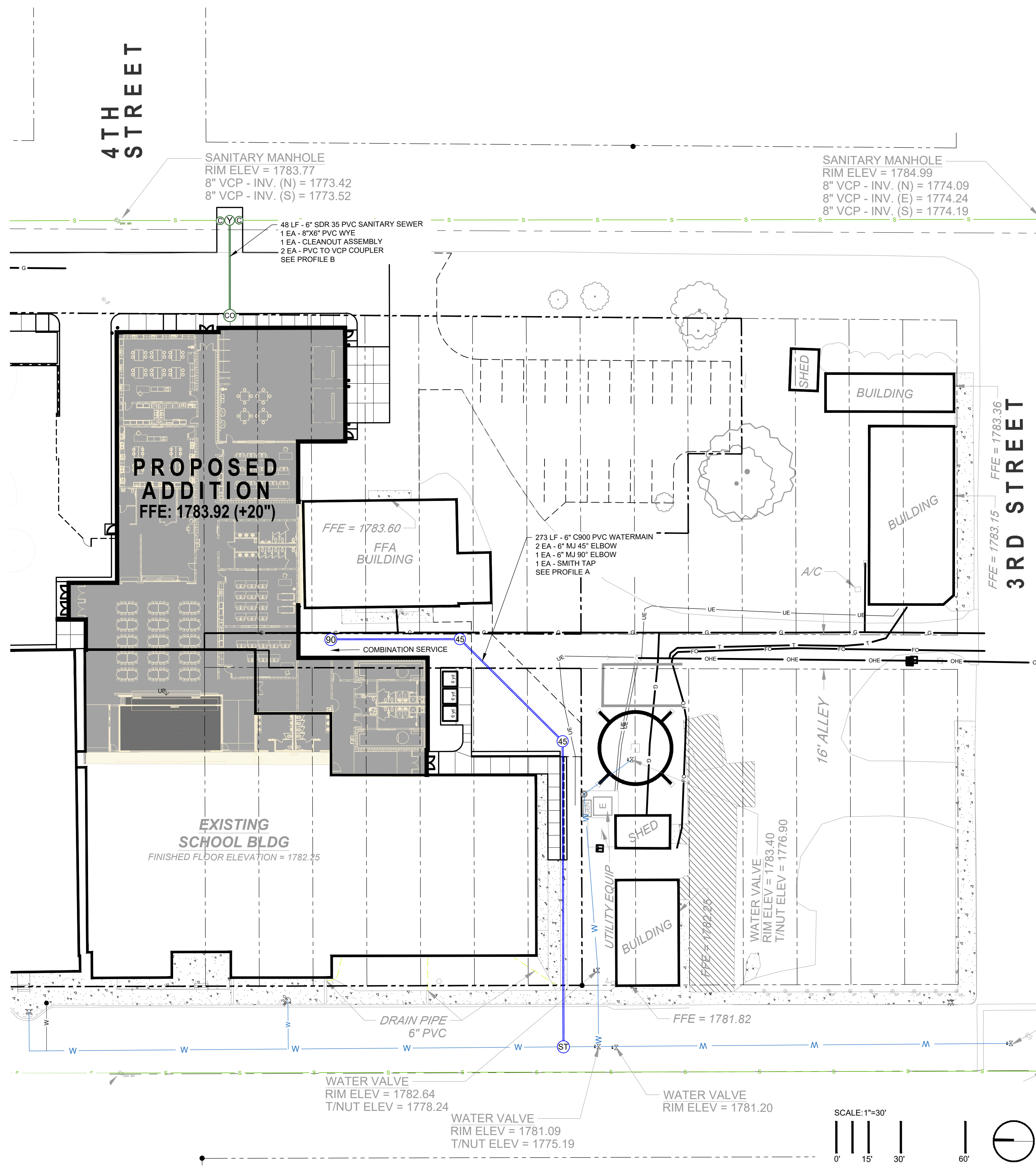
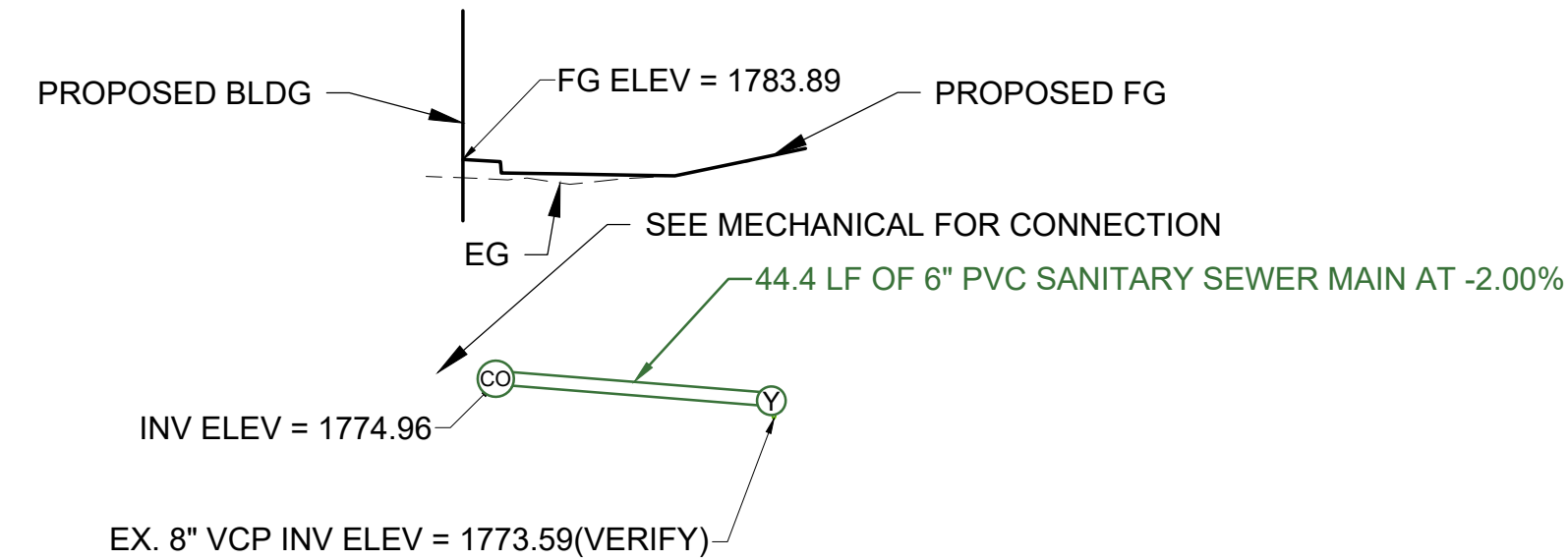
WATER THAT IS DISCHARGED DURING WATER MAIN FLUSHING SHALL NOT REACH A STREAM, RIVER OR WATER WAY IF THE CHLORINE RESIDUAL EXCEEDS 0.05MG/L.

THE CITY OF WILLOW LAKE OR ITS REPRESENTATIVE SHALL NOTIFY ALL CONSUMERS AFFECTED BY ANY INTERRUPTION OF WATER SERVICE AT LEAST 24 HOURS BEFORE THE INTERRUPTION OF WATER SERVICE. IN THE EVENT A CONSUMER CANNOT BE VERBALLY NOTIFIED, A DOOR HANGAR SHALL BE SECURED TO THE MOST FREQUENTLY USED ENTRANCE BY THE CITY OF WILLOW LAKE OR ITS REPRESENTATIVE.

**PROFILE A**



**PROFILE B**



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



116 W. 69TH STREET, SUITE 200,  
SIOUX FALLS, SD 57108  
PH: 605.271.5527 FAX: 605.271.2753



CO-OP PROJECT NO:

ISSUE:  
01-30-2023 CONSTRUCTION DOCUMENTS

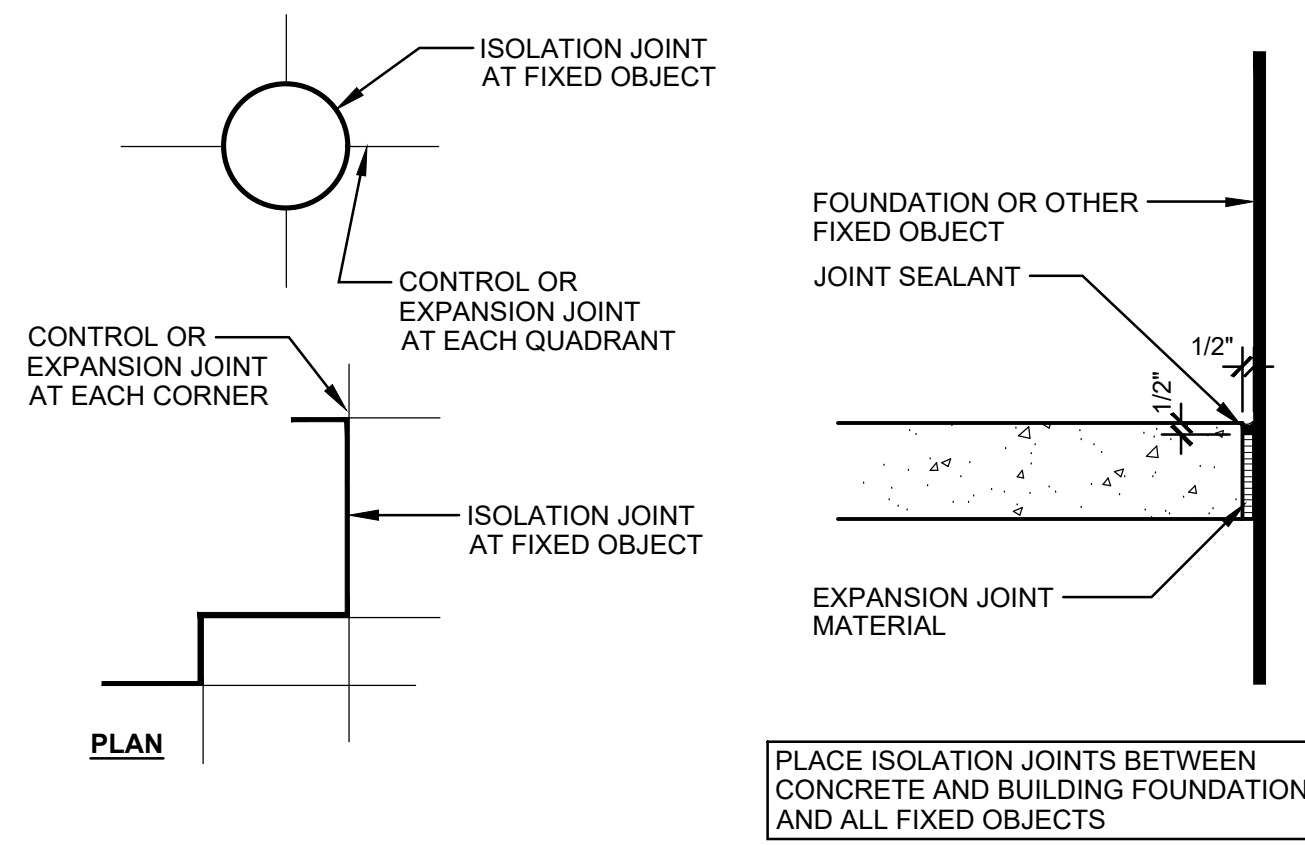
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

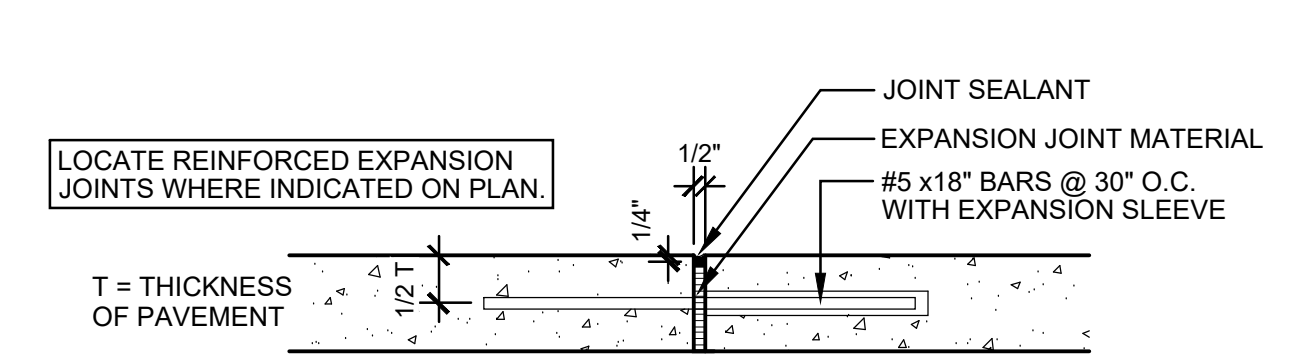
WILLOW LAKE, SD

SHEET TITLE:  
UTILITY PLAN & PROFILE

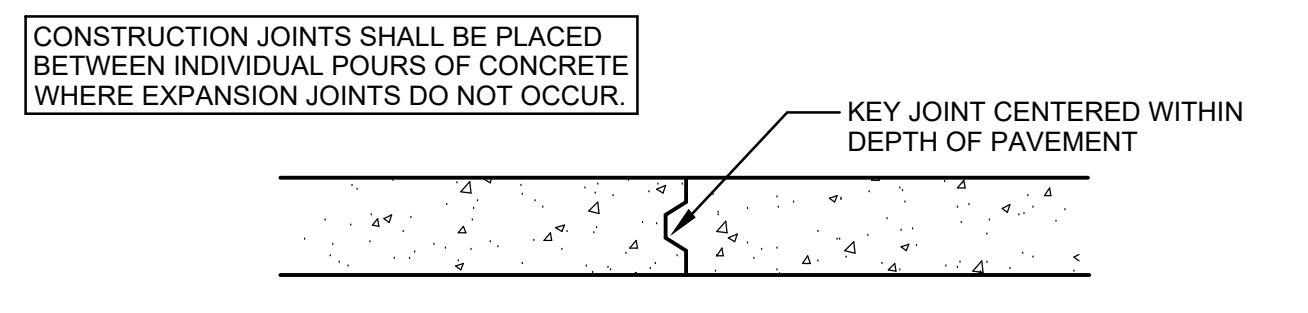
**SP401**



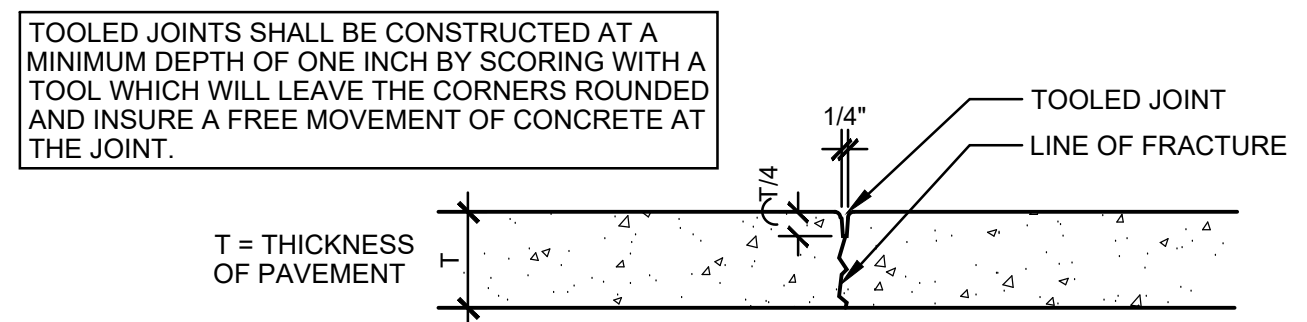
**D1** SP501 **ISOLATION JOINT** SCALE: 1-1/2"=1'-0"



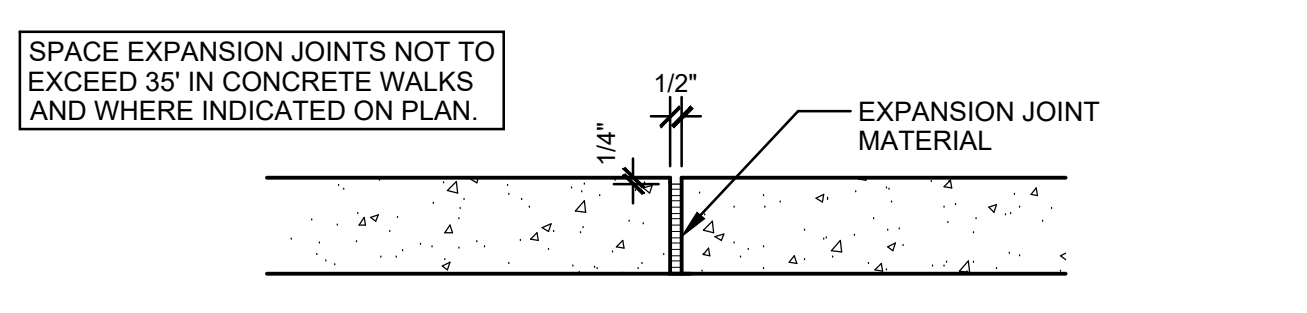
**D2.5** SP501 **REINFORCED EXPANSION JOINT** SCALE: 1-1/2"=1'-0"



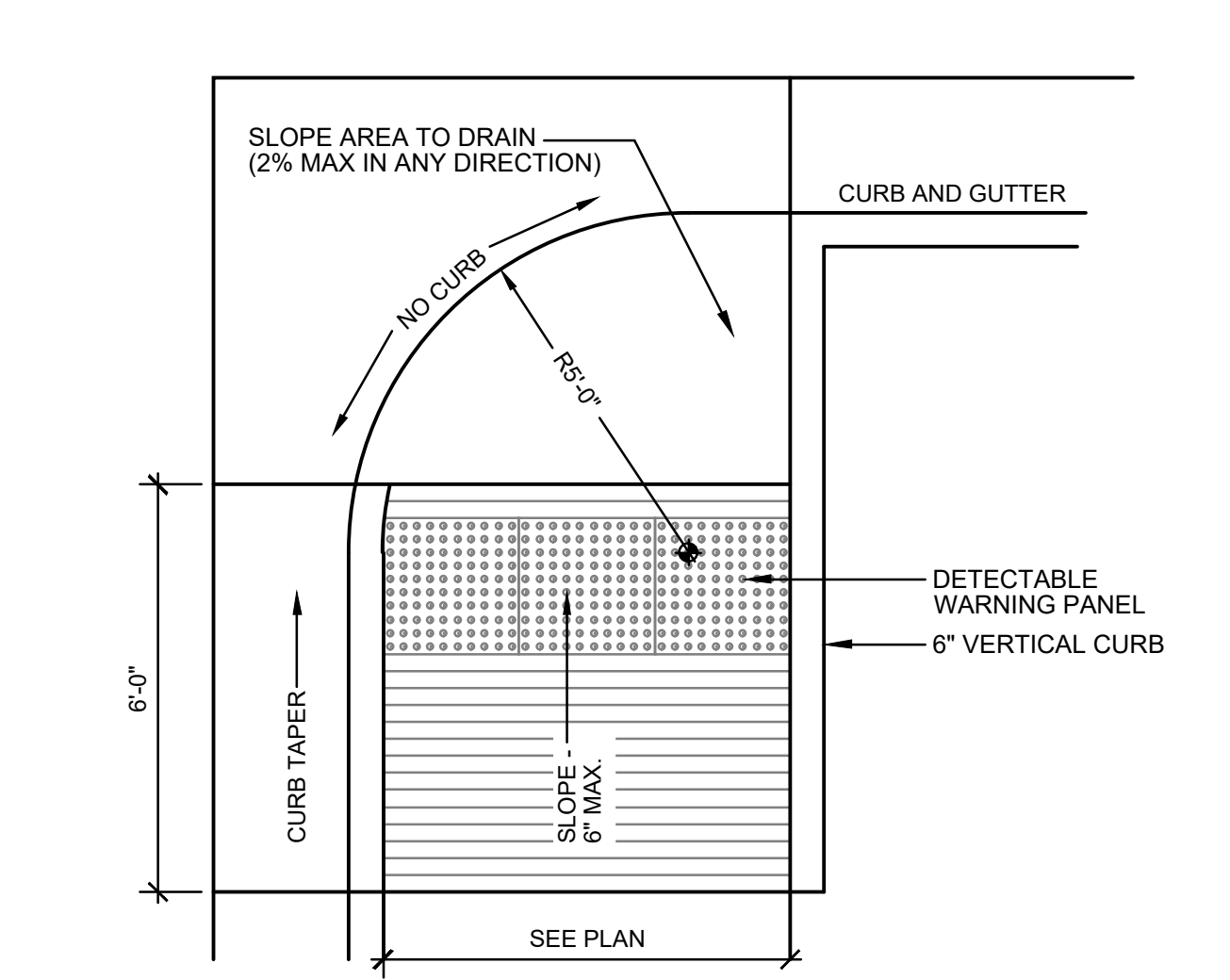
**D2** SP501 **CONSTRUCTION JOINT** SCALE: 1-1/2"=1'-0"



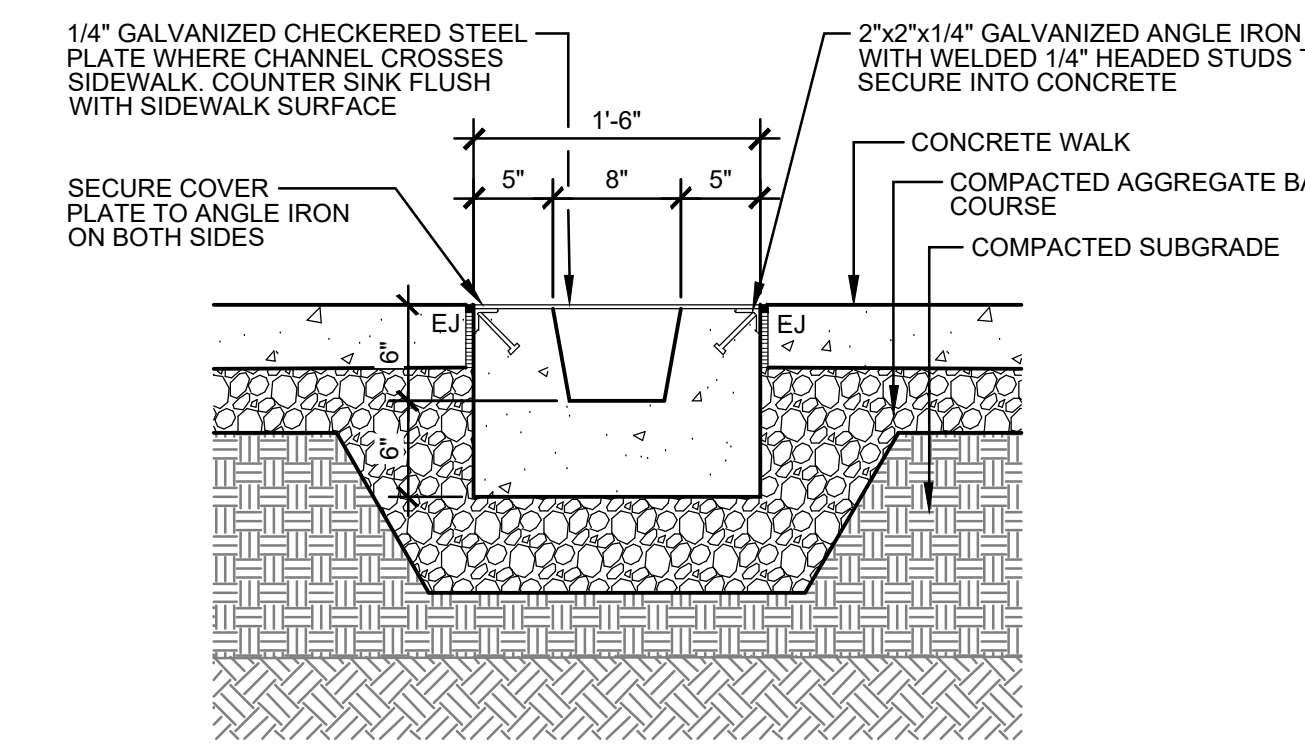
**D3.5** SP501 **CONTROL JOINT** SCALE: 1-1/2"=1'-0"



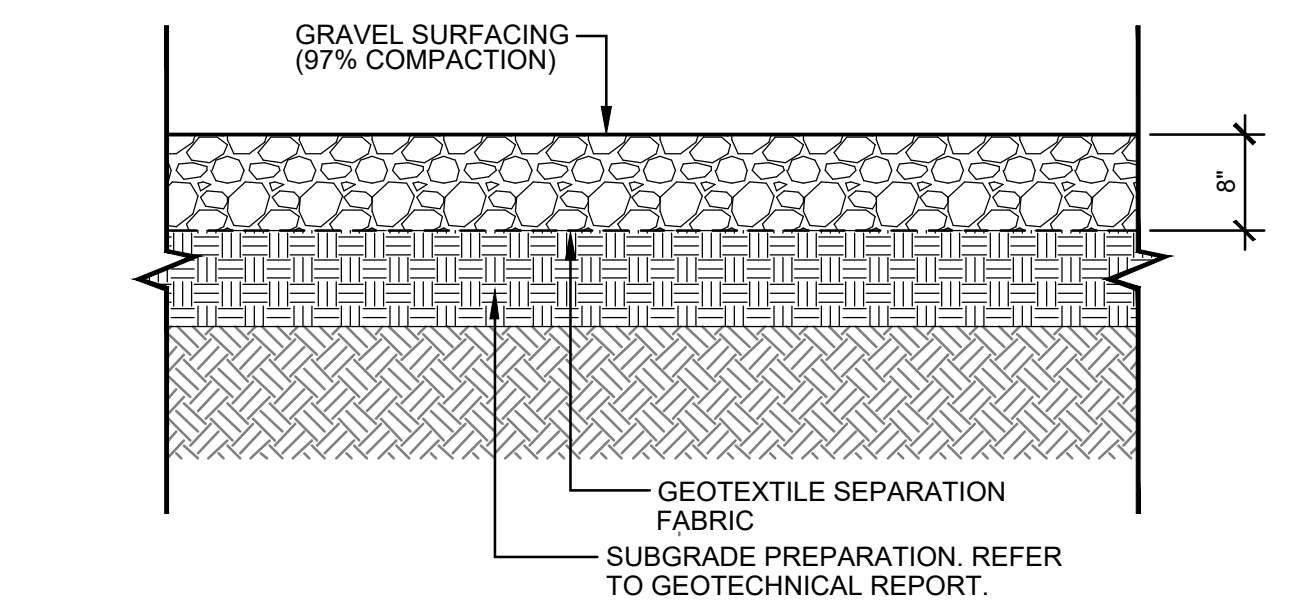
**D3** SP501 **EXPANSION JOINT** SCALE: 1-1/2"=1'-0"



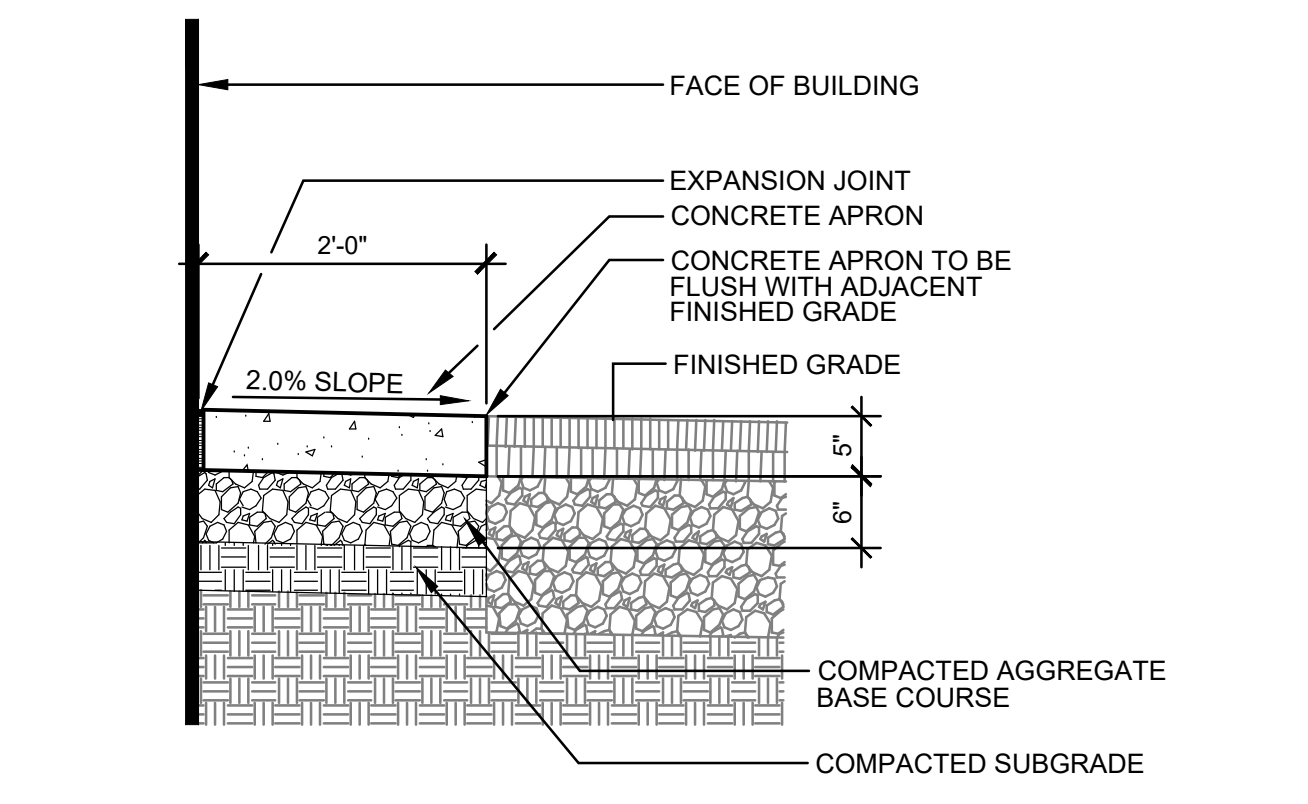
**D4** SP501 **CONCRETE CURB RAMP** SCALE: 3/8"=1'-0"



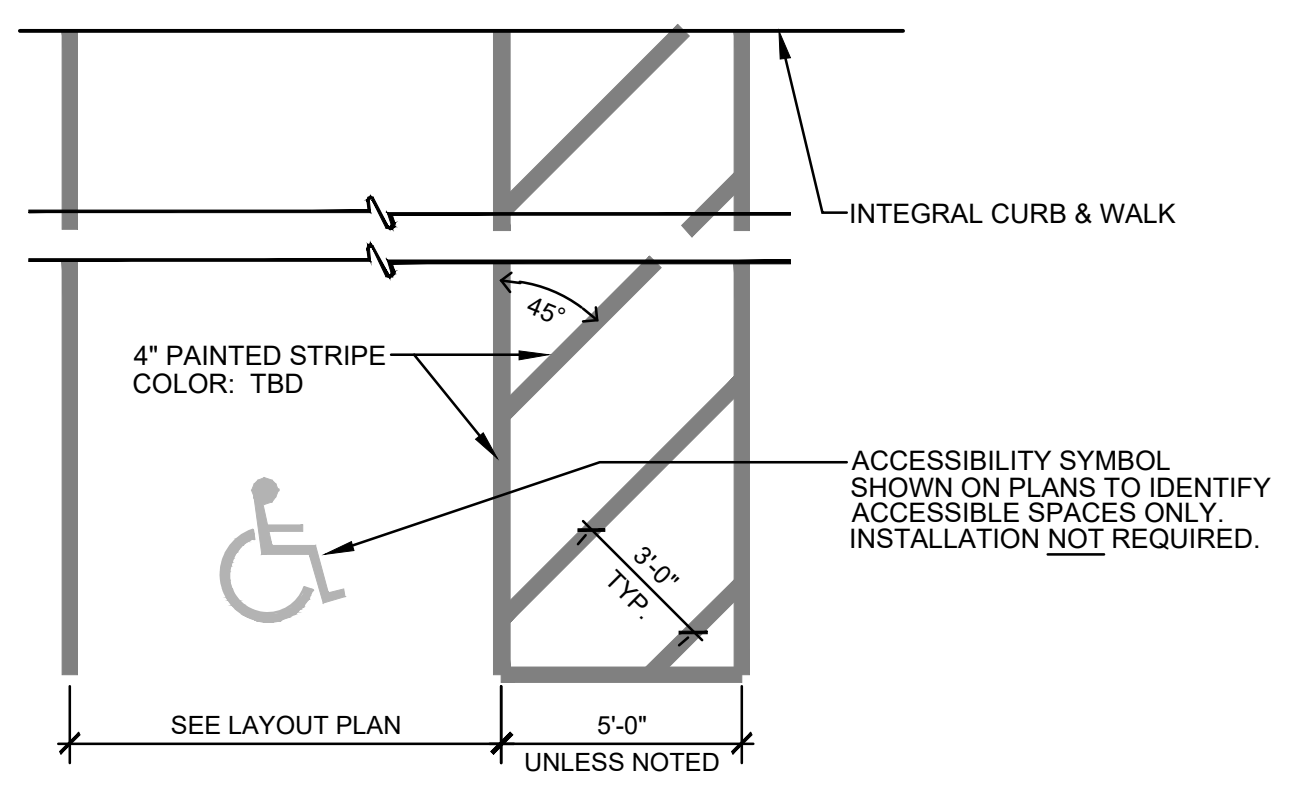
**C4** SP501 **CHANNEL DRAIN** SCALE: 1"=1'-0"



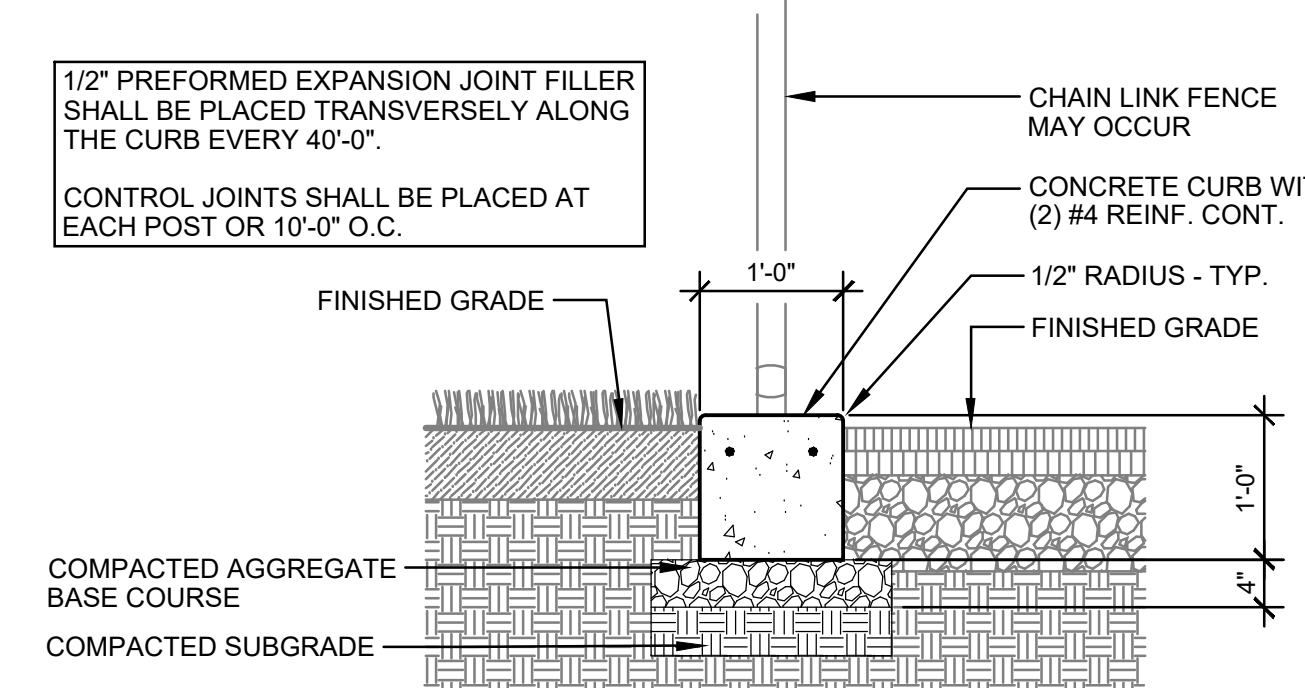
**C1** SP501 **GRAVEL SURFACING** SCALE: 3/4"=1'-0"



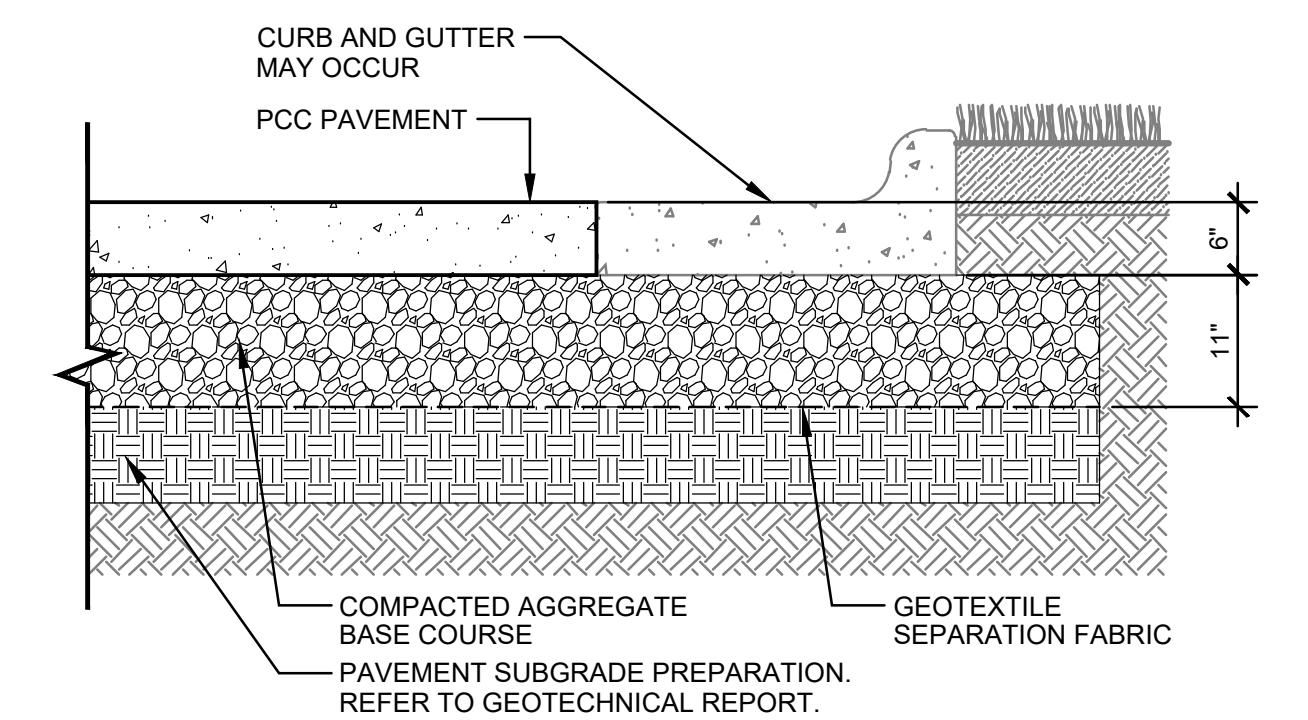
**C2** SP501 **CONCRETE APRON** SCALE: 3/4"=1'-0"



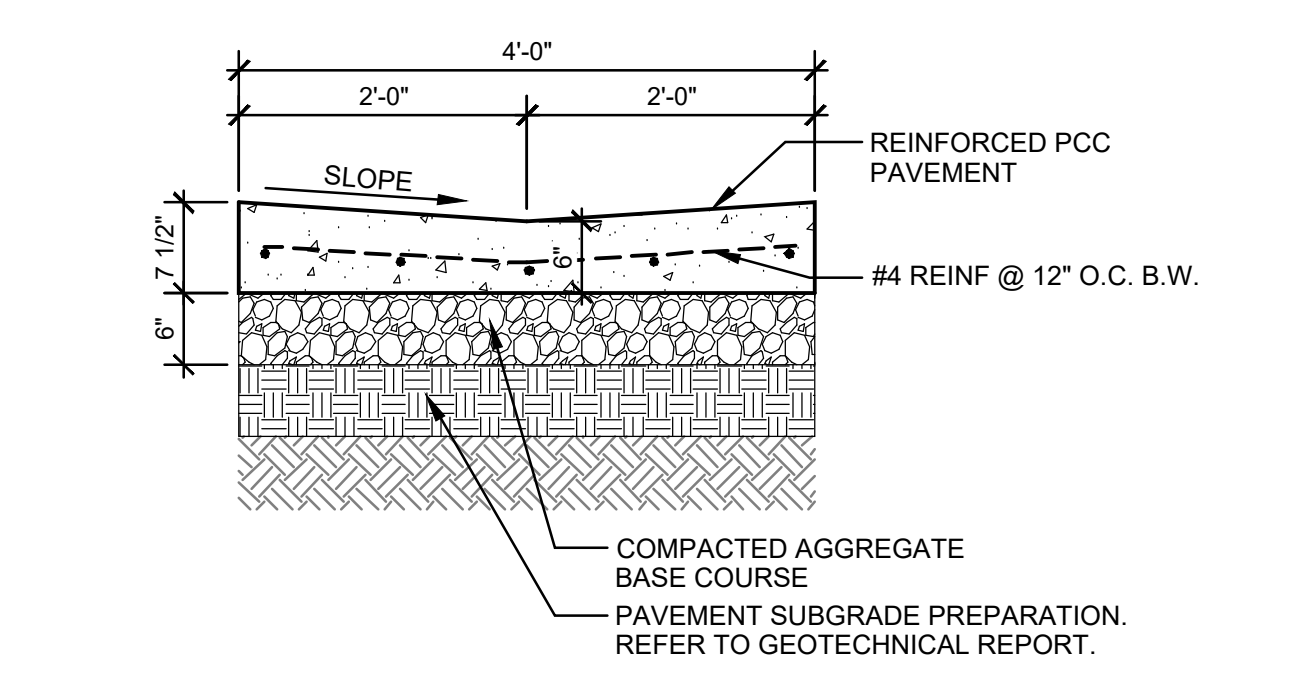
**C3** SP501 **PAVEMENT MARKINGS** SCALE: 1/4"=1'-0"



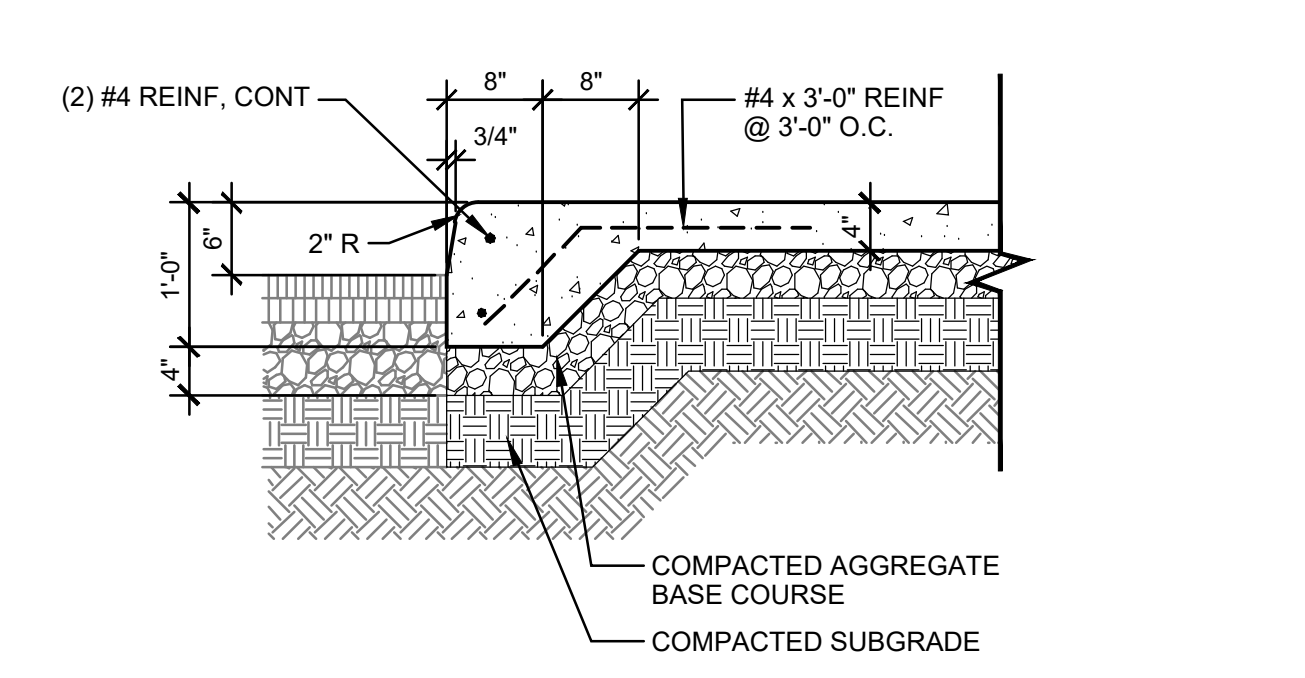
**B1** SP501 **WIDE CONCRETE CURB** SCALE: 3/4"=1'-0"



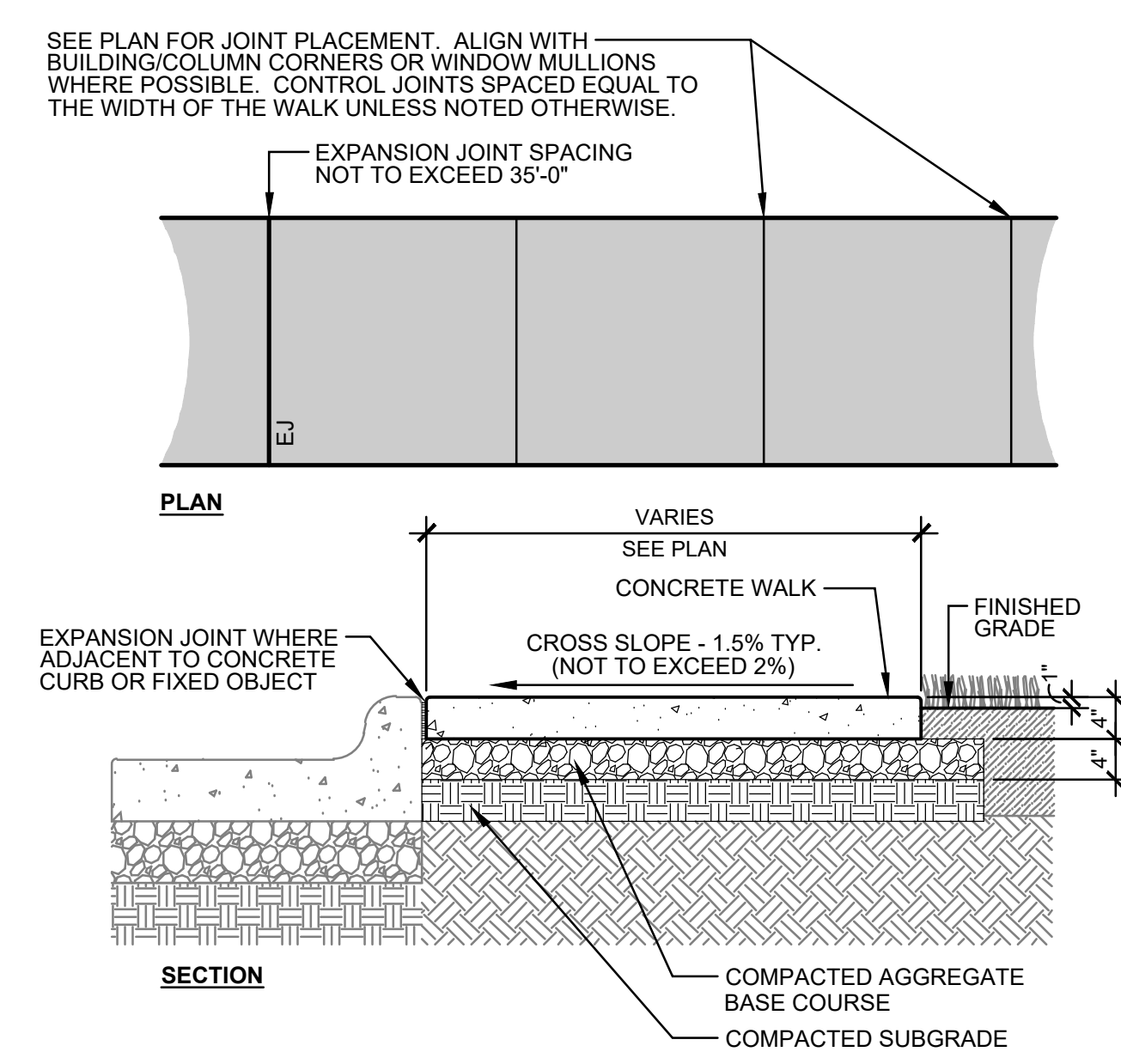
**B2** SP501 **CONCRETE PAVEMENT** SCALE: 3/4"=1'-0"



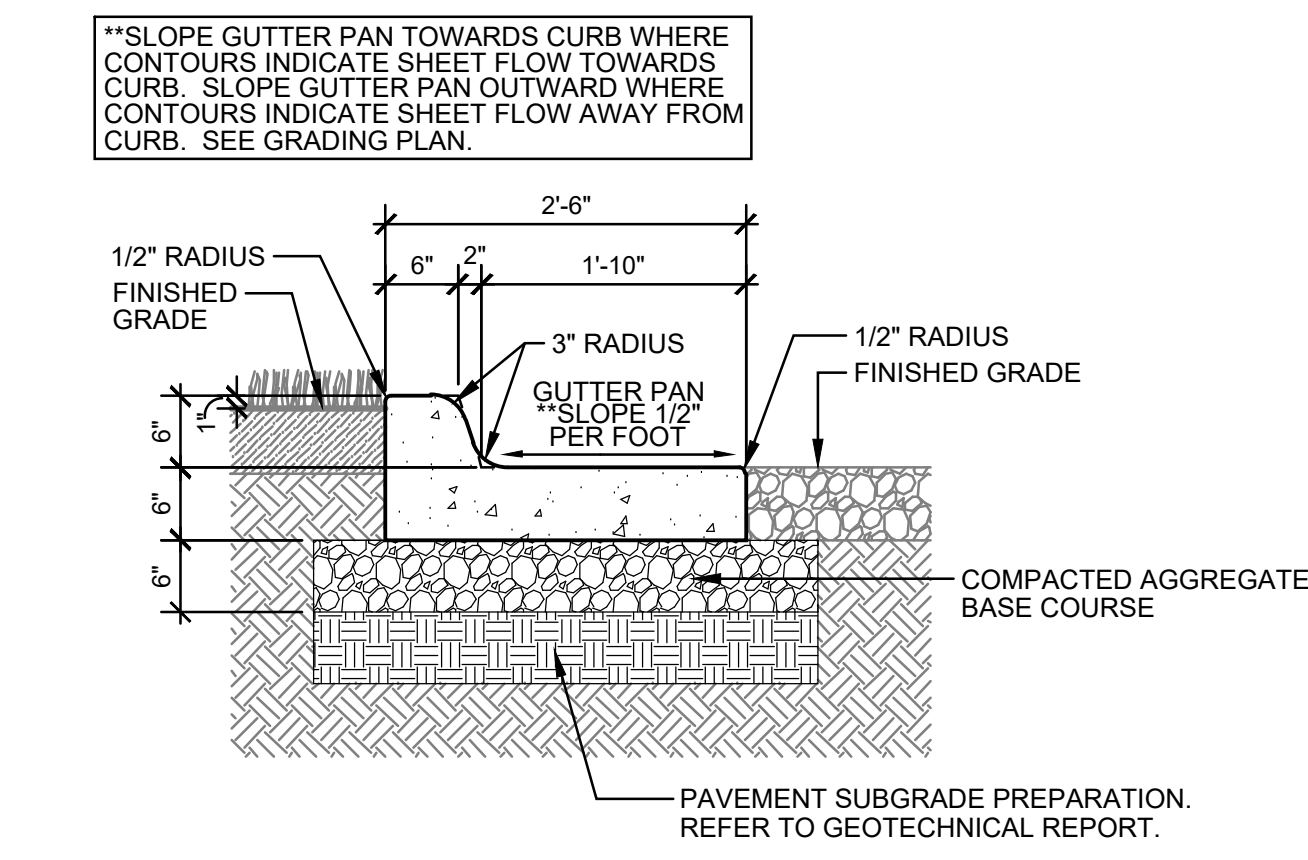
**B3** SP501 **CONCRETE VALLEY GUTTER** SCALE: 3/4"=1'-0"



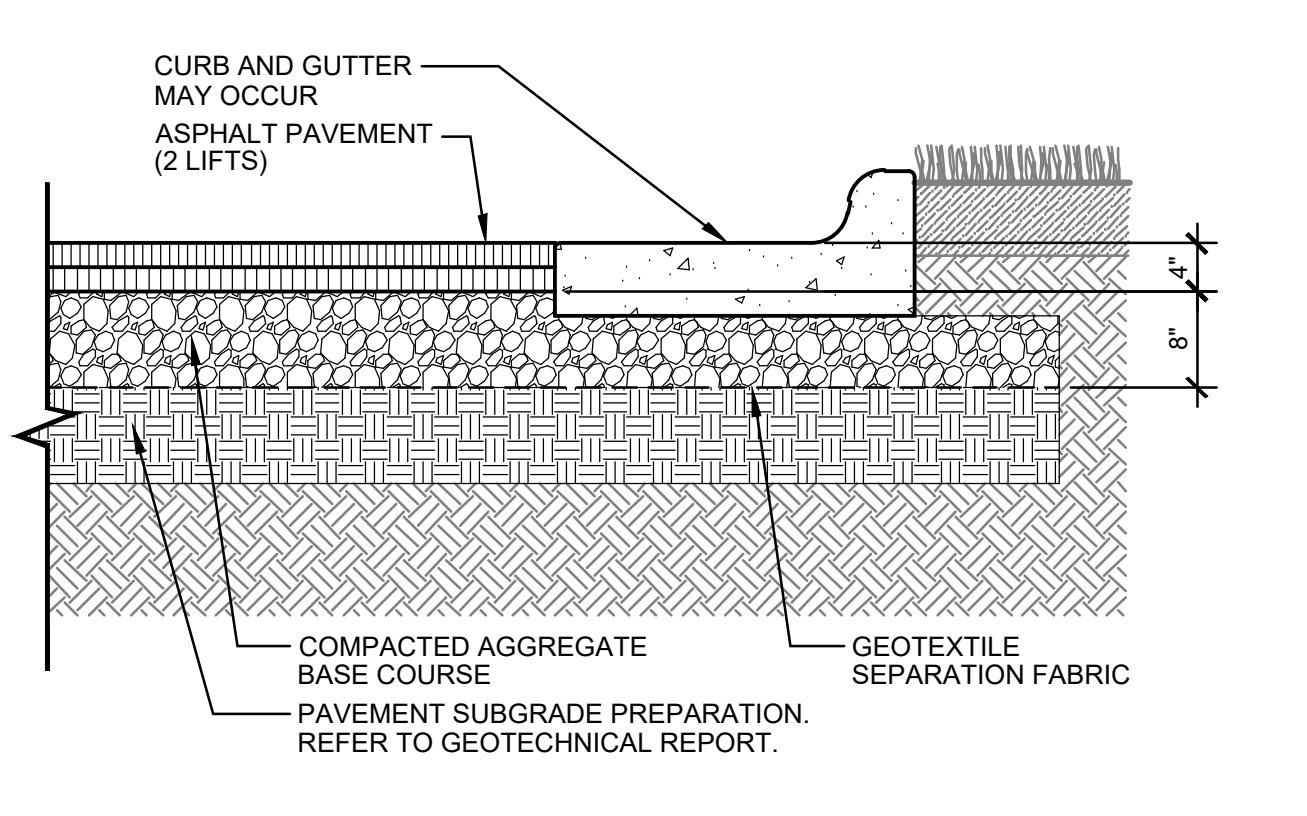
**B4** SP501 **INTEGRAL CURB & WALK** SCALE: 3/4"=1'-0"



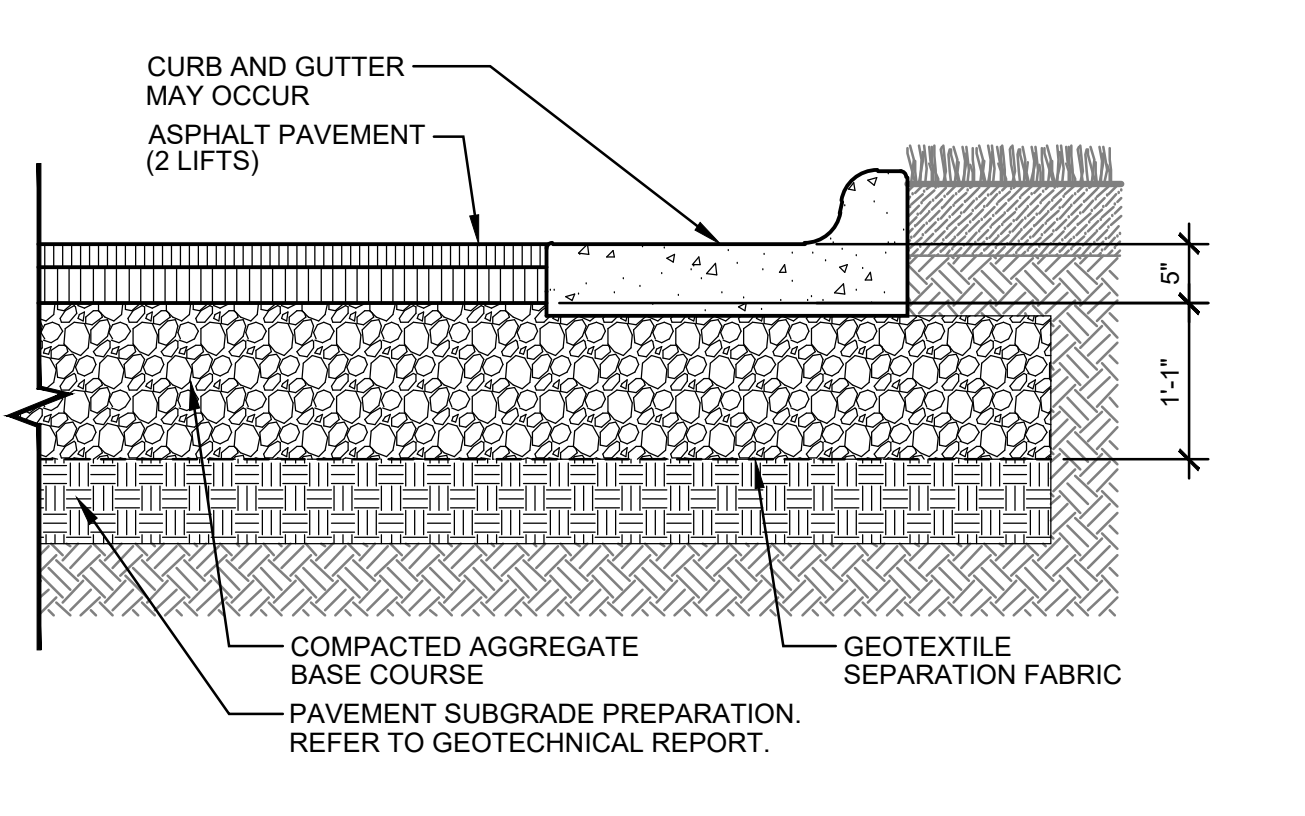
**A1** SP501 **CONCRETE WALK** SCALE: 3/4"=1'-0"



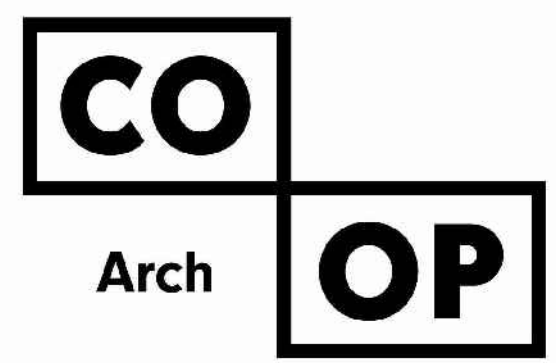
**A2** SP501 **CURB AND GUTTER** SCALE: 3/4"=1'-0"



**A3** SP501 **ASPHALT PAVEMENT - STANDARD** SCALE: 3/4"=1'-0"



**A4** SP501 **ASPHALT PAVEMENT - HEAVY** SCALE: 3/4"=1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



LANDSCAPE ARCHITECT  
CONFLUENCE

440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:



ISSUE:  
01-30-2023 CONSTRUCTION DOCUMENTS

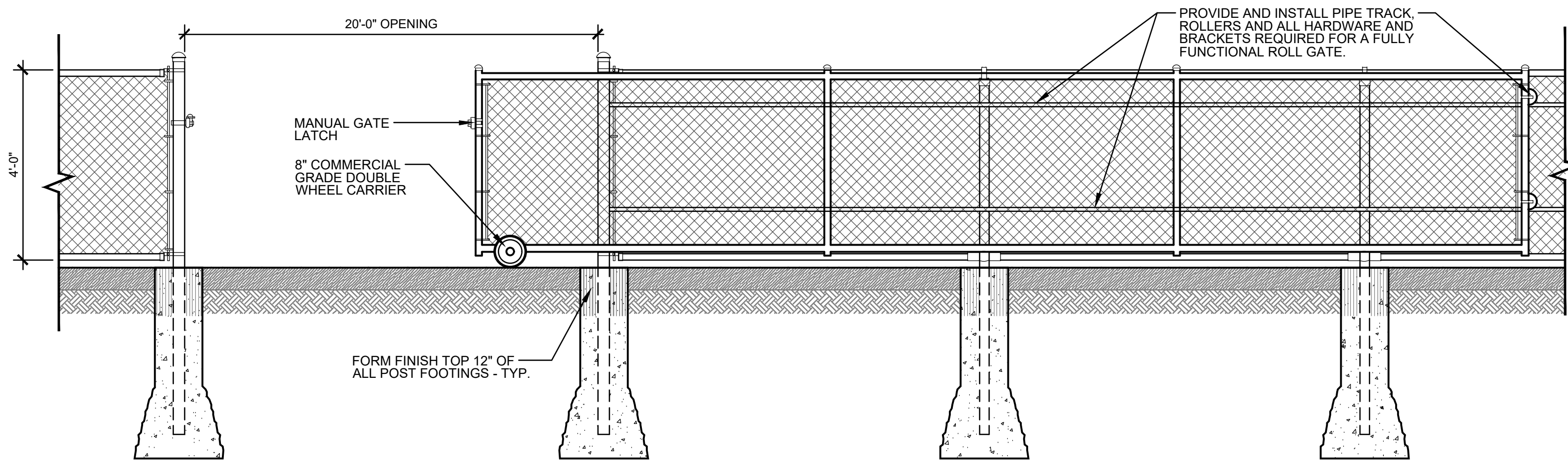
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

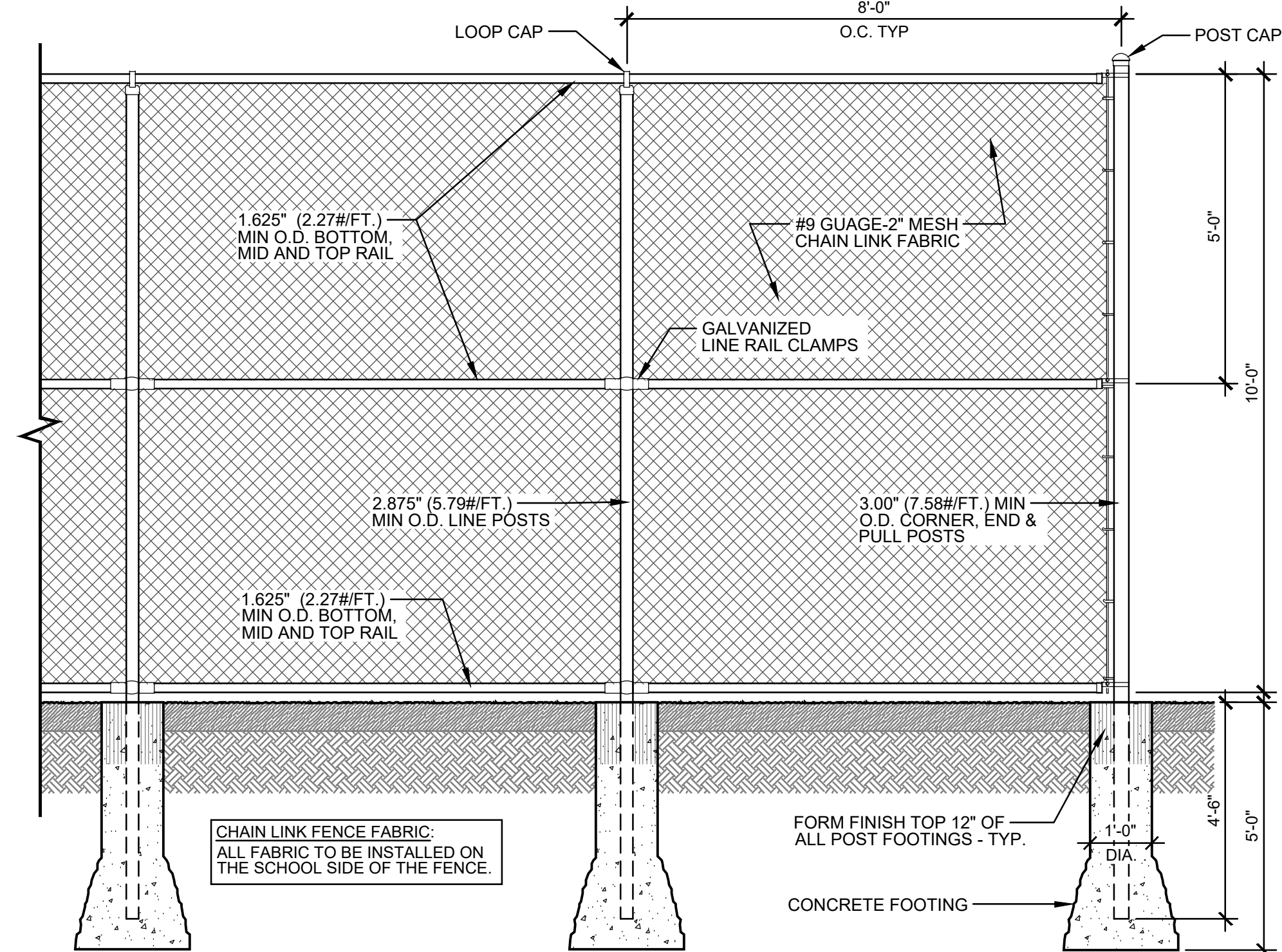
WILLOW LAKE, SD

SHEET TITLE:  
SITE DETAILS

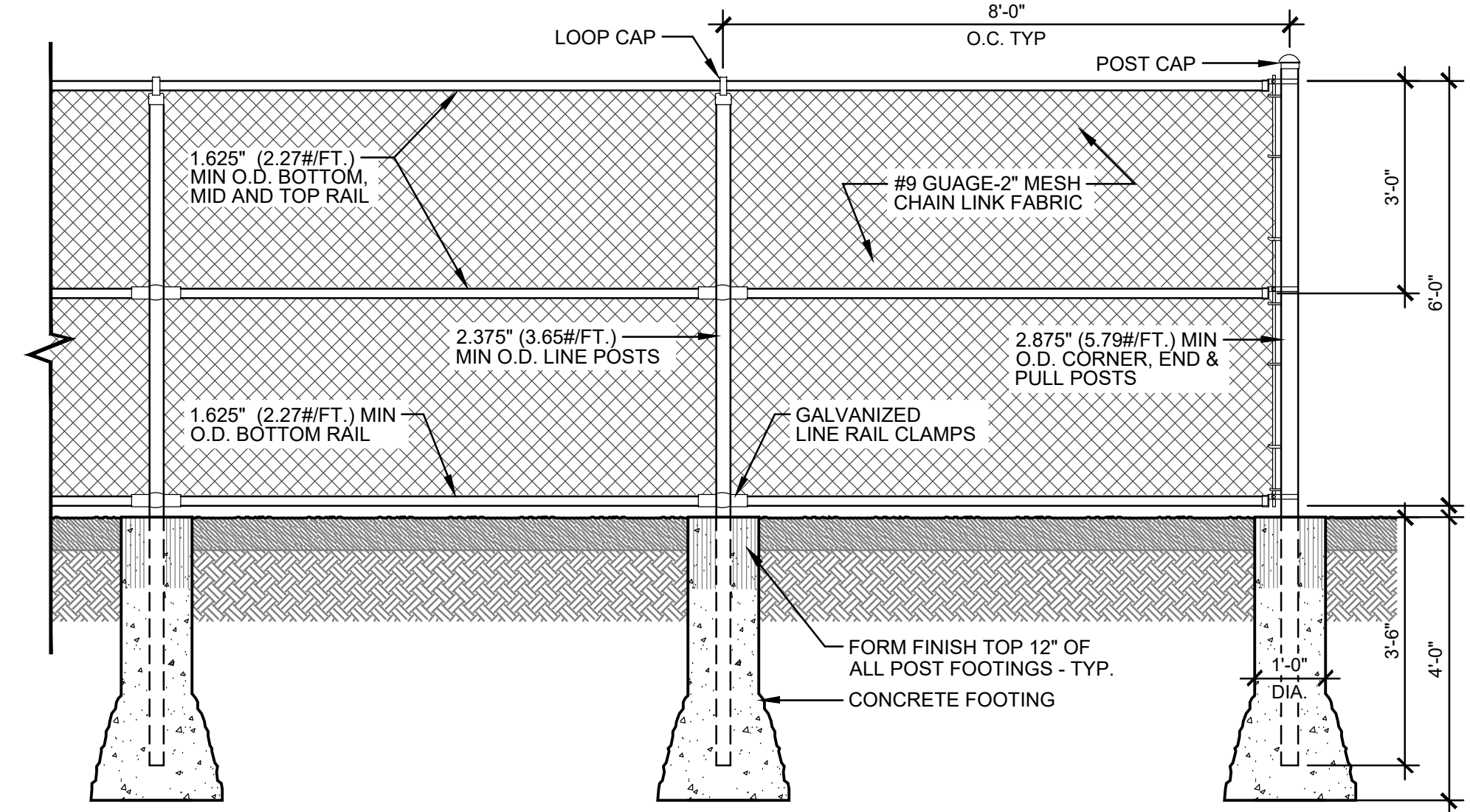
SP501



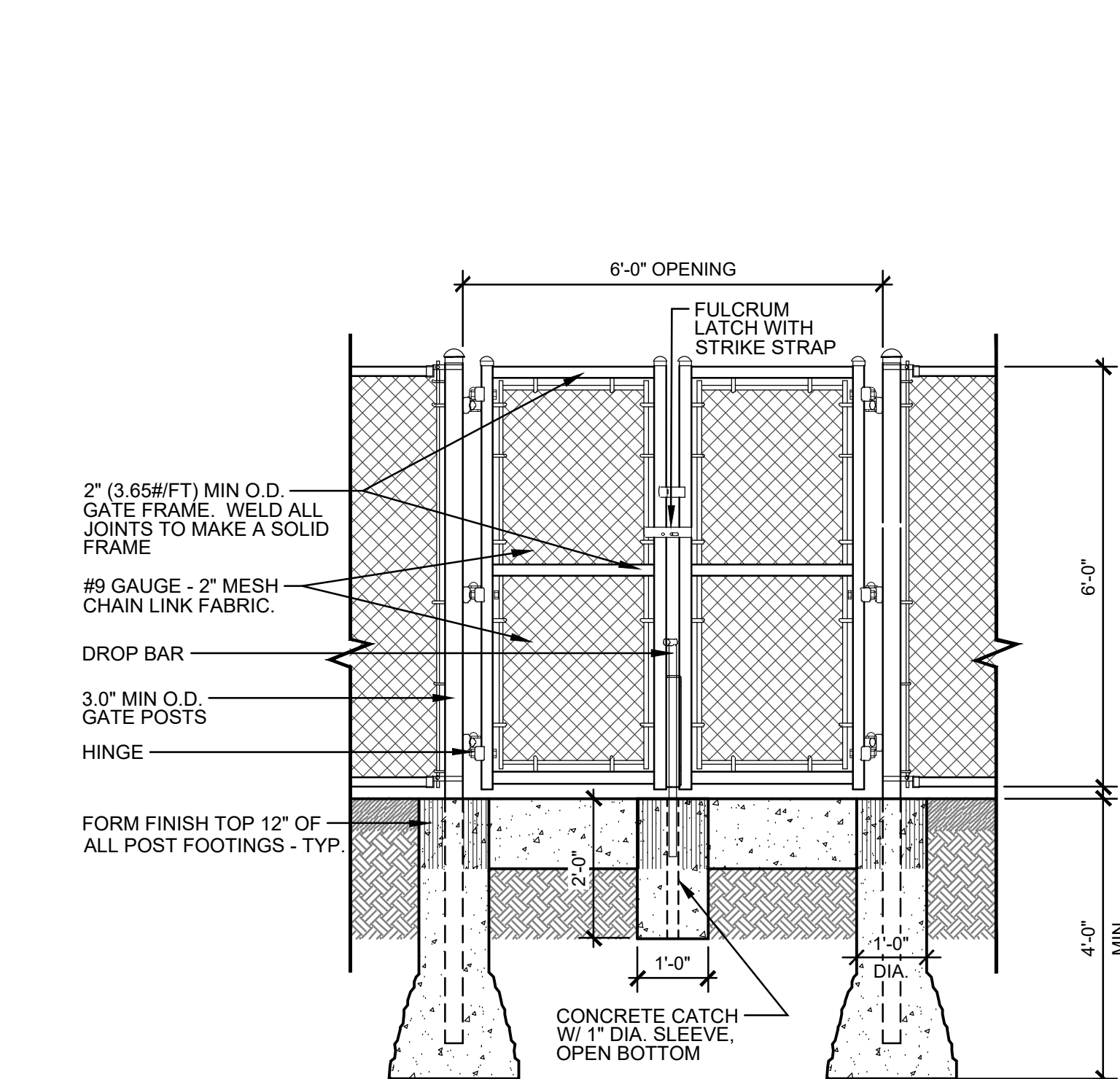
D1 SP502 4'-0" ROLL GATE SCALE: 1/2" = 1'-0"



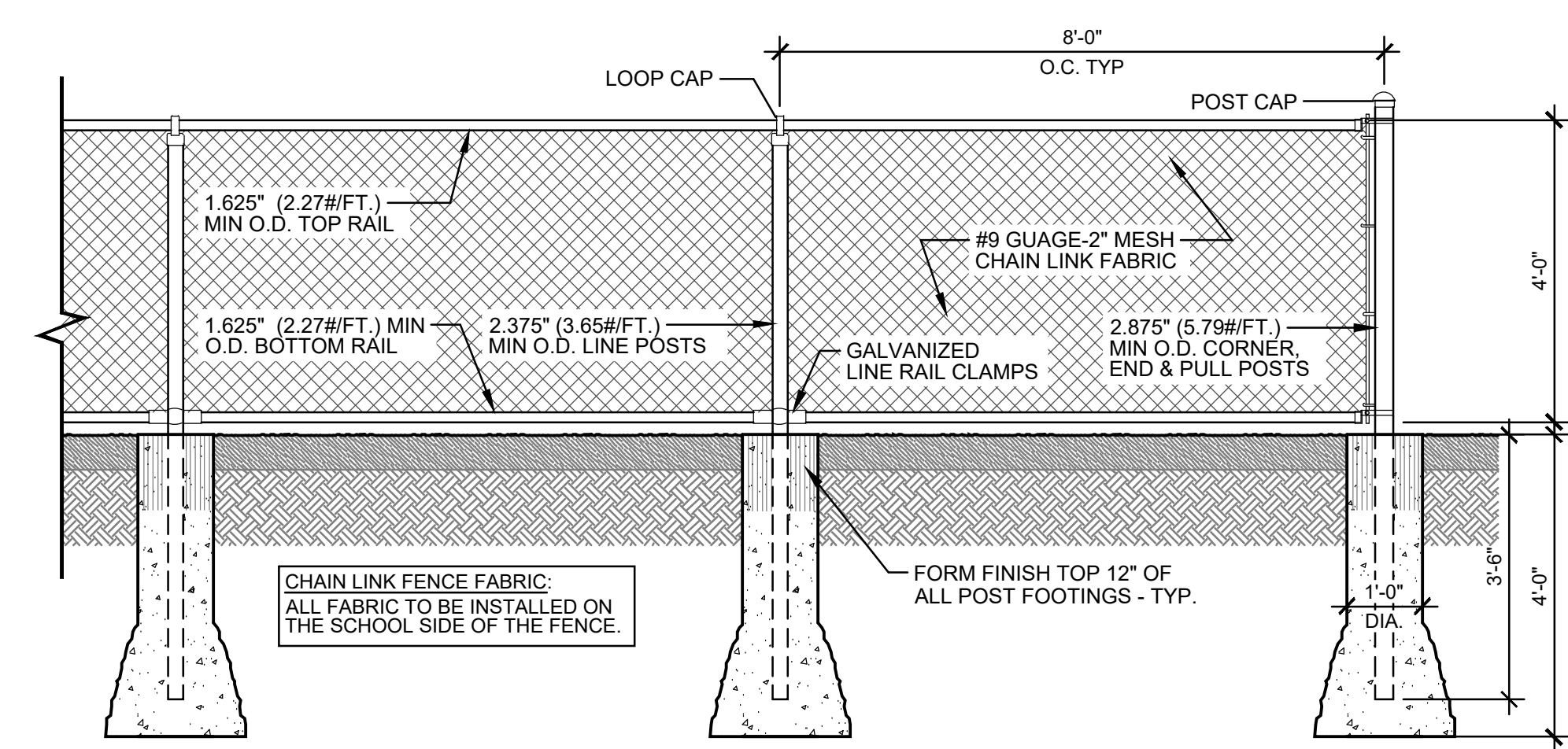
B1 SP502 10'-0" CHAIN LINK FENCE SCALE: 1/2" = 1'-0"



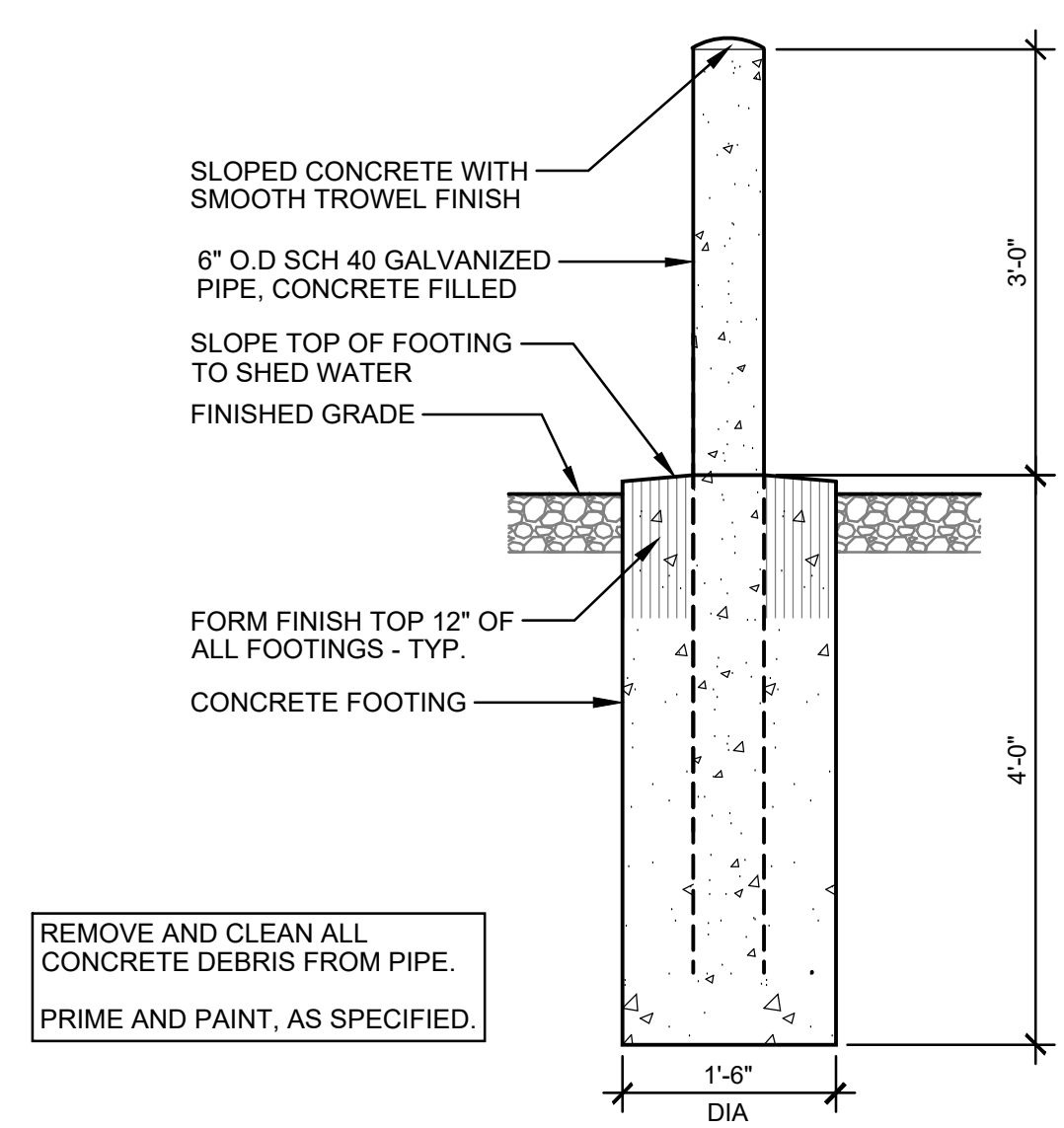
A1 SP502 6'-0" CHAIN LINK FENCE SCALE: 1/2" = 1'-0"



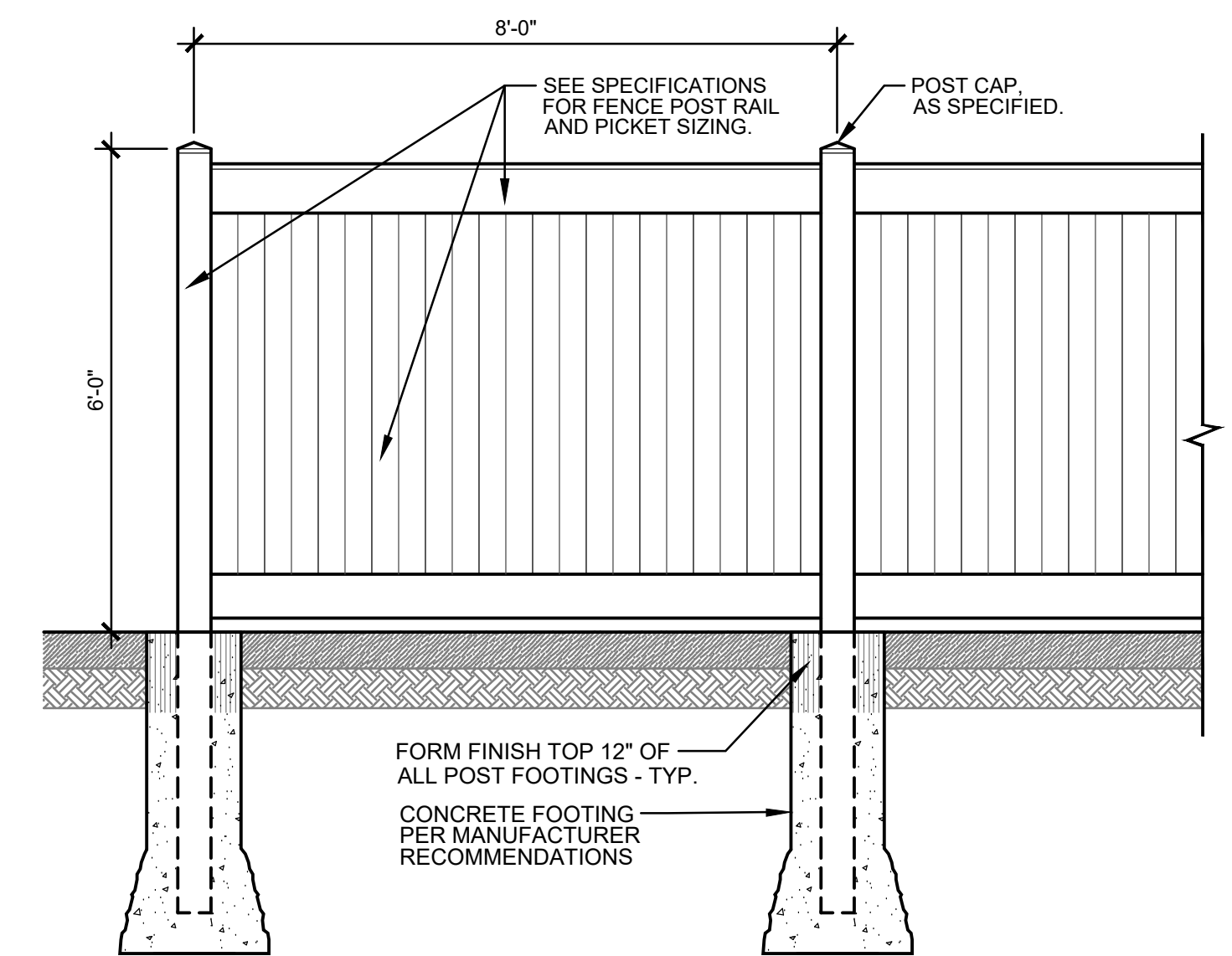
B2 SP502 6'-0" CHAIN LINK GATE SCALE: 1/2" = 1'-0"



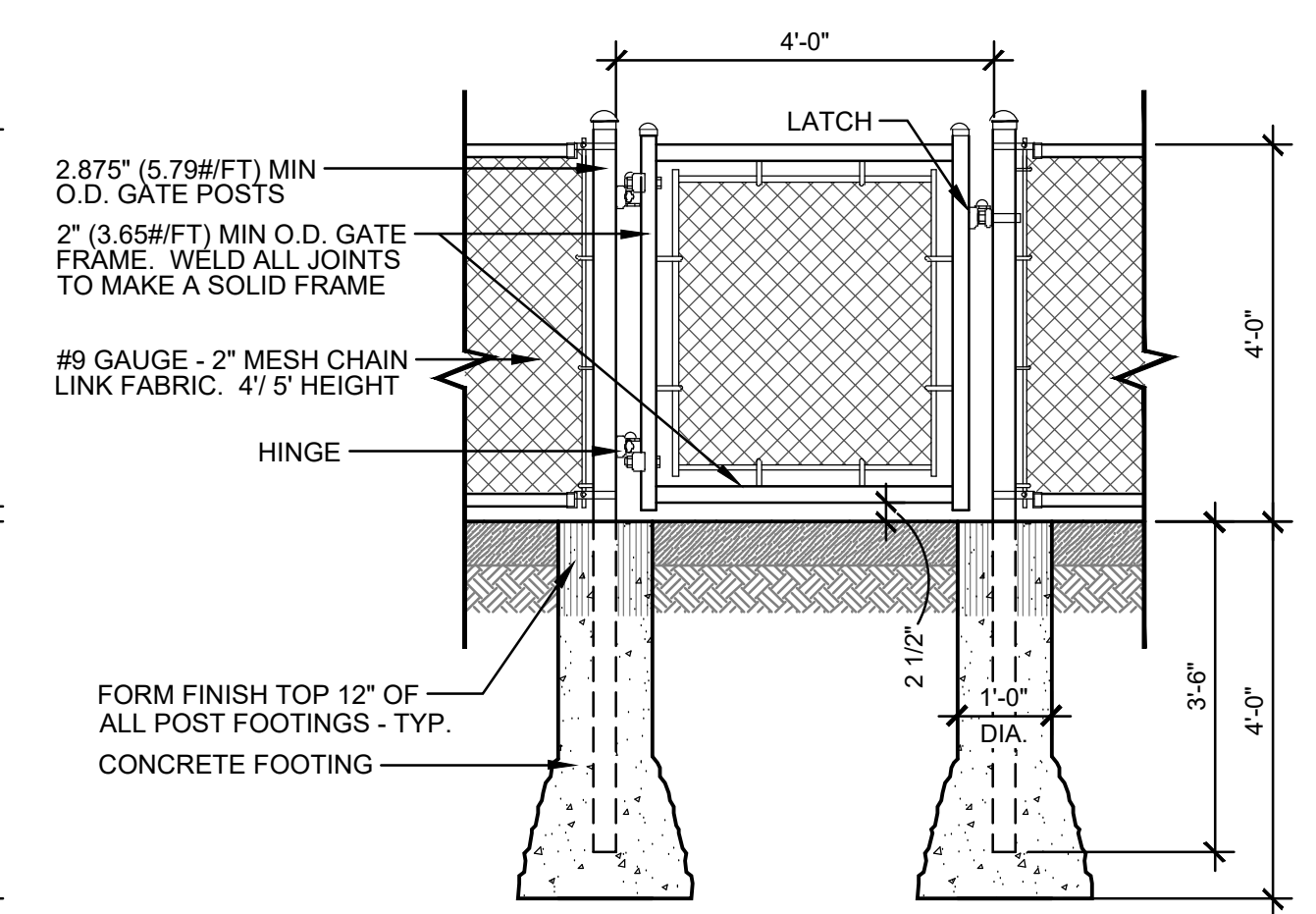
A2 SP502 4'-0" CHAIN LINK FENCE SCALE: 1/2" = 1'-0"



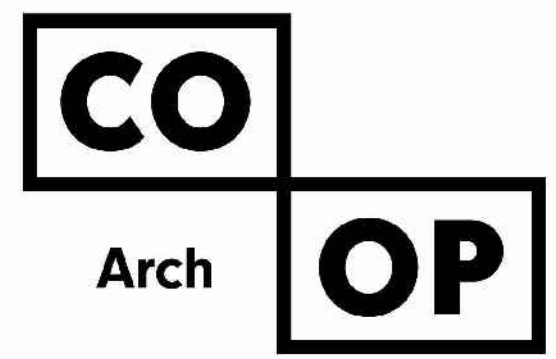
D4 SP502 CONCRETE GUARD POST SCALE: 3/4" = 1'-0"



B4 SP502 6'-0" COMPOSITE PRIVACY FENCE SCALE: 1/2" = 1'-0"



A4 SP502 4'-0" CHAIN LINK GATE SCALE: 1/2" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



LANDSCAPE ARCHITECT  
CONFLUENCE  
440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:



ISSUE:  
01-30-2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

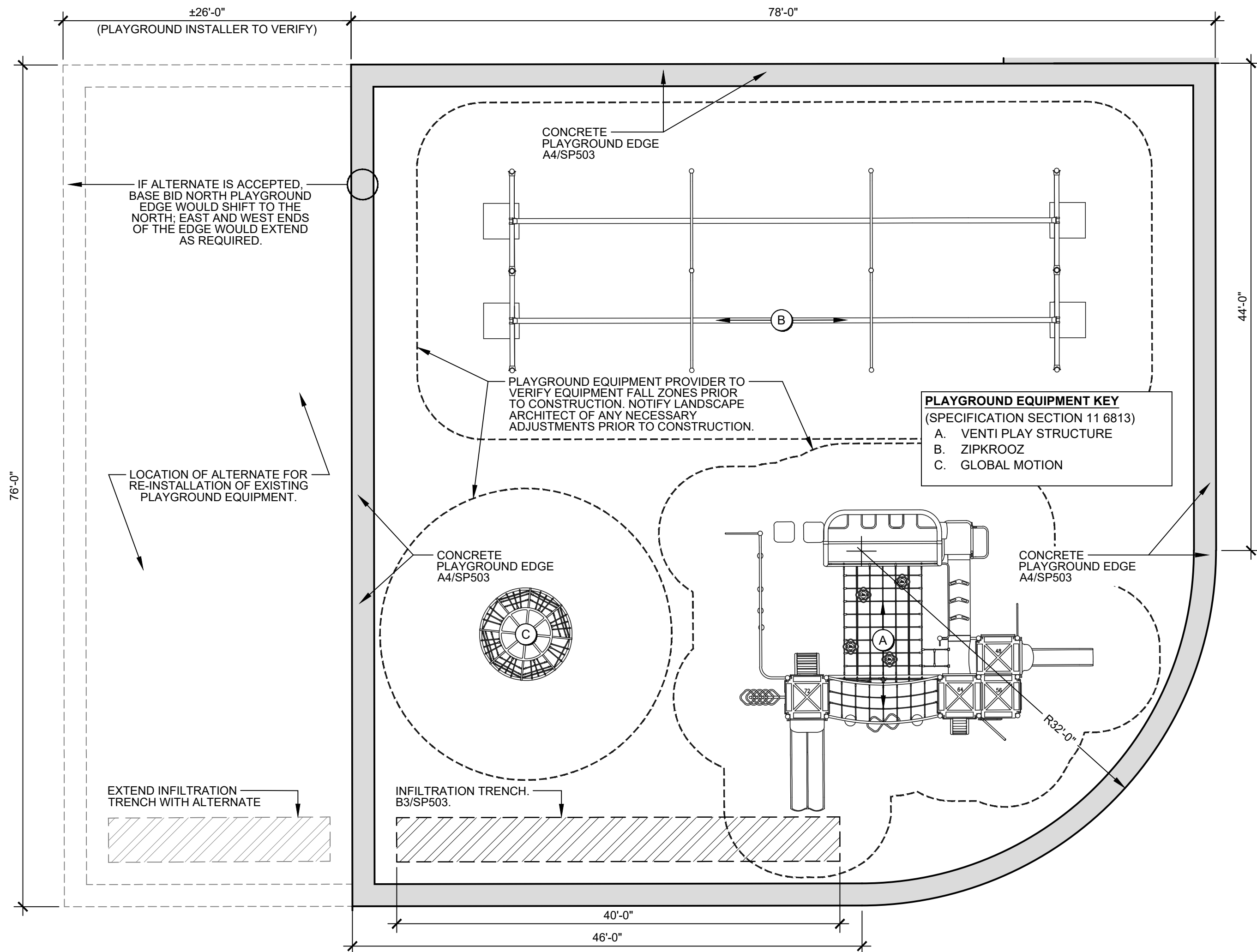
SHEET TITLE:  
SITE DETAILS

SP502



**D1 SP503** EXISTING PLAYGROUND EQUIPMENT RE-INSTALLATION (ALTERNATE) N.T.S.

**NOTE**  
THE CONTRACTOR IS TO LOCATE THE SALVAGED EQUIPMENT SO REQUIRED FALL ZONES HAVE BEEN ACCOUNTED FOR ON ALL SIDES.

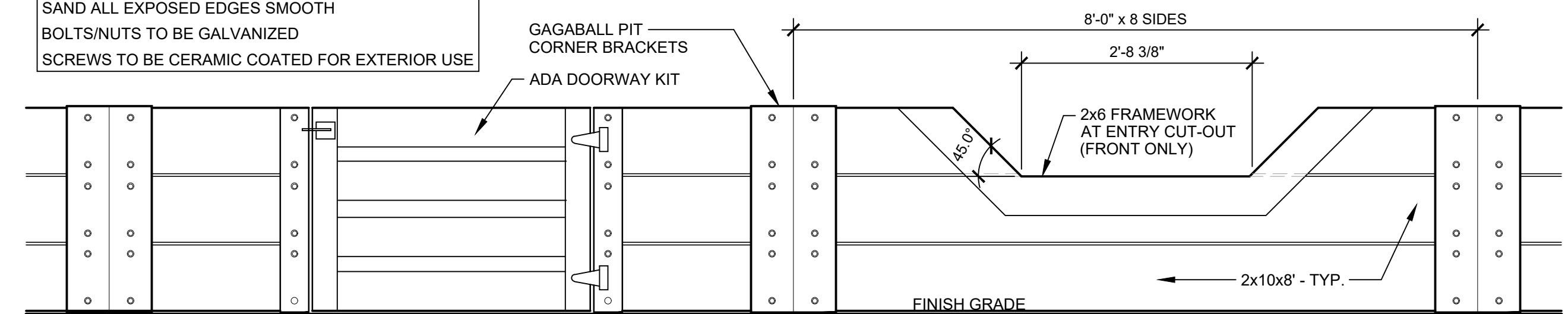


**B1 SP503** PLAYGROUND ENLARGEMENT SEE DESCRIPTION OF ALTERNATES IN SPECIFICATIONS SCALE: 1/8" = 1'-0"

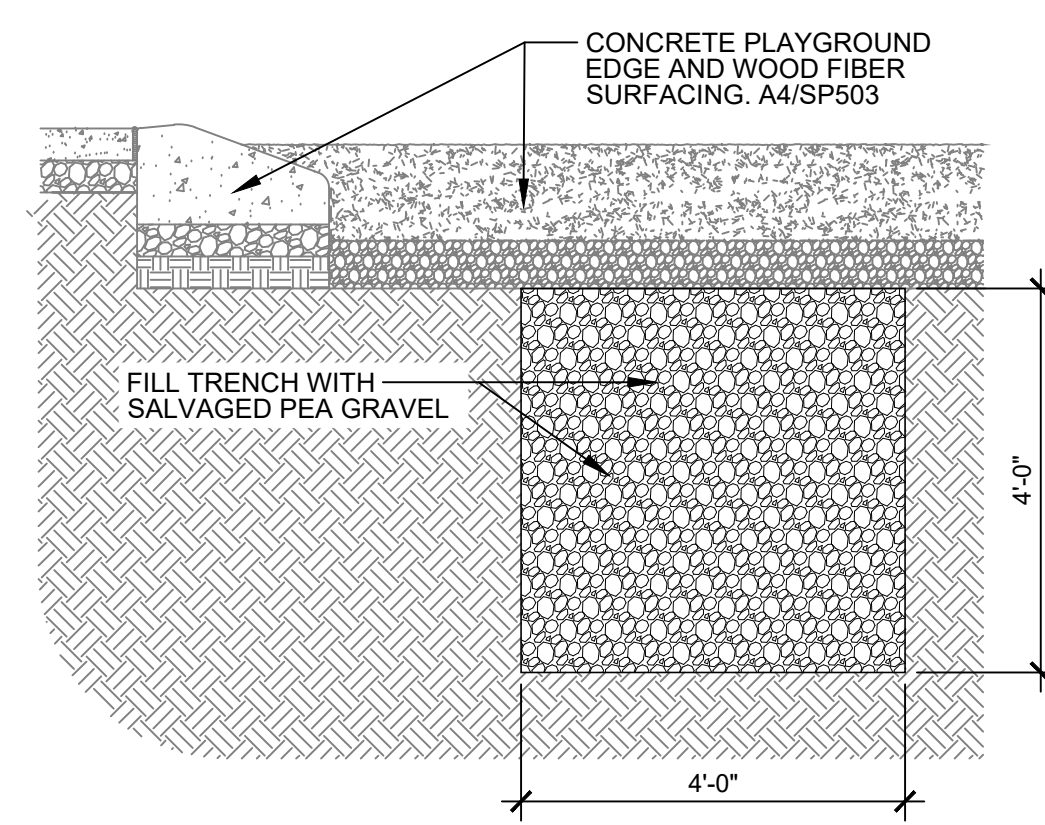


POSSIBLE SOURCE:  
COACH CLIFF'S GAGA BALL PITS  
www.gagaballpits.com  
COLOR: YELLOW

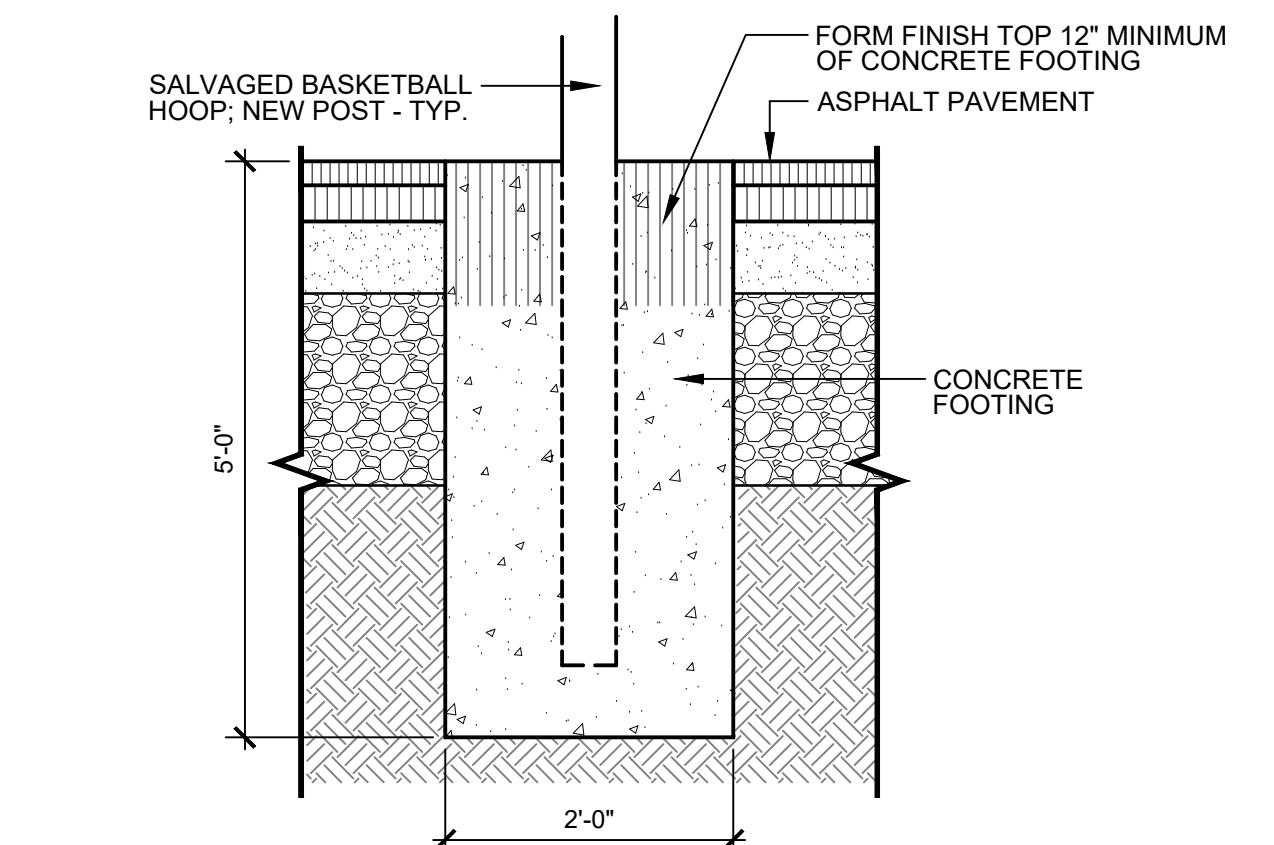
INSTALL PER MANUFACTURER SPECIFICATIONS  
ALL LUMBER TO BE PRESSURE TREATED  
SAND ALL EXPOSED EDGES SMOOTH  
BOLTS/NUTS TO BE GALVANIZED  
SCREWS TO BE CERAMIC COATED FOR EXTERIOR USE



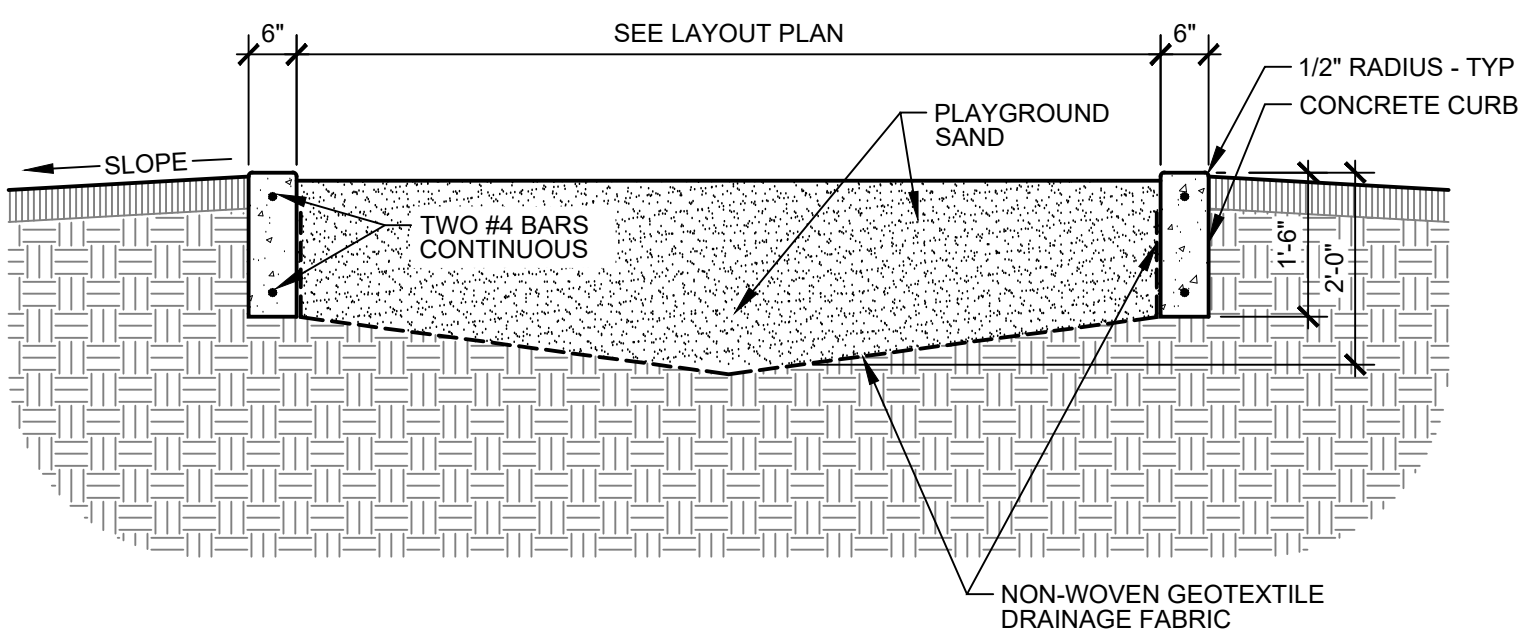
**A1 SP503** GAGA BALL PIT SCALE: 3/4" = 1'-0"



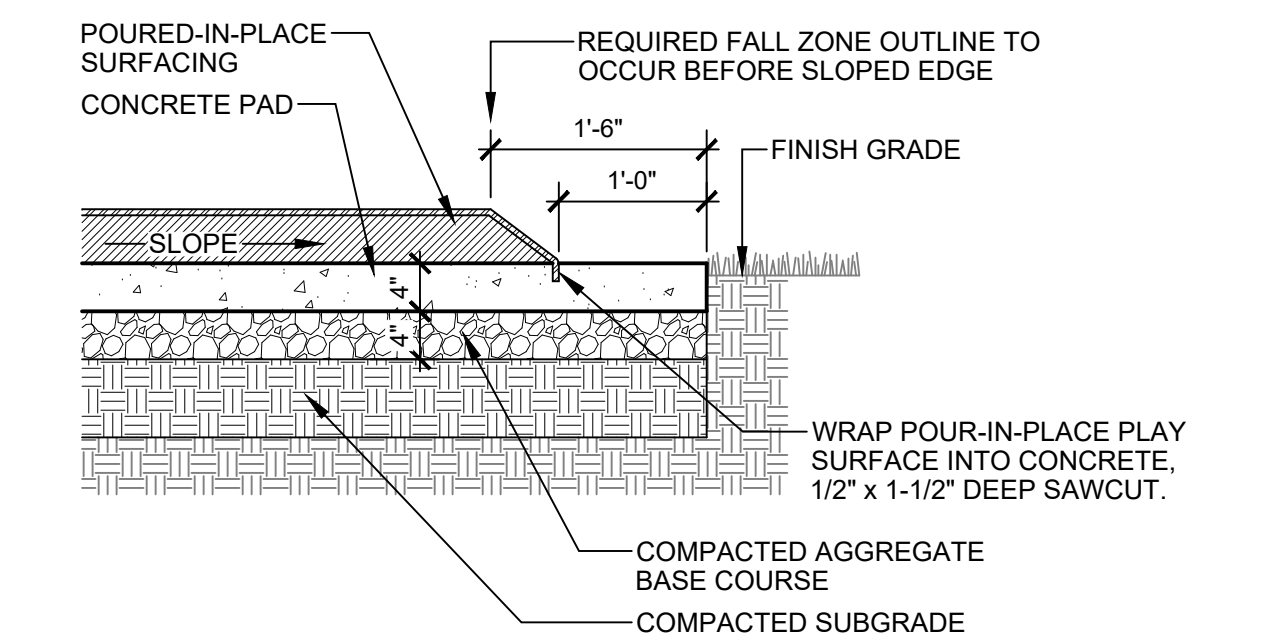
**B3 SP503** INFILTRATION TRENCH SCALE: 1/2" = 1'-0"



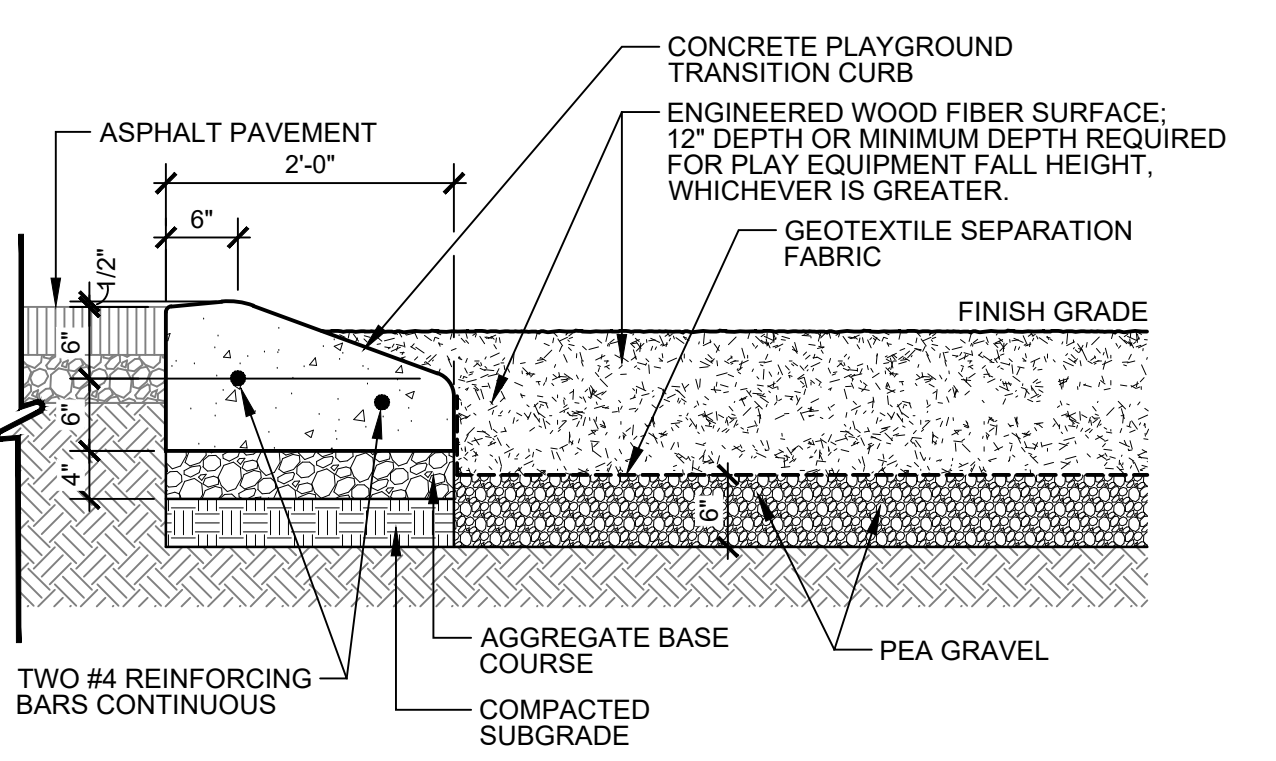
**A3 SP503** DETAIL: BASKETBALL FOOTING SCALE: 3/4" = 1'-0"



**C4 SP503** SECTION: SAND DIG PIT SCALE: 1/2" = 1'-0"

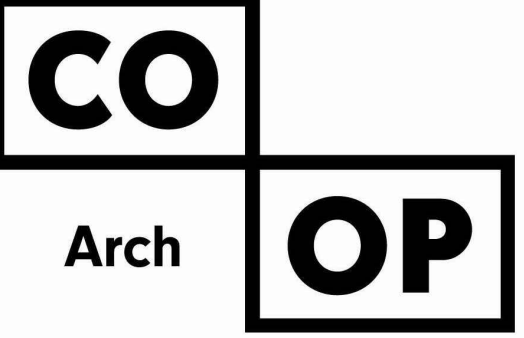


**B4 SP503** PLAYGROUND SURFACING (ALTERNATE) SCALE: 3/4" = 1'-0"



**CONCRETE NOTES:**  
• TOOLED CONTROL JOINTS SHALL BE PLACED @10'-0" O.C.  
• EXPANSION JOINTS SHALL BE PLACED EVERY 50'. SEE JOINT DETAILS.

**A4 SP503** PLAYGROUND EDGE & SURFACING SCALE: 3/4" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



LANDSCAPE ARCHITECT  
CONFLUENCE  
440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:



ISSUE:  
01-30-2023 CONSTRUCTION DOCUMENTS

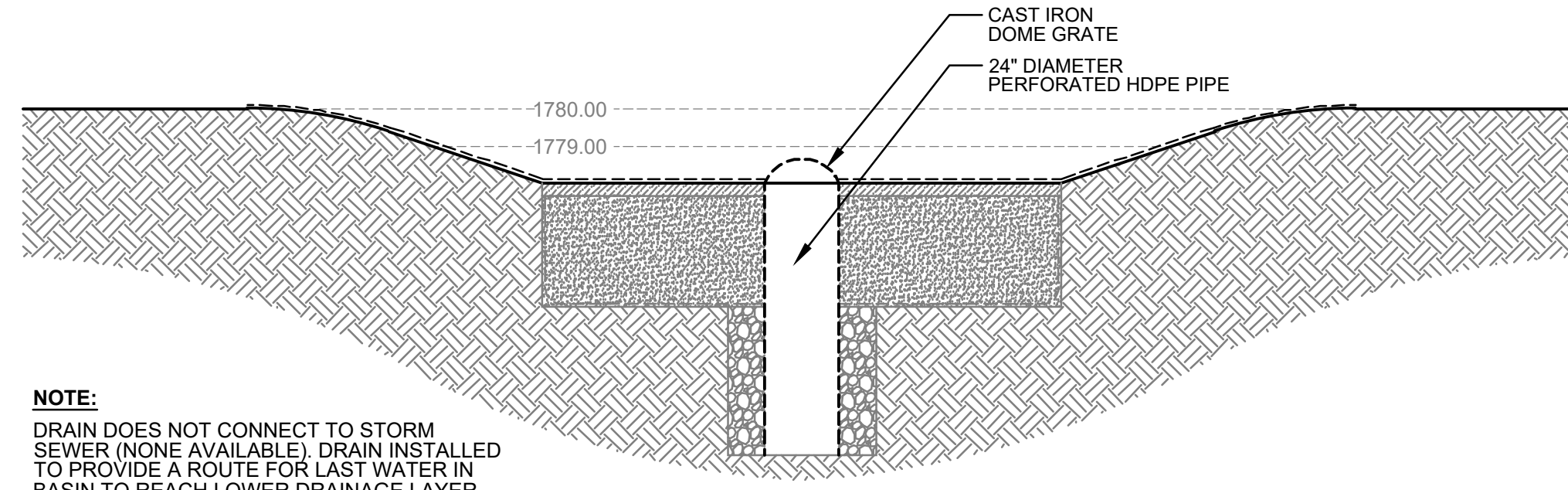
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

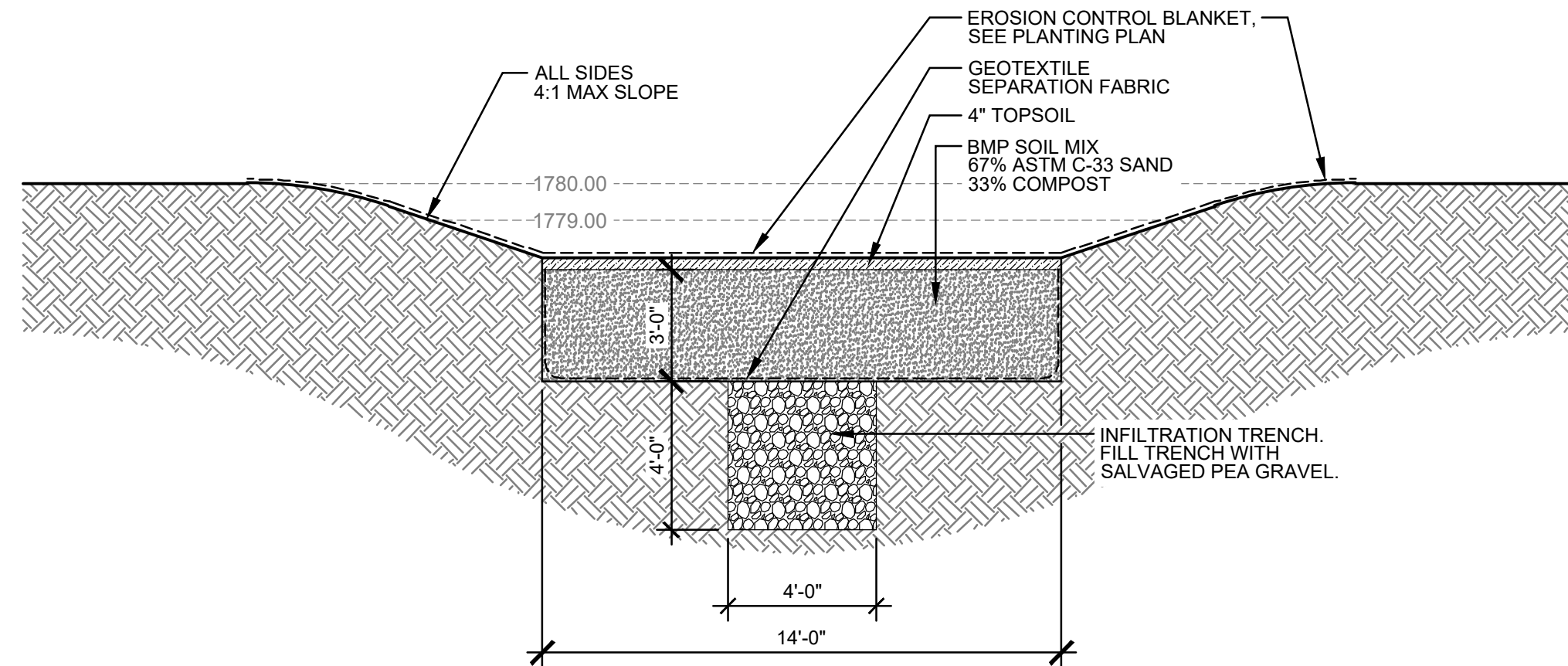
SHEET TITLE:  
SITE DETAILS

SP503



**NOTE:**  
DRAIN DOES NOT CONNECT TO STORM SEWER (NONE AVAILABLE). DRAIN INSTALLED TO PROVIDE A ROUTE FOR LAST WATER IN BASIN TO REACH LOWER DRAINAGE LAYER.

**D1 SP504 POROUS LANDSCAPE DETENTION - FRENCH DRAIN** SCALE: 1/4" = 1'-0"



**C1 SP504 POROUS LANDSCAPE DETENTION** SCALE: 1/4" = 1'-0"

**Valve Box Extension**  
(or replacement of top section)

**Valve Box Extension Notes:**

- Use this method if top section of valve box cannot be extended to meet proposed grade.
- If the top section of valve box will not accept the riser, replace the top and center section as shown in detail for valve box replacement.

**Valve Box Installation**

**General Notes:**

- Non-threaded adjustments will not be allowed.
- Plumb valve box prior to backfilling. All valve boxes shall be adjusted to be flush with the pavement surface prior to placement of the pavement surfacing. The allowable vertical tolerance between the pavement surface and any part of the valve box shall be 0" to 1/2" low. In no case shall the valve box be above the surface of the pavement.
- It shall be the contractor's responsibility to provide a system to prevent material from entering the valve box during the work.
- All adjustments shall be completed prior to opening up the street to traffic.

Revised: December 2020

Valve Box Installation and Extension		
	Specification Reference No. 900	Plate Number 900.02

**Water Main Bedding**

Pipe Size Diameter	Trench Width	Trench Height	Trench Area	Pipe Area	Water Main Bedding Mat. Area	Water Main Bedding Mat. Tons/LF
4"	28"	16"	3.11 Sq.Ft.	.09 Sq.Ft.	3.02 Sq.Ft.	0.21
6"	30"	18"	3.75 Sq.Ft.	.20 Sq.Ft.	3.55 Sq.Ft.	0.25
8"	32"	20"	4.44 Sq.Ft.	.35 Sq.Ft.	4.10 Sq.Ft.	0.29
10"	34"	22"	5.19 Sq.Ft.	.55 Sq.Ft.	4.65 Sq.Ft.	0.33
12"	36"	24"	6.00 Sq.Ft.	.79 Sq.Ft.	5.22 Sq.Ft.	0.37
16"	40"	28"	7.78 Sq.Ft.	1.40 Sq.Ft.	6.38 Sq.Ft.	0.45
20"	44"	32"	9.78 Sq.Ft.	2.18 Sq.Ft.	7.60 Sq.Ft.	0.53
24"	48"	36"	12.00 Sq.Ft.	3.14 Sq.Ft.	8.86 Sq.Ft.	0.62
30"	60"	42"	17.50 Sq.Ft.	4.91 Sq.Ft.	12.59 Sq.Ft.	0.88

\* If >30" use dia./2 on each side of water main pipe.  
\* Length based on one (1) foot of main.

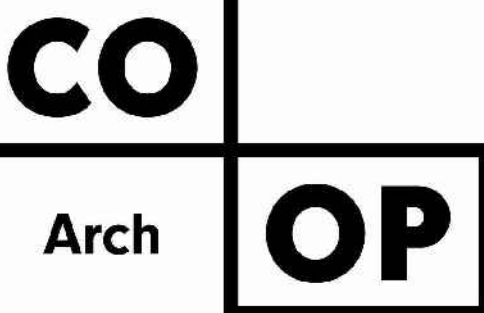
Revised: December 2020

Water Main Bedding			
	Specification Reference No. 900	Plate Number 900.11	

**Concrete Thrust Blocks**

Revised: December 2020

Concrete Thrust Blocks		
	Specification Reference No. 900	Plate Number 900.01



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



LANDSCAPE ARCHITECT  
CONFLUENCE  
440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:



ISSUE:  
01-30-2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

SHEET TITLE:  
STANDARD PLATES

SP504



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

LANDSCAPE ARCHITECT  
CONFLUENCE  
440 E 8TH STREET, SUITE 121  
SIOUX FALLS, SD 57103  
PH: 605.339.1205 FAX: 605.339.1215  
CONTACT: LYLE PUDWILL, ASLA  
EMAIL: lpudwill@thinkconfluence.com

CO-OP PROJECT NO:

ISSUE:

01-30-2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:

WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT

WILLOW LAKE, SD

SHEET TITLE:

STANDARD PLATES

**(B)**

**Minor Impact Construction Site, Silt Fence**

**Definition:**  
A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched. The silt fence is a temporary linear barrier constructed of synthetic filter fabric and supported by wooden posts.

**Purposes:**

- To intercept and detain small amounts of sediment from disturbed areas during construction operations in order to reduce sediment in runoff from leaving the site.
- To decrease the velocity of sheet flows and low-to-moderate level concentrated flows.

This modified plate can only be used as a structural BMP for a minor impact construction site (erosion sediment control plan drawing) that is within an approved subdivision in compliance with Section 15A.11.020 of the ordinances of Sioux Falls and is classified as a minor impact construction site.

Revised: October 2005

<b>Minor Impact Construction Site Silt Fence</b>	Specification Reference No. 734	Plate Number 734.25
--	---------------------------------------	---------------------------

**(C)**

**Concrete Washout Facility**

**Notes:**

- Concrete washout facility shall be installed prior to any concrete placement on site.
- A sign shall be installed adjacent to each washout facility to inform concrete equipment operators to utilize the CWF.
- The concrete washout facility shall be repaired and enlarged or cleaned out as necessary to maintain capacity for wasted concrete.
- When CWF are no longer required for the work, the hardened concrete and materials used to construct the CWF shall be removed and disposed of.
- When the concrete washout facility is removed, the holes, depressions or other ground disturbance shall be backfilled, repaired and stabilized.

Cross Sectional View

Revised: December 2008

<b>Concrete Washout Facility</b>	Specification Reference No. 734	Plate Number 734.28
----------------------------------	---------------------------------------	---------------------------

**(A)**

**Vehicle Tracking Control**

**Definition:**  
A stone stabilized pad located at points of vehicular ingress and egress on a construction site.

**Purposes:**  
To reduce the amount of mud transported onto public roads by motor vehicles or runoff.

Revised: May 2019

<b>Temporary Vehicle Tracking Control</b>	Specification Reference No. 734	Plate Number 734.02
---	---------------------------------------	---------------------------



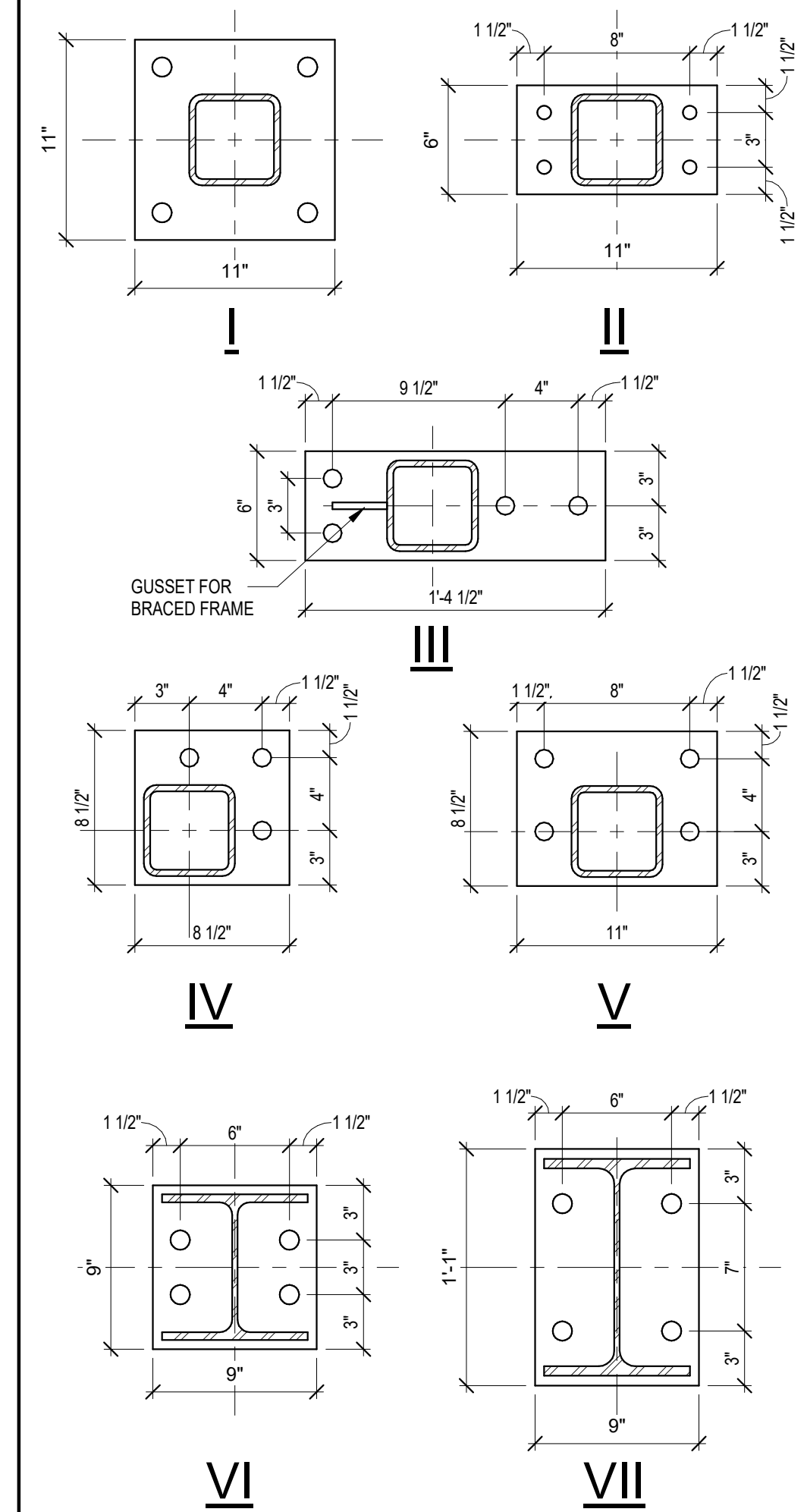


## COLUMN SCHEDULE

MARK	SECTION	BASE PLATE	ANCHOR BOLTS	REMARKS
C1	HSS 5x5x1/4"	I	4	POST-INSTALLED (SEE NOTE 3)
C2	HSS 5x5x1/4"	I	4	POST-INSTALLED (SEE NOTE 3)
C3	HSS 5x5x1/4"	I	4	POST-INSTALLED (SEE NOTE 3)
C4	HSS 5x5x1/4"	IV	3	POST-INSTALLED (SEE NOTE 3)
C5	HSS 5x5x1/4"	V	4	POST-INSTALLED (SEE NOTE 3)
C6	HSS 5x5x5/16"	V	4	POST-INSTALLED (SEE NOTE 3)
C7	W8x31	VI	4	3/4" DIA. x 9" EMBED. PABs (WET-SET)
C8	W12x40	VII	4	3/4" DIA. x 9" EMBED. PABs (WET-SET)

### GENERAL NOTES:

- ALL BASE PLATES 3/4" THICK U.N.O.
- T.O.C. ELEV. 99'-4" U.N.O.
- POST-INSTALLED ANCHORAGE TO BE 3/4" DIA. x 9" EMBED THREADED ROD w/ SIMPSON SET-3G ADHESIVE.



## WALL FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT
WF1	2'-0" x 1'-0"	(2) #5 CONT.
WF2	3'-0" x 1'-0"	(3) #5 CONT. w/ #4 TRANS. BARS @ 24" O.C.
WF3	1'-4" x 1'-0"	(2) #5 CONT.

## PAD FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT
F1	3'-0" x 3'-0" x 1'-0"	4-#5 EA. WAY
F2	4'-0" x 4'-0" x 1'-0"	5-#5 EA. WAY
F3	5'-0" x 5'-0" x 1'-0"	6-#5 EA. WAY

## PIER SCHEDULE

MARK	SIZE	VERT. REINF.	TIES	T/PIER
P1	18" x 18"	(4) #6	#4 @ 12" O.C.	99'-4"
P2	24" x 24"	(8) #6	#4 @ 12" O.C.	99'-4"

## LINTEL SCHEDULE

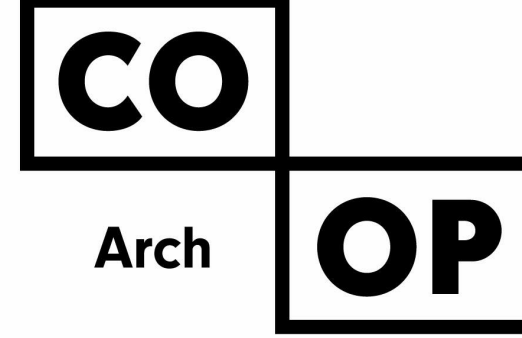
MARK	LINTEL	DETAIL	REMARKS
L1	(2)-L5x3-1/2x1/4" (LLV)		
L2	W8x15 w/ 7"x5/16" BOT. PL.		
L3	W8x21 w/ 7"x5/16" BOT. PL.		
L4	W16x26 w/ 7"x5/16" BOT. PL.		1/2" DIA. x 4" HASs @ 24" O.C. ON TOP

### NOTES:

- PROVIDE MIN. 8" BEARING ON BLOCK AT ALL LINTELS.
- STOP PLATE 1" SHORT OF JAMB EA. END.
- FULLY GROUT CMU CORES BELOW LINTEL BEARING.
- PROVIDE 7"x5/8"x8" STL. BEARING PL. w/ (2) 1/2" DIA. x 4" HASs EA. END OF LINTEL.
- 3/8" STL. BOT. PLATE TO SUPPORT BRICK FACING WHERE NECESSARY.

## METAL DECK SCHEDULE

- ACOUSTICAL ROOF DECK (AG SHOP & COMMONS ROOFS)
  - FOR 5'-0" O.C. MAX. SPACING SUPPORTING MEMBERS
    - DECK: 1.5BA 22 GA
    - FASTENERS (STRUCTURAL STEEL): HILTI X-ENP19 PAFs @ 36/5 PATTERN
    - FASTENERS (BAR JOISTS): HILTI X-HSN24 PAFs @ 36/5 PATTERN
    - SIDLAP FASTENERS: #12 SIDLAP SCREWS @ 18" O.C.
- STANDARD ROOF DECK
  - FOR STEEL PURLIN SUPPORTING MEMBERS
    - DECK: 1.5B 22 GA
    - FASTENERS (STRUCTURAL STEEL): HILTI X-ENP19 PAFs @ 36/5 PATTERN
    - FASTENERS (BAR JOISTS): HILTI X-HSN24 PAFs @ 36/5 PATTERN
    - SIDLAP FASTENERS: #12 SIDLAP SCREWS @ 18" O.C.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

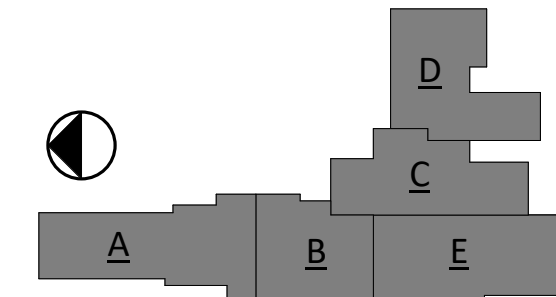
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



6909 S. Lyncrest Place - Suite 110  
Sioux Falls, SD 57108  
(605)743-2510  
www.riseincorp.com



RISE PROJECT NO: 22359



### ISSUE:

01-30-23 100% CONSTRUCTION DOCUMENTS

### REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

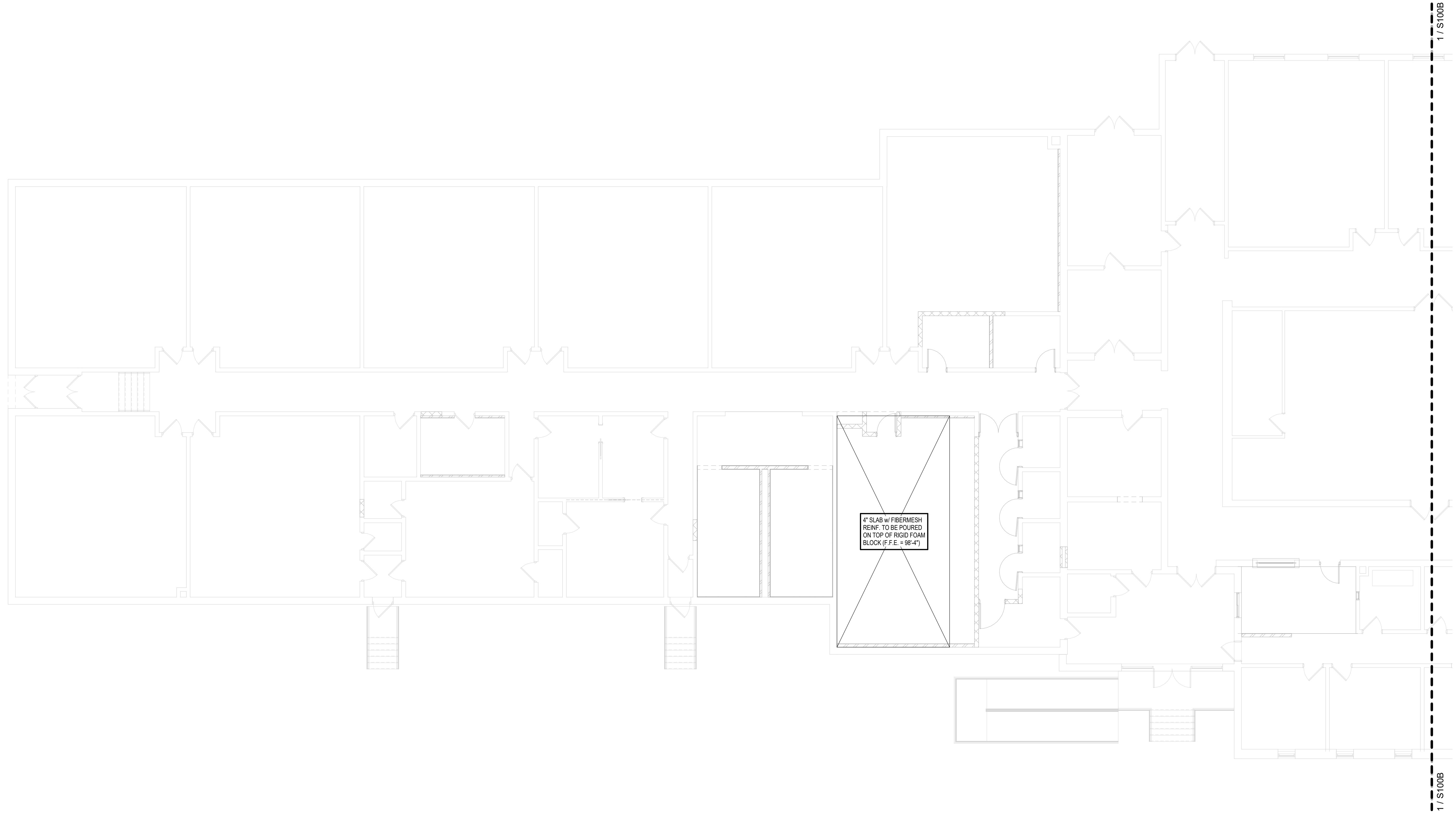
### PROJECT:

WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

### SHEET TITLE:

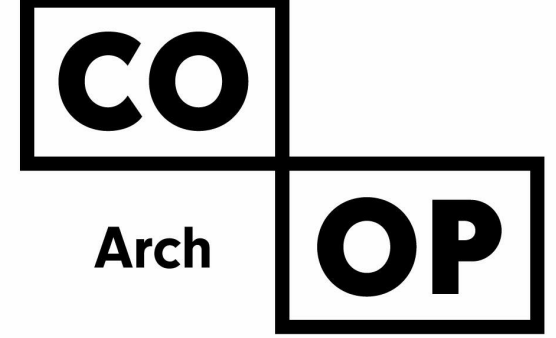
STRUCTURAL SCHEDULES

S001



1 / S100B

1 / S100B



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

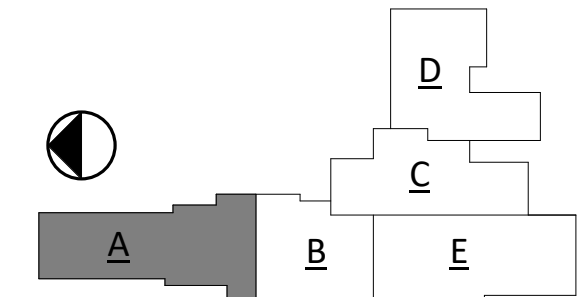
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



6909 S. Lyncrest Place - Suite 110  
Sioux Falls, SD 57108  
(605)743-2510  
www.riseincorp.com



RISE PROJECT NO: 22359



ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

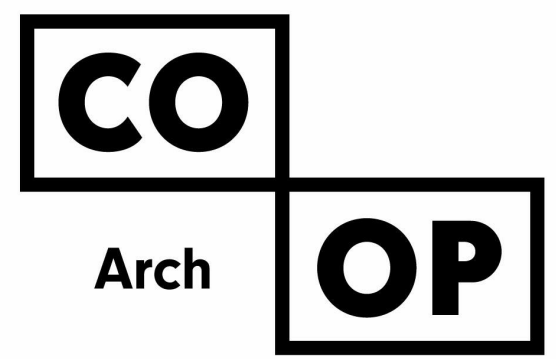
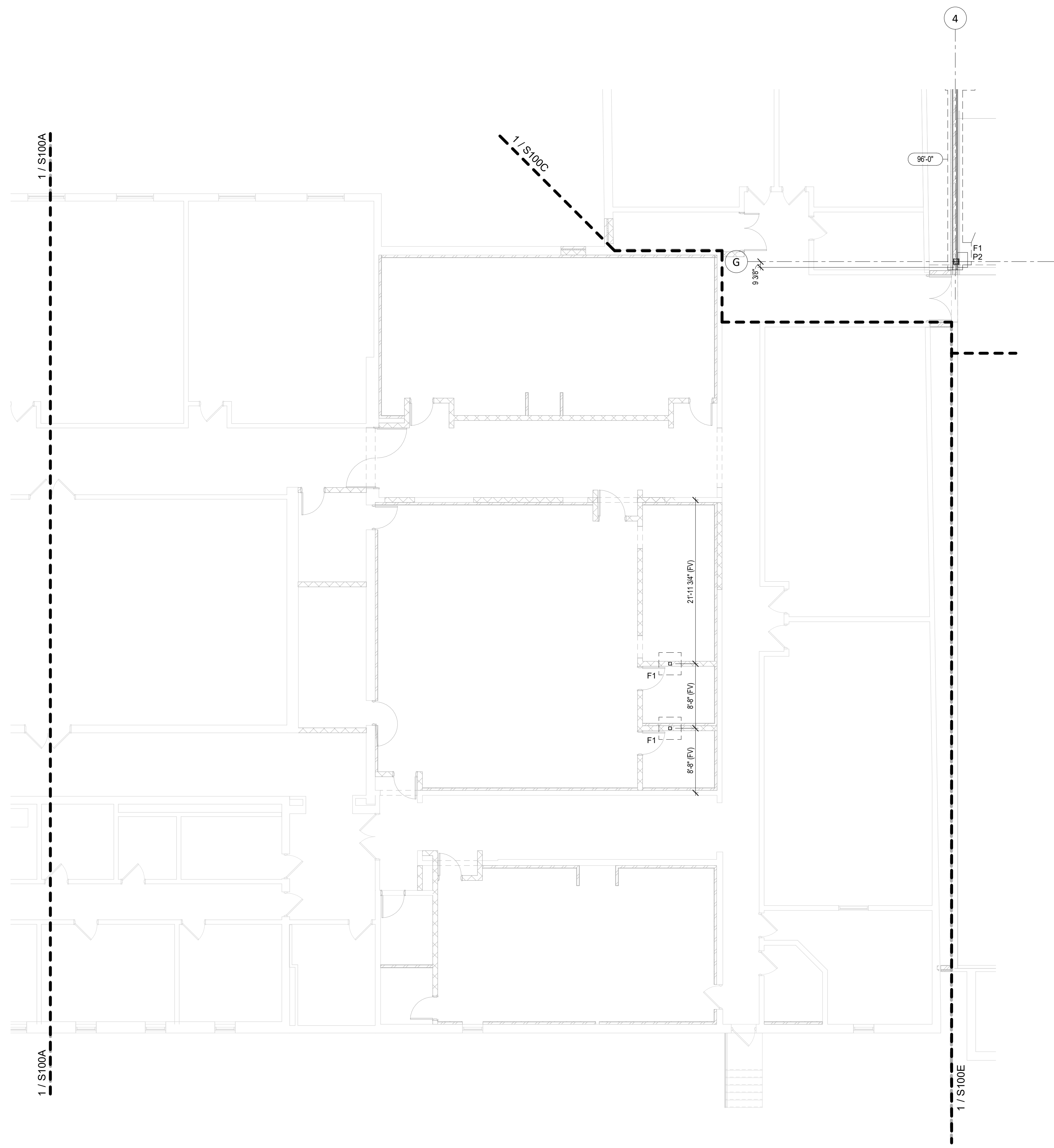
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FOOTING & FOUNDATION PLAN -  
AREA A

S100A

1 FOOTING & FOUNDATION PLAN - AREA A  
1/8" = 1'-0"

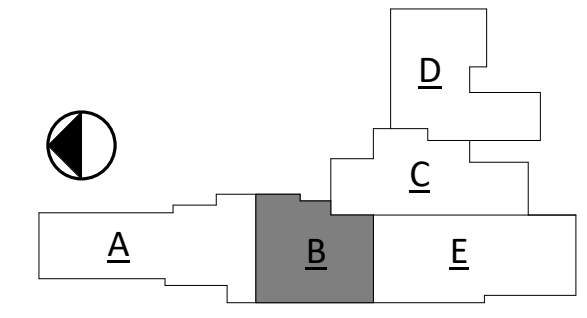


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

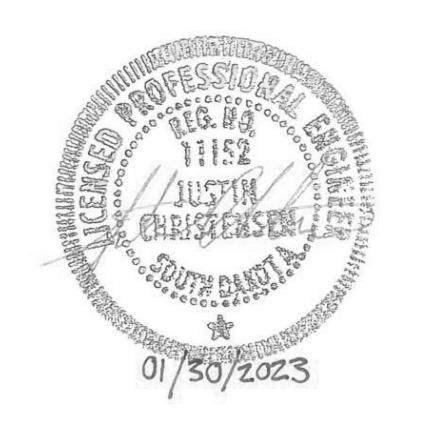
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



RISE PROJECT NO: 22359



ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

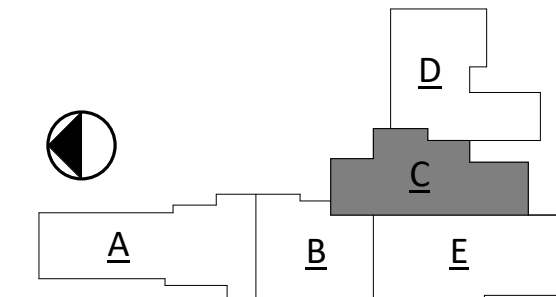
REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FOOTING & FOUNDATION PLAN -  
AREA B

S100B

1 FOOTING & FOUNDATION PLAN - AREA B  
1/8" = 1'-0"



RISE PROJECT NO: 22359



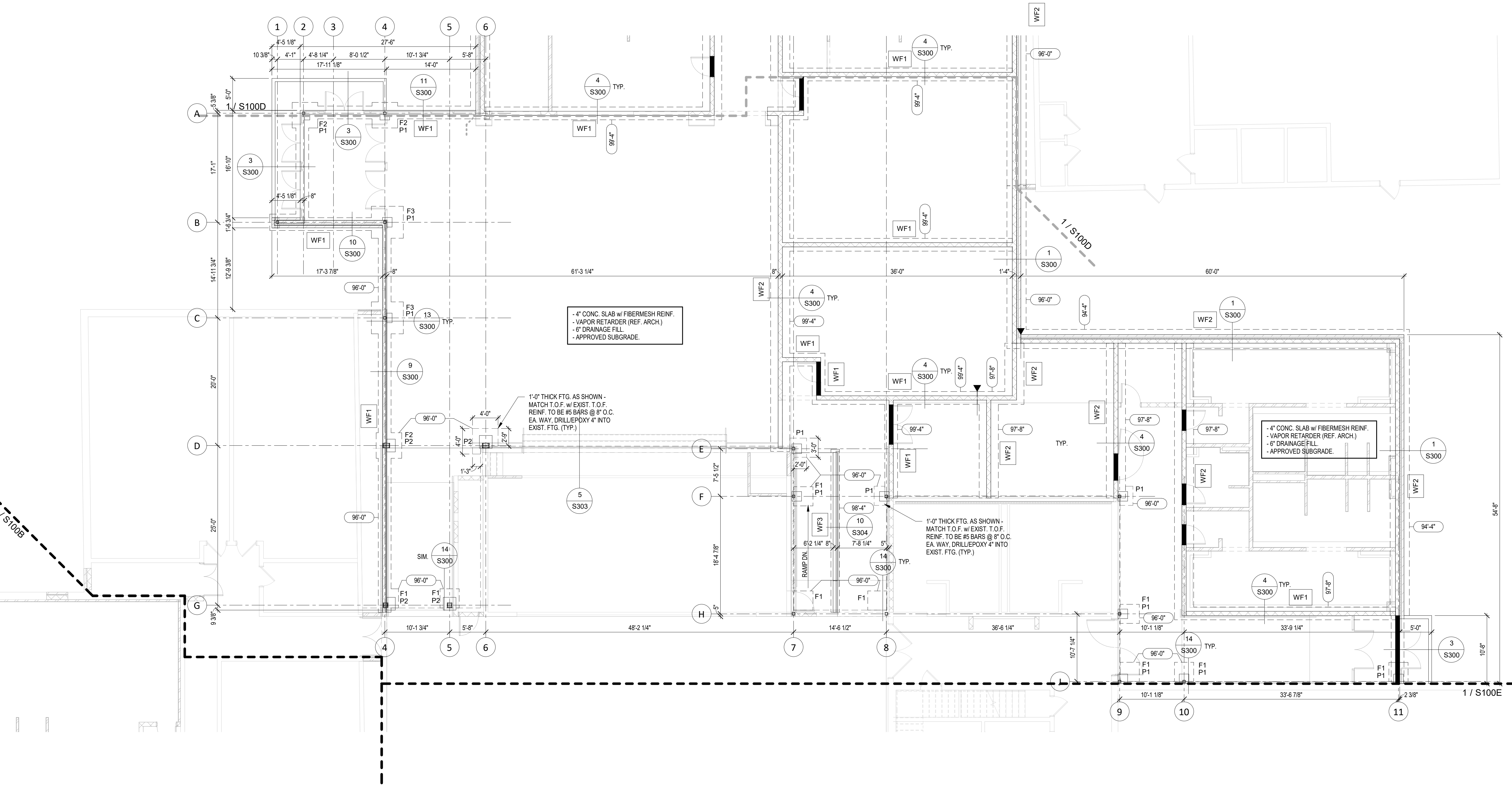
ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

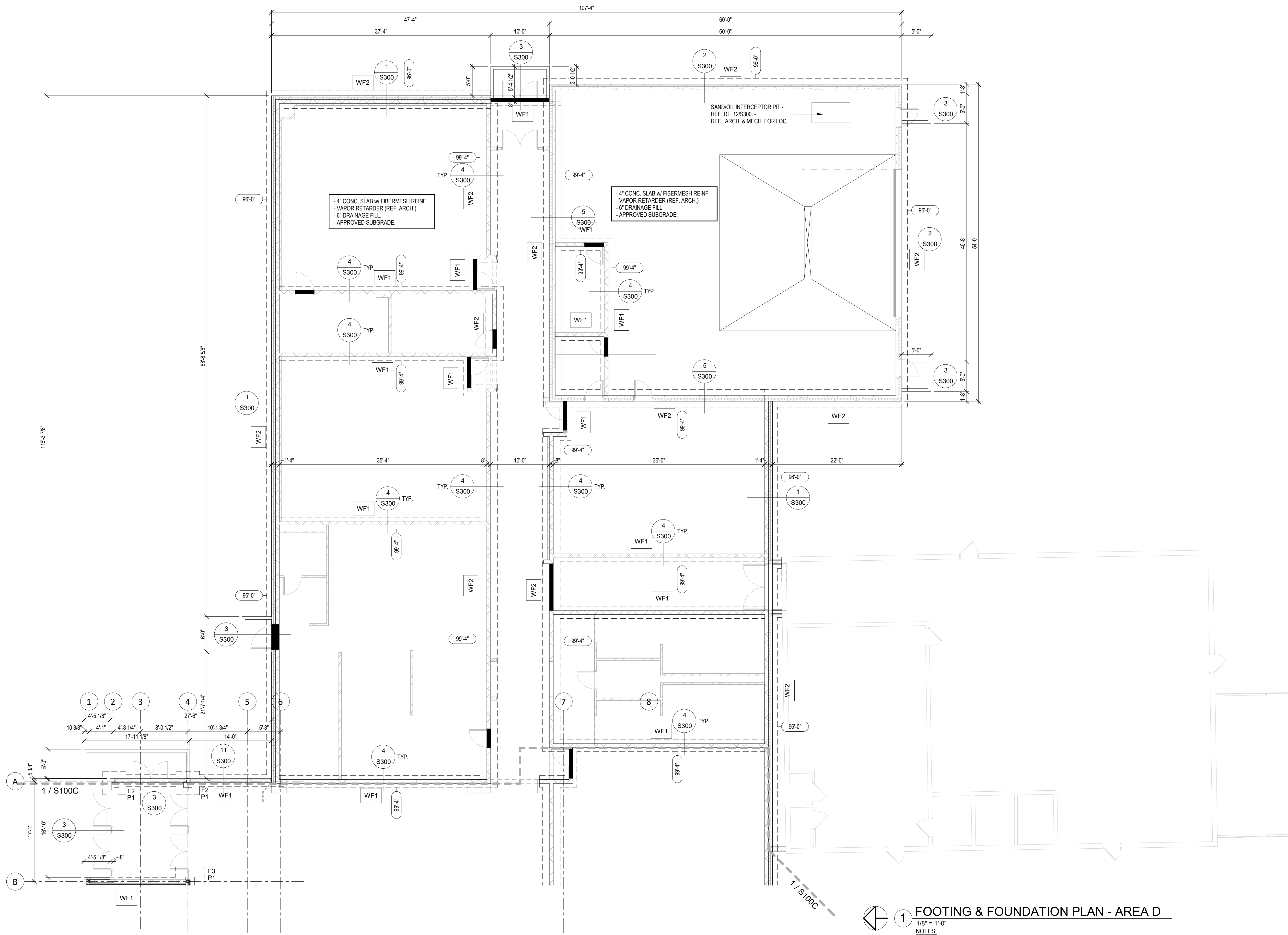
SHEET TITLE:  
FOOTING & FOUNDATION PLAN - AREA C

**S100C**

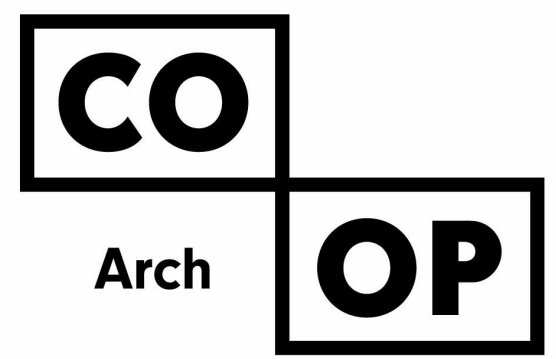


**1 FOOTING & FOUNDATION PLAN - AREA C**

- 1/8" = 1'-0"  
NOTES:  
- CONTRACTOR TO SUBMIT CONTROL JOINT LAYOUT FOR ARCH/ENGINEER APPROVAL  
- SEE STRUCTURAL NOTES FOR SIZE/SPACING LIMITATIONS.  
- SEE 6 & 7 ON SHEET S300 FOR TYPICAL CONTROL JOINT DETAILS.  
- SEE 8/S300 FOR TYPICAL CORNER WALL REINFORCING.



**1 FOOTING & FOUNDATION PLAN - AREA D**  
 1/8" = 1'-0"  
 NOTES:  
 - CONTRACTOR TO SUBMIT CONTROL JOINT LAYOUT FOR ARCH./ENGINEER APPROVAL  
 - SEE STRUCTURAL NOTES FOR SIZE/SPACING LIMITATIONS.  
 - SEE 6 & 7 ON SHEET S300 FOR TYPICAL CONTROL JOINT DETAILS.  
 - SEE 8/S300 FOR TYPICAL CORNER WALL REINFORCING.

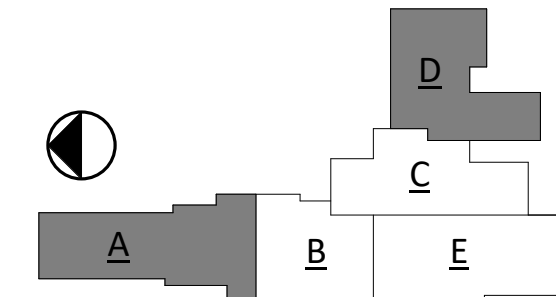


1108 S. Main St. 102  
 Aberdeen, SD 57401  
 Phone: 605-725-4852

601 Kansas City St. 7  
 Rapid City, SD 57701  
 Phone: 605-716-3652

440 E. 8th St. 221  
 Sioux Falls, SD 57103  
 Phone: 605-334-9999

co-oparch.com



RISE PROJECT NO: 22359



ISSUE:  
 01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
 REV. # REV. DSC. REV. DATE

PROJECT:  
 WILLOW LAKE SCHOOL ADDITION  
 WILLOW LAKE SCHOOL DISTRICT  
 WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
 FOOTING & FOUNDATION PLAN - AREA D

**S100D**

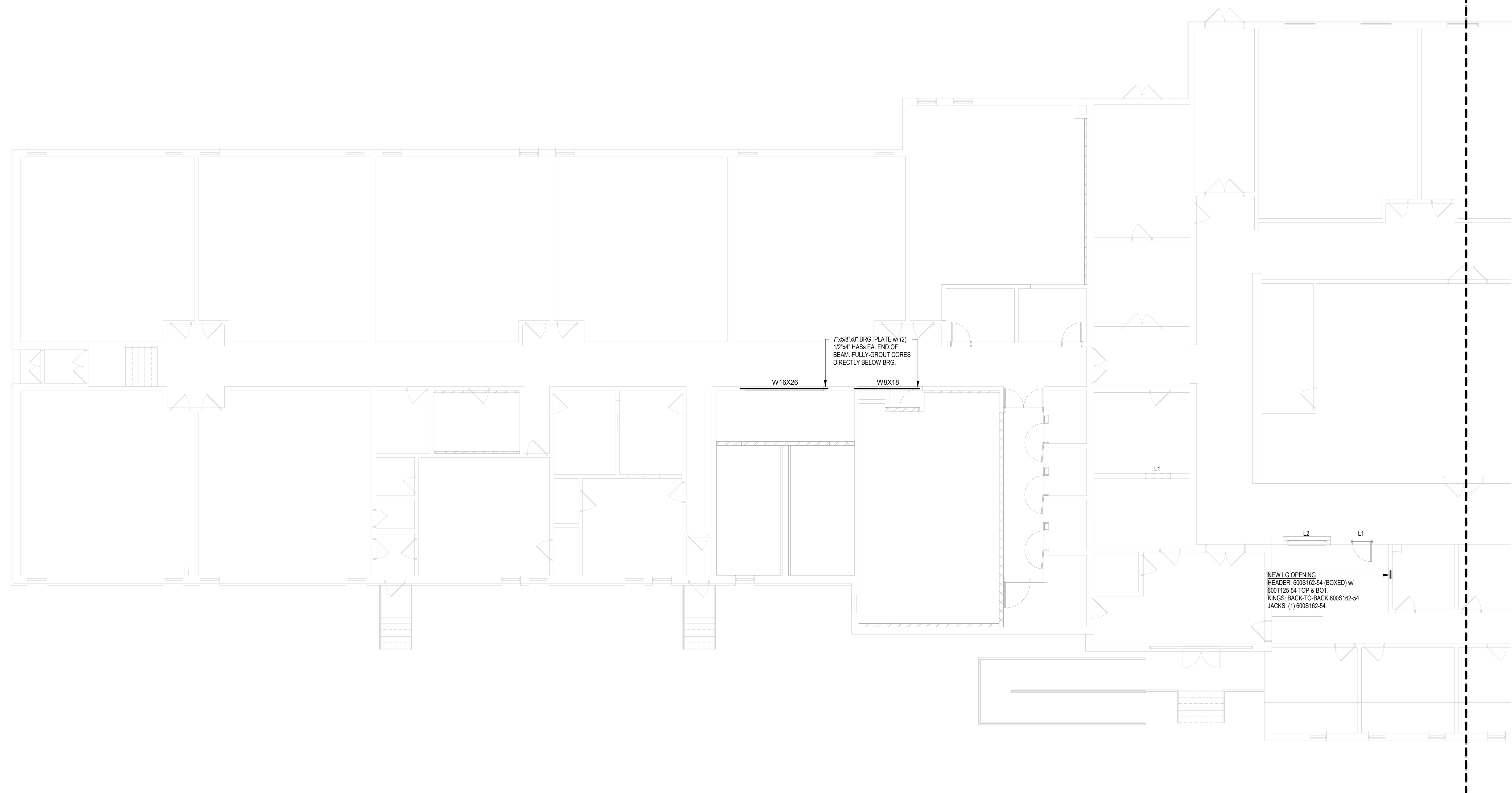
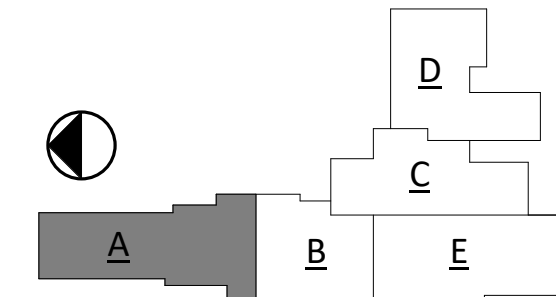


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



RISE PROJECT NO: 22359



ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

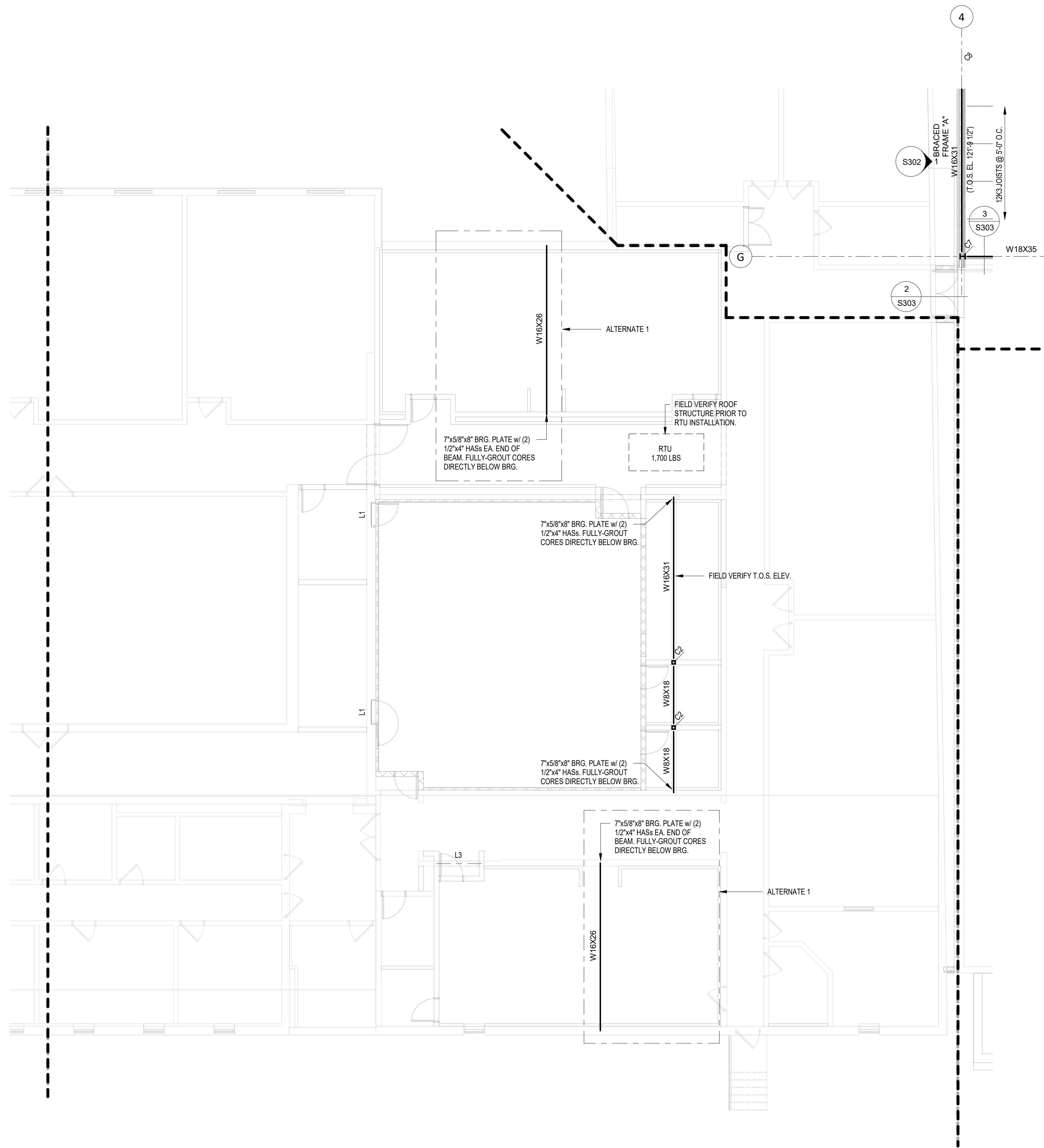
REVISION SCHEDULE:  
REV. #      REV. DSC.      REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ROOF FRAMING PLAN - AREA A

**S200A**

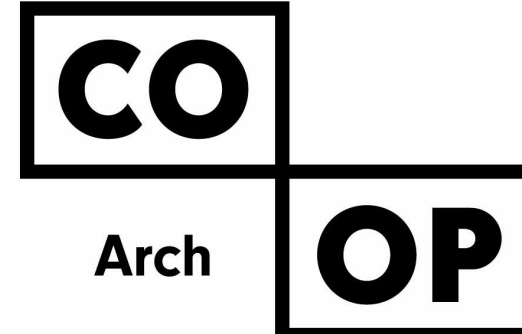
① ROOF FRAMING PLAN - AREA A  
1/8" = 1'-0"  
NOTES:  
- THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH, SAFETY, AND STABILITY OF THE NEW AND EXISTING STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING, AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE.



**1 ROOF FRAMING PLAN - AREA B**

1/8" = 1'-0"

NOTES:  
 - THE CONTRACTOR IS RESPONSIBLE FOR THE STRENGTH, SAFETY, AND STABILITY OF THE NEW AND EXISTING STRUCTURE DURING CONSTRUCTION AND SHALL PROVIDE TEMPORARY SHORING, BRACING, AND OTHER ELEMENTS REQUIRED TO MAINTAIN STABILITY UNTIL THE STRUCTURE IS COMPLETE.

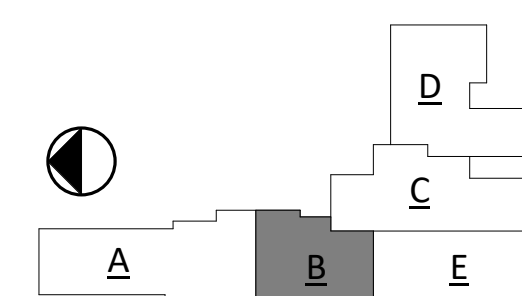


1108 S. Main St. 102  
 Aberdeen, SD 57401  
 Phone: 605-725-4852

601 Kansas City St. 7  
 Rapid City, SD 57701  
 Phone: 605-716-3652

440 E. 8th St. 221  
 Sioux Falls, SD 57103  
 Phone: 605-334-9999

co-oparch.com



RISE PROJECT NO: 22359



ISSUE:  
 01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
 REV. # REV. DSC. REV. DATE

PROJECT:  
 WILLOW LAKE SCHOOL ADDITION  
 WILLOW LAKE SCHOOL DISTRICT  
 WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
 ROOF FRAMING PLAN - AREA B

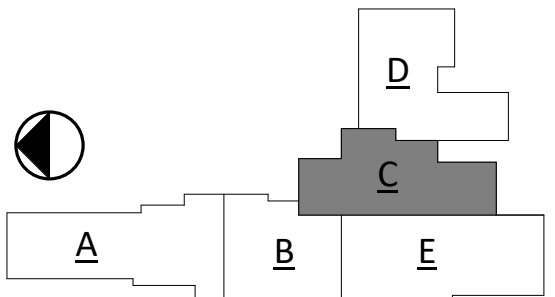
**S200B**

1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



RISE PROJECT NO: 22359



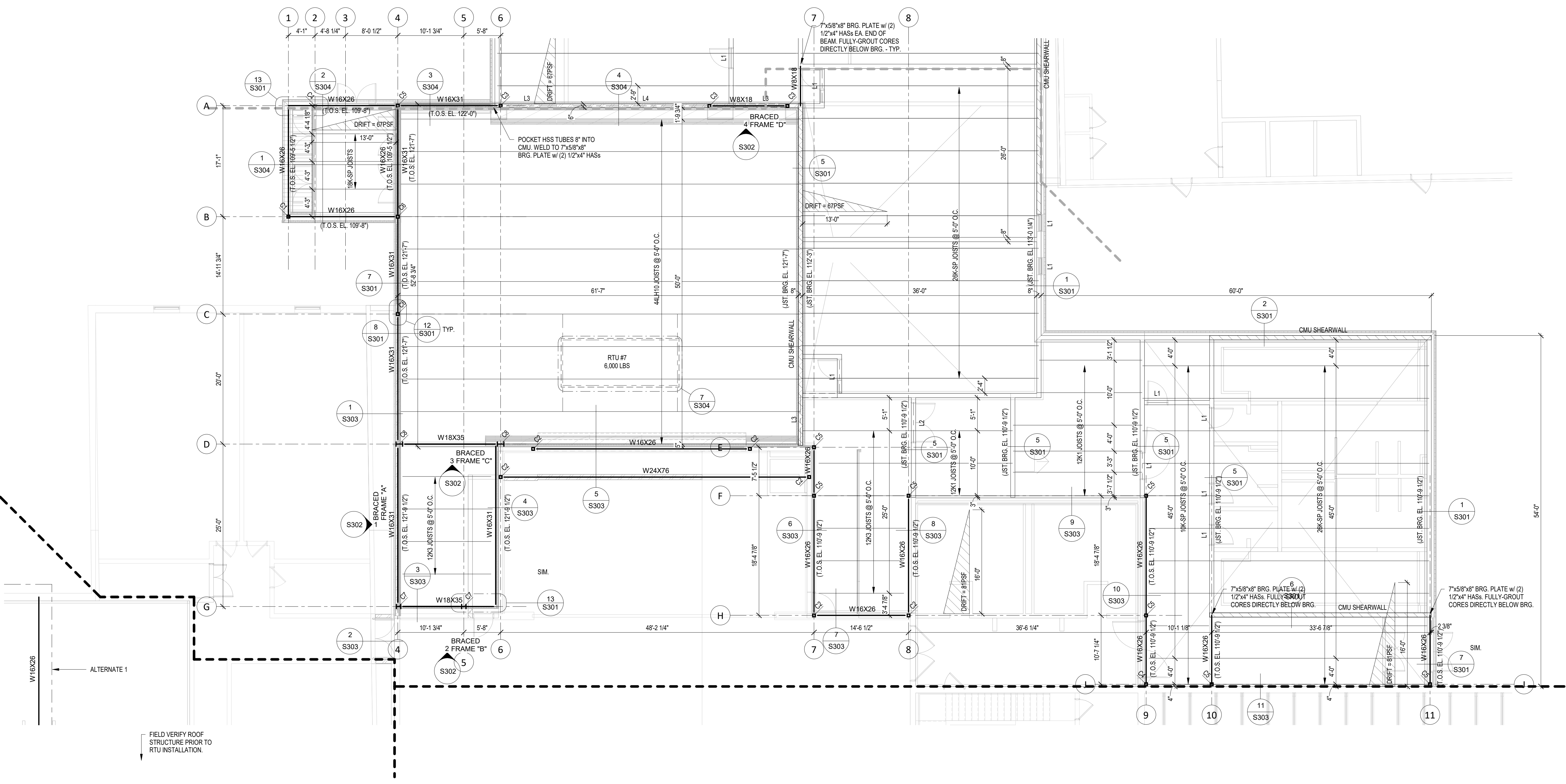
ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

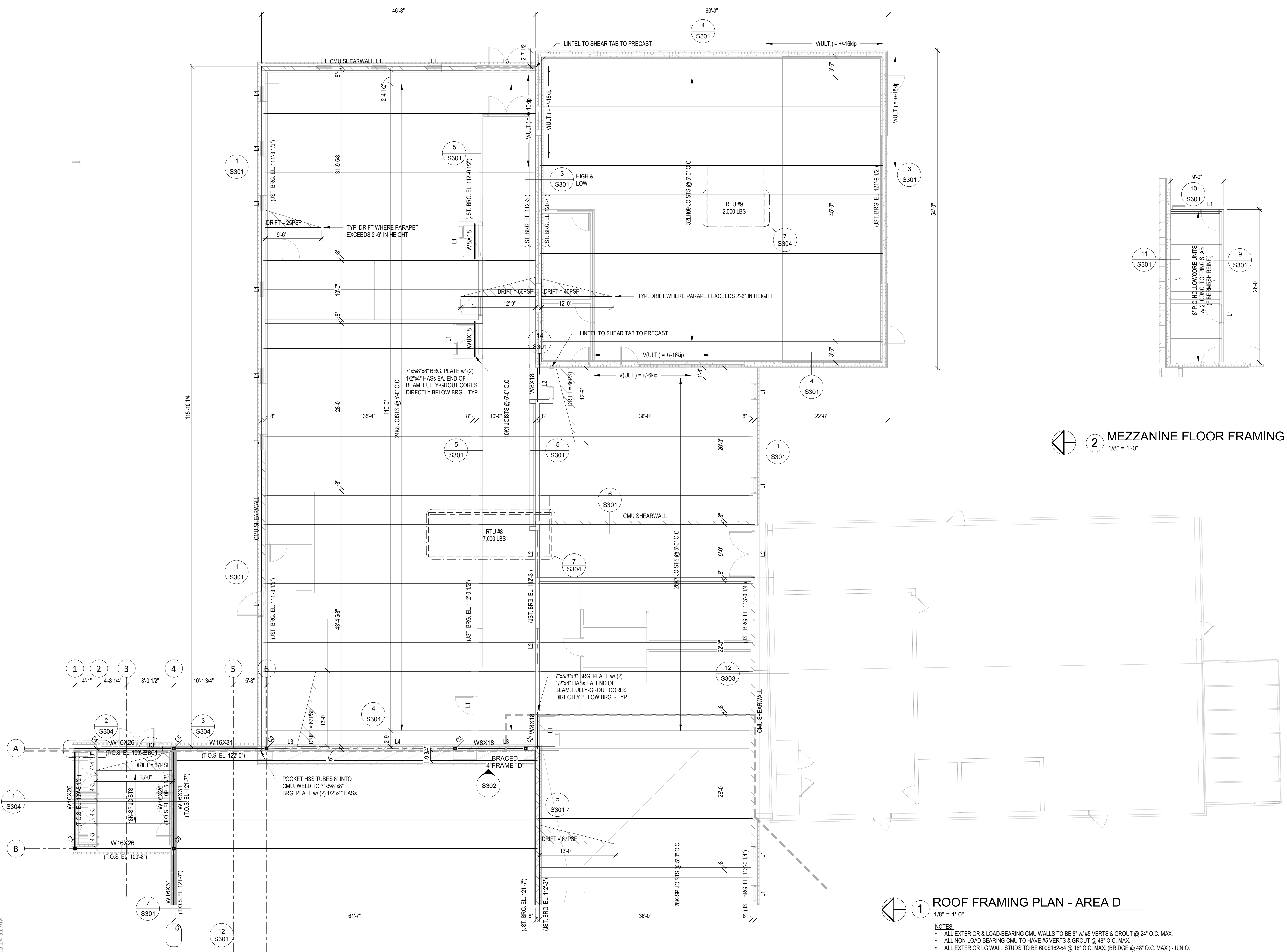
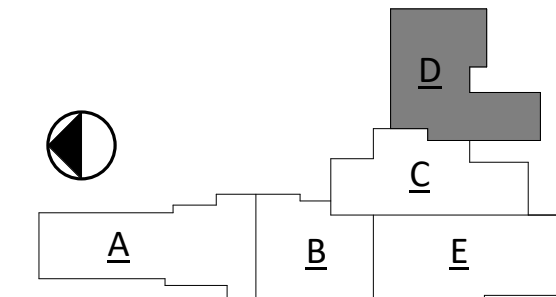
SHEET TITLE:  
ROOF FRAMING PLAN - AREA C

**S200C**



**1 ROOF FRAMING PLAN - AREA C**  
1/8" = 1'-0"

- NOTES:
- ALL EXTERIOR & LOAD-BEARING CMU WALLS TO BE 8" w/ #5 VERTS & GROUT @ 24" O.C. MAX.
  - ALL NON-LOAD BEARING CMU TO HAVE #5 VERTS & GROUT @ 48" O.C. MAX.
  - ALL EXTERIOR LG WALL STUDS TO BE 6005162-54 @ 16" O.C. MAX. (BRIDGE @ 48" O.C. MAX.) - U.N.O.
  - \*CMU SHEARWALL\* = #5 VERTS & GROUT @ 24" O.C. MAX. w/ (2) #5 VERTS ON EA. END OF WALL SEGMENT.



2 MEZZANINE FLOOR FRAMING PLAN  
1/8" = 1'-0"

1 ROOF FRAMING PLAN - AREA D  
1/8" = 1'-0"

- NOTES:**
- ALL EXTERIOR & LOAD-BEARING CMU WALLS TO BE 8" w/ #5 VERTS & GROUT @ 24" O.C. MAX.
  - ALL NON-LOAD BEARING CMU TO HAVE #5 VERTS & GROUT @ 48" O.C. MAX.
  - ALL EXTERIOR LG WALL STUDS TO BE 600S162-54 @ 16" O.C. MAX. (BRIDGE @ 48" O.C. MAX.) - U.N.O.
  - "CMU SHEARWALL" = #5 VERTS & GROUT @ 24" O.C. MAX. w/ (2) #5 VERTS ON EA. END OF WALL SEGMENT.

RISE PROJECT NO: 22359



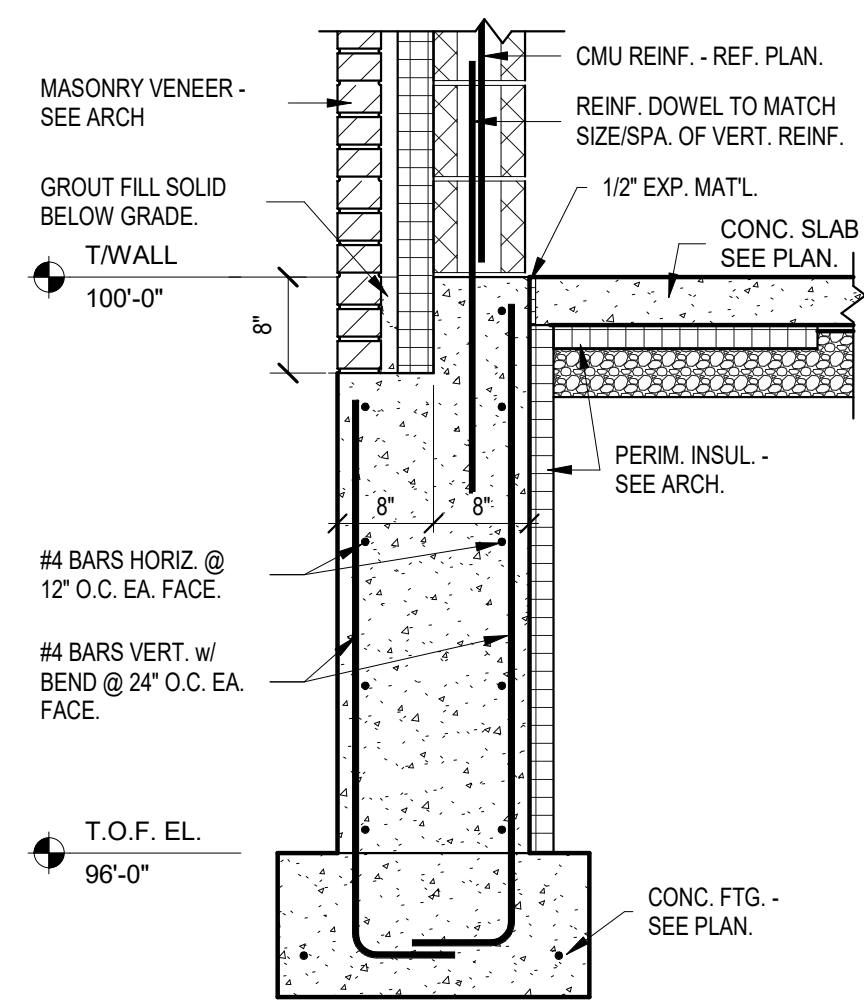
ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

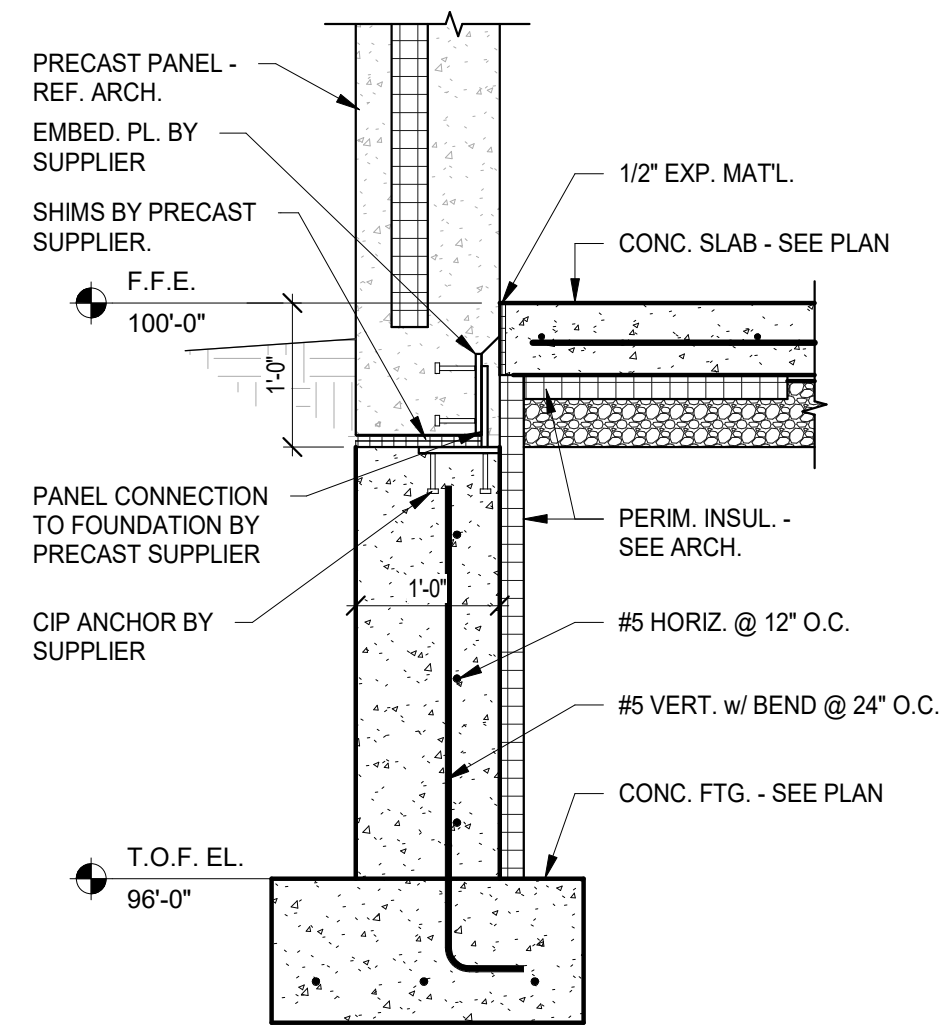
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ROOF FRAMING PLAN - AREA D

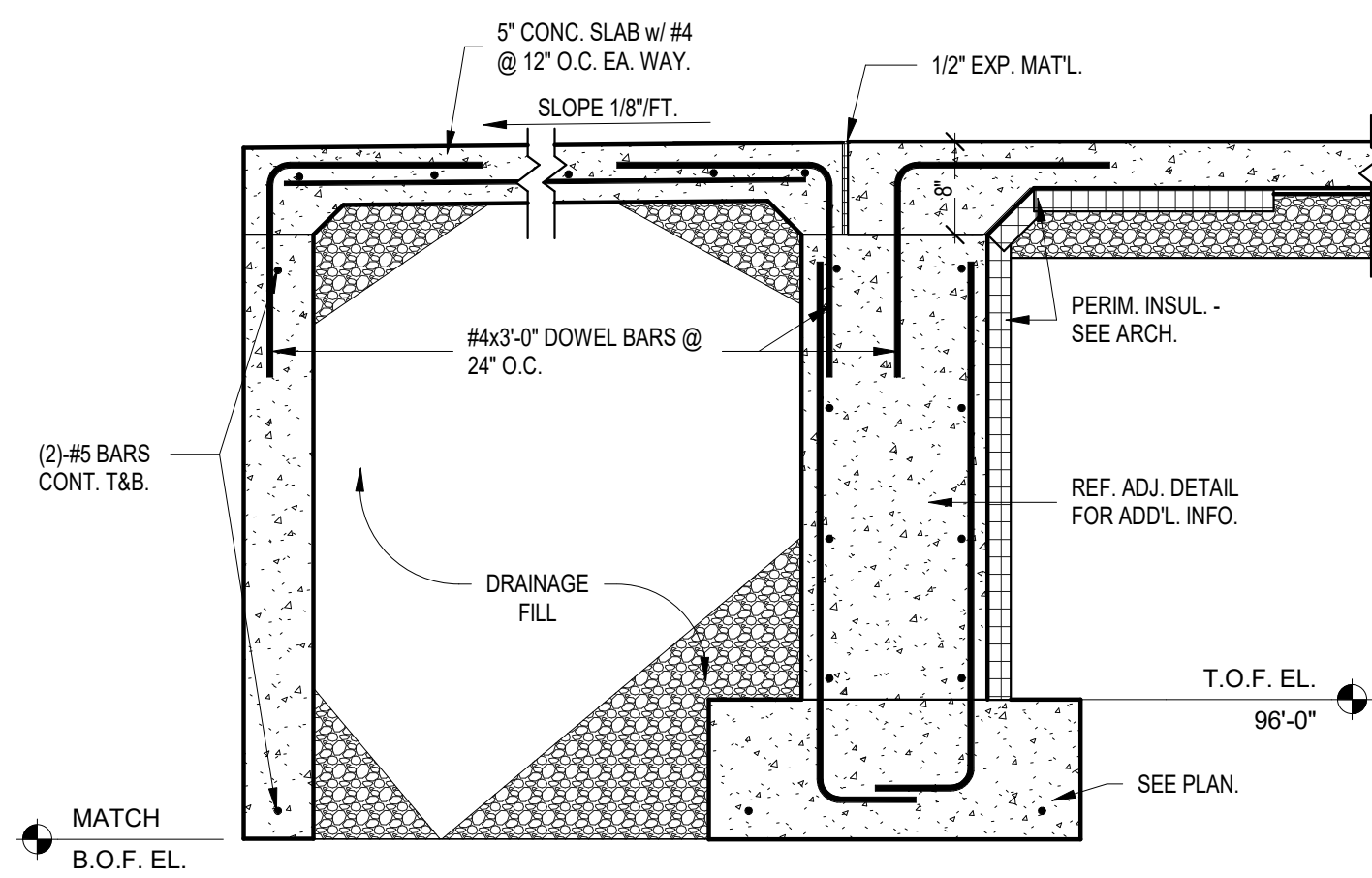
**S200D**



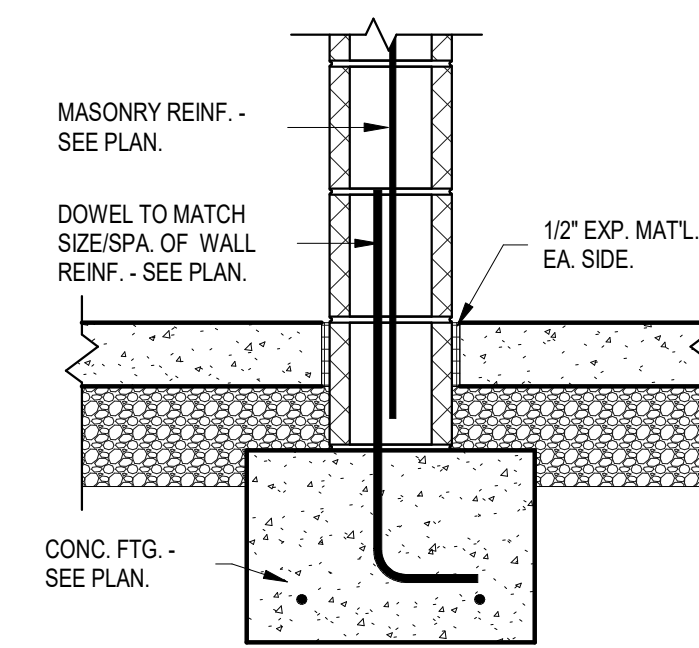
1 TYP. FOUND. @ BRICK LEDGE  
3/4" = 1'-0"



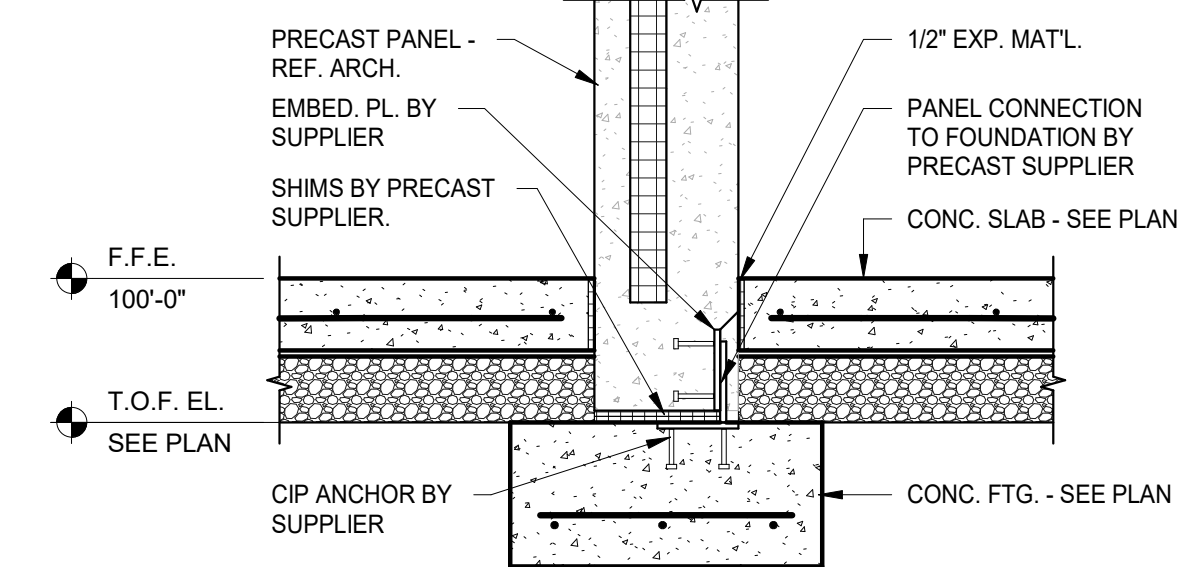
2 FOUND. SECTION @ PRECAST PANEL  
3/4" = 1'-0"



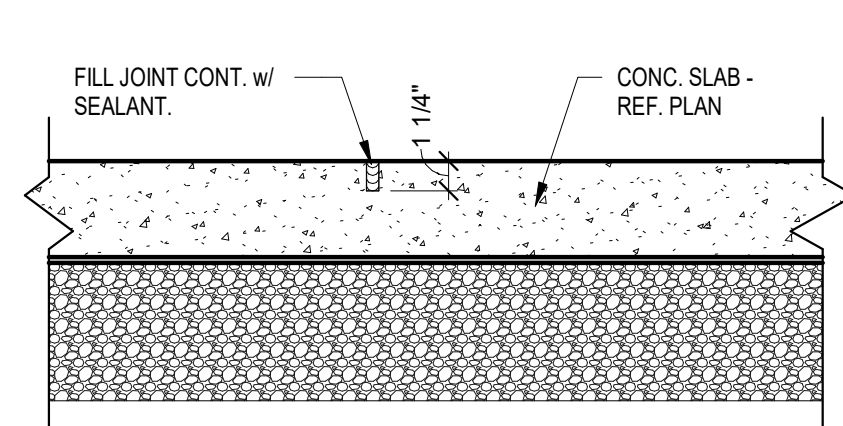
3 FROST STOOP SECTION  
3/4" = 1'-0"



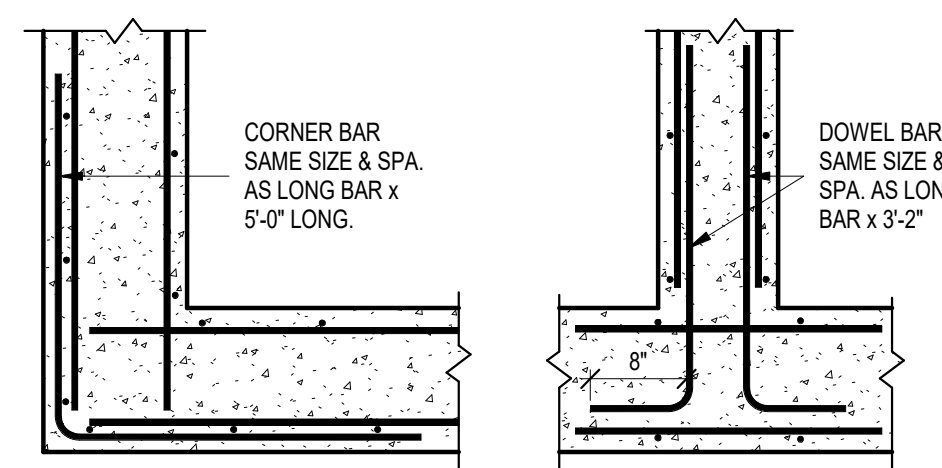
4 INT. COL. PAD FOOTING  
1" = 1'-0"



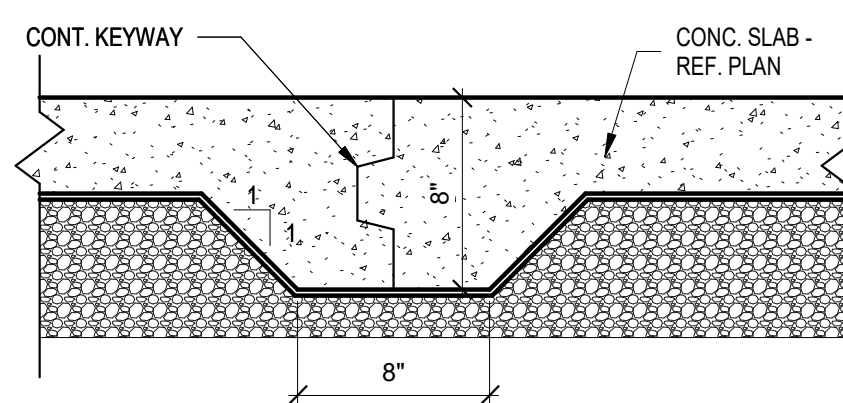
5 INT. FTG. @ PRECAST PANEL  
3/4" = 1'-0"



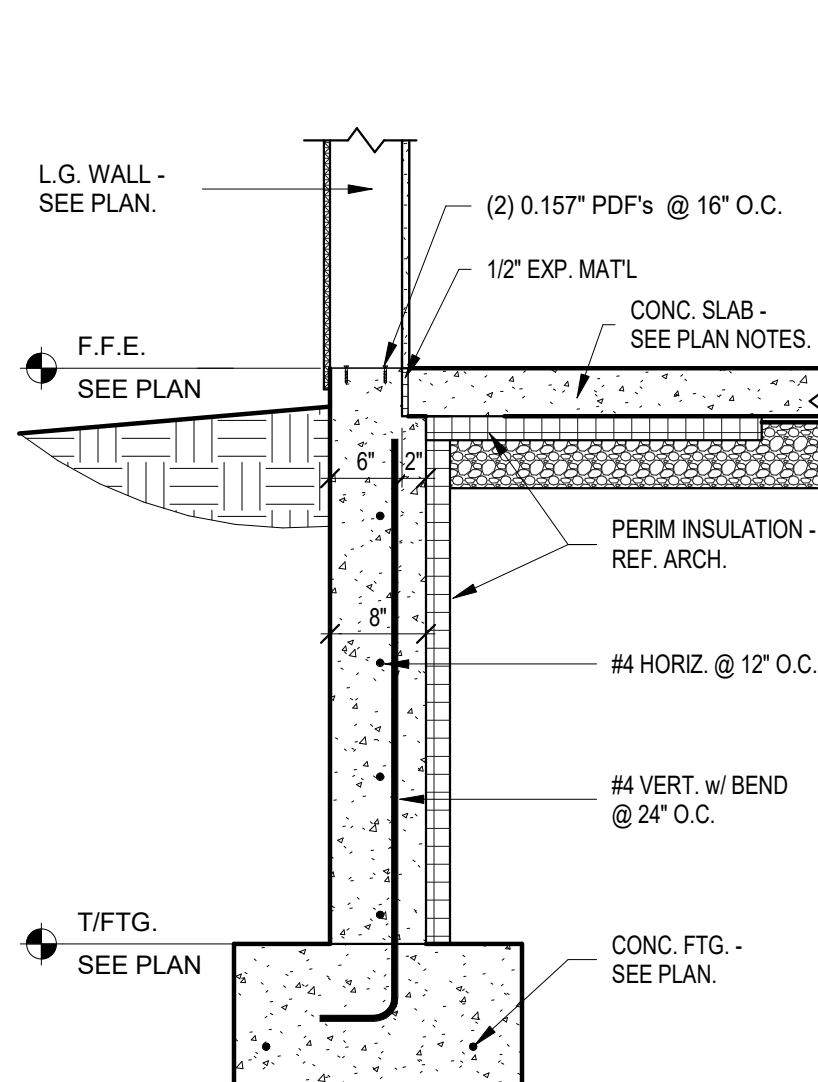
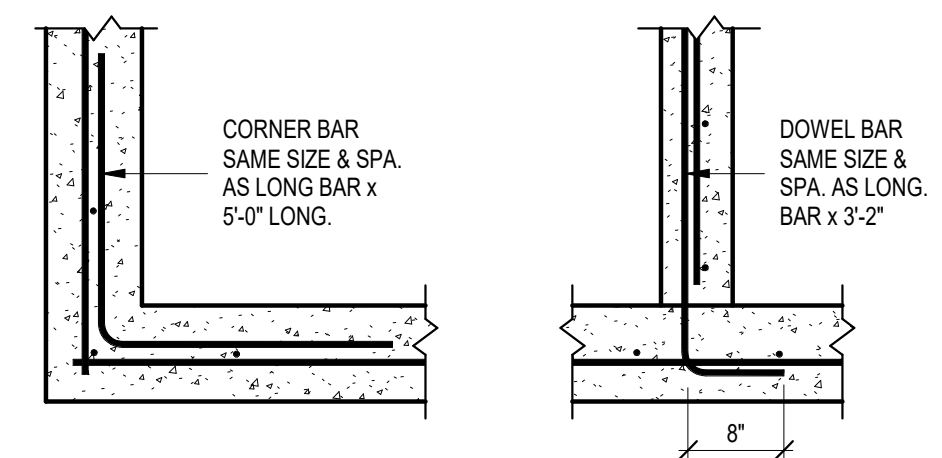
6 TYP. CONTROL JOINT DETAIL  
1 1/2" = 1'-0"



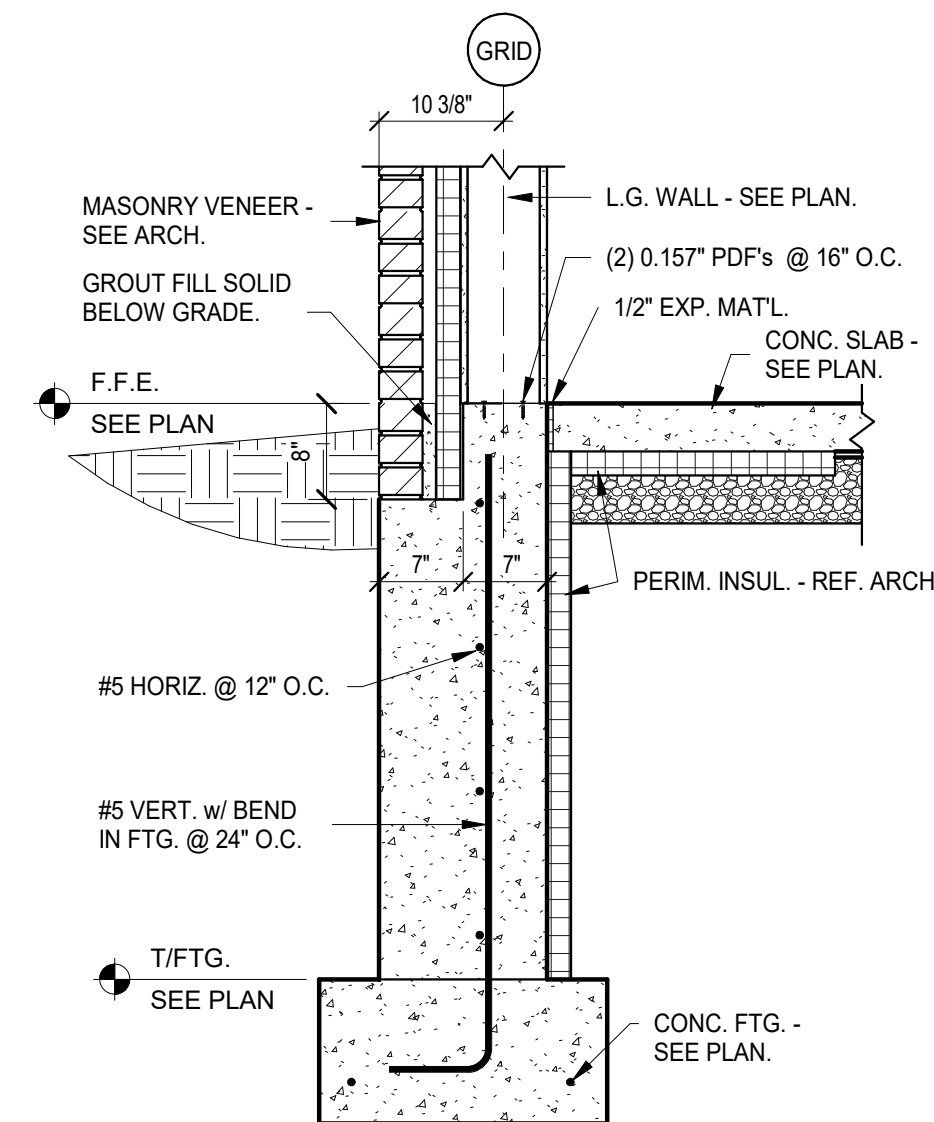
8 TYP. WALL CORNER REINF. DETAILS  
3/4" = 1'-0"



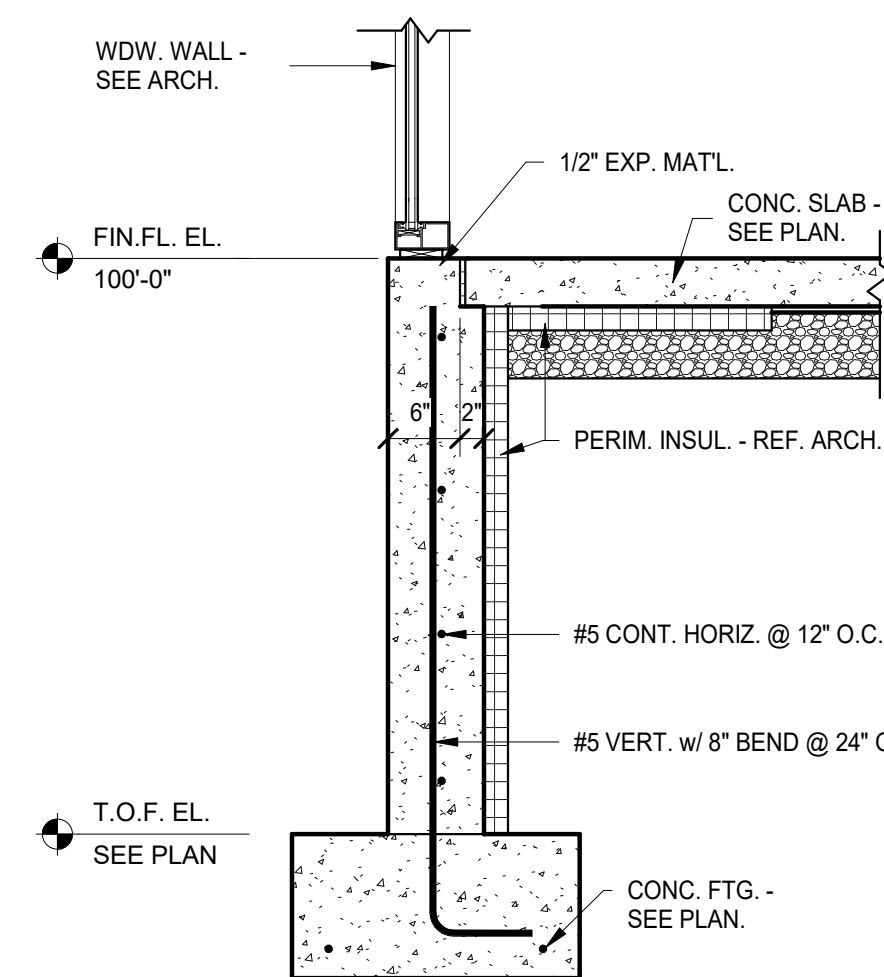
7 KEYED CONSTR. JOINT  
1 1/2" = 1'-0"



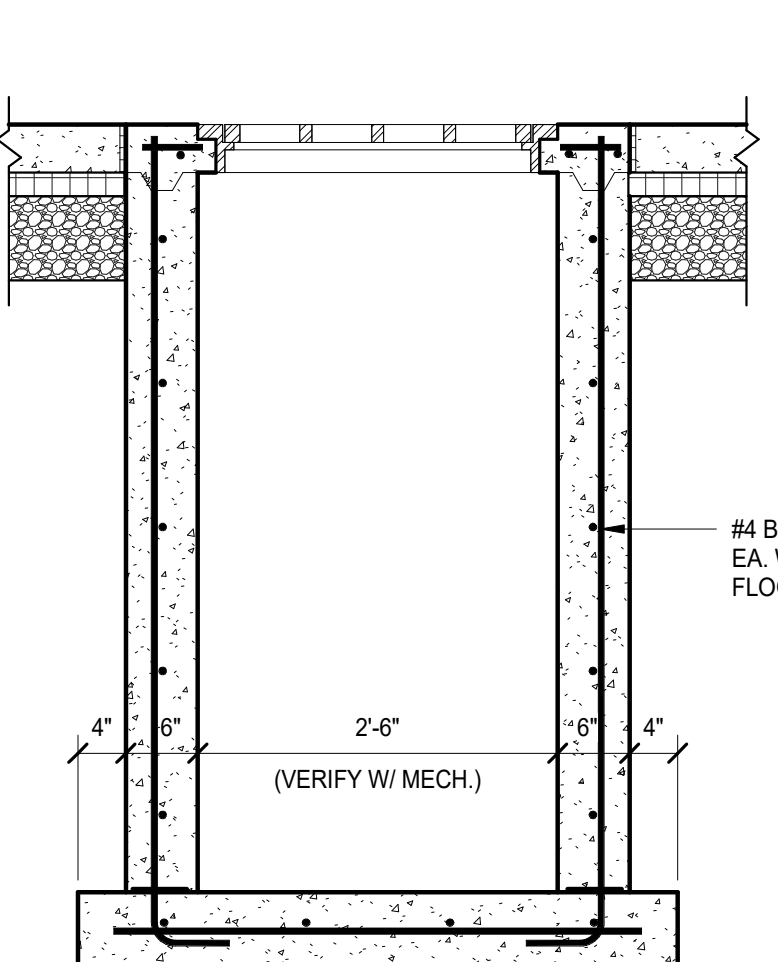
9 FOUND. WALL SECTION @ L.G. WALL  
3/4" = 1'-0"



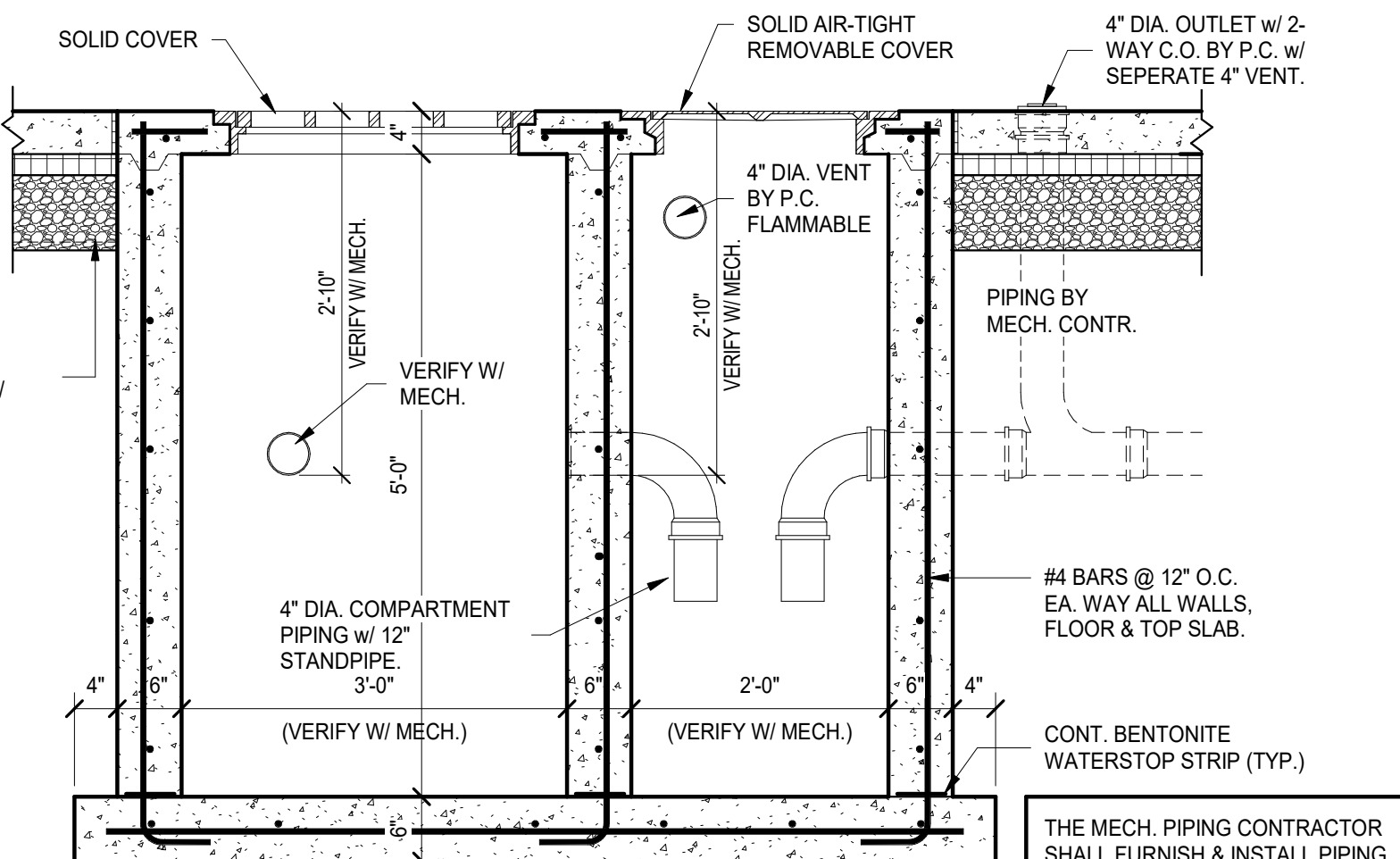
10 FOUND. WALL @ L.G. WALL w/ B.L.  
3/4" = 1'-0"



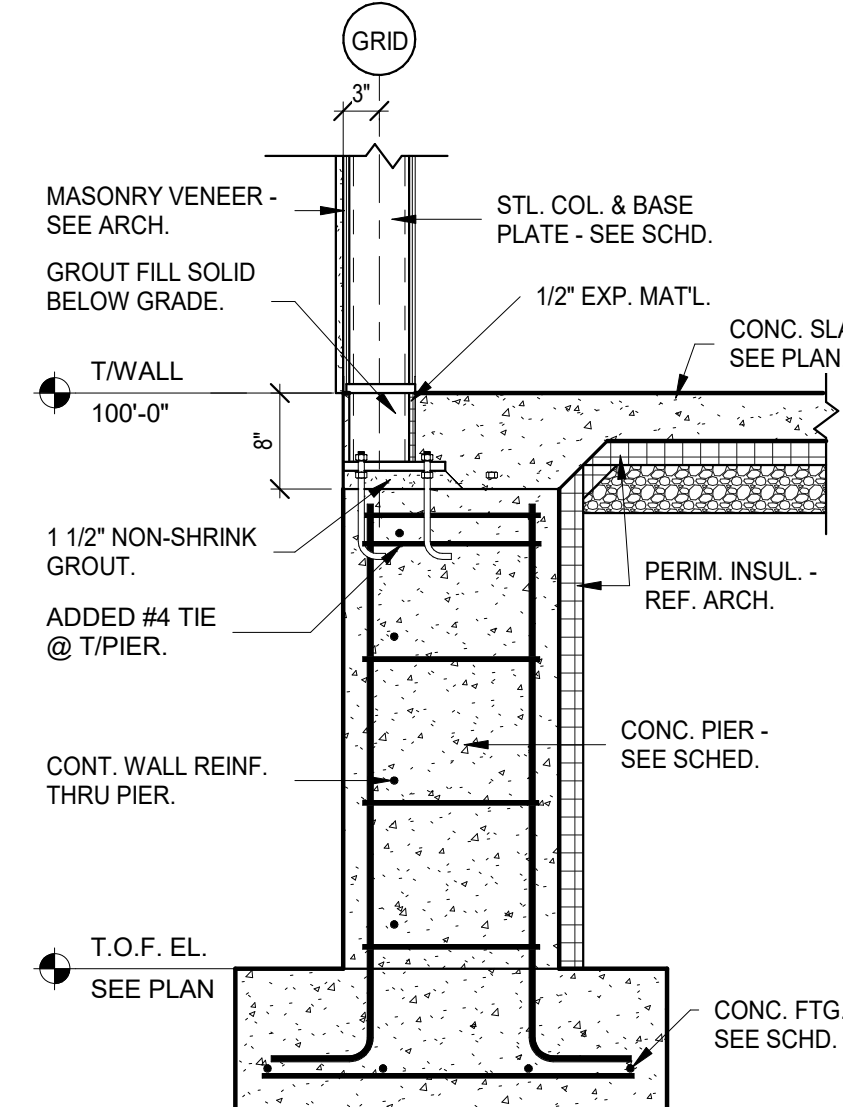
11 FOUND. WALL SECTION @ WDW.  
3/4" = 1'-0"



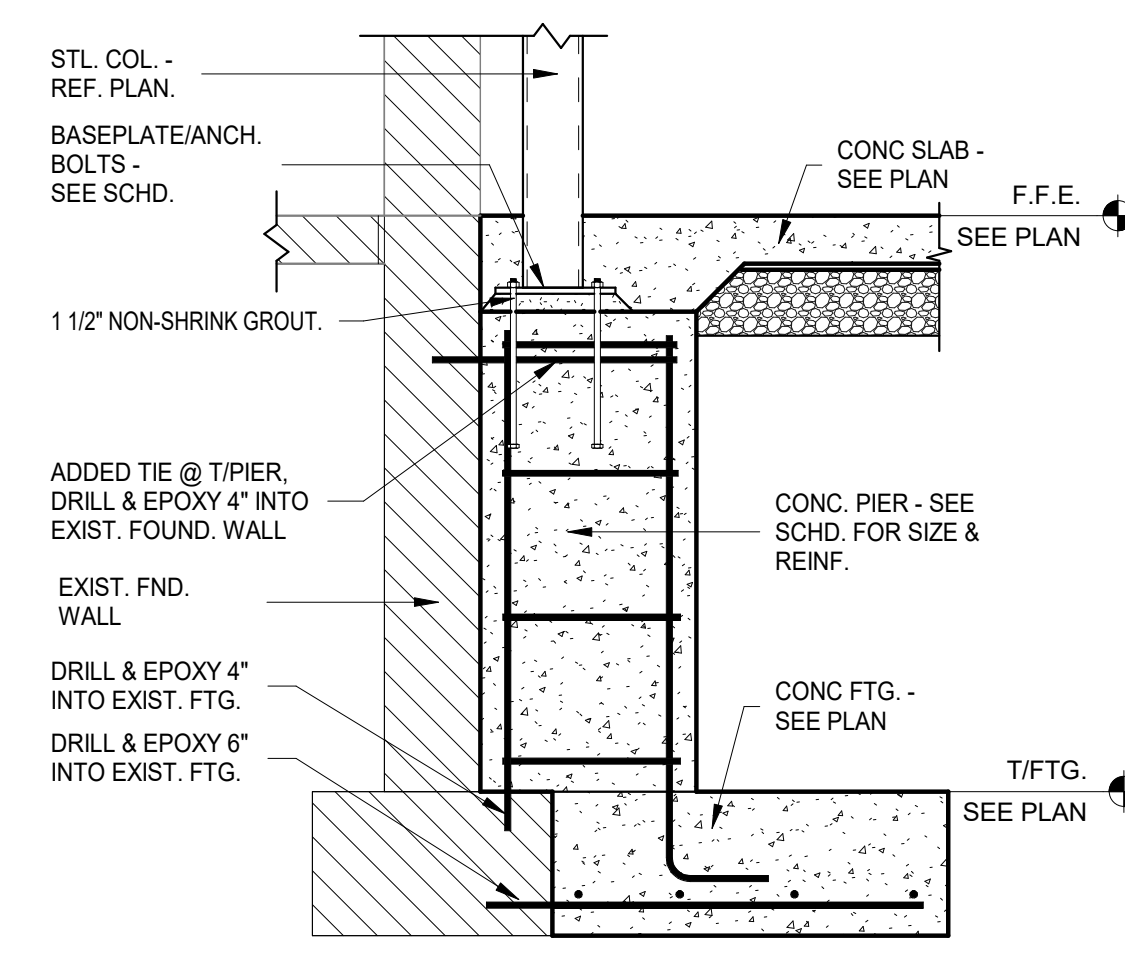
12 SAND/OIL INTERCEPTOR PIT DETAILS  
3/4" = 1'-0"



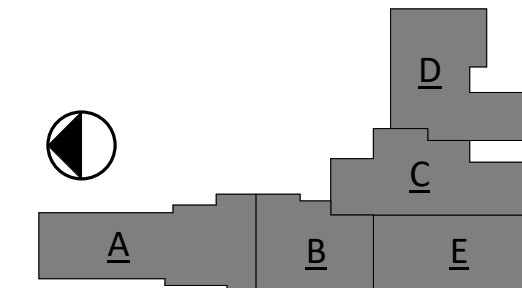
THE MECH. PIPING CONTRACTOR SHALL FURNISH & INSTALL PIPING AS SHOWN. NOTE: THE INVERT OF THE INLET PIPE SHALL BE NO LOWER THAN THE INVERT OF THE OUTLET PIPE. THE MINIMUM DEPTH UNDER THE OUTLET PIPE IS 2 FEET.

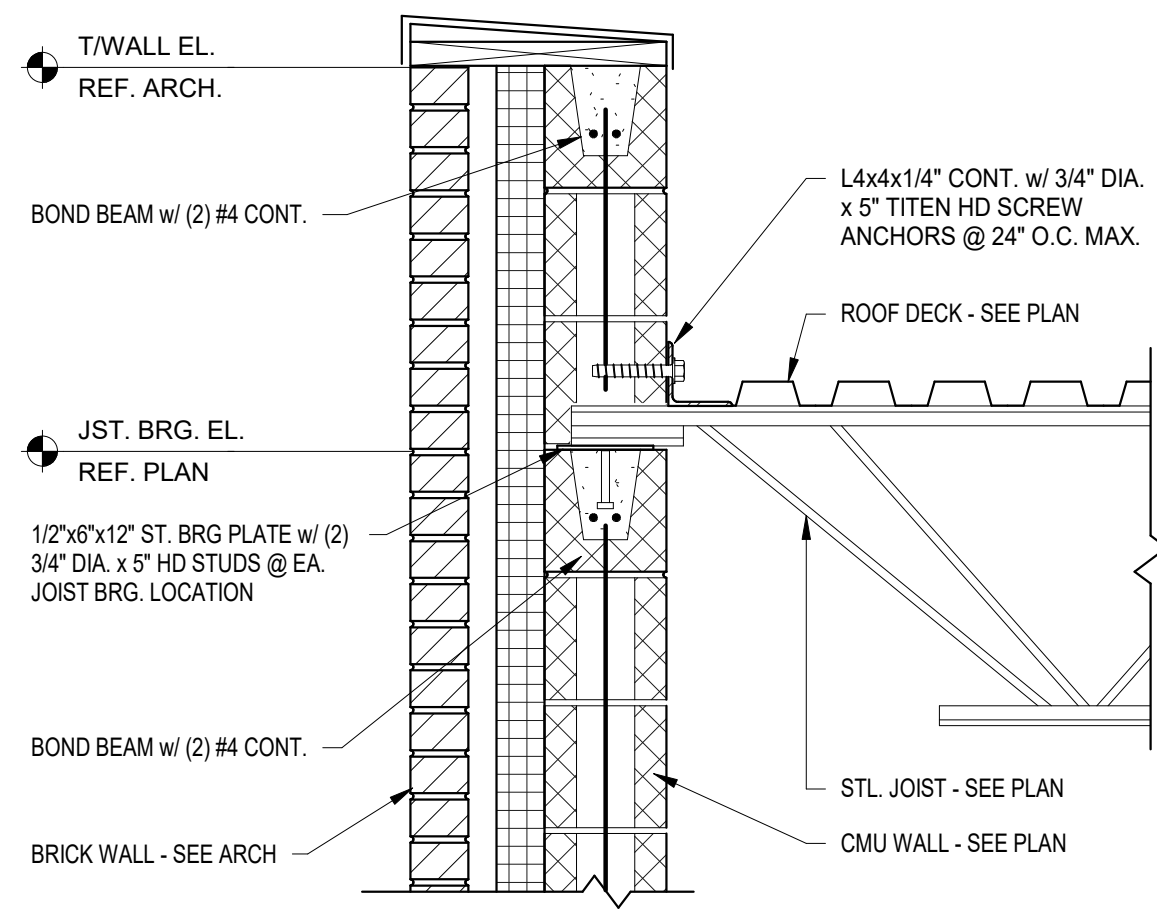


13 SECTION @ EXT. CONC. PIER  
3/4" = 1'-0"

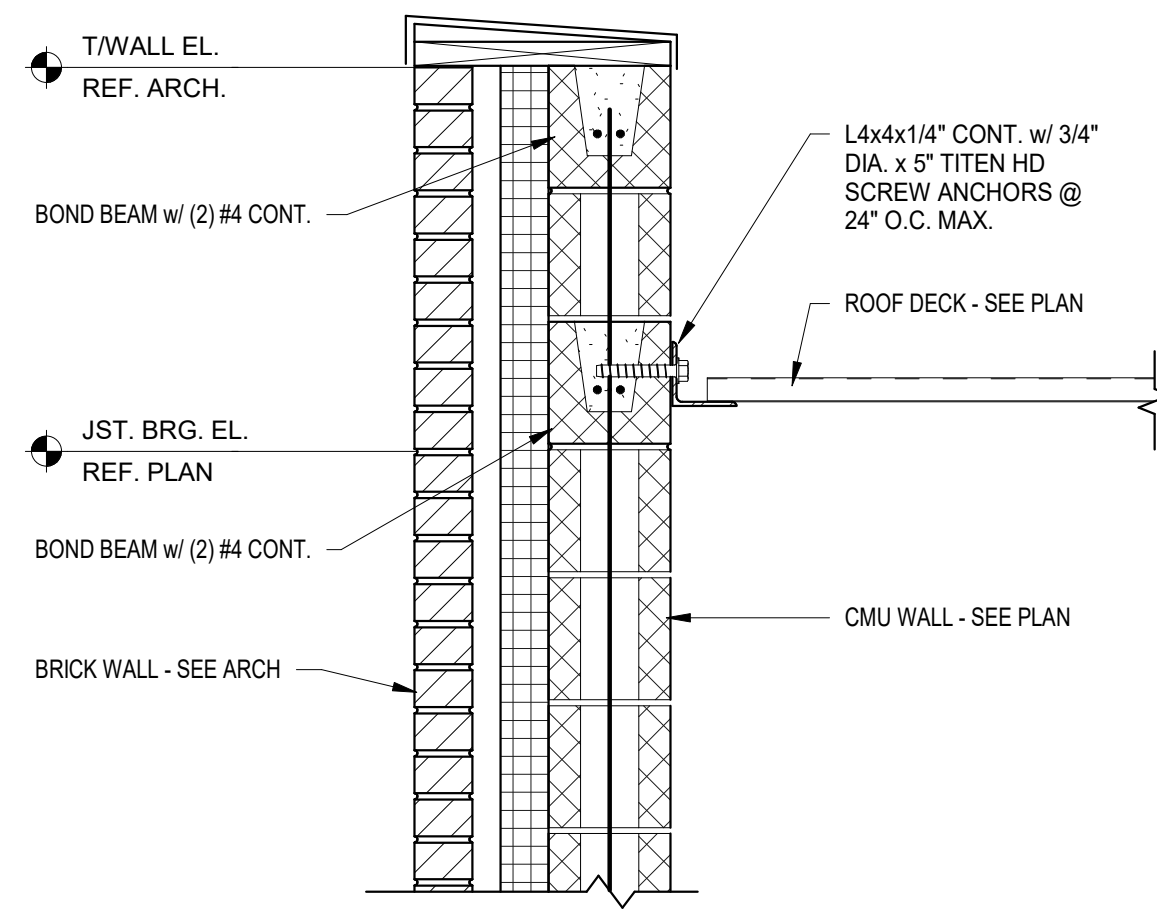


14 CONC. PIER @ EXIST. FND.  
3/4" = 1'-0"

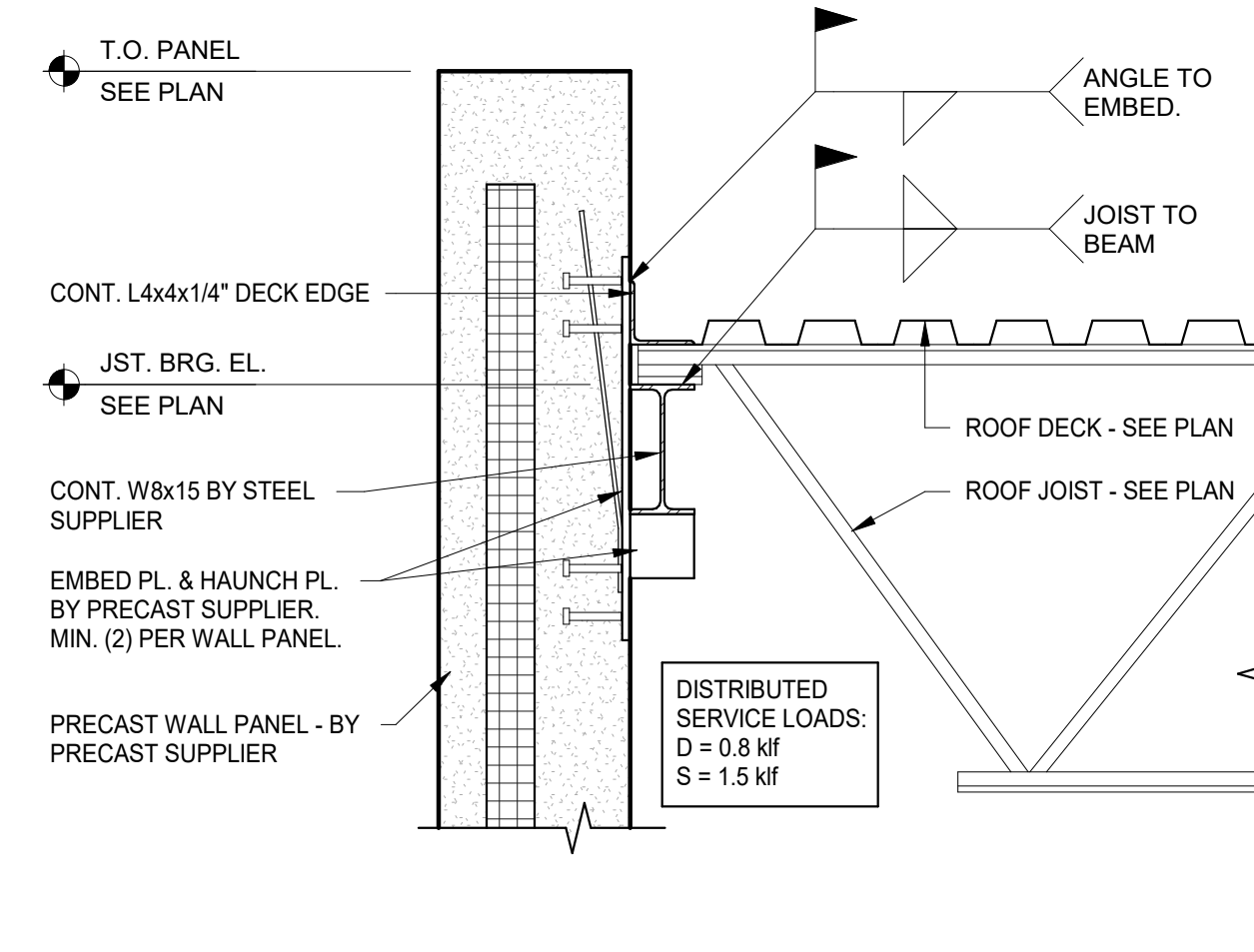




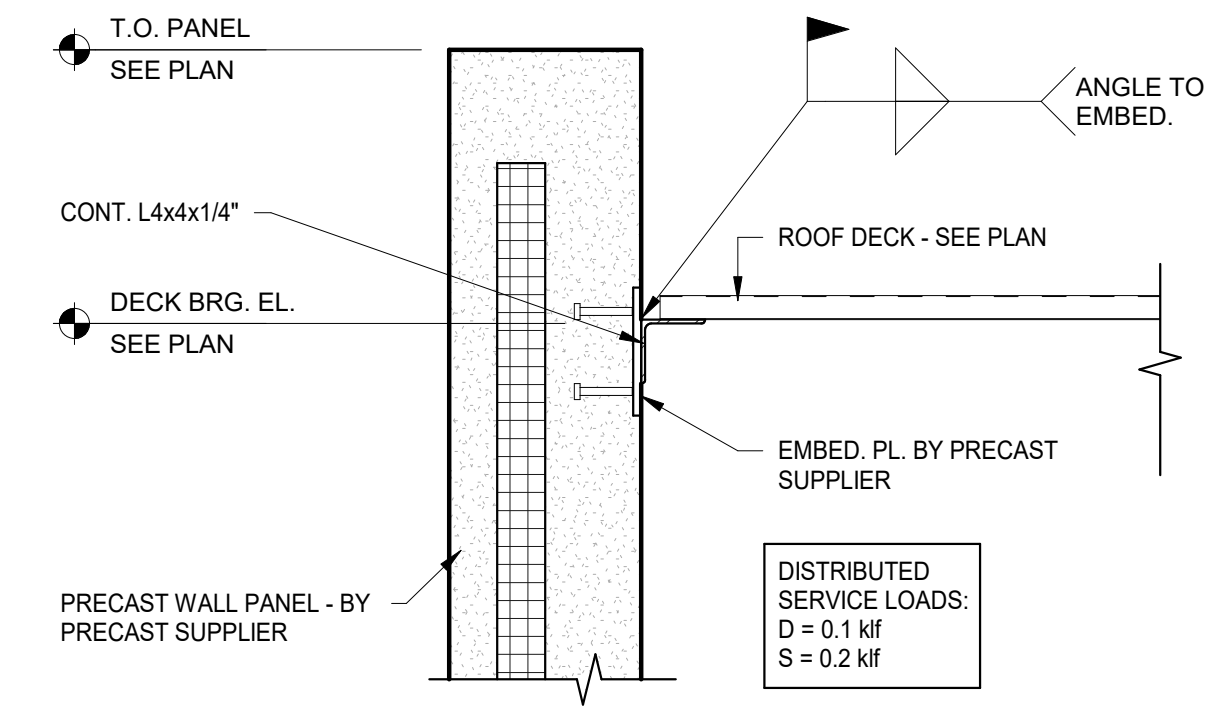
1 JOIST BRG. @ CMU WALL  
1" = 1'-0"



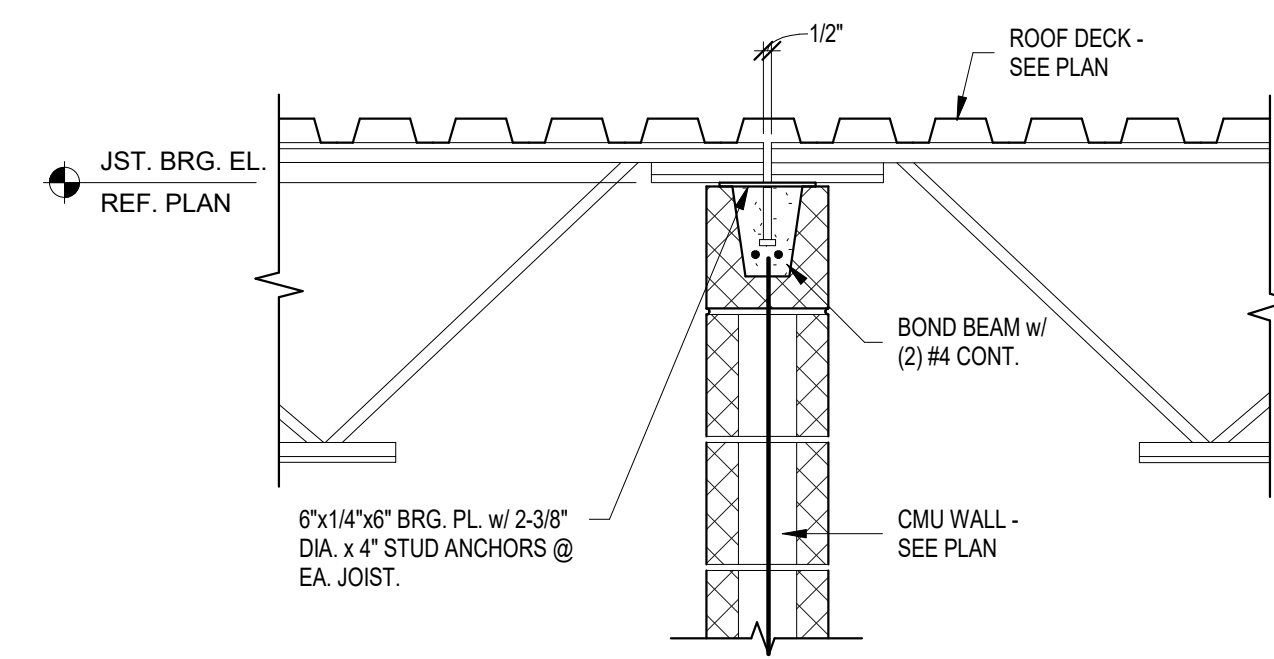
2 ROOF DECK BRG. @ CMU WALL  
1" = 1'-0"



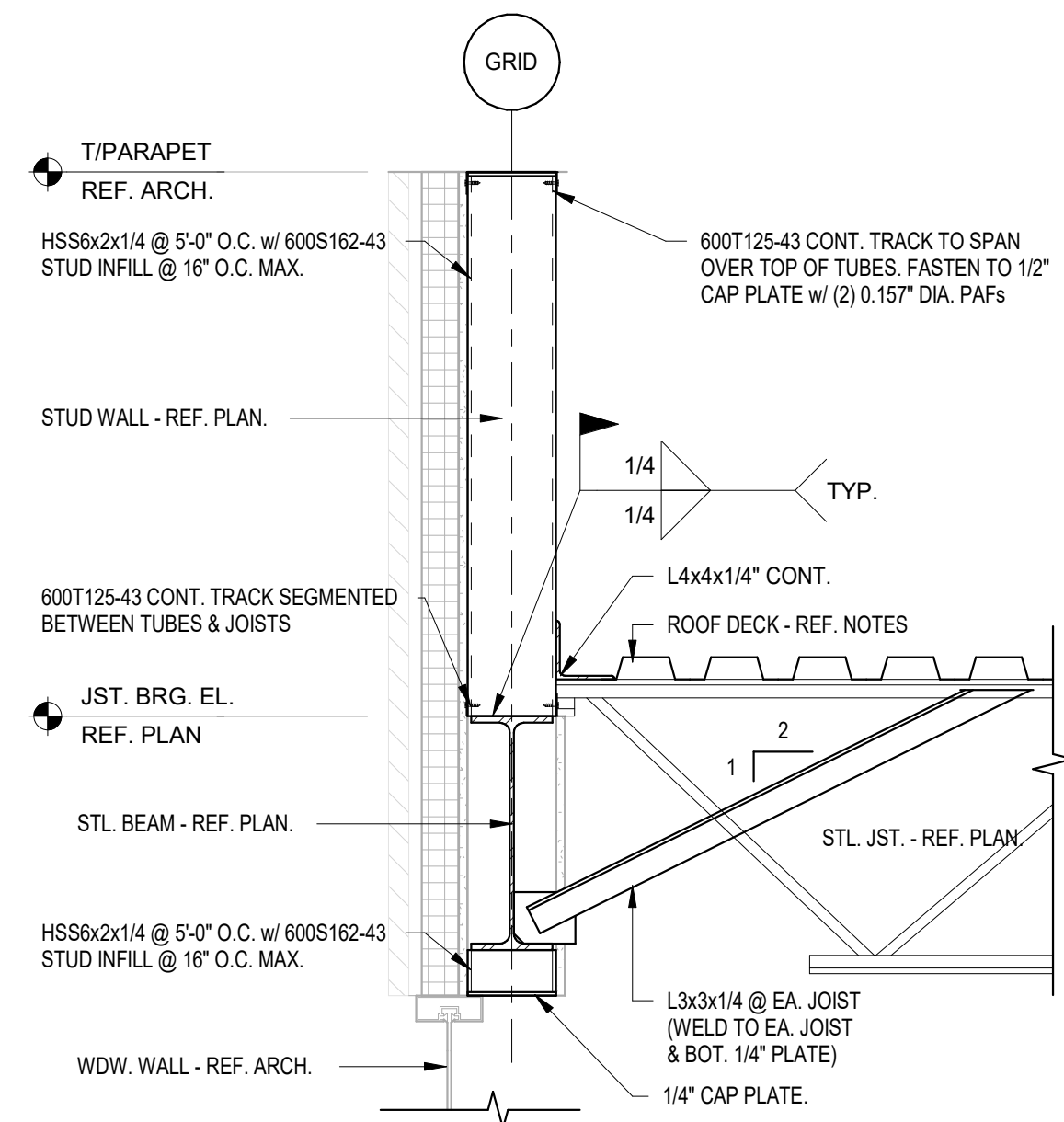
3 JOIST BRG. @ PRECAST PANEL (HAUNCH)  
1" = 1'-0"



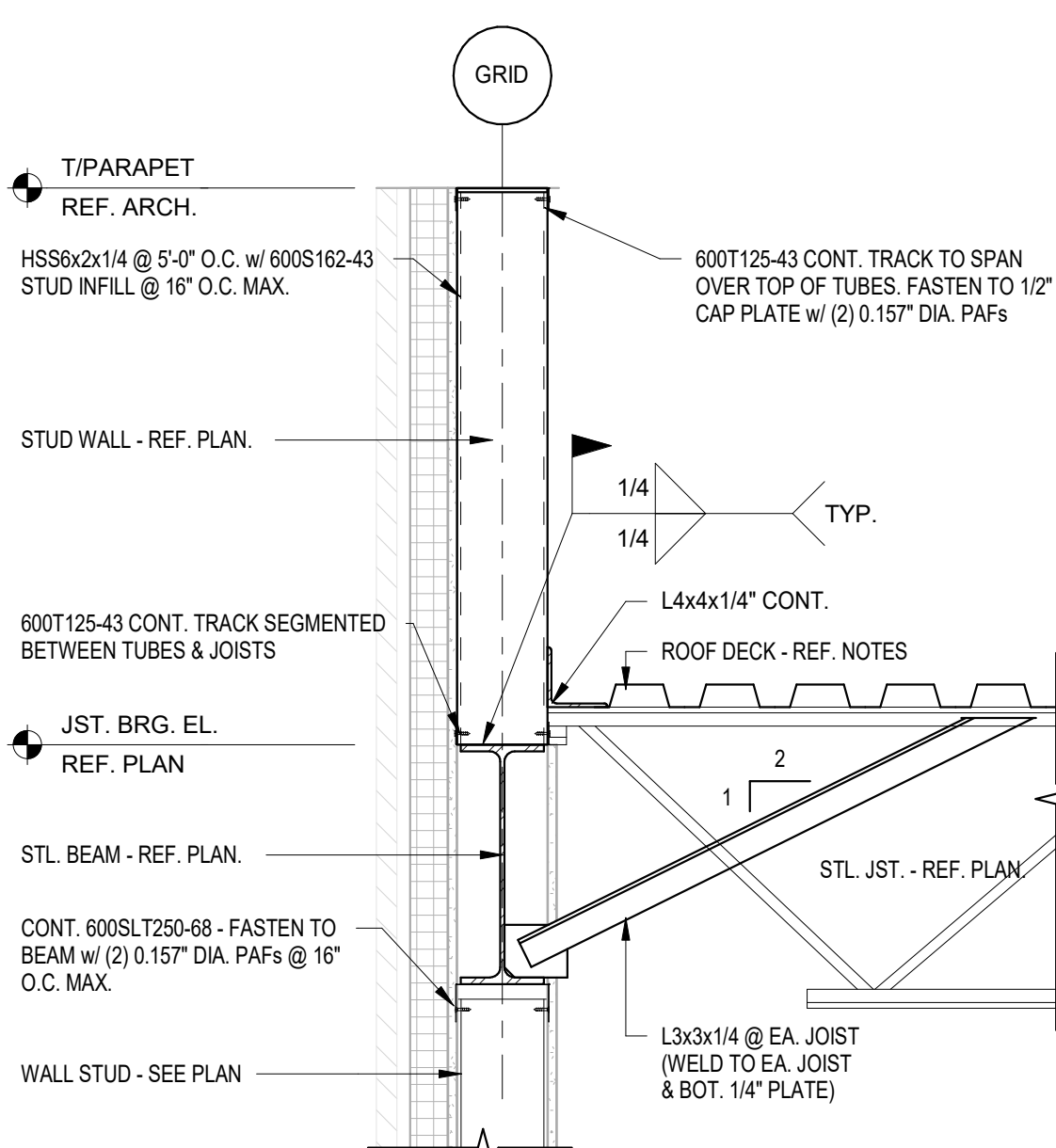
4 ROOF DECK BRG. @ PRECAST PANEL  
1" = 1'-0"



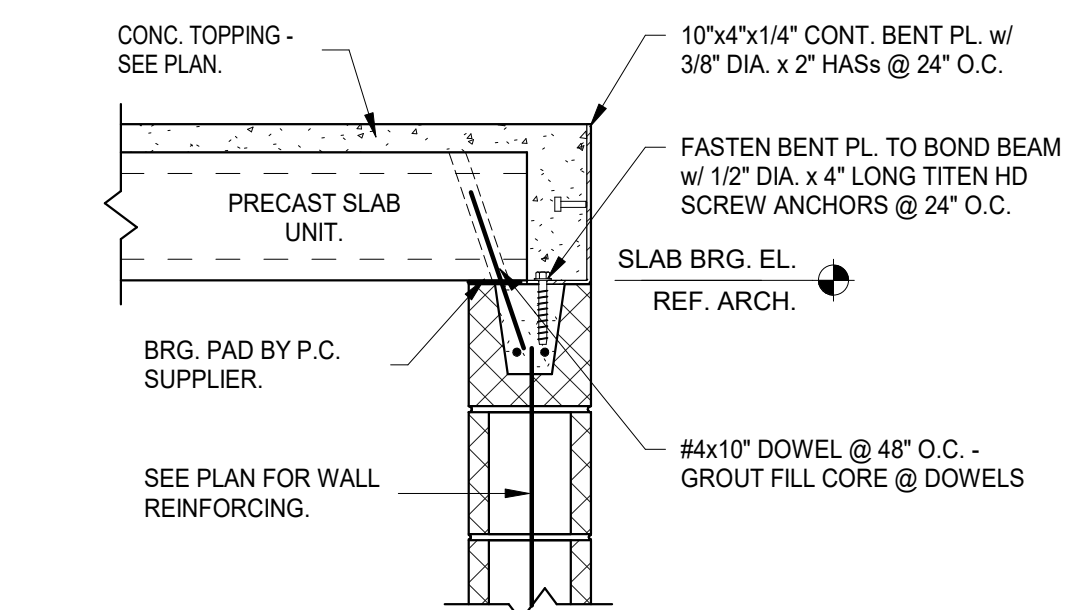
5 JOIST BRG. @ INT. CMU WALL  
1" = 1'-0"



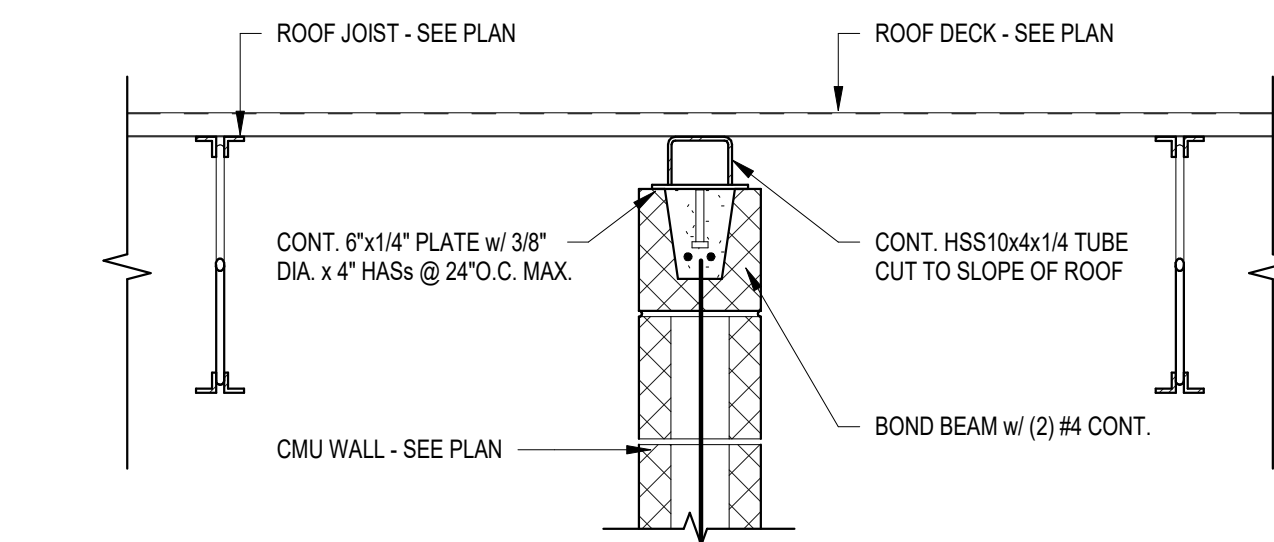
7 JOIST BRG. @ EXT. BEAM  
1" = 1'-0"



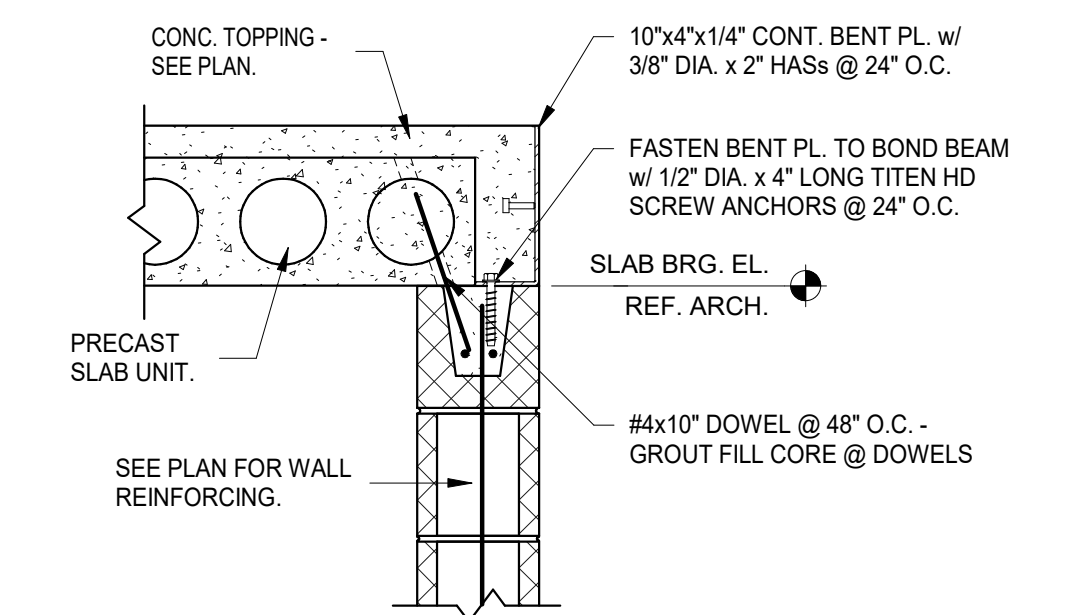
8 JOIST BRG. @ EXT. BEAM  
1" = 1'-0"



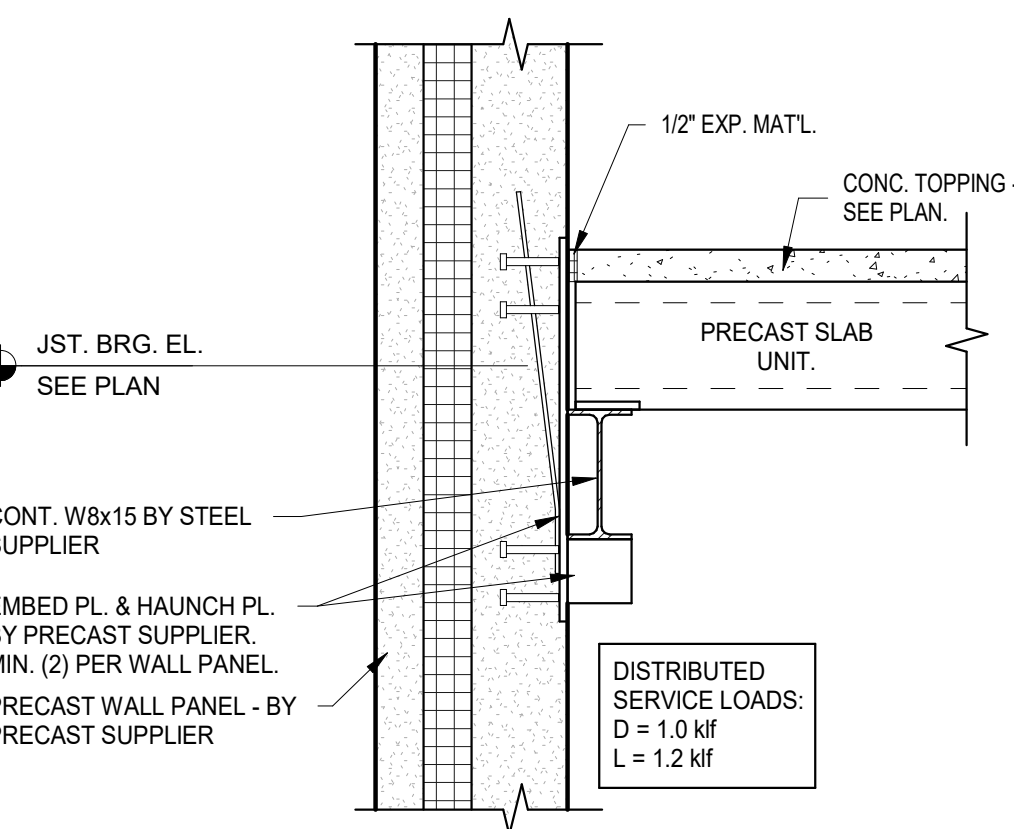
9 ROOF DECK BRG. @ CMU WALL  
1" = 1'-0"



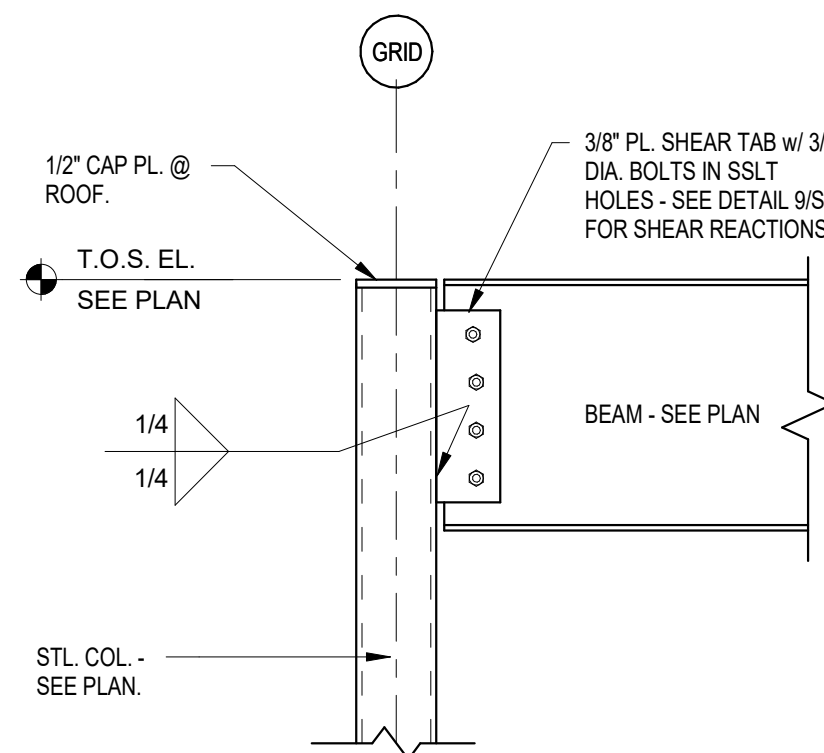
6 JOIST BRG. @ INT. CMU WALL  
1" = 1'-0"



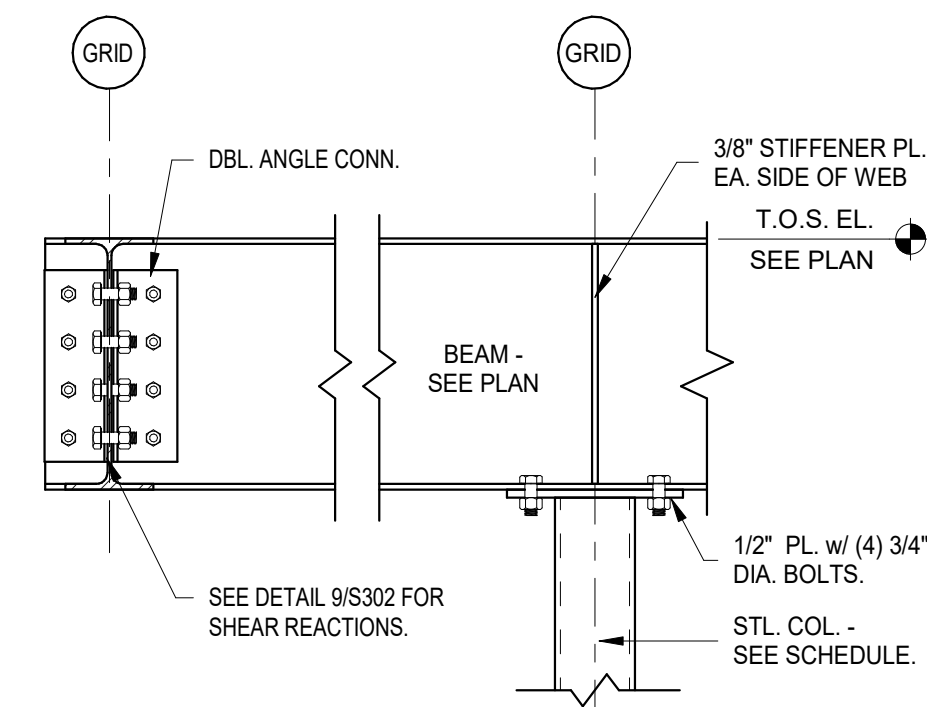
10 ROOF DECK BRG. @ CMU WALL  
1" = 1'-0"



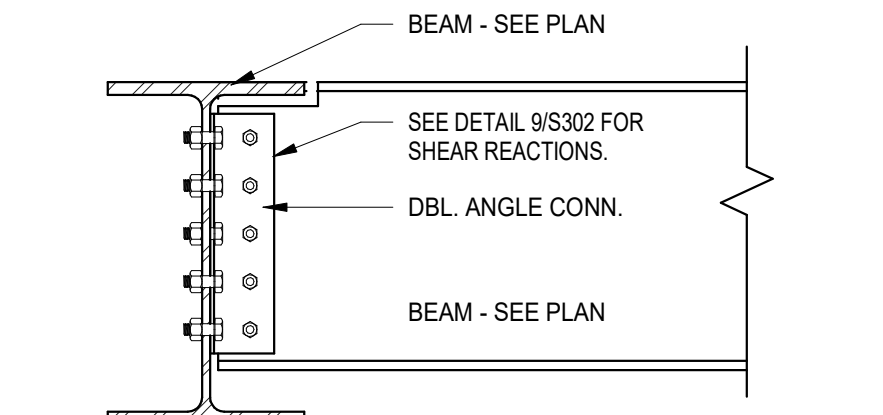
11 H.C. BRG. @ P.C. WALL  
1" = 1'-0"



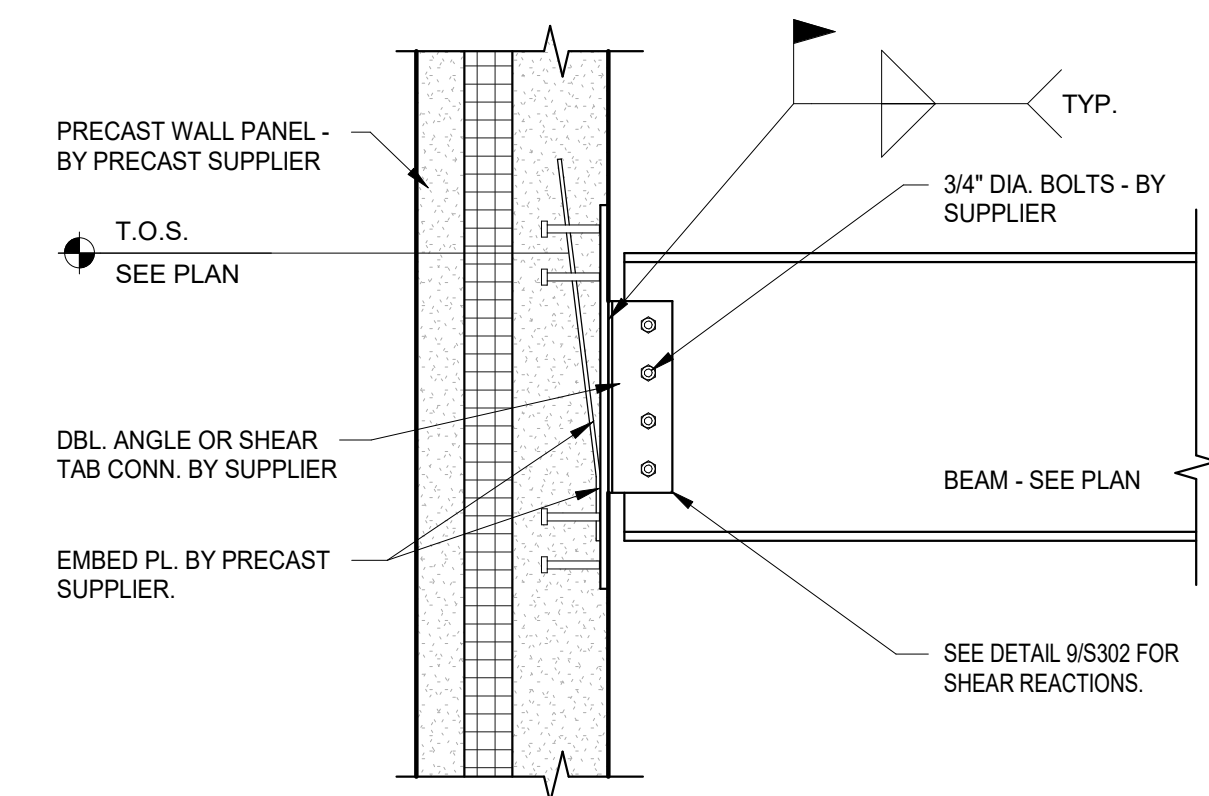
12 STL. BM. CONN. TO COL.  
1" = 1'-0"



13 CANT. BEAM DETAIL  
1" = 1'-0"



15 TYP. BM. TO BM. CONN. DETAIL  
1" = 1'-0"



14 STEEL BEAM CONN. @ PRECAST PANEL  
1" = 1'-0"

**CO Arch OP**

1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**RISE**  
STRUCTURAL ASSOCIATES INC.

6909 S. Lyncrest Place - Suite 110  
Sioux Falls, SD 57108  
(605)743-2510  
www.risecorp.com

RISE PROJECT NO: 22359

ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

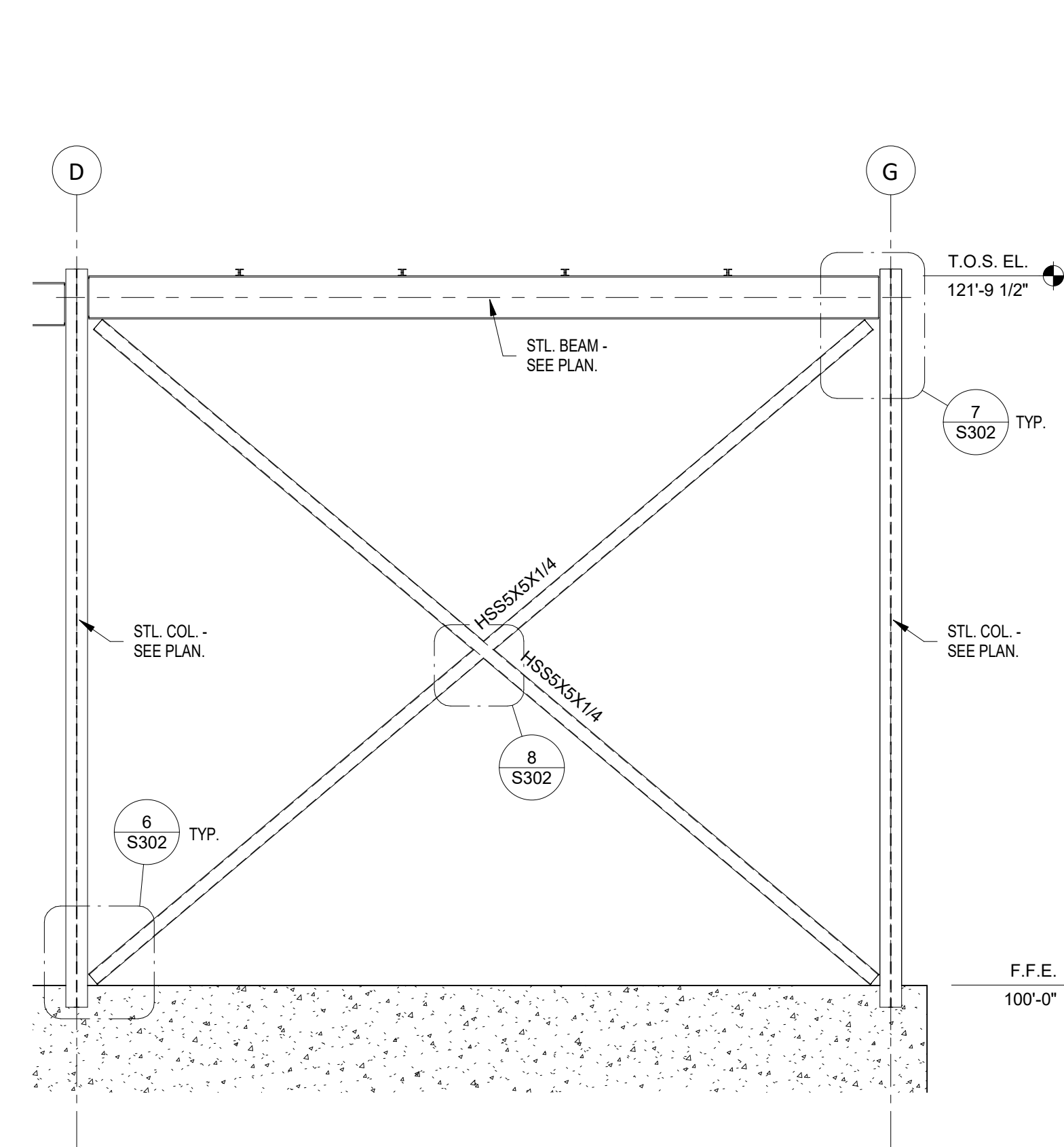
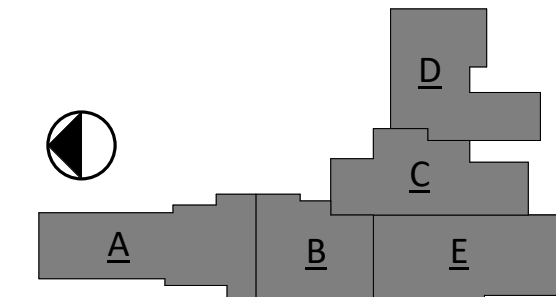
REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

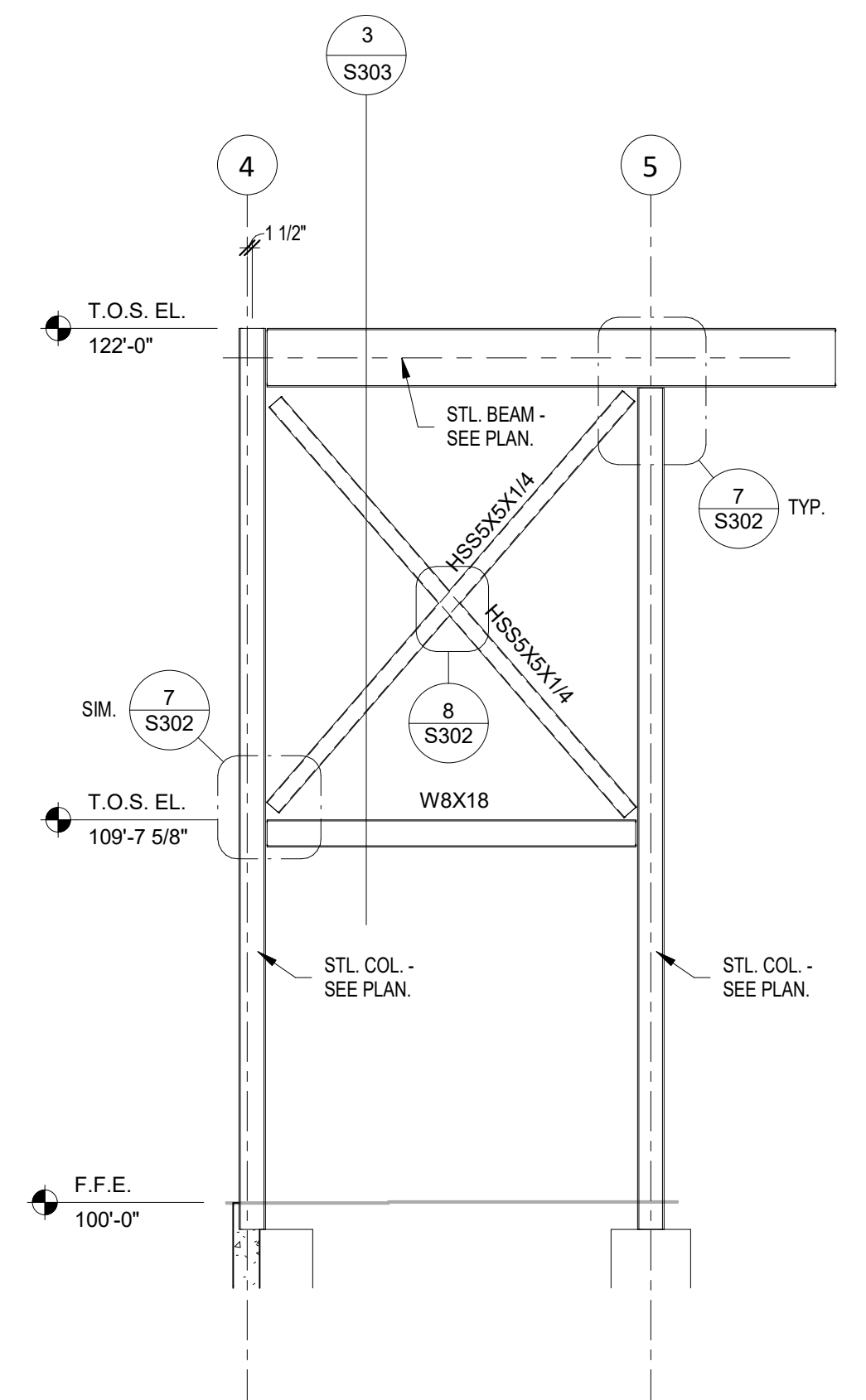
SHEET TITLE:  
STRUCTURAL DETAILS

**S301**

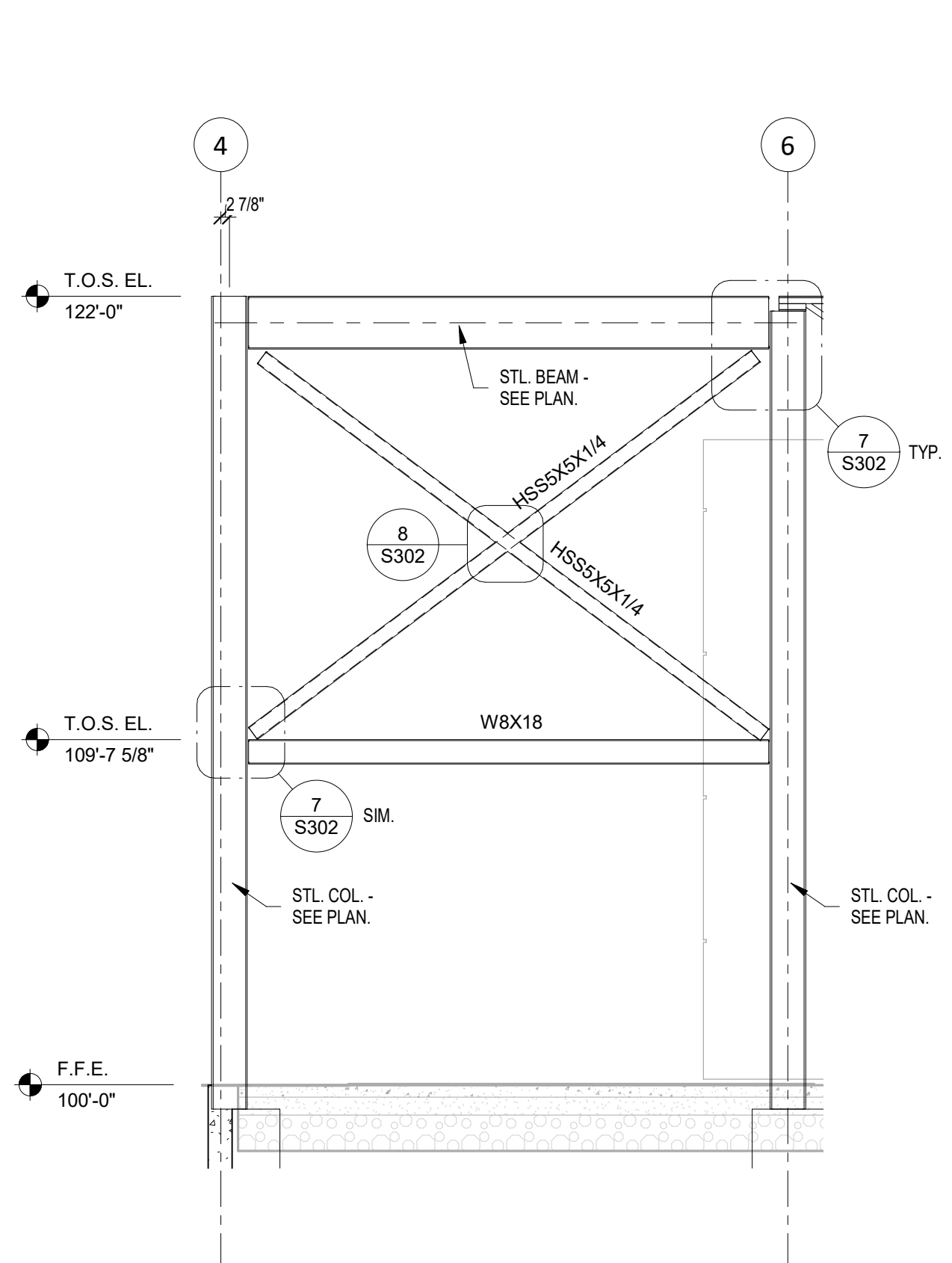
1/26/2023 10:24:36 AM



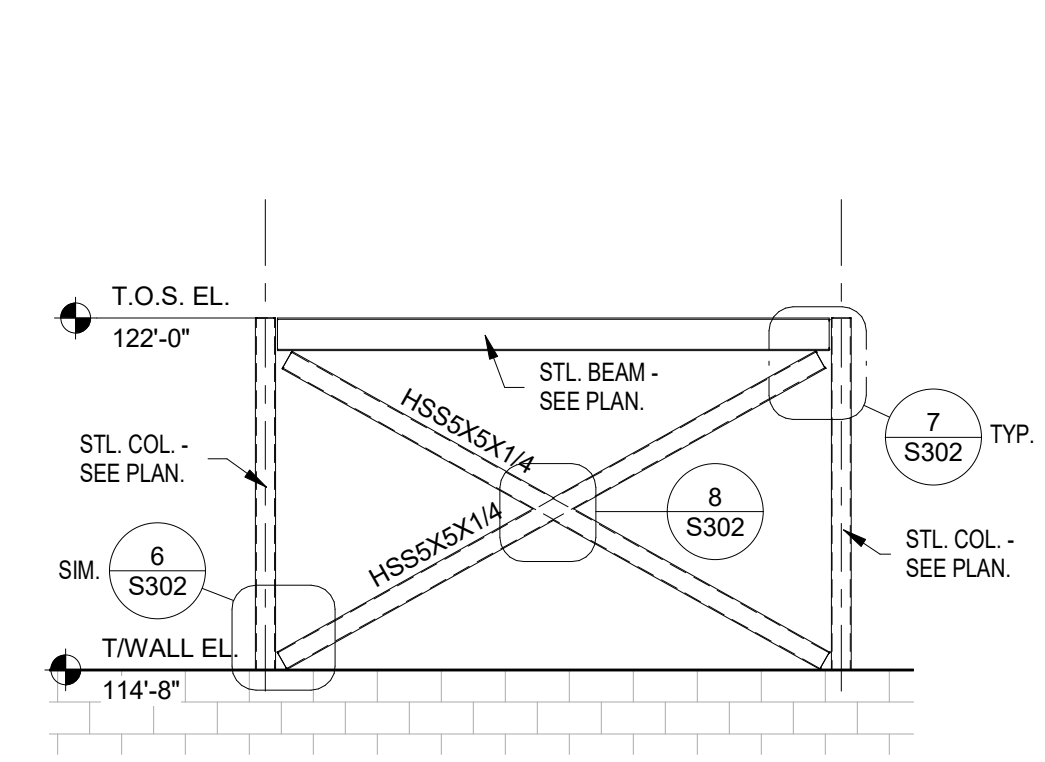
**1 BRACED FRAME "A"**  
1/4" = 1'-0"



**2 BRACED FRAME "B"**  
1/4" = 1'-0"



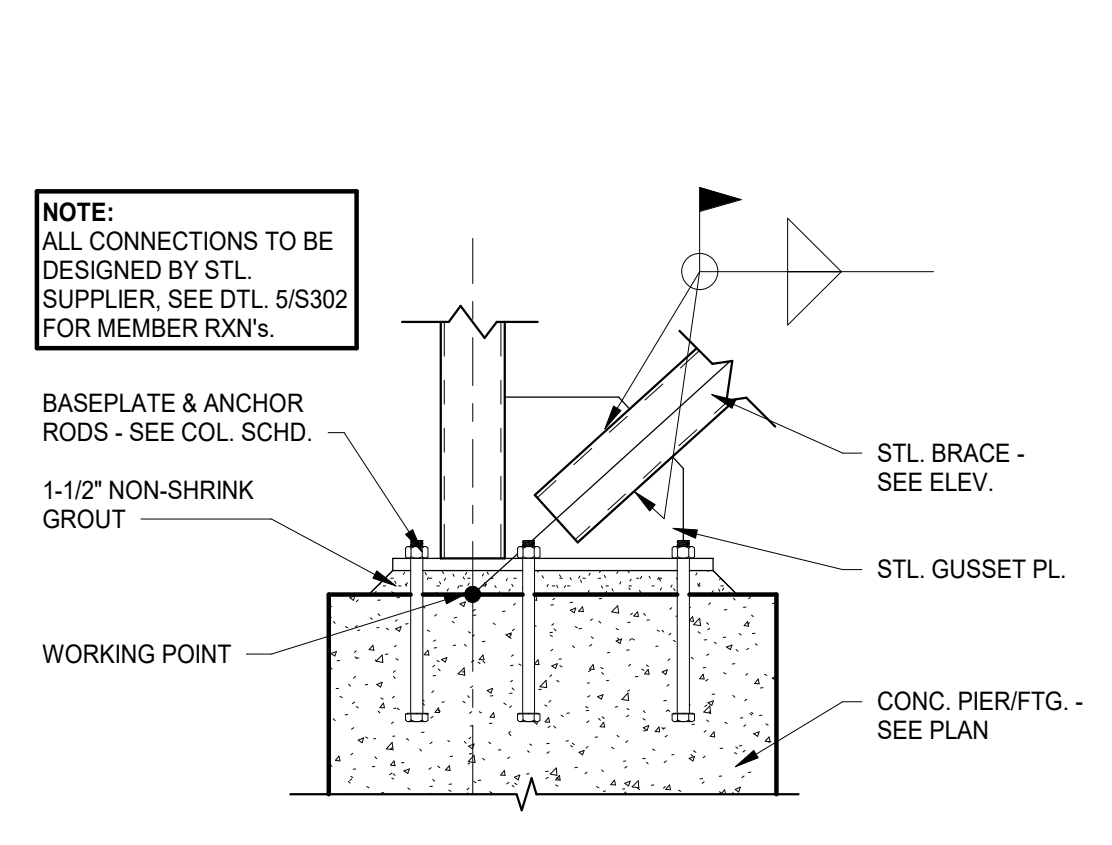
**3 BRACED FRAME "C"**  
1/4" = 1'-0"



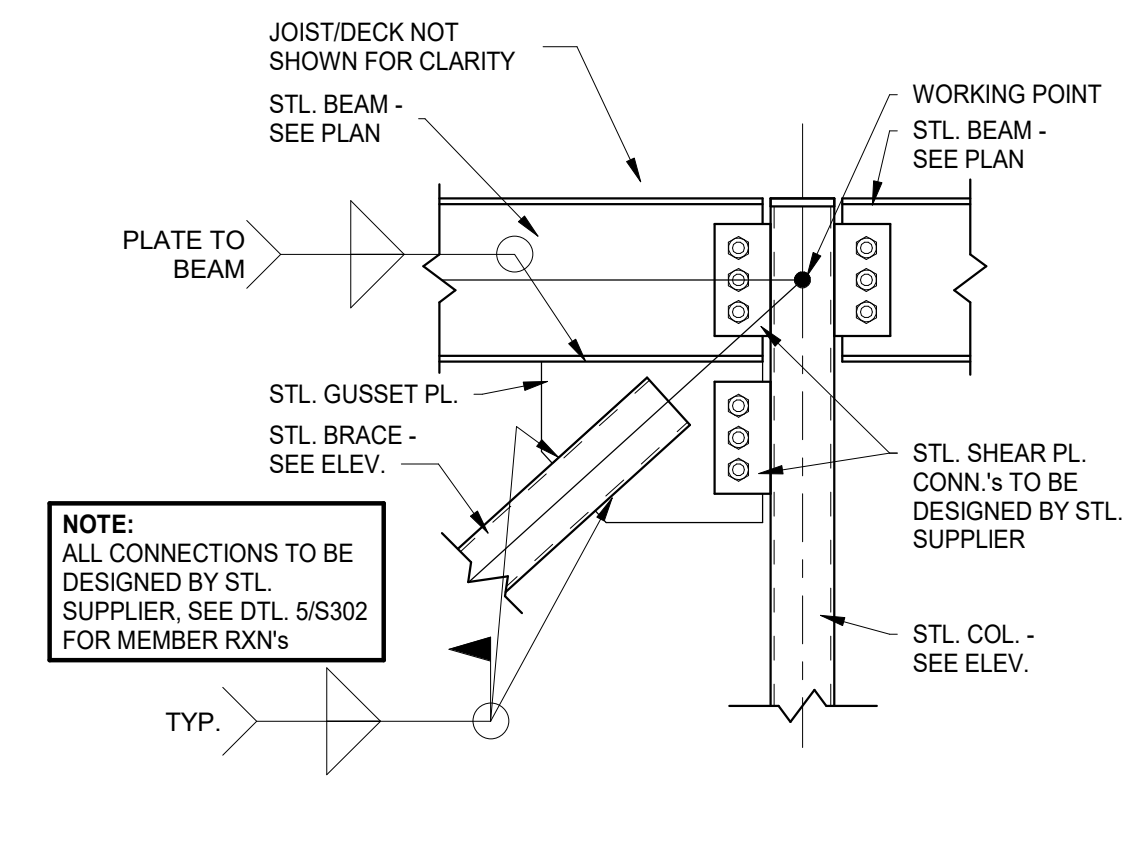
**4 BRACED FRAME "D"**  
1/4" = 1'-0"

BRACE FRAME MEMBER RXN. TABLE (ASD)			
FRAME MARK	BRACE AXIAL RXN	COL. AXIAL RXN	BEAM SHEAR RXN
BRACE "A"	12 KIPS	29KIPS	8 KIPS
BRACE "B"	6 KIPS	15 KIPS	8 KIPS
BRACE "C"	14 KIPS	29 KIPS	8 KIPS
BRACE "D"	4 KIPS	4 KIPS	2 KIPS

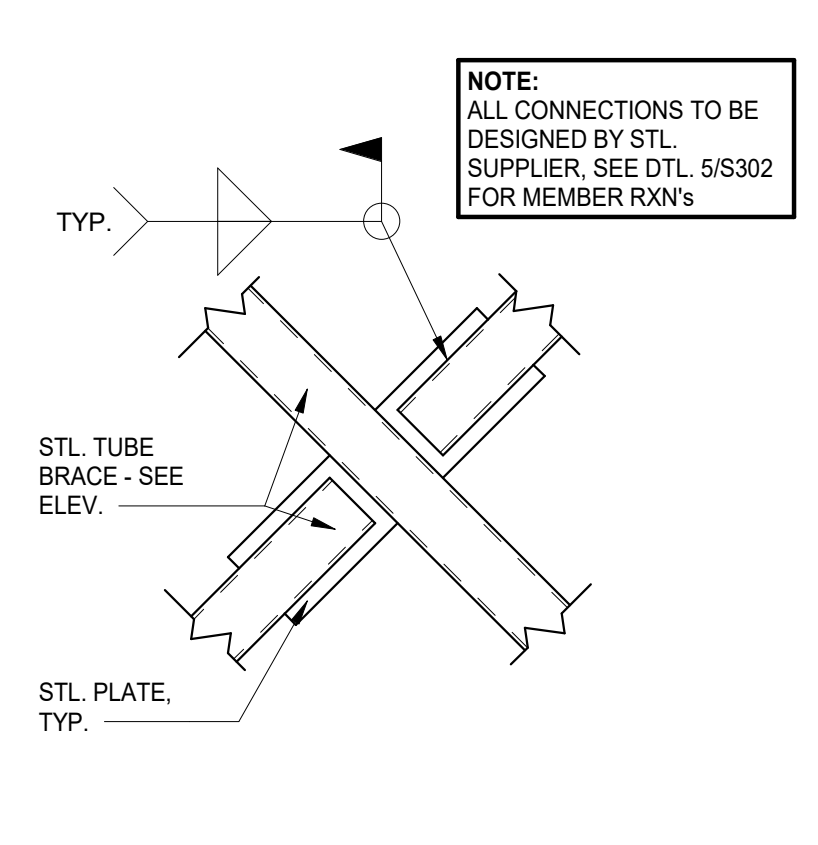
**5 BRACED FRAME MEMBER RXN. TABLE**  
1" = 1'-0"



**6 BRACED FRAME @ BASEPLATE**  
1" = 1'-0"



**7 BRACED FRAME @ BEAM/COL.**  
1" = 1'-0"



**8 BRACED FRAME @ SPLICE**  
1" = 1'-0"

BEAM SHEAR RXN. TABLE (ASD)	
BEAM SHAPE	BEAM SHEAR RXN
W8X15	9 KIPS
W8X18	10 KIPS
W8X21	10 KIPS
W16X26	10 KIPS
W16X31	22 KIPS
W18X35	22 KIPS
W24X76	10 KIPS

SHEAR REACTIONS LISTED ABOVE ARE FOR ALL SIMPLE SHEAR CONNECTIONS (BEAM TO BEAM, BEAM TO COLUMN, BEAM TO PRECAST, ETC.).

**9 SHEAR CONNECTION RXN. TABLE**  
1" = 1'-0"

RISE PROJECT NO: 22359

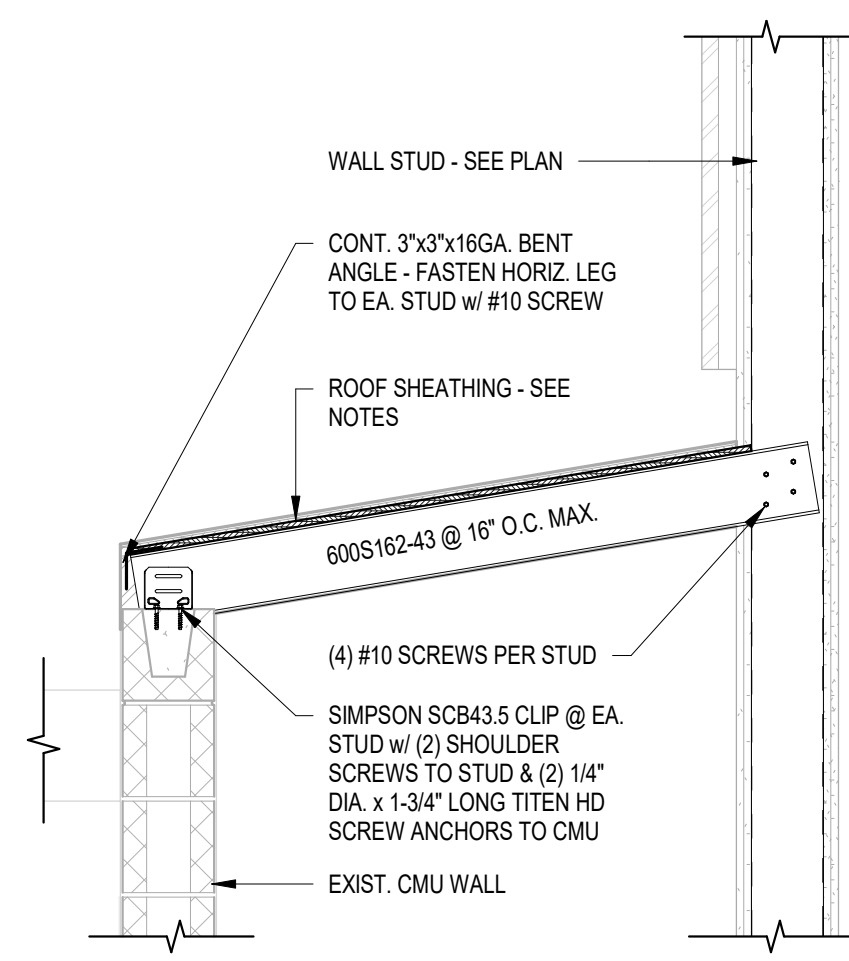


ISSUE:  
01-30-23 100% CONSTRUCTION DOCUMENTS

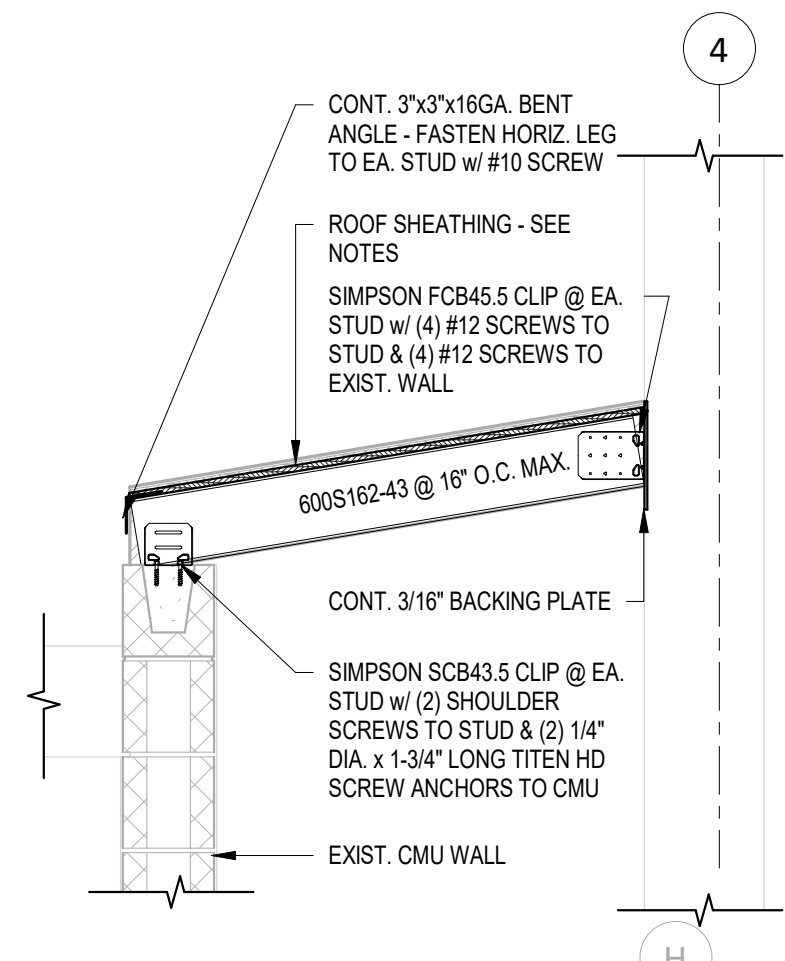
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

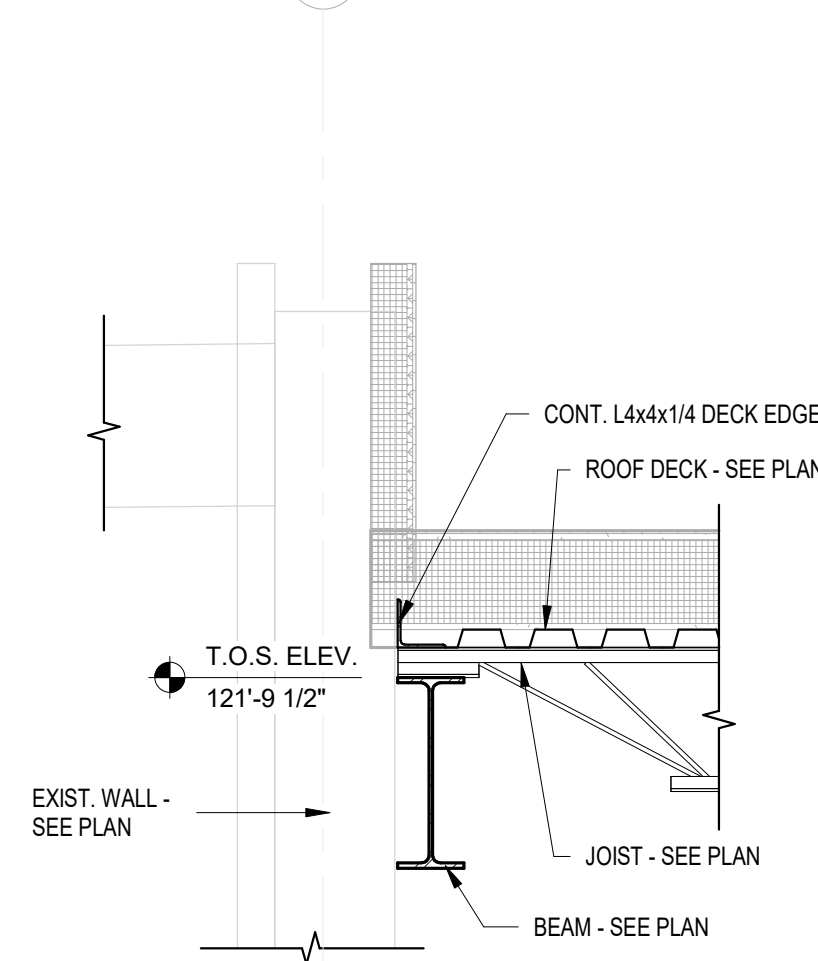
SHEET TITLE:  
BRACED FRAME ELEVATIONS



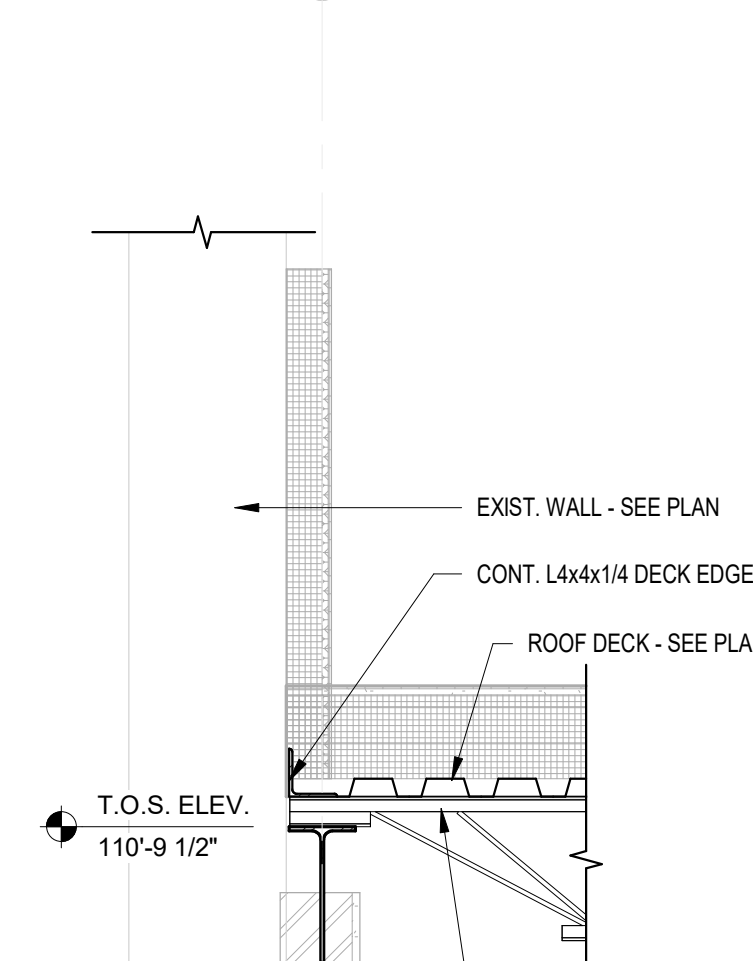
1 CAP OVER CHANNEL @ ADDITION  
3/4" = 1'-0"



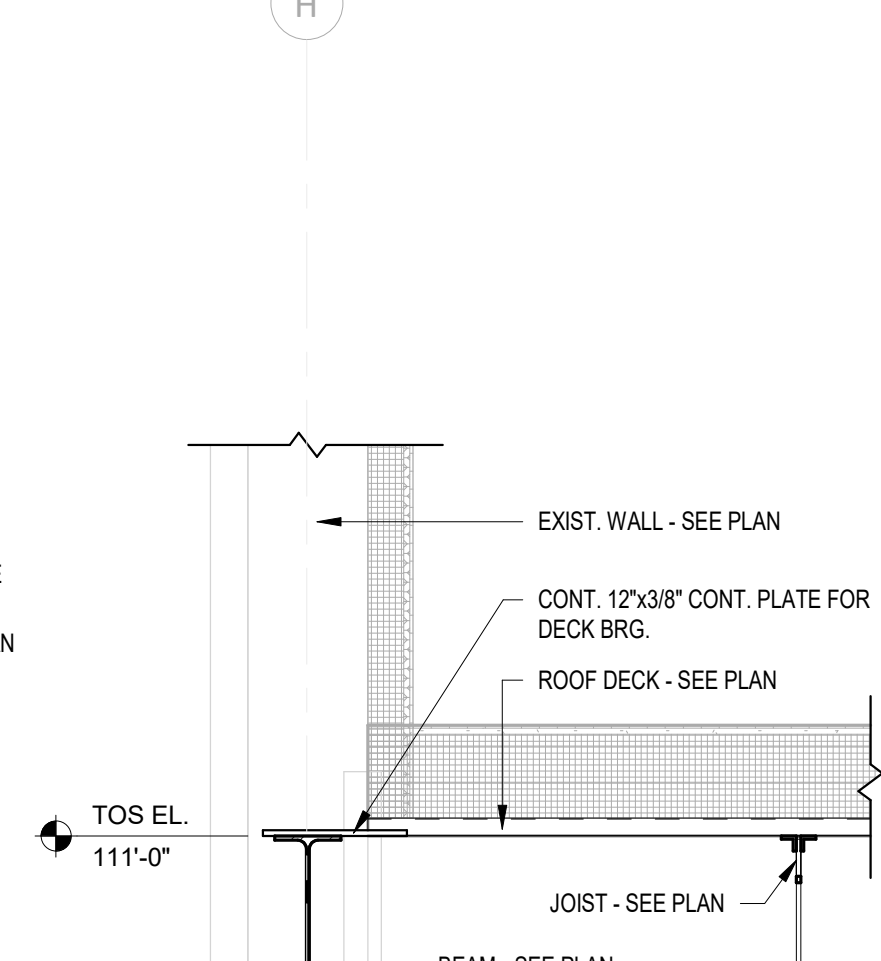
2 CAP OVER CHANNEL @ EXIST.  
3/4" = 1'-0"



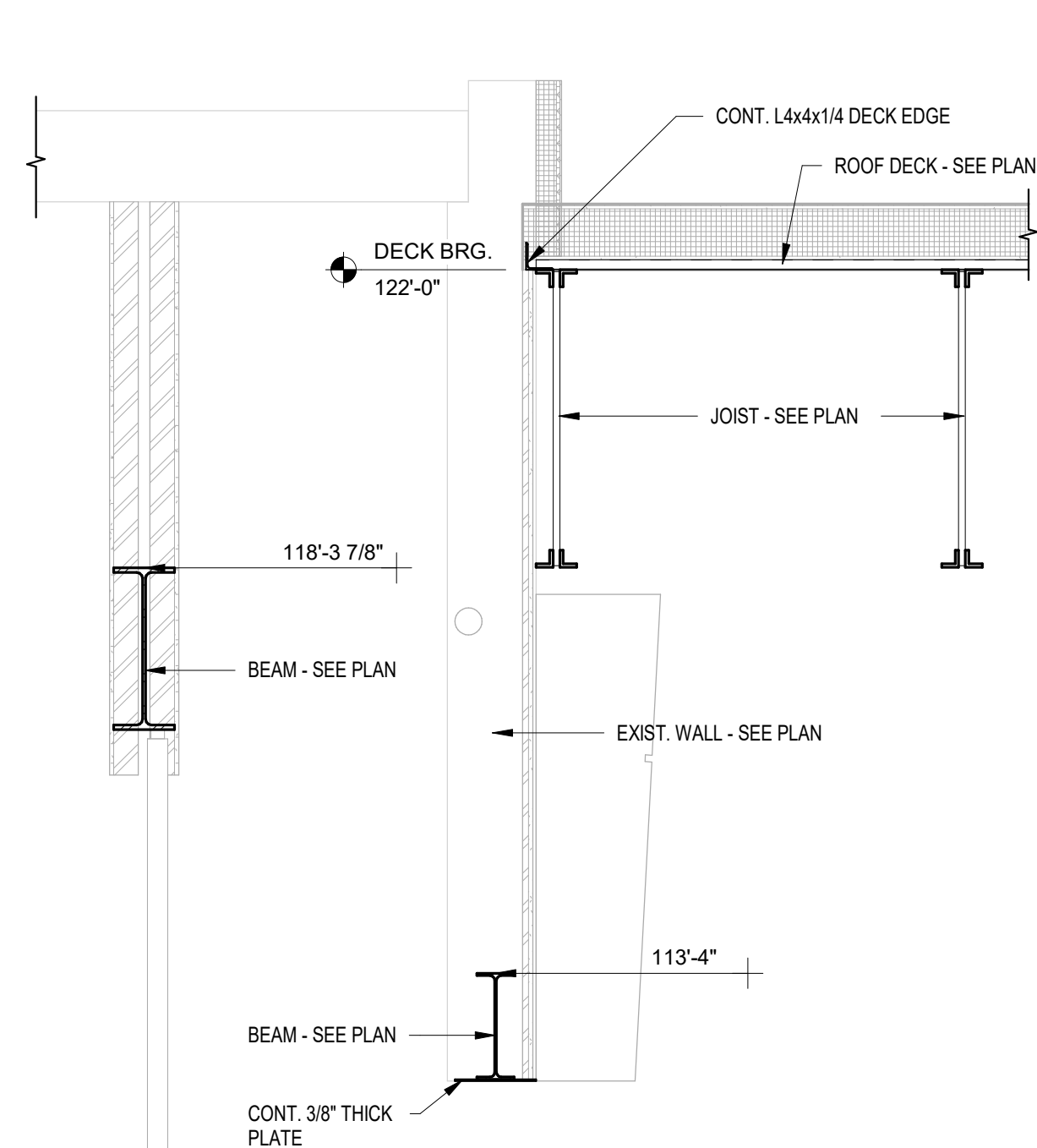
4 WALL SECTION @ EXIST.1  
3/4" = 1'-0"



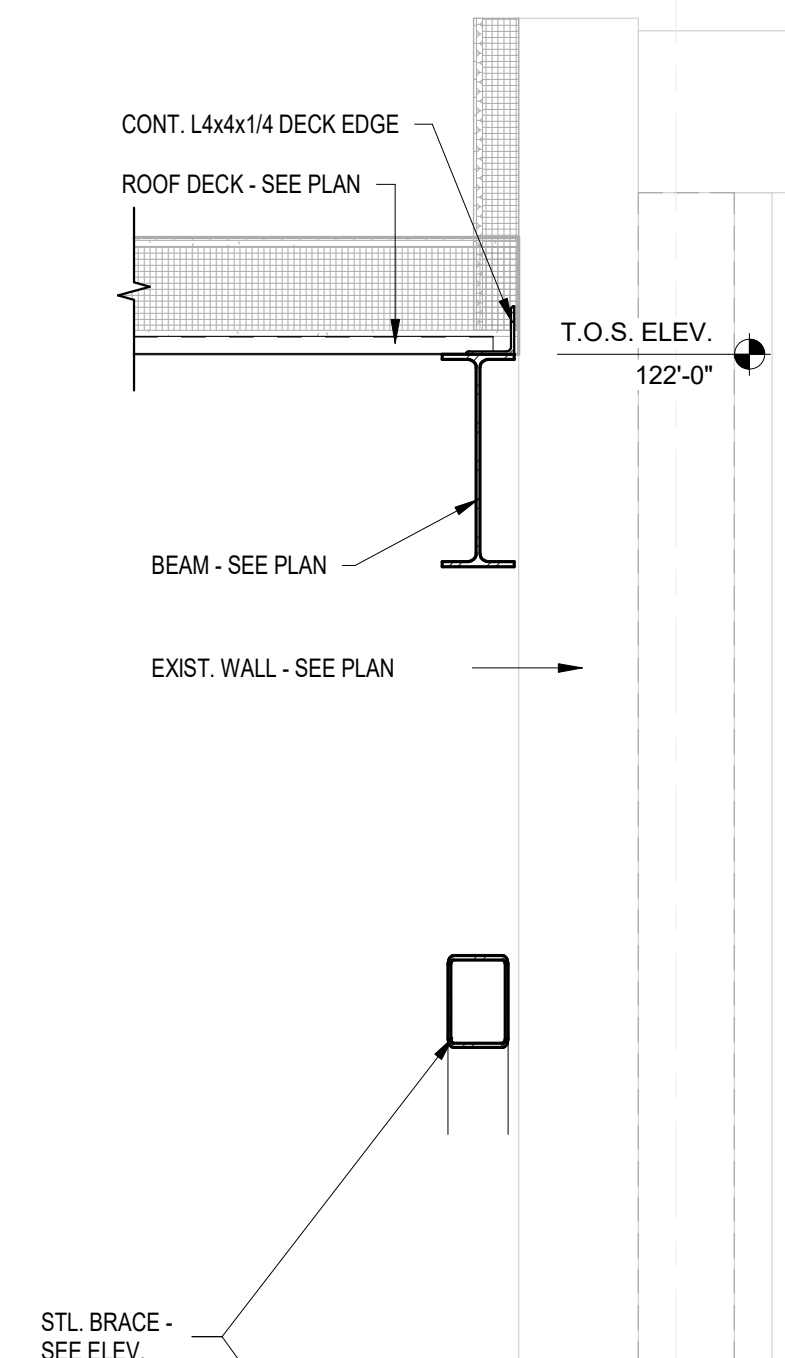
6 WALL SECTION @ EXIST.3  
3/4" = 1'-0"



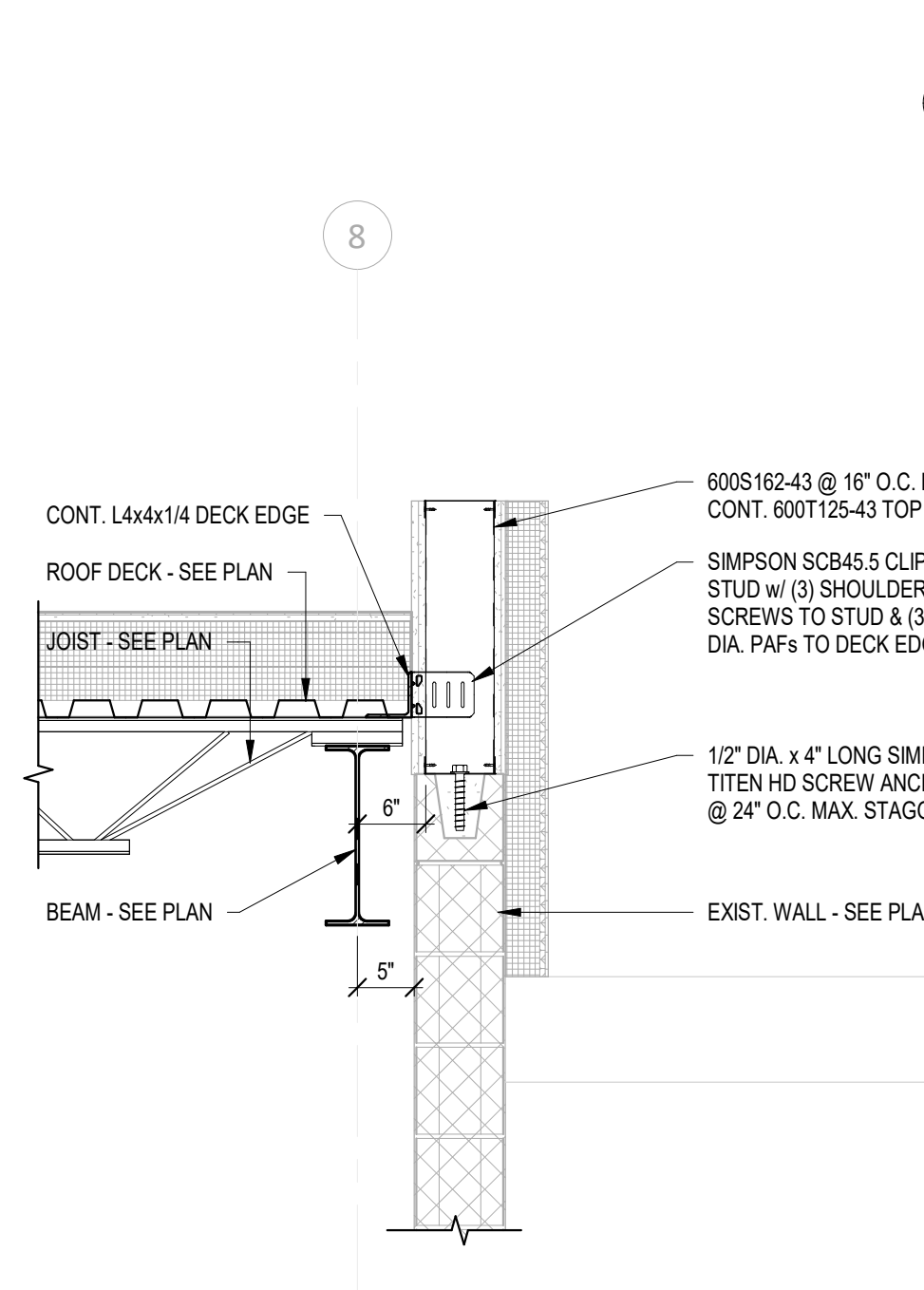
7 WALL SECTION @ EXIST.4  
3/4" = 1'-0"



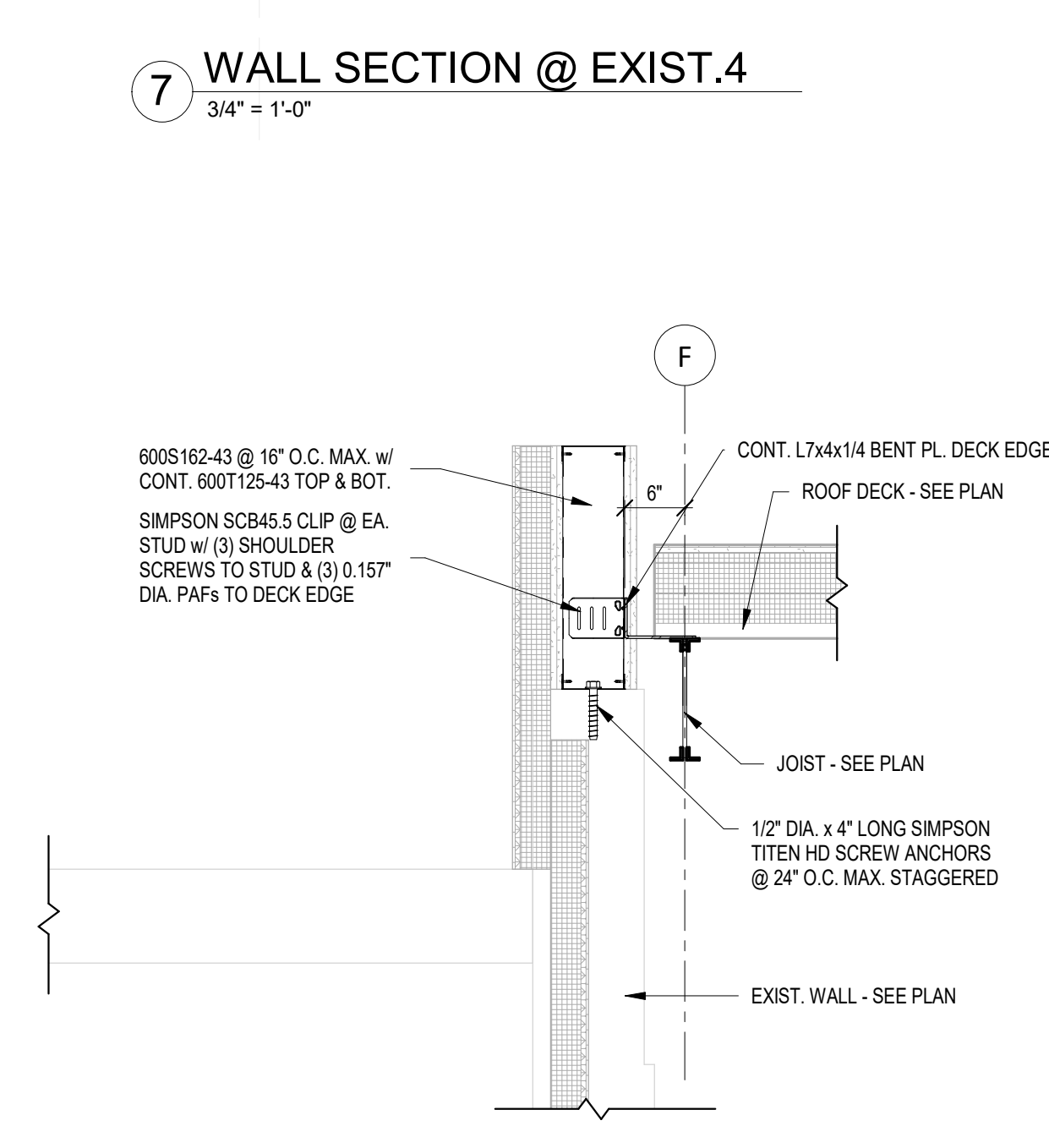
5 WALL SECTION @ EXIST.2  
1/2" = 1'-0"



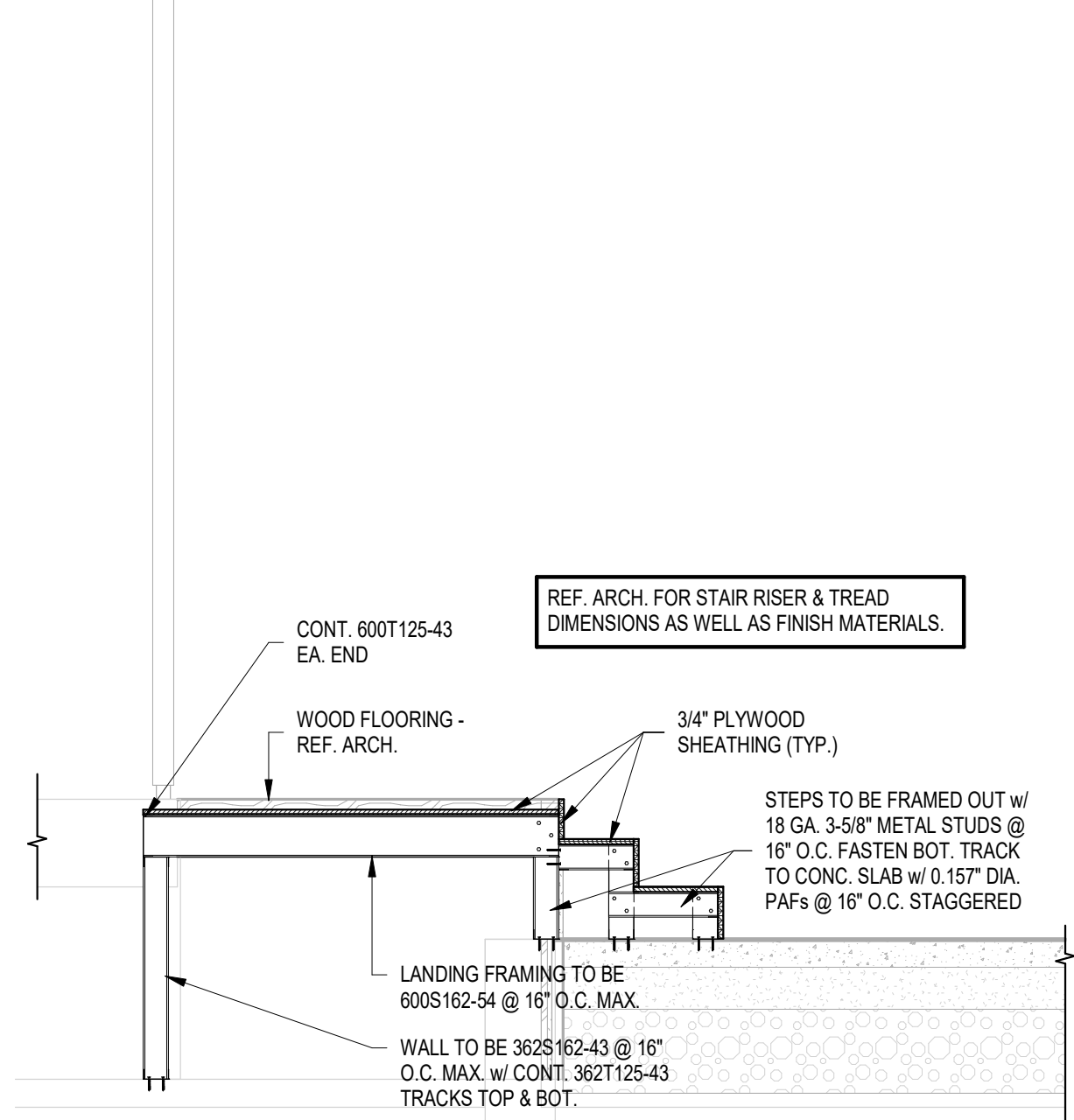
3 WALL SECTION @ EXIST.  
3/4" = 1'-0"



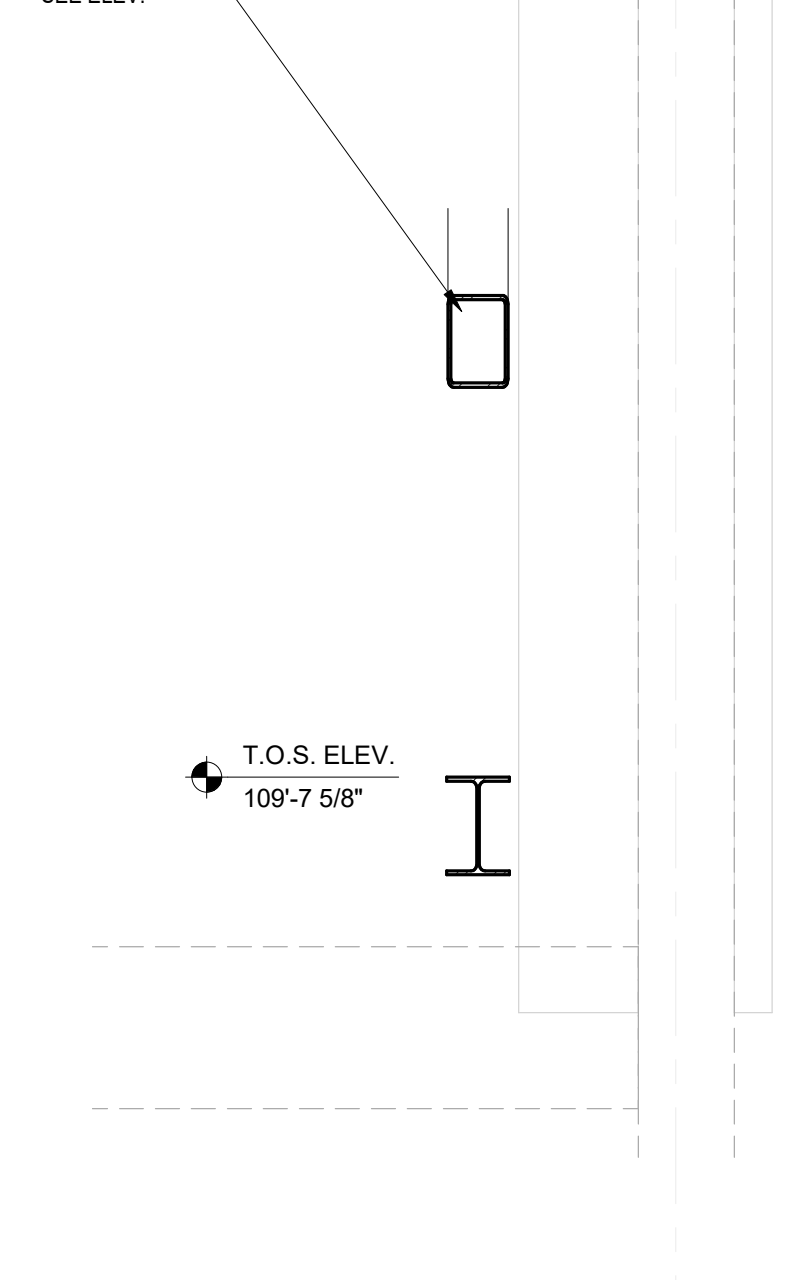
8 WALL SECTION @ EXIST.5  
3/4" = 1'-0"



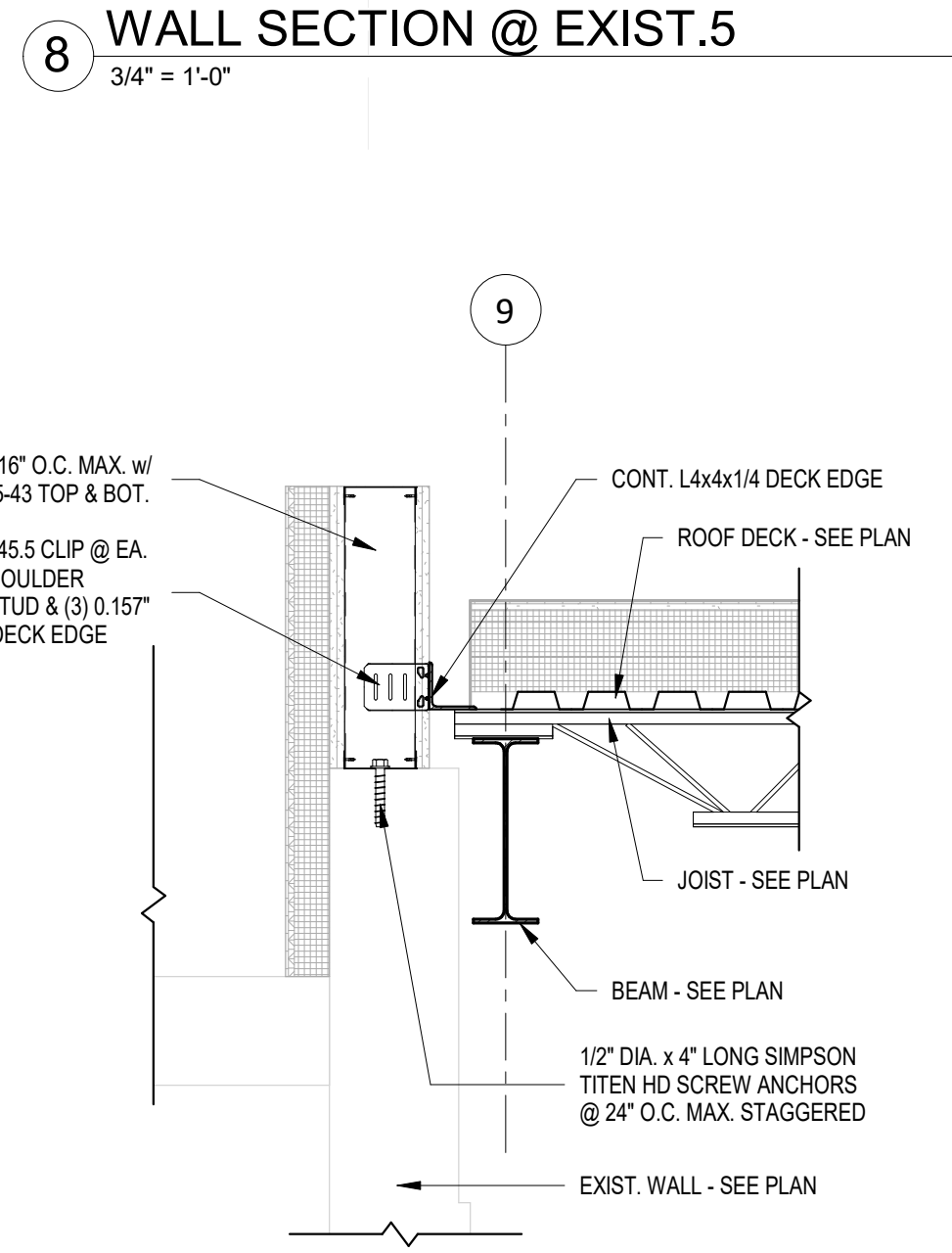
9 WALL SECTION @ EXIST.6  
3/4" = 1'-0"



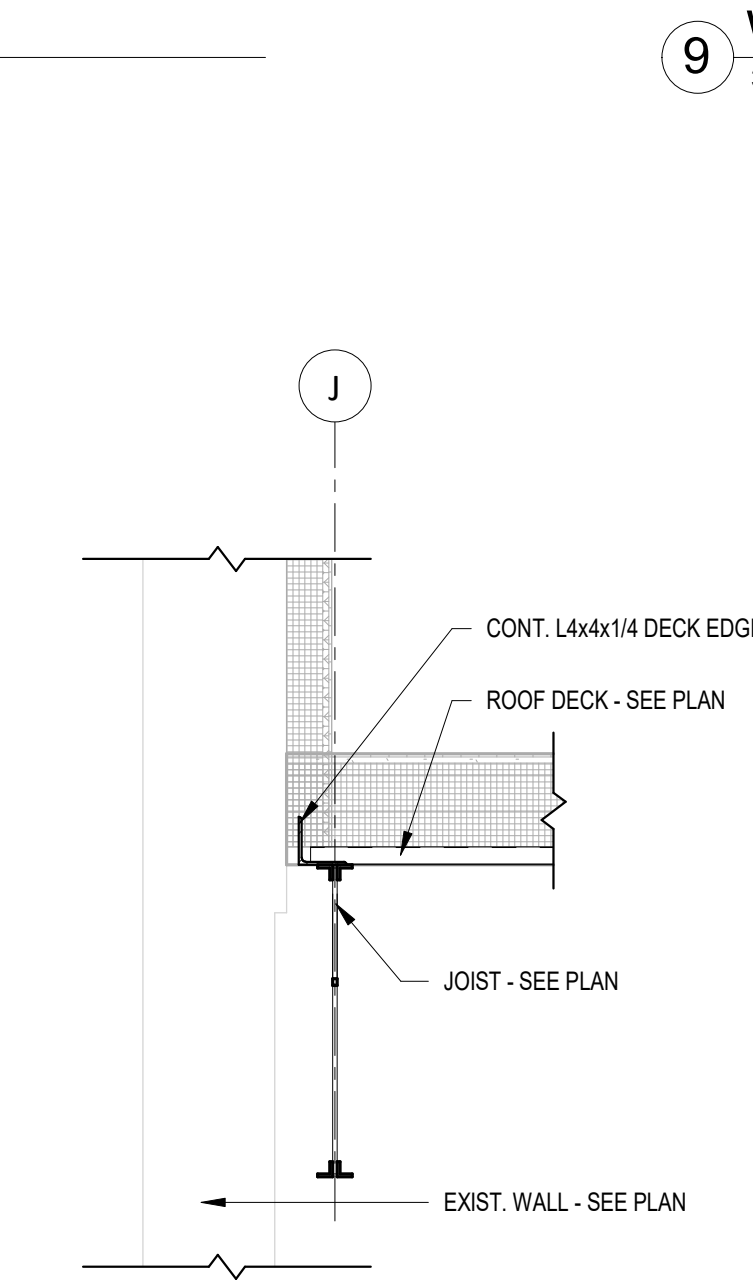
5 WALL SECTION @ EXIST.2  
1/2" = 1'-0"



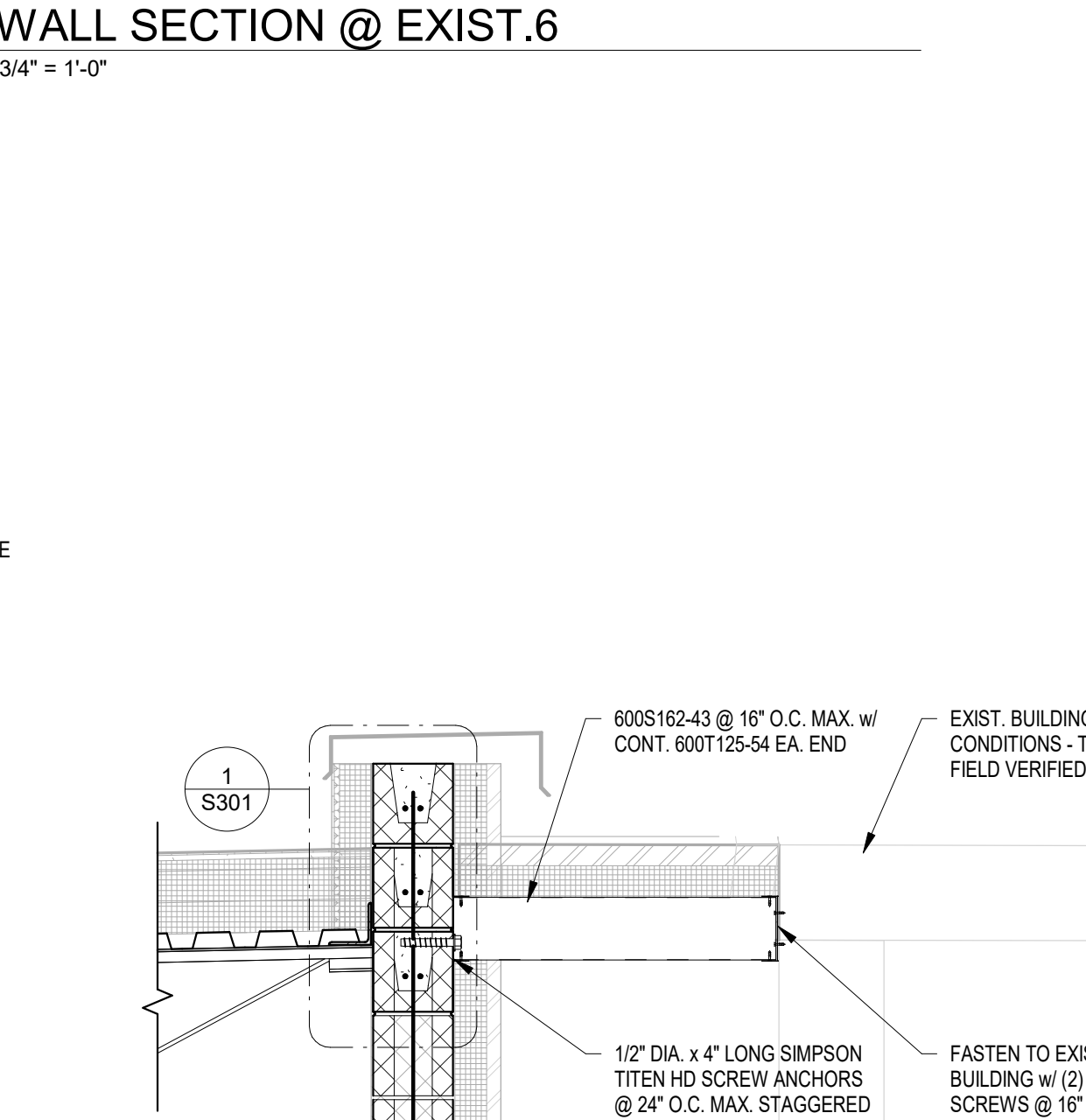
3 WALL SECTION @ EXIST.  
3/4" = 1'-0"



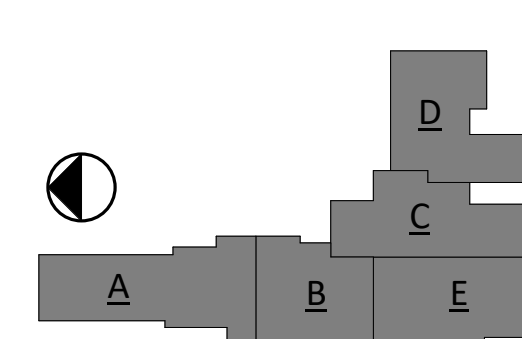
10 WALL SECTION @ EXIST.7  
3/4" = 1'-0"



11 WALL SECTION @ EXIST.8  
3/4" = 1'-0"



12 WALL SECTION @ EXIST.9  
3/4" = 1'-0"



RISE PROJECT NO: 22359



ISSUE: 01-30-23 100% CONSTRUCTION DOCUMENTS

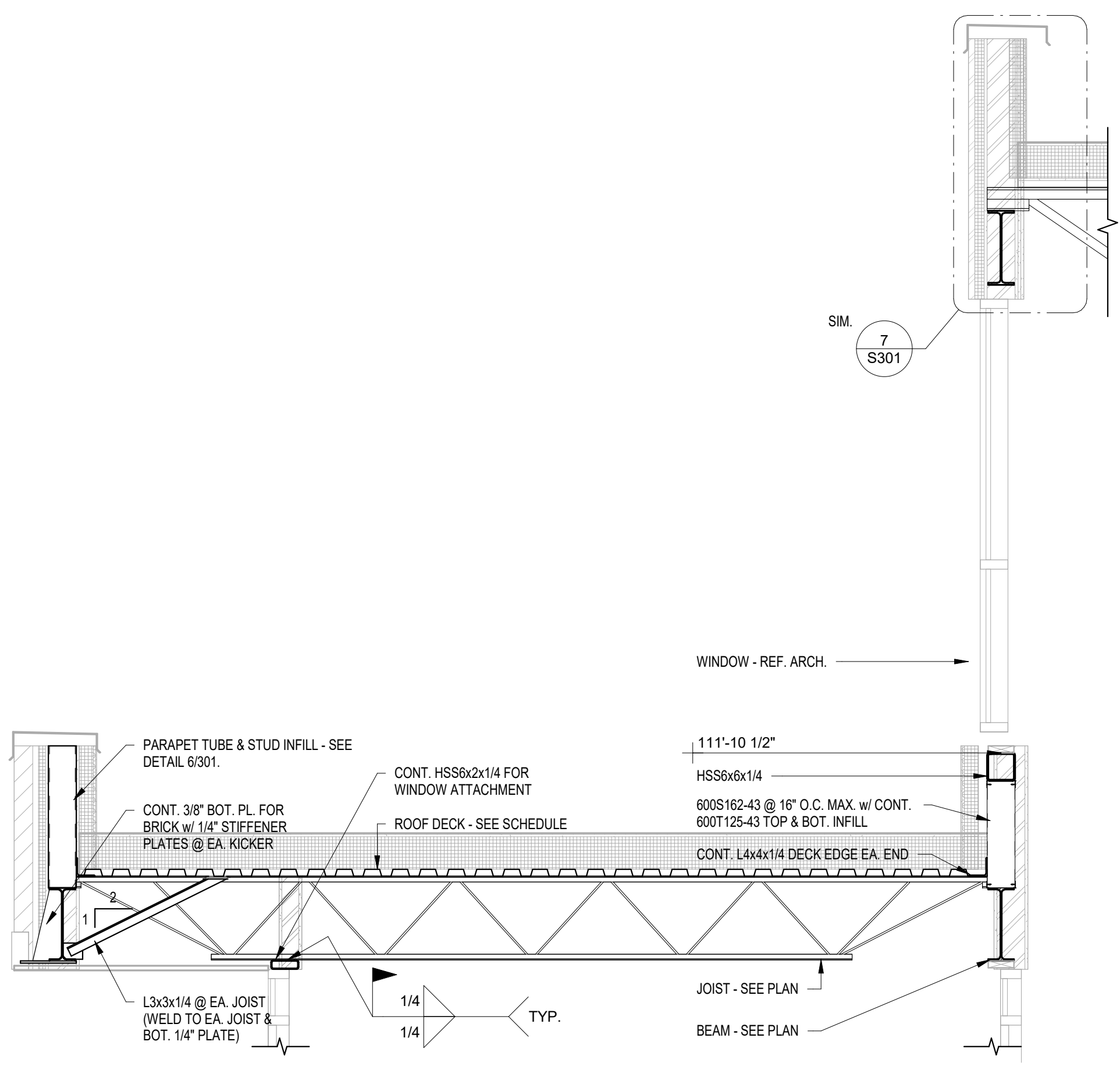
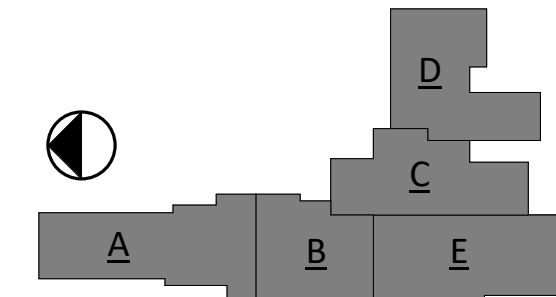
REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

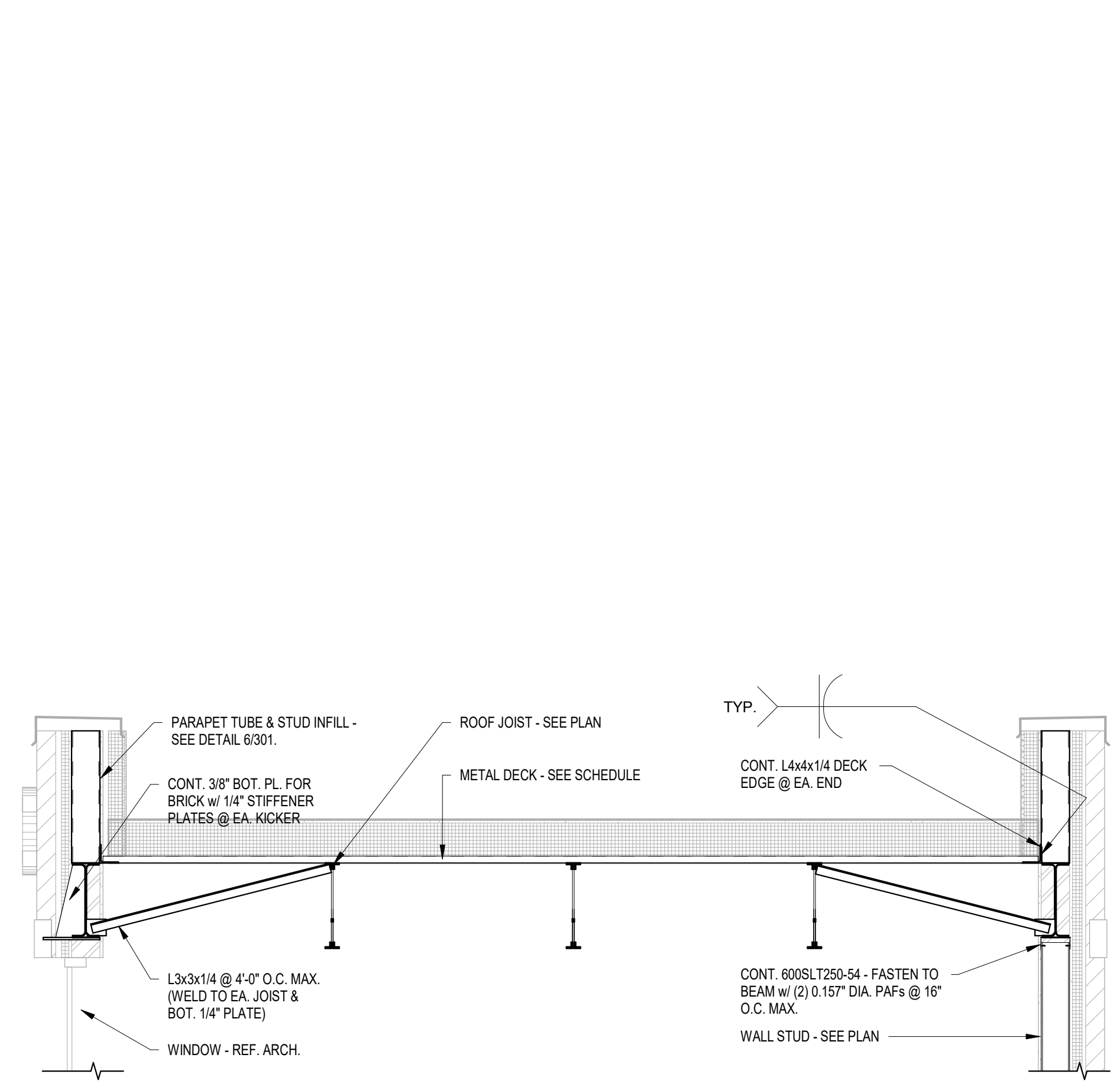
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
WALL SECTIONS

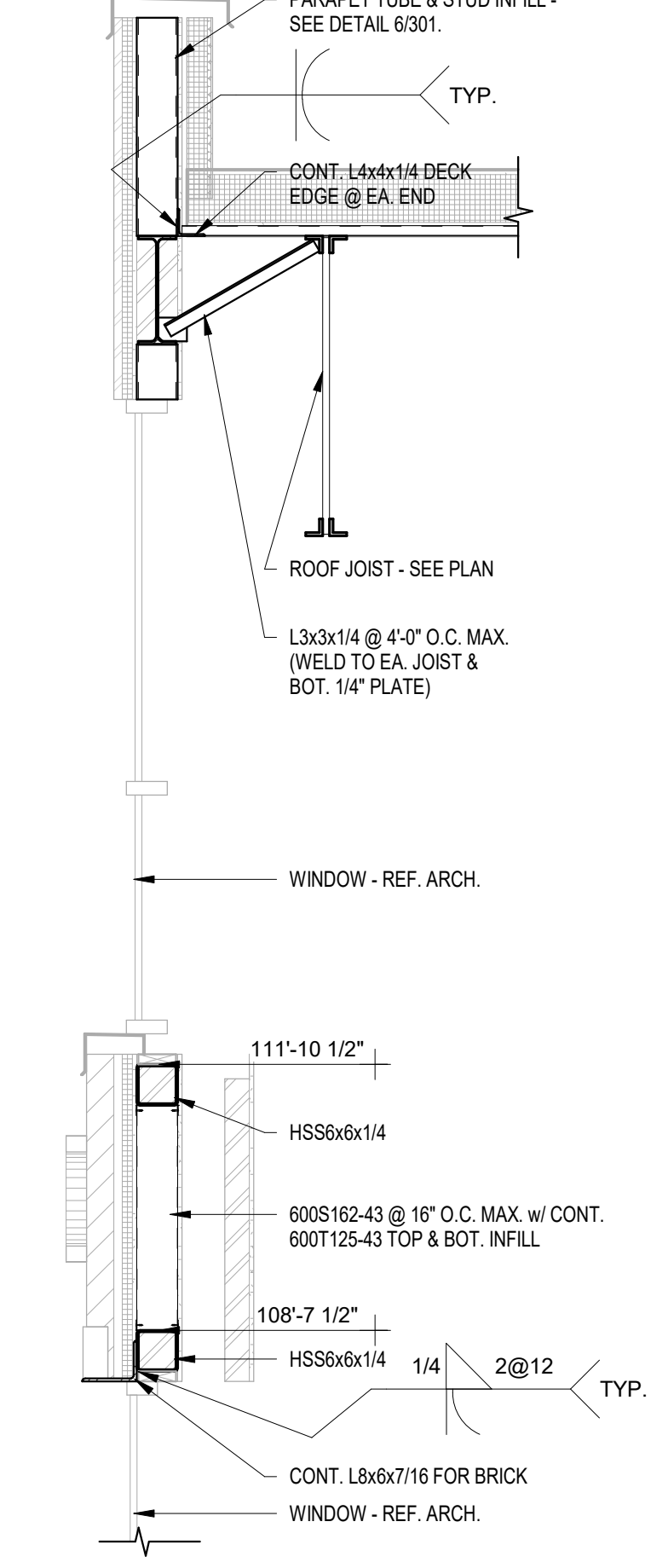




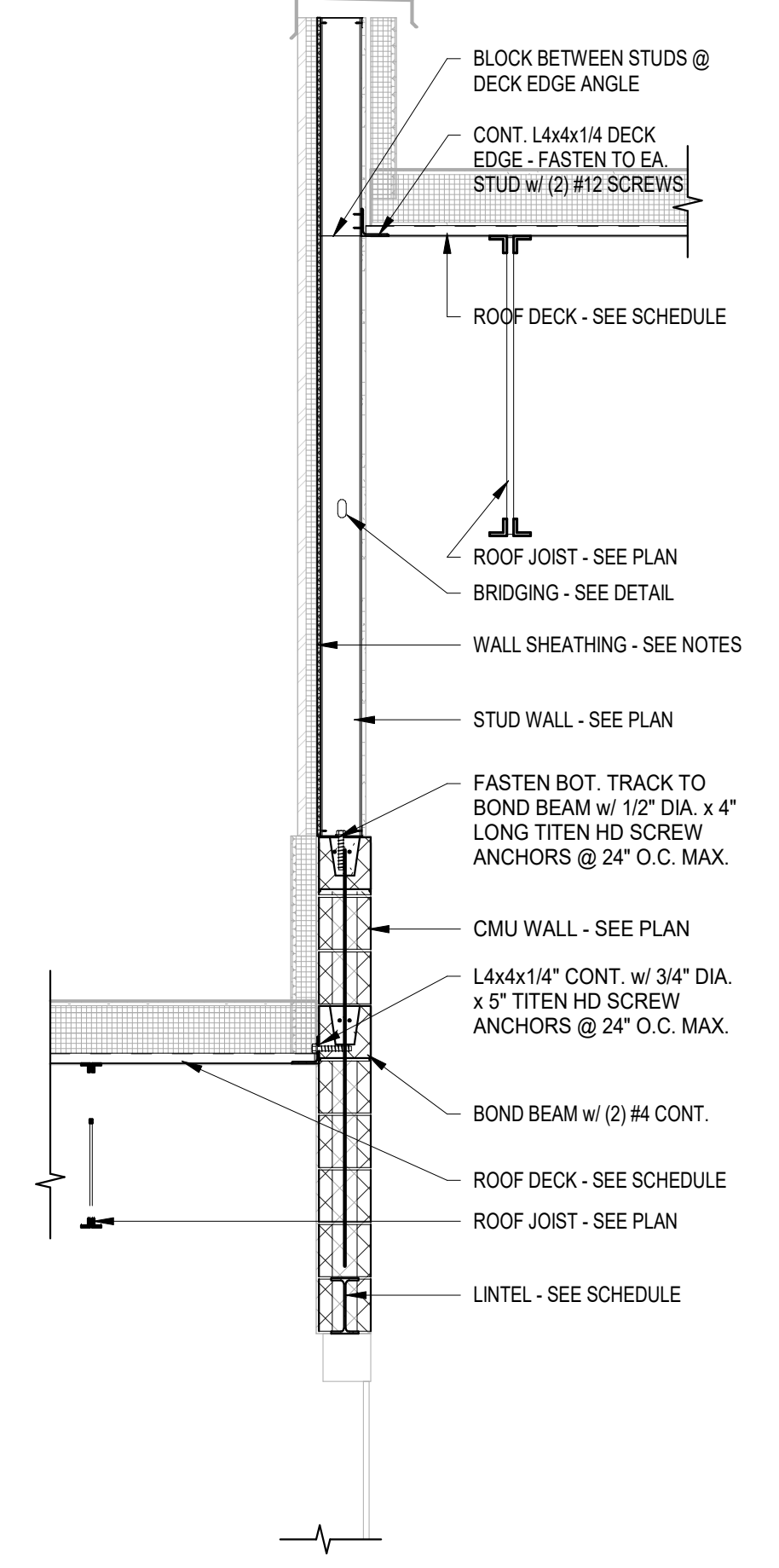
**1** ENTRYWAY FRAMING  
1/2" = 1'-0"



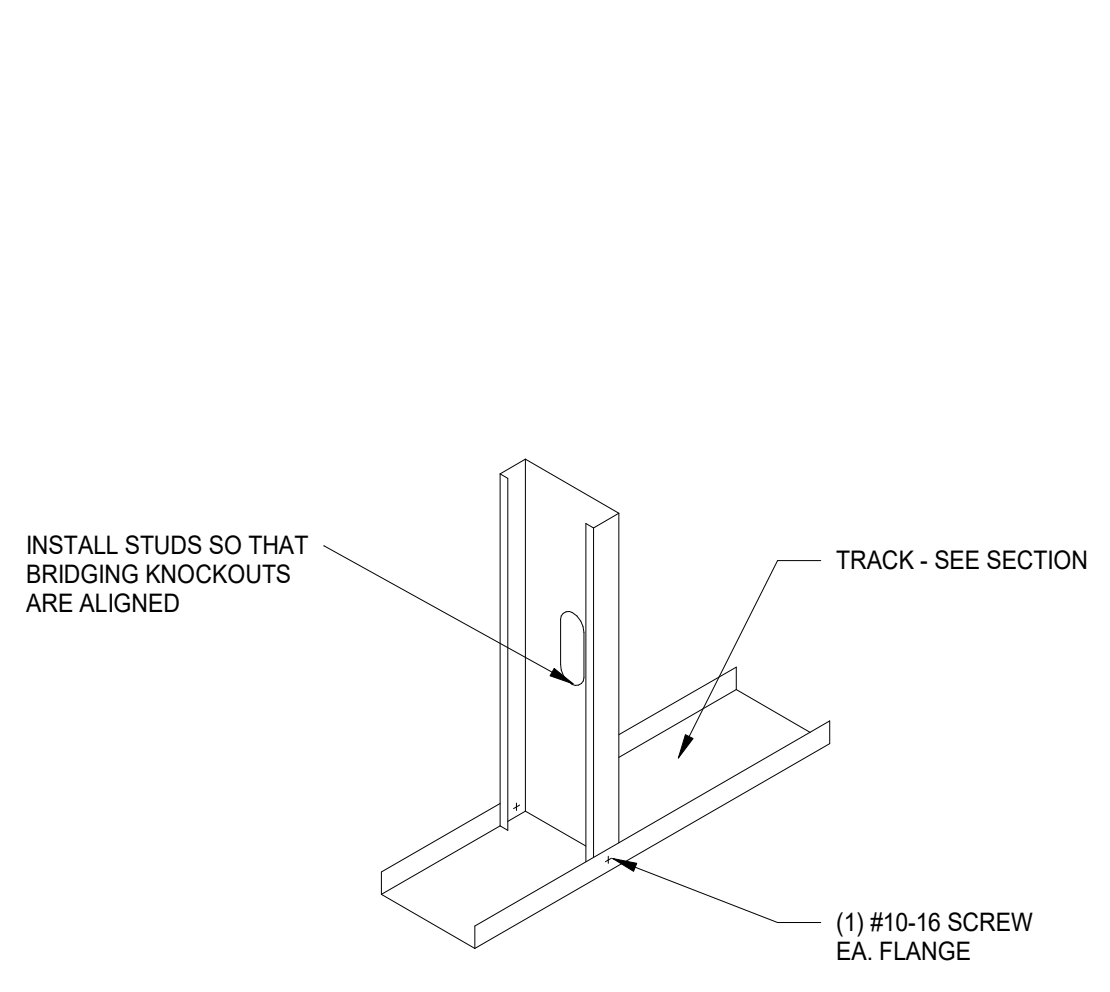
**2** ENTRYWAY FRAMING 2  
1/2" = 1'-0"



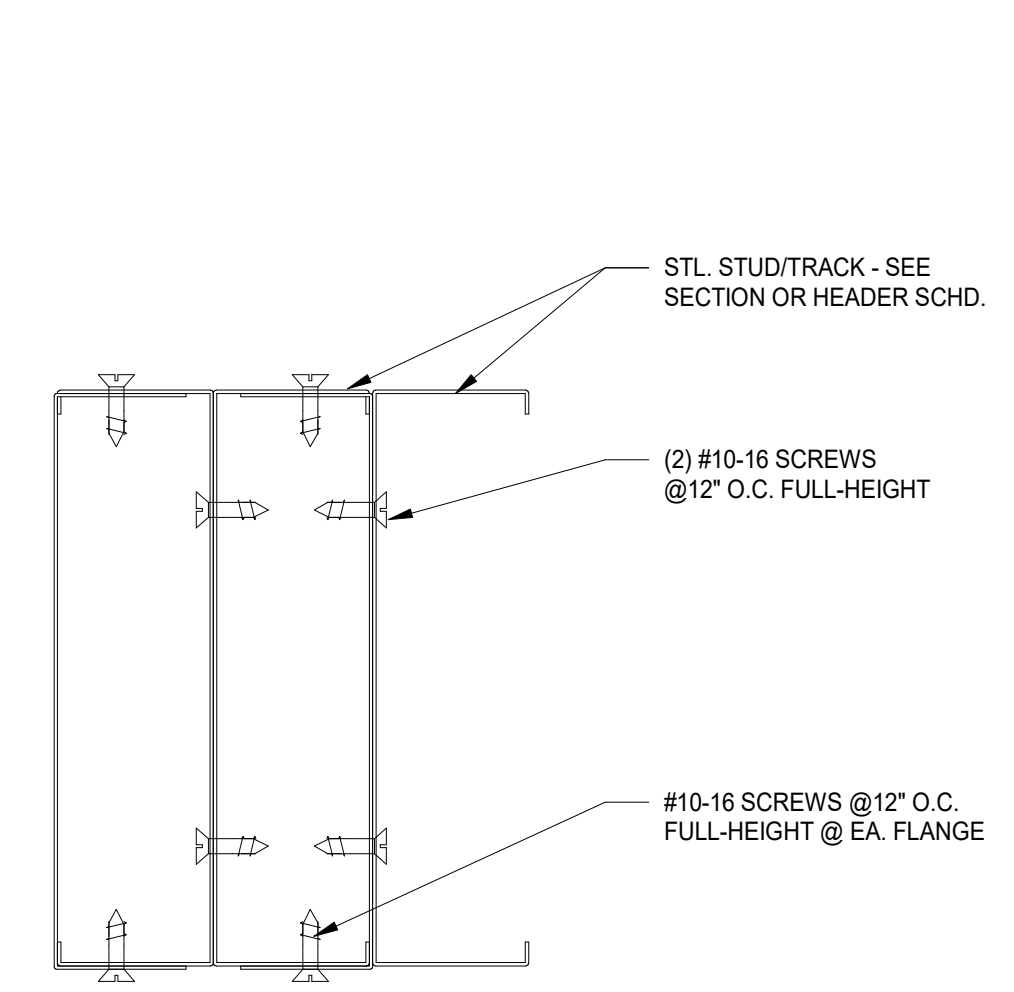
**3** ENTRYWAY FRAMING 3  
1/2" = 1'-0"



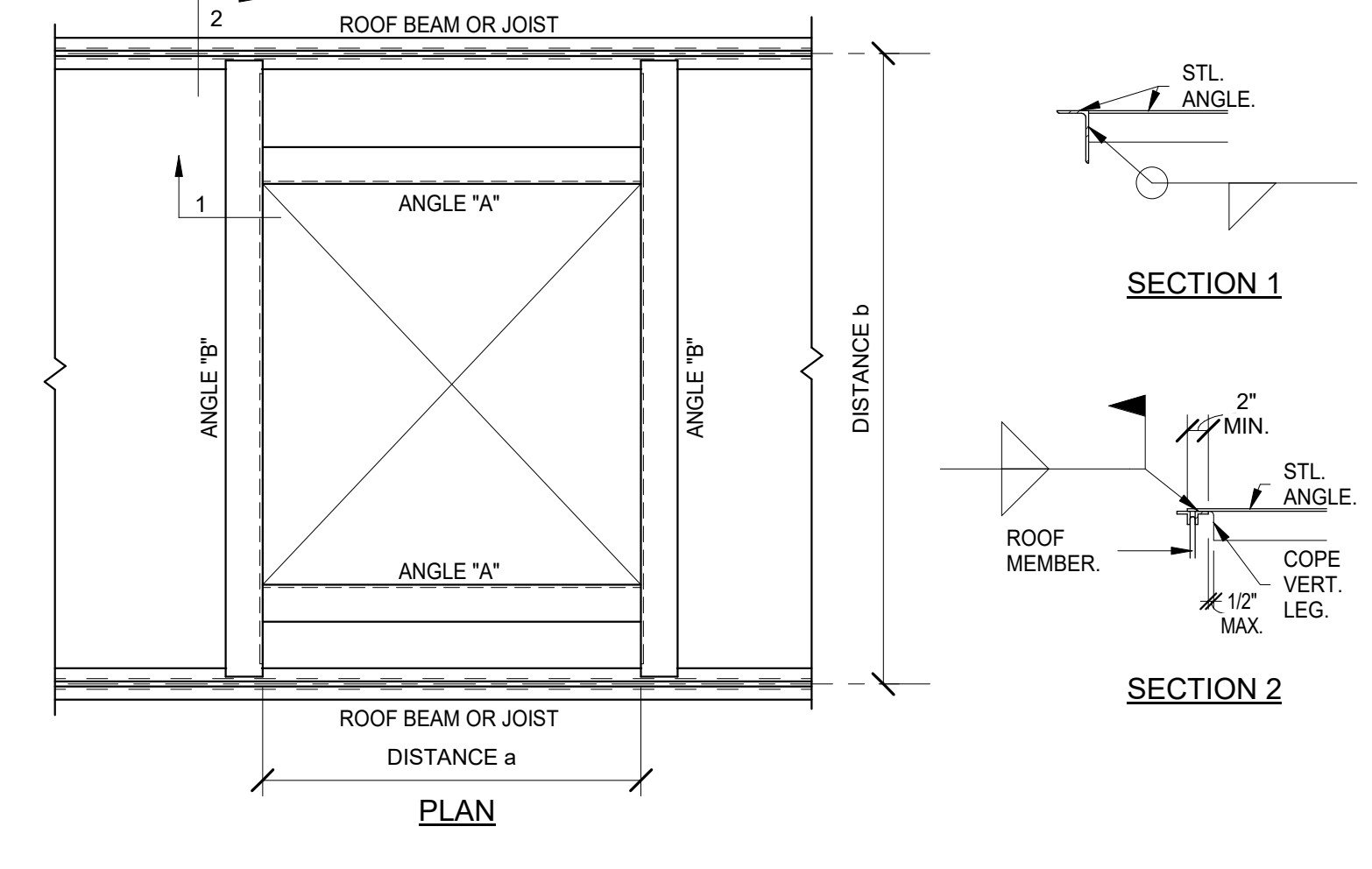
**4** COMMONS @ LOW ROOF  
1/2" = 1'-0"



**5** STUD TO TRACK DETAIL  
3/4" = 1'-0"



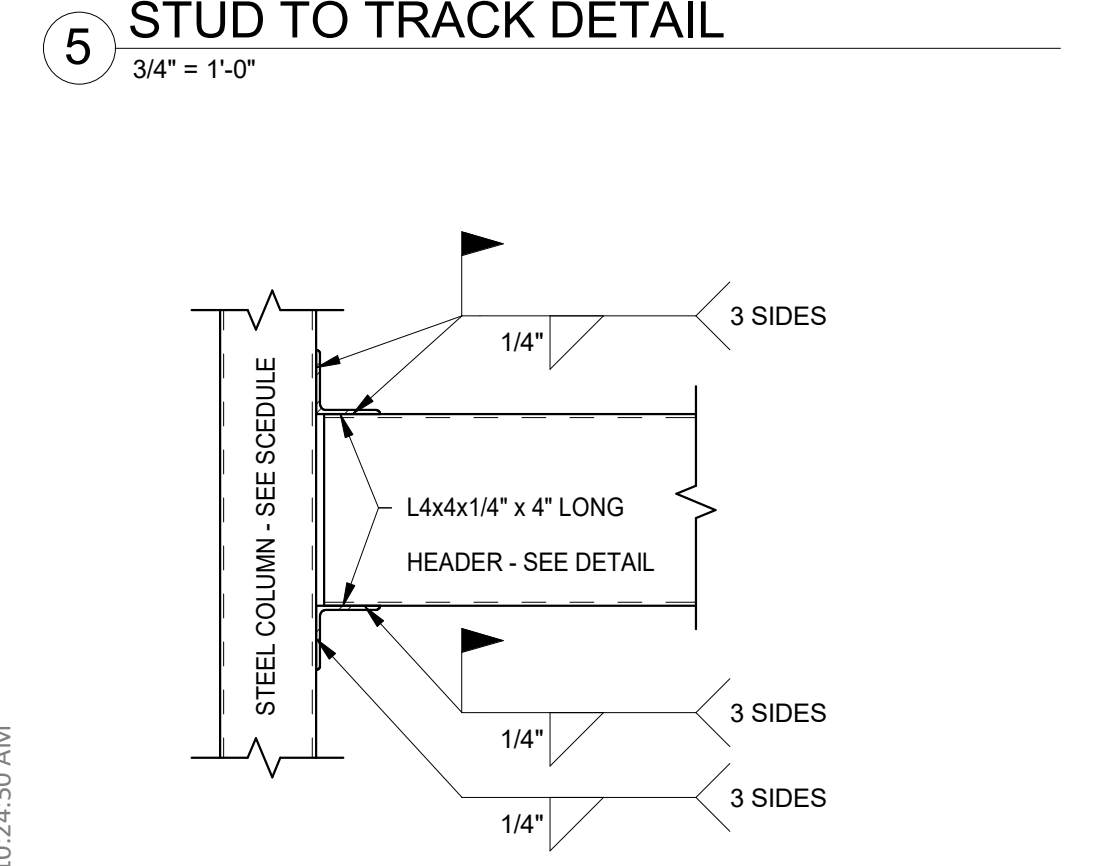
**6** L.G. MULTIPLE STUD CONN. DTL.  
6" = 1'-0"



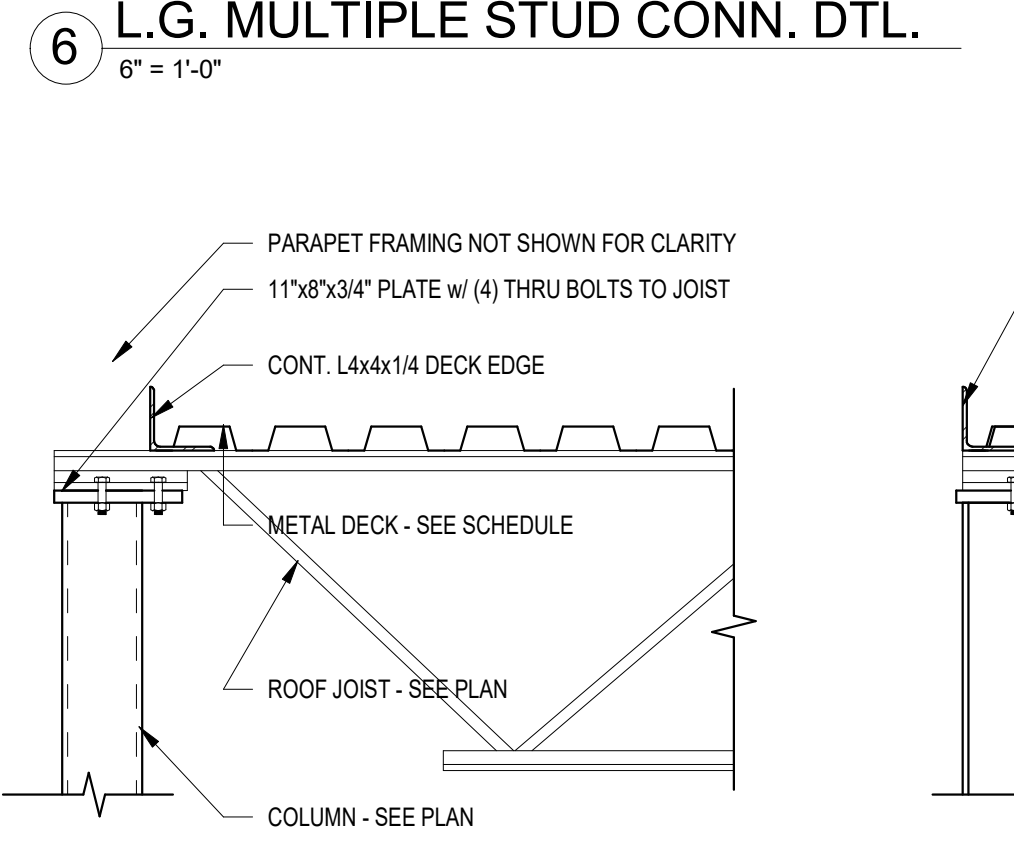
**7** TYPICAL ROOF OPENING W.A.F.  
3/4" = 1'-0"

		DISTANCE b			
ANGLE "A"	ANGLE "B"	0ft - 4ft	4ft - 8ft	8ft - 12ft	12ft - 16ft
0ft - 2ft	L3x3x1/4"	L3x3x1/4"	L3x3x1/4"	L3x3x1/4"	L3x3x1/4"
2ft - 4ft	L3x3x1/4"	L3x3x1/4"	L3x3x1/4"	L3x3x1/4"	L3x3x1/4"
4ft - 6ft	L5x3x1/4"	L3x3x1/4"	L5x3x1/4"	L5x3x1/4"	L5x3x1/4"
6ft - 8ft	L5x3x3/8"	L3x3x1/4"	L5x3x3/8"	L5x3x3/8"	L5x3x3/8"

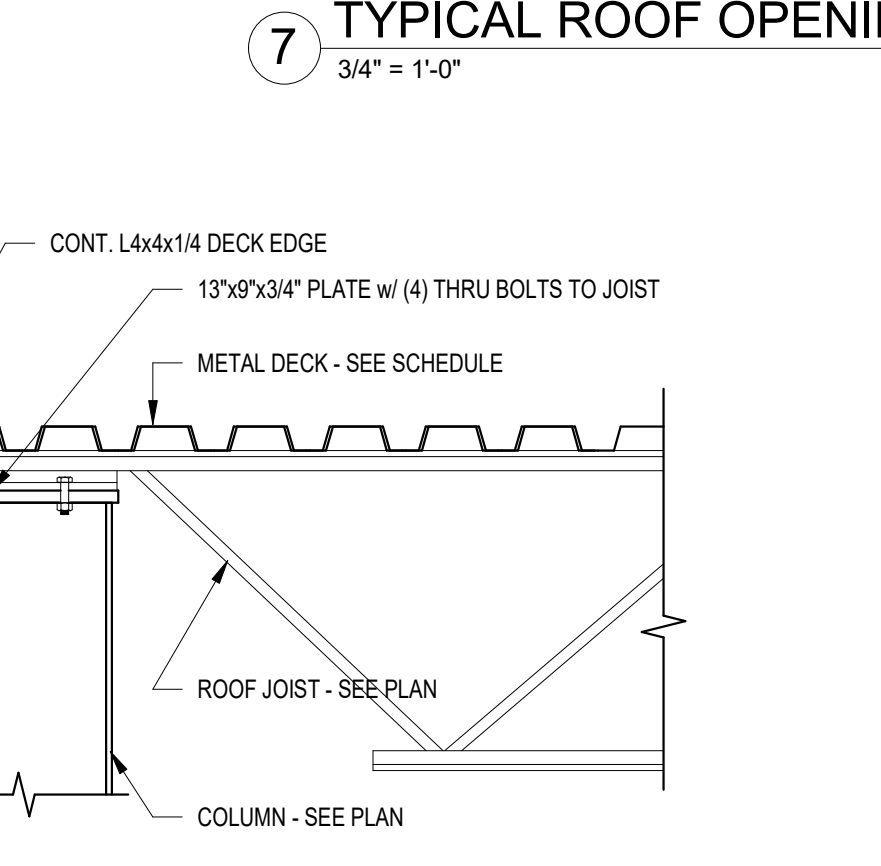
NOTES:- LONG LEGS VERTICAL. (TYP.)  
- FOR OPENINGS LARGER THAN SHOWN, CONTACT STRUCTURAL ENGINEER.



**8** HSS JAMB TO HSS HEADER/SILL  
1" = 1'-0"



**9** JOIST BRG. ON COL.  
1" = 1'-0"



**10** FOUND. WALL SECTION @ RAMP  
3/4" = 1'-0"

RISE PROJECT NO: 22359



ISSUE: 01-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE


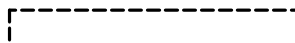
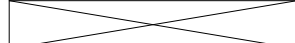
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
STRUCTURAL DETAILS

### GENERAL NOTES - DEMOLITION

1. THE OWNER'S NORMAL OPERATIONS WILL BE CONTINUED DURING DEMOLITION. DEMOLITION CONTRACTOR SHALL NOT INTERFERE WITH THESE OPERATIONS IN ANY WAY WITHOUT THE OWNER'S EXPRESSED CONSENT.
2. PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
3. PROVIDE 1HR FIRE RESISTANT CONSTRUCTION BARRIERS WHERE REQ'D TO PROTECT EXISTING CONSTRUCTION AND OWNERS OPERATIONS.
4. PRIOR TO CUTTING EXISTING CONSTRUCTION, LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL FLOOR PENETRATIONS. UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC. AND ANY WALLS THAT CONTAIN LIFE SAFETY VERTICAL RISERS THAT MUST REMAIN IN OPERATION DURING THE DEMOLITION WORK.
5. PROVIDE SHORING, BRACING AND ANY OTHER MEANS REQ'D TO PROTECT AND MAINTAIN THE SAFETY, INTEGRITY AND STABILITY OF ALL EXISTING AND NEW CONSTRUCTION.
6. WHEN ROOFING, GLAZING, FLASHING, COPING OR PORTIONS OF EXTERIOR WALLS ARE REMOVED OR OPENED, SUITABLE WEATHER PROTECTION SHALL BE PROVIDED AND MAINTAINED FOR THE DURATION OF WORK.
7. WHEREVER WATER CLOSETS, FLOOR SINKS OR OTHER EQUIPMENT AND RELATED PIPING ARE TO BE REMOVED, PATCH FLOOR SLAB W/ CONCRETE AS REQUIRED.
8. ALL CONCRETE FLOOR SLABS NOTED TO BE REMOVED SHALL BE SAWCUT TO PROVIDE A NEAT JOINT.
9. SEE MECHANICAL, LANDSCAPE, AND ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE OF DEMOLITION WORK.
10. SALVAGE ALL EXISTING REMOVED BRICK FOR PATCHING AND REFINISH WORK AS REQ'D.
11. ALL DEMOLITION SHALL COMPLY WITH APPLICABLE LOCAL CODES AND STATE CODES AND ORDINANCES.
12. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

### DEMOLITION LEGEND

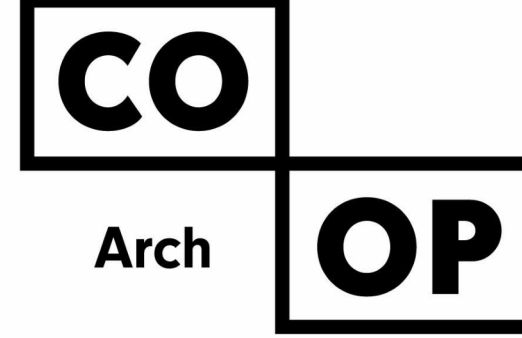
-  - EXISTING TO REMAIN
-  - EXISTING TO BE REMOVED
-  - COMPLETELY REMOVE ALL EXISTING CEILINGS U.N.O. (EITHER LAY-IN, PLASTER, OR GYPBOARD INCLUDING ALL CURTAIN, CEILING MOUNTED EQUIPMENT, SUPPORTS, TRACKS, ETC.)

ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.

REFER TO FINISH SCHEDULE FOR ADDITIONAL FINISH WORK REQUIRED IN OTHER AREAS THAT ARE NOT DOCUMENTED TO RECEIVE DEMOLITION/REMOVAL WORK INDICATED ON THE DEMOLITION PLANS.

### KEYNOTE SCHEDULE

2.01 REMOVE ENTIRE STRUCTURE TO EXTENTS AS INDICATED



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



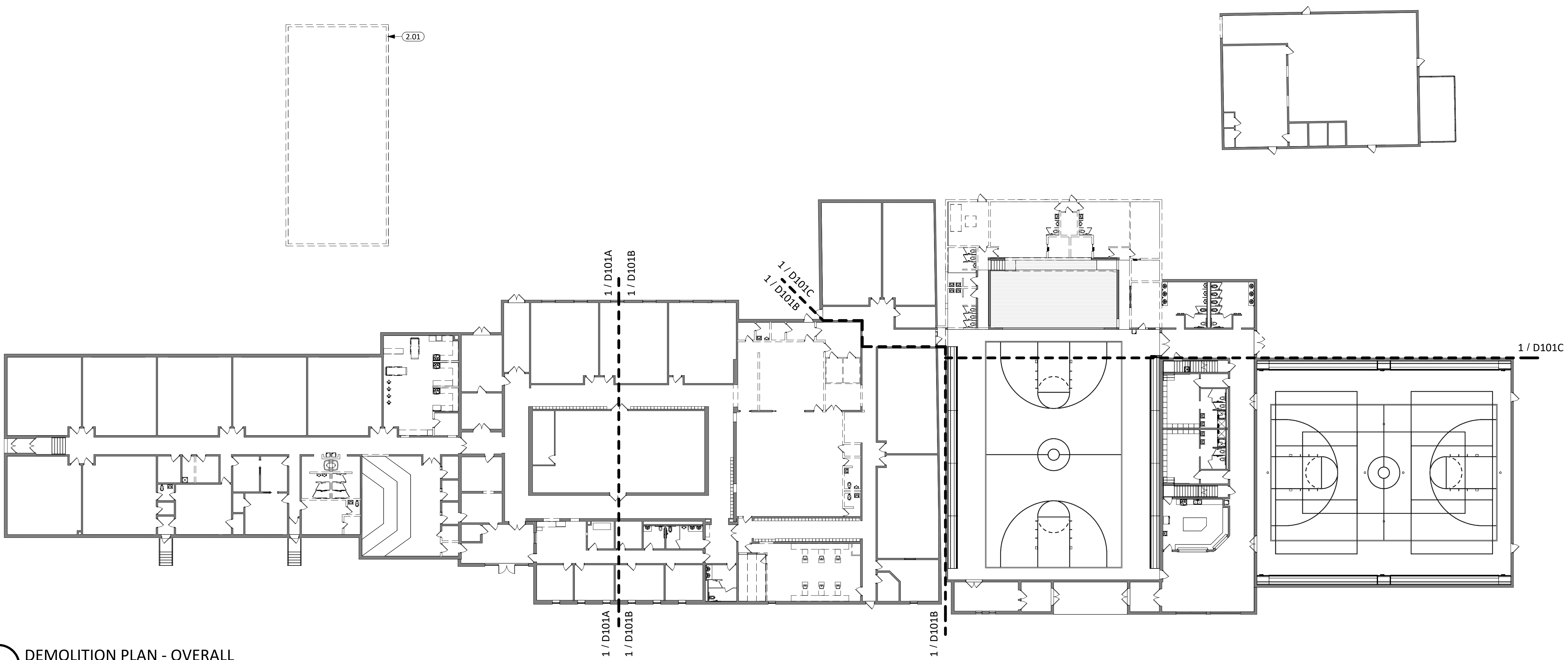
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
DEMOLITION PLAN - OVERALL

# D100



### GENERAL NOTES - DEMOLITION

- THE OWNER'S NORMAL OPERATIONS WILL BE CONTINUED DURING DEMOLITION. DEMOLITION CONTRACTOR SHALL NOT INTERFERE WITH THESE OPERATIONS IN ANY WAY WITHOUT THE OWNER'S EXPRESSED CONSENT.
- PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
- PROVIDE 1HR FIRE RESISTANT CONSTRUCTION BARRIERS WHERE REQ'D TO PROTECT EXISTING CONSTRUCTION AND OWNERS OPERATIONS.
- PRIOR TO CUTTING EXISTING CONSTRUCTION, LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL FLOOR PENETRATIONS, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC. AND ANY WALLS THAT CONTAIN LIFE SAFETY VERTICAL RISERS THAT MUST REMAIN IN OPERATION DURING THE DEMOLITION WORK.
- PROVIDE SHORING, BRACING AND ANY OTHER MEANS REQ'D TO PROTECT AND MAINTAIN THE SAFETY, INTEGRITY AND STABILITY OF ALL EXISTING AND NEW CONSTRUCTION.
- WHEN ROOFING, GLAZING, FLASHING, COPING OR PORTIONS OF EXTERIOR WALLS ARE REMOVED OR OPENED, SUITABLE WEATHER PROTECTION SHALL BE PROVIDED AND MAINTAINED FOR THE DURATION OF WORK.
- WHEREVER WATER CLOSETS, FLOOR SINKS OR OTHER EQUIPMENT AND RELATED PIPING ARE TO BE REMOVED, PATCH FLOOR SLAB W/ CONCRETE AS REQUIRED.
- ALL CONCRETE FLOOR SLABS NOTED TO BE REMOVED SHALL BE SAWCUT TO PROVIDE A NEAT JOINT.
- SEE MECHANICAL, LANDSCAPE, AND ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE OF DEMOLITION WORK.
- SALVAGE ALL EXISTING REMOVED BRICK FOR PATCHING AND REFINISH WORK AS REQ'D.
- ALL DEMOLITION SHALL COMPLY WITH APPLICABLE LOCAL CODES AND STATE CODES AND ORDINANCES.
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

### DEMOLITION LEGEND

- EXISTING TO REMAIN
- EXISTING TO BE REMOVED
- COMPLETELY REMOVE ALL EXISTING CEILINGS U.N.O. (EITHER LAY-IN, PLASTER, OR GYPBOARD INCLUDING ALL CURTAIN, CEILING MOUNTED EQUIPMENT, SUPPORTS, TRACKS, ETC.)

ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.

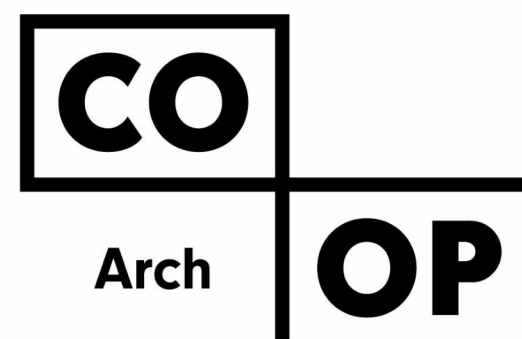
REFER TO FINISH SCHEDULE FOR ADDITIONAL FINISH WORK REQUIRED IN OTHER AREAS THAT ARE NOT DOCUMENTED TO RECEIVE DEMOLITION/REMOVAL WORK INDICATED ON THE DEMOLITION PLANS.

### KEYNOTE SCHEDULE

2.24	REMOVE PORTION OF MASONRY WALL
2.26	REMOVE PORTION OF STUD FRAMED WALL
2.36	REMOVE DOOR & H.M. FRAME
2.41	REMOVE WINDOW UNIT
2.54	REMOVE SINK; SEE MEP FOR MORE INFORMATION.
2.55	REMOVE TOILET AND TOILET ACCESSORIES. SEE MEP FOR MORE INFORMATION
2.56	REMOVE MOP SINK; SEE MEP FOR MORE INFORMATION.
2.57	REMOVE DRINKING FOUNTAIN; SEE MEP FOR MORE INFORMATION.
2.58	REMOVE URINAL; SEE MEP FOR MORE INFORMATION.
2.59	REMOVE TOILET, TOILET ACCESSORIES, AND TOILET PARTITIONS. SEE MEP FOR MORE INFORMATION.
2.60	REMOVE EQUIPMENT AND RETURN TO OWNER
2.61	REMOVE DESK
2.62	REMOVE KITCHEN STATION CASEWORK, SINK, RANGE, AND ASSOCIATED EQUIPMENT. COORDINATE WITH OWNER PRIOR TO DEMOLITION FOR ANY EQUIPMENT TO BE RETURNED
2.63	REMOVE WASHER/DRYER AND RETURN TO OWNER

### KEYNOTE SCHEDULE

2.64	REMOVE FRIDGE/FREEZER AND RETURN TO OWNER
2.65	REMOVE AND DISPOSE OF ALL CASEWORK IN THIS ROOM.
2.66	REMOVE AND RETURN TO OWNER ALL MARKERBOARDS, TACKBOARDS, AND SMARTBOARDS IN THIS ROOM.
2.67	REMOVE PORTIONS OF CONCRETE SLAB AS REQUIRED FOR NEW PLUMBING OR FOUNDATION WORK. SEE STRUCTURAL AND MEP FOR EXTENTS OF REQUIRED CUTTING AND PATCHING.
2.68	REMOVE CASEWORK AND PROTECT FOR REINSTALLATION.
2.69	REMOVE EQUIPMENT; SEE MEP FOR MORE INFORMATION
2.80	HATCHED AREA INDICATES REMOVAL OF EXISTING FLOOR SLAB AS REQUIRED FOR NEW PLUMBING; SEE MEP FOR MORE INFORMATION AND ANY ADDITIONAL AREAS TO BE CUT/PATCHED. COORDINATE W/ GC ON FINAL WIDTHS AND LENGTHS OF CUTTING AND PATCHING. FLOOR SHALL BE CUT CLEANLY SO THAT THERE IS A NEAT JOINT WHEN RECEIVING A NEW FLOOR SLAB.
2.84	REMOVE AND PROTECT FOR REINSTALLATION PORTIONS OF ACOUSTIC TILE CEILING AS REQUIRED FOR NEW MEP WORK. SEE MEP DRAWINGS FOR MORE INFORMATION.

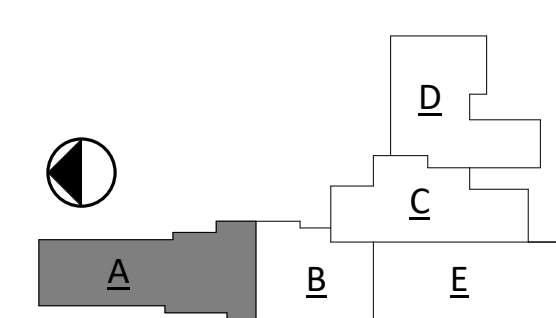


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



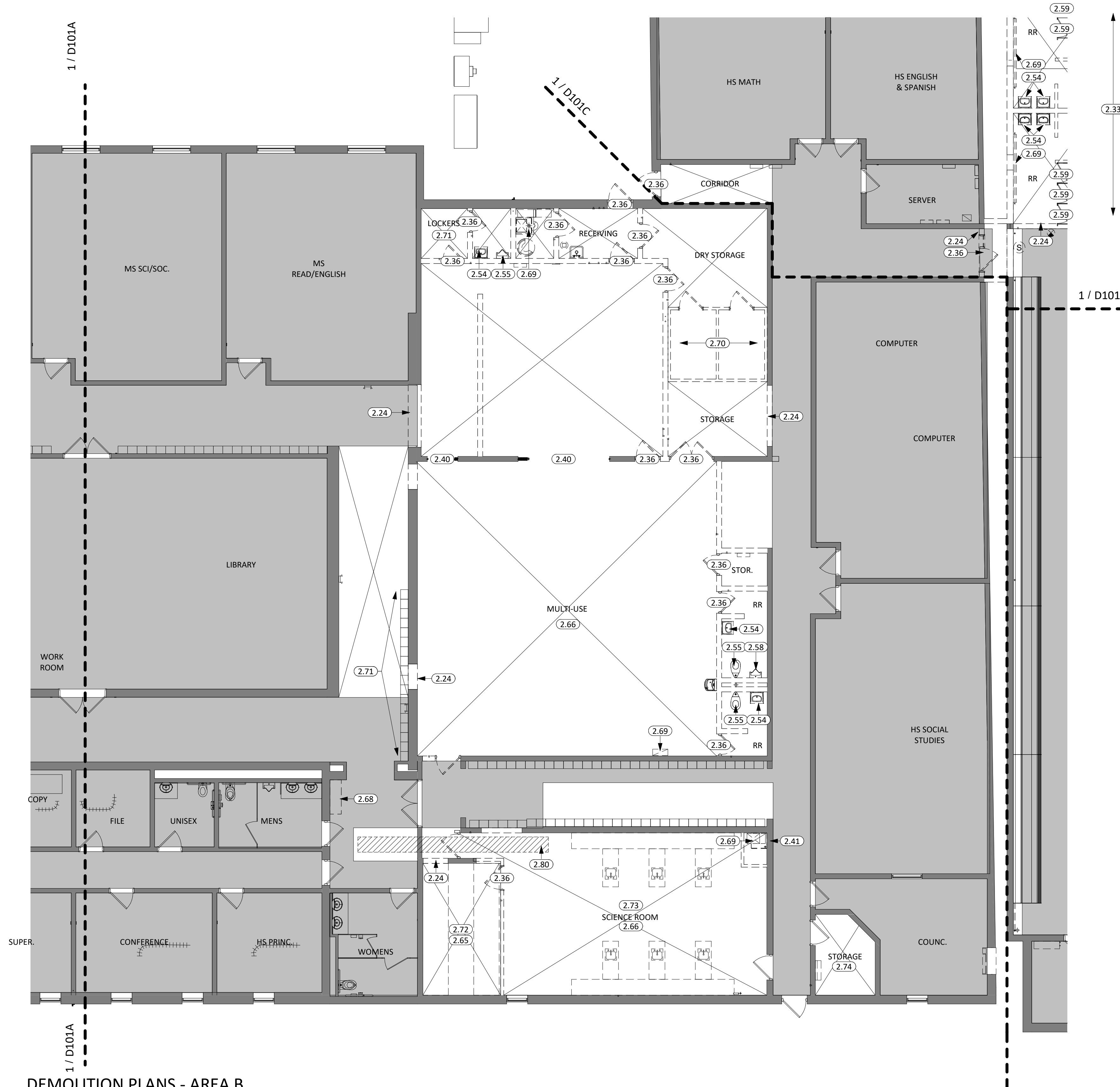
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
DEMOLITION PLAN - AREA A

# D101A



**DEMOLITION PLANS - AREA B**

1/8" = 1'-0"

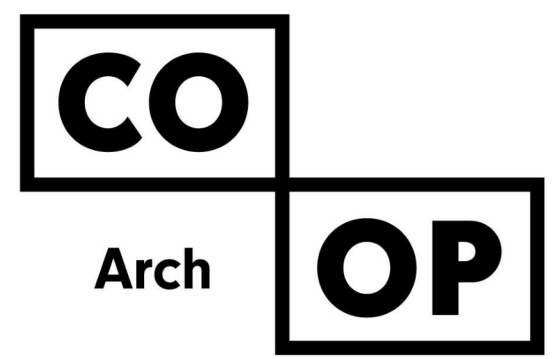
KEYNOTE SCHEDULE	
2.24	REMOVE PORTION OF MASONRY WALL
2.33	REMOVE ACOUSTIC PANEL CEILING
2.36	REMOVE DOOR & H.M. FRAME
2.40	REMOVE OPERABLE WALL PARTITION
2.41	REMOVE WINDOW UNIT
2.54	REMOVE SINK; SEE MEP FOR MORE INFORMATION.
2.55	REMOVE TOILET AND TOILET ACCESSORIES. SEE MEP FOR MORE INFORMATION
2.58	REMOVE URINAL; SEE MEP FOR MORE INFORMATION.
2.59	REMOVE TOILET, TOILET ACCESSORIES, AND TOILET PARTITIONS. SEE MEP FOR MORE INFORMATION.
2.65	REMOVE AND DISPOSE OF ALL CASEWORK IN THIS ROOM.
2.66	REMOVE AND RETURN TO OWNER ALL MARKERBOARDS, TACKBOARDS, AND SMARTBOARDS IN THIS ROOM.
2.68	REMOVE CASEWORK AND PROTECT FOR REINSTALLATION.
2.69	REMOVE EQUIPMENT; SEE MEP FOR MORE INFORMATION
2.70	REMOVE FREEZER/COOLER; SEE MEP/FOOD SERVICE FOR MORE INFORMATION
2.71	REMOVE LOCKERS AND RETURN TO OWNER.
2.72	REMOVE TIERED CONCRETE SLABS TO MAIN FLOOR ELEVATION.
2.73	REMOVE SCIENCE STATIONS; SEE MEP FOR MORE INFORMATION.
2.74	REMOVE CASEWORK IN THIS ROOM.
2.80	HATCHED AREA INDICATES REMOVAL OF EXISTING FLOOR SLAB AS REQUIRED FOR NEW PLUMBING; SEE MEP FOR MORE INFORMATION AND ANY ADDITIONAL AREAS TO BE CUT/PATCHED. COORDINATE W/ GC ON FINAL WIDTHS AND LENGTHS OF CUTTING AND PATCHING. FLOOR SHALL BE CUT CLEANLY SO THAT THERE IS A NEAT JOINT WHEN RECEIVING A NEW FLOOR SLAB.

DEMOLITION LEGEND	
	- EXISTING TO REMAIN
	- EXISTING TO BE REMOVED
	- COMPLETELY REMOVE ALL EXISTING CEILINGS U.N.O. (EITHER LAY-IN, PLASTER, OR GYPBOARD INCLUDING ALL CURTAIN, CEILING MOUNTED EQUIPMENT, SUPPORTS, TRACKS, ETC.)

ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.

REFER TO FINISH SCHEDULE FOR ADDITIONAL FINISH WORK REQUIRED IN OTHER AREAS THAT ARE NOT DOCUMENTED TO RECEIVE DEMOLITION/REMOVAL WORK INDICATED ON THE DEMOLITION PLANS.

- GENERAL NOTES - DEMOLITION**
- THE OWNER'S NORMAL OPERATIONS WILL BE CONTINUED DURING DEMOLITION. DEMOLITION CONTRACTOR SHALL NOT INTERFERE WITH THESE OPERATIONS IN ANY WAY WITHOUT THE OWNER'S EXPRESSED CONSENT.
  - PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
  - PROVIDE 1HR FIRE RESISTANT CONSTRUCTION BARRIERS WHERE REQ'D TO PROTECT EXISTING CONSTRUCTION AND OWNERS OPERATIONS.
  - PRIOR TO CUTTING EXISTING CONSTRUCTION, LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL FLOOR PENETRATIONS. UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC. AND ANY WALLS THAT CONTAIN LIFE SAFETY VERTICAL RISERS THAT MUST REMAIN IN OPERATION DURING THE DEMOLITION WORK.
  - PROVIDE SHORING, BRACING AND ANY OTHER MEANS REQ'D TO PROTECT AND MAINTAIN THE SAFETY, INTEGRITY AND STABILITY OF ALL EXISTING AND NEW CONSTRUCTION.
  - WHEN ROOFING, GLAZING, FLASHING, COPING OR PORTIONS OF EXTERIOR WALLS ARE REMOVED OR OPENED, SUITABLE WEATHER PROTECTION SHALL BE PROVIDED AND MAINTAINED FOR THE DURATION OF WORK.
  - WHEREVER WATER CLOSETS, FLOOR SINKS OR OTHER EQUIPMENT AND RELATED PIPING ARE TO BE REMOVED, PATCH FLOOR SLAB W/ CONCRETE AS REQUIRED.
  - ALL CONCRETE FLOOR SLABS NOTED TO BE REMOVED SHALL BE SAWCUT TO PROVIDE A NEAT JOINT.
  - SEE MECHANICAL, LANDSCAPE, AND ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE OF DEMOLITION WORK.
  - SALVAGE ALL EXISTING REMOVED BRICK FOR PATCHING AND REFINISH WORK AS REQ'D.
  - ALL DEMOLITION SHALL COMPLY WITH APPLICABLE LOCAL CODES AND STATE CODES AND ORDINANCES.
  - REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

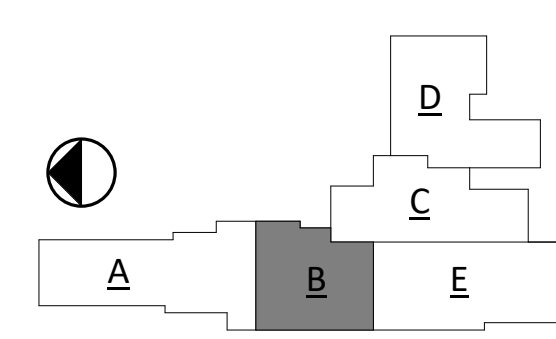


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



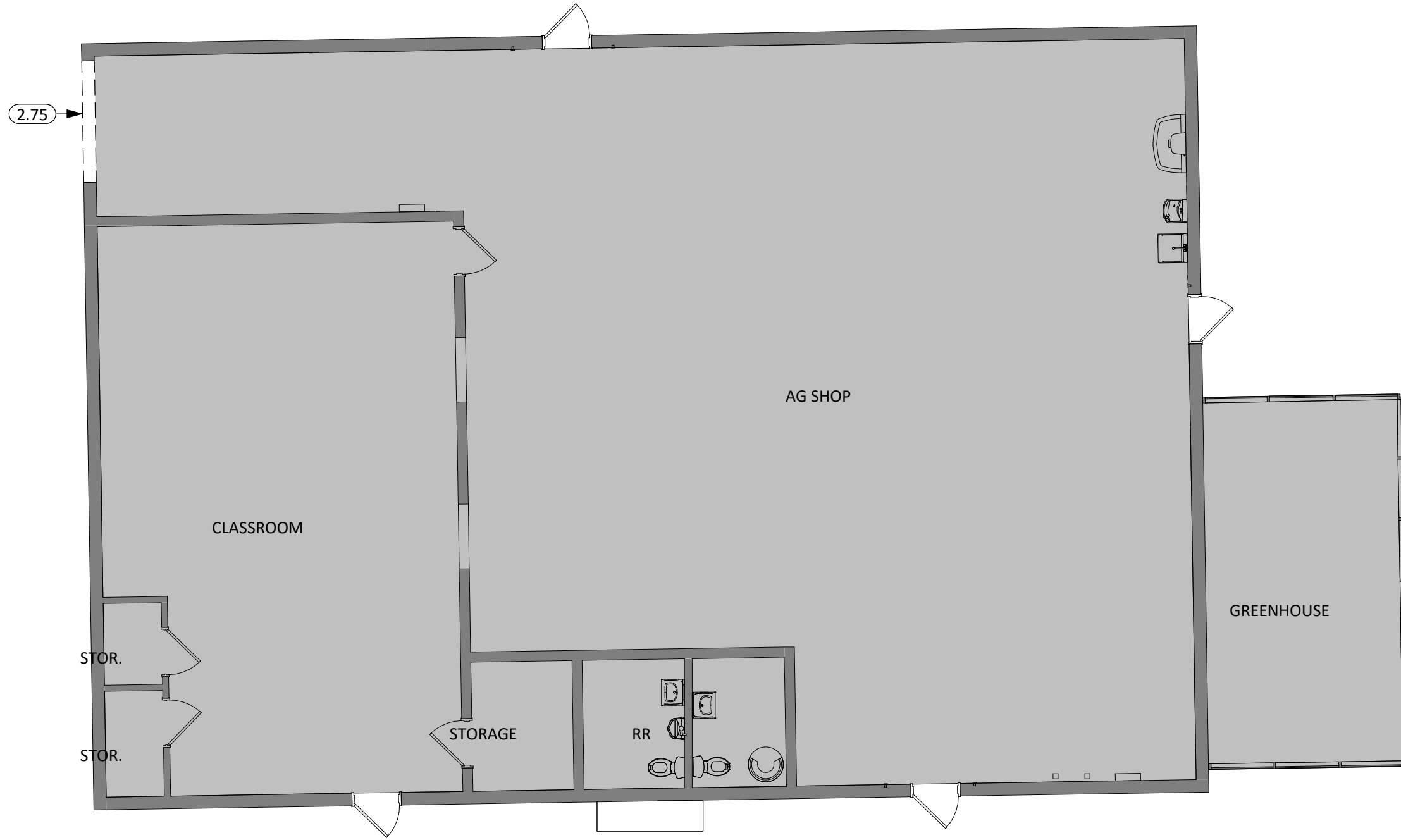
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
DEMOLITION PLAN - AREA B

**D101B**



DEMOLITION PLANS - EXISTING AG SHOP  
1/8" = 1'-0"

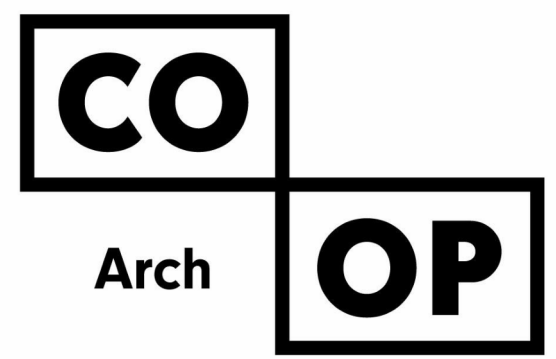
KEYNOTE SCHEDULE	
2.24	REMOVE PORTION OF MASONRY WALL
2.33	REMOVE ACOUSTIC PANEL CEILING
2.36	REMOVE DOOR & H.M. FRAME
2.41	REMOVE WINDOW UNIT
2.52	REMOVE TOILET PARTITION
2.54	REMOVE SINK; SEE MEP FOR MORE INFORMATION.
2.57	REMOVE DRINKING FOUNTAIN; SEE MEP FOR MORE INFORMATION.
2.58	REMOVE URINAL; SEE MEP FOR MORE INFORMATION.
2.59	REMOVE TOILET, TOILET ACCESSORIES, AND TOILET PARTITIONS. SEE MEP FOR MORE INFORMATION.
2.69	REMOVE EQUIPMENT; SEE MEP FOR MORE INFORMATION
2.70	REMOVE FREEZER/COOLER; SEE MEP/FOOD SERVICE FOR MORE INFORMATION
2.75	REMOVE PORTION OF METAL FRAMED WALL.
2.76	REMOVE STAIRS
2.77	REMOVE PORTION OF STAGE AND STAGE FRAMING
2.78	REMOVE SHOWER AND SHOWER ACCESSORIES. SEE MEP FOR MORE INFORMATION
2.79	REMOVE CURTAIN AND CURTAIN ROD
2.80	HATCHED AREA INDICATES REMOVAL OF EXISTING FLOOR SLAB AS REQUIRED FOR NEW PLUMBING; SEE MEP FOR MORE INFORMATION AND ANY ADDITIONAL AREAS TO BE CUT/PATCHED. COORDINATE W/ GC ON FINAL WIDTHS AND LENGTHS OF CUTTING AND PATCHING. FLOOR SHALL BE CUT CLEANLY SO THAT THERE IS A NEAT JOINT WHEN RECEIVING A NEW FLOOR SLAB.
2.81	REMOVE PORTION OF WALL TO STAGE FLOOR BELOW. MAINTAIN SEPARATION BETWEEN EXISTING BELOW STAGE STORAGE AREA AND NEW BELOW STAGE AREA.
2.82	REMOVE AND PROTECT FOR REINSTALLATION MIRRORS, SOAP DISPENSERS, PAPER TOWEL DISPENSERS, AND ANY OTHER WALL MOUNTED ITEMS ALONG THIS WALL
2.83	REMOVE PORTION OF WALL AS REQUIRED FOR INSTALLATION OF NEW COLUMN

DEMOLITION LEGEND	
	- EXISTING TO REMAIN
	- EXISTING TO BE REMOVED
	- COMPLETELY REMOVE ALL EXISTING CEILINGS U.N.O. (EITHER LAY-IN, PLASTER, OR GYPBOARD INCLUDING ALL CURTAIN, CEILING MOUNTED EQUIPMENT, SUPPORTS, TRACKS, ETC.)

ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLANS. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.

REFER TO FINISH SCHEDULE FOR ADDITIONAL FINISH WORK REQUIRED IN OTHER AREAS THAT ARE NOT DOCUMENTED TO RECEIVE DEMOLITION/REMOVAL WORK INDICATED ON THE DEMOLITION PLANS.

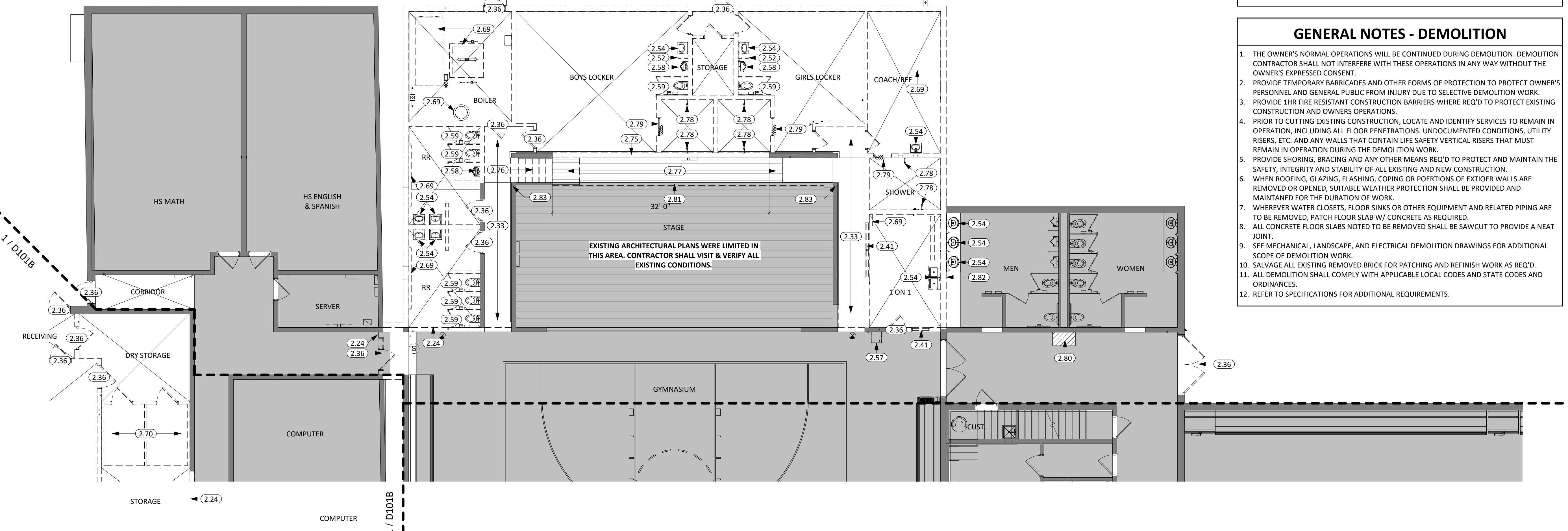
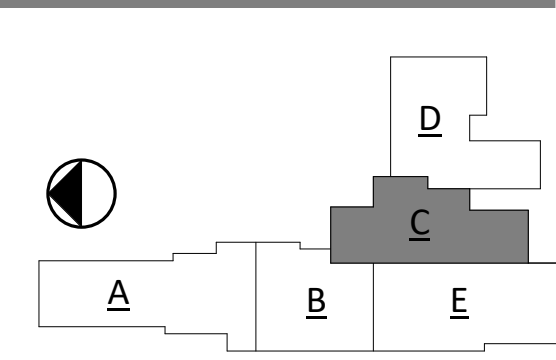


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



DEMOLITION PLANS - AREA C  
1/8" = 1'-0"

- ### GENERAL NOTES - DEMOLITION
- THE OWNER'S NORMAL OPERATIONS WILL BE CONTINUED DURING DEMOLITION. DEMOLITION CONTRACTOR SHALL NOT INTERFERE WITH THESE OPERATIONS IN ANY WAY WITHOUT THE OWNER'S EXPRESSED CONSENT.
  - PROVIDE TEMPORARY BARRICADES AND OTHER FORMS OF PROTECTION TO PROTECT OWNER'S PERSONNEL AND GENERAL PUBLIC FROM INJURY DUE TO SELECTIVE DEMOLITION WORK.
  - PROVIDE 1HR FIRE RESISTANT CONSTRUCTION BARRIERS WHERE REQ'D TO PROTECT EXISTING CONSTRUCTION AND OWNERS OPERATIONS.
  - PRIOR TO CUTTING EXISTING CONSTRUCTION, LOCATE AND IDENTIFY SERVICES TO REMAIN IN OPERATION, INCLUDING ALL FLOOR PENETRATIONS, UNDOCUMENTED CONDITIONS, UTILITY RISERS, ETC. AND ANY WALLS THAT CONTAIN LIFE SAFETY VERTICAL RISERS THAT MUST REMAIN IN OPERATION DURING THE DEMOLITION WORK.
  - PROVIDE SHORING, BRACING AND ANY OTHER MEANS REQ'D TO PROTECT AND MAINTAIN THE SAFETY, INTEGRITY AND STABILITY OF ALL EXISTING AND NEW CONSTRUCTION.
  - WHEN ROOFING, GLAZING, FLASHING, COPING OR PORTIONS OF EXTERIOR WALLS ARE REMOVED OR OPENED, SUITABLE WEATHER PROTECTION SHALL BE PROVIDED AND MAINTAINED FOR THE DURATION OF WORK.
  - WHEREVER WATER CLOSETS, FLOOR SINKS OR OTHER EQUIPMENT AND RELATED PIPING ARE TO BE REMOVED, PATCH FLOOR SLAB W/ CONCRETE AS REQUIRED.
  - ALL CONCRETE FLOOR SLABS NOTED TO BE REMOVED SHALL BE SAWCUT TO PROVIDE A NEAT JOINT.
  - SEE MECHANICAL, LANDSCAPE, AND ELECTRICAL DEMOLITION DRAWINGS FOR ADDITIONAL SCOPE OF DEMOLITION WORK.
  - SALVAGE ALL EXISTING REMOVED BRICK FOR PATCHING AND REFINISH WORK AS REQ'D.
  - ALL DEMOLITION SHALL COMPLY WITH APPLICABLE LOCAL CODES AND STATE CODES AND ORDINANCES.
  - REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
DEMOLITION PLAN - AREA C

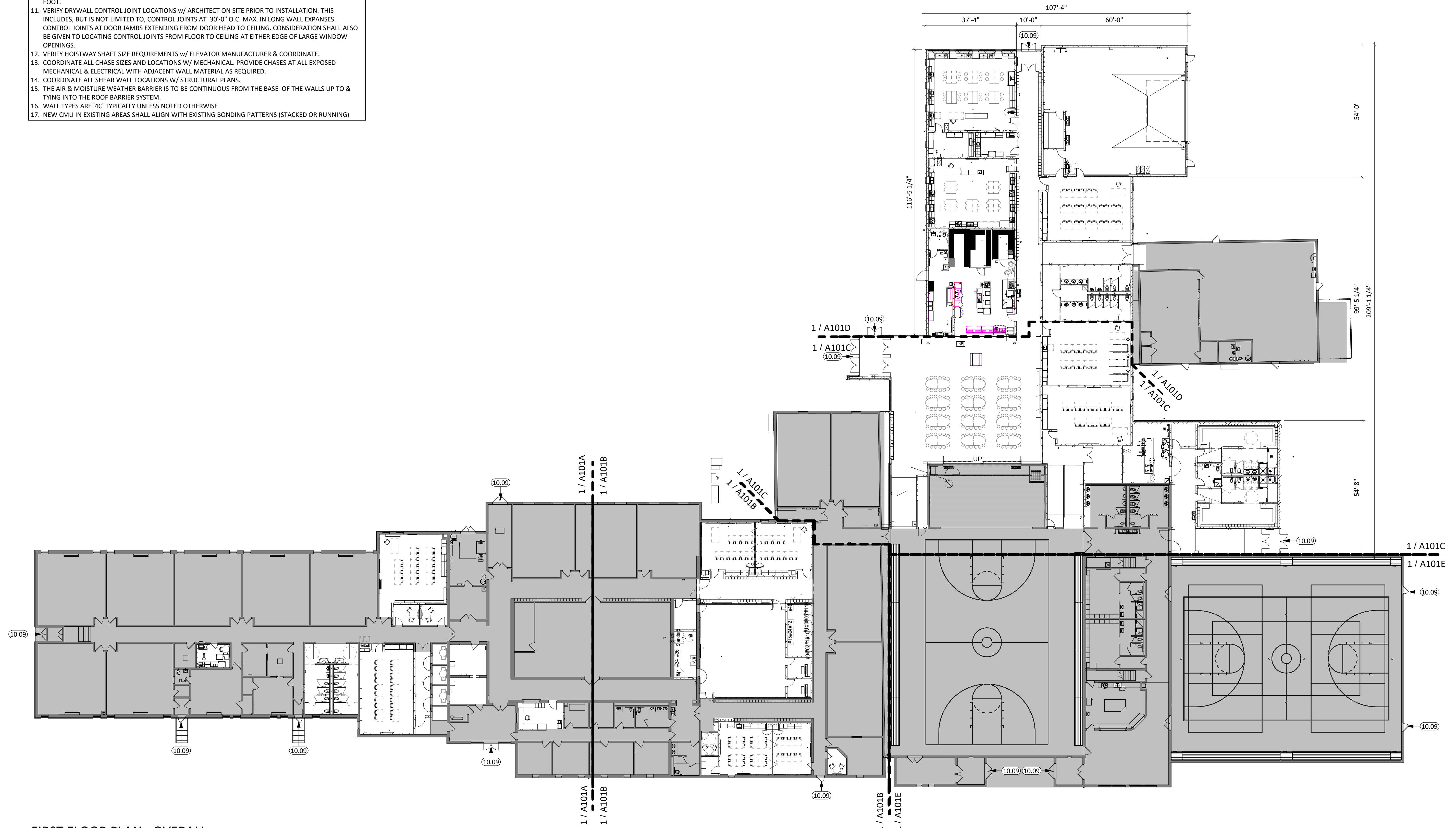
D101C

**GENERAL NOTES**

1. FIRE RATED WALL ARE INDICATED ON THE CODE PLANS.
2. PROVIDE FIRE EXTINGUISHERS AND CABINETS AS SHOWN ON THE CODE PLAN(S).
3. REFER TO SHEET **6000** FOR ADA STANDARDS.
4. REFER TO SHEET **6003** FOR WALL, ROOF, AND FLOOR TYPES.
5. INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU UNLESS OTHERWISE NOTED.
6. ALL WALL TYPES TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
7. EXTERIOR DIMENSIONS ARE FROM FACE OF BRICK/SHEATHING UNLESS OTHERWISE NOTED.
8. COORDINATE WORK DONE BY OTHERS AS INDICATED ON THE DRAWINGS.
9. INCREASE WALL THICKNESS OF METAL STUD AND CONCRETE BLOCK WALLS AS REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL DEVICES - VERIFY w/ ARCHITECT PRIOR TO WORK.
10. SEE MECHANICAL FOR ALL FLOOR DRAIN SIZES AND LOCATIONS U.N.O. SET FLOOR DRAINS MINIMUM 3/4" BELOW FINISHED FLOOR. PROVIDE EVEN SLOPE FROM WALL TO DRAIN W/ A MAXIMUM SLOPE OF 1/4" PER FOOT.
11. VERIFY DRYWALL CONTROL JOINT LOCATIONS w/ ARCHITECT ON SITE PRIOR TO INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROL JOINTS AT 30'-0" O.C. MAX. IN LONG WALL EXPANSES. CONTROL JOINTS AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CONSIDERATION SHALL ALSO BE GIVEN TO LOCATING CONTROL JOINTS FROM FLOOR TO CEILING AT EITHER EDGE OF LARGE WINDOW OPENINGS.
12. VERIFY HOISTWAY SHAFT SIZE REQUIREMENTS w/ ELEVATOR MANUFACTURER & COORDINATE.
13. COORDINATE ALL CHASE SIZES AND LOCATIONS W/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
14. COORDINATE ALL SHEAR WALL LOCATIONS W/ STRUCTURAL PLANS.
15. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
16. WALL TYPES ARE '4C' TYPICALLY UNLESS NOTED OTHERWISE
17. NEW CMU IN EXISTING AREAS SHALL ALIGN WITH EXISTING BONDING PATTERNS (STACKED OR RUNNING)

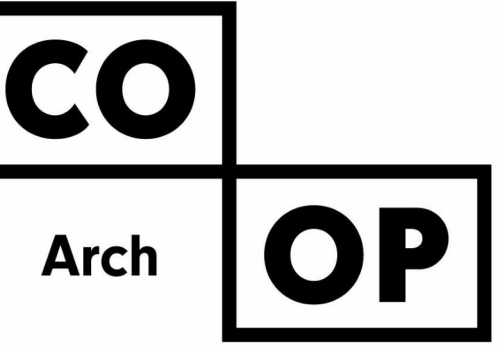
**KEYNOTE SCHEDULE**

10.09	PROVIDE APPROXIMATELY 8"X8" ARIAL FONT WINDOW FILM FOR ENTRANCE IDENTIFICATION. COORDINATE WITH ARCHITECT ON LETTERING. FINISH TO BE WHITE
-------	--



**FIRST FLOOR PLAN - OVERALL**

1" = 20'-0"

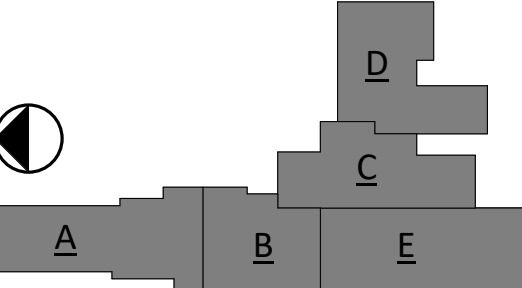


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
OVERALL FIRST FLOOR PLAN

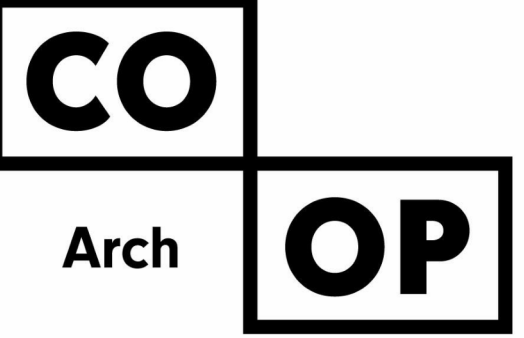
**A100**

**GENERAL NOTES**

1. FIRE RATED WALL ARE INDICATED ON THE CODE PLANS.
2. PROVIDE FIRE EXTINGUISHERS AND CABINETS AS SHOWN ON THE CODE PLAN(S).
3. REFER TO SHEET **6000** FOR ADA STANDARDS.
4. REFER TO SHEET **6003** FOR WALL, ROOF, AND FLOOR TYPES.
5. INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU UNLESS OTHERWISE NOTED.
6. ALL WALL TYPES TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
7. EXTERIOR DIMENSIONS ARE FROM FACE OF BRICK/SHEATHING UNLESS OTHERWISE NOTED.
8. COORDINATE WORK DONE BY OTHERS AS INDICATED ON THE DRAWINGS.
9. INCREASE WALL THICKNESS OF METAL STUD AND CONCRETE BLOCK WALLS AS REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL DEVICES - VERIFY w/ ARCHITECT PRIOR TO WORK.
10. SEE MECHANICAL FOR ALL FLOOR DRAIN SIZES AND LOCATIONS U.N.O. SET FLOOR DRAINS MINIMUM 1/4" BELOW FINISHED FLOOR. PROVIDE EVEN SLOPE FROM WALL TO DRAIN W/ A MAXIMUM SLOPE OF 1/8" PER FOOT.
11. VERIFY DRYWALL CONTROL JOINT LOCATIONS w/ ARCHITECT ON SITE PRIOR TO INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROL JOINTS AT 30'-0" O.C. MAX. IN LONG WALL EXPANSES. CONTROL JOINTS AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CONSIDERATION SHALL ALSO BE GIVEN TO LOCATING CONTROL JOINTS FROM FLOOR TO CEILING AT EITHER EDGE OF LARGE WINDOW OPENINGS.
12. VERIFY HOISTWAY SHAFT SIZE REQUIREMENTS w/ ELEVATOR MANUFACTURER & COORDINATE.
13. COORDINATE ALL CHASE SIZES AND LOCATIONS W/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
14. COORDINATE ALL SHEAR WALL LOCATIONS W/ STRUCTURAL PLANS.
15. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
16. WALL TYPES ARE '4C' TYPICALLY UNLESS NOTED OTHERWISE
17. NEW CMU IN EXISTING AREAS SHALL ALIGN WITH EXISTING BONDING PATTERNS (STACKED OR RUNNING)

**KEYNOTE SCHEDULE**

4.71	INFILL LOUVER OPENING W/ BRICK, INSULATION, AND CMU TO MATCH EXISTING WALL CONSTRUCTION/FINISH; SEE MECHANICAL PLANS FOR DEMOLISHED LOUVER LOCATIONS.
8.86	EXISTING GLAZING TO BE REPLACED WITH 1" INSULATED FROSTED GLASS
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE].
11.33	TV MONITOR (OWNER PROVIDED CONTRACTOR INSTALLED)

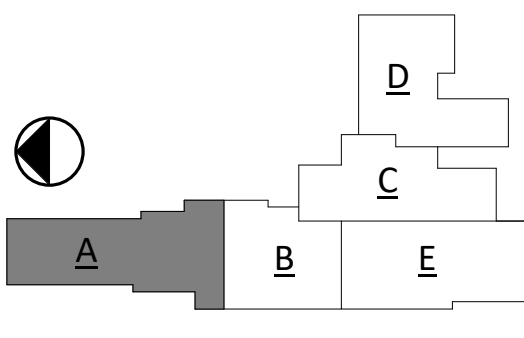


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



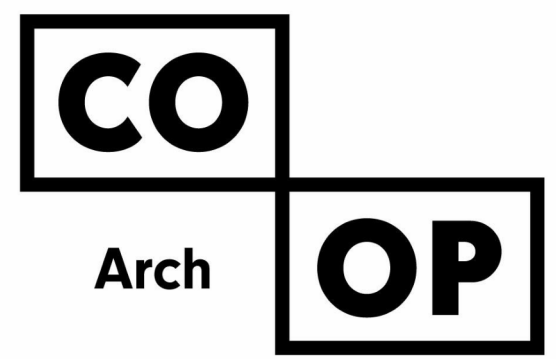
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR PLAN - AREA A

**A101A**

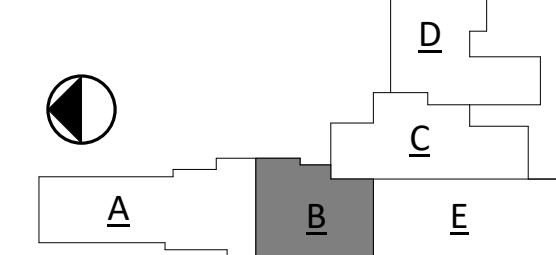


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

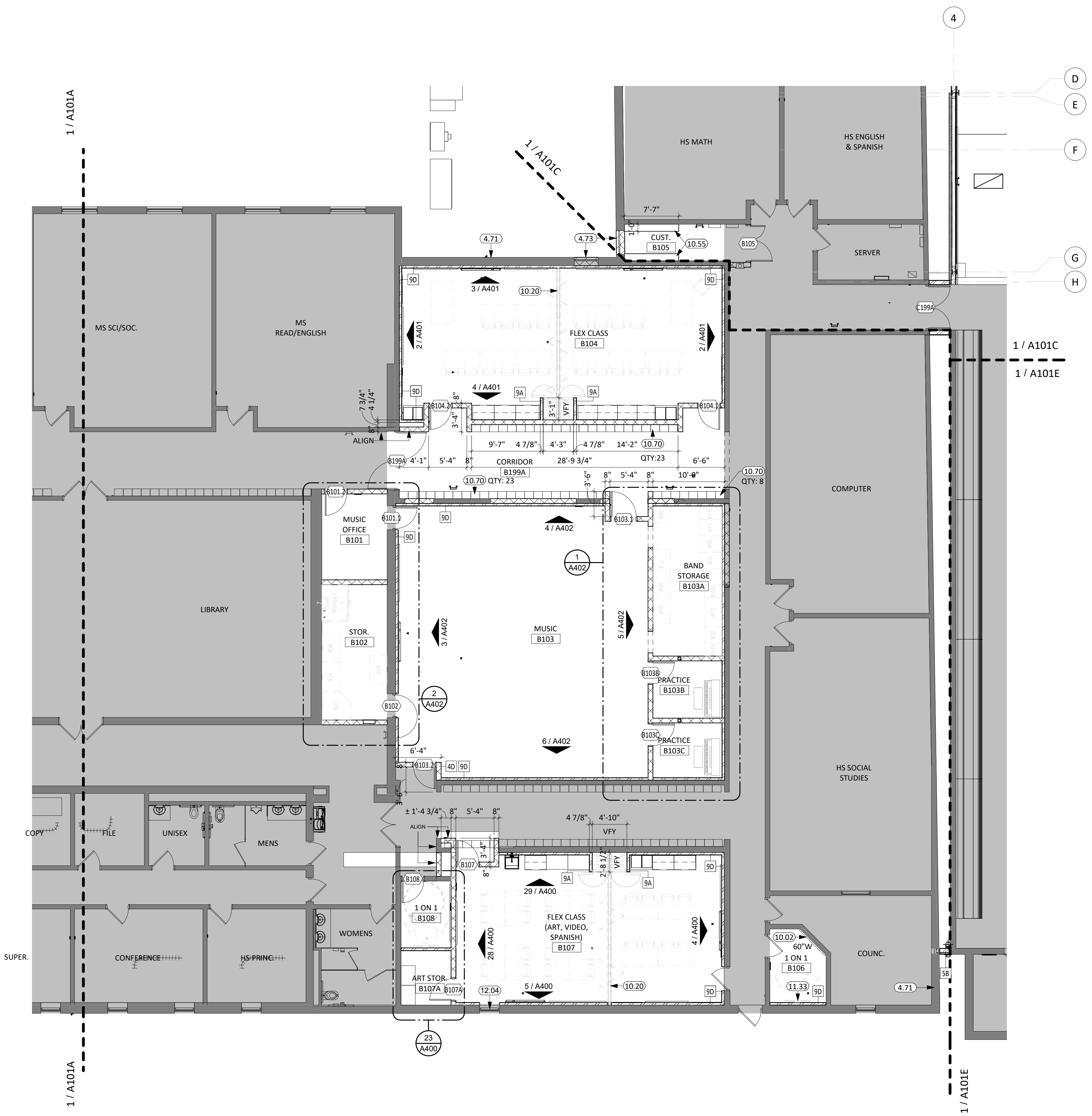
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR PLAN - AREA B

A101B

KEYNOTE SCHEDULE	
4.71	INFILL LOUVER OPENING W/ BRICK, INSULATION, AND CMU TO MATCH EXISTING WALL CONSTRUCTION/FINISH; SEE MECHANICAL PLANS FOR DEMOLISHED LOUVER LOCATIONS.
4.73	INFILL EXISTING DOOR OPENING W/ BRICK, INSULATION, AND CMU TO MATCH EXISTING WALL CONSTRUCTION/FINISH.
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE].
10.20	OPERABLE PANEL PARTITIONS
10.55	WALL MOUNTED STANDARDS AND BRACKETS
10.70	15"W x 12"D x 6"H SINGLE TIER METAL LOCKERS W/ 4" METAL BASE
11.33	TV MONITOR (OWNER PROVIDED CONTRACTOR INSTALLED)
12.04	ROLLER WINDOW SHADES

- ### GENERAL NOTES
- FIRE RATED WALL ARE INDICATED ON THE CODE PLANS.
  - PROVIDE FIRE EXTINGUISHERS AND CABINETS AS SHOWN ON THE CODE PLAN(S).
  - REFER TO SHEET **6002** FOR ADA STANDARDS.
  - REFER TO SHEET **6002** FOR WALL, ROOF, AND FLOOR TYPES.
  - INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU UNLESS OTHERWISE NOTED.
  - ALL WALL TYPES TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
  - EXTERIOR DIMENSIONS ARE FROM FACE OF BRICK/SHEATHING UNLESS OTHERWISE NOTED.
  - COORDINATE WORK DONE BY OTHERS AS INDICATED ON THE DRAWINGS.
  - INCREASE WALL THICKNESS OF METAL STUD AND CONCRETE BLOCK WALLS AS REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL DEVICES - VERIFY W/ ARCHITECT PRIOR TO WORK.
  - SEE MECHANICAL FOR ALL FLOOR DRAIN SIZES AND LOCATIONS U.N.O. SET FLOOR DRAINS MINIMUM 1/4" BELOW FINISHED FLOOR. PROVIDE EVEN SLOPE FROM WALL TO DRAIN W/ A MAXIMUM SLOPE OF 1/4" PER FOOT.
  - VERIFY DRYWALL CONTROL JOINT LOCATIONS W/ ARCHITECT ON SITE PRIOR TO INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROL JOINTS AT 30'-0" O.C. MAX. IN LONG WALL EXPANSES. CONTROL JOINTS AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CONSIDERATION SHALL ALSO BE GIVEN TO LOCATING CONTROL JOINTS FROM FLOOR TO CEILING AT EITHER EDGE OF LARGE WINDOW OPENINGS.
  - VERIFY HOISTWAY SHAFT SIZE REQUIREMENTS W/ ELEVATOR MANUFACTURER & COORDINATE.
  - COORDINATE ALL CHASE SIZES AND LOCATIONS W/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
  - COORDINATE ALL SHEAR WALL LOCATIONS W/ STRUCTURAL PLANS.
  - THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
  - WALL TYPES ARE 'C' TYPICALLY UNLESS NOTED OTHERWISE
  - NEW CMU IN EXISTING AREAS SHALL ALIGN WITH EXISTING BONDING PATTERNS (STACKED OR RUNNING)



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

1/31/2023 1:42:11 PM

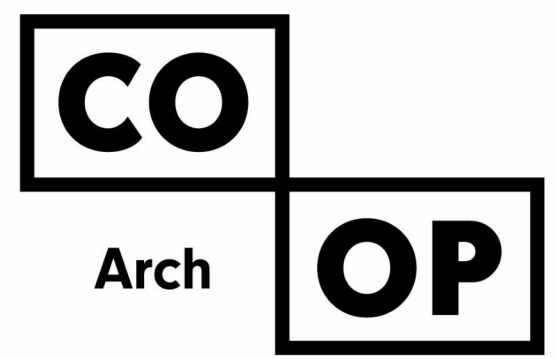


**KEYNOTE SCHEDULE**

7.54	PREFINISHED METAL SCUPPER AND DOWNSPOUT (W/ ALL REQ. FLASHING & SUPPORTS). PROVIDE SPLASH PAD WHERE RETURNING TO GRADE.
7.55	PREFINISHED OVERFLOW SCUPPER (W/ ALL REQ. FLASHING, TRIMS, ETC.). LOCATE OVERFLOW SCUPPER 2" MIN. ABOVE MAIN SCUPPER.
12.04	ROLLER WINDOW SHADES
26.22	CARD READER AND ADA PADDLE SWITCH
26.23	ADA PADDLE SWITCH

**GENERAL NOTES**

1. FIRE RATED WALL ARE INDICATED ON THE CODE PLANS.
2. PROVIDE FIRE EXTINGUISHERS AND CABINETS AS SHOWN ON THE CODE PLAN(S).
3. REFER TO SHEET **G003** FOR ADA STANDARDS.
4. REFER TO SHEET **G003** FOR WALL, ROOF, AND FLOOR TYPES.
5. INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU UNLESS OTHERWISE NOTED.
6. ALL WALL TYPES TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
7. EXTERIOR DIMENSIONS ARE FROM FACE OF BRICK/SHEATHING UNLESS OTHERWISE NOTED.
8. COORDINATE WORK DONE BY OTHERS AS INDICATED ON THE DRAWINGS.
9. INCREASE WALL THICKNESS OF METAL STUD AND CONCRETE BLOCK WALLS AS REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL DEVICES - VERIFY W/ ARCHITECT PRIOR TO WORK.
10. SEE MECHANICAL FOR ALL FLOOR DRAIN SIZES AND LOCATIONS U.N.O. SET FLOOR DRAINS MINIMUM 1/4" BELOW FINISHED FLOOR. PROVIDE EVEN SLOPE FROM WALL TO DRAIN W/ A MAXIMUM SLOPE OF 1/4" PER FOOT.
11. VERIFY DRYWALL CONTROL JOINT LOCATIONS W/ ARCHITECT ON SITE PRIOR TO INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROL JOINTS AT 30'-0" O.C. MAX. IN LONG WALL EXPANSES. CONTROL JOINTS AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CONSIDERATION SHALL ALSO BE GIVEN TO LOCATING CONTROL JOINTS FROM FLOOR TO CEILING AT EITHER EDGE OF LARGE WINDOW OPENINGS.
12. VERIFY HOISTWAY SHAFT SIZE REQUIREMENTS W/ ELEVATOR MANUFACTURER & COORDINATE.
13. COORDINATE ALL CHASE SIZES AND LOCATIONS W/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
14. COORDINATE ALL SHEAR WALL LOCATIONS W/ STRUCTURAL PLANS.
15. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
16. WALL TYPES ARE '4C' TYPICALLY UNLESS NOTED OTHERWISE
17. NEW CMU IN EXISTING AREAS SHALL ALIGN WITH EXISTING BONDING PATTERNS (STACKED OR RUNNING)

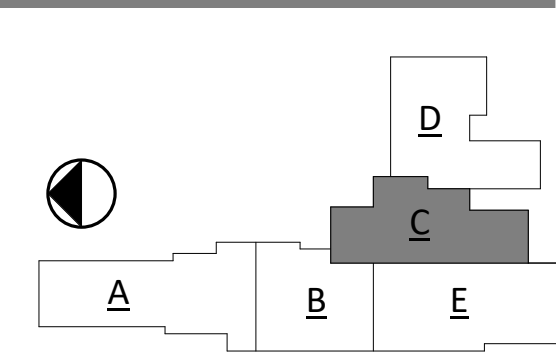


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



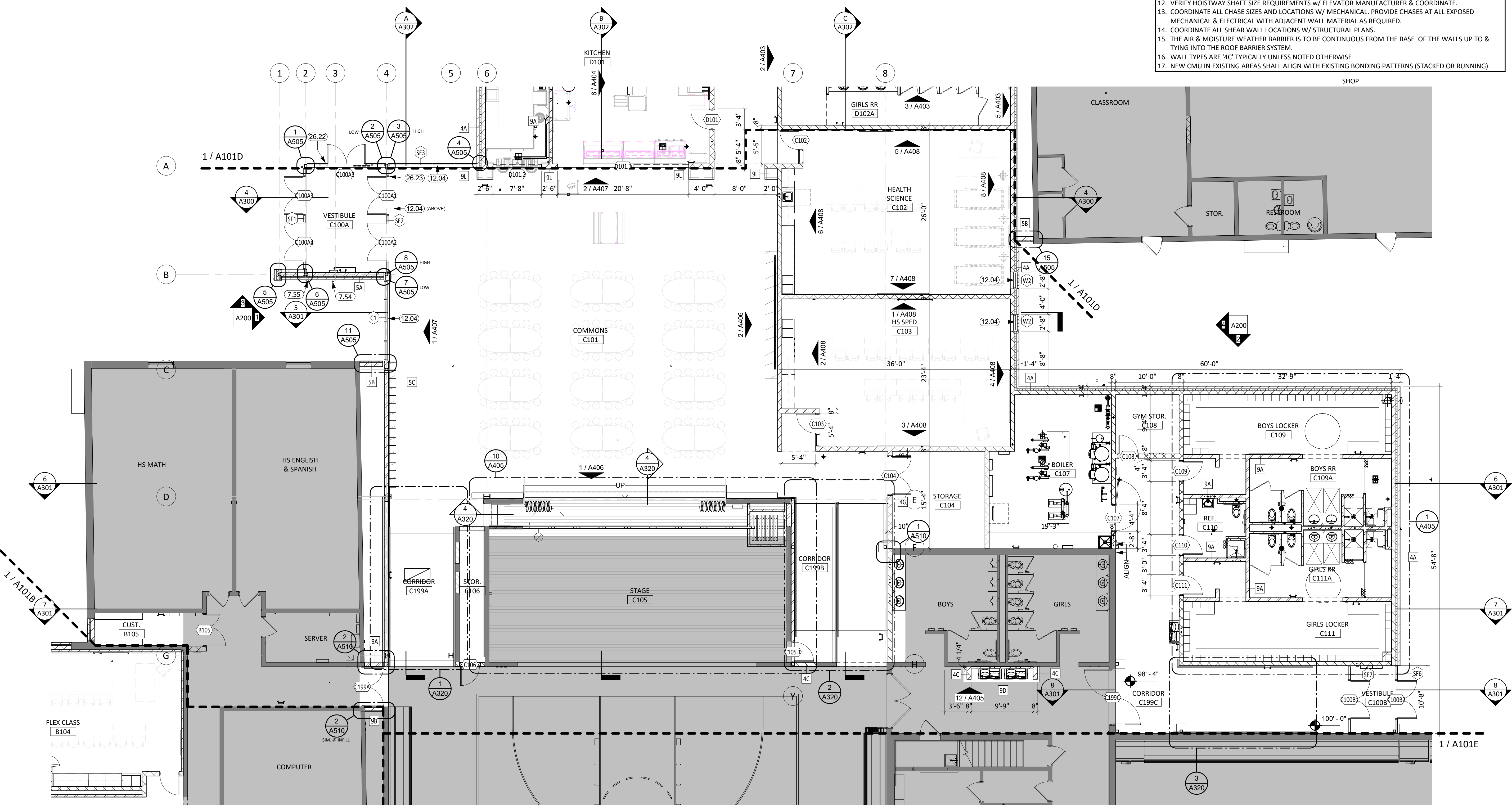
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR PLAN - AREA C

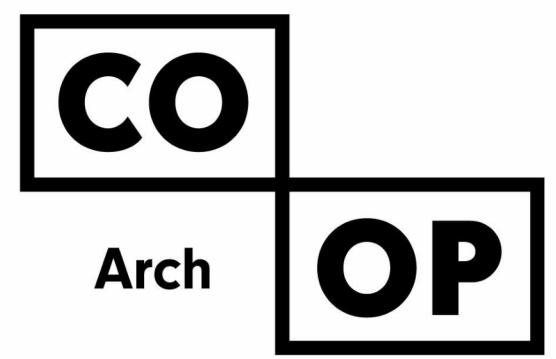
**A101C**



FIRST FLOOR PLAN - AREA C

1/8" = 1'-0"

1/31/2023 1:42:29 PM

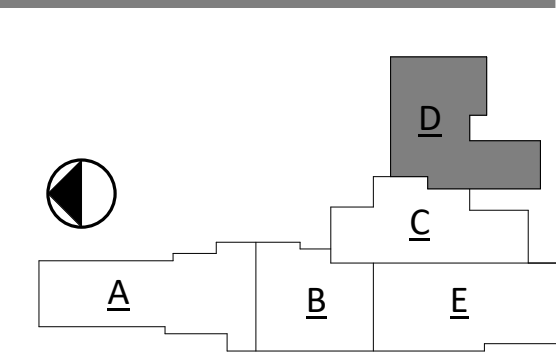


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

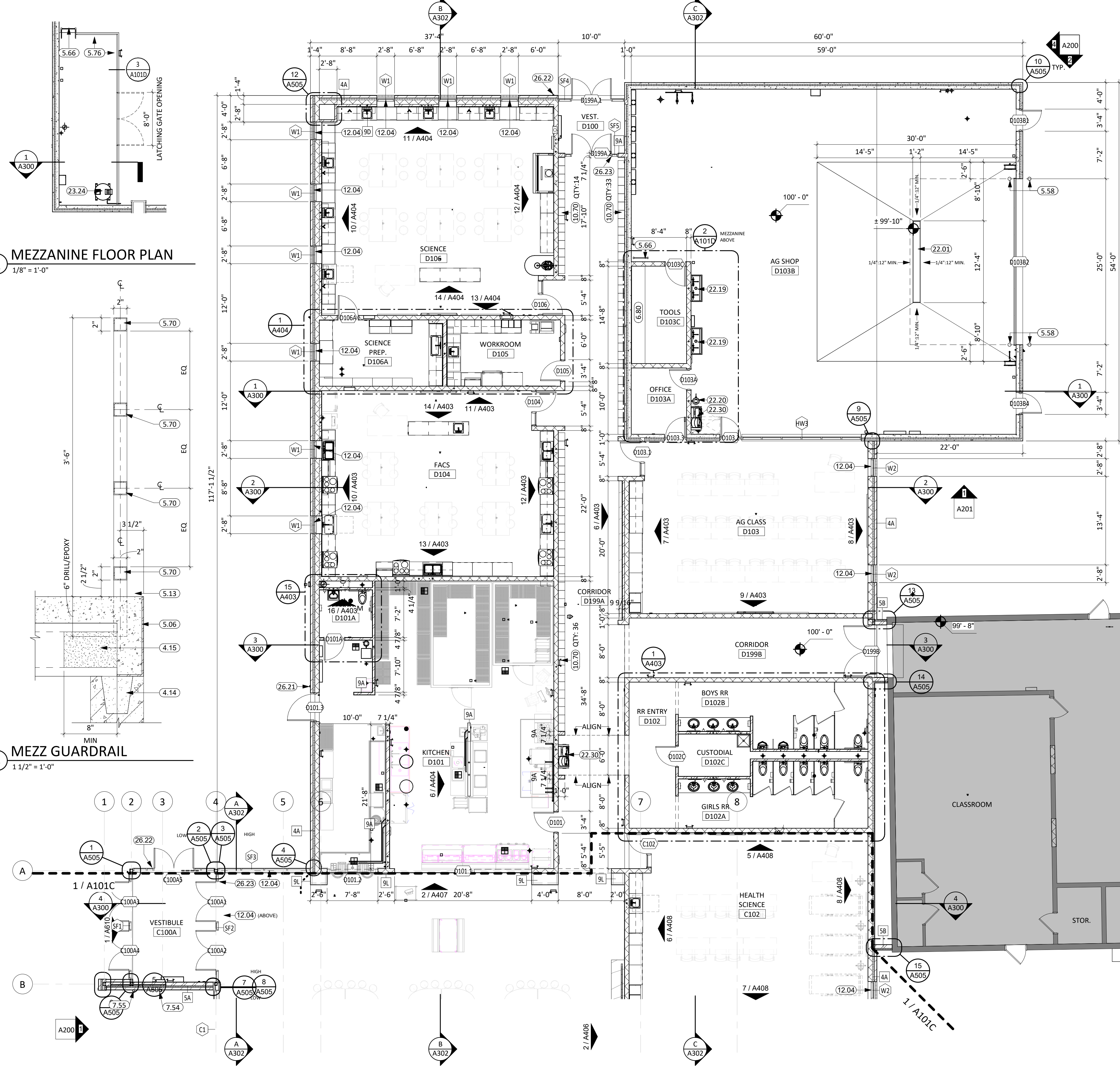


**GENERAL NOTES**

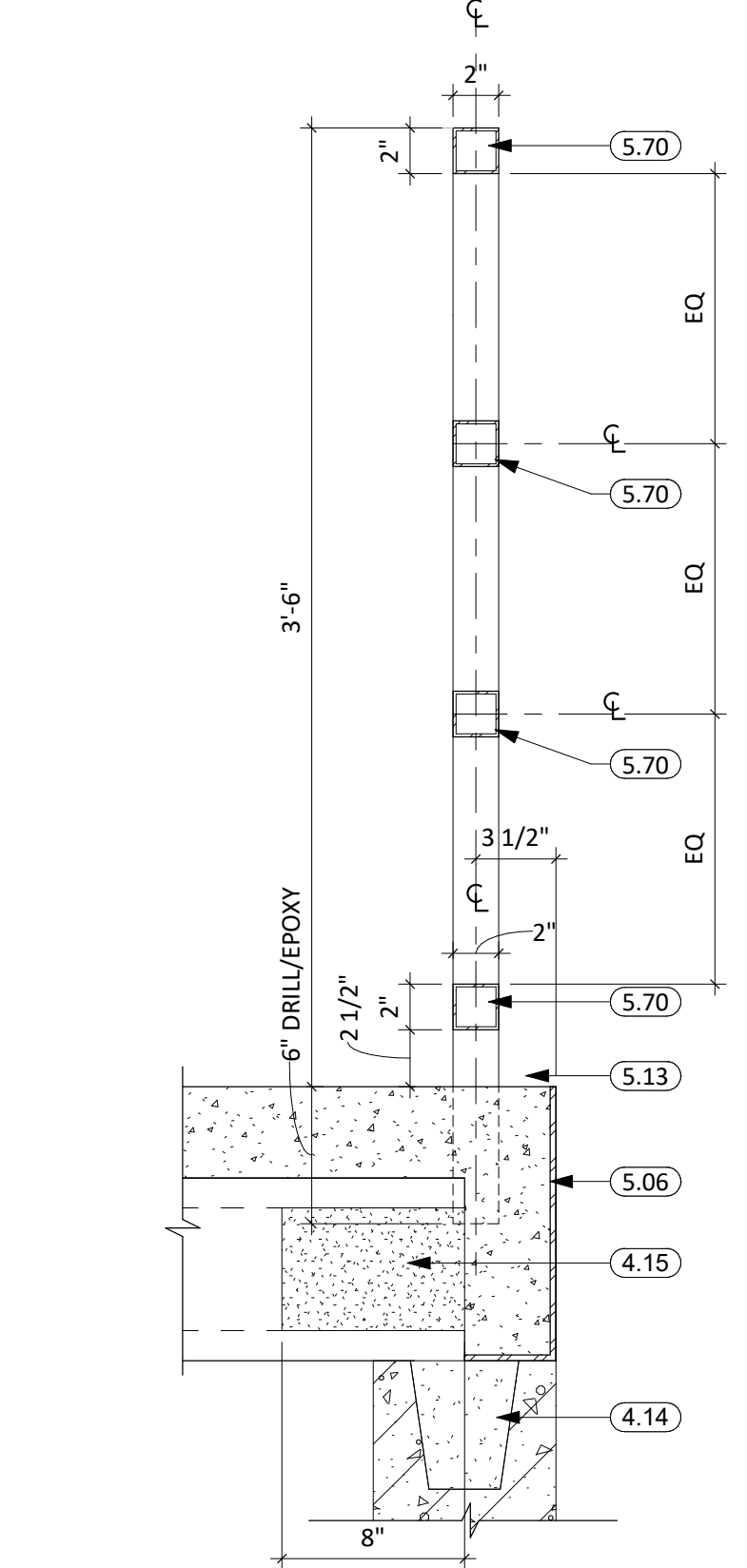
1. FIRE RATED WALL ARE INDICATED ON THE CODE PLAN(S).
2. PROVIDE FIRE EXTINGUISHERS AND CABINETS AS SHOWN ON THE CODE PLAN(S).
3. REFER TO SHEET **6000** FOR ADA STANDARDS.
4. REFER TO SHEET **6000** FOR WALL, ROOF, AND FLOOR TYPES.
5. INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU UNLESS OTHERWISE NOTED.
6. ALL WALL TYPES TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
7. EXTERIOR DIMENSIONS ARE FROM FACE OF BRICK/SHEATHING UNLESS OTHERWISE NOTED.
8. COORDINATE WORK DONE BY OTHERS AS INDICATED ON THE DRAWINGS.
9. INCREASE WALL THICKNESS OF METAL STUD AND CONCRETE BLOCK WALLS AS REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL DEVICES - VERIFY w/ ARCHITECT PRIOR TO WORK.
10. SEE MECHANICAL FOR ALL FLOOR DRAIN SIZES AND LOCATIONS U.N.O. SET FLOOR DRAINS MINIMUM 1/4" BELOW FINISHED FLOOR. PROVIDE EVEN SLOPE FROM WALL TO DRAIN W/ A MAXIMUM SLOPE OF 1/4" PER FOOT.
11. VERIFY DRYWALL CONTROL JOINT LOCATIONS w/ ARCHITECT ON SITE PRIOR TO INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROL JOINTS AT 30'-0" O.C. MAX. IN LONG WALL EXPANSES. CONTROL JOINTS AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CONSIDERATION SHALL ALSO BE GIVEN TO LOCATING CONTROL JOINTS FROM FLOOR TO CEILING AT EITHER EDGE OF LARGE WINDOW OPENINGS.
12. VERIFY HOISTWAY SHAFT SIZE REQUIREMENTS w/ ELEVATOR MANUFACTURER & COORDINATE.
13. COORDINATE ALL CHASE SIZES AND LOCATIONS w/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
14. COORDINATE ALL SHEAR WALL LOCATIONS w/ STRUCTURAL PLANS.
15. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
16. WALL TYPES ARE '4C' TYPICALLY UNLESS NOTED OTHERWISE
17. NEW CMU IN EXISTING AREAS SHALL ALIGN WITH EXISTING BONDING PATTERNS (STACKED OR RUNNING)

**KEYNOTE SCHEDULE**

4.14	BOND BEAM MASONRY UNIT
4.15	FILL w/GROUT
5.06	STRUCTURAL STEEL PLATE (SEE ARCH. & STRUCT.)
5.13	STEEL CONNECTION (SEE ARCH. & STRUCT.)
5.58	PIPE BOLLARD (FILL w/CONC.) (SEE ARCH. & STRUCT.)
5.66	STEEL LADDER (SEE ARCH. & STRUCT.)
5.70	SQUARE STEEL GAUDDRAIL SECTION (SEE ARCH. & STRUCT.)
5.76	GAUDDRAIL (SEE ARCH. & STRUCT.)
6.80	PLASTIC LAMINATE COUNTERTOP
7.54	PREFINISHED METAL SCUPPER AND DOWNSPOUT (W/ ALL REQ. FLASHING & SUPPORTS). PROVIDE SPLASH PAD WHERE RETURNING TO GRADE.
7.55	PREFINISHED OVERFLOW SCUPPER (W/ ALL REQ. FLASHING, TRIMS, ETC.). LOCATE OVERFLOW SCUPPER 2" MIN. ABOVE MAIN SCUPPER.
10.70	15"W x 12"D x 6"H SINGLE TIER METAL LOCKERS W/ 4" METAL BASE
12.04	ROLLER WINDOW SHADES
22.01	TRENCH DRAIN
22.19	UTILITY SINK; SEE PLUMBING
22.20	EMERGENCYEYEWASH UNIT
22.30	ELECTRIC WATER COOLER
23.24	AIR COMPRESSOR; SEE MECHANICAL
26.21	CARD READER
26.22	CARD READER AND ADA PADDLE SWITCH
26.23	ADA PADDLE SWITCH



**2 MEZZANINE FLOOR PLAN**  
1/8" = 1'-0"



**3 MEZZ GUARDRAIL**  
1 1/2" = 1'-0"

**FIRST FLOOR PLAN - AREA D**  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR PLAN - AREA D

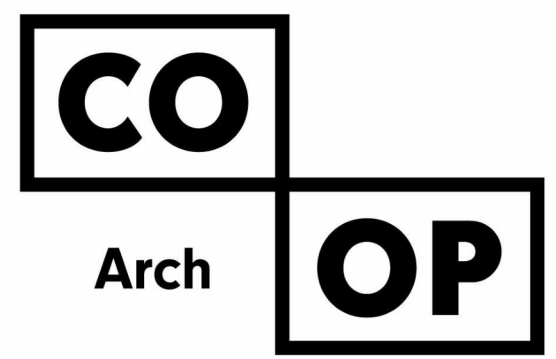
**A101D**

**GENERAL NOTES**

1. FIRE RATED WALL ARE INDICATED ON THE CODE PLANS.
2. PROVIDE FIRE EXTINGUISHERS AND CABINETS AS SHOWN ON THE CODE PLAN(S).
3. REFER TO SHEET **G003** FOR ADA STANDARDS.
4. REFER TO SHEET **G003** FOR WALL, ROOF, AND FLOOR TYPES.
5. INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU UNLESS OTHERWISE NOTED.
6. ALL WALL TYPES TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
7. EXTERIOR DIMENSIONS ARE FROM FACE OF BRICK/SHEATHING UNLESS OTHERWISE NOTED.
8. COORDINATE WORK DONE BY OTHERS AS INDICATED ON THE DRAWINGS.
9. INCREASE WALL THICKNESS OF METAL STUD AND CONCRETE BLOCK WALLS AS REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL DEVICES - VERIFY w/ ARCHITECT PRIOR TO WORK.
10. SEE MECHANICAL FOR ALL FLOOR DRAIN SIZES AND LOCATIONS U.N.O. SET FLOOR DRAINS MINIMUM 3/4" BELOW FINISHED FLOOR. PROVIDE EVEN SLOPE FROM WALL TO DRAIN W/ A MAXIMUM SLOPE OF 1/4" PER FOOT.
11. VERIFY DRYWALL CONTROL JOINT LOCATIONS w/ ARCHITECT ON SITE PRIOR TO INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROL JOINTS AT 30'-0" O.C. MAX. IN LONG WALL EXPANSES. CONTROL JOINTS AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CONSIDERATION SHALL ALSO BE GIVEN TO LOCATING CONTROL JOINTS FROM FLOOR TO CEILING AT EITHER EDGE OF LARGE WINDOW OPENINGS.
12. VERIFY HOISTWAY SHAFT SIZE REQUIREMENTS w/ ELEVATOR MANUFACTURER & COORDINATE.
13. COORDINATE ALL CHASE SIZES AND LOCATIONS w/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
14. COORDINATE ALL SHEAR WALL LOCATIONS w/ STRUCTURAL PLANS.
15. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
16. WALL TYPES ARE '4C' TYPICALLY UNLESS NOTED OTHERWISE.
17. NEW CMU IN EXISTING AREAS SHALL ALIGN WITH EXISTING BONDING PATTERNS (STACKED OR RUNNING)

**KEYNOTE SCHEDULE**

4.71 INFILL LOUVER OPENING W/ BRICK, INSULATION, AND CMU TO MATCH EXISTING WALL CONSTRUCTION/FINISH; SEE MECHANICAL PLANS FOR DEMOLISHED LOUVER LOCATIONS.

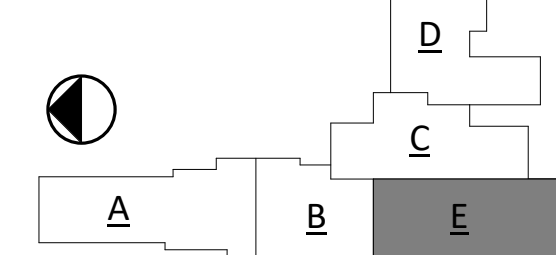


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



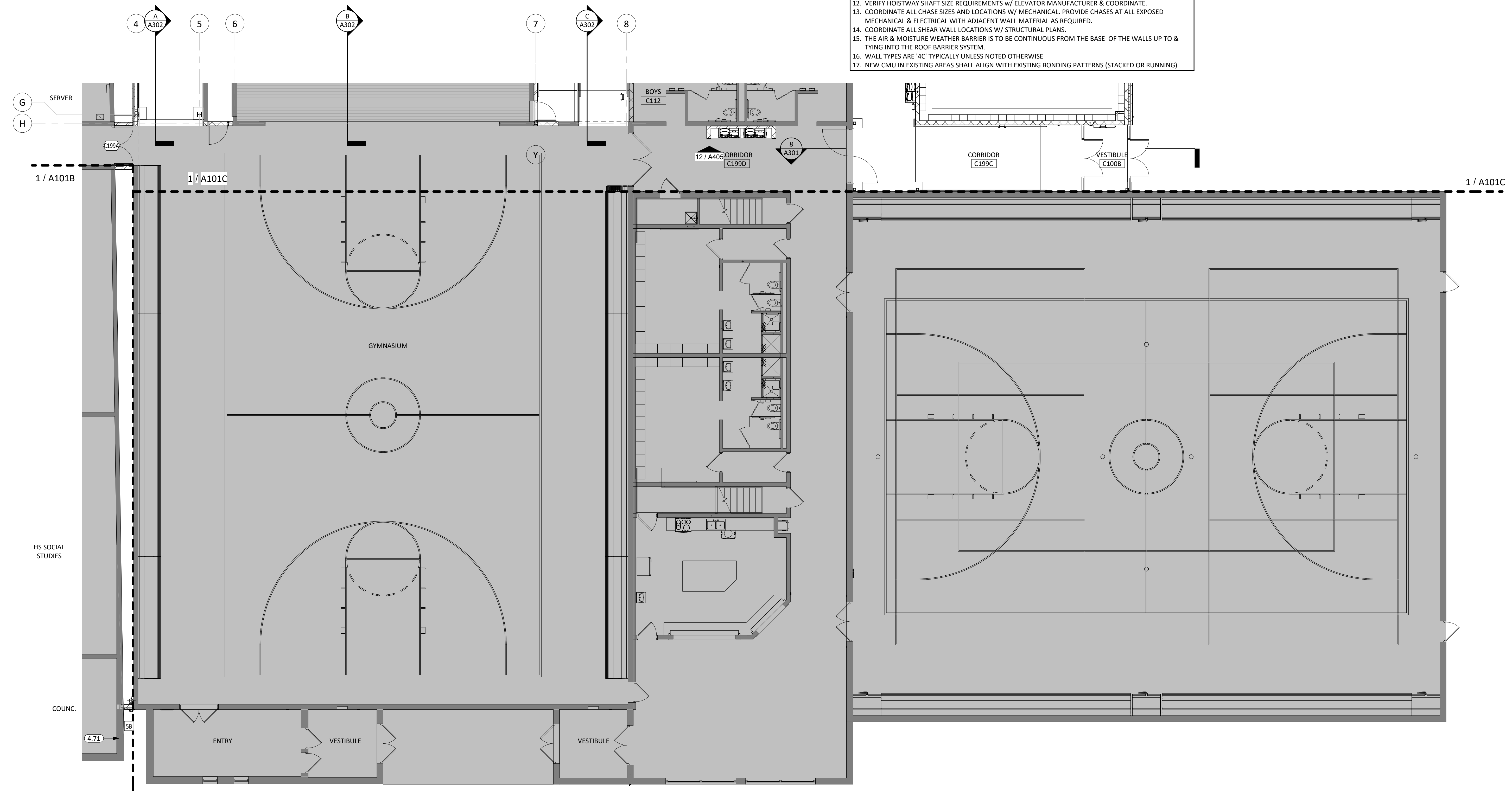
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR PLAN - AREA E

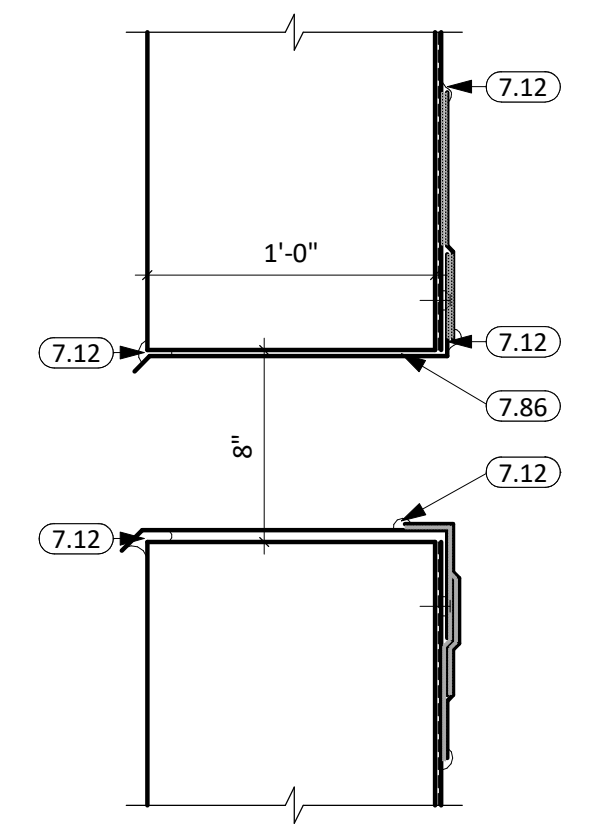
**A101E**



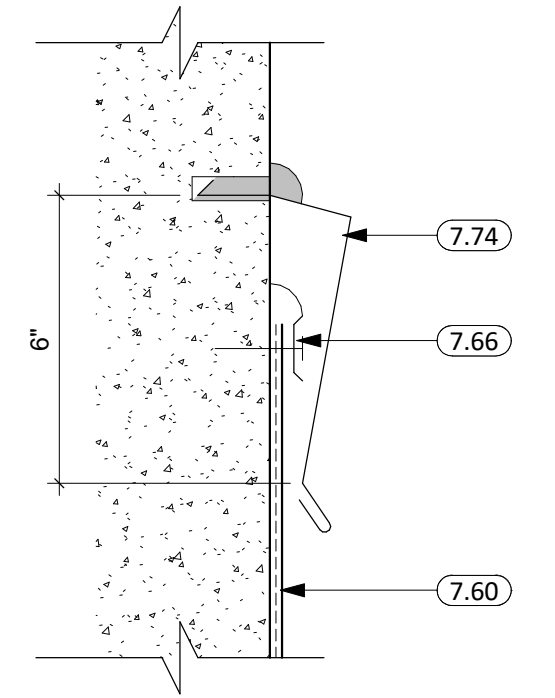
**FIRST FLOOR PLAN - AREA E**

1/8" = 1'-0"

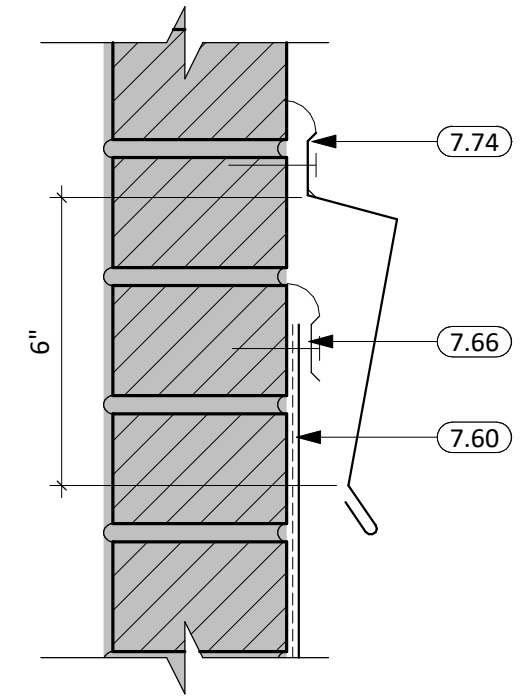
1/31/2023 1:42:46 PM



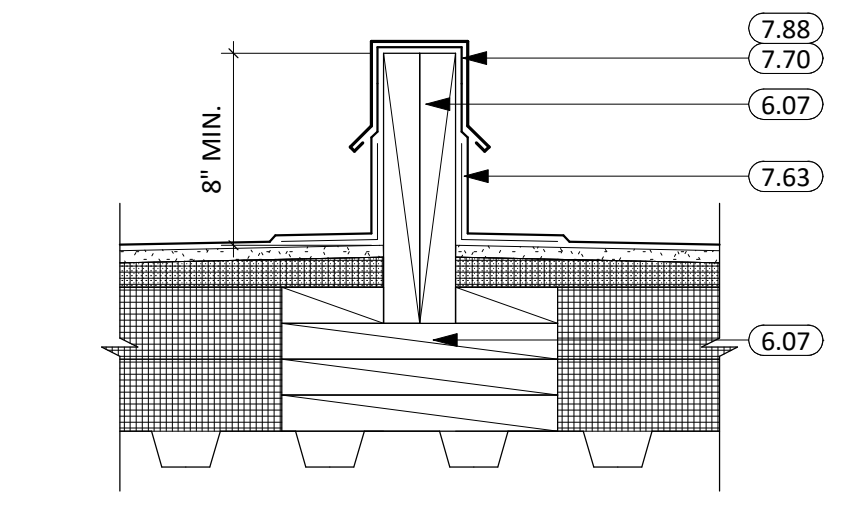
**3** OVERFLOW ROOF SCUPPER  
1 1/2" = 1'-0"



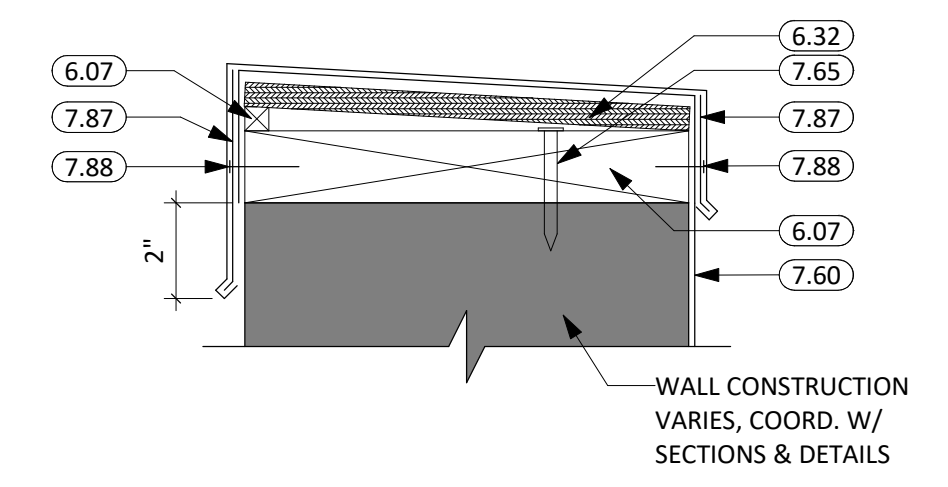
**5** TERMINATION W/ REGLET  
3" = 1'-0"



**6** TERMINATION W/ SURFACE REGLET @ EXIST.  
3" = 1'-0"



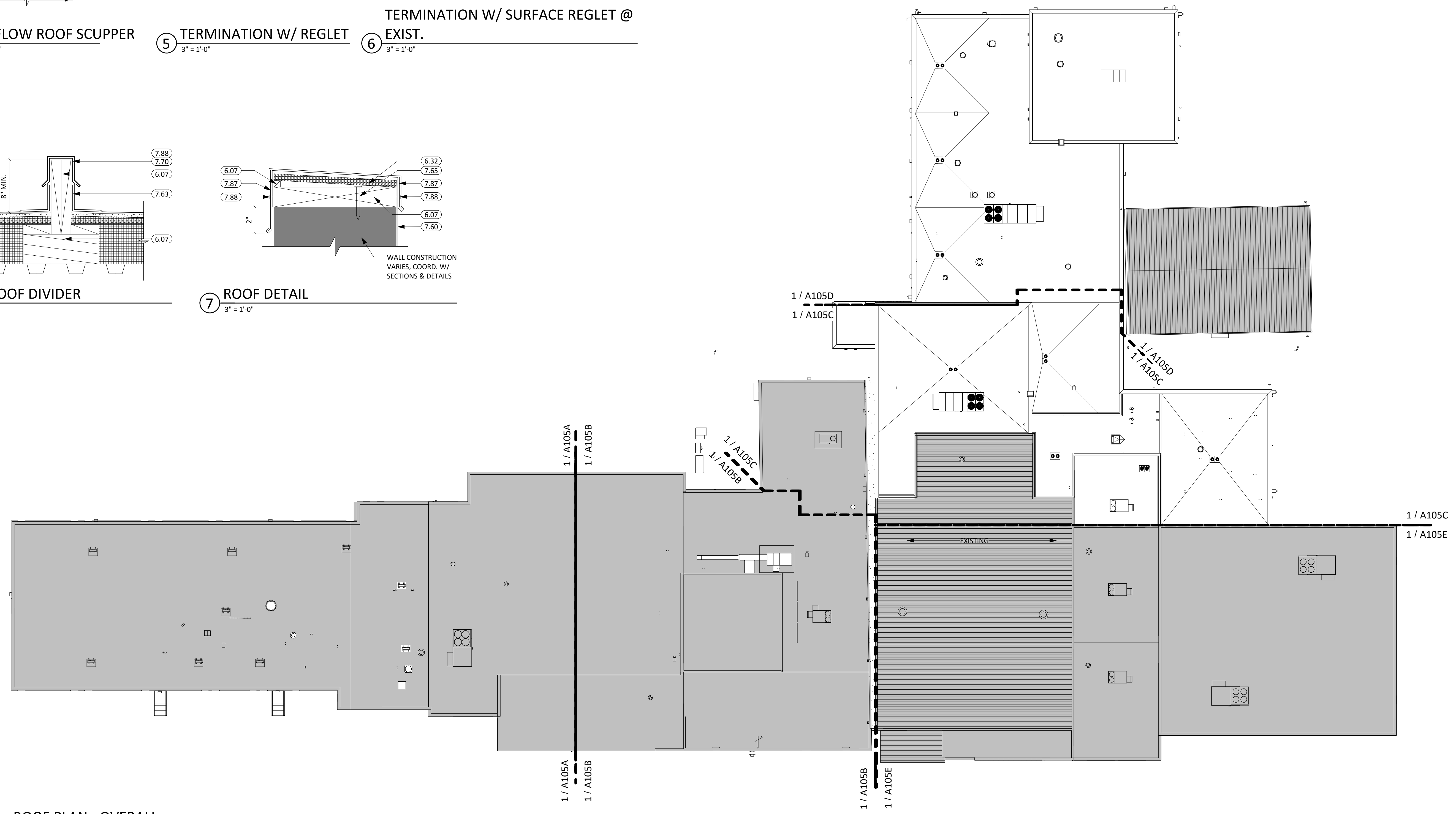
**4** TYP. ROOF DIVIDER  
1 1/2" = 1'-0"



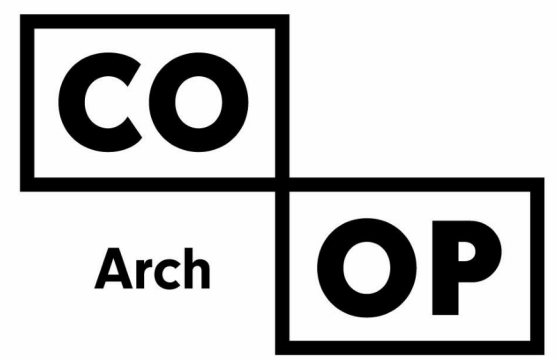
**7** ROOF DETAIL  
3" = 1'-0"

KEYNOTE SCHEDULE	
6.07	2x WOOD BLOCKING AS REQUIRED
6.32	ROOF SHEATHING
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.60	FULLY ADHERED EPDM SINGLE MEMBRANE ROOF (WRAP PARAPET WHERE OCCURS)
7.63	REINFORCED PERIMETER FASTENING STRIP
7.65	ANCHOR (3'-0" O.C. MAX)
7.66	TERMINATION BAR AND HIGH GRADE SEALANT
7.70	PRE-FINISHED SHEET METAL FLASHING
7.74	PRE-FINISHED J-CHANNEL
7.86	PRE-FINISHED DOWNSPOUT
7.87	CONTINUOUS CLEAT
7.88	FASTENER W/ NEOPRENE WASHER

- GENERAL NOTES**
- SEE CIVIL, STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INFORMATION AND COORDINATION.
  - ALL TAPERED ROOF SYSTEM SLOPES ARE 1/4" PER FOOT UNLESS OTHERWISE NOTED.
  - ALL THRU ROOF PENETRATION BOOTS IN ROOF SYSTEM ARE TO BE PROVIDED.
  - THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
  - COORDINATE ROOF PENETRATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.
  - ALL ROOF SADDLES SHALL HAVE A MINIMUM OF 1/2" PER FOOT SLOPE.
  - PROVIDE ROOF CURBS FOR ALL EQUIPMENT SCHEDULED TO BE ON THE ROOF. COORDINATE SIZE AND LOCATION WITH APPLICABLE TRADES.
  - PROVIDE CRICKETS AT ALL ROOF TOP EQUIPMENT TO ALLOW FOR UNIMPEDED WATER FLOW.
  - DIMENSIONS AND LOCATIONS OF EQUIPMENT ON THE ROOF ARE APPROX., DO NOT SCALE THE DRAWINGS. VERIFY WITH APPLICABLE TRADES.
  - TAPERED INSULATION SHALL HAVE A MINIMUM OF 1/4" PER FOOT SLOPE. PROVIDE TAPERED INSULATION AS REQUIRED TO ACHIEVE 1/4" PER FOOT SLOPE.
  - PROVIDE R-30 MINIMUM ROOF INSULATION AT ROOF DRAINS.
  - PROVIDE ROOF WALKING PADS AS SHOWN.



**ROOF PLAN - OVERALL**  
3/64" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ROOF PLAN OVERALL

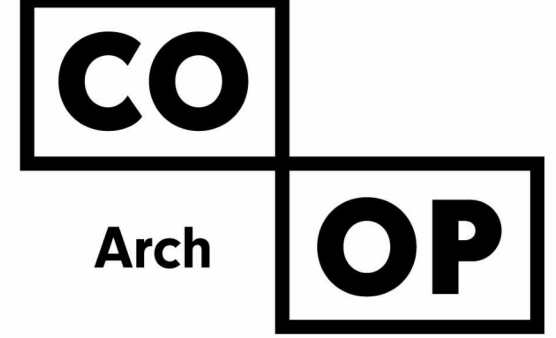
**A105**

**KEYNOTE SCHEDULE**

23.22	EXHAUST FAN; SEE MECHANICAL
23.23	CONDENSER; SEE MECHANICAL
23.25	DSC; SEE MECHANICAL
23.26	IH; SEE MECHANICAL

**GENERAL NOTES**

1. SEE CIVIL, STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INFORMATION AND COORDINATION.
2. ALL TAPERED ROOF SYSTEM SLOPES ARE 1/4" PER FOOT UNLESS OTHERWISE NOTED.
3. ALL THRU ROOF PENETRATION BOOTS IN ROOF SYSTEM ARE TO BE PROVIDED.
4. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
5. COORDINATE ROOF PENETRATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.
6. ALL ROOF SADDLES SHALL HAVE A MINIMUM OF 1/2" PER FOOT SLOPE.
7. PROVIDE ROOF CURBS FOR ALL EQUIPMENT SCHEDULED TO BE ON THE ROOF. COORDINATE SIZE AND LOCATION WITH APPLICABLE TRADES.
8. PROVIDE CRICKETS AT ALL ROOF TOP EQUIPMENT TO ALLOW FOR UNIMPEDED WATER FLOW.
9. DIMENSIONS AND LOCATIONS OF EQUIPMENT ON THE ROOF ARE APPROX., DO NOT SCALE THE DRAWINGS. VERIFY WITH APPLICABLE TRADES.
10. TAPERED INSULATION SHALL HAVE A MINIMUM OF 1/4" PER FOOT SLOPE. PROVIDE TAPERED INSULATION AS REQUIRED TO ACHIEVE 1/4" PER FOOT SLOPE.
11. PROVIDE R-30 MINIMUM ROOF INSULATION AT ROOF DRAINS.
12. PROVIDE ROOF WALKING PADS AS SHOWN.

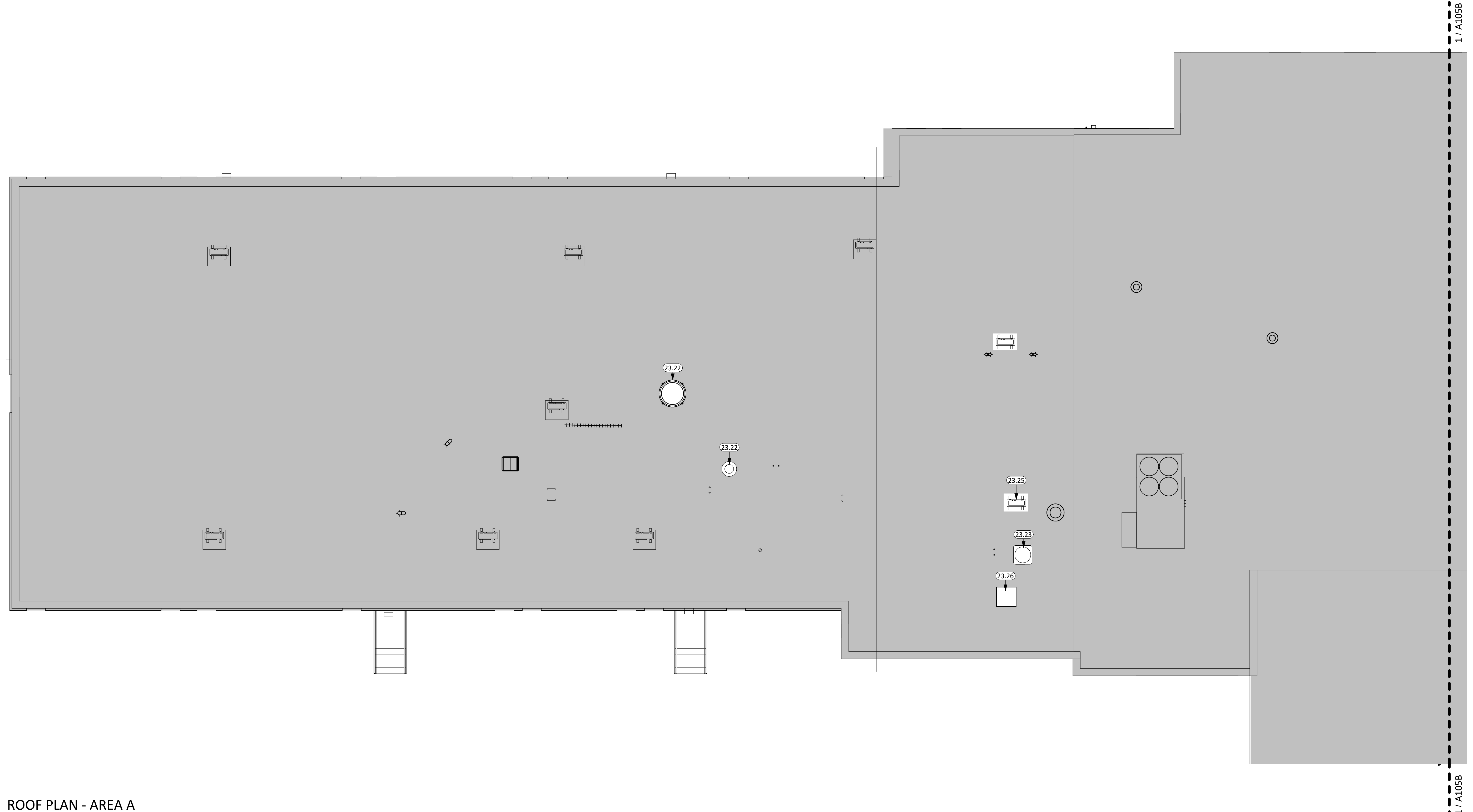
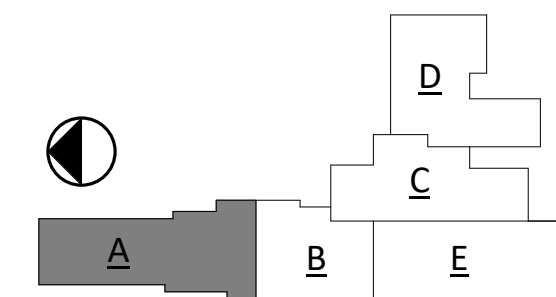


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



1 / A105B

1 / A105B

CO-OP PROJECT NO: 2153



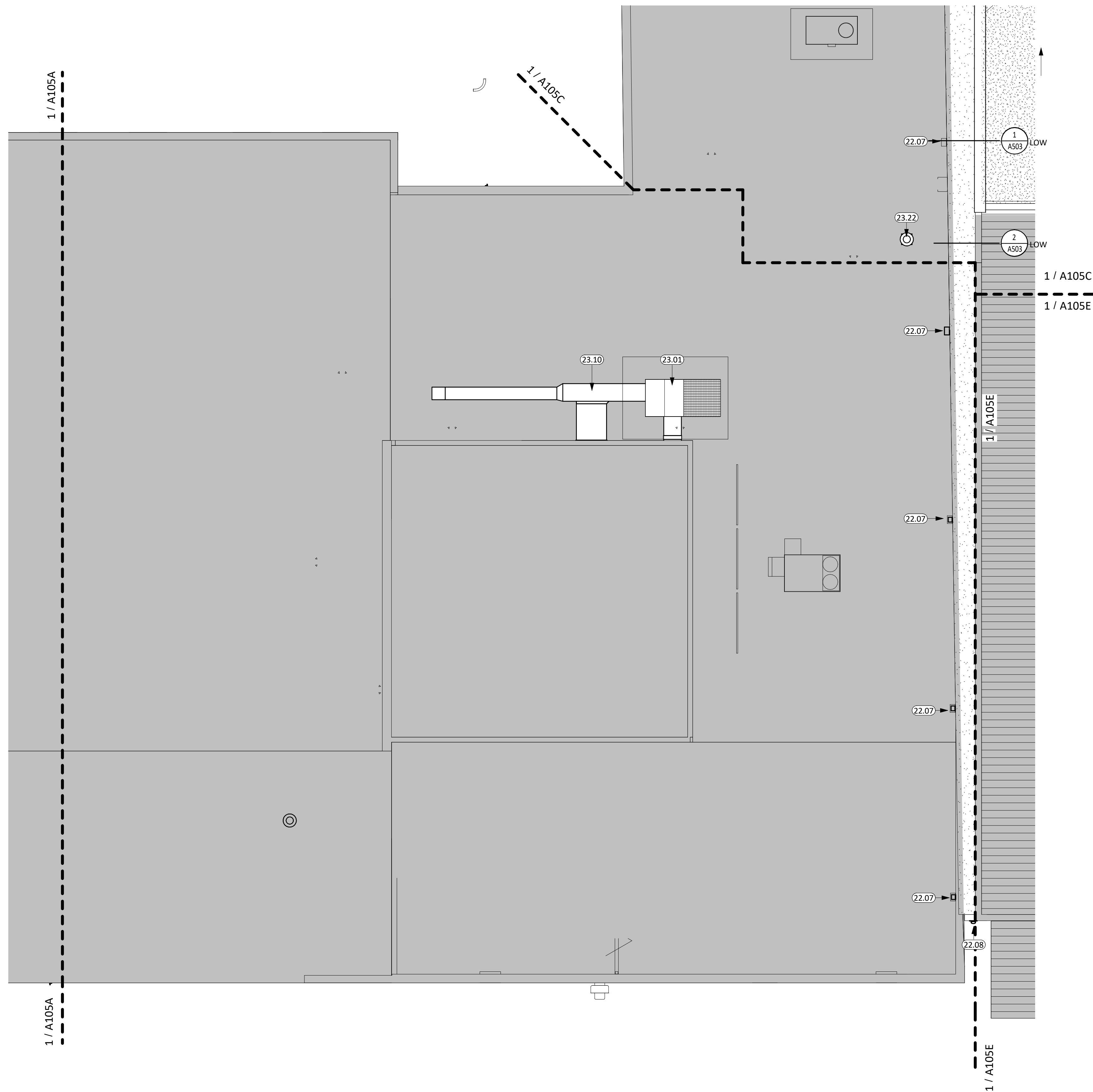
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ROOF PLAN - AREA A

**A105A**

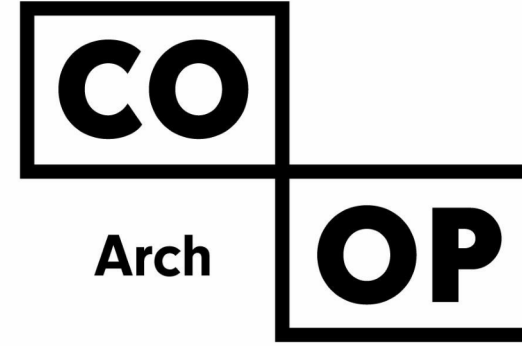


**GENERAL NOTES**

1. SEE CIVIL, STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INFORMATION AND COORDINATION.
2. ALL TAPERED ROOF SYSTEM SLOPES ARE 1/4" PER FOOT UNLESS OTHERWISE NOTED.
3. ALL THRU ROOF PENETRATION BOOTS IN ROOF SYSTEM ARE TO BE PROVIDED.
4. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
5. COORDINATE ROOF PENETRATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.
6. ALL ROOF SADDLES SHALL HAVE A MINIMUM OF 1/2" PER FOOT SLOPE.
7. PROVIDE ROOF CURBS FOR ALL EQUIPMENT SCHEDULED TO BE ON THE ROOF. COORDINATE SIZE AND LOCATION WITH APPLICABLE TRADES.
8. PROVIDE CRICKETS AT ALL ROOF TOP EQUIPMENT TO ALLOW FOR UNIMPEDED WATER FLOW.
9. DIMENSIONS AND LOCATIONS OF EQUIPMENT ON THE ROOF ARE APPROX., DO NOT SCALE THE DRAWINGS. VERIFY WITH APPLICABLE TRADES.
10. TAPERED INSULATION SHALL HAVE A MINIMUM OF 1/4" PER FOOT SLOPE. PROVIDE TAPERED INSULATION AS REQUIRED TO ACHIEVE 1/4" PER FOOT SLOPE.
11. PROVIDE R-30 MINIMUM ROOF INSULATION AT ROOF DRAINS.
12. PROVIDE ROOF WALKING PADS AS SHOWN.

**KEYNOTE SCHEDULE**

22.08	DOWNSPOUT ROOF NOZZLE; PROVIDE SPLASH BLOCK AT GRADE LOCATIONS
23.01	HVAC UNIT; SEE MECHANICAL
23.10	DUCTWORK
23.22	EXHAUST FAN; SEE MECHANICAL

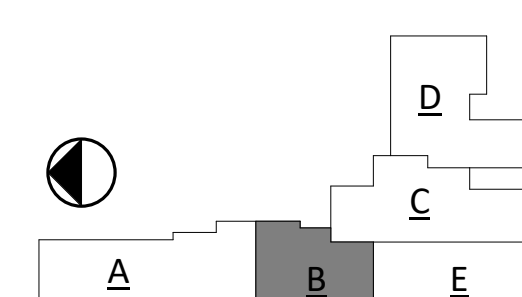


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ROOF PLAN AREA B

**A105B**

ROOF PLAN - AREA B

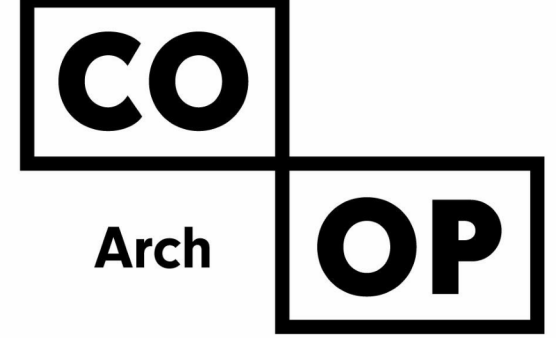
1/8" = 1'-0"

### KEYNOTE SCHEDULE

23.01	HVAC UNIT; SEE MECHANICAL
23.10	DUCTWORK
23.22	EXHAUST FAN; SEE MECHANICAL

### GENERAL NOTES

- SEE CIVIL, STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INFORMATION AND COORDINATION.
- ALL TAPERED ROOF SYSTEM SLOPES ARE 1/4" PER FOOT UNLESS OTHERWISE NOTED.
- ALL THRU ROOF PENETRATION BOOTS IN ROOF SYSTEM ARE TO BE PROVIDED.
- THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
- COORDINATE ROOF PENETRATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.
- ALL ROOF SADDLES SHALL HAVE A MINIMUM OF 1/2" PER FOOT SLOPE.
- PROVIDE ROOF CURBS FOR ALL EQUIPMENT SCHEDULED TO BE ON THE ROOF. COORDINATE SIZE AND LOCATION WITH APPLICABLE TRADES.
- PROVIDE CRICKETS AT ALL ROOF TOP EQUIPMENT TO ALLOW FOR UNIMPEDED WATER FLOW.
- DIMENSIONS AND LOCATIONS OF EQUIPMENT ON THE ROOF ARE APPROX., DO NOT SCALE THE DRAWINGS. VERIFY WITH APPLICABLE TRADES.
- TAPERED INSULATION SHALL HAVE A MINIMUM OF 1/4" PER FOOT SLOPE. PROVIDE TAPERED INSULATION AS REQUIRED TO ACHIEVE 1/4" PER FOOT SLOPE.
- PROVIDE R-30 MINIMUM ROOF INSULATION AT ROOF DRAINS.
- PROVIDE ROOF WALKING PADS AS SHOWN.

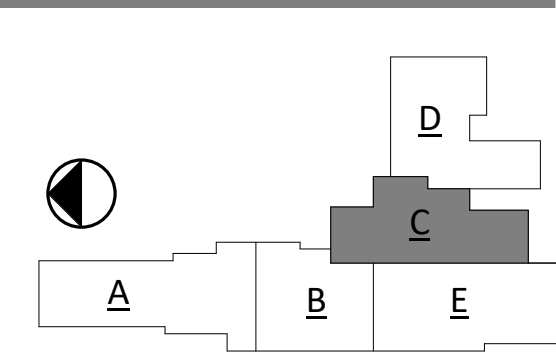


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



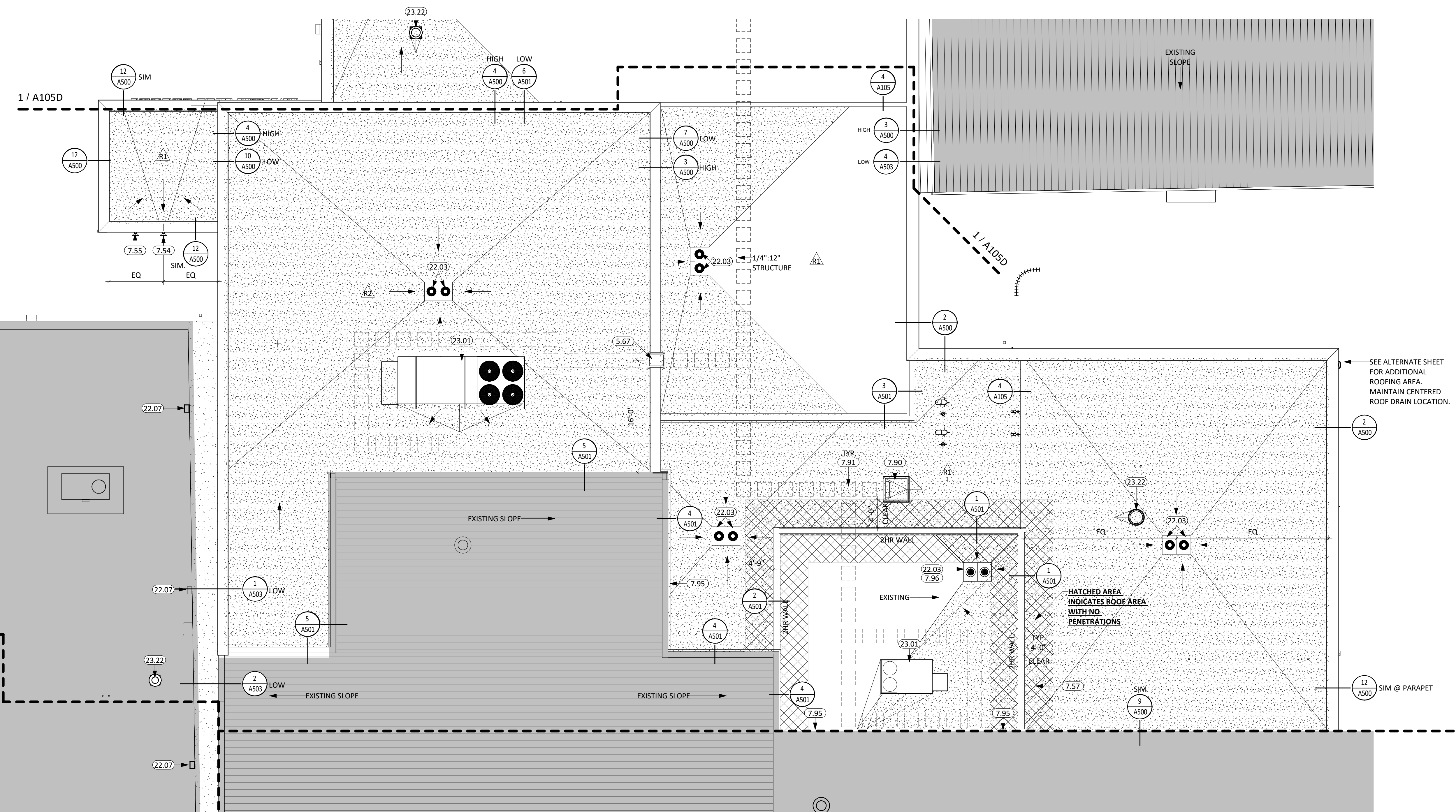
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ROOF PLAN - AREA C

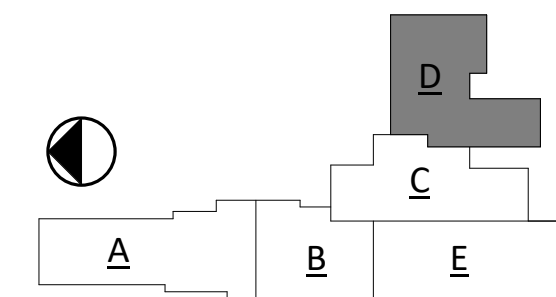
# A105C



ROOF PLAN - AREA C

1/8" = 1'-0"

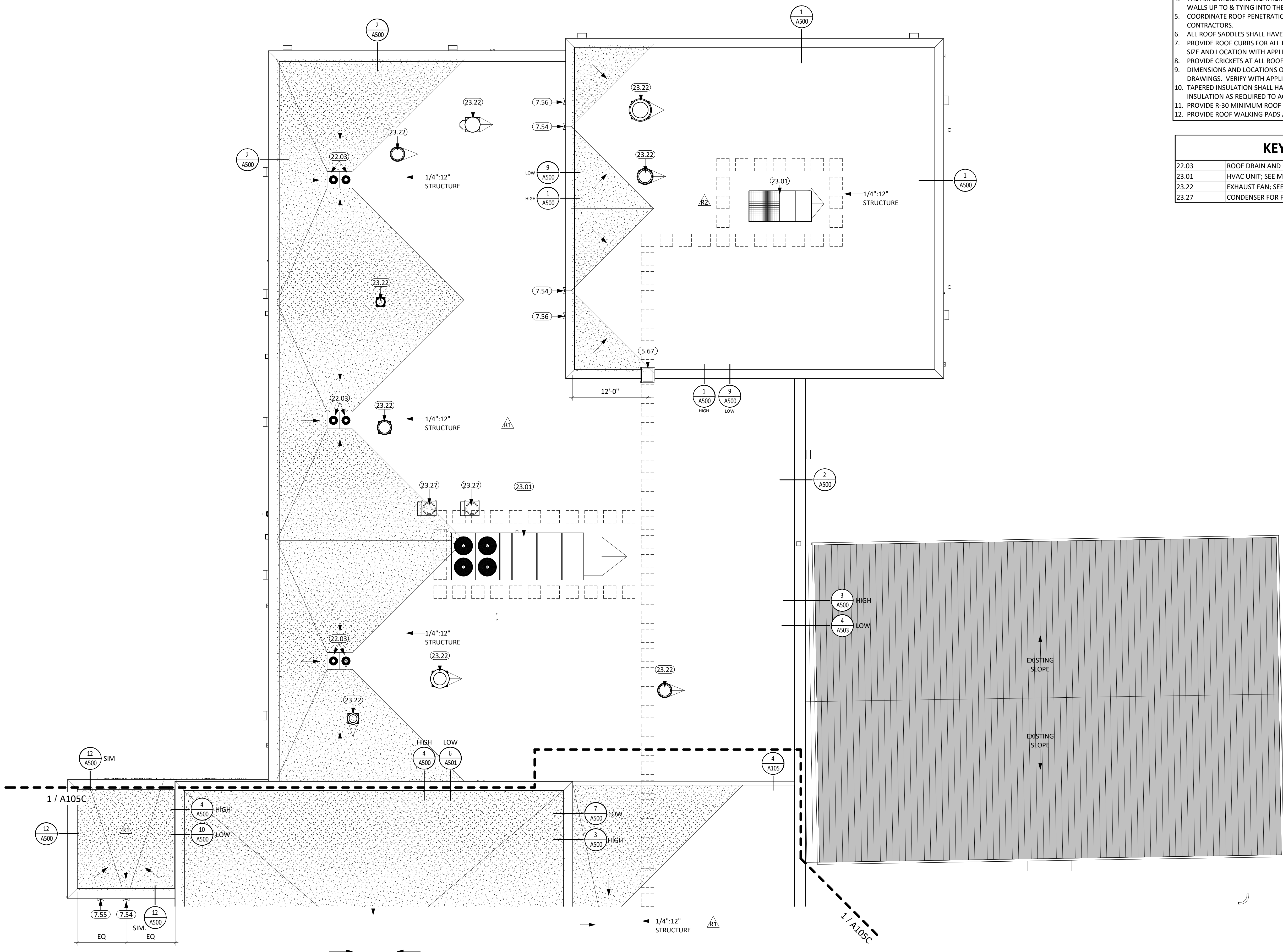
1/31/2023 1:43:15 PM



- ### GENERAL NOTES
- SEE CIVIL, STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INFORMATION AND COORDINATION.
  - ALL TAPERED ROOF SYSTEM SLOPES ARE 1/4" PER FOOT UNLESS OTHERWISE NOTED.
  - ALL THRU ROOF PENETRATION BOOTS IN ROOF SYSTEM ARE TO BE PROVIDED.
  - THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
  - COORDINATE ROOF PENETRATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.
  - ALL ROOF SADDLES SHALL HAVE A MINIMUM OF 1/2" PER FOOT SLOPE.
  - PROVIDE ROOF CURBS FOR ALL EQUIPMENT SCHEDULED TO BE ON THE ROOF. COORDINATE SIZE AND LOCATION WITH APPLICABLE TRADES.
  - PROVIDE CRICKETS AT ALL ROOF TOP EQUIPMENT TO ALLOW FOR UNIMPEDED WATER FLOW.
  - DIMENSIONS AND LOCATIONS OF EQUIPMENT ON THE ROOF ARE APPROX., DO NOT SCALE THE DRAWINGS. VERIFY WITH APPLICABLE TRADES.
  - TAPERED INSULATION SHALL HAVE A MINIMUM OF 1/4" PER FOOT SLOPE. PROVIDE TAPERED INSULATION AS REQUIRED TO ACHIEVE 1/4" PER FOOT SLOPE.
  - PROVIDE R-30 MINIMUM ROOF INSULATION AT ROOF DRAINS.
  - PROVIDE ROOF WALKING PADS AS SHOWN.

### KEYNOTE SCHEDULE

22.03	ROOF DRAIN AND OVERFLOW ROOF DRAIN; SEE MECHANICAL
23.01	HVAC UNIT; SEE MECHANICAL
23.22	EXHAUST FAN; SEE MECHANICAL
23.27	CONDENSER FOR FOOD SERVICE EQUIPMENT; SEE FOOD SERVICE/MECHANICAL



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ROOF PLAN - AREA D

**A105D**

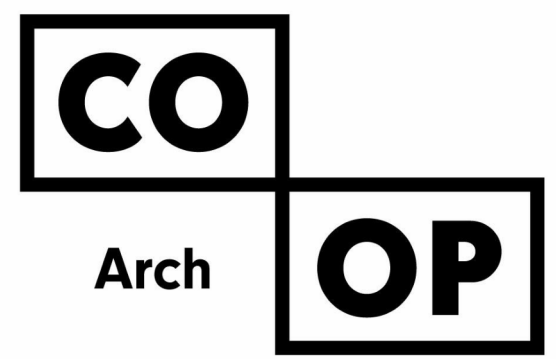
ROOF PLAN - AREA D  
1/8" = 1'-0"



- ### GENERAL NOTES
1. SEE CIVIL, STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INFORMATION AND COORDINATION.
  2. ALL TAPERED ROOF SYSTEM SLOPES ARE 1/4" PER FOOT UNLESS OTHERWISE NOTED.
  3. ALL THRU ROOF PENETRATION BOOTS IN ROOF SYSTEM ARE TO BE PROVIDED.
  4. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
  5. COORDINATE ROOF PENETRATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.
  6. ALL ROOF SADDLES SHALL HAVE A MINIMUM OF 1/2" PER FOOT SLOPE.
  7. PROVIDE ROOF CURBS FOR ALL EQUIPMENT SCHEDULED TO BE ON THE ROOF. COORDINATE SIZE AND LOCATION WITH APPLICABLE TRADES.
  8. PROVIDE CRICKETS AT ALL ROOF TOP EQUIPMENT TO ALLOW FOR UNIMPEDED WATER FLOW.
  9. DIMENSIONS AND LOCATIONS OF EQUIPMENT ON THE ROOF ARE APPROX., DO NOT SCALE THE DRAWINGS. VERIFY WITH APPLICABLE TRADES.
  10. TAPERED INSULATION SHALL HAVE A MINIMUM OF 1/4" PER FOOT SLOPE. PROVIDE TAPERED INSULATION AS REQUIRED TO ACHIEVE 1/4" PER FOOT SLOPE.
  11. PROVIDE R-30 MINIMUM ROOF INSULATION AT ROOF DRAINS.
  12. PROVIDE ROOF WALKING PADS AS SHOWN.

### KEYNOTE SCHEDULE

22.08	DOWNSPOUT ROOF NOZZLE; PROVIDE SPLASH BLOCK AT GRADE LOCATIONS
23.22	EXHAUST FAN; SEE MECHANICAL

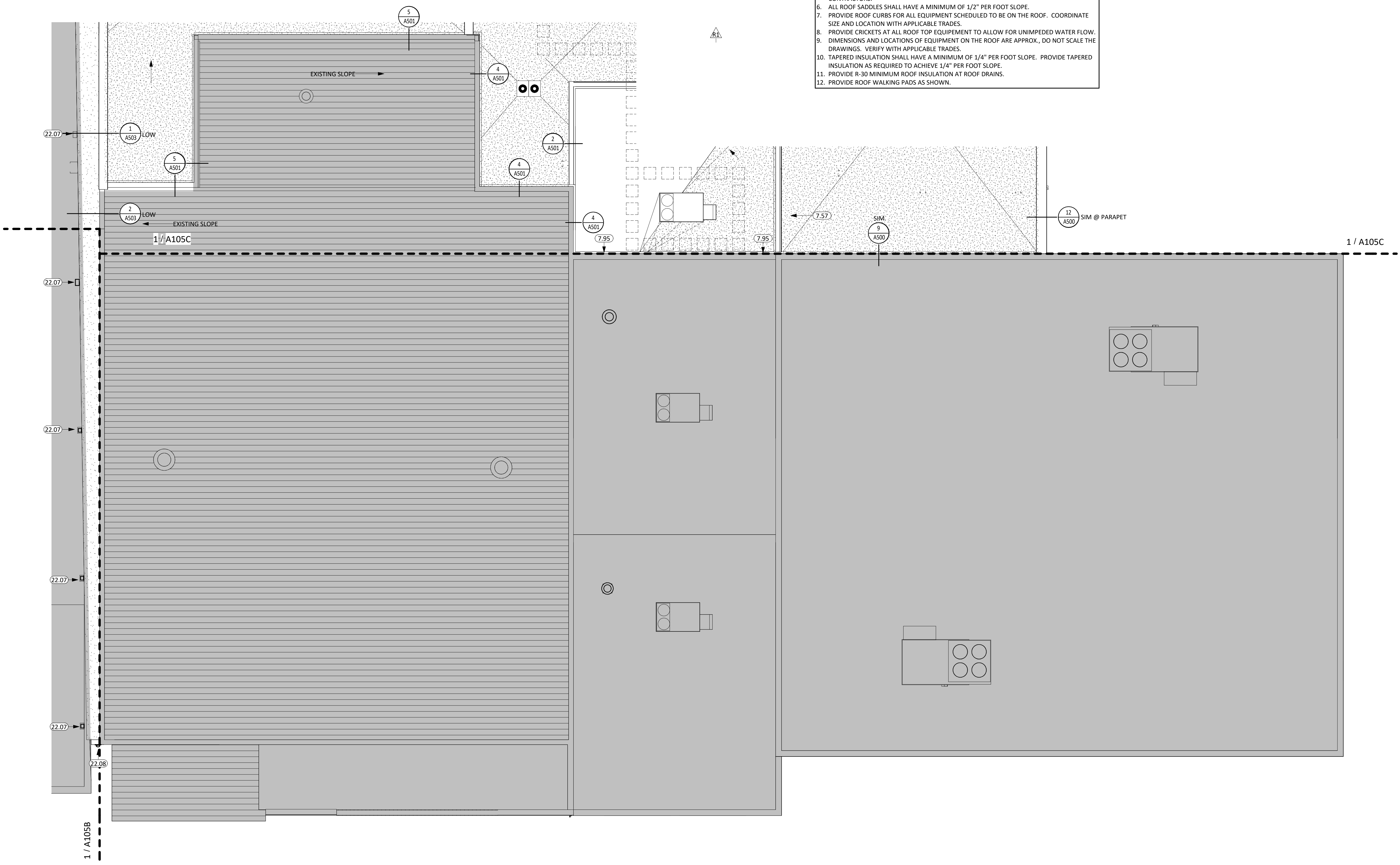
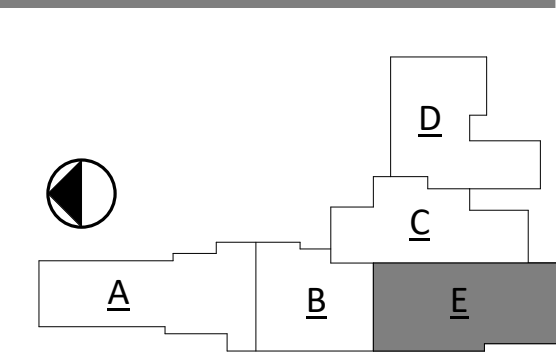


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



**ROOF PLAN - AREA E**  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

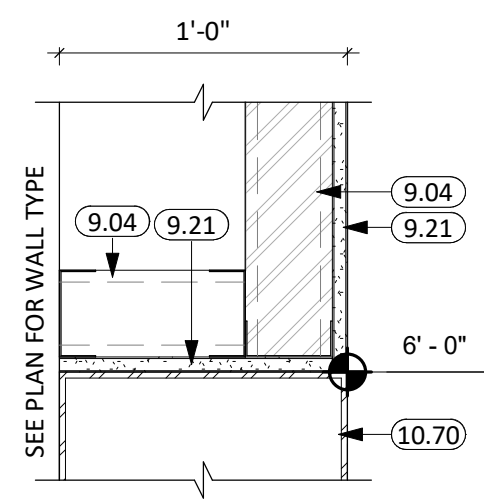
REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

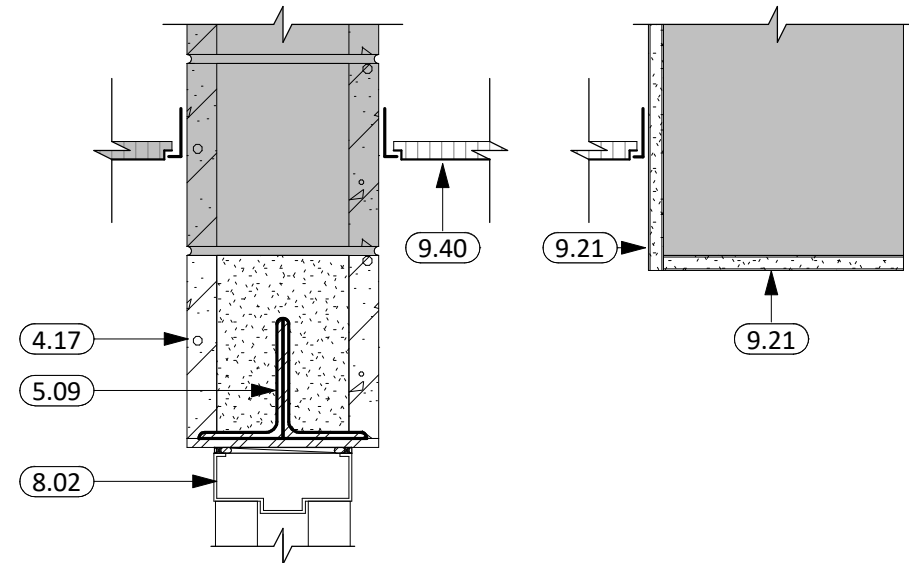
SHEET TITLE:  
ROOF PLAN - AREA E

# A105E

1/31/2023 1:43:32 PM



② RECESSED LOCKER DETAIL  
1 1/2" = 1'-0"



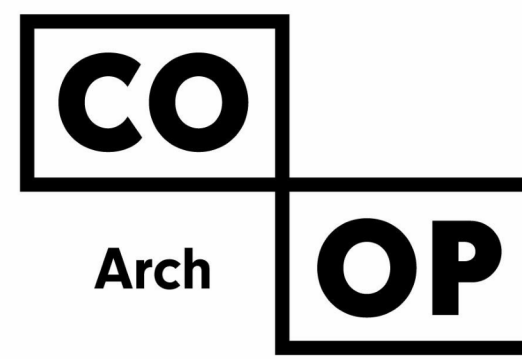
③ CEILING DETAIL @ C199A  
1 1/2" = 1'-0"

**KEYNOTE SCHEDULE**

4.17	CMU SOAPBLOCK
5.09	STRUCTURAL STEEL LINTLE (SEE ARCH. & STRUCT.)
8.02	FRAME (SEE SCHED.)
9.04	3 5/8" STEEL STUD & TRACK FRAMING
9.21	5/8" GYPSUM BOARD
9.40	ACOUSTICAL PANEL CEILING SYSTEM (COORD. w/ MECH. & ELEC. FOR FIXTURE REQ./LOCATIONS)
10.70	15"W x 12"D x 6"H SINGLE TIER METAL LOCKERS W/ 4" METAL BASE

**GENERAL NOTES**

- ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIAL UNLESS OTHERWISE NOTED.
- REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.
- PROVIDE ACCESS DOORS AT MECHANICAL UNIT LOCATIONS ABOVE CEILING. COORDINATE NUMBER REQUIRED AND LOCATIONS WITH MECHANICAL SHEETS.
- CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
- CENTER LIGHT FIXTURES BETWEEN WALLS AND/OR CEILING BULKHEADS UNLESS OTHERWISE DIMENSIONED.
- IN EXPOSED TO STRUCTURE ROOMS, CENTER LIGHTS FIXTURES WITHIN ROOMS UNLESS OTHERWISE NOTED.
- THE REFLECTED CEILING PLANS ARE INTENDED TO AID IN COORDINATION ONLY AND ARE NOT INTENDED TO BE COMPREHENSIVE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT WHERE CONFLICTS OCCUR.
- PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
- PROVIDE GLASS-MATT FACED GYPSUM SHEATHING BEHIND TILE FINISHES AT ALL SHOWERS AND BATHTUBS.
- ELEVATION MARKERS INDICATE HEIGHT FROM FLOOR OF THE ROOM THE CEILING IS IN.

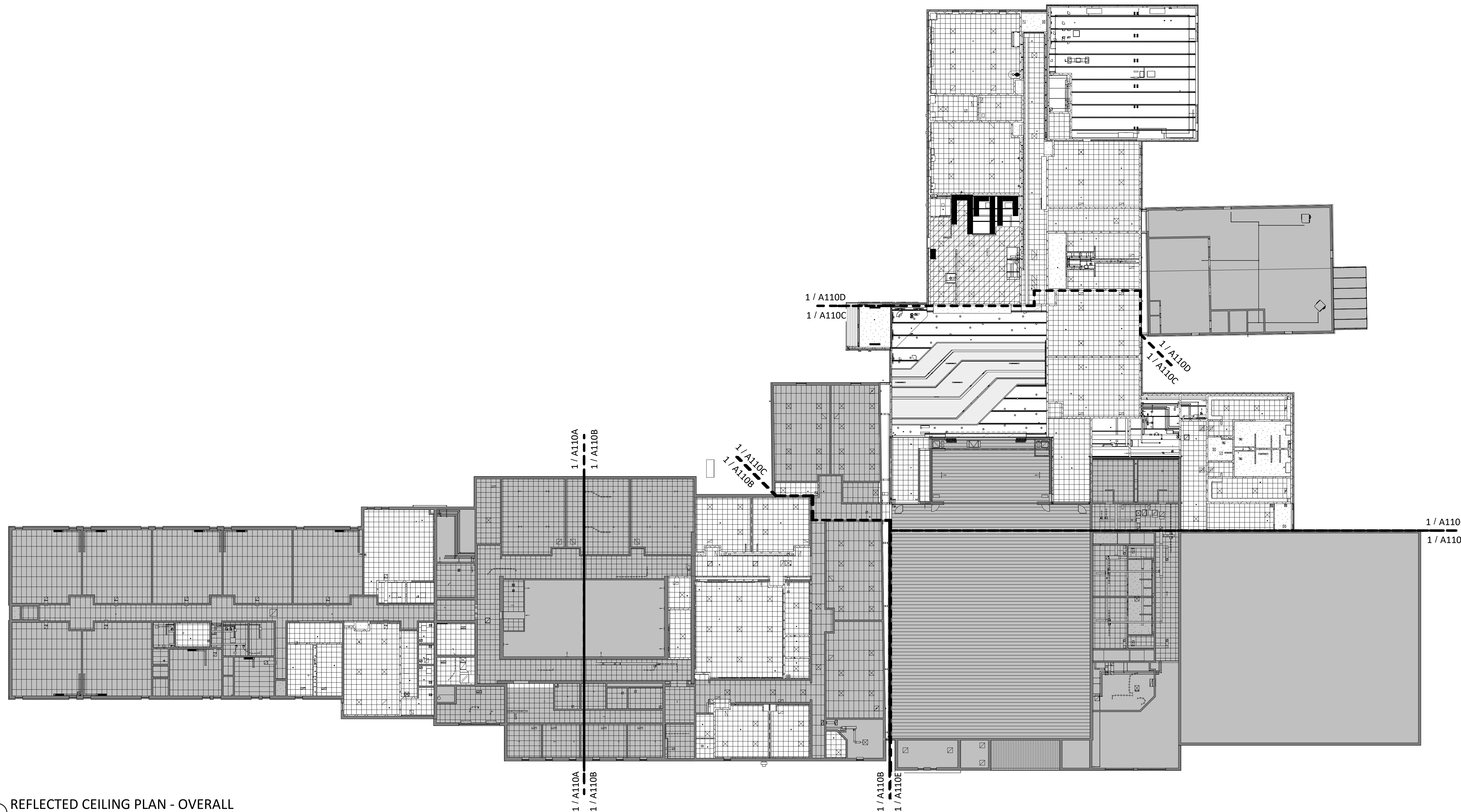
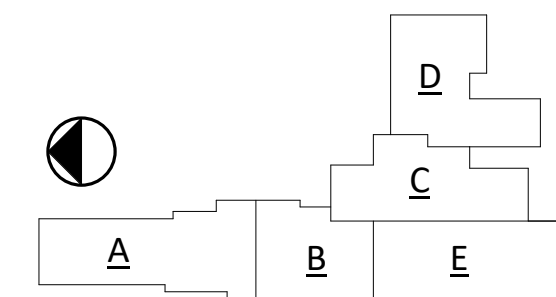


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



① REFLECTED CEILING PLAN - OVERALL  
1" = 20'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

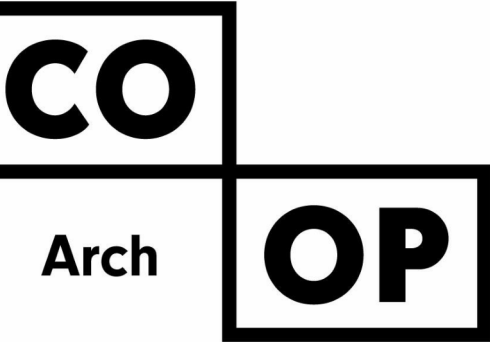
SHEET TITLE:  
REFLECTED CLG PLAN - OVERALL

**A110**

KEYNOTE SCHEDULE

GENERAL NOTES

1. ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIAL UNLESS OTHERWISE NOTED.
2. REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.
3. PROVIDE ACCESS DOORS AT MECHANICAL UNIT LOCATIONS ABOVE CEILING. COORDINATE NUMBER REQUIRED AND LOCATIONS WITH MECHANICAL SHEETS.
4. CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
5. CENTER LIGHT FIXTURES BETWEEN WALLS AND/OR CEILING BULKHEADS UNLESS OTHERWISE DIMENSIONED.
6. IN EXPOSED TO STRUCTURE ROOMS, CENTER LIGHTS FIXTURES WITHIN ROOMS UNLESS OTHERWISE NOTED.
7. THE REFLECTED CEILING PLANS ARE INTENDED TO AID IN COORDINATION ONLY AND ARE NOT INTENDED TO BE COMPREHENSIVE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT WHERE CONFLICTS OCCUR.
8. PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
9. PROVIDE GLASS-MATT FACED GYPSUM SHEATHING BEHIND TILE FINISHES AT ALL SHOWERS AND BATHTUBS.
10. ELEVATION MARKERS INDICATE HEIGHT FROM FLOOR OF THE ROOM THE CEILING IS IN

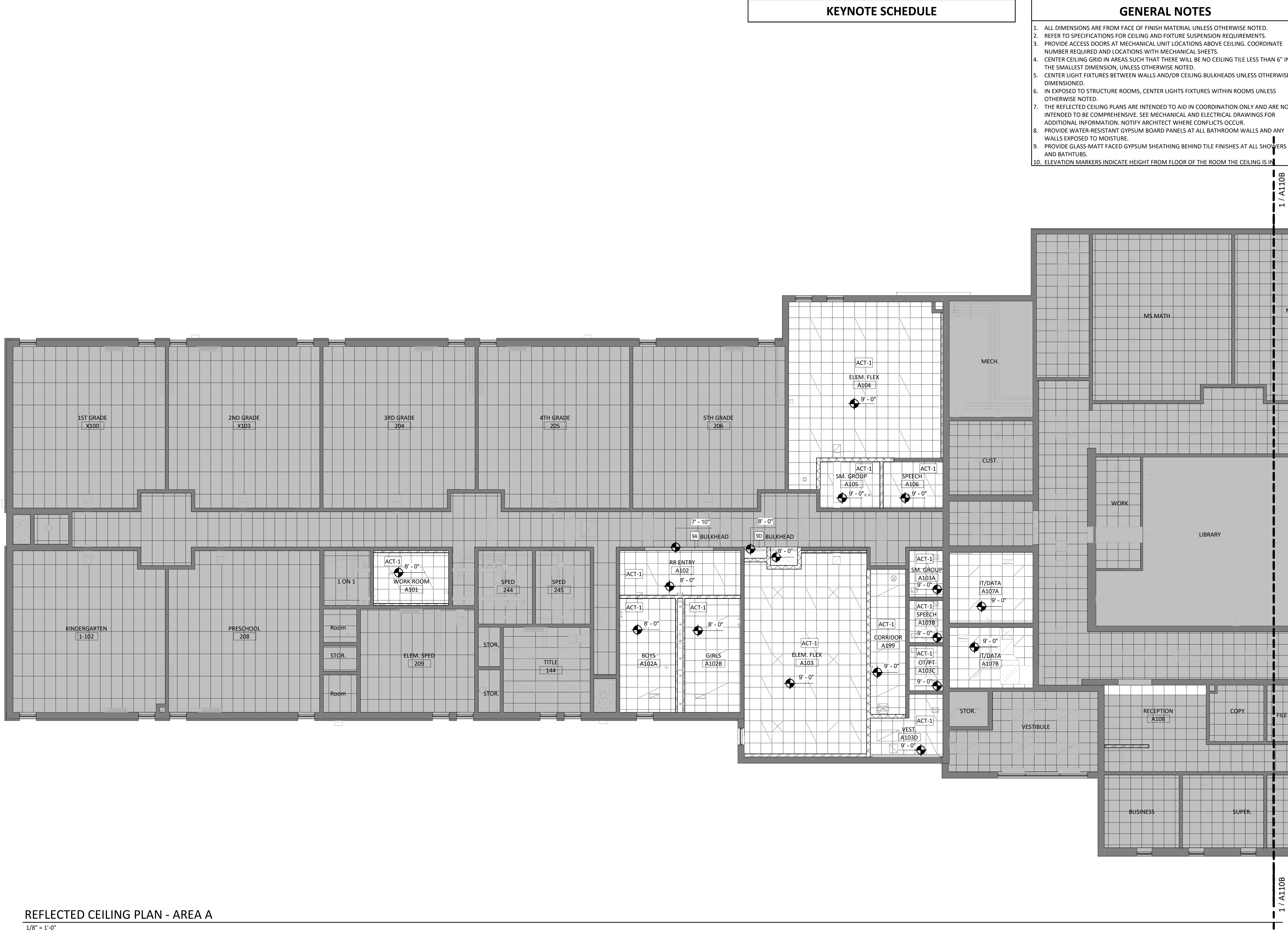
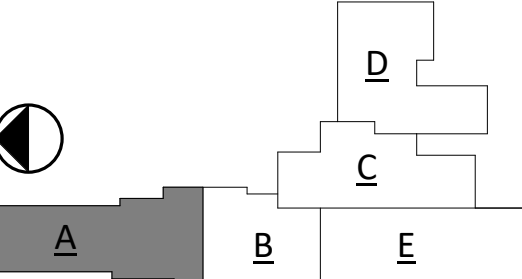


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

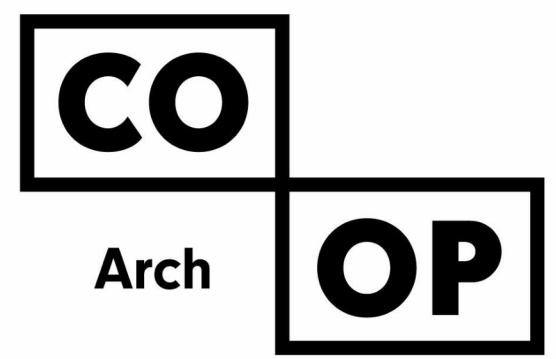
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
REFLECTED CLG PLAN - AREA A

A110A

KEYNOTE SCHEDULE	
9.27	(2) LAYERS OF 5/8" TYPE 'X' GYPSUM WALLBOARD FASTENED UNDERNEATH STRUCTURE ABOVE.
10.20	OPERABLE PANEL PARTITIONS

- GENERAL NOTES**
- ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIAL UNLESS OTHERWISE NOTED.
  - REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.
  - PROVIDE ACCESS DOORS AT MECHANICAL UNIT LOCATIONS ABOVE CEILING. COORDINATE NUMBER REQUIRED AND LOCATIONS WITH MECHANICAL SHEETS.
  - CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
  - CENTER LIGHT FIXTURES BETWEEN WALLS AND/OR CEILING BULKHEADS UNLESS OTHERWISE DIMENSIONED.
  - IN EXPOSED TO STRUCTURE ROOMS, CENTER LIGHTS FIXTURES WITHIN ROOMS UNLESS OTHERWISE NOTED.
  - THE REFLECTED CEILING PLANS ARE INTENDED TO AID IN COORDINATION ONLY AND ARE NOT INTENDED TO BE COMPREHENSIVE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT WHERE CONFLICTS OCCUR.
  - PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
  - PROVIDE GLASS-MATT FACED GYPSUM SHEATHING BEHIND TILE FINISHES AT ALL SHOWERS AND BATHTUBS.
  - ELEVATION MARKERS INDICATE HEIGHT FROM FLOOR OF THE ROOM THE CEILING IS IN.

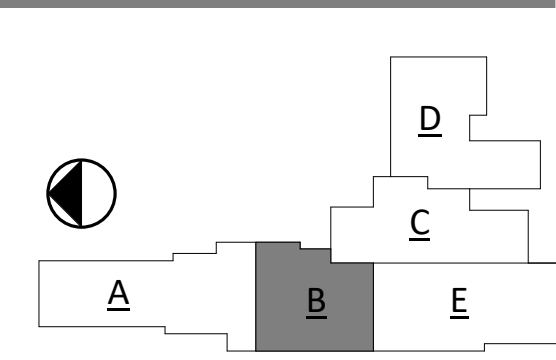


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



REFLECTED CEILING PLAN - AREA B  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

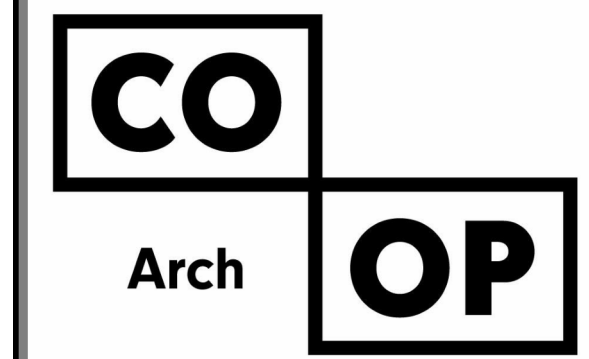
REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
REFLECTED CLG PLAN - AREA B

**A110B**

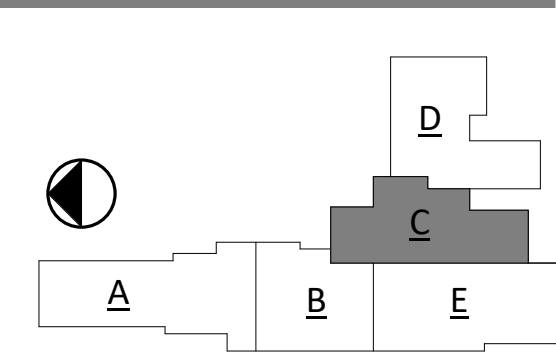


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

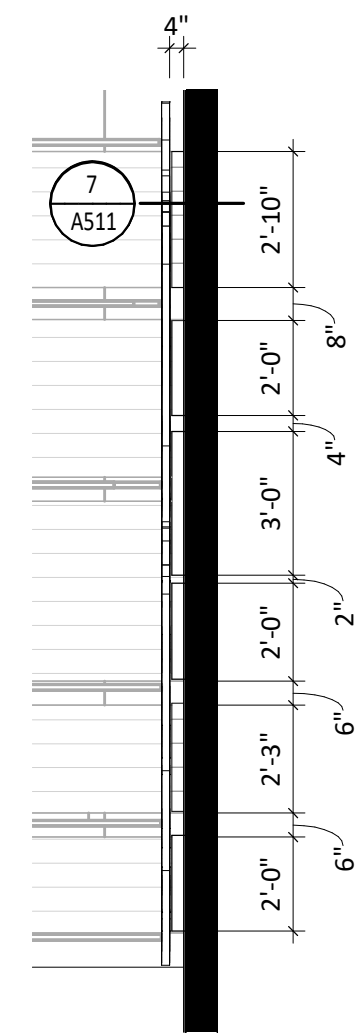
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
REFLECTED CLG PLAN - AREA C

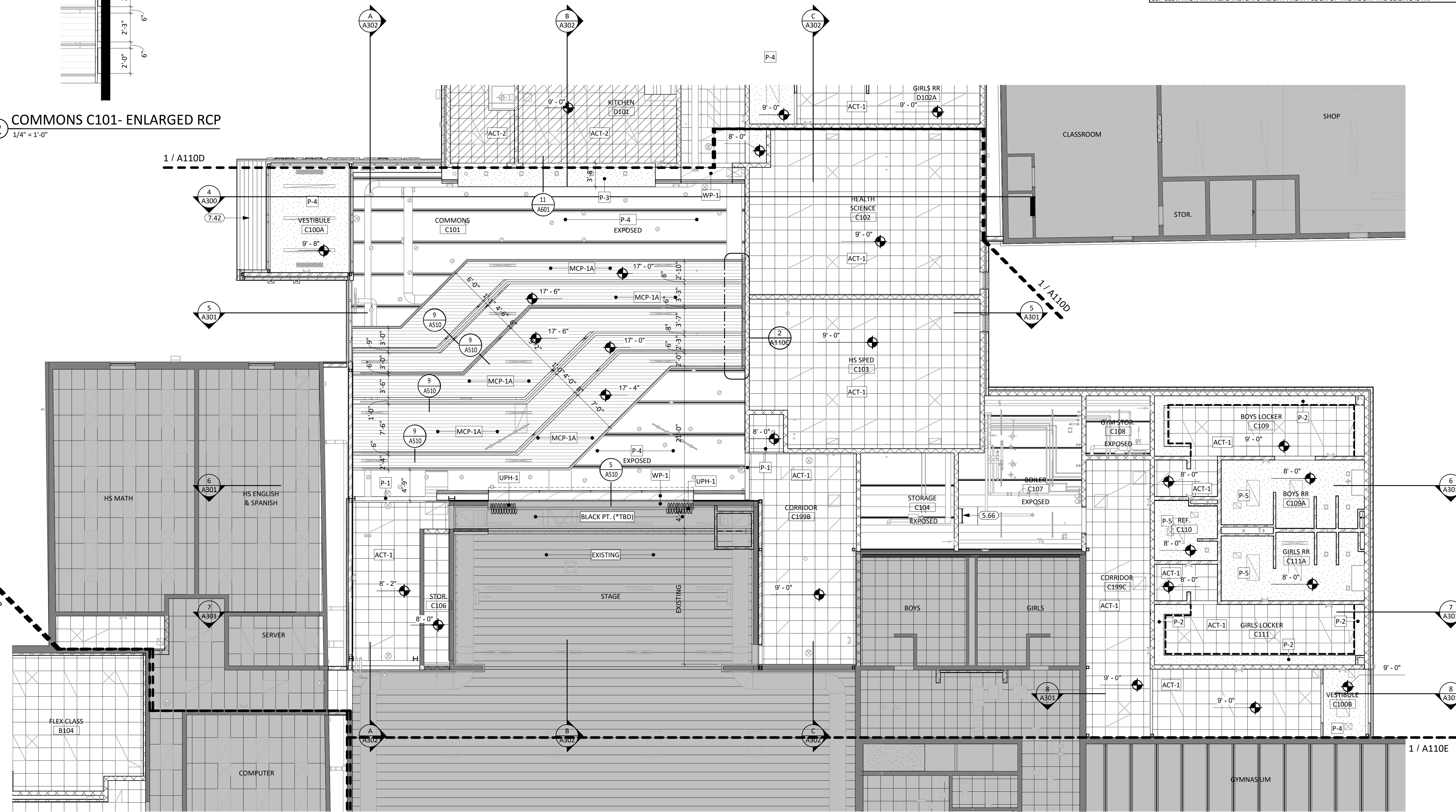
**A110C**

KEYNOTE SCHEDULE	
5.66	STEEL LADDER (SEE ARCH. & STRUCT.)
7.42	METAL SOFFIT PANELS

- GENERAL NOTES**
- ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIAL UNLESS OTHERWISE NOTED.
  - REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.
  - PROVIDE ACCESS DOORS AT MECHANICAL UNIT LOCATIONS ABOVE CEILING. COORDINATE NUMBER REQUIRED AND LOCATIONS WITH MECHANICAL SHEETS.
  - CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
  - CENTER LIGHT FIXTURES BETWEEN WALLS AND/OR CEILING BULKHEADS UNLESS OTHERWISE DIMENSIONED.
  - IN EXPOSED TO STRUCTURE ROOMS, CENTER LIGHTS FIXTURES WITHIN ROOMS UNLESS OTHERWISE NOTED.
  - THE REFLECTED CEILING PLANS ARE INTENDED TO AID IN COORDINATION ONLY AND ARE NOT INTENDED TO BE COMPREHENSIVE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT WHERE CONFLICTS OCCUR.
  - PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
  - PROVIDE GLASS-MATT FACED GYPSUM SHEATHING BEHIND TILE FINISHES AT ALL SHOWERS AND BATHTUBS.
  - ELEVATION MARKERS INDICATE HEIGHT FROM FLOOR OF THE ROOM THE CEILING IS IN.

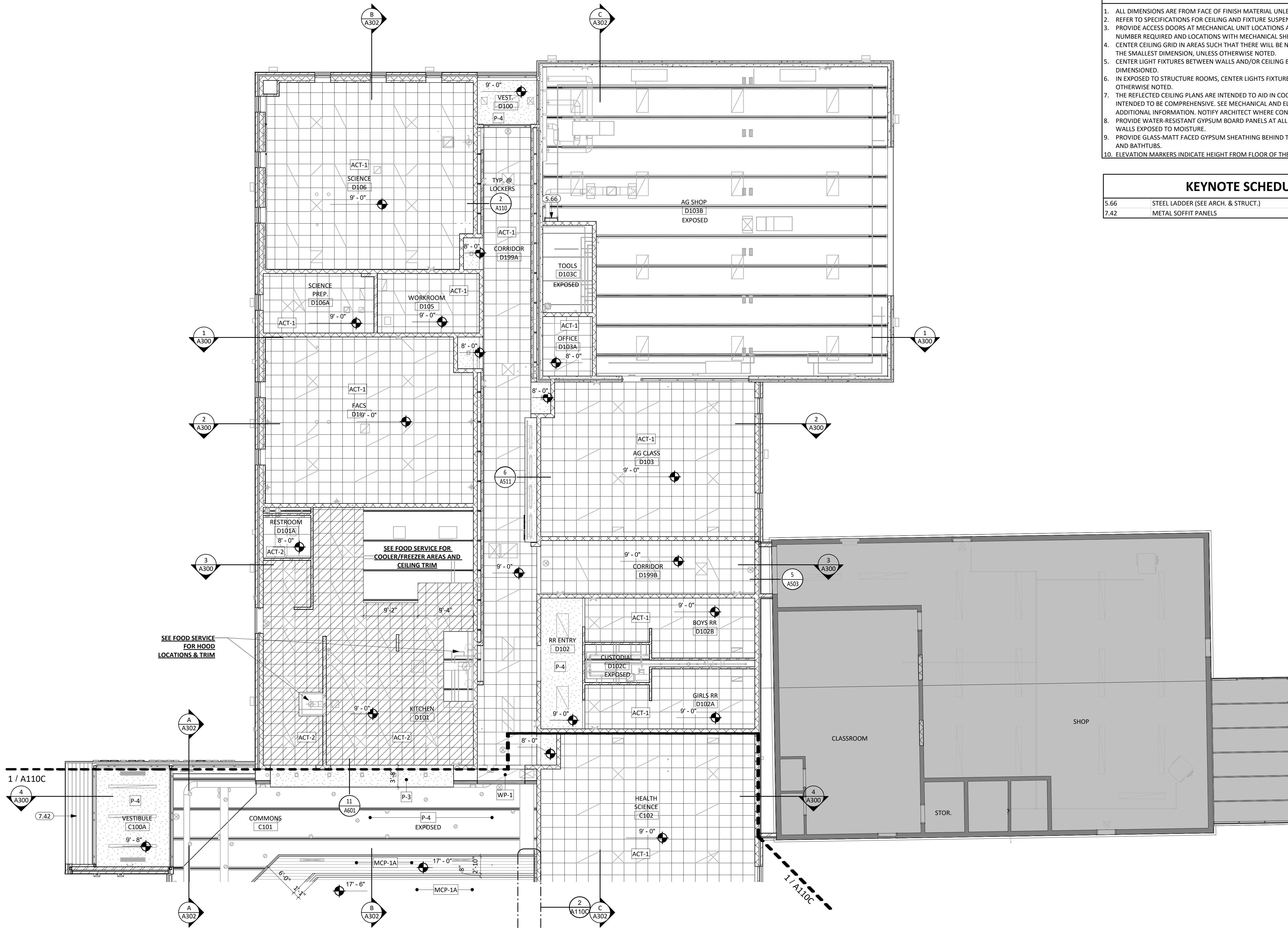


**2 COMMONS C101- ENLARGED RCP**  
1/4" = 1'-0"



**REFLECTED CEILING PLAN - AREA C**  
1/8" = 1'-0"

1/31/2023 1:44:02 PM

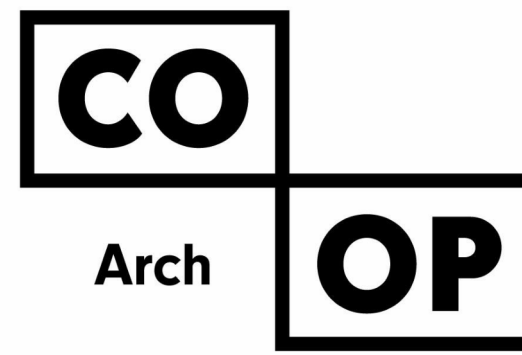


**GENERAL NOTES**

1. ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIAL UNLESS OTHERWISE NOTED.
2. REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.
3. PROVIDE ACCESS DOORS AT MECHANICAL UNIT LOCATIONS ABOVE CEILING. COORDINATE NUMBER REQUIRED AND LOCATIONS WITH MECHANICAL SHEETS.
4. CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
5. CENTER LIGHT FIXTURES BETWEEN WALLS AND/OR CEILING BULKHEADS UNLESS OTHERWISE DIMENSIONED.
6. IN EXPOSED TO STRUCTURE ROOMS, CENTER LIGHTS FIXTURES WITHIN ROOMS UNLESS OTHERWISE NOTED.
7. THE REFLECTED CEILING PLANS ARE INTENDED TO AID IN COORDINATION ONLY AND ARE NOT INTENDED TO BE COMPREHENSIVE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT WHERE CONFLICTS OCCUR.
8. PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
9. PROVIDE GLASS-MATT FACED GYPSUM SHEATHING BEHIND TILE FINISHES AT ALL SHOWERS AND BATHTUBS.
10. ELEVATION MARKERS INDICATE HEIGHT FROM FLOOR OF THE ROOM THE CEILING IS IN.

**KEYNOTE SCHEDULE**

5.66	STEEL LADDER (SEE ARCH. & STRUCT.)
7.42	METAL SOFFIT PANELS

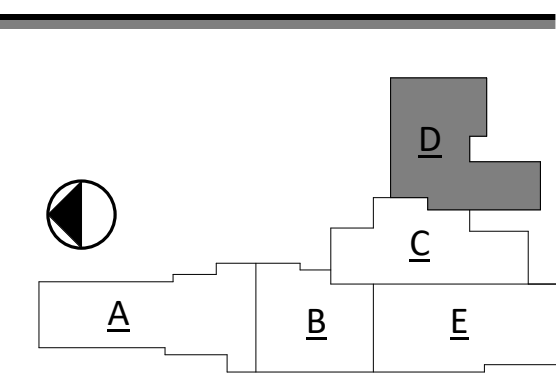


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

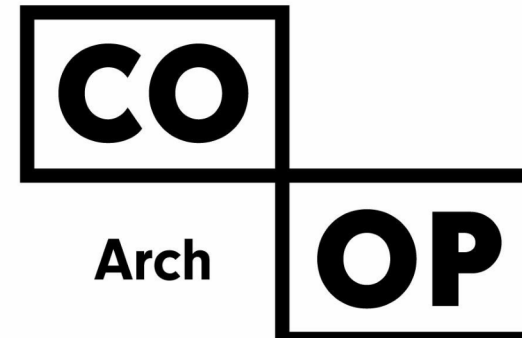
SHEET TITLE:  
REFLECTED CLG PLAN AREA - D

**A110D**

REFLECTED CEILING PLAN - AREA D  
1/8" = 1'-0"

- ### GENERAL NOTES
1. ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIAL UNLESS OTHERWISE NOTED.
  2. REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.
  3. PROVIDE ACCESS DOORS AT MECHANICAL UNIT LOCATIONS ABOVE CEILING. COORDINATE NUMBER REQUIRED AND LOCATIONS WITH MECHANICAL SHEETS.
  4. CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
  5. CENTER LIGHT FIXTURES BETWEEN WALLS AND/OR CEILING BULKHEADS UNLESS OTHERWISE DIMENSIONED.
  6. IN EXPOSED TO STRUCTURE ROOMS, CENTER LIGHTS FIXTURES WITHIN ROOMS UNLESS OTHERWISE NOTED.
  7. THE REFLECTED CEILING PLANS ARE INTENDED TO AID IN COORDINATION ONLY AND ARE NOT INTENDED TO BE COMPREHENSIVE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT WHERE CONFLICTS OCCUR.
  8. PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
  9. PROVIDE GLASS-MATT FACED GYPSUM SHEATHING BEHIND TILE FINISHES AT ALL SHOWERS AND BATHTUBS.
  10. ELEVATION MARKERS INDICATE HEIGHT FROM FLOOR OF THE ROOM THE CEILING IS IN.

### KEYNOTE SCHEDULE

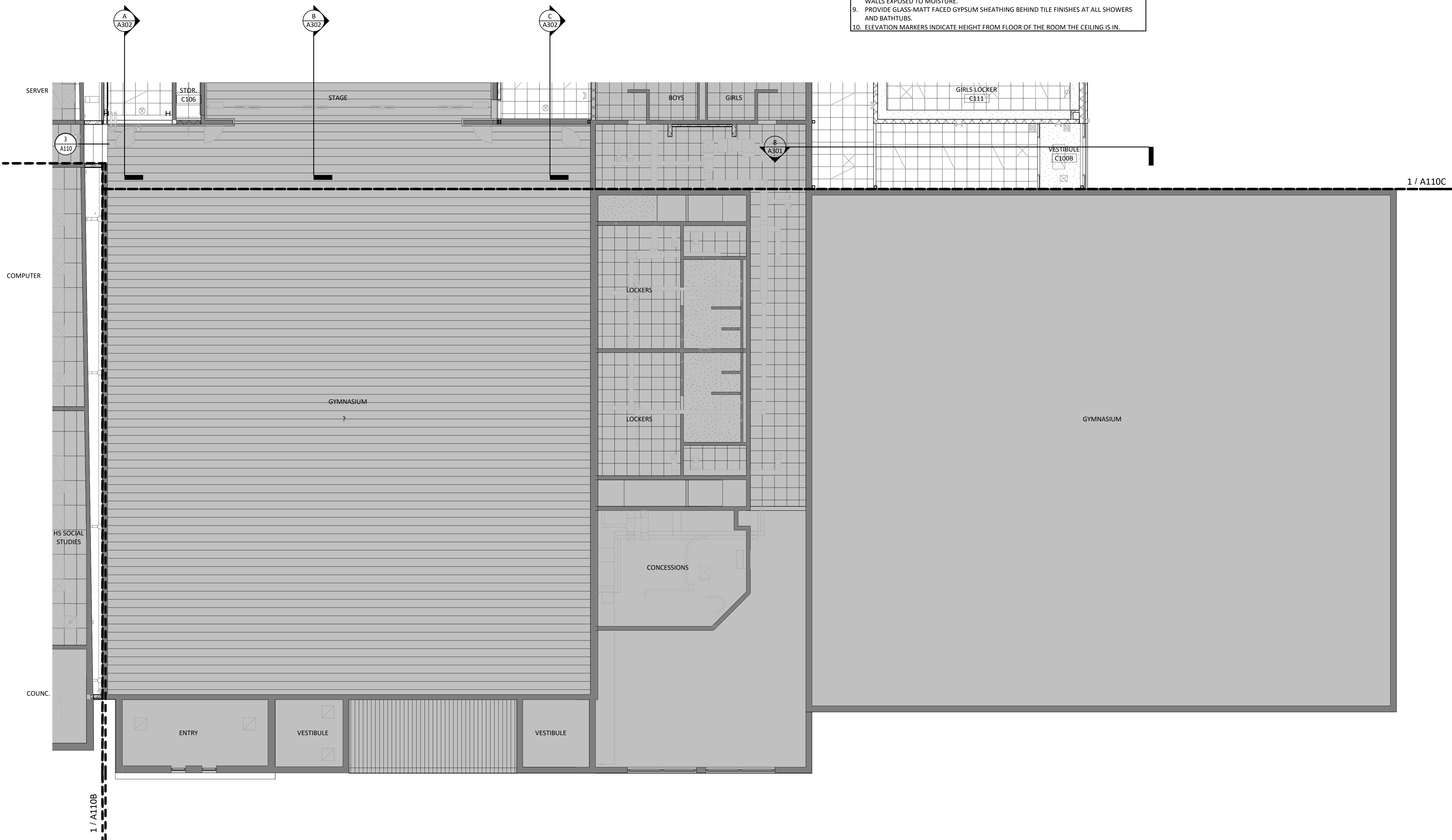
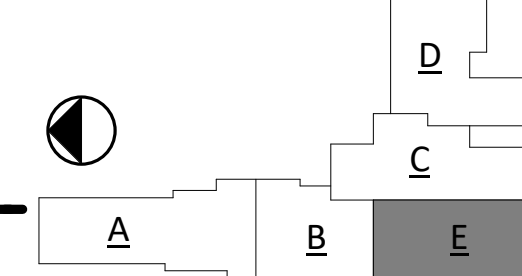


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
REFLECTED CLG PLAN AREA - E

# A110E

REFLECTED CEILING PLAN - AREA E

1/8" = 1'-0"

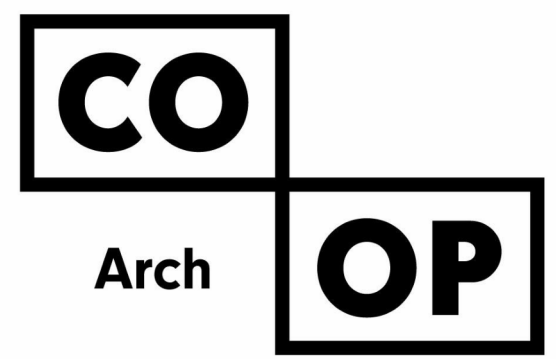
1/31/2023 1:44:10 PM





**GENERAL NOTES**

1. REFER TO SHEET **A601** FOR ROOM FINISH SCHEDULE AND LEGEND.
2. INTERIOR WALLS FINISHES ARE FULL HEIGHT UNLESS OTHERWISE NOTED.
3. PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
4. PROVIDE GLASS-MATT FACED GYPSUM BOARD WEATHING BEHIND TILE FINISHES AT ALL SHOWER AND BATHTUBS.
5. SEE FLOOR PLAN(S) AND ARCHITECTURAL ELEVATIONS FOR CASEWORK INFORMATION. FIELD VERIFY DIMENSIONS OF CASEWORK FINISHINGS.

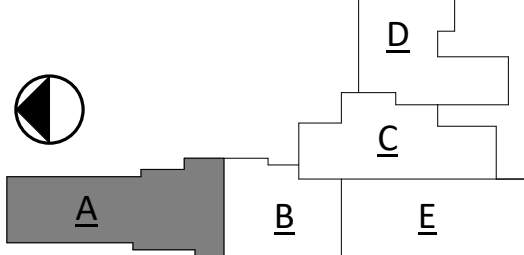


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

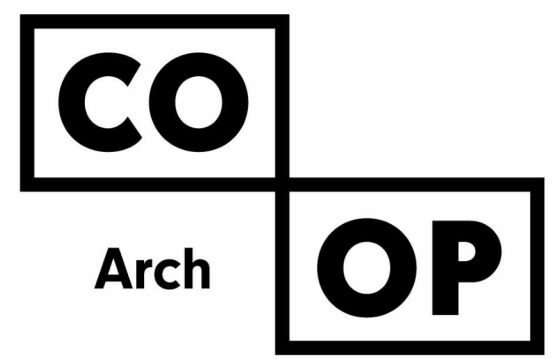
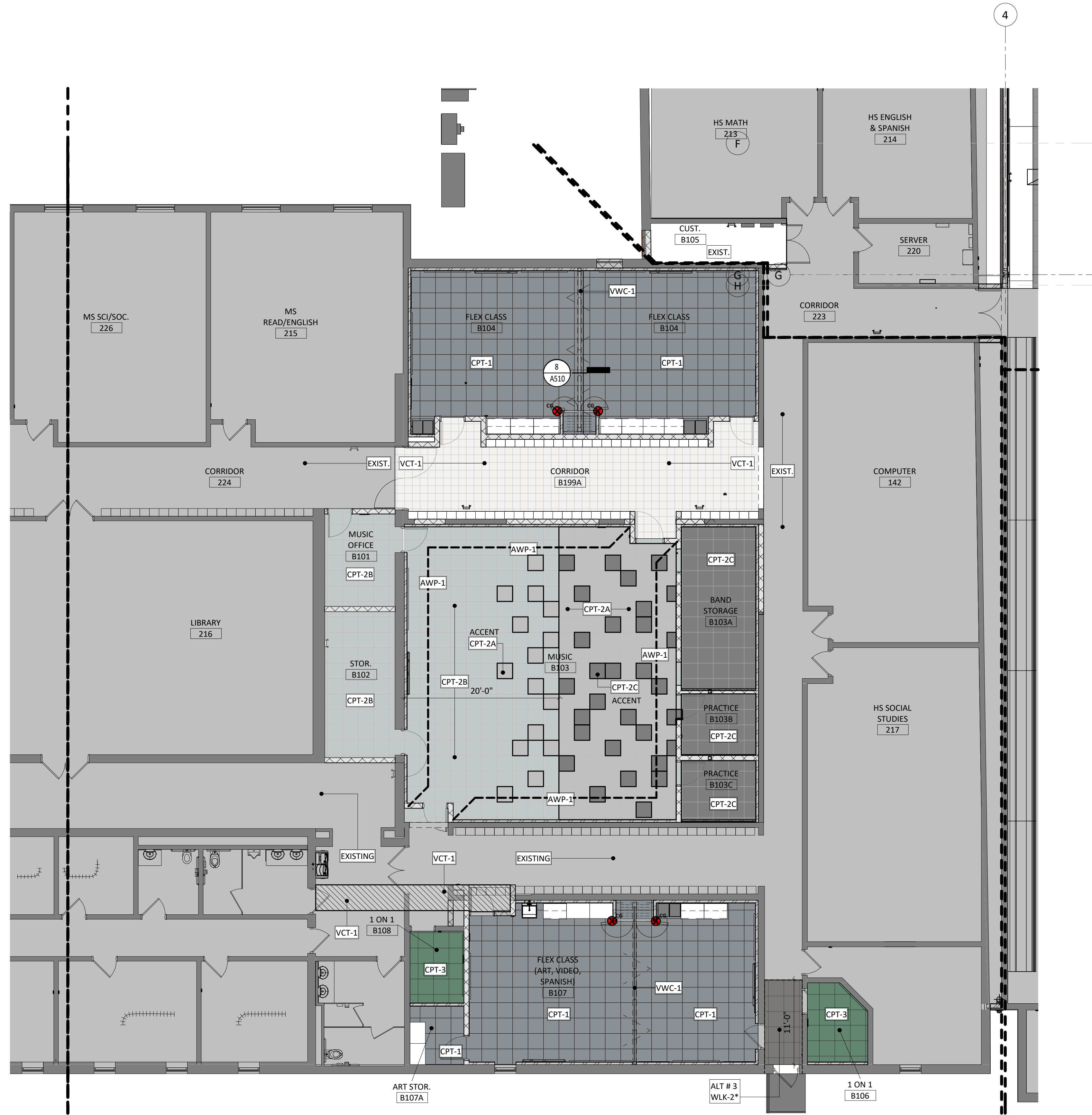
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED FINISH PLANS- AREA A

**A120**



**1** FINISH FLOOR PLAN - AREA A  
1/8" = 1'-0"

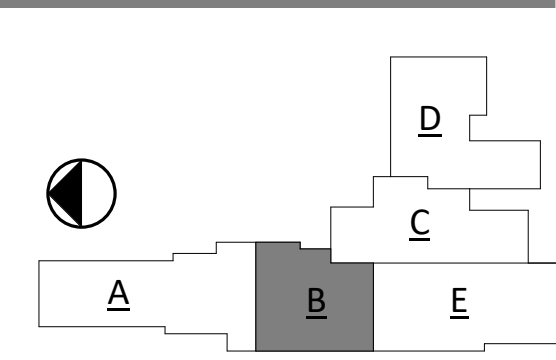


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

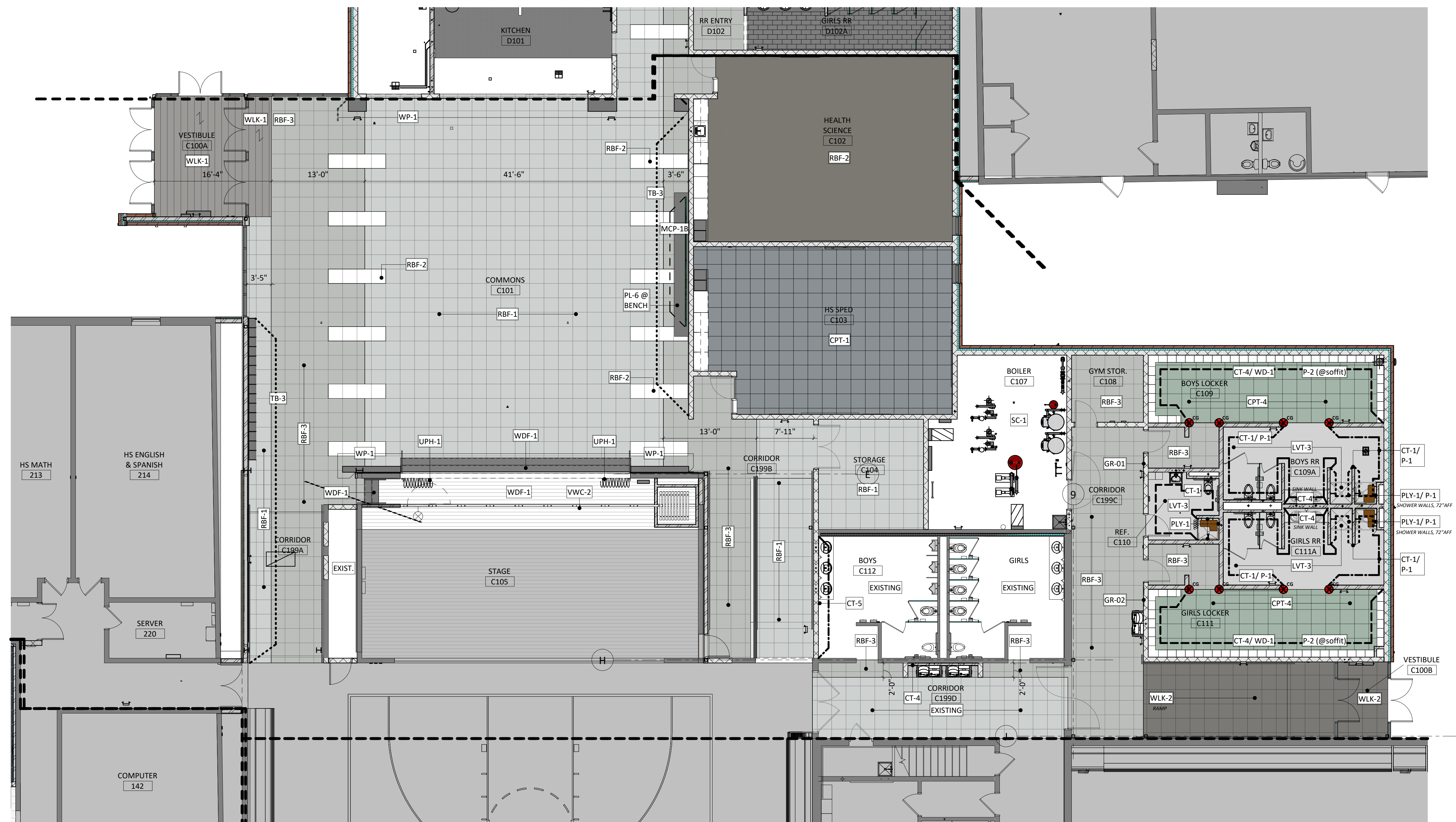
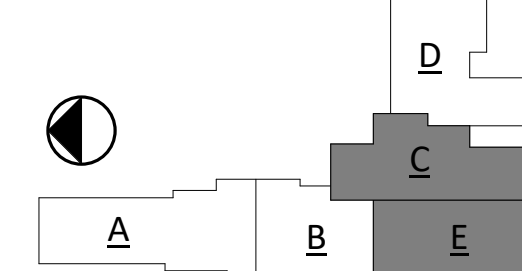
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED FINISH PLANS- AREA B

1 FINISH FLOOR PLAN - AREA B  
1/8" = 1'-0"

A121

1/31/2023 1:44:17 PM



1 FINISH FLOOR PLAN - AREA C & E  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153

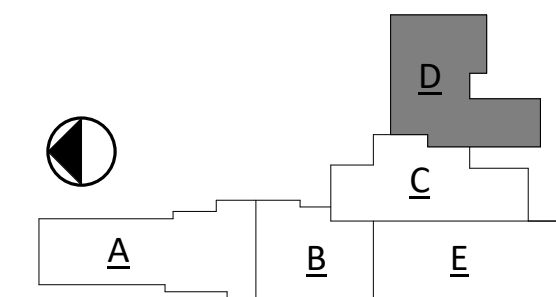


ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED FINISH PLANS-  
AREA(S) C & E



CO-OP PROJECT NO: 2153



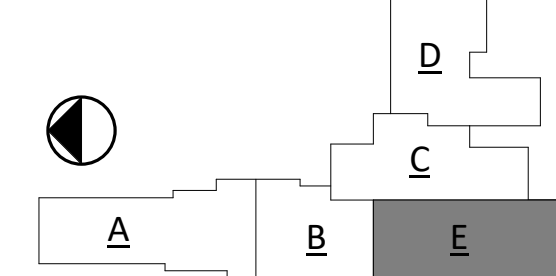
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED FINISH PLANS- AREA D



CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

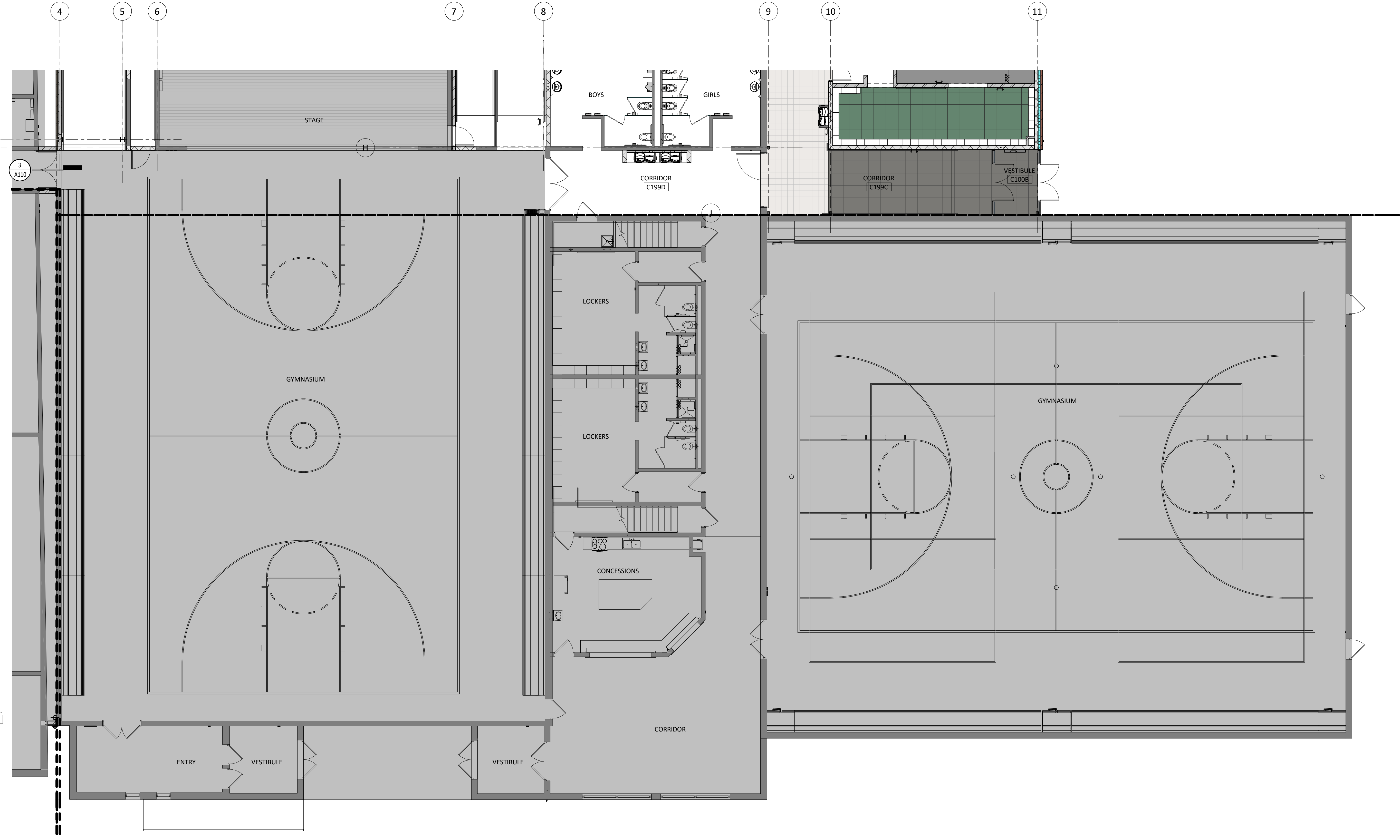
REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

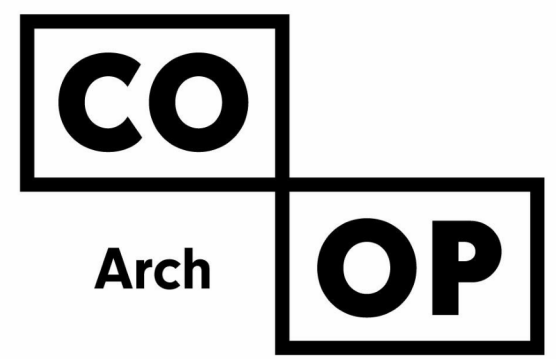
SHEET TITLE:  
ENLARGED FINISH PLANS- AREA E

**A124**



① FINISH FLOOR PLAN - AREA E  
1/8" = 1'-0"

KEYNOTE SCHEDULE	
1	DIVISION 1 – GENERAL REQUIREMENTS
4.01	BRICK VENEER; SEE EXTERIOR ELEVATIONS FOR TYPE
4.02	BRICK SOLDIER COURSING; SEE EXTERIOR ELEVATIONS FOR TYPE
7.41	METAL WALL PANELS (PROVIDE ALL REQ. TRIM & FLASHING)
7.54	PREFINISHED METAL SCUPPER AND DOWNSPOUT (W/ ALL REQ. FLASHING & SUPPORTS). PROVIDE SPLASH PAD WHERE RETURNING TO GRADE.
7.56	PREFINISHED OVERFLOW SCUPPER AND DOWNSPOUT (W/ ALL REQ. FLASHING & SUPPORTS). PROVIDE SPLASH PAD WHERE RETURNING TO GRADE. LOCATE OVERFLOW SCUPPER 2" MIN. ABOVE MAIN SCUPPER.
7.70	PRE-FINISHED SHEET METAL FLASHING
10.06	CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE - ARIAL FONT STYLE
22	DIVISION 22 – PLUMBING
22.03	ROOF DRAIN AND OVERFLOW ROOF DRAIN; SEE MECHANICAL
23.01	HVAC UNIT; SEE MECHANICAL
23.12	LOUVER
23.22	EXHAUST FAN; SEE MECHANICAL

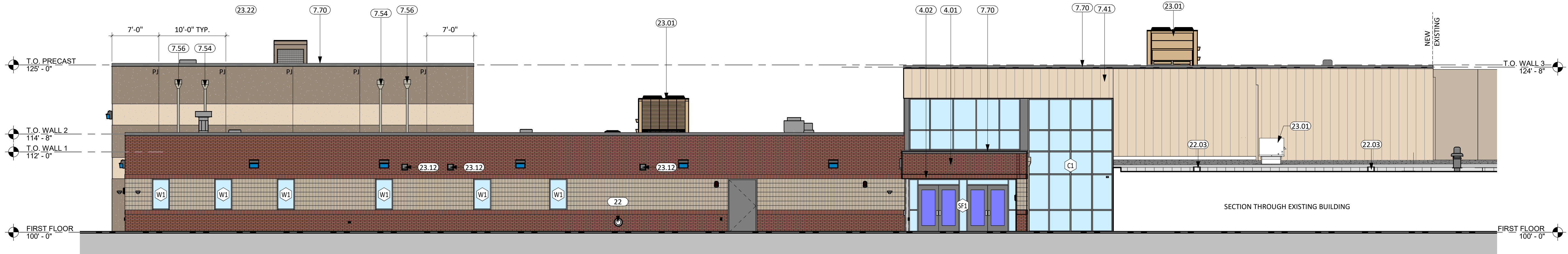


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

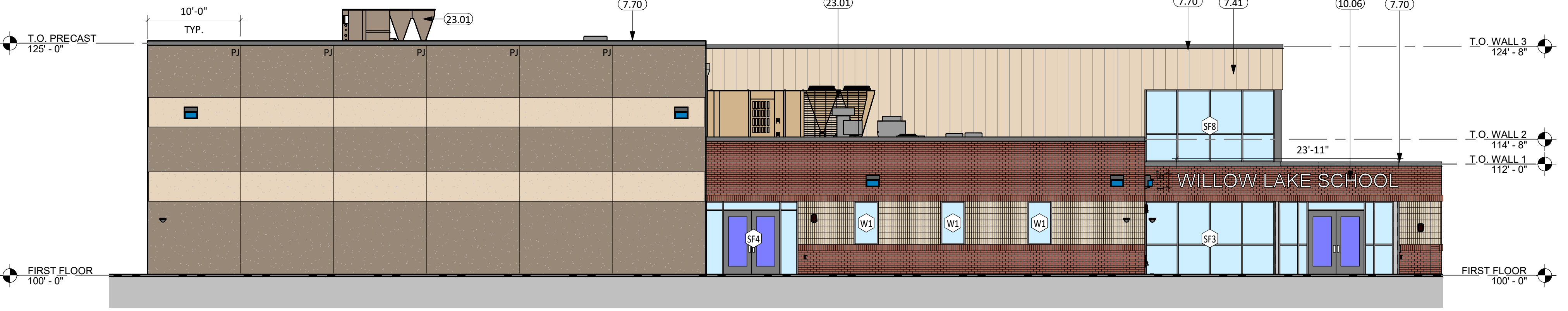
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

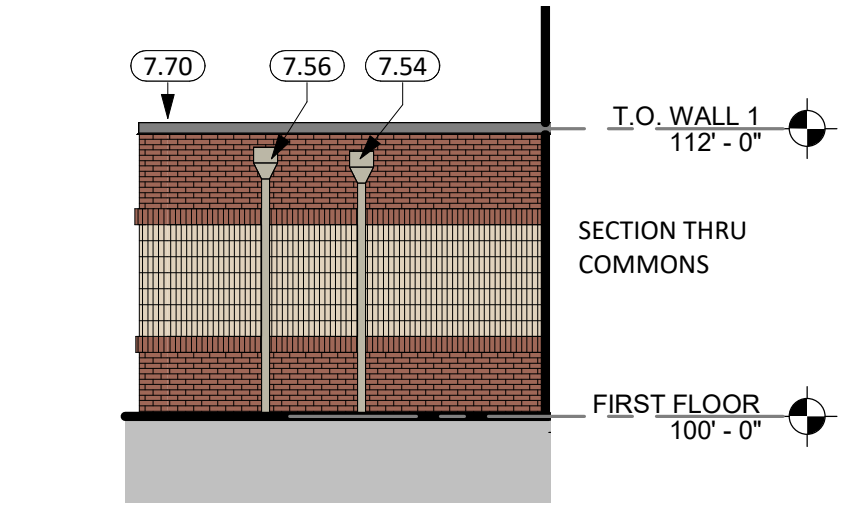
co-oparch.com



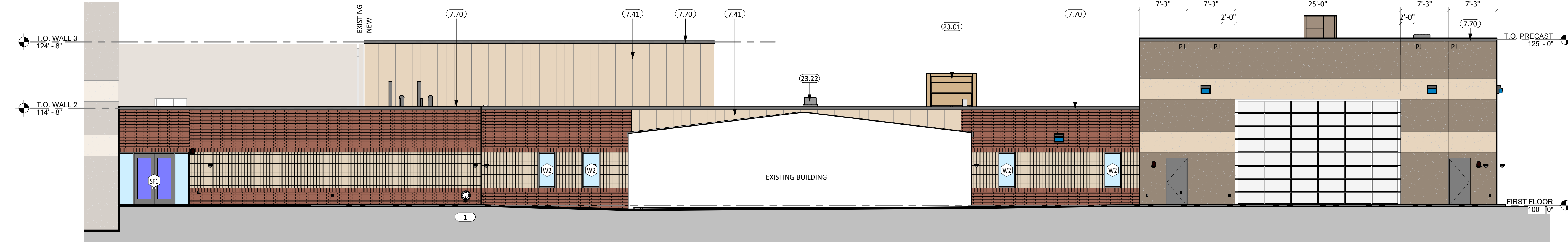
1 ELEVATION - ADDITION - NORTH  
1/8" = 1'-0"



2 ELEVATION - ADDITION - EAST  
1/8" = 1'-0"



3 VESTIBULE C100A - WEST  
1/8" = 1'-0"



4 ELEVATION - ADDITION - SOUTH  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153



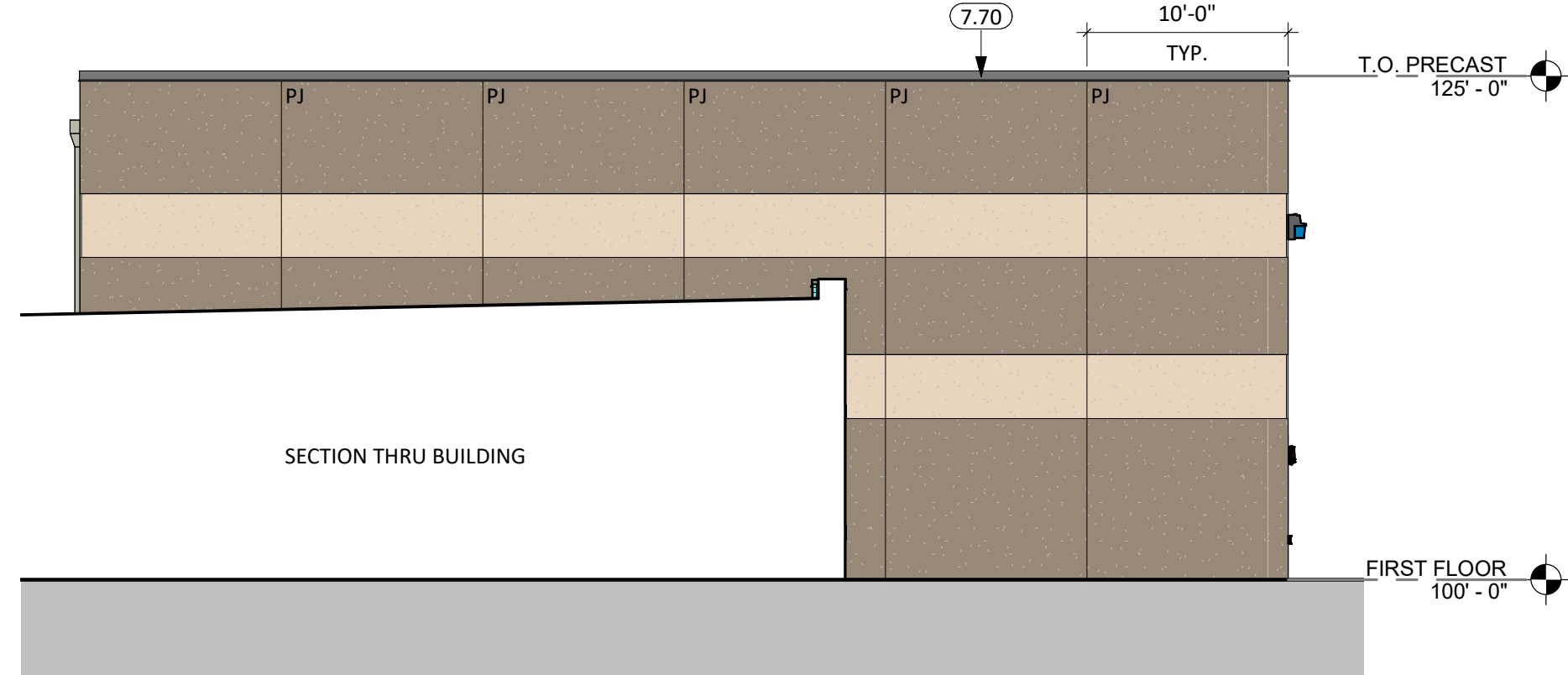
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

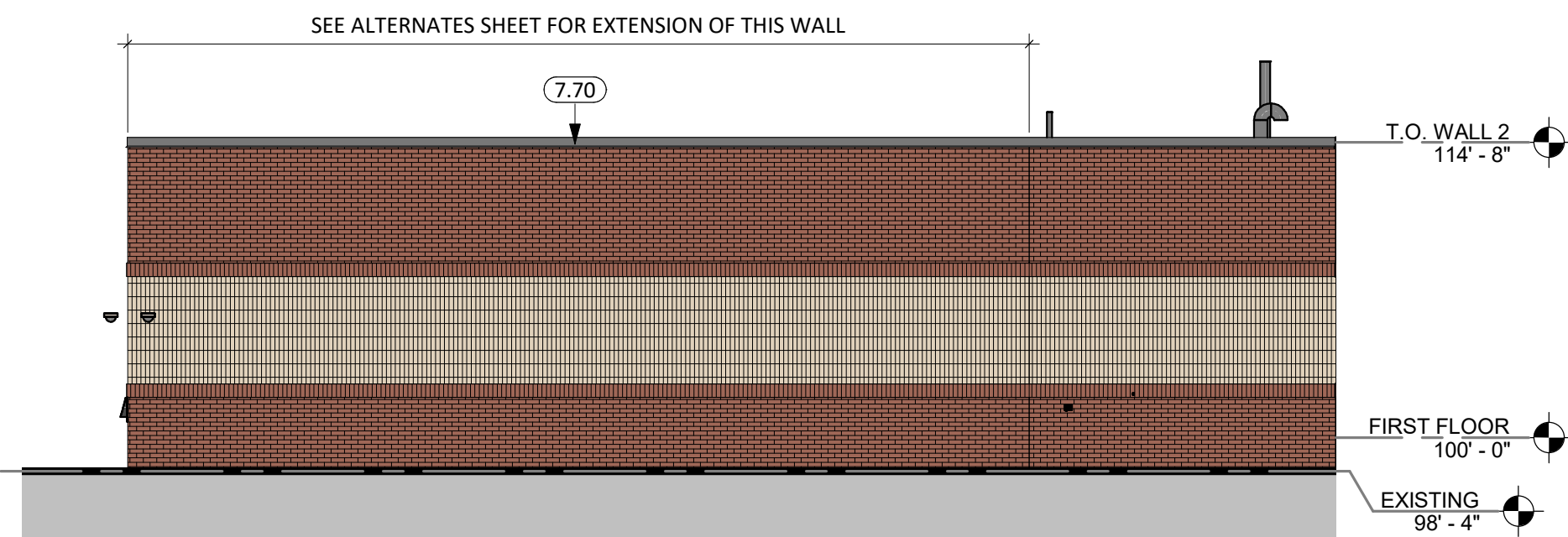
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
EXTERIOR ELEVATIONS

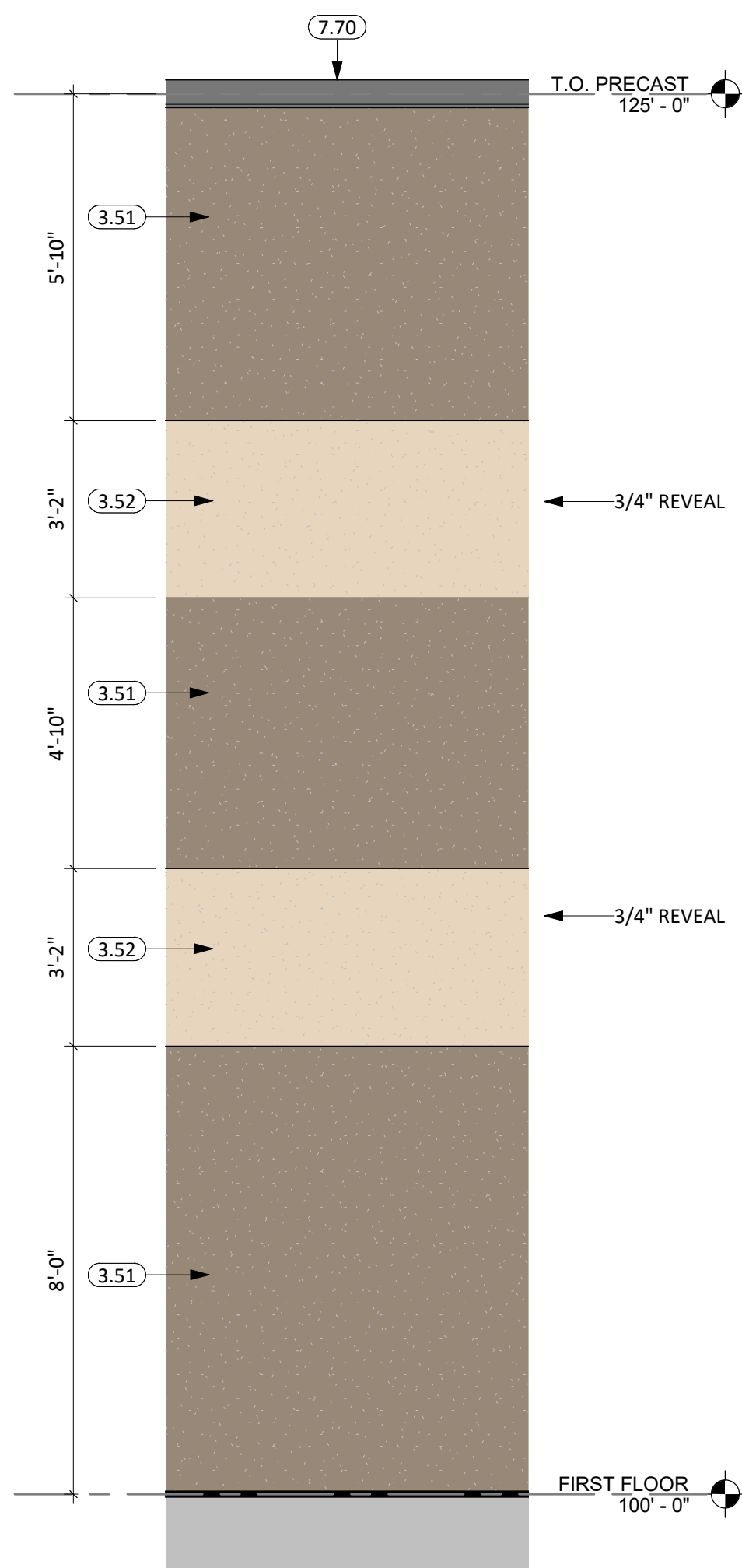
A200



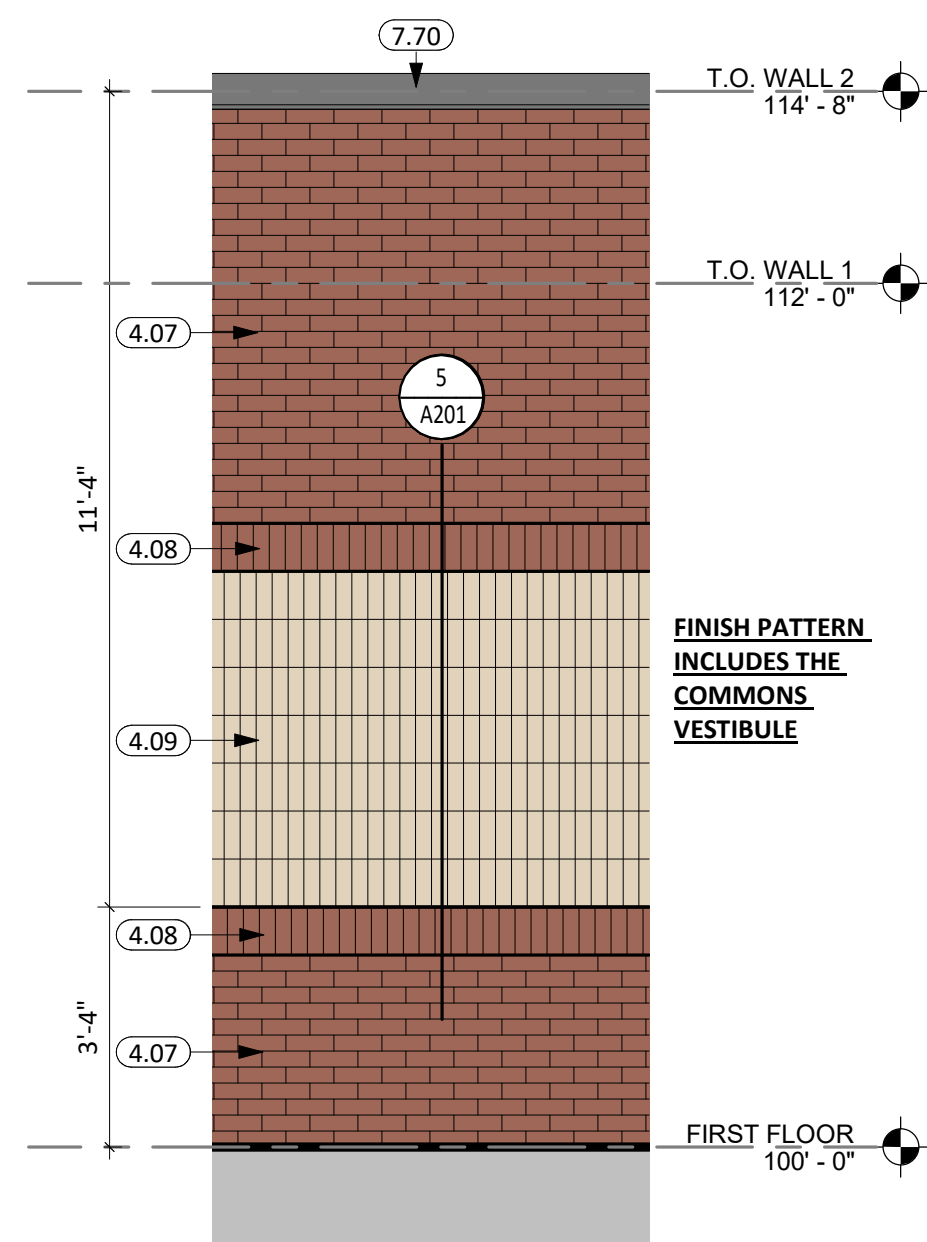
1 AG SHOP - WEST  
1/8" = 1'-0"



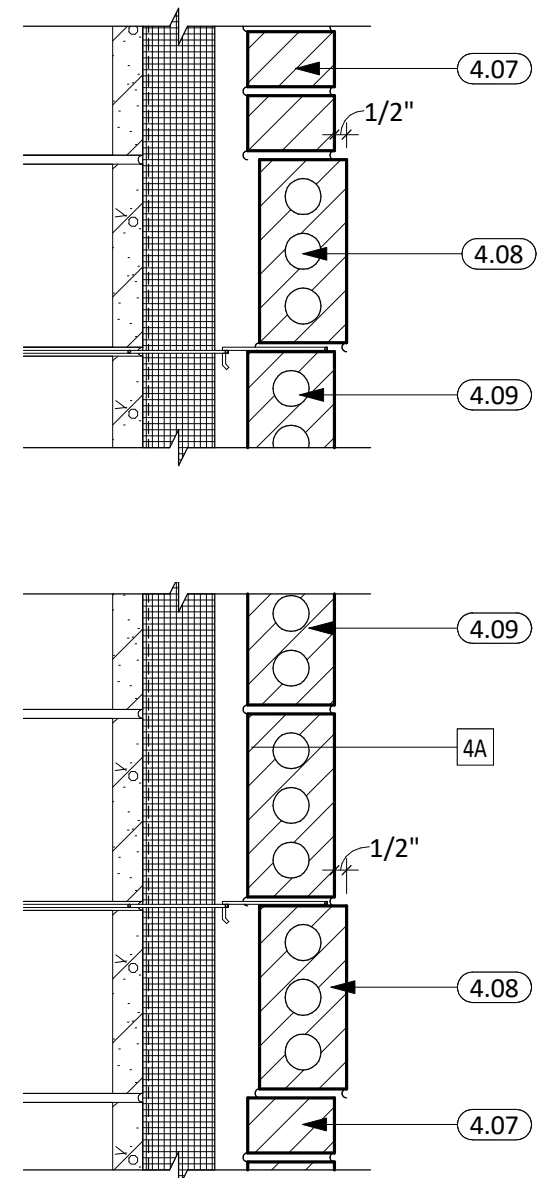
2 LOCKER ROOMS - EAST  
1/8" = 1'-0"



3 TYPICAL PRECAST FINISH PATTERN  
3/8" = 1'-0"

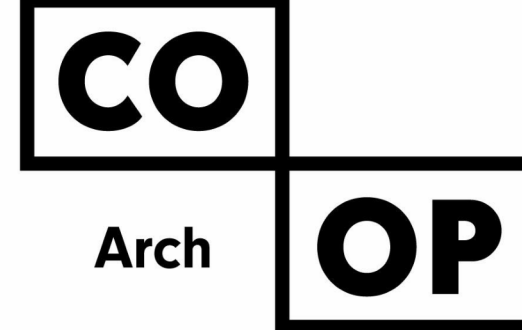


4 TYPICAL MASONRY FINISH PATTERN  
3/8" = 1'-0"



5 4A STEPPED SOLDIER COURSE  
1 1/2" = 1'-0"

KEYNOTE SCHEDULE	
3.51	PRECAST FINISH-1; MATCH EXISTING DARK PRECAST FINISH
3.52	PRECAST FINISH-2; MATCH EXISTING LIGHT PRECAST FINISH
4.07	BRICK-1 VENEER
4.08	BRICK-1 SOLDIER COURSING
4.09	BRICK-2 SOLDIER COURSING
7.70	PRE-FINISHED SHEET METAL FLASHING



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

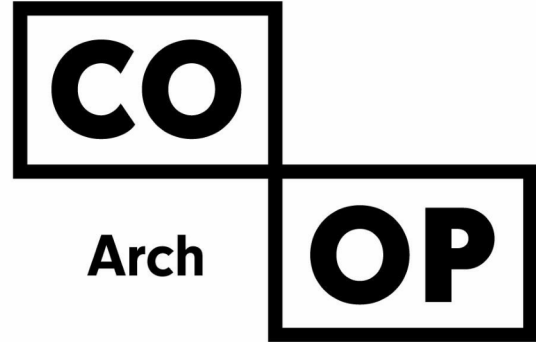
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
EXTERIOR ELEVATIONS

A201

KEYNOTE SCHEDULE

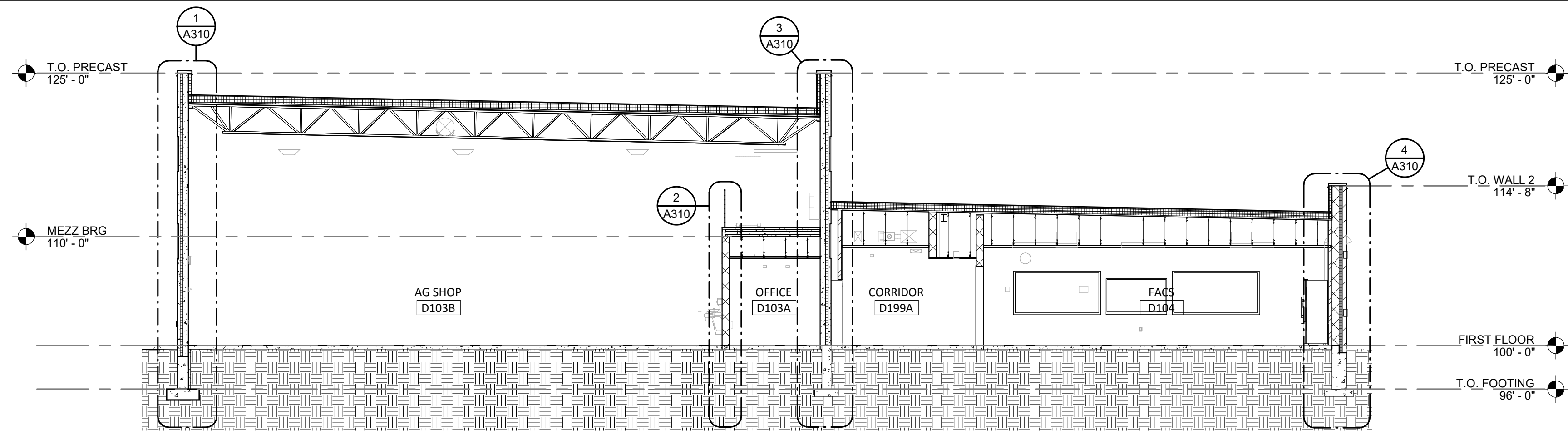


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

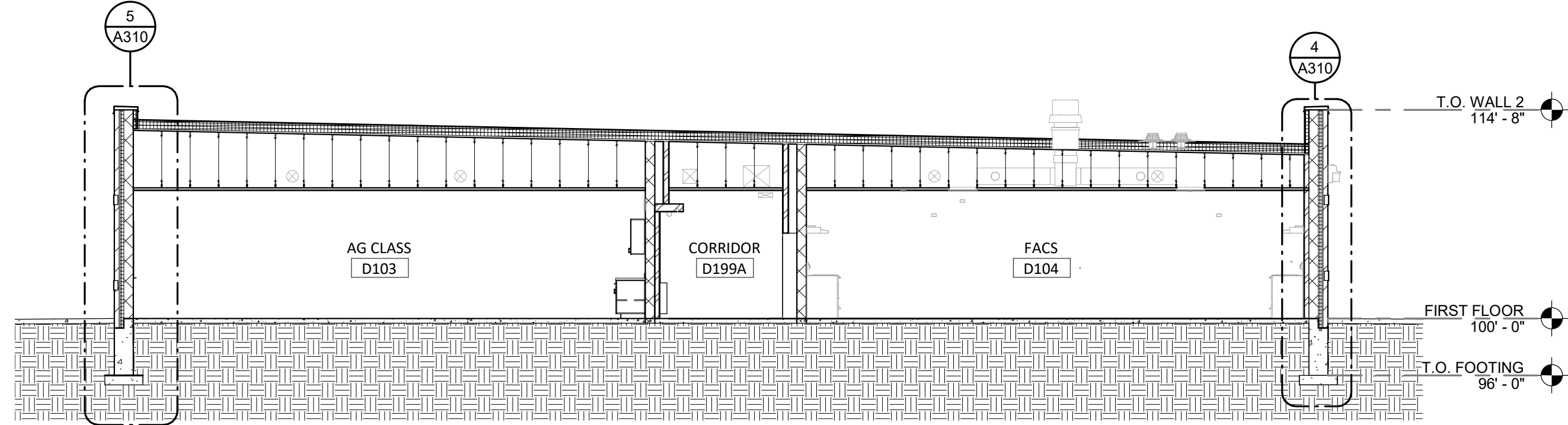
440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



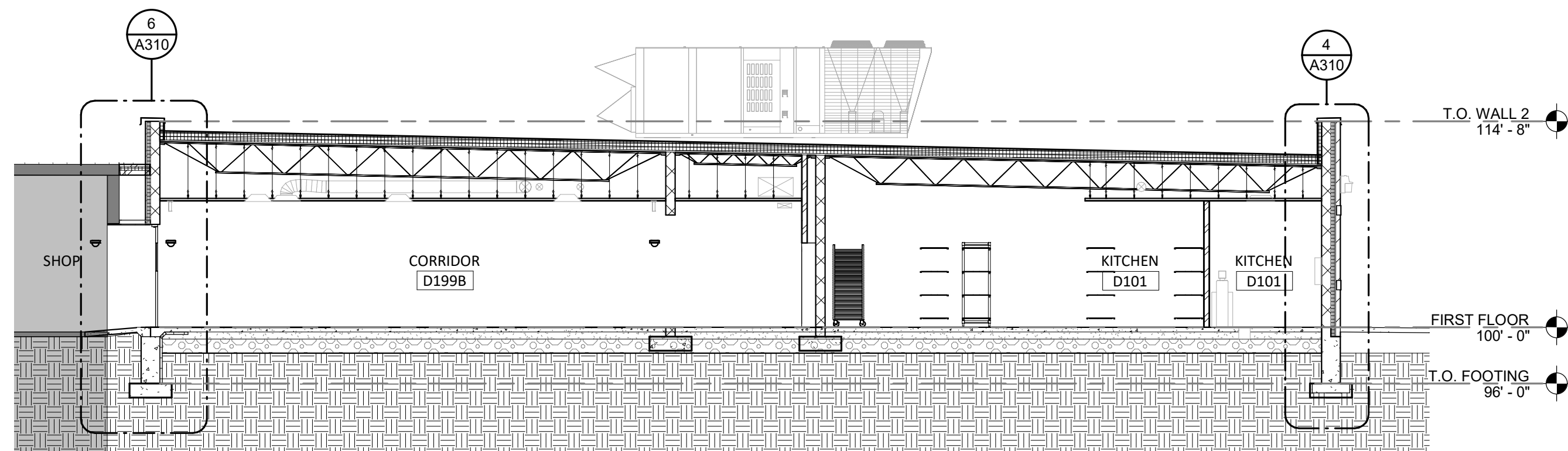
1 SECTION - 1

1/8" = 1'-0"



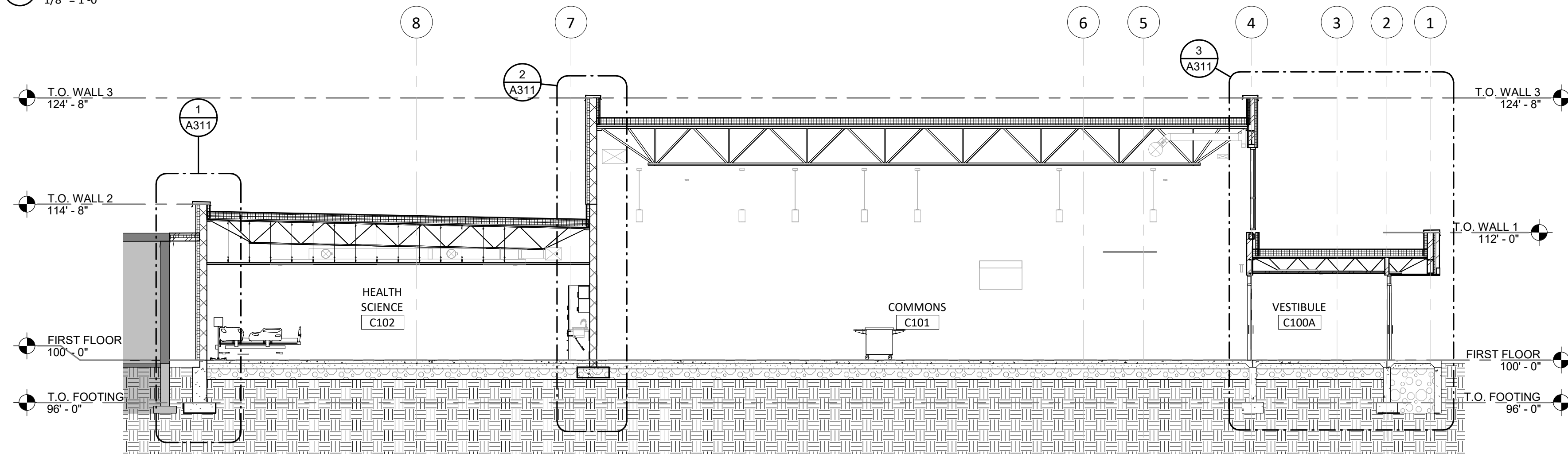
2 SECTION - 2

1/8" = 1'-0"



3 SECTION - 3

1/8" = 1'-0"



4 SECTION - 4

1/8" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

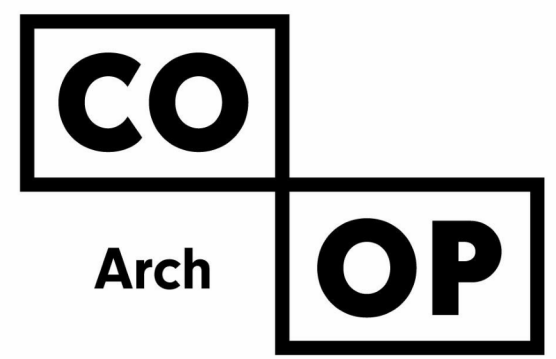
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
BUILDING SECTIONS

A300



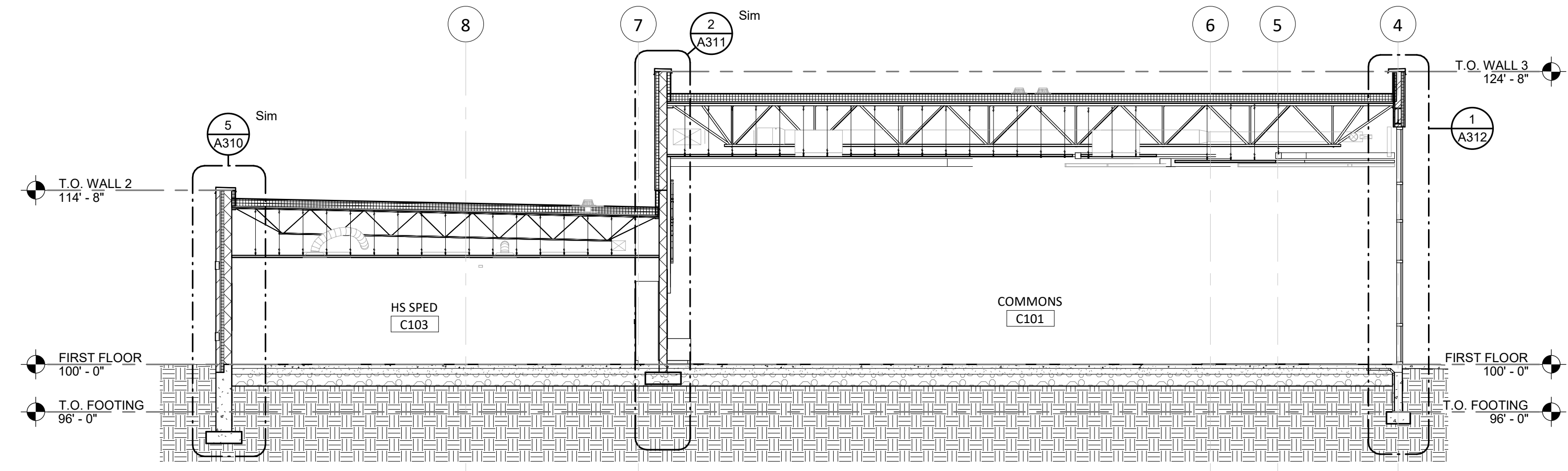


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

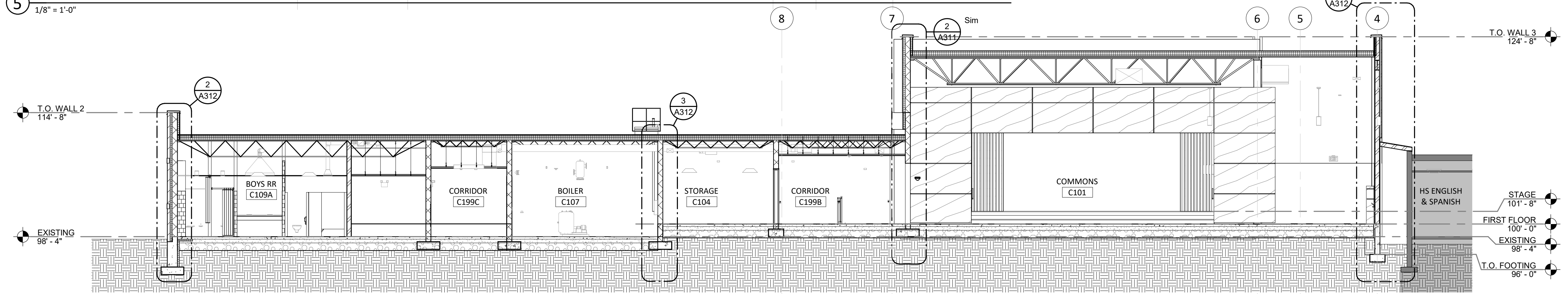
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

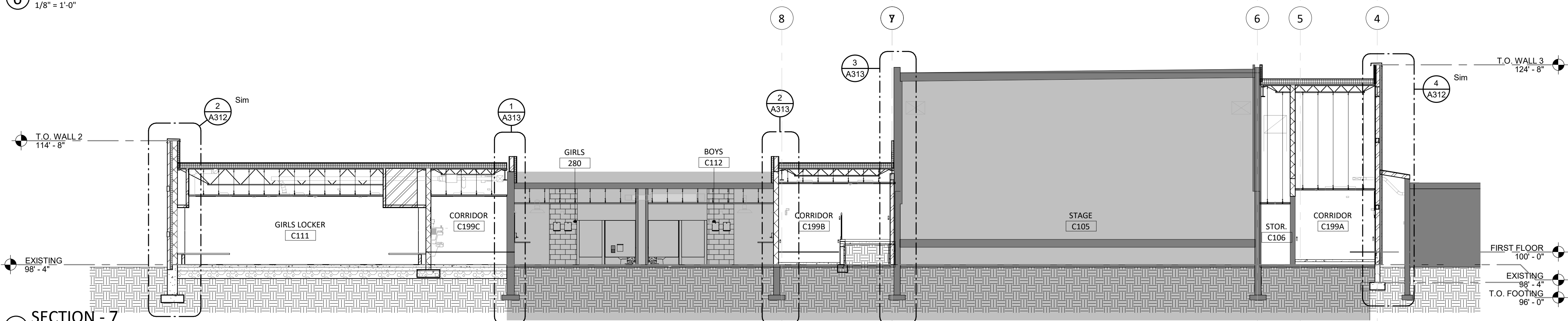
co-oparch.com



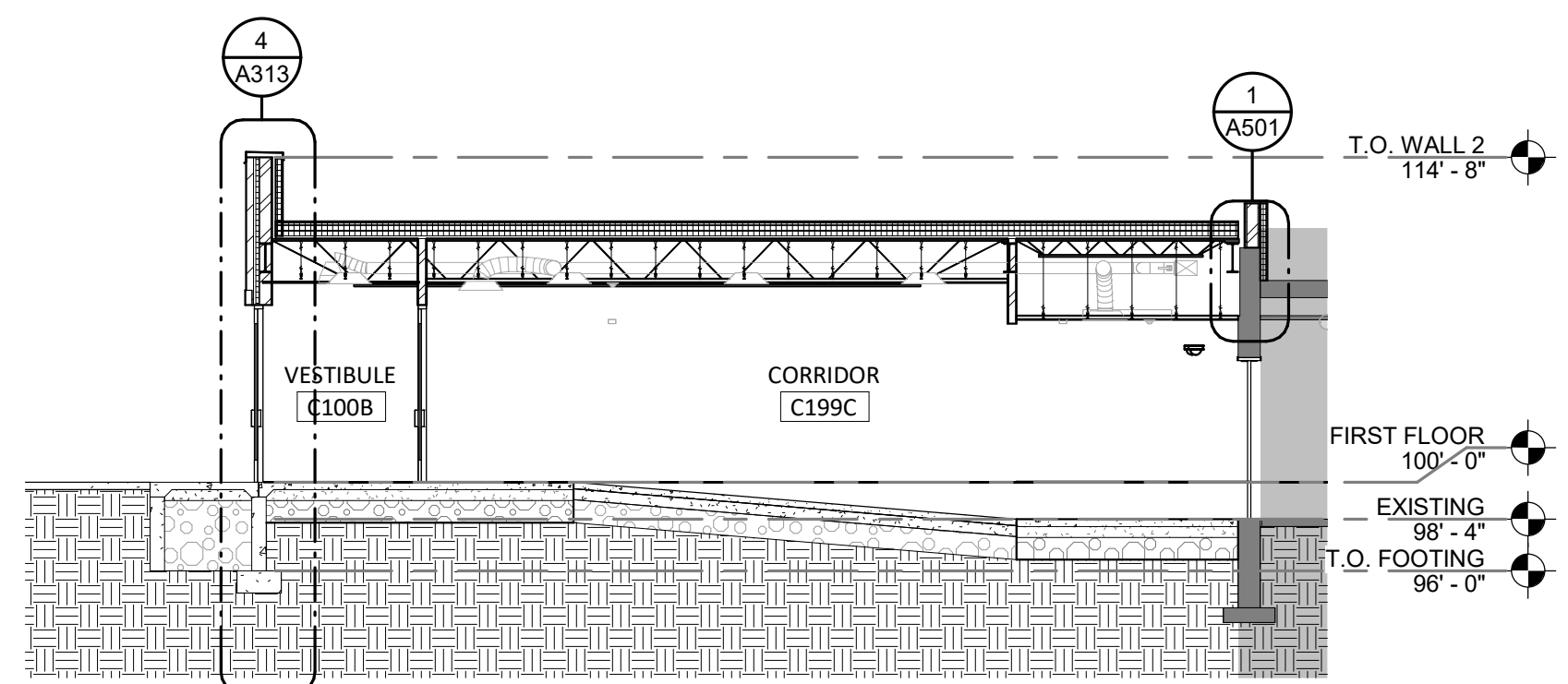
5 SECTION - 5  
1/8" = 1'-0"



6 SECTION - 6  
1/8" = 1'-0"



7 SECTION - 7  
1/8" = 1'-0"



8 SECTION - 8  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

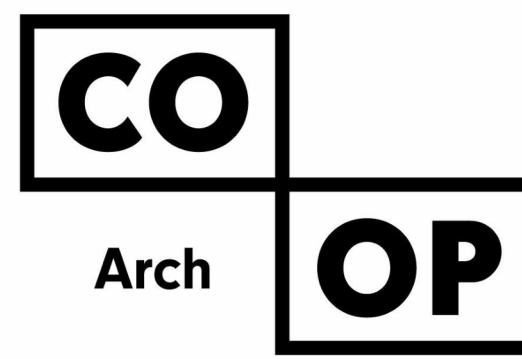
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
BUILDING SECTIONS

A301

**KEYNOTE SCHEDULE**

9.62 METAL TRANSITION STRIP, SEE DETAILS ON A511

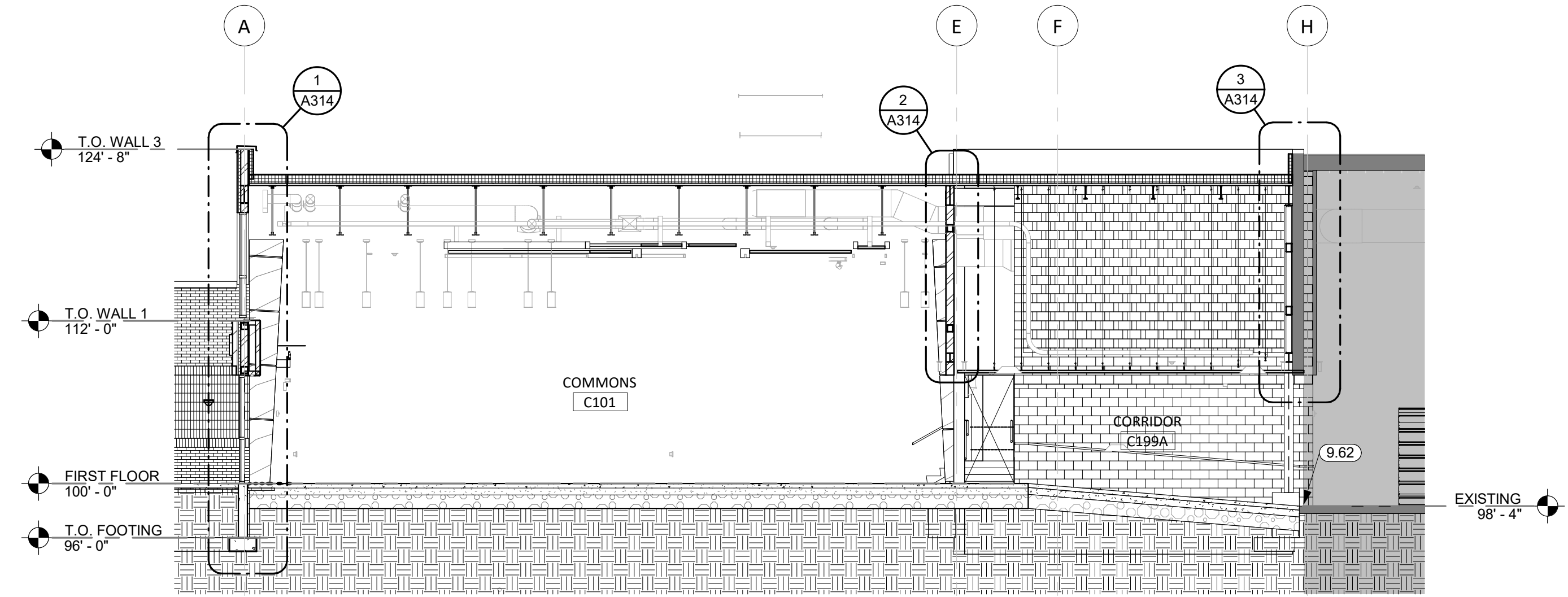


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

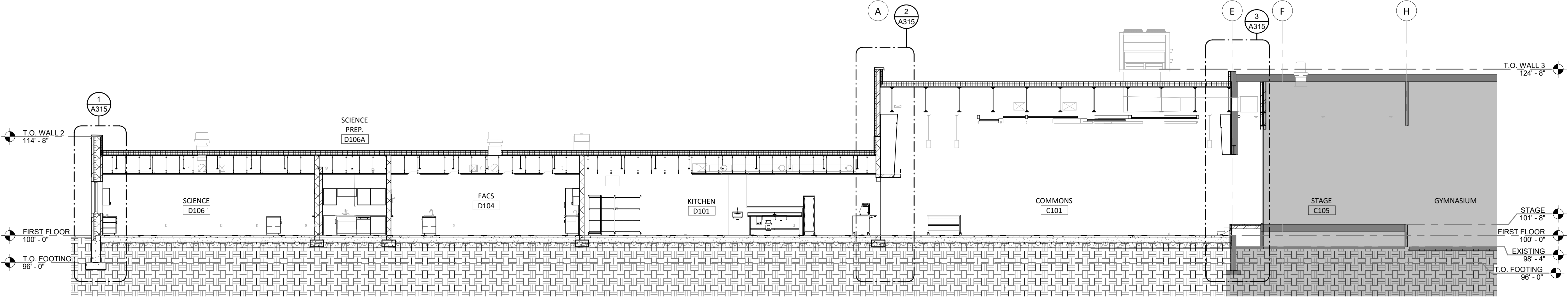
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

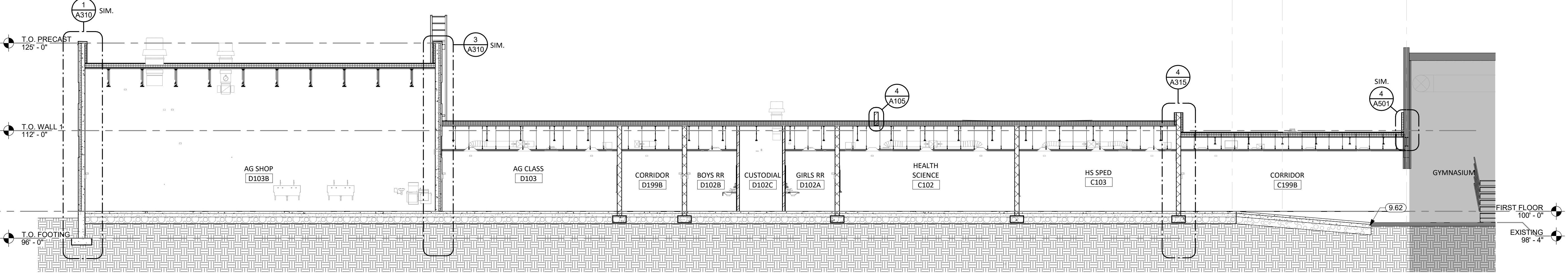
co-oparch.com



**SECTION - A**  
1/8" = 1'-0"



**SECTION - B**  
1/8" = 1'-0"



**SECTION - C**  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

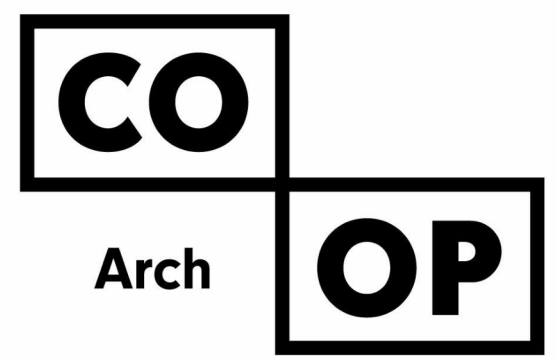
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
BUILDING SECTIONS

**A302**

KEYNOTE SCHEDULE	
3.03	CONC. FOOTING PAD (SEE STRUCTURAL PLANS)
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.05	THICKENED SLAB
3.11	1/2" EXPANSION/ISOLATION JOINT MATERIAL
5.10	STEEL JOIST (SEE ARCH. & STRUCT.)
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
9.41	ACOUSTICAL TILE CEILING SYSTEM (COORD. W/ MECH. & ELEC. FOR FIXTURE REQ./LOCATIONS)
10.70	15"W x 12"D x 6"H SINGLE TIER METAL LOCKERS W/ 4" METAL BASE

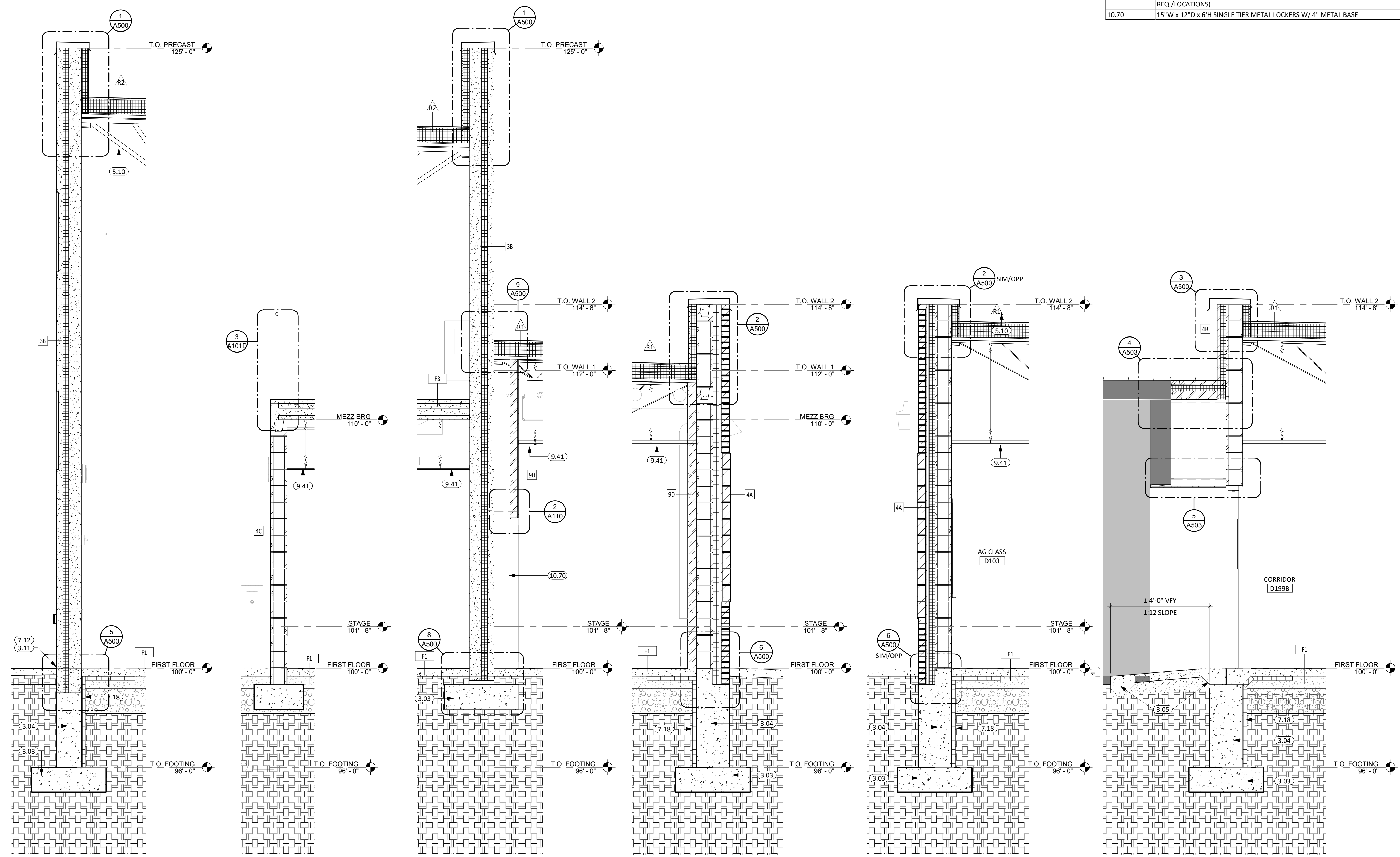


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



① SECTION 1 - WALL SEC. 1 1/2" = 1'-0"  
 ② SECTION 1 - WALL SEC. 2 1/2" = 1'-0"  
 ③ SECTION 1 - WALL SEC. 3 1/2" = 1'-0"  
 ④ SECTION 1 - WALL SEC. 4 1/2" = 1'-0"  
 ⑤ SECTION 2 - WALL SEC. 1 1/2" = 1'-0"  
 ⑥ SECTION 3 - WALL SEC. 1 1/2" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
WALL SECTIONS

A310

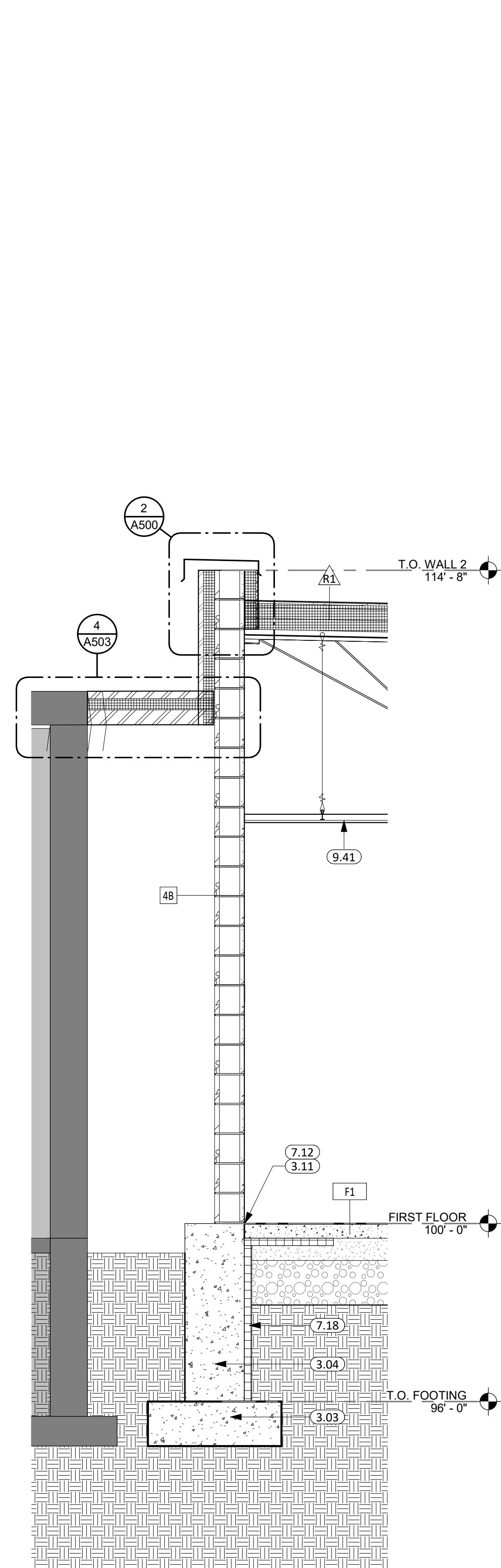
1/31/2023 1:45:19 PM

**GENERAL NOTES**

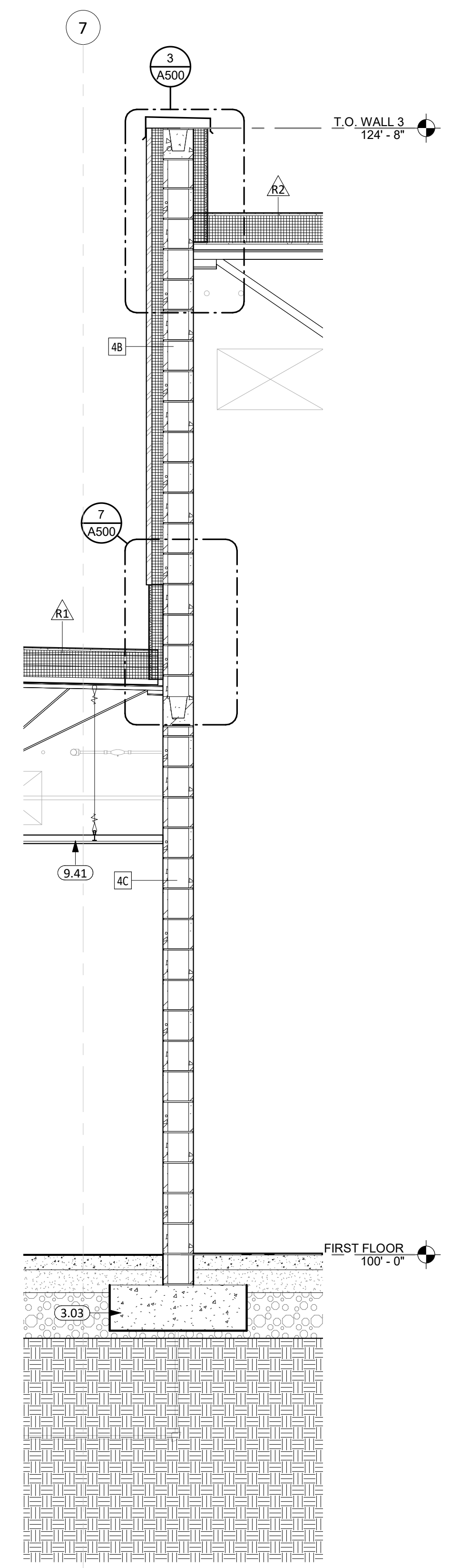
1. SEE CIVIL, STRUCTURAL, MECHANICAL, AND ELECTRICAL FOR ADDITIONAL INFORMATION AND COORDINATION.
2. ALL TAPERED ROOF SYSTEM SLOPES ARE 1/2" PER FOOT UNLESS OTHERWISE NOTED.
3. ALL THRU ROOF PENETRATION BOOTS IN ROOF SYSTEM ARE TO BE PROVIDED.
4. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
5. COORDINATE ROOF PENETRATIONS WITH MECHANICAL, ELECTRICAL, AND PLUMBING CONTRACTORS.
6. ALL ROOF SADDLES SHALL HAVE A MINIMUM OF 1/2" PER FOOT SLOPE.
7. PROVIDE ROOF CURBS FOR ALL EQUIPMENT SCHEDULED TO BE ON THE ROOF. COORDINATE SIZE AND LOCATION WITH APPLICABLE TRADES.
8. PROVIDE CRICKETS AT ALL ROOF TOP EQUIPMENT TO ALLOW FOR UNIMPEDED WATER FLOW.
9. DIMENSIONS AND LOCATIONS OF EQUIPMENT ON THE ROOF ARE APPROX., DO NOT SCALE THE DRAWINGS. VERIFY WITH APPLICABLE TRADES.
10. TAPERED INSULATION SHALL HAVE A MINIMUM OF 1/4" PER FOOT SLOPE. PROVIDE TAPERED INSULATION AS REQUIRED TO ACHIEVE 1/4" PER FOOT SLOPE.
11. PROVIDE R-30 MINIMUM ROOF INSULATION AT ROOF DRAINS.
12. PROVIDE ROOF WALKING PADS AS SHOWN.

**KEYNOTE SCHEDULE**

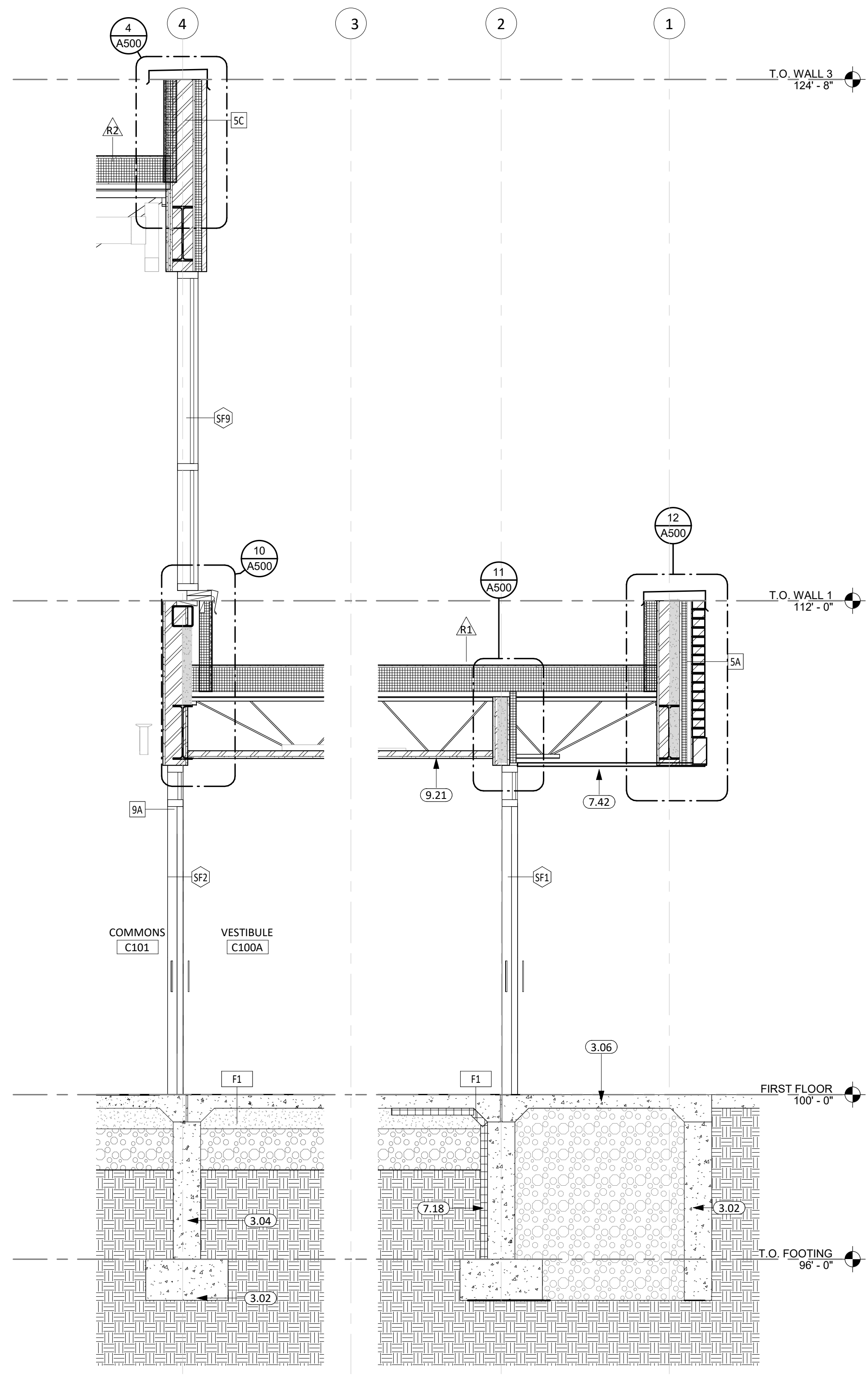
3.02	CONT. CONC. FOOTING (SEE STRUCTURAL PLANS)
3.03	CONC. FOOTING PAD (SEE STRUCTURAL PLANS)
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.06	CONCRETE STOOP w/FROST FREE FOOTING (SEE STRUCTURAL/LANDSCAPE PLANS)
3.11	1/2" EXPANSION/ISOLATION JOINT MATERIAL
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
7.42	METAL SOFFIT PANELS
9.21	5/8" GYPSUM BOARD
9.41	ACOUSTICAL TILE CEILING SYSTEM (COORD. w/ MECH. & ELEC. FOR FIXTURE REQ./LOCATIONS)



1 SECTION - 4 - WALL SEC. 1  
1/2" = 1'-0"



2 SECTION 4 - WALL SEC. 2  
1/2" = 1'-0"



3 SECTION 4 - WALL SEC. 3  
1/2" = 1'-0"

CO-OP PROJECT NO: 2153



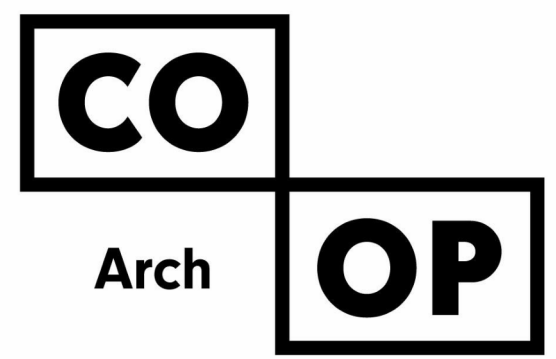
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
WALL SECTIONS

KEYNOTE SCHEDULE	
3.03	CONC. FOOTING PAD (SEE STRUCTURAL PLANS)
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.11	1/2" EXPANSION/ISOLATION JOINT MATERIAL
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.

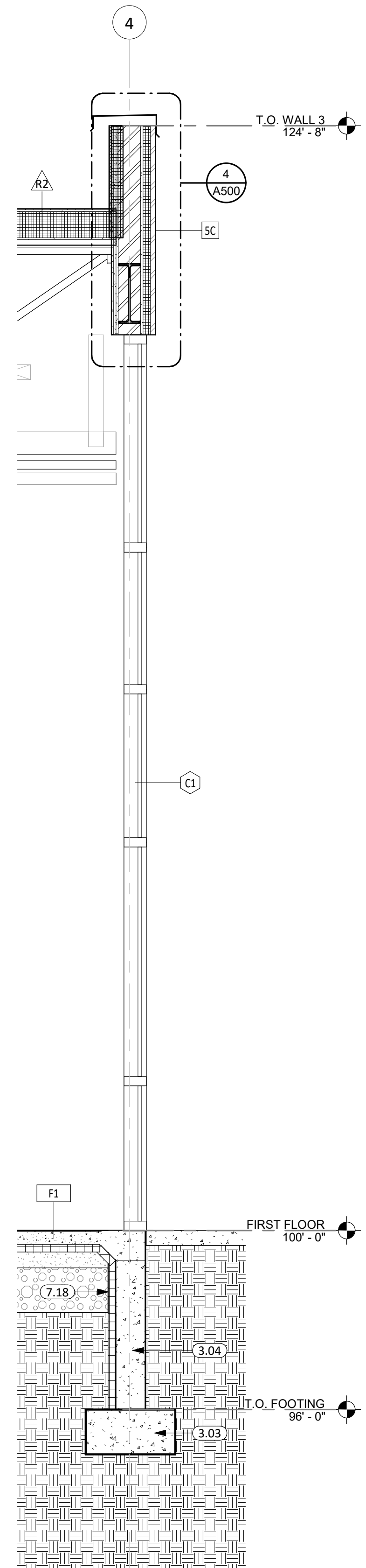


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

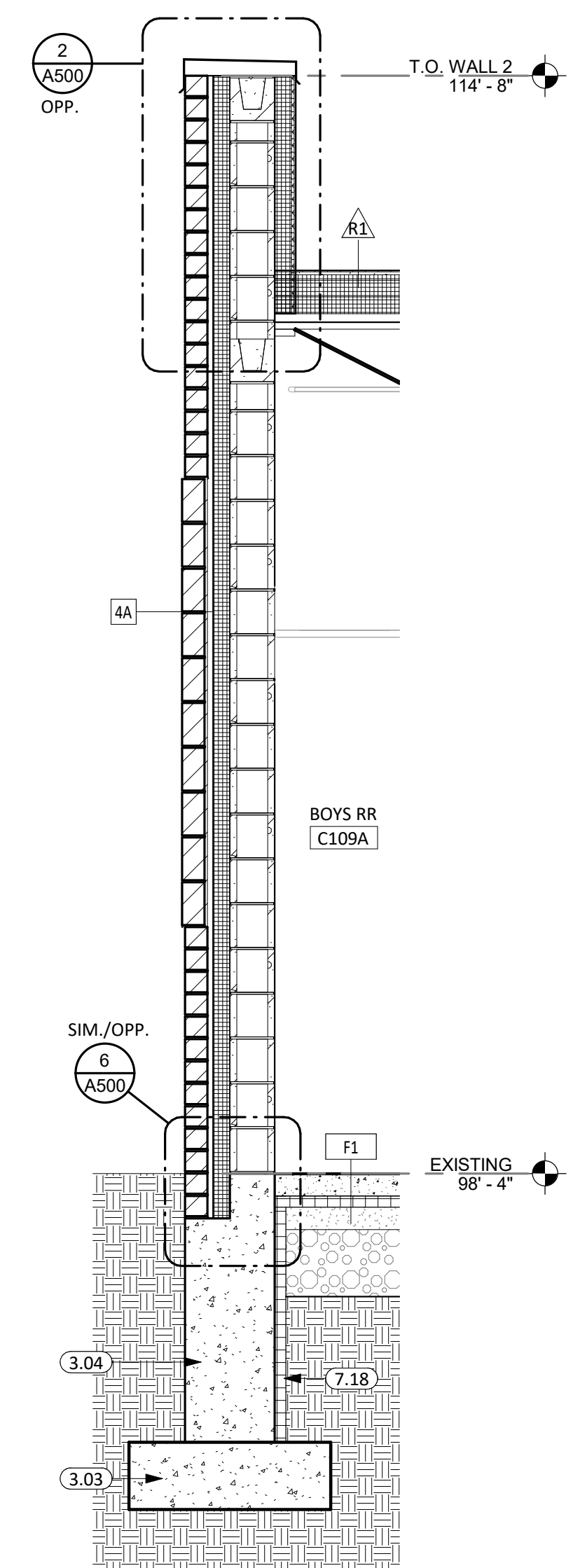
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

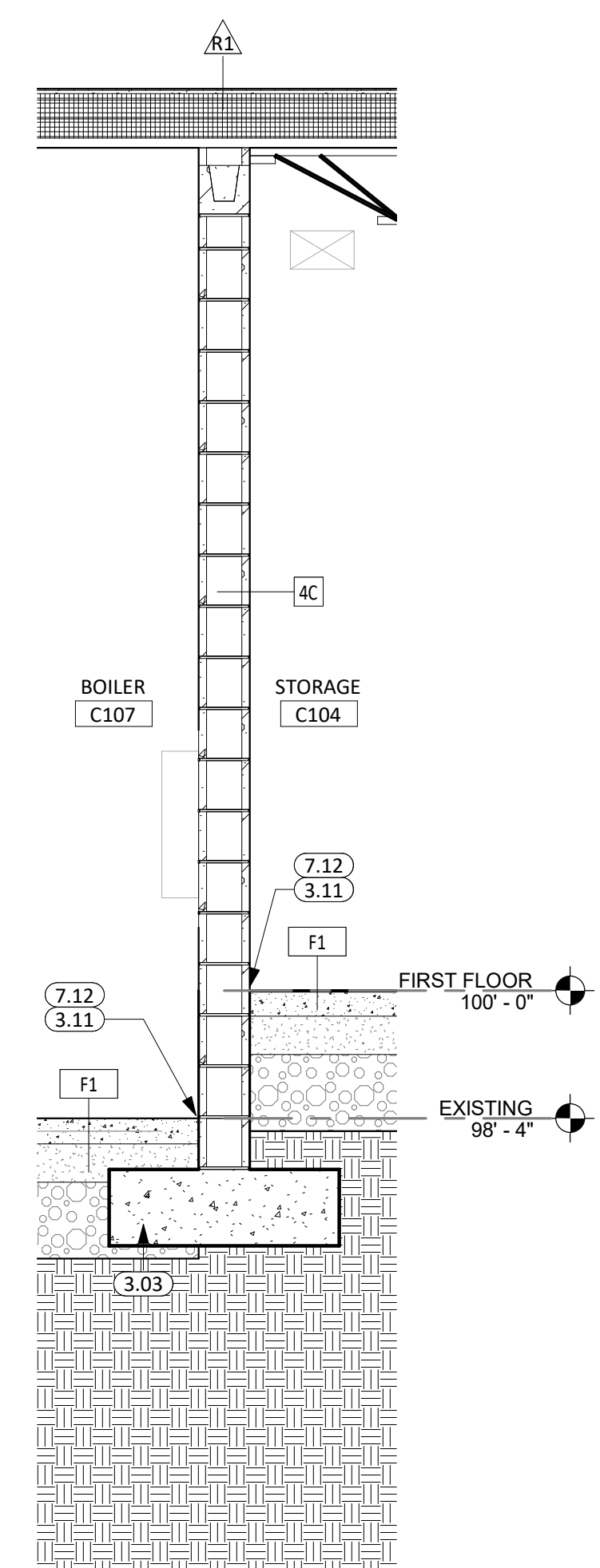
co-oparch.com



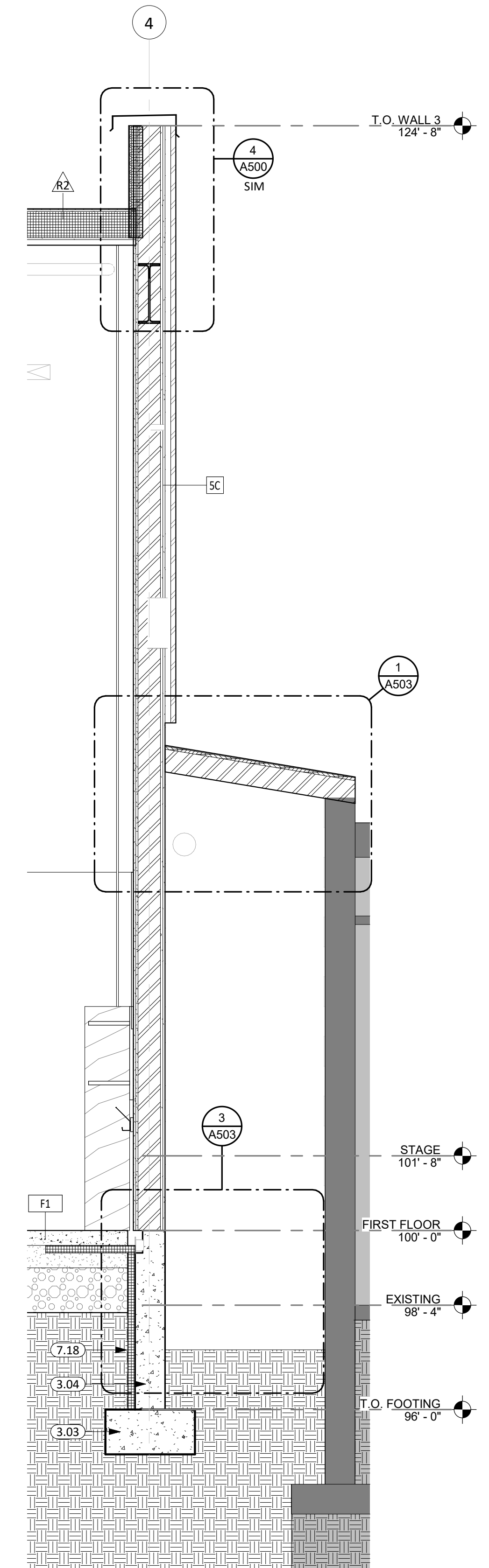
1 SECTION 5 - WALL SEC. 1  
1/2" = 1'-0"



2 SECTION 6 - WALL SECTION 1  
1/2" = 1'-0"



3 SECTION 6 - WALL SECTION 2  
1/2" = 1'-0"



4 SECTION - 6 - WALL SECTION 1  
1/2" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

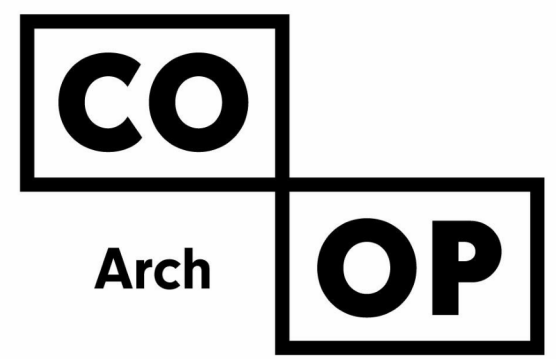
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
WALL SECTIONS

A312

1/31/2023 1:45:24 PM

KEYNOTE SCHEDULE	
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.06	CONCRETE STOOP w/FROST FREE FOOTING (SEE STRUCTURAL/LANDSCAPE PLANS)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
9.41	ACOUSTICAL TILE CEILINGS SYSTEM (COORD. w/ MECH. & ELEC. FOR FIXTURE REQ./LOCATIONS)

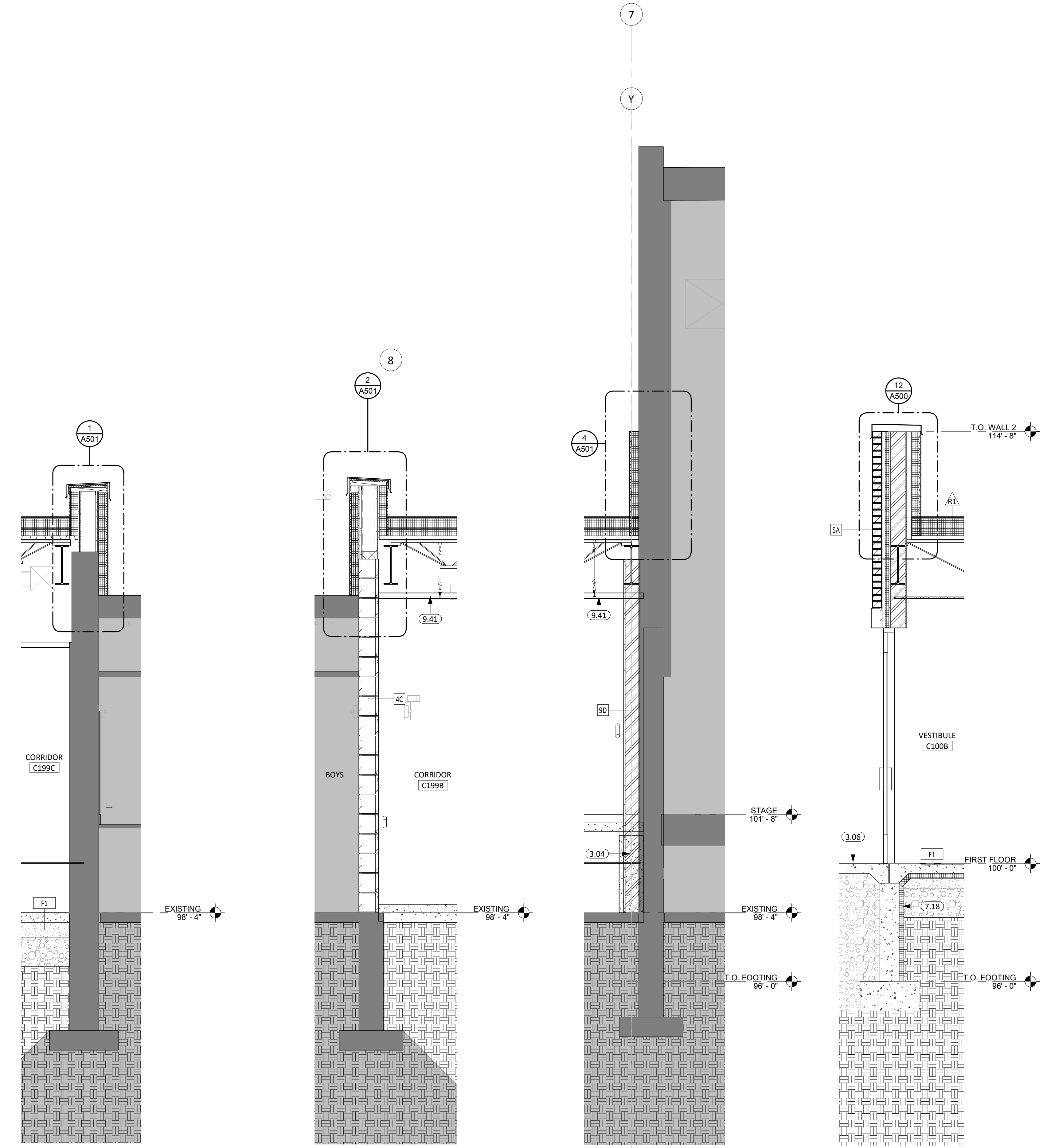
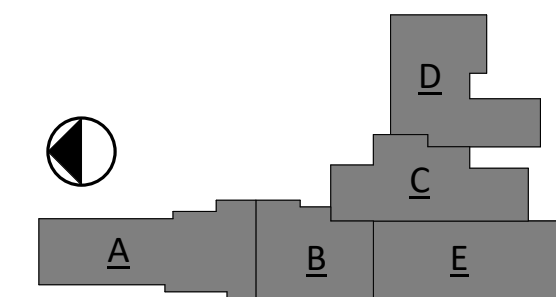


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



1 SECTION 7 - WALL SEC. 1  
1/2" = 1'-0"

2 SECTION 7 - WALL SEC. 2  
1/2" = 1'-0"

3 SECTION 7 - WALL SEC. 3  
1/2" = 1'-0"

4 SECTION 8 - WALL SEC. 1  
1/2" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

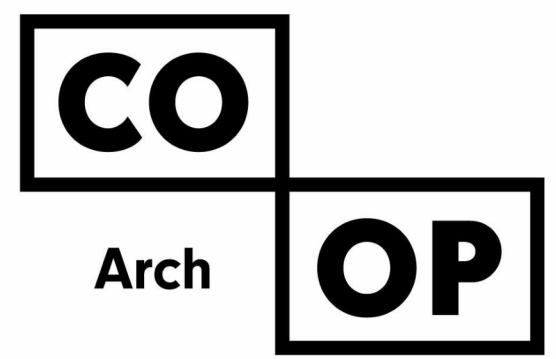
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
WALL SECTIONS

A313

1/31/2023 1:45:26 PM

KEYNOTE SCHEDULE	
3.03	CONC. FOOTING PAD (SEE STRUCTURAL PLANS)
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
5.02	STRUCTURAL STEEL BEAM (SEE ARCH. & STRUCT.)
5.10	STEEL JOIST (SEE ARCH. & STRUCT.)
5.12	STEEL BRACE FRAME (SEE ARCH. & STRUCT.)
6.07	2x WOOD BLOCKING AS REQUIRED
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
7.70	PRE-FINISHED SHEET METAL FLASHING
9.10	7/8" FURRING CHANNEL
9.21	5/8" GYPSUM BOARD
9.41	ACOUSTICAL TILE CEILING SYSTEM (COORD. w/ MECH. & ELEC. FOR FIXTURE REQ./LOCATIONS)
10.06	CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE - ARIAL FONT STYLE

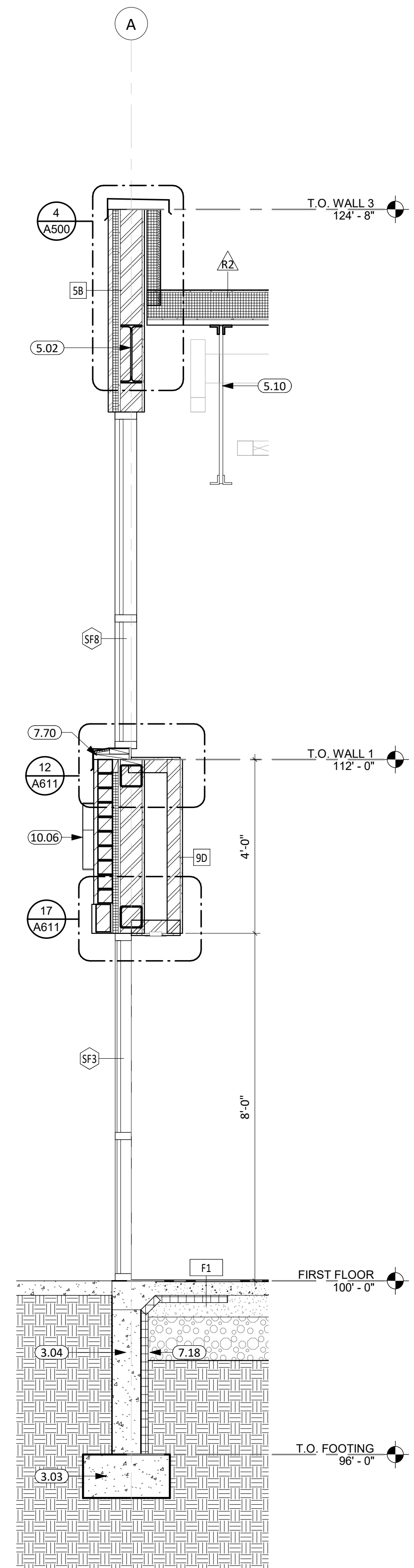


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

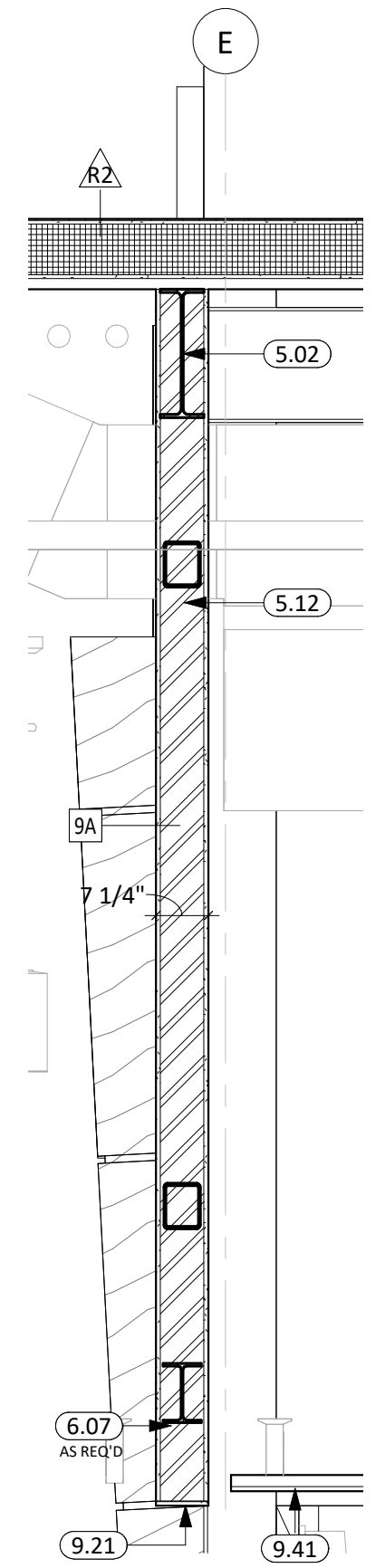
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

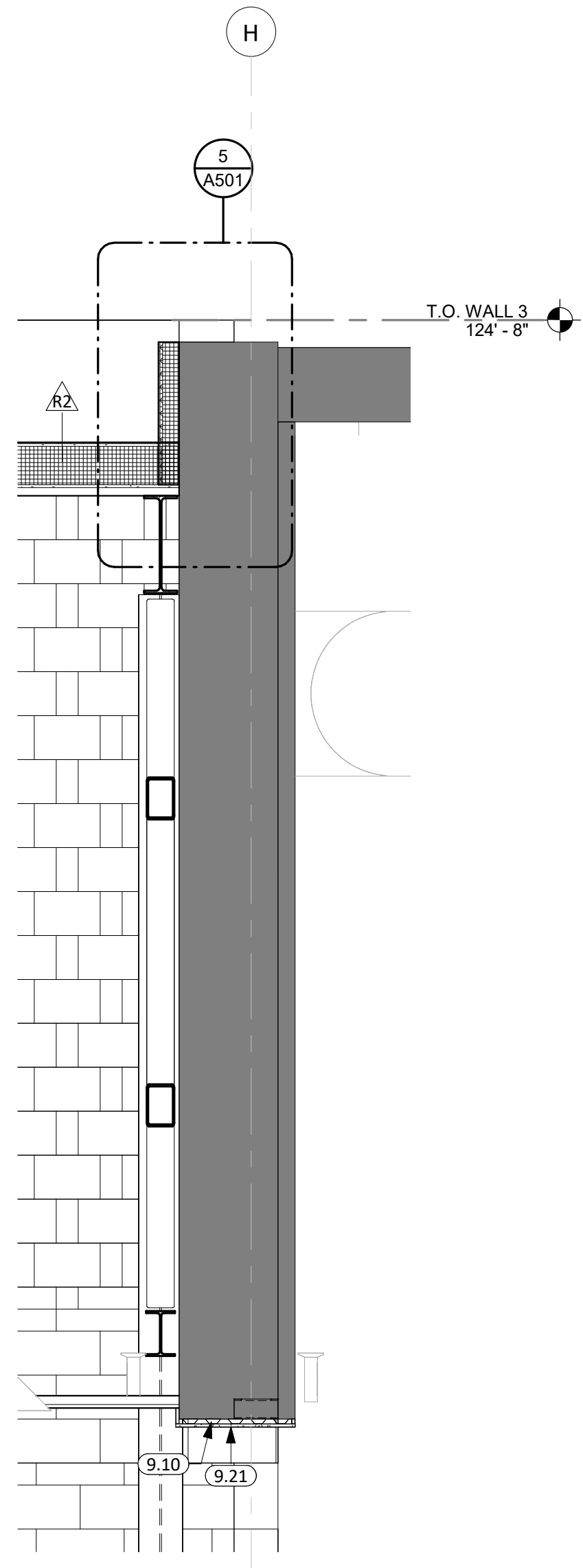
co-oparch.com



1 SECTION A - WALL SEC. 1  
1/2" = 1'-0"



2 SECTION A - WALL SEC. 2  
1/2" = 1'-0"



3 SECTION A - WALL SEC. 3  
1/2" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

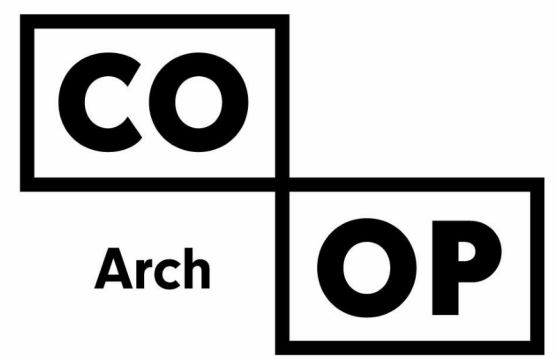
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
WALL SECTIONS

A314

KEYNOTE SCHEDULE	
3.03	CONC. FOOTING PAD (SEE STRUCTURAL PLANS)
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
5.30	3 5/8" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.31	6" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.74	HANDRAIL (MATCH GUARDRAIL PROFILE & FINISH) (SEE ARCH. & STRUCT.)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
8.30	OVERHEAD COILING DOOR
9.41	ACOUSTICAL TILE CEILING SYSTEM (COORD. w/ MECH. & ELEC. FOR FIXTURE REQ./LOCATIONS)
9.45	FIXED VELOUR CURTAIN PANELS



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



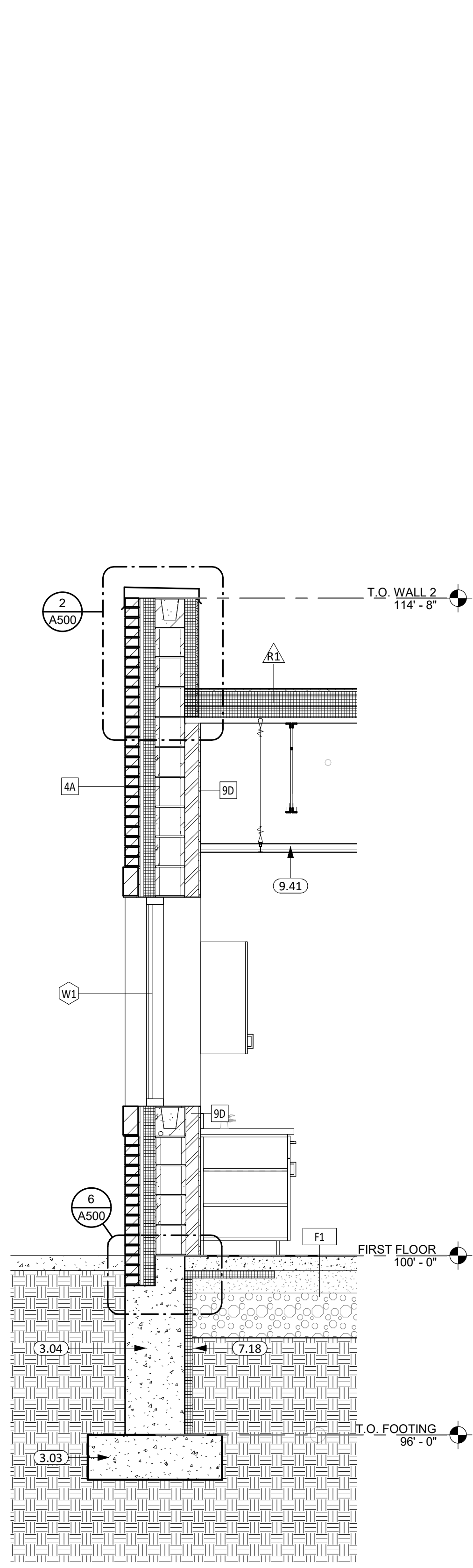
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

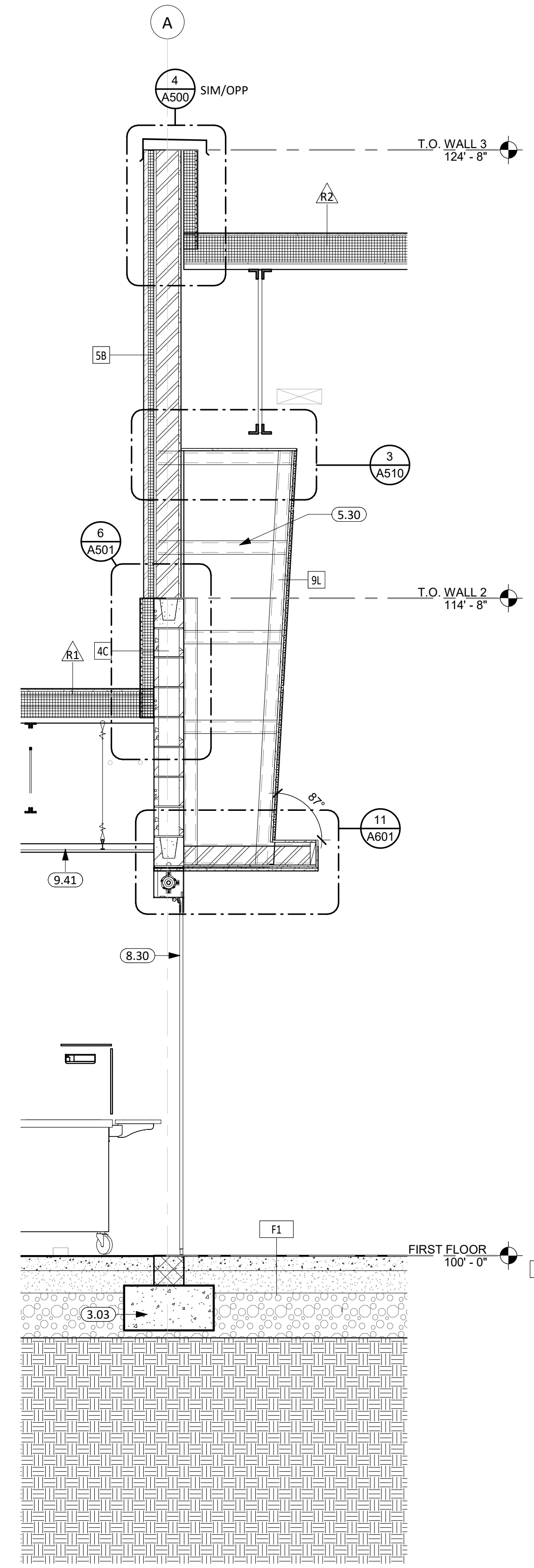
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
WALL SECTIONS

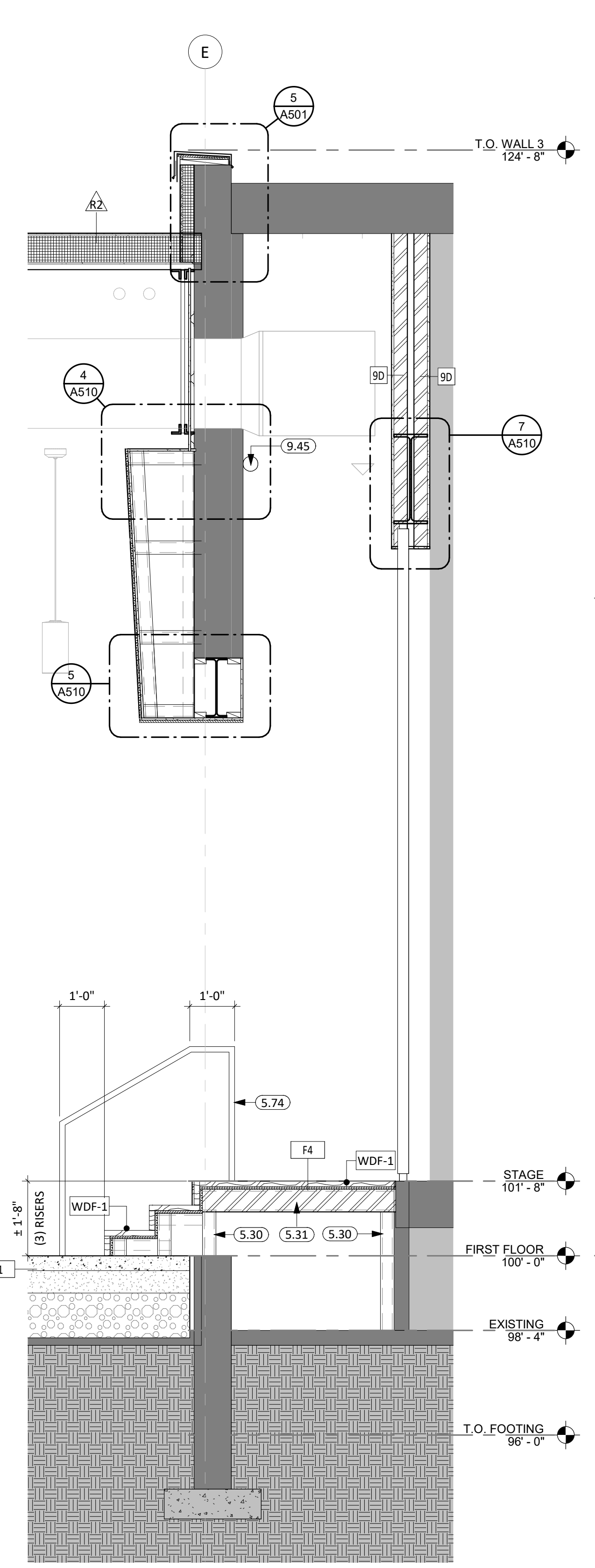
A315



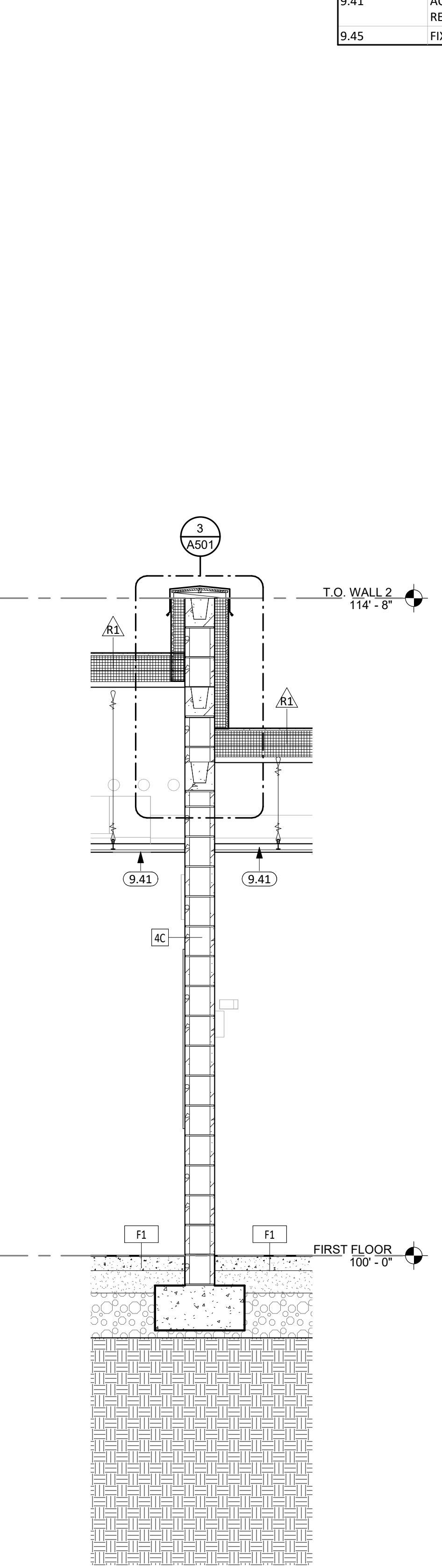
1 SECTION B - WALL SEC. 1  
1/2" = 1'-0"



2 SECTION B - WALL SEC. 2  
1/2" = 1'-0"



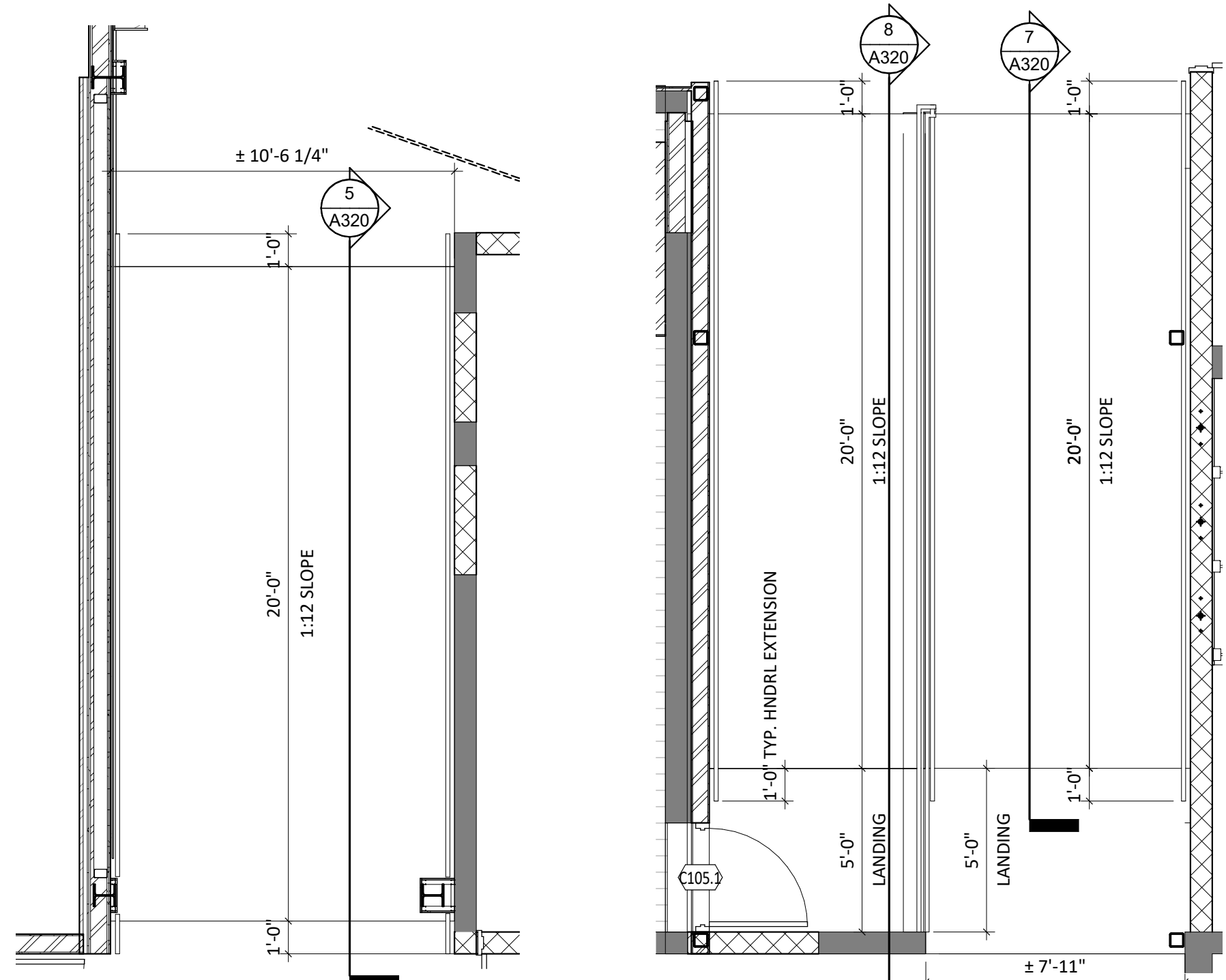
3 SECTION B - WALL SEC. 3  
1/2" = 1'-0"



4 SECTION C - WALL SEC. 1  
1/2" = 1'-0"

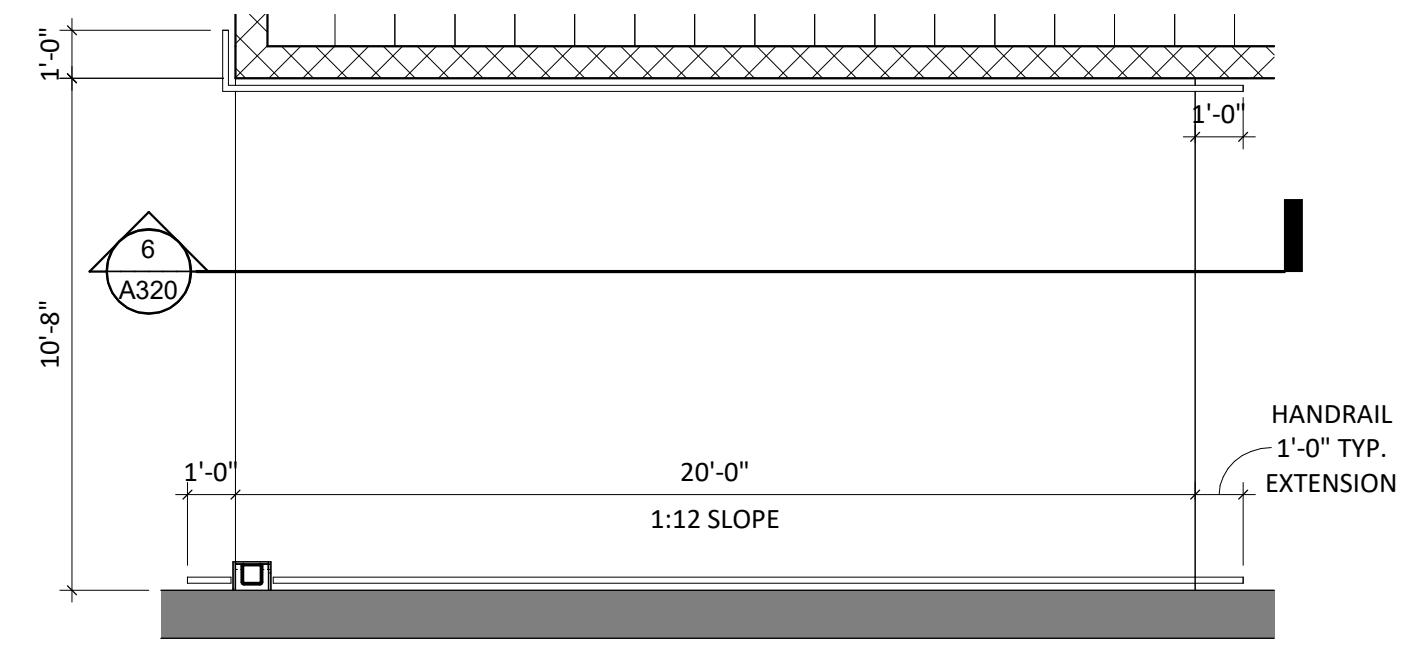
1/31/2023 1:45:31 PM



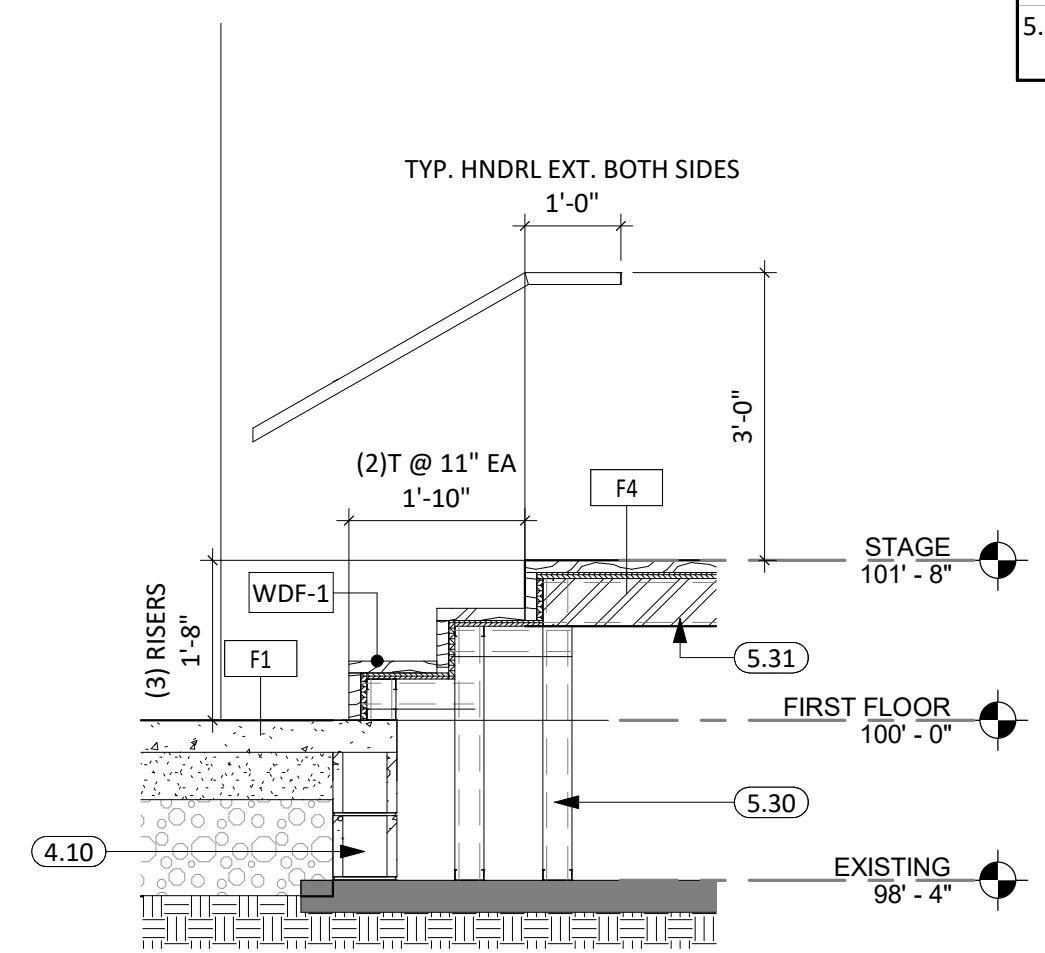


1 CORRIDOR C199A  
1/4" = 1'-0"

2 CORRIDOR C199B  
1/4" = 1'-0"

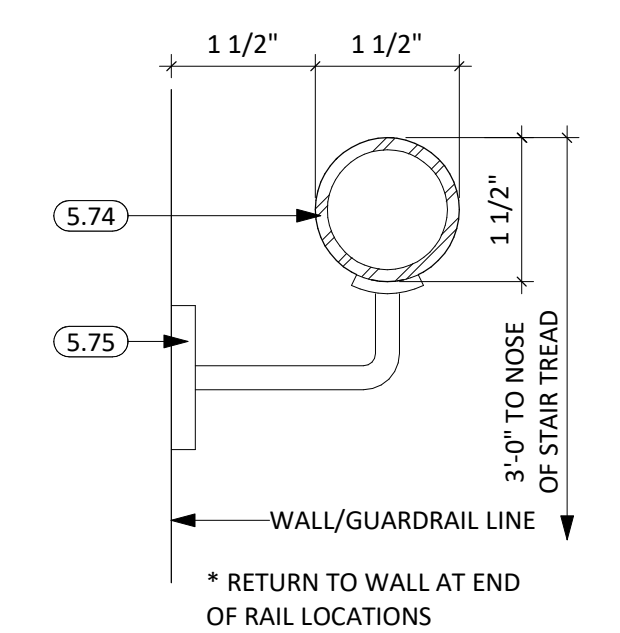


3 C199C RAMP  
1/4" = 1'-0"

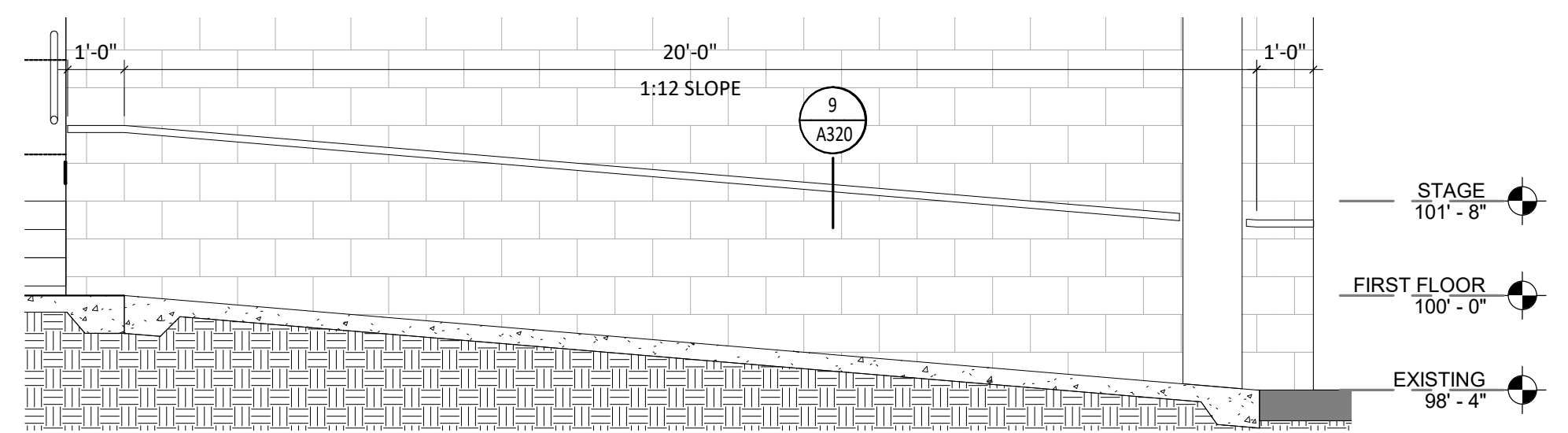


4 STAIR SECTION @ STAGE  
1/2" = 1'-0"

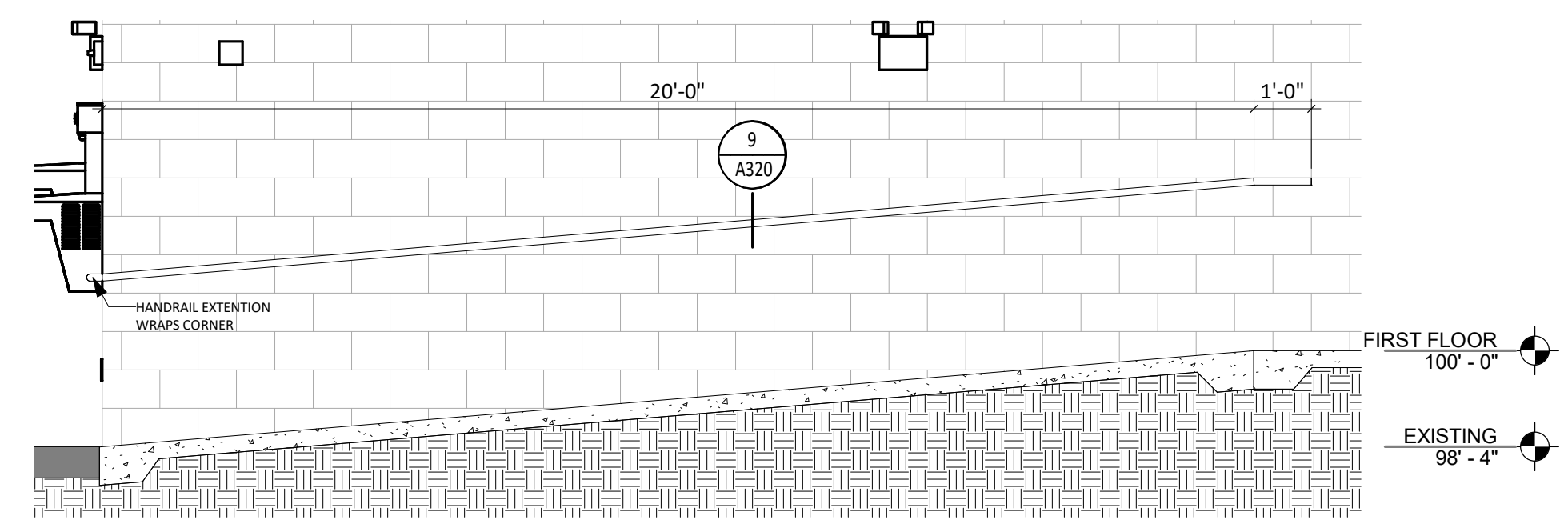
KEYNOTE SCHEDULE	
4.10	CMU MASONRY UNIT
5.30	3 5/8" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.31	6" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.71	ROUND STEEL GUARDRAIL SECTION (SEE ARCH. & STRUCT.)
5.74	HANDRAIL (MATCH GUARDRAIL PROFILE & FINISH) (SEE ARCH. & STRUCT.)
5.75	HANDRAIL BRACKET (SEE ARCH. & STRUCT.)
5.77	3/4" ROUND STEEL BALUSTERS; 4" ON CENTER SPACING. (MATCH GUARDRAIL FINISH) (SEE ARCH. & STRUCT.)
5.78	DRILL AND EPOXY GUARDRAIL BALUSTERS INTO CONCRETE BELOW. 6" MIN DEPTH. (SEE ARCH. & STRUCT.)



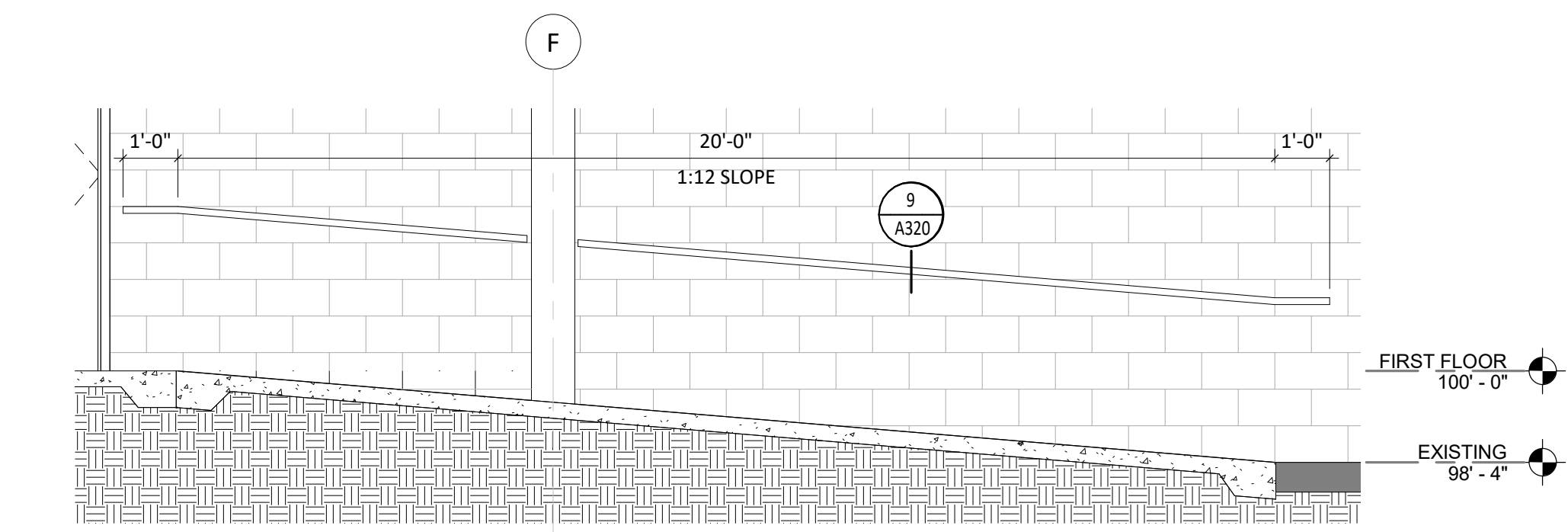
9 HANDRAIL DETAIL  
6" = 1'-0"



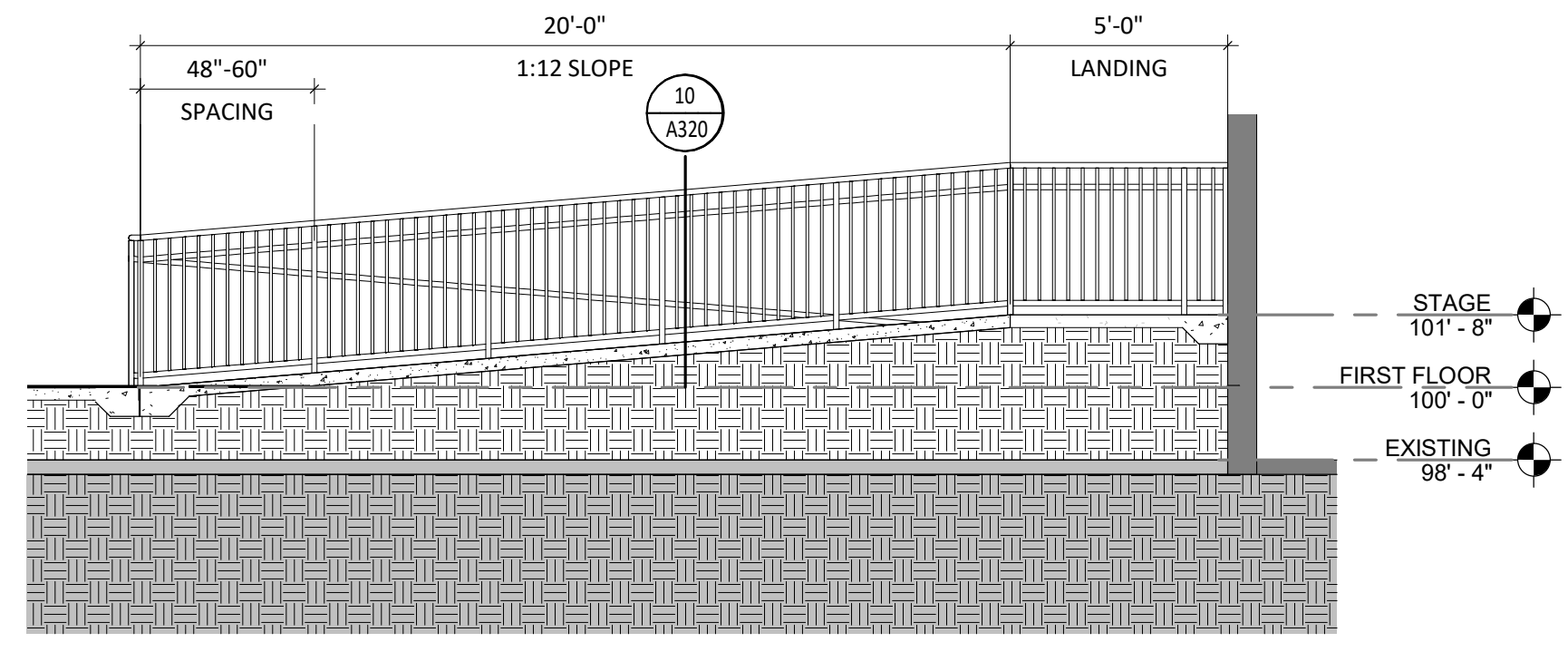
5 CORRIDOR 199A RAMP SECTION  
3/8" = 1'-0"



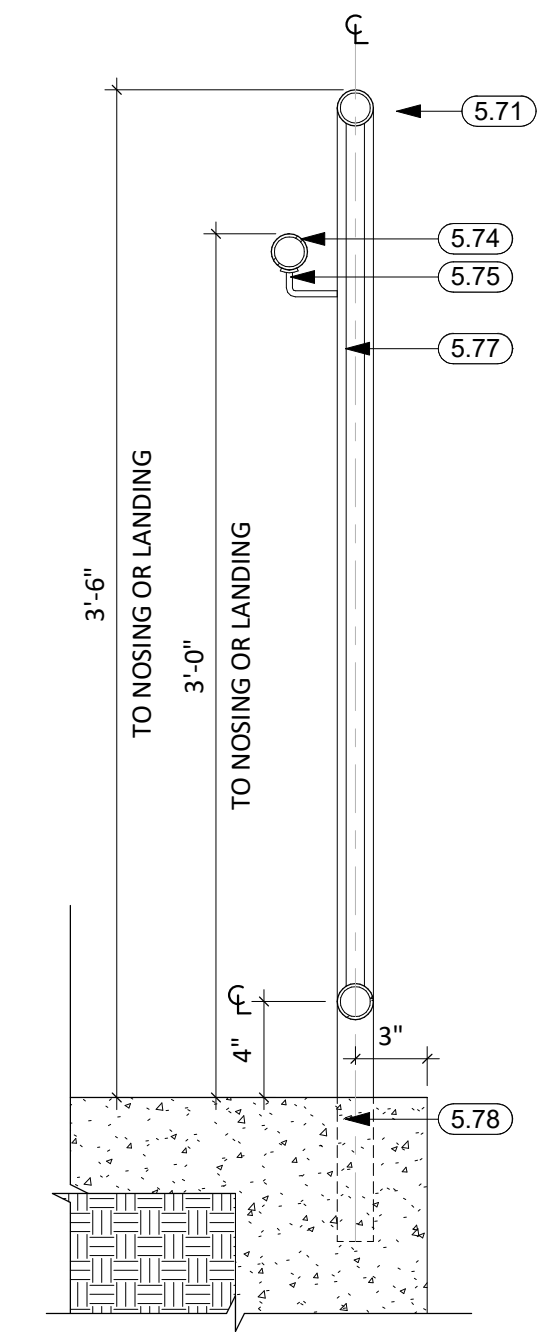
6 CORRIDOR 199C RAMP SECTION  
3/8" = 1'-0"



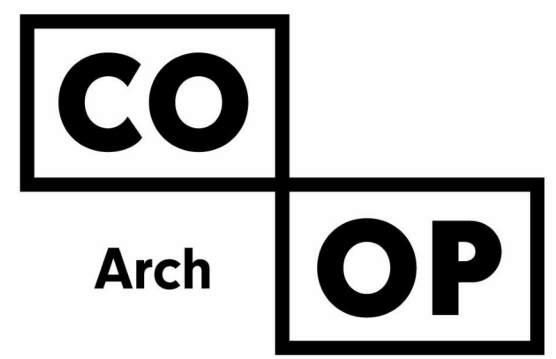
7 CORRIDOR 199B RAMP SECTION 1  
3/8" = 1'-0"



8 CORRIDOR 199B RAMP SECTION 2  
1/4" = 1'-0"



10 GUARDRAIL DETAIL @ RAMP  
1 1/2" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



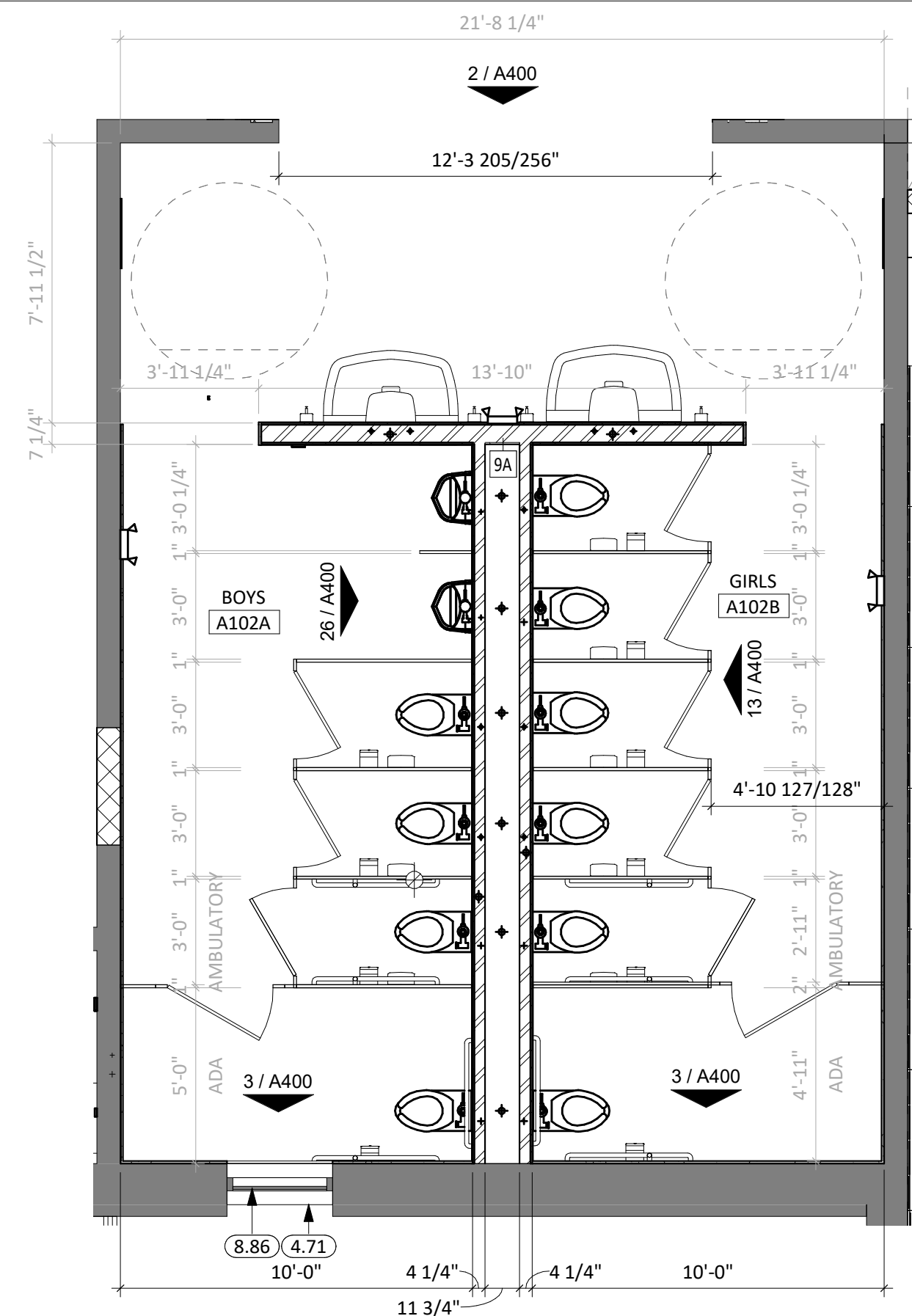
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

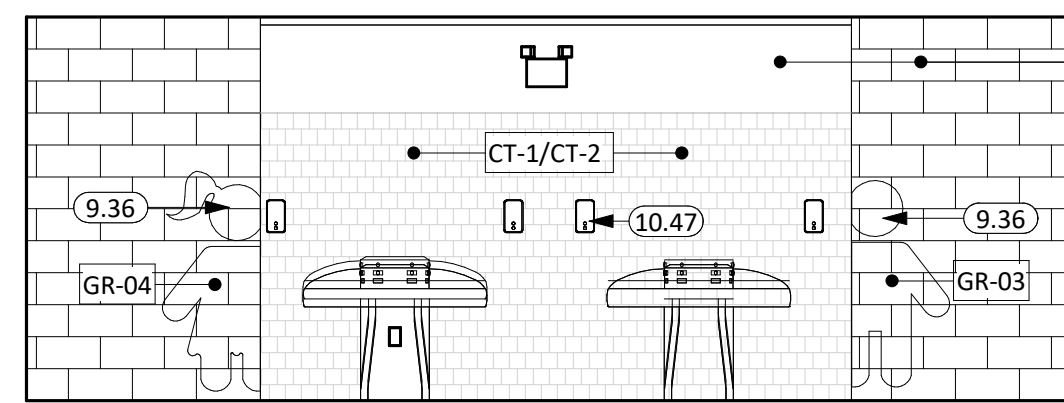
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
STAIR/RAMP SECTIONS & DETAILS

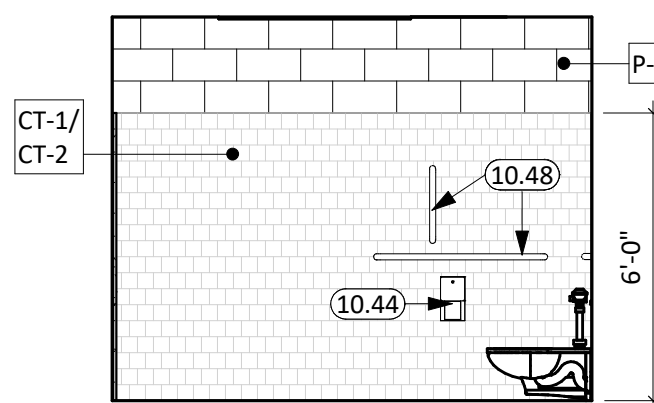
A320



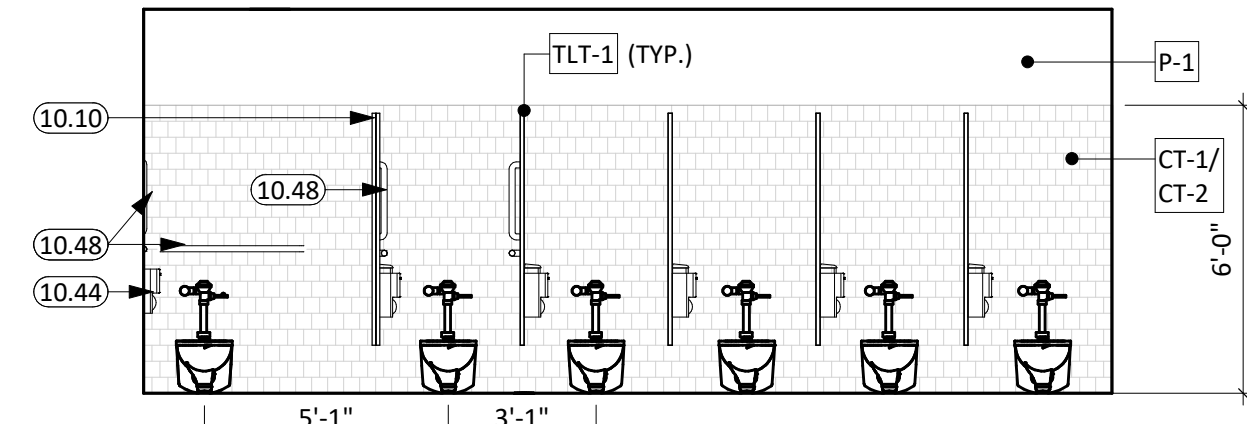
1 RESTROOMS A102A / A102B  
1/4" = 1'-0"



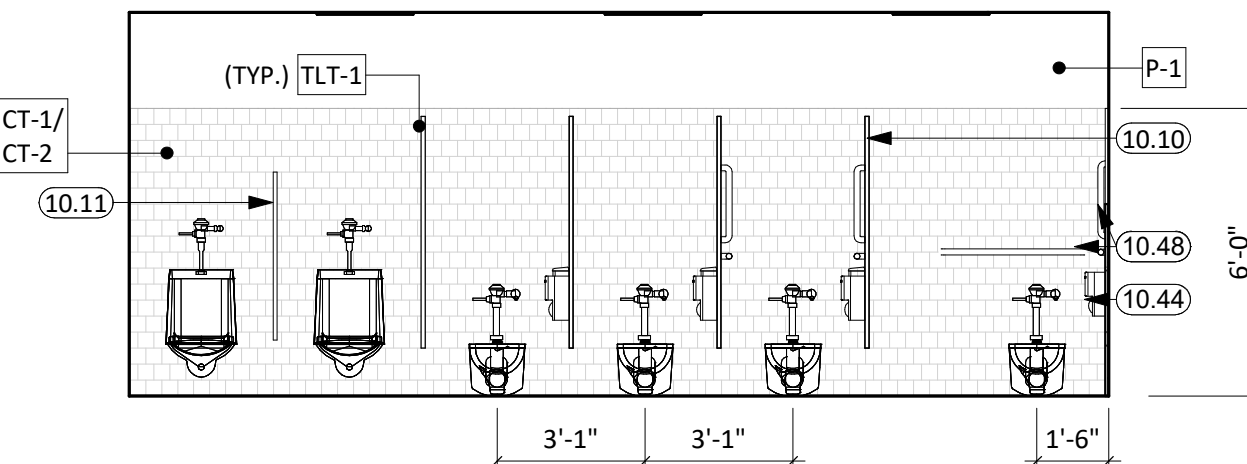
2 RESTROOMS A102A/A102B SINK WALL  
1/4" = 1'-0"



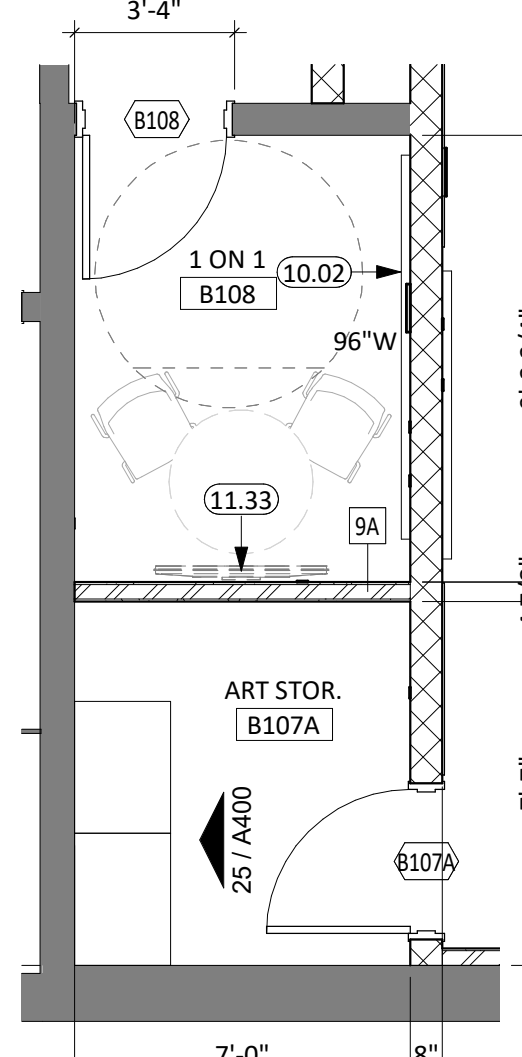
3 ADA STALL A102A/A102B - WEST  
1/4" = 1'-0"



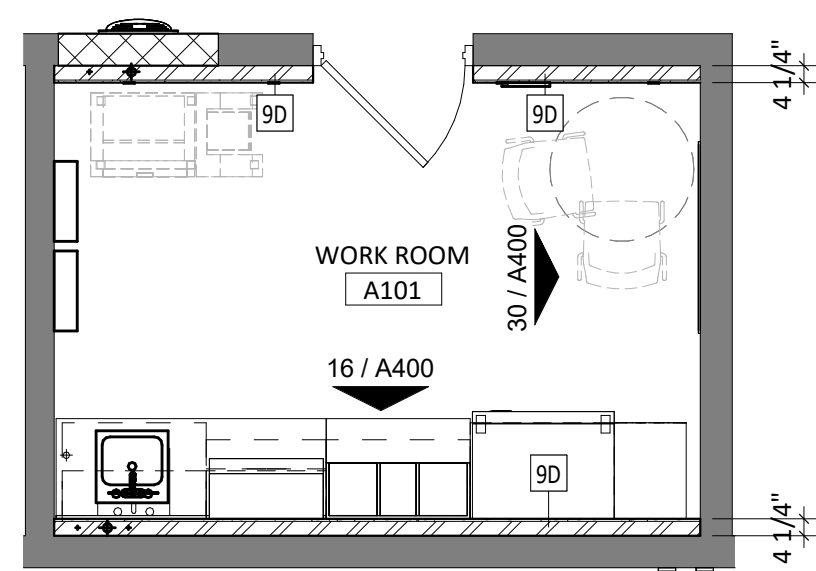
13 GIRLS RESTROOM A102B  
1/4" = 1'-0"



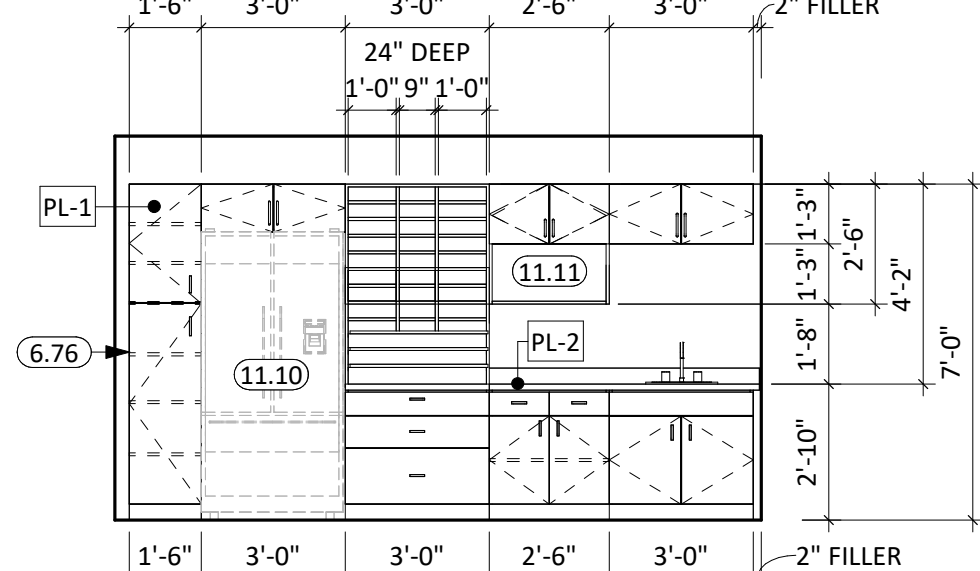
26 BOYS RESTROOM A102A  
1/4" = 1'-0"



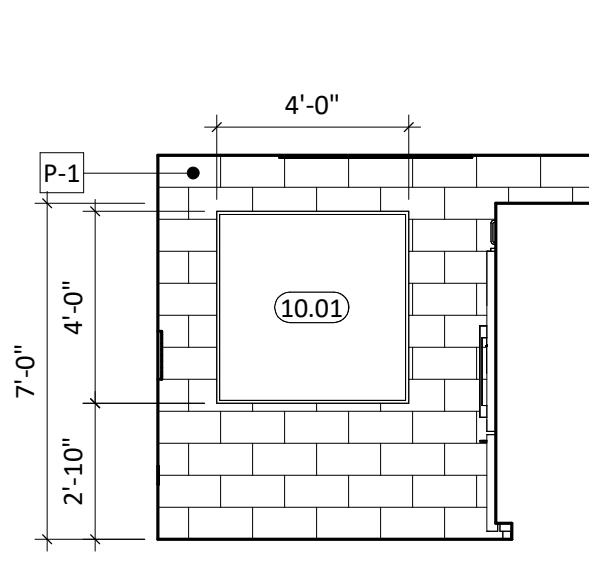
23 ART STOR. B107A & 1 ON 1 B108  
1/4" = 1'-0"



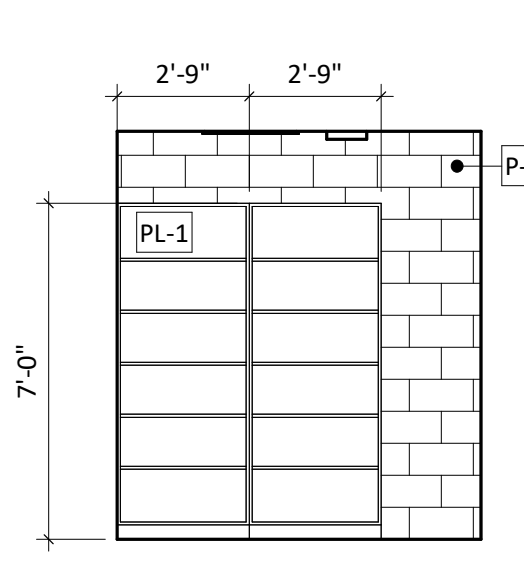
17 WORK ROOM A101  
1/4" = 1'-0"



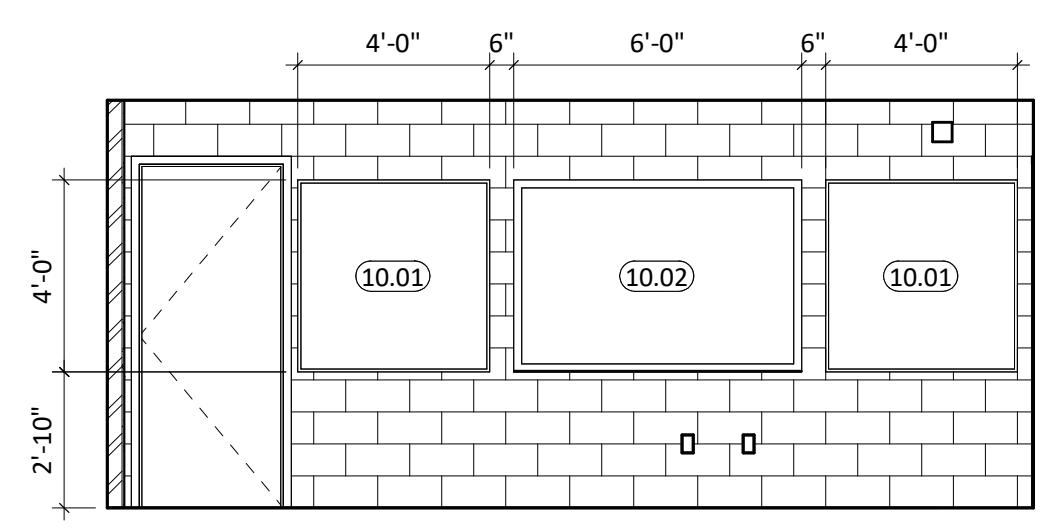
16 WORK ROOM A101 - WEST  
1/4" = 1'-0"



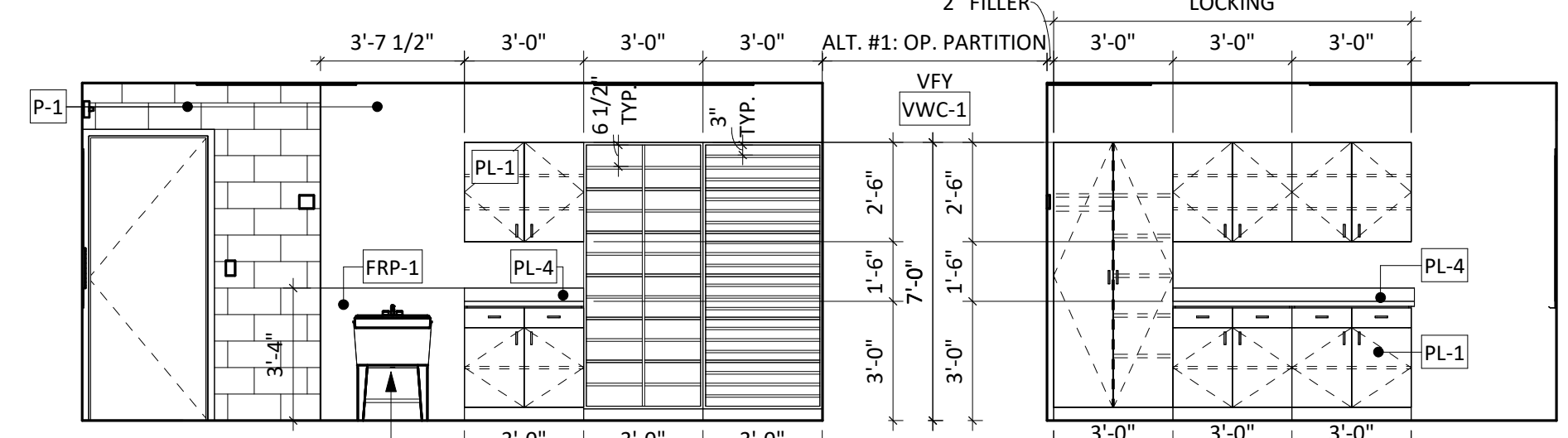
30 WORK ROOM A101 - SOUTH  
1/4" = 1'-0"



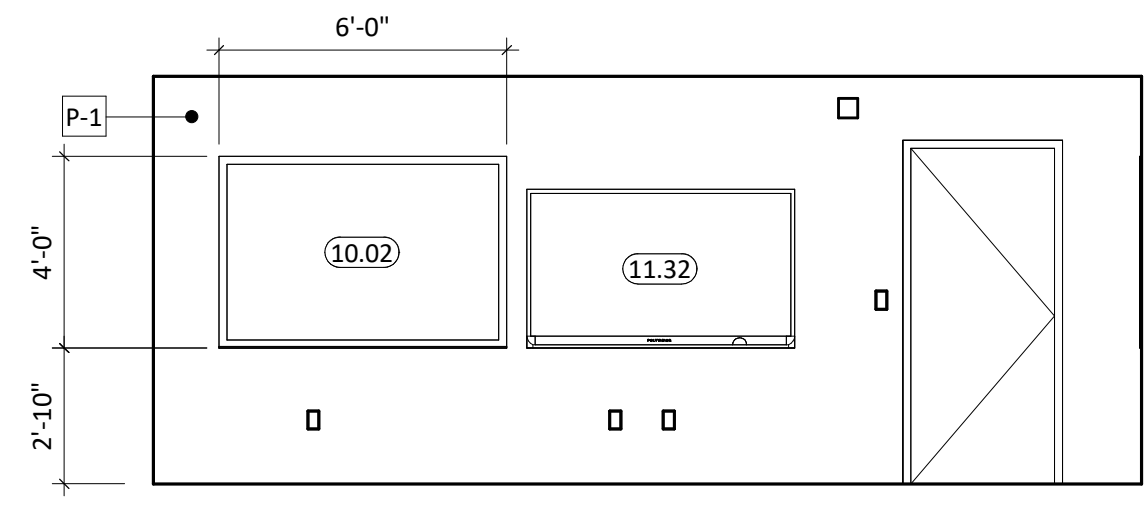
25 ART STOR. B107A - NORTH  
1/4" = 1'-0"



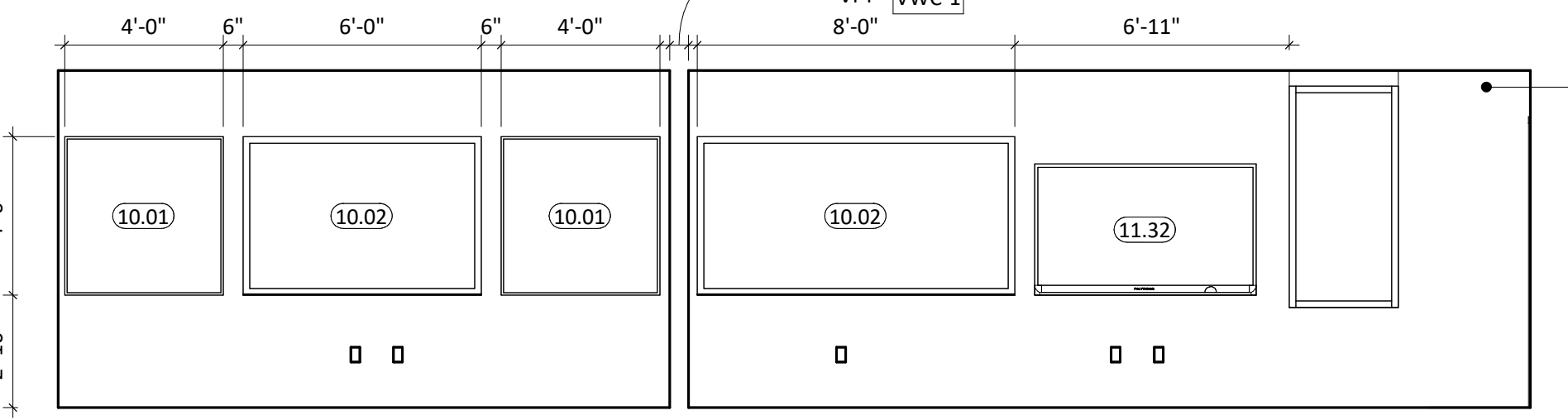
28 FLEX CLASS B107 - NORTH  
1/4" = 1'-0"



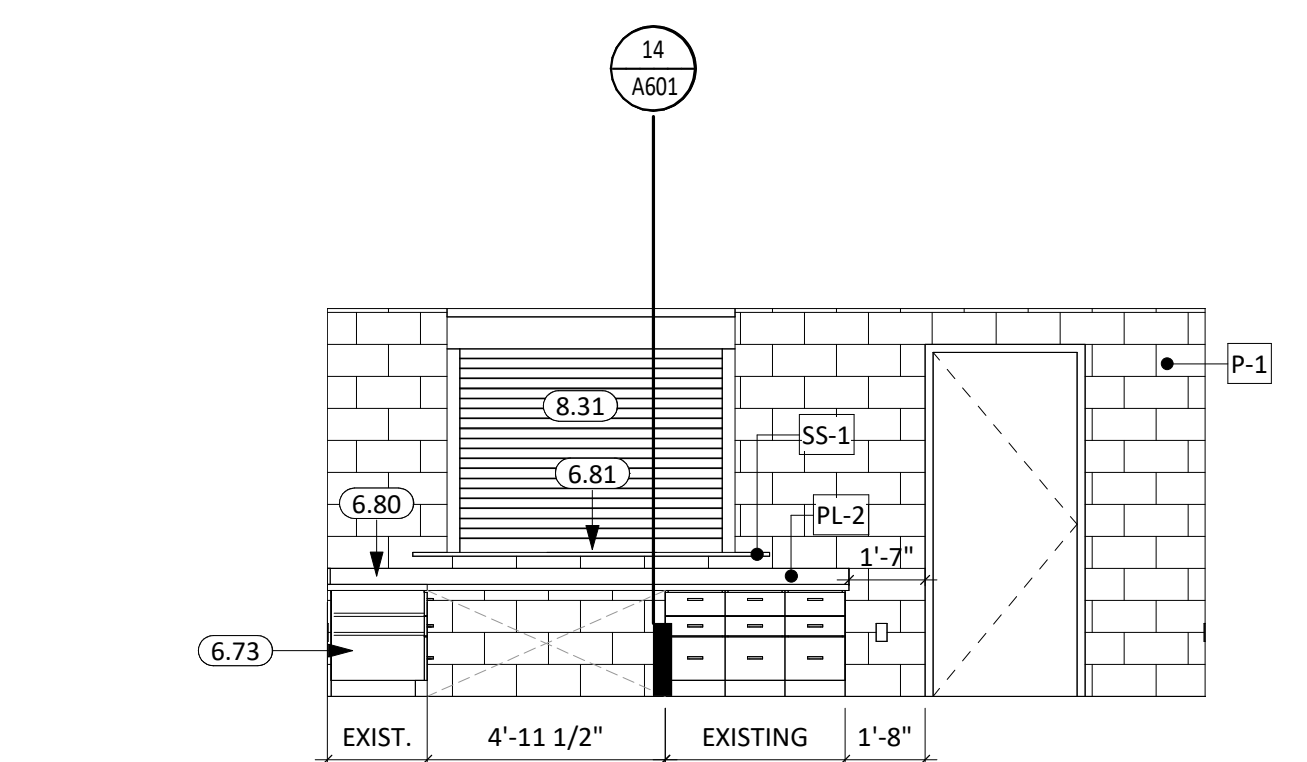
29 FLEX CLASS B107 - EAST  
1/4" = 1'-0"



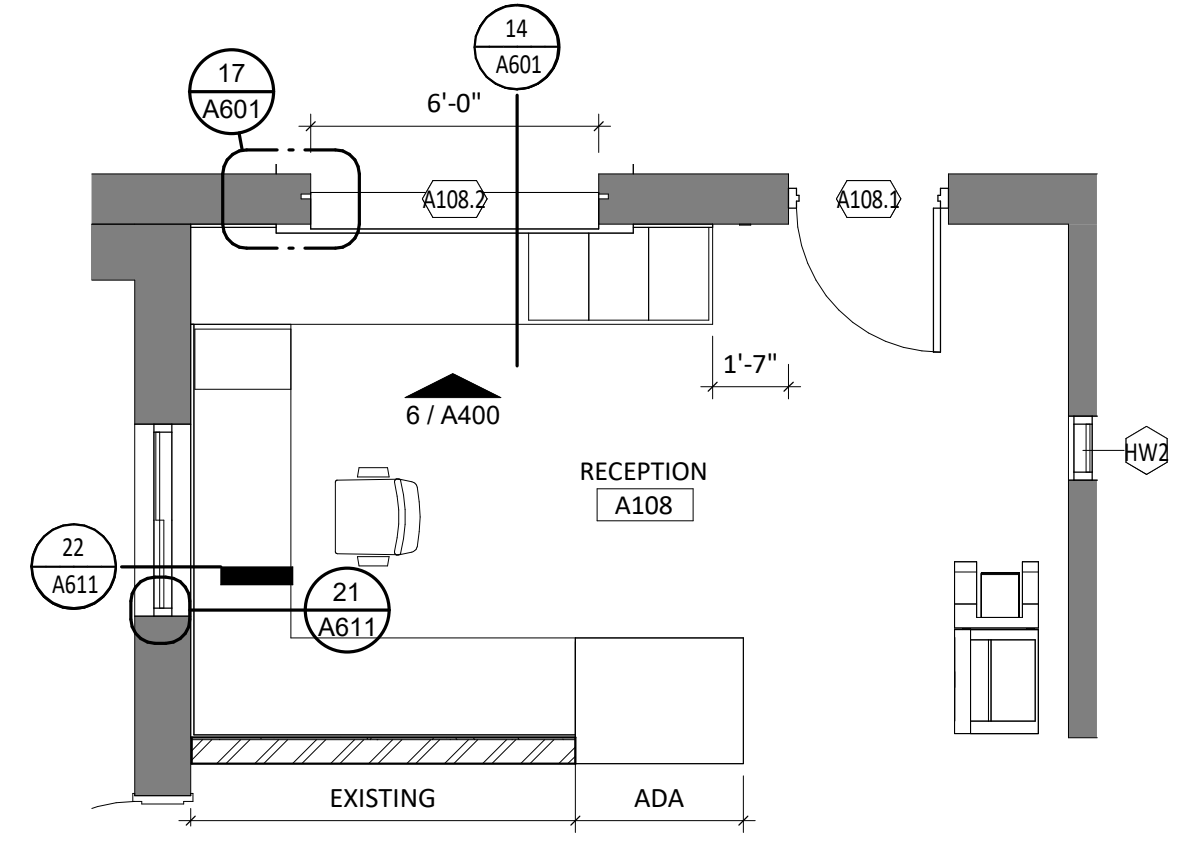
4 FLEX CLASS B107 - SOUTH  
1/4" = 1'-0"



5 FLEX CLASS B107 - WEST  
1/4" = 1'-0"



6 RECEPTION A108 - EAST  
1/4" = 1'-0"



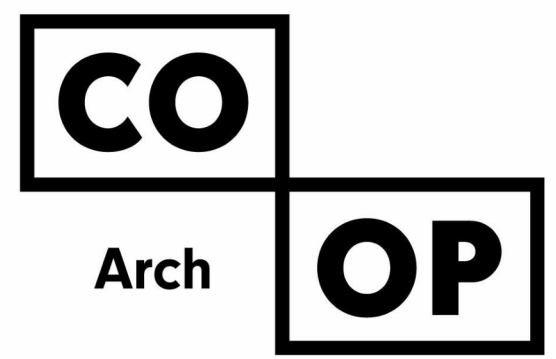
18 RECEPTION A108  
1/4" = 1'-0"

GENERAL NOTES

- SEE SHEET 6000 FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
- FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
- ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
- RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
- ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
- SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION TO VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
- PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
- TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
- COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
- MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
- PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
- COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
- CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
- PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
- PJ = PANEL JOINT
- RV = REVEAL

KEYNOTE SCHEDULE

4.71	INFILL LOUVER OPENING W/ BRICK, INSULATION, AND CMU TO MATCH EXISTING WALL CONSTRUCTION/FINISH; SEE MECHANICAL PLANS FOR DEMOLISHED LOUVER LOCATIONS.
6.73	PLASTIC LAMINATE BASE CABINET
6.76	FINISHED END
6.80	PLASTIC LAMINATE COUNTERTOP
6.81	SOLID SURFACE
8.31	OVERHEAD COILING COUNTER DOOR
8.86	EXISTING GLAZING TO BE REPLACED WITH 1" INSULATED FROSTED GLASS
9.36	SINGLE-TONE PAINTED SIGNAGE GRAPHIC
10.01	TACKBOARD, SEE FINISH LEGEND [TB-1]
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE]
10.10	TOILET PARTITION
10.11	URINAL SCREEN
10.44	TOILET TISSUE DISPENSER, PER OWNER
10.47	SOAP DISPENSER, PER OWNER
10.48	GRAB BAR
11.10	REFRIGERATOR
11.11	MICROWAVE; (OWNER PROVIDED CONTRACTOR INSTALLED)
11.32	SMARTBOARD (OWNER PROVIDED CONTRACTOR INSTALLED)
11.33	TV MONITOR (OWNER PROVIDED CONTRACTOR INSTALLED)
22.19	UTILITY SINK; SEE PLUMBING



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



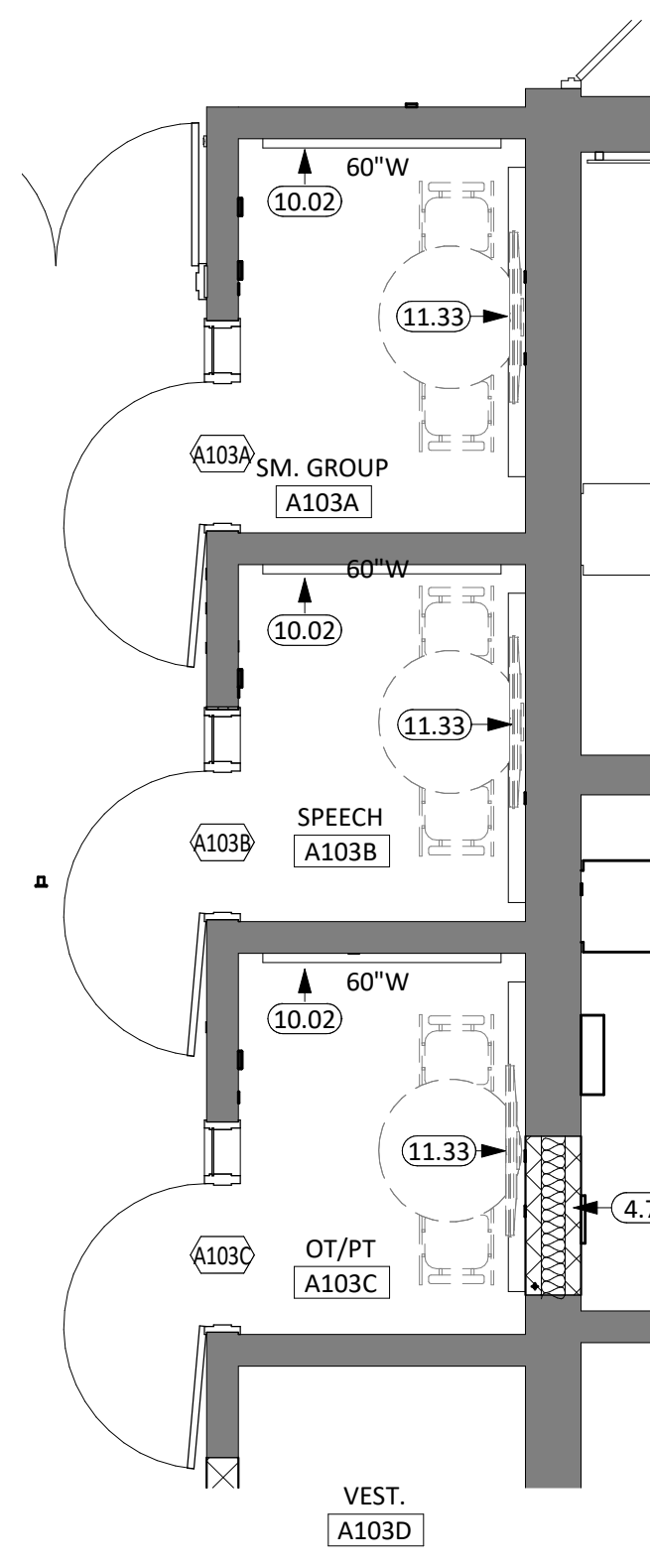
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

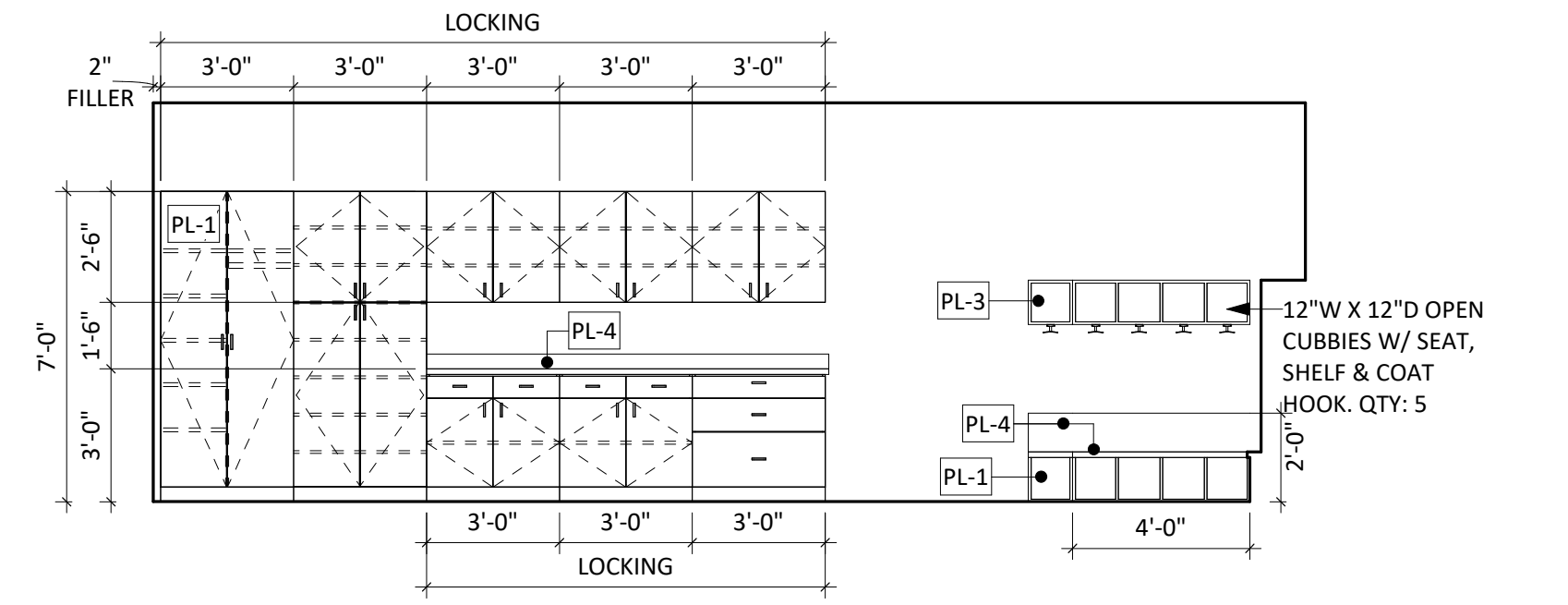
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED PLANS & INTERIOR ELEVATIONS

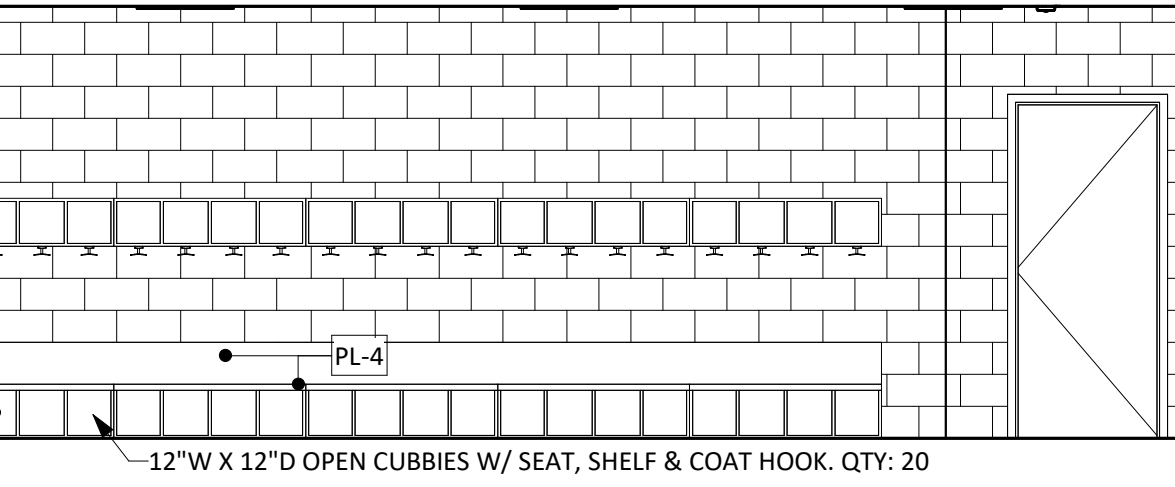
A400



5 ELEM. FLEX A104 - NORTH  
1/4" = 1'-0"

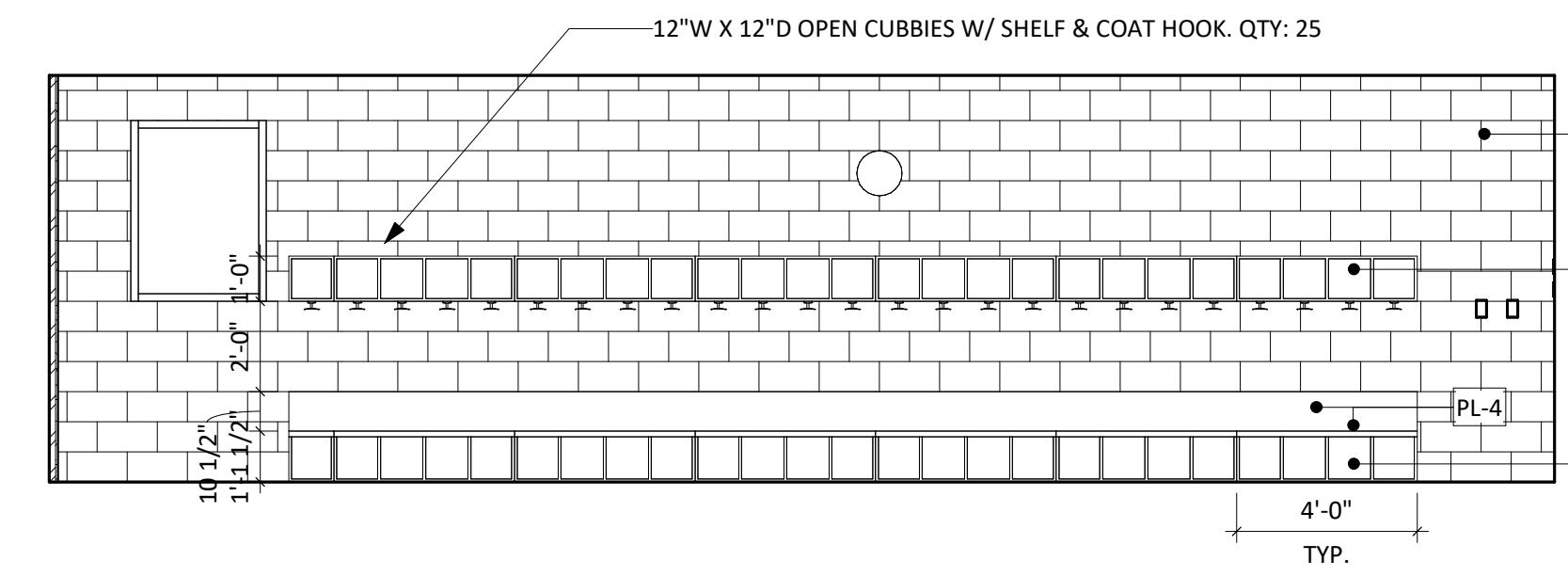


6 ELEM. FLEX A104 - EAST  
1/4" = 1'-0"

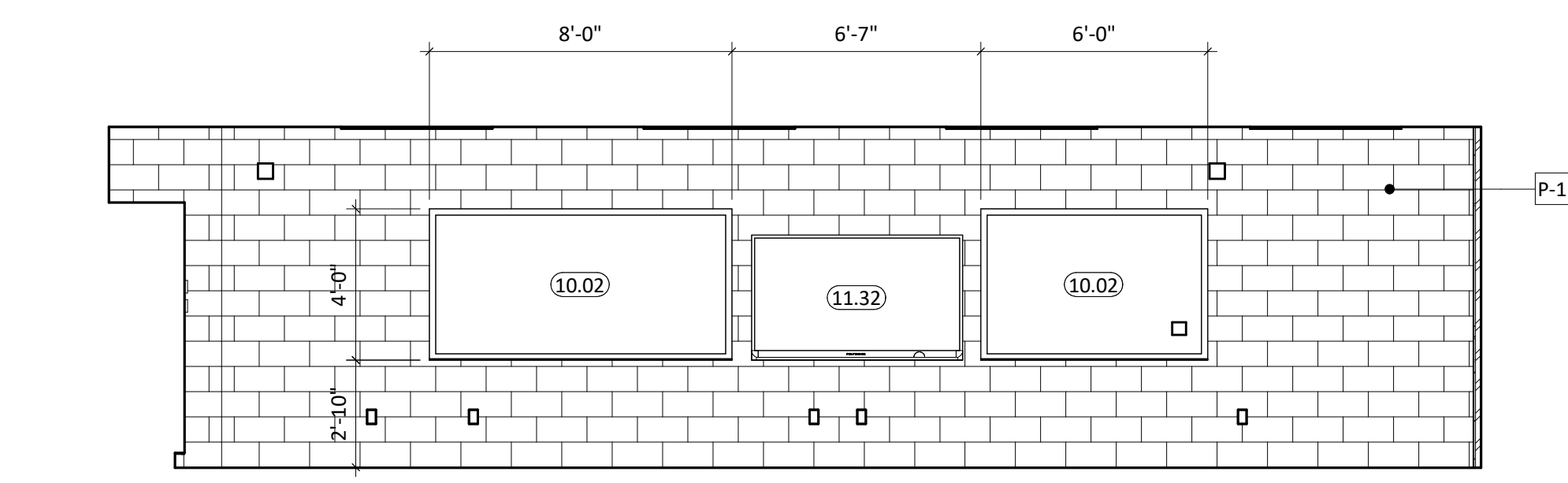
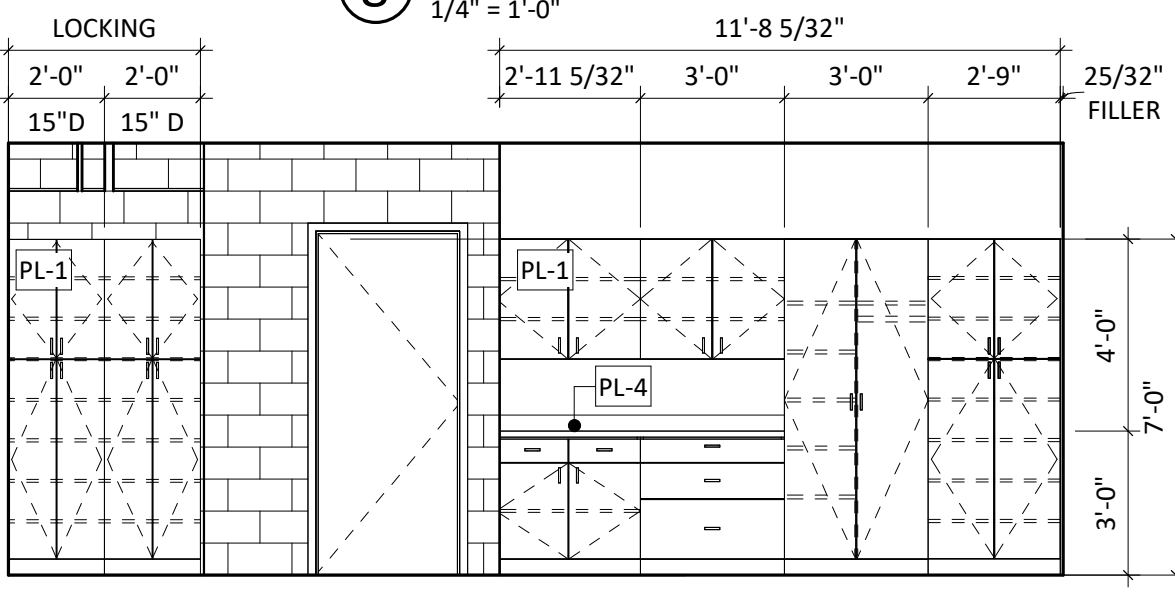


1 ELEM. FLEX SM ROOMS  
1/4" = 1'-0"

7 ELEM. FLEX A104 - SOUTH  
1/4" = 1'-0"



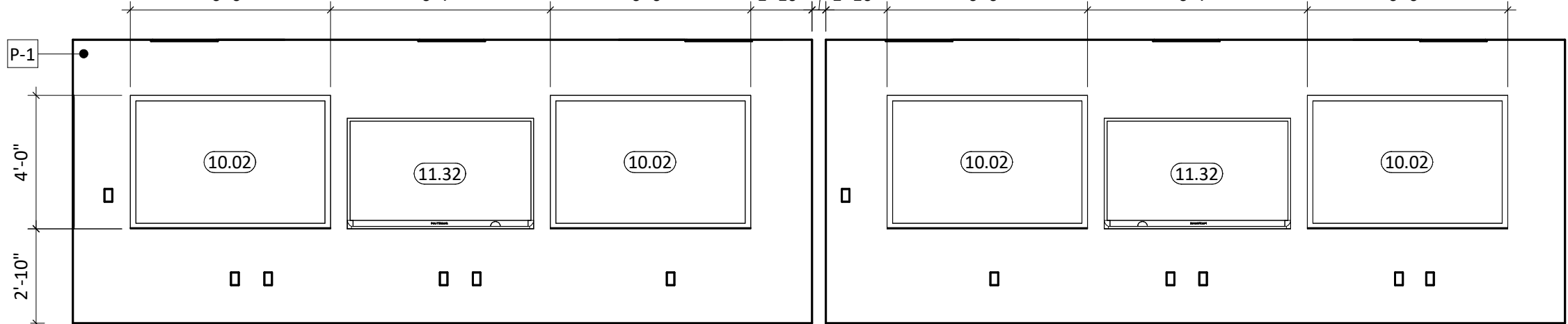
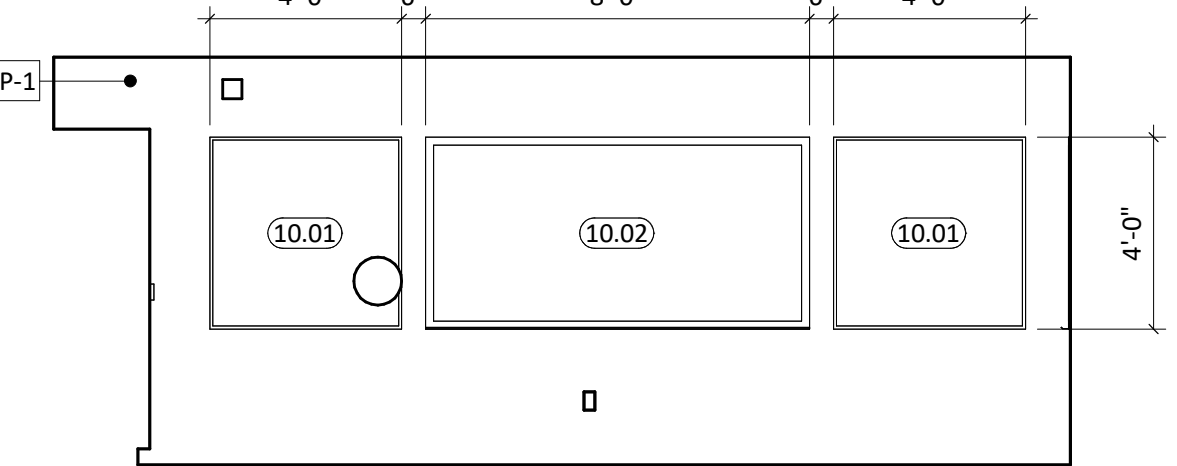
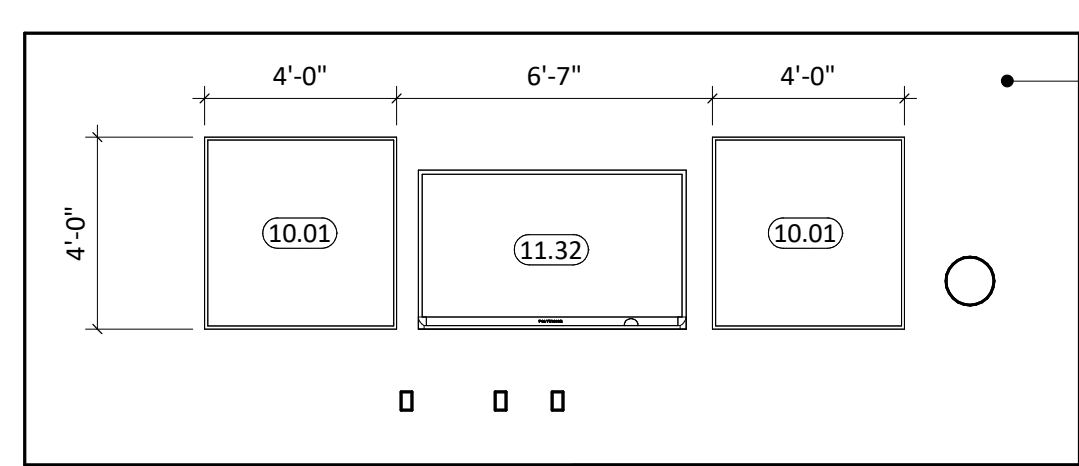
8 ELEM. FLEX A104 - WEST  
1/4" = 1'-0"



11 ELEM. FLEX A103 - NORTH  
1/4" = 1'-0"

10 ELEM. FLEX A103 - EAST  
1/4" = 1'-0"

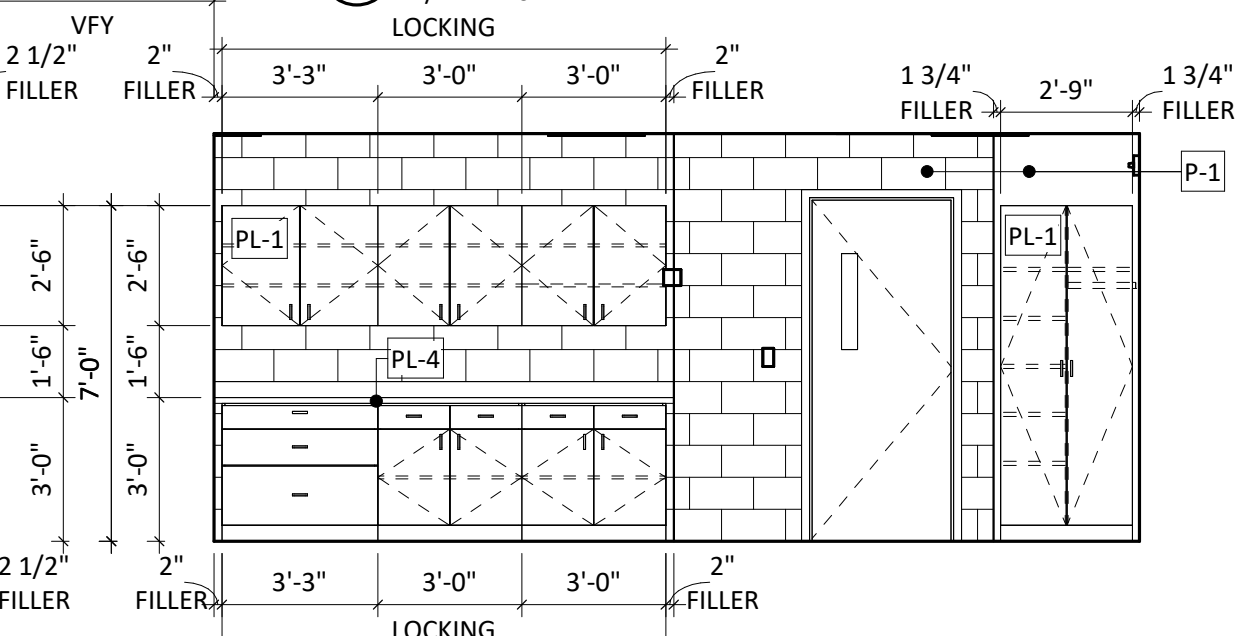
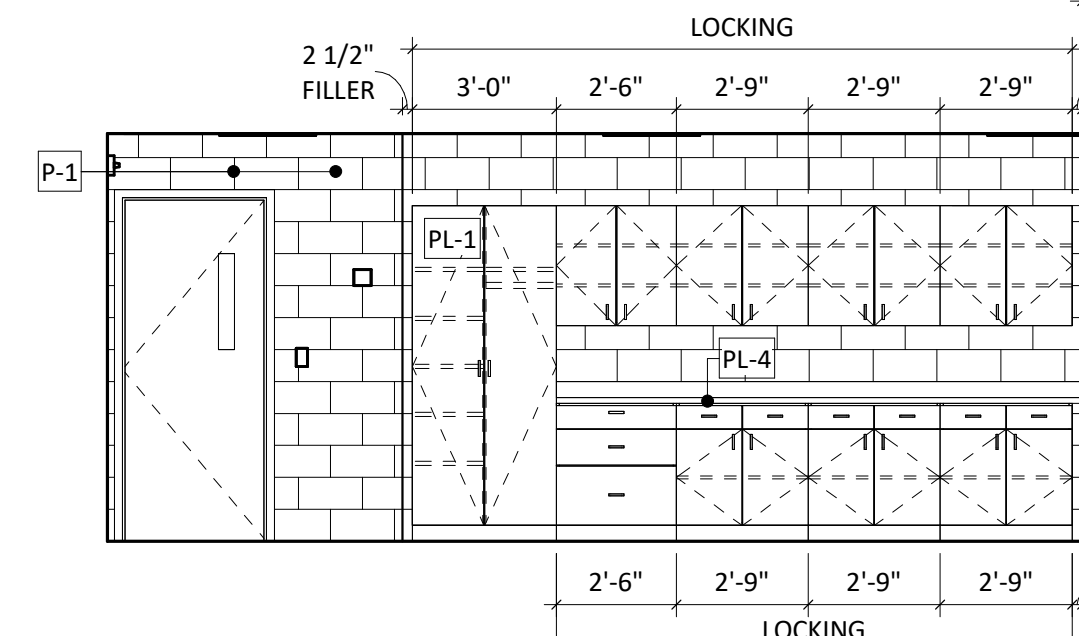
12 ELEM. FLEX A103 - SOUTH  
1/4" = 1'-0"



13 ELEM. FLEX A103 - WEST  
1/4" = 1'-0"

2 FLEX ROOM B104 - NORTH  
1/4" = 1'-0"

3 FLEX CLASS B104 - EAST  
1/4" = 1'-0"

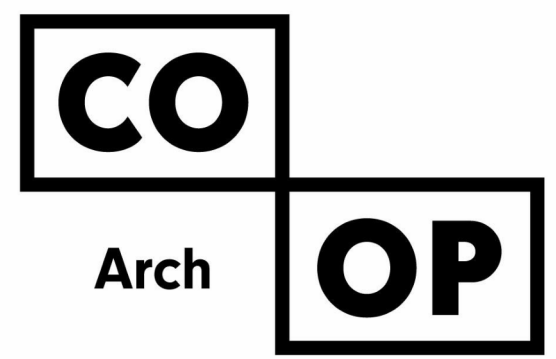


4 FLEX CLASS B104 - WEST  
1/4" = 1'-0"

- ### GENERAL NOTES
- SEE SHEET 6000 FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
  - FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
  - ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
  - RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
  - ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
  - SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
  - PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
  - TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
  - COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
  - MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
  - PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
  - COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
  - CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
  - PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
  - PJ = PANEL JOINT
  - RV = REVEAL

### KEYNOTE SCHEDULE

4.72	INFILL EXISTING OPENING WITH 4" CMU ON EITHER SIDE AND ACOUSTIC BATT INSULATION IN-BETWEEN.
10.01	TACKBOARD, SEE FINISH LEGEND [TB-1]
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE]
11.32	SMARTBOARD (OWNER PROVIDED CONTRACTOR INSTALLED)
11.33	TV MONITOR (OWNER PROVIDED CONTRACTOR INSTALLED)



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



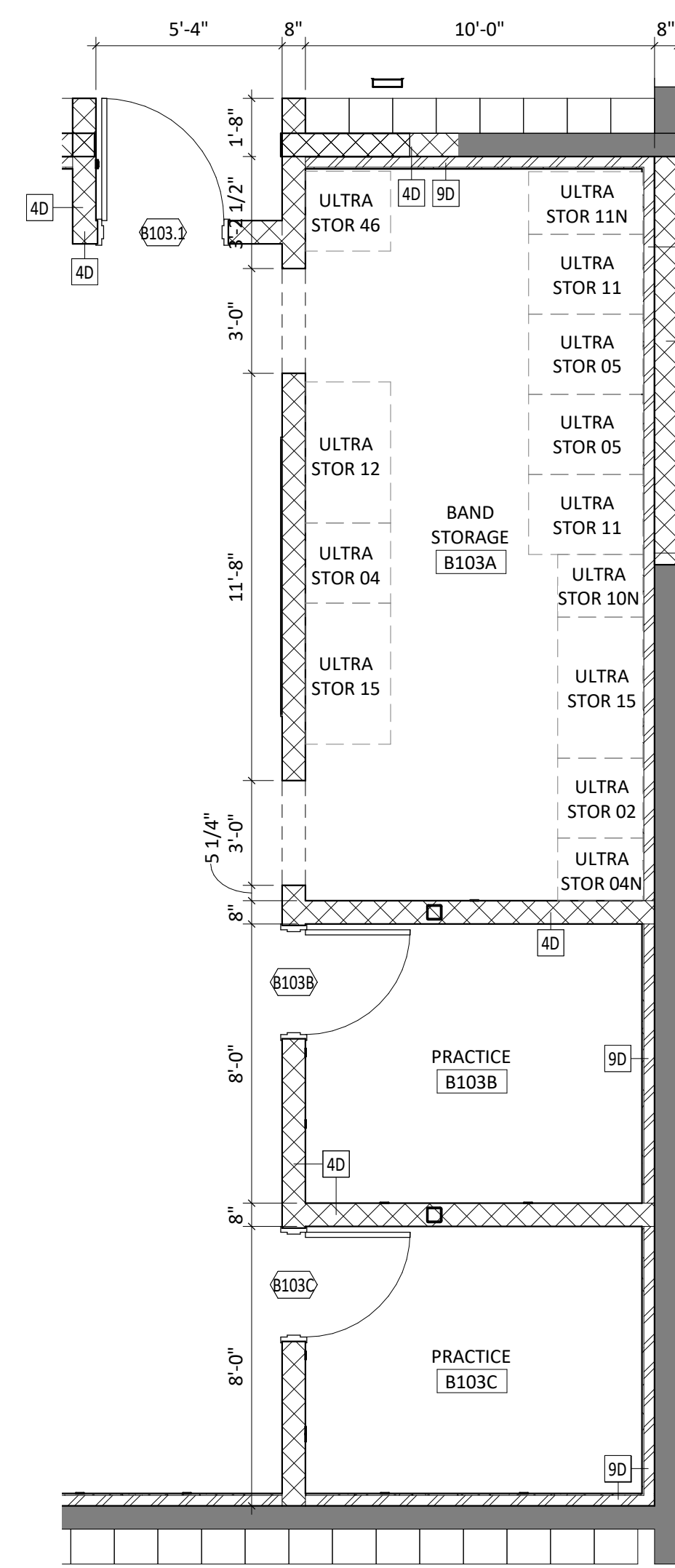
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

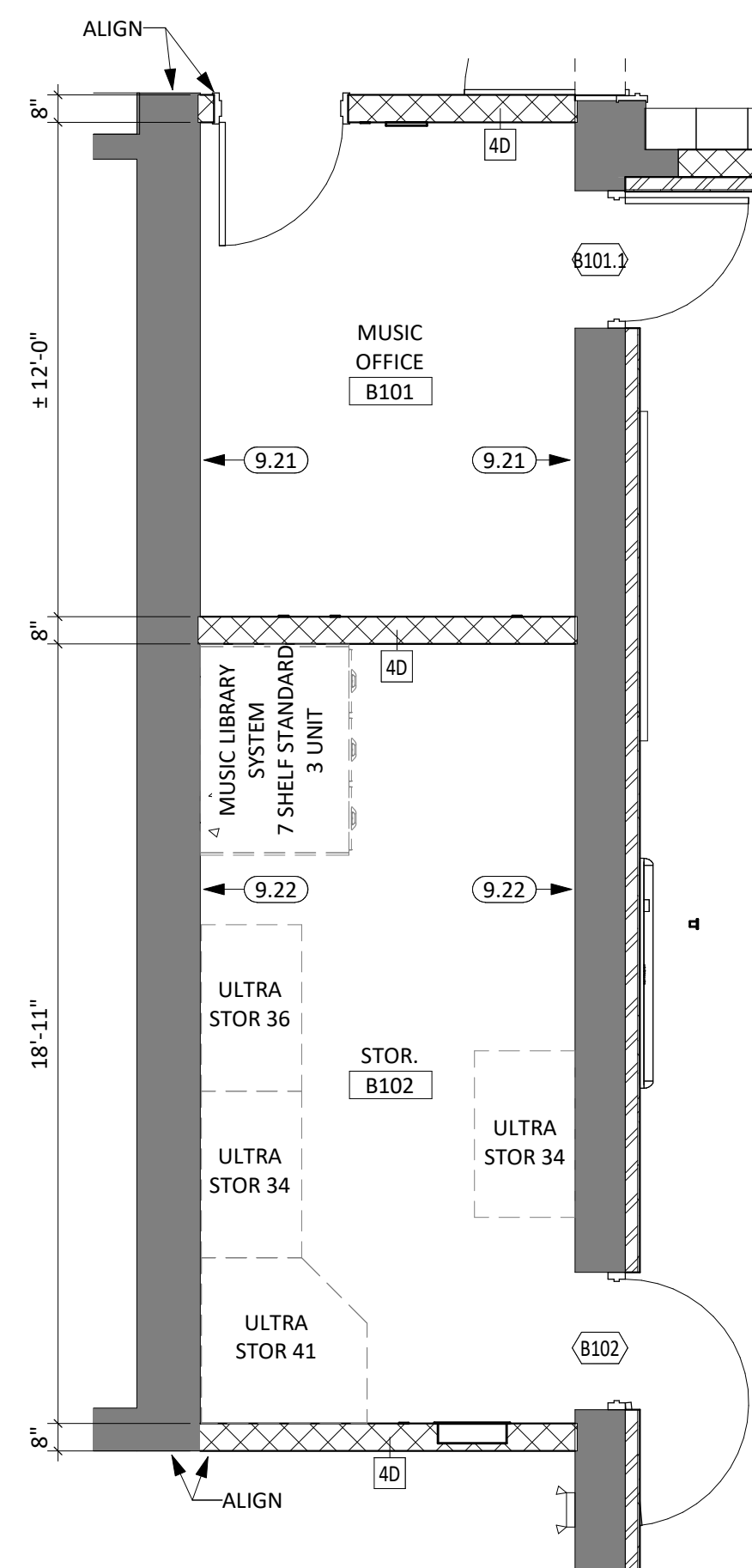
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED PLANS & INTERIOR  
ELEVATIONS

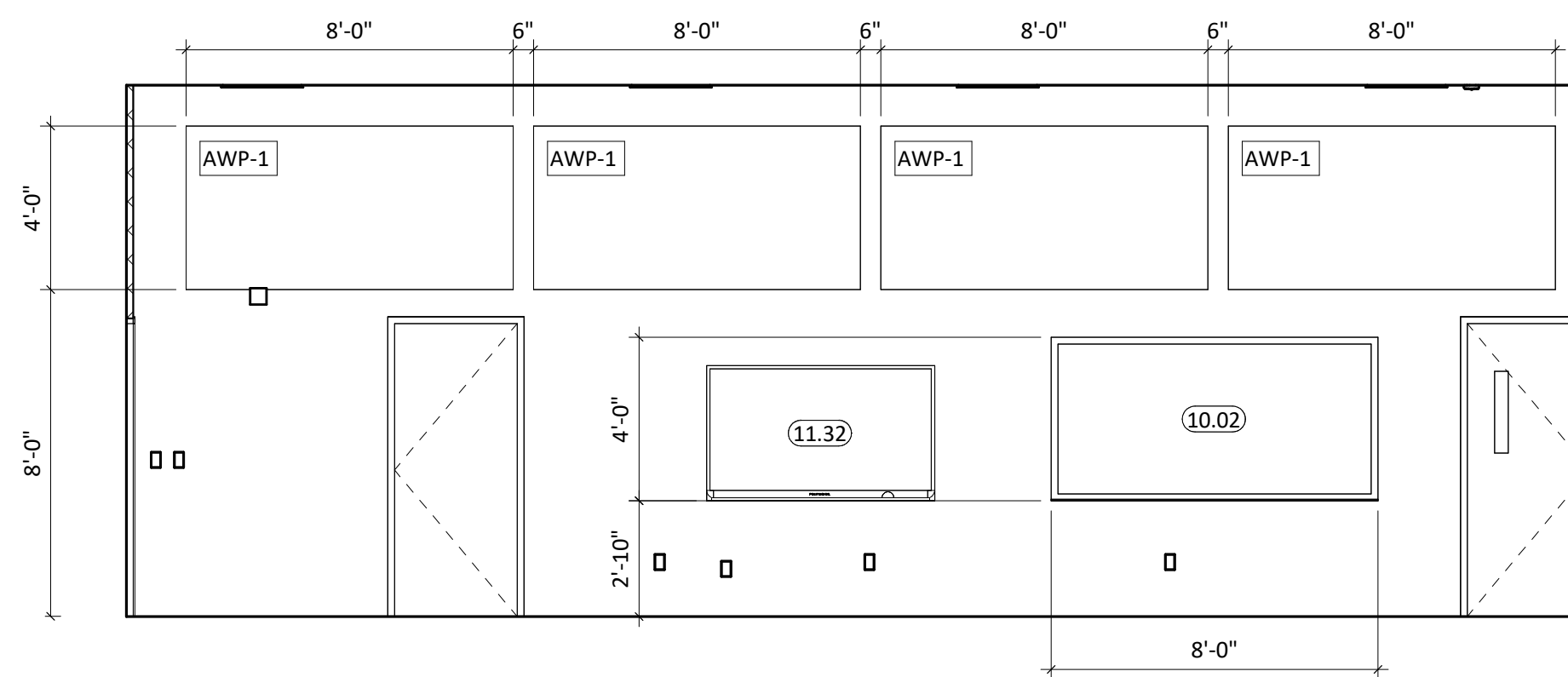
A401



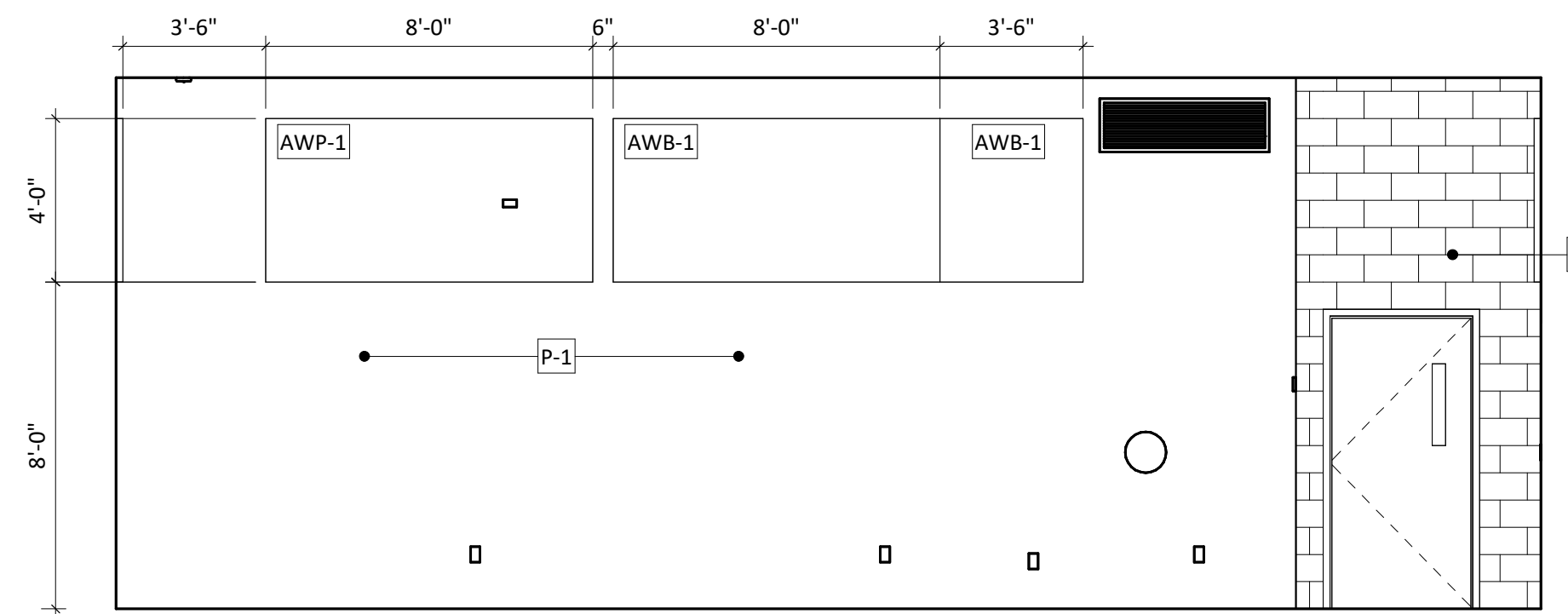
1 BAND STORAGE - ENLARGED  
1/4" = 1'-0"



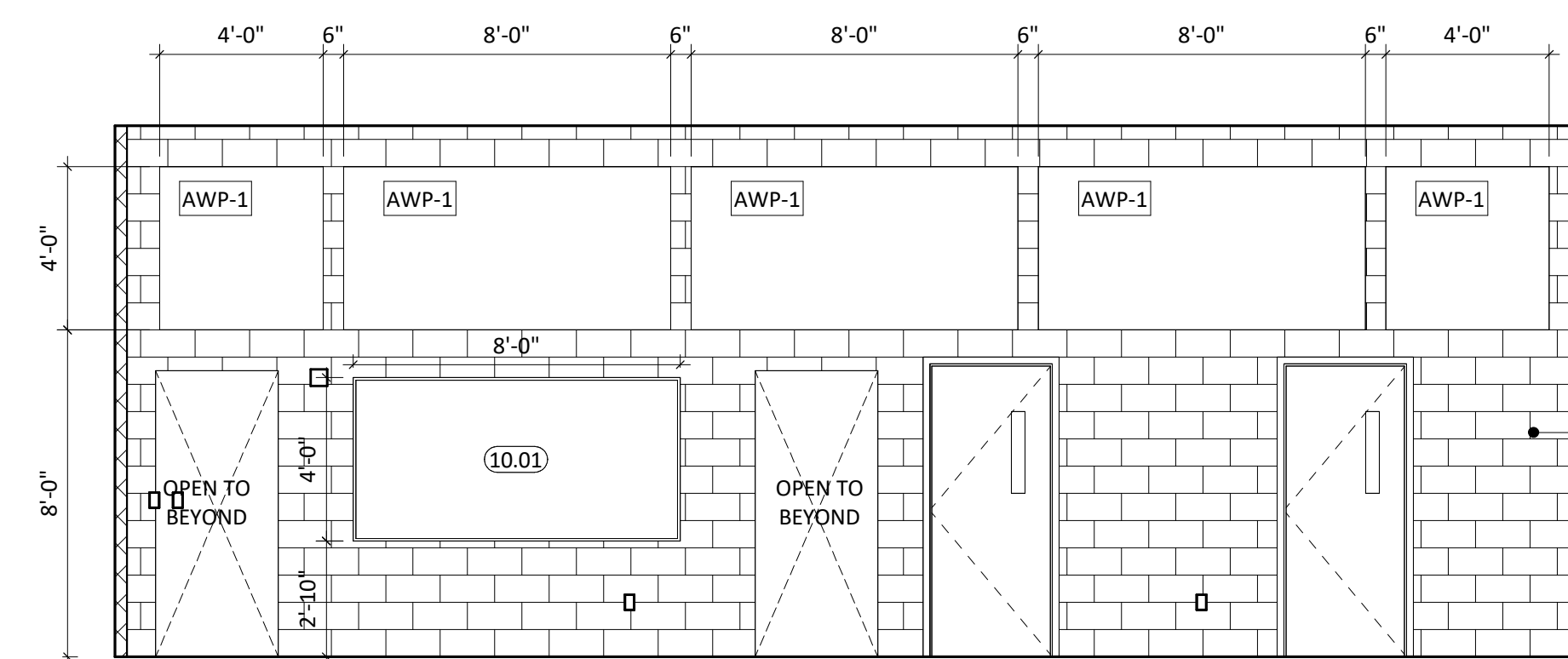
2 MUSIC STORAGE - ENLARGED  
1/4" = 1'-0"



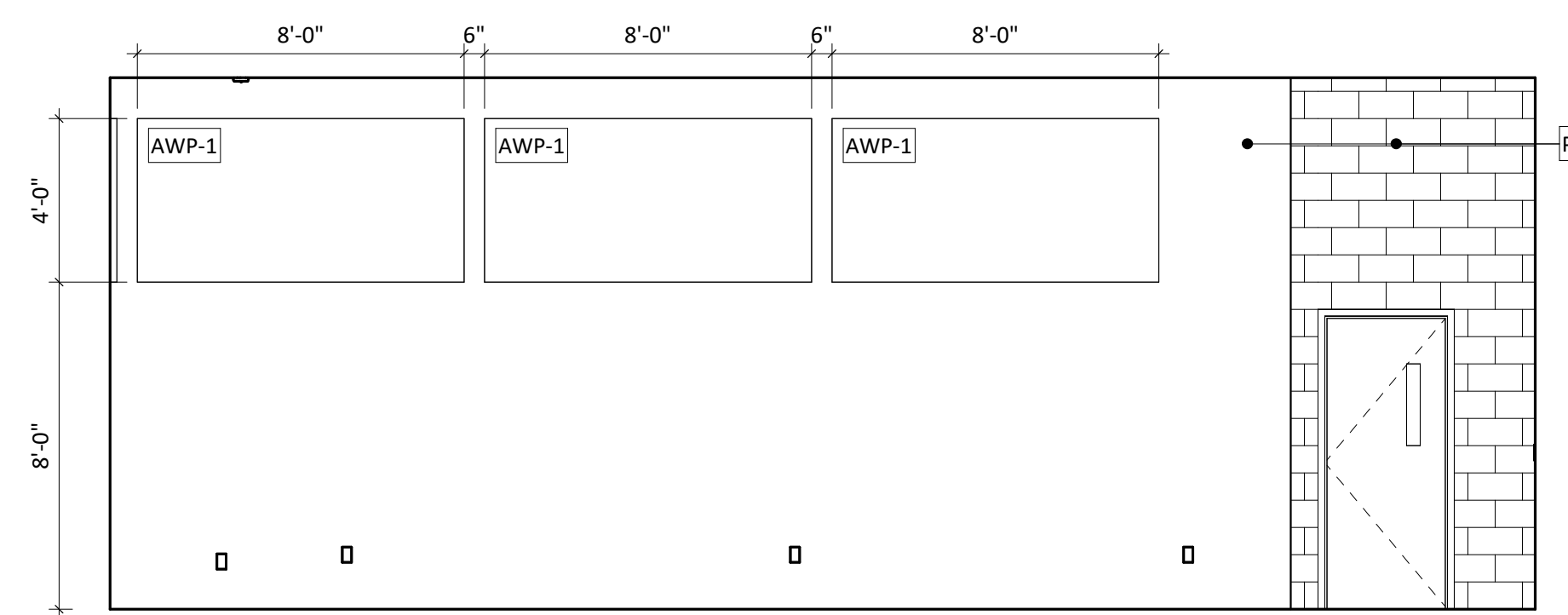
3 MUSIC B103 - NORTH  
1/4" = 1'-0"



4 MUSIC B103 - EAST  
1/4" = 1'-0"



5 MUSIC B103 - SOUTH  
1/4" = 1'-0"



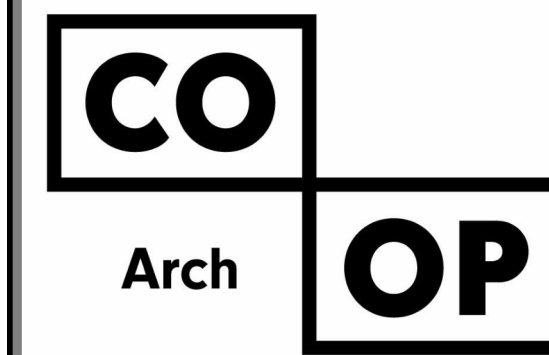
6 MUSIC B103 - WEST  
1/4" = 1'-0"

GENERAL NOTES

- SEE SHEET 6000 FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
- FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
- ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
- RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
- ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
- SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
- PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
- TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
- COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
- MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
- PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
- COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
- CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
- PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
- PJ = PANEL JOINT
- RV = REVEAL

KEYNOTE SCHEDULE

9.21	5/8" GYPSUM BOARD
9.22	5/8" HIGH IMPACT GYPSUM BOARD
10.01	TACKBOARD, SEE FINISH LEGEND [TB-1]
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE].
11.32	SMARTBOARD (OWNER PROVIDED CONTRACTOR INSTALLED)



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



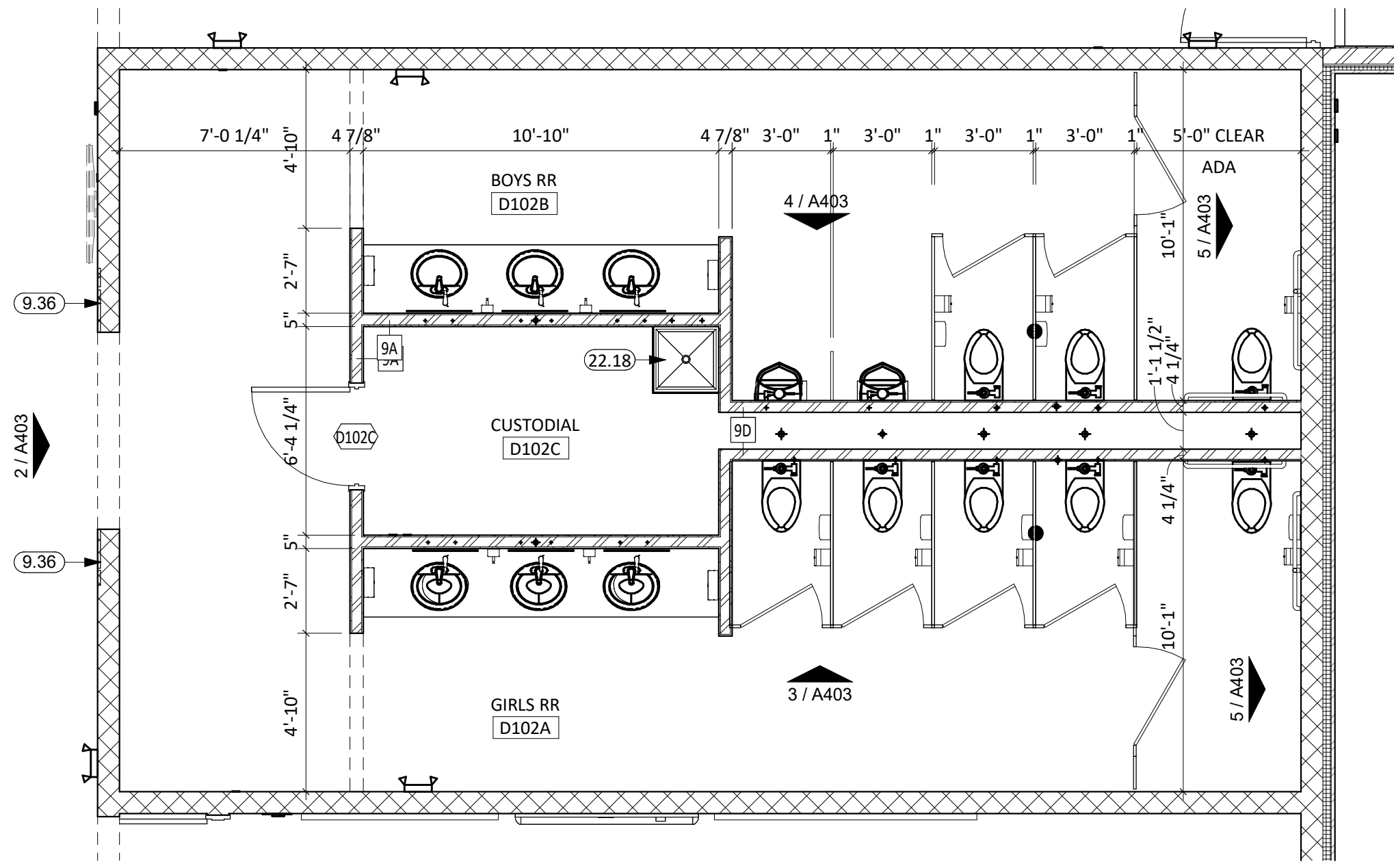
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

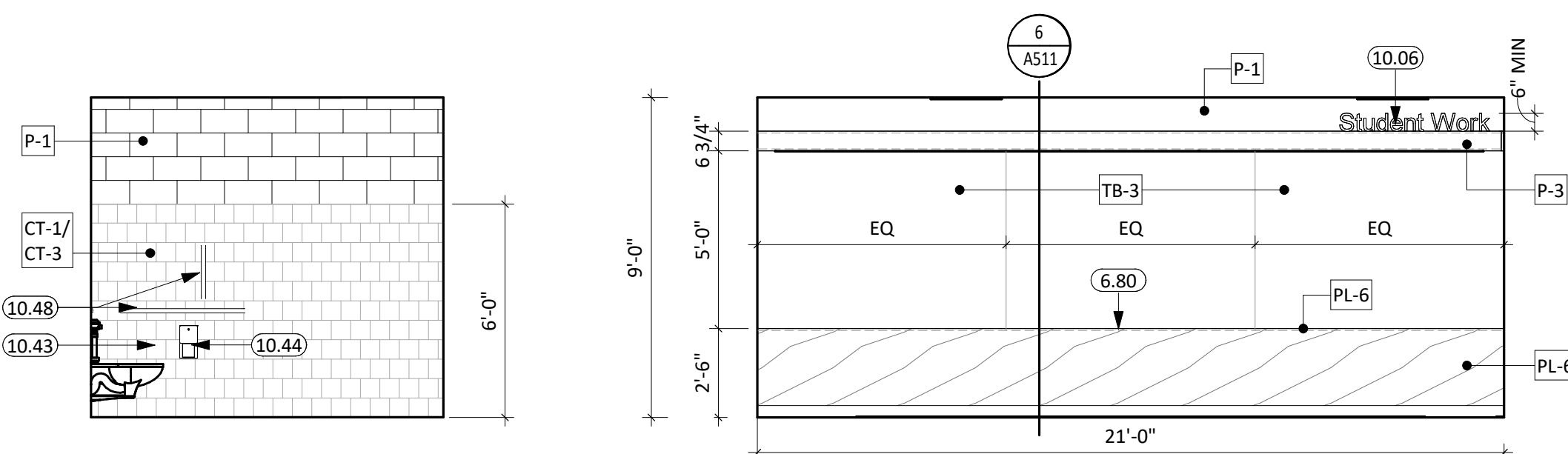
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED PLANS & INTERIOR  
ELEVATIONS

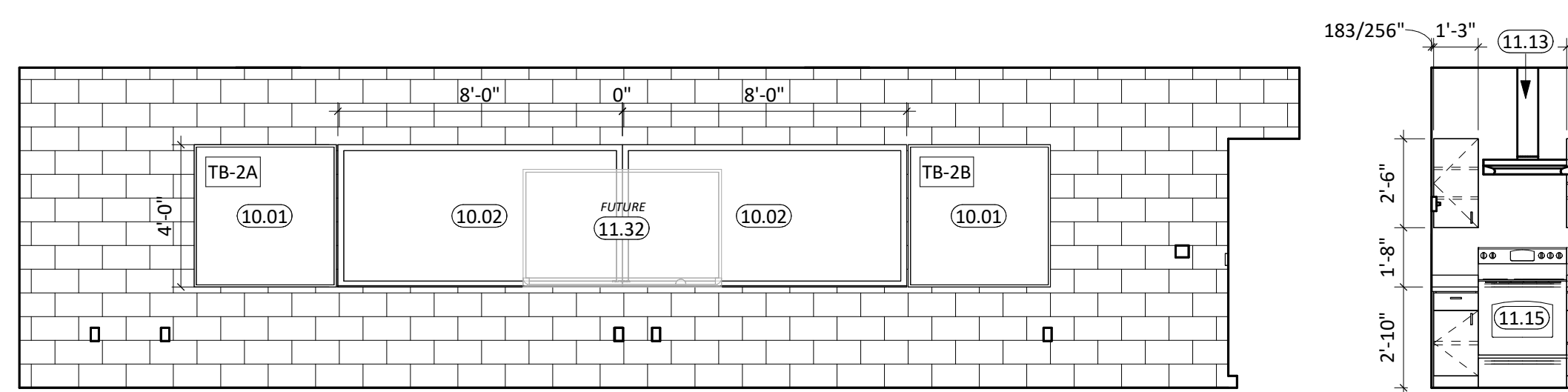
A402



1 ENLARGED PLAN - AREA D - RESTROOMS  
1/4" = 1'-0"

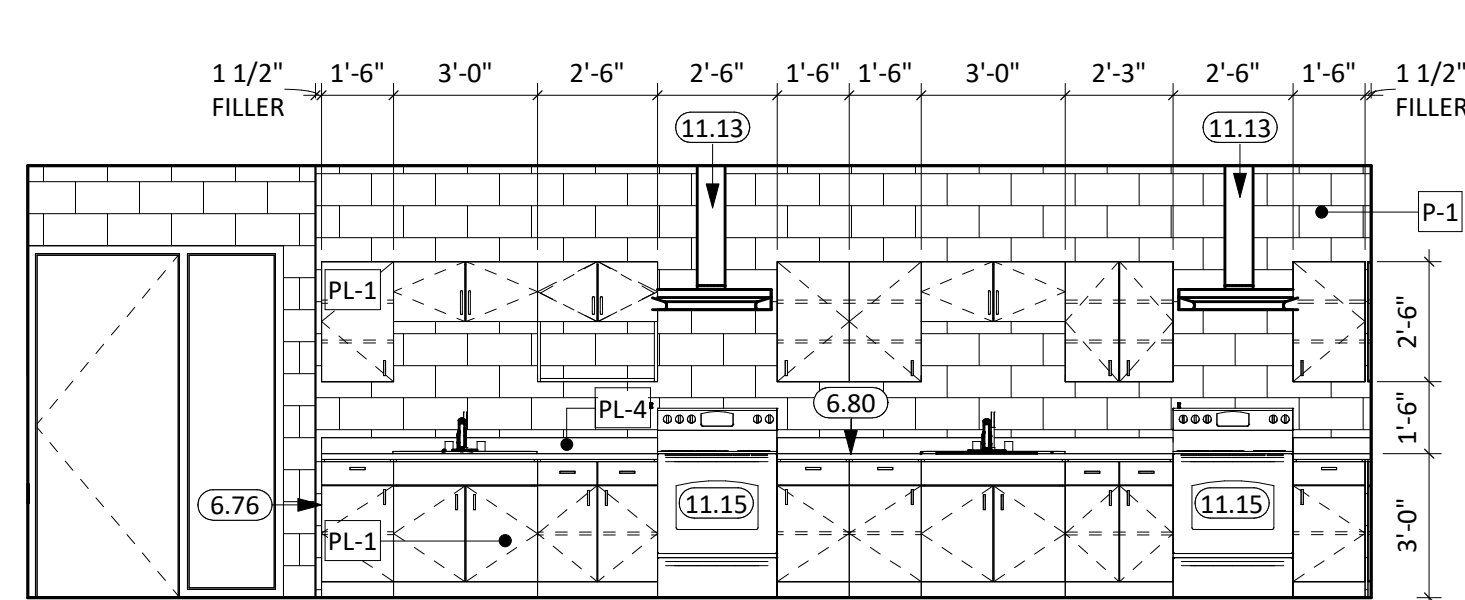


5 GIRLS RR D102A - SOUTH  
1/4" = 1'-0"



6 CORR. D199A - PROJ. DISPLAY  
1/4" = 1'-0"

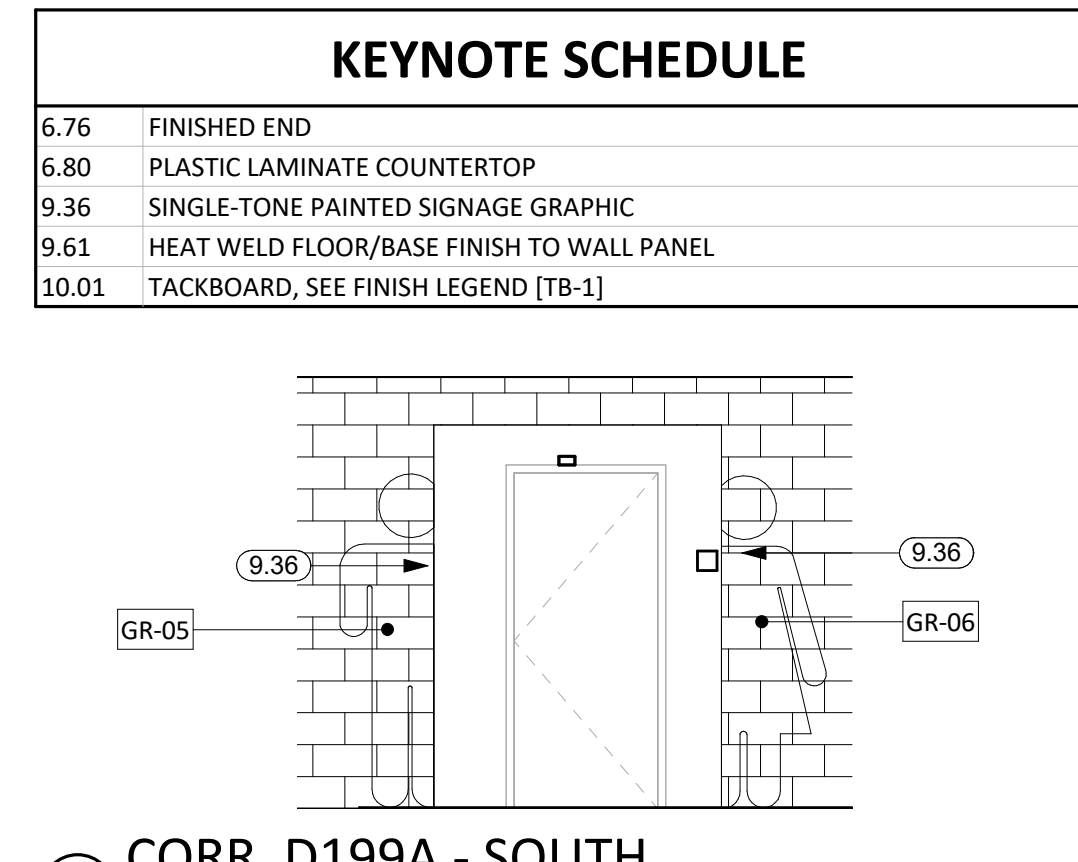
9 AG CLASS D103 - WEST  
1/4" = 1'-0"



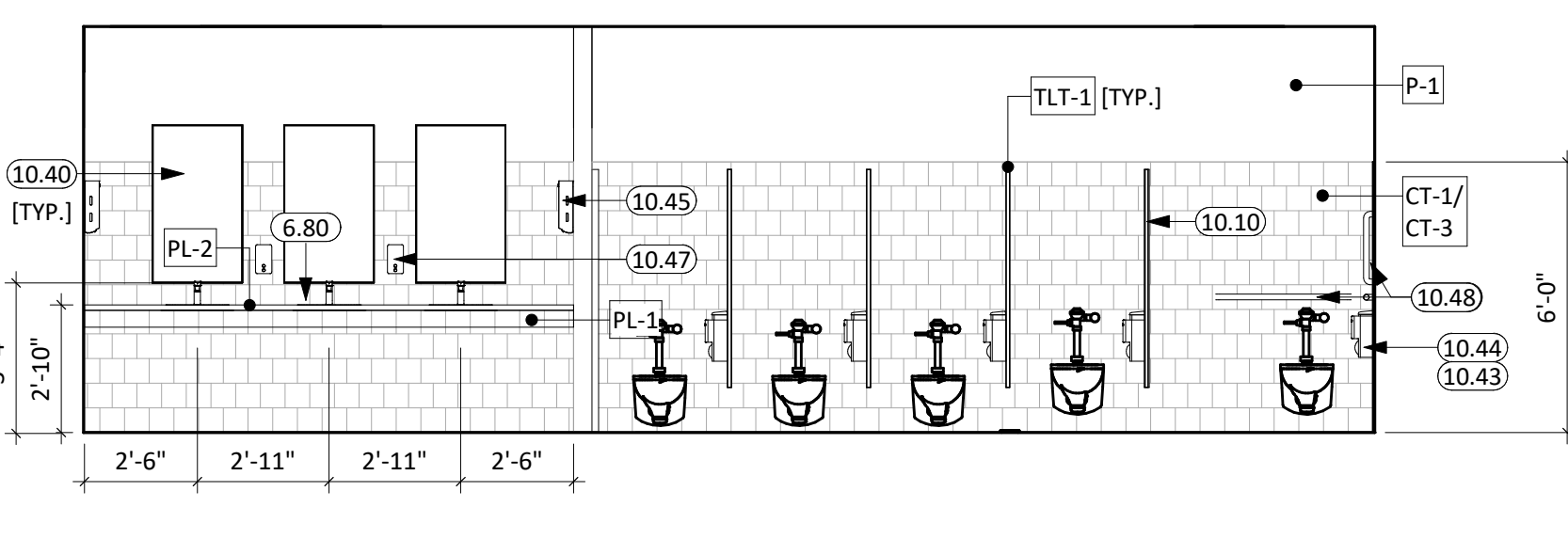
12 FACS D104 - SOUTH  
1/4" = 1'-0"



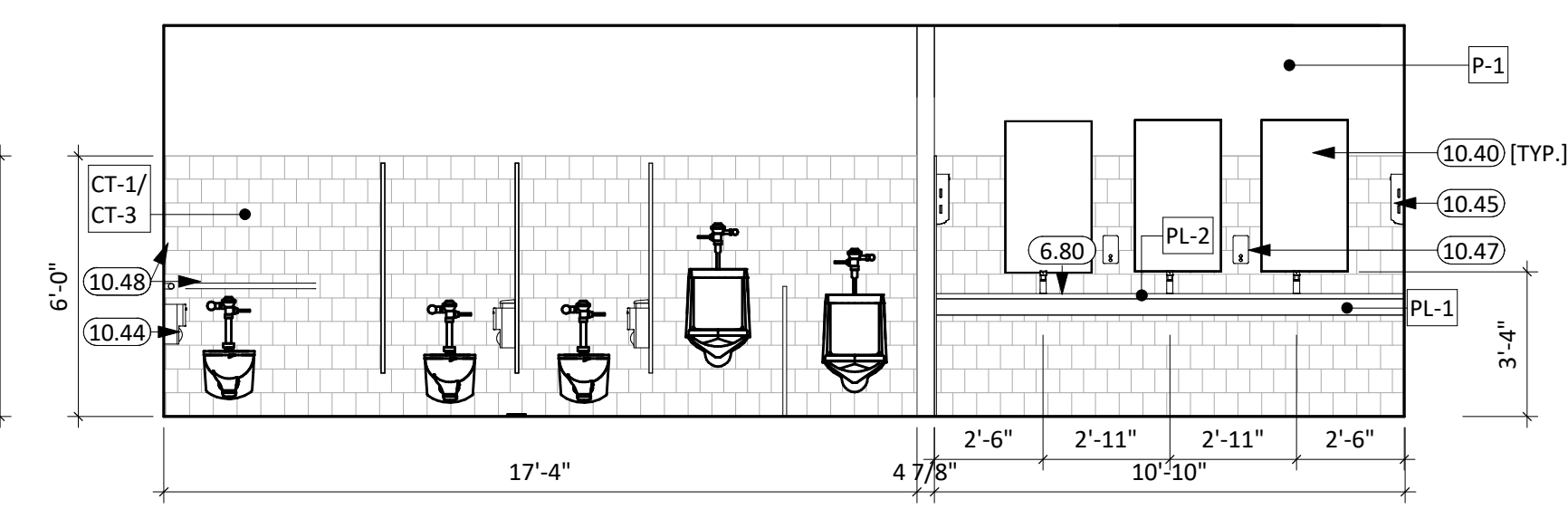
KEYNOTE SCHEDULE	
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE].
10.06	CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE - ARIAL FONT STYLE
10.10	TOILET PARTITION
10.33	MIRROR W/ TRIM
10.40	RECESSED MIRROR w/SCHIENE TRIM
10.43	SANITARY NAPKIN DISPOSAL, PER OWNER
10.44	TOILET TISSUE DISPENSER, PER OWNER
10.45	PAPER TOWEL DISPENSER, PER OWNER
10.47	SOAP DISPENSER, PER OWNER
10.48	GRAB BAR
11.10	REFRIGERATOR
11.13	RANGE HOOD
11.15	DROP-IN RANGE
11.17	DISHWASHER; (OWNER PROVIDED CONTRACTOR INSTALLED).
11.18	WASHER
11.32	SMARTBOARD (OWNER PROVIDED CONTRACTOR INSTALLED)
22.18	MOP SINK; ALL MOP SINKS SHALL HAVE 48"H X 48"W (MIN) ON ALL ADJACENT WALLS, SEE FINISH LEGEND



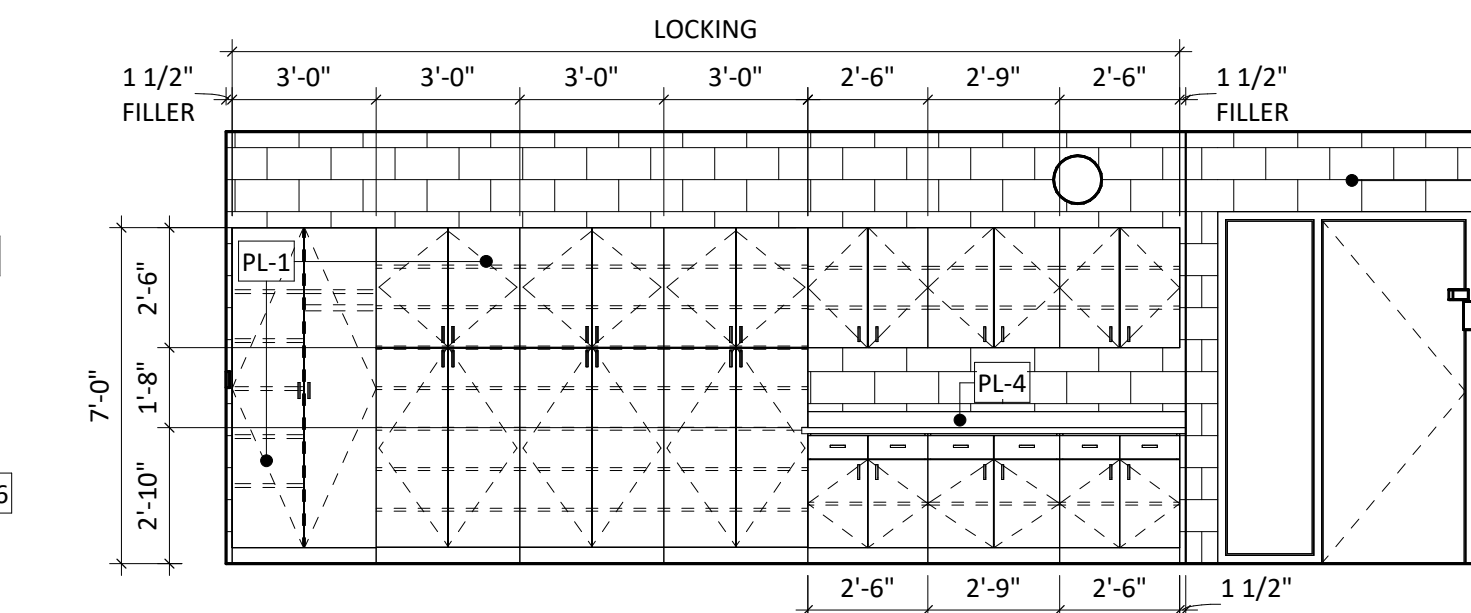
2 CORR. D199A - SOUTH  
1/4" = 1'-0"



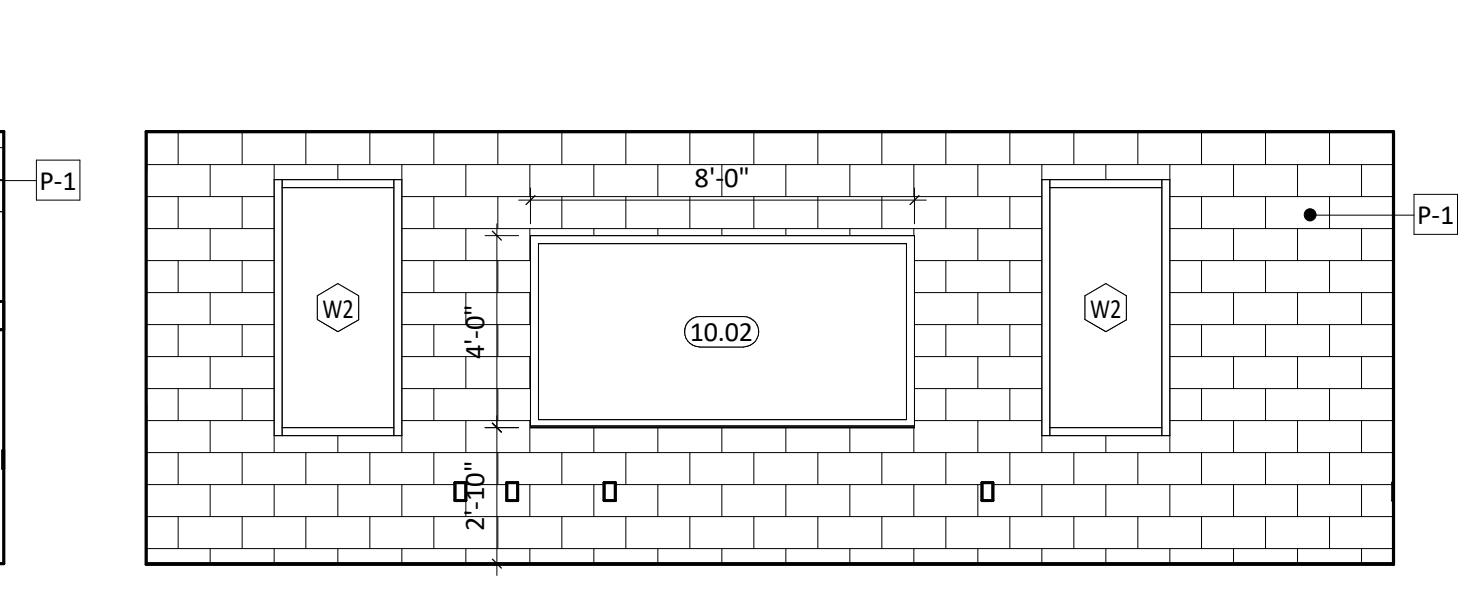
3 GIRLS RESTROOM  
1/4" = 1'-0"



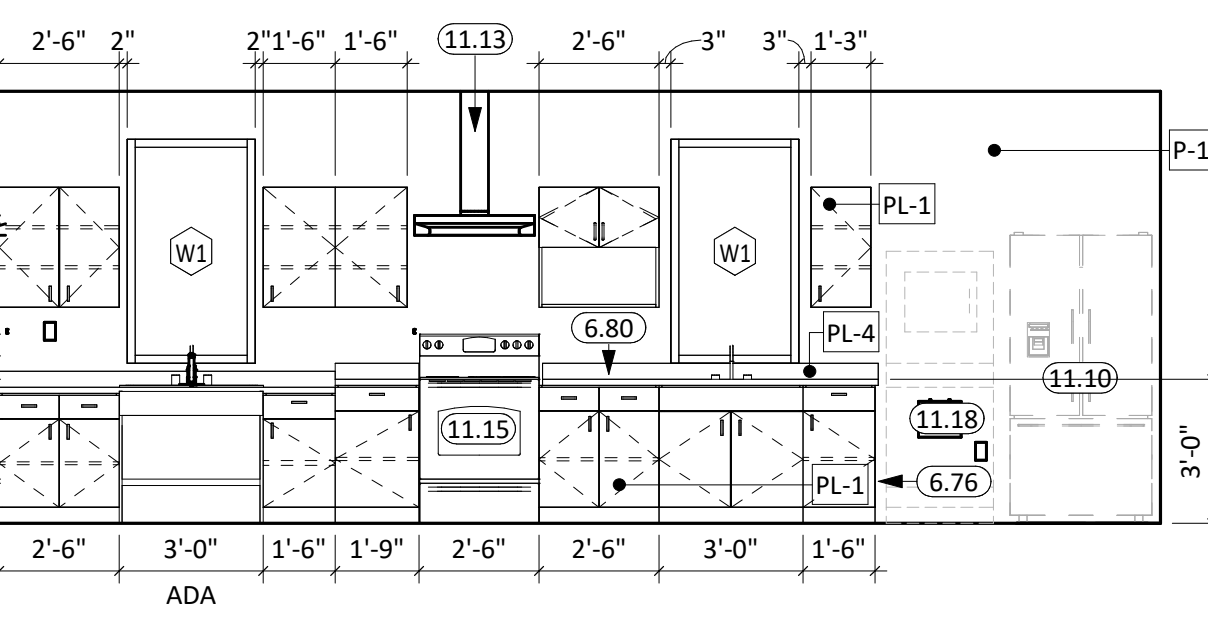
4 BOYS RESTROOM  
1/4" = 1'-0"



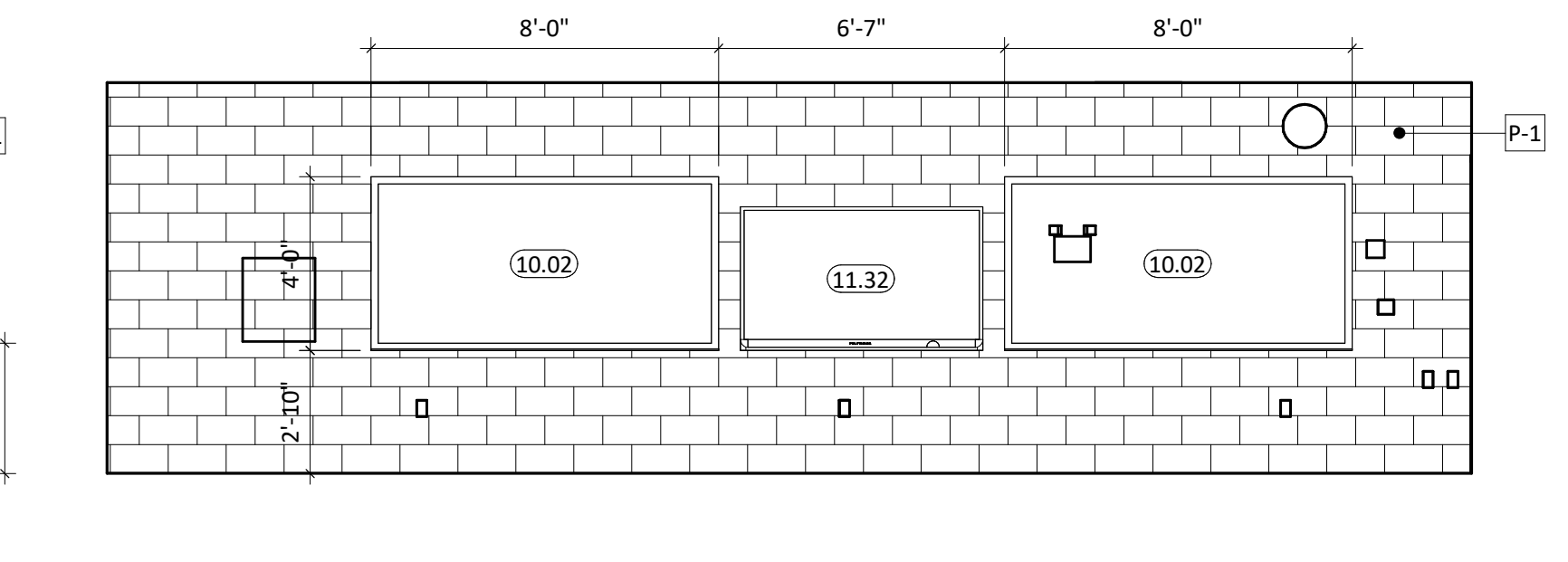
7 AG CLASS D102 - NORTH  
1/4" = 1'-0"



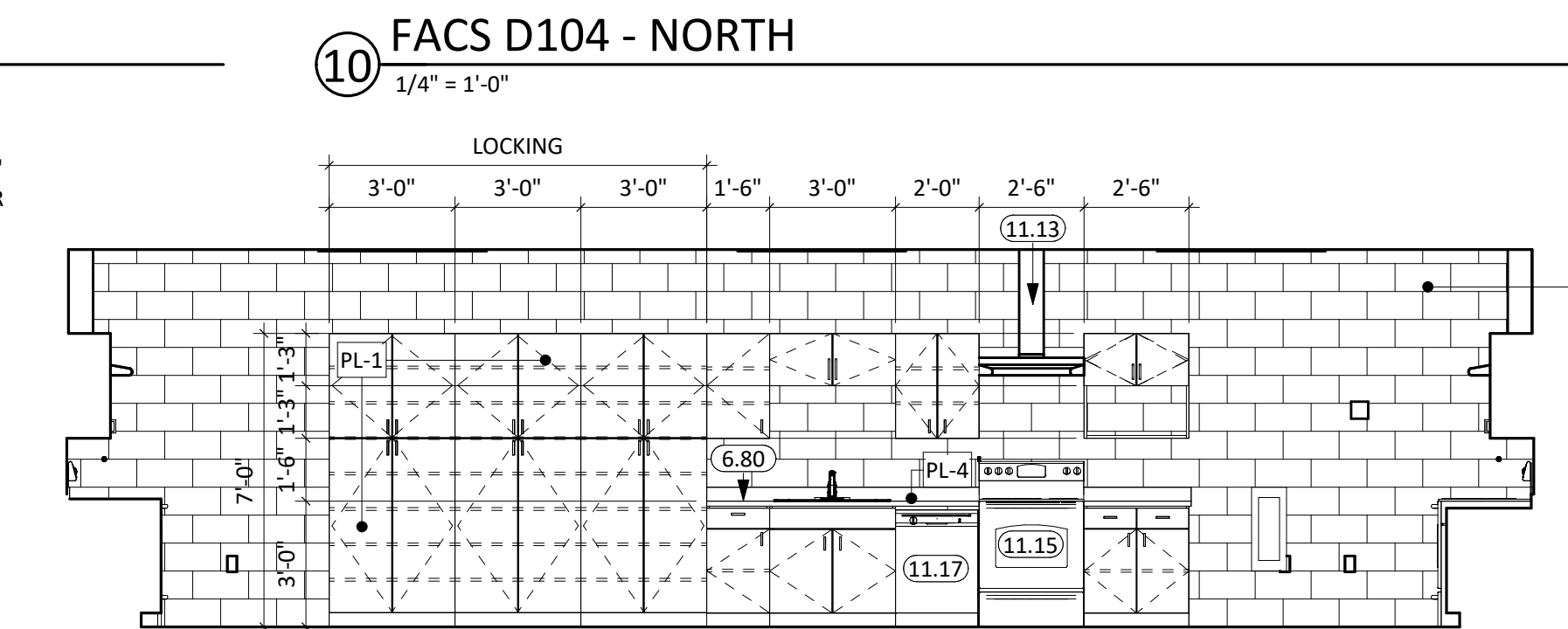
8 AG CLASS D103 - SOUTH  
1/4" = 1'-0"



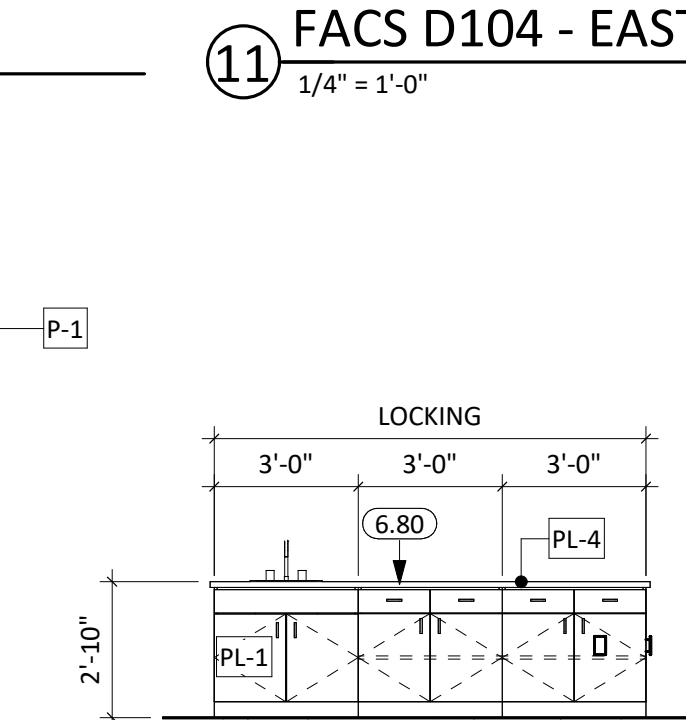
10 FACS D104 - NORTH  
1/4" = 1'-0"



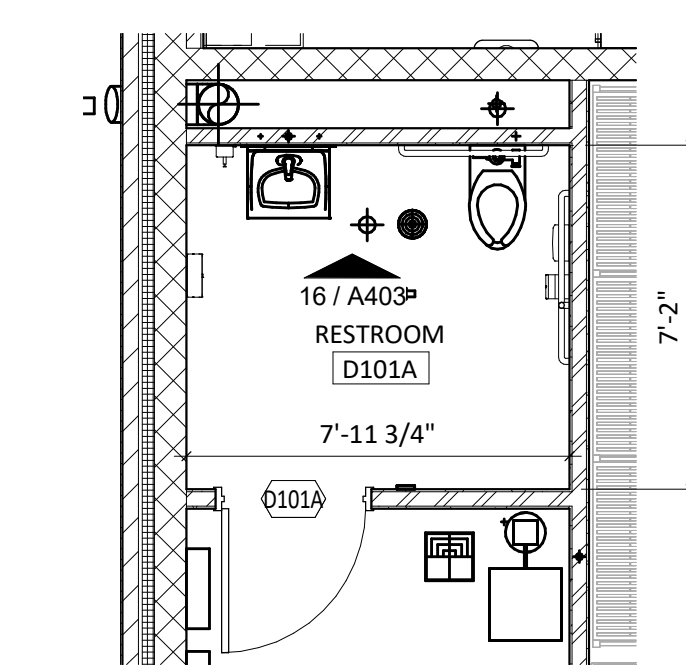
11 FACS D104 - EAST  
1/4" = 1'-0"



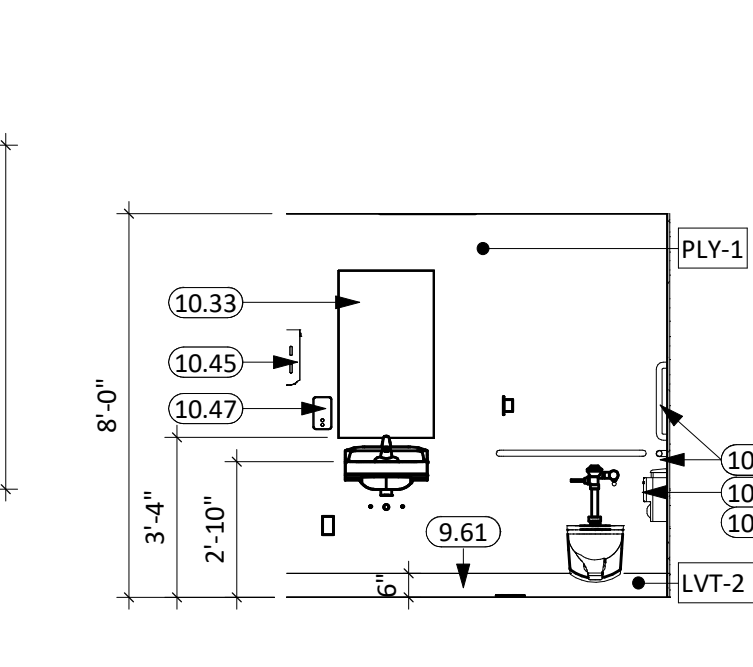
13 FACS D104 - WEST  
1/4" = 1'-0"



14 FACS D104 - TEACHING STATION  
1/4" = 1'-0"

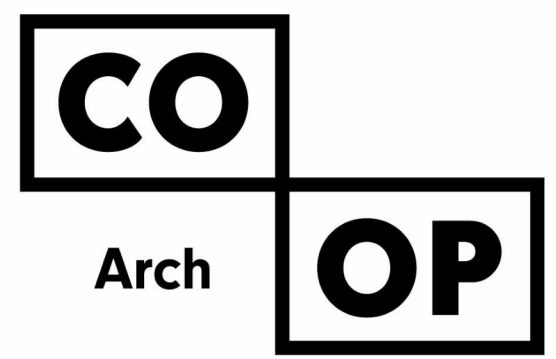


15 RESTROOM D101A  
1/4" = 1'-0"



16 KITCHEN RR D101A - EAST  
1/4" = 1'-0"

- ### GENERAL NOTES
- SEE SHEET 6000 FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
  - FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
  - ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
  - RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
  - ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
  - SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
  - PROVIDE COUNTERTOP SUPPORTS AT QRE SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
  - TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
  - COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
  - MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
  - PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
  - COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
  - CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
  - PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
  - PJ = PANEL JOINT
  - RV = REVEAL



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



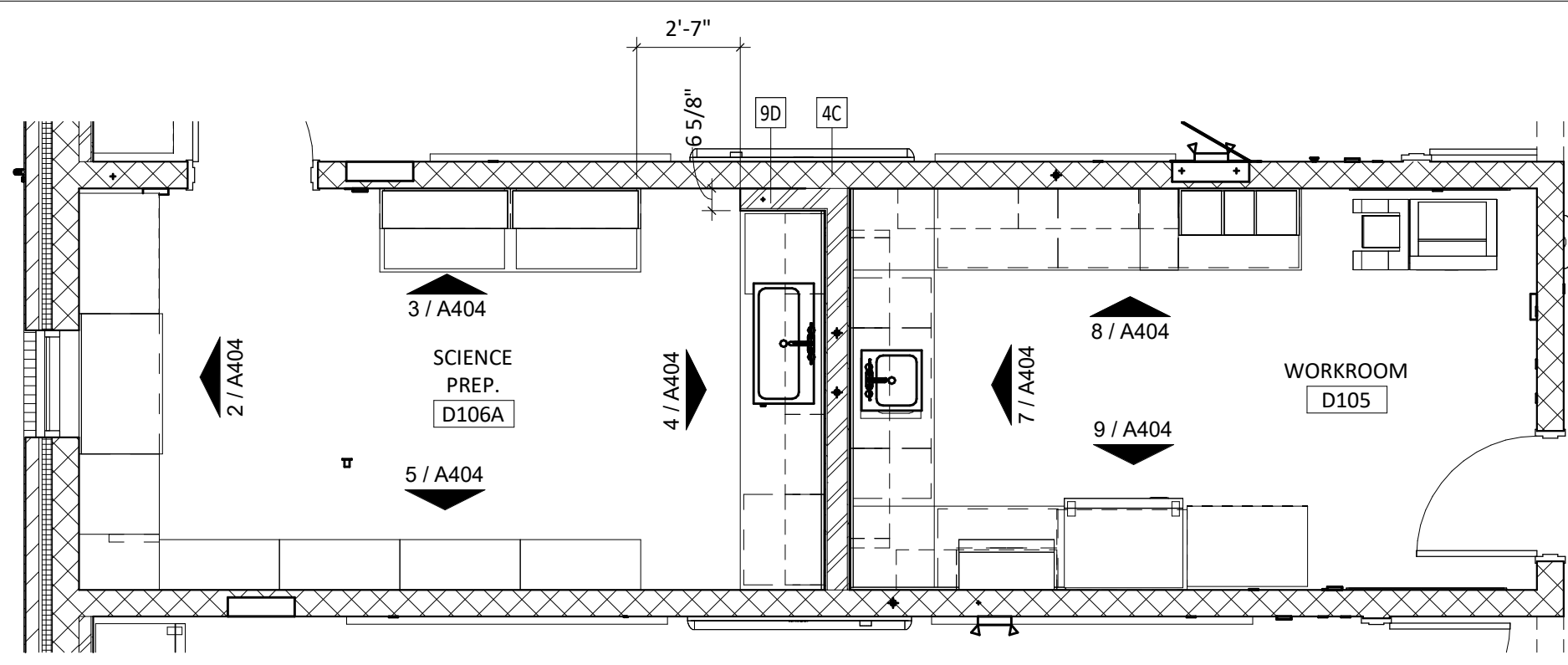
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

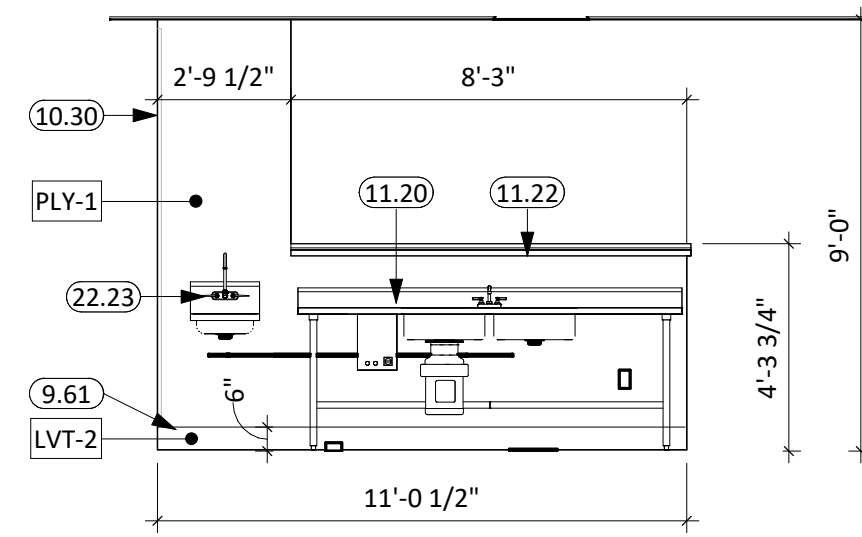
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED PLANS & INTERIOR ELEVATIONS

A403

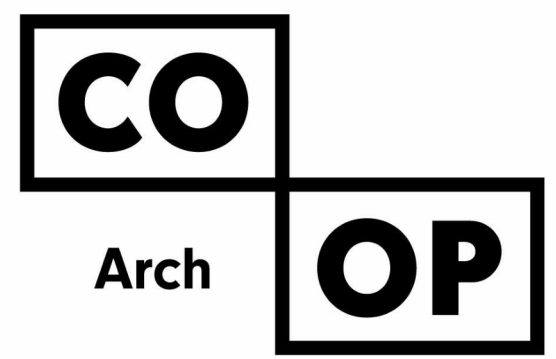


1 SCIENCE PREP. / WORKROOM  
1/4" = 1'-0"



6 KITCHEN D101 - HALF WALL  
1/4" = 1'-0"

- ### GENERAL NOTES
- SEE SHEET **6000** FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
  - FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
  - ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
  - RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
  - ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
  - SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
  - PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
  - TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
  - COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS W/ MECHANICAL AND ELECTRICAL.
  - MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
  - PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
  - COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
  - CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
  - PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
  - PJ = PANEL JOINT
  - RV = REVEAL



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

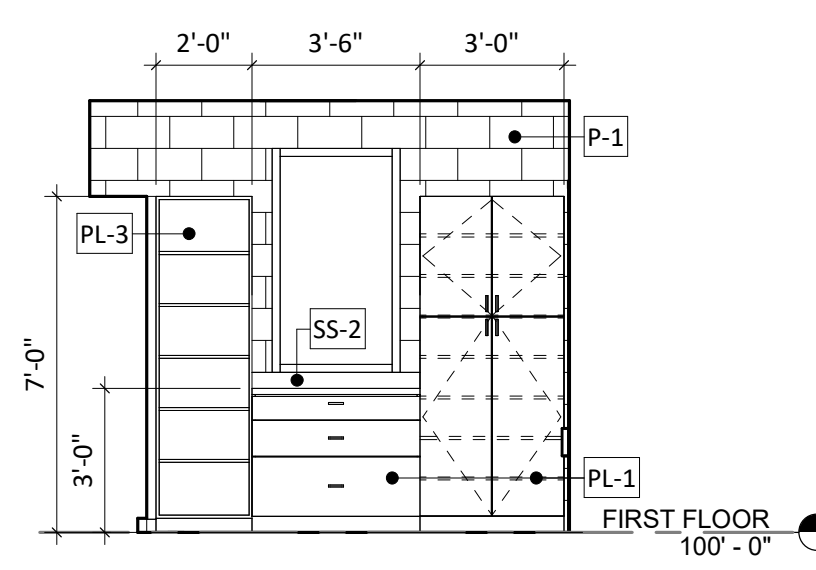
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

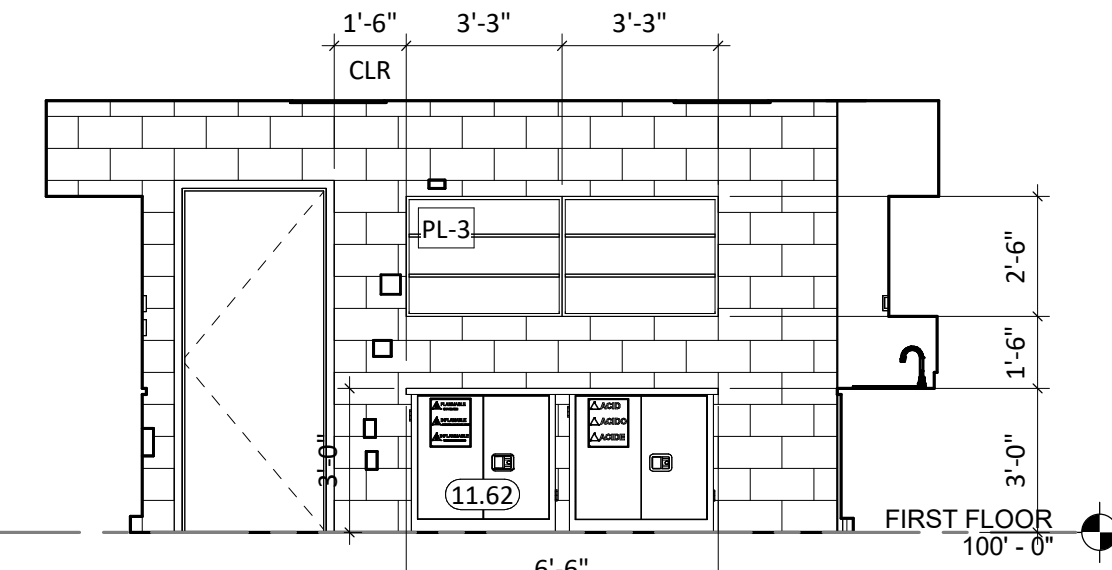
co-oparch.com

### KEYNOTE SCHEDULE

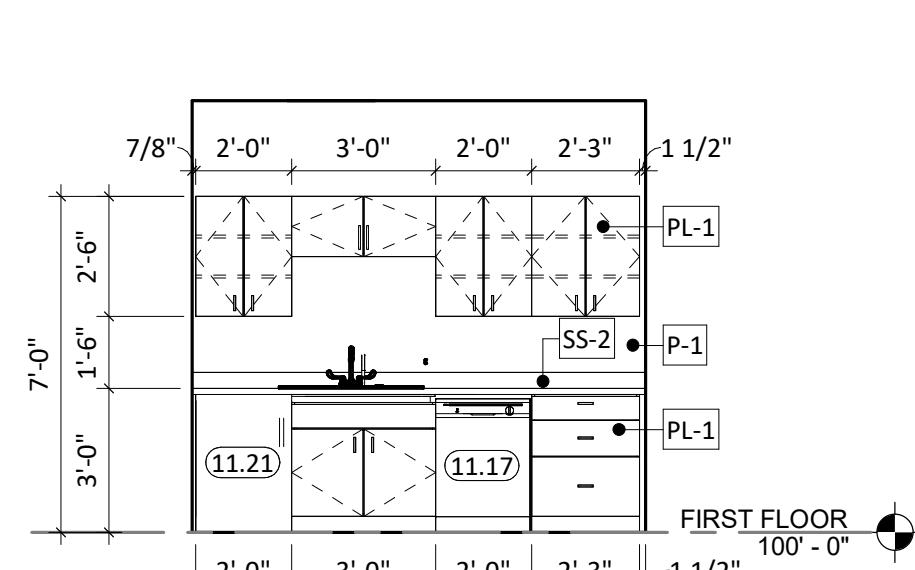
9.61	HEAT WELD FLOOR/BASE FINISH TO WALL PANEL
10.01	TACKBOARD, SEE FINISH LEGEND [TB-1]
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE]
10.30	CORNER GUARDS
10.61	FIRE EXTINGUISHER AND WALL CABINET
10.62	FIRE BLANKET AND WALL CABINET
11.10	REFRIGERATOR
11.17	DISHWASHER; (OWNER PROVIDED CONTRACTOR INSTALLED).
11.20	FOOD SERVICE EQUIPMENT (SEE SCHEDULE)
11.21	MINI-FRIDGE (OWNER PROVIDED CONTRACTOR INSTALLED)
11.22	1.5" WALL CAP, PROVIDED W/ EQUIPMENT
11.32	SMARTBOARD (OWNER PROVIDED CONTRACTOR INSTALLED)
11.61	FUME HOOD
11.62	FLAMMABLE STORAGE CABINET
22.20	EMERGENCYEYEWASH UNIT
22.22	ACID REDUCER; SEE MECHANICAL
22.23	WASH SINK; SEE PLUMBING



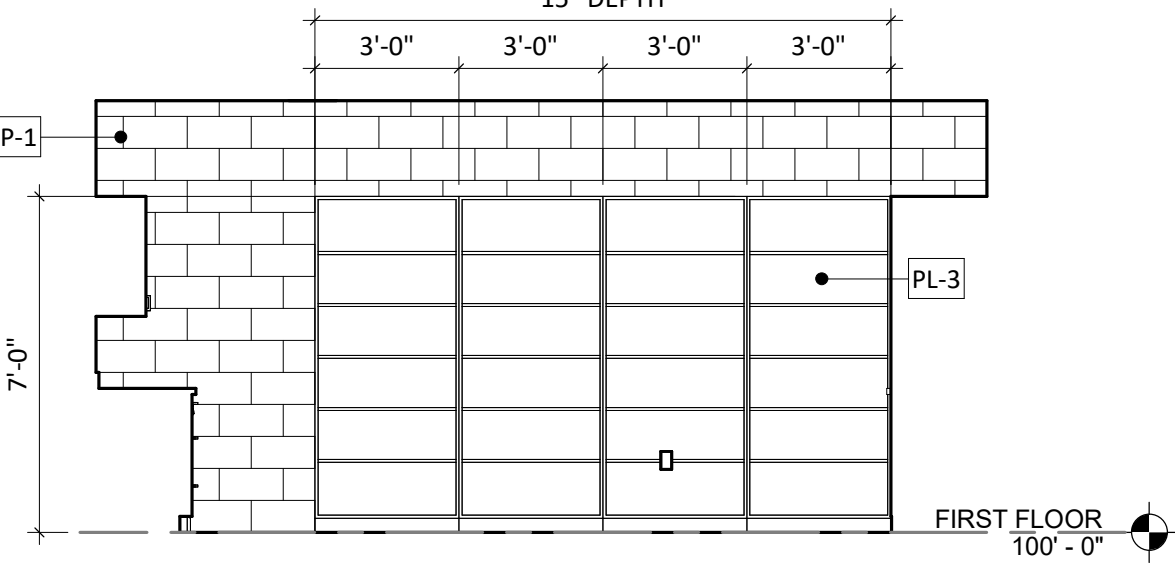
2 SCIENCE PREP. D106A - NORTH  
1/4" = 1'-0"



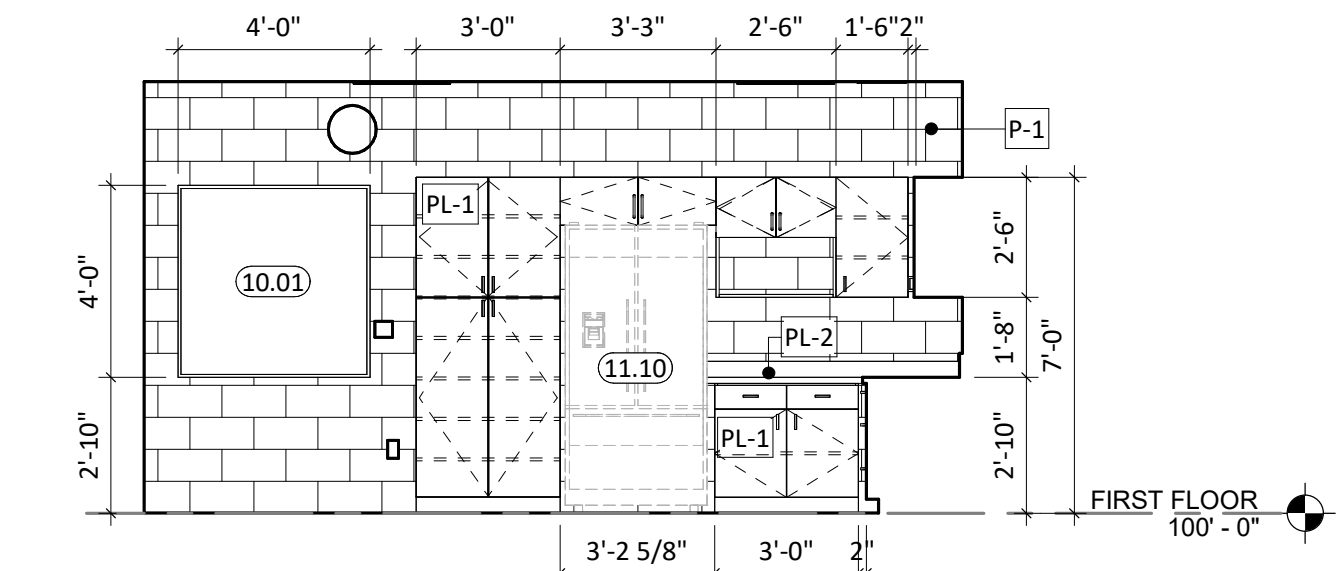
3 SCIENCE PREP. D106A - EAST  
1/4" = 1'-0"



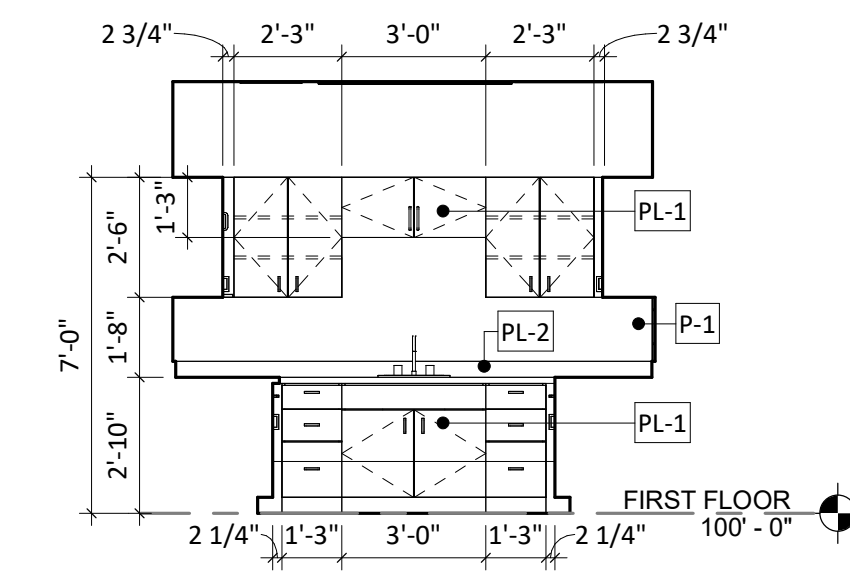
4 SCIENCE PREP. D106A - SOUTH  
1/4" = 1'-0"



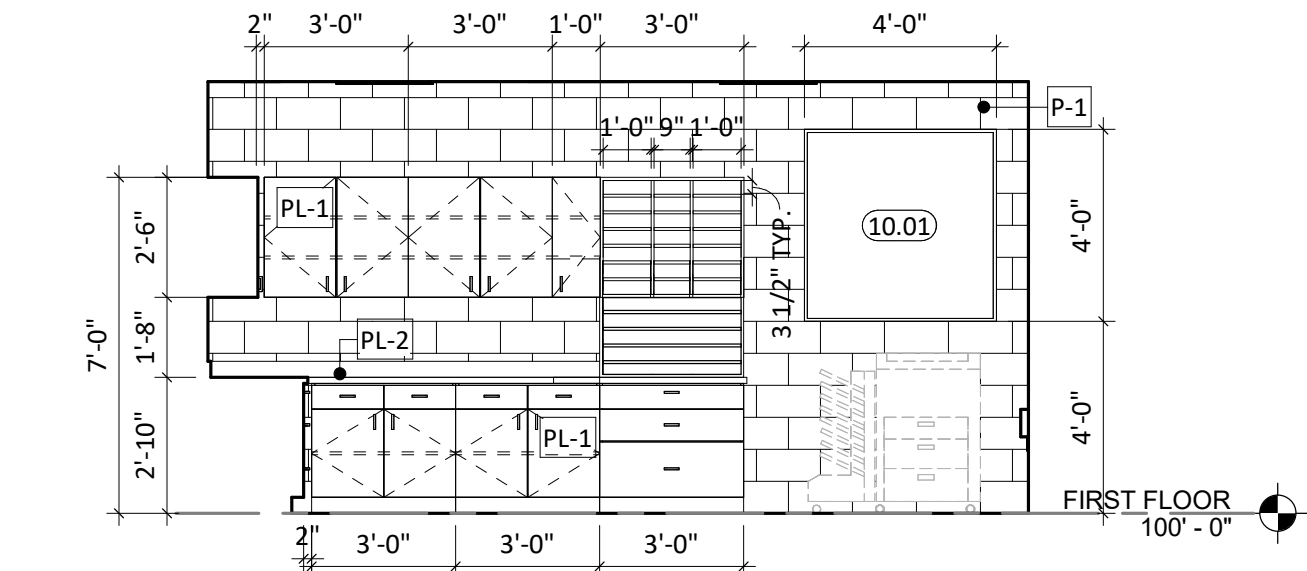
5 SCIENCE PREP. D106A - WEST  
1/4" = 1'-0"



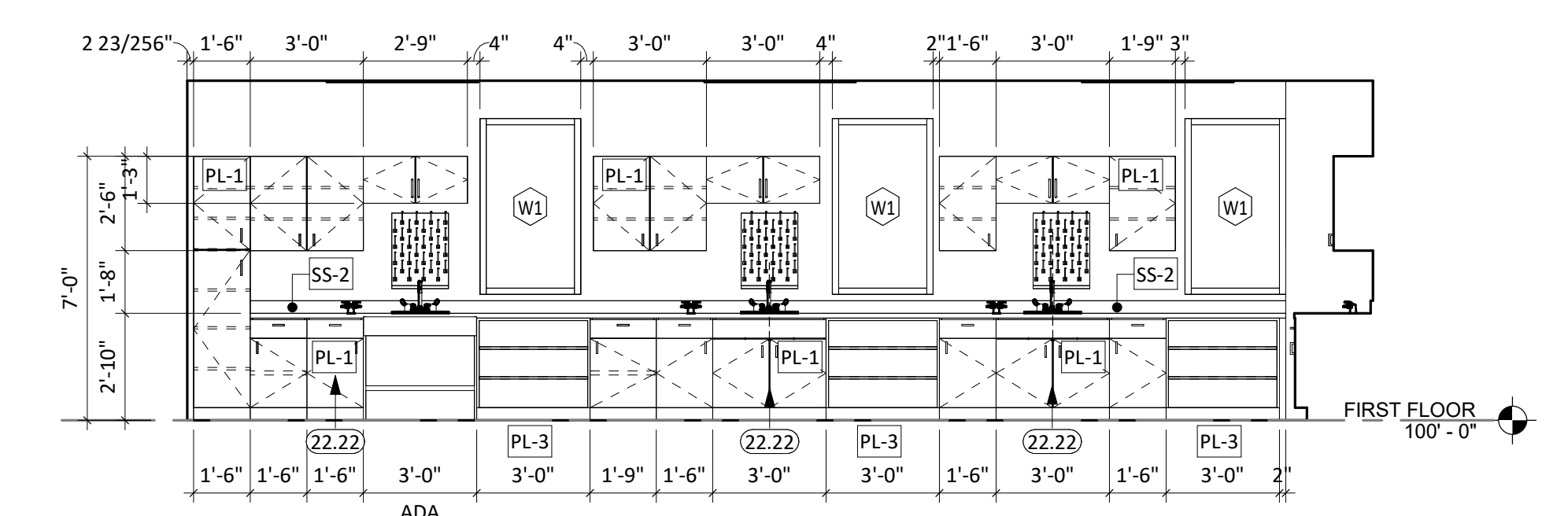
9 WORKROOM D105 - WEST  
1/4" = 1'-0"



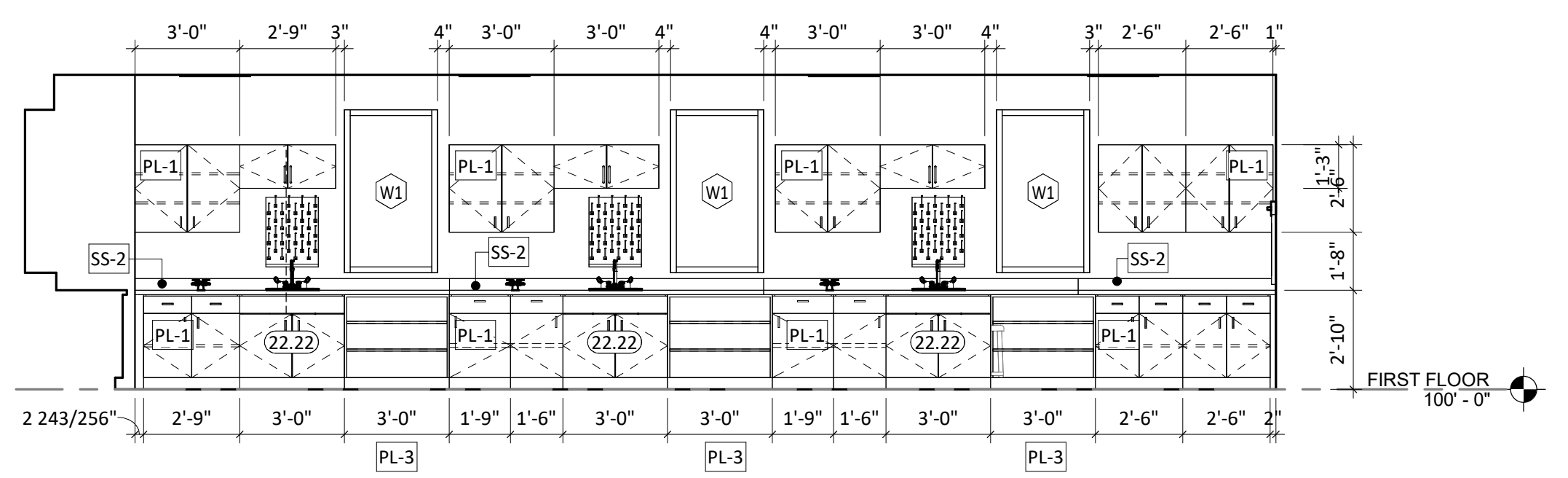
7 WORKROOM D105 - NORTH  
1/4" = 1'-0"



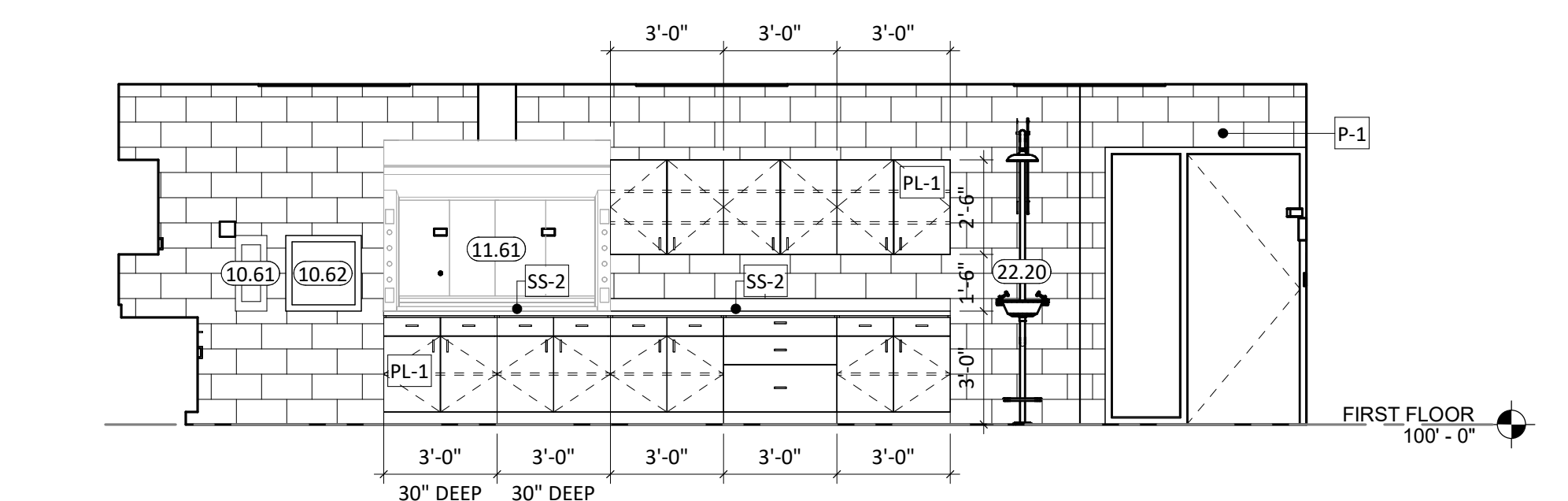
8 WORKROOM D105 - EAST  
1/4" = 1'-0"



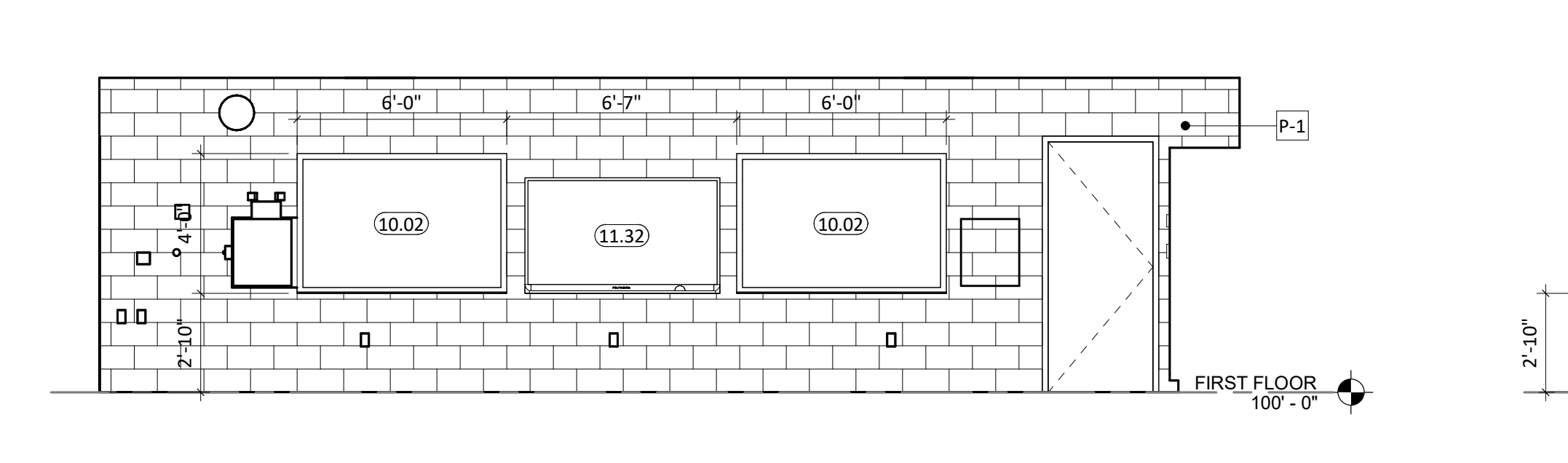
10 SCIENCE D106 - NORTH  
1/4" = 1'-0"



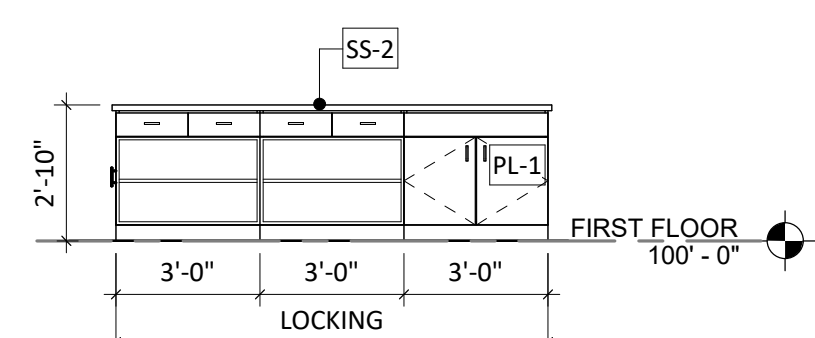
11 SCIENCE D106 - EAST  
1/4" = 1'-0"



12 SCIENCE D106 - SOUTH  
1/4" = 1'-0"



13 SCIENCE D106 - WEST  
1/4" = 1'-0"



14 SCIENCE D106 - TEACHING STATION  
1/4" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

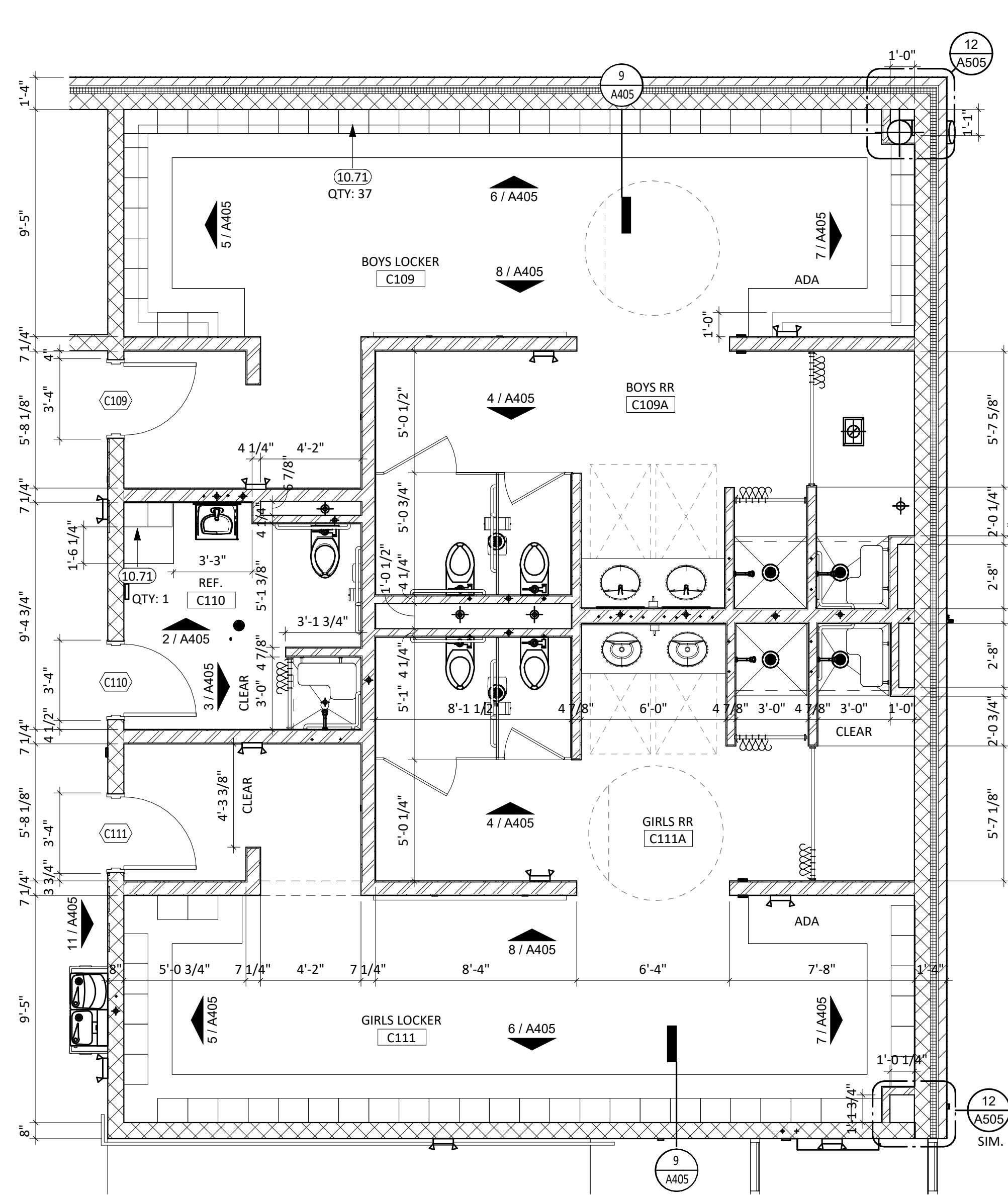
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

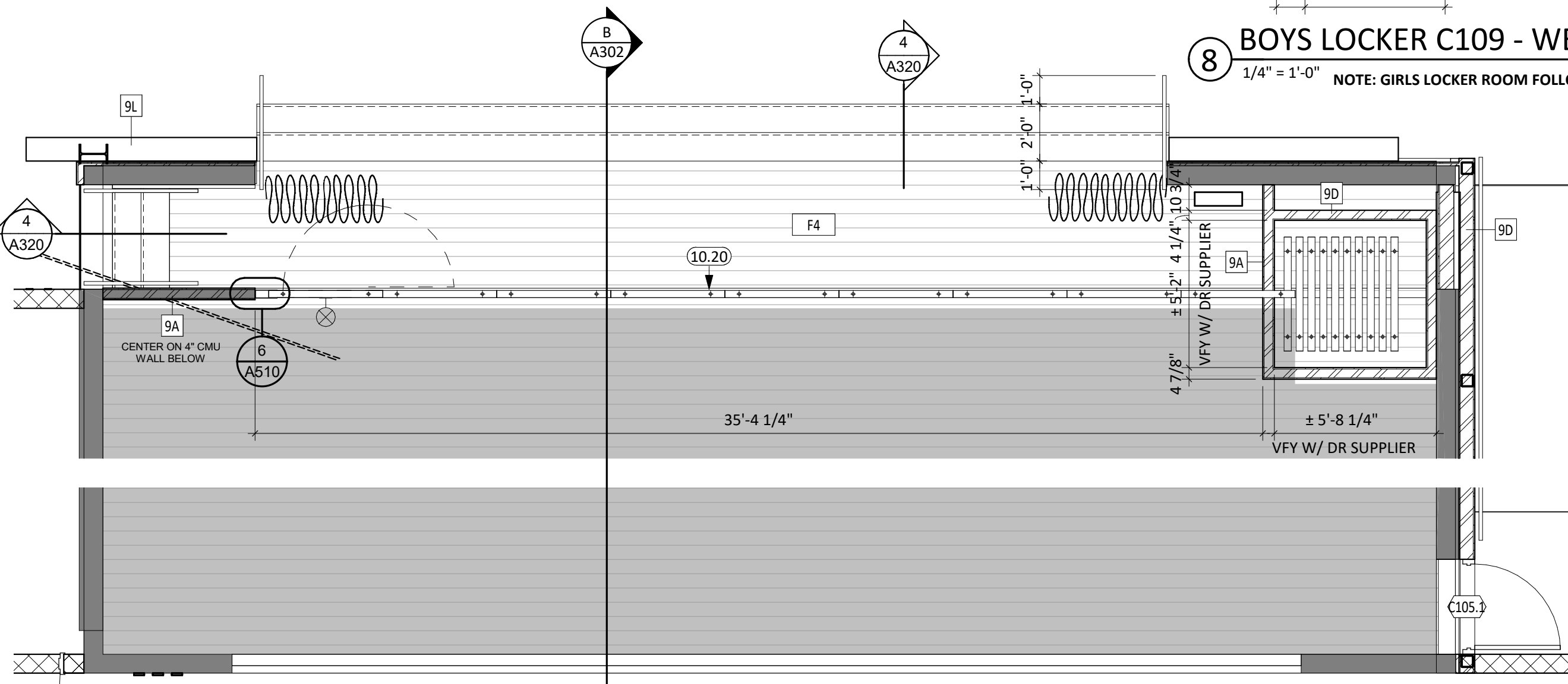
SHEET TITLE:  
ENLARGED PLANS & INTERIOR ELEVATIONS

A404

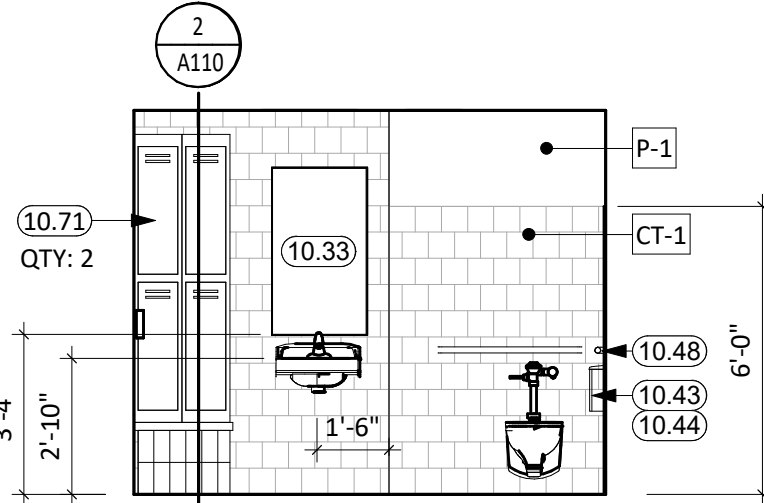
1/31/2023 1:46:02 PM



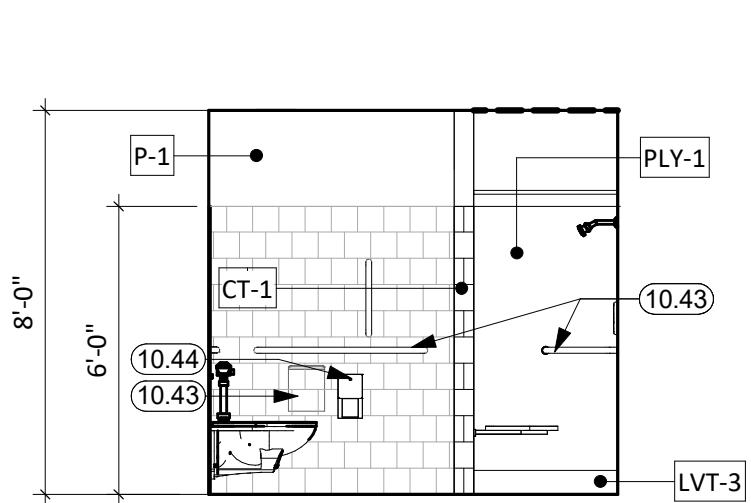
**1** LOCKER ROOMS  
1/4" = 1'-0"



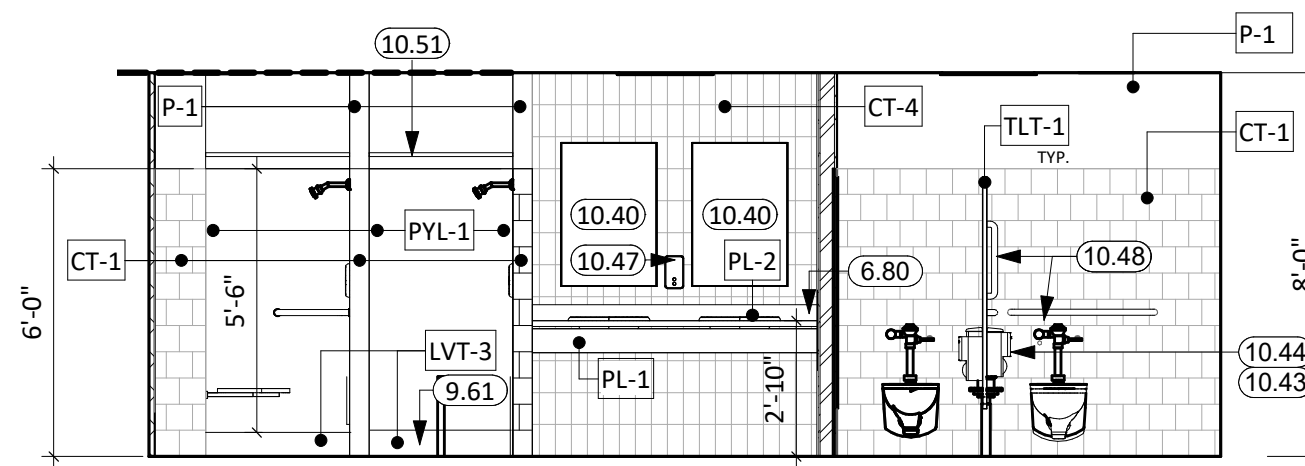
**10** ENLARGED STAGE PLAN  
1/4" = 1'-0"



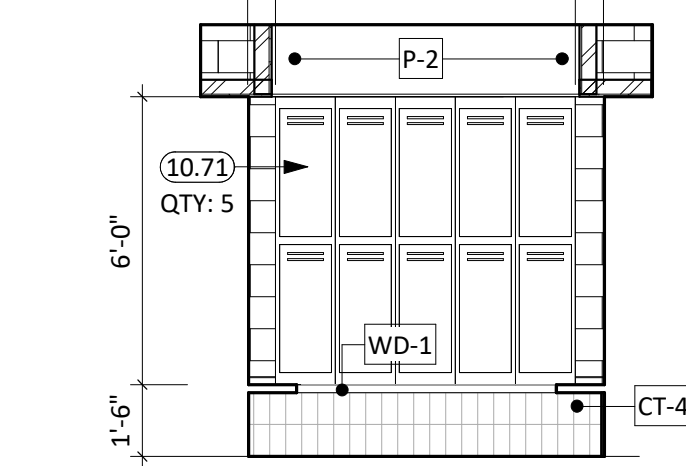
**2** REF. - EAST  
1/4" = 1'-0"



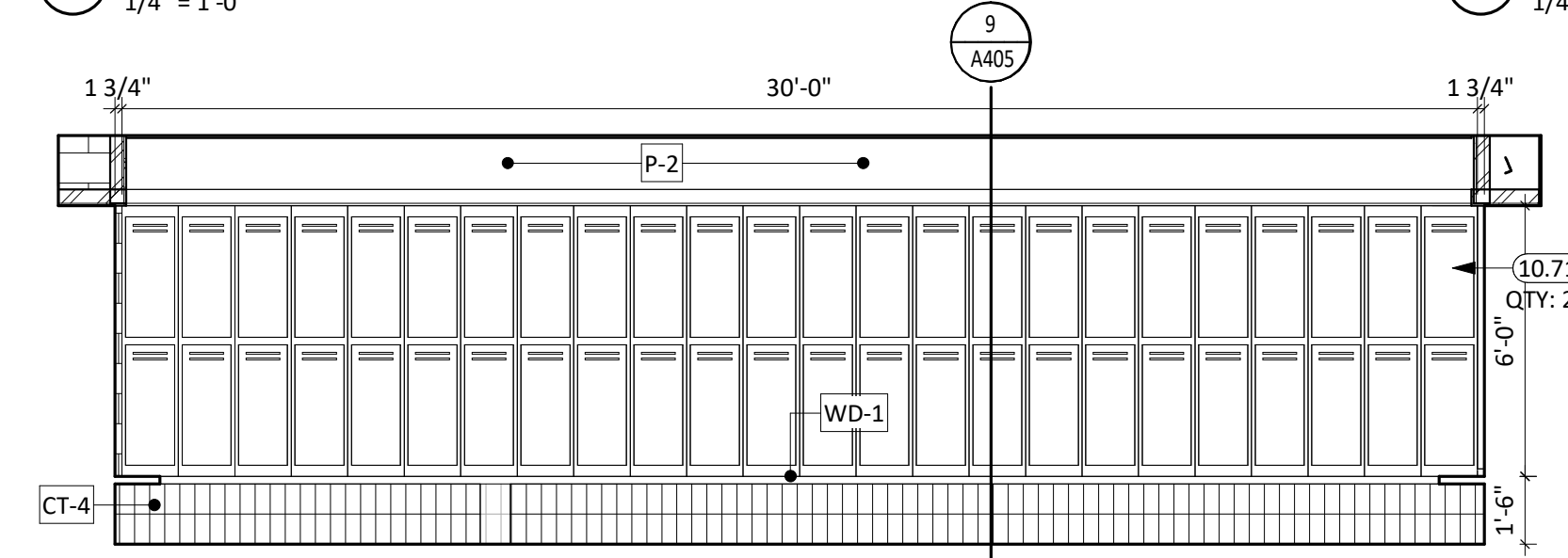
**3** REF. - SOUTH  
1/4" = 1'-0"



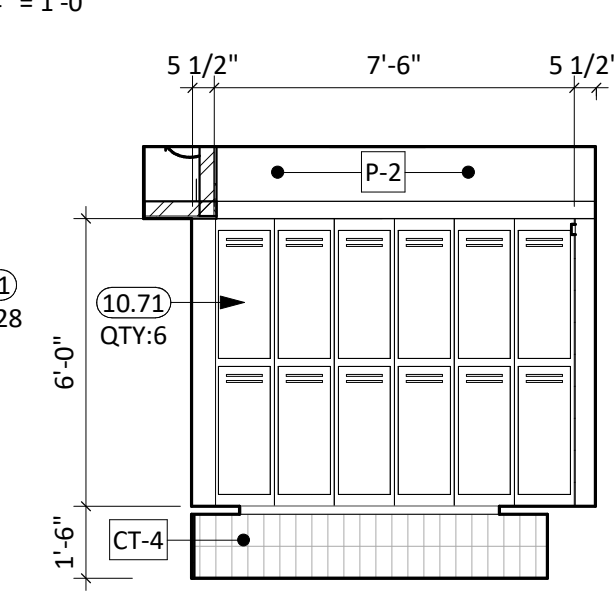
**4** WET WALL TYP. RR C109A/C111A  
1/4" = 1'-0"



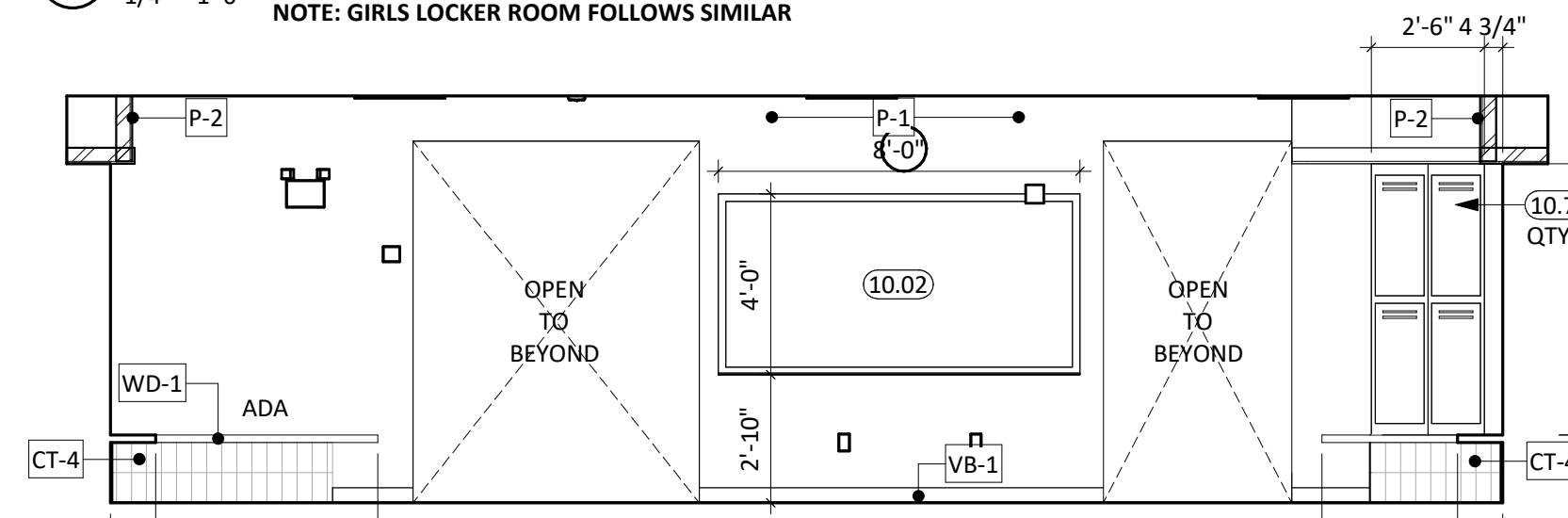
**5** BOYS LOCKER C109 - NORTH  
1/4" = 1'-0"



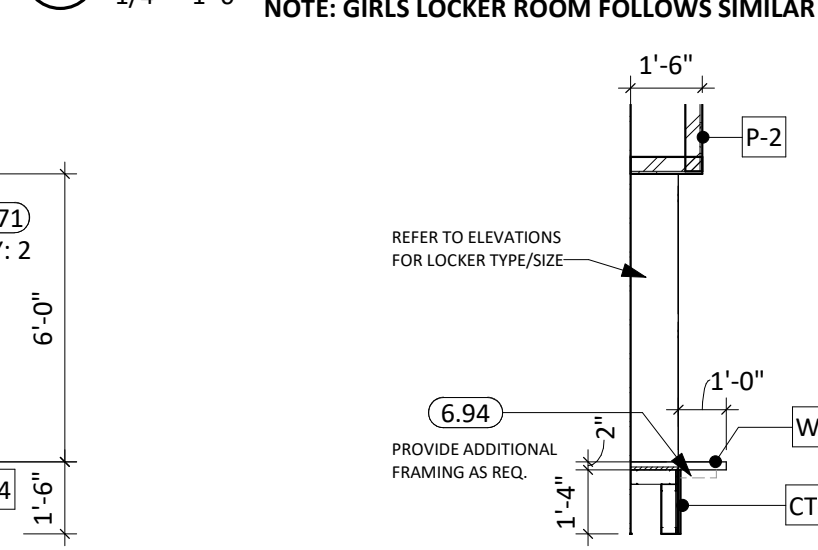
**6** BOYS LOCKER C109 - EAST  
1/4" = 1'-0"  
NOTE: GIRLS LOCKER ROOM FOLLOWS SIMILAR



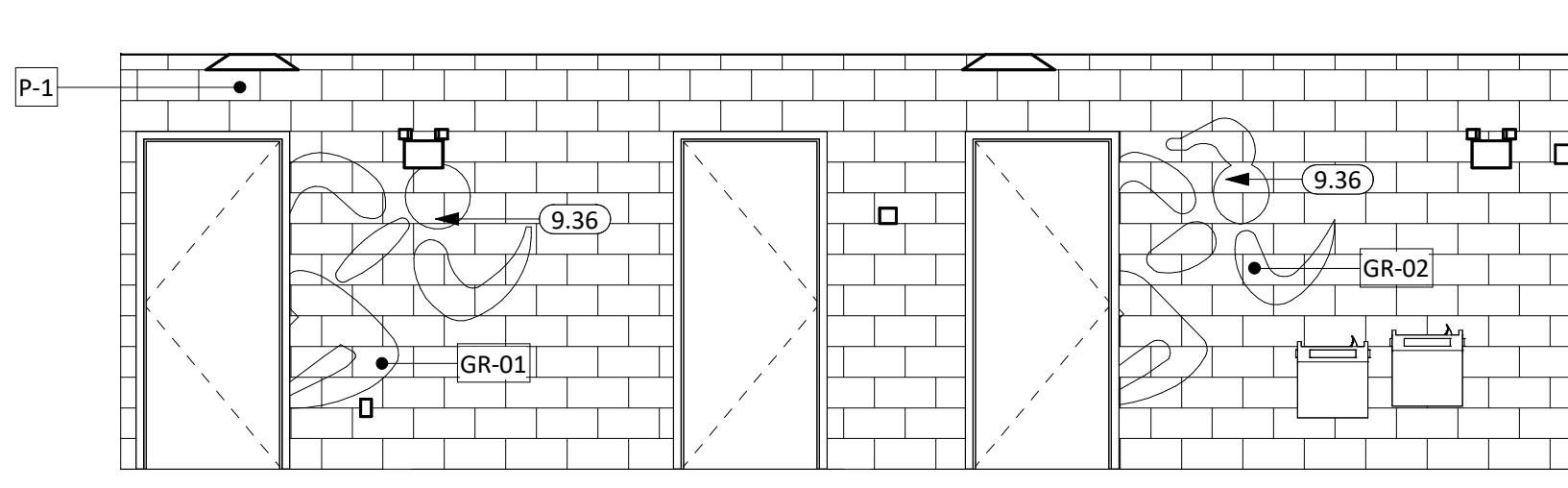
**7** BOYS LOCKER C109 - SOUTH  
1/4" = 1'-0"  
NOTE: GIRLS LOCKER ROOM FOLLOWS SIMILAR



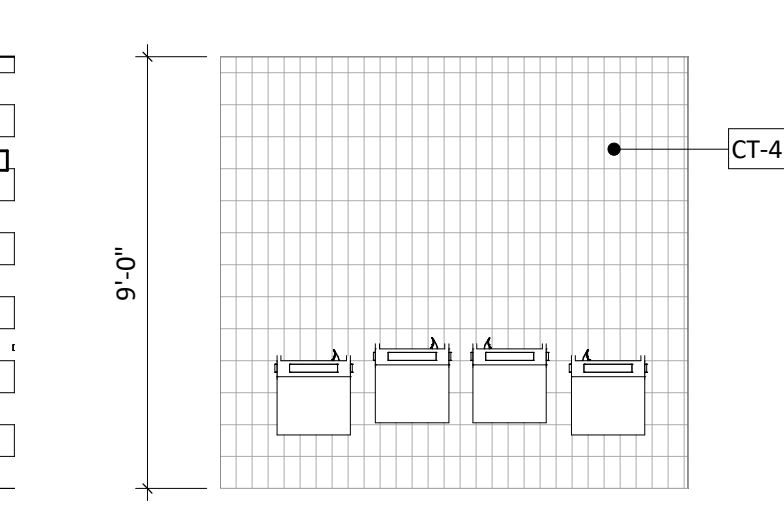
**8** BOYS LOCKER C109 - WEST  
1/4" = 1'-0"  
NOTE: GIRLS LOCKER ROOM FOLLOWS SIMILAR



**9** TYP. LOCKER/BENCH SECTION  
1/4" = 1'-0"



**11** CORR. C199C - SOUTH  
1/4" = 1'-0"



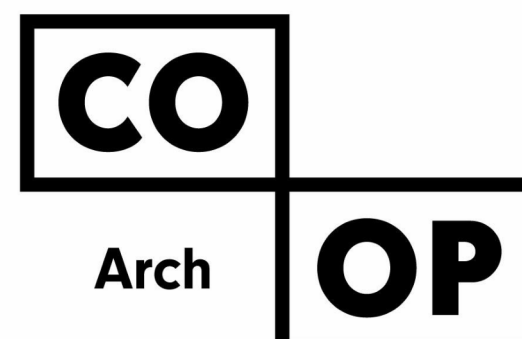
**12** CORR. C199D - EAST  
1/4" = 1'-0"

**GENERAL NOTES**

- SEE SHEET 6000 FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
- FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
- ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
- RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
- ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
- SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
- PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
- TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
- COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS W/ MECHANICAL AND ELECTRICAL.
- MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
- PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
- COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
- CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
- PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
- PJ = PANEL JOINT
- RV = REVEAL

**KEYNOTE SCHEDULE**

6.80	PLASTIC LAMINATE COUNTERTOP
6.94	COUNTERTOP BRACKET
9.36	SINGLE-TONE PAINTED SIGNAGE GRAPHIC
9.61	HEAT WELD FLOOR/BASE FINISH TO WALL PANEL
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE]
10.20	OPERABLE PANEL PARTITIONS
10.33	MIRROR W/ TRIM
10.40	RECESSED MIRROR W/SCHIENE TRIM
10.43	SANITARY NAPKIN DISPOSAL, PER OWNER
10.44	TOILET TISSUE DISPENSER, PER OWNER
10.47	SOAP DISPENSER, PER OWNER
10.48	GRAB BAR
10.51	SHOWER ROD, CURTAIN, & HOOKS
10.71	15"W x 12"D x 6'H DOUBLE TIER METAL LOCKERS W/ SLOPED TOP



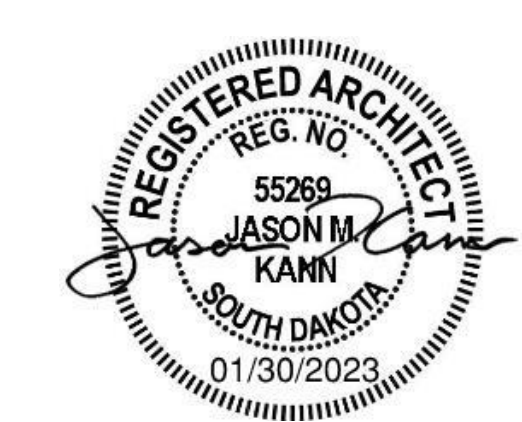
1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



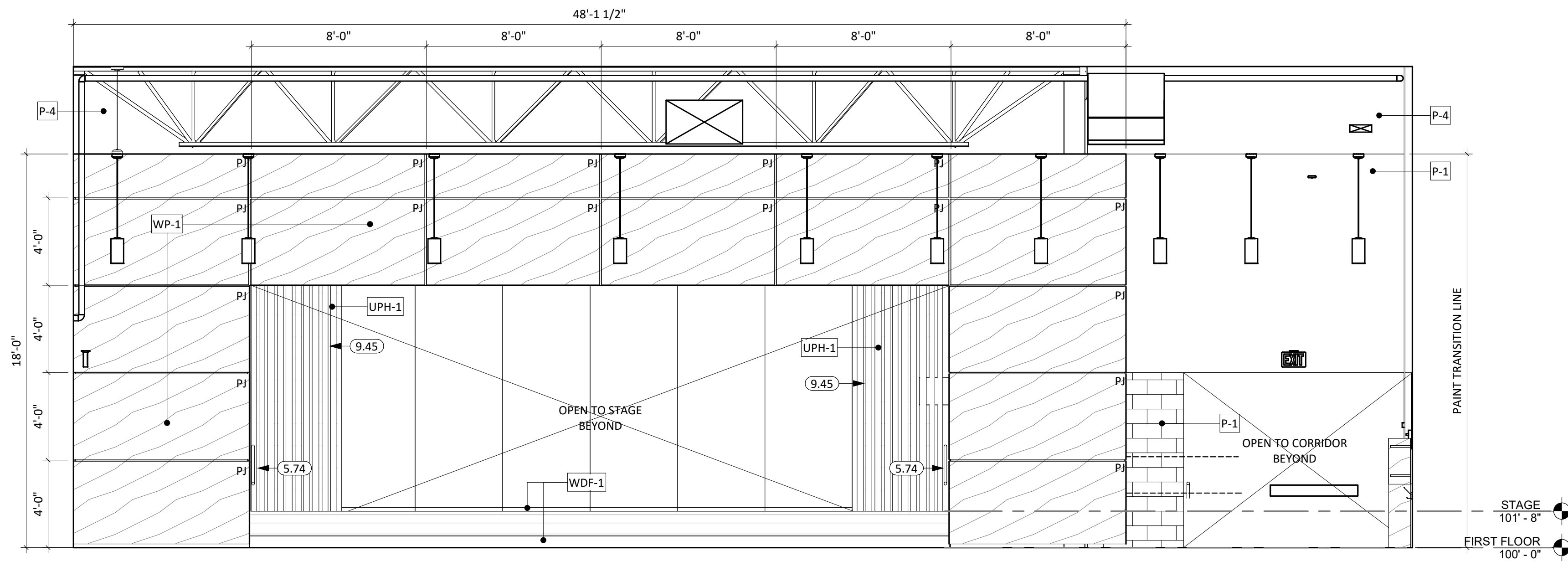
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ENLARGED PLANS & INTERIOR ELEVATIONS

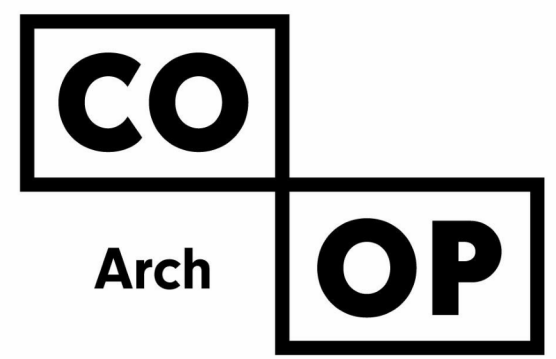
**A405**



- ### GENERAL NOTES
1. SEE SHEET **6000** FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
  2. FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
  3. ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
  4. RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
  5. ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
  6. SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
  7. PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
  8. TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
  9. COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
  10. MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
  11. PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
  12. COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
  13. CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
  14. PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
  15. PJ = PANEL JOINT
  16. RV = REVEAL

### KEYNOTE SCHEDULE

5.74	HANDRAIL (MATCH GUARDRAIL PROFILE & FINISH) (SEE ARCH. & STRUCT.)
9.38	WALLCOVERING WRAPPED 5/8" X 60" (MIN) CORK BOARD
9.45	FIXED VELOUR CURTAIN PANELS
9.46	1/8" ACRYLIC DIMENSIONAL SIGNAGE ON STRUCTURAL STAND-OFF(S) @ METAL WALL PANEL. FLOAT CYCLONE-LOGO & SCALE DOWN, AS NEEDED



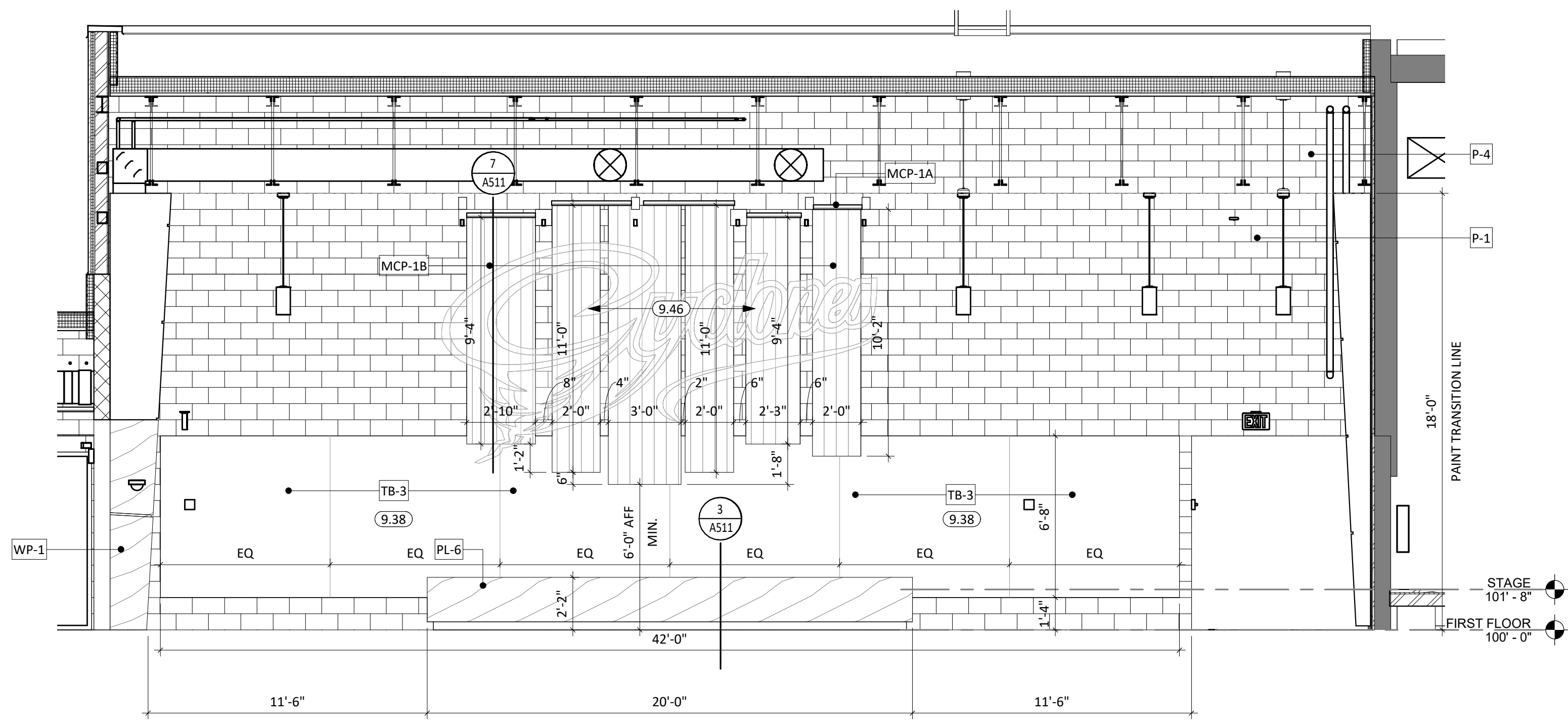
1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**1** COMMONS C101 - WEST  
1/4" = 1'-0"



**2** COMMONS C101 - SOUTH  
1/4" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

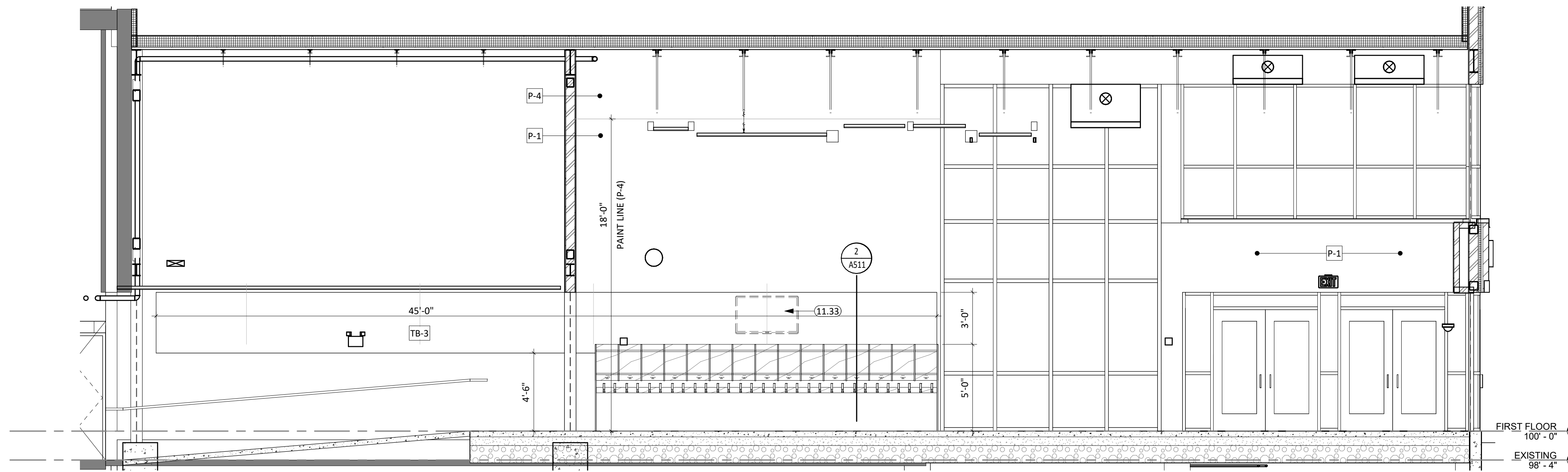
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

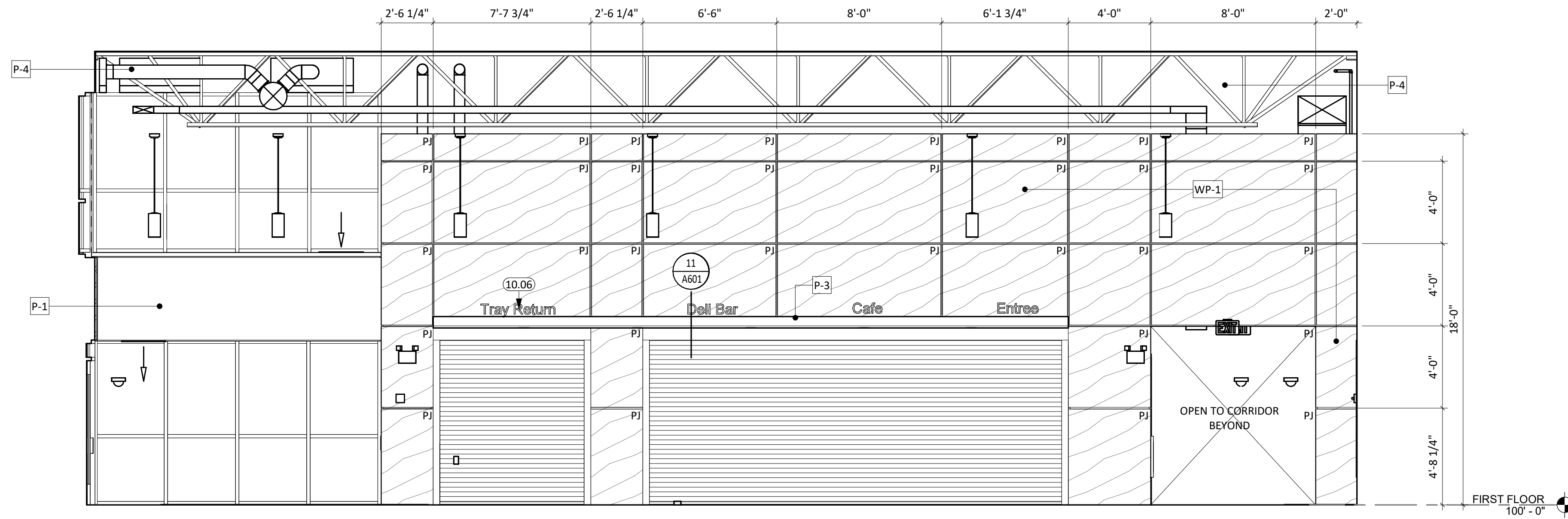
SHEET TITLE:  
ENLARGED PLANS & INTERIOR  
ELEVATIONS

# A406





1 COMMONS C101 - NORTH  
1/4" = 1'-0"



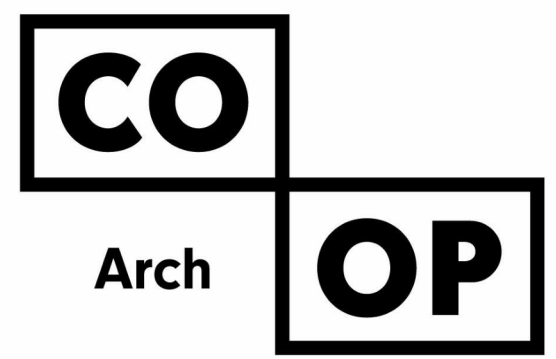
2 COMMONS C101 - EAST  
1/4" = 1'-0"

**GENERAL NOTES**

1. SEE SHEET **6000** FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
2. FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
3. ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
4. RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
5. ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
6. SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
7. PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
8. TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
9. COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
10. MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
11. PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
12. COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
13. CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
14. PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
15. PJ = PANEL JOINT
16. RV = REVEAL

**KEYNOTE SCHEDULE**

10.06	CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE - ARIAL FONT STYLE
11.33	TV MONITOR (OWNER PROVIDED CONTRACTOR INSTALLED)



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



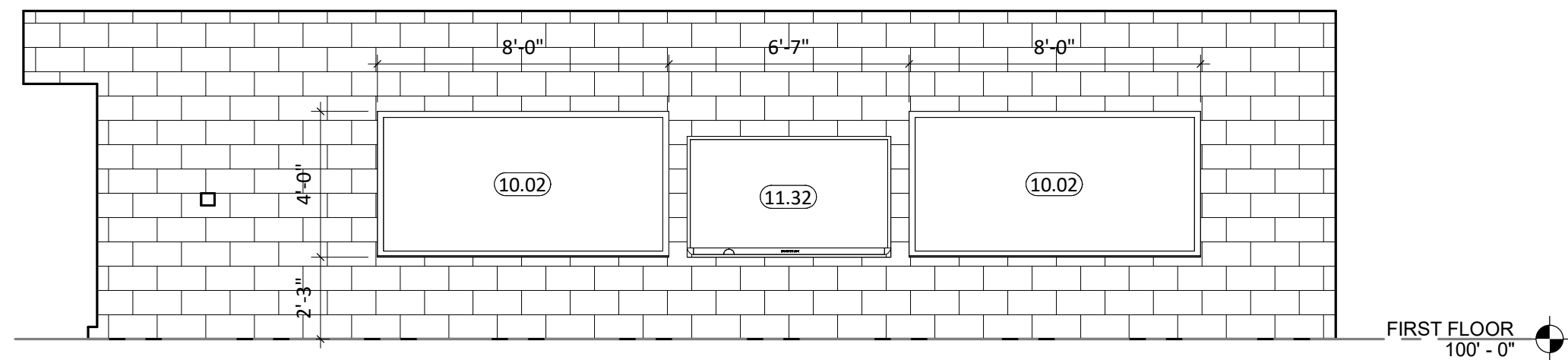
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

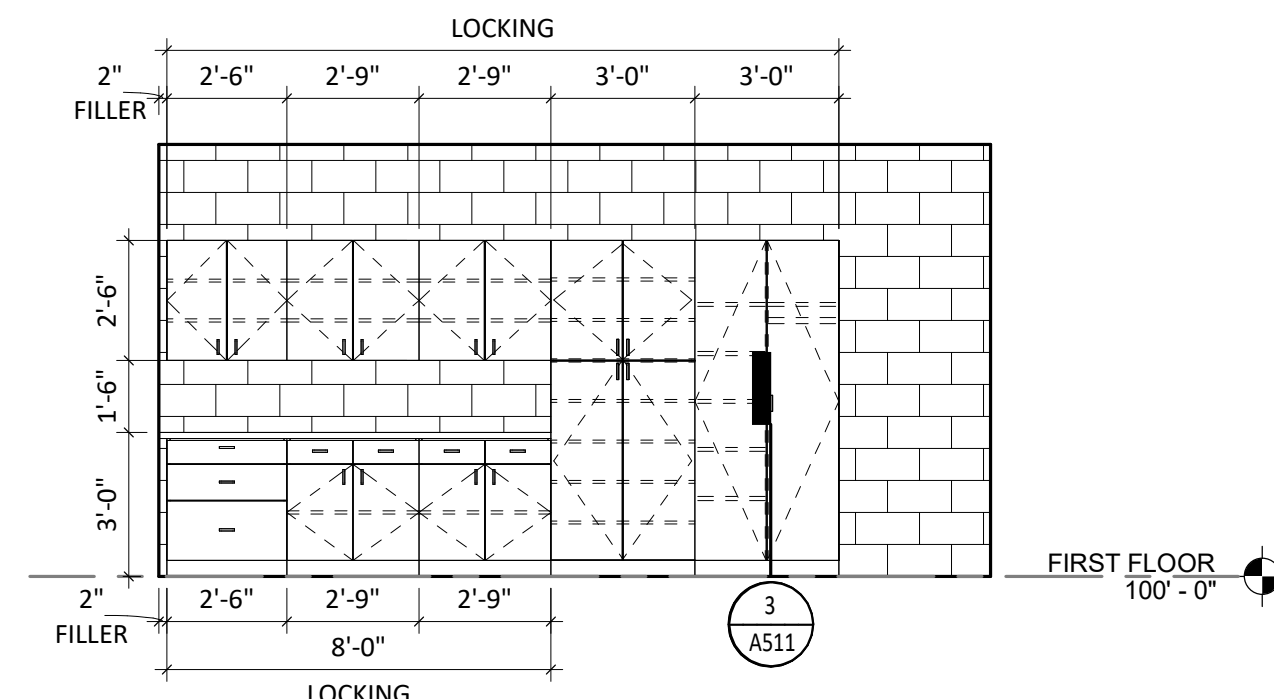
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
INTERIOR ELEVATIONS

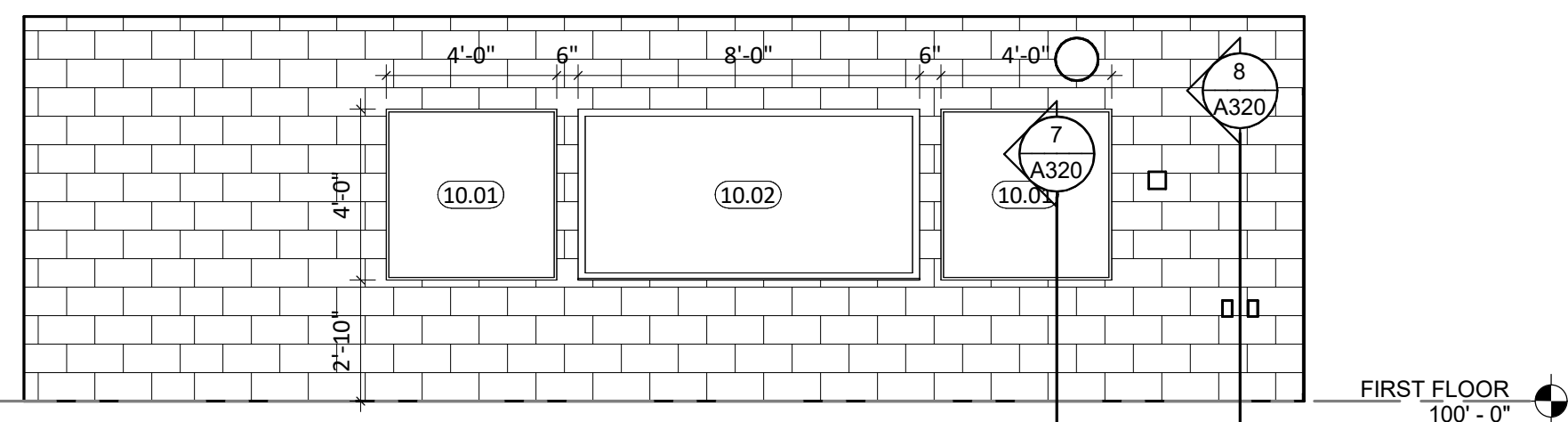
**A407**



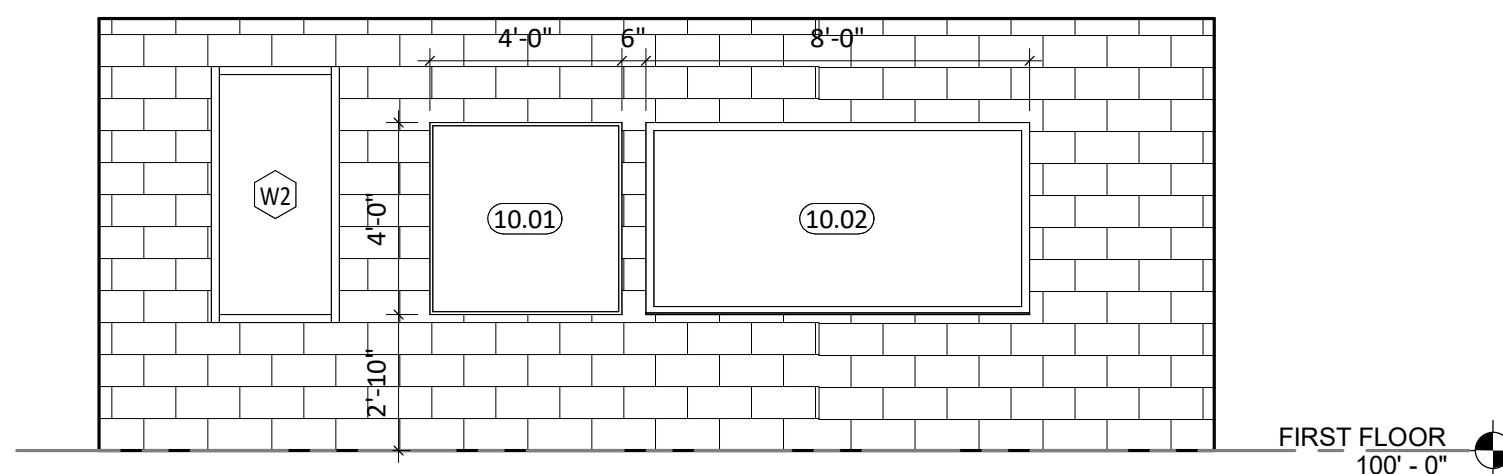
① HS SPED C103 - EAST  
1/4" = 1'-0"



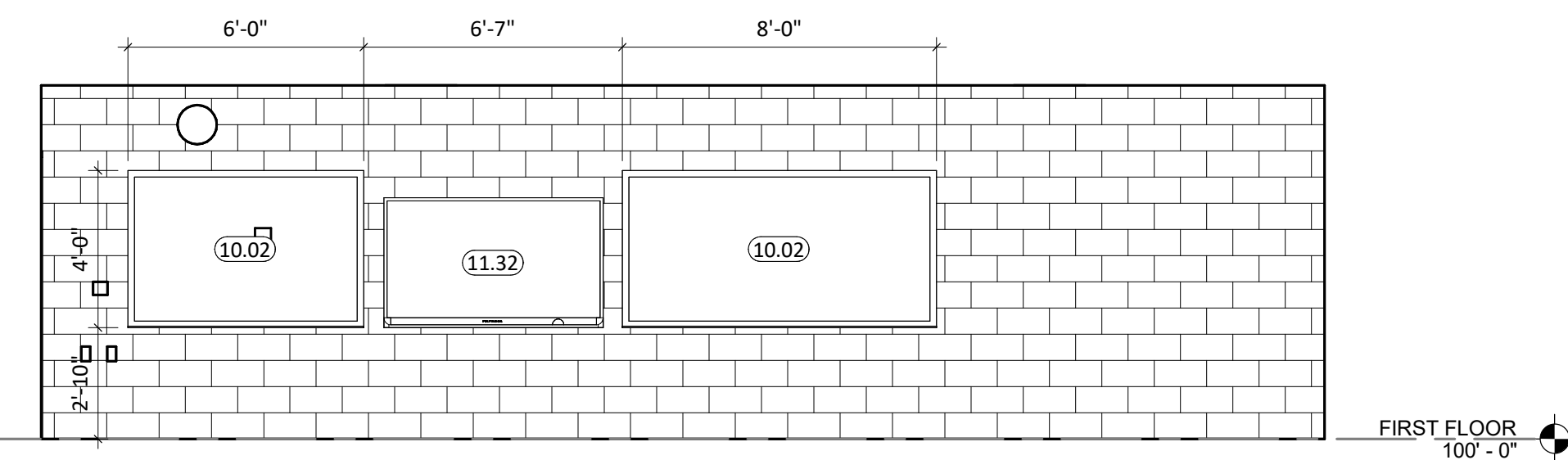
② HS SPED C103 - NORTH  
1/4" = 1'-0"



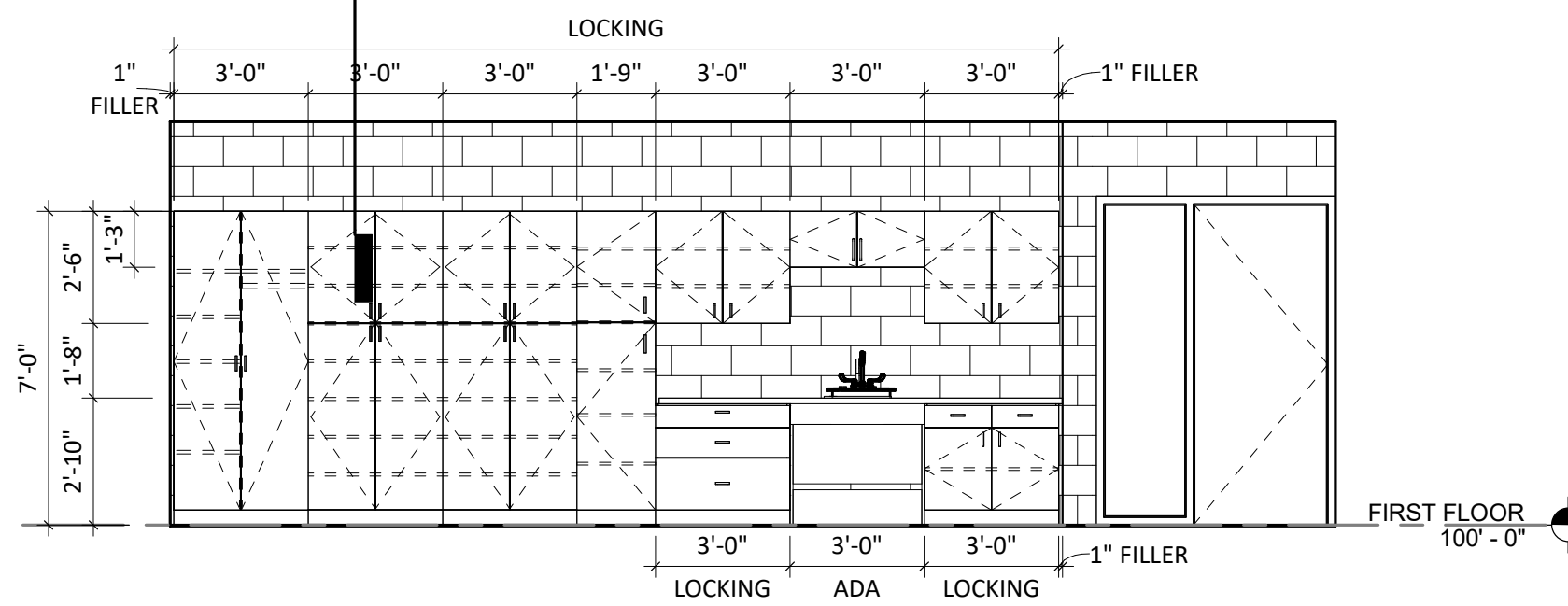
③ HS SPED C103 - WEST  
1/4" = 1'-0"



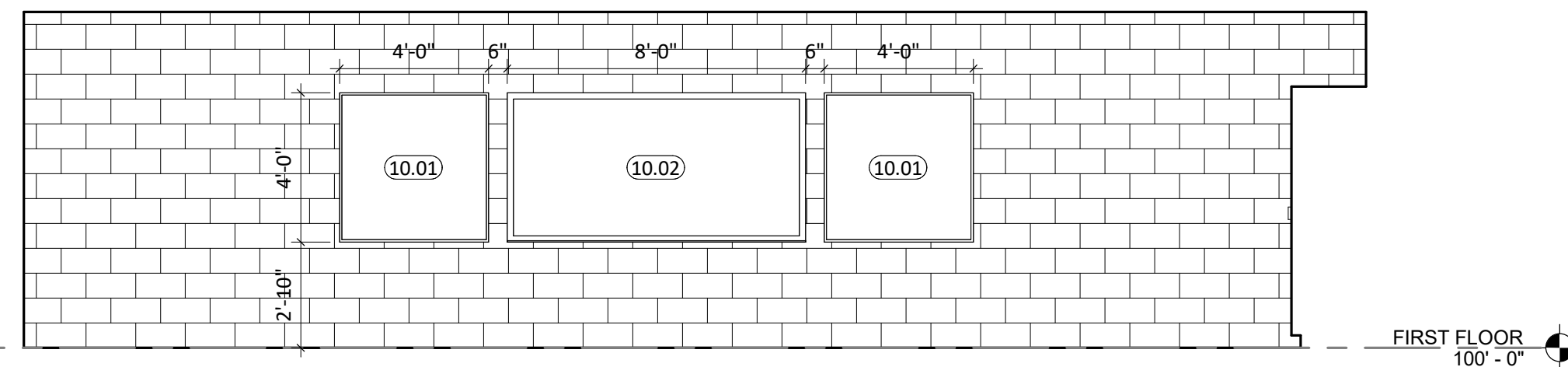
④ HS SPED C103 - SOUTH  
1/4" = 1'-0"



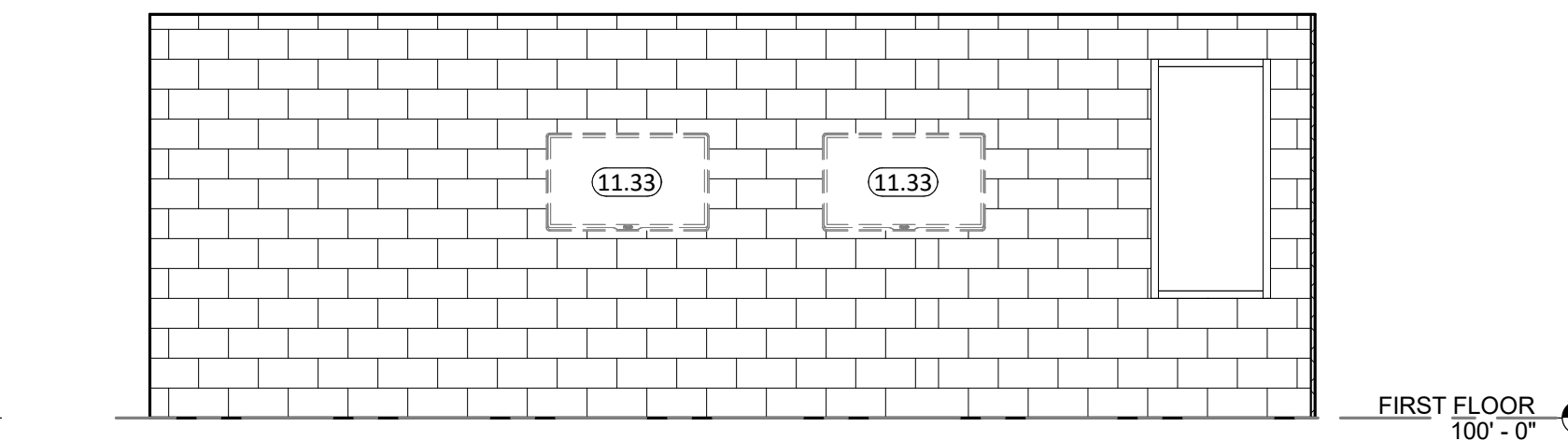
⑤ NURSING C102 - EAST  
1/4" = 1'-0"



⑥ NURSING C102 - NORTH  
1/4" = 1'-0"



⑦ NURSING C102 - WEST  
1/4" = 1'-0"



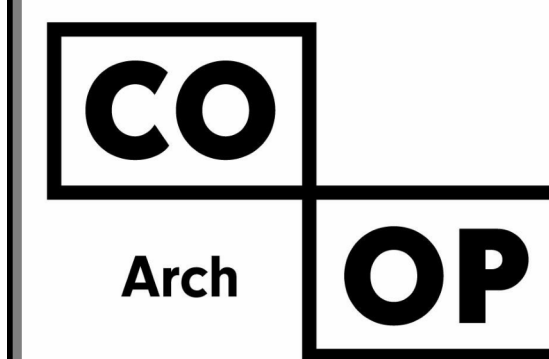
⑧ NURSING C102 - SOUTH  
1/4" = 1'-0"

**GENERAL NOTES**

1. SEE SHEET **6000** FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
2. FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
3. ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
4. RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
5. ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
6. SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
7. PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
8. TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
9. COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
10. MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
11. PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
12. COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
13. CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
14. PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
15. PJ = PANEL JOINT
16. RV = REVEAL

**KEYNOTE SCHEDULE**

10.01	TACKBOARD, SEE FINISH LEGEND (TB-1)
10.02	MARKERBOARD, B.O.D.-CLARIDGE SERIES 1 WALLBOARD W/ 1" CORK/MAP RAIL [WHITE]
11.32	SMARTBOARD (OWNER PROVIDED CONTRACTOR INSTALLED)
11.33	TV MONITOR (OWNER PROVIDED CONTRACTOR INSTALLED)



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



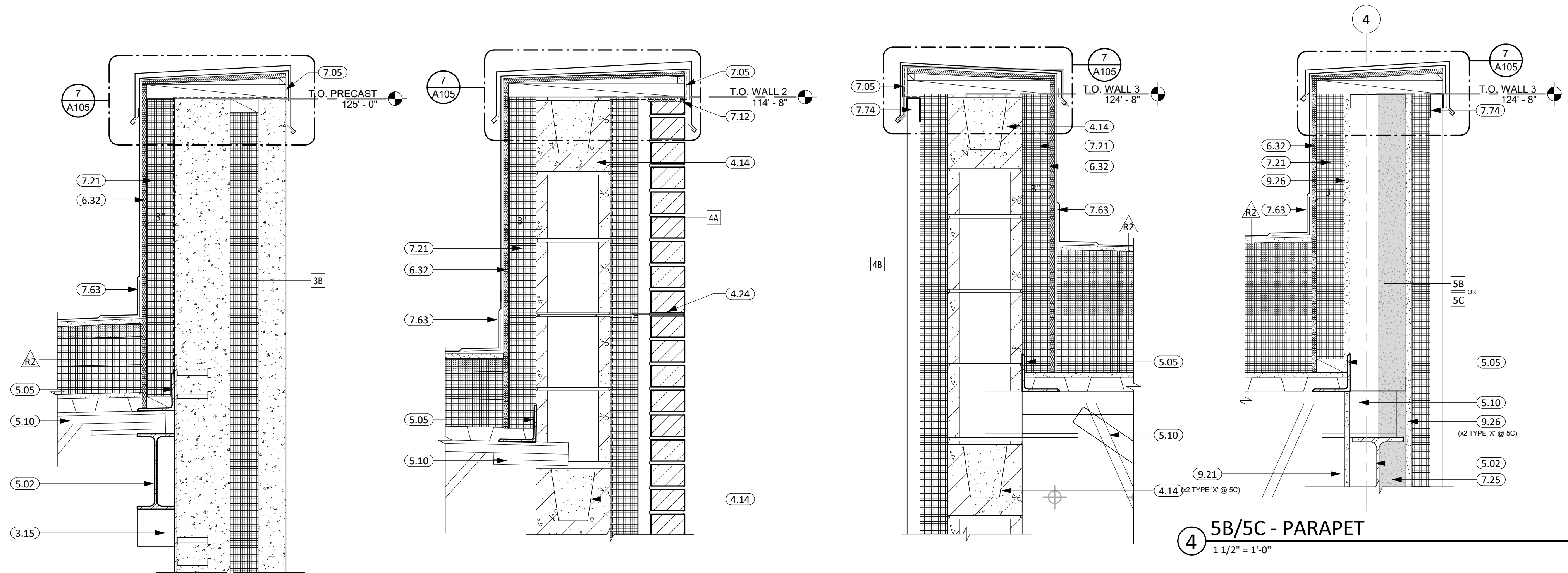
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
INTERIOR ELEVATIONS

**A408**

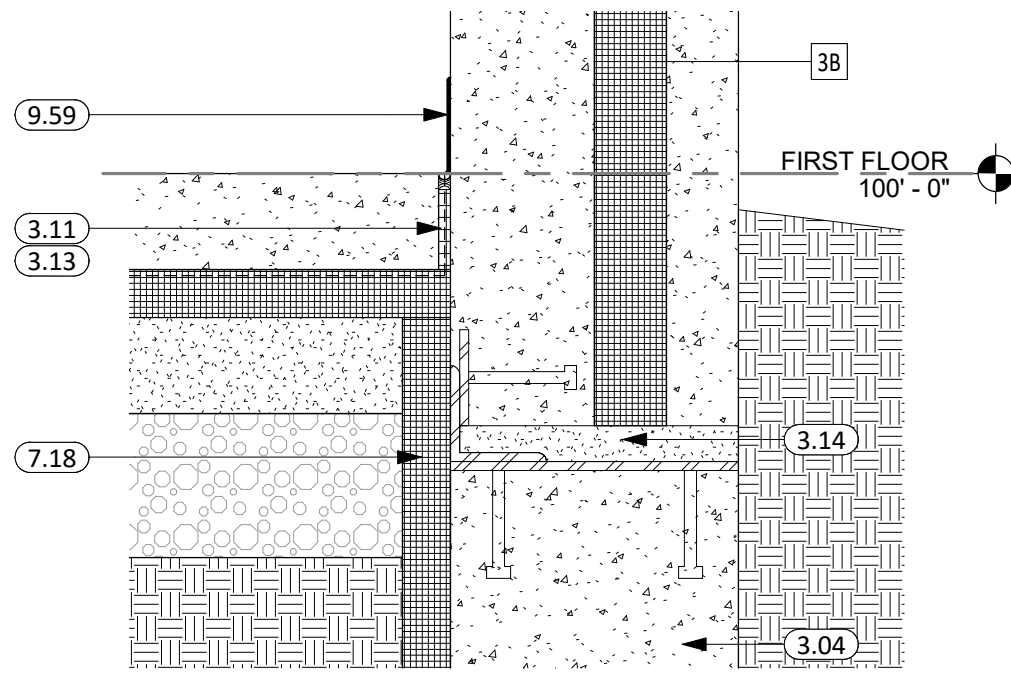


**1 3B - PARAPET**  
1 1/2" = 1'-0"

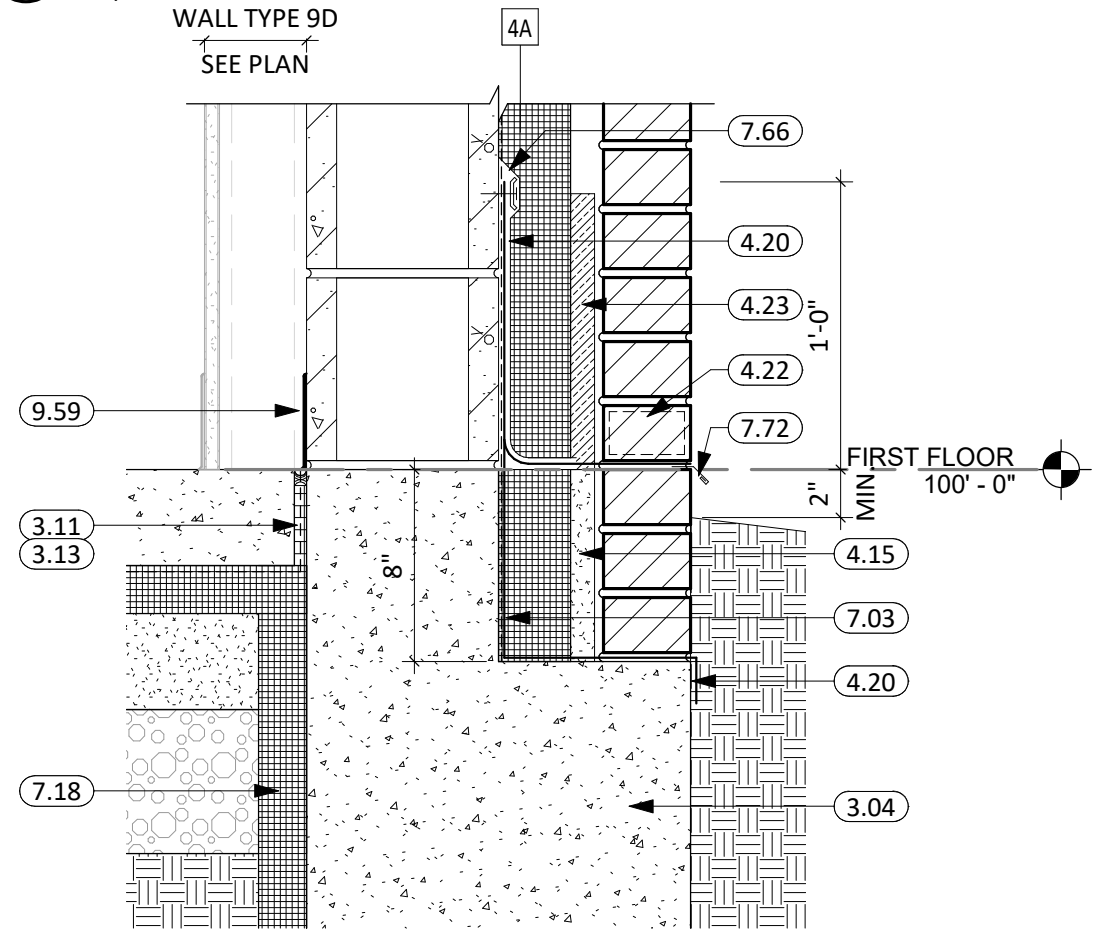
**2 4A - PARAPET**  
1 1/2" = 1'-0"  
WALL TYPE 9D  
SEE PLAN

**3 4B - PARAPET**  
1 1/2" = 1'-0"

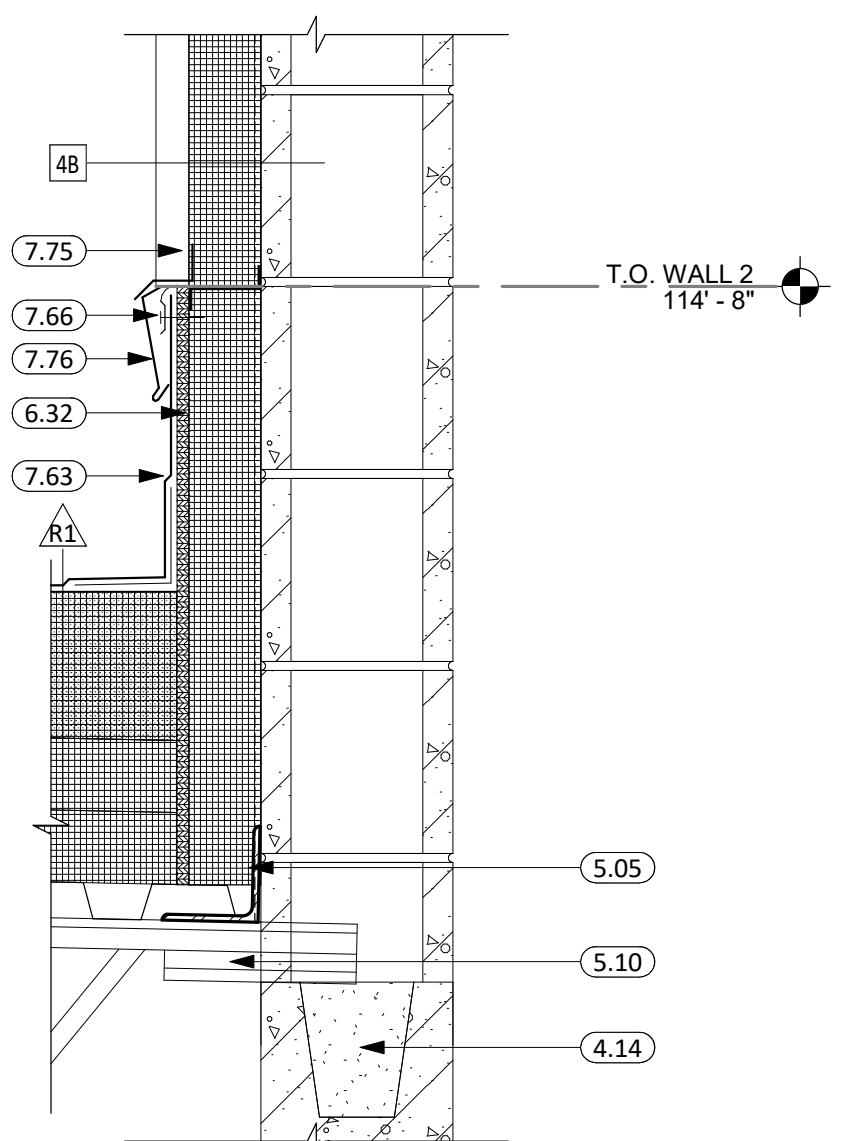
**4 5B/5C - PARAPET**  
1 1/2" = 1'-0"



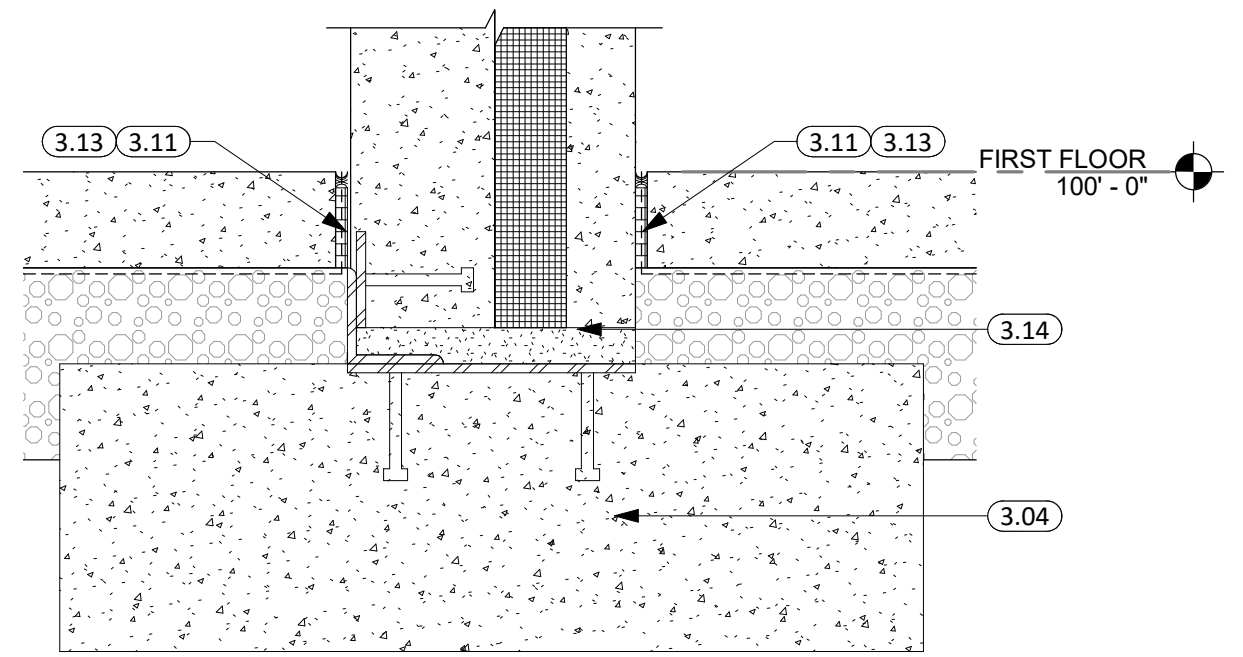
**5 3B - FND**  
1 1/2" = 1'-0"



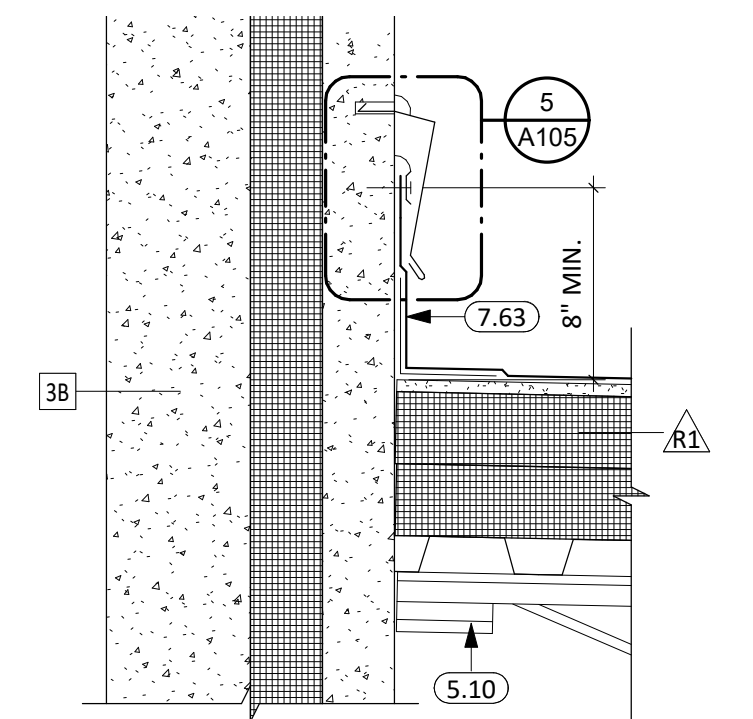
**6 4A - FND DETAIL**  
1 1/2" = 1'-0"  
COORDINATE GROUTING, WEEP, AND FLASHING HEIGHTS WITH GRADING PLAN



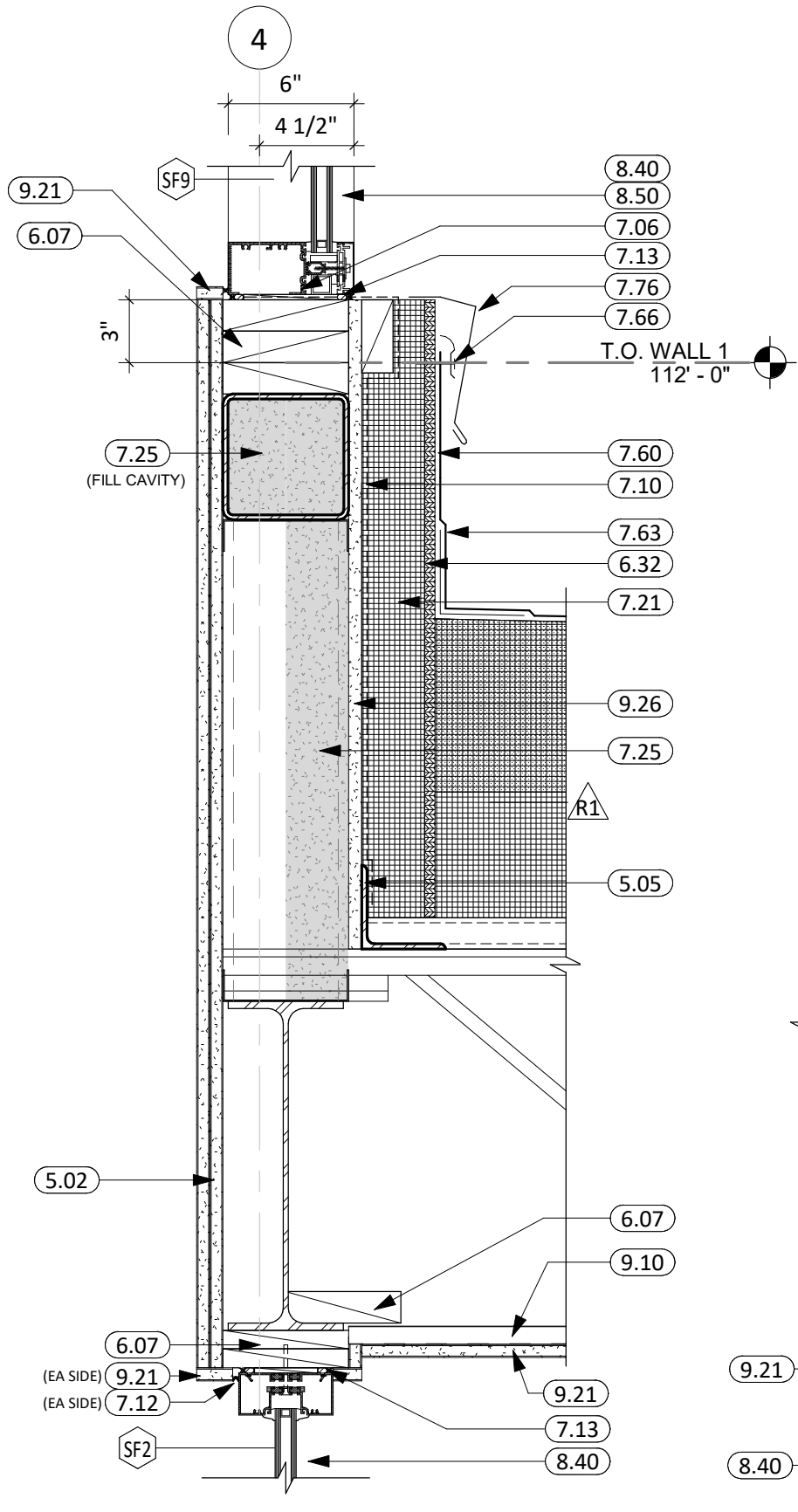
**7 4B/R1 TIE-IN**  
1 1/2" = 1'-0"



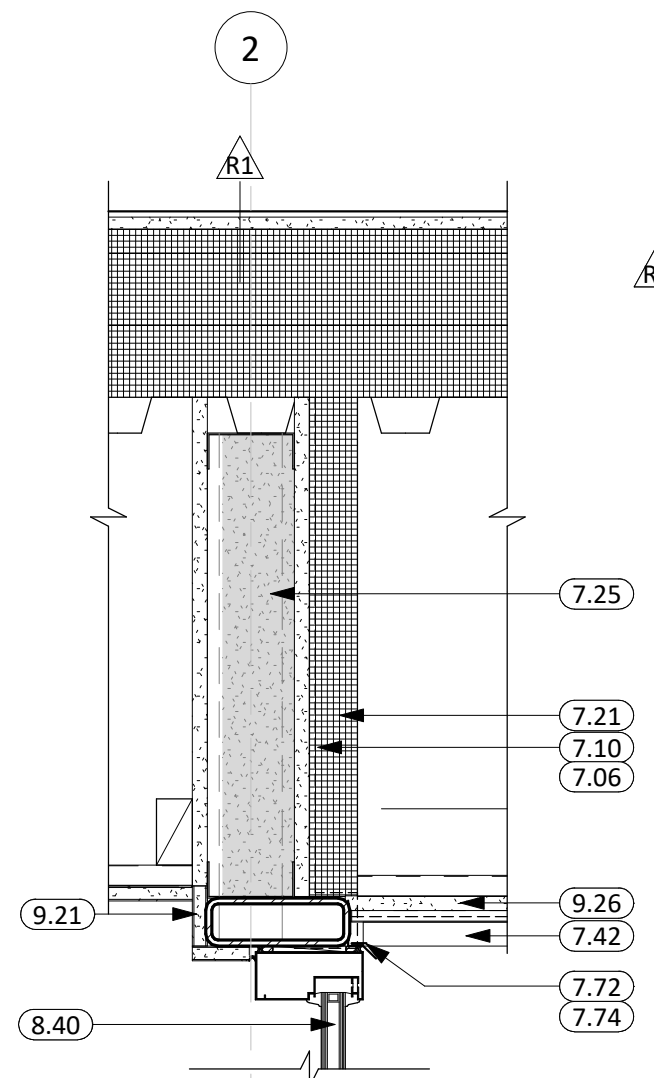
**8 3B/F1 @ INTERIOR**  
1 1/2" = 1'-0"



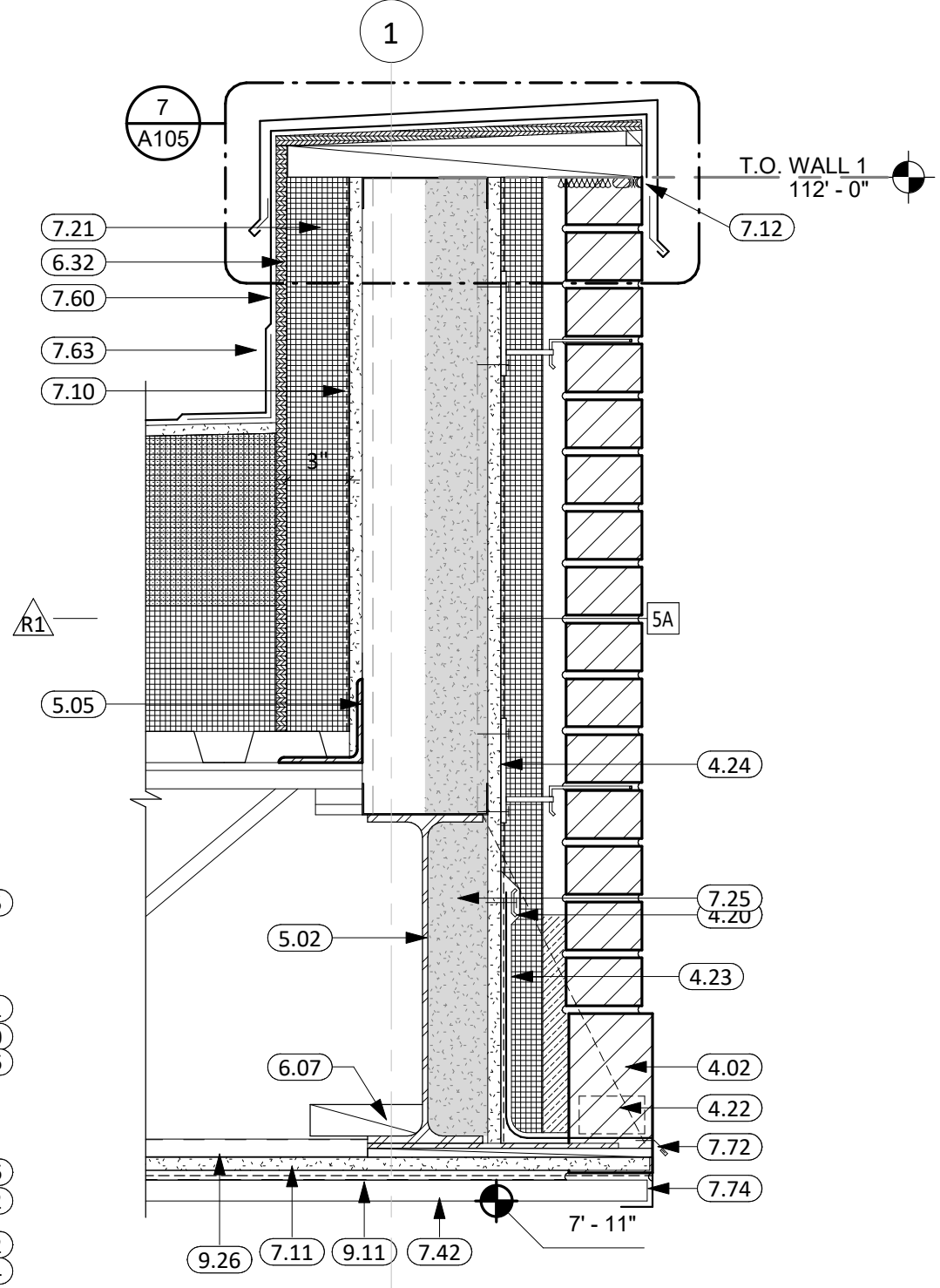
**9 3B/R1 TRANSITION**  
1 1/2" = 1'-0"



**10 R1 TIE-IN @ CANOPY**  
1 1/2" = 1'-0"

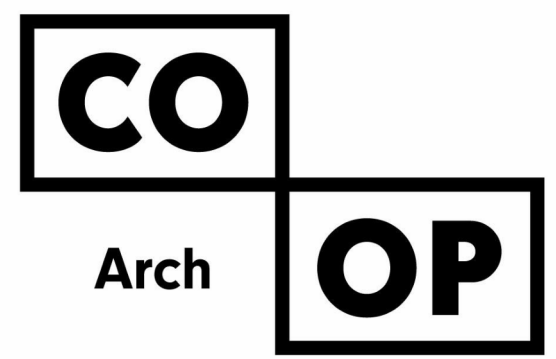


**11 DETAIL @ SOFFIT/VESTIBULE**  
1 1/2" = 1'-0"



**12 5A - SOFFIT/PARAPET**  
1 1/2" = 1'-0"

KEYNOTE SCHEDULE	
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.11	1/2" EXPANSION/ISOLATION JOINT MATERIAL
3.13	WRAP UNDERSLAB VAPOR BARRIER AND SEAL TO FACE OF FOUNDATION WALL
3.14	PRECAST CONNECTION BY PC SUPPLIER
3.15	EMBED AND HAUNCH PLATE BY PRECAST SUPPLIER. (SEE STRUCT. FOR ADDITIONAL INFORMATION).
4.02	BRICK SOLDIER COURSING; SEE EXTERIOR ELEVATIONS FOR TYPE
4.14	BOND BEAM MASONRY UNIT
4.15	FILL w/GROUT
4.20	THRU-WALL FLASHING
4.22	WEEP VENTS
4.23	MORTAR NET
4.24	BRICK WALL TIES
5.02	STRUCTURAL STEEL BEAM (SEE ARCH. & STRUCT.)
5.05	STRUCTURAL STEEL ANGLE (SEE ARCH. & STRUCT.)
5.10	STEEL JOIST (SEE ARCH. & STRUCT.)
6.07	2x WOOD BLOCKING AS REQUIRED
6.32	ROOF SHEATHING
7.03	EXTEND AND SEAL VAPOR BARRIER SYSTEM TO TOP OF BRICK LEDGE AND OVER EXTERIOR FACE OF FOUNDATION WALL OR AS RECOMMENDED BY VAPOR BARRIER SYSTEM MANUFACTURER.
7.05	WRAP WEATHER BARRIER SYSTEM OVER BLOCKING AND TERMINATE BEHIND EPDM.
7.06	WRAP VAPOR BARRIER INTO WINDOW OPENING
7.10	VAPOR BARRIER
7.11	AIR & MOISTURE WEATHER BARRIER
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.13	SEALANT AROUND PEREMETER (TYP. BOTH SIDES)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
7.21	RIGID INSULATION
7.25	SPRAY APPLIED FOAM INSULATION (3" MIN.)
7.42	METAL SOFFIT PANELS
7.60	FULLY ADHERED EPDM SINGLE MEMBRANE ROOF (WRAP PARAPET WHERE OCCURS)
7.63	REINFORCED PERIMETER FASTENING STRIP
7.66	TERMINATION BAR AND HIGH GRADE SEALANT
7.72	PRE-FINISHED METAL DRIP EDGE
7.74	PRE-FINISHED J-CHANNEL
7.75	PRE-FINISHED SILL FLASHING PER METAL PANEL MFR
7.76	PRE-FINISHED REGLET AND COUNTERFLASHING. PROVIDE CONTINUOUS BEADS OF HIGH GRADE SEALANT AS REQUIRED FOR WATERPROOFING.
8.40	ALUMINUM FRAMED ENTRANCE/STOREFRONT
8.50	ALUMINUM CURTAIN WALL
9.10	7/8" FURRING CHANNEL
9.11	1 1/2" FURRING CHANNEL
9.21	5/8" GYPSUM BOARD
9.26	5/8" EXTERIOR GYPSUM SHEATHING
9.59	SEE ROOM SCHEDULE FOR WALL BASE FINISH



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



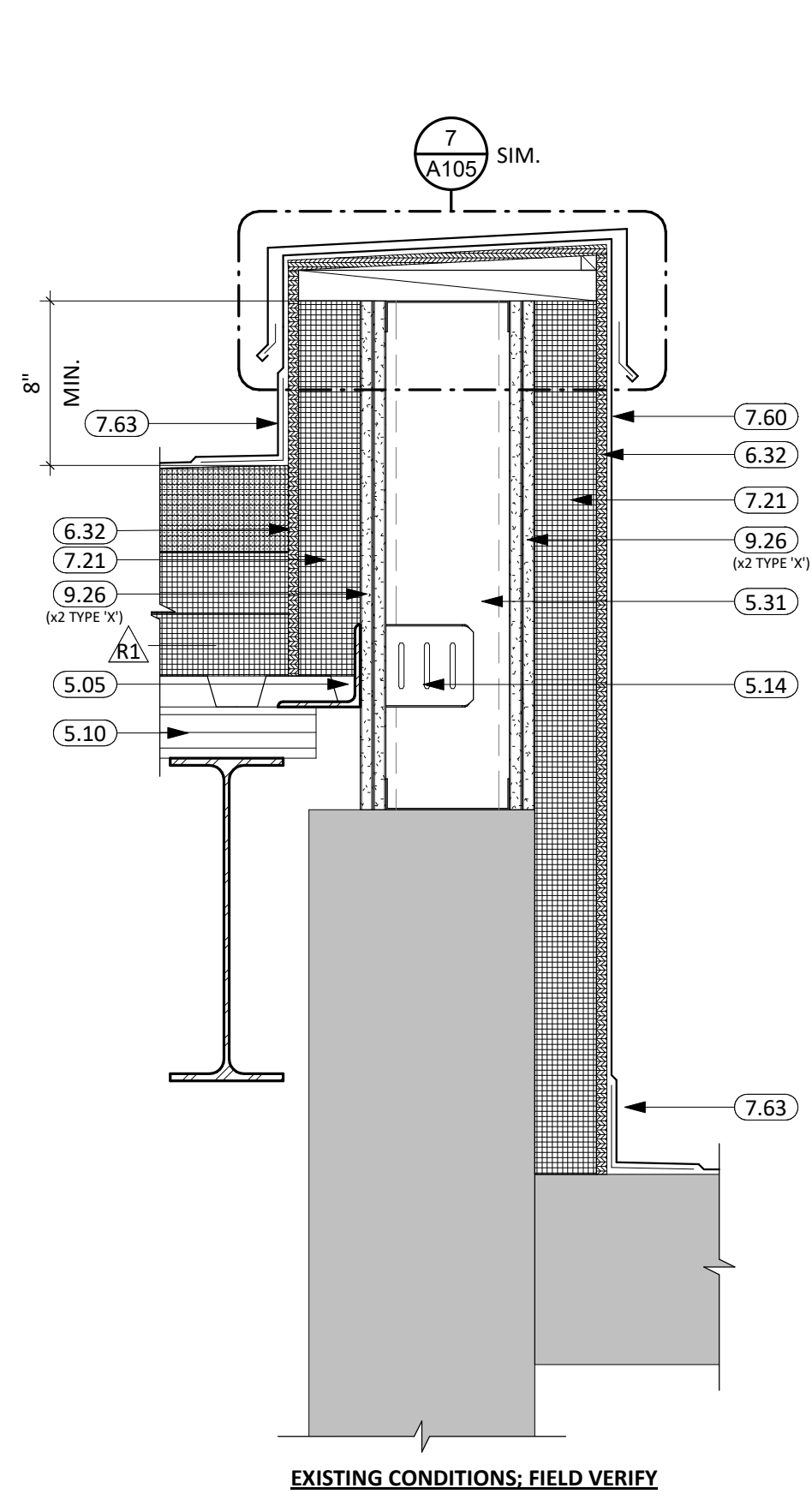
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

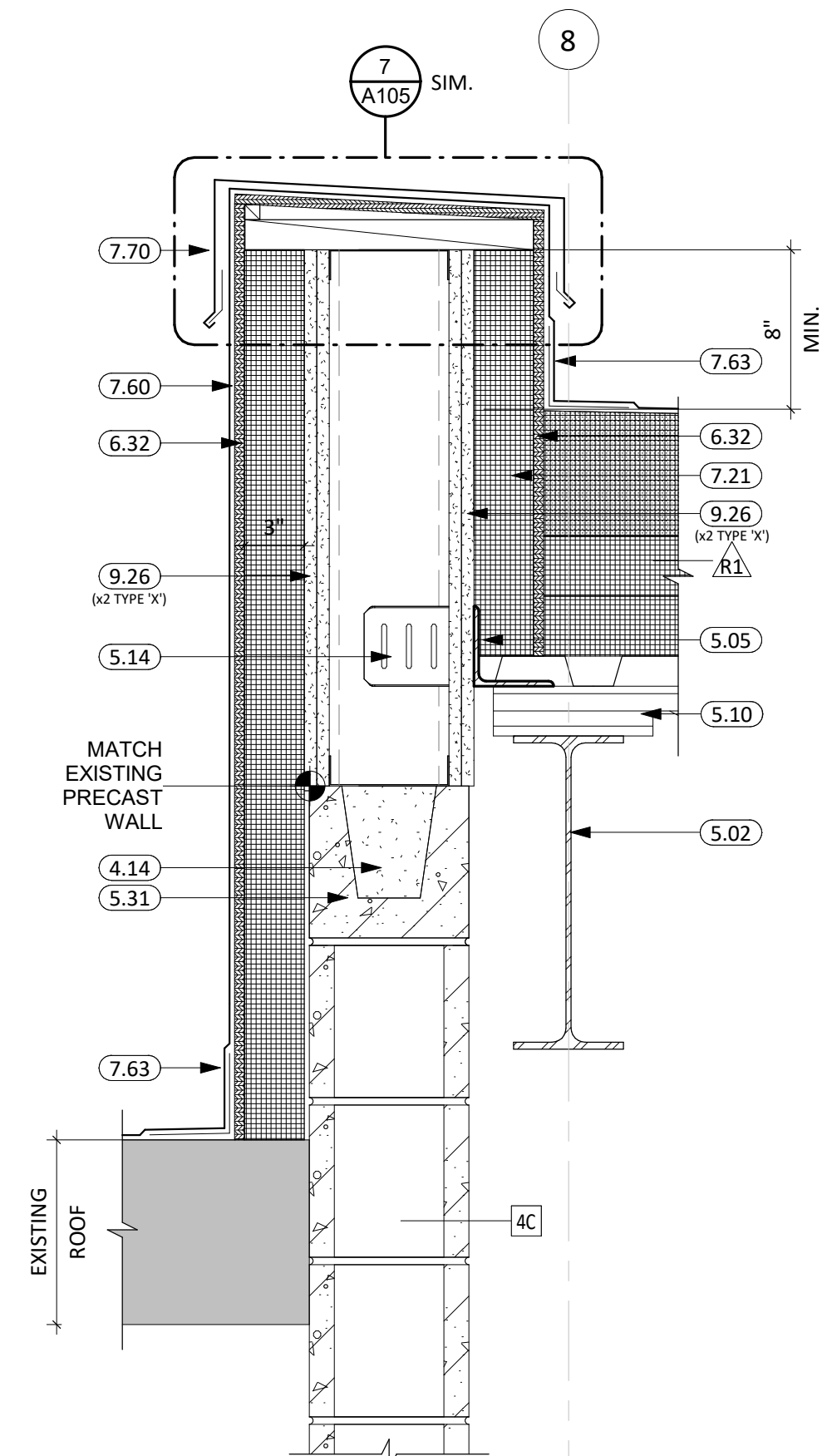
SHEET TITLE:  
EXTERIOR DETAILS

A500



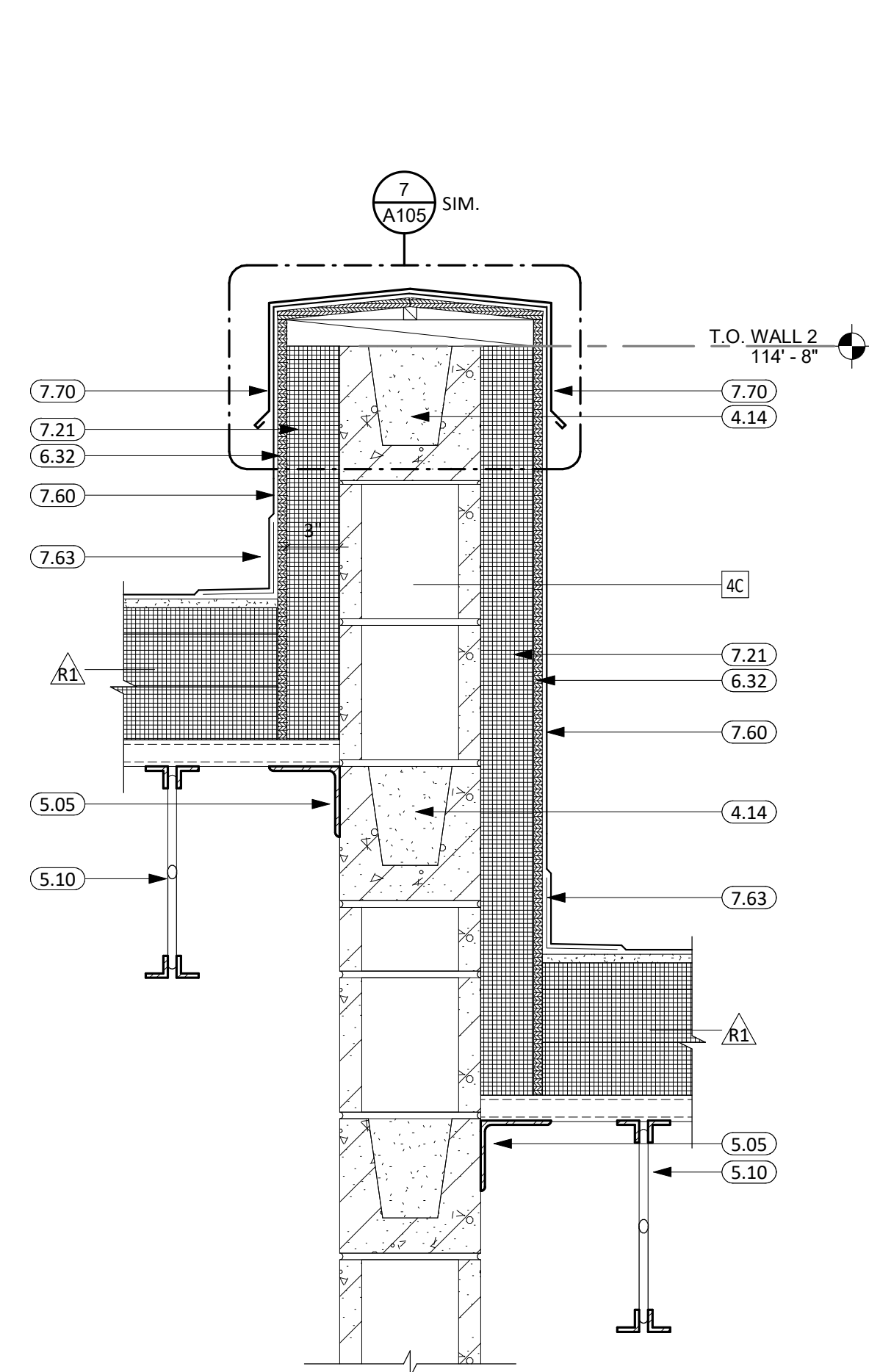
EXISTING CONDITIONS: FIELD VERIFY

1 R1/EXIST. PC WALL  
1 1/2" = 1'-0"



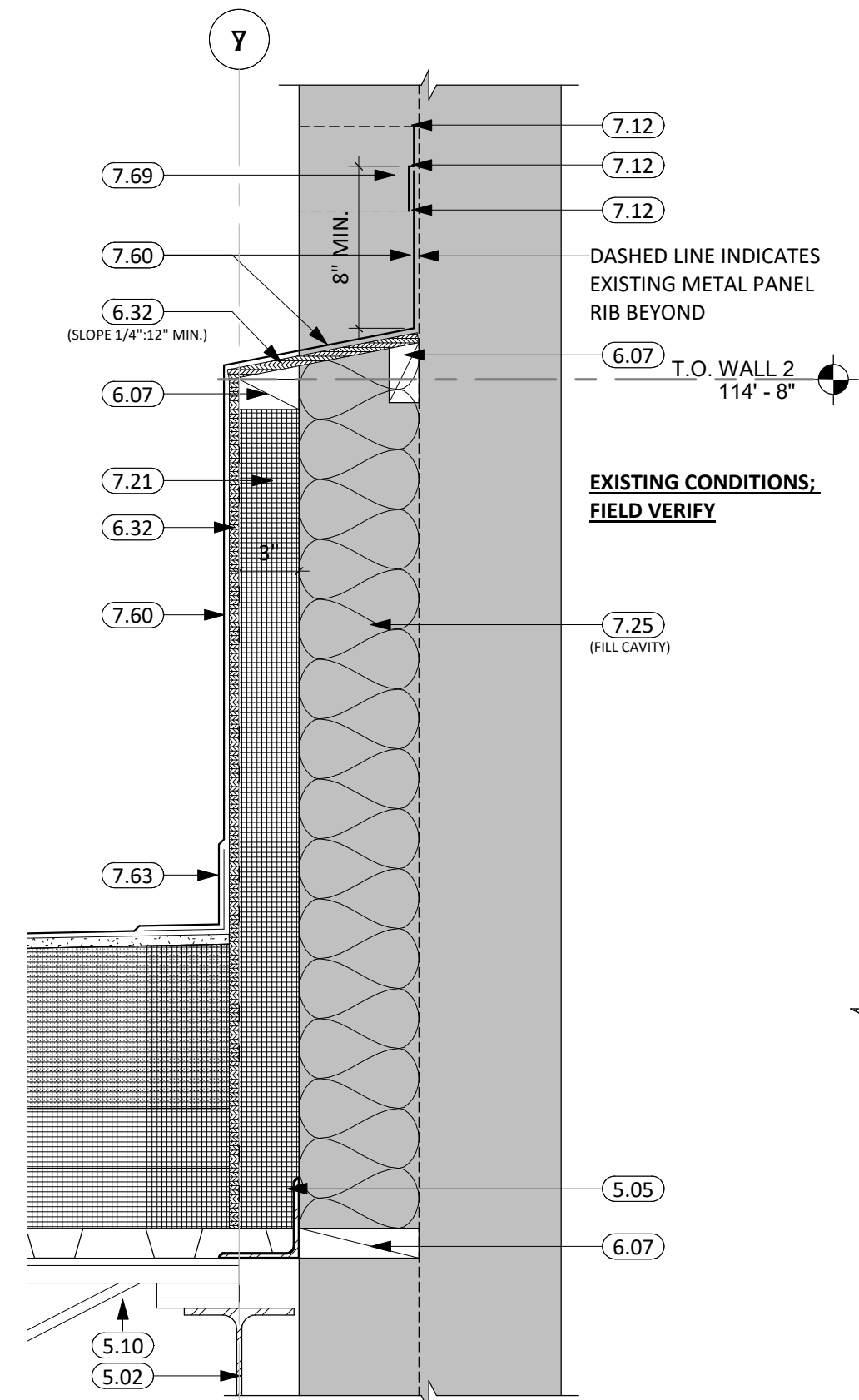
EXISTING CONDITIONS: FIELD VERIFY

2 R1/EXIST. PC WALL 2  
1 1/2" = 1'-0"



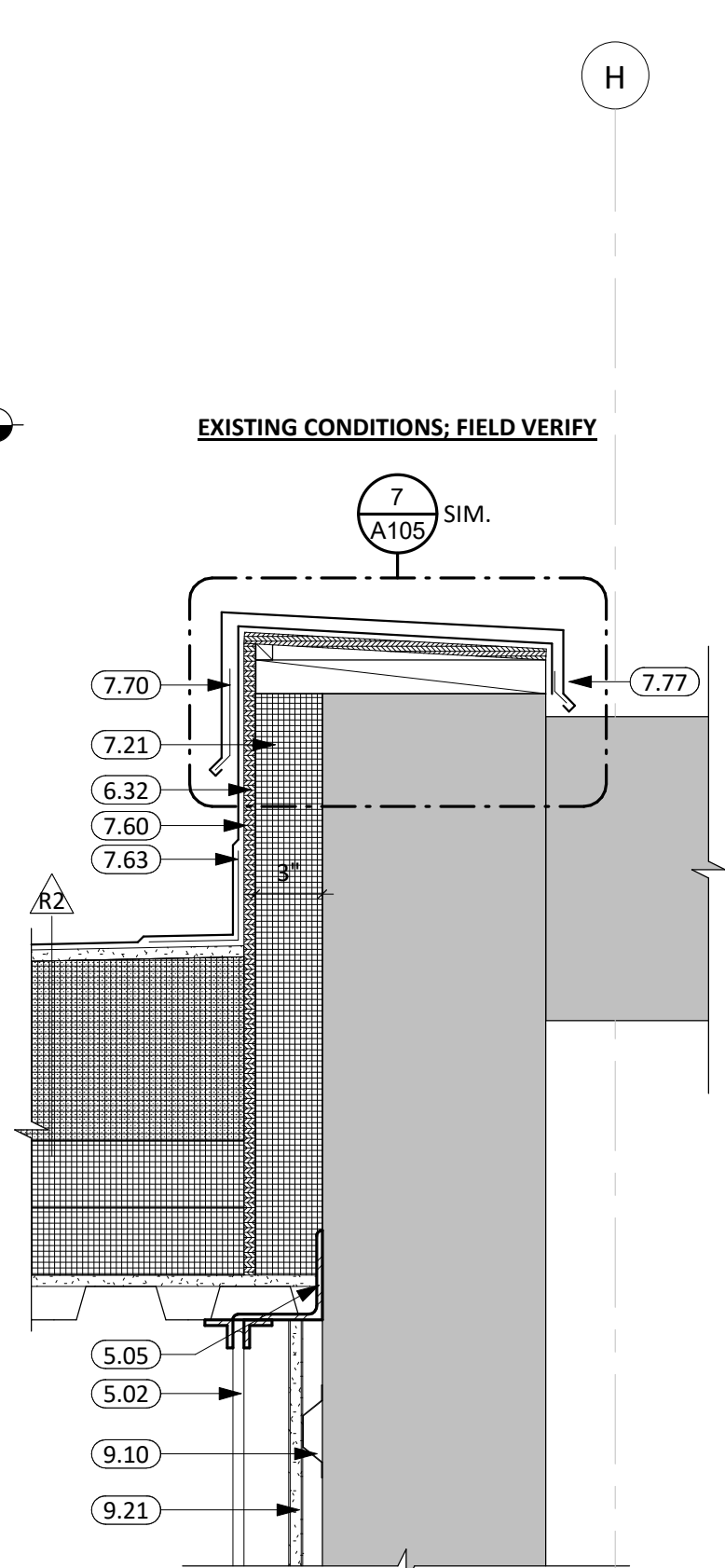
EXISTING CONDITIONS: FIELD VERIFY

3 4C - PARAPET  
1 1/2" = 1'-0"



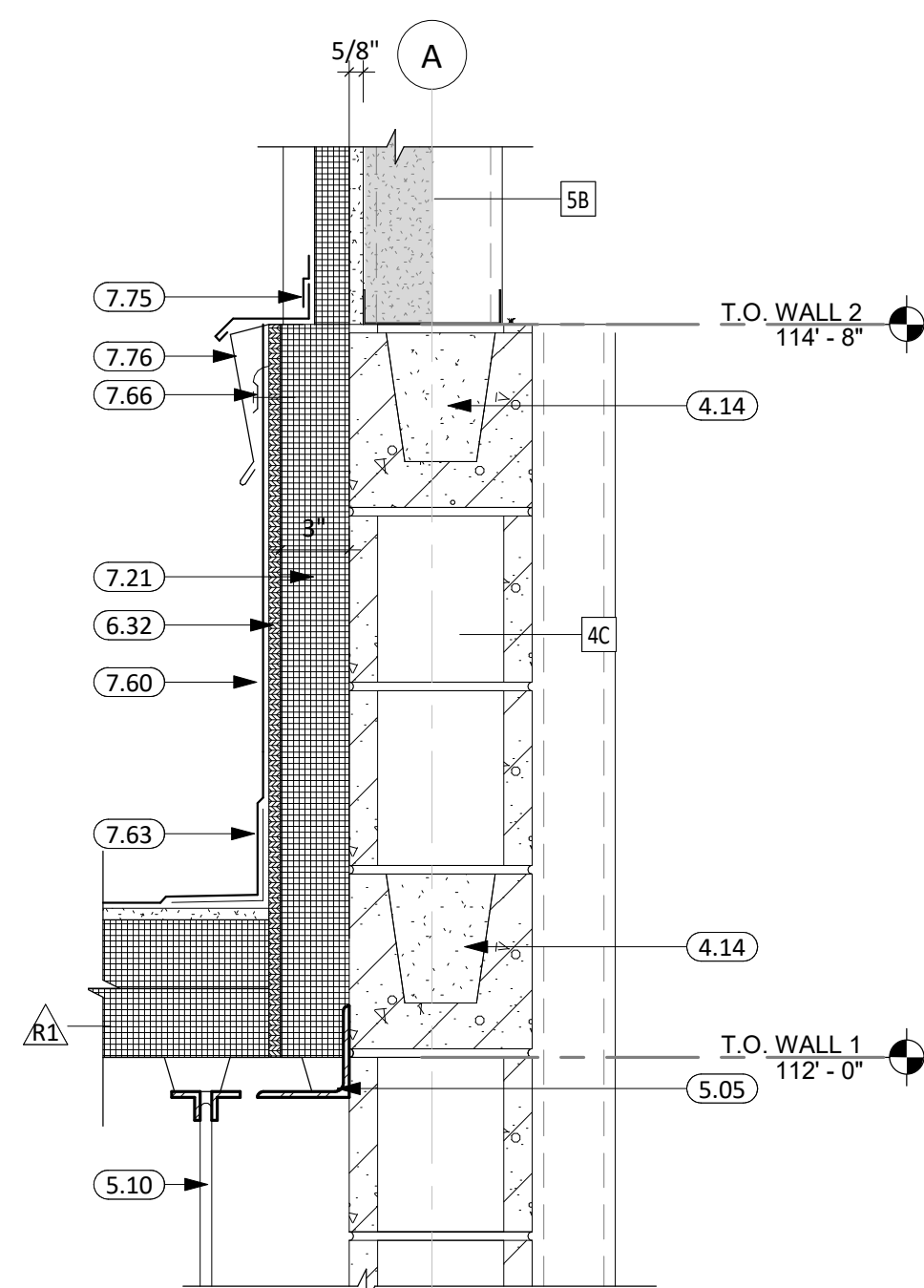
EXISTING CONDITIONS: FIELD VERIFY

4 R1/EXIST. MTL WALL TIE-IN  
1 1/2" = 1'-0"



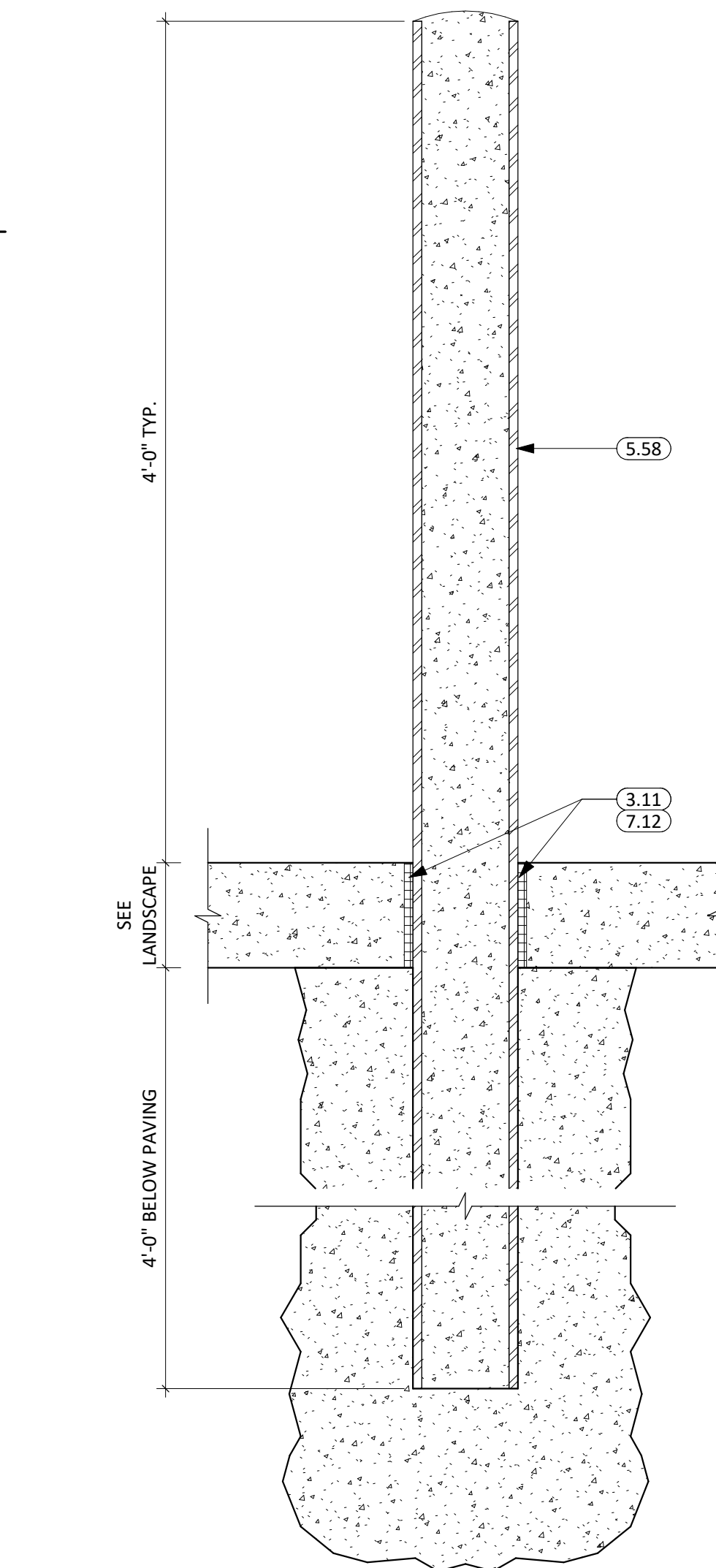
EXISTING CONDITIONS: FIELD VERIFY

5 R2/EXIST. MTL WALL TIE-IN  
1 1/2" = 1'-0"



EXISTING CONDITIONS: FIELD VERIFY

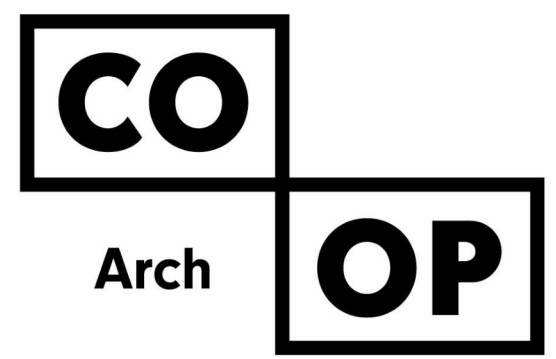
6 5B/4C TRANSITION @ R1  
1 1/2" = 1'-0"



EXISTING CONDITIONS: FIELD VERIFY

7 TYP. BOLLARD SECTION  
1 1/2" = 1'-0"

KEYNOTE SCHEDULE	
3.11	1/2" EXPANSION/ISOLATION JOINT MATERIAL
4.14	BOND BEAM MASONRY UNIT
5.02	STRUCTURAL STEEL BEAM (SEE ARCH. & STRUCT.)
5.05	STRUCTURAL STEEL ANGLE (SEE ARCH. & STRUCT.)
5.10	STEEL JOIST (SEE ARCH. & STRUCT.)
5.14	SLIDE-CLIP CONNECTOR; (SEE STRUCT.)
5.31	6" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.58	PIPE BOLLARD (FILL w/CONC.) (SEE ARCH. & STRUCT.)
6.07	2x WOOD BLOCKING AS REQUIRED
6.32	ROOF SHEATHING
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.21	RIGID INSULATION
7.25	SPRAY APPLIED FOAM INSULATION (3" MIN.)
7.60	FULLY ADHERED EPDM SINGLE MEMBRANE ROOF (WRAP PARAPET WHERE OCCURS)
7.63	REINFORCED PERIMETER FASTENING STRIP
7.66	TERMINATION BAR AND HIGH GRADE SEALANT
7.69	FLEXIBLE ROOF MEMBRANE FLASHING; FOLLOW EXISTING METAL PANEL RIBS AND PROVIDE WEATHER TIGHT SEALANT ON EITHER SIDE.
7.70	PRE-FINISHED SHEET METAL FLASHING
7.75	PRE-FINISHED SILL FLASHING PER METAL PANEL MFR
7.76	PRE-FINISHED REGLET AND COUNTERFLASHING. PROVIDE CONTINUOUS BEADS OF HIGH GRADE SEALANT AS REQUIRED FOR WATERPROOFING.
7.77	INTEGRATE NEW AND OLD ROOFING TOGETHER AND SEAL WEATHER TIGHT
9.10	7/8" FURRING CHANNEL
9.21	5/8" GYPSUM BOARD
9.26	5/8" EXTERIOR GYPSUM SHEATHING



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

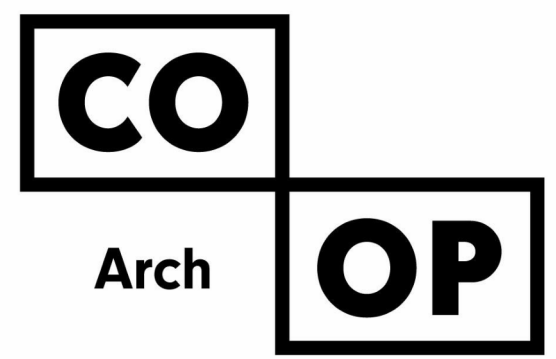
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
EXTERIOR DETAILS

A501

KEYNOTE SCHEDULE	
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.11	1/2" EXPANSION/ISOLATION JOINT MATERIAL
4.14	BOND BEAM MASONRY UNIT
4.17	CMU SOAPBLOCK
5.09	STRUCTURAL STEEL LINTLE (SEE ARCH. & STRUCT.)
5.13	STEEL CONNECTION (SEE ARCH. & STRUCT.)
5.14	SLIDE-CLIP CONNECTOR; (SEE STRUCT.)
5.31	6" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
6.07	2x WOOD BLOCKING AS REQUIRED
6.08	1x WOOD NAILER
6.32	ROOF SHEATHING
7.11	AIR & MOISTURE WEATHER BARRIER
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
7.21	RIGID INSULATION
7.25	SPRAY APPLIED FOAM INSULATION (3" MIN.)
7.60	FULLY ADHERED EPDM SINGLE MEMBRANE ROOF (WRAP PARAPET WHERE OCCURS)
7.69	FLEXIBLE ROOF MEMBRANE FLASHING; FOLLOW EXISTING METAL PANEL RIBS AND PROVIDE WEATHER TIGHT SEALANT ON EITHER SIDE.
7.75	PRE-FINISHED SILL FLASHING PER METAL PANEL MFR
7.97	PROFILED SHEET METAL ROOFING TO MATCH EXISTING AG SHOP ROOFING. LAP AND SEAL TOGETHER AND PROVIDE ALL REQUIRED FLASHINGS AND SEALANTS.
8.01	DOOR (SEE SCHED.)
8.02	FRAME (SEE SCHED.)
9.04	3 5/8" STEEL STUD & TRACK FRAMING
9.28	5/8" TYPE 'X' GYPSUM BOARD
9.29	EXTEND LAYER OF GYP OVER FOUNDATION WALL AND SCRIBE TO RAMP BELOW. SECURE TO FOUNDATION WALL WITH MANUFACTURER APPROVED ADHESIVE.
22.07	OBLIQUE ROOF DRAIN; SEE MECHANICAL

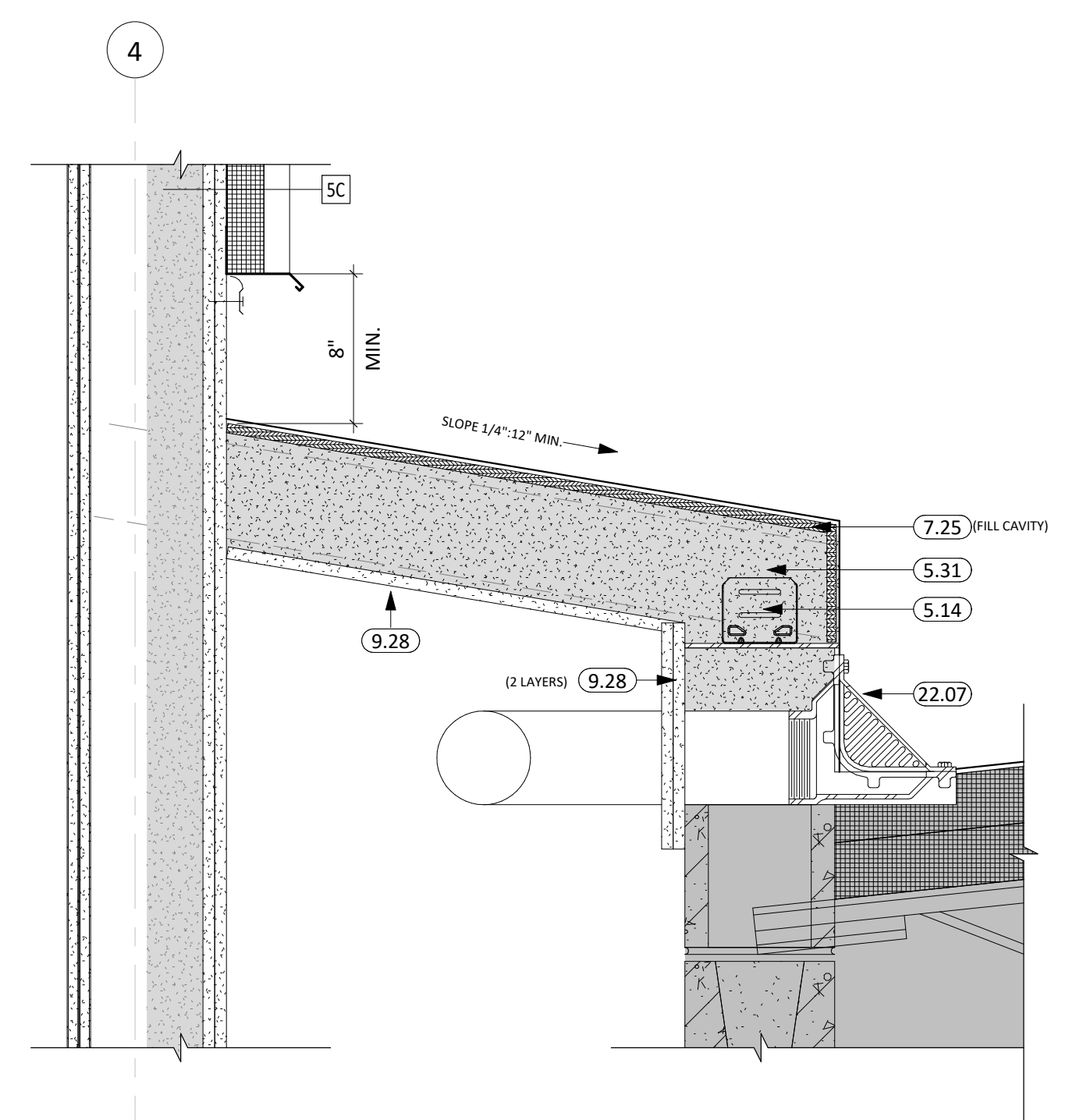


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

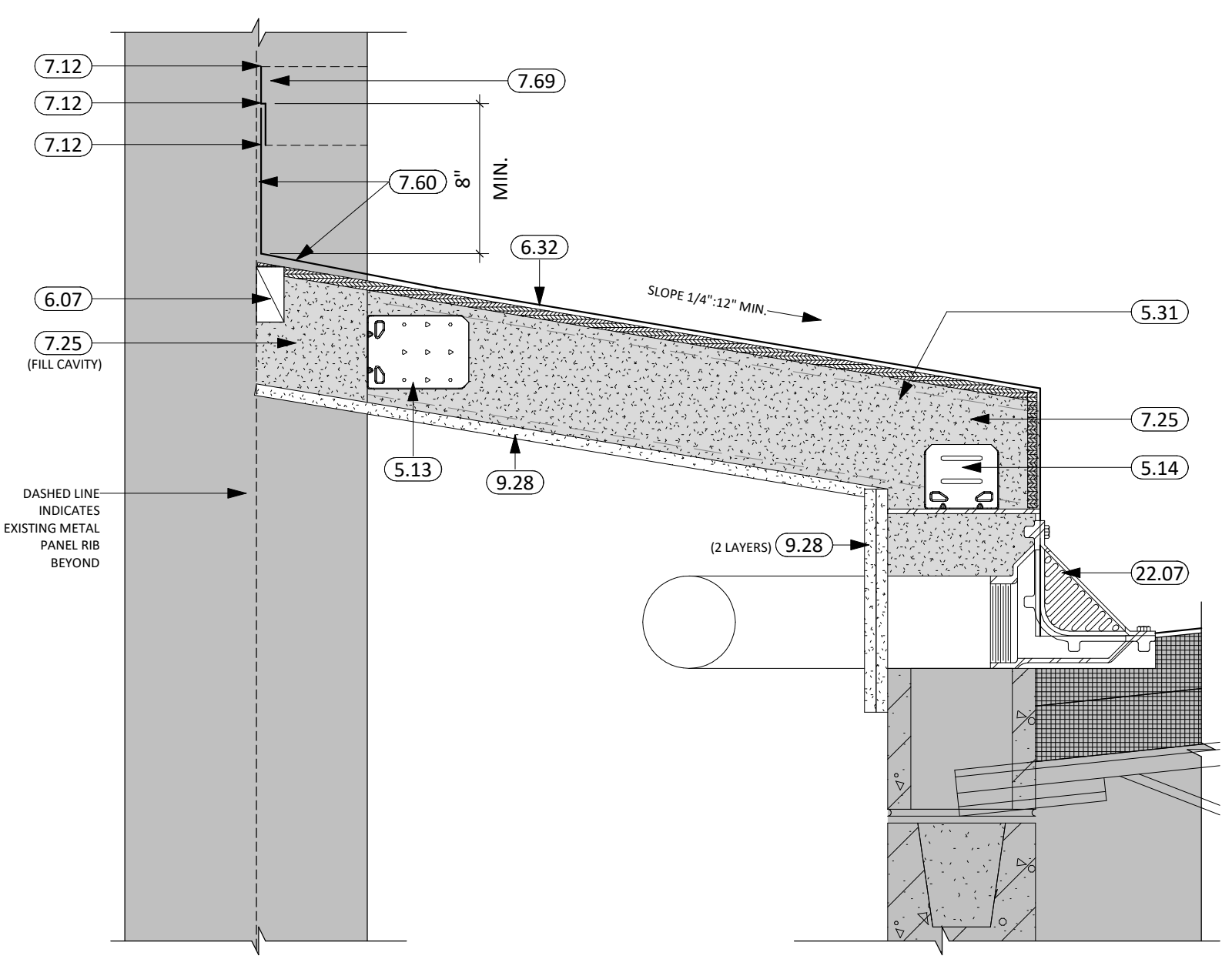
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

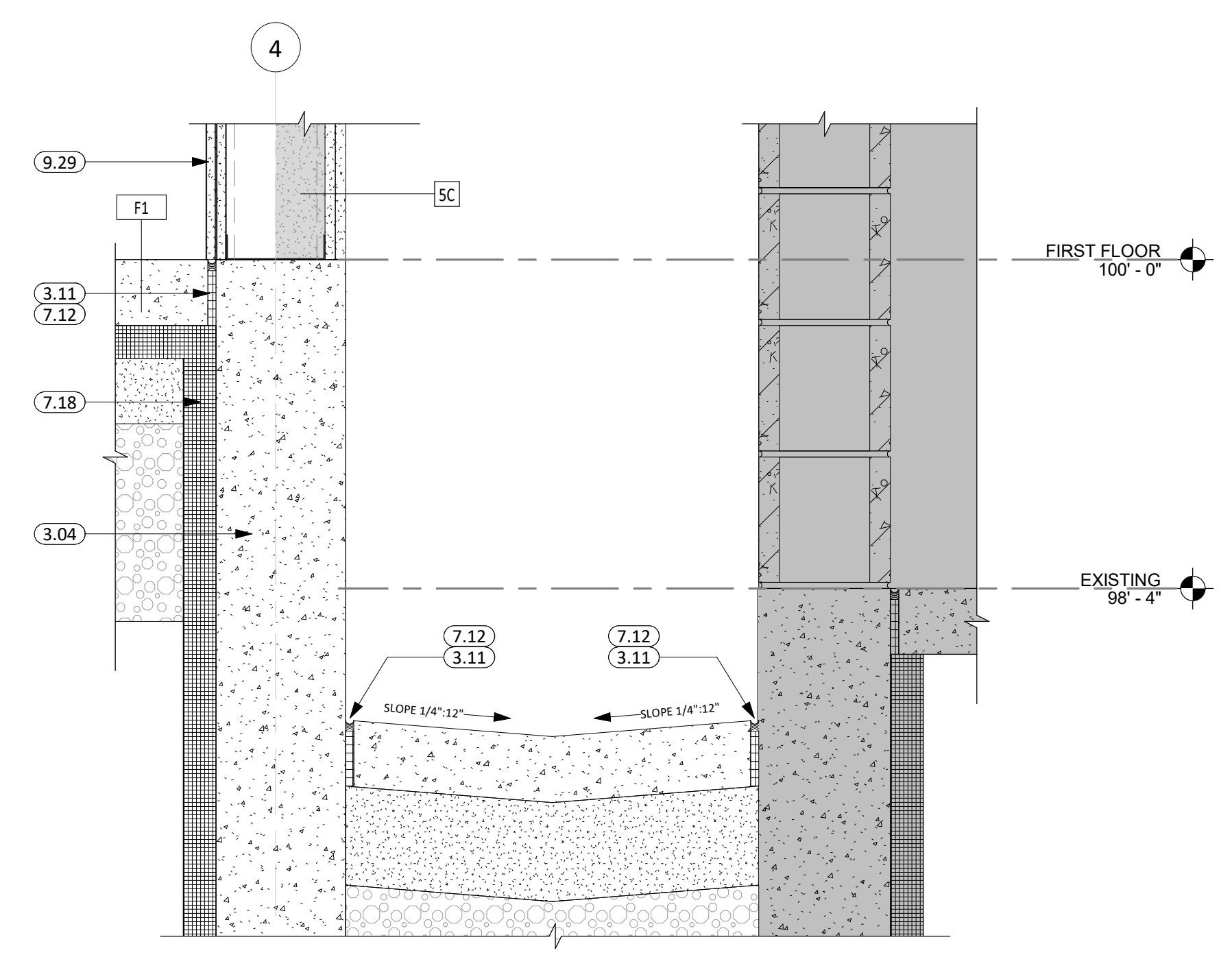
co-oparch.com



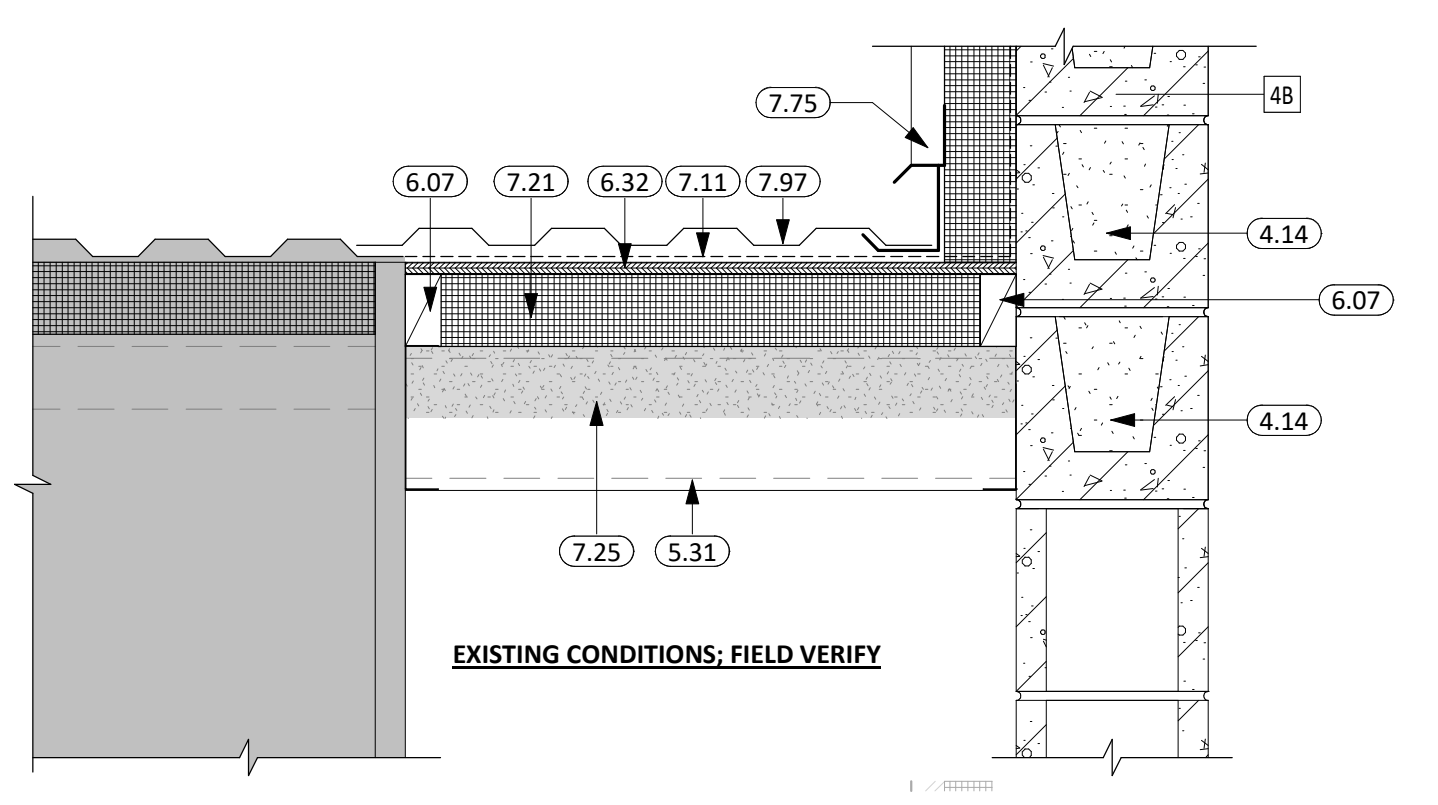
1 DRAIN CHANNEL ROOF BRG @ NEW  
1 1/2" = 1'-0"



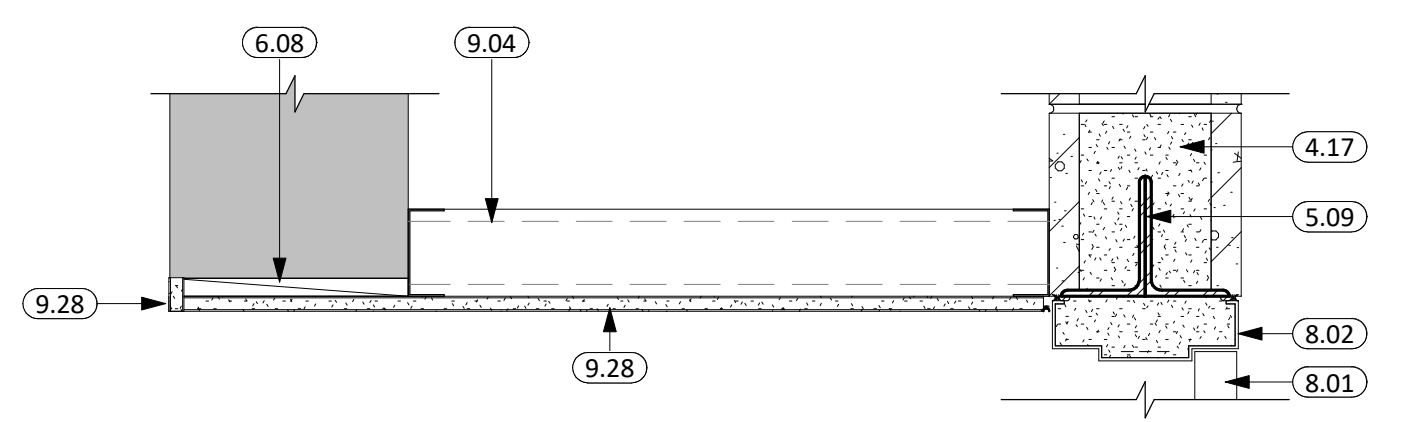
2 DRAIN CHANNEL ROOF BRG @ EXISTING  
1 1/2" = 1'-0"



3 5C FND @ DRAIN CHANNEL  
1 1/2" = 1'-0"



4 4B/EXISTING AG SHOP ROOF  
1 1/2" = 1'-0"



5 CORRIDOR D199B BRG  
1 1/2" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

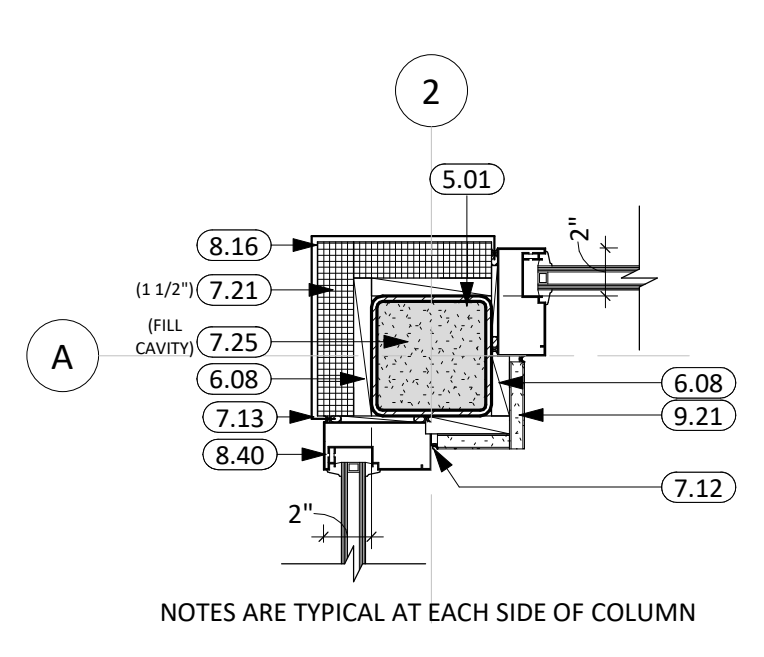
REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

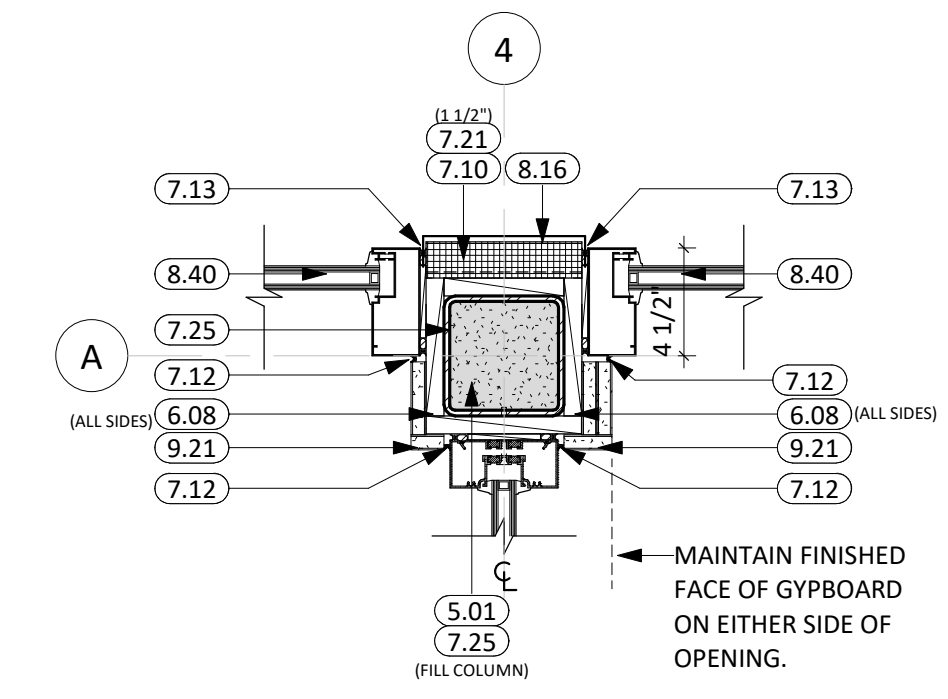
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
EXTERIOR DETAILS

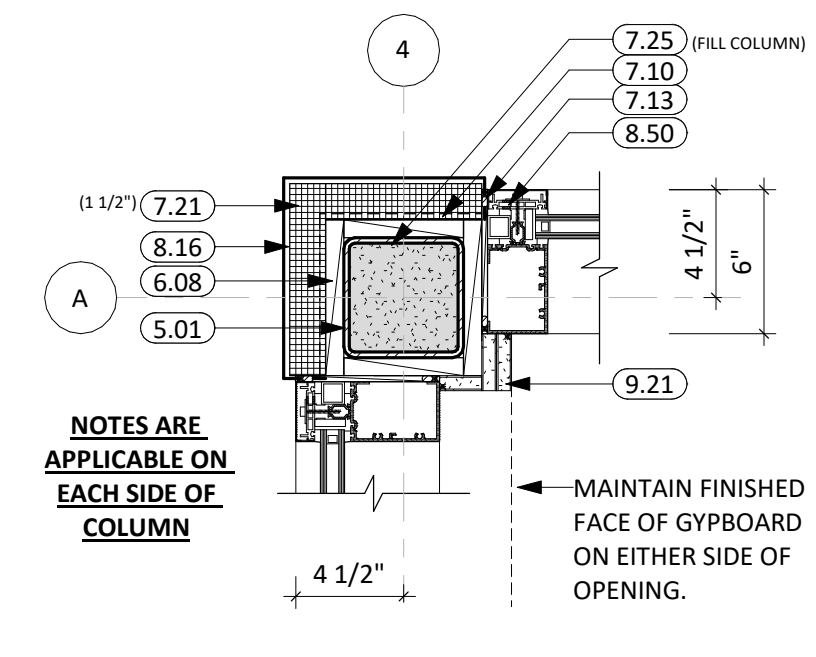
A503



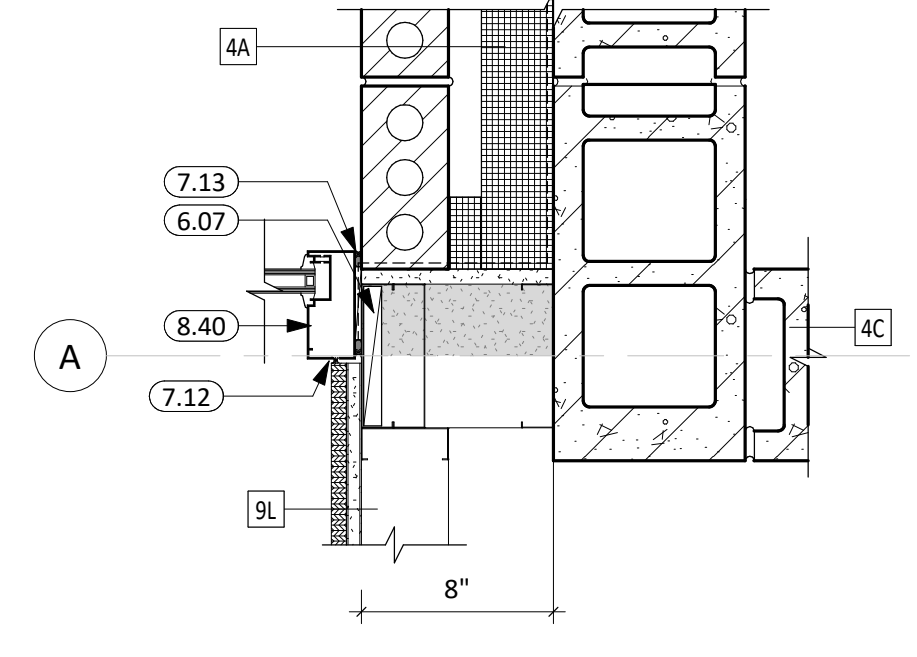
1 SF CORNER DETAIL @ COLUMN  
1 1/2" = 1'-0"



2 PLAN DETAIL - SF @ COMMONS  
1 1/2" = 1'-0"

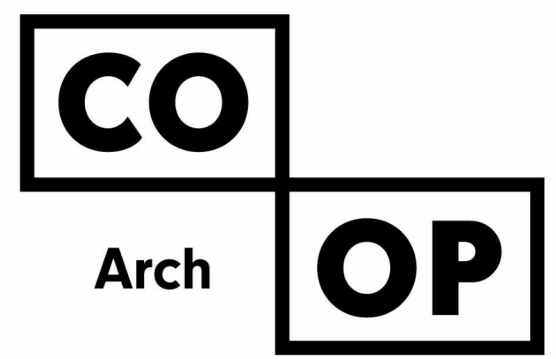


3 CW/SF CORNER @ GRIDS (A,4)  
1 1/2" = 1'-0"



4 PLAN DETAIL - 4A - SF  
1 1/2" = 1'-0"

KEYNOTE SCHEDULE	
3.14	PRECAST CONNECTION BY PC SUPPLIER
5.01	STRUCTURAL STEEL COLUMN (SEE ARCH. & STRUCT.)
5.30	3 5/8" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.31	6" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
6.07	2x WOOD BLOCKING AS REQUIRED
6.08	1x WOOD NAILER
7.06	WRAP VAPOR BARRIER INTO WINDOW OPENING
7.10	VAPOR BARRIER
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.13	SEALANT AROUND PERIMETER (TYP. BOTH SIDES)
7.20	BATT INSULATION
7.21	RIGID INSULATION
7.25	SPRAY APPLIED FOAM INSULATION (3" MIN.)
7.45	PRE-FINISHED EXPANSION JOINT ASSEMBLY; BASIS OF DESIGN: INPRO 1200 FOAM SEAL SERIES
7.74	PRE-FINISHED J-CHANNEL
8.02	FRAME (SEE SCHED.)
8.16	BRAKE METAL; MATCH ALUMINUM FRAME FINISH
8.40	ALUMINUM FRAMED ENTRANCE/STOREFRONT
8.50	ALUMINUM CURTAIN WALL
9.21	5/8" GYPSUM BOARD
9.22	5/8" HIGH IMPACT GYPSUM BOARD

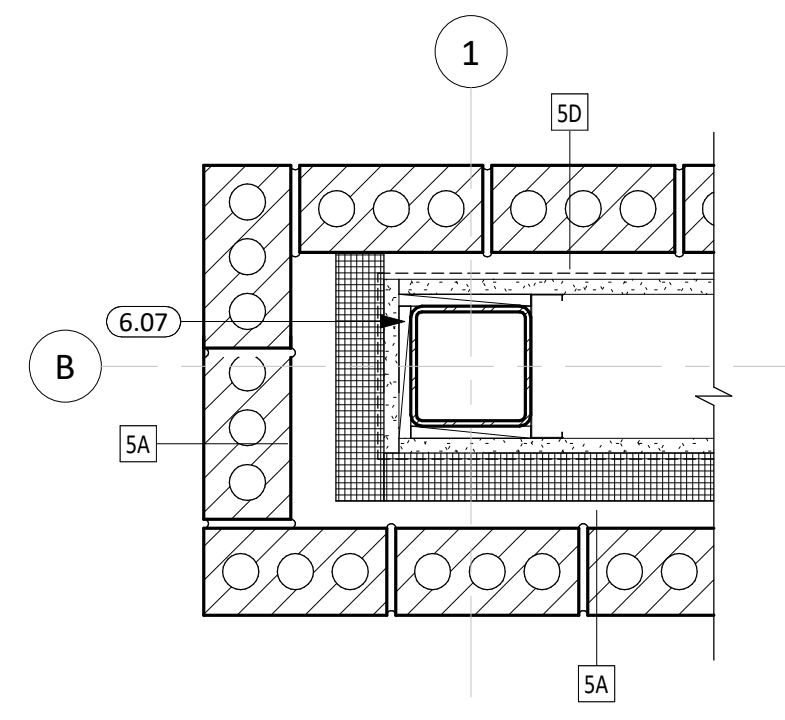


1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

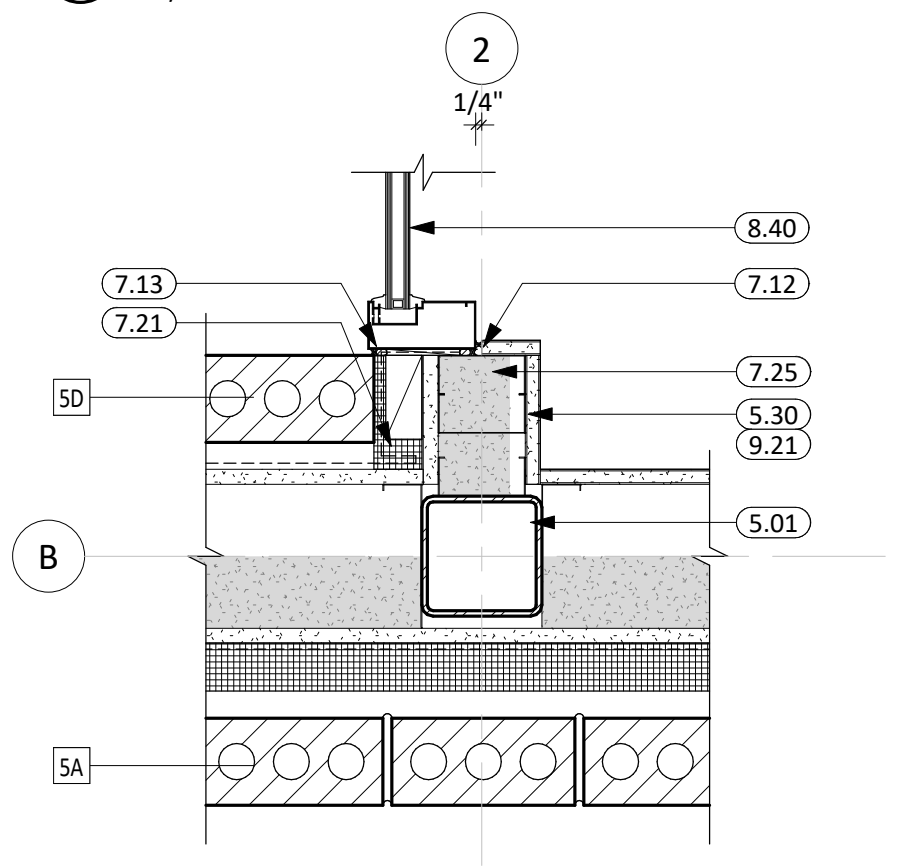
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

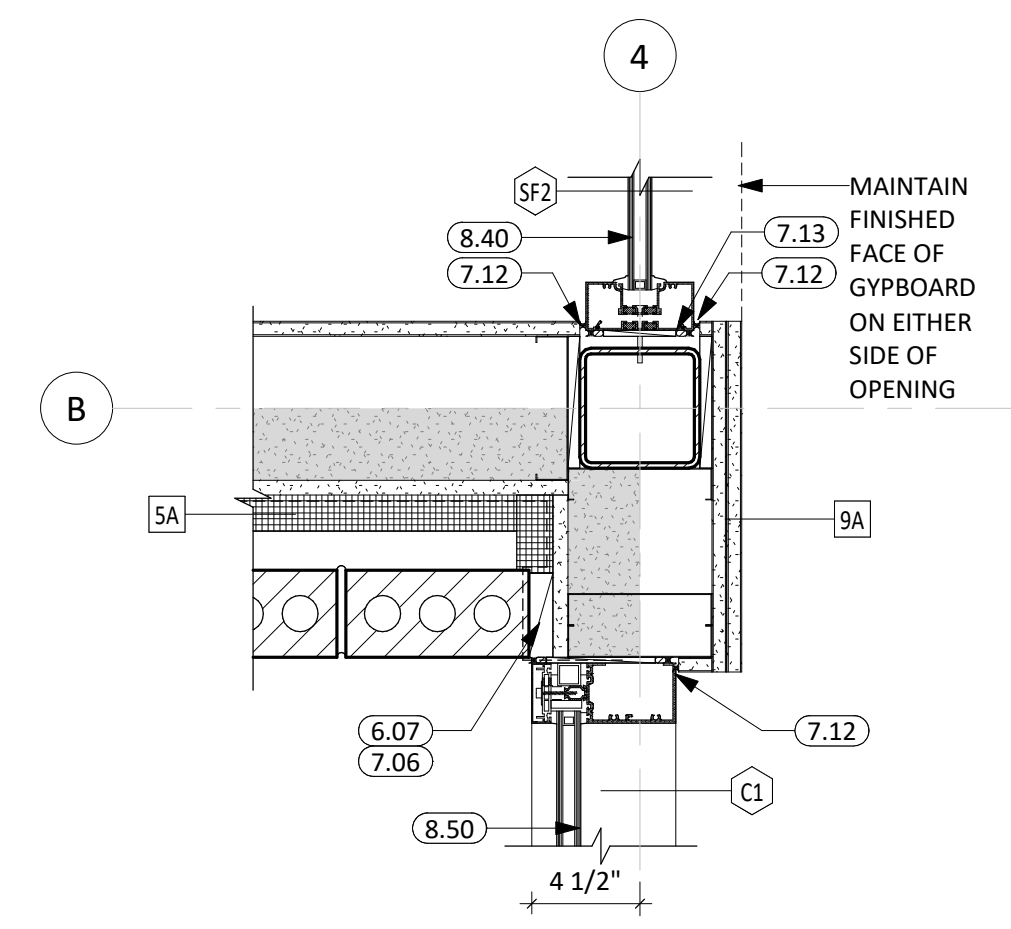
co-oparch.com



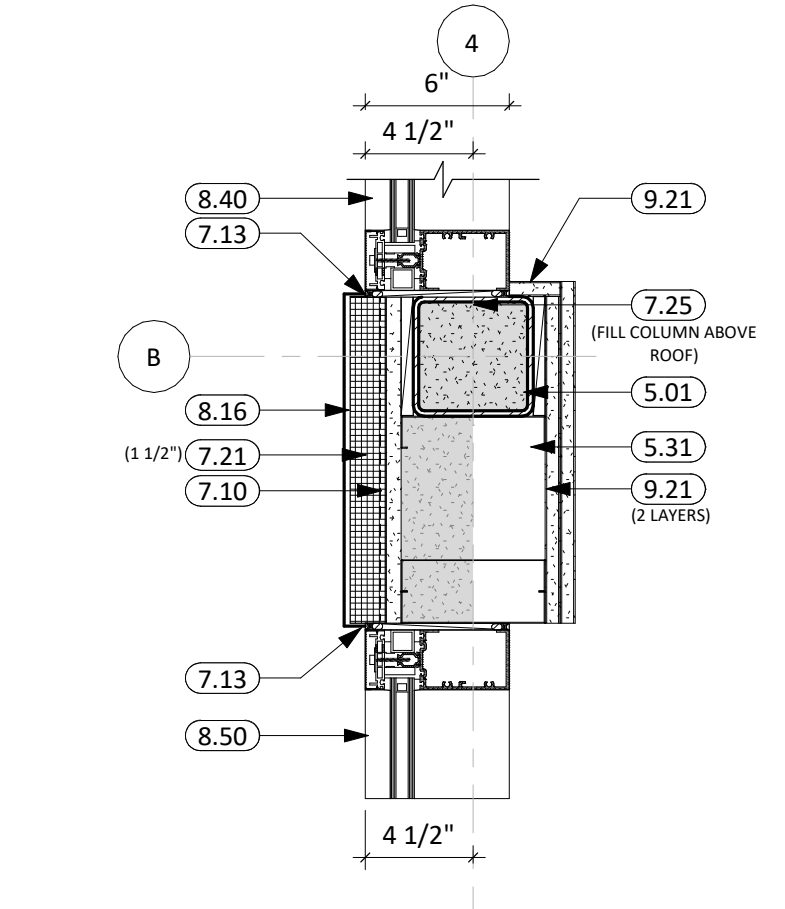
5 PLAN DETAIL - 5A @ COLUMN  
1 1/2" = 1'-0"



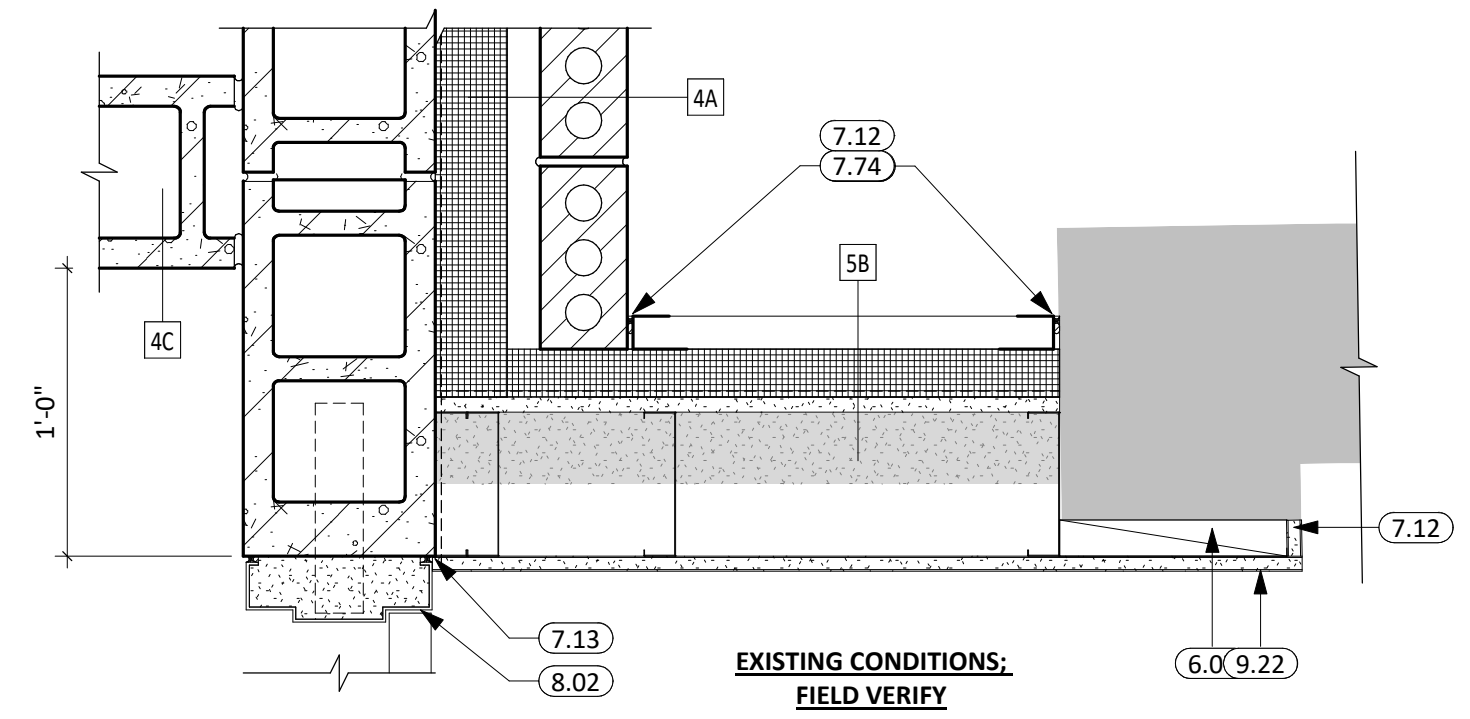
6 PLAN DETAIL - 5A @ VESTIBULE  
1 1/2" = 1'-0"



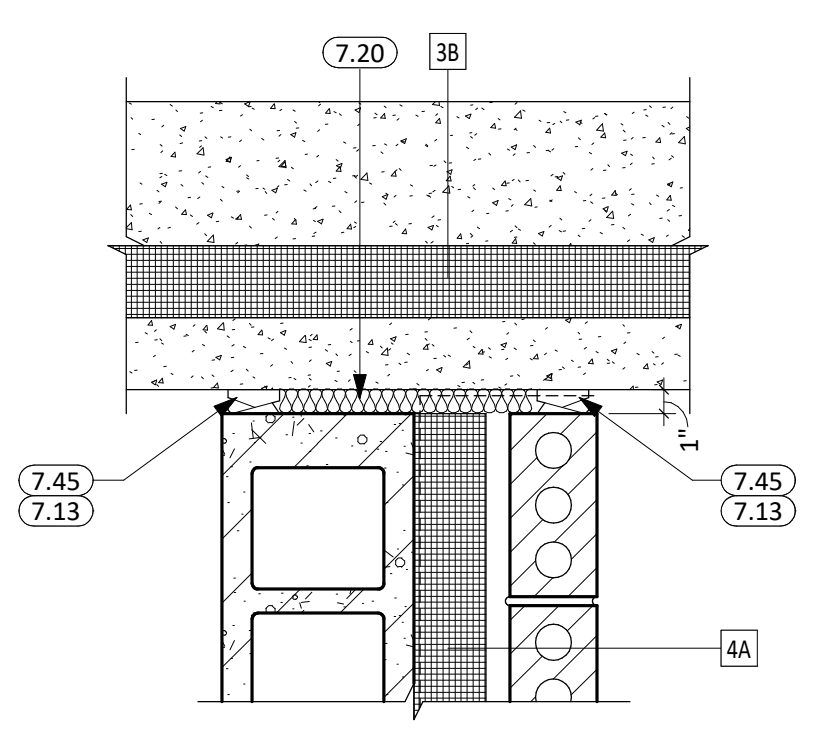
7 PLAN DETAIL - 5A @ COMMONS  
1 1/2" = 1'-0"



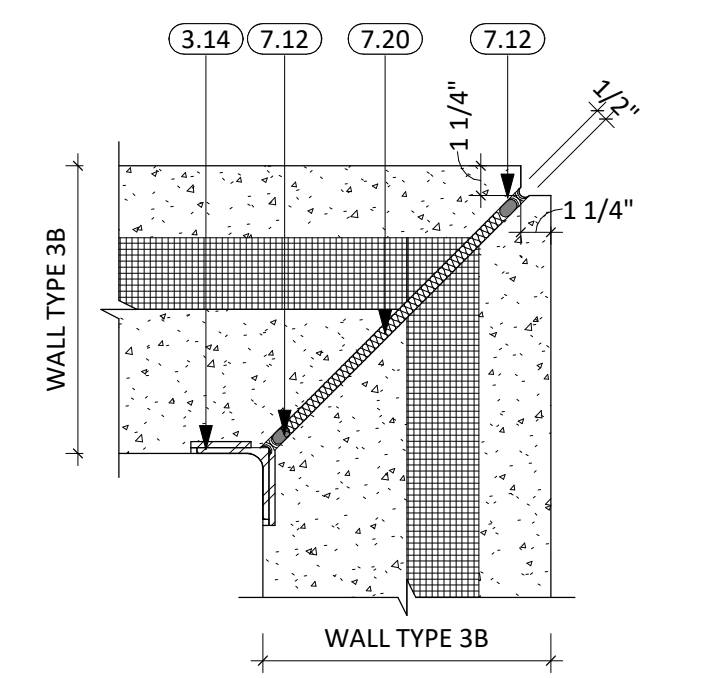
8 CW/SF @ GRIDS (B,4)  
1 1/2" = 1'-0"



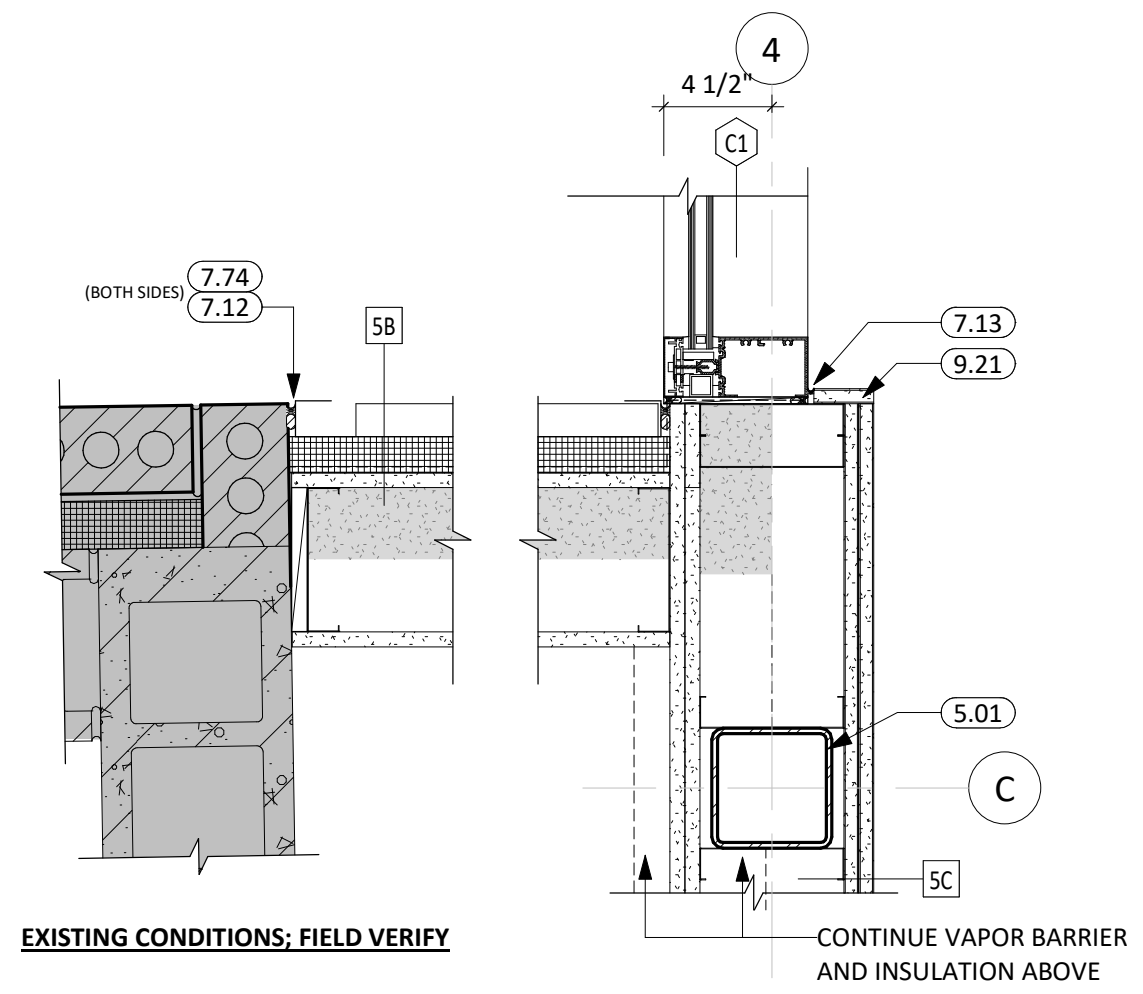
13 PLAN DETAIL - COR. D199B @ EXIST. 1  
1 1/2" = 1'-0"



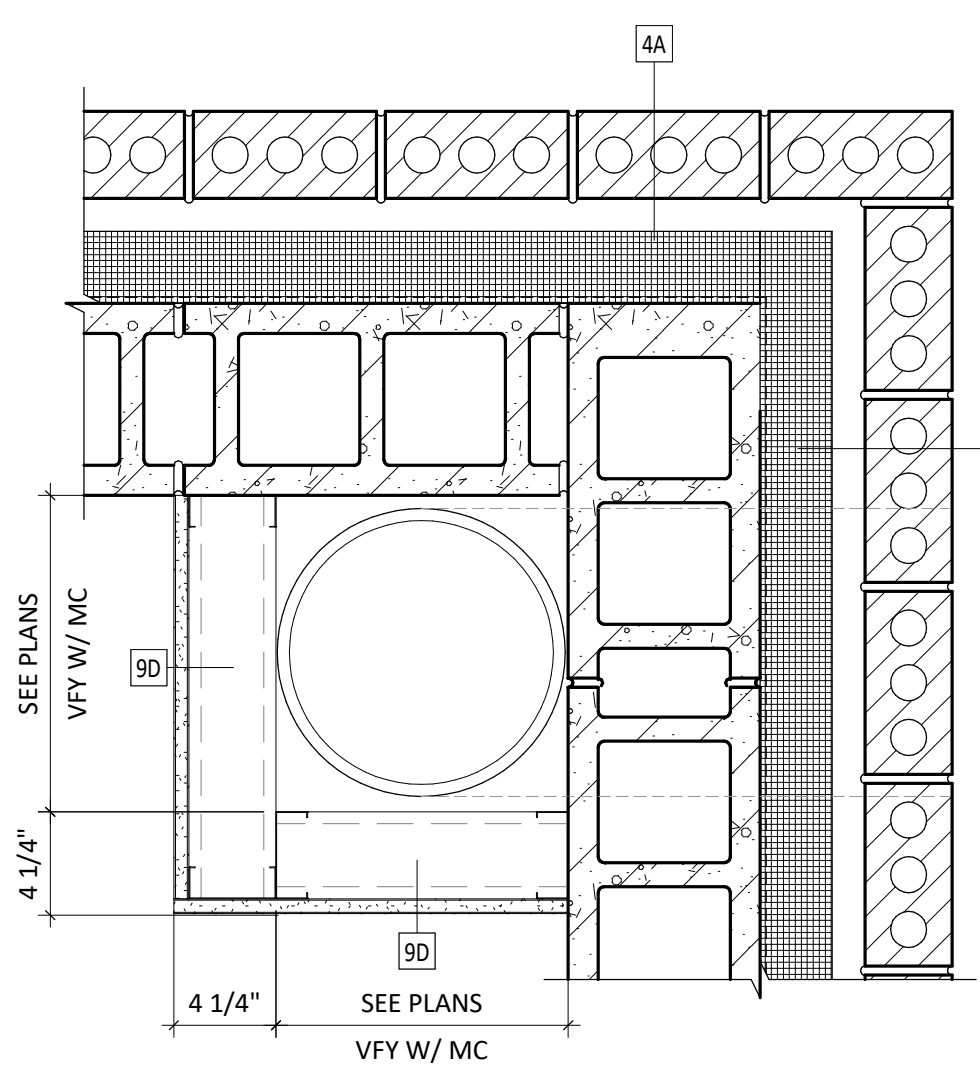
9 PLAN DETAIL - 4A - 3B  
1 1/2" = 1'-0"



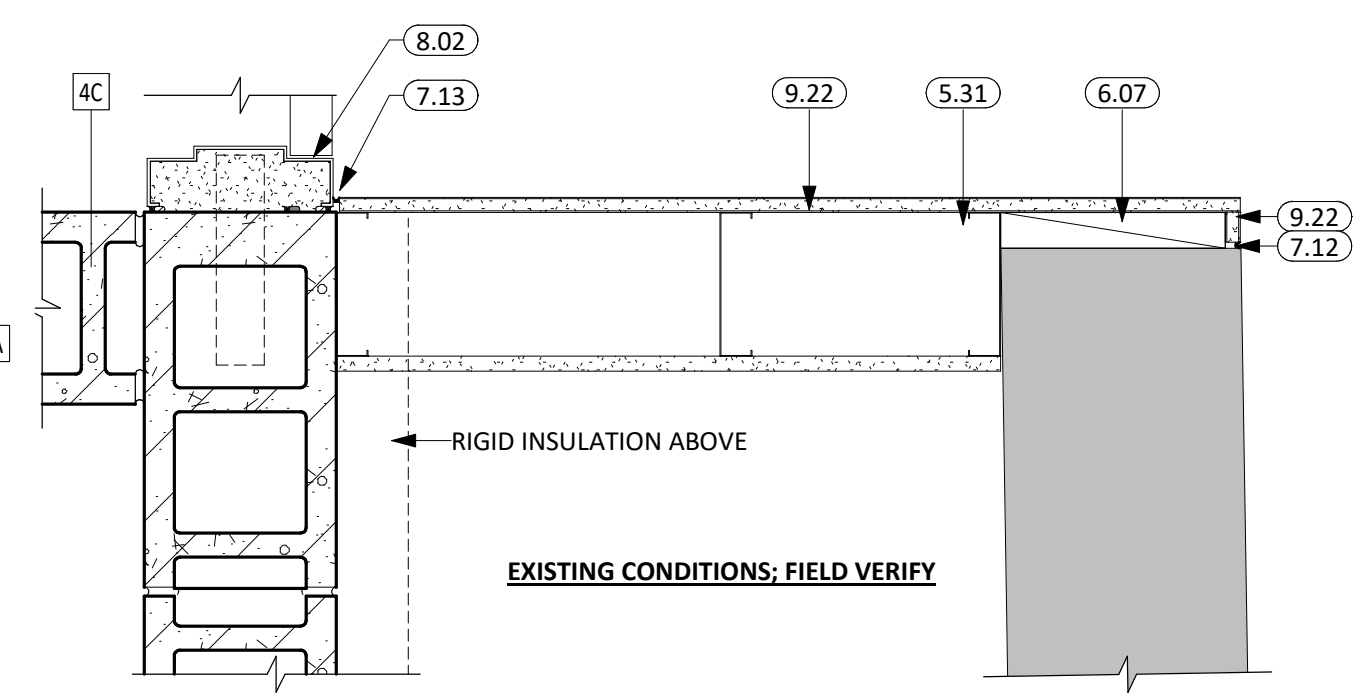
10 PLAN DETAIL - 3B - TYP. CORNER  
1 1/2" = 1'-0"



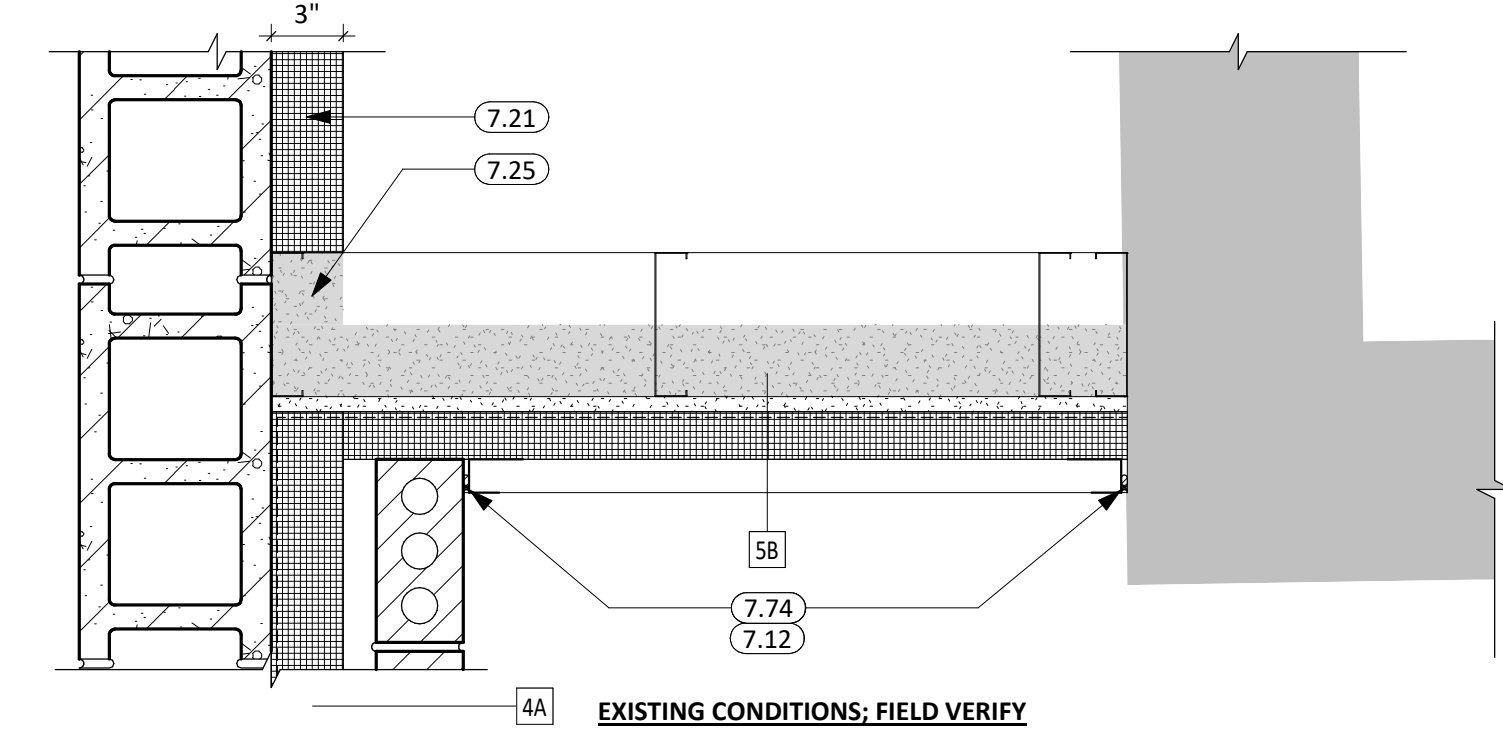
11 PLAN DETAIL - C1 @ EXISTING  
1 1/2" = 1'-0"



12 TYP. CORNER W/ MECH. CHASE  
1 1/2" = 1'-0"



14 PLAN DETAIL - CORR. D199B @ EXIST. 2  
1 1/2" = 1'-0"



15 PLAN DETAIL - 4A @ EXISTING  
1 1/2" = 1'-0"

CO-OP PROJECT NO: 2153



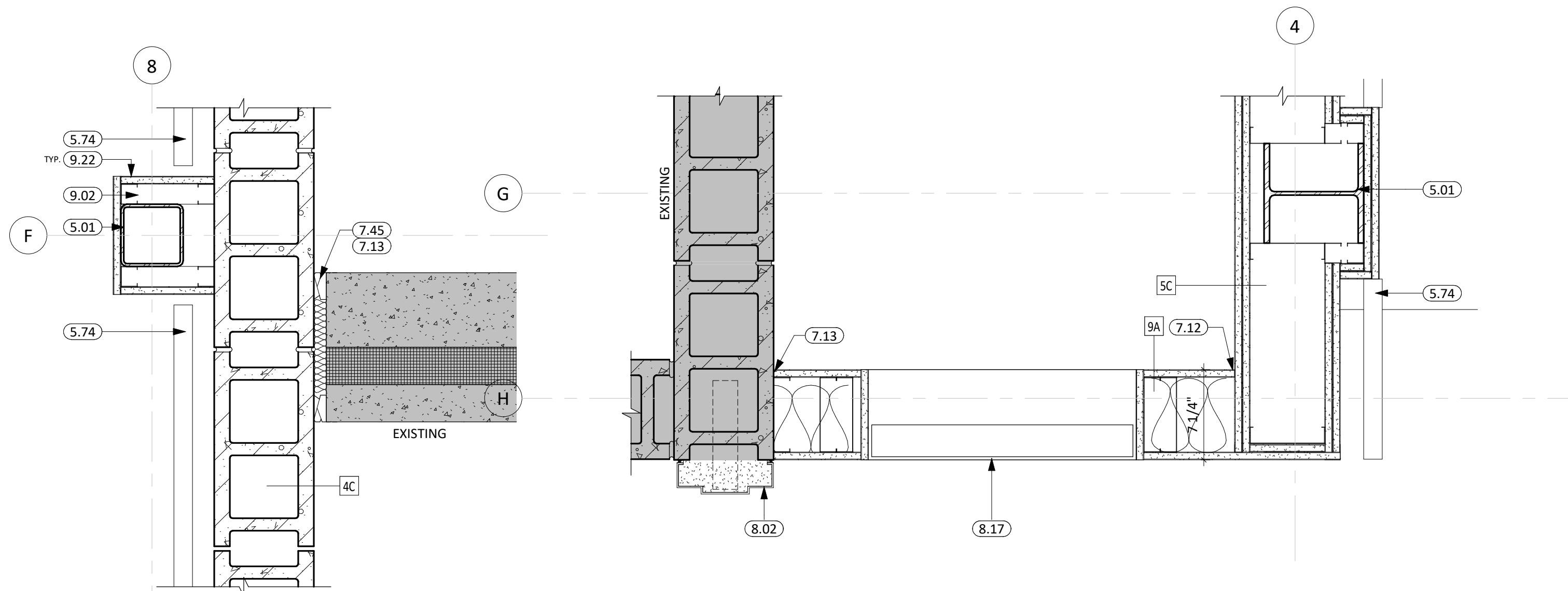
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

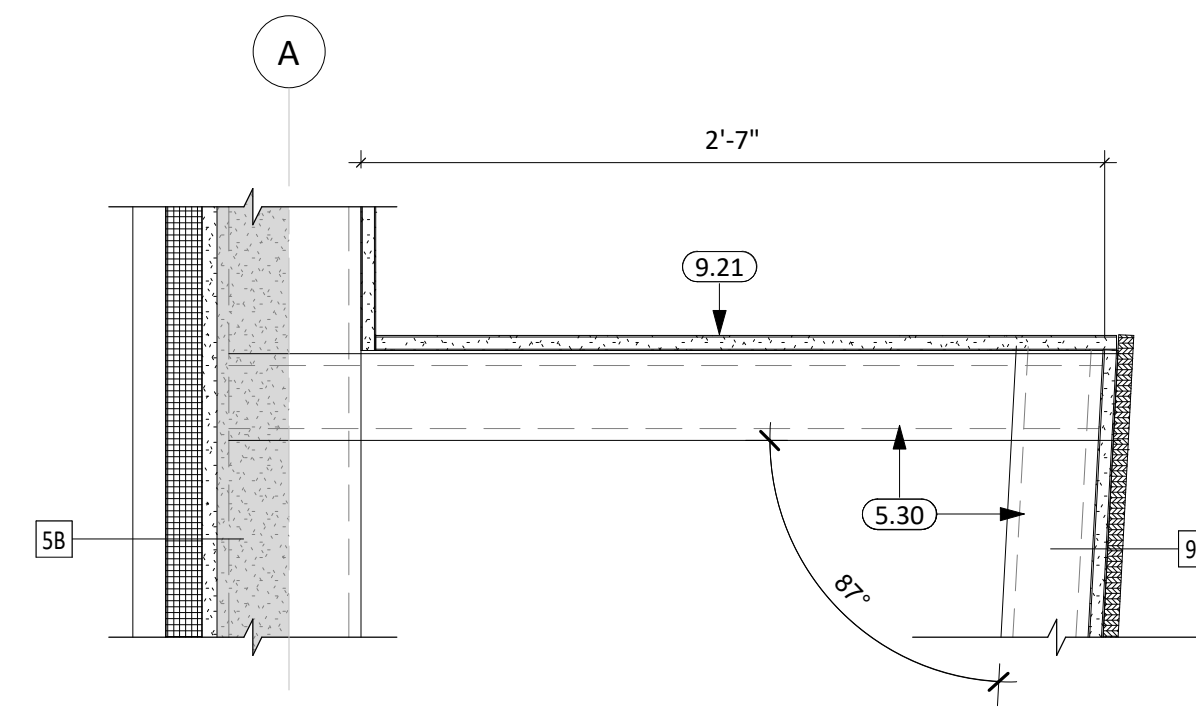
SHEET TITLE:  
EXTERIOR PLAN DETAILS

A505

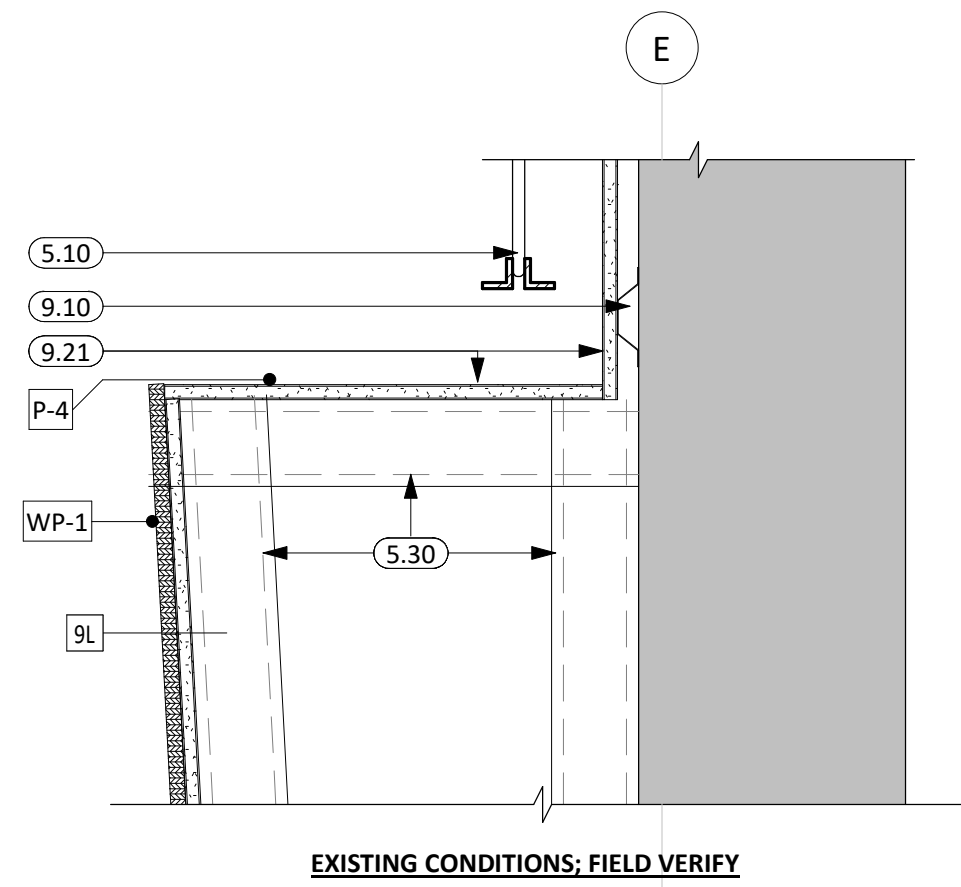


1 PLAN DETAIL - CORNER @ STORAGE  
1 1/2" = 1'-0"

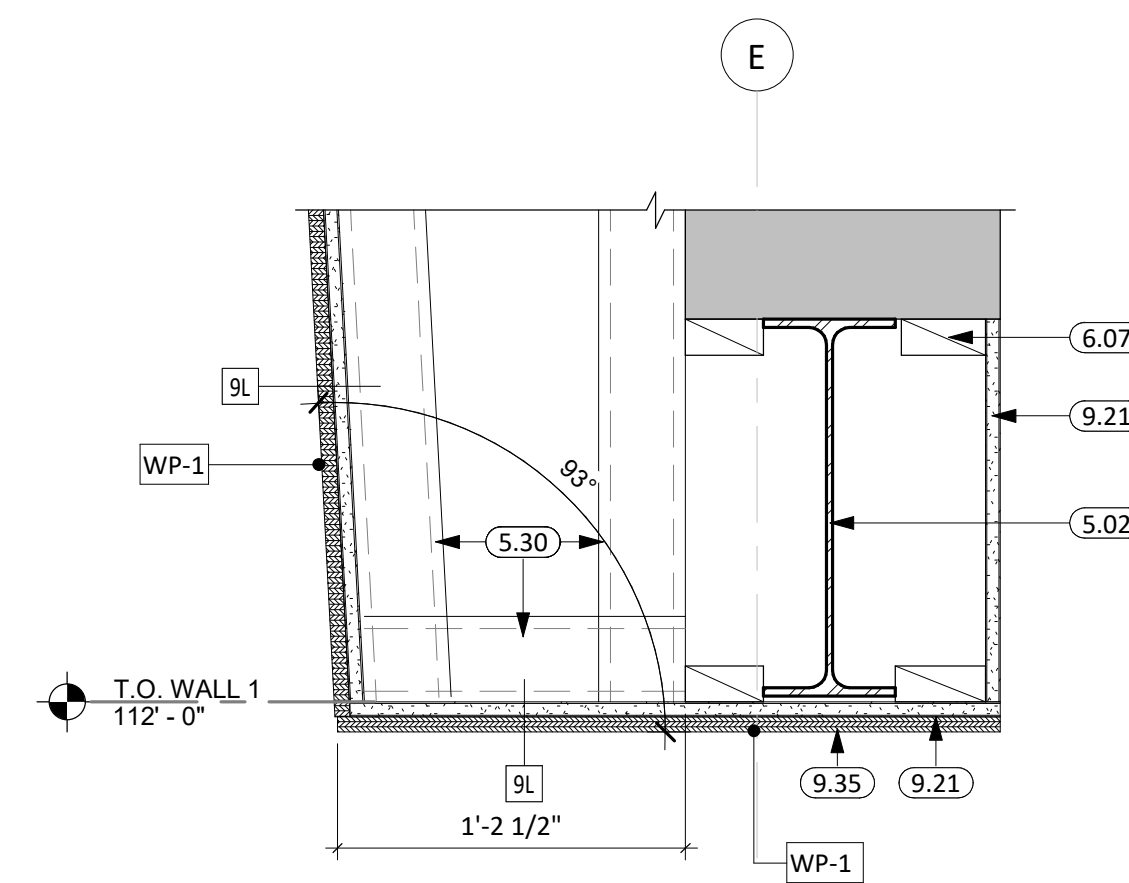
2 PLAN DETAIL - COR. 199A  
1 1/2" = 1'-0"



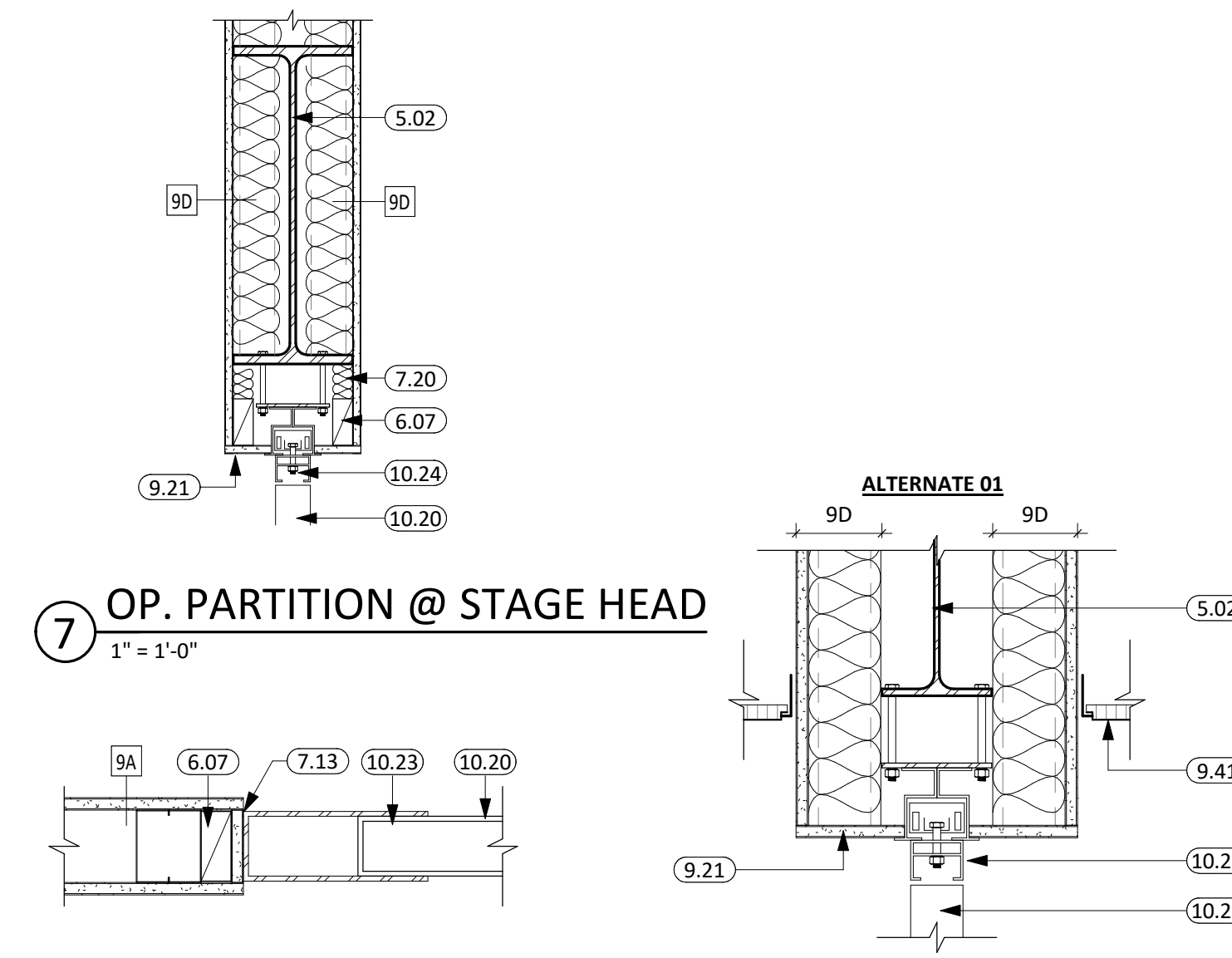
3 COMMONS WALL 1 - TOP SECTION  
DETAIL  
1 1/2" = 1'-0"



4 COMMONS WALL 2 - TOP SEC. DETAIL  
1 1/2" = 1'-0"



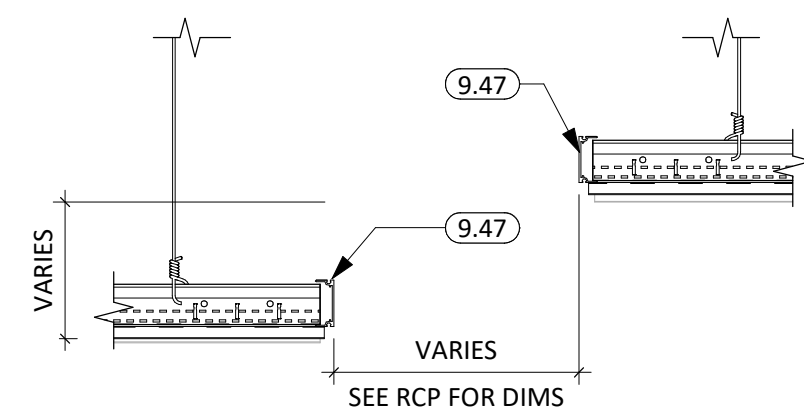
5 STAGE OPENING HEAD  
1 1/2" = 1'-0"



7 OP. PARTITION @ STAGE HEAD  
1" = 1'-0"

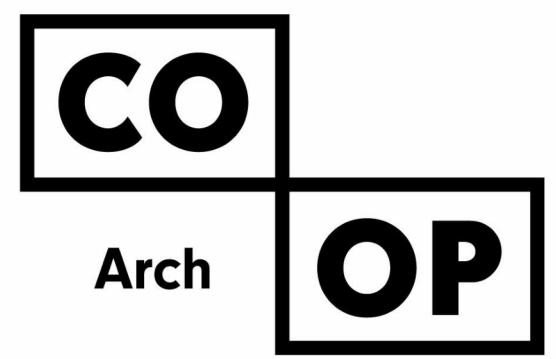
6 OPERABLE PARTITION JAMB  
1 1/2" = 1'-0"

8 OP. PARTITION @ CLASSROOM  
1 1/2" = 1'-0"



9 AXIOM DETAIL- 2" PERIMETER TRIM  
1 1/2" = 1'-0"

KEYNOTE SCHEDULE	
5.01	STRUCTURAL STEEL COLUMN (SEE ARCH. & STRUCT.)
5.02	STRUCTURAL STEEL BEAM (SEE ARCH. & STRUCT.)
5.10	STEEL JOIST (SEE ARCH. & STRUCT.)
5.30	3 5/8" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.74	HANDRAIL (MATCH GUARDRAIL PROFILE & FINISH) (SEE ARCH. & STRUCT.)
6.07	2x WOOD BLOCKING AS REQUIRED
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.13	SEALANT AROUND PEREMETER (TYP. BOTH SIDES)
7.20	BATT INSULATION
7.45	PRE-FINISHED EXPANSION JOINT ASSEMBLY; BASIS OF DESIGN: INPRO 1200 FOAM SEAL SERIES
8.02	FRAME (SEE SCHED.)
8.17	ACCESS DOOR & FRAME; 2HR RATING. BASIS OF DESIGN: ACUDOR FB-5060-DW 24"X48"
9.02	1 5/8" STEEL STUD & TRACK FRAMING
9.10	7/8" FURRING CHANNEL
9.21	5/8" GYPSUM BOARD
9.22	5/8" HIGH IMPACT GYPSUM BOARD
9.35	HIGH PRESSURE LAMINATE; SEE FINISH LEGEND
9.41	ACOUSTICAL TILE CEILINGS SYSTEM (COORD. w/ MECH. & ELEC. FOR FIXTURE REQ./LOCATIONS)
9.47	2" CLASSIC AXIOM CLIP @ ALL EXPOSED SIDES
10.20	OPERABLE PANEL PARTITIONS
10.23	OPERABLE PANEL PARTITION JAMB
10.24	OPERABLE PANEL PARTITION TRACK BY OPERABLE PARTITION SUPPLIER.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



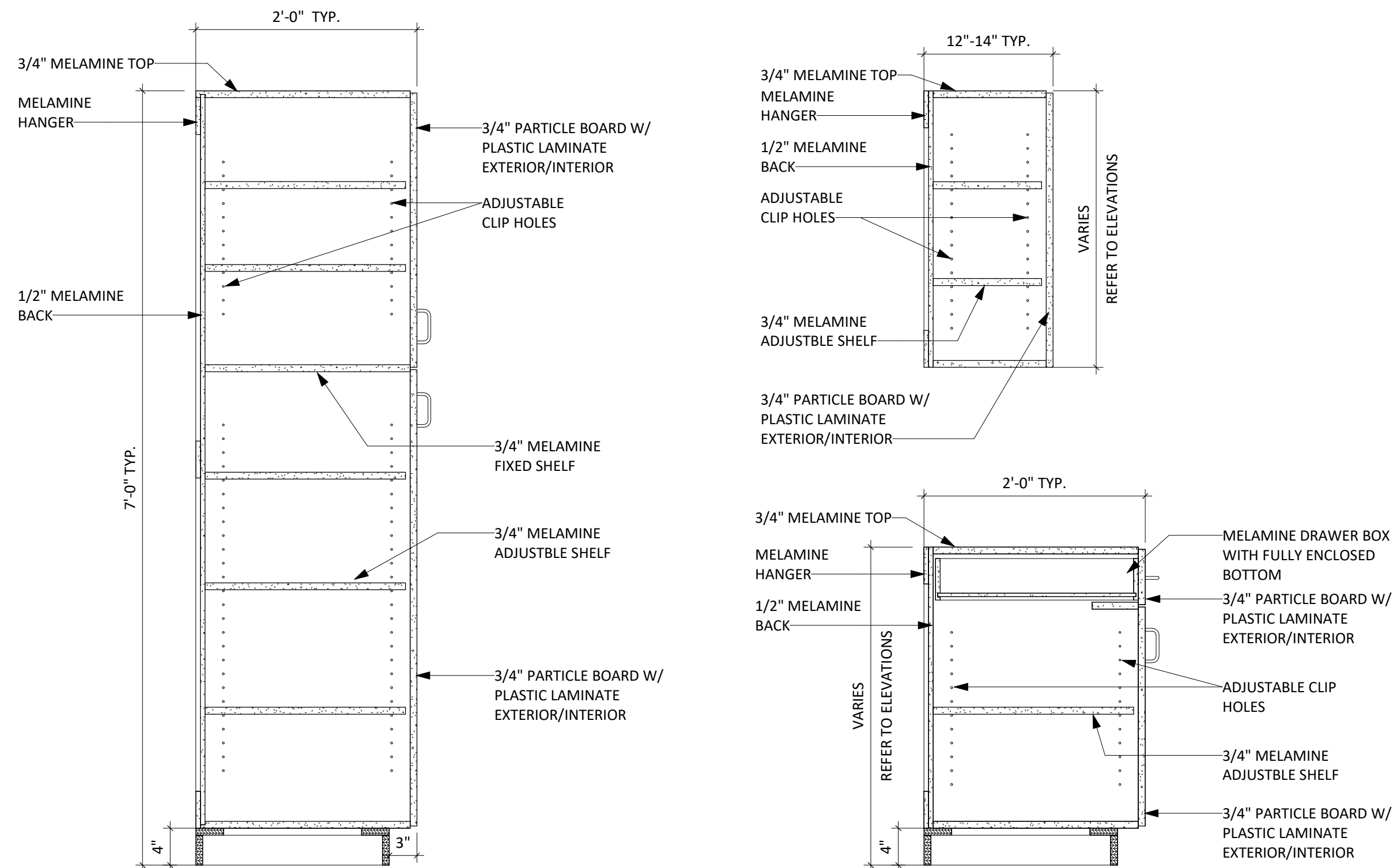
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

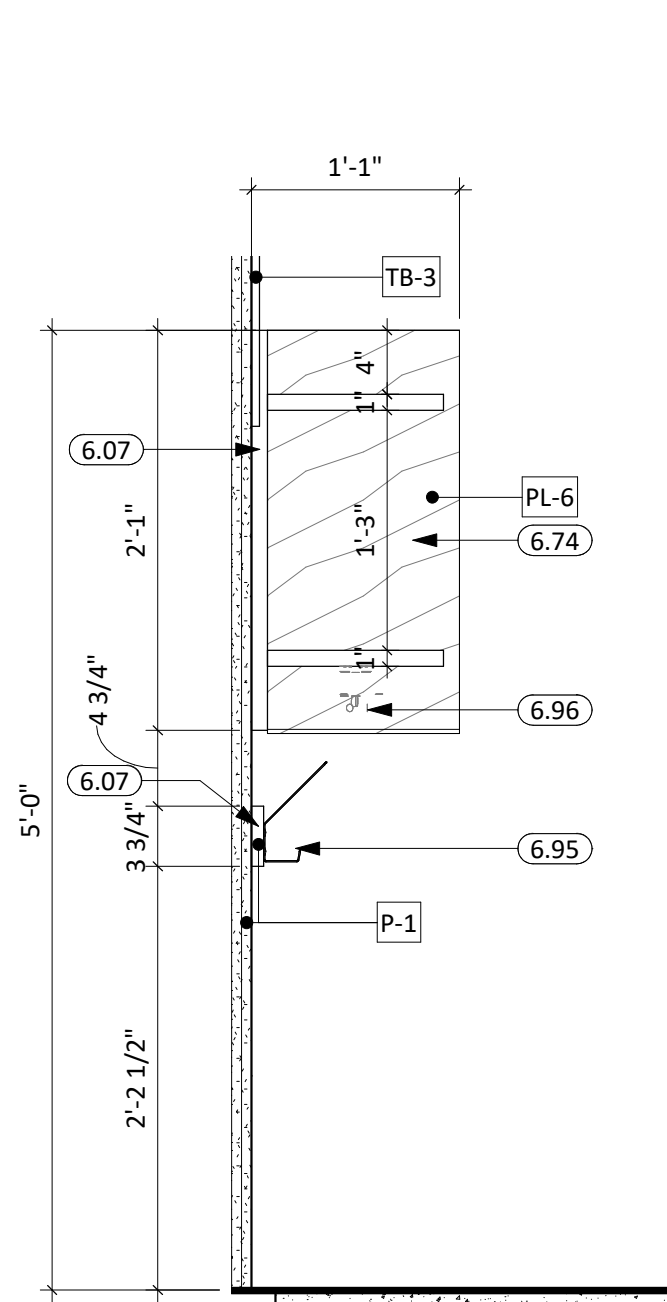
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
INTERIOR DETAILS

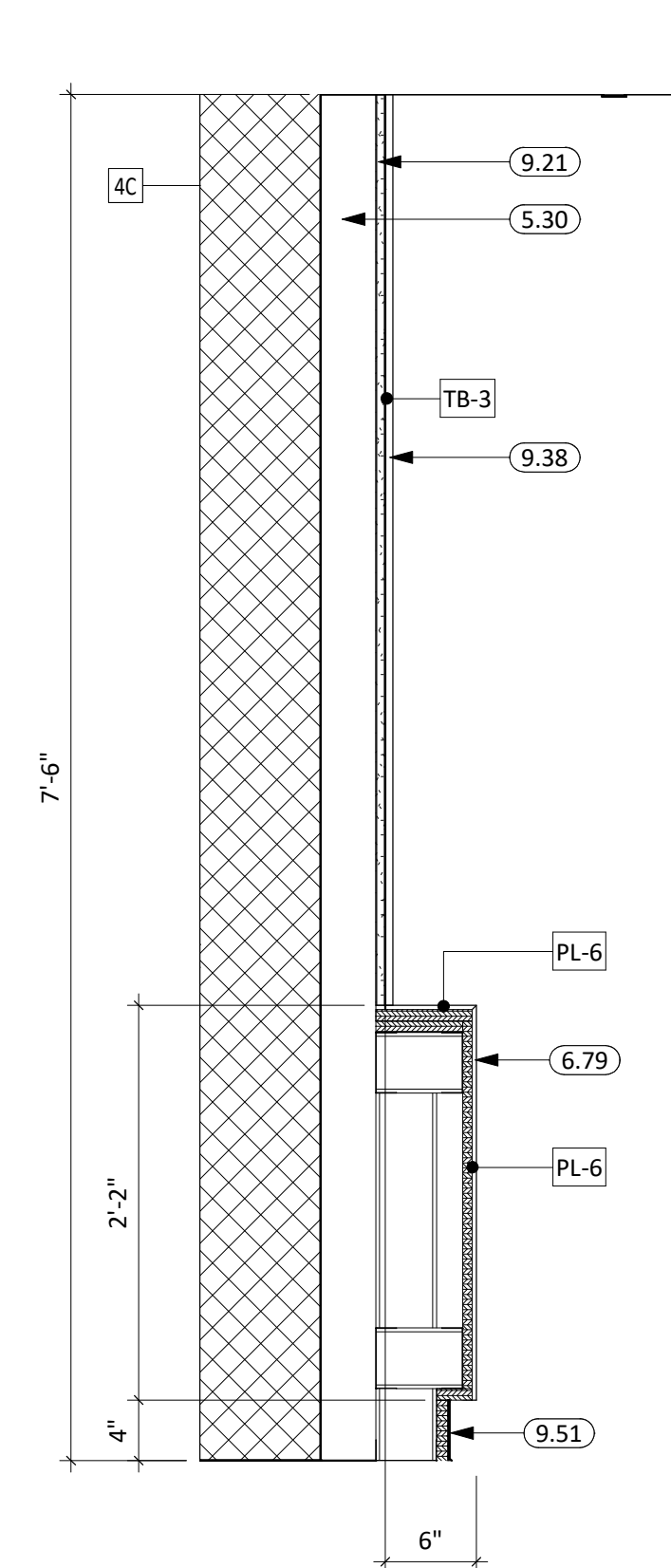
A510



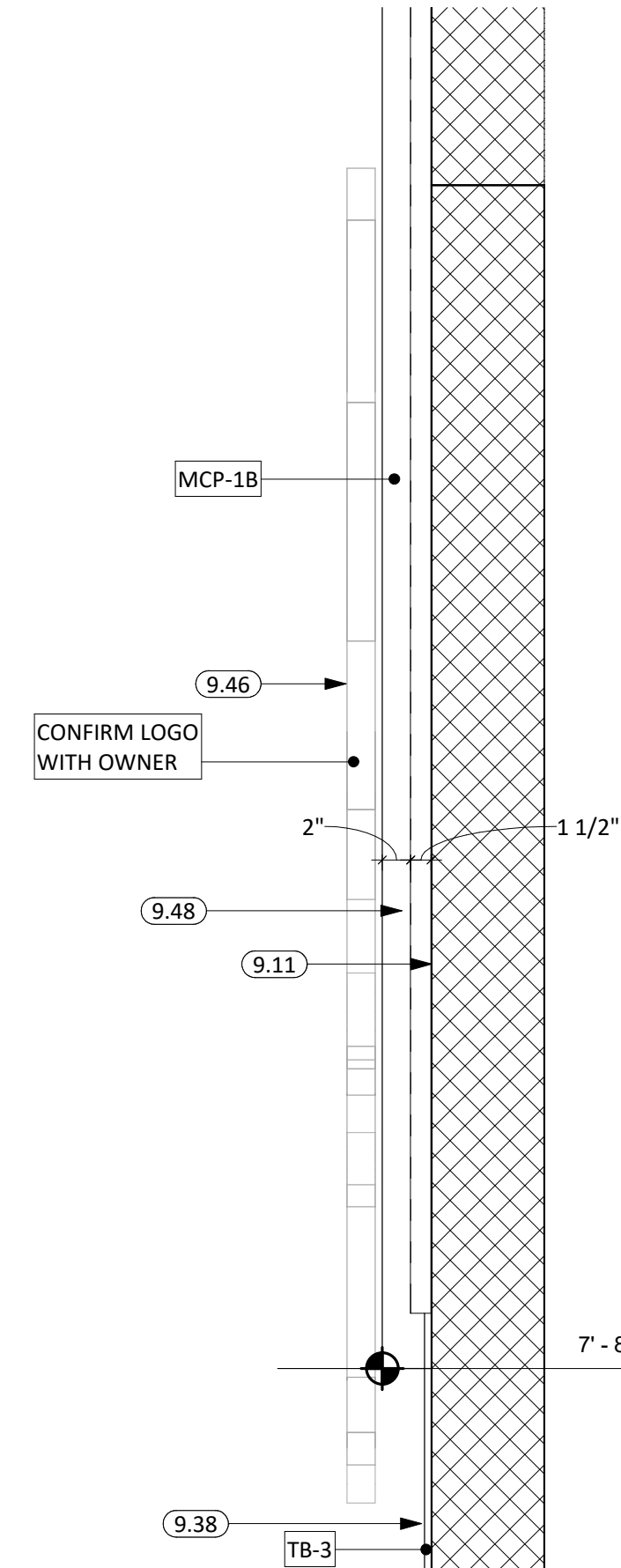
1 TYP. CABINET DETAILS  
1" = 1'-0"



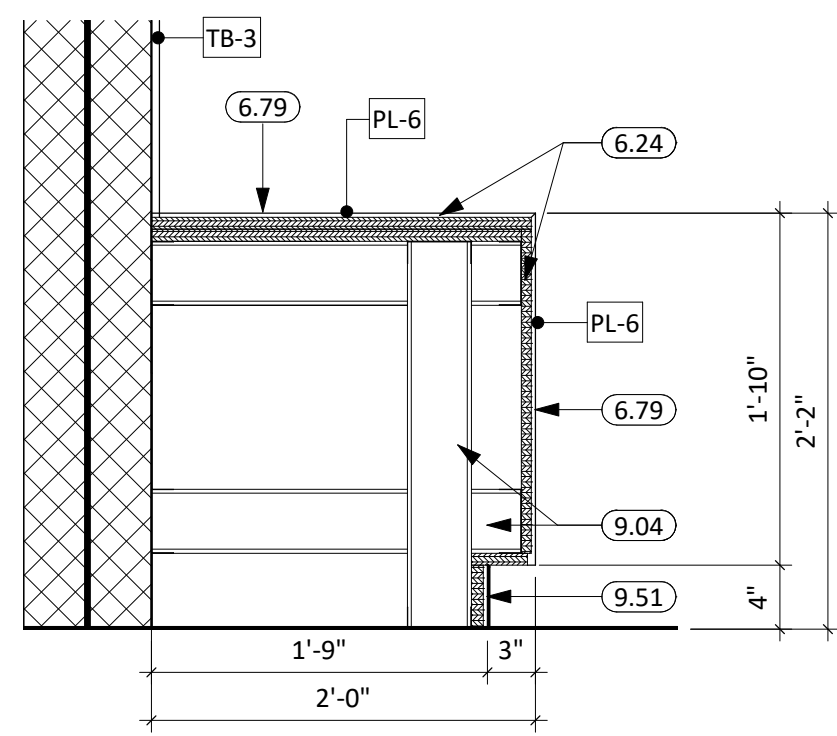
2 BAG DROP CASEWORK SECTION  
1" = 1'-0"



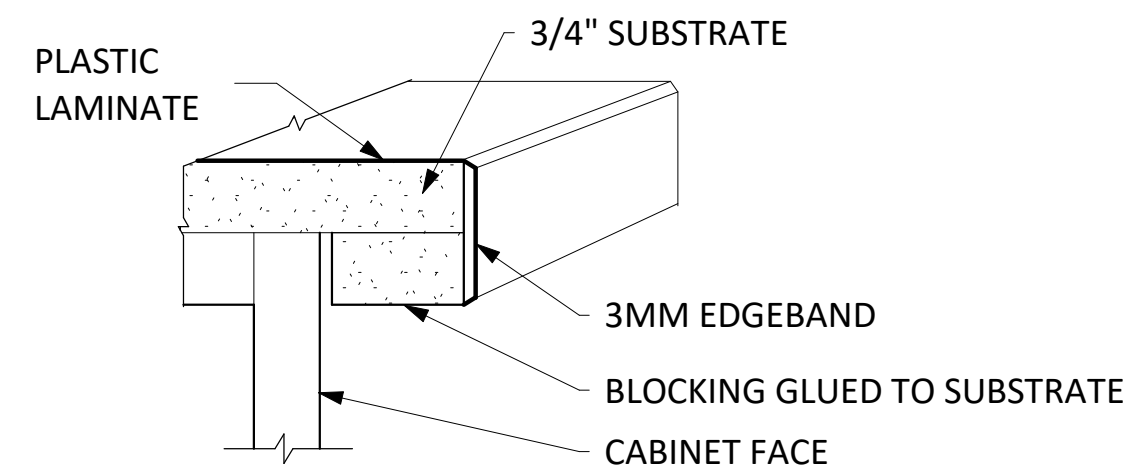
6 WALL DISPLAY SECTION DETAIL  
1" = 1'-0"



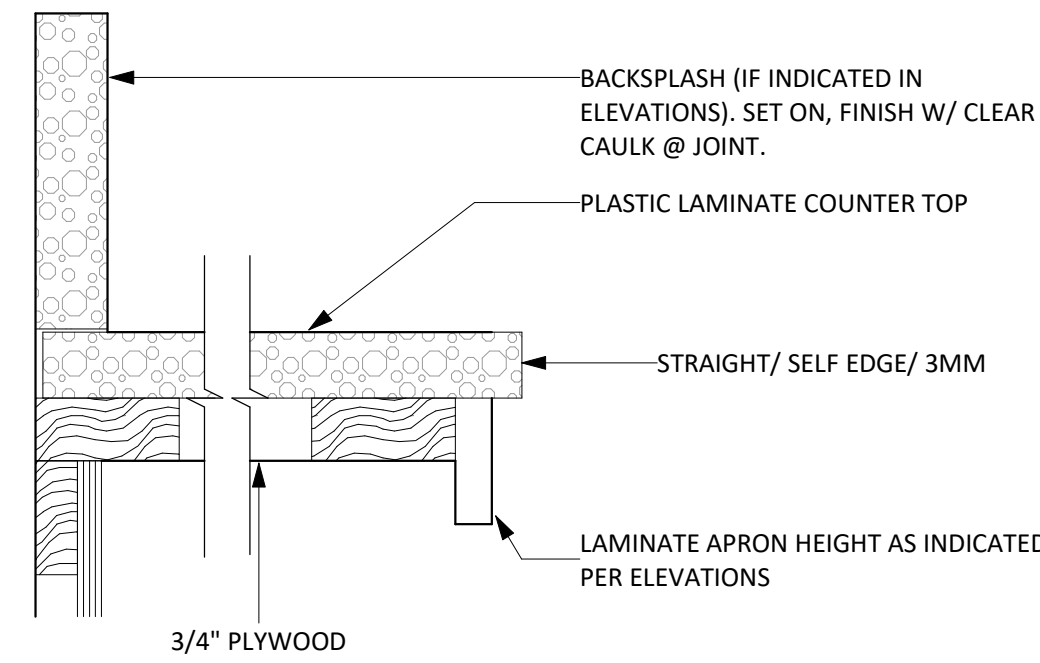
7 ACOUSTIC METAL PANEL VERT. SECTION  
1" = 1'-0"



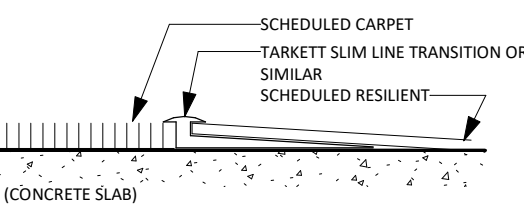
3 COMMONS BENCH DETAIL  
1" = 1'-0"



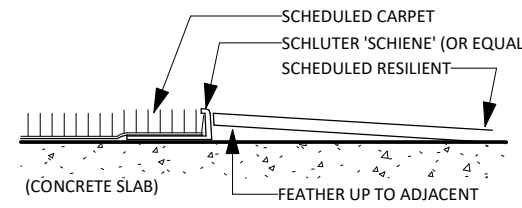
4 3MM EDGEBAND  
1 1/2" = 1'-0"



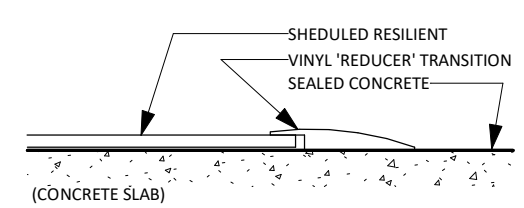
5 PLAM COUNTERTOP W/ LAM. APRON  
1 1/2" = 1'-0"



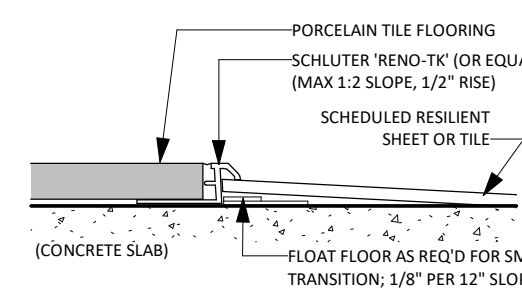
8 CARPET TO RESILIENT - VINYL  
6" = 1'-0"



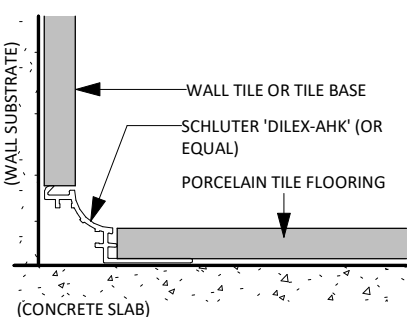
9 CARPET TO RESILIENT - SCHLUTER  
6" = 1'-0"



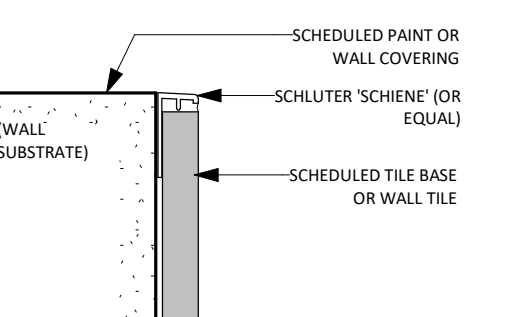
10 RESILIENT TO CONCRETE  
6" = 1'-0"



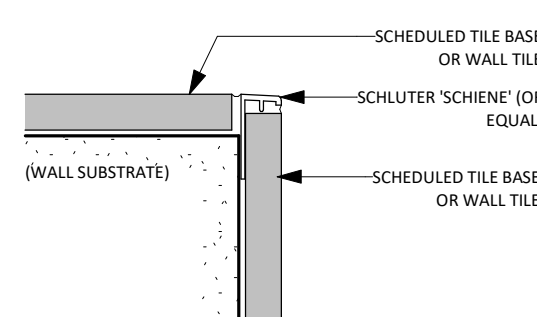
11 TILE TO RESILIENT  
6" = 1'-0"



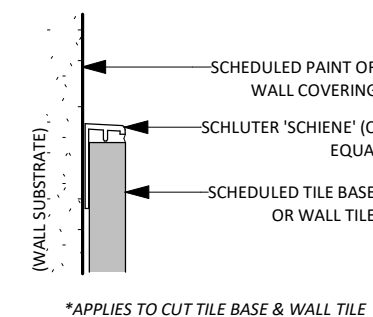
13 TILE FLOOR TO WALL  
6" = 1'-0"



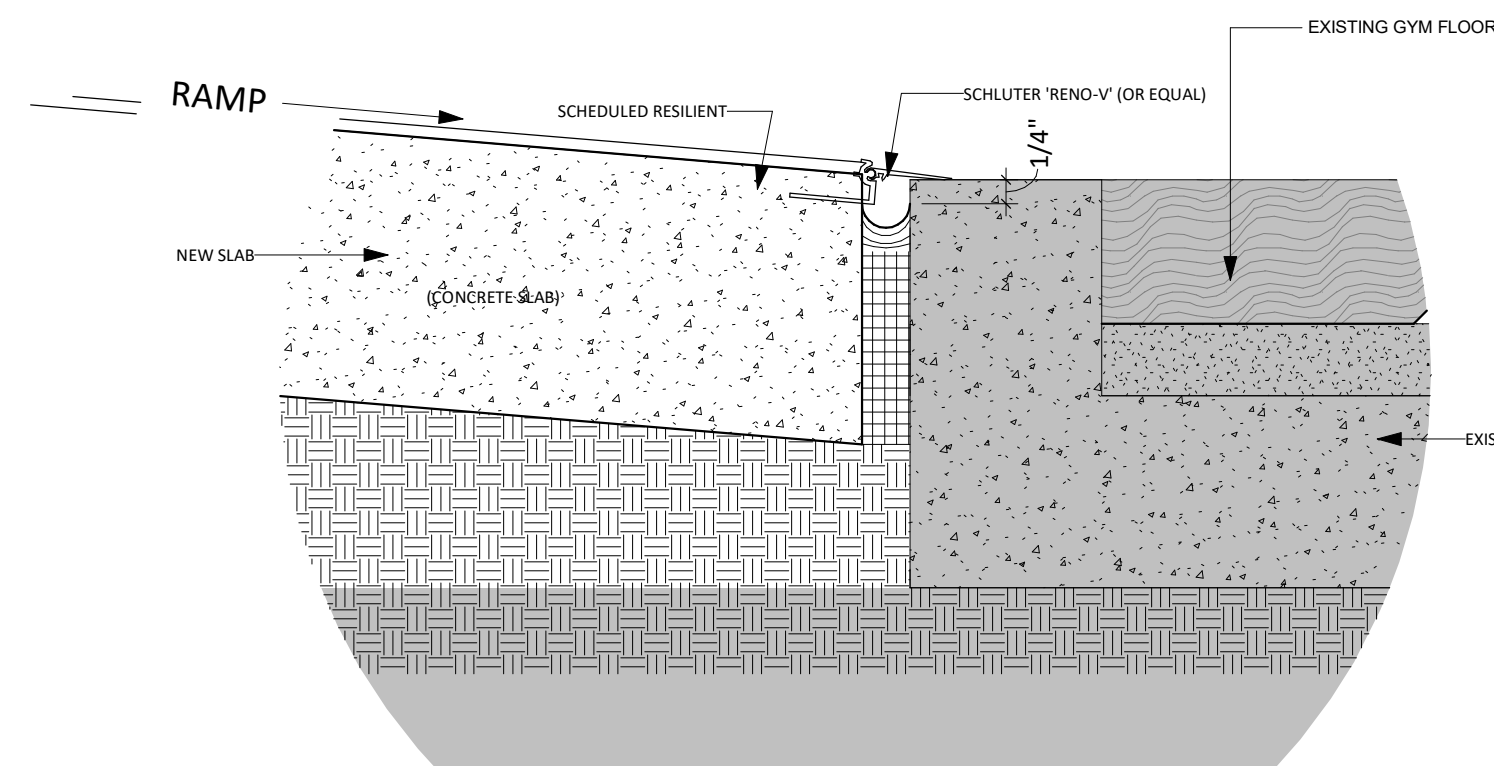
14 WALL TILE TO GWB OUTSIDE CORNER  
6" = 1'-0"



15 WALL TILE TO OUTSIDE CORNER - SCHIENE  
6" = 1'-0"

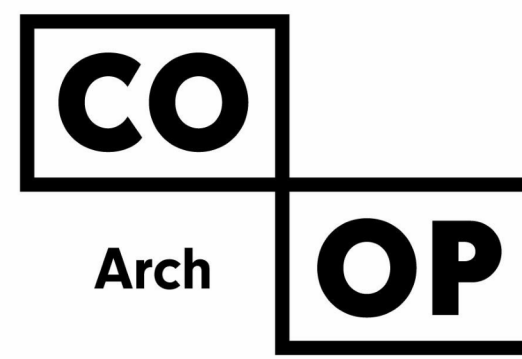


16 WALL TILE TO GWB  
6" = 1'-0"



12 RESILIENT TO EXISTING @ RAMP  
6" = 1'-0"

KEYNOTE SCHEDULE	
5.30	3 5/8" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
6.07	2x WOOD BLOCKING AS REQUIRED
6.24	5/8" PLYWOOD
6.74	PLASTIC LAMINATE WALL CABINET
6.79	HIGH PRESSURE LAMINATE CASEWORK
6.95	DOUBLE WALL COAT HOOKS
6.96	TRIPLE PURSE/ CEILING HOOKS, OR SIMILAR
9.04	3 5/8" STEEL STUD & TRACK FRAMING
9.11	1 1/2" FURRING CHANNEL
9.21	5/8" GYPSUM BOARD
9.38	WALLCOVERING WRAPPED 5/8" X 60" (MIN) CORK BOARD
9.46	1/8" ACRYLIC DIMENSIONAL SIGNAGE ON STRUCTURAL STAND-OFF(S) @ METAL WALL PANEL. FLOAT CYCLONE-LOGO & SCALE DOWN, AS NEEDED
9.48	ARMSTRONG 'DIVERGENT' ACOUSTIC METAL PANEL
9.51	RESILIENT BASE



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

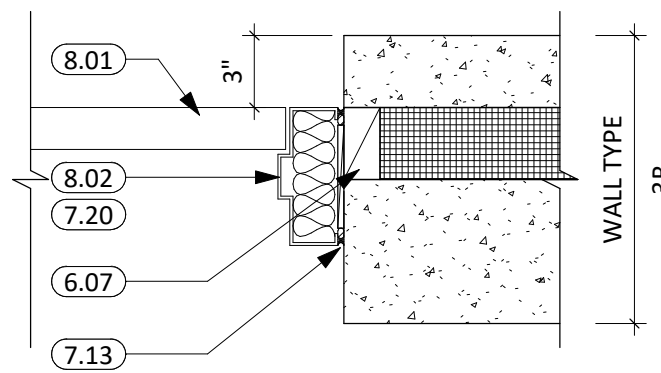
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
INTERIOR DETAILS

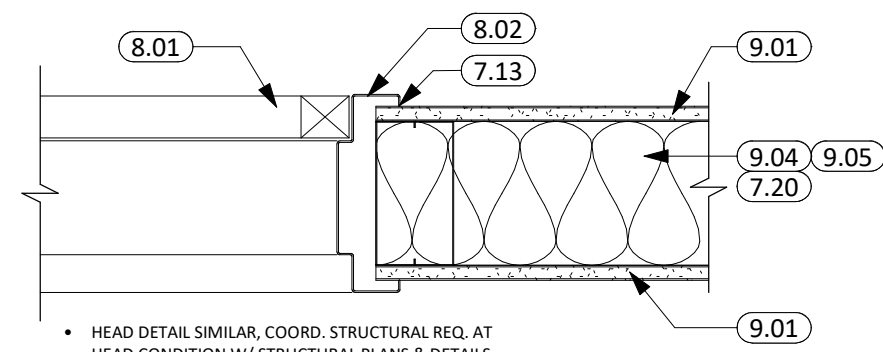
A511



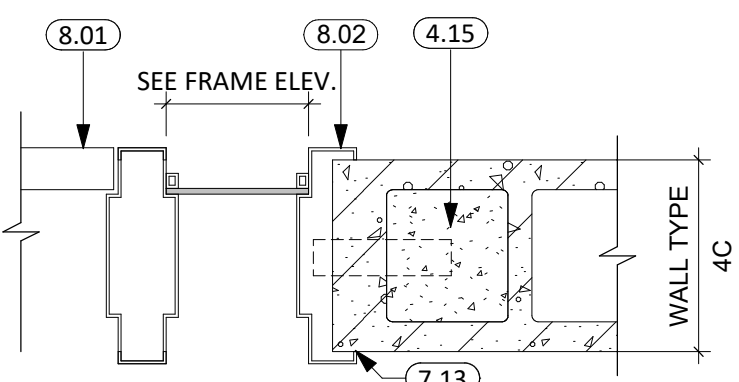




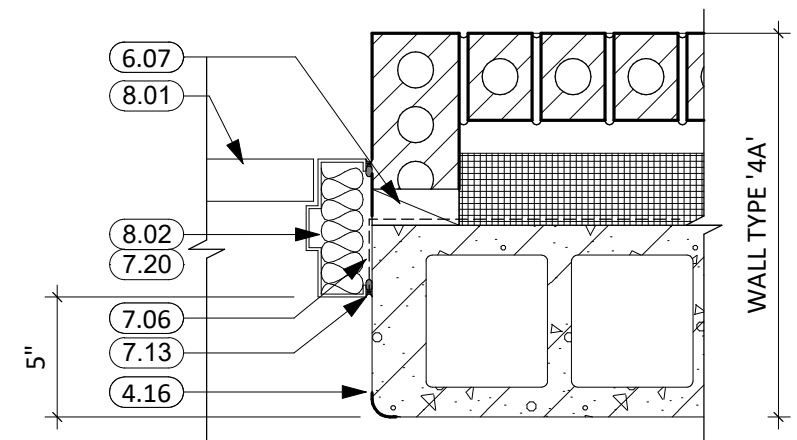
1 3B - HM 002 - HEAD/JAMB  
1 1/2" = 1'-0"



2 9A - HM 001 - HEAD / JAMB DETAIL  
1 1/2" = 1'-0"



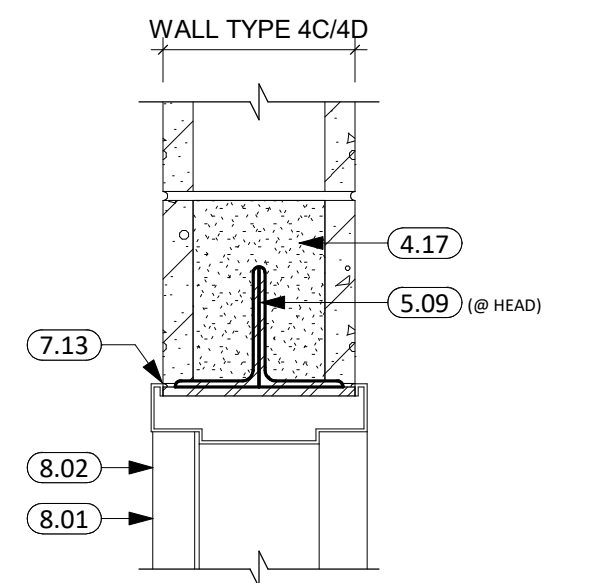
3 4C - HM 011A/B - HEAD/JAMB  
1 1/2" = 1'-0"



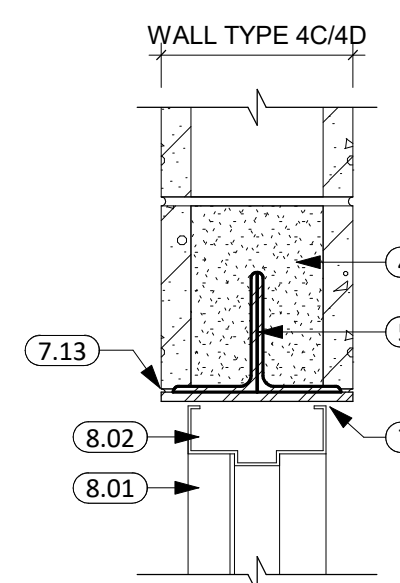
4 4A - HM 002-JAMB  
1 1/2" = 1'-0"

GENERAL NOTES	
1.	ALL HM FRAMES IN STUD PARTITIONS SHALL BE WRAPPED AROUND BOTH SIDERS OF PARTITION UNLESS OTHERWISE NOTED. SEE FLOOR PLAN(S) FOR WALL THICKNESS.
2.	ALL EXTERIOR FRAMES & DOORS ARE TO BE THERMALLY BROKEN.
3.	CAULK ENTIRE PERIMETER OF H.M. FRAMES (BOTH SIDES).
4.	PAINT H.M. FRAMES TO MATCH WALL. SPLIT PAINT COLOR AT DOOR GASKET AS REQUIRED.
5.	PROVIDE ROOM SIGNAGE AT ALL DOORS. WHERE MOUNTED TO GLAZING, PROVIDE A BLANK BACK PLATE ON OPPOSITE SIDE OF GLAZING. SEE CODE STANDARDS FOR MOUNTING HEIGHTS AND LOCATIONS. SEE SPECIFICATIONS FOR SPECIAL SIGNAGE REQUIREMENTS.
6.	REFER TO WALL TYPES FOR WALL CONSTRUCTION ELEMENTS FOR ALL DOOR AND WINDOW DETAILS. COORDINATE ALL STRUCTURAL REQ. WITH STRUCTURAL DRAWINGS.
7.	WALL MOUNTED EXIT SIGNS AND FIXTURES ARE TO BE CENTERED OVER DOOR OR DOOR OPENING WHERE APPLICABLE.

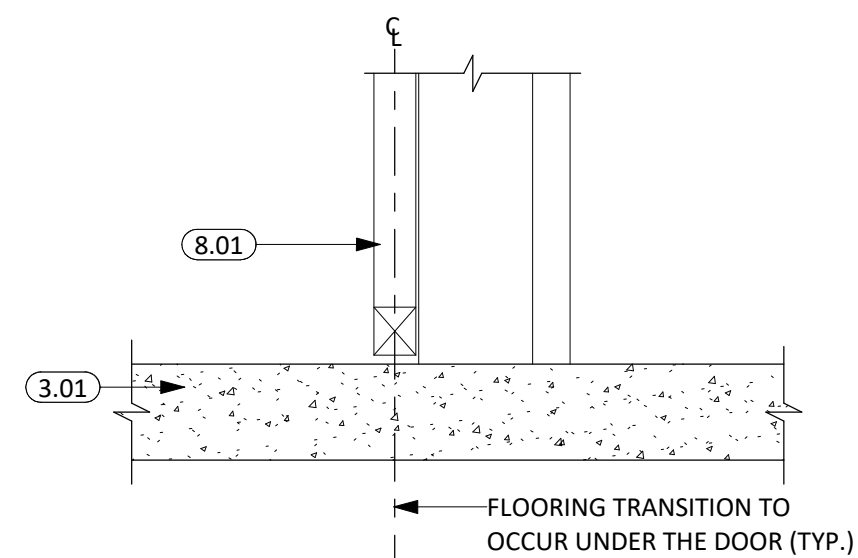
KEYNOTE SCHEDULE	
3.01	CONC. FLOOR SLAB ON GRADE (SEE STRUCT. FOR THICKNESS AND REINF.) w/ 15 MIL. VAPOR BARRIER BELOW
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.05	THICKENED SLAB
3.06	CONCRETE STOOP w/FROST FREE FOOTING (SEE STRUCTURAL/LANDSCAPE PLANS)
3.11	1/2" EXPANSION/ISOLATION JOINT MATERIAL
4.10	CMU MASONRY UNIT
4.14	BOND BEAM MASONRY UNIT
4.15	FILL w/GROUT
4.16	CMU BULLNOSE CORNER UNIT
4.17	CMU SOAPBLOCK
4.20	THRU-WALL FLASHING
4.22	WEEP VENTS
4.23	MORTAR NET
5.05	STRUCTURAL STEEL ANGLE (SEE ARCH. & STRUCT.)
5.06	STRUCTURAL STEEL PLATE (SEE ARCH. & STRUCT.)
5.09	STRUCTURAL STEEL LINTLE (SEE ARCH. & STRUCT.)
5.30	3 5/8" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.31	6" STRUCTURAL STEEL STUD & TRACK FRAMING (SEE ARCH. & STRUCT.)
5.39	HEADER CONDITION (SEE ARCH. & STRUCT.)
5.58	PIPE BOLLARD (FILL w/CONC.) (SEE ARCH. & STRUCT.)
6.05	DOUBLE SILL PLATE
6.07	2x WOOD BLOCKING AS REQUIRED
6.10	BLOCKING (SEE STRUCT. FOR ADDITIONAL REQ.)
6.80	PLASTIC LAMINATE COUNTERTOP
6.81	SOLID SURFACE
7.06	WRAP VAPOR BARRIER INTO WINDOW OPENING
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.13	SEALANT AROUND PEREMETER (TYP. BOTH SIDES)
7.20	BATT INSULATION
7.21	RIGID INSULATION
7.72	PRE-FINISHED METAL DRIP EDGE
8.01	DOOR (SEE SCHED.)
8.02	FRAME (SEE SCHED.)
8.11	TRACK
8.12	THRESHOLD
8.13	WEATHERSTRIPPING
8.30	OVERHEAD COILING DOOR
8.31	OVERHEAD COILING COUNTER DOOR
8.33	OVERHEAD SECTIONAL GARAGE DOOR
9.01	GYPSUM SHAFT WALL
9.04	3 5/8" STEEL STUD & TRACK FRAMING
9.05	6" STEEL STUD & TRACK FRAMING
9.21	5/8" GYPSUM BOARD
9.22	5/8" HIGH IMPACT GYPSUM BOARD
10.06	CAST ALUMINUM DIMENSIONAL LETTER SIGNAGE - ARIAL FONT STYLE
31.02	DRAINAGE FILL (COORD. REQ. W/ SOILS REPORT)



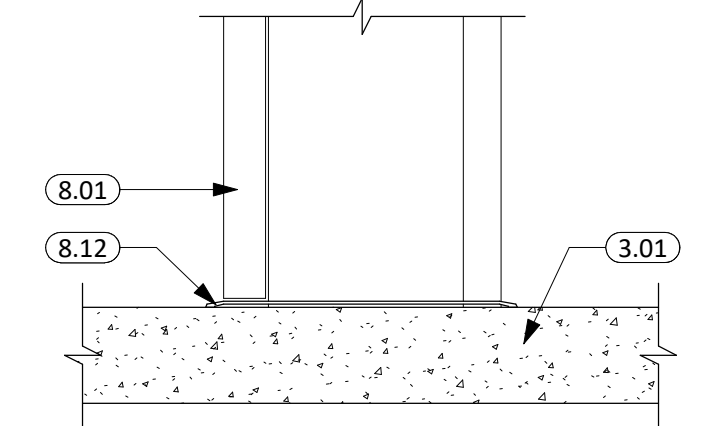
5 4C - HM 001/003 - HEAD/JAMB  
1 1/2" = 1'-0"



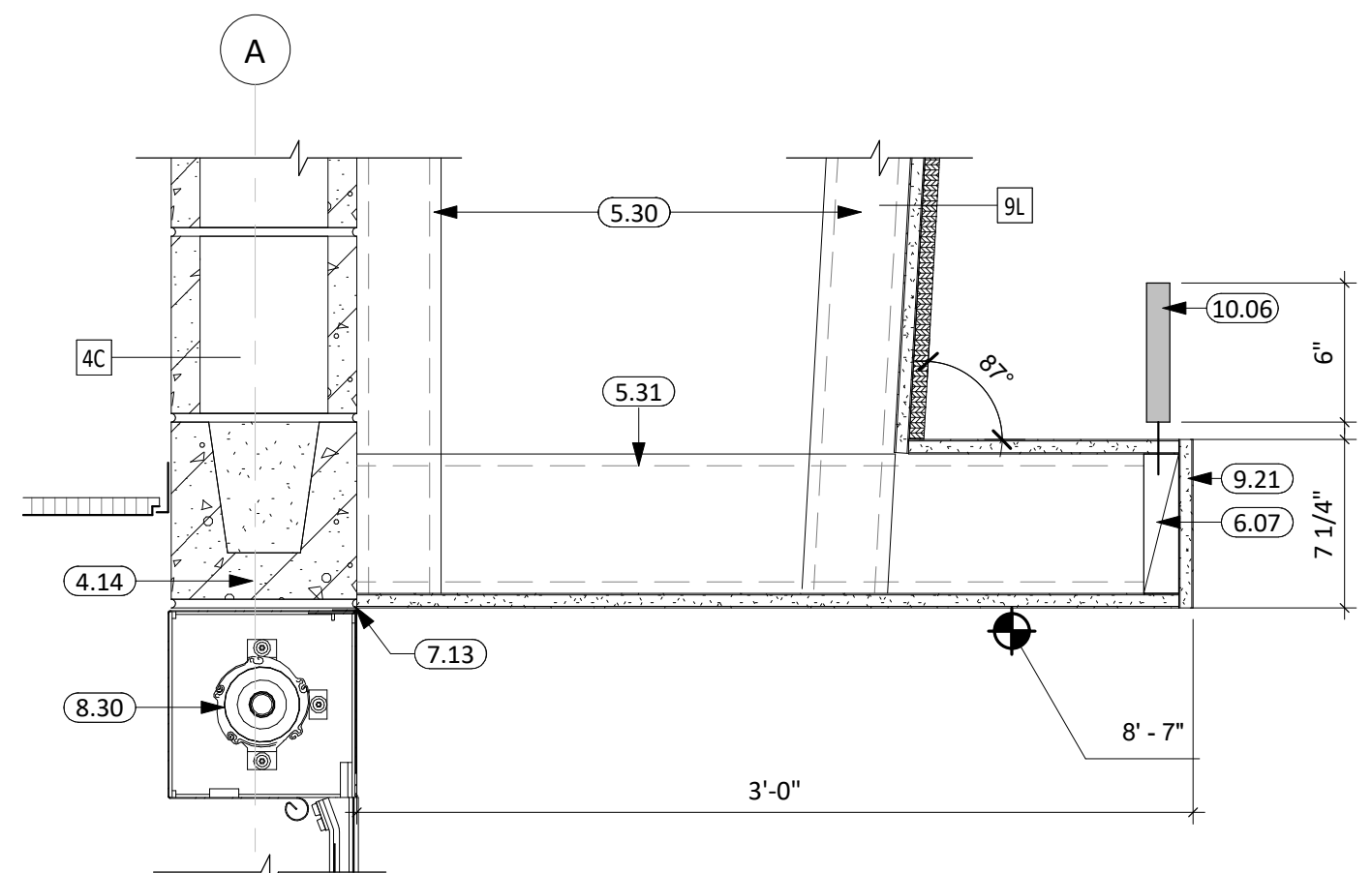
6 4C/4D - HM 002/004 - HEAD/JAMB  
1 1/2" = 1'-0"



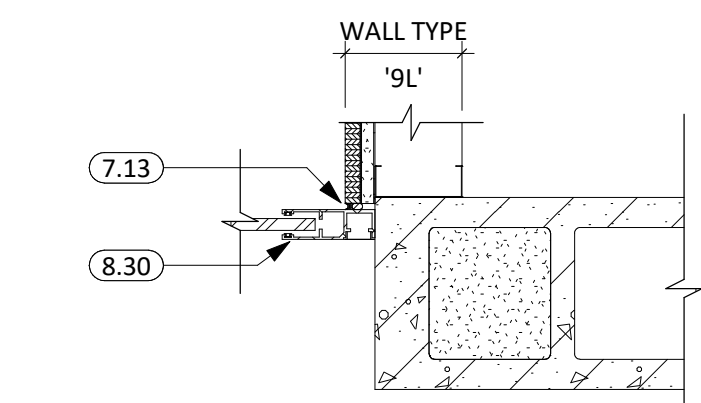
7 SILL DETAIL @ DOOR PANEL  
1 1/2" = 1'-0"



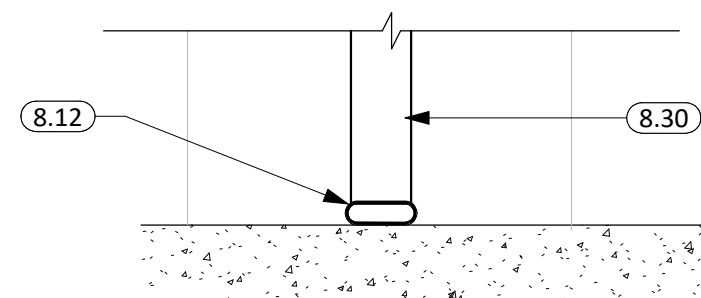
8 SILL DETAIL W/ THRESHOLD  
1 1/2" = 1'-0"



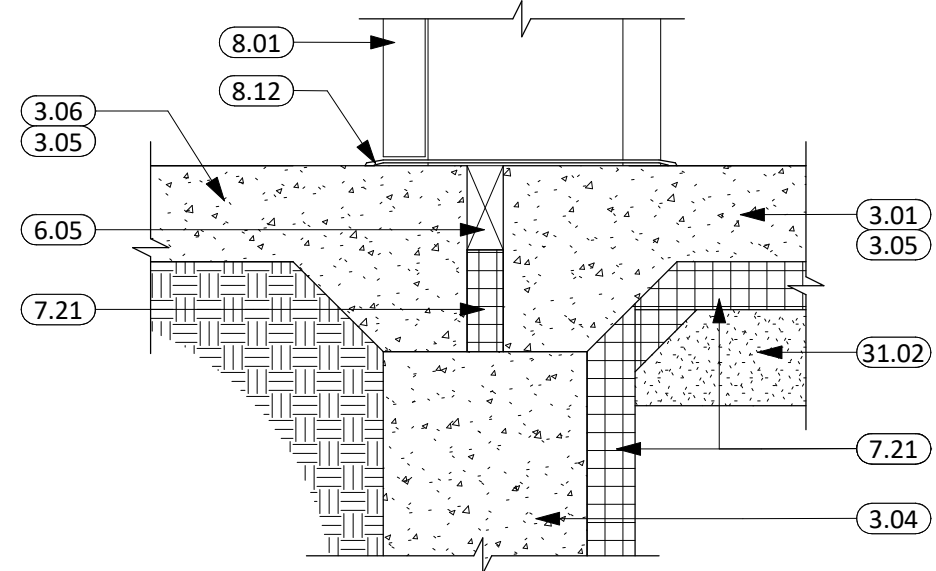
11 OHC-1/2 HEAD/SOFFIT DETAIL  
1 1/2" = 1'-0"



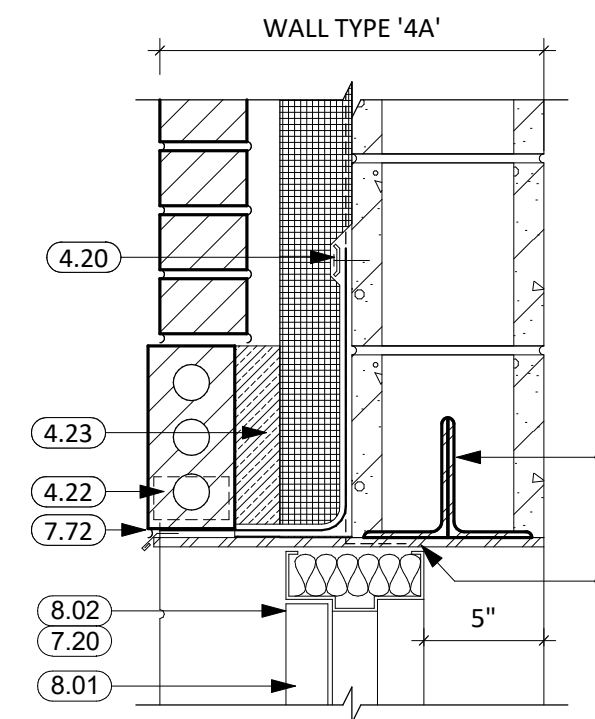
12 OHC - 4C - JAMB  
1 1/2" = 1'-0"



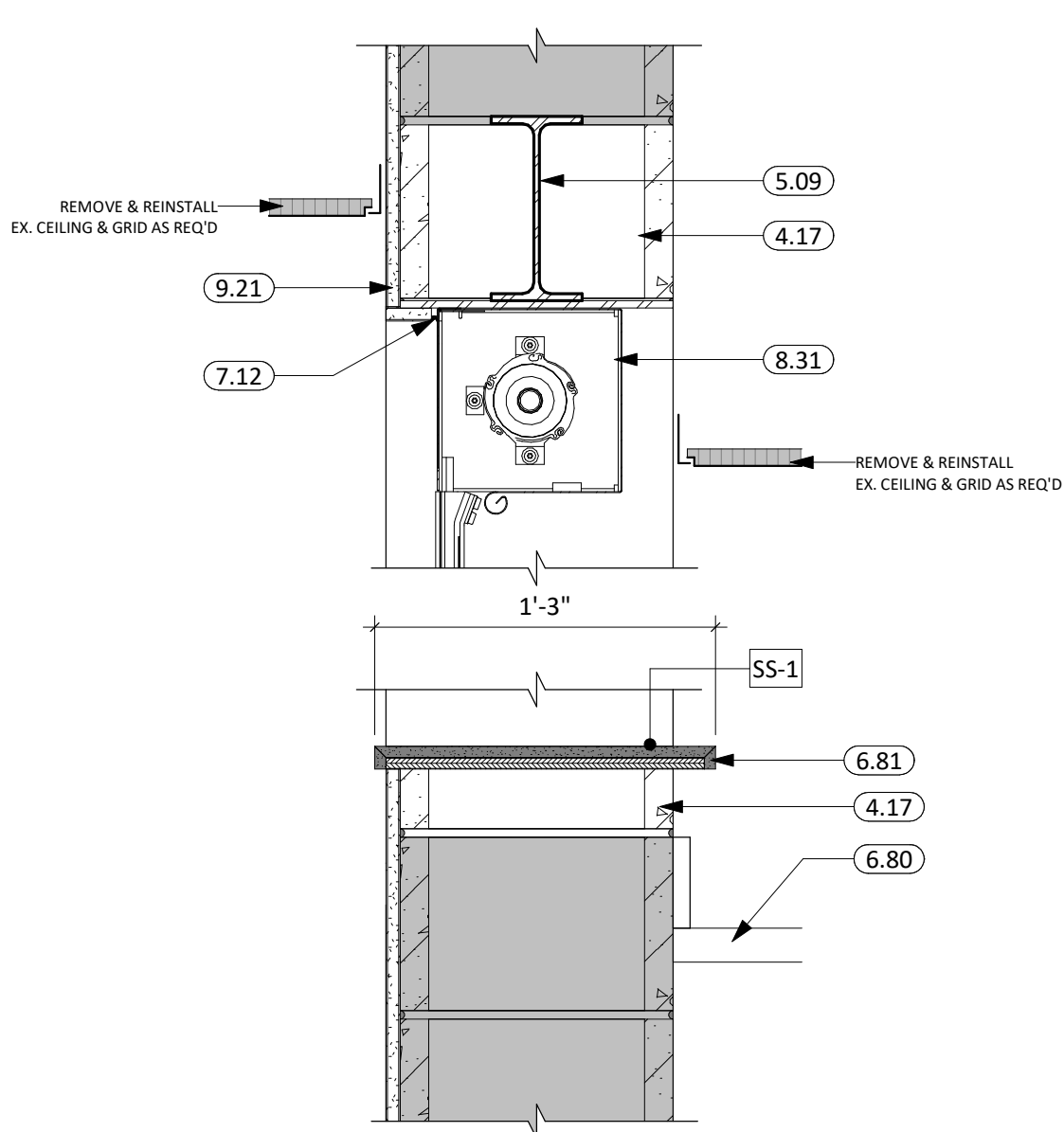
13 OHC - SILL  
1 1/2" = 1'-0"



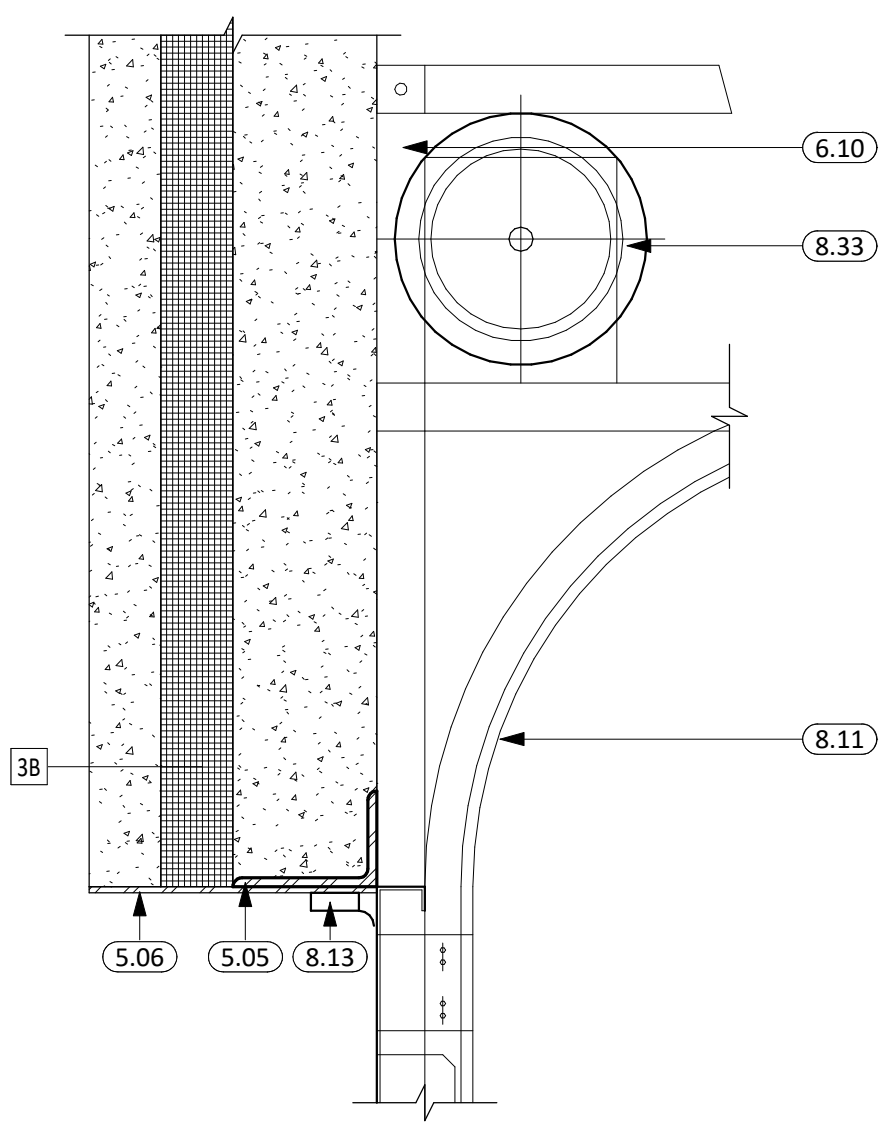
9 SILL DETAIL @ STOOP  
1 1/2" = 1'-0"



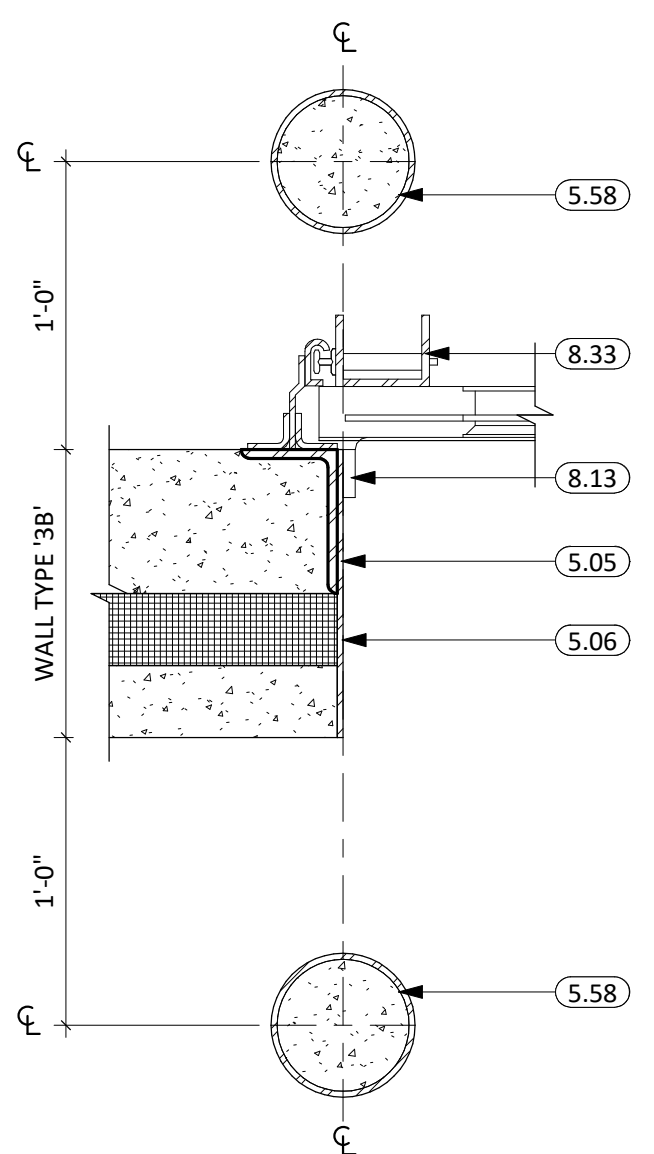
10 4A - HM 002- HEAD  
1 1/2" = 1'-0"



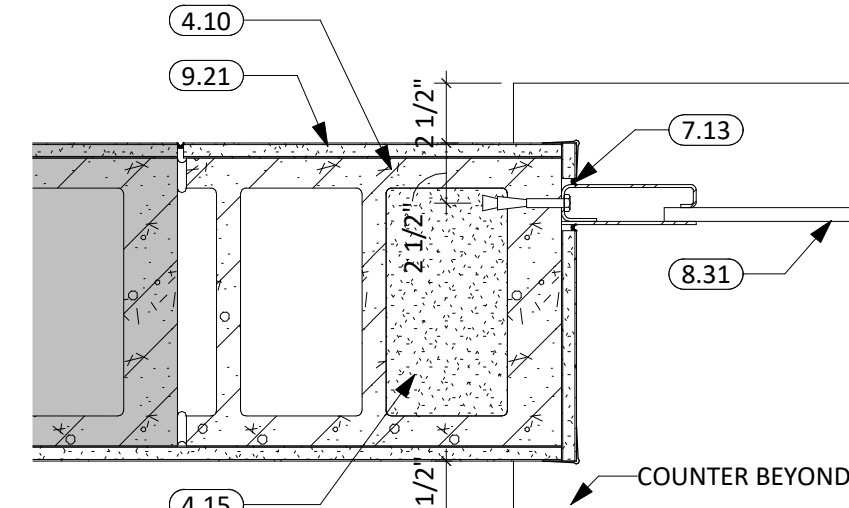
14 OHC-3 - HEAD/SILL  
1 1/2" = 1'-0"



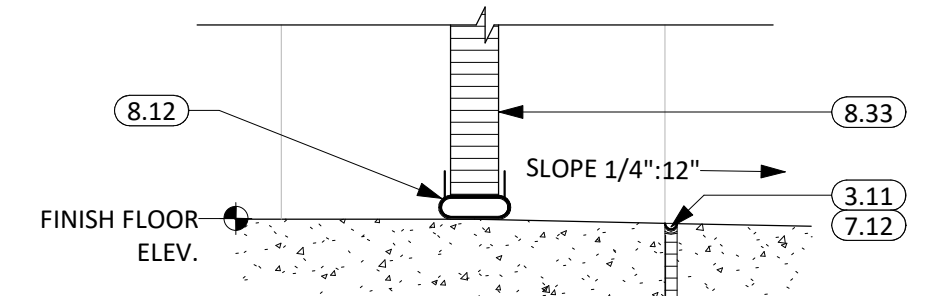
15 OHS-1 - 3B - HEAD  
1 1/2" = 1'-0"



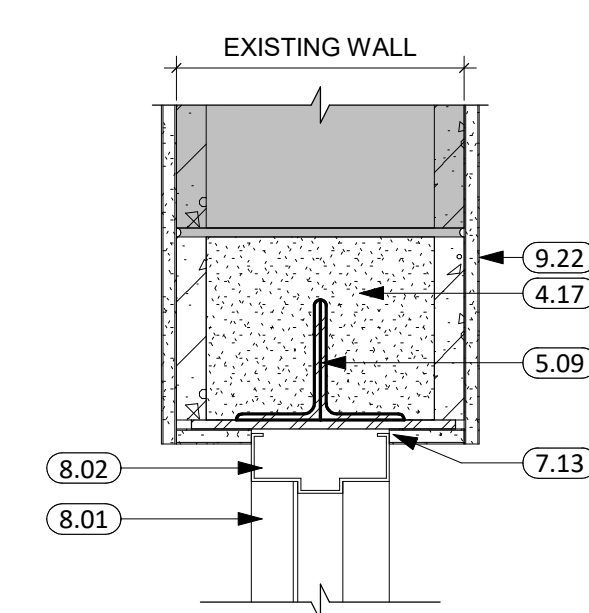
16 OHS-1 - 3B - JAMB  
1 1/2" = 1'-0"



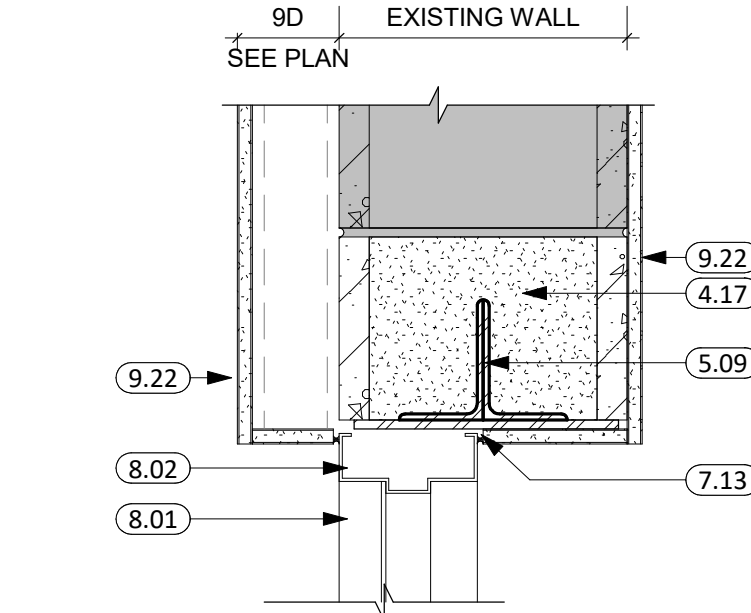
17 OHC-3 - JAMB  
1 1/2" = 1'-0"



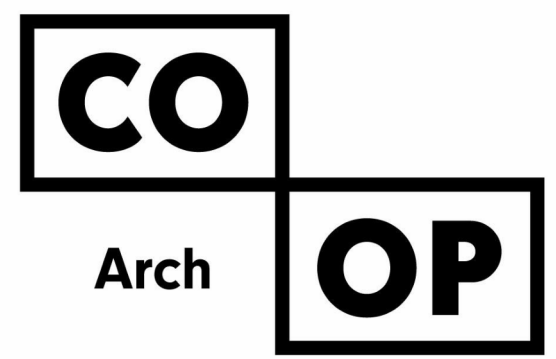
18 OHS-1 - SILL  
1 1/2" = 1'-0"



19 HM 002/004 @ EXISTING 1  
1 1/2" = 1'-0"



20 HM 002/004 @ EXISTING 2  
1 1/2" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



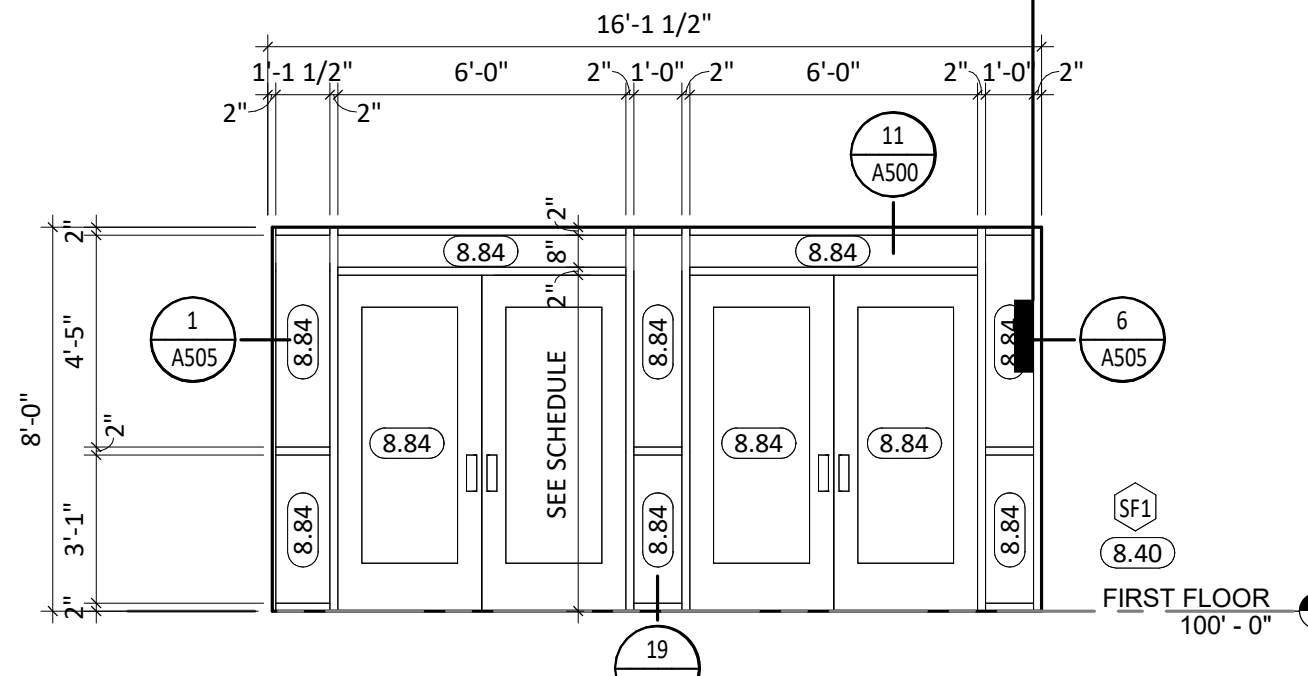
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

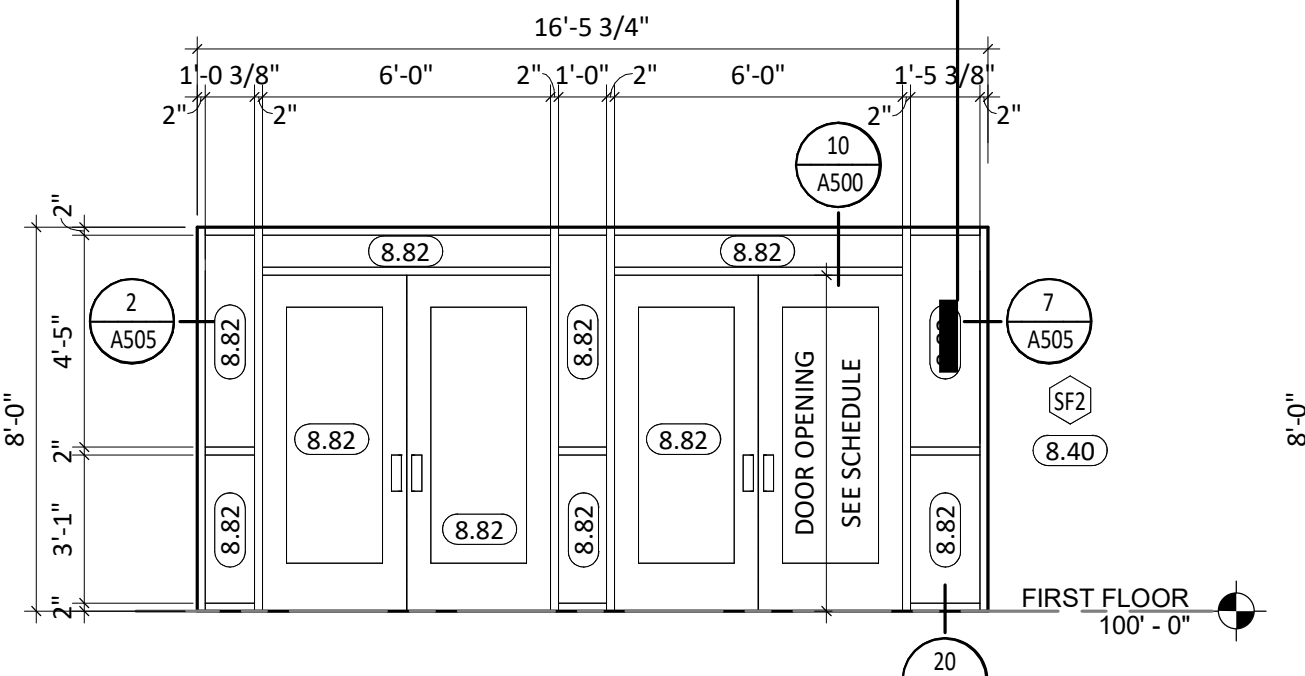
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
DOOR & FRAME DETAILS

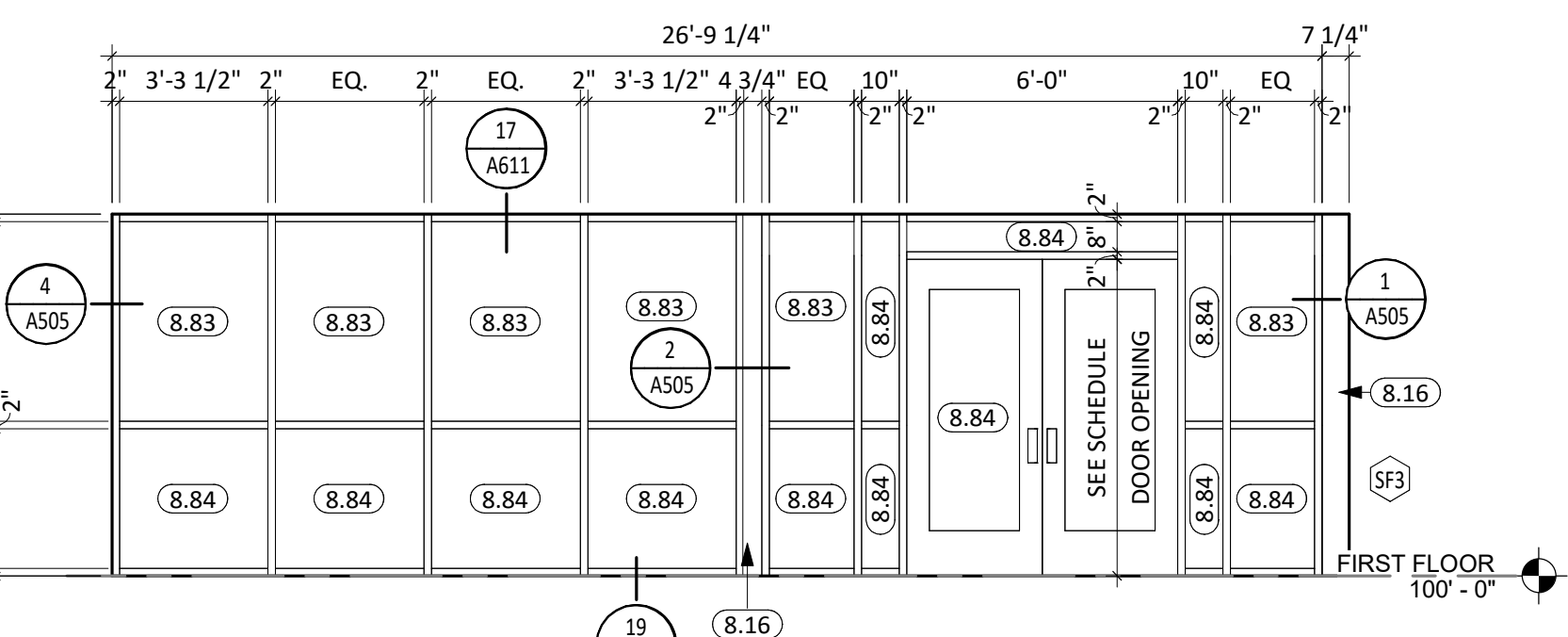
A601



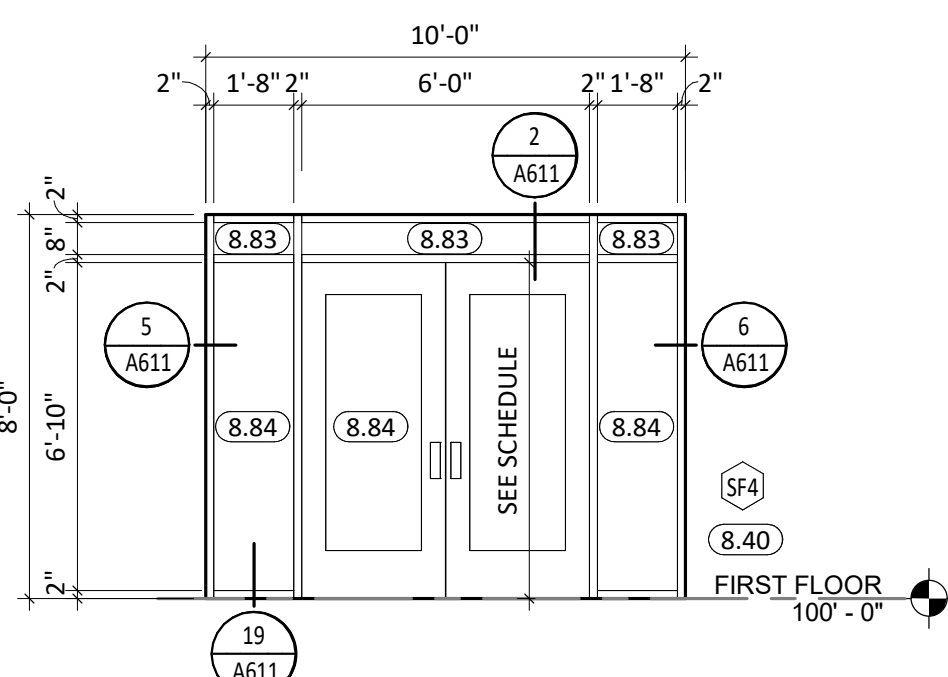
**FRAME TYPE SF1**  
1/4" = 1'-0"



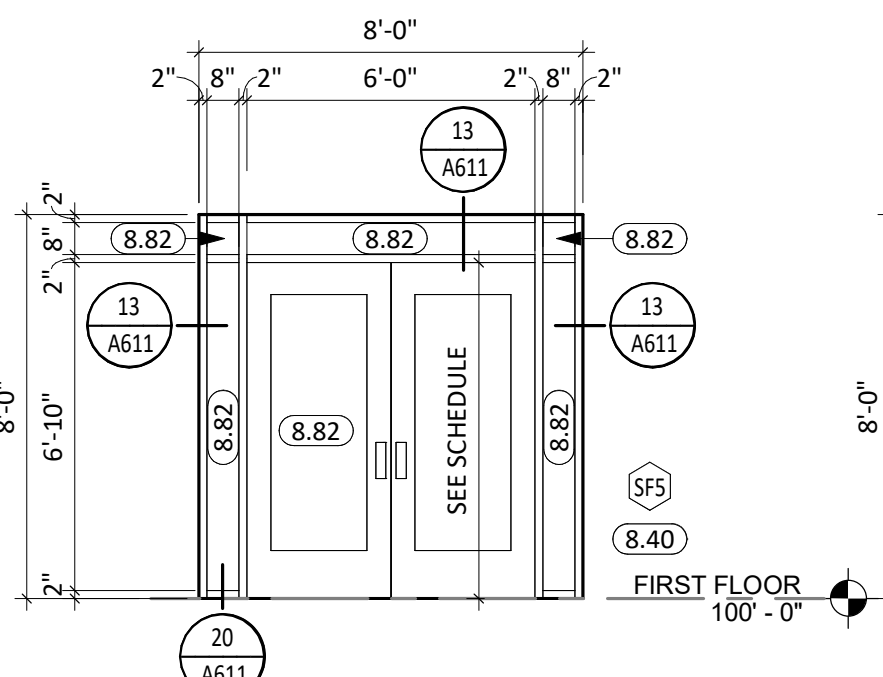
**FRAME TYPE SF2**  
1/4" = 1'-0"



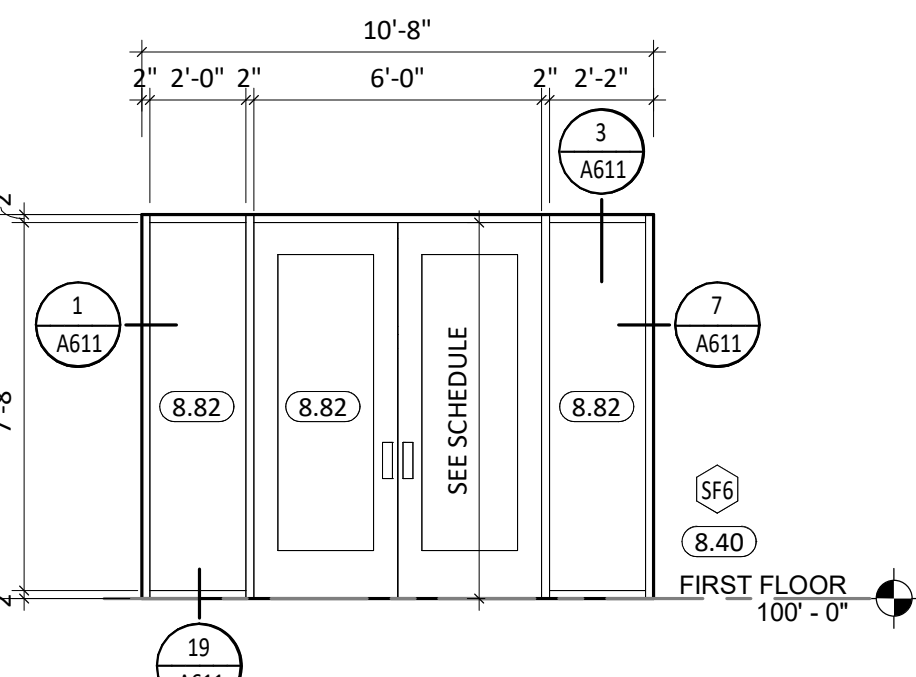
**FRAME TYPE SF3**  
1/4" = 1'-0"



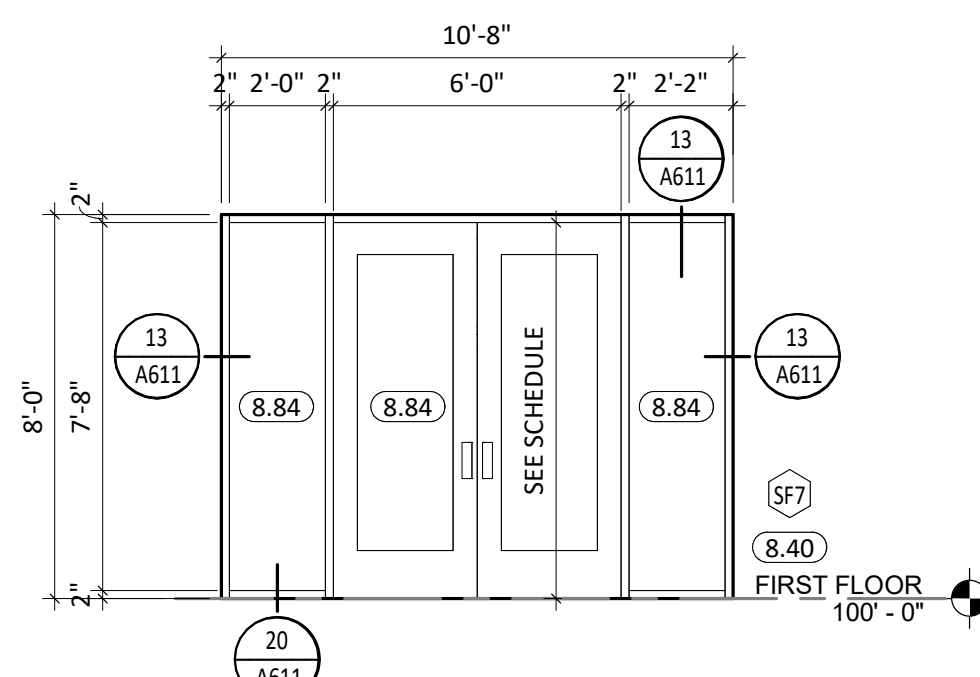
**FRAME TYPE SF4**  
1/4" = 1'-0"



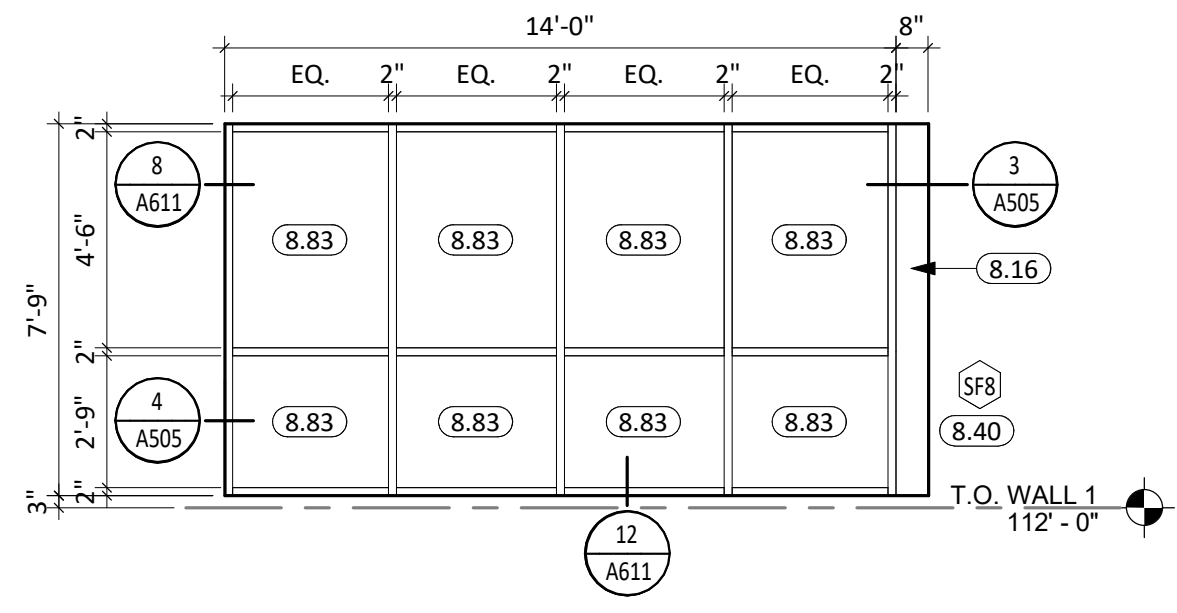
**FRAME TYPE SF5**  
1/4" = 1'-0"



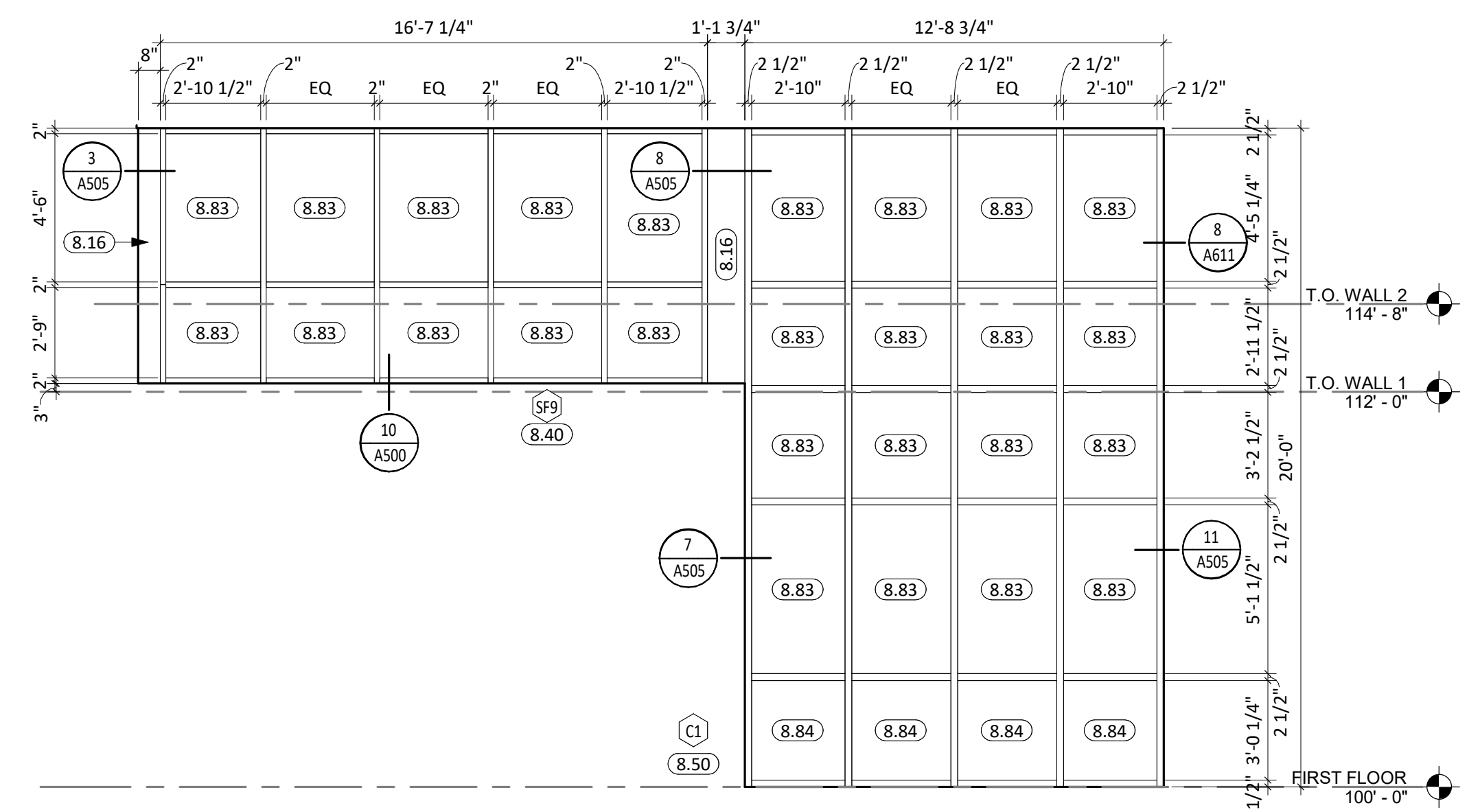
**FRAME TYPE SF6**  
1/4" = 1'-0"



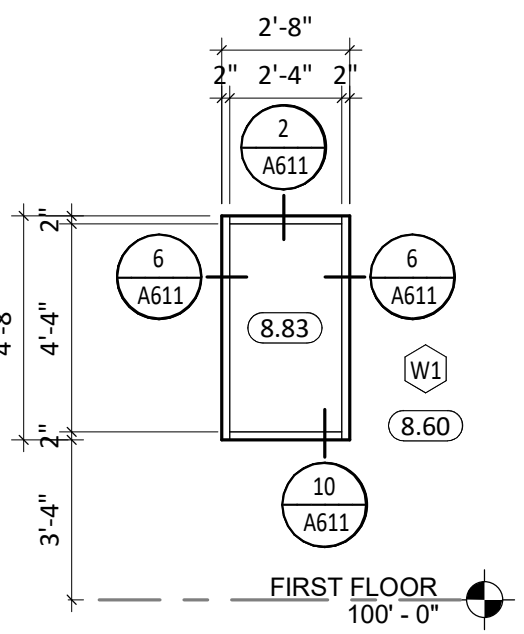
**FRAME TYPE SF7**  
1/4" = 1'-0"



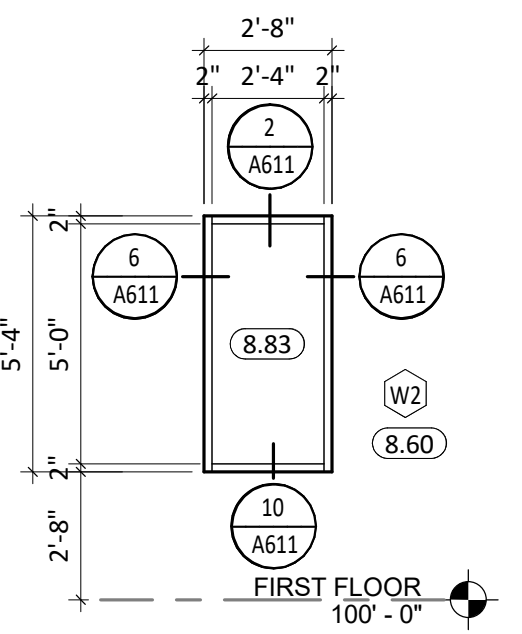
**FRAME TYPE SF8**  
1/4" = 1'-0"



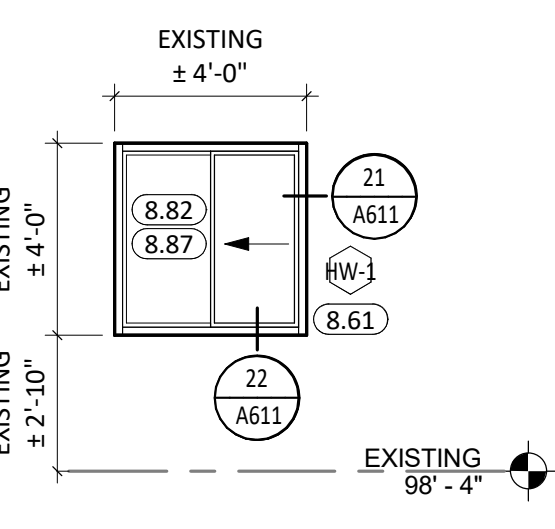
**FRAME TYPES SF10/C1**  
1/4" = 1'-0"



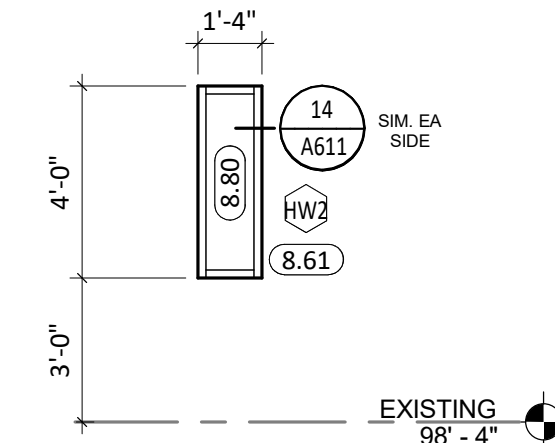
**FRAME TYPE W1**  
1/4" = 1'-0"



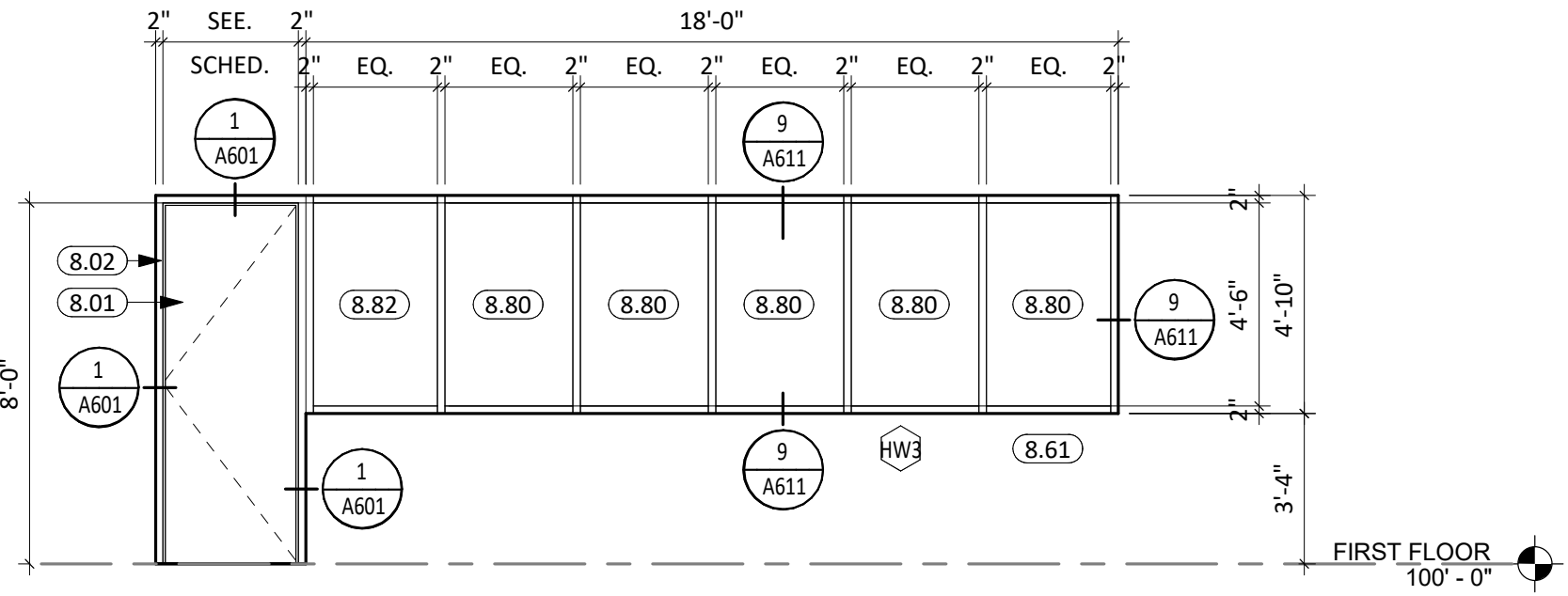
**FRAME TYPE W2**  
1/4" = 1'-0"



**FRAME TYPE HW1**  
1/4" = 1'-0"



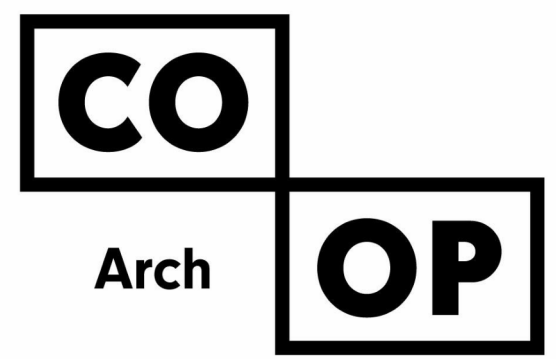
**FRAME TYPE HW2**  
1/4" = 1'-0"



**FRAME TYPE HW3**  
1/4" = 1'-0"

GENERAL NOTES	
1.	SEE SHEET <b>6000</b> FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
2.	FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
3.	ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
4.	RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
5.	ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
6.	SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION TO VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
7.	PROVIDE COUNTERTOP SUPPORTS AT QUEL SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
8.	TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
9.	COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
10.	MILLWORK SUPPLIER SHALL PROVIDE FULLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
11.	PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
12.	COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
13.	CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
14.	PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
15.	PJ = PANEL JOINT
16.	RV = REVEAL

KEYNOTE SCHEDULE	
8.01	DOOR (SEE SCHED.)
8.02	FRAME (SEE SCHED.)
8.16	BRAKE METAL; MATCH ALUMINUM FRAME FINISH
8.40	ALUMINUM FRAMED ENTRANCE/STOREFRONT
8.50	ALUMINUM CURTAIN WALL
8.60	ALUMINUM WINDOW UNIT
8.61	HOLLOW-METAL WINDOW UNIT
8.80	1/2" FLOAT GLASS
8.82	1/2" TEMPERED GLASS
8.83	1" INSULATED GLASS
8.84	1" INSULATED TEMPERED GLASS
8.87	SINGLE PANEL SLIDING TRANSACTION WINDOW, 1HR RATED



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



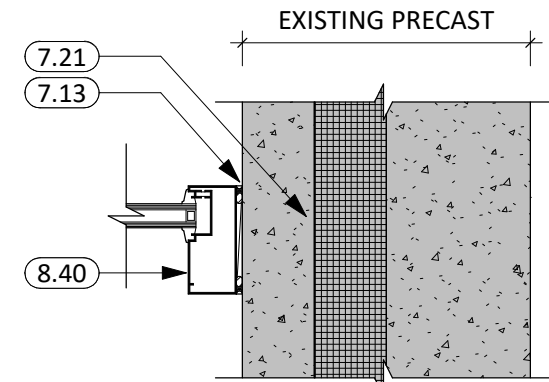
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

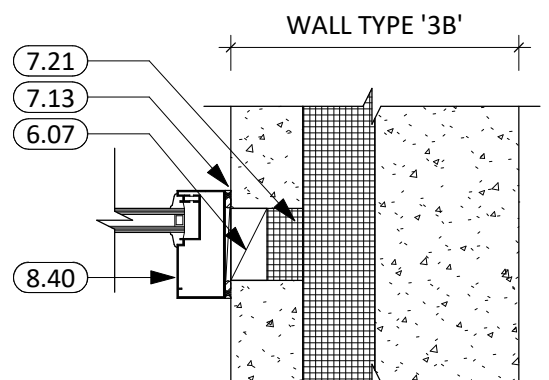
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
GLAZING ELEVATIONS

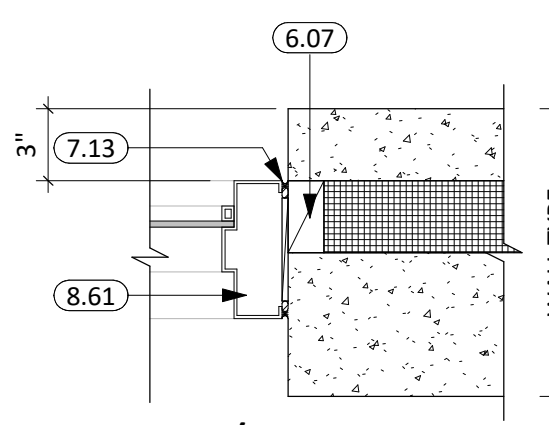
**A610**



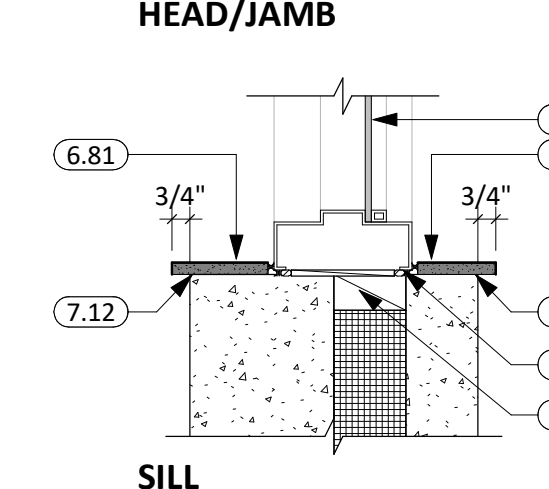
1 SF JAMB - EXIST. PRECAST  
1 1/2" = 1'-0"



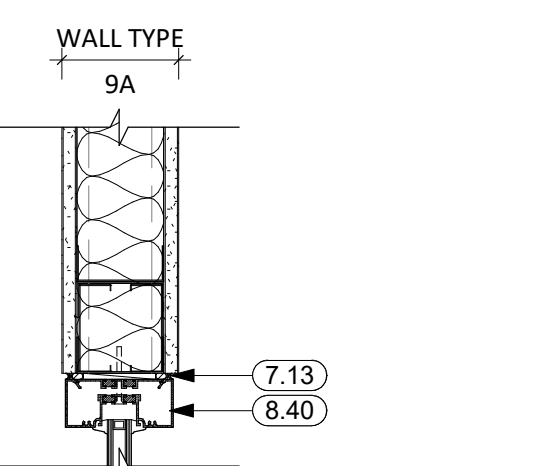
5 SF HEAD/JAMB DETAIL - 3B  
1 1/2" = 1'-0"



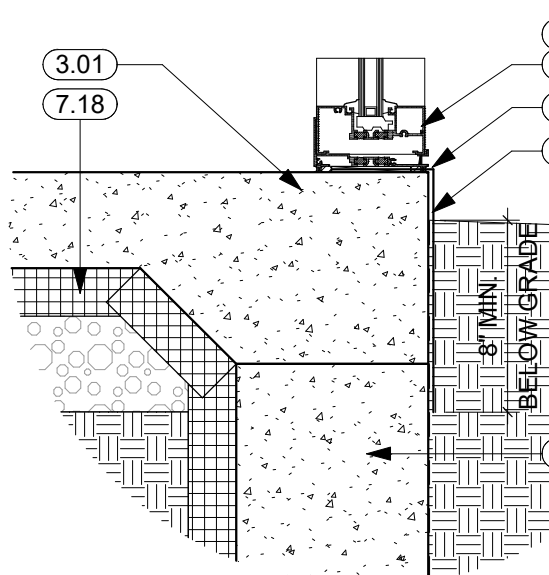
6 SF/W JAMB DETAIL - 4A  
1 1/2" = 1'-0"



13 SF HEAD/JAMB - 9A  
1 1/2" = 1'-0"

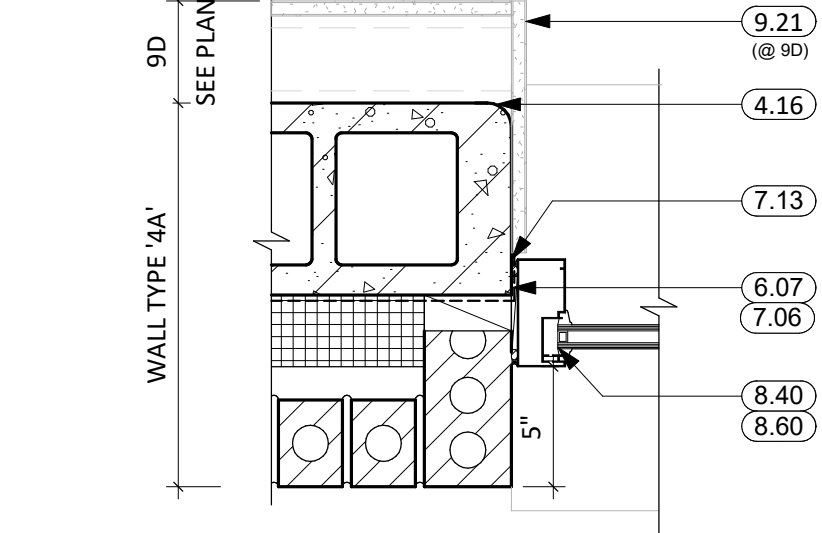


14 HMW HEAD/JAMB - 9A  
1 1/2" = 1'-0"

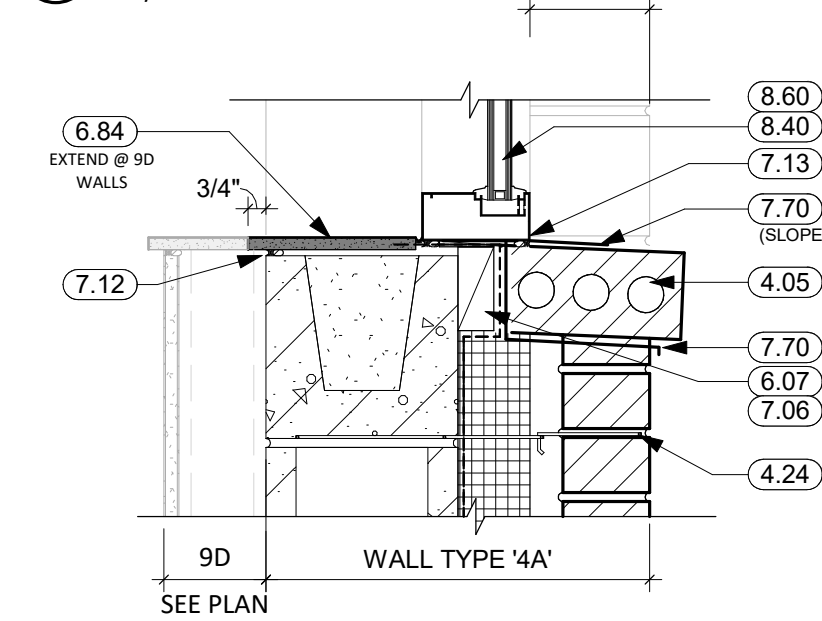


18 SILL @ GRADE  
1 1/2" = 1'-0"

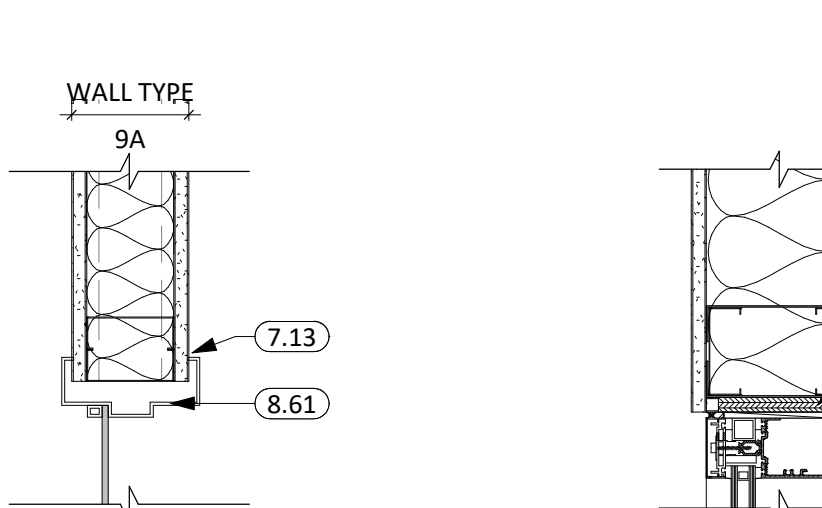
2 SF/W HEAD DETAIL - 4A  
1 1/2" = 1'-0"



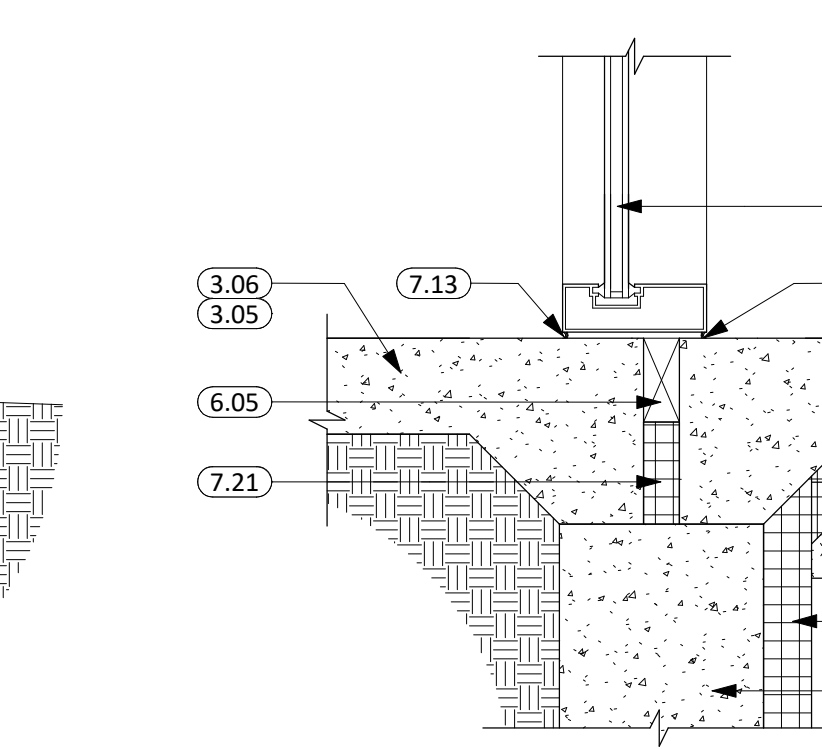
6 SF/W JAMB DETAIL - 4A  
1 1/2" = 1'-0"



10 SF/W SILL DETAIL - 4A  
1 1/2" = 1'-0"

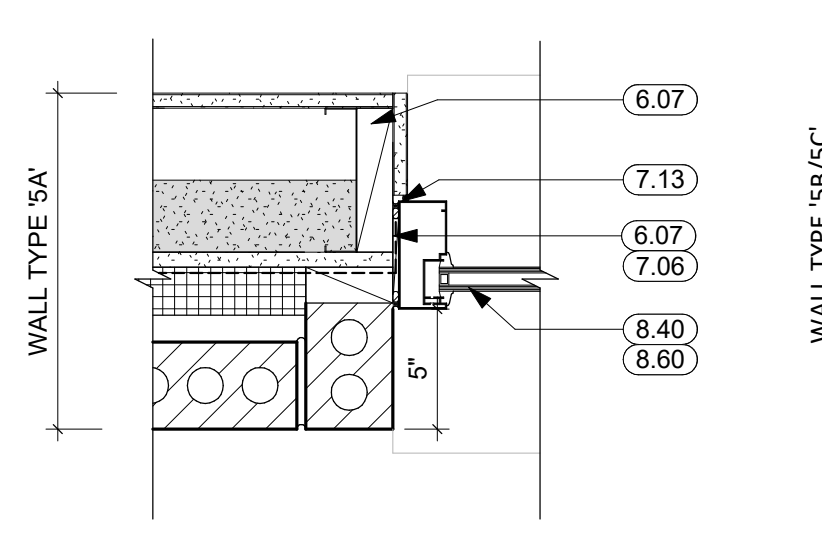


14 HMW HEAD/JAMB - 9A  
1 1/2" = 1'-0"

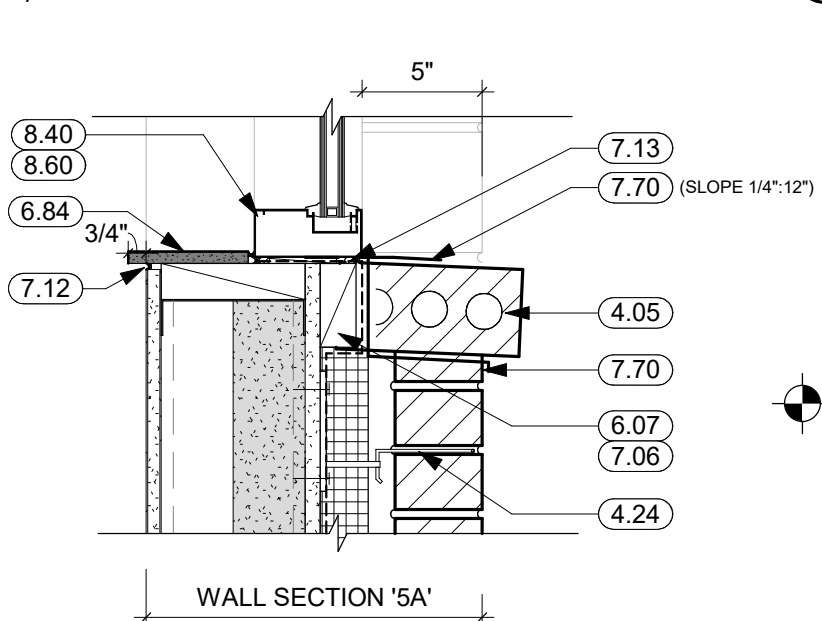


19 SILL @ STOOP  
1 1/2" = 1'-0"

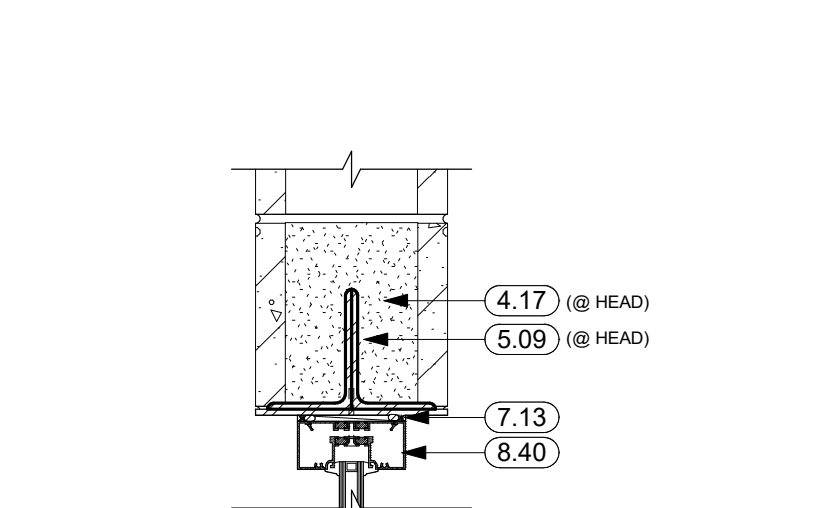
3 SF/W HEAD DETAIL - 5A  
1 1/2" = 1'-0"



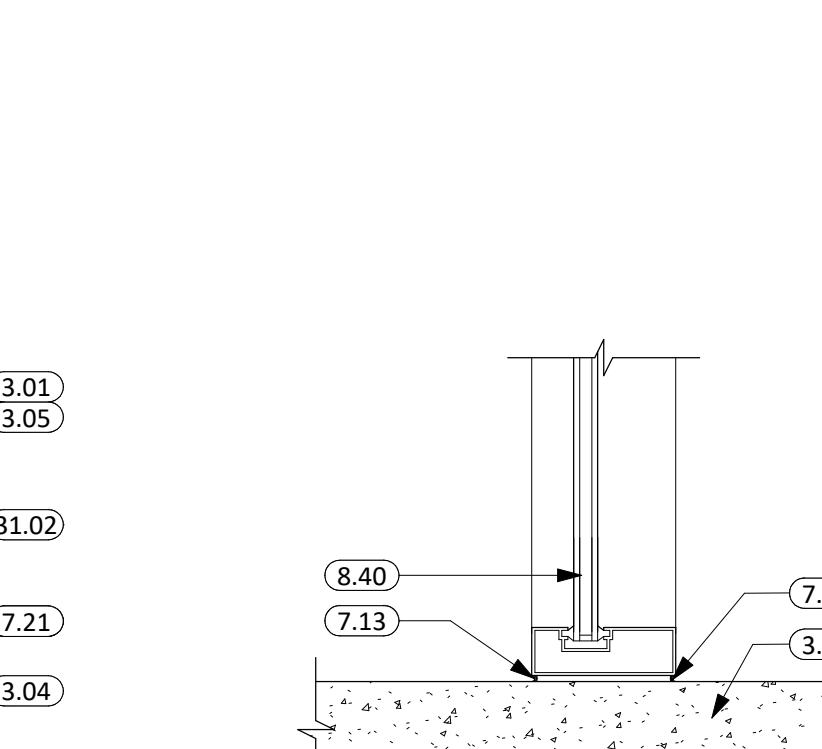
7 SF/W JAMB DETAIL - 5A  
1 1/2" = 1'-0"



11 SF/W SILL DETAIL - 5A  
1 1/2" = 1'-0"

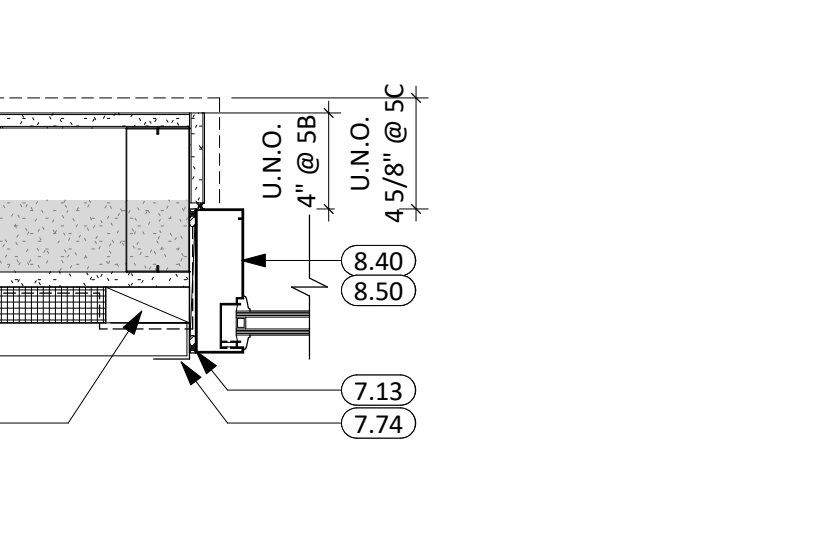


16 SF HEAD/JAMB - 4B  
1 1/2" = 1'-0"

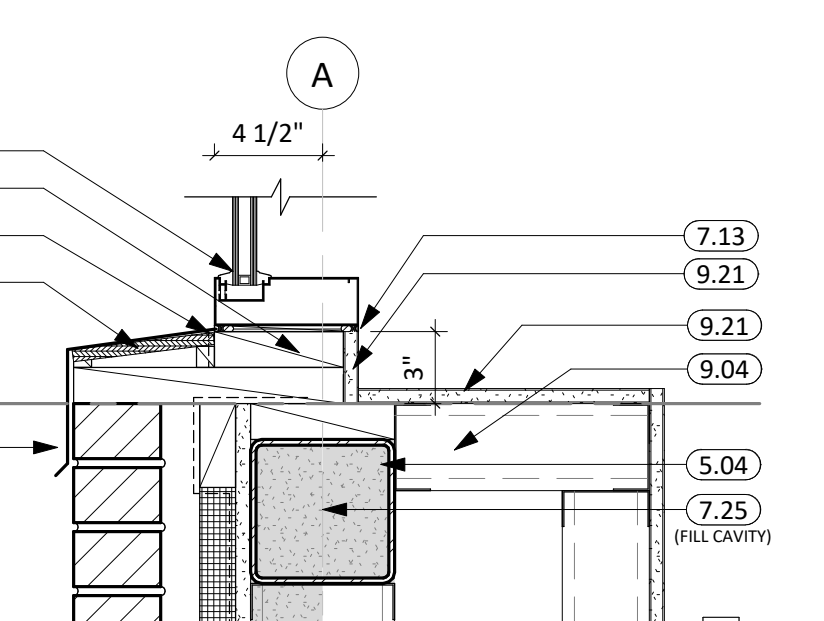


20 SILL @ INT. SLAB  
1 1/2" = 1'-0"

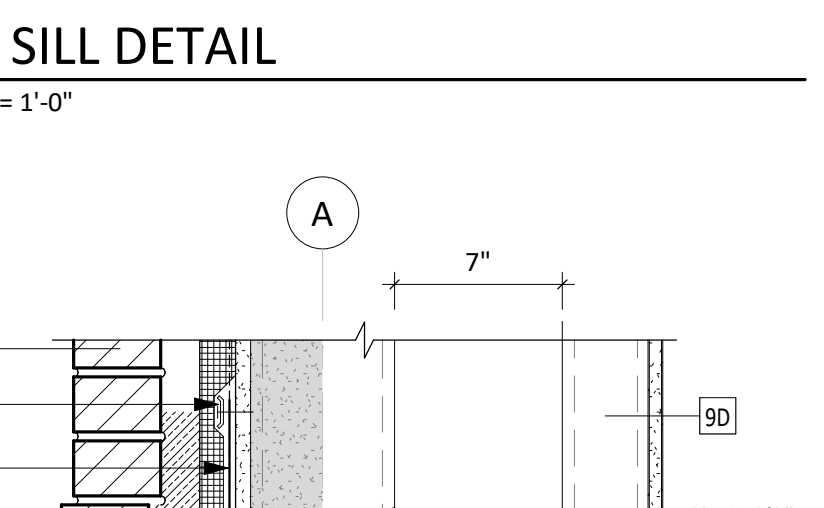
4 CW/SF HEAD DETAIL - 5B/5C  
1 1/2" = 1'-0"



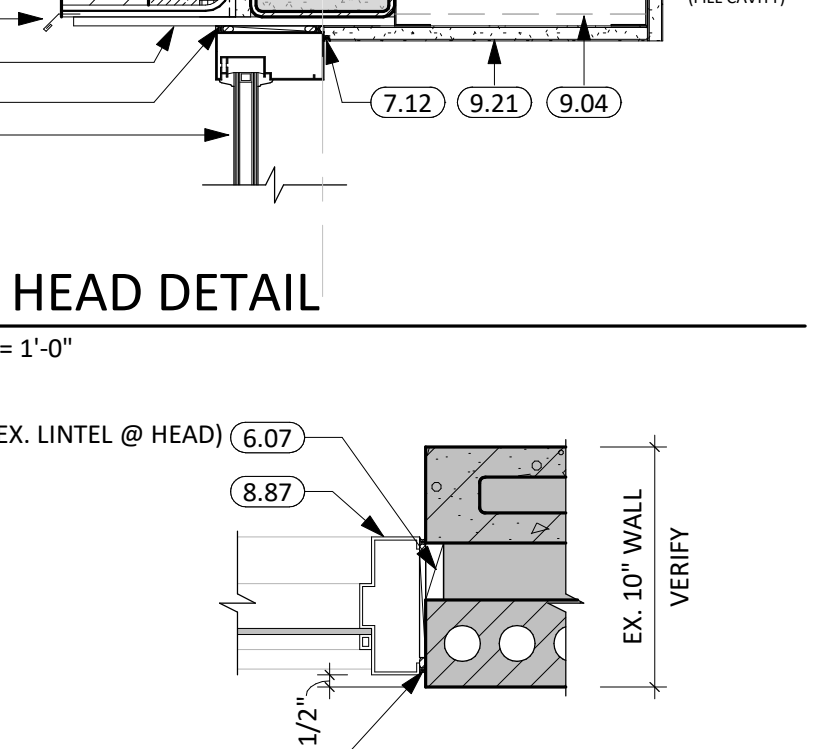
8 CW/SF JAMB DETAIL - 5B/5C  
1 1/2" = 1'-0"



12 SF9 SILL DETAIL  
1 1/2" = 1'-0"

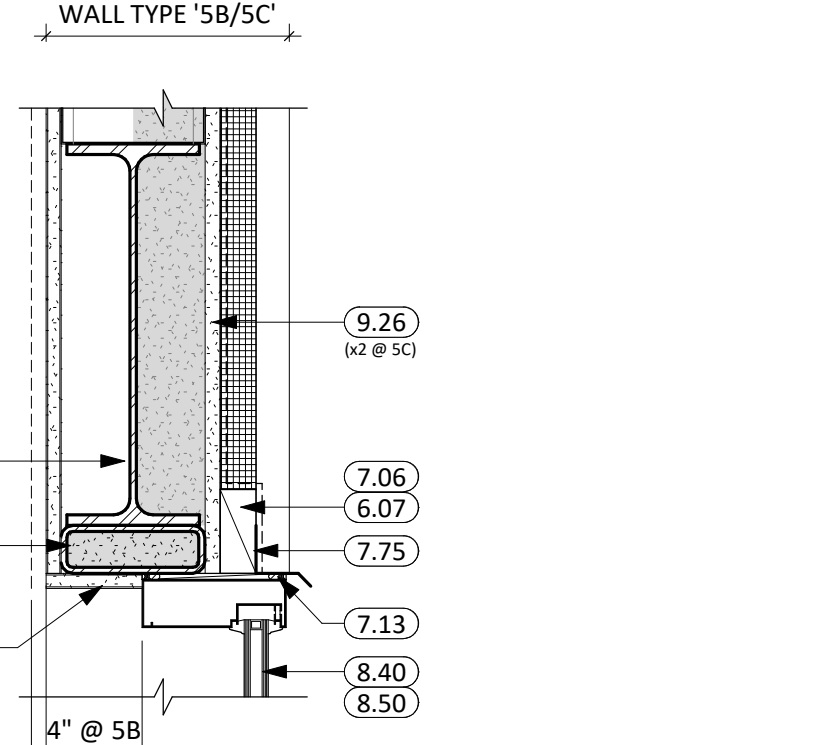
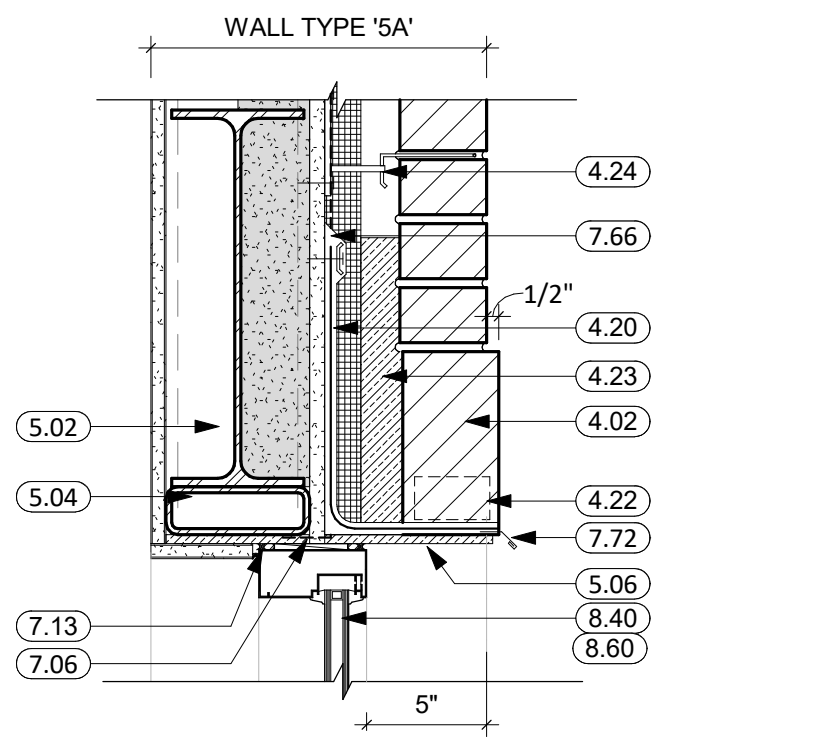
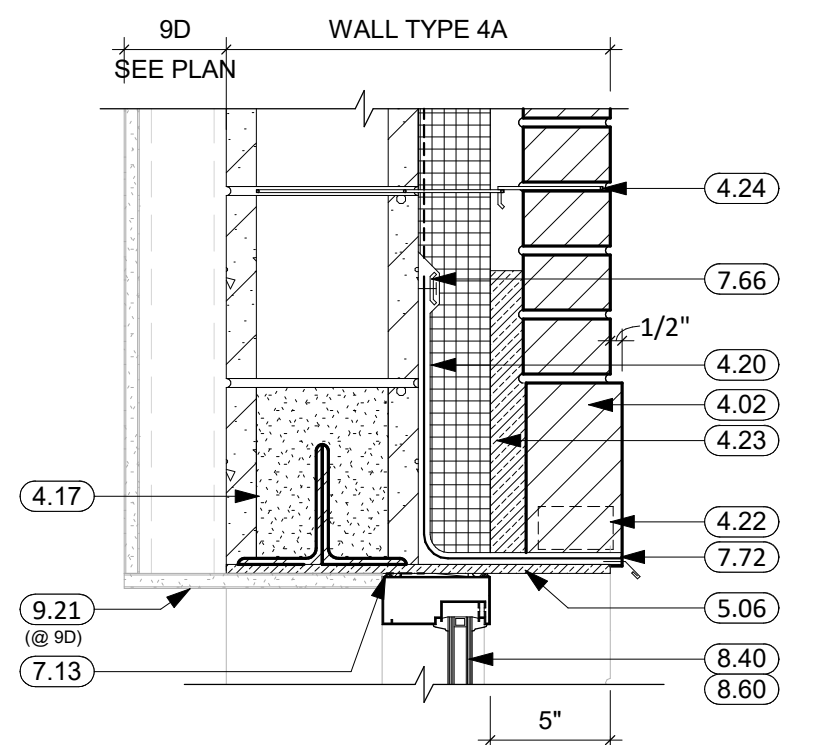
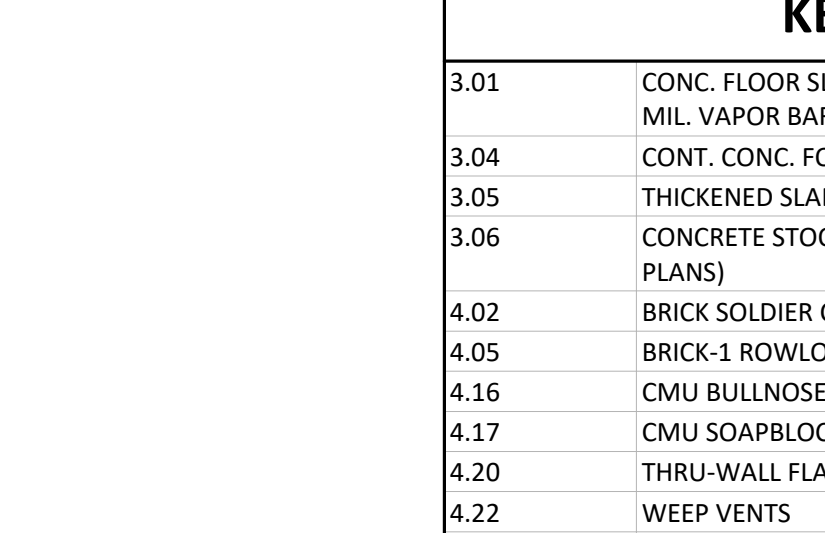


17 SF3 HEAD DETAIL  
1 1/2" = 1'-0"



21 HM-1 HEAD/JAMB  
1 1/2" = 1'-0"

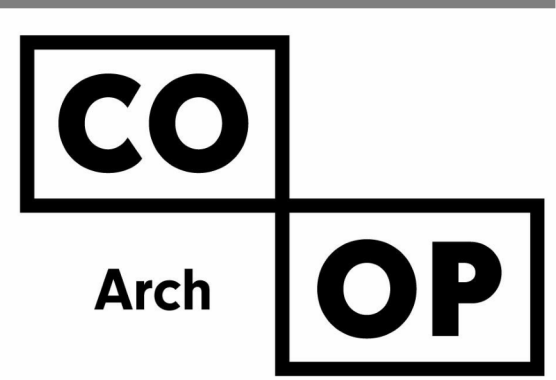
22 HM-1 SILL  
1 1/2" = 1'-0"



- ### GENERAL NOTES
- SEE SHEET 6000 FOR REQUIRED ADA CLEARANCES & MOUNTING HEIGHTS.
  - FIRE RATED WALLS ARE INDICATED ON THE CODE PLANS.
  - ALL WALLS TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
  - RESTROOM WALLS ARE SOUND INSULATED AND EXTEND TO THE DECK.
  - ALL INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU, UNLESS OTHERWISE NOTED.
  - SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION TO VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT.
  - PROVIDE COUNTERTOP SUPPORTS AT OPEN SPACES AT MINIMUM OF 32" ON CENTER AND MAXIMUM OF 48" ON CENTER.
  - TALL CABINETS OVER 30" WIDE SHALL HAVE VERTICAL DIVIDER FULL HEIGHT.
  - COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS w/ MECHANICAL AND ELECTRICAL.
  - MILLWORK SUPPLIER SHALL PROVIDE FILLER PANELS AND SCRIBE STRIPS AS NEEDED FOR COMPLETE INSTALLATION.
  - PROVIDE FINISHED END PANELS AT EXPOSED MILLWORK SURFACES.
  - COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
  - CAULK PERIMETER OF TUB/SHOWER UNITS, TOILETS, URINALS, SINKS AND COUNTERTOPS AS REQUIRED.
  - PROVIDE 2x BLOCKING AT GRAB BAR AND FUTURE GRAB BAR LOCATIONS. SEE CODE SHEETS FOR ADDITIONAL BLOCKING INFORMATION.
  - PJ = PANEL JOINT
  - RV = REVEAL

### KEYNOTE SCHEDULE

3.01	CONC. FLOOR SLAB ON GRADE (SEE STRUCT. FOR THICKNESS AND REINF.) w/ 15 MIL. VAPOR BARRIER BELOW
3.04	CONT. CONC. FOUNDATION WALL (SEE STRUCTURAL PLANS)
3.05	THICKENED SLAB
3.06	CONCRETE STOOP w/FROST FREE FOOTING (SEE STRUCTURAL/LANDSCAPE PLANS)
4.02	BRICK SOLDIER COURSING; SEE EXTERIOR ELEVATIONS FOR TYPE
4.05	BRICK-1 ROWLOCK WINDOW SILL (SLOPE AS NEEDED)
4.16	CMU BULLNOSE CORNER UNIT
4.17	CMU SOAPBLOCK
4.20	THRU-WALL FLASHING
4.22	WEEP VENTS
4.23	MORTAR NET
4.24	BRICK WALL TIES
5.02	STRUCTURAL STEEL BEAM (SEE ARCH. & STRUCT.)
5.04	STRUCTURAL STEEL TUBE (SEE ARCH. & STRUCT.)
5.06	STRUCTURAL STEEL PLATE (SEE ARCH. & STRUCT.)
5.09	STRUCTURAL STEEL LITTLE (SEE ARCH. & STRUCT.)
5.39	HEADER CONDITION (SEE ARCH. & STRUCT.)
6.05	DOUBLE SILL PLATE
6.07	2x WOOD BLOCKING AS REQUIRED
6.16	ROOF SHEATHING
6.80	PLASTIC LAMINATE COUNTERTOP
6.81	SOLID SURFACE
6.84	SOLID SURFACE WINDOW SILL
7.06	WRAP VAPOR BARRIER INTO WINDOW OPENING
7.12	SEALANT (PROVIDE BACKER ROD WHERE REQ.)
7.13	SEALANT AROUND PEREMETER (TYP. BOTH SIDES)
7.18	2" RIGID INSULATION. INSULATION IS CONTINUOUS FROM TOP OF FOOTING TO 24" INTO BUILDING UNDER FLOOR SLAB AS INDICATED.
7.21	RIGID INSULATION
7.25	SPRAY APPLIED FOAM INSULATION (3" MIN.)
7.66	TERMINATION BAR AND HIGH GRADE SEALANT
7.70	PRE-FINISHED SHEET METAL FLASHING
7.72	PRE-FINISHED METAL DRIP EDGE
7.74	PRE-FINISHED J-CHANNEL
7.75	PRE-FINISHED SILL FLASHING PER METAL PANEL MFR
8.40	ALUMINUM FRAMED ENTRANCE/STOREFRONT
8.50	ALUMINUM CURTAIN WALL
8.60	ALUMINUM WINDOW UNIT
8.61	HOLLOW-METAL WINDOW UNIT
8.87	SINGLE PANEL SLIDING TRANSACTION WINDOW, 1HR RATED
9.04	3 5/8" STEEL STUD & TRACK FRAMING
9.05	6" STEEL STUD & TRACK FRAMING
9.21	5/8" GYPSUM BOARD
9.26	5/8" EXTERIOR GYPSUM SHEATHING
31.02	DRAINAGE FILL (COORD. REQ. w/ SOILS REPORT)



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

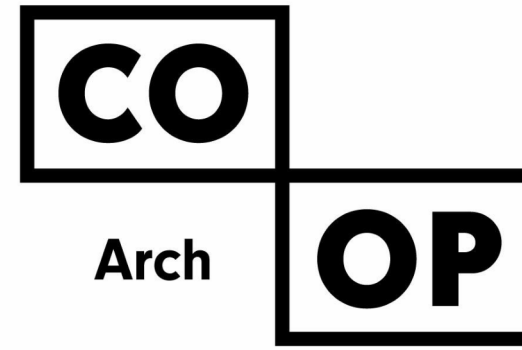
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
GLAZING DETAILS

A611

DOOR & FRAME SCHEDULE ALTERNATES												
NO.	DOOR				FRAME		FRAME DETAILS			FIRE	HDWRE	ADDITIONAL NOTES
	W	H	T	TYPE	MAT'L	TYPE	MAT'L	HEAD	JAMB			
ALT100	3' - 0"	7' - 2"	0' - 1 3/4"	F	WD	HM-001	HM	5/A601	5/A601	--		26
ALT101	3' - 0"	7' - 2"	0' - 1 3/4"	F	WD	HM-001	HM	5/A601	5/A601	--		26

**KEYNOTE SCHEDULE**



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

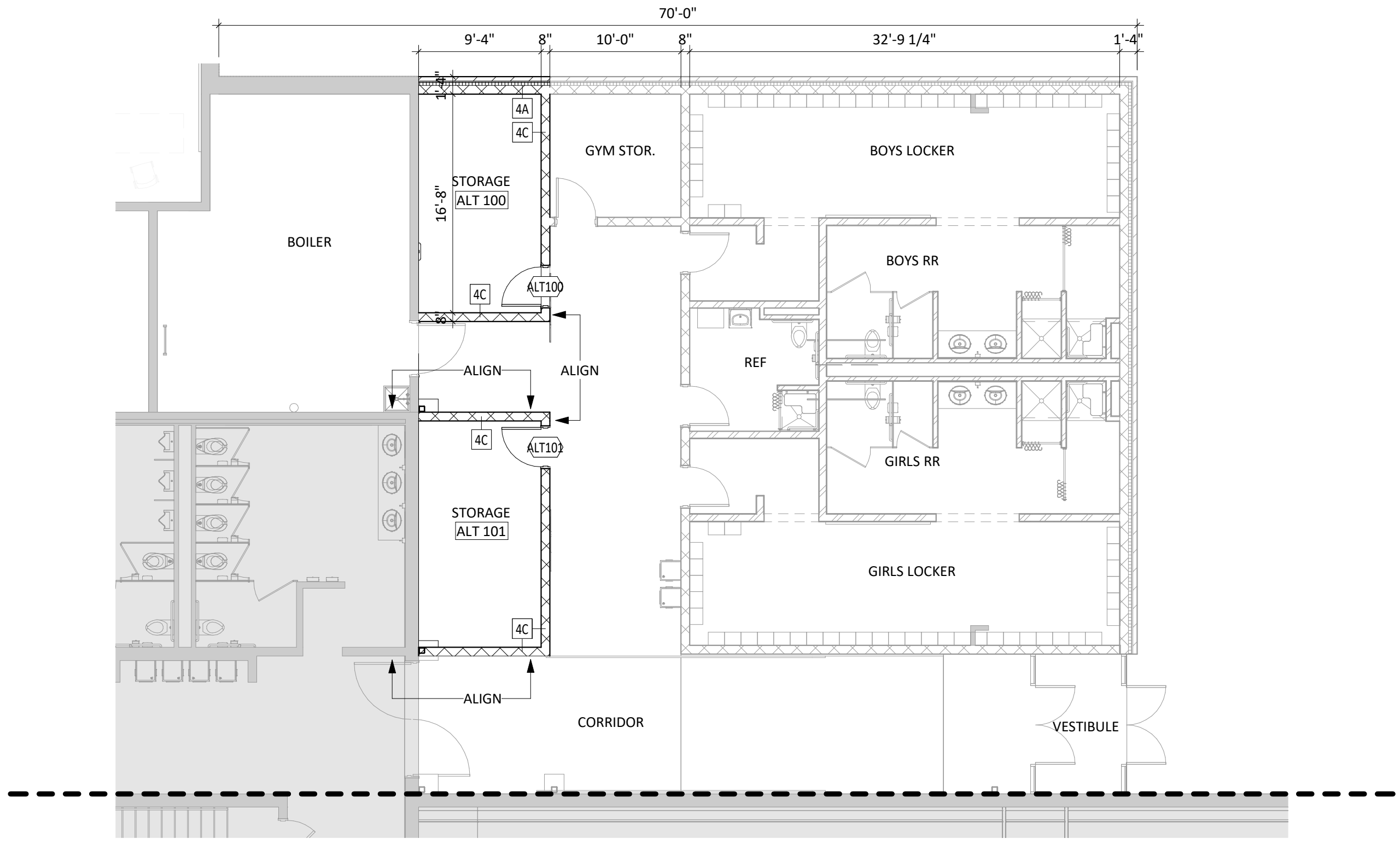
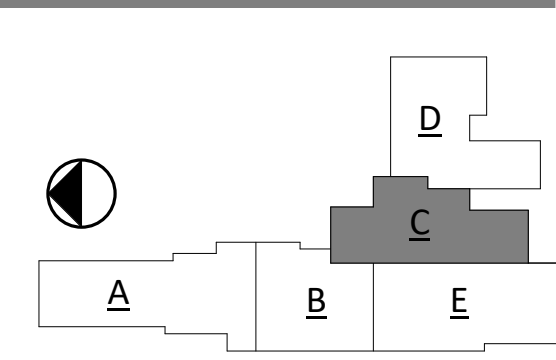
co-oparch.com

**GENERAL NOTES**

1. FIRE RATED WALL ARE INDICATED ON THE CODE PLANS.
2. PROVIDE FIRE EXTINGUISHERS AND CABINETS AS SHOWN ON THE CODE PLAN(S).
3. REFER TO SHEET **G000** FOR ADA STANDARDS.
4. REFER TO SHEET **G003** FOR WALL, ROOF, AND FLOOR TYPES.
5. INTERIOR DIMENSIONS ARE FROM FACE OF GWB/CMU TO FACE OF GWB/CMU UNLESS OTHERWISE NOTED.
6. ALL WALL TYPES TO EXTEND TO DECK UNLESS OTHERWISE NOTED ON WALL TYPES.
7. EXTERIOR DIMENSIONS ARE FROM FACE OF BRICK/SHEATHING UNLESS OTHERWISE NOTED.
8. COORDINATE WORK DONE BY OTHERS AS INDICATED ON THE DRAWINGS.
9. INCREASE WALL THICKNESS OF METAL STUD AND CONCRETE BLOCK WALLS AS REQUIRED TO ACCOMMODATE MECHANICAL AND ELECTRICAL DEVICES - VERIFY W/ ARCHITECT PRIOR TO WORK.
10. SEE MECHANICAL FOR ALL FLOOR DRAIN SIZES AND LOCATIONS U.N.D. SET FLOOR DRAINS MINIMUM 1/4" BELOW FINISHED FLOOR. PROVIDE EVEN SLOPE FROM WALL TO DRAIN W/ A MAXIMUM SLOPE OF 1/4" PER FOOT.
11. VERIFY DRYWALL CONTROL JOINT LOCATIONS W/ ARCHITECT ON SITE PRIOR TO INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONTROL JOINTS AT 30'-0" O.C. MAX. IN LONG WALL EXPANSES. CONTROL JOINTS AT DOOR JAMBS EXTENDING FROM DOOR HEAD TO CEILING. CONSIDERATION SHALL ALSO BE GIVEN TO LOCATING CONTROL JOINTS FROM FLOOR TO CEILING AT EITHER EDGE OF LARGE WINDOW OPENINGS.
12. VERIFY HOISTWAY SHAFT SIZE REQUIREMENTS W/ ELEVATOR MANUFACTURER & COORDINATE.
13. COORDINATE ALL CHASE SIZES AND LOCATIONS W/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
14. COORDINATE ALL SHEAR WALL LOCATIONS W/ STRUCTURAL PLANS.
15. THE AIR & MOISTURE WEATHER BARRIER IS TO BE CONTINUOUS FROM THE BASE OF THE WALLS UP TO & TYING INTO THE ROOF BARRIER SYSTEM.
16. WALL TYPES ARE '4C' TYPICALLY UNLESS NOTED OTHERWISE
17. NEW CMU IN EXISTING AREAS SHALL ALIGN WITH EXISTING BONDING PATTERNS (STACKED OR RUNNING)

**GENERAL NOTES**

1. ALL DIMENSIONS ARE FROM FACE OF FINISH MATERIAL UNLESS OTHERWISE NOTED.
2. REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.
3. PROVIDE ACCESS DOORS AT MECHANICAL UNIT LOCATIONS ABOVE CEILING. COORDINATE NUMBER REQUIRED AND LOCATIONS WITH MECHANICAL SHEETS.
4. CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
5. CENTER LIGHT FIXTURES BETWEEN WALLS AND/OR CEILING BULKHEADS UNLESS OTHERWISE DIMENSIONED.
6. IN EXPOSED TO STRUCTURE ROOMS, CENTER LIGHTS FIXTURES WITHIN ROOMS UNLESS OTHERWISE NOTED.
7. THE REFLECTED CEILING PLANS ARE INTENDED TO AID IN COORDINATION ONLY AND ARE NOT INTENDED TO BE COMPREHENSIVE. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. NOTIFY ARCHITECT WHERE CONFLICTS OCCUR.
8. PROVIDE WATER-RESISTANT GYPSUM BOARD PANELS AT ALL BATHROOM WALLS AND ANY WALLS EXPOSED TO MOISTURE.
9. PROVIDE GLASS-MATT FACED GYPSUM SHEATHING BEHIND TILE FINISHES AT ALL SHOWERS AND BATHTUBS.
10. ELEVATION MARKERS INDICATE HEIGHT FROM FLOOR OF THE ROOM THE CEILING IS IN.



**FIRST FLOOR PLAN - AREA C - ALTERNATE 1**  
1/8" = 1'-0"

CO-OP PROJECT NO: 2153



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ALTERNATE

**A991**



**SPECIAL NOTES**

- REFER TO THE FRONT END BIDDING DOCUMENTS FOR DESCRIPTION OF ALTERNATES.
- CLARIFICATION TO THE BIDDING - ANY NATURAL GAS OR ELECTRIC UTILITY COSTS FROM NORTHWESTERN ENERGY WILL BE PAID DIRECTLY BY THE OWNER AND SHALL NOT BE INCLUDED AS PART OF THE CONTRACT.
- CIVIL UTILITIES ARE NOT SHOWN. REFER TO CIVIL ENGINEERS PLANS FOR INFORMATION.

**GENERAL NOTES**

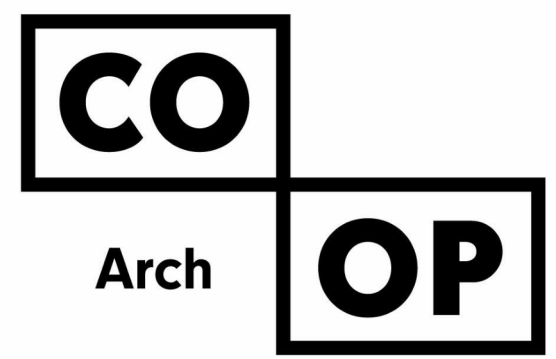
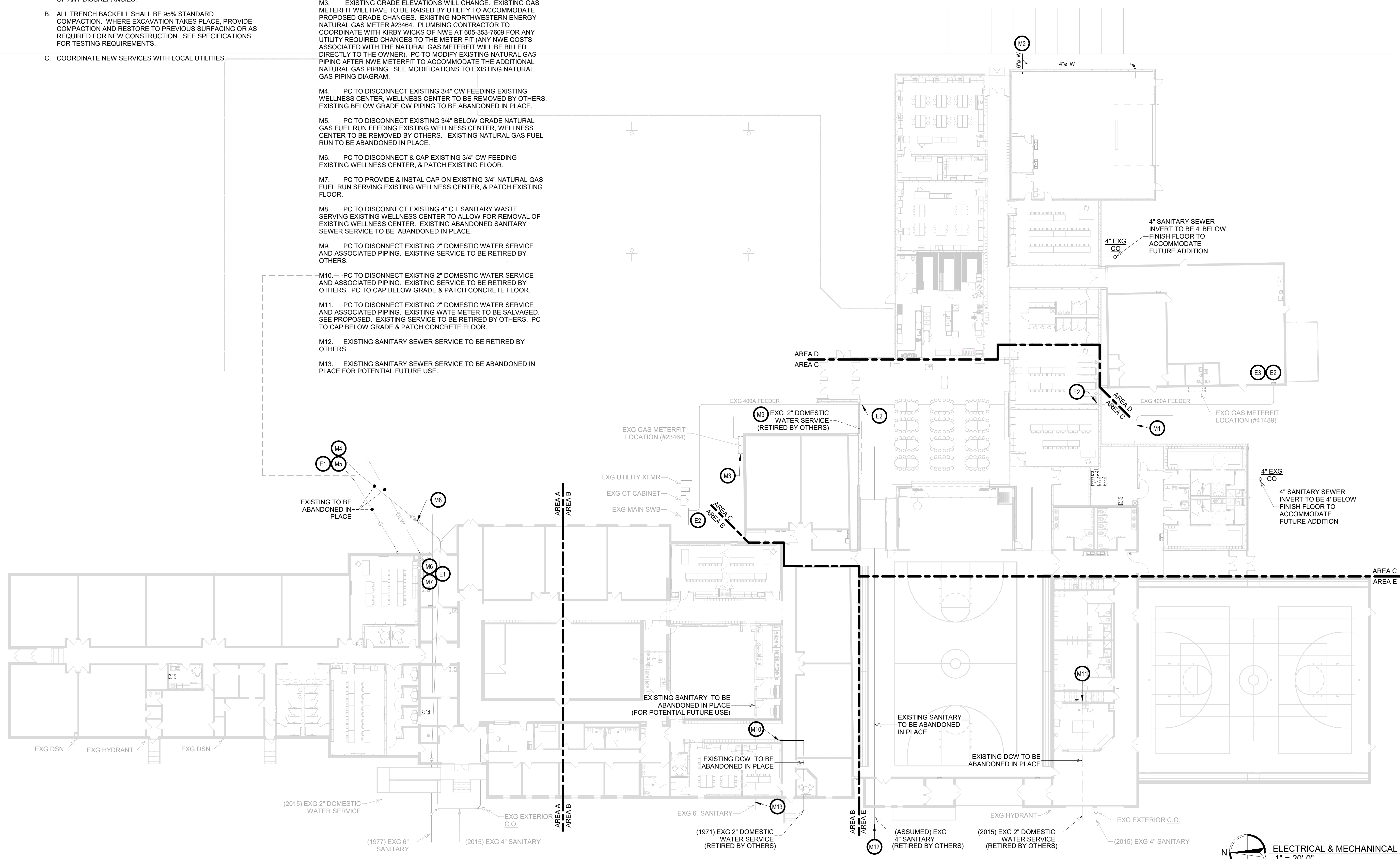
- CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
- ALL TRENCH BACKFILL SHALL BE 95% STANDARD COMPACTION. WHERE EXCAVATION TAKES PLACE, PROVIDE COMPACTION AND RESTORE TO PREVIOUS SURFACING OR AS REQUIRED FOR NEW CONSTRUCTION. SEE SPECIFICATIONS FOR TESTING REQUIREMENTS.
- COORDINATE NEW SERVICES WITH LOCAL UTILITIES.

**MECHANICAL KEYNOTES**

- PLUMBING CONTRACTOR TO CONNECT NEW 6" COMBINATION DOMESTIC & FIRE PROTECTION WATER SERVICE TO NEW 6" WATER SERVICE INSTALLED BY SITE UTILITY AT THIS LOCATION 5' OUTSIDE OF BUILDING. PLUMBING CONTRACTOR TO EXTEND INTO BUILDING, FURNISH AND INSTALL THRUST BLOCKS AND/OR TIE-RODS IN ACCORDANCE WITH THE LOCAL WATER DEPARTMENT STANDARDS AND REGULATIONS, AND PROVIDE 6" FLANGED CONNECTION FOR SPRINKLER CONTRACTOR'S USE. AS-BUILTS AND REQUIRED UNDERGROUND FIRE PROTECTION PIPING TESTING/TEST CERTIFICATE SHALL BE SUBMITTED TO ENGINEER AND FIRE PROTECTION CONTRACTOR FROM THE PLUMBING CONTRACTOR.
- PLUMBING CONTRACTOR TO CONNECT NEW 6" SANITARY SEWER TO NEW 6" SANITARY SEWER SERVICE INSTALLED BY SITE UTILITY CONTRACTOR AT THIS LOCATION 5' OUTSIDE OF BUILDING. PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATION, & INVERT.
- EXISTING GRADE ELEVATIONS WILL CHANGE. EXISTING GAS METERFIT WILL HAVE TO BE RAISED BY UTILITY TO ACCOMMODATE PROPOSED GRADE CHANGES. EXISTING NORTHWESTERN ENERGY NATURAL GAS METER #23464. PLUMBING CONTRACTOR TO COORDINATE WITH KIRBY WICKS OF NWE AT 605-353-7609 FOR ANY UTILITY REQUIRED CHANGES TO THE METER FIT (ANY NWE COSTS ASSOCIATED WITH THE NATURAL GAS METERFIT WILL BE BILLED DIRECTLY TO THE OWNER). PC TO MODIFY EXISTING NATURAL GAS PIPING AFTER NWE METERFIT TO ACCOMMODATE THE ADDITIONAL NATURAL GAS PIPING. SEE MODIFICATIONS TO EXISTING NATURAL GAS PIPING DIAGRAM.
- PC TO DISCONNECT EXISTING 3/4" CW FEEDING EXISTING WELLNESS CENTER. WELLNESS CENTER TO BE REMOVED BY OTHERS. EXISTING BELOW GRADE CW PIPING TO BE ABANDONED IN PLACE.
- PC TO DISCONNECT EXISTING 3/4" BELOW GRADE NATURAL GAS FUEL RUN FEEDING EXISTING WELLNESS CENTER. WELLNESS CENTER TO BE REMOVED BY OTHERS. EXISTING NATURAL GAS FUEL RUN TO BE ABANDONED IN PLACE.
- PC TO DISCONNECT & CAP EXISTING 3/4" CW FEEDING EXISTING WELLNESS CENTER, & PATCH EXISTING FLOOR.
- PC TO PROVIDE & INSTAL CAP ON EXISTING 3/4" NATURAL GAS FUEL RUN SERVING EXISTING WELLNESS CENTER, & PATCH EXISTING FLOOR.
- PC TO DISCONNECT EXISTING 4" C.I. SANITARY WASTE SERVING EXISTING WELLNESS CENTER TO ALLOW FOR REMOVAL OF EXISTING WELLNESS CENTER. EXISTING ABANDONED SANITARY SEWER SERVICE TO BE ABANDONED IN PLACE.
- PC TO DISCONNECT EXISTING 2" DOMESTIC WATER SERVICE AND ASSOCIATED PIPING. EXISTING SERVICE TO BE RETIRED BY OTHERS.
- PC TO DISCONNECT EXISTING 2" DOMESTIC WATER SERVICE AND ASSOCIATED PIPING. EXISTING SERVICE TO BE RETIRED BY OTHERS. PC TO CAP BELOW GRADE & PATCH CONCRETE FLOOR.
- PC TO DISCONNECT EXISTING 2" DOMESTIC WATER SERVICE AND ASSOCIATED PIPING. EXISTING WATE METER TO BE SALVAGED. SEE PROPOSED. EXISTING SERVICE TO BE RETIRED BY OTHERS. PC TO CAP BELOW GRADE & PATCH CONCRETE FLOOR.
- EXISTING SANITARY SEWER SERVICE TO BE RETIRED BY OTHERS.
- EXISTING SANITARY SEWER SERVICE TO BE ABANDONED IN PLACE FOR POTENTIAL FUTURE USE.

**ELECTRICAL KEYNOTES**

- WELLNESS CENTER: PROVIDE DISCONNECTION OF 100 AMP, 208/120 VOLT, 3 PHASE FEEDER FROM WELLNESS CENTER TO PANEL DP. COORDINATE DISCONNECTION AND REMOVAL OF FEEDER WITH GENERAL CONTRACTOR.
- AG SHOP POWER: PROVIDE PROTECTION OF EXISTING 400 AMP, 208/120 VOLT, 3 PHASE FEEDER FROM MAIN SWB TO AG SHOP. LOCATE AND EXCAVATE DIRT AROUND FEEDERS FOR FOOTINGS AND FOUNDATION WORK.
- AG SHOP SYSTEMS: PROVIDE TEMPORARY FIRE ALARM CONNECTION TO AG SHOP DURING CONSTRUCTION. PROVIDE (3) CAT 6 CABLES FROM SERVER RM 220 TO AG SHOP DATA RACK FOR TEMPORARY TELECOMMUNICATIONS CONNECTIONS. PROVIDE RIGID RACEWAY AND ROUTING TO MINIMIZE DAMAGE TO CABLING. COORDINATE FINAL REQUIREMENTS WITH OWNER'S IT DEPARTMENT AND GENERAL CONTRACTOR.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

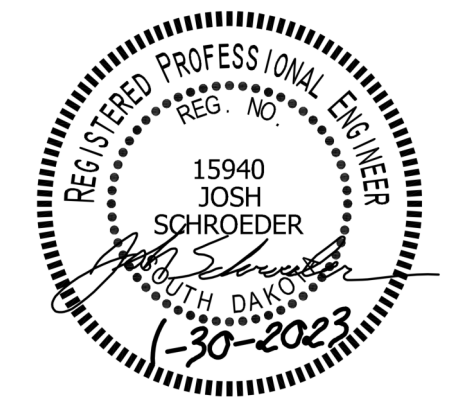
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

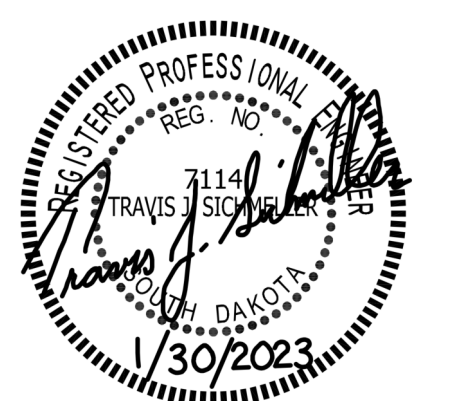
co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz



SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ELECTRICAL & MECHANICAL  
SITE PLAN

**EM101**

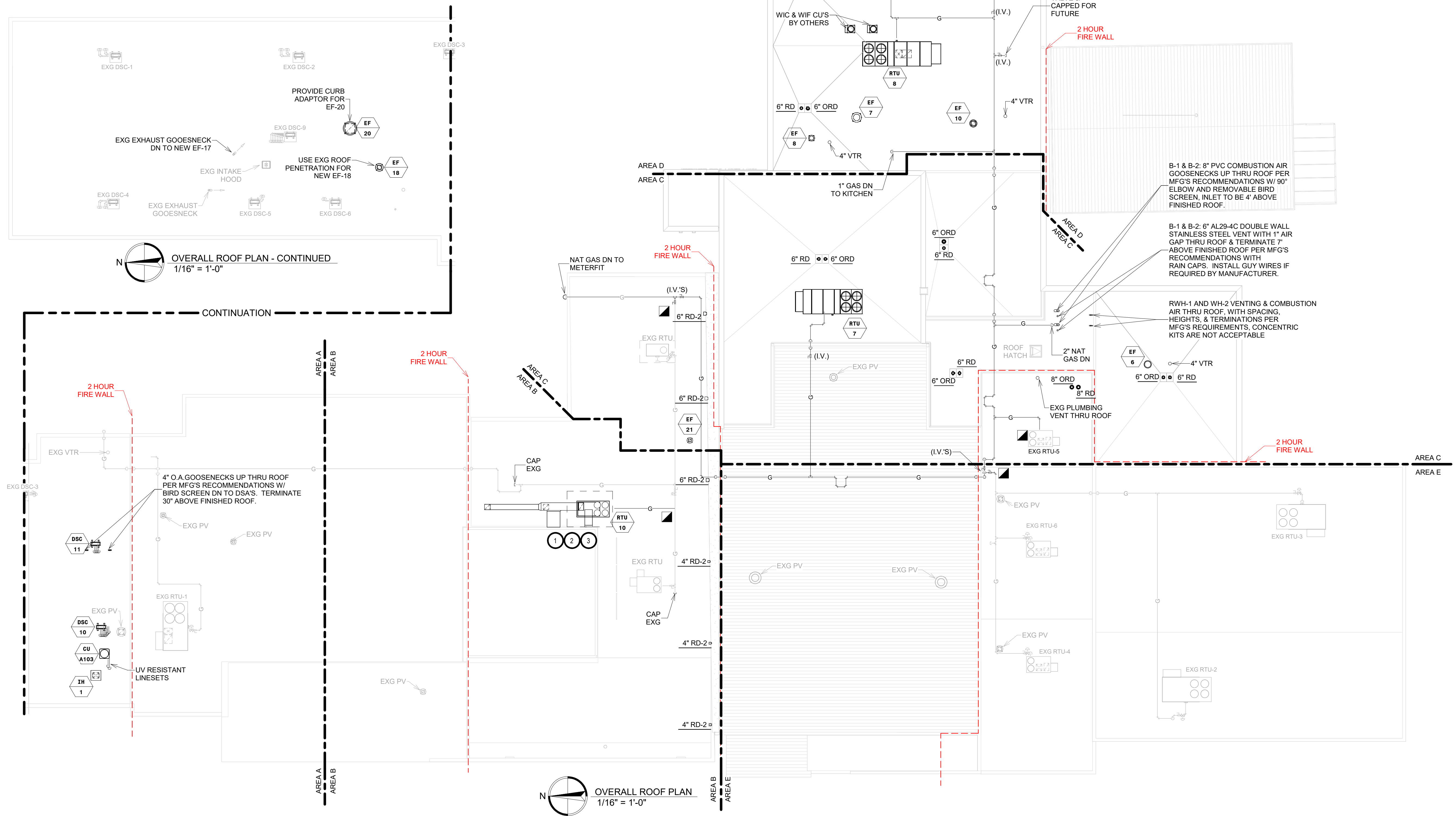
ELECTRICAL & MECHANICAL SITE PLAN  
1" = 20'-0"





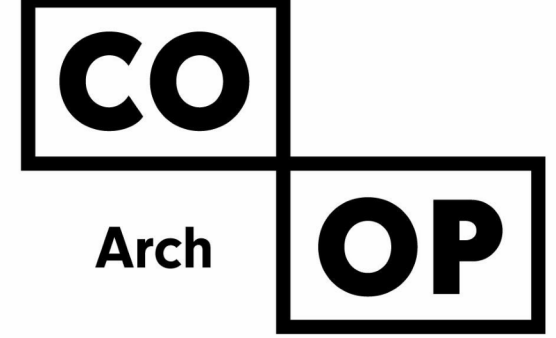
- MECHANICAL KEYNOTES**
1. PROVIDE & INSTALL WATER TIGHT SHEET METAL "CRICKET" AND COLLAR AT HORIZONTAL BUILDING PENETRATION TO PREVENT MIGRATION OF PRECIPITATION INTO BUILDING.
  2. PROVIDE & INSTALL VENTURE CLAD JACKETING (OR PRIOR APPROVED EQUAL) VENTURE CLAD 1577-CWE STUCCO EMBOSSED JACKETING ON ALL SIDES FOR EXTERIOR APPLICATION. THE TOP OF ALL DUCTWORK IS TO BE CROWNED (PITCHED) TO ALLOW WATER RUNOFF AND PREVENT POOLING.
  3. WATER TIGHT CAULK ALL AROUND AT ALL PENETRATIONS.

- GENERAL NOTES**
- A. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
  - B. PC TO PROVIDE & INSTALL PREMANUFACTURED ROOF BLOCKS FOR SUPPORT OF HORIZONTAL PIPING AS FOLLOWS: 1/2" DIAMETER STEEL PIPE EVERY 6 FEET, 3/4" DIAMETER THROUGH 1" DIAMETER EVERY 8 FEET, 1-1/4" DIAMETER AND LARGER EVERY 10 FEET. SUPPORTS SHALL BE INSTALLED SO AS TO NOT INTERFERE WITH THE FREE EXPANSION AND CONTRACTION OF THE PIPING BETWEEN SUPPORTS.
  - C. SEE MODIFICATIONS TO EXISTING NATURAL GAS PIPING DIAGRAM.



OVERALL ROOF PLAN - CONTINUED  
1/16" = 1'-0"

OVERALL ROOF PLAN  
1/16" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

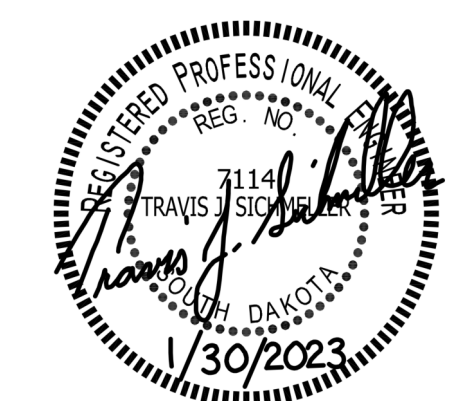
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
MECHANICAL ROOF PLAN

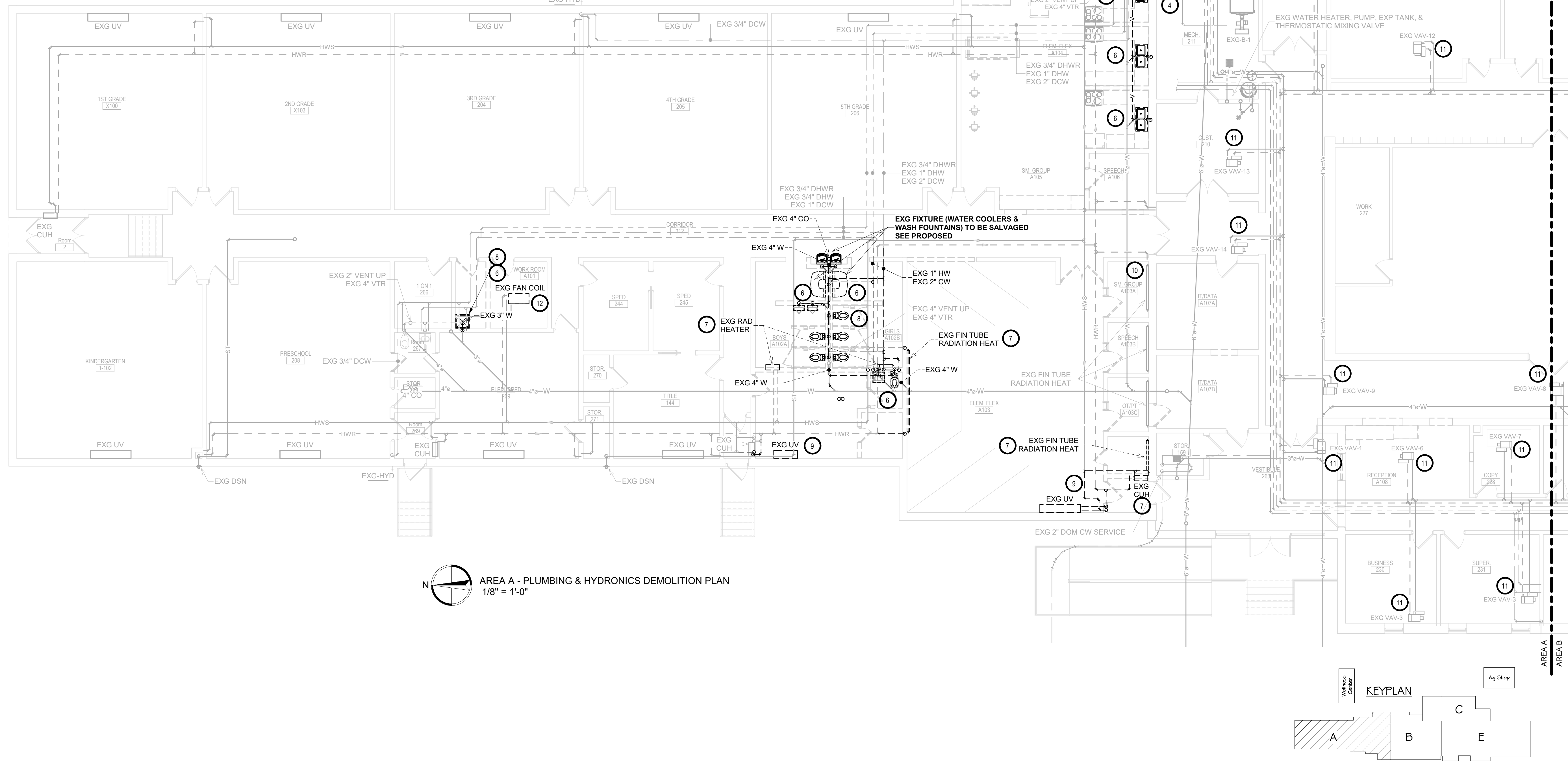
**M103**

MECHANICAL GENERAL NOTES:

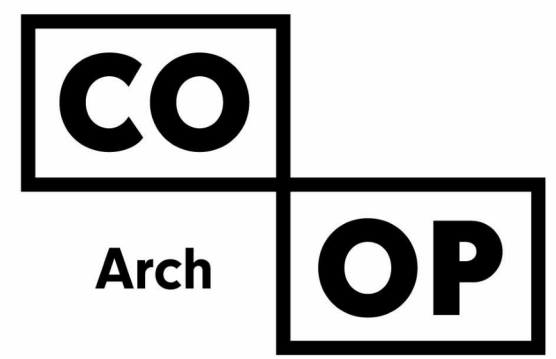
- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN, DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFERENCE WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- F. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- G. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.

KEYNOTES

1. PC TO DISCONNECT EXISTING 3/4" CW FEEDING EXISTING WELLNESS CENTER, WELLNESS CENTER TO BE REMOVED BY OTHERS. EXISTING BELOW GRADE CW PIPING TO BE ABANDONED AND REMOVED BY OTHERS.
2. PC TO DISCONNECT EXISTING 3/4" BELOW GRADE NATURAL GAS FUEL RUN FEEDING EXISTING WELLNESS CENTER, WELLNESS CENTER TO BE REMOVED BY OTHERS. EXISTING NATURAL GAS FUEL RUN TO BE ABANDONED AND REMOVED BY OTHERS.
3. PC TO DISCONNECT & CAP EXISTING 3/4" CW FEEDING EXISTING WELLNESS CENTER, EXISTING WELLNESS CENTER TO BE REMOVED BY OTHERS. PATCHING OF FLOOR BY PC.
4. PC TO PROVIDE & INSTAL CAP ON EXISTING 3/4" NATURAL GAS FUEL RUN SERVING EXISTING WELLNESS CENTER, EXISTING WELLNESS CENTER TO BE REMOVED BY OTHERS. PATCHING BY PC.
5. PC TO DISCONNECT EXISTING 4" C.I. SANITARY WASTE SERVING EXISTING WELLNESS CENTER TO ALLOW FOR REMOVAL OF EXISTING WELLNESS CENTER. EXISTING ABANDONED SANITARY SEWER SERVICE TO BE REMOVED BY OTHERS.
6. PC TO DISCONNECT AND REMOVE EXISTING PLUMBING FIXTURE, WASTE, VENTING, DOMESTIC WATER AND INSTALL CAP NEAR MAINS. PATCH FLOORS AND WALLS AS REQUIRED.
7. PC TO DISCONNECT AND REMOVE EXISTING RADIANT HEATER OR EXG CUH AND ASSOCIATED PIPING. INSTALL CAP NEAR MAINS. GROUT/PATCH WALL PENETRATIONS. PAINTING BY PAINTING CONTRACTOR.
8. PC TO COORDINATE FLOOR CUTTING BY OTHERS WITH GC FOR NEW BELOW GRADE PIPING. SEE PROPOSED.
9. PC TO DISCONNECT AND REMOVE EXISTING HYDRONIC PIPING & VALVES TO ALLOW VC TO REMOVE EXISTING UNIT VENTILATOR. PC TO REMOVE EXISTING PIPING ENCLOSURE & CAP PIPING NEAR MAINS. PC TO PATCH EXG HYDRONIC PIPING WALL PENETRATIONS IN BLOCKWALL. PAINTING BY PAINTING CONTRACTOR.
10. PC TO DEMO EXISTING PNEUMATIC TEMPERATURE CONTROL VALVE SERVING EXISTING FINNED TUBE EXISTING UNIT VENTILATOR. SEE MODIFICATIONS TO EXISTING FINNED TUBE RADIATION PIPING DETAIL. NOTE: ONE VALVE CONTROLS FLOW THRU ALL RADIATION IN THESE 4 SMALL ROOMS.
11. PC TO REMOVE TEMPERATURE CONTROL VALVE DISCONNECTED BY TC. SEE PROPOSED.
12. PC TO DEMO EXISTING HWS/HWR TO EXISTING FAN COIL TO ALLOW VC TO REMOVE AND REPLACE EXISTING FAN COIL UNIT.



AREA A - PLUMBING & HYDRONICS DEMOLITION PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

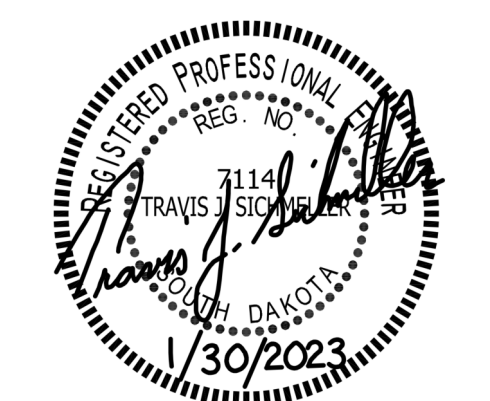
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



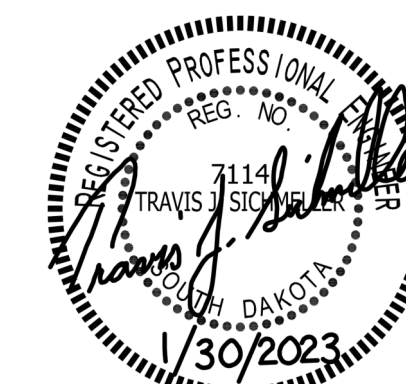
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA A - PLUMBING & HYDRONICS DEMOLITION PLAN

M200A

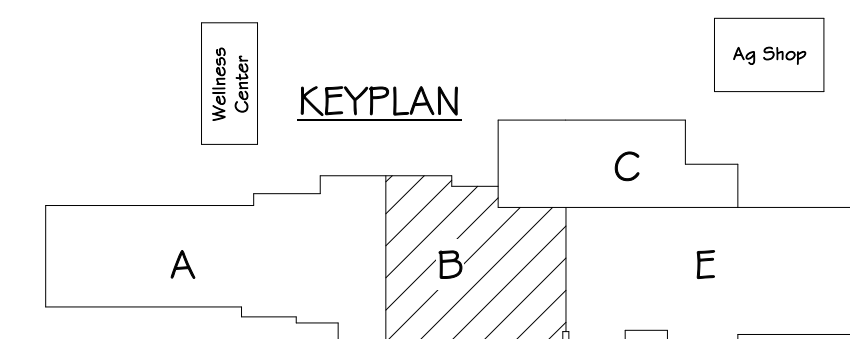
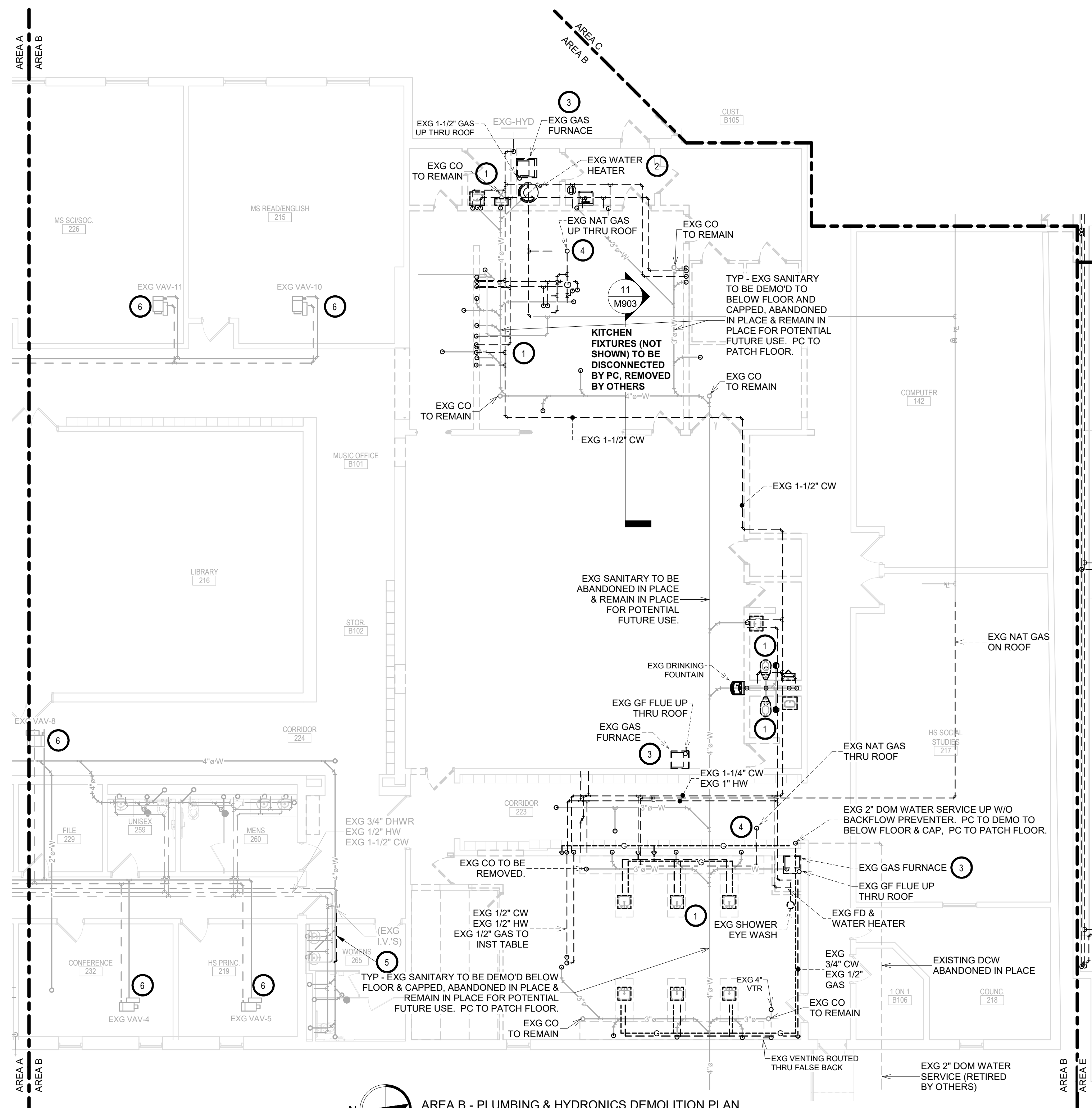


MECHANICAL GENERAL NOTES:

- CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN, DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.

KEYNOTES

- PC TO DISCONNECT AND REMOVE EXISTING PLUMBING FIXTURE, FLOOR DRAIN, WASTE, VENTING, DOMESTIC WATER PIPING SHOWN DARK AND DASHED, NATURAL GAS (AS NEEDED) AND INSTALL CAP NEAR MAINS. ALL EXISTING SANITARY WASTE ROUGHINS UP THRU FLOOR SHALL BE REMOVED TO A POINT BELOW FLOOR AND CAPPED. FLOOR PATCHING BY PC.
- PC TO DISCONNECT AND REMOVE EXISTING WATER HEATER, GAS PIPING, AND ASSOCIATED PIPING.
- PC TO DISCONNECT EXISTING GAS FURNACE, AND NATURAL GAS PIPING. FURNACE REMOVED BY VC.
- PC TO DISCONNECT EXISTING NATURAL GAS PIPING AND CAP ON ROOF NEAR MAIN.
- PC TO REMOVE EXISTING 3/4" DHWR AS NECESSARY TO ACCOMMODATE REMODEL. SEE PROPOSED.
- PC TO REMOVE DDC TEMPERATURE CONTROL VALVE DISCONNECTED BY TC. SEE PROPOSED.

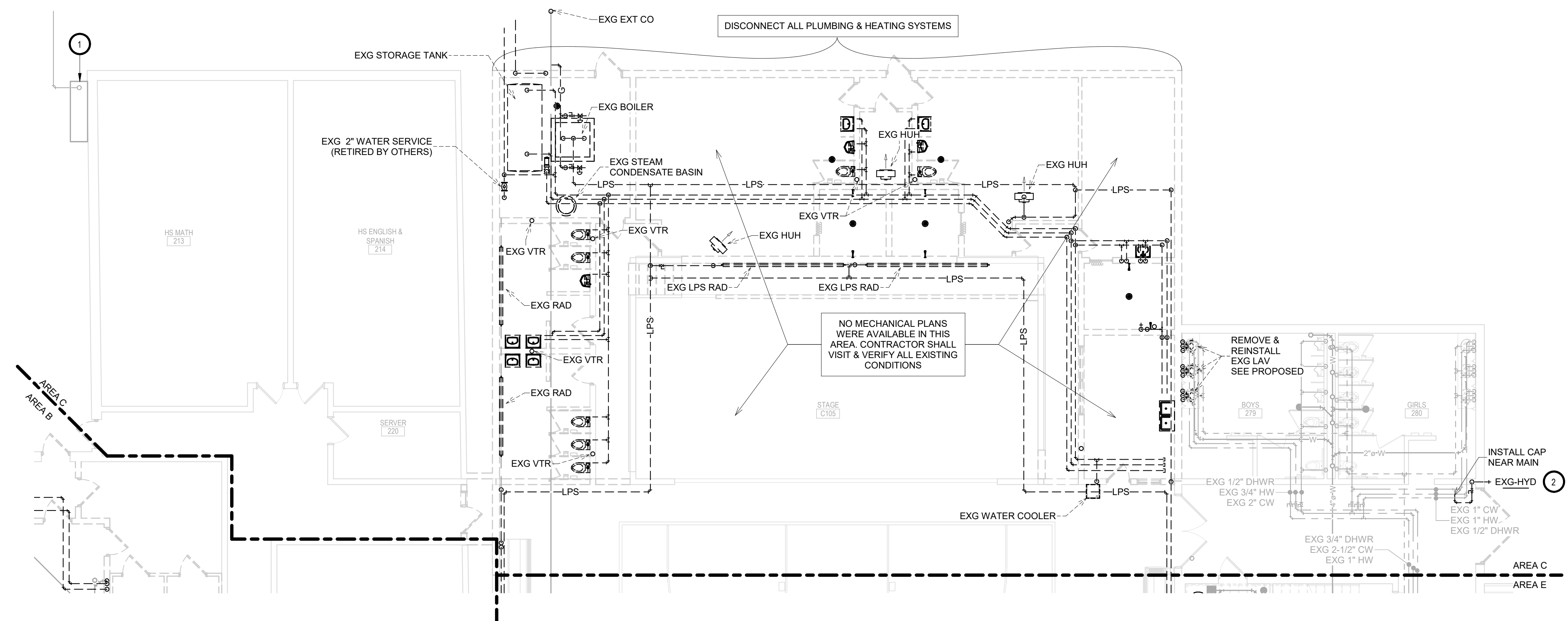


MECHANICAL GENERAL NOTES:

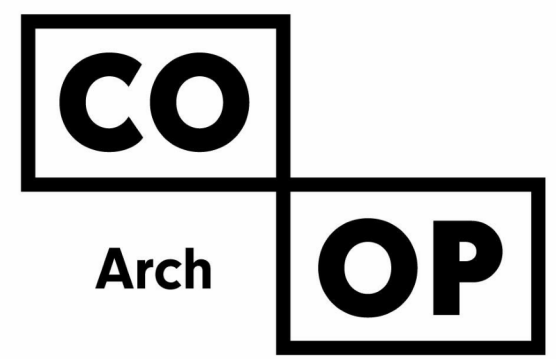
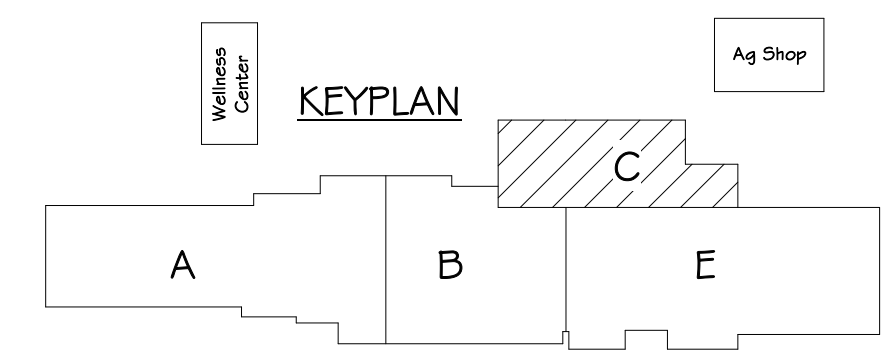
- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN, DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- F. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- G. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.

KEYNOTES

1. EXISTING GRADE ELEVATIONS WILL CHANGE. EXISTING GAS METERFIT WILL HAVE TO BE RAISED BY UTILITY TO ACCOMMODATE PROPOSED GRADE CHANGES. EXISTING NORTHWESTERN ENERGY NATURAL GAS METER #23484. PLUMBING CONTRACTOR TO COORDINATE WITH KIRBY WICKS OF NWE AT 605-353-7609 FOR ANY UTILITY REQUIRED CHANGES TO THE METER FIT (ANY NWE COSTS ASSOCIATED WITH THE NATURAL GAS METERFIT WILL BE BILLED DIRECTLY TO THE OWNER). PC TO MODIFY EXISTING NATURAL GAS PIPING AFTER NWE METERFIT TO ACCOMMODATE THE ADDITIONAL NATURAL GAS PIPING. SEE MODIFICATIONS TO EXISTING NATURAL GAS PIPING DIAGRAM.
2. PC TO DISCONNECT AND REMOVE EXISTING PLUMBING FIXTURE, DOMESTIC WATER AND INSTALL CAP NEAR MAIN.



AREA C - PLUMBING & HYDRONICS DEMOLITION PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

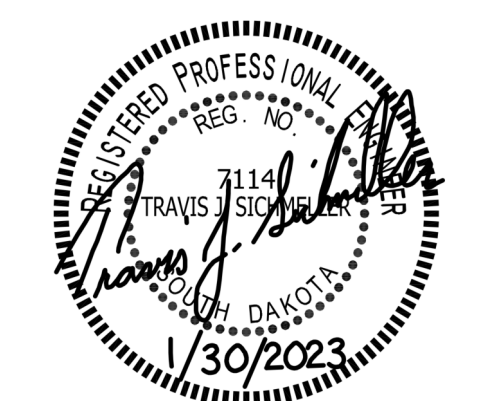
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

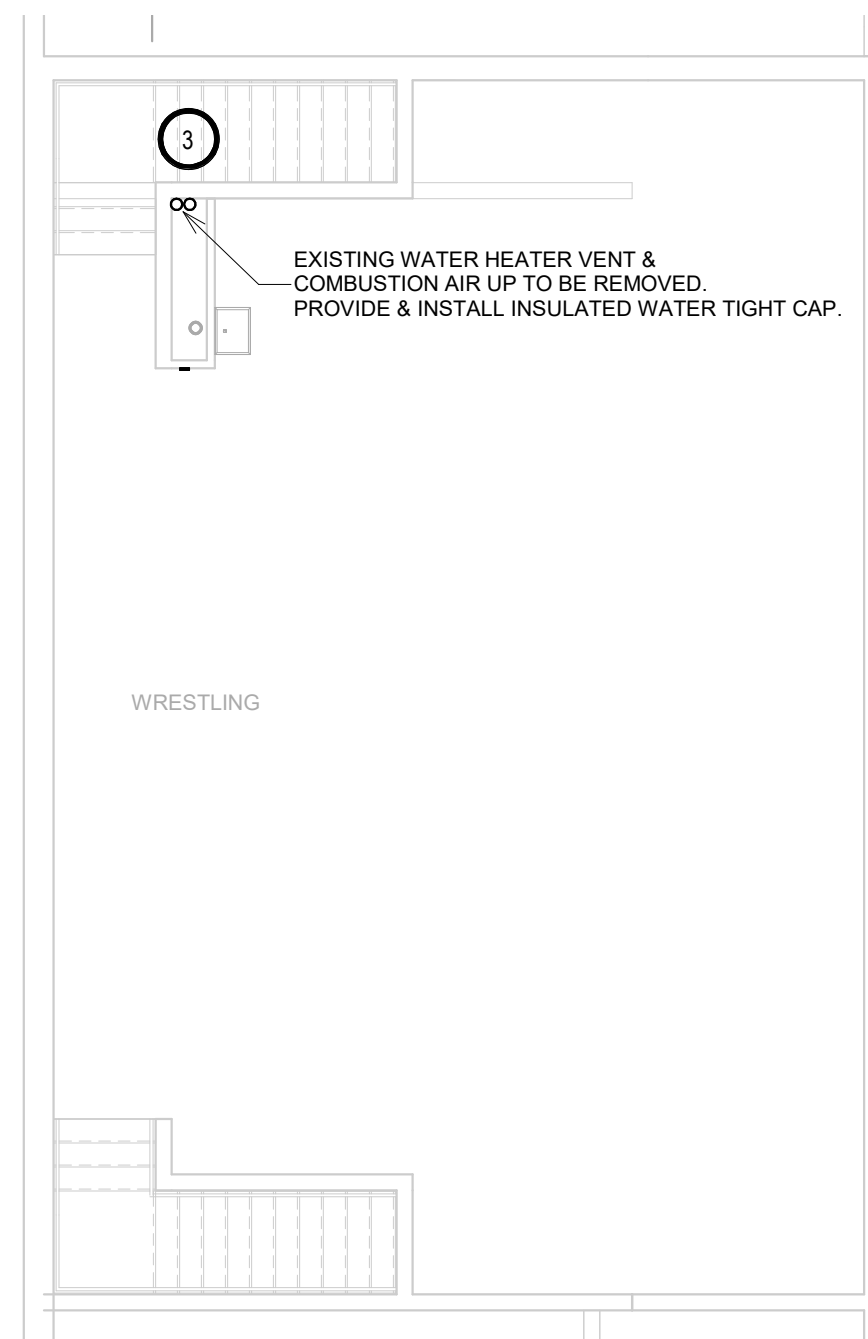
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA C - PLUMBING &  
HYDRONICS DEMOLITION PLAN

M202C

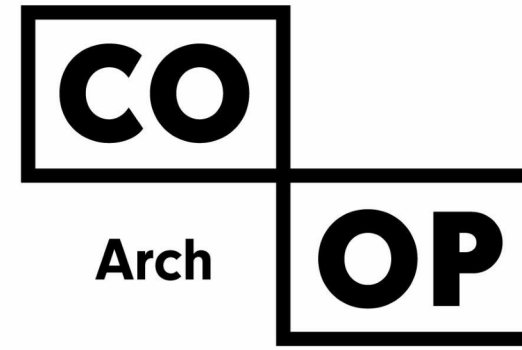
MECHANICAL GENERAL NOTES:

- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN. DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- F. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- G. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.



KEYNOTES

1. PC TO DISCONNECT AND REMOVE EXISTING STEAM HUH'S AND ASSOCIATED PIPING SHOWN DARK AND DASHED.
2. PC TO DISCONNECT AND REMOVE EXISTING STEAM CABINET UNIT HEATER. PATCHING AND PAINTING BY GC.
3. PC TO DISCONNECT AND REMOVE EXISTING WATER HEATER, THERMOSTATIC MIXING VALVE, DOMESTIC HW RECIRC PUMP, AND VENT/COMB AIR. PROVIDE & INSTALL INSULATED WEATHER TIGHT ON VENT AND COMB AIR. EXISTING WATER HEATER AND RECIRC PUMP TO BE RELOCATED. SEE PROPOSED. CONTRACTOR TO SALVAGE EXISTING THERMOSTATIC MIXING VALVE TO OWNER.
4. PC TO DISCONNECT AND REMOVE EXISTING WATER METER, EXG 2-1/2" PIPING AND CAP BELOW GRADE. EXG 2" WATER SERVICE TO BE RETIRED (BY OTHERS). EXG 2" WATER METER TO BE RELOCATED. PC TO PATCH CONCRETE FLOOR. SEE PROPOSED.
5. PC TO DEMO EXISTING FLOOR SINK AND CAP PIPE BELOW GRADE. PC TO PATCH EXISTING CONCRETE FLOOR.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

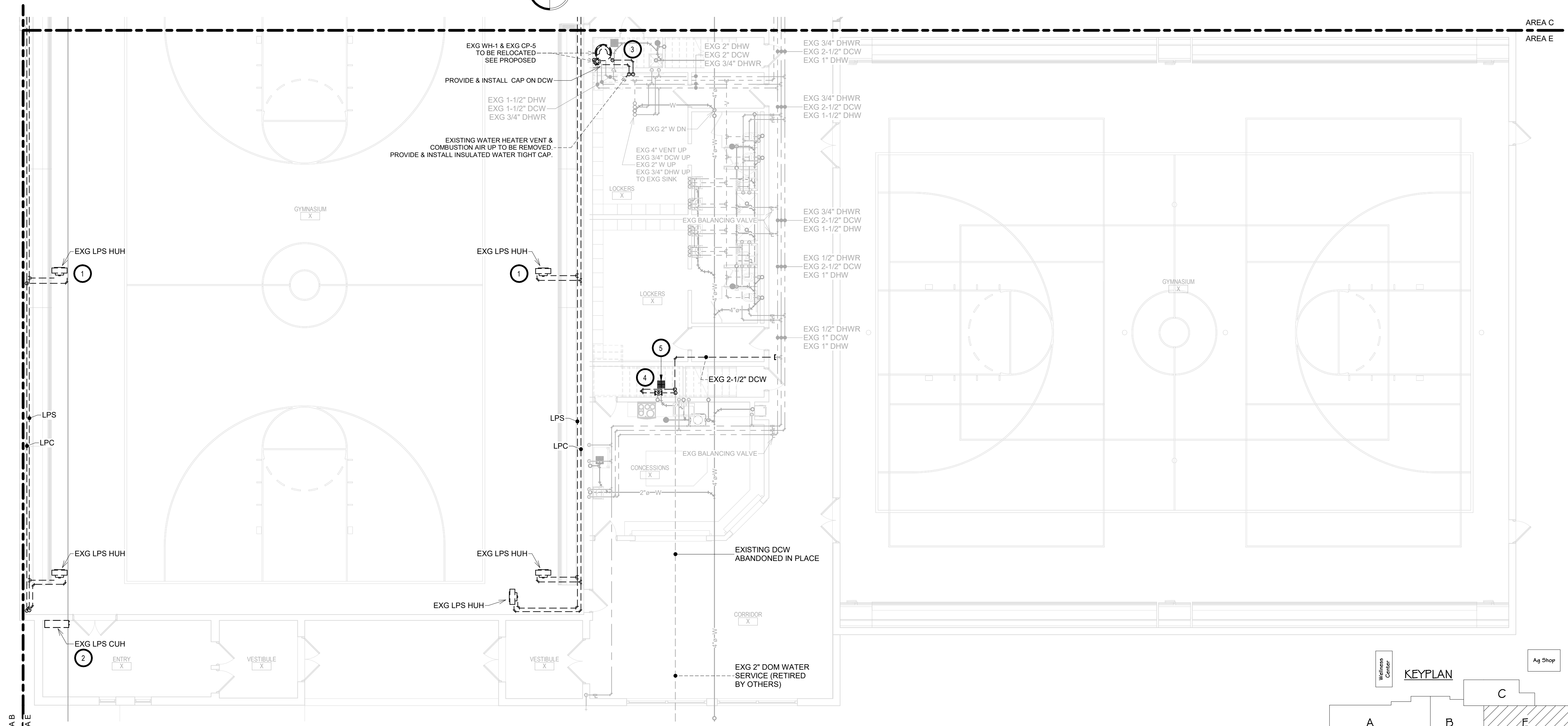
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

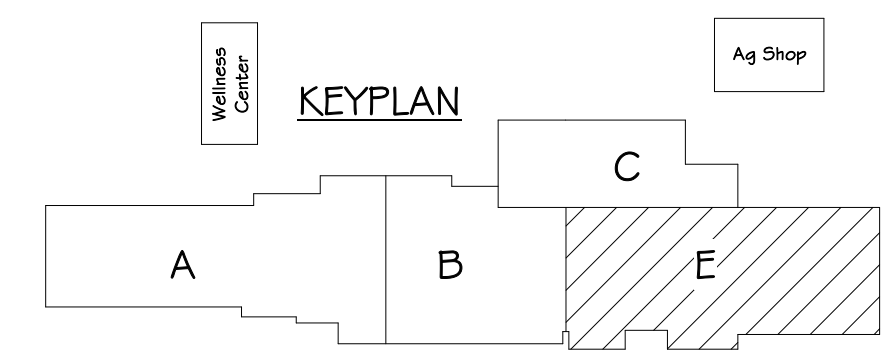
**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

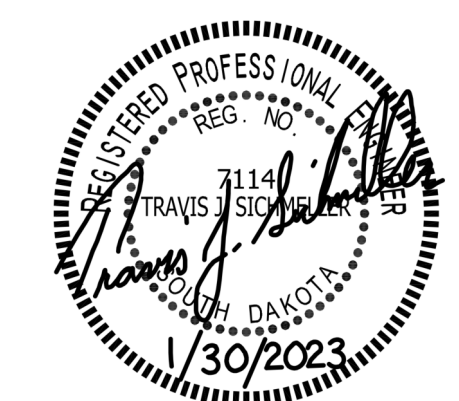
AREA E - MEZZANINE PLUMBING & HYDRONICS DEMOLITION PLAN  
1/8" = 1'-0"



AREA E - PLUMBING & HYDRONICS DEMOLITION PLAN  
1/8" = 1'-0"



SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA E - PLUMBING & HYDRONICS DEMOLITION PLAN

M203E

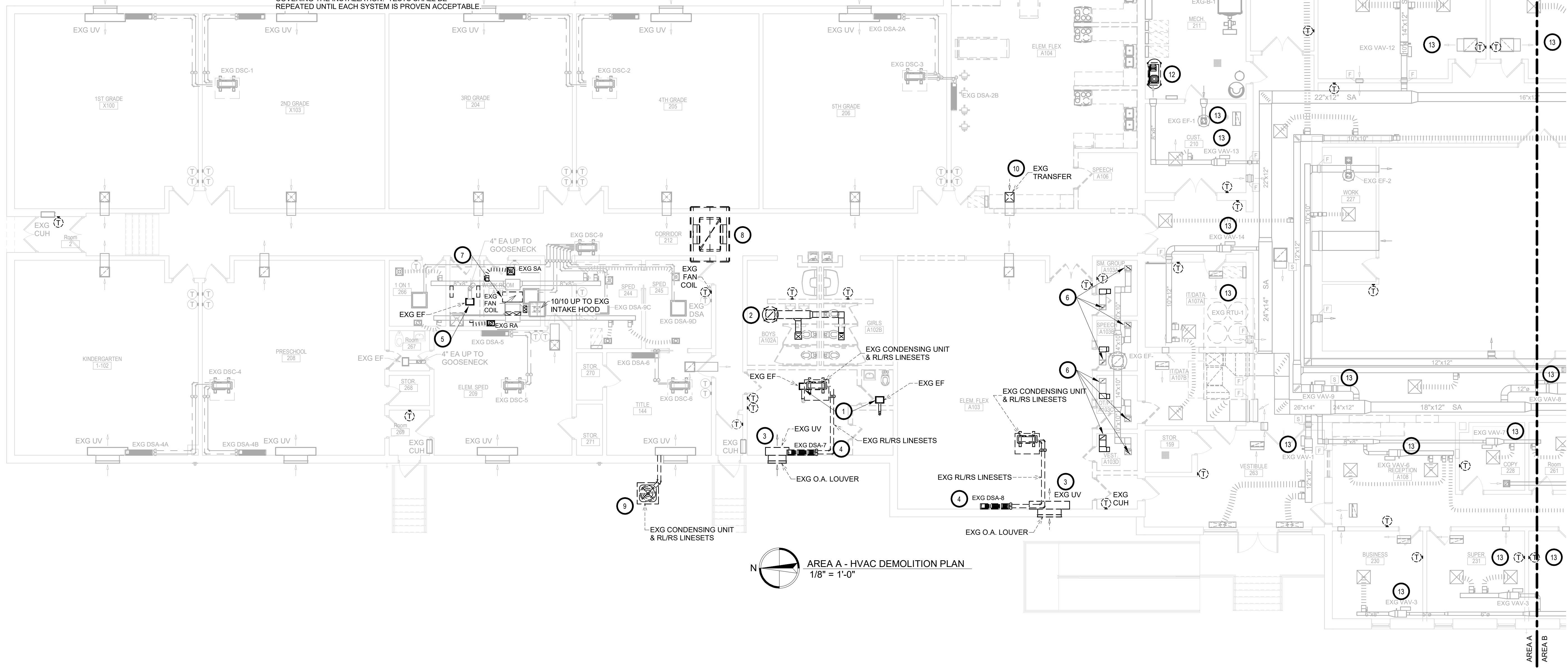
MECHANICAL GENERAL NOTES:

- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN, DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.

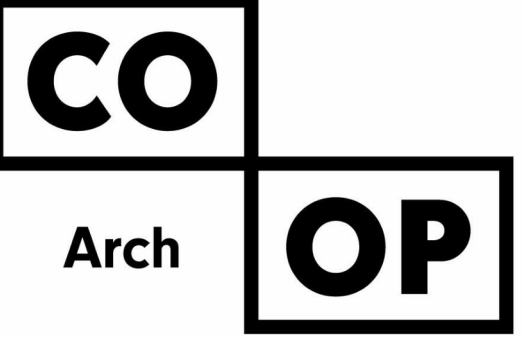
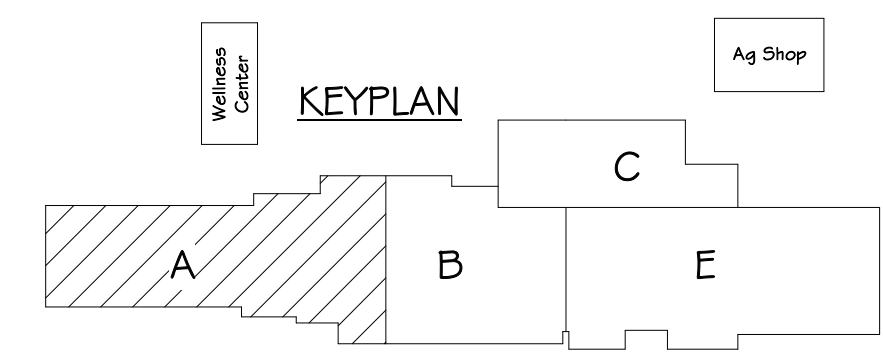
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- F. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- G. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.

KEYNOTES

1. VC TO DISCONNECT AND REMOVE EXISTING EXHAUST FAN AND DUCTWORK THRU ROOF. COORDINATE ROOF PATCHING WITH ROOFING CONTRACTOR.
2. VC TO DISCONNECT AND REMOVE EXISTING PRV, DUCTWORK AND REGISTERS SHOWN DARK AND DASHED. EXISTING CURB TO REMAIN. SEE PROPOSED.
3. VC TO DISCONNECT AND REMOVE EXISTING UNIT VENTILATOR, CONTROLS, REMOVE EXISTING OUTDOOR GRILLE, ETC. G.C. TO PATCH OPENING WITH MATERIALS AND INSULATION CONSISTENT TO EXISTING FINISH.
4. VC TO DISCONNECT AND REMOVE EXISTING DUCTLESS SPLIT AC UNIT AND ROOF MOUNTED CONDENSING UNIT AND REFRIGERATION LINESETS AND CONTROLS.
5. VC TO DISCONNECT AND REMOVE EXISTING EXHAUST FAN. EXISTING DUCTWORK TO REMAIN. SEE PROPOSED.
6. VC TO DISCONNECT AND REMOVE EXISTING RETURN AIR AND EXHAUST AIR GRILLES. SEE PROPOSED.
7. VC TO DISCONNECT AND REMOVE EXISTING FAN COIL UNIT, CONTROLS, AND DUCT MOUNTED PNEUMATIC DAMPERS. TC TO REMOVE EXG PNEUMATIC CONTROLS. SEE PROPOSED.
8. VC TO DISCONNECT AND REMOVE EXISTING RELIEF HOOD AND DUCTWORK. EXISTING ROOF CURB TO REMAIN. SEE PROPOSED.
9. VC TO DISCONNECT AND REMOVE EXISTING ABANDONED CONDENSING UNIT, REFRIGERATION LINESETS AND CONTROLS.
10. VC TO DISCONNECT AND REMOVE EXISTING TRANSFER REGISTER. SEE PROPOSED.
11. VC TO DISCONNECT AND REMOVE EXISTING DRYER VENT, DUCTWORK, AND WALL CAP. GC TO PATCH OPENING.
12. TC TO DEMO ALL PNEUMATIC CONTROL SYSTEMS, ACTUATORS, TUBING, CONTROL CABINETS, DISCONNECT AND REMOVE EXISTING AIR COMPRESSOR & FILTER DRYER.
13. TYPICAL - TC TO DEMO EXISTING T-STATS AND DDC TEMPERATURE CONTROLS. SEE PROPOSED.



AREA A - HVAC DEMOLITION PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

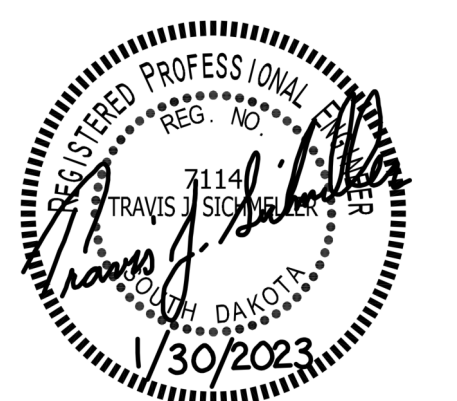
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



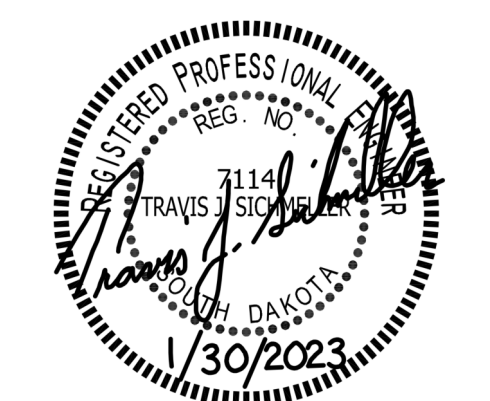
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA A - HVAC DEMOLITION PLAN

M300A

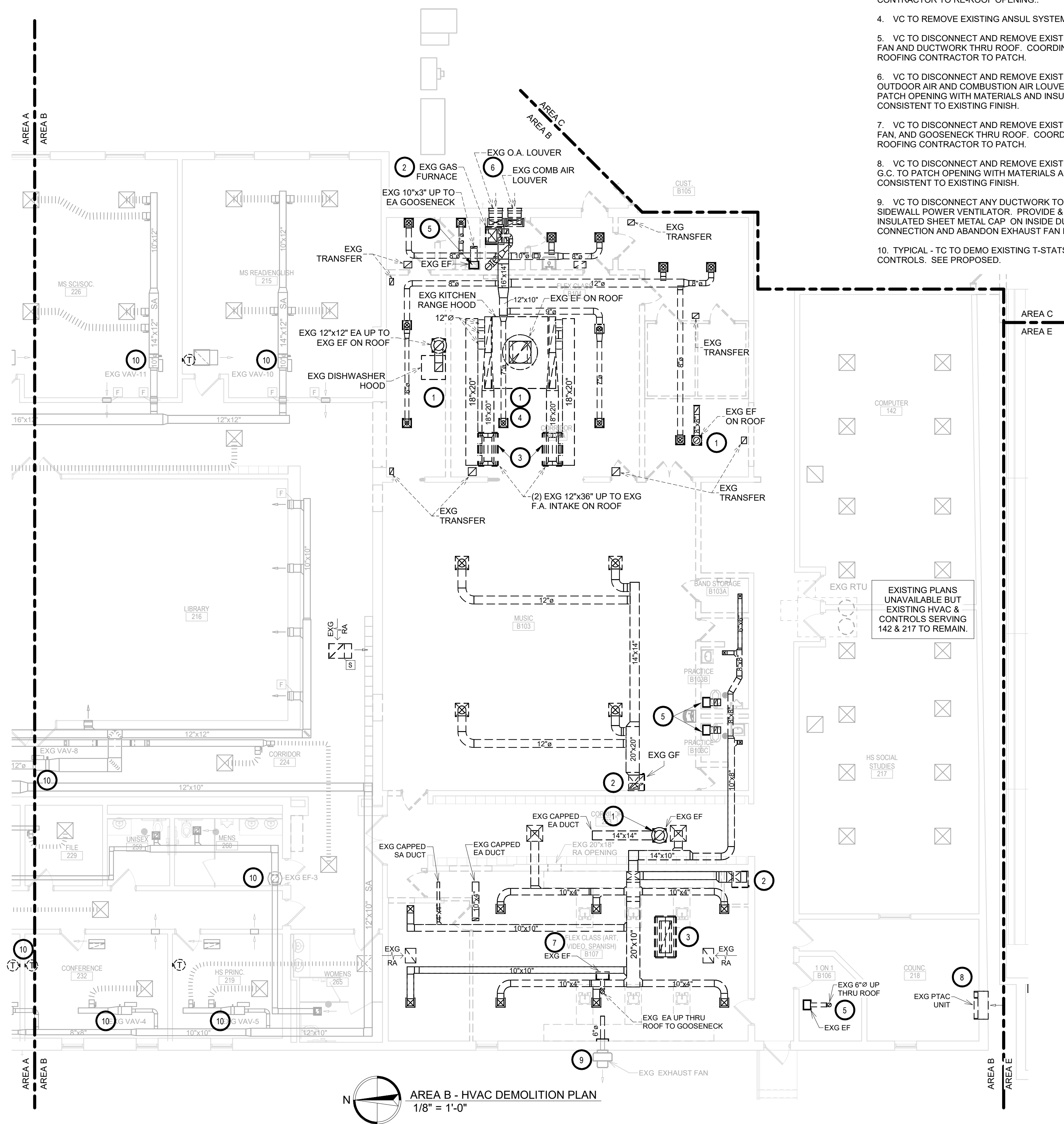


**KEYNOTES**

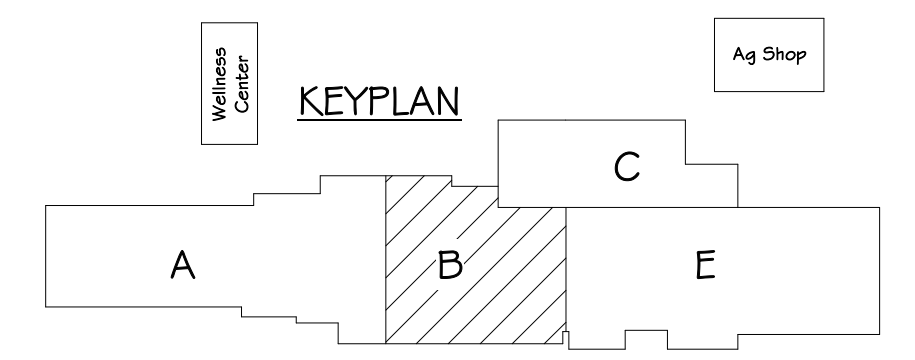
1. VC TO DISCONNECT AND REMOVE EXISTING POWER ROOF VENTILATOR, DUCTWORK, HOOD SHOWN DARK AND DASHED, EXISTING ROOF CURB AND COORDINATE WITH ROOFING CONTRACTOR TO RE-ROOF OPENING.
2. VC TO DISCONNECT AND REMOVE EXISTING NATURAL GAS FURNACE, EXISTING DUCTWORK SHOWN DARK AND DASHED, REGISTERS, AND CONTROLS.
3. VC TO DISCONNECT AND REMOVE EXISTING INTAKE HOOD, DUCTWORK SHOWN DARK AND DASHED, EXISTING ROOF CURB AND COORDINATE WITH ROOFING CONTRACTOR TO RE-ROOF OPENING.
4. VC TO REMOVE EXISTING ANSUL SYSTEM.
5. VC TO DISCONNECT AND REMOVE EXISTING EXHAUST FAN AND DUCTWORK THRU ROOF. COORDINATE WITH ROOFING CONTRACTOR TO PATCH.
6. VC TO DISCONNECT AND REMOVE EXISTING EXISTING OUTDOOR AIR AND COMBUSTION AIR LOUVER. G.C. TO PATCH OPENING WITH MATERIALS AND INSULATION CONSISTENT TO EXISTING FINISH.
7. VC TO DISCONNECT AND REMOVE EXISTING EXHAUST FAN, AND GOOSENECK THRU ROOF. COORDINATE WITH ROOFING CONTRACTOR TO PATCH.
8. VC TO DISCONNECT AND REMOVE EXISTING PTAC UNIT. G.C. TO PATCH OPENING WITH MATERIALS AND INSULATION CONSISTENT TO EXISTING FINISH.
9. VC TO DISCONNECT ANY DUCTWORK TO EXISTING SIDEWALL POWER VENTILATOR. PROVIDE & INSTALL INSULATED SHEET METAL CAP ON INSIDE DUCT CONNECTION AND ABANDON EXHAUST FAN IN PLACE.
10. TYPICAL - TC TO DEMO EXISTING T-STATS AND DDC CONTROLS. SEE PROPOSED.

**MECHANICAL GENERAL NOTES:**

- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN. DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON THE PLAN. DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- F. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- G. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.



**AREA B - HVAC DEMOLITION PLAN**  
1/8" = 1'-0"

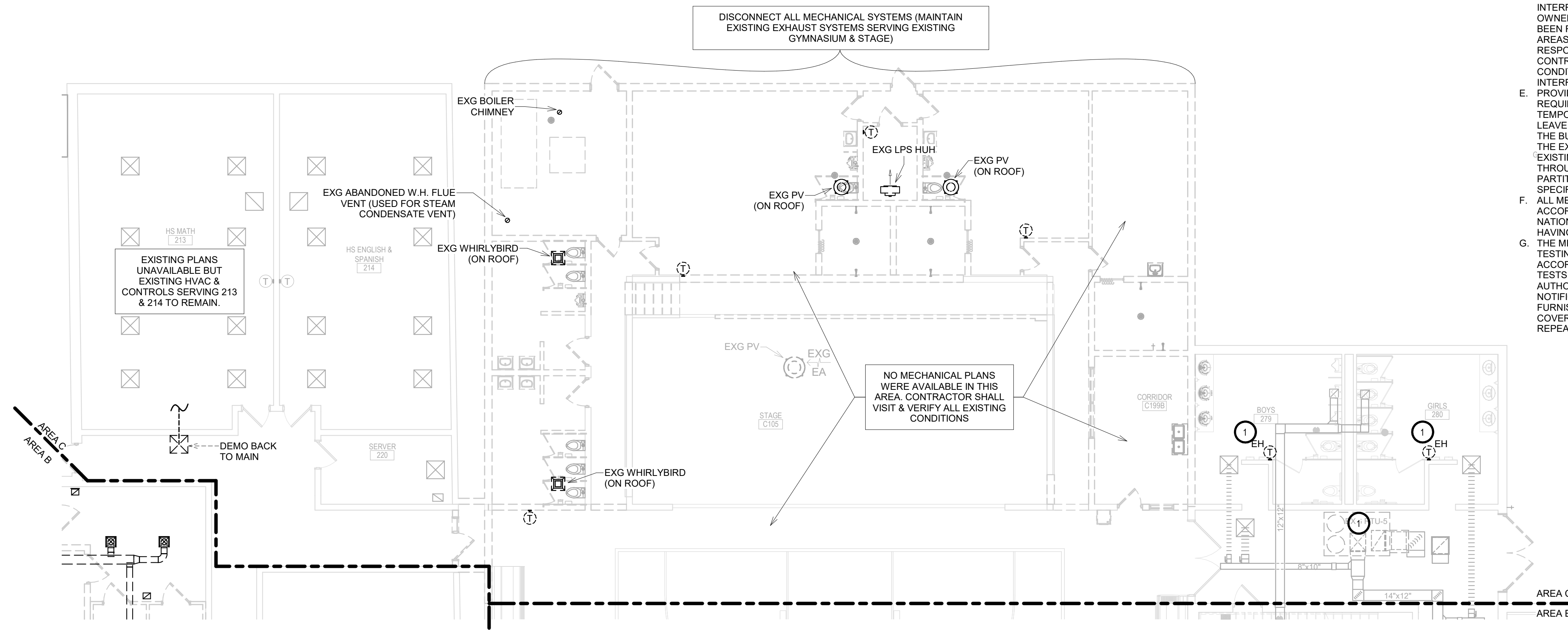


**KEYNOTES**

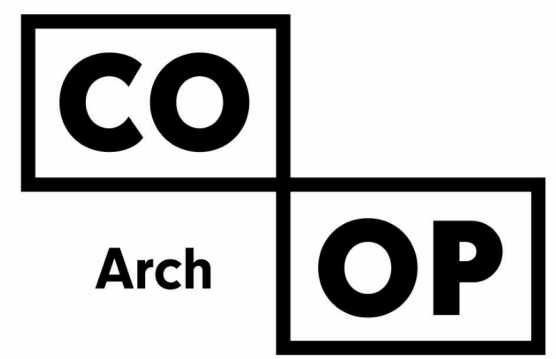
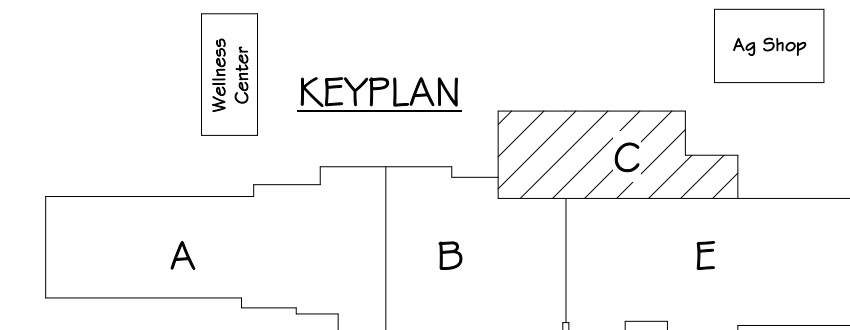
1. TYPICAL - TO DEMO EXISTING T-STATS AND DDC TEMPERATURE CONTROLS. SEE PROPOSED.

**MECHANICAL GENERAL NOTES:**

- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN, DISCONNECT SERVICES AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- F. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- G. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.



**AREA C - HVAC DEMOLITION PLAN**  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

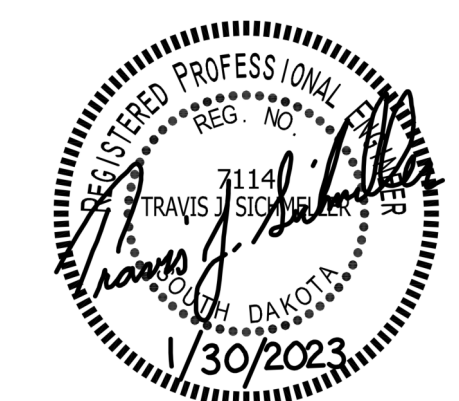
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



**ISSUE:**  
1/30/23 CONSTRUCTION DOCUMENTS

**REVISION SCHEDULE:**

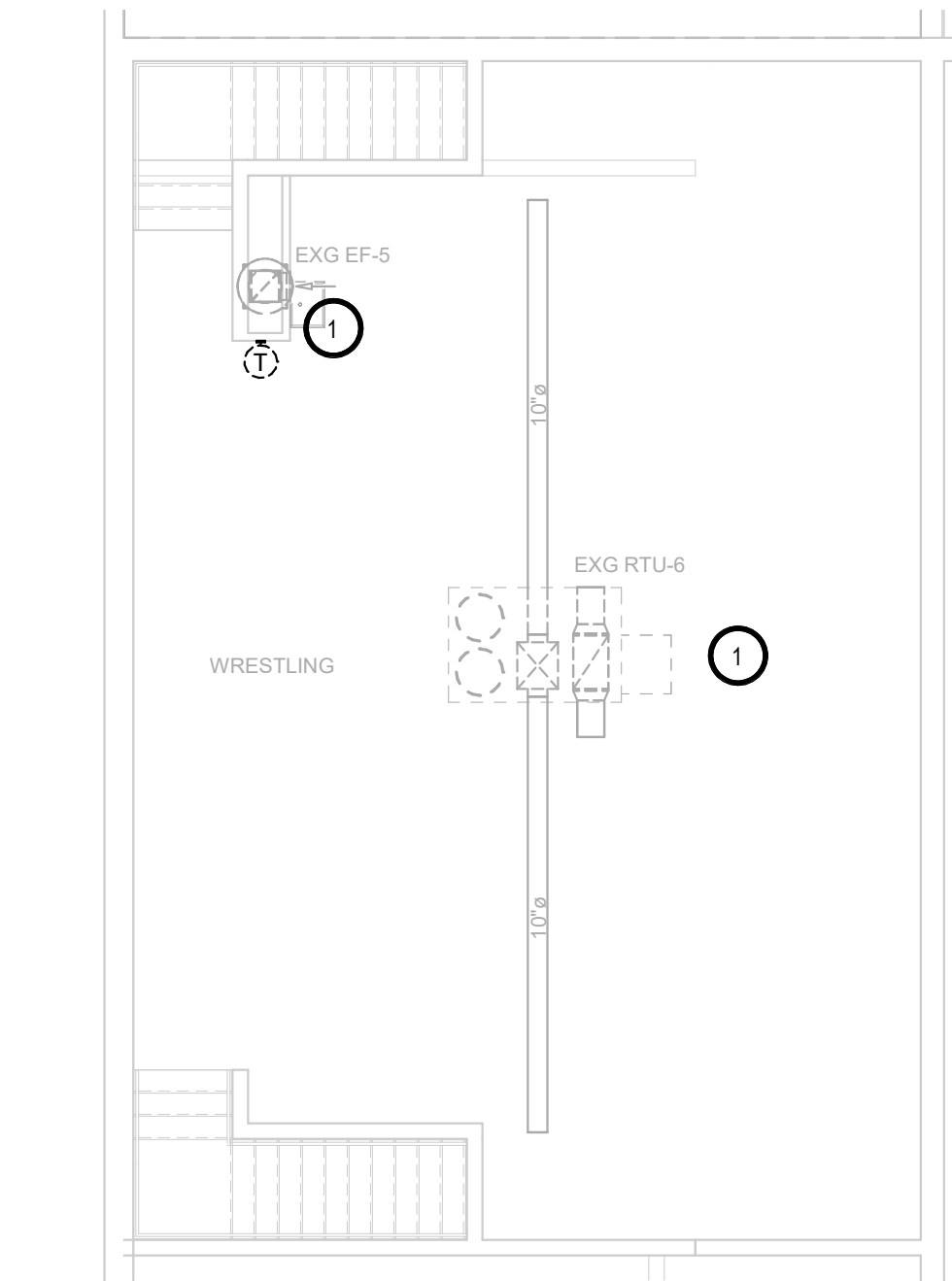
REV. #	REV. DSC.	REV. DATE
--------	-----------	-----------

**PROJECT:**  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

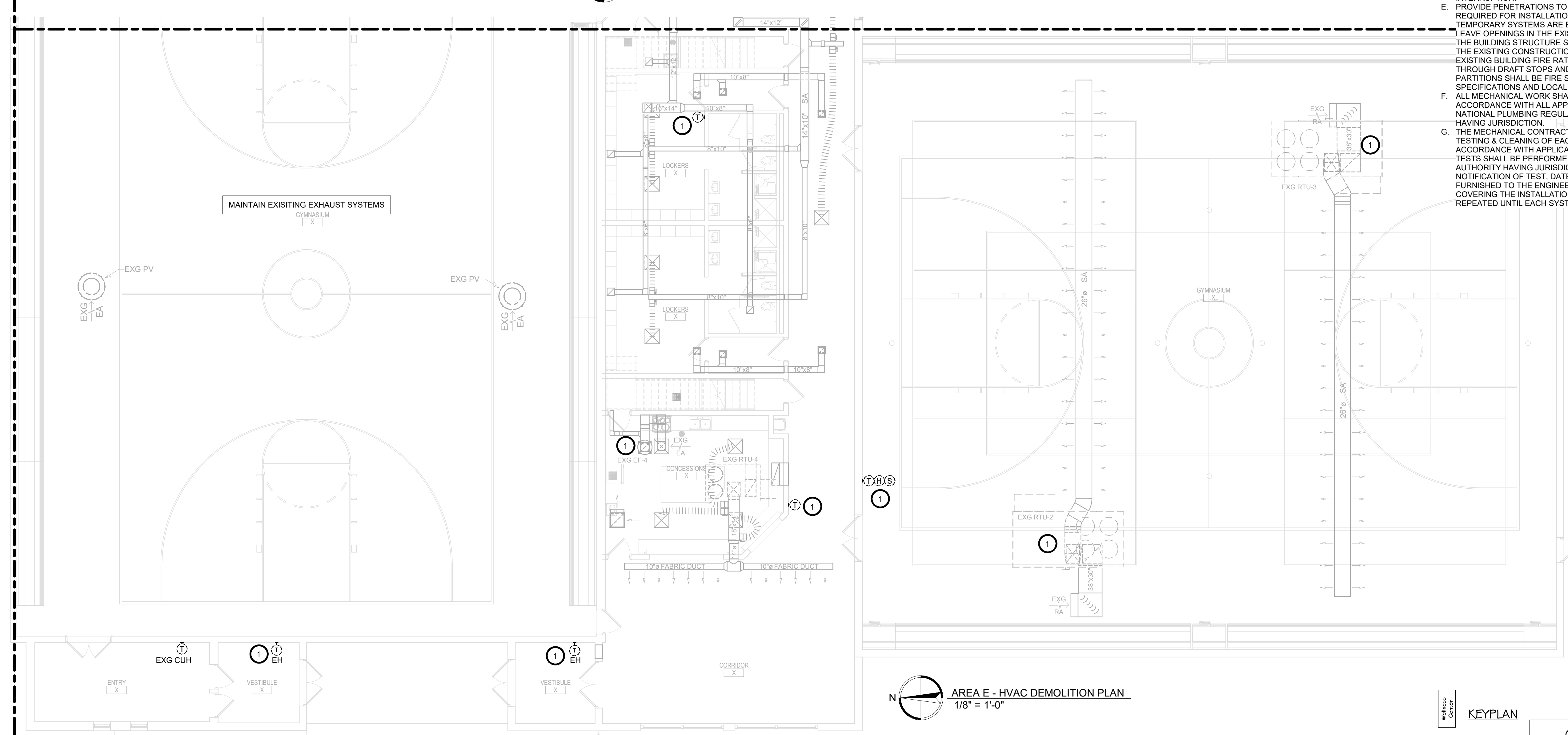
**SHEET TITLE:**  
AREA C - HVAC DEMOLITION PLAN

**M302C**





AREA E - MEZZANINE HVAC DEMOLITION PLAN  
1/8" = 1'-0"



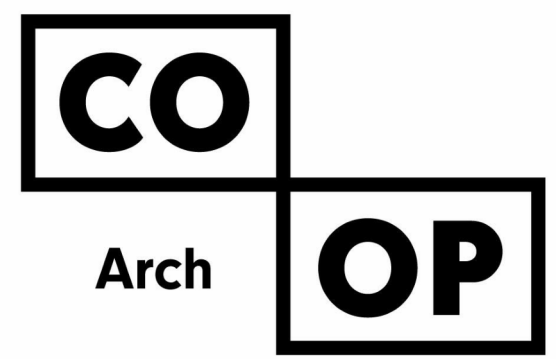
AREA E - HVAC DEMOLITION PLAN  
1/8" = 1'-0"

KEYNOTES

- 1. TYPICAL - TO DEMO EXISTING T-STATS AND DDC TEMPERATURE CONTROLS. SEE PROPOSED.

MECHANICAL GENERAL NOTES:

- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE MECHANICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN. DISCONNECT SERVICE AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE SERVICES ARE STOPPED. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- F. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- G. THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR THE TESTING & CLEANING OF EACH RESPECTIVE SYSTEM IN ACCORDANCE WITH APPLICABLE STATE & LOCAL CODES. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE AUTHORITY HAVING JURISDICTION. WRITTEN NOTIFICATION OF TEST, DATE, AND RESULTS SHALL BE FURNISHED TO THE ENGINEER BEFORE CONCEALING OR COVERING THE INSTALLATION. TESTS SHALL BE REPEATED UNTIL EACH SYSTEM IS PROVEN ACCEPTABLE.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

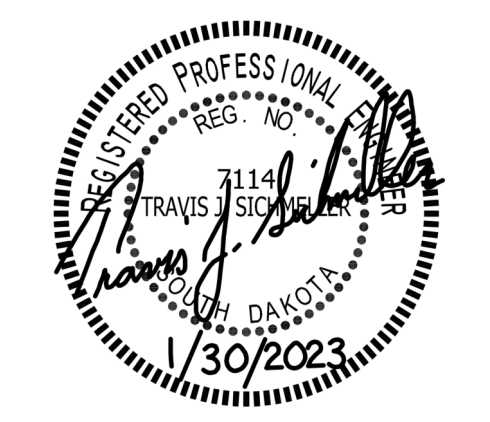
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771

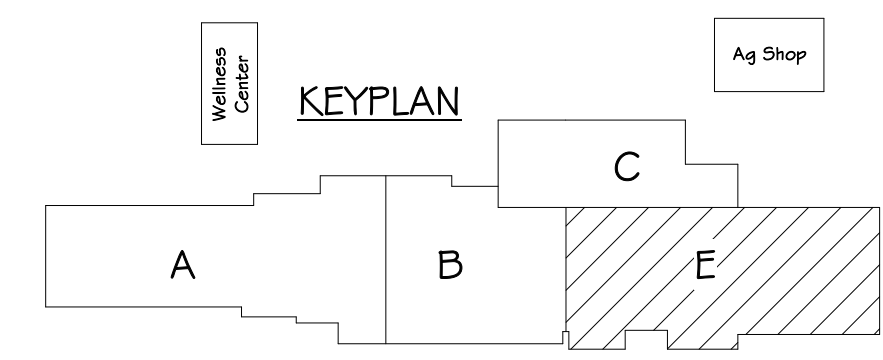


ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA E - HVAC DEMOLITION  
PLAN



M303E

**SPECIAL NOTES**

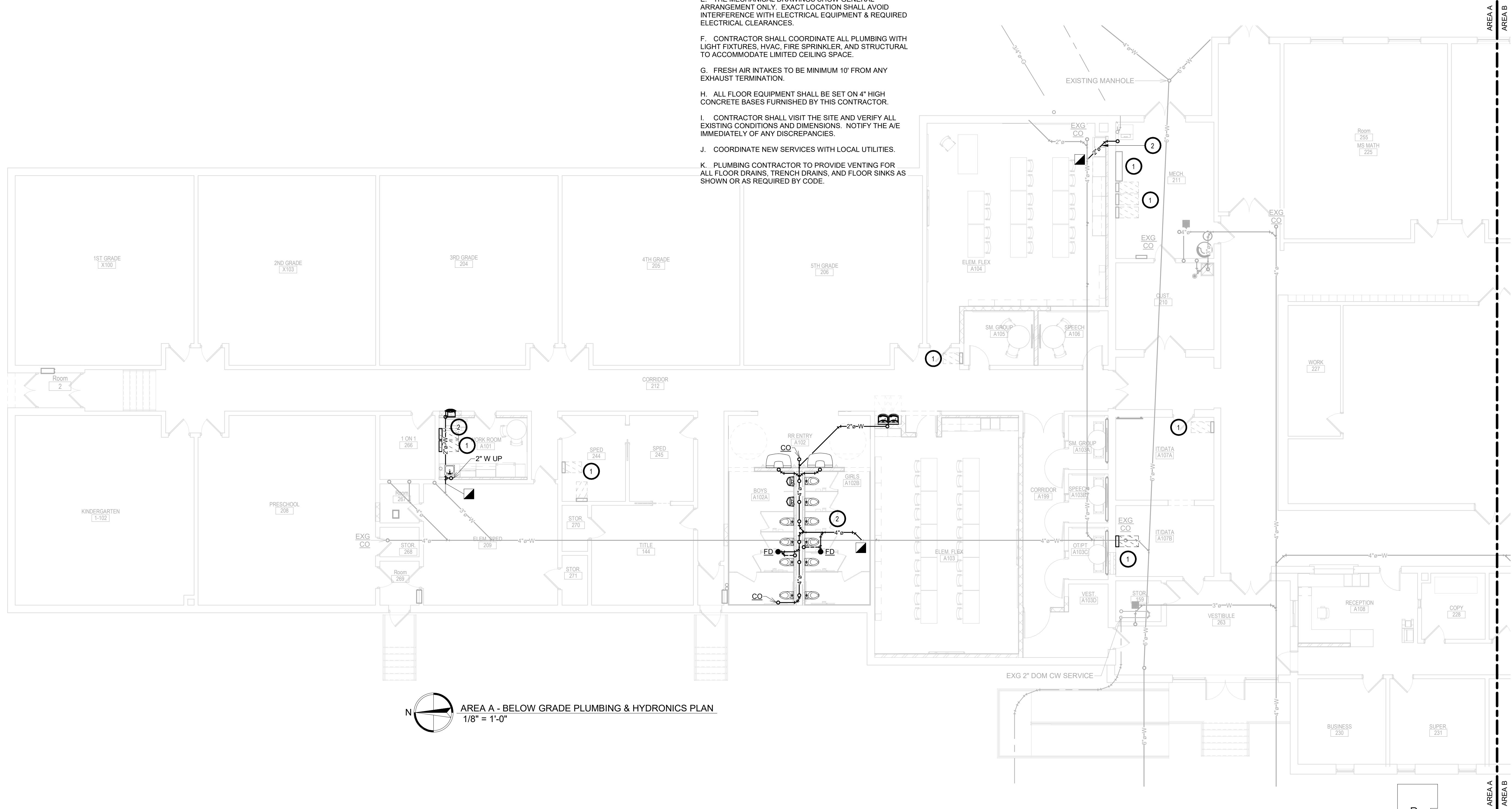
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
- B. FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
- C. ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.

**KEYNOTES**

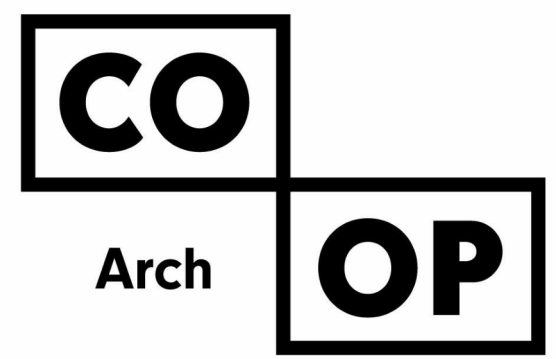
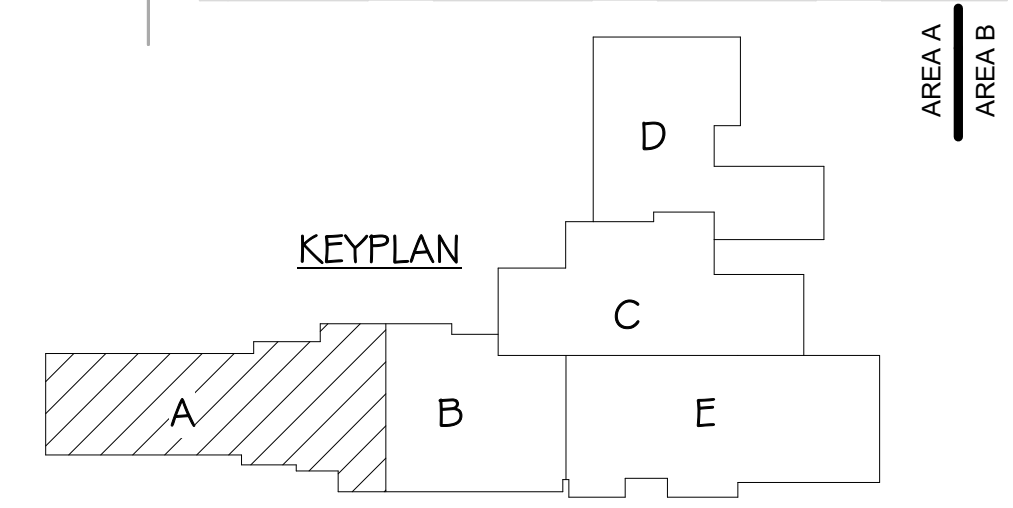
- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. PC TO COORDINATE FLOOR CUTTING BY OTHERS WITH GC FOR NEW BELOW GRADE PIPING.

**GENERAL NOTES:**

- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- H. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
- I. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
- J. COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
- K. PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.



**AREA A - BELOW GRADE PLUMBING & HYDRONICS PLAN**  
 1/8" = 1'-0"



1108 S. Main St. 102  
 Aberdeen, SD 57401  
 Phone: 605-725-4852

601 Kansas City St. 7  
 Rapid City, SD 57701  
 Phone: 605-716-3652

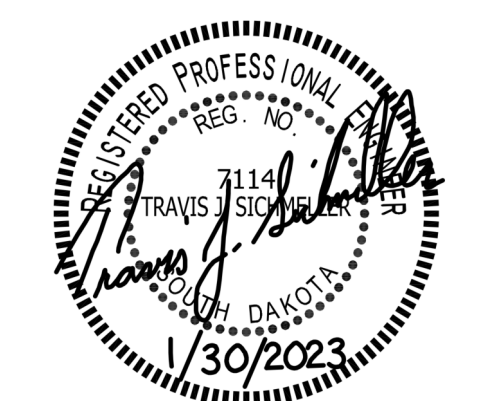
440 E. 8th St 221  
 Sioux Falls, SD 57103  
 Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
 Mechanical & Electrical Engineering

801 Railroad Ave. SE  
 Aberdeen, SD 57401  
 Phone: 605-225-4344  
 www.siceng.biz

SE PROJECT NO: 220900771



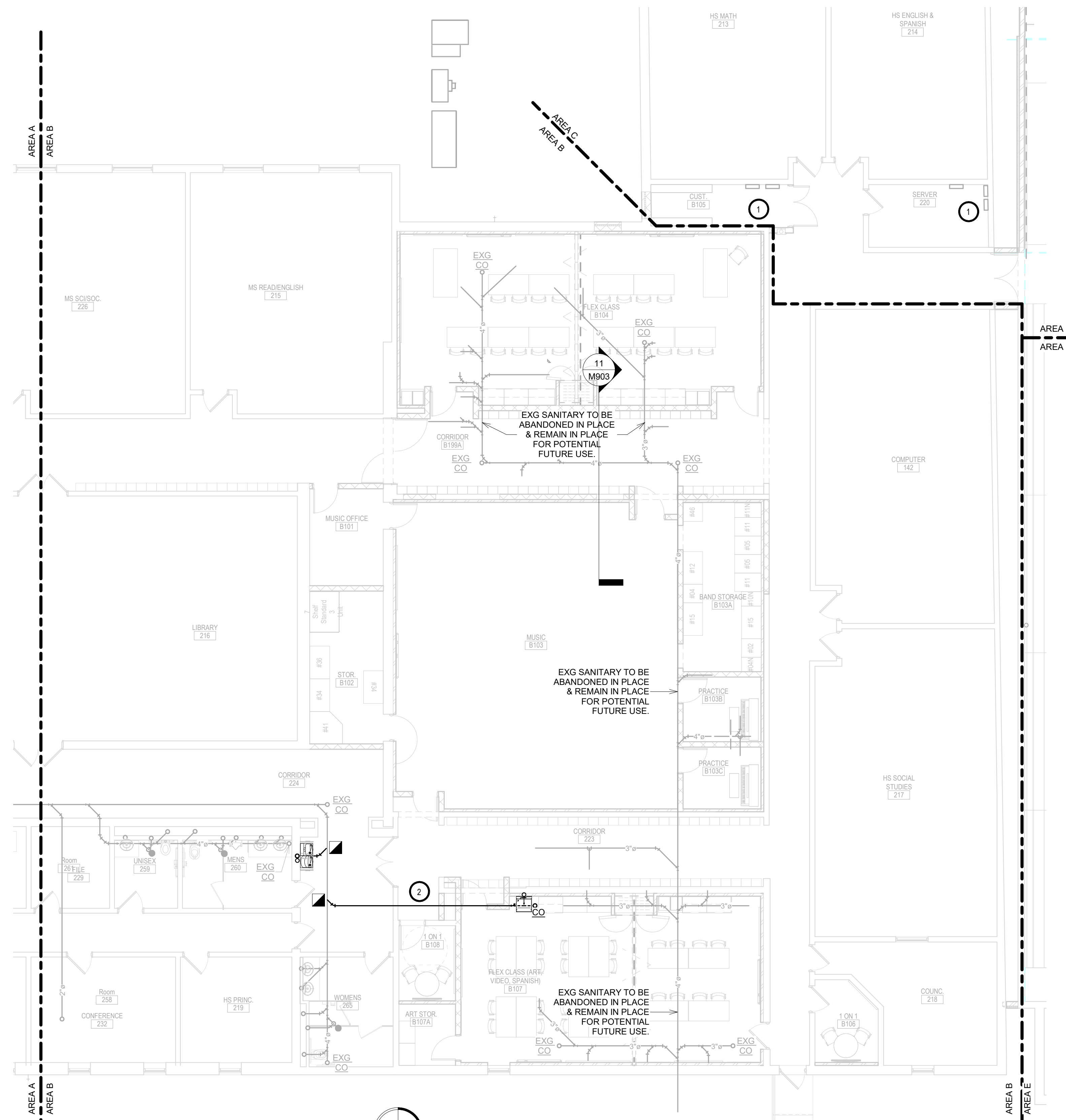
ISSUE:  
 1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
 REV. # REV. DSC. REV. DATE

PROJECT:  
 WILLOW LAKE SCHOOL ADDITION  
 WILLOW LAKESCHOOL DISTRICT  
 WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
 AREA A - BELOW GRADE  
 PLUMBING & HYDRONICS PLAN

**M400A**



AREA B - BELOW GRADE PLUMBING & HYDRONICS PLAN  
1/8" = 1'-0"

GENERAL NOTES:

- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- H. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
- I. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE AE IMMEDIATELY OF ANY DISCREPANCIES.
- J. COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
- K. PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.

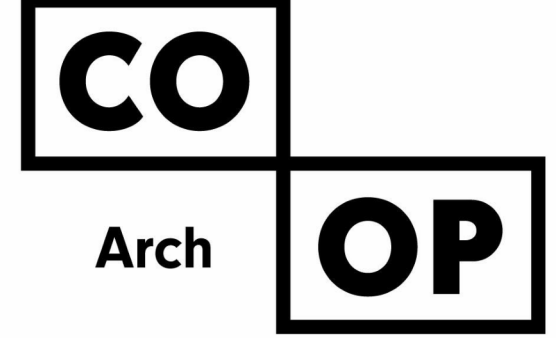
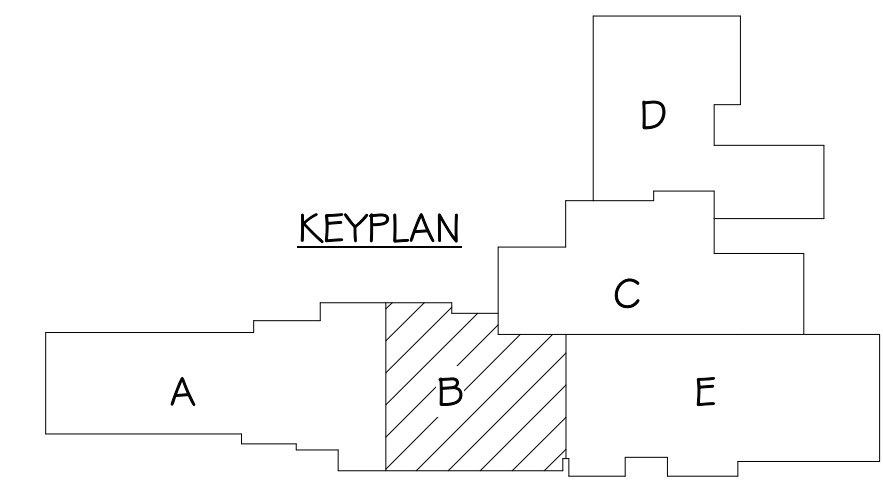
KEYNOTES

- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. PC TO COORDINATE FLOOR CUTTING BY OTHERS WITH GC FOR NEW BELOW GRADE PIPING.

SPECIAL NOTES

- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
- B. FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
- C. ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.

KEYPLAN



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

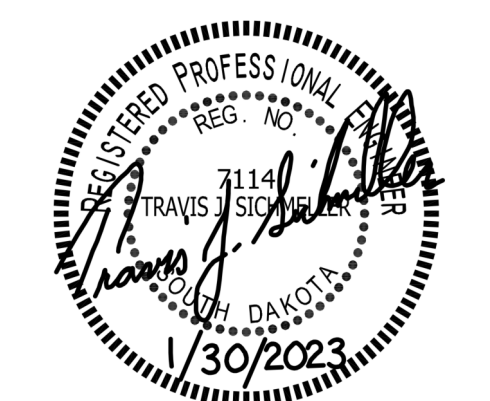
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA B - BELOW GRADE  
PLUMBING & HYDRONICS PLAN

M401B

GENERAL NOTES:

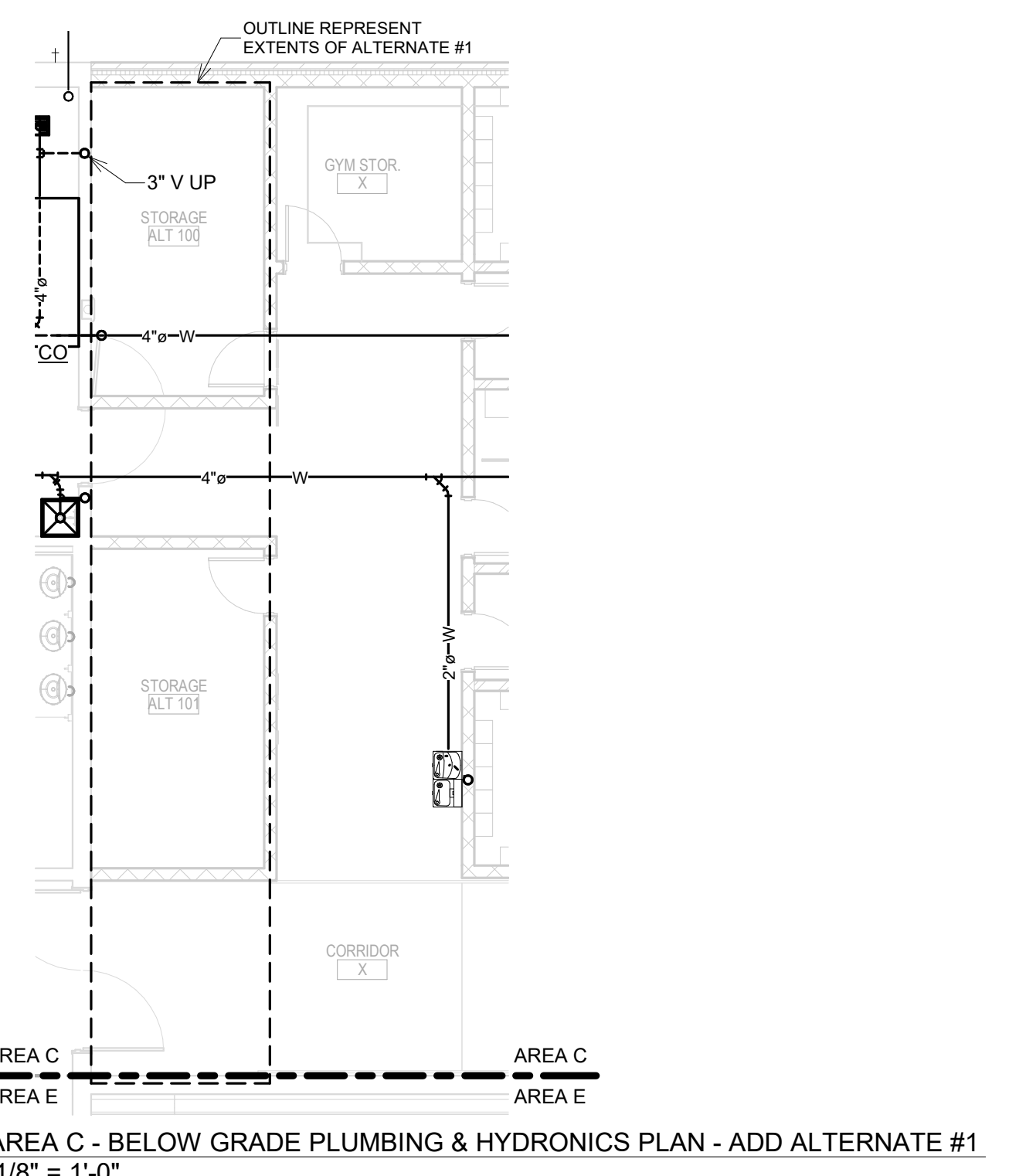
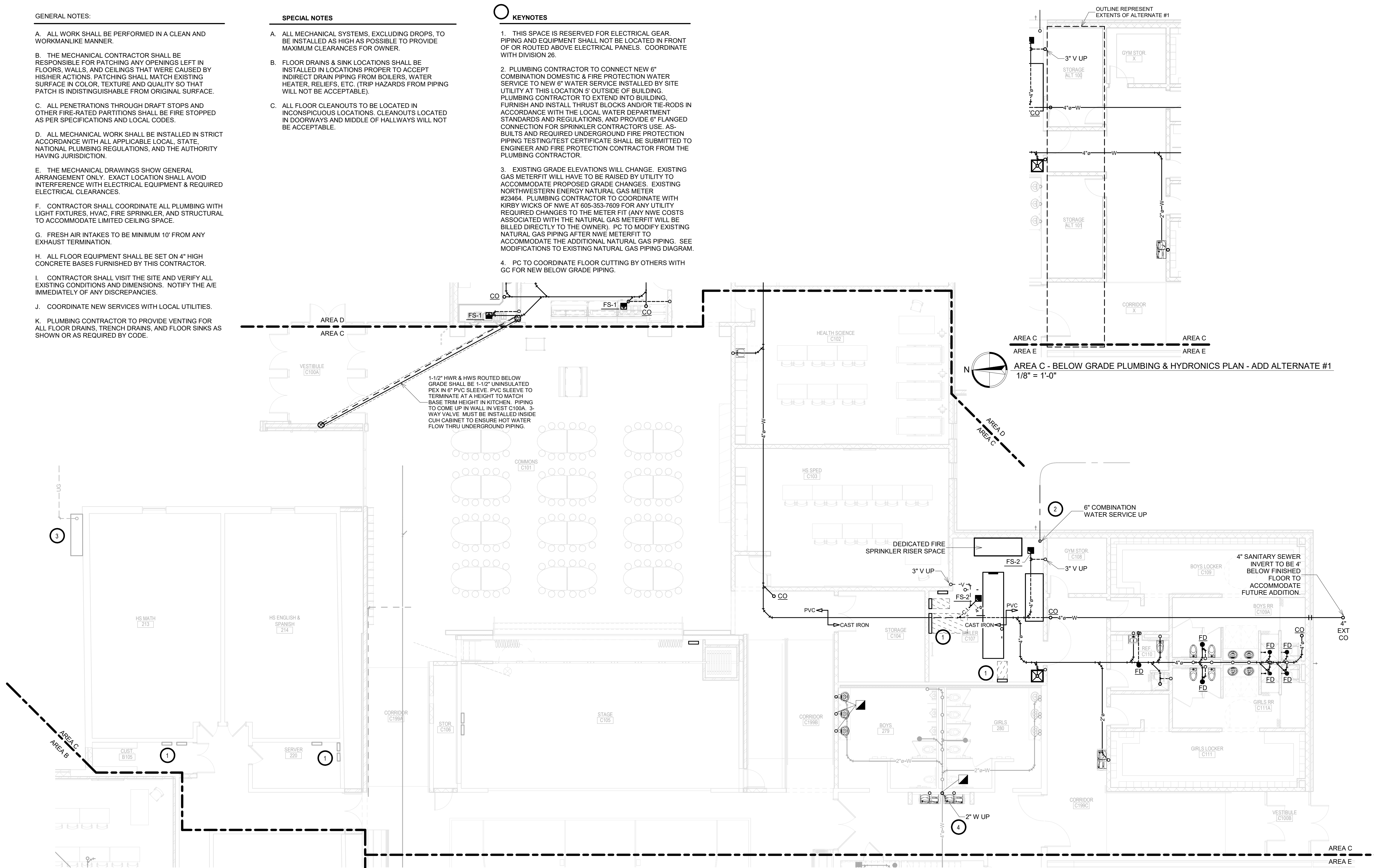
- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- H. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
- I. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE AE IMMEDIATELY OF ANY DISCREPANCIES.
- J. COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
- K. PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.

SPECIAL NOTES

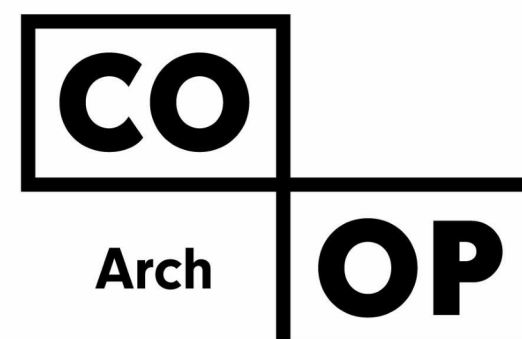
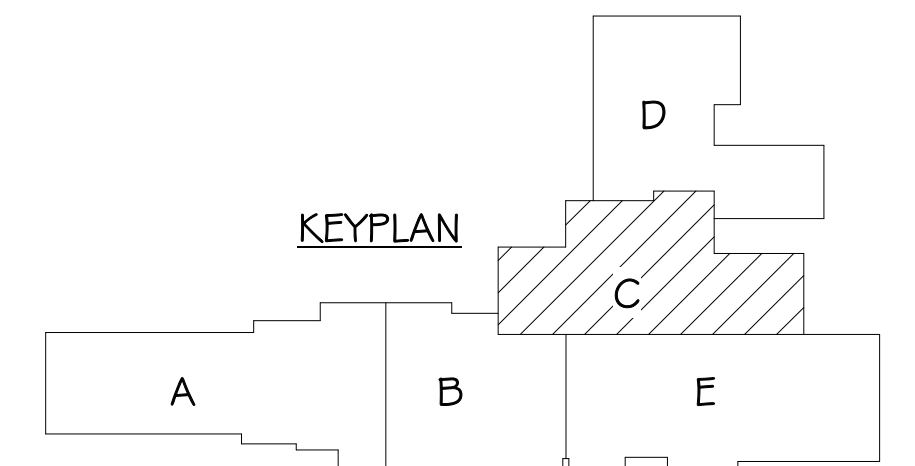
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
- B. FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
- C. ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.

KEYNOTES

1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
2. PLUMBING CONTRACTOR TO CONNECT NEW 6" COMBINATION DOMESTIC & FIRE PROTECTION WATER SERVICE TO NEW 6" WATER SERVICE INSTALLED BY SITE UTILITY AT THIS LOCATION 5' OUTSIDE OF BUILDING. PLUMBING CONTRACTOR TO EXTEND INTO BUILDING. FURNISH AND INSTALL THRUST BLOCKS AND/OR TIE-RODS IN ACCORDANCE WITH THE LOCAL WATER DEPARTMENT STANDARDS AND REGULATIONS, AND PROVIDE 6" FLANGED CONNECTION FOR SPRINKLER CONTRACTOR'S USE. AS-BUILTS AND REQUIRED UNDERGROUND FIRE PROTECTION PIPING TESTING/TEST CERTIFICATE SHALL BE SUBMITTED TO ENGINEER AND FIRE PROTECTION CONTRACTOR FROM THE PLUMBING CONTRACTOR.
3. EXISTING GRADE ELEVATIONS WILL CHANGE. EXISTING GAS METERFIT WILL HAVE TO BE RAISED BY UTILITY TO ACCOMMODATE PROPOSED GRADE CHANGES. EXISTING NORTHWESTERN ENERGY NATURAL GAS METER #23464. PLUMBING CONTRACTOR TO COORDINATE WITH KIRBY WICKS OF NWE AT 605-353-7609 FOR ANY UTILITY REQUIRED CHANGES TO THE METER FIT (ANY NWE COSTS ASSOCIATED WITH THE NATURAL GAS METERFIT WILL BE BILLED DIRECTLY TO THE OWNER). PC TO MODIFY EXISTING NATURAL GAS PIPING AFTER NWE METERFIT TO ACCOMMODATE THE ADDITIONAL NATURAL GAS PIPING. SEE MODIFICATIONS TO EXISTING NATURAL GAS PIPING DIAGRAM.
4. PC TO COORDINATE FLOOR CUTTING BY OTHERS WITH GC FOR NEW BELOW GRADE PIPING.



AREA C - BELOW GRADE PLUMBING & HYDRONICS PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

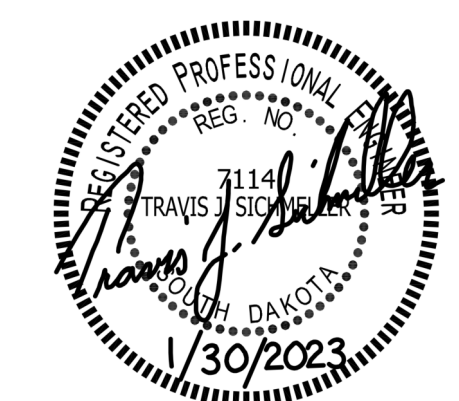
co-oparch.com

SICHMELLER  
ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



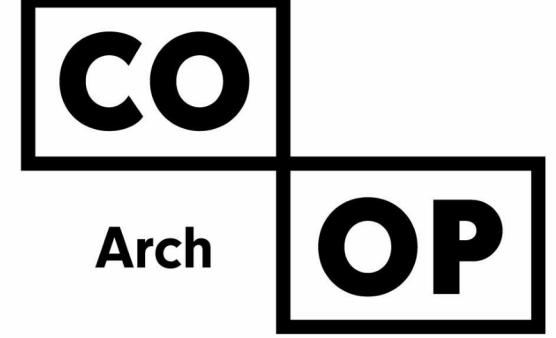
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA C - BELOW GRADE  
PLUMBING & HYDRONICS PLAN

M402C



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

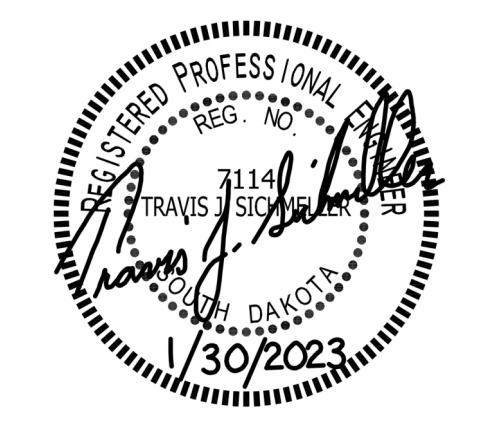
co-oparch.com

### SICHMELLER ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA D - BELOW GRADE  
PLUMBING & HYDRONICS PLAN

# M403D

#### GENERAL NOTES:

- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- H. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
- I. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
- J. COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
- K. PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.

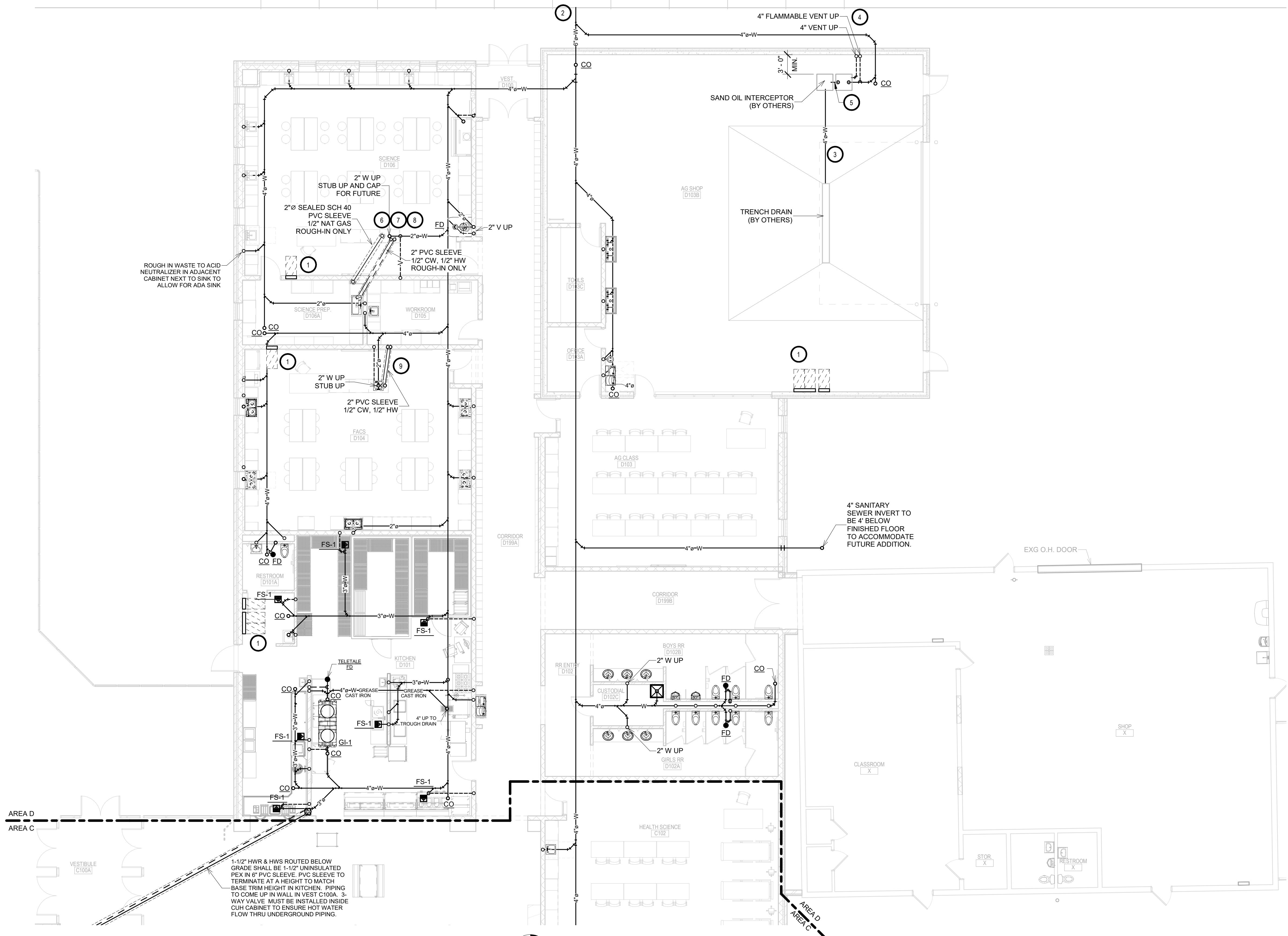
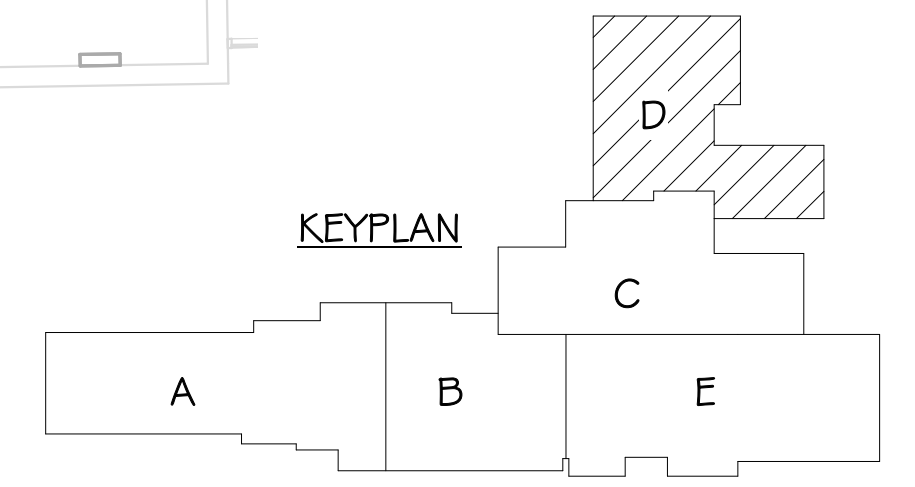
#### KEYNOTES

- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. PLUMBING CONTRACTOR TO CONNECT NEW 6" SANITARY SEWER TO NEW 6" SANITARY SEWER SERVICE INSTALLED BY SITE UTILITY CONTRACTOR AT THIS LOCATION 5' OUTSIDE OF BUILDING. PLUMBING CONTRACTOR SHALL VERIFY EXACT LOCATION, & INVERT.
- 3. 4" WASTE TO SAND/OIL INTERCEPTOR.
- 4. 4" VENT TO SAND/OIL INTERCEPTOR.
- 5. 4" WASTE CONNECTING INLET AND OUTLET SECTION OF SAND/OIL SEPARATOR.
- 6. ROUGH-IN ONLY FOR FUTURE: 1/2" CW, 1/2" HW POTABLE WATER PEX PIPING TO FUTURE ISLAND INSTRUCTOR'S SINK. EACH BELOW GRADE FEED TO BE ENCASED IN 2" SCH 40 PVC WITH LONG SWEEP ELBOW.
- 7. ROUGH-IN ONLY FOR FUTURE: 1/2" CSST GAS TO ISLAND INSTRUCTORS TABLE. BELOW GRADE GAS PIPING TO BE ENCASED IN 2" SCH 40 PVC PIPE WITH LONG SWEEP ELBOWS. SEAL AND CAP 2" PVC PIPE ENCASMENT PIPING AS SHOWN IN GAS PIPING DIAGRAM.
- 8. SEE FUTURE INSTRUCTOR'S TABLE/VENTING GAS PIPING DIAGRAM.
- 9. 1/2" CW, 1/2" HW POTABLE WATER PEX PIPING TO ISLAND INSTRUCTOR'S TABLE. EACH BELOW GRADE FEED TO BE ENCASED IN 2" SCH 40 PVC WITH LONG SWEEP ELBOW.

#### SPECIAL NOTES

- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
- B. FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
- C. ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.

#### KEYPLAN



ROUGH IN WASTE TO ACID NEUTRALIZER IN ADJACENT CABINET NEXT TO SINK TO ALLOW FOR ADA SINK

1-1/2" HWR & HWS ROUTED BELOW GRADE SHALL BE 1-1/2" UNINSULATED PEX IN 6" PVC SLEEVE. PVC SLEEVE TO TERMINATE AT A HEIGHT TO MATCH BASE TRIM HEIGHT IN KITCHEN. PIPING TO COME UP IN WALL IN VEST C100A. 3-WAY VALVE MUST BE INSTALLED INSIDE CUH CABINET TO ENSURE HOT WATER FLOW THRU UNDERGROUND PIPING.

AREA D - BELOW GRADE PLUMBING & HYDRONICS PLAN  
1/8" = 1'-0"

**SPECIAL NOTES**

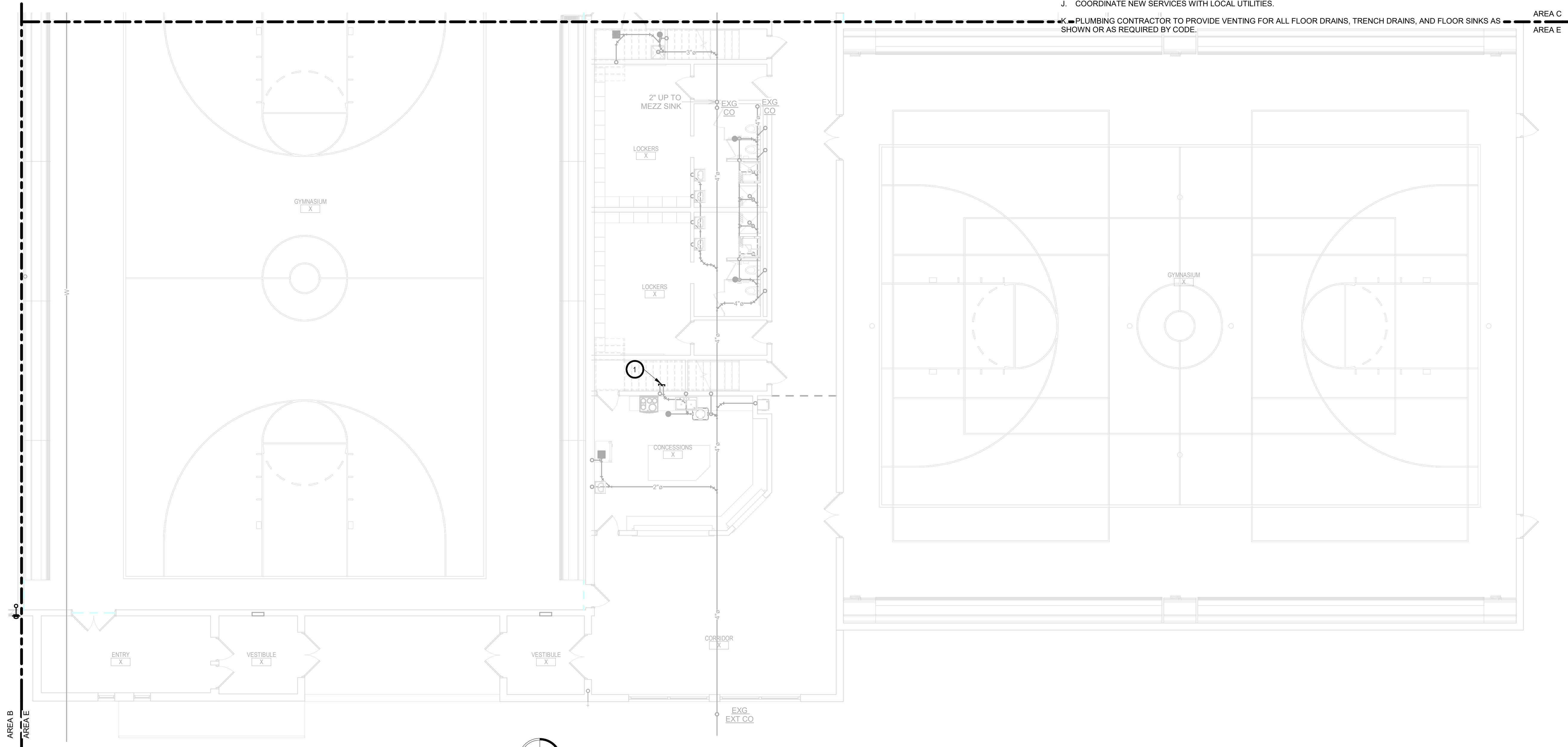
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
- B. FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
- C. ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.

**KEYNOTES**

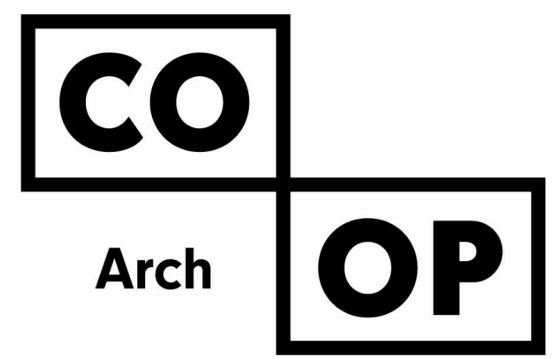
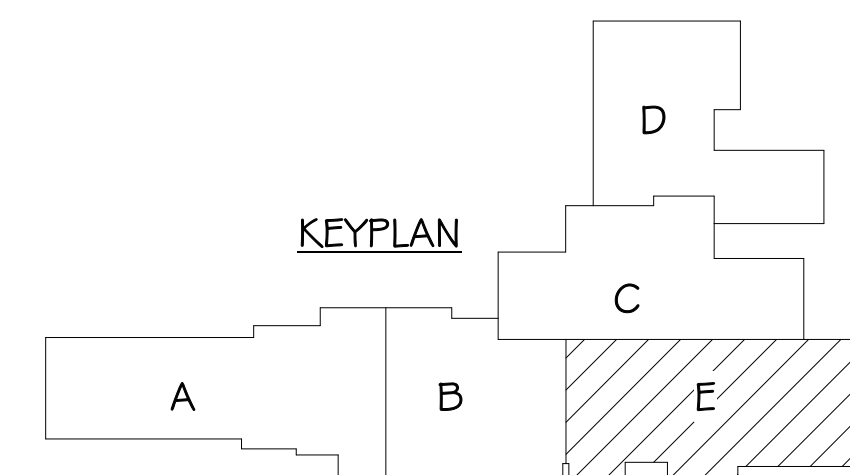
- 1. PC TO DEMO EXISTING FLOOR SINK, DCW, AND CAP PIPE BELOW GRADE. PC TO PATCH EXISTING CONCRETE FLOOR.

**GENERAL NOTES:**

- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- H. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
- I. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
- J. COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
- K. PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.



**AREA E - BELOW GRADE PLUMBING & HYDRONICS PLAN**  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

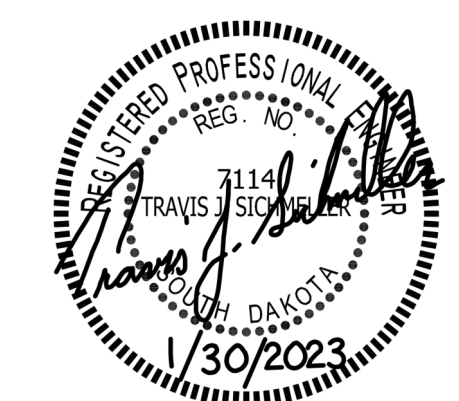
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



**ISSUE:**  
1/30/23 CONSTRUCTION DOCUMENTS

**REVISION SCHEDULE:**

REV. #	REV. DSC.	REV. DATE

**PROJECT:**  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

**SHEET TITLE:**  
AREA E - BELOW GRADE  
PLUMBING & HYDRONICS PLAN

**M404E**

SPECIAL NOTES:

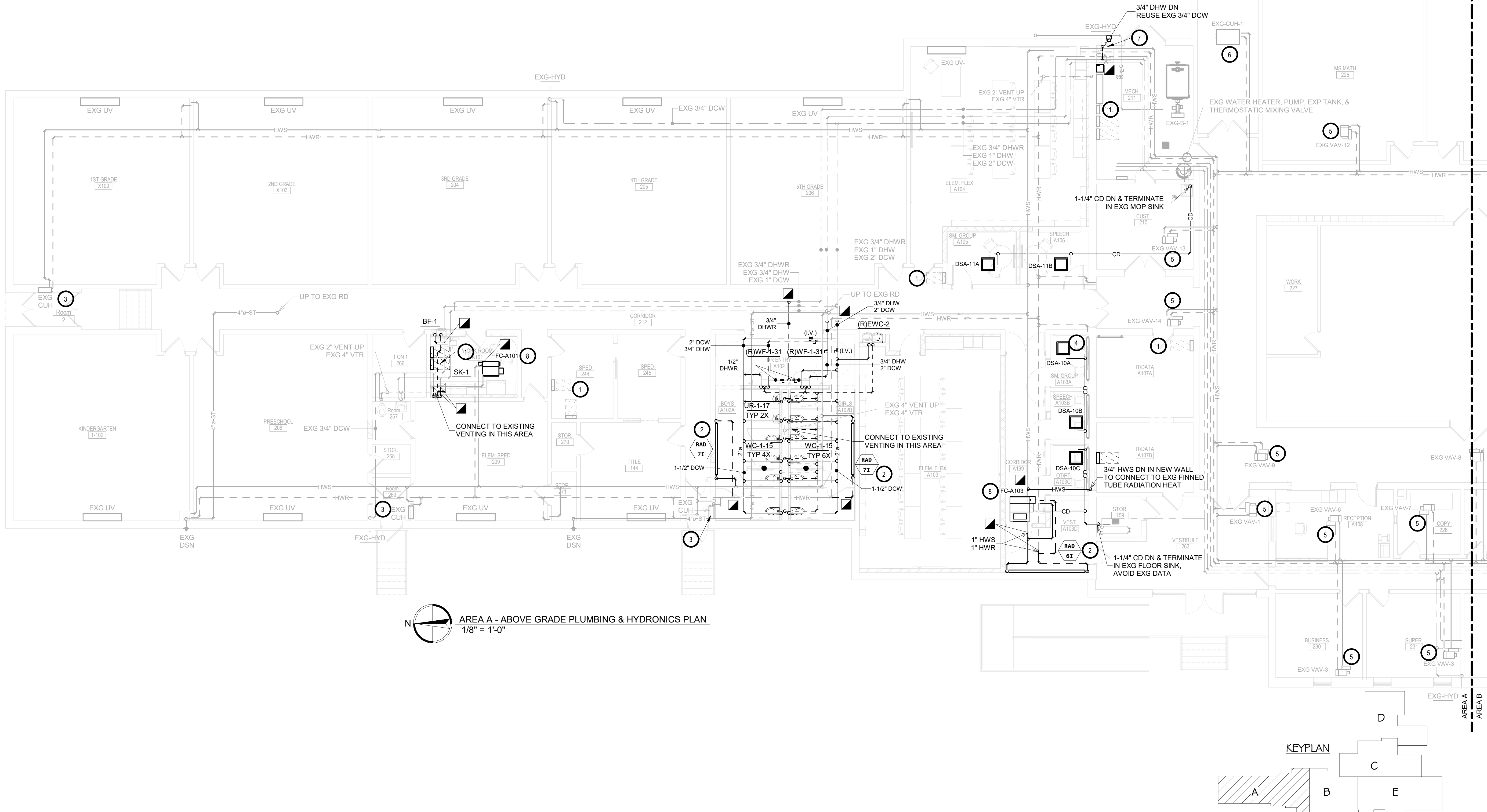
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
- B. FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
- C. ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.
- D. ALL STORM DRAINAGE TO BE 1/8" SLOPE UNLESS OTHERWISE SPECIFIED.

KEYNOTES:

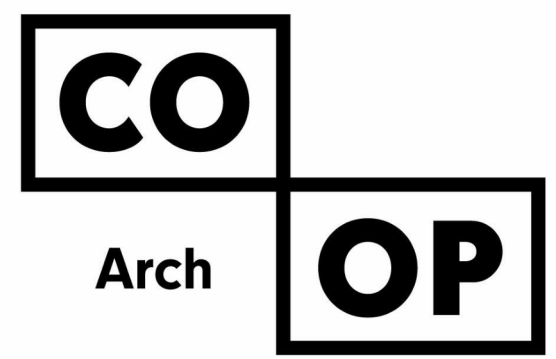
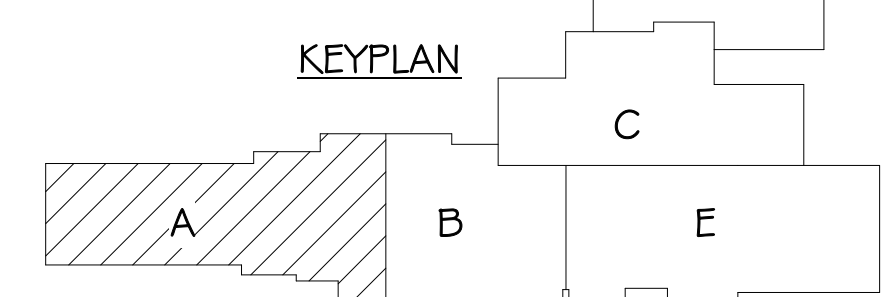
- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. SEE INVERTED FIN TUBE RADIATION PIPING DETAIL.
- 3. SEE MODIFICATIONS TO EXISTING CABINET UNIT HEATER PIPING DETAIL.
- 4. SEE MODIFICATIONS TO EXISTING FINNED TUBE RADIATION DETAIL.
- 5. PC TO INSTALL NEW 2-WAY NORMALLY OPEN MODULATING CONTROL VALVE ON EXISTING VAV'S.
- 6. PC TO INSTALL NEW 3-WAY NORMALLY OPEN MODULATING CONTROL VALVE ON EXISTING CUH.
- 7. PROVIDE & INSTALL LEAD FREE DCW & DHW HOSE BIBBS WITH WATER HAMMER ARRESTORS FOR RELOCATED CLOTHES WASHER. PROVIDE & INSTALL CLOTHES WASHER STANDPIPE. COORDINATE FLOOR CUTTING & PATCHING FOR NEW WASTE WITH GC.
- 8. SEE FAN COIL HEATING COIL PIPING DETAIL.

GENERAL NOTES:

- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- H. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
- I. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
- J. COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
- K. PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.



AREA A - ABOVE GRADE PLUMBING & HYDRONICS PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

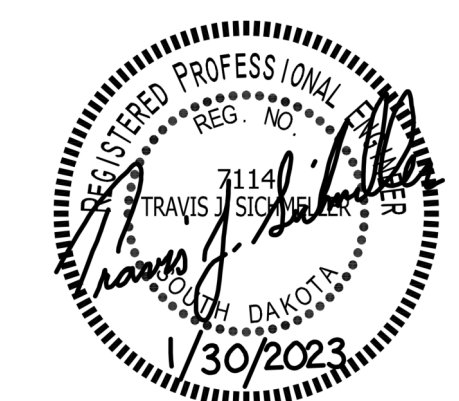
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



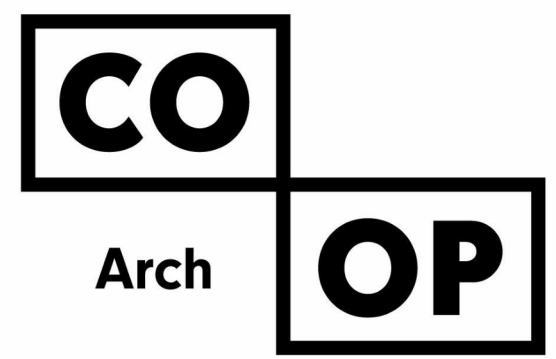
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA A - ABOVE GRADE  
PLUMBING & HYDRONICS PLAN

M500A



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

### SICHMELLER ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

**GENERAL NOTES:**

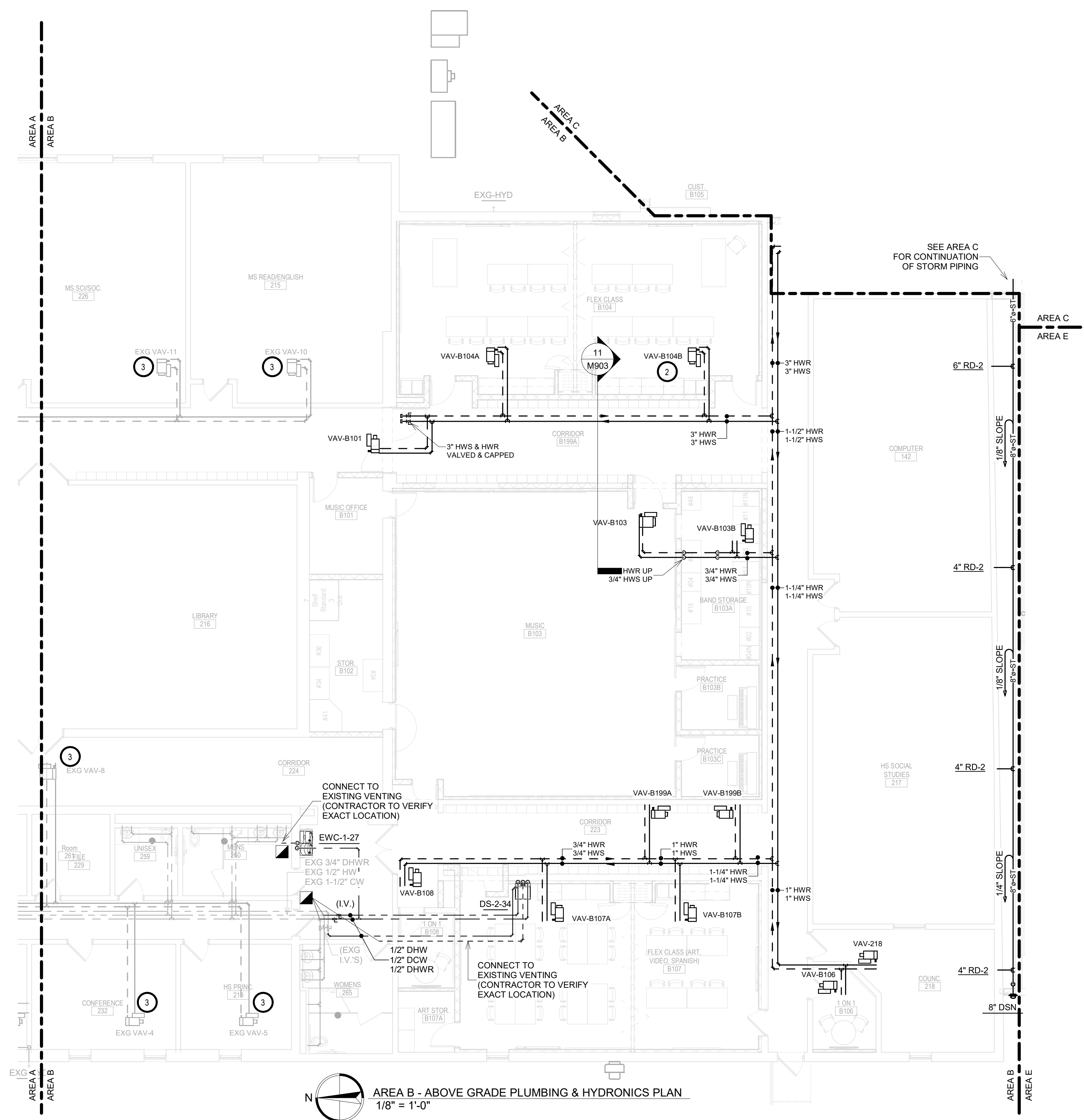
- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- H. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
- I. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
- J. COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
- K. PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.

**KEYNOTES:**

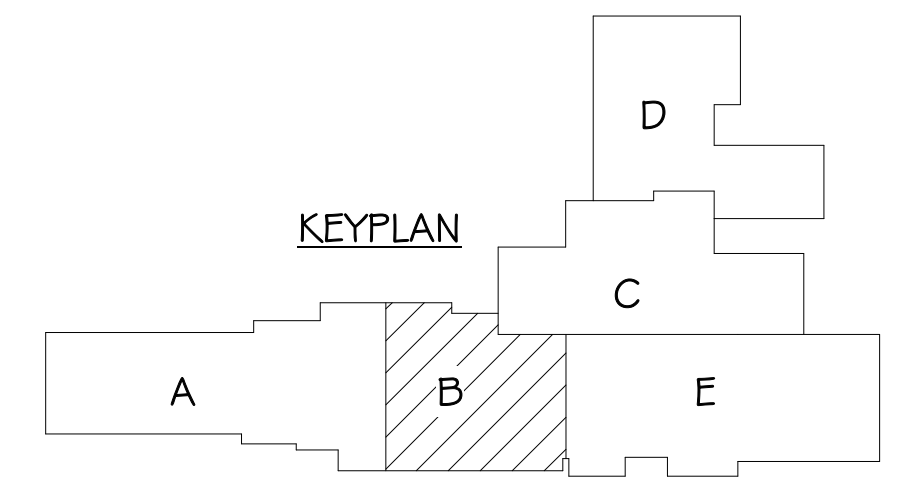
- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. TYPICAL - SEE VAV HEATING COIL PIPING DETAIL.
- 3. PC TO INSTALL NEW 2-WAY NORMALLY OPEN MODULATING CONTROL VALVE ON EXISTING VAV'S.

**SPECIAL NOTES:**

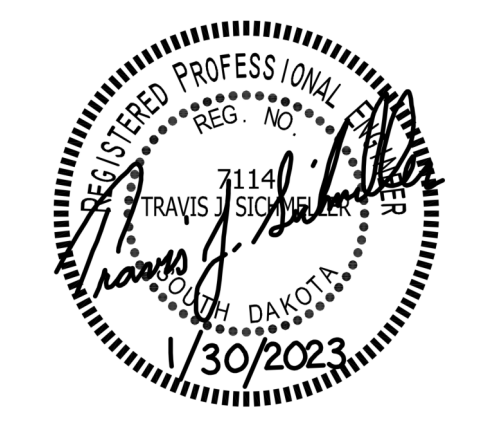
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
- B. FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
- C. ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.
- D. ALL STORM DRAINAGE TO BE 1/8" SLOPE UNLESS OTHERWISE SPECIFIED.



**AREA B - ABOVE GRADE PLUMBING & HYDRONICS PLAN**  
1/8" = 1'-0"



SE PROJECT NO: 220900771



**ISSUE:**  
1/30/23 CONSTRUCTION DOCUMENTS

**REVISION SCHEDULE:**

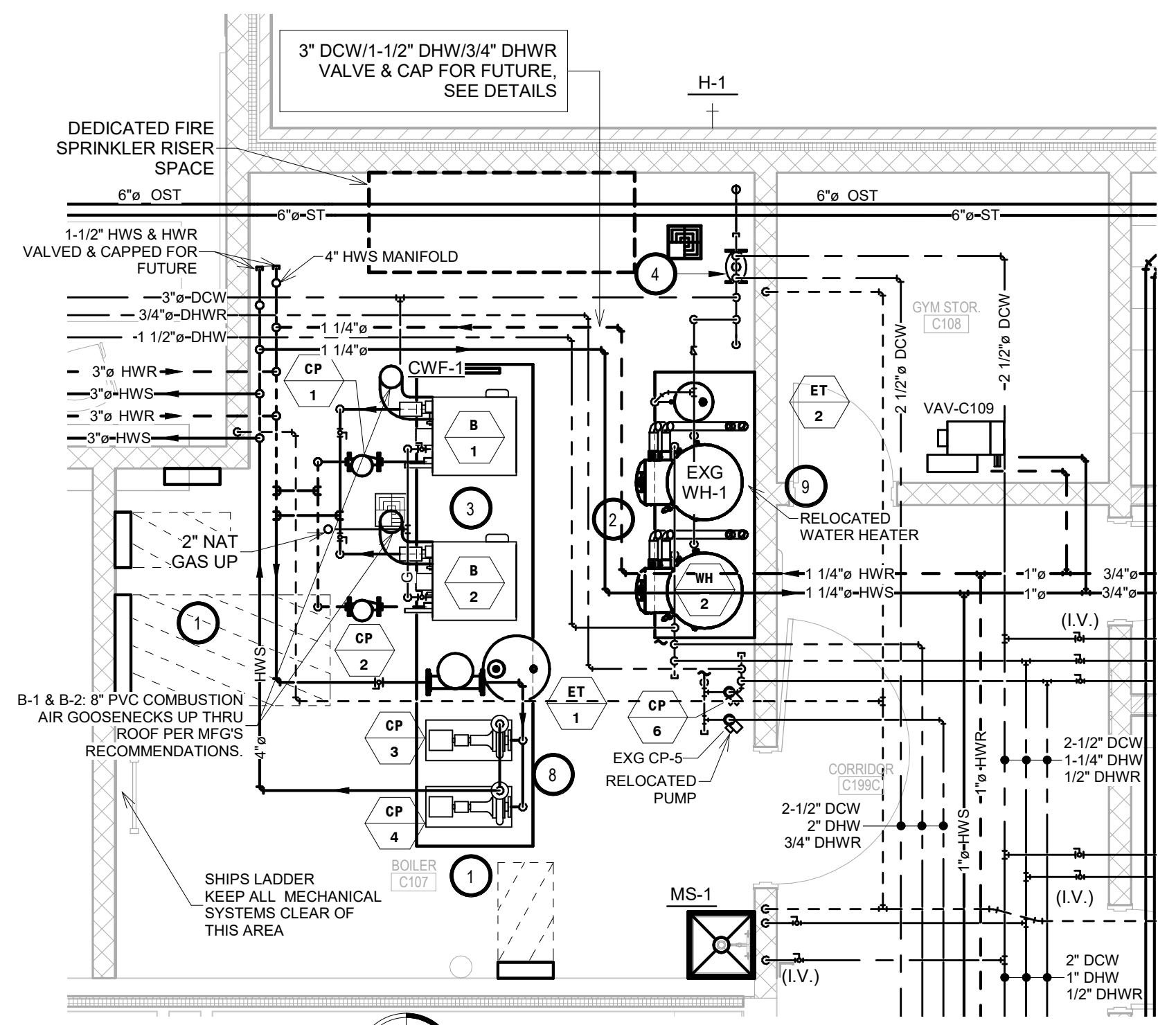
REV. #	REV. DSC.	REV. DATE

**PROJECT:**  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

**SHEET TITLE:**  
AREA B - ABOVE GRADE  
PLUMBING & HYDRONICS PLAN

# M501B

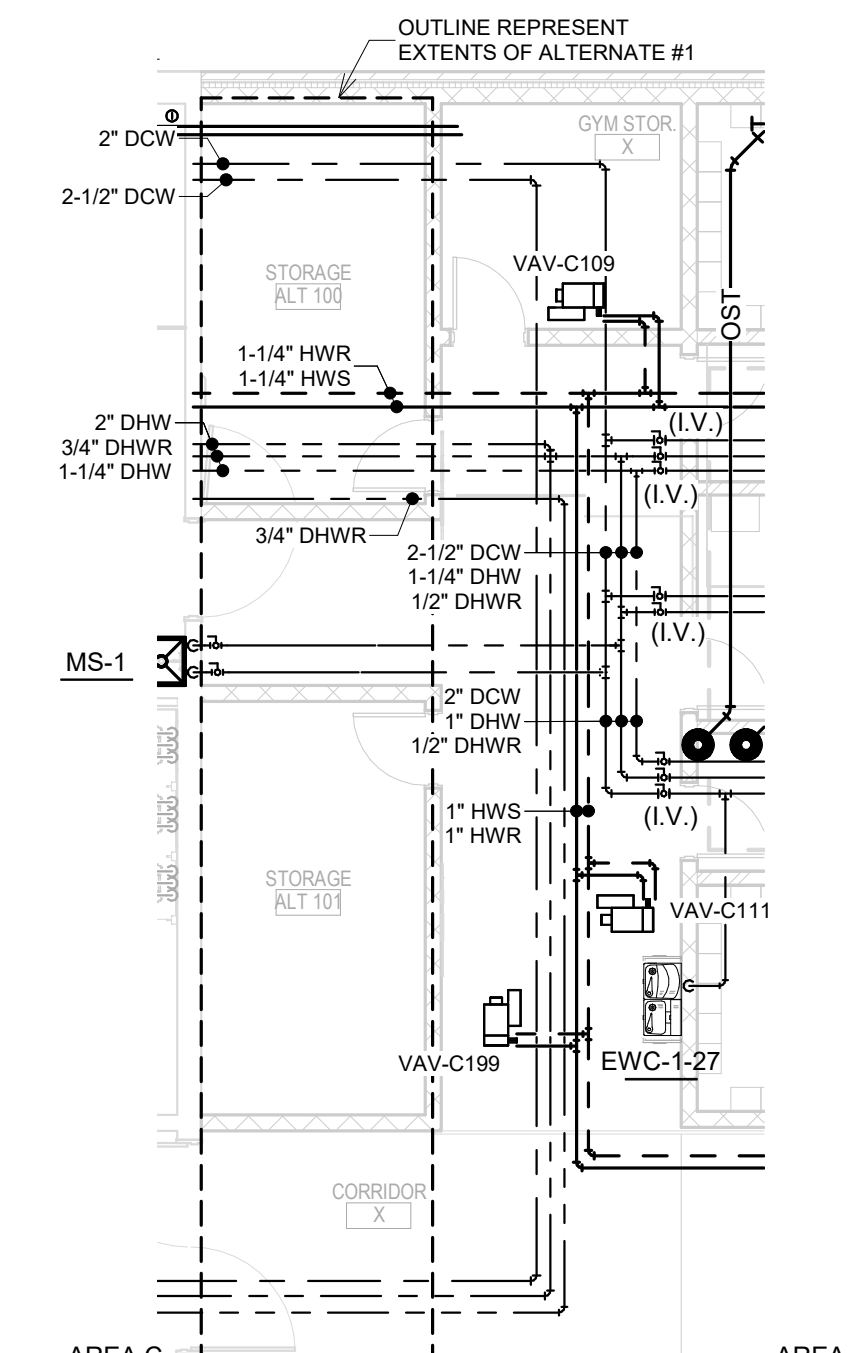




AREA C - ENLARGED BOILER ROOM PLAN  
1/4" = 1'-0"

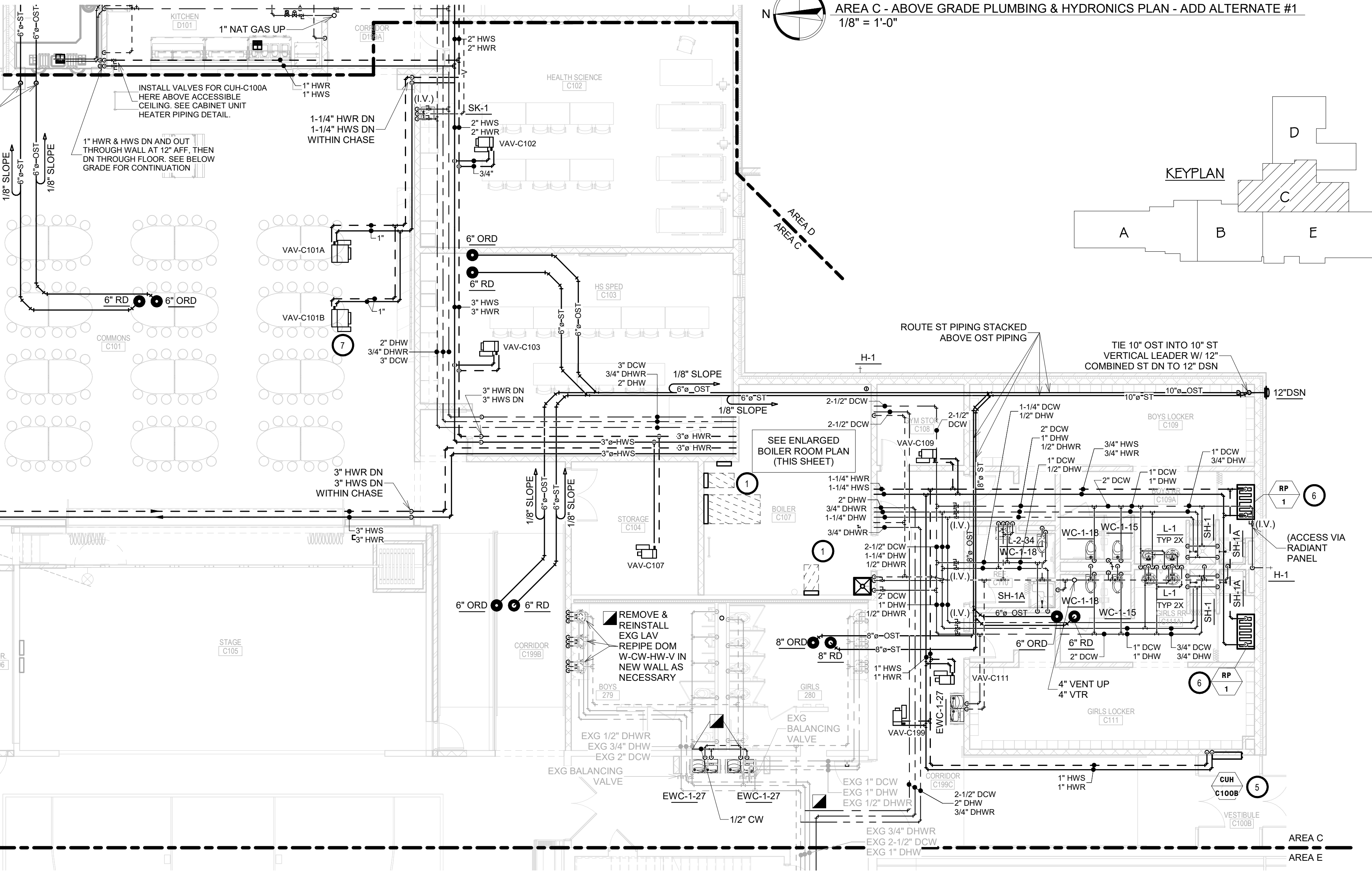
- KEYNOTES:**
- THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
  - SEE MODIFICATIONS TO EXISTING NATURAL GAS WATER HEATER PIPING DIAGRAM.
  - SEE HEATING WATER SYSTEM PIPING DIAGRAM INCLUDING 3-WAY DDC TEMPERATURE CONTROL VALVE NOT SHOWN ON THIS PLAN VIEW FOR SIMPLICITY.
  - SEE WATER HEADER PIPING DIAGRAM.
  - SEE CABINET UNIT HEATER PIPING DETAIL.
  - SEE RADIANT PANEL PIPING DETAIL.
  - TYPICAL - SEE VAV HEATING COIL PIPING DETAIL.
  - SEE END SUCTION PUMP DETAIL.
  - RWH-1 AND WH-2 VENTING & COMBUSTION AIR THRU ROOF, WITH SPACING, HEIGHTS, & TERMINATIONS PER MFG'S REQUIREMENTS. CONCENTRIC KITS ARE NOT ACCEPTABLE.

- GENERAL NOTES:**
- ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
  - THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
  - ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
  - ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
  - THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
  - CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
  - FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
  - ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
  - CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
  - COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
  - PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.

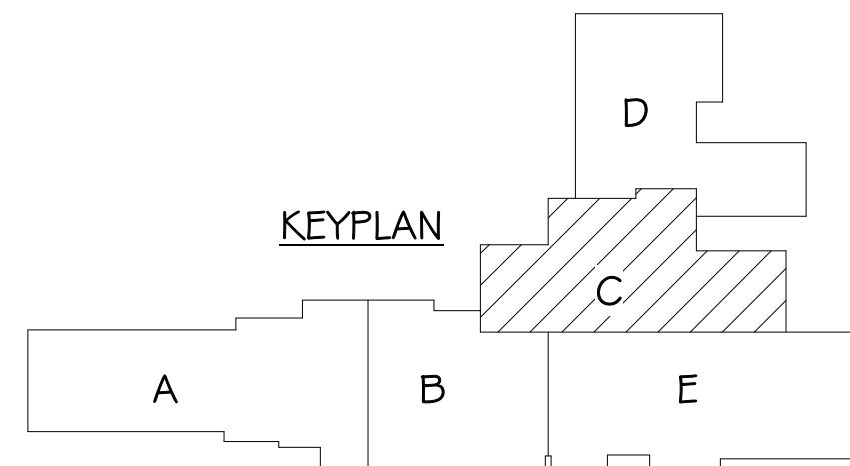


AREA C - ABOVE GRADE PLUMBING & HYDRONICS PLAN - ADD ALTERNATE #1  
1/8" = 1'-0"

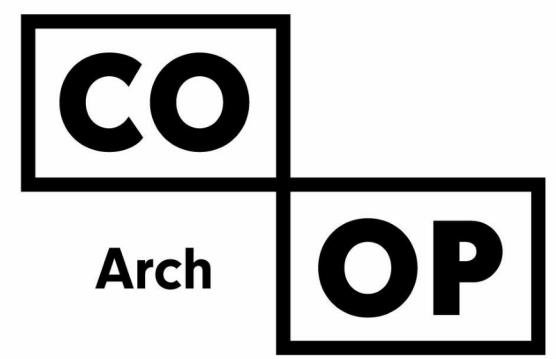
- SPECIAL NOTES:**
- ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
  - FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
  - ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.
  - ALL STORM DRAINAGE TO BE 1/8" SLOPE UNLESS OTHERWISE SPECIFIED.



AREA C - ABOVE GRADE PLUMBING & HYDRONICS PLAN  
1/8" = 1'-0"



KEYPLAN



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

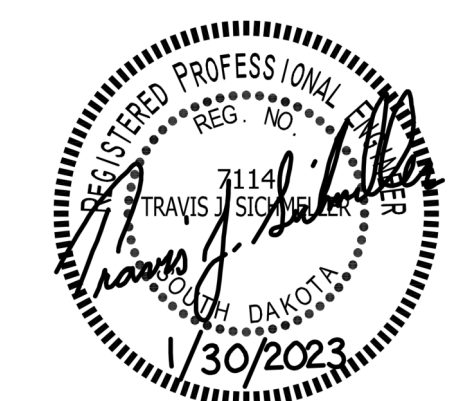
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



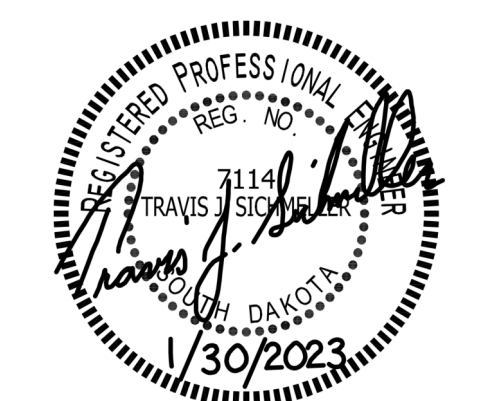
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA C - ABOVE GRADE  
PLUMBING & HYDRONICS PLAN

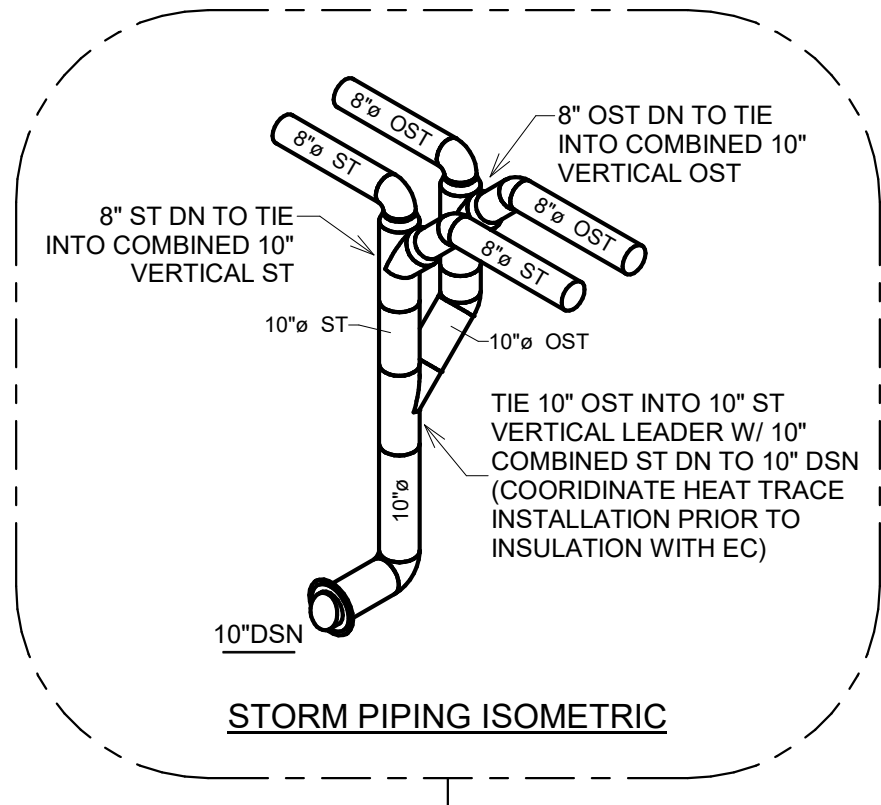
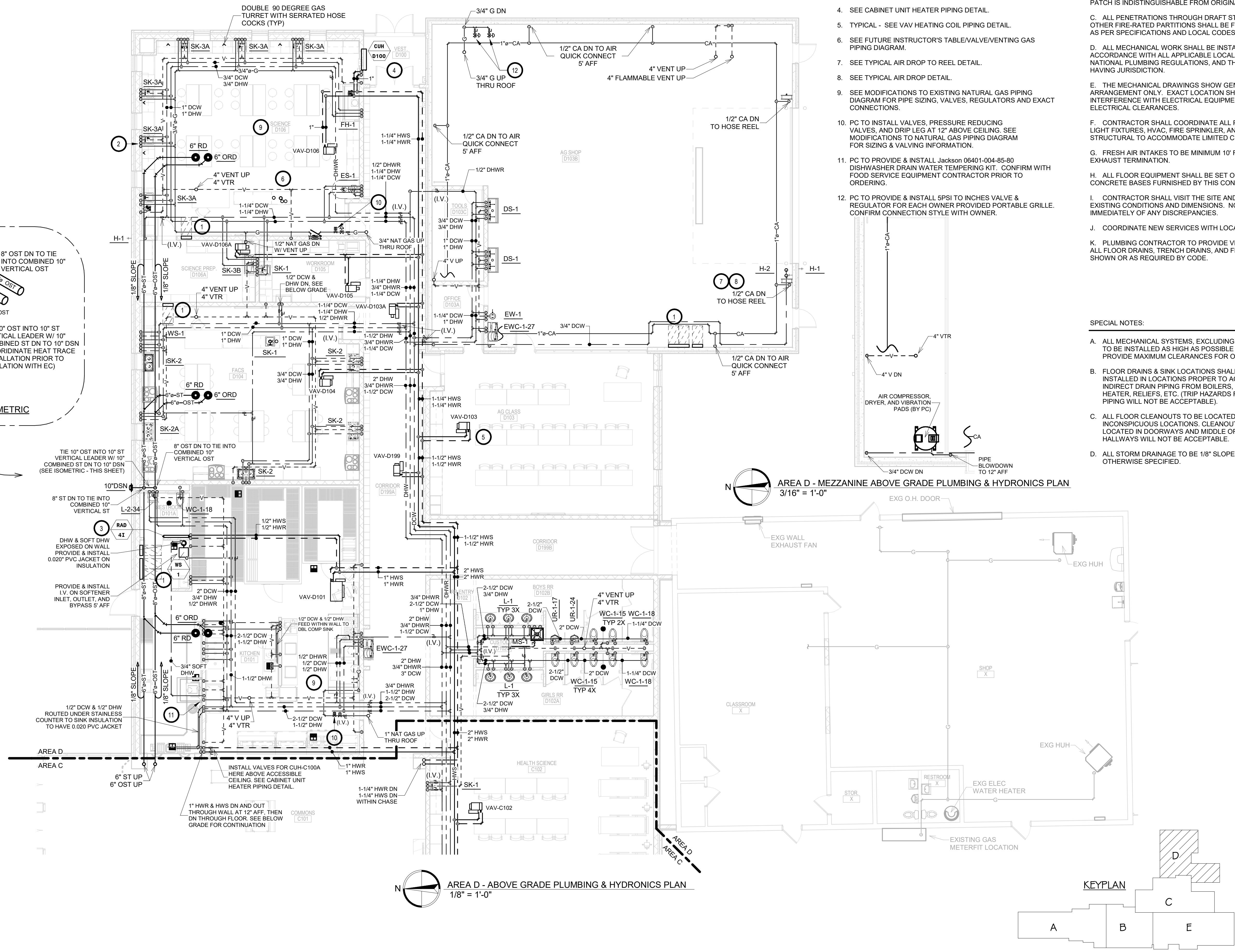
M502C

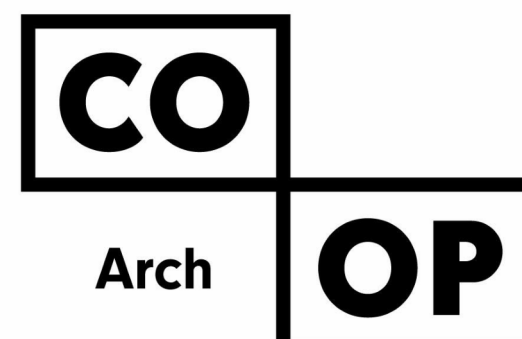


- KEYNOTES:**
- THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
  - TYPICAL - 1/2" WELDED NAT GAS DN TO GAS TURRET, SEE MODIFICATIONS TO EXISTING NATURAL GAS PIPING DIAGRAM.
  - SEE INVERTED FIN TUBE RADIATION PIPING DETAIL.
  - SEE CABINET UNIT HEATER PIPING DETAIL.
  - TYPICAL - SEE VAV HEATING COIL PIPING DETAIL.
  - SEE FUTURE INSTRUCTOR'S TABLE/VALVE/VENTING GAS PIPING DIAGRAM.
  - SEE TYPICAL AIR DROP TO REEL DETAIL.
  - SEE TYPICAL AIR DROP DETAIL.
  - SEE MODIFICATIONS TO EXISTING NATURAL GAS PIPING DIAGRAM FOR PIPE SIZING, VALVES, REGULATORS AND EXACT CONNECTIONS.
  - PC TO INSTALL VALVES, PRESSURE REDUCING VALVES, AND DRIP LEG AT 12" ABOVE CEILING. SEE MODIFICATIONS TO NATURAL GAS PIPING DIAGRAM FOR SIZING & VALVING INFORMATION.
  - PC TO PROVIDE & INSTALL Jackson 06401-004-85-80 DISHWASHER DRAIN WATER TEMPERING KIT. CONFIRM WITH FOOD SERVICE EQUIPMENT CONTRACTOR PRIOR TO ORDERING.
  - PC TO PROVIDE & INSTALL 5PSI TO INCHES VALVE & REGULATOR FOR EACH OWNER PROVIDED PORTABLE GRILLE. CONFIRM CONNECTION STYLE WITH OWNER.

- GENERAL NOTES:**
- ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
  - THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
  - ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
  - ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
  - THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
  - CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
  - FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
  - ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
  - CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
  - COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
  - PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.

- SPECIAL NOTES:**
- ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
  - FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
  - ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.
  - ALL STORM DRAINAGE TO BE 1/8" SLOPE UNLESS OTHERWISE SPECIFIED.





1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

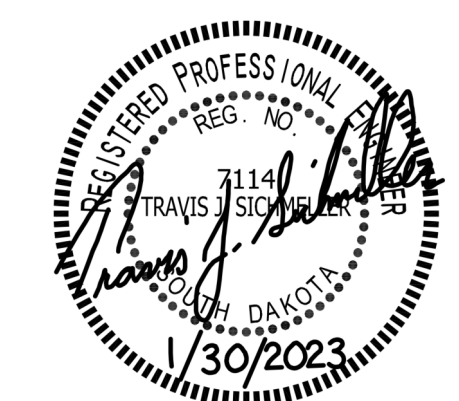
co-oparch.com

## SICHMELLER ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

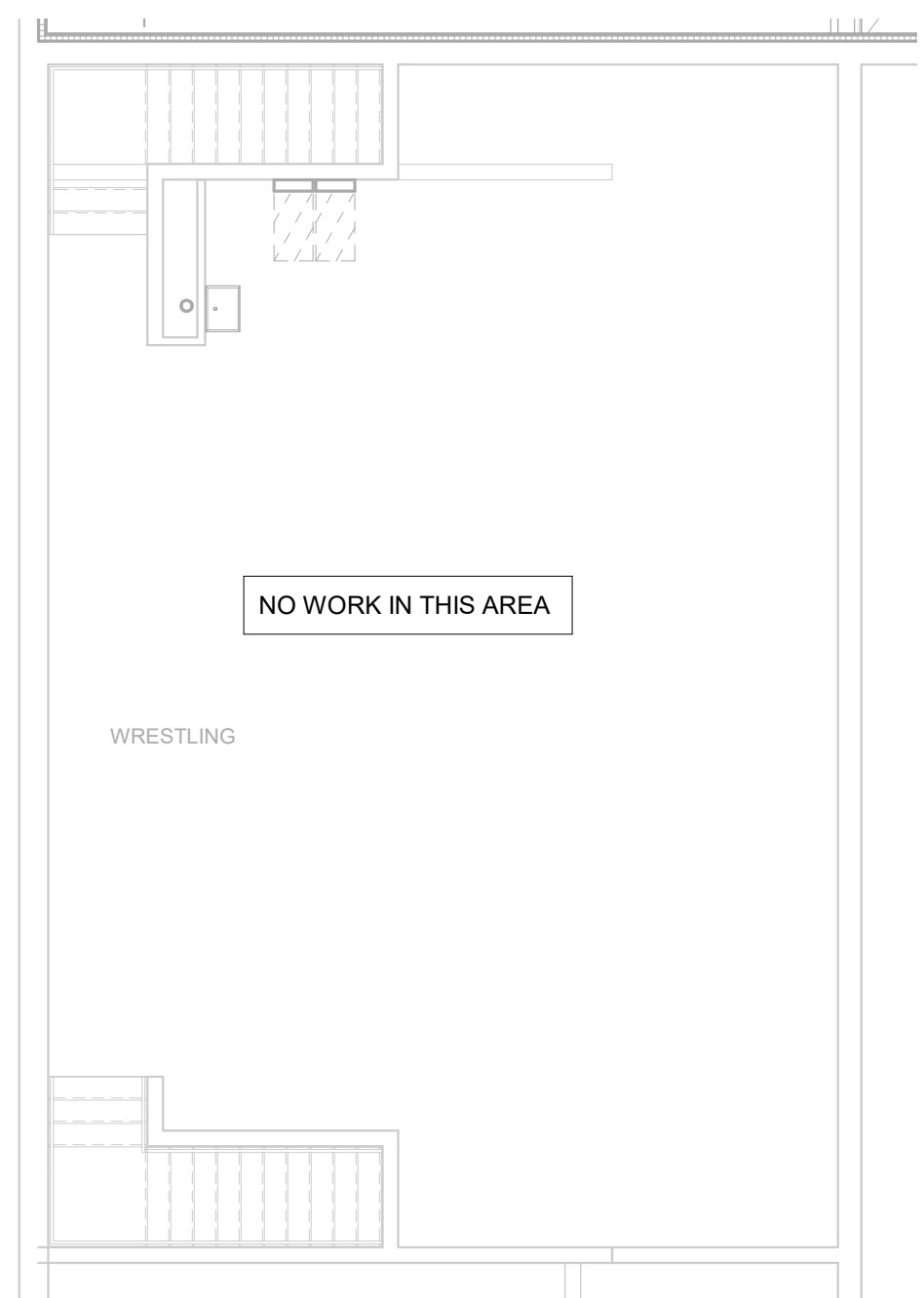
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA E - ABOVE GRADE  
PLUMBING & HYDRONICS PLAN

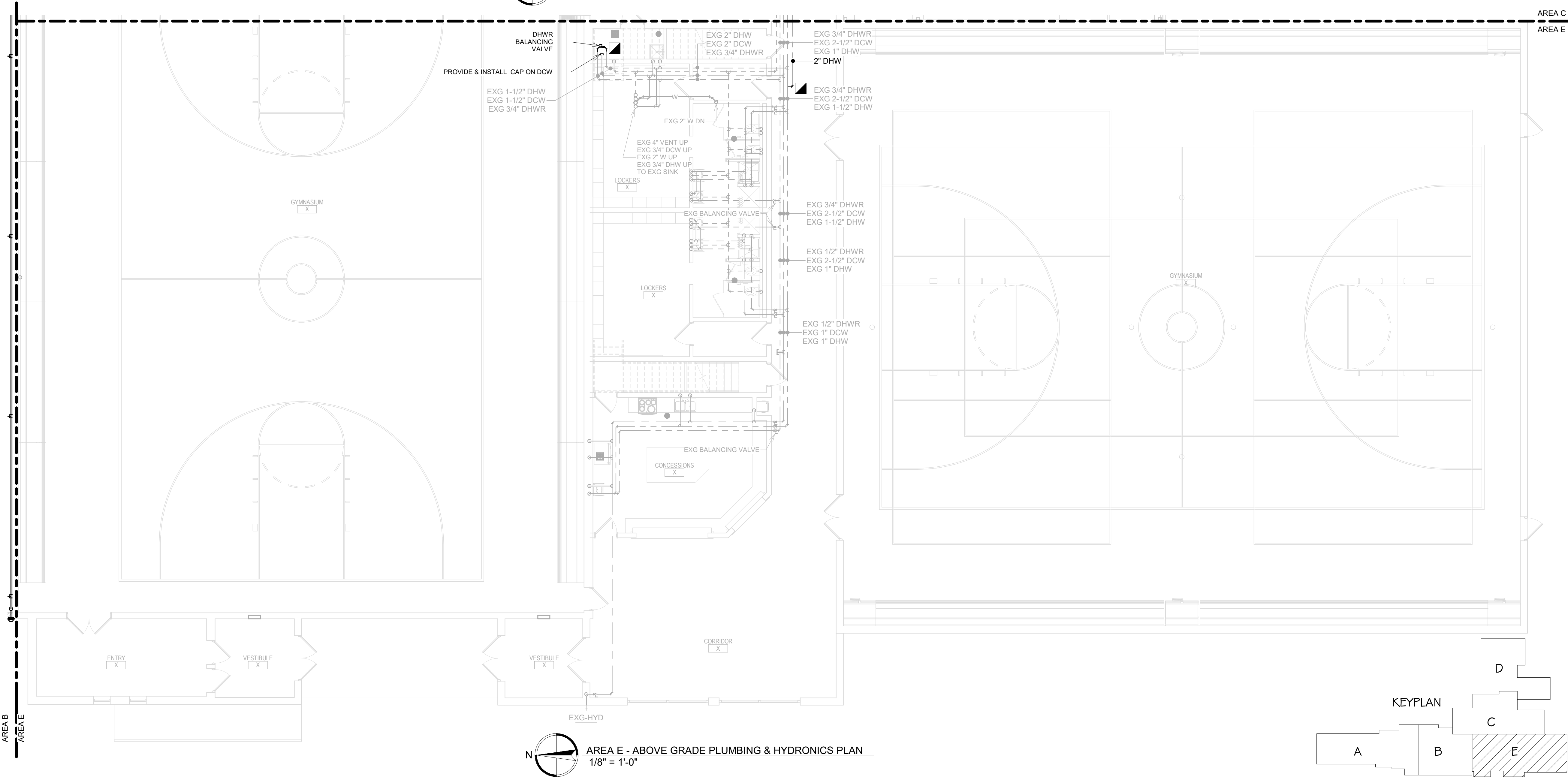
# M504E

- SPECIAL NOTES:**
- ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.
  - FLOOR DRAINS & SINK LOCATIONS SHALL BE INSTALLED IN LOCATIONS PROPER TO ACCEPT INDIRECT DRAIN PIPING FROM BOILERS, WATER HEATER, RELIEFS, ETC. (TRIP HAZARDS FROM PIPING WILL NOT BE ACCEPTABLE).
  - ALL FLOOR CLEANOUTS TO BE LOCATED IN INCONSPICUOUS LOCATIONS. CLEANOUTS LOCATED IN DOORWAYS AND MIDDLE OF HALLWAYS WILL NOT BE ACCEPTABLE.
  - ALL STORM DRAINAGE TO BE 1/8" SLOPE UNLESS OTHERWISE SPECIFIED.

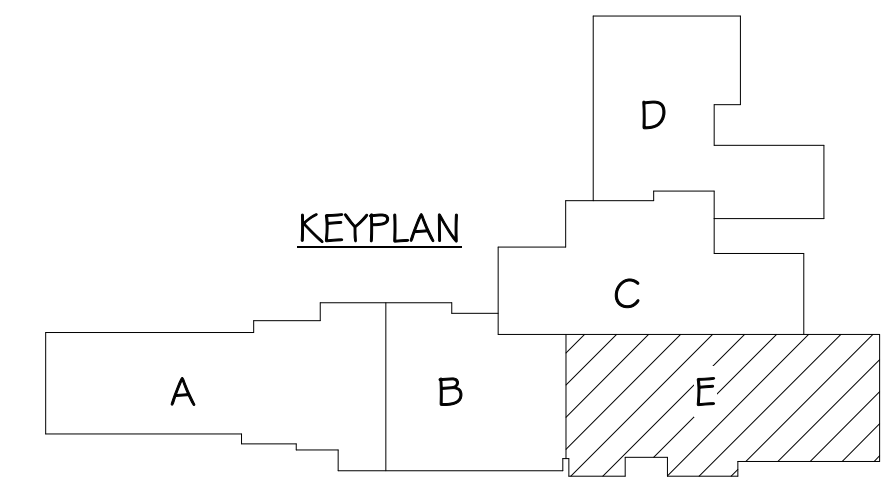
- GENERAL NOTES:**
- ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
  - THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
  - ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
  - ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
  - THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
  - CONTRACTOR SHALL COORDINATE ALL PLUMBING WITH LIGHT FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.
  - FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
  - ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.
  - CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES.
  - COORDINATE NEW SERVICES WITH LOCAL UTILITIES.
  - PLUMBING CONTRACTOR TO PROVIDE VENTING FOR ALL FLOOR DRAINS, TRENCH DRAINS, AND FLOOR SINKS AS SHOWN OR AS REQUIRED BY CODE.



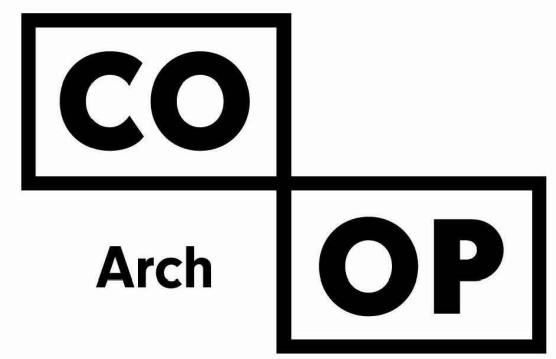
AREA E - MEZZANINE ABOVE GRADE PLUMBING & HYDRONICS PLAN  
1/8" = 1'-0"



AREA E - ABOVE GRADE PLUMBING & HYDRONICS PLAN  
1/8" = 1'-0"



1/30/2023 3:55:56 PM



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

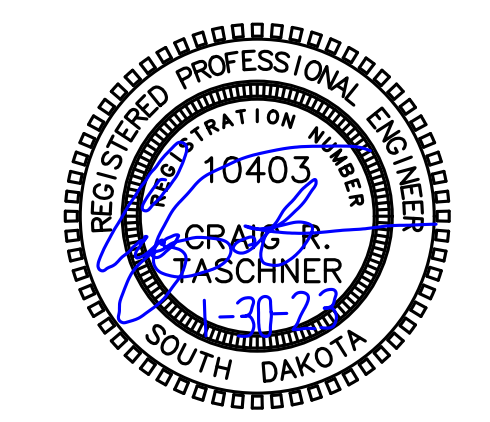
# SICHMELLER ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344

www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FIRE PROTECTION - LEGENDS & DETAILS

# M600

### GENERAL NOTES:

- THIS PROJECT INCLUDES THE DESIGN AND INSTALLATION OF SINGLE ZONE (1) WET SYSTEM ZONE FOR THE BUILDING ADDITION AND THE PORTION OF THE EXISTING BUILDING DEFINED BY THESE PLANS DESIGNED PER NFPA 13 (2019 ed.) AND LOCAL BUILDING CODES. THE SYSTEM WILL BE SUPPLIED BY A 6" UNDERGROUND WATER SERVICE LINE FED BY THE CITY'S UNDERGROUND WATER SYSTEM. EXISTING BUILDING IS NOT SPRINKLED AND ONLY A PORTION OF THE EXISTING BUILDING AS PART OF THE SCOPE OF WORK OF THIS PROJECT. A 2 HR FIRE WALL SEPARATION WILL BE CONSTRUCTED BETWEEN THE ADDITION AND THE NON SPRINKLED PORTIONS OF THE EXISTING BUILDING.
- FINAL PIPE SIZING AND LOCATION IS TO BE DETERMINED BY THE FIRE SPRINKLER CONTRACTOR AND IS SUBJECT TO APPROVAL BY THE ENGINEER. NOT ALL REQUIRED PIPING IS SHOWN.
- REFER TO SPECIFICATION DIVISION 211000 FOR ADDITIONAL FIRE SPRINKLER SYSTEM INFORMATION.
- ALL SPRINKLERS IN LIGHT HAZARD OCCUPANCIES ARE TO BE OF THE QUICK RESPONSE TYPE.
- SPRINKLERS ARE REQUIRED TO BE PROTECTED DURING PAINTING.
- SPRINKLERS SHALL BE LOCATED IN THE CENTER POINT OF SQUARE CEILING TILES AND ALLOWED TO BE IN THE QUARTER AND/OR CENTER POINTS OF RECTANGULAR CEILING TILES.
- SPRINKLER GUARDS ARE TO BE INSTALLED ON ALL EXPOSED SPRINKLERS LOCATED IN COMPETITION GYM 145, ELEVATED BELOW 7'-0", SIDEWALL SPRINKLERS LOCATED BELOW OVERHEAD DOORS, AND THROUGHOUT AREAS WHERE HEADS ARE EXPOSED TO INTERFERENCE DAMAGE.
- ALL SYSTEMS PIPING AND FITTINGS TO MEET THE REQUIREMENTS OF NFPA 13.
- REQUIRED SYSTEM TESTING IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR PER NFPA 25.
- NOT ALL REQUIRED SPRINKLERS AND PIPING ARE SHOWN. CONSIDERATION OF ADDITIONAL SPRINKLERS, PIPING, AND FITTINGS DUE TO INTERFERENCE WITH OTHER TRADES, OBSTRUCTIONS, IMPROVED AESTHETICS, OR OWNER/AHJ REQUESTS SHALL BE MADE PRIOR TO BID BY THE FIRE SPRINKLER CONTRACTOR.
- FIRE SPRINKLER CONTRACTOR TO PROVIDE ALL NECESSARY MATERIAL, INCLUDING BUT NOT LIMITED TO, SPRINKLERS, PIPING, VALVES, AND LABOR TO PROVIDE A COMPLETE SYSTEM TO COMPLY WITH NFPA 13 AND LOCAL BUILDING CODES. ALL HYDRAULIC CALCULATIONS AND PIPE SIZING ARE THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR. ANY AND ALL CLARIFICATIONS TO BID DOCUMENTS SHALL BE MADE PRIOR TO BID.
- UPRIGHT SPRINKLERS TO HAVE A BRASS FINISH THROUGHOUT, UNLESS NOTED OTHERWISE.
- ALL GROOVED STEEL PIPING SHALL BE SCHEDULE 10 MINIMUM.
- ALL THREADED STEEL PIPING SHALL BE SCHEDULE 40.
- ALL DRY PIPING SHALL BE SCHEDULE 40.
- ALL PIPING PENETRATING AN EXTERIOR WALL SHALL BE GALVANIZED SCHEDULE 40.
- ALL THREADED FITTINGS SHALL BE DUCTILE IRON.
- LISTED FLEX PIPING TO PENDENT HEADS IN CEILING IS ALLOWED FOR THIS PROJECT IF PROVEN HYDRAULICALLY.
- CPVC IS ALLOWED FOR THIS PROJECT WHERE APPROVED BY ITS LISTING AND INSTALLED IN A CONCEALED SPACE. NO EXPOSED CPVC PIPING IS ALLOWED.
- FURNISH AND INSTALL AN AUTOMATIC AIR VENT FOR EACH WET SPRINKLER ZONE. AUTOMATIC AIR VENT SHALL BE LOCATED NEAR A HIGH POINT IN THE WET SYSTEM THAT ALLOWS FOR THE MAXIMUM AMOUNT OF AIR REMOVAL FROM THAT SYSTEM. ALL MATERIAL BEING INSTALLED MUST BE NEW AND LISTED FOR USE.
- THE FIRE SPRINKLER CONTRACTOR SHALL VERIFY LOCATIONS AND ROUTING OF PIPE PRIOR TO BID. NO ALLOWANCES FOR EXTRA FITTINGS, PIPING, SPRINKLERS, ETC. WILL BE ALLOWED AFTER AWARD OF CONTRACT.
- ALL ARCHITECTURAL, MECHANICAL, STRUCTURAL, CIVIL, & ELECTRICAL FEATURES INDICATED ON THE FP SHEETS SHALL BE VERIFIED BY CONSULTING THE A, M, S, C. & E SHEETS.
- PIPING SHOWN ON THESE PLANS IS CONCEPTUAL BUT SHALL BE CLOSELY FOLLOWED BY THE FIRE SPRINKLER CONTRACTOR. ANY MAJOR CHANGES TO WHAT IS BEING INDICATED ON THESE PLANS SHALL FIRST BE APPROVED BY THE ARCHITECT AND ENGINEER.
- ALL SPRINKLERS LOCATED NEAR HEAT PRODUCING DEVICES SHALL BE PROVIDED WITH THE APPROPRIATE TEMPERATURE RATING PER THE REQUIREMENTS OF NFPA 13.
- THE FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BID.
- THESE PLANS SHALL BE USED AS A GENERAL GUIDE IN THE GENERATION OF THE FIRE SPRINKLER CONTRACTOR'S BID AND ARE NOT INTENDED TO INDICATE THE ENTIRE EXTENT OF SPRINKLER PROTECTION REQUIRED. ANY AREAS REQUIRED TO BE PROTECTED PER NFPA 13 THAT MAY OR MAY NOT BE SHOWN WITH PROTECTION ON THESE PLANS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. NO ALLOWANCES FOR EXTRAS WILL BE ALLOWED AFTER AWARD OF CONTRACT.
- SPARE SPRINKLERS SHALL BE PROVIDED PER THE REQUIREMENTS OF NFPA 13.
- CONTRACTOR TO PROVIDE OWNER WITH COPY OF NFPA 25.

### OCCUPANCY HAZARD CLASSIFICATIONS:

- SEE PLAN FOR HAZARD NOTATIONS. ALL AREAS TO BE DESIGNED AS LIGHT HAZARD UNLESS NOTED OTHERWISE.
- LIGHT HAZARD OCCUPANCIES
  - 0.10 gpm/ft<sup>2</sup> PER MOST DEMANDING 1500 ft<sup>2</sup>
- ORDINARY HAZARD GROUP 1 OCCUPANCIES
  - 0.15 gpm/ft<sup>2</sup> PER MOST DEMANDING 1500 ft<sup>2</sup>
- ORDINARY HAZARD GROUP 2 OCCUPANCIES
  - 0.20 gpm/ft<sup>2</sup> PER MOST DEMANDING 1500 ft<sup>2</sup>
- REMOTE AREA REDUCTIONS WILL BE ALLOWED PER NFPA 13
- REMOTE AREA INCREASES ARE REQUIRED PER NFPA 13
- REQUIRED SYSTEM PRESSURE SHALL BE A MINIMUM OF 5 PSI LESS THAN THAT WHICH IS AVAILABLE AT SPRINKLER SYSTEM DEMAND PLUS HOSE ALLOWANCE

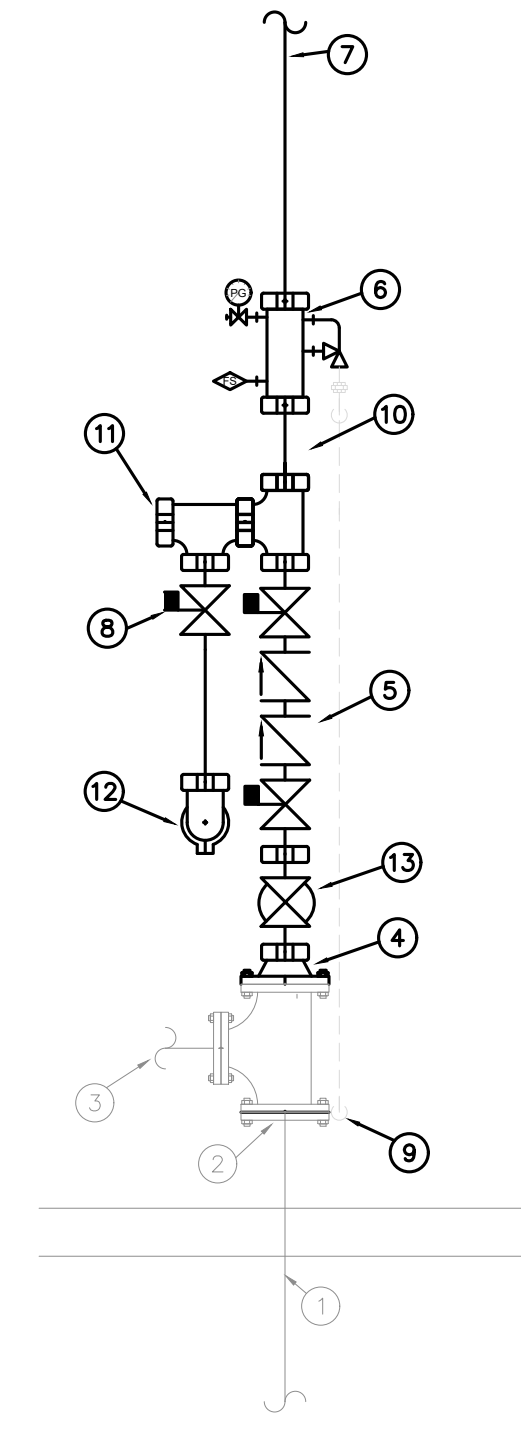
(OH1)  
(OH2)

### RISER LEGEND - SERVICE ENTRY

- 6" UNDERGROUND WATER SERVICE (BY SITE UTILITY CONTRACTOR)
- FLANGED TEE - BY PLUMBING CONTRACTOR
- OUT TO DOMESTIC - BY PLUMBING CONTRACTOR
- REDUCER IF PROVEN HYDRAULICALLY - FRSP CONTRACTOR START POINT
- DOUBLE CHECK VALVE BACKFLOW PREVENTER W/ SUPERVISED BUTTERFLY VALVES
- RISER MANIFOLD W/ FLOW SWITCH, PRESSURE GAUGE, & TEST & MAIN DRAIN W/ PRESSURE RELIEF VALVE
- OUT TO WET ZONE & FIRE DEPARTMENT CONNECTION
- SUPERVISED BUTTERFLY VALVE - NORMALLY CLOSED
- MAIN DRAIN DISCHARGE TO BUILDING'S EXTERIOR
- SPOOL PIECE FOR FUTURE ZONE CONTROL VALVE
- PROVIDE GROOVED CAP FOR FUTURE ZONES
- OUT TO BACKFLOW TEST CONNECTION
- SUPERVISED BUTTERFLY WALL POST INDICATOR VALVE

NOTES:

- PIPE BEFORE DOUBLE CHECK BACKFLOW VALVE TO BE GALVANIZED
- ALL DRAIN PIPE & PIPE AFTER FDC CHECK VALVE TO BE SCH. 40
- ALL PIPE & FITTINGS THAT PENETRATE EXTERIOR WALLS SHALL BE GALVANIZED



A RISER DETAIL  
NO SCALE

SYM	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	NOTES
○	PENDENT	WHITE	155°	5.6	1/2"	TY3231	TYCO	TY-FRB	RECESSED	1, 3, 4
○	PENDENT	WHITE	200°	5.6	1"	TY3235	TYCO	DS-1	RECESSED	1
○	PENDENT	WHITE	155°	11.2	3/4"	TY5237	TYCO	TY-FRB	RECESSED	1, 3
○	PENDENT	WHITE	200°	5.6	1/2"	TY3231	TYCO	TY-FRB	RECESSED	1, 4
⊙	UPRIGHT	BRASS	155°	5.6	1/2"	TY3131	TYCO	TY-FRB	NONE	1, 2, 4, 5
⊙	UPRIGHT	BRASS	155°	8.0	3/4"	TY4131	TYCO	TY-FRB	NONE	1, 2, 4, 5
◄	SIDEWALL	BRASS	155°	8.0	3/4"	TY4332	TYCO	TY-FRB	NONE	1, 2, 4, 5

- NOTES:
- OR EQUAL
  - STANDARD RESPONSE SPRINKLERS MAY BE USED IN ORDINARY AND EXTRA HAZARD AREAS
  - STANDARD COVERAGE OR EXTENDED COVERAGE SPRINKLERS MAY BE USED AT THE CONTRACTOR'S OPTION WHERE PROVEN HYDRAULICALLY
  - INTERMEDIATE TEMPERATURE RATED HEADS SHALL BE INSTALLED IN MECHANICAL AND ELECTRICAL ROOMS. HIGH TEMPERATURE RATED HEADS TO BE USED NEAR HEAT PRODUCING DEVICES PER NFPA-13.
  - SPRINKLER GUARDS ARE TO BE INSTALLED ON ALL EXPOSED SPRINKLERS ELEVATED BELOW 7'-0" AND THROUGHOUT AREAS WHERE HEADS ARE EXPOSED TO INTERFERENCE DAMAGE, INCLUDING BUT NOT LIMITED TO COMPETITION GYM 145 AND BELOW OVERHEAD DOORS.

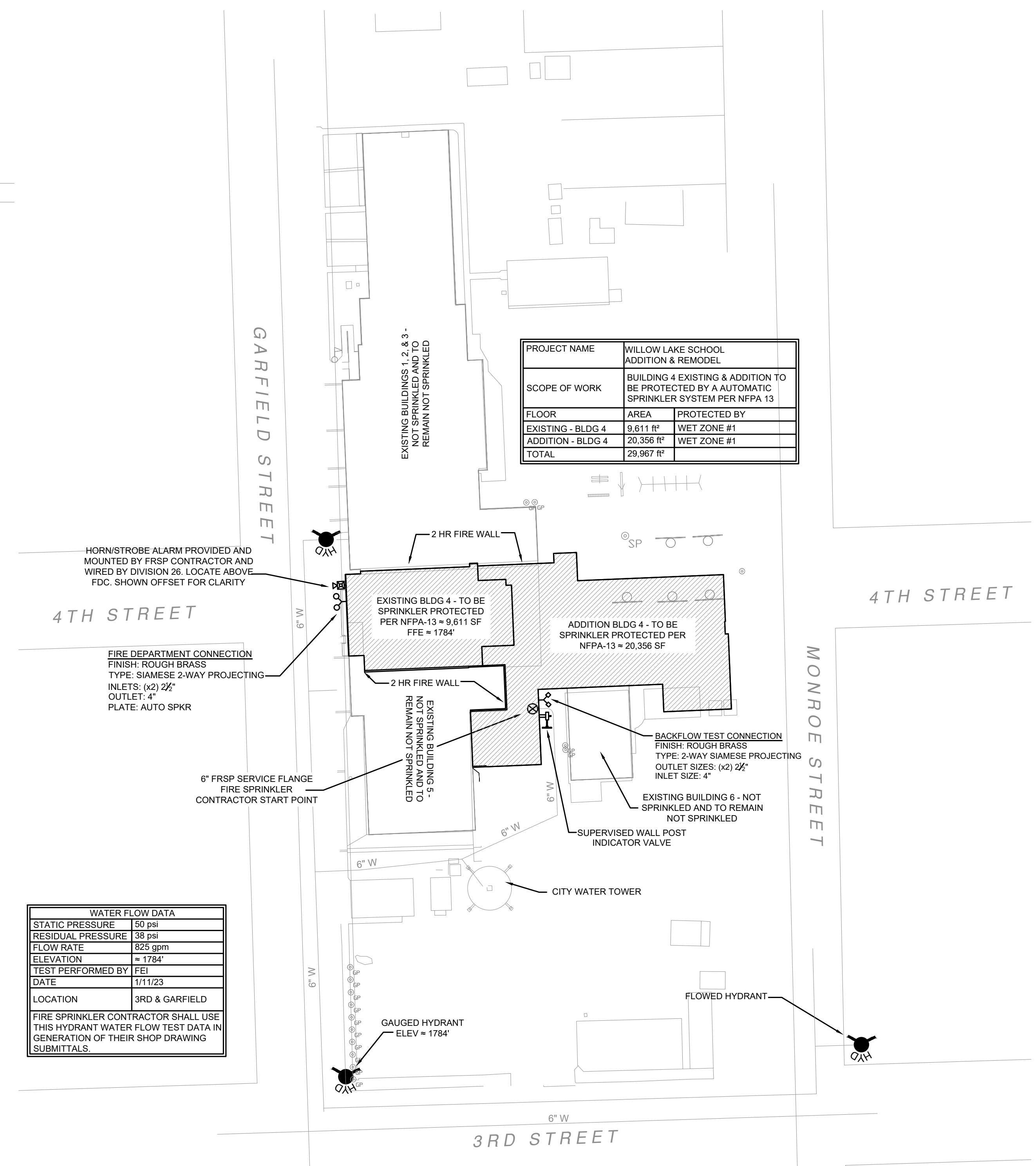
B SPRINKLER LEGEND  
NO SCALE

### WATER FLOW DATA

STATIC PRESSURE	150 psi
RESIDUAL PRESSURE	38 psi
FLOW RATE	825 gpm
ELEVATION	= 1784'
TEST PERFORMED BY	FEI
DATE	1/11/23
LOCATION	3RD & GARFIELD

FIRE SPRINKLER CONTRACTOR SHALL USE THIS HYDRANT WATER FLOW TEST DATA IN GENERATION OF THEIR SHOP DRAWING SUBMITTALS.

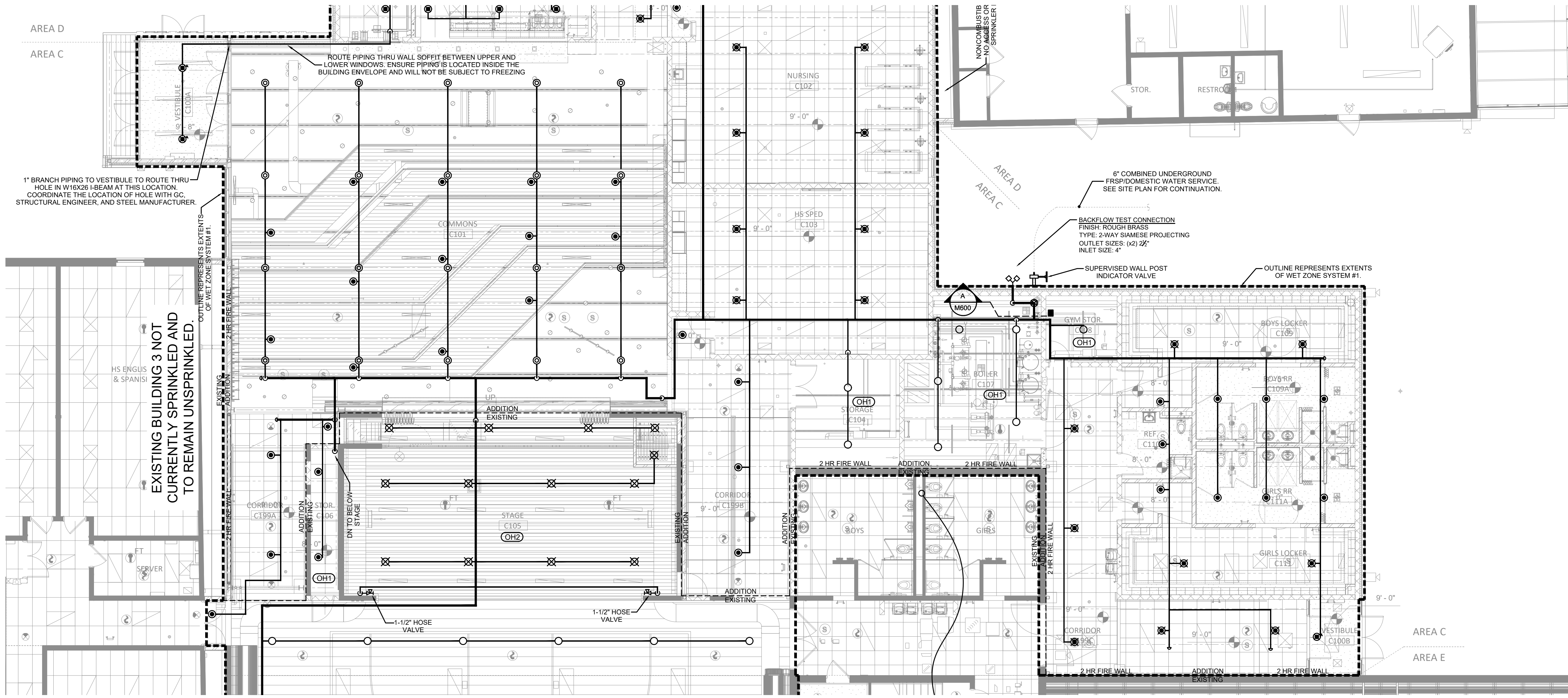
PROJECT NAME	WILLOW LAKE SCHOOL ADDITION & REMODEL	
SCOPE OF WORK	BUILDING 4 EXISTING & ADDITION TO BE PROTECTED BY A AUTOMATIC SPRINKLER SYSTEM PER NFPA 13	
FLOOR	AREA	PROTECTED BY
EXISTING - BLDG 4	9,611 ft <sup>2</sup>	WET ZONE #1
ADDITION - BLDG 4	20,356 ft <sup>2</sup>	WET ZONE #1
TOTAL	29,967 ft <sup>2</sup>	



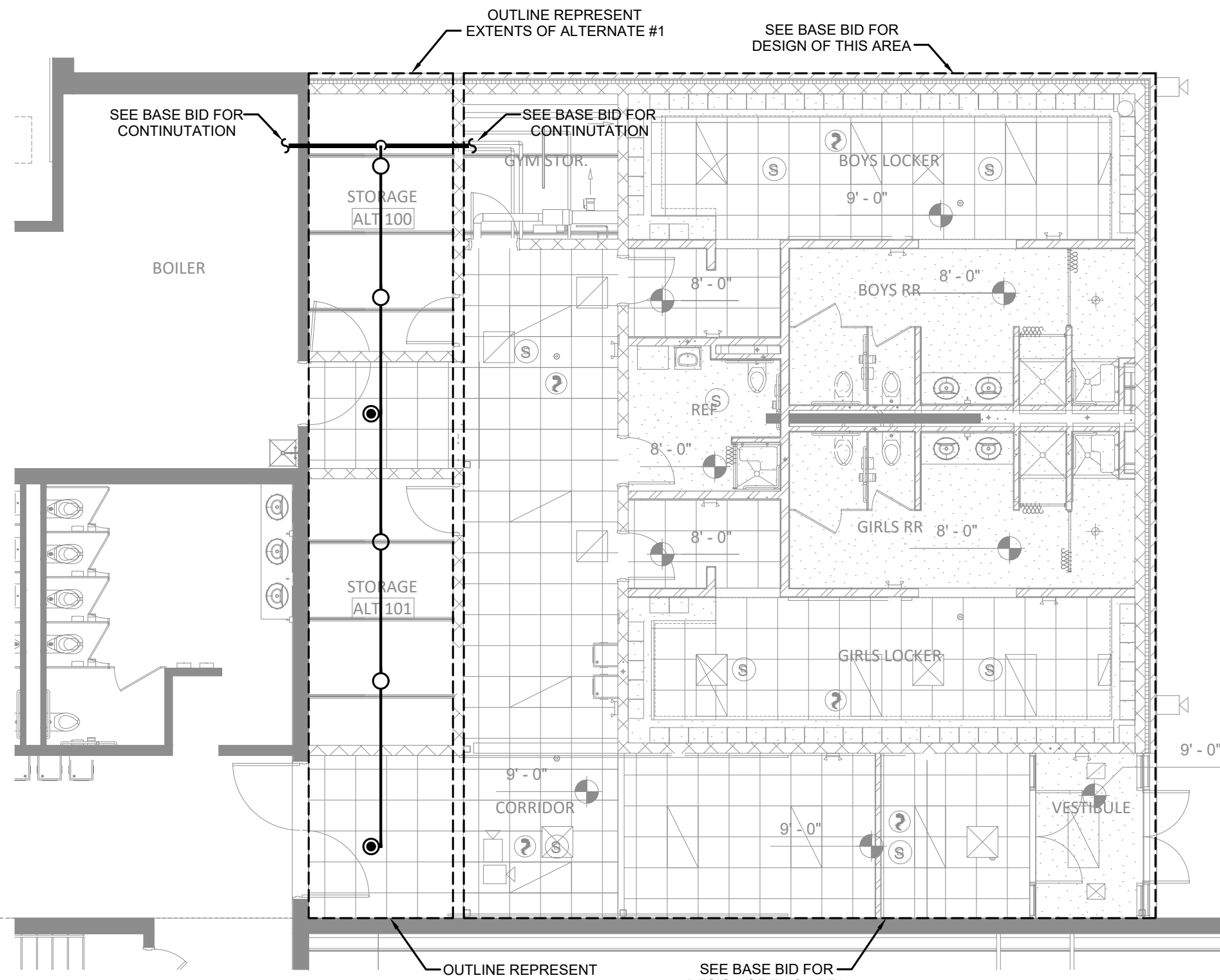
C FIRE PROTECTION SITE PLAN  
1" = 60'-0"

FEI# 222-287

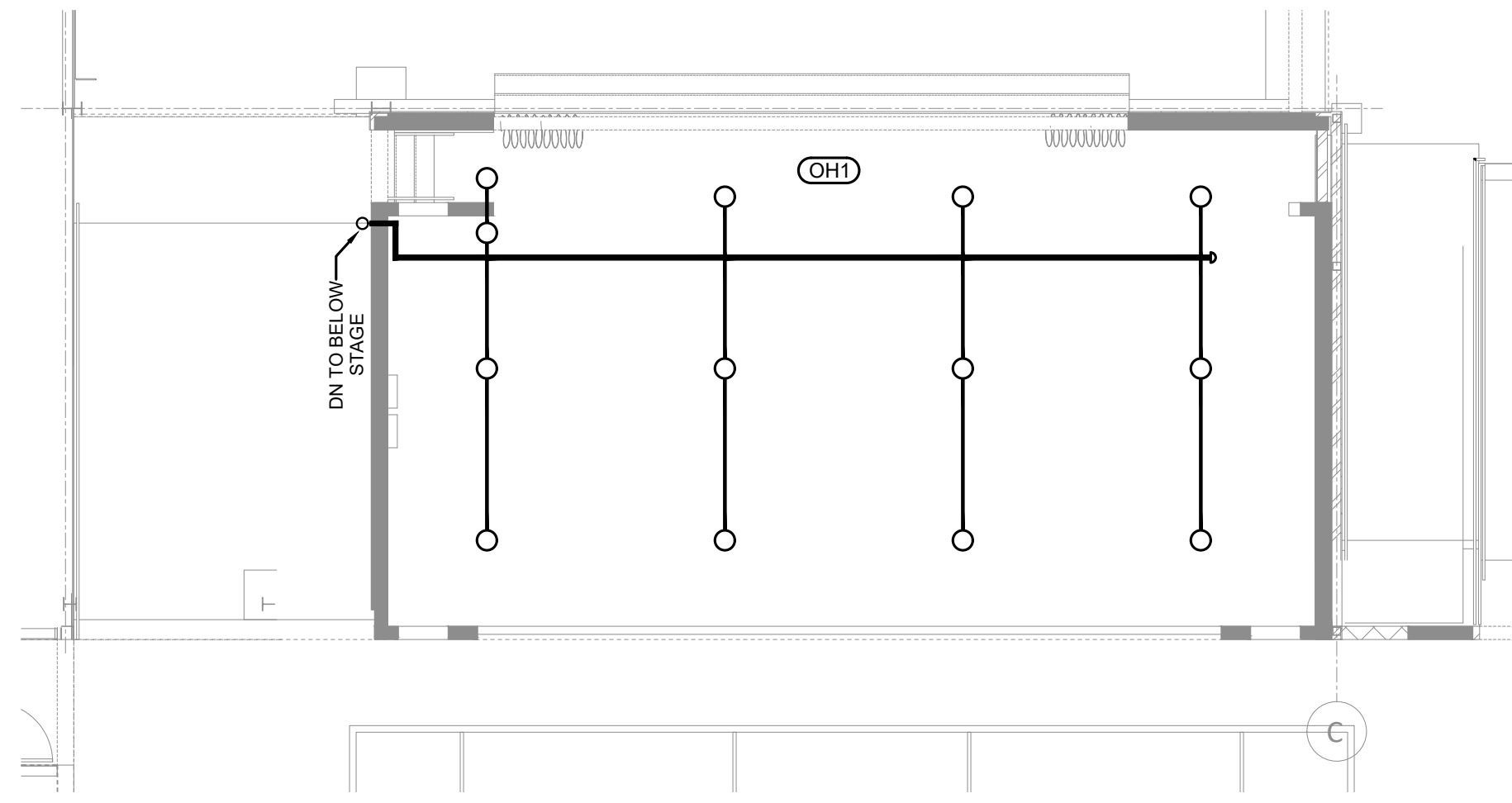
PO BOX 386 • SIOUX FALLS, SD 57101  
PHONE: (605) 543-5170  
WWW.FIRE-ENR.COM  
FIRE PROTECTION ENGINEERING CONSULTANTS



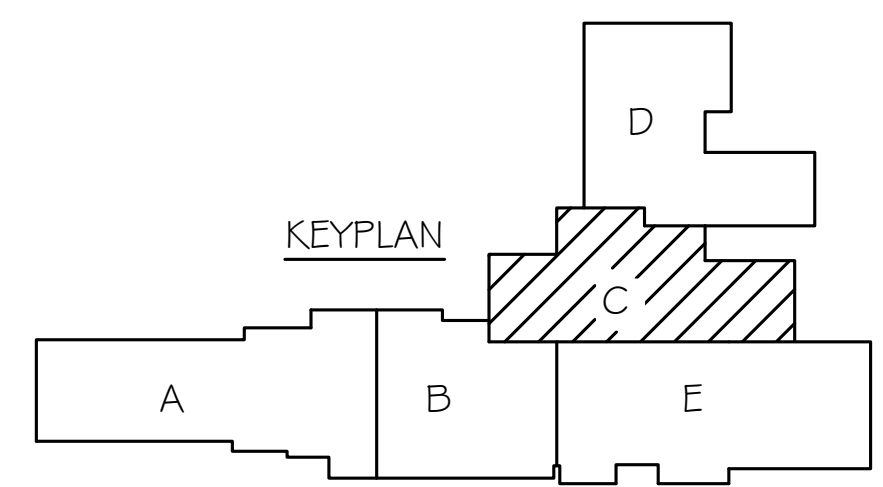
AREA C - FIRE PROTECTION PLAN  
1/8" = 1'-0"



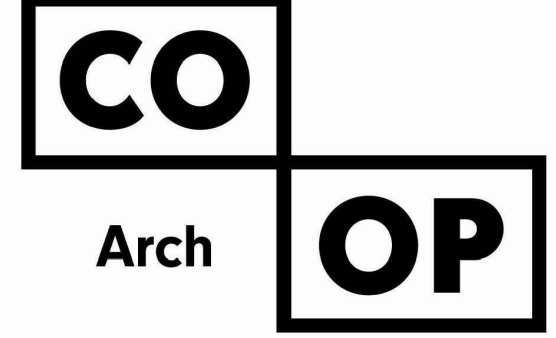
AREA C - ALTERNATE #1 - FIRE PROTECTION PLAN  
1/8" = 1'-0"



AREA C - BELOW STAGE - FIRE PROTECTION PLAN  
1/8" = 1'-0"



FEI# 222-287  
**FIRE ENGINEERING**  
PO BOX 386 • SIOUX FALLS, SD 57101  
PHONE: (605) 543-5170  
WWW.FIRE-ENR.COM  
FIRE PROTECTION ENGINEERING CONSULTANTS



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

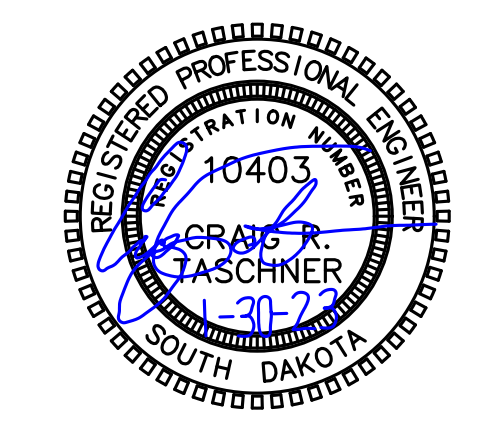
**SICHMELLER ENGINEERING**

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344

www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

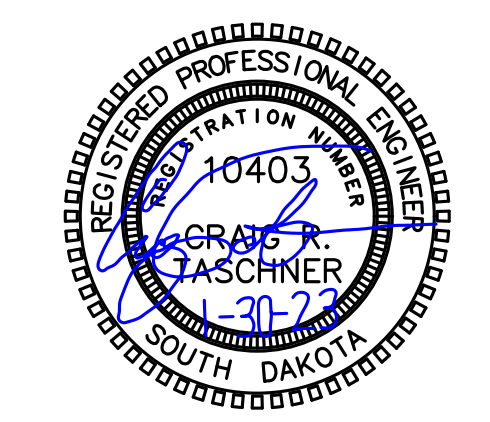
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA C - FIRE PROTECTION PLAN

**M601C**

1/30/2023 09:05:30 AM



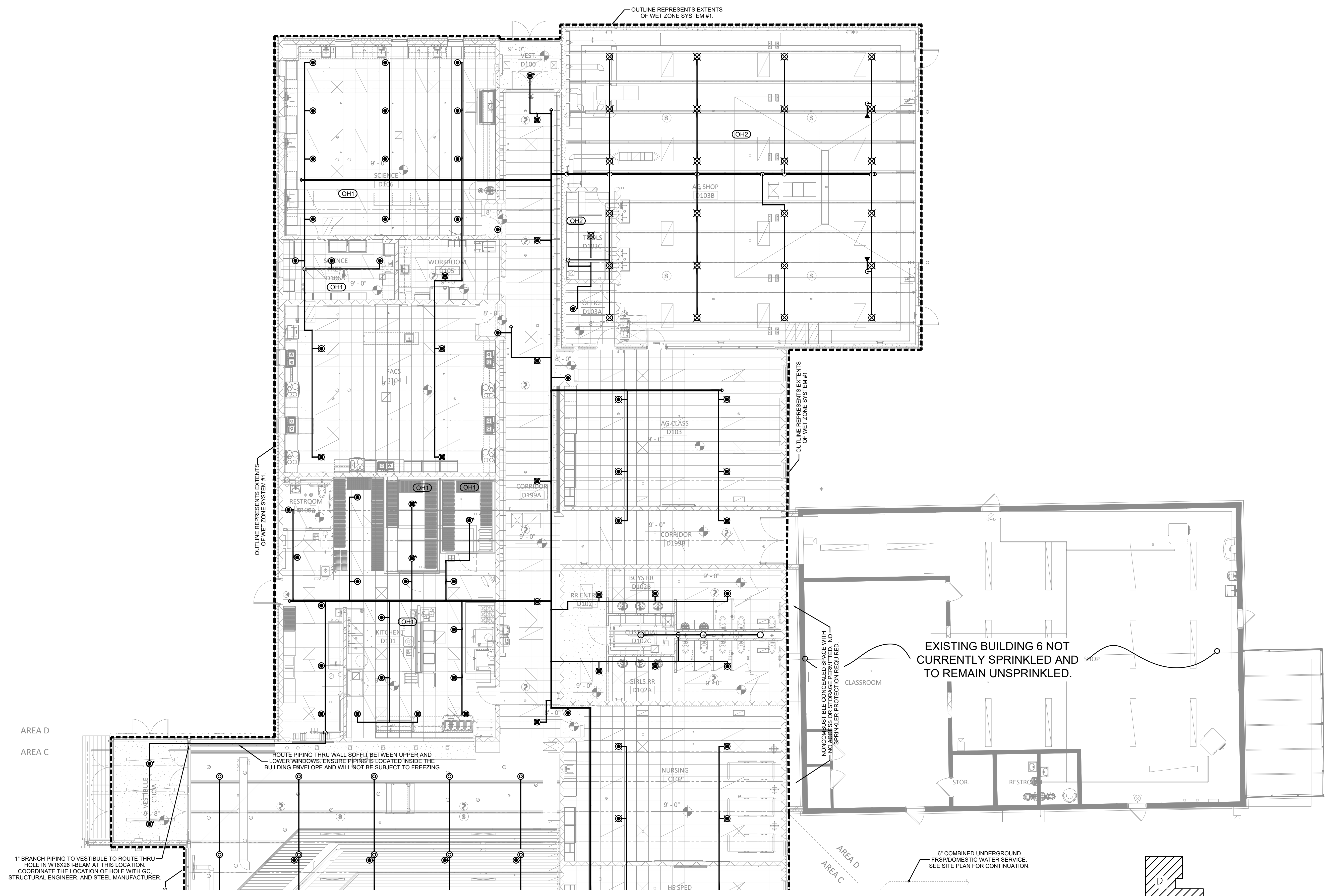
ISSUE:  
01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

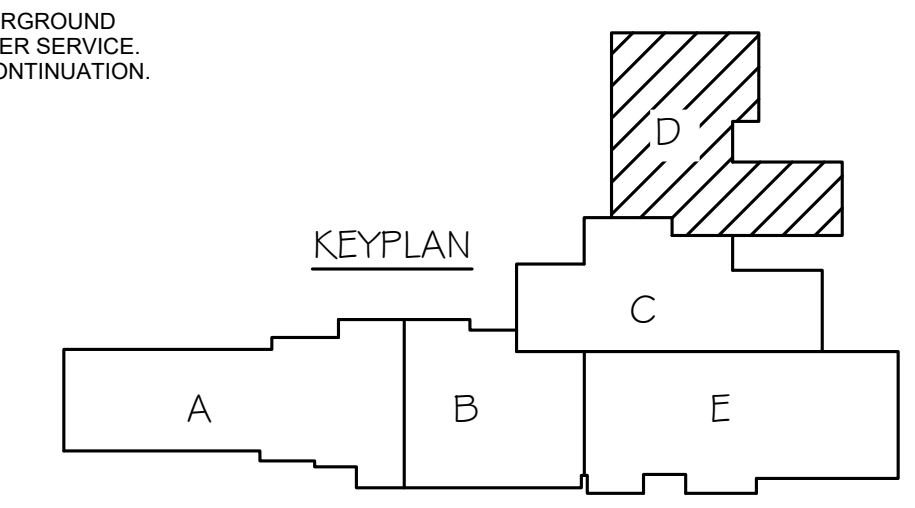
REV. #	REV. DSC.	REV. DATE

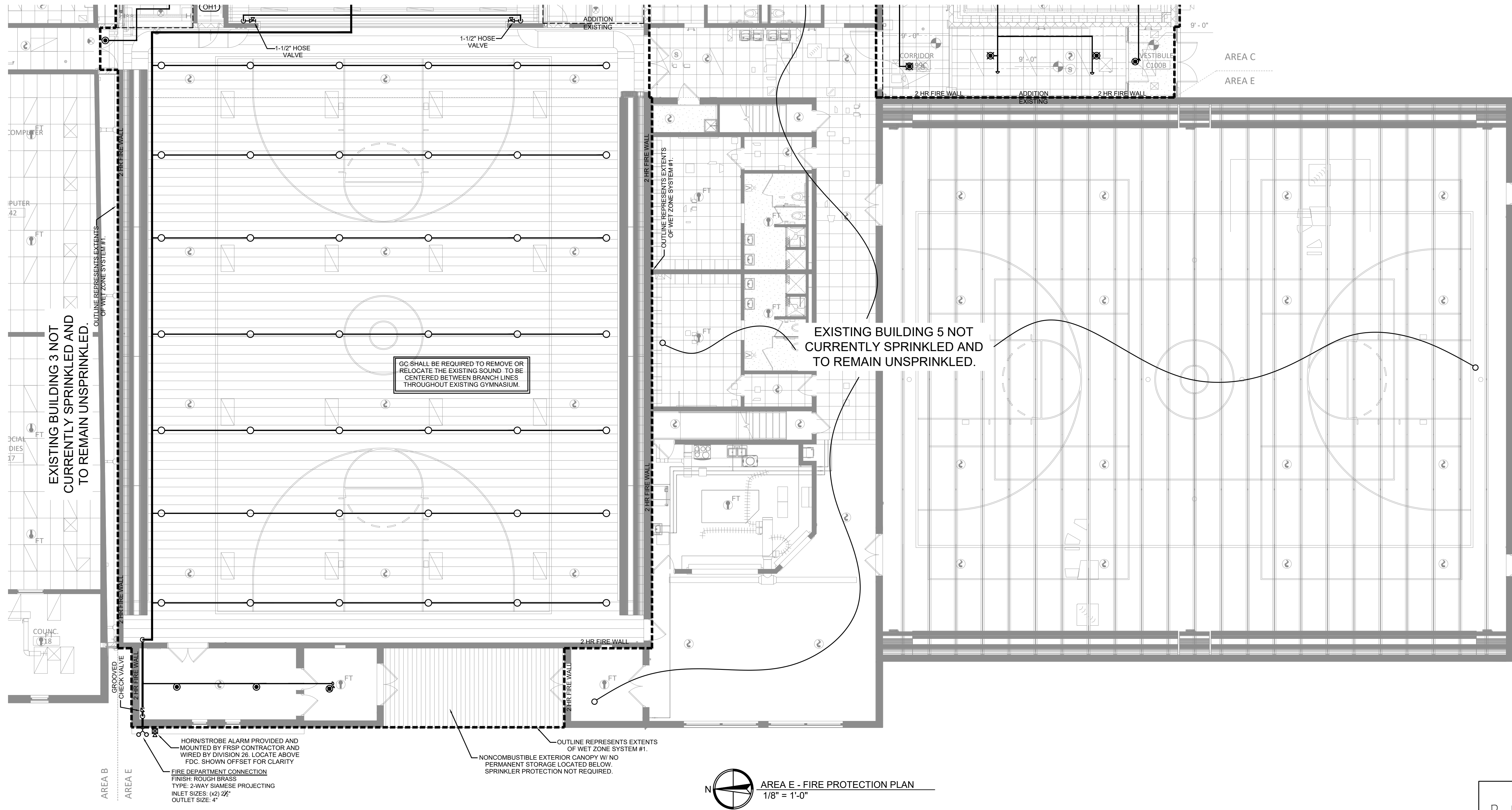
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA D - FIRE PROTECTION  
PLAN

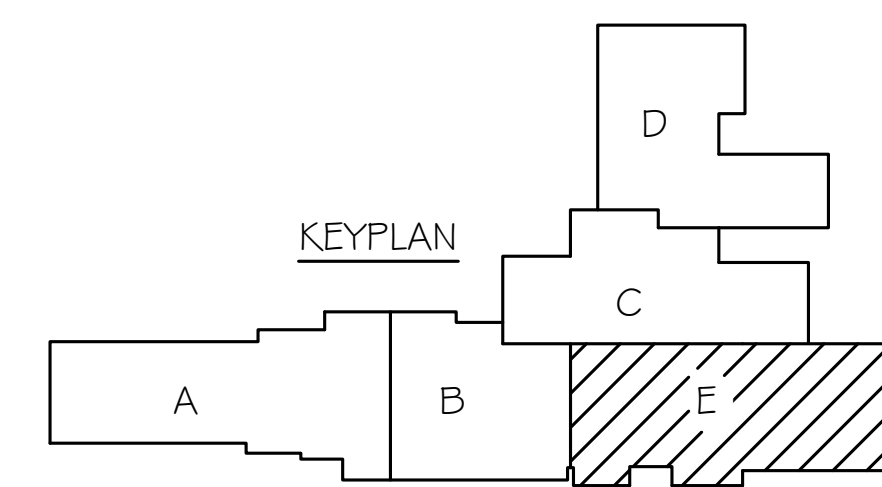


**AREA D - FIRE PROTECTION PLAN**  
1/8" = 1'-0"

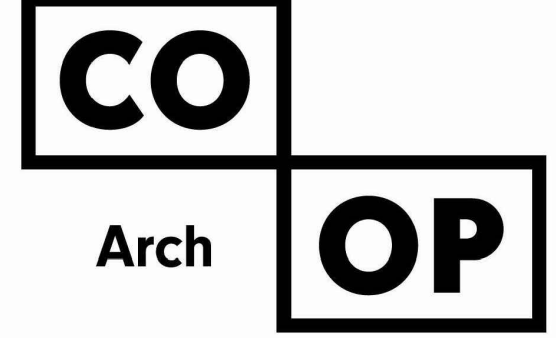




AREA E - FIRE PROTECTION PLAN  
1/8" = 1'-0"



FEI# 222.287  
**FIRE ENGINEERING**  
 PO BOX 386 • SIOUX FALLS, SD 57101  
 PHONE: (605) 543-5170  
 WWW.FIRE-ENGR.COM  
 FIRE PROTECTION ENGINEERING CONSULTANTS

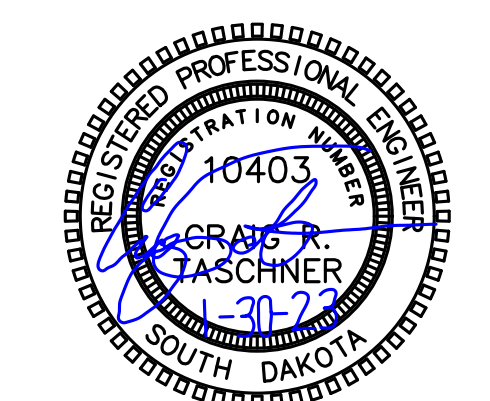


1108 S. Main St. 102  
 Aberdeen, SD 57401  
 Phone: 605-725-4852  
 601 Kansas City St. 7  
 Rapid City, SD 57701  
 Phone: 605-716-3652  
 440 E. 8th St 221  
 Sioux Falls, SD 57103  
 Phone: 605-334-9999  
 co-oparch.com

**SICHMELLER ENGINEERING**

Mechanical & Electrical Engineering  
 801 Railroad Ave. SE  
 Aberdeen, SD 57401  
 Phone: 605-225-4344  
 www.siceng.biz

SE PROJECT NO: 220900771



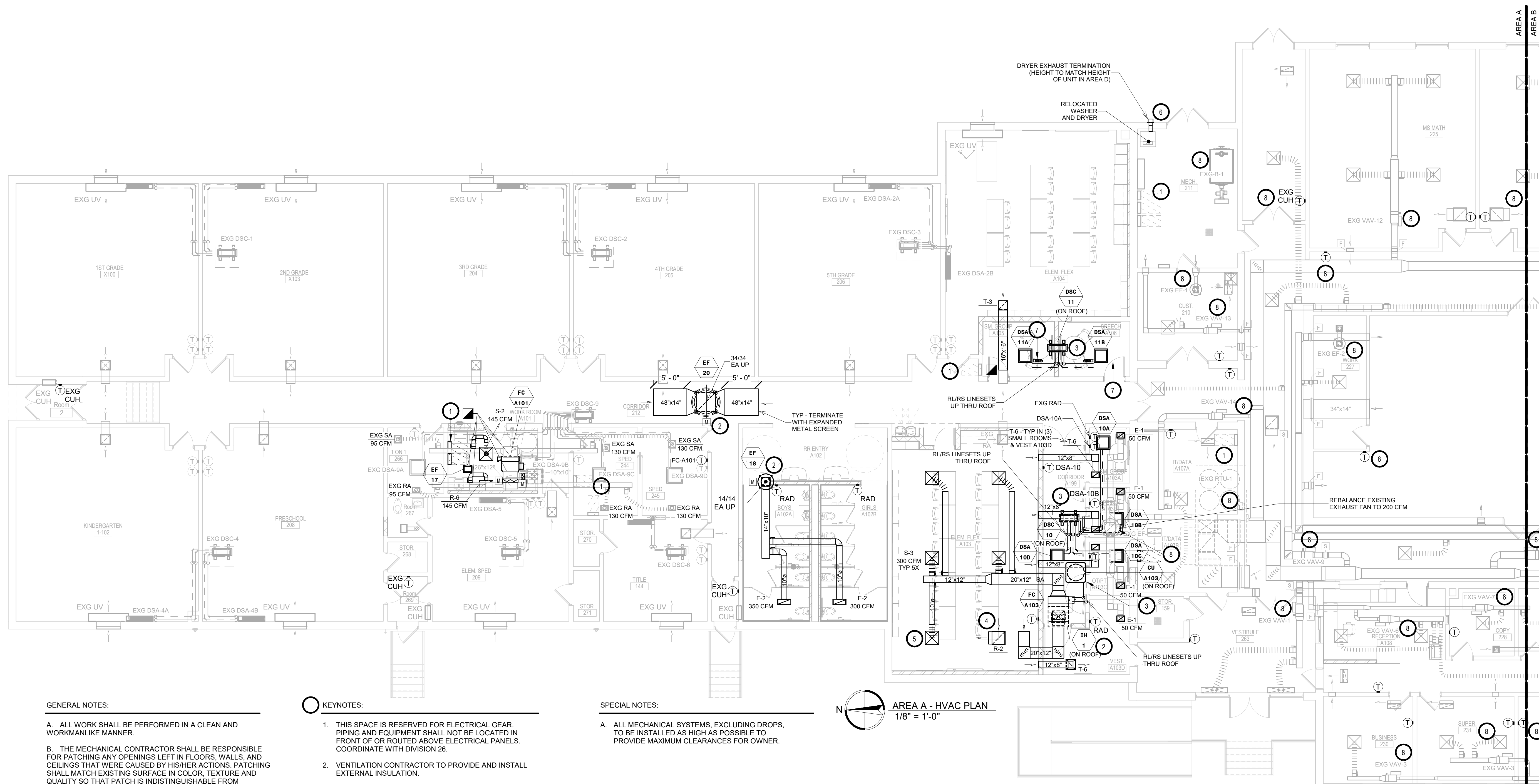
ISSUE:  
 01/30/2023 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
 REV. # REV. DSC. REV. DATE

PROJECT:  
 WILLOW LAKE SCHOOL ADDITION  
 WILLOW LAKE SCHOOL DISTRICT  
 WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
 AREA E - FIRE PROTECTION PLAN

**M603E**



**GENERAL NOTES:**

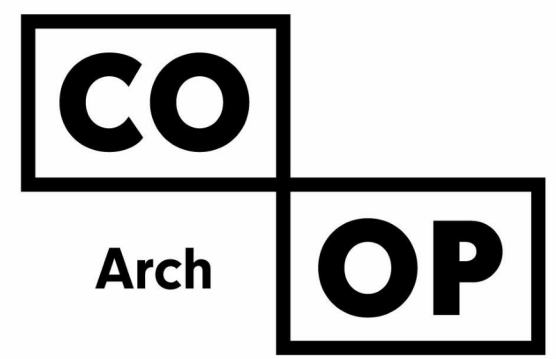
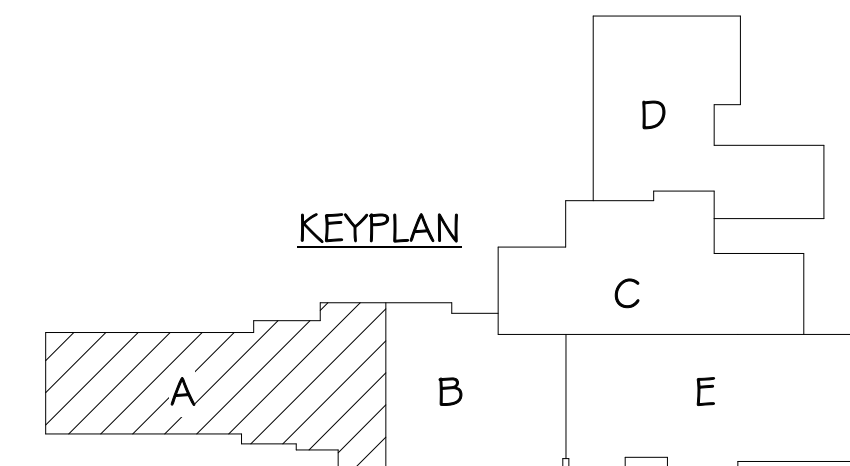
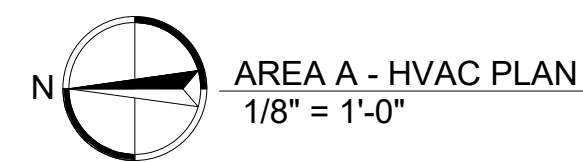
- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. COORDINATE INSTALLATION OF ALL HVAC WITH PLUMBING, FIRE SPRINKLER, LIGHT FIXTURES, AND STRUCTURE TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FOR SIMPLICITY DUCT INSULATION NOT SHOWN, DUCT SIZES INDICATED ON DRAWING ARE INTERNAL DIMENSIONS. AS NEEDED ADJUST ACTUAL SIZE FOR INSULATION THICKNESS AS SPECIFIED.
- H. ALL FLEXIBLE DUCTWORK AND CONNECTORS BETWEEN THE LOW PRESSURE DUCTWORK AND THE DIFFUSERS SHALL BE THE SIZE OF THE DIFFUSER INLET.
- I. PROVIDE & INSTALL VIBRATION ISOLATION ON ALL HANGING EQUIPMENT. PROVIDE & INSTALL VIBRATION ABSORPTION MOUNTING PADS ON ALL EQUIPMENT MOUNTED ON FLOOR.
- J. PROVIDE AND INSTALL DURODINE FLEX DUCT CONNECTORS AT ALL EQUIPMENT CONNECTIONS.
- K. ALL DUCTWORK TO BE SEALED AIRTIGHT.
- H. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- I. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.

**KEYNOTES:**

- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. VENTILATION CONTRACTOR TO PROVIDE AND INSTALL EXTERNAL INSULATION.
- 3. REFRIGERANT LIQUID & SUCTION LINE SETS BY VENTILATION CONTRACTOR SHALL BE SECURED UNIFORMLY ON UNISTRUT & SHALL BE NEAT IN APPEARANCE. (GENERAL ARRANGEMENT OF LINE SETS ROUTING SHOWN). SEE REFRIGERATION RL/R'S ROOF CURB DETAIL.
- 4. TYPICAL - SEE INSULATED RETURN ELBOW DETAIL.
- 5. TYPICAL - SEE TYPICAL DIFFUSER CONNECTION DETAIL.
- 6. VC TO PROVIDE AND INSTALL DRYER VENT. ALL PIPING TO BE 4" DIAMETER RIGID WITH SEALED JOINTS WITHOUT ANY FASTENERS PROTRUDING TO THE INTERIOR OF THE PIPE AND SHALL TERMINATE AT WALL CAP WITH DAMPER. VERIFY WITH OWNER DRYER LOCATION.
- 7. 4" DIAMETER FULLY INSULATED AND VAPOR SEALED OUTSIDE AIR DUCT UP TO GOOSENECK WITH BIRD SCREEN.
- 8. TC TO PROVIDE NEW T-STATS, CONTROL CABLING, CONTROL VALVE (PC TO PIPE) AND DDC TEMPERATURE CONTROL SYSTEM FOR EXISTING EQUIPMENT, SEE SPECS.

**SPECIAL NOTES:**

- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

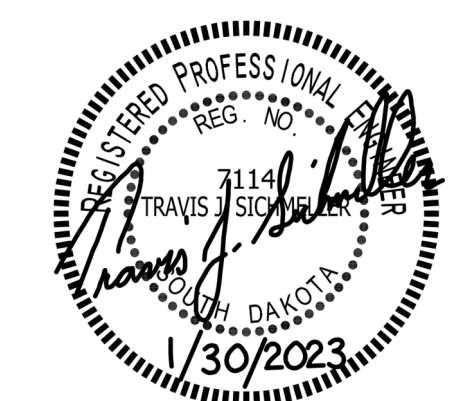
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA A - HVAC PLAN

**M700A**



**GENERAL NOTES:**

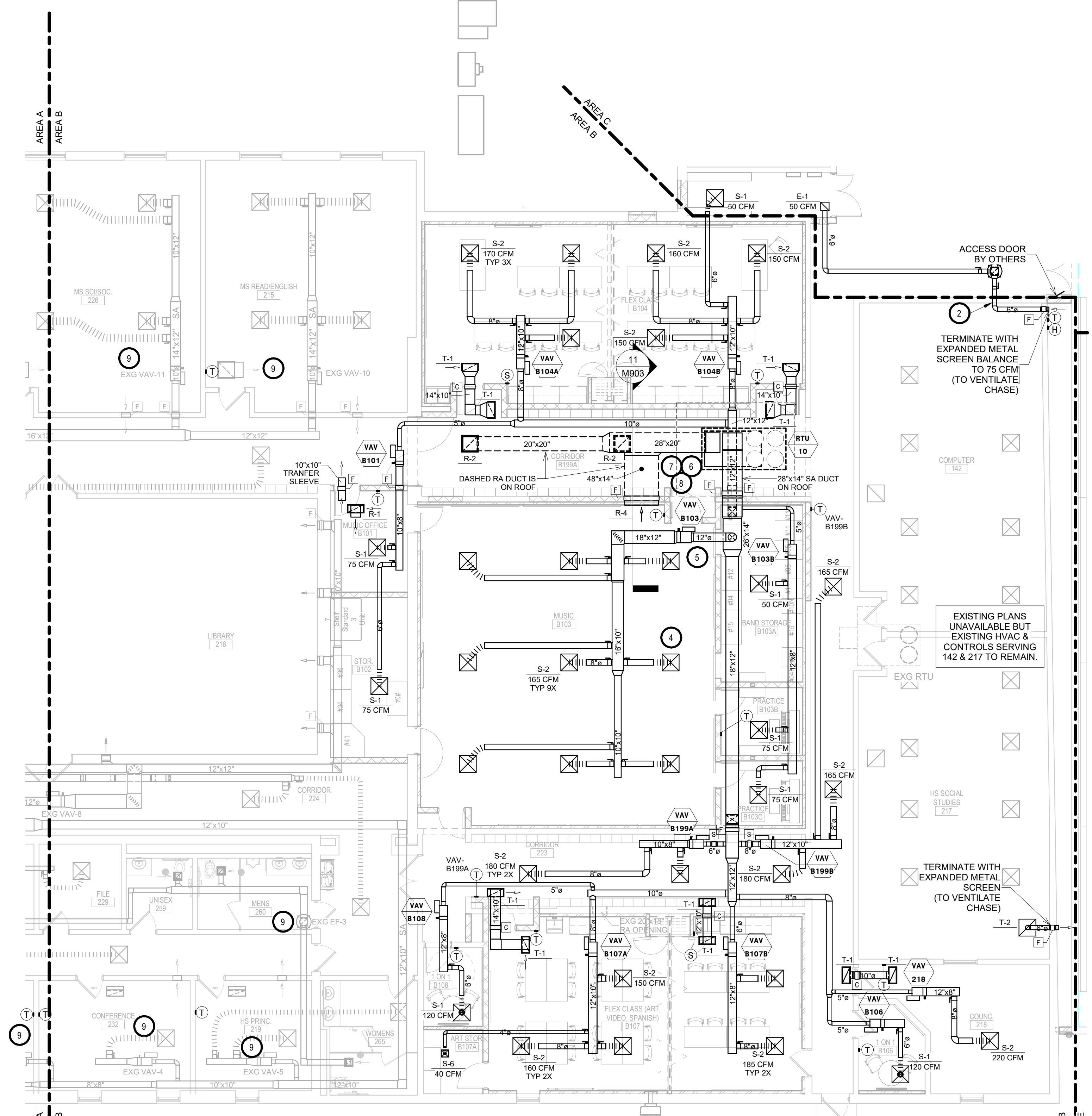
- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. COORDINATE INSTALLATION OF ALL HVAC WITH PLUMBING, FIRE SPRINKLER, LIGHT FIXTURES, AND STRUCTURE TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FOR SIMPLICITY DUCT INSULATION NOT SHOWN, DUCT SIZES INDICATED ON DRAWING ARE INTERNAL DIMENSIONS. AS NEEDED ADJUST ACTUAL SIZE FOR INSULATION THICKNESS AS SPECIFIED.
- H. ALL FLEXIBLE DUCTWORK AND CONNECTORS BETWEEN THE LOW PRESSURE DUCTWORK AND THE DIFFUSERS SHALL BE THE SIZE OF THE DIFFUSER INLET.
- I. PROVIDE & INSTALL VIBRATION ISOLATION ON ALL HANGING EQUIPMENT. PROVIDE & INSTALL VIBRATION ABSORPTION MOUNTING PADS ON ALL EQUIPMENT MOUNTED ON FLOOR.
- J. PROVIDE AND INSTALL DURODINE FLEX DUCT CONNECTORS AT ALL EQUIPMENT CONNECTIONS.
- K. ALL DUCTWORK TO BE SEALED AIRTIGHT.
- H. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- I. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.

**KEYNOTES:**

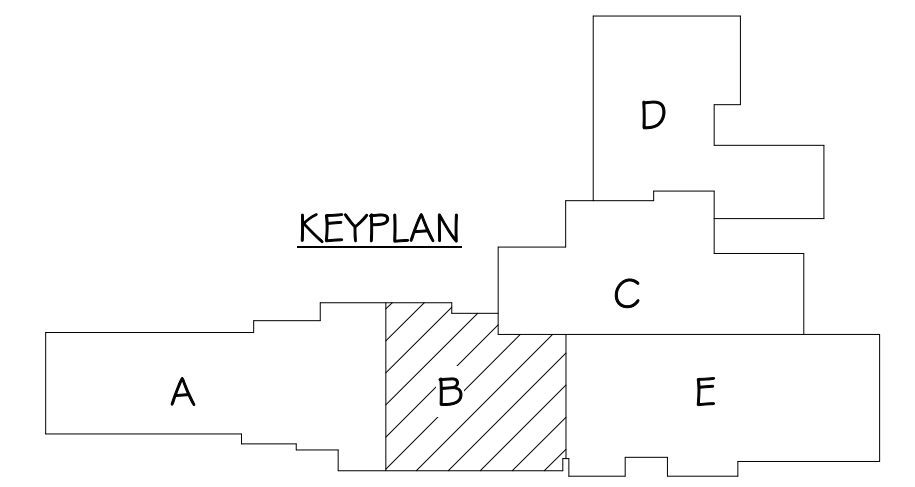
- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. VENTILATION CONTRACTOR TO PROVIDE AND INSTALL EXTERNAL INSULATION.
- 3. NOT USED.
- 4. TYPICAL - SEE TYPICAL DIFFUSER CONNECTION DETAIL.
- 5. TYPICAL - SEE VAV BOX DUCT CONNECTION DETAIL.
- 6. PROVIDE & INSTALL WATER TIGHT SHEET METAL "CRICKET" AND COLLAR AT HORIZONTAL BUILDING PENETRATION TO PREVENT MIGRATION OF PRECIPITATION INTO BUILDING.
- 7. PROVIDE & INSTALL VENTURE CLAD JACKETING (OR PRIOR APPROVED EQUAL) VENTURE CLAD 1577-OWE STUCCO EMBOSSED JACKETING ON ALL SIDES FOR EXTERIOR APPLICATION. THE TOP OF ALL DUCTWORK IS TO BE CROWNED (PITCHED) TO ALLOW WATER RUNOFF AND PREVENT POOLING.
- 8. WATER TIGHT CAULK ALL AROUND AT ALL PENETRATIONS.
- 9. TYPICAL - TC TO PROVIDE NEW T-STATS AND DDC TEMPERATURE CONTROL SYSTEM FOR CONTROL CABLING, CONTROL VALVE (PC TO PIPE) EXISTING EQUIPMENT, SEE SPECS.

**SPECIAL NOTES:**

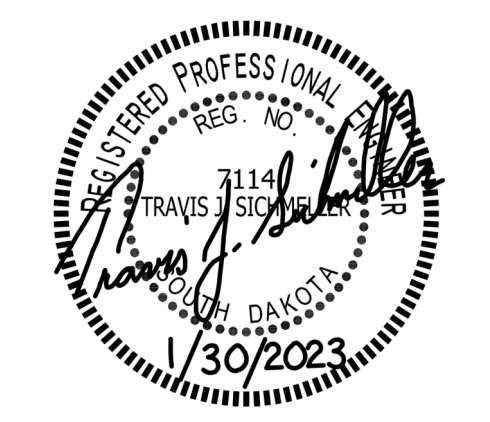
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.



**AREA B - HVAC PLAN**  
1/8" = 1'-0"



SE PROJECT NO: 220900771



**ISSUE:**  
1/30/23 CONSTRUCTION DOCUMENTS

**REVISION SCHEDULE:**

REV. #	REV. DSC.	REV. DATE

**PROJECT:**  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

**SHEET TITLE:**  
AREA B - HVAC PLAN

**M701B**

GENERAL NOTES:

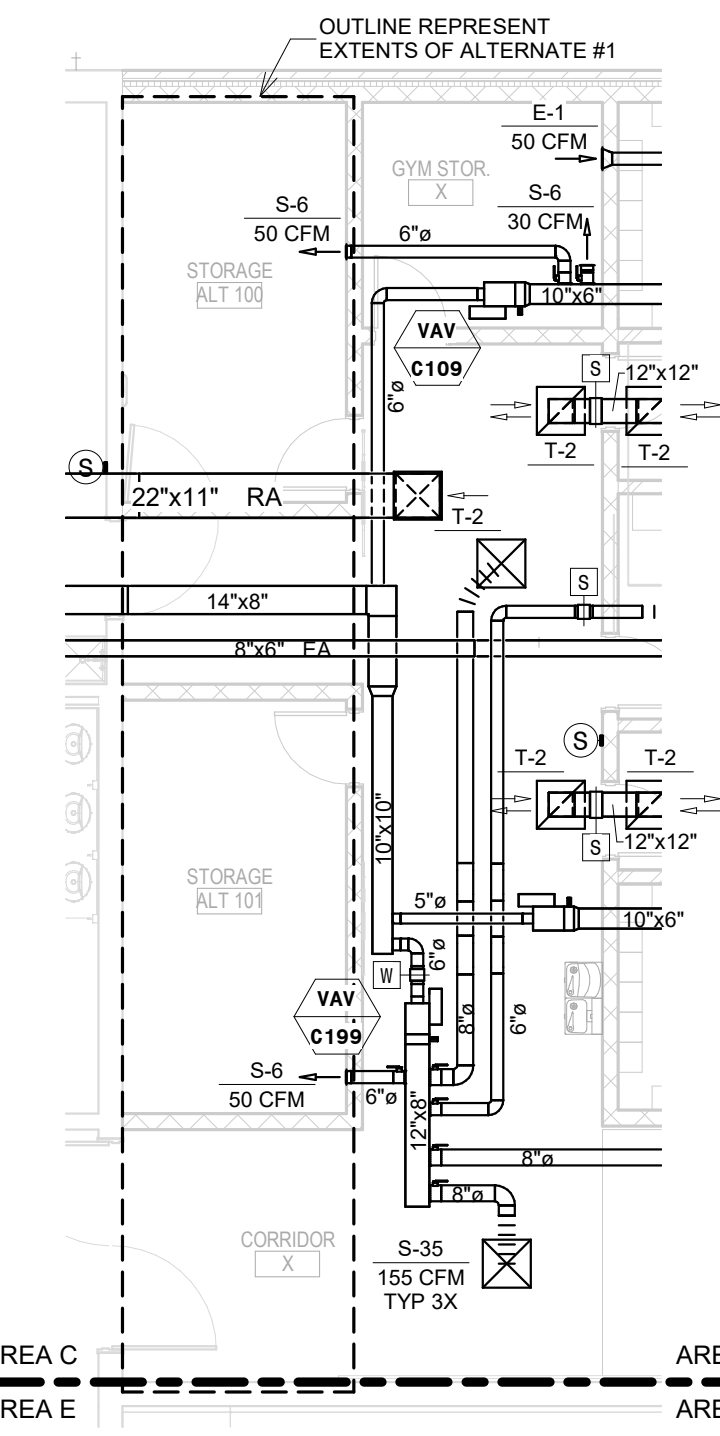
- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. COORDINATE INSTALLATION OF ALL HVAC WITH PLUMBING, FIRE SPRINKLER, LIGHT FIXTURES, AND STRUCTURE TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FOR SIMPLICITY DUCT INSULATION NOT SHOWN, DUCT SIZES INDICATED ON DRAWING ARE INTERNAL DIMENSIONS. AS NEEDED ADJUST ACTUAL SIZE FOR INSULATION THICKNESS AS SPECIFIED.
- H. ALL FLEXIBLE DUCTWORK AND CONNECTORS BETWEEN THE LOW PRESSURE DUCTWORK AND THE DIFFUSERS SHALL BE THE SIZE OF THE DIFFUSER INLET.
- I. PROVIDE & INSTALL VIBRATION ISOLATION ON ALL HANGING EQUIPMENT. PROVIDE & INSTALL VIBRATION ABSORPTION MOUNTING PADS ON ALL EQUIPMENT MOUNTED ON FLOOR.
- J. PROVIDE AND INSTALL DURODINE FLEX DUCT CONNECTORS AT ALL EQUIPMENT CONNECTIONS.
- K. ALL DUCTWORK TO BE SEALED AIRTIGHT.
- H. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- I. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.

KEYNOTES:

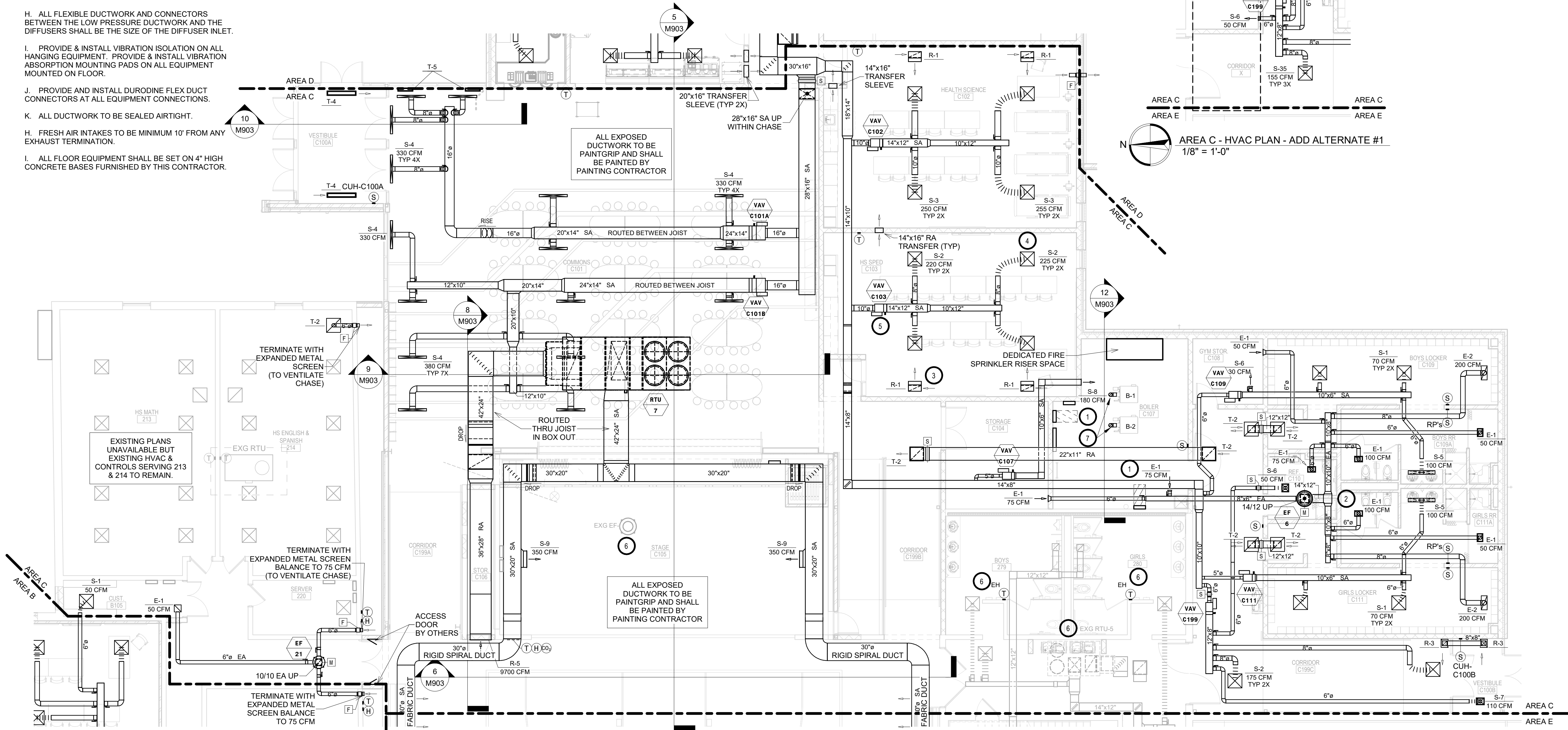
- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. VENTILATION CONTRACTOR TO PROVIDE AND INSTALL EXTERNAL INSULATION.
- 3. TYPICAL - SEE INSULATED RETURN ELBOW DETAIL.
- 4. TYPICAL - SEE TYPICAL DIFFUSER CONNECTION DETAIL.
- 5. TYPICAL - SEE VAV BOX DUCT CONNECTION DETAIL.
- 6. TYPICAL - TC TO PROVIDE NEW T-STATS, CONTROL CABLING, AND DDC TEMPERATURE CONTROL SYSTEM FOR EXISTING EQUIPMENT, SEE SPECS.
- 7. B-1 & B-2: 6" AL29-4C DOUBLE WALL STAINLESS STEEL VENT WITH 1" AIR GAP THRU ROOF & TERMINATE 7' ABOVE FINISHED ROOF PER MFG'S RECOMMENDATIONS WITH RAIN CAPS. INSTALL GUY WIRES IF REQUIRED BY MANUFACTURER.

SPECIAL NOTES:

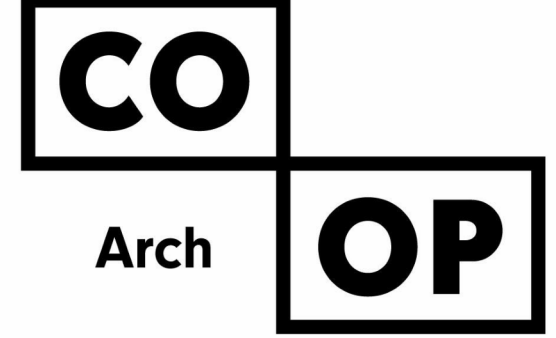
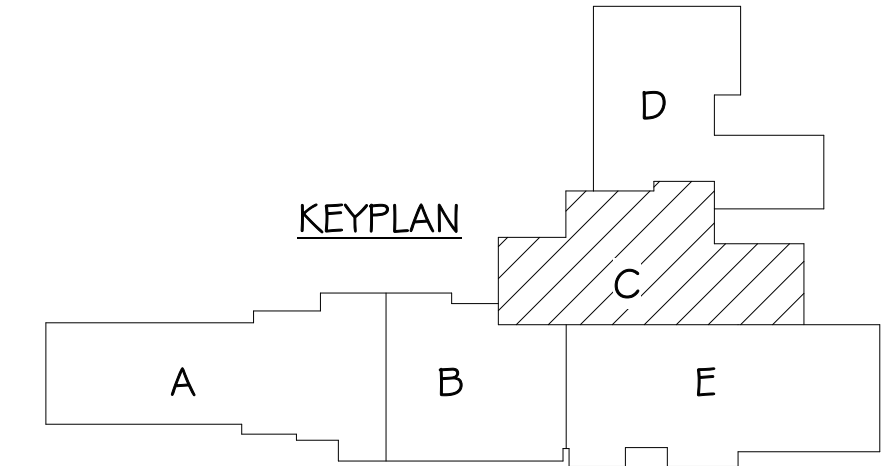
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.



AREA C - HVAC PLAN - ADD ALTERNATE #1  
1/8" = 1'-0"



AREA C - HVAC PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

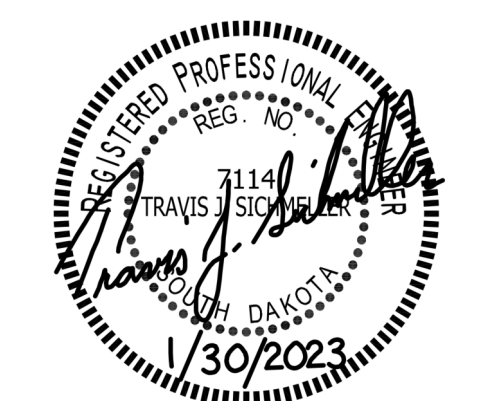
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA C - HVAC PLAN

M702C

SPECIAL NOTES:

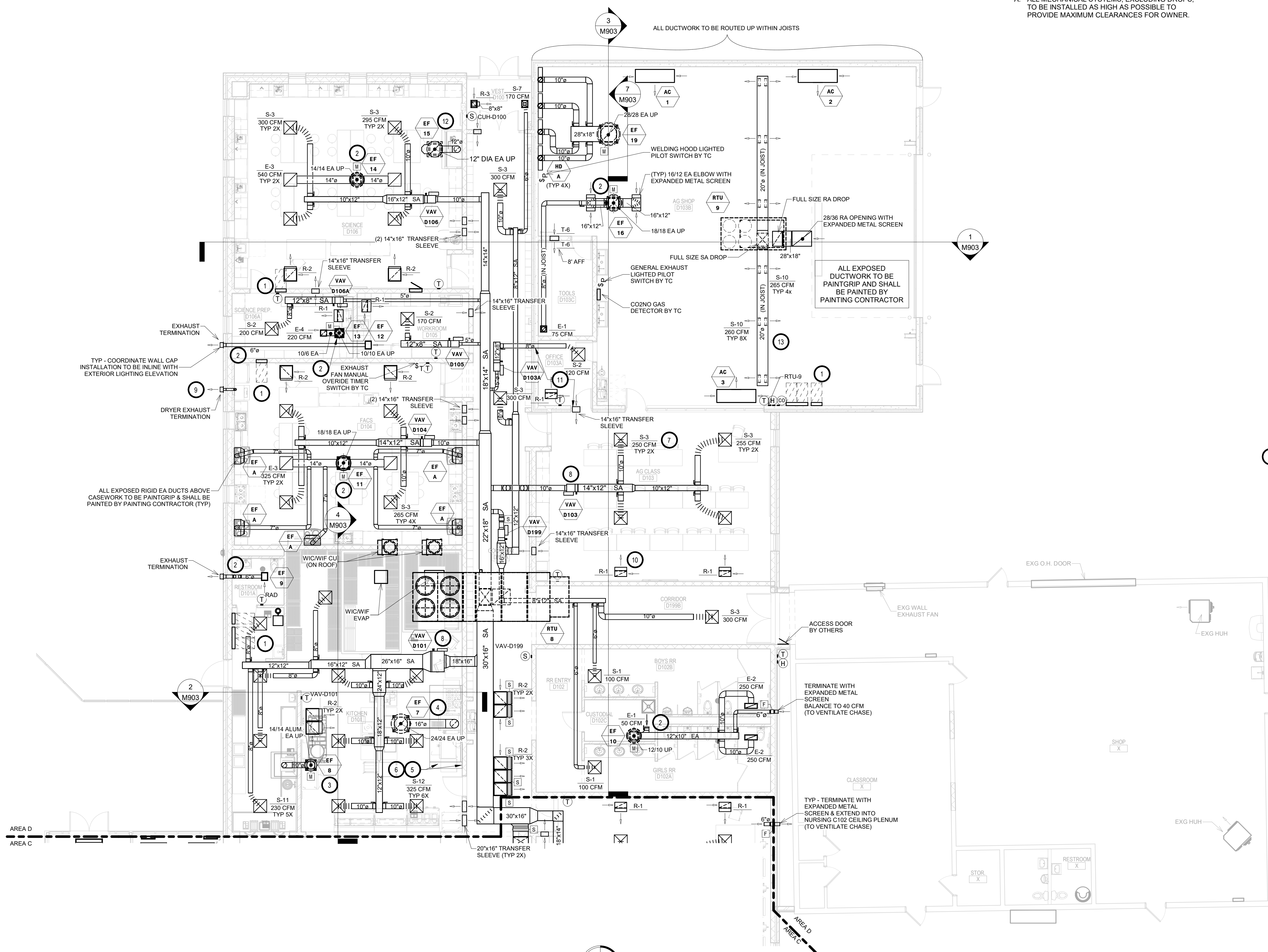
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.

GENERAL NOTES:

- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. COORDINATE INSTALLATION OF ALL HVAC WITH PLUMBING, FIRE SPRINKLER, LIGHT FIXTURES, AND STRUCTURE TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FOR SIMPLICITY DUCT INSULATION NOT SHOWN, DUCT SIZES INDICATED ON DRAWING ARE INTERNAL DIMENSIONS. AS NEEDED ADJUST ACTUAL SIZE FOR INSULATION THICKNESS AS SPECIFIED.
- H. ALL FLEXIBLE DUCTWORK AND CONNECTORS BETWEEN THE LOW PRESSURE DUCTWORK AND THE DIFFUSERS SHALL BE THE SIZE OF THE DIFFUSER INLET.
- I. PROVIDE & INSTALL VIBRATION ISOLATION ON ALL HANGING EQUIPMENT. PROVIDE & INSTALL VIBRATION ABSORPTION MOUNTING PADS ON ALL EQUIPMENT MOUNTED ON FLOOR.
- J. PROVIDE AND INSTALL DURODINE FLEX DUCT CONNECTORS AT ALL EQUIPMENT CONNECTIONS.
- K. ALL DUCTWORK TO BE SEALED AIRTIGHT.
- H. FRESH AIR INTAKES TO BE MINIMUM 10' FROM ANY EXHAUST TERMINATION.
- I. ALL FLOOR EQUIPMENT SHALL BE SET ON 4" HIGH CONCRETE BASES FURNISHED BY THIS CONTRACTOR.

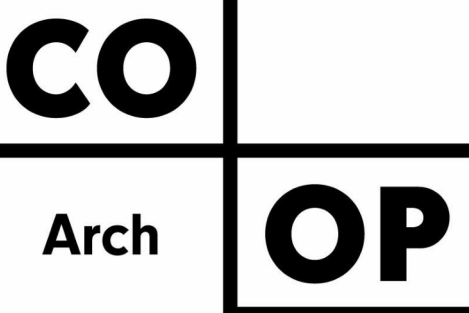
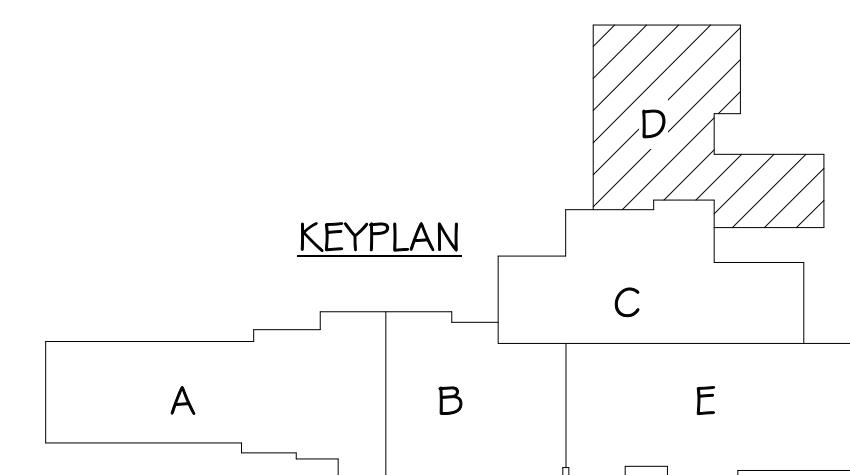
KEYNOTES:

- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. VENTILATION CONTRACTOR TO PROVIDE AND INSTALL EXTERNAL INSULATION.
- 3. VENTILATION CONTRACTOR TO INSTALL ALUMINUM EA DUCT FROM CONDENSATE HOOD TO ROOF EXHAUST FAN.
- 4. VENTILATION CONTRACTOR TO INSTALL GREASE DUCT SLOPED AS REQUIRED BY CODE TO AVOID A GREASE BUILD UP AND FIRE HAZARD. GREASE EXHAUST DUCT TO BE 16GA WELDED BLACK IRON WRAPPED WITH 3M FIRE BARRIER DUCT WRAP 15A OR EQUAL. INSTALL ACCESSIBLE ACCESS DOORS AS PER CODE.
- 5. ANSUL SYSTEM PROVIDED AND INSTALLED BY FSEC.
- 6. FSEC TO PROVIDE & INSTALL FULL WALL 430 STAINLESS STEEL BACKSPASH ON WALL UNDER HOOD, EXTENDING 18" BEYOND WEST EDGE OF HOOD (6" BEYOND ANSUL CABINET), 6" BEYOND EAST EDGE OF HOOD.
- 7. TYPICAL - SEE TYPICAL DIFFUSER CONNECTION DETAIL.
- 8. TYPICAL - SEE VAV BOX DUCT CONNECTION DETAIL.
- 9. VC TO PROVIDE AND INSTALL DRYER VENT. ALL PIPING TO BE 4" DIAMETER RIGID WITH SEALED JOINTS WITHOUT ANY FASTENERS PROTRUDING TO THE INTERIOR OF THE PIPE AND SHALL TERMINATE AT WALL CAP WITH DAMPER. VERIFY WITH OWNER DRYER LOCATION.
- 10. TYPICAL - SEE INSULATED RETURN ELBOW DETAIL.
- 11. COORDINATE PENETRATION SIZE AND LOCATION IN PRE-CAST WITH G.C.
- 12. FUME HOOD EXHAUST DUCT TO BE PVC COATED OR BE CONSTRUCTED OF CHEMICAL RESISTANT PVC DUCTING. INSTALL TEE WITH CAPPED DRIP TEE ON RISE TO EXHAUST FAN.
- 13. SEE DUCT HANGER SECTION.



AREA D - HVAC PLAN  
1/8" = 1'-0"

KEYPLAN



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



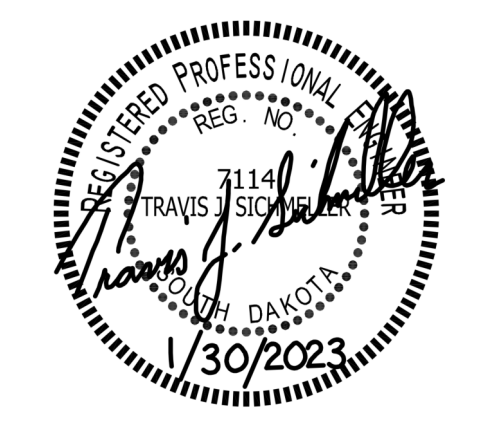
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA D - HVAC PLAN

M703D



GENERAL NOTES:

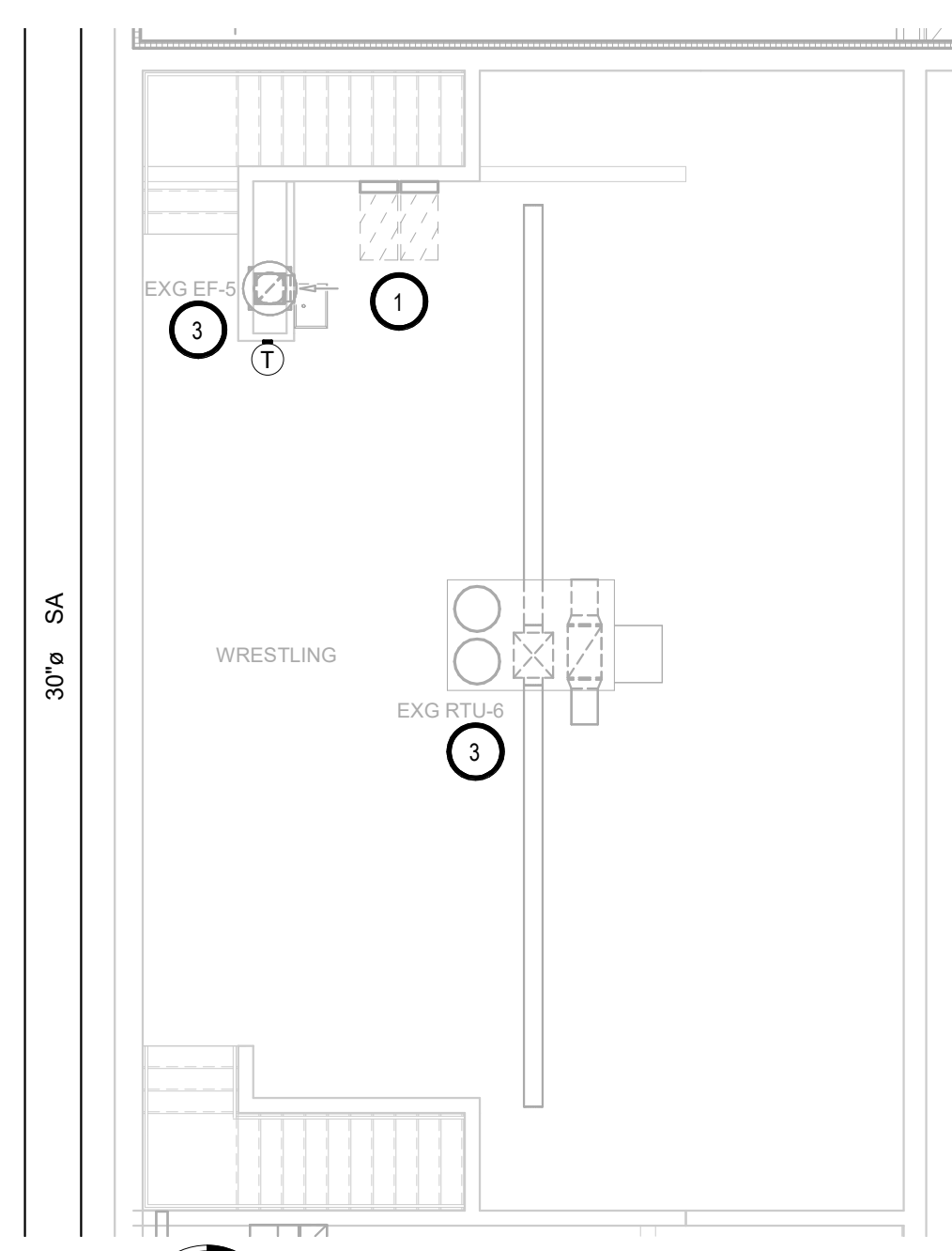
- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH IS INDISTINGUISHABLE FROM ORIGINAL SURFACE.
- C. ALL PENETRATIONS THROUGH DRAFT STOPS AND OTHER FIRE-RATED PARTITIONS SHALL BE FIRE STOPPED AS PER SPECIFICATIONS AND LOCAL CODES.
- D. ALL MECHANICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL PLUMBING REGULATIONS, AND THE AUTHORITY HAVING JURISDICTION.
- E. THE MECHANICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- F. COORDINATE INSTALLATION OF ALL HVAC WITH PLUMBING, FIRE SPRINKLER, LIGHT FIXTURES, AND STRUCTURE TO ACCOMMODATE LIMITED CEILING SPACE.
- G. FOR SIMPLICITY DUCT INSULATION NOT SHOWN, DUCT SIZES INDICATED ON DRAWING ARE INTERNAL DIMENSIONS. AS NEEDED ADJUST ACTUAL SIZE FOR INSULATION THICKNESS AS SPECIFIED.
- H. ALL FLEXIBLE DUCTWORK AND CONNECTORS BETWEEN THE LOW PRESSURE DUCTWORK AND THE DIFFUSERS SHALL BE THE SIZE OF THE DIFFUSER INLET.
- I. PROVIDE & INSTALL VIBRATION ISOLATION ON ALL HANGING EQUIPMENT. PROVIDE & INSTALL VIBRATION ABSORPTION MOUNTING PADS ON ALL EQUIPMENT MOUNTED ON FLOOR.
- K. ALL DUCTWORK TO BE SEALED AIRTIGHT.

KEYNOTES:

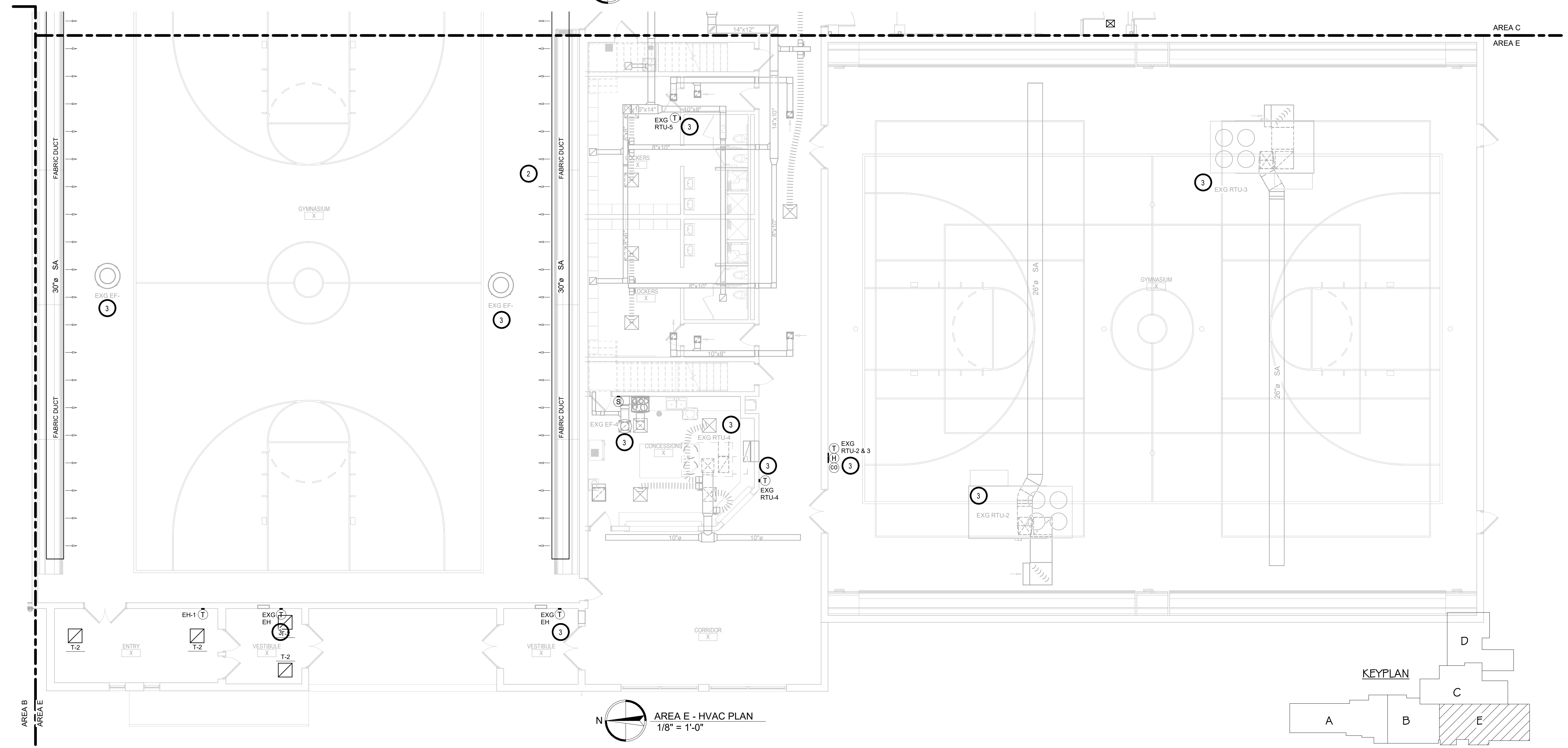
- 1. THIS SPACE IS RESERVED FOR ELECTRICAL GEAR. PIPING AND EQUIPMENT SHALL NOT BE LOCATED IN FRONT OF OR ROUTED ABOVE ELECTRICAL PANELS. COORDINATE WITH DIVISION 26.
- 2. VENTILATION CONTRACTOR TO PROVIDE AND INSTALL 30"ø FABRIC DUCT.
- 3. TYP - TC TO PROVIDE NEW T-STATS, CONTROL CABLING, AND DDC TEMPERATURE CONTROL SYSTEM FOR EXISTING EQUIPMENT, SEE SPECS.

SPECIAL NOTES:

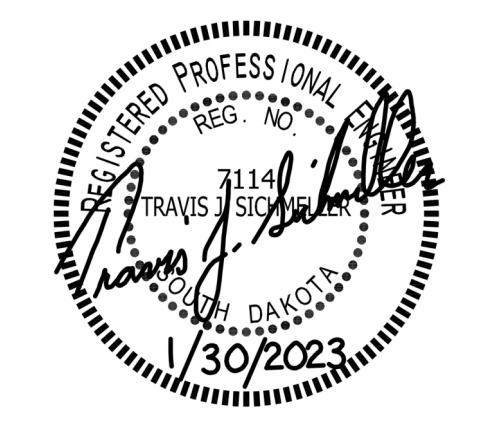
- A. ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.



AREA E - MEZZANINE HVAC PLAN  
1/8" = 1'-0"



AREA E - HVAC PLAN  
1/8" = 1'-0"



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

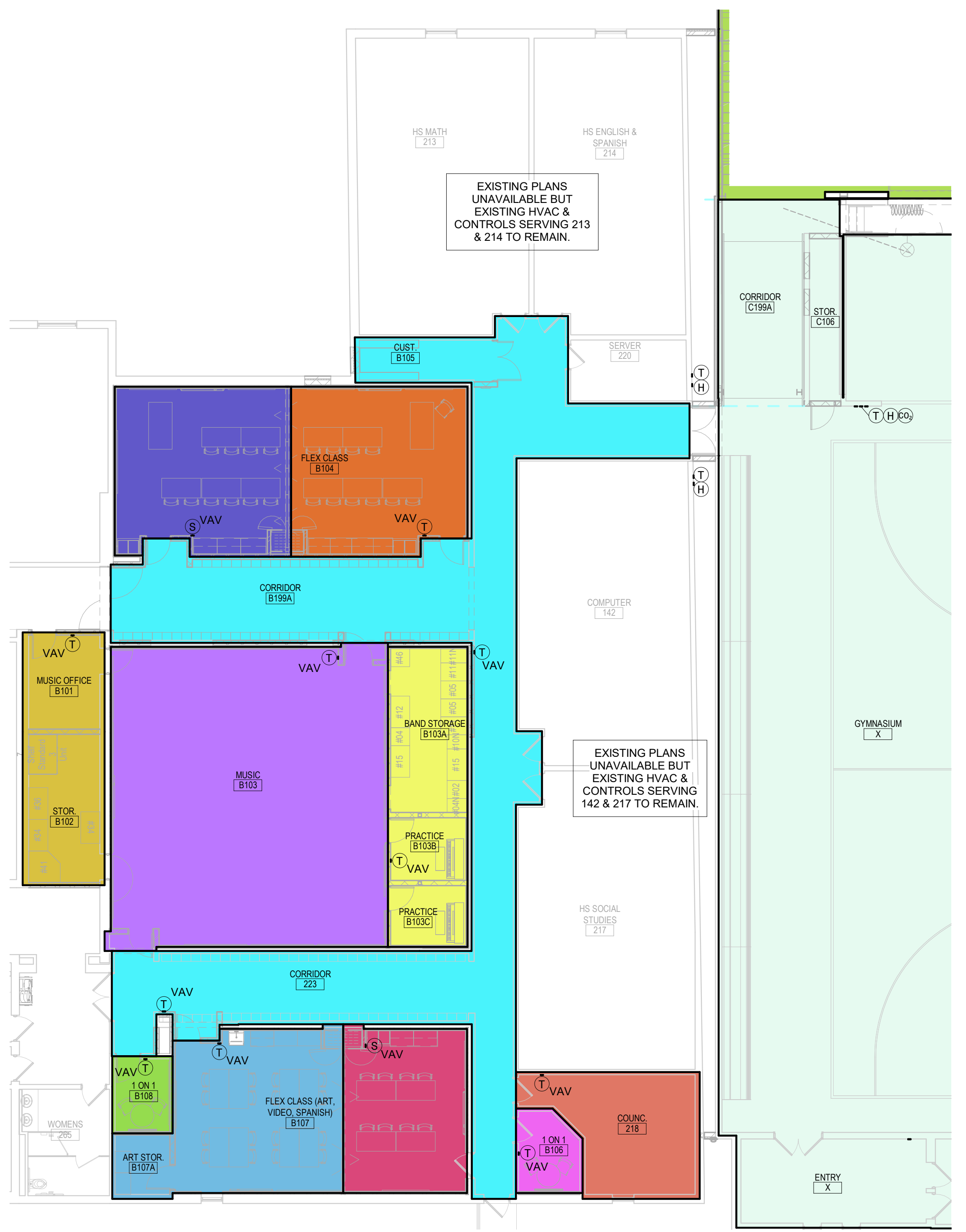
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
HVAC TEMPERATURE CONTROL ZONE PLAN

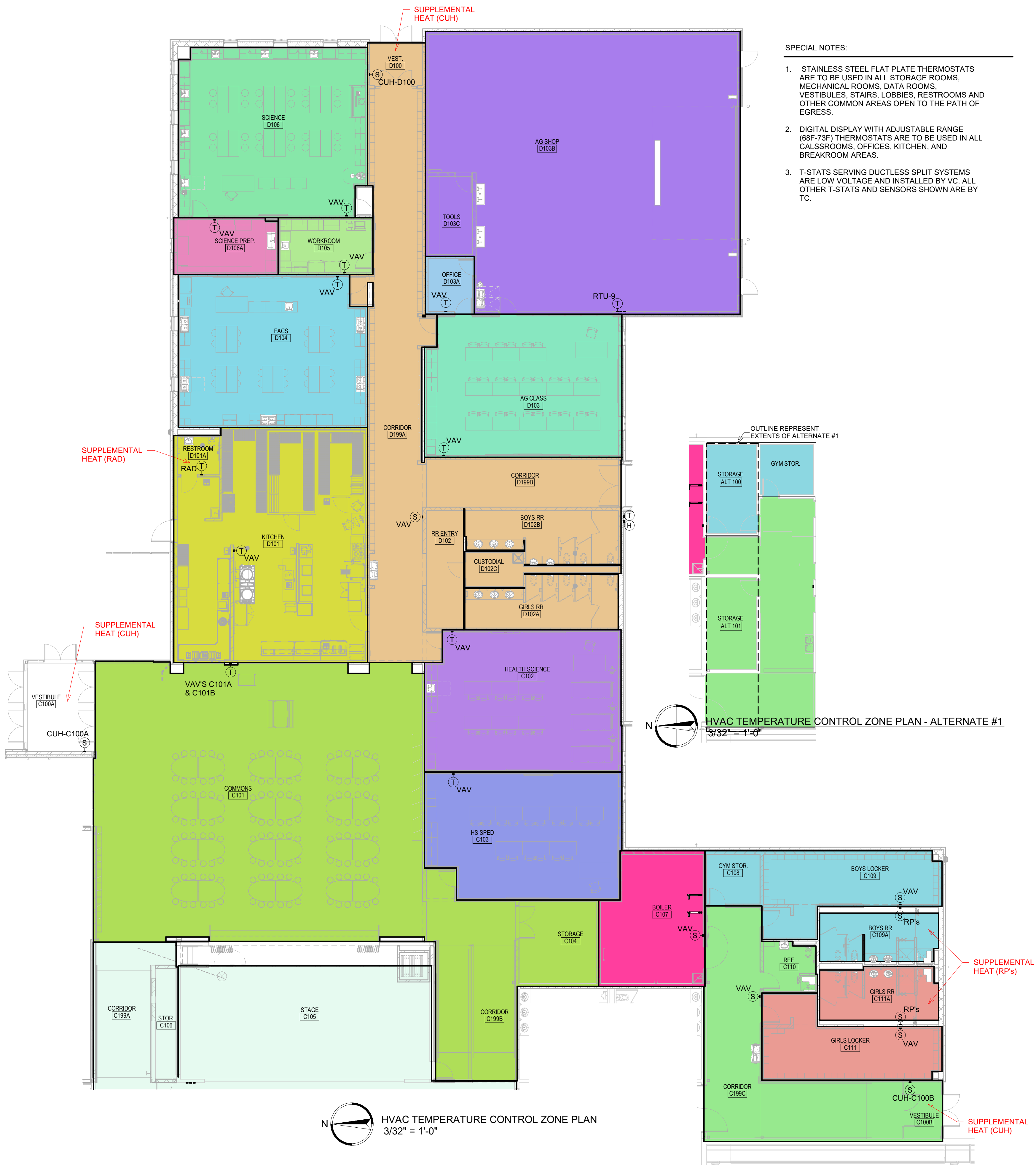
**M705**

SPECIAL NOTES:

1. STAINLESS STEEL FLAT PLATE THERMOSTATS ARE TO BE USED IN ALL STORAGE ROOMS, MECHANICAL ROOMS, DATA ROOMS, VESTIBULES, STAIRS, LOBBIES, RESTROOMS AND OTHER COMMON AREAS OPEN TO THE PATH OF EGRESS.
2. DIGITAL DISPLAY WITH ADJUSTABLE RANGE (68F-73F) THERMOSTATS ARE TO BE USED IN ALL CLASSROOMS, OFFICES, KITCHEN, AND BREAKROOM AREAS.
3. T-STATS SERVING DUCTLESS SPLIT SYSTEMS ARE LOW VOLTAGE AND INSTALLED BY VC. ALL OTHER T-STATS AND SENSORS SHOWN ARE BY TC.



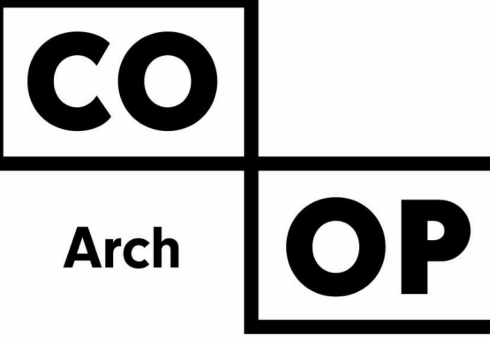
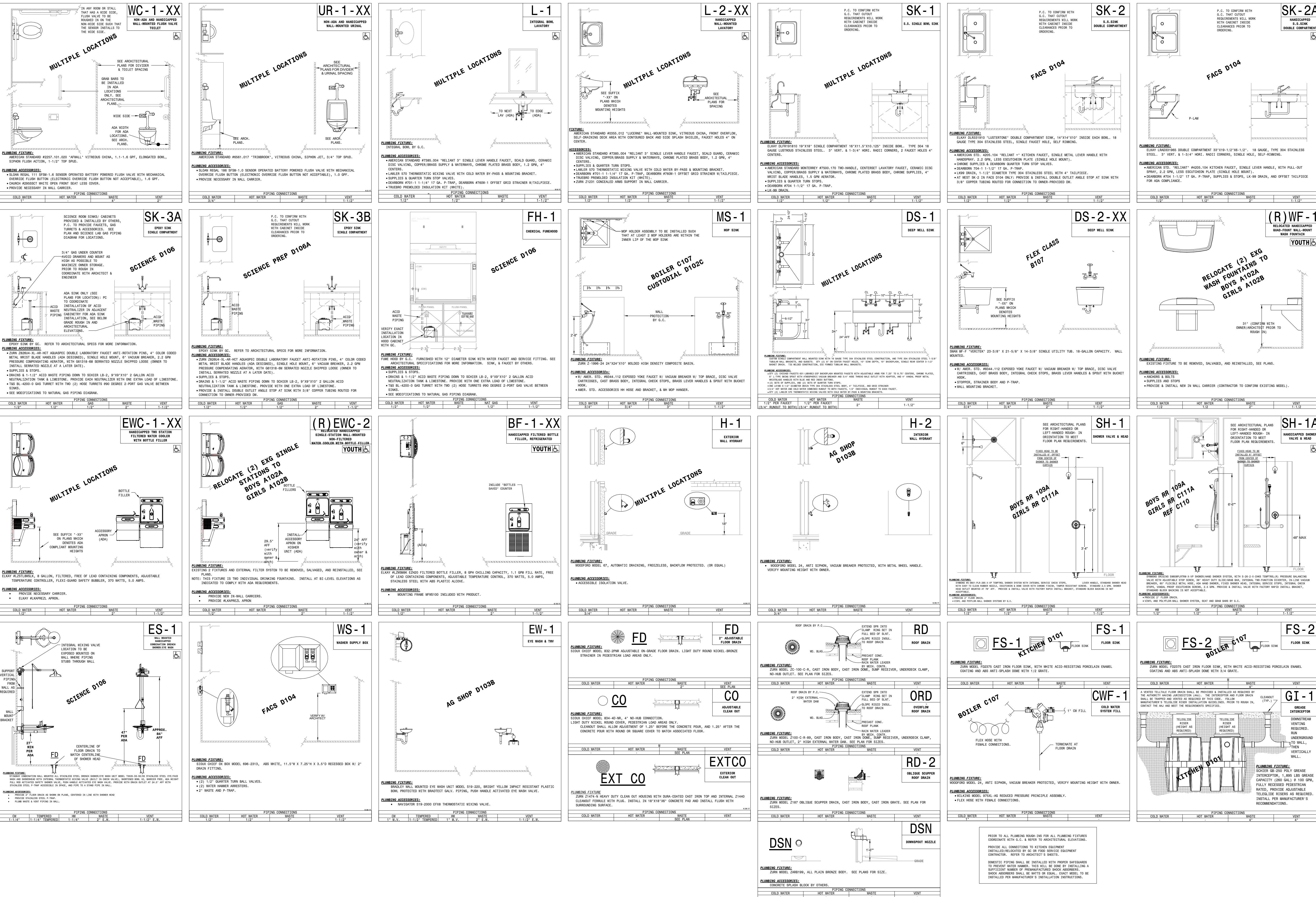
HVAC TEMPERATURE CONTROL ZONE PLAN - PARTIAL AREA B  
3/32" = 1'-0"



HVAC TEMPERATURE CONTROL ZONE PLAN  
3/32" = 1'-0"

OUTLINE REPRESENT EXTENTS OF ALTERNATE #1

HVAC TEMPERATURE CONTROL ZONE PLAN - ALTERNATE #1  
3/32" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

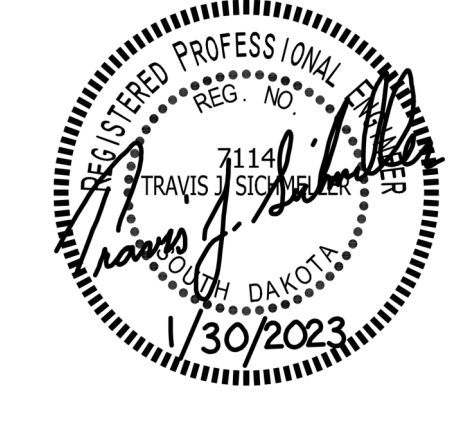
co-oparch.com

**SICHMELLER**  
ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE: 1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. #	REV. DSC.	REV. DATE

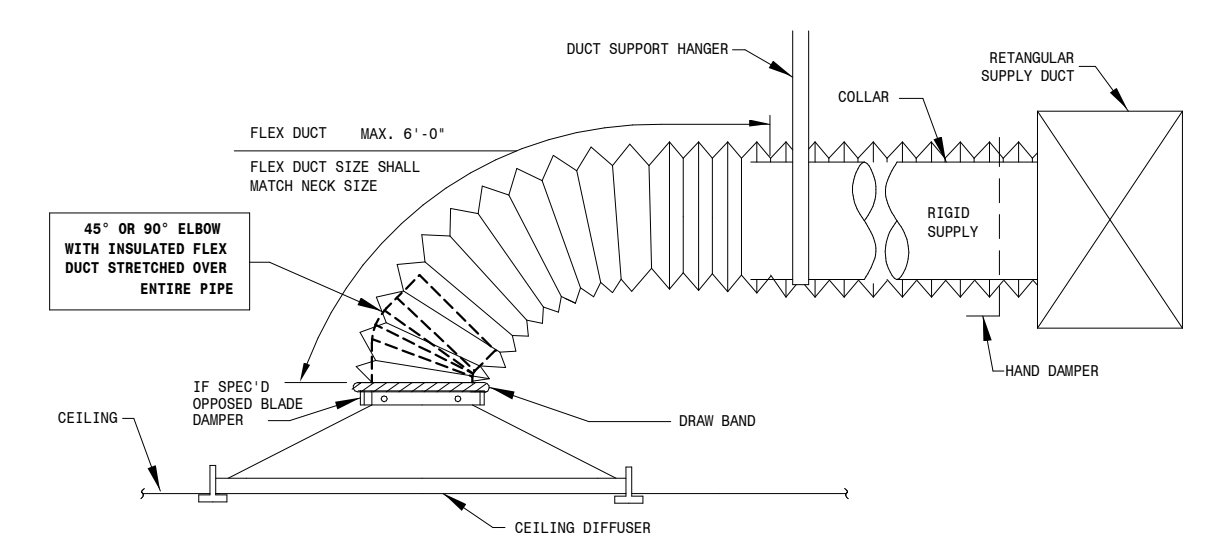
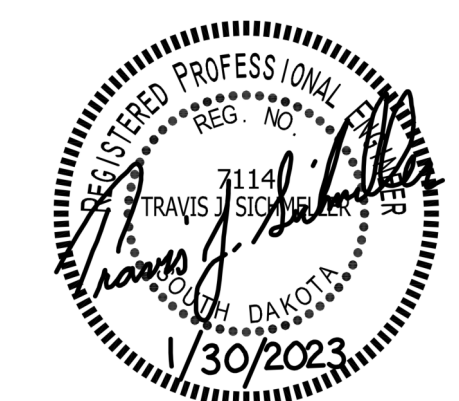
**PROJECT:**  
WILLOW LAKE SCHOOL ADDITION

**WILLOW LAKE SCHOOL DISTRICT**  
WILLOW LAKE, SOUTH DAKOTA

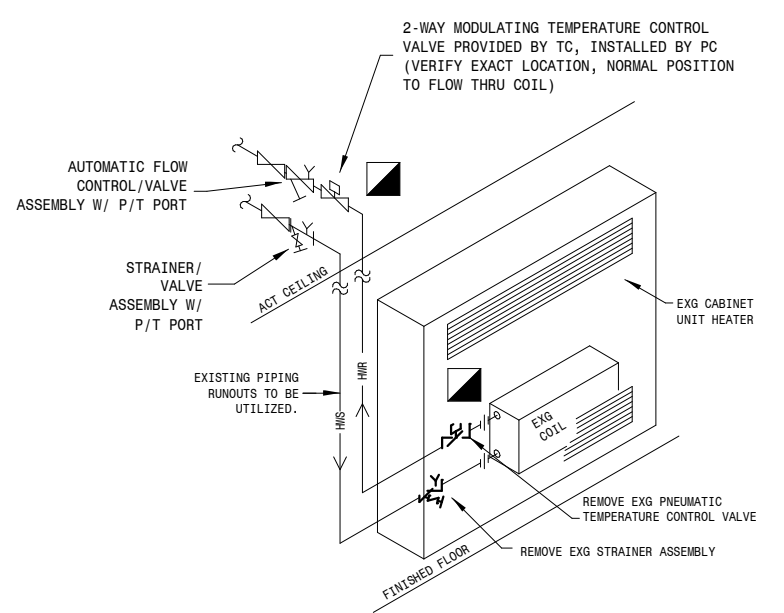
**SHEET TITLE:**  
PLUMBING FIXTURE SCHEDULE

**M800**

1/30/2023 3:56:42 PM

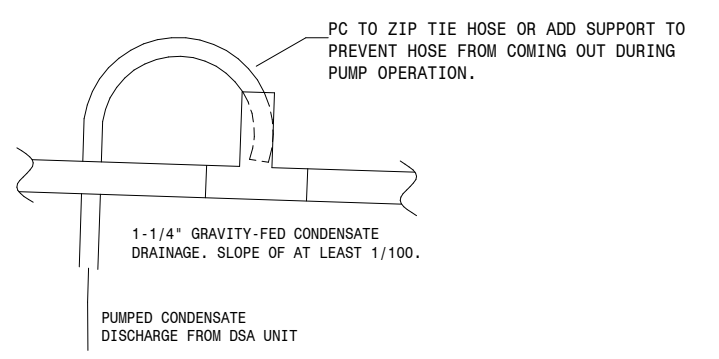


**Typical Diffuser Connection Detail**  
NOT TO SCALE

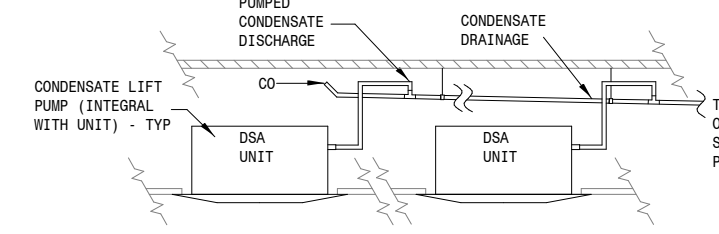


**Modifications to Existing Cabinet Unit Heater Piping Detail**  
NOT TO SCALE

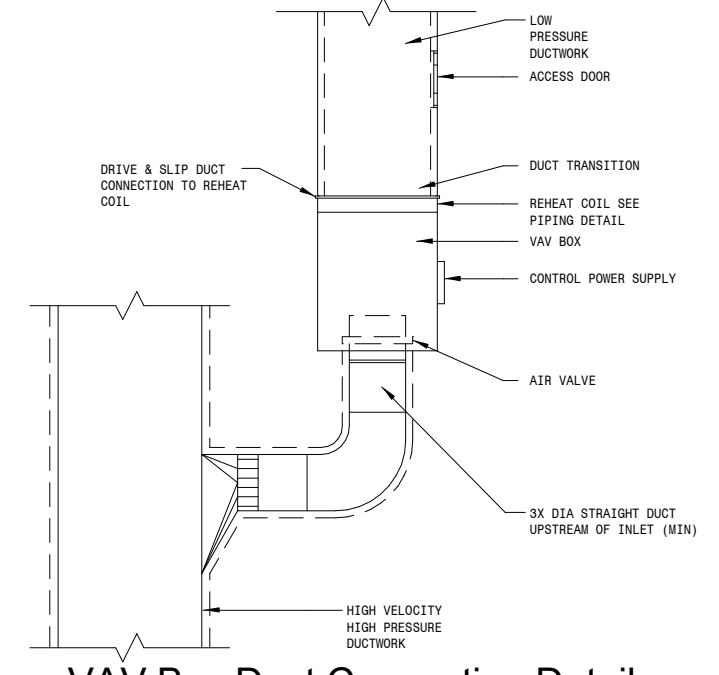
**Cabinet Unit Heater Piping Detail**  
NOT TO SCALE



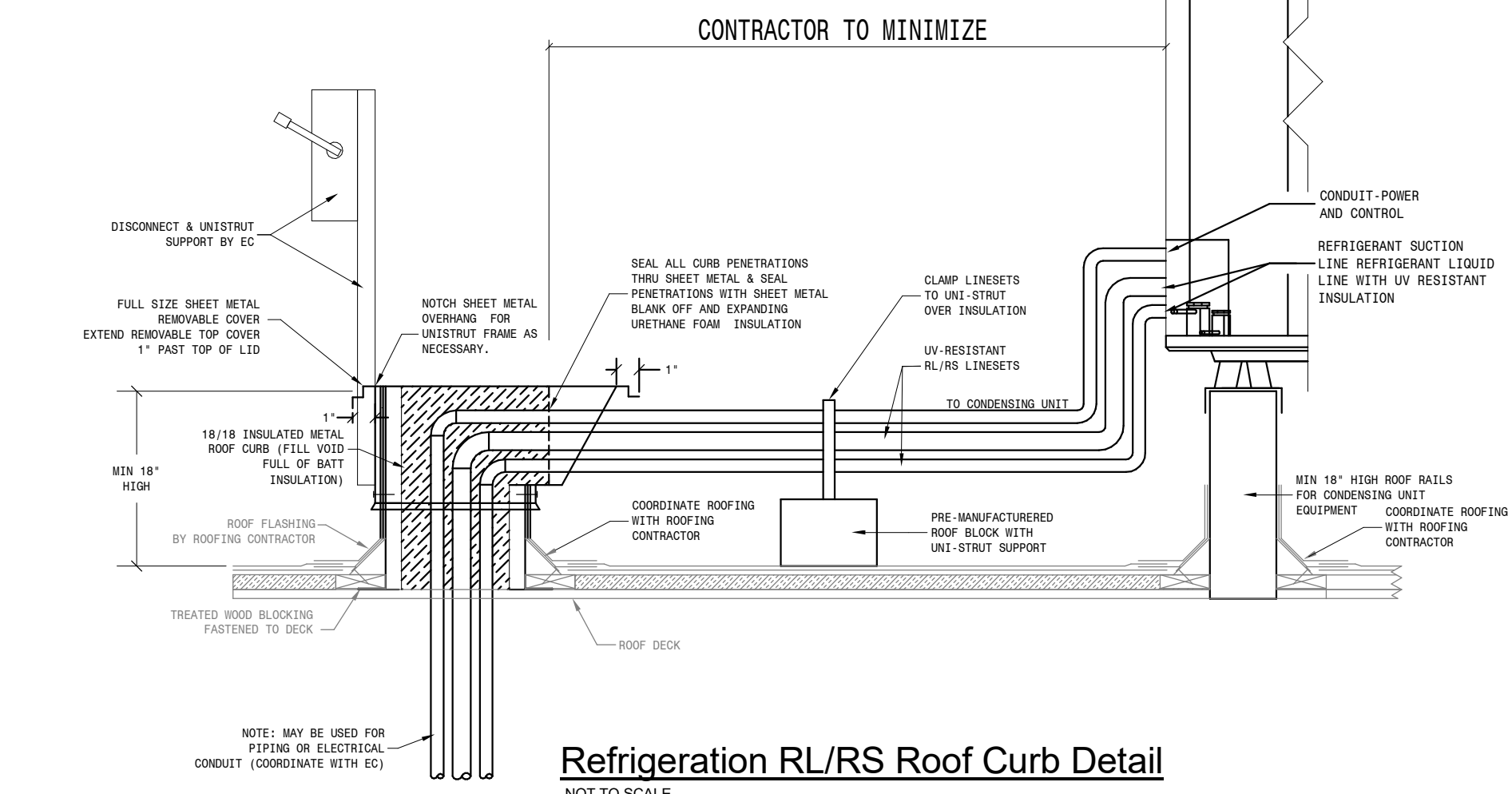
**Typical Connection from Unit to Condensate Drainage**  
NOT TO SCALE



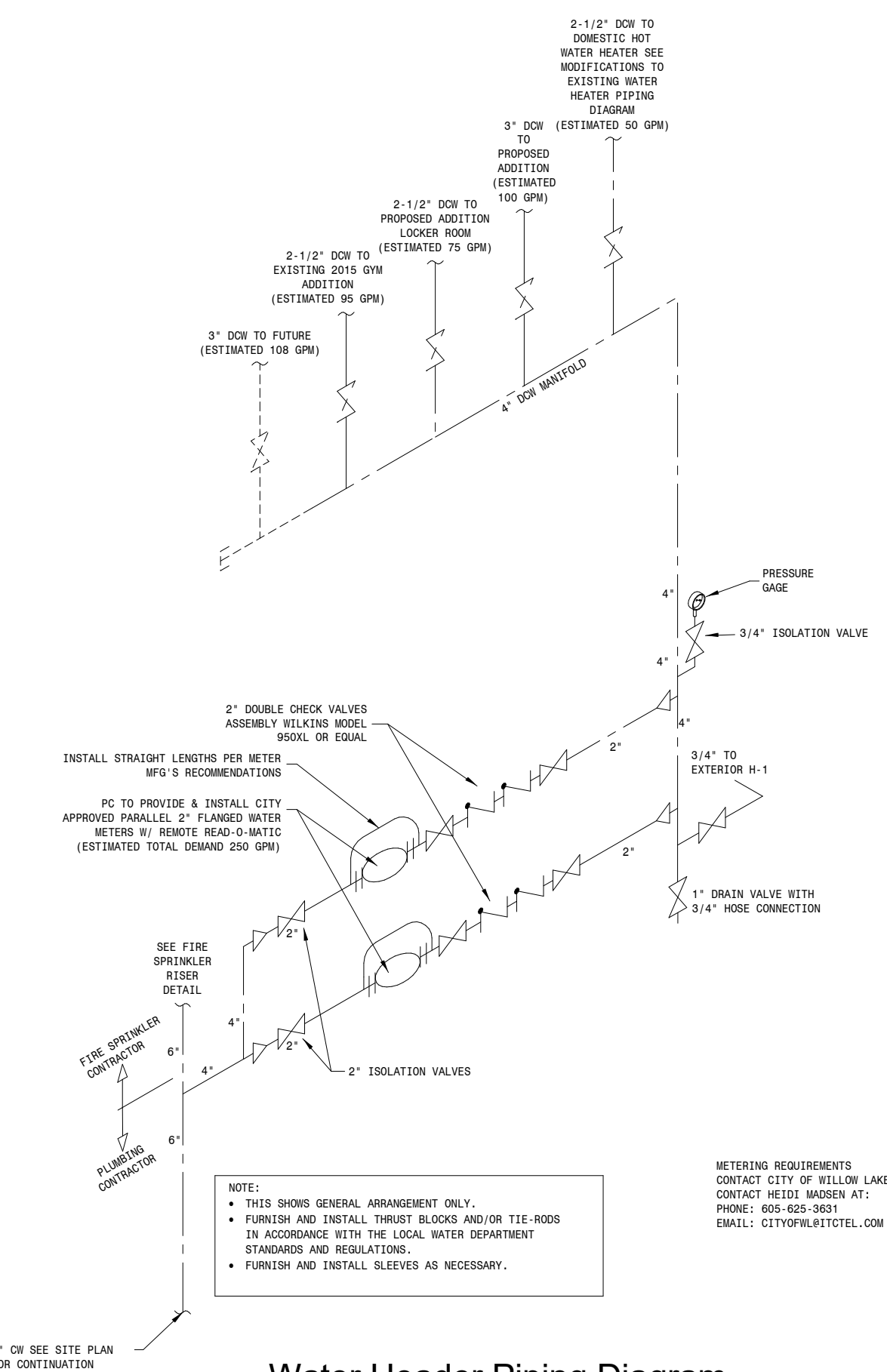
**Ceiling "Cassette" Unit Condensate Drain Piping**  
NOT TO SCALE



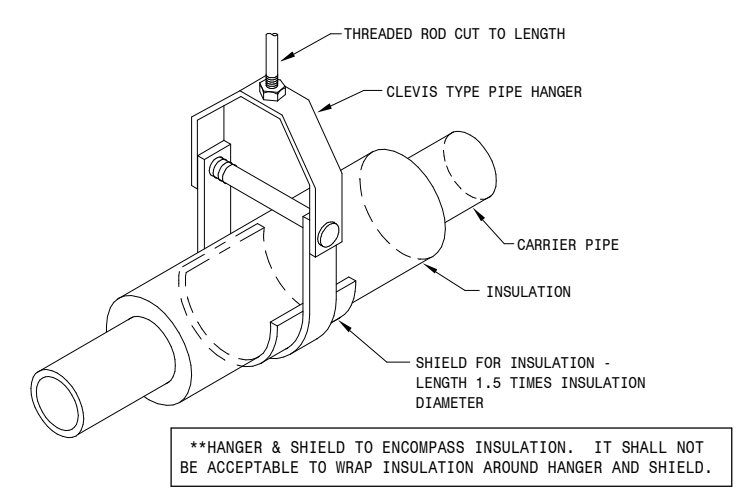
**VAV Box Duct Connection Detail**  
NOT TO SCALE



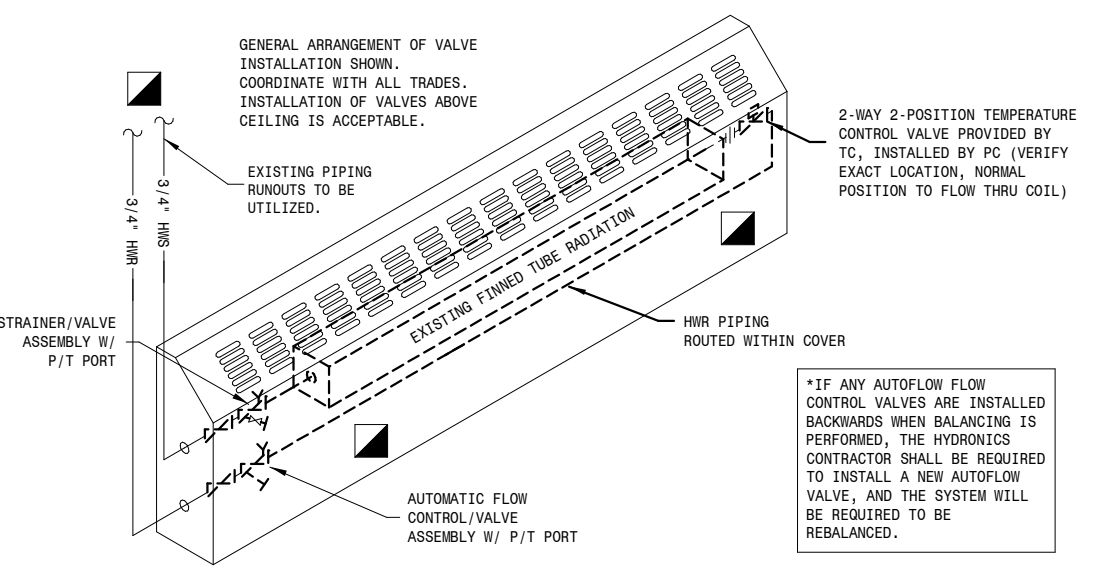
**Refrigeration RL/RS Roof Curb Detail**  
NOT TO SCALE



**Water Header Piping Diagram**  
NOT TO SCALE

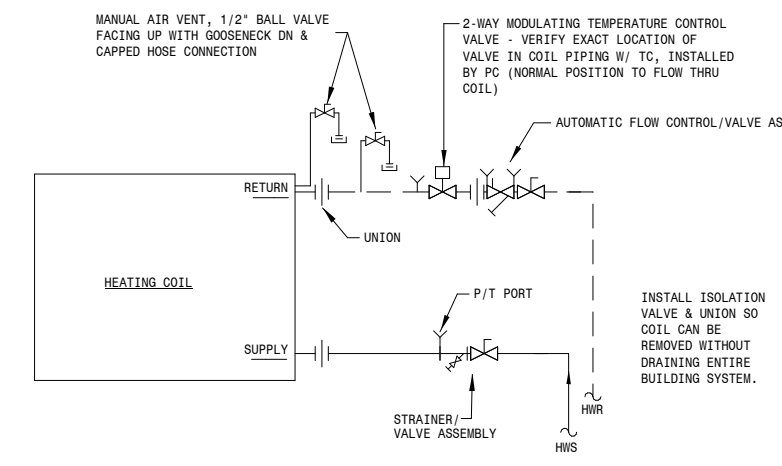


**Clevis Type Pipe Hanger For Insulated Pipe Detail**  
NOT TO SCALE

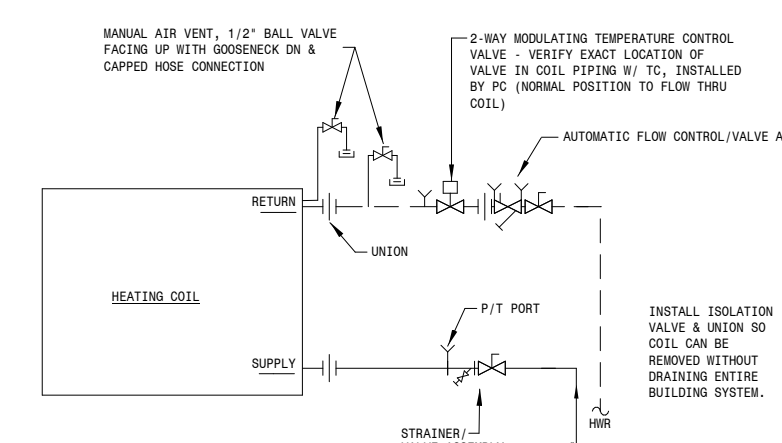


**Modifications to Existing Fin Tube Radiation Piping Detail**  
NOT TO SCALE

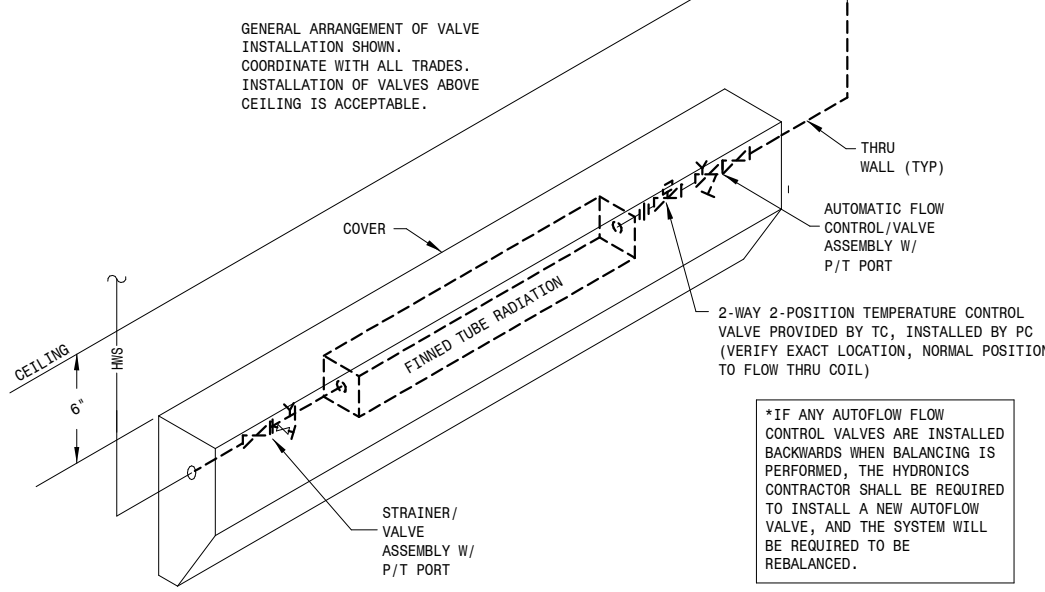
**Radiant Panel Piping Detail**  
NOT TO SCALE



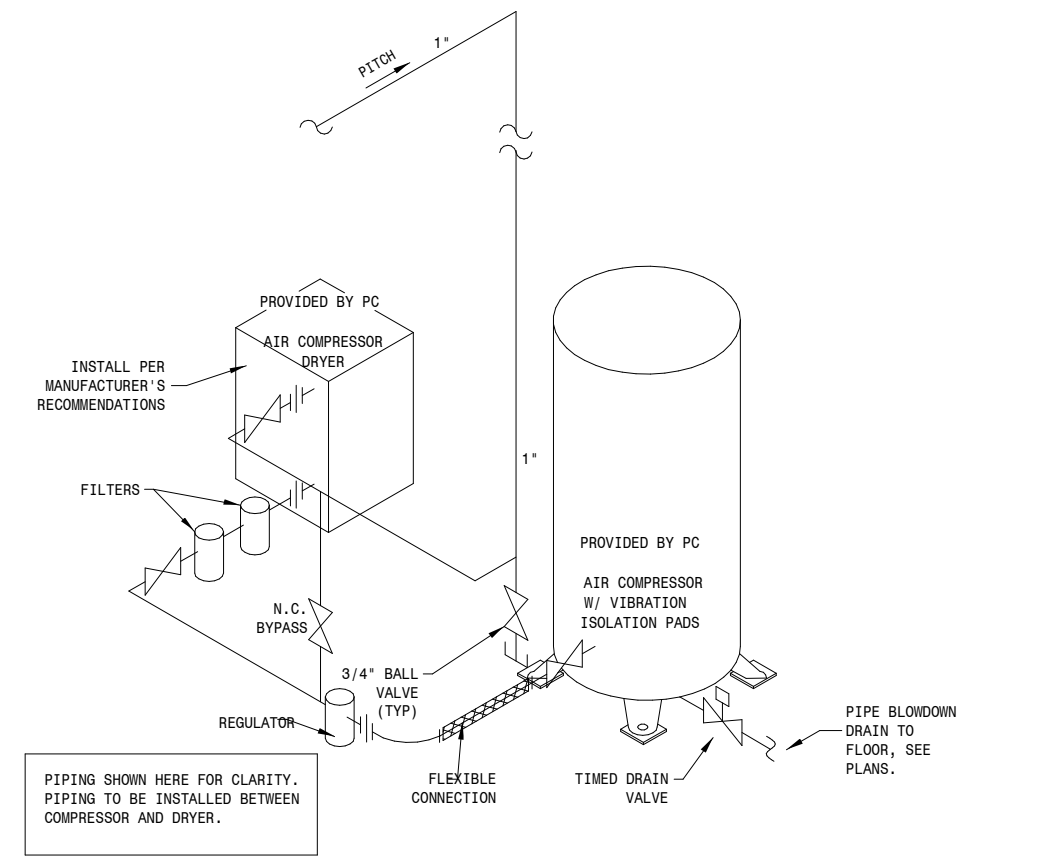
**VAV Heating Coil Piping Detail**  
NOT TO SCALE



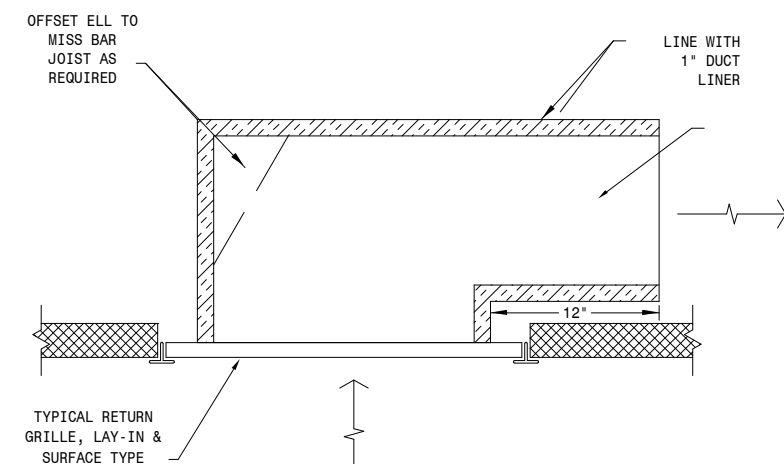
**Fan Coil Heating Coil Piping Detail**  
NOT TO SCALE



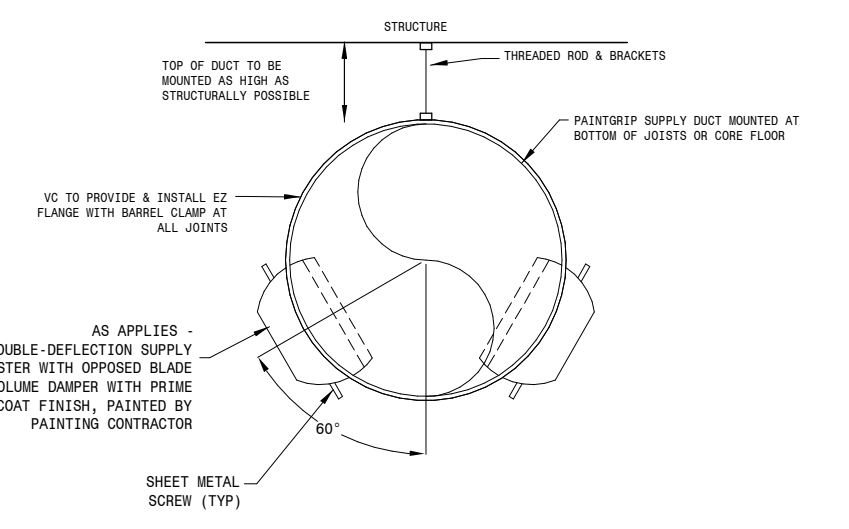
**Inverted Fin Tube Radiation Piping Detail**  
NOT TO SCALE



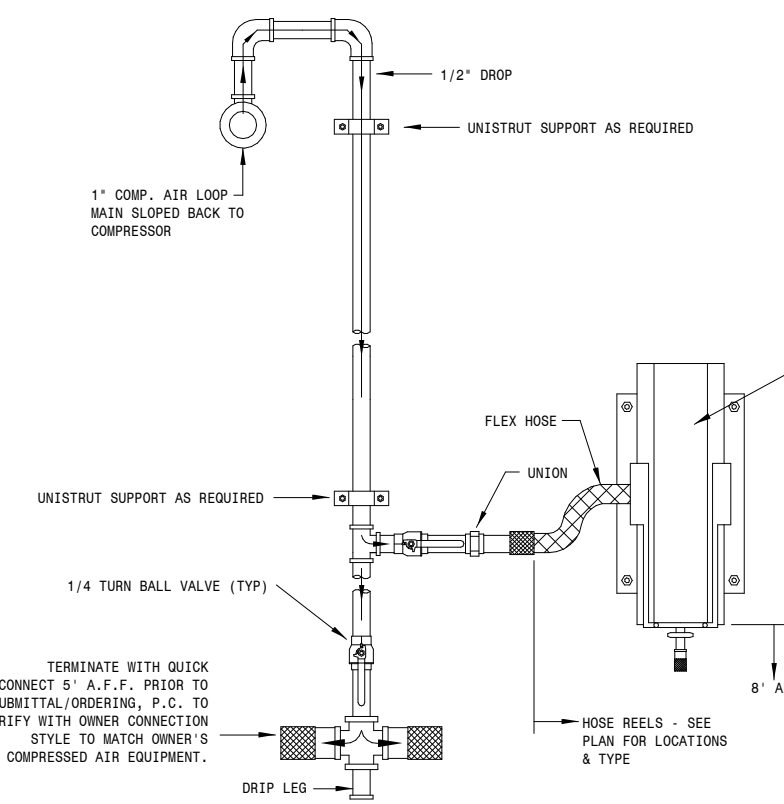
**Air Drop to Compressor Detail**  
NOT TO SCALE



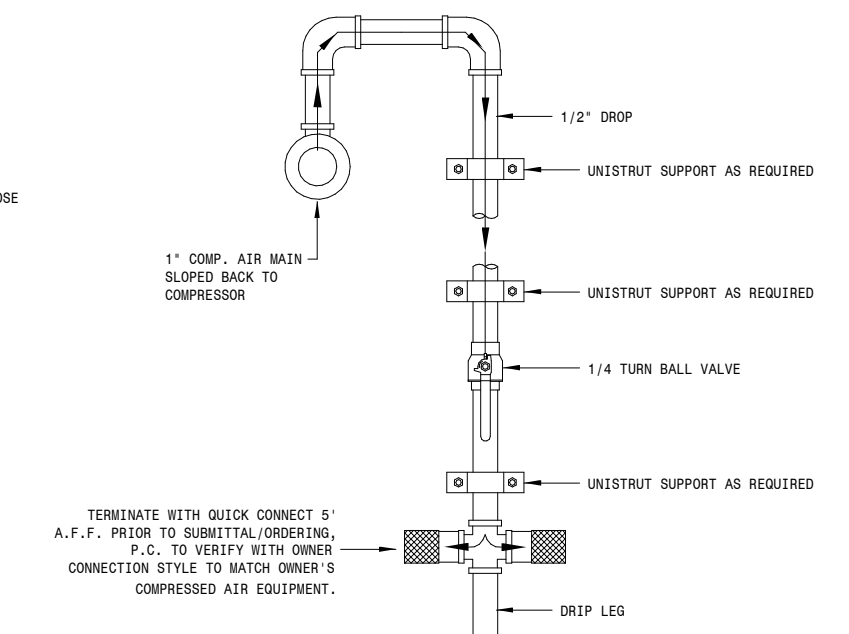
**Insulated Return Elbow Detail**  
NOT TO SCALE



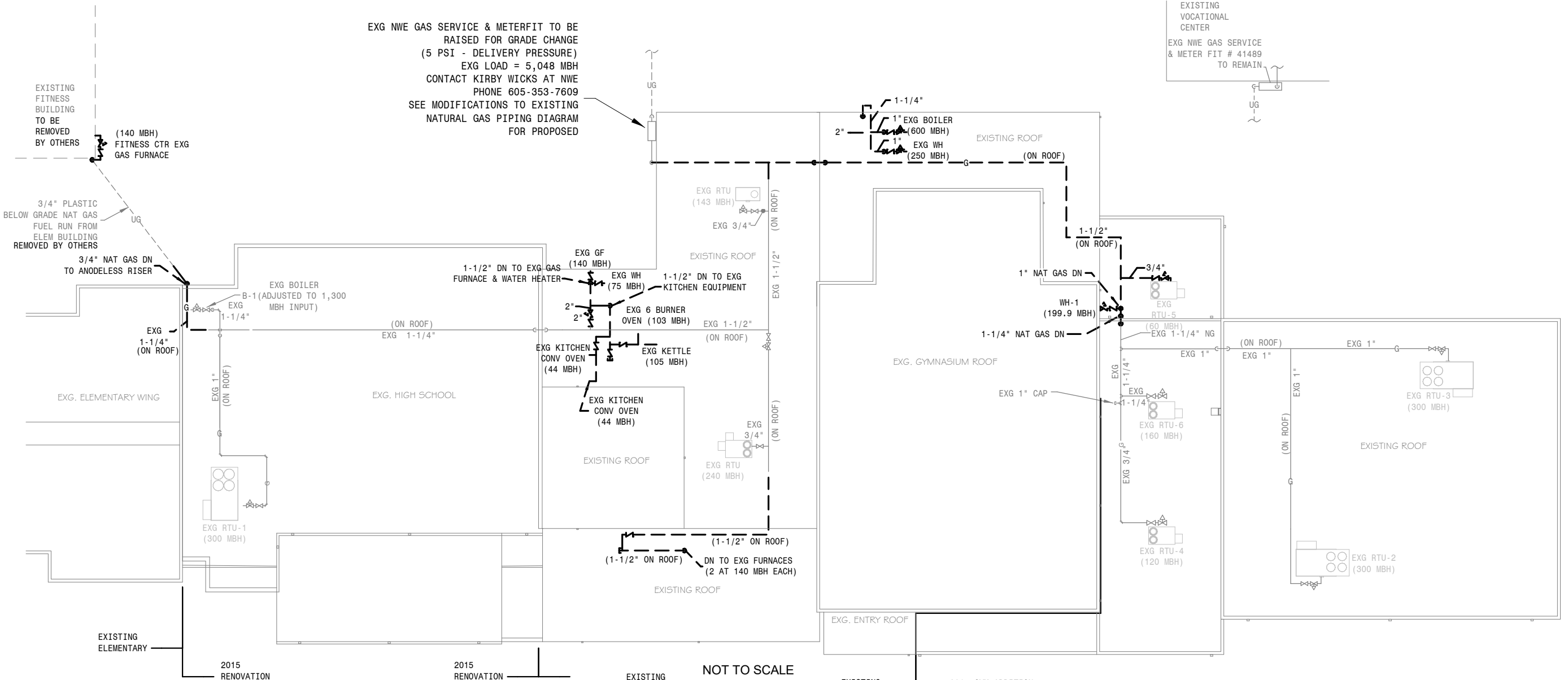
**Duct Hanger Section**  
NOT TO SCALE



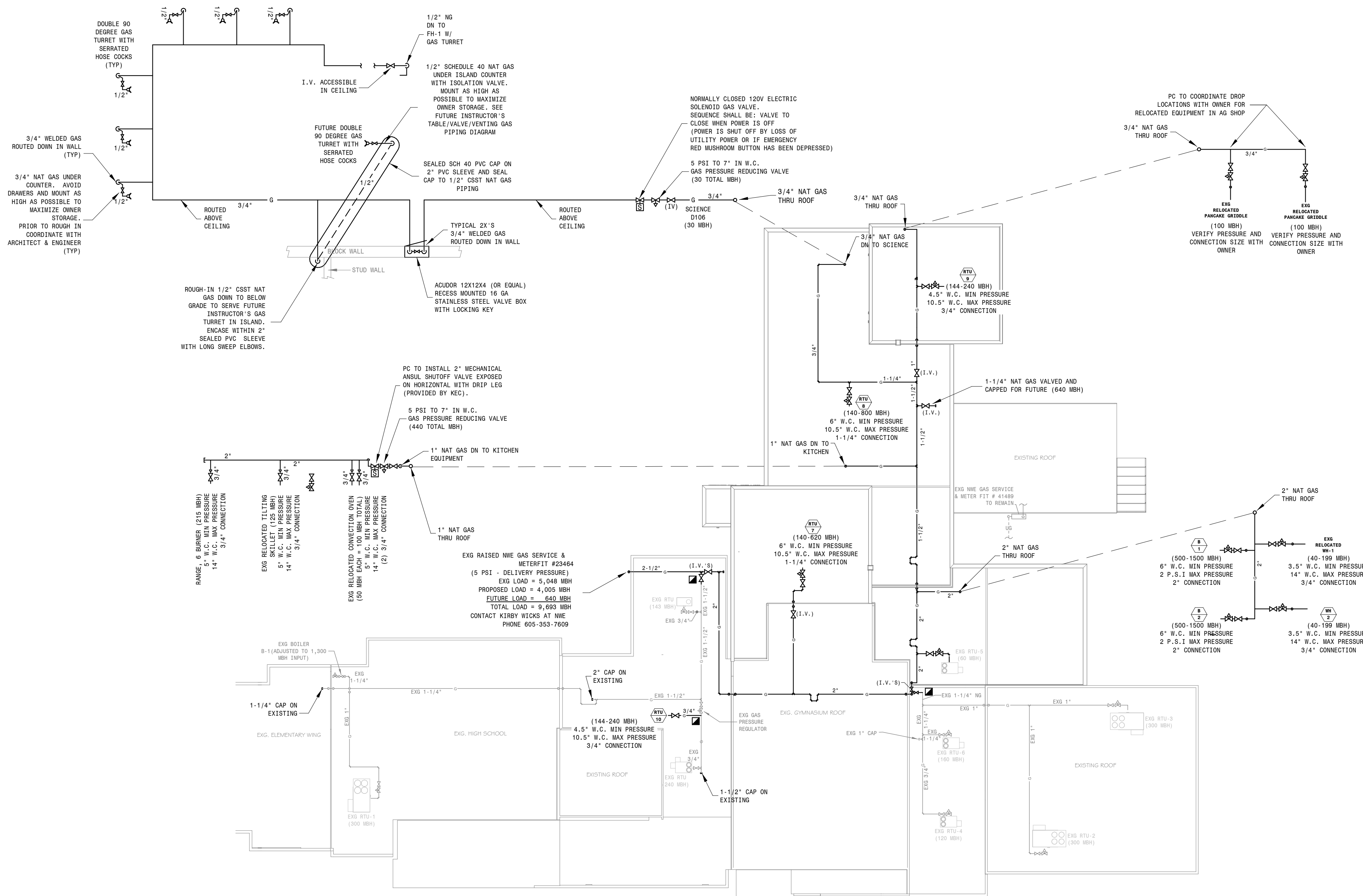
**Typical Air Drop to Reel Detail**  
NOT TO SCALE



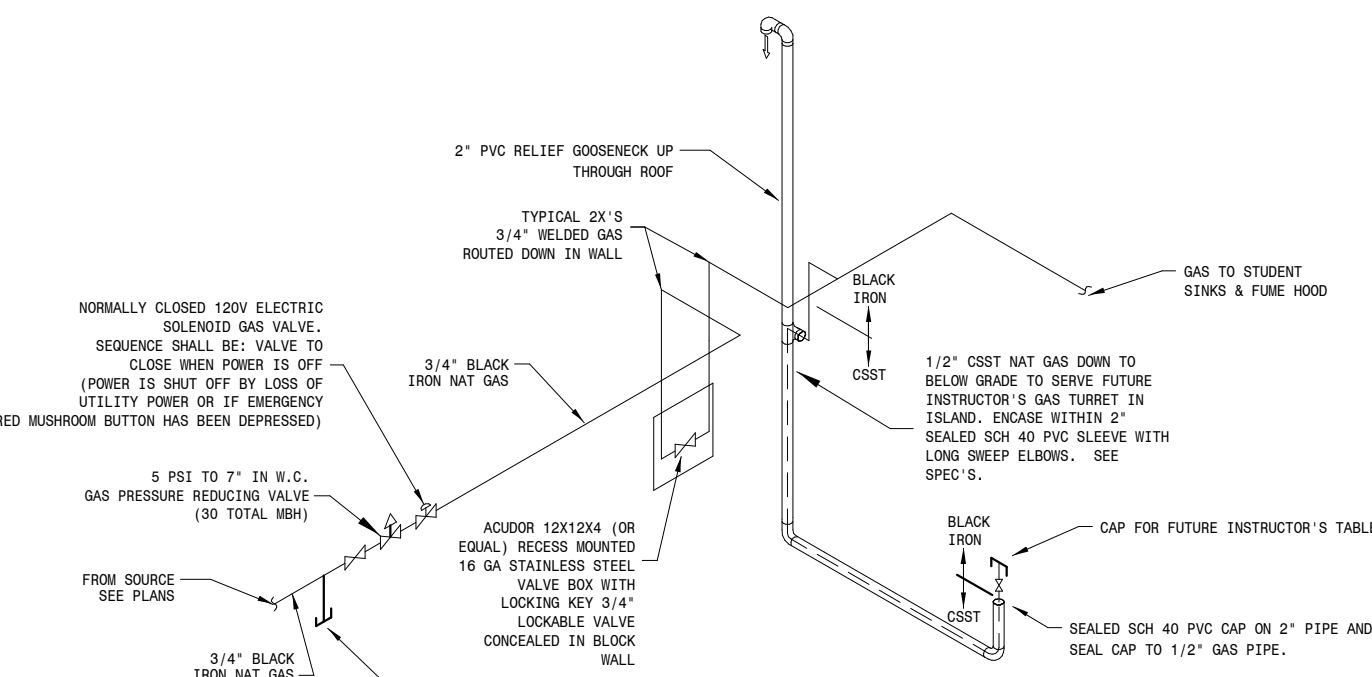
**Typical Air Drop Detail**  
NOT TO SCALE



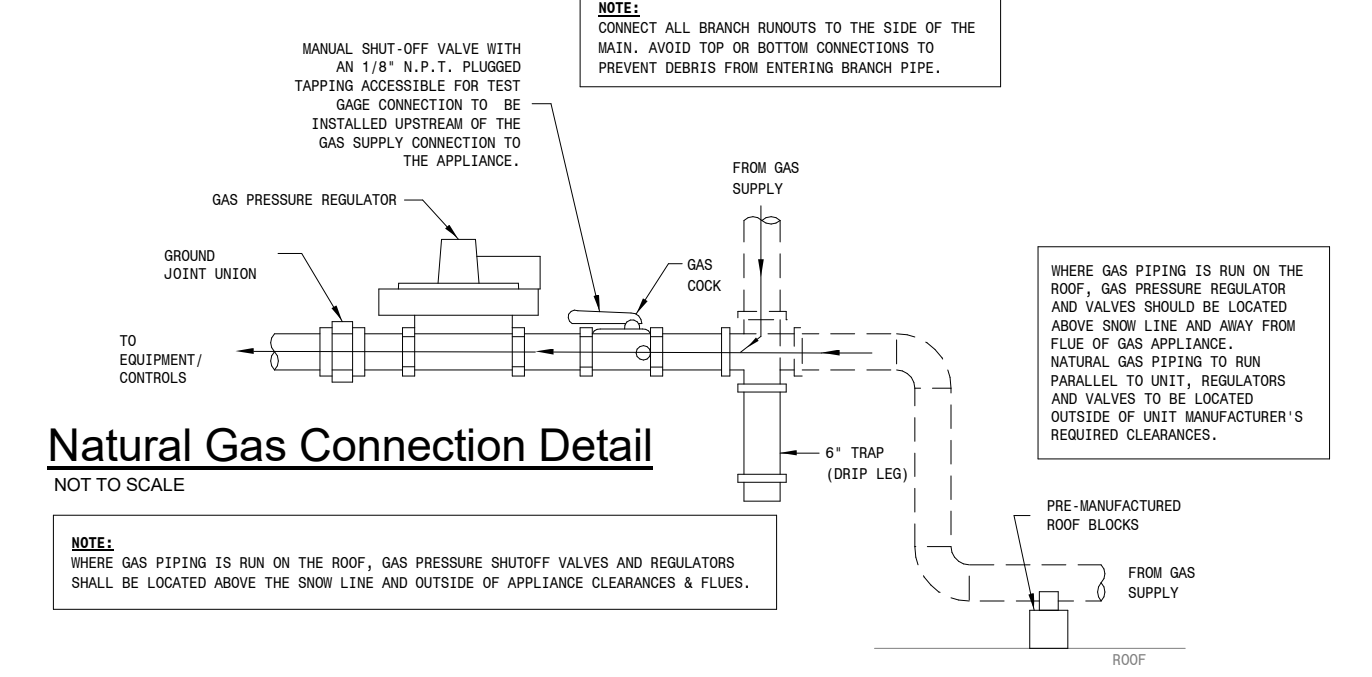
**Demolition to Existing Natural Gas Piping Diagram**  
NOT TO SCALE



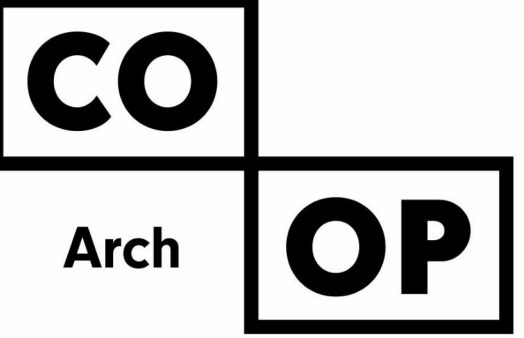
**Modifications to Existing Natural Gas Piping Diagram**  
NOT TO SCALE



**Future Instructor's Table/Valve/Venting Gas Piping Diagram**  
NOT TO SCALE



**Natural Gas Connection Detail**  
NOT TO SCALE



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

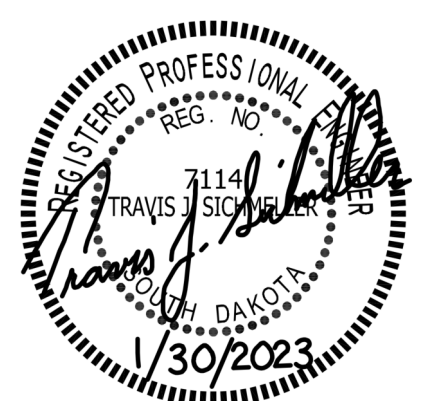
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE: 1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT: WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE: MECHANICAL DETAILS CONTINUED

**M901**



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

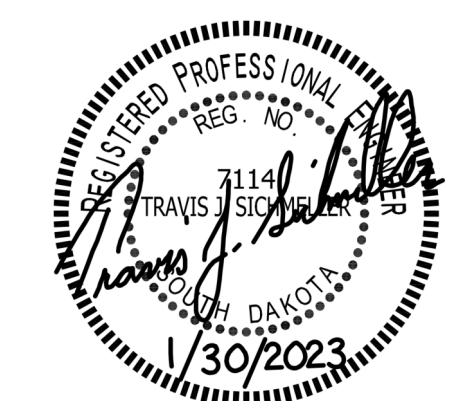
601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



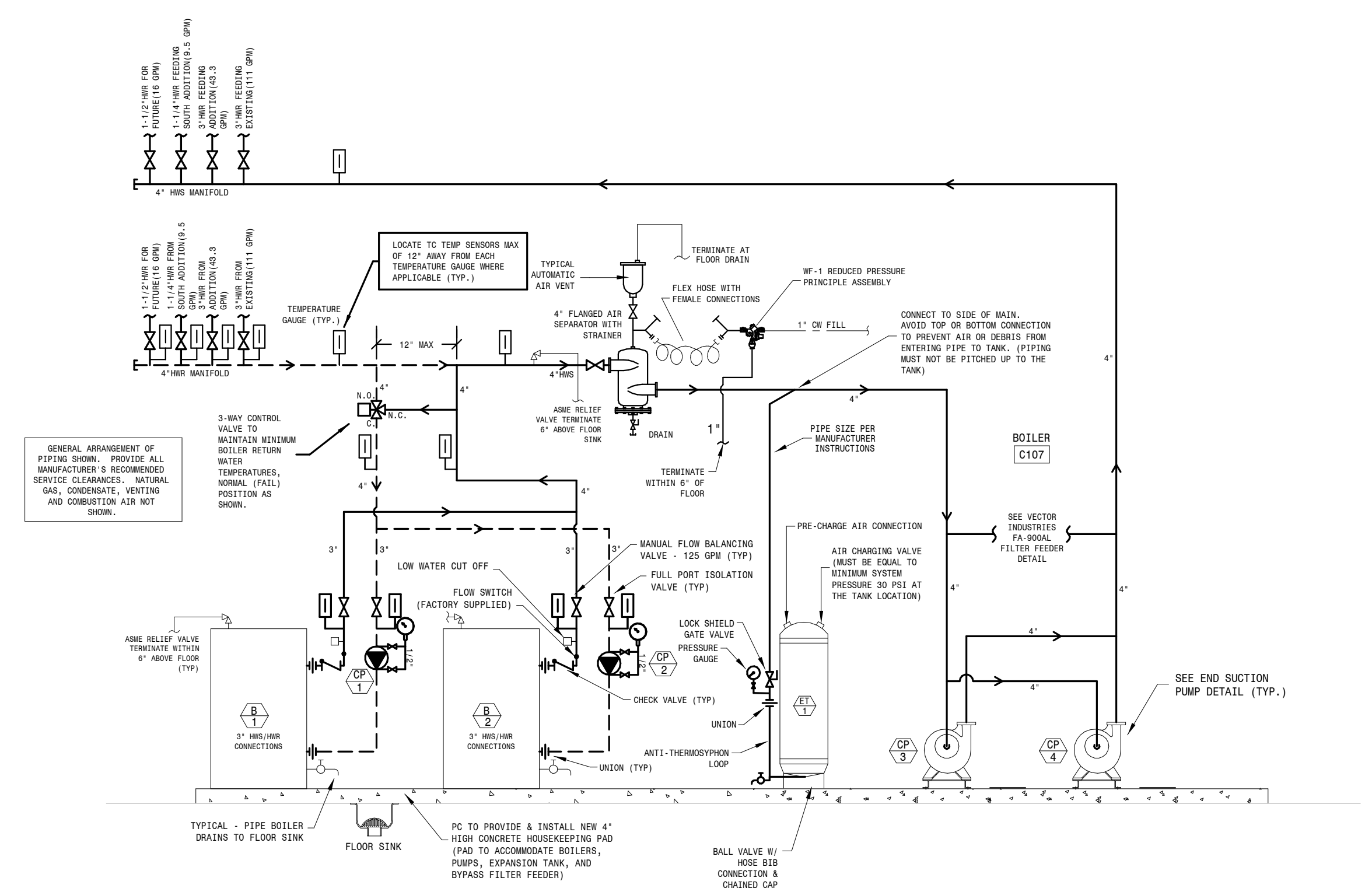
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

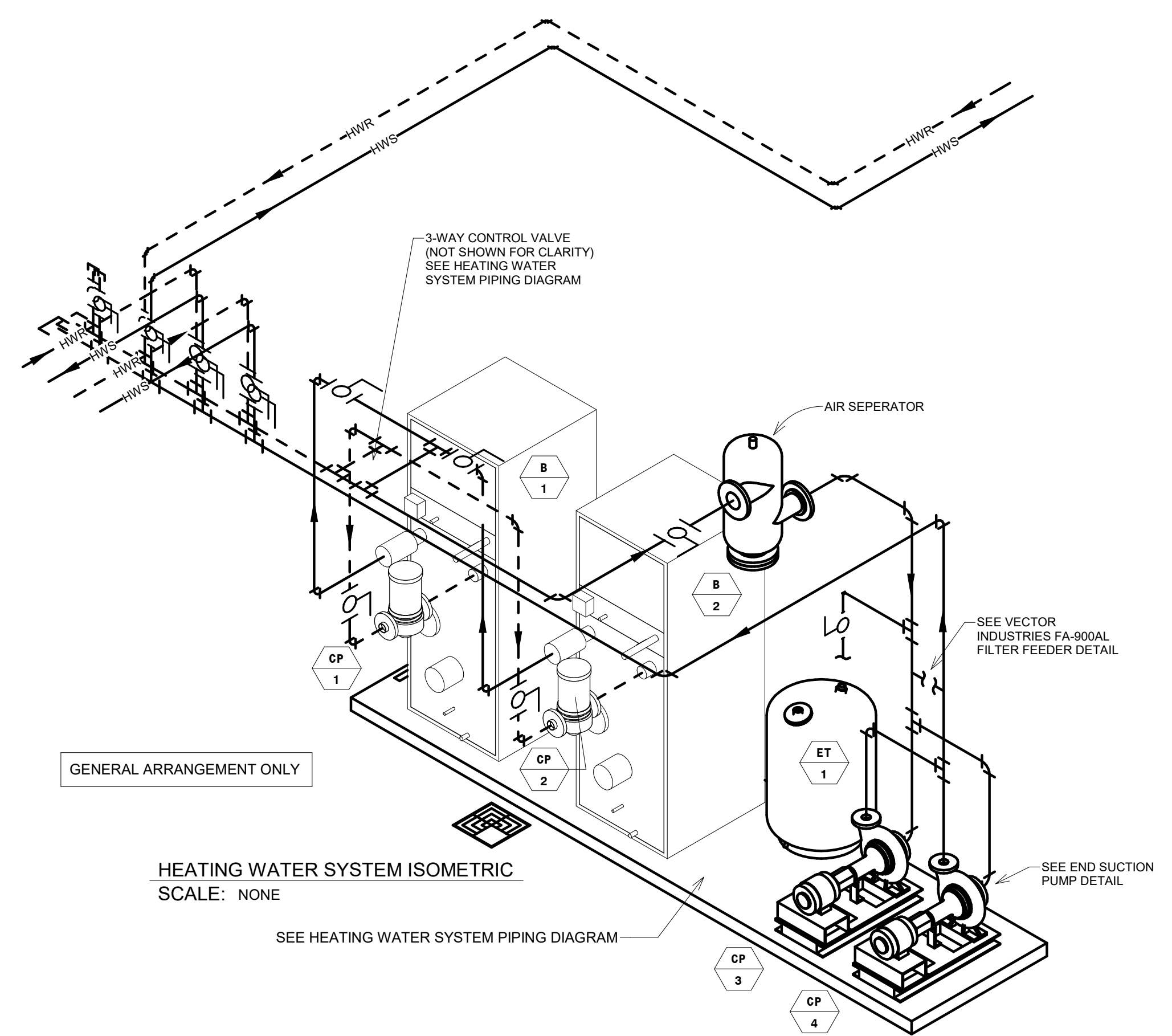
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
MECHANICAL DETAILS &  
ISOMETRICS

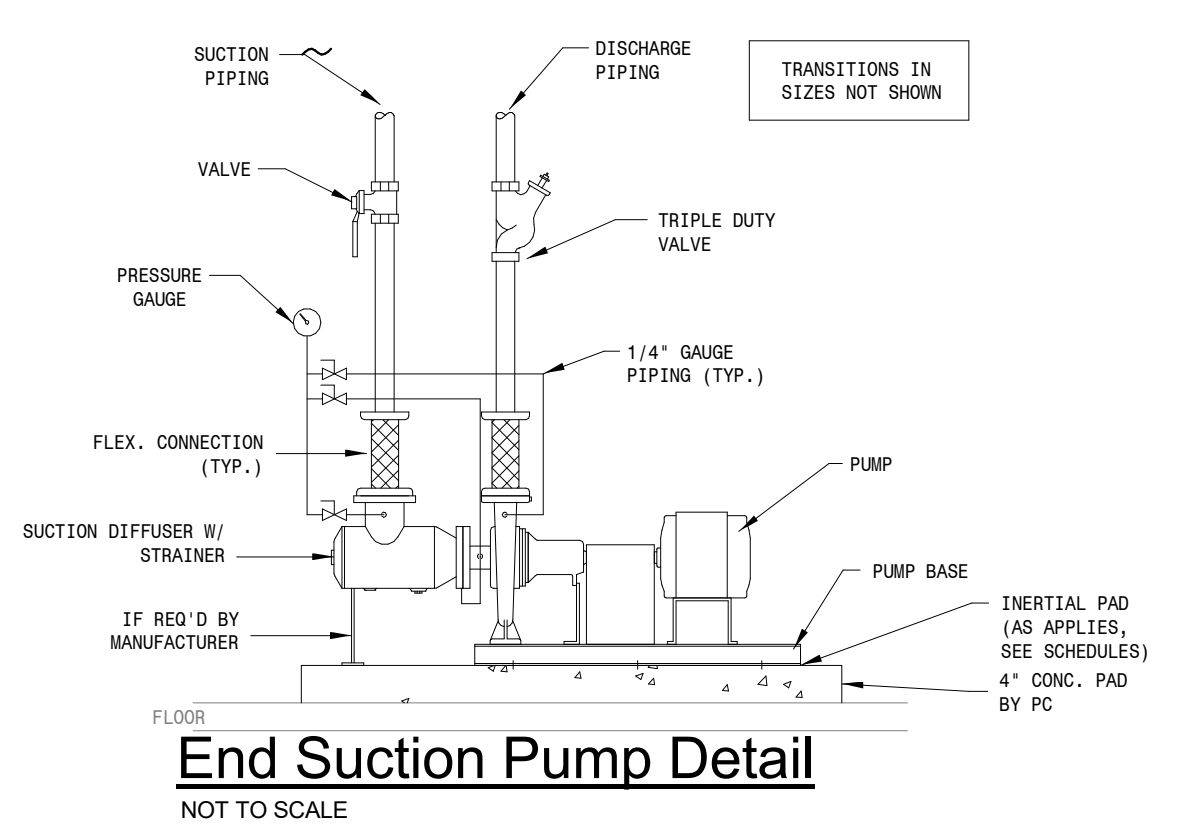
**M902**



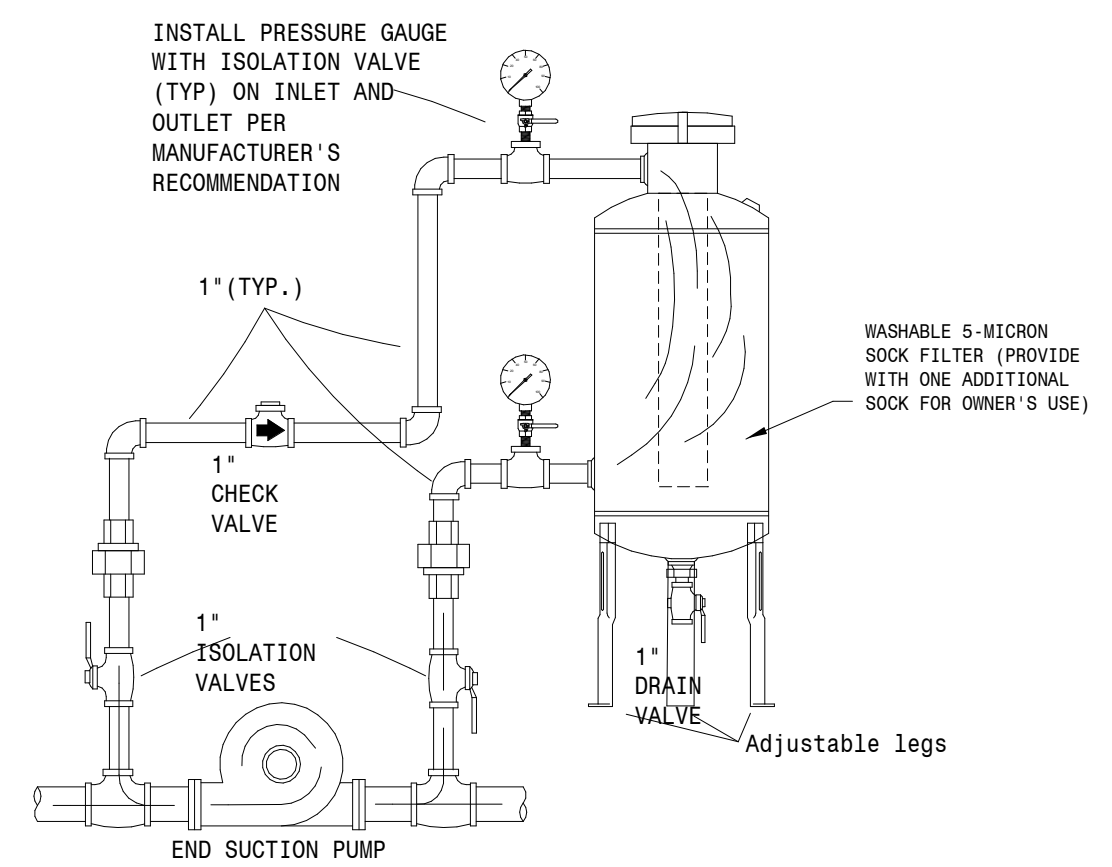
**Heating Water System Piping Diagram**  
NOT TO SCALE



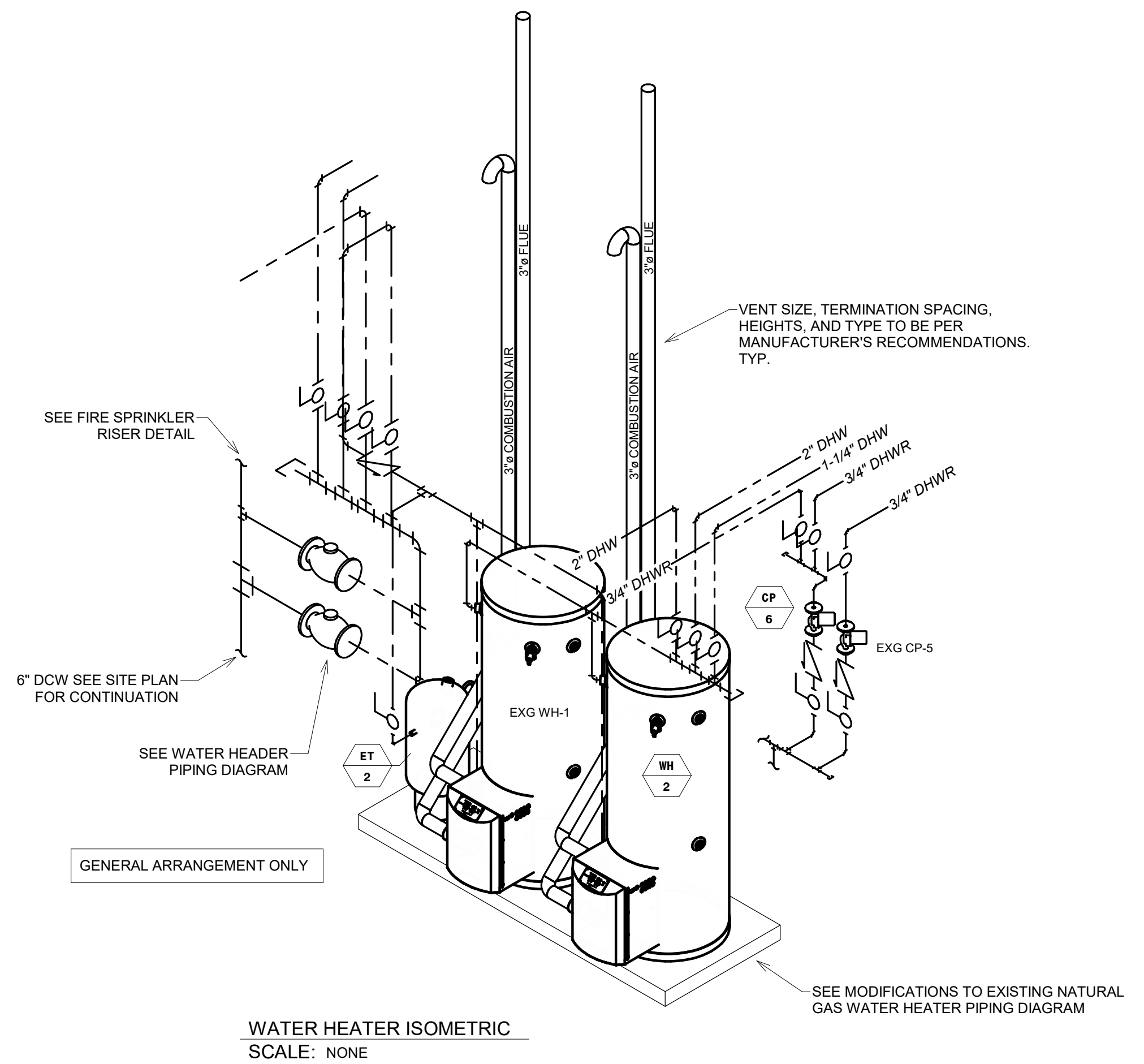
**HEATING WATER SYSTEM ISOMETRIC**  
SCALE: NONE



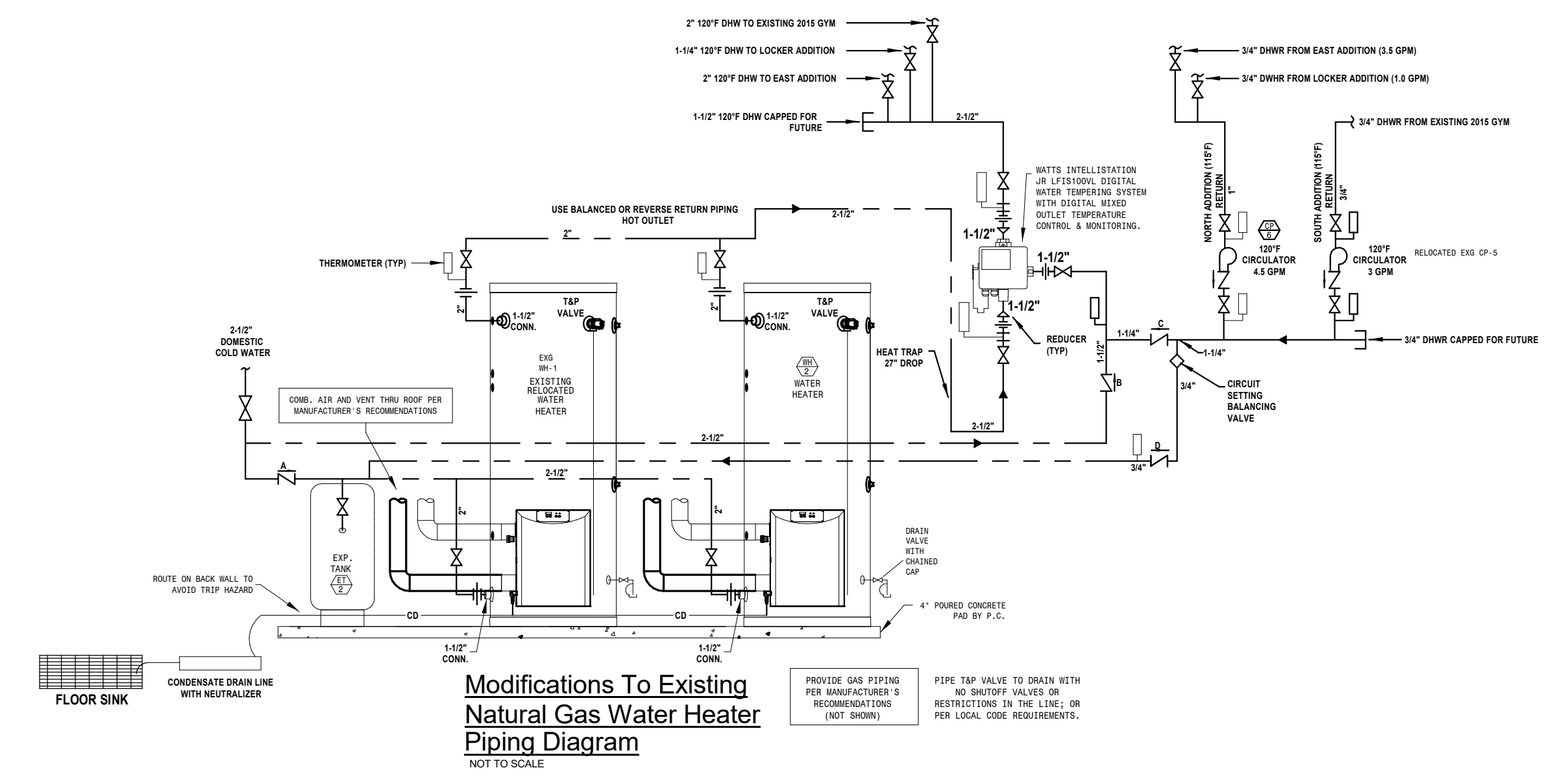
**End Suction Pump Detail**  
NOT TO SCALE



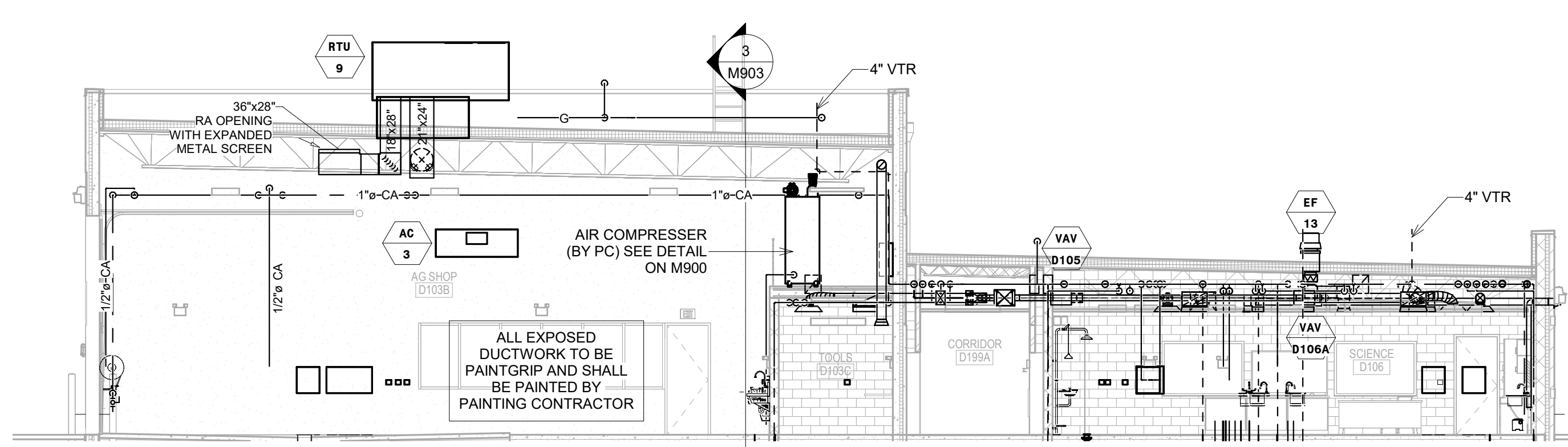
**Vector Industries FA-900AL**  
**(with adjustable legs)**  
**High Flow Bypass Filter Feeder Detail**  
NOT TO SCALE



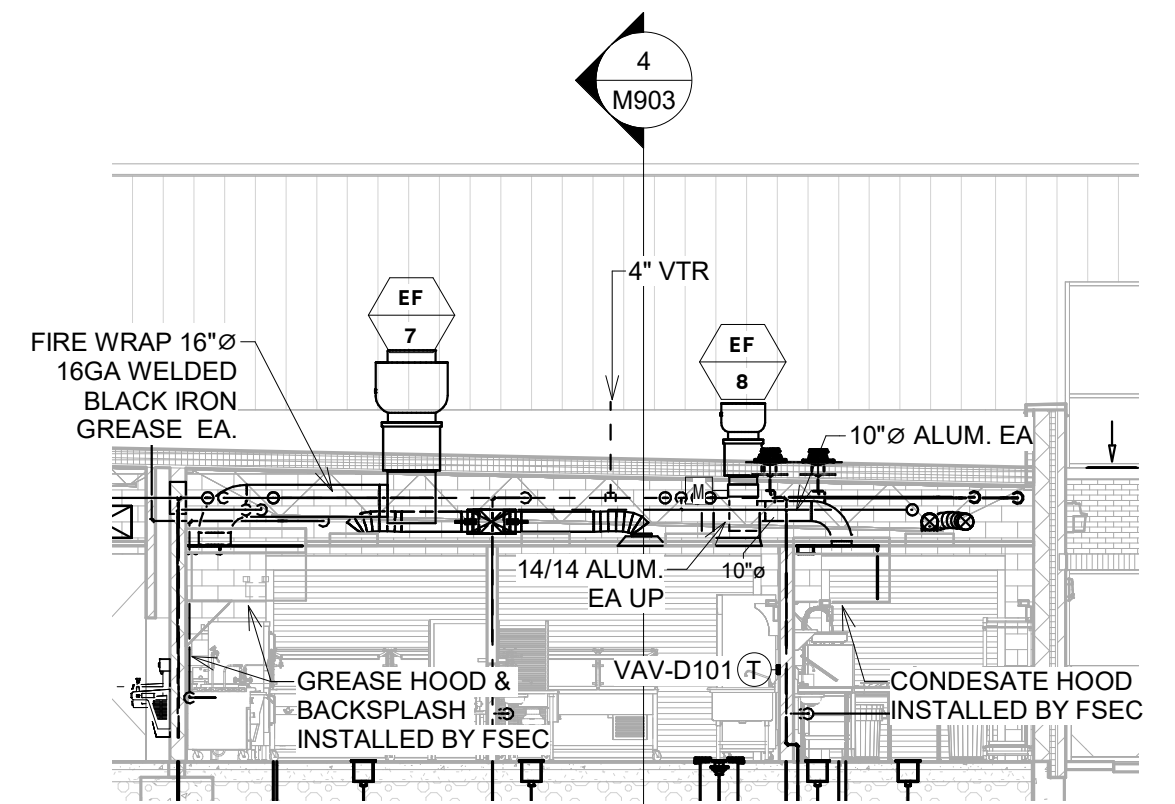
**WATER HEATER ISOMETRIC**  
SCALE: NONE



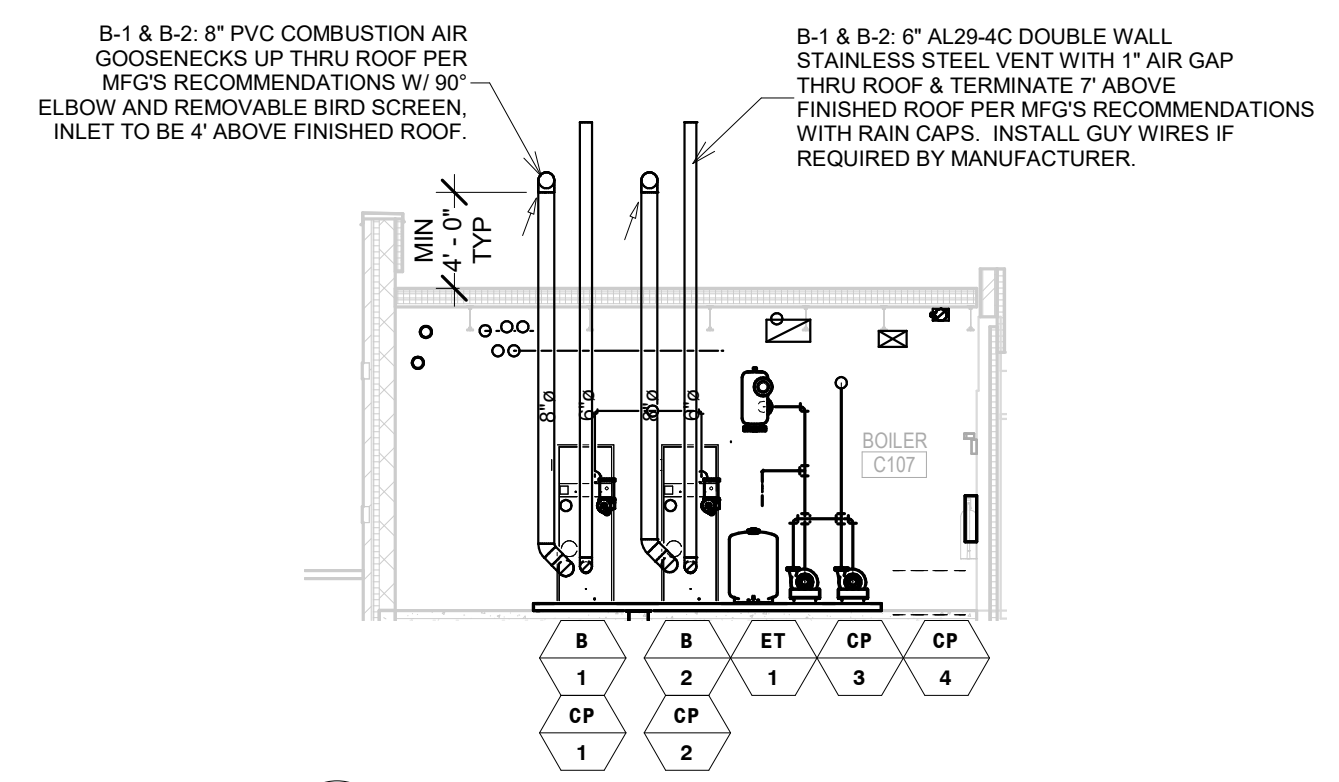
**Modifications To Existing**  
**Natural Gas Water Heater**  
**Piping Diagram**  
NOT TO SCALE



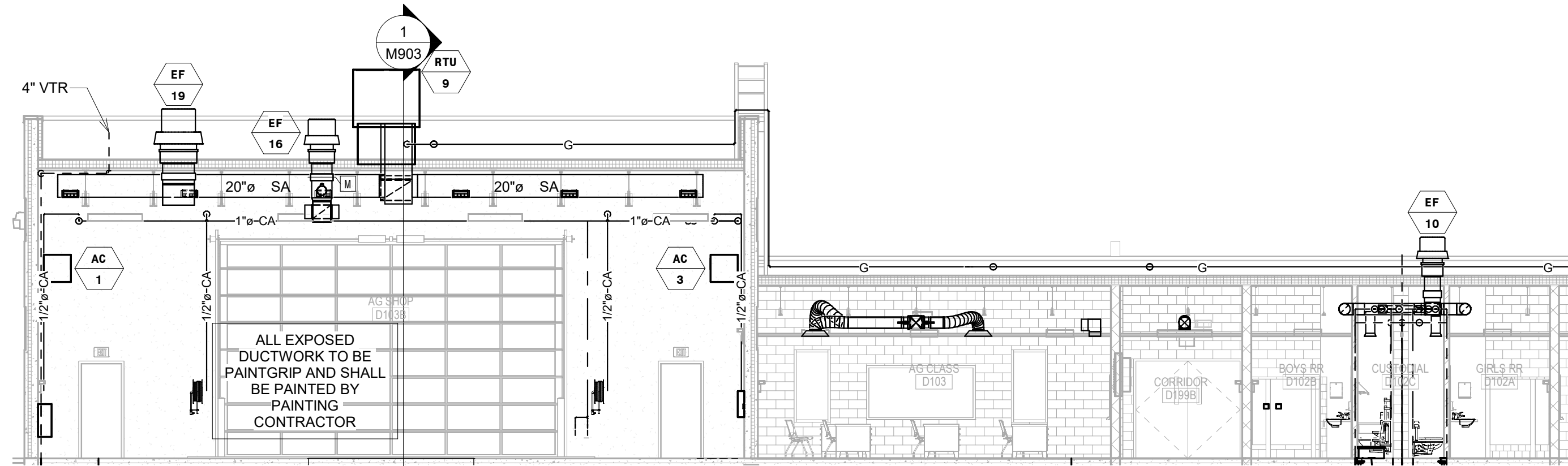
1 AG SHOP D105B SECTION  
M903 SCALE: 1/8" = 1'-0"



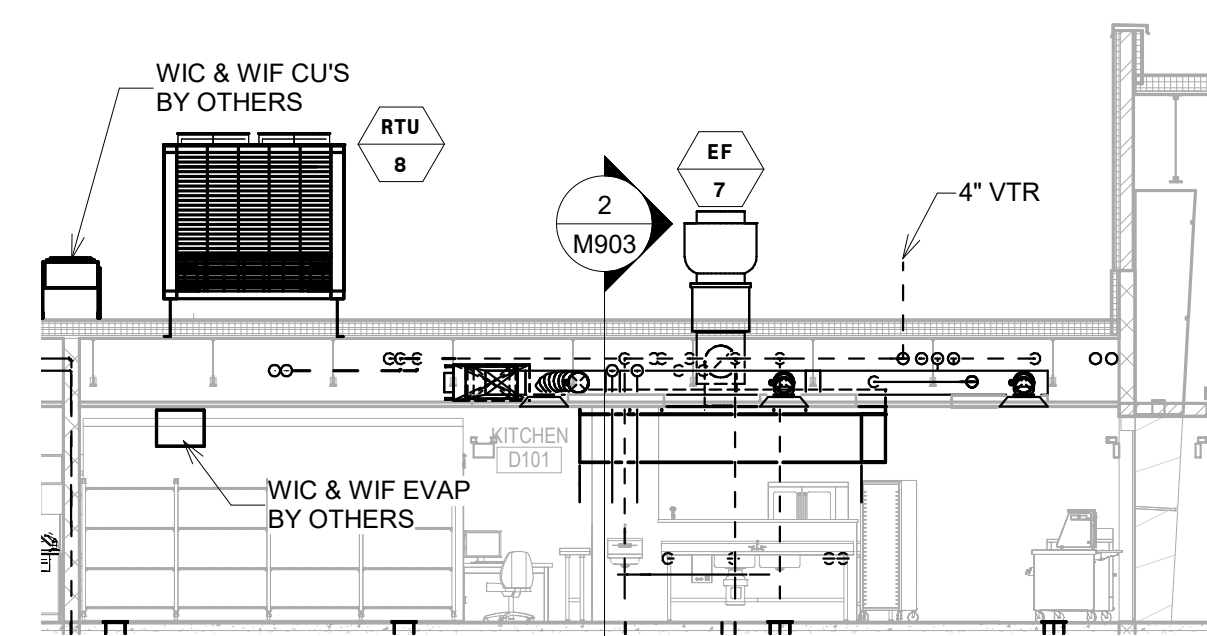
2 E/W KITCHEN SECTION  
M903 SCALE: 1/8" = 1'-0"



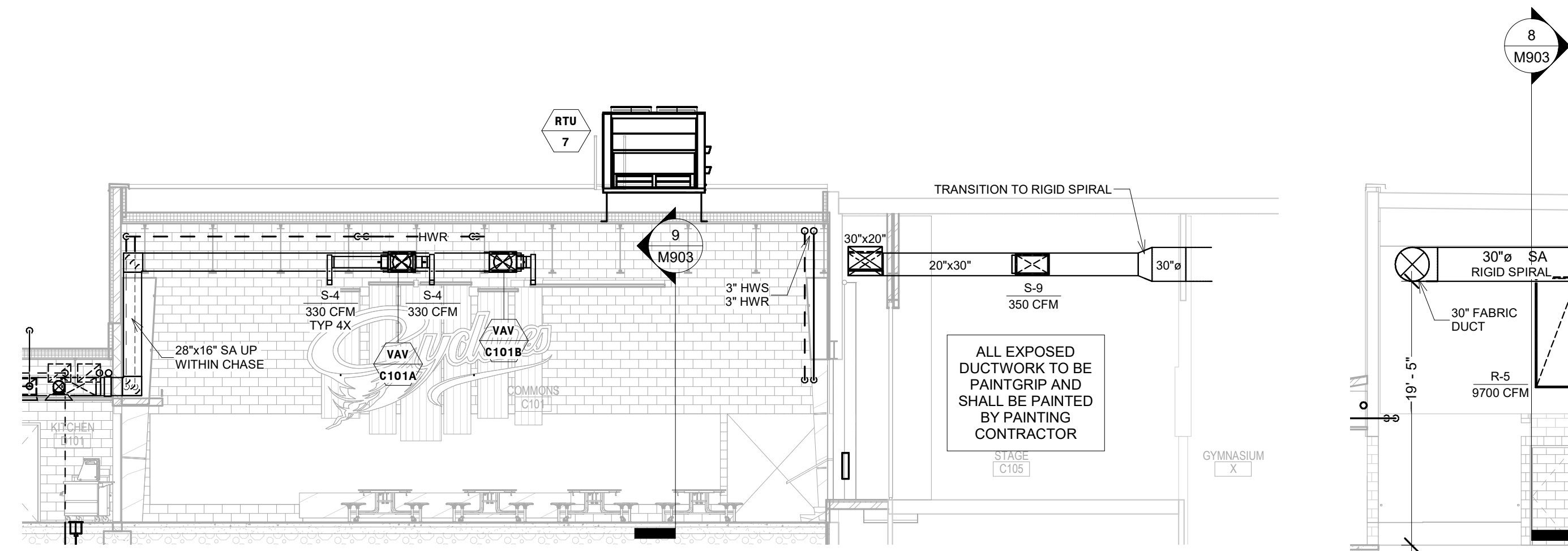
12 B-1 & B-2 VENTING & COMBUSTION AIR SECTION  
M903 SCALE: 1/8" = 1'-0"



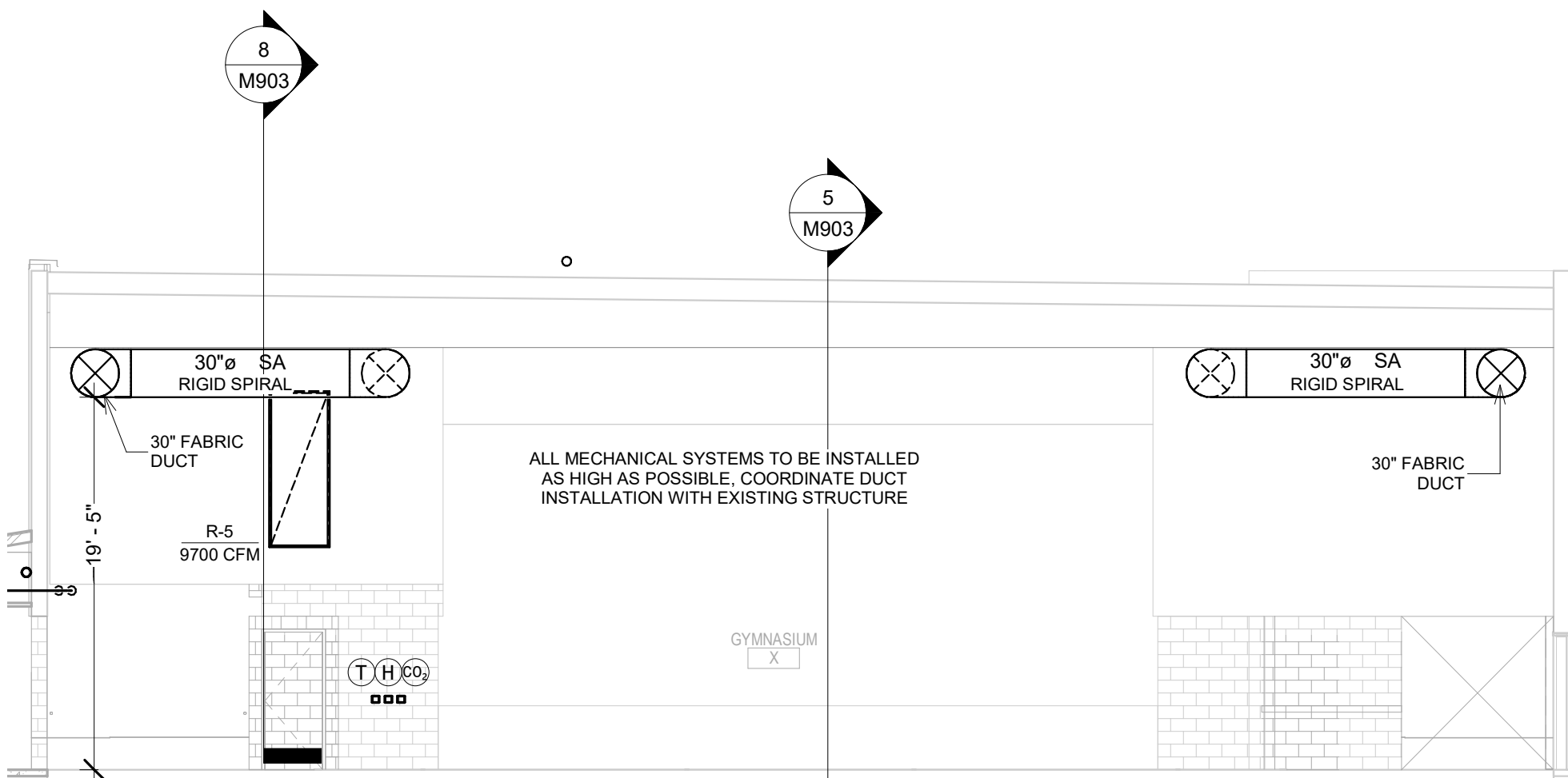
3 AG SHOP D105B & CLASSROOM SECTION  
M903 SCALE: 1/8" = 1'-0"



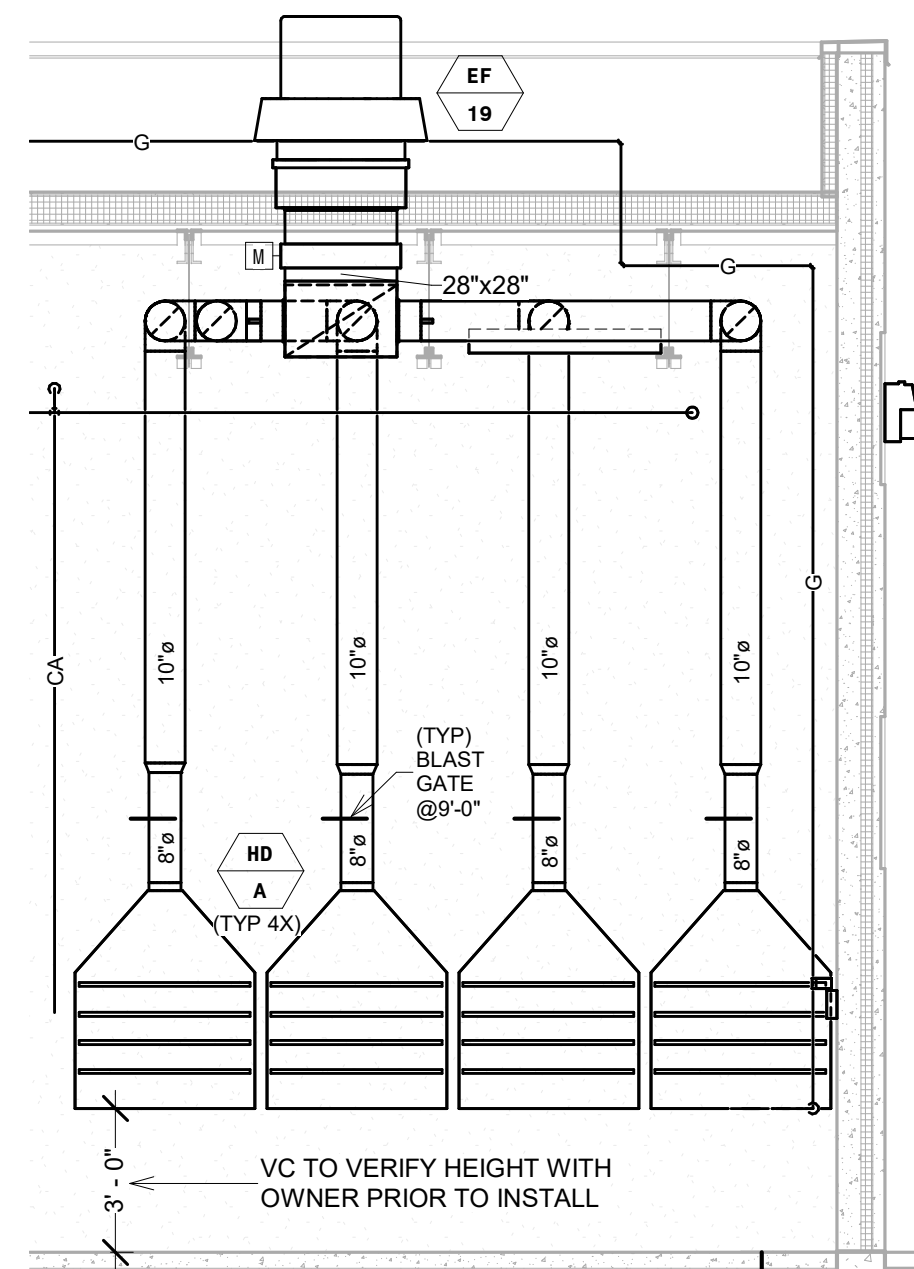
4 N/S KITCHEN SECTION  
M903 SCALE: 1/8" = 1'-0"



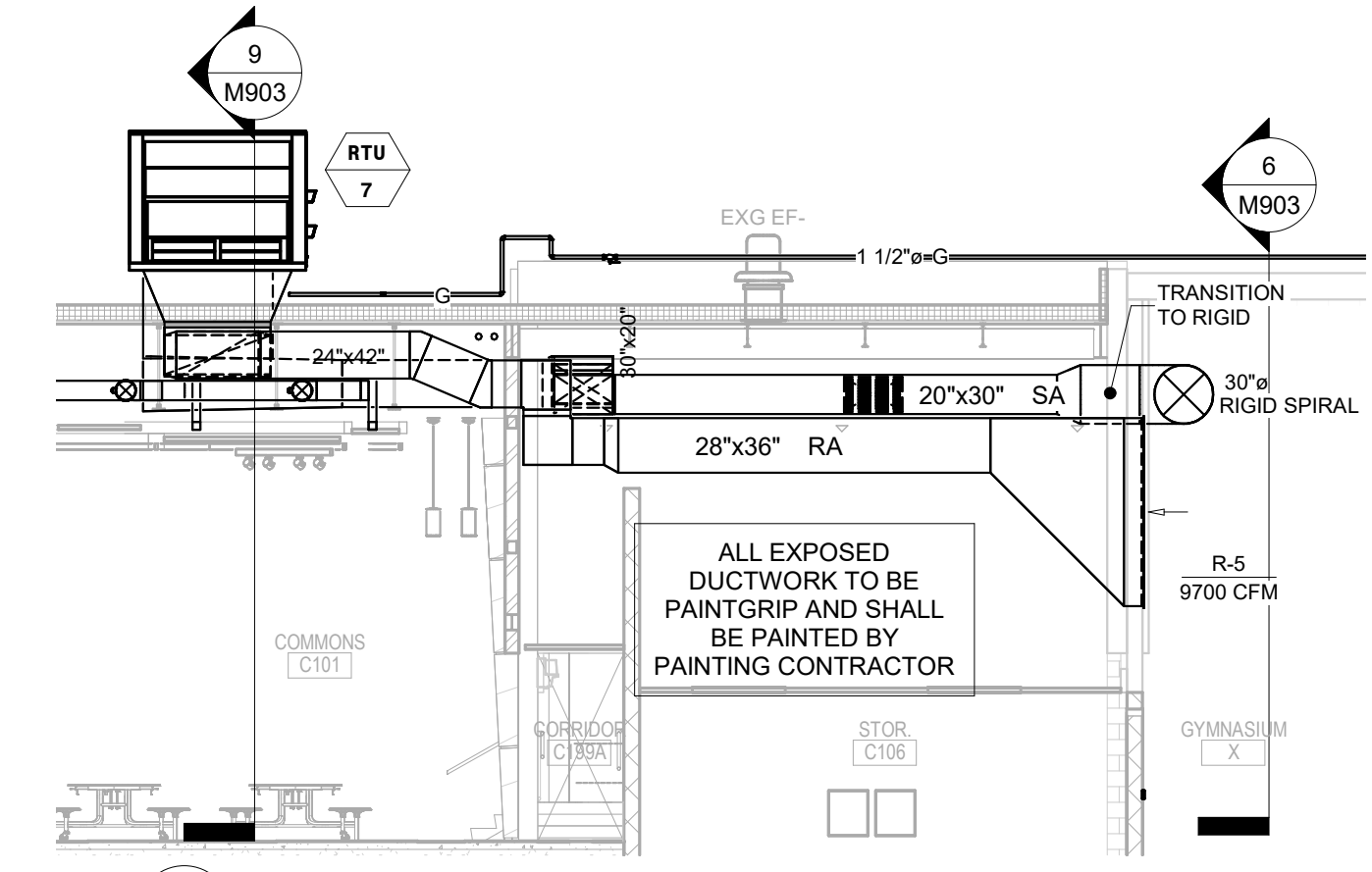
5 COMMONS C101 SECTION  
M903 SCALE: 1/8" = 1'-0"



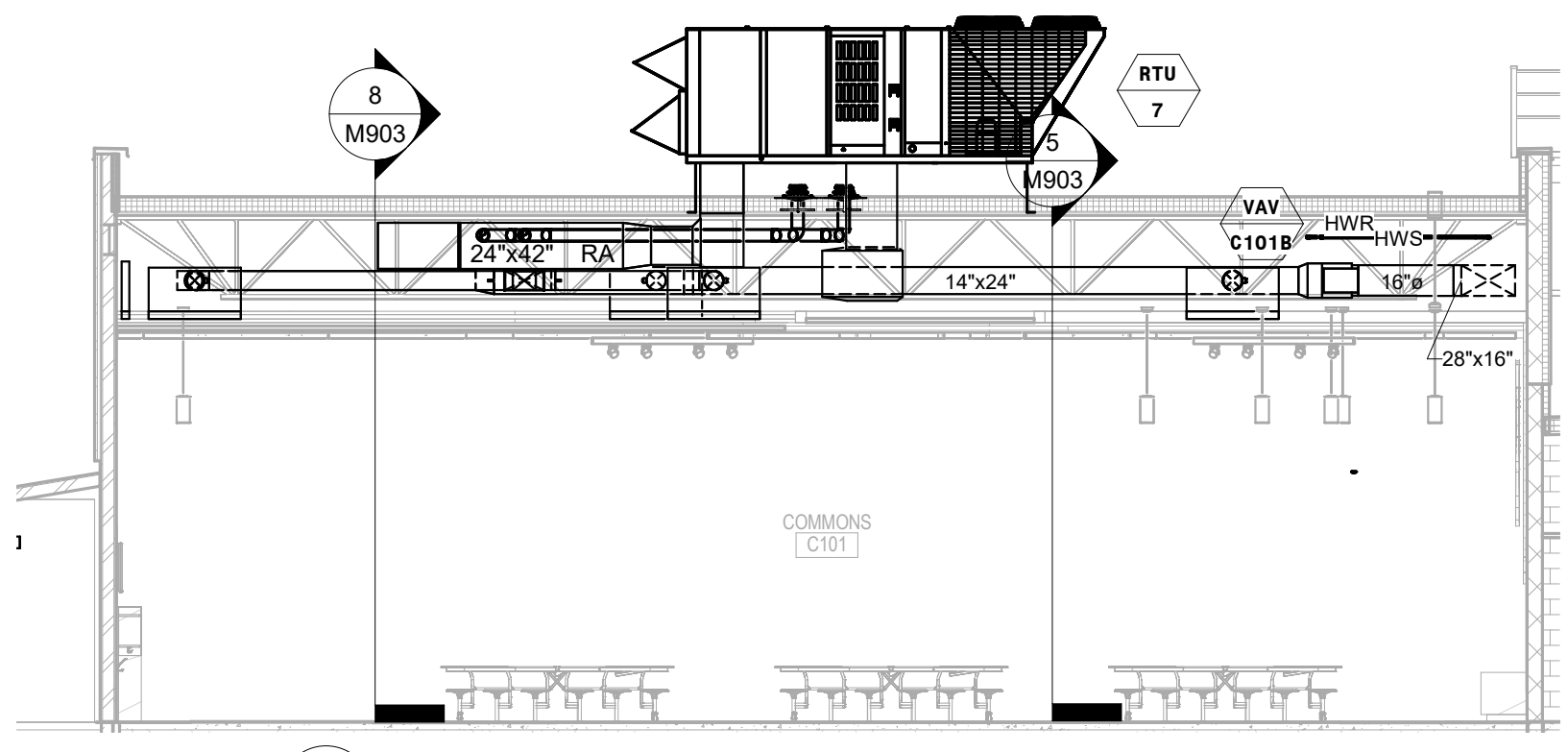
6 GYMNASIUM SECTION  
M903 SCALE: 1/8" = 1'-0"



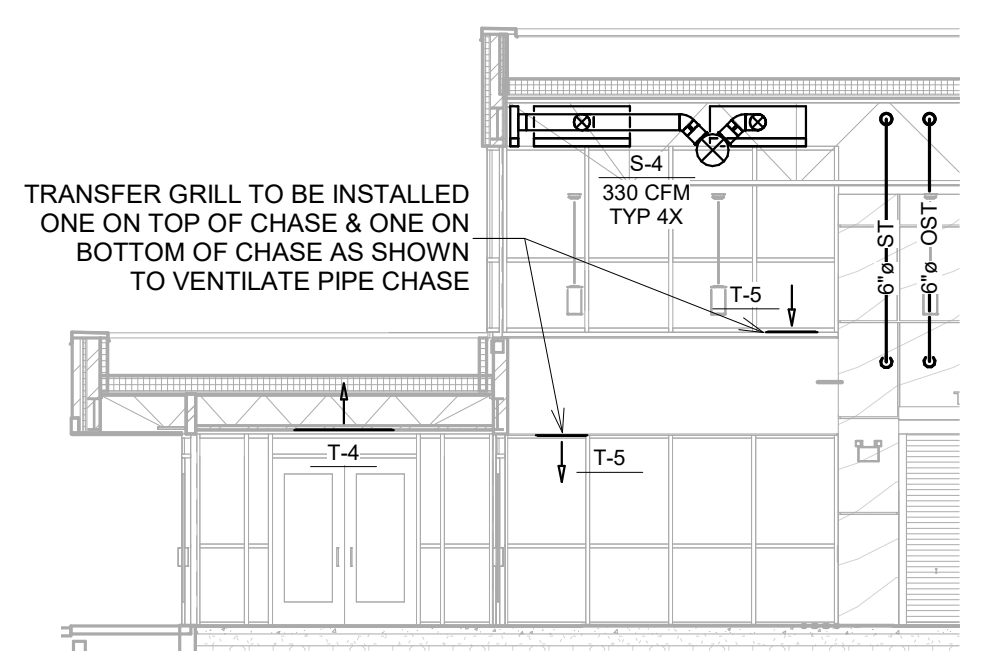
7 AG SHOP - WELDING HOOD  
M903 SCALE: 1/4" = 1'-0"



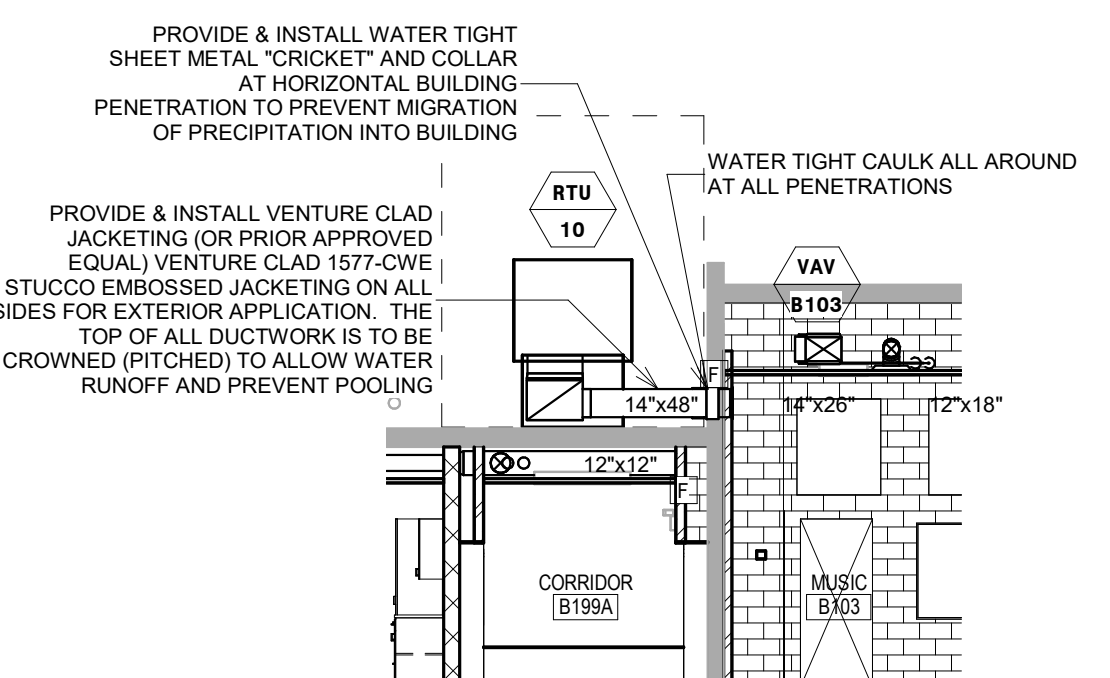
8 RTU-7 DUCT SECTION  
M903 SCALE: 1/8" = 1'-0"



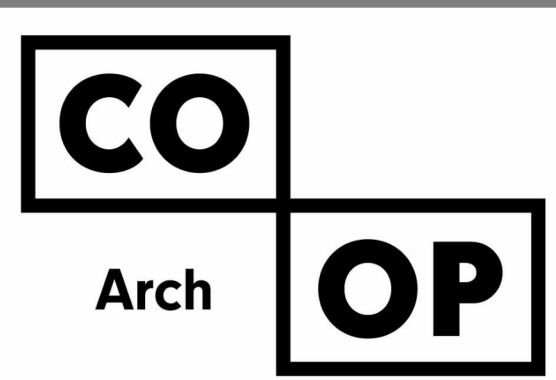
9 RTU-7 COMMONS C101 DUCT SECTION  
M903 SCALE: 1/8" = 1'-0"



10 COMMONS PIPING CHASE ELEVATION  
M903 SCALE: 1/8" = 1'-0"



11 RTU-10 DUCT SECTION  
M903 SCALE: 1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

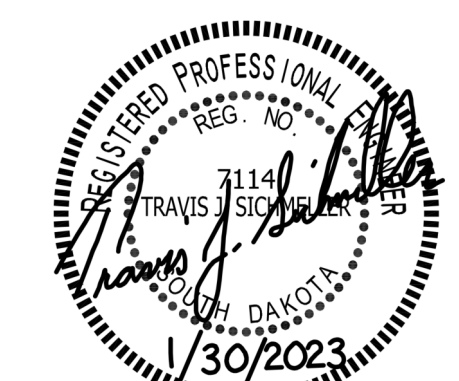
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER  
ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
MECHANICAL SECTIONS

M903

PACKAGED ROOFTOP UNIT SCHEDULE - NATURAL GAS HEAT. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, LOCATION, SERVICE, SUPPLY AIR CFM, OUTSIDE AIR CFM, SUPPLY AIR TEMP, EXHAUST AIR TEMP, MIN. TONS, TOTAL TONS, GAS (BTU/H), LAT (IN), HGT (IN), EER, SEER, ISEER, HSP, COP, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

DUST COLLECTOR SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, CFM, EXHAUST PRESS., HP, RPM, ELECTRICAL, FLA, UNIT WEIGHT (LBS), NOTES.

AIR CLEANER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, SUPPLY AIR CFM, OUTSIDE AIR CFM, F.P.M., F.A.M., CAPACITY (CFM), STAGES, GAS (BTU/H), LAT (IN), HGT (IN), MIN. TONS, TOTAL TONS, GAS (BTU/H), LAT (IN), HGT (IN), EER, SEER, ISEER, HSP, COP, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

NAV TERMINAL SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, SUPPLY AIR CFM, OUTSIDE AIR CFM, F.P.M., F.A.M., CAPACITY (CFM), STAGES, GAS (BTU/H), LAT (IN), HGT (IN), MIN. TONS, TOTAL TONS, GAS (BTU/H), LAT (IN), HGT (IN), EER, SEER, ISEER, HSP, COP, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

FAN COIL SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

FAN COIL SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

AIR COOLED CONDENSING UNIT SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

INTAKE HOOD SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

FAN SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

SLOTTED FINE EXHAUST HOOD SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

HVAC SHEET METAL DUCTWORK CONSTRUCTION & INSULATION SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

GRILLE - REGISTER - DIFFUSER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

GRILLE - REGISTER - DIFFUSER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

DUCTLESS SPLIT SYSTEM INDOOR UNIT SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

DUCTLESS SPLIT SYSTEM OUTDOOR UNIT SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

DUCTLESS SPLIT SYSTEM OUTDOOR UNIT SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

FAN COIL SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

AIR COOLED CONDENSING UNIT SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

INTAKE HOOD SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

SLOTTED FINE EXHAUST HOOD SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

HVAC SHEET METAL DUCTWORK CONSTRUCTION & INSULATION SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, SUPPLY AIR CFM, IN (IN), HGT (IN), SUPPLY AIR TEMP, COOLING CAPACITY (BTU/H), HEATING CAPACITY (BTU/H), REPRESENTATIVE PIPING, ELECTRICAL, FLA, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

DOMESTIC & HYDRONIC PIPING MATERIAL & INSULATION SCHEDULE. Table with columns: SYSTEM, TYPE/MATERIAL, FITTINGS, INSULATION THICKNESS, PIPE SIZES, PIPE SIZES 1/2" AND SMALLER, NOTES.

DOMESTIC & HYDRONIC PIPING MATERIAL & INSULATION SCHEDULE. Table with columns: SYSTEM, TYPE/MATERIAL, FITTINGS, INSULATION THICKNESS, PIPE SIZES, PIPE SIZES 1/2" AND SMALLER, NOTES.

NATURAL GAS WATER HEATER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, STORAGE CAPACITY (GAL.), RECOVERY R (GPH), FUEL, INPUT (MBH), AFUE %, ELECTRICAL, PIPING CONNECTIONS, DIMENSIONS, SHIPPING WEIGHT (LBS), NOTES.

WATER SOFTENER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, RATED SOFTENER CAPACITY (GAL.), CONTINUOUS SERVICE FLOW RATE (GPM), BACKWASH RATE (GPM), RESIN TANK VOLUME (GAL.), TANK DOWNSIDE (GPM), TANK DOWNSIDE (GPM), CONTINUOUS DUMP (PSI), PIPING CONNECTIONS, FLOOR SPACE (SQ. FT.), DETERMINATION (INCHES & R. DIMENSIONS), ELECTRICAL, UNIT WEIGHT (LBS), NOTES.

NATURAL GAS BOILER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, MEDIA, SYSTEM PRESSURE (PSI), RELIEF PRESSURE (PSI), INPUT (MBH), OUTPUT (MBH), AFUE %, RIN VOLUME (GAL.), MIN. TONS, TOTAL TONS, GAS (BTU/H), LAT (IN), HGT (IN), EER, SEER, ISEER, HSP, COP, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

NATURAL GAS BOILER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, MEDIA, SYSTEM PRESSURE (PSI), RELIEF PRESSURE (PSI), INPUT (MBH), OUTPUT (MBH), AFUE %, RIN VOLUME (GAL.), MIN. TONS, TOTAL TONS, GAS (BTU/H), LAT (IN), HGT (IN), EER, SEER, ISEER, HSP, COP, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

PUMP SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, GPM, HEAD (FEET), TYPE, HP (HP), RPM, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

PUMP SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, GPM, HEAD (FEET), TYPE, HP (HP), RPM, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

EXPANSION TANK SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, CALCULATED SYSTEM VOLUME (GAL.), SYSTEM VOLUME WITH SAFETY FACTOR (GAL.), TEMP RANGE (°F), PRESSURE RANGE (PSI), RES. V. ACCEPTANCE VOLUME (GAL.), RES. V. ACTUAL VOLUME (GAL.), SHIPPING WEIGHT (LBS), NOTES.

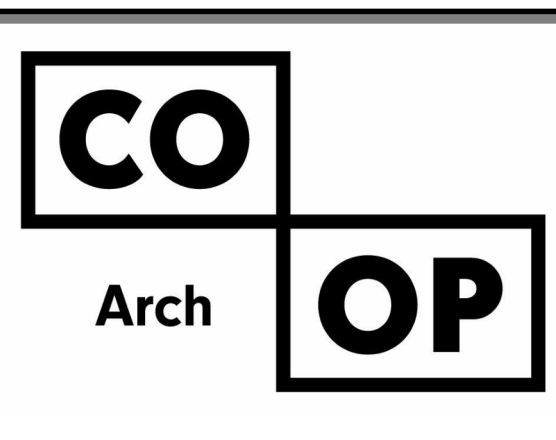
EXPANSION TANK SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, CALCULATED SYSTEM VOLUME (GAL.), SYSTEM VOLUME WITH SAFETY FACTOR (GAL.), TEMP RANGE (°F), PRESSURE RANGE (PSI), RES. V. ACCEPTANCE VOLUME (GAL.), RES. V. ACTUAL VOLUME (GAL.), SHIPPING WEIGHT (LBS), NOTES.

HOT WATER CABINET UNIT HEATER. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, CFM, INCH, GPM, INCH, ENT. LBT, INCH, ELECTRICAL, RIMWOT SIZE, UNIT WEIGHT (LBS), NOTES.

RADIANT PANEL SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, PANEL SIZE (IN), P/W PER PANEL, R/W PER PANEL, GPM PER PANEL, P/W PER PANEL SERIES, PRESSURE DROP PER PANEL (PSI), AVG. WATER TEMP, OVERALL WGT, OVERALL LENGTH, FINISH, NOTES.

FINNED TUBE RADIATION HEATER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, CAPACITY (GPM), LOCATIONS, AVG. WATER TEMP, FLOW RATE (GPM), TUBE SIZE, FINNED TUBE SIZE, ELEMENT, WGT PER PANEL, FINISH, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.

FINNED TUBE RADIATION HEATER SCHEDULE. Table with columns: EQUIP. NO., MANUFACTURER & MODEL, SERVICE, LOCATION, CAPACITY (GPM), LOCATIONS, AVG. WATER TEMP, FLOW RATE (GPM), TUBE SIZE, FINNED TUBE SIZE, ELEMENT, WGT PER PANEL, FINISH, R290, R410A, R454B, R454C, R513, UNIT WEIGHT (LBS), NOTES.



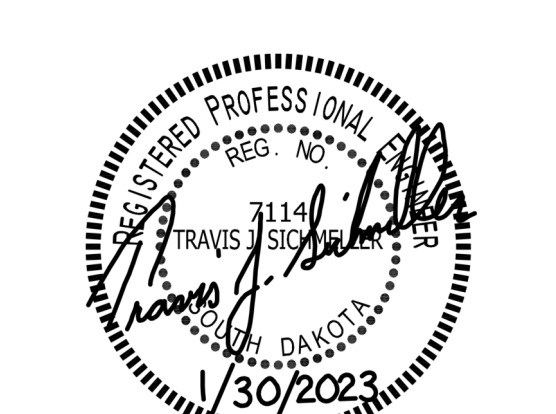
1108 S. Main St. 102 Aberdeen, SD 57401 Phone: 605-725-4852 601 Kansas City St. 7 Rapid City, SD 57701 Phone: 605-716-3652 440 E. 8th St 221 Sioux Falls, SD 57103 Phone: 605-334-9999

co-oparch.com

SICHMELLER ENGINEERING Mechanical & Electrical Engineering

801 Railroad Ave. SE Aberdeen, SD 57401 Phone: 605-225-4344 www.sicng.com

SE PROJECT NO: 220900771



HOT WATER CABINET UNIT HEATER

ISSUE: 1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE: REV. # REV. DSC. REV. DATE

PROJECT: WILLOW LAKE SCHOOL ADDITION WILLOW LAKE SCHOOL DISTRICT WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE: MECHANICAL SCHEDULES

M904

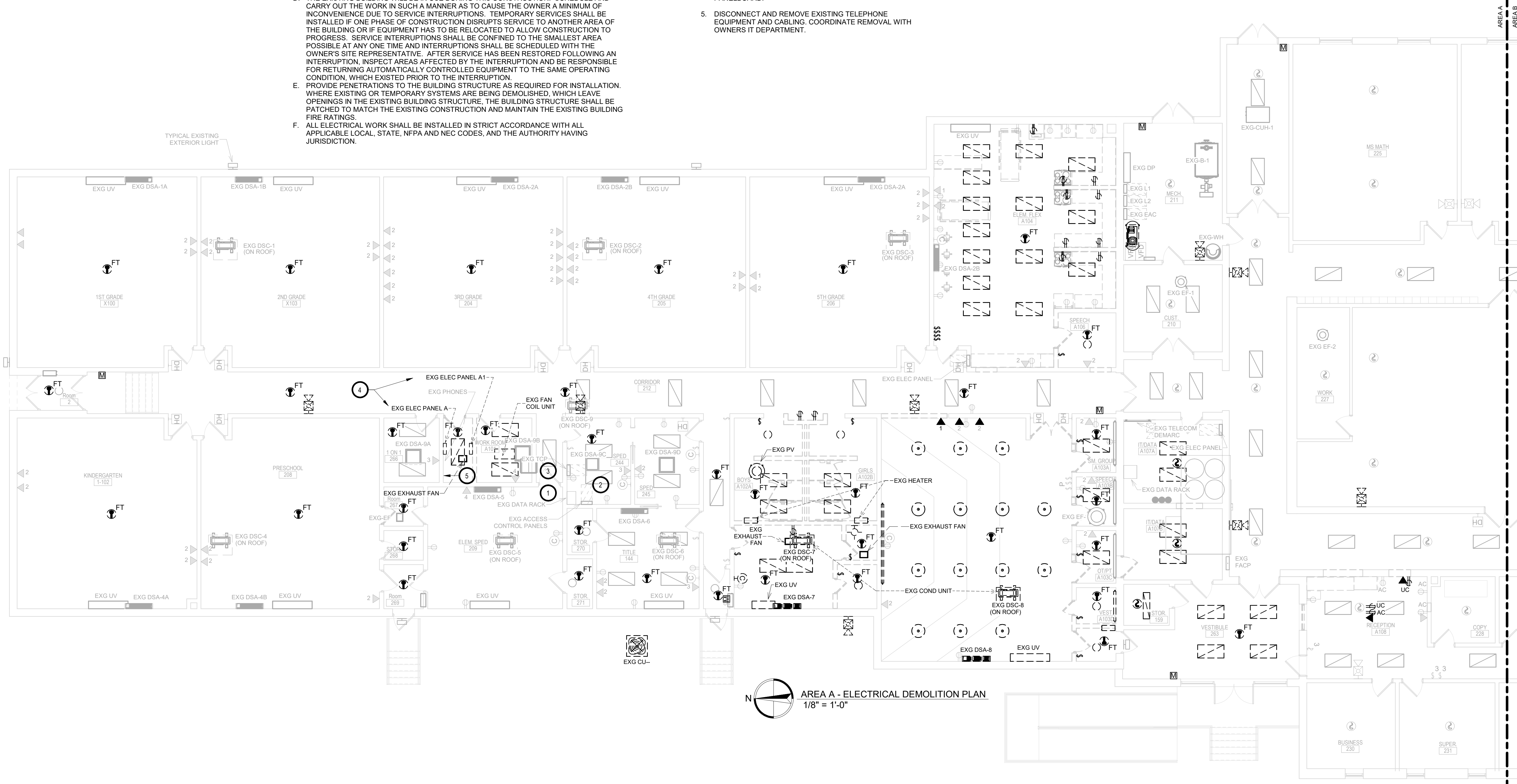
1/30/2023 3:56:50 PM

**ELECTRICAL GENERAL NOTES**

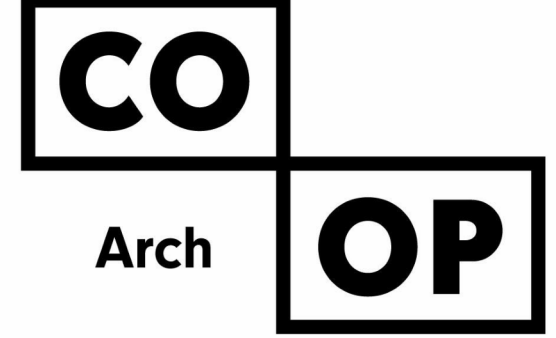
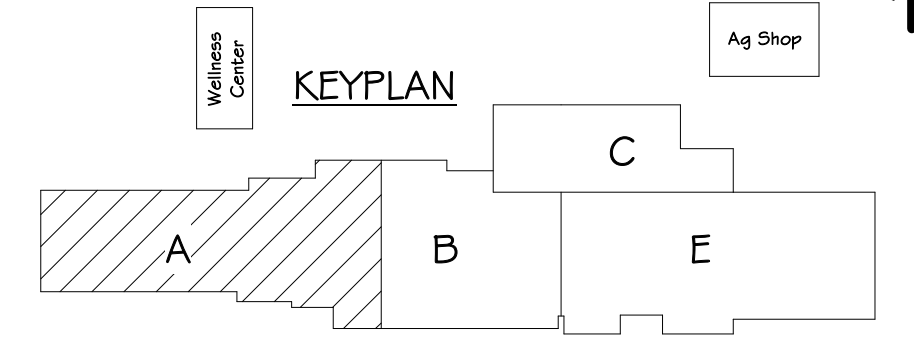
- CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- REMOVE ELECTRICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN, DISCONNECT CIRCUITS AND CONDUITS AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE CIRCUITS ARE STOPPED. DISCONNECT THE POWER AND LIGHTING CIRCUITS IN THE PANELS TO ASSURE THAT THERE IS NO DANGER FROM ELECTRICAL SHOCK HAZARD PRESENT. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS.
- ALL ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NFPA AND NEC CODES, AND THE AUTHORITY HAVING JURISDICTION.

**KEYNOTES**

- DATA RACK: EXISTING DATA RACK RELOCATED BY OWNER. DEMO POWER AND RACEWAYS ASSOCIATED WITH RACK.
- ACCESS CONTROL PANEL(S): PROVIDE RELOCATION OF EXISTING ACCESS CONTROL PANELS. NEW CABLING SHALL BE UTILIZED IN RELOCATION. SEE SPECIAL SYSTEMS SHEET FOR NEW LOCATION IN IT ROOM #A107B. EXTEND POWER CONNECTION TO THIS LOCATION.
- TEMPERATURE CONTROL PANEL (TCP): PROVIDE RELOCATION OF EXISTING 120 VOLT, 20 AMP BRANCH CIRCUIT FOR TEMPERATURE CONTROL PANEL. SEE POWER PLAN FOR NEW LOCATION AND COORDINATE FINAL LOCATION WITH MECHANICAL PRIOR TO ROUGH-IN.
- PROVIDE RELOCATION OF EXISTING PANEL 'A' & 'A1' TO NEW PANEL IN EXISTING PANEL 'A' LOCATION. PROVIDE EXTENSION OF (20) 120 VOLT, 20 AMP BRANCH CIRCUITS AND (1) 60 AMP 2-POLE. COORDINATE FINAL REQUIREMENTS IN FIELD PRIOR TO ORDERING PANELBOARD.
- DISCONNECT AND REMOVE EXISTING TELEPHONE EQUIPMENT AND CABLING. COORDINATE REMOVAL WITH OWNERS IT DEPARTMENT.



AREA A - ELECTRICAL DEMOLITION PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

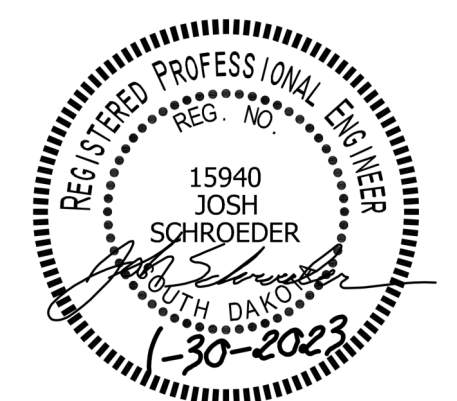
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



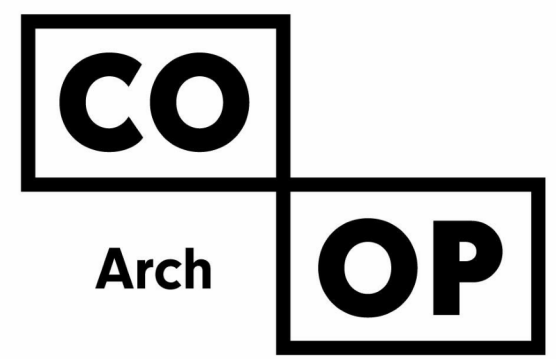
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA A - ELECTRICAL DEMOLITION PLAN

**E200A**



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

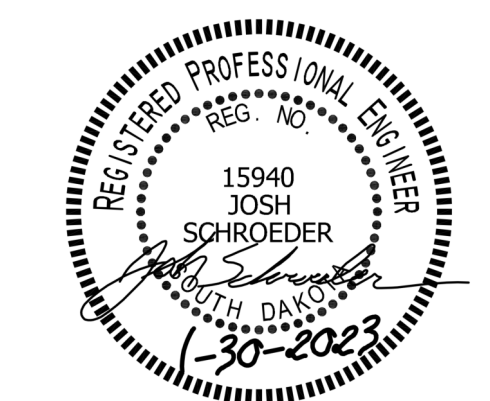
co-oparch.com

## SICHMELLER ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA B - ELECTRICAL  
DEMOLITION PLAN

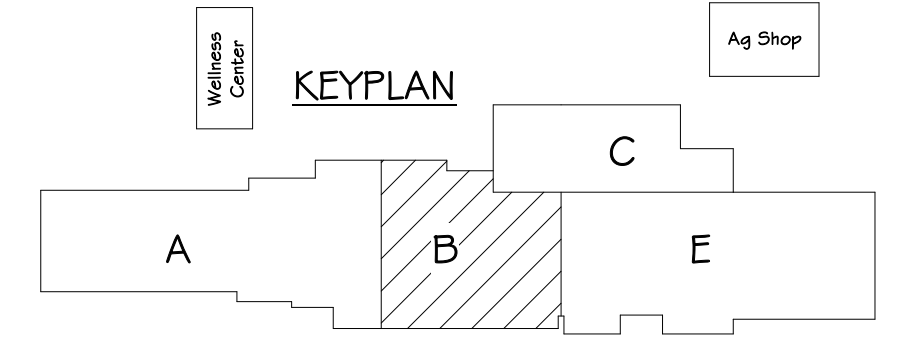
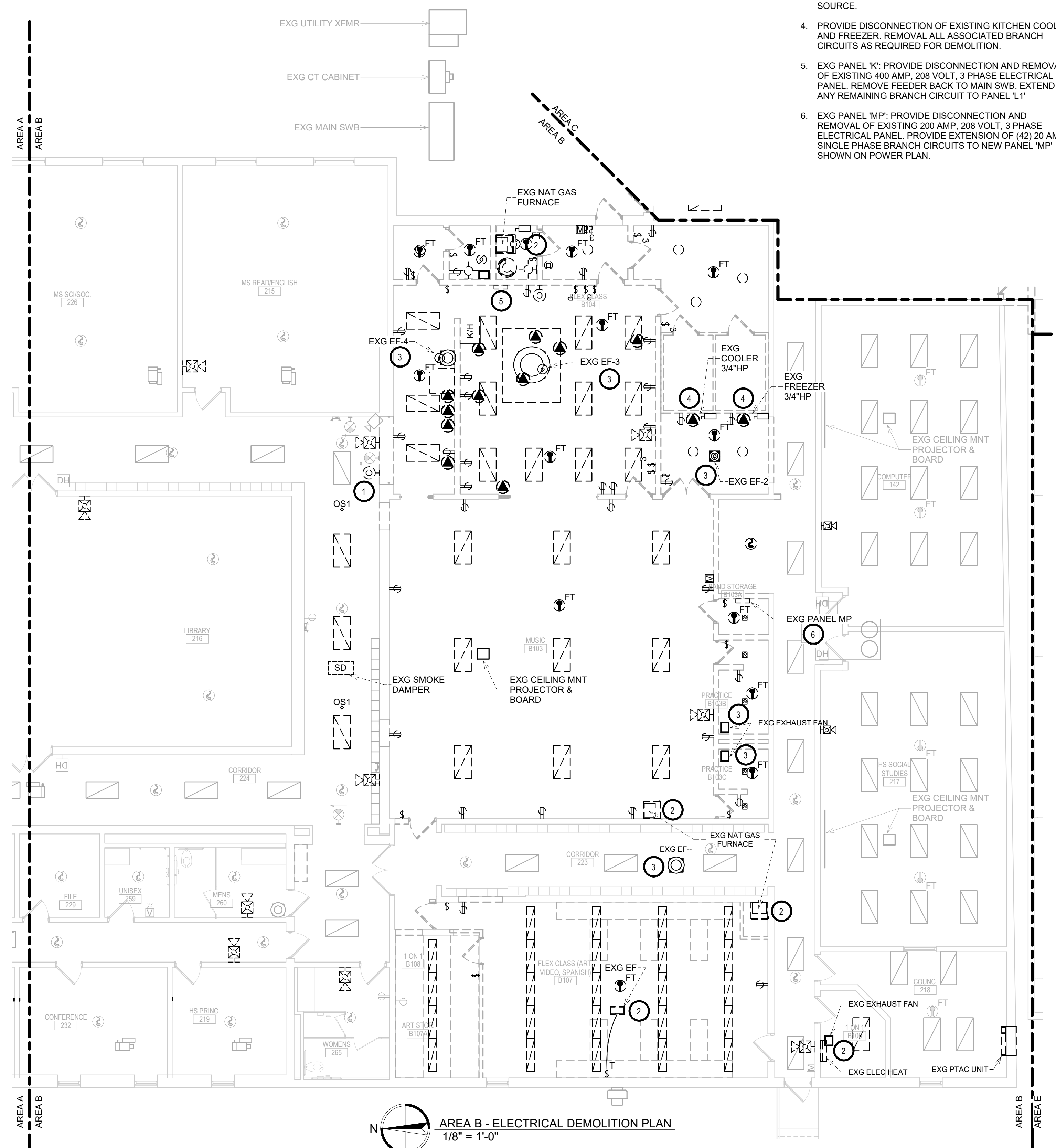
# E201B

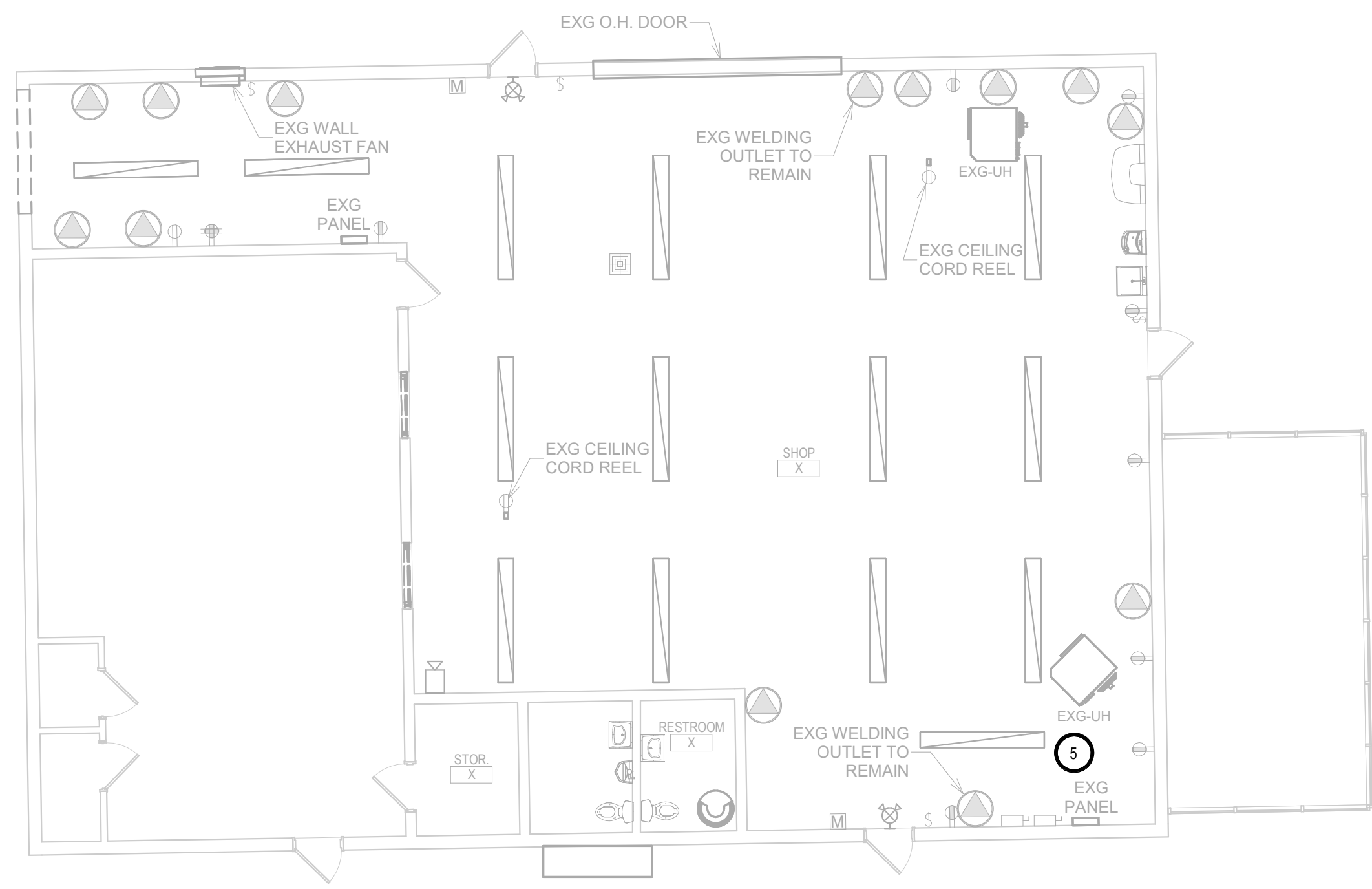
### KEYNOTES

1. PROVIDE RELOCATION OF EXISTING CLOCK TO NEW COMMONS AREA. EXTEND EXISTING CIRCUITING AS REQUIRED, SEE SYSTEMS PLAN FOR ADDITIONAL INFORMATION.
2. PROVIDE DISCONNECTION OF EXISTING 120 VOLT BRANCH CIRCUIT TO FURNACE. REMOVE ALL BRANCH CIRCUIT WIRING BACK TO SOURCE.
3. PROVIDE DISCONNECTION OF EXISTING EXHAUST FAN AND REMOVE ALL BRANCH CIRCUIT WIRING BACK TO SOURCE.
4. PROVIDE DISCONNECTION OF EXISTING KITCHEN COOLER AND FREEZER. REMOVE ALL ASSOCIATED BRANCH CIRCUITS AS REQUIRED FOR DEMOLITION.
5. EXG PANEL 'K': PROVIDE DISCONNECTION AND REMOVAL OF EXISTING 400 AMP, 208 VOLT, 3 PHASE ELECTRICAL PANEL. REMOVE FEEDER BACK TO MAIN SWB. EXTEND ANY REMAINING BRANCH CIRCUIT TO PANEL 'L'
6. EXG PANEL 'MP': PROVIDE DISCONNECTION AND REMOVAL OF EXISTING 200 AMP, 208 VOLT, 3 PHASE ELECTRICAL PANEL. PROVIDE EXTENSION OF (42) 20 AMP, SINGLE PHASE BRANCH CIRCUITS TO NEW PANEL 'MP' SHOWN ON POWER PLAN.

### ELECTRICAL GENERAL NOTES

- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE ELECTRICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN. DISCONNECT CIRCUITS AND CONDUITS AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE CIRCUITS ARE STOPPED. DISCONNECT THE POWER AND LIGHTING CIRCUITS IN THE PANELS TO ASSURE THAT THERE IS NO DANGER FROM ELECTRICAL SHOCK HAZARD PRESENT. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS.
- F. ALL ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NFPA AND NEC CODES, AND THE AUTHORITY HAVING JURISDICTION.





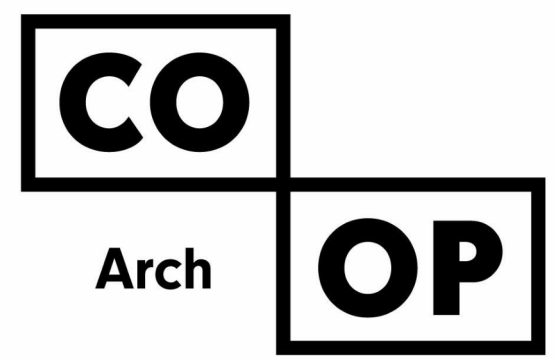
N  
AREA D - ELECTRICAL DEMOLITION PLAN  
1/8" = 1'-0"

KEYNOTES

1. ELECTRICAL CONTRACTOR SHALL SURVEY EXISTING ELECTRICAL RACEWAYS FOR UTILIZATION. IF DEEMED TO REMAIN BY OWNER PROVIDE RELOCATION OF CONDUITS AROUND CONSTRUCTION AREAS AND PROTECTION OF CIRCUITS DURING CONSTRUCTION PHASES.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE REMOVAL AND REINSTALLATION OF SPEAKER AS REQUIRED FOR CONSTRUCTION IN AREA, PROVIDE PROTECTION OF CIRCUIT AND DEVICE DURING CONSTRUCTION PHASES.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE REMOVAL OF 200 AMP DISCONNECT AND UNDERGROUND FEEDER BACK TO MAIN DISTRIBUTION PANEL. VERIFY EXISTING BRANCH CIRCUITS ARE BEING DEMOED UNDER CURRENT CONSTRUCTION. PROVIDE EXTENSION OF ANY SMALL BRANCH CIRCUITS TO PANEL IN NEW ADDITION.
4. PROVIDE REMOVAL OF EXISTING FACP FOR INSTALLATION OF NEW FACP WITH VOICE NOTIFICATION. VERIFY FINAL REQUIREMENTS WITH SIEMENS FIRE ALARM SUPPLIER AND SYSTEMS PLANS.
5. EXISTING AG SHOP ELECTRICAL TO REMAIN IN WORKING ORDER FOR SCHOOL USE DURING CONSTRUCTION. PROVIDE PROTECTION OF EXISTING FEEDER FROM MAIN SWB. SEE SITE PLAN EM101 FOR ADDITIONAL INFORMATION.

ELECTRICAL GENERAL NOTES

- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE ELECTRICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN. DISCONNECT CIRCUITS AND CONDUITS AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE CIRCUITS ARE STOPPED. DISCONNECT THE POWER AND LIGHTING CIRCUITS IN THE PANELS TO ASSURE THAT THERE IS NO DANGER FROM ELECTRICAL SHOCK HAZARD PRESENT. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS.
- F. ALL ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NFPA AND NEC CODES, AND THE AUTHORITY HAVING JURISDICTION.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771

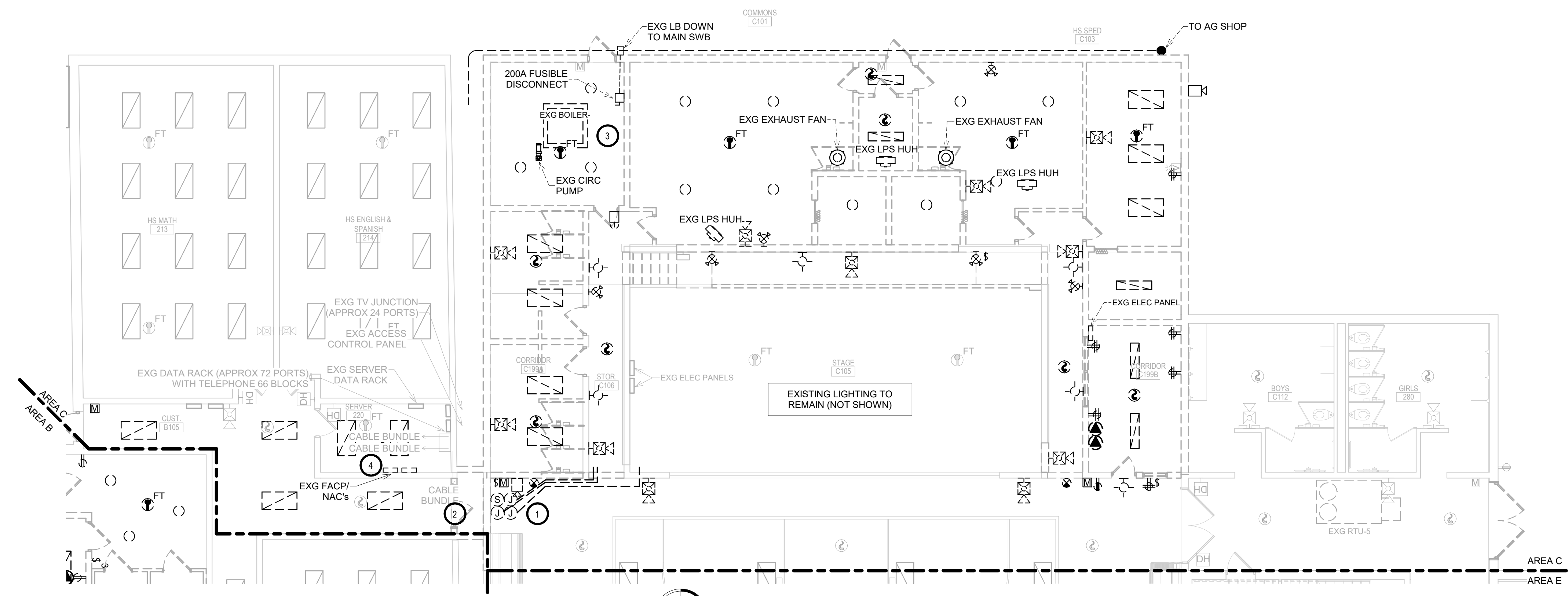


ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

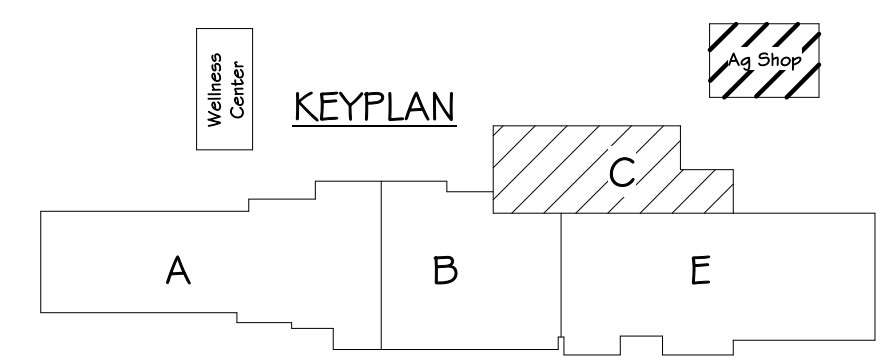
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

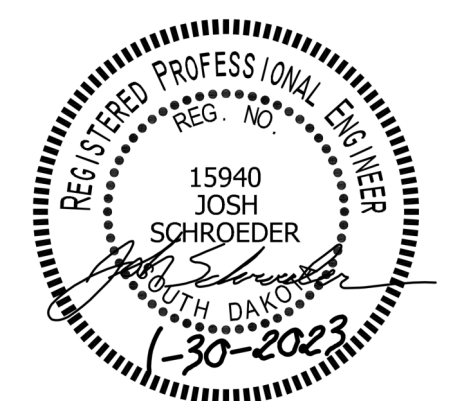
SHEET TITLE:  
AREA C & D - ELECTRICAL  
DEMOLITION PLAN



N  
AREA C - ELECTRICAL DEMOLITION PLAN  
1/8" = 1'-0"



E202CD



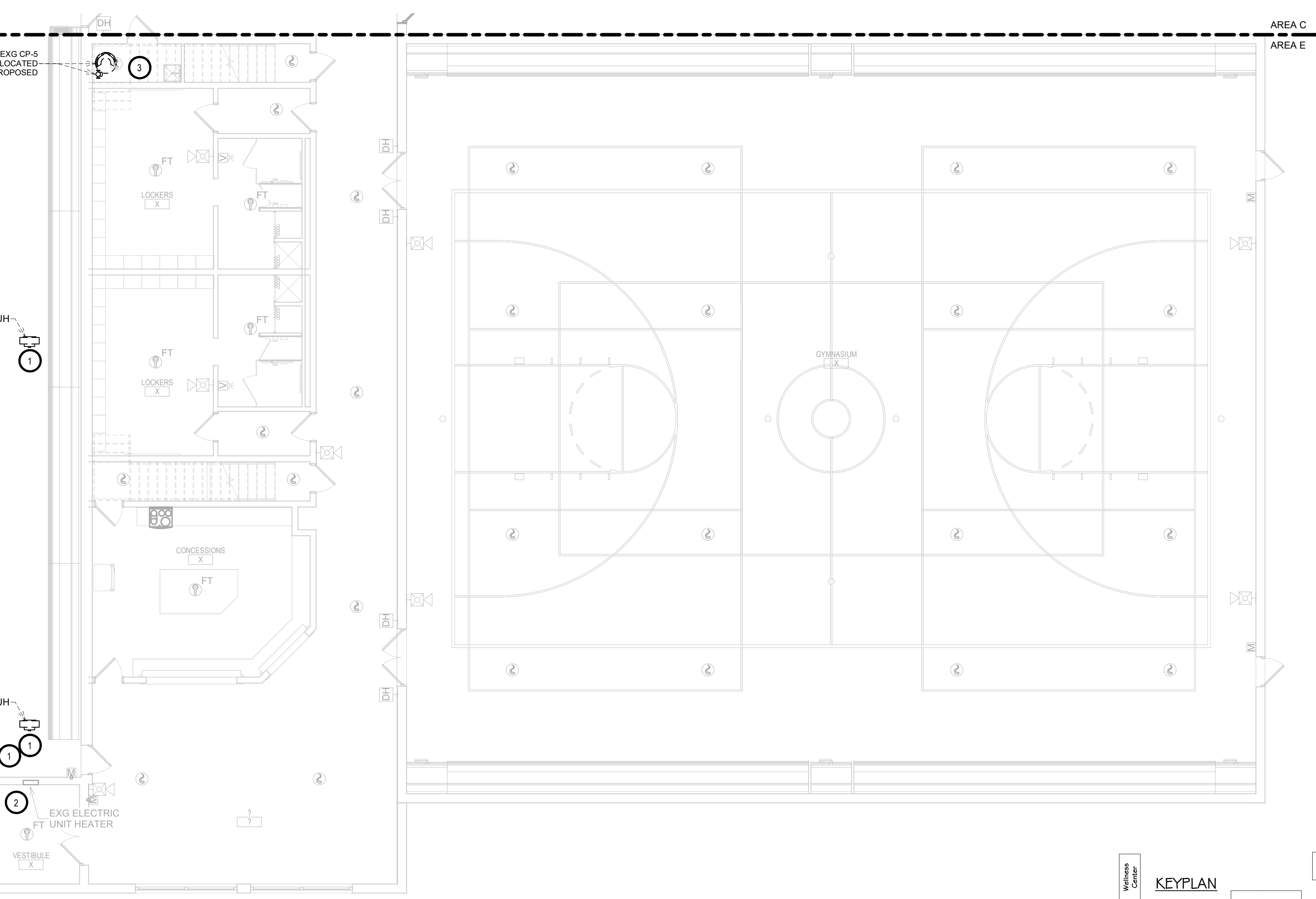
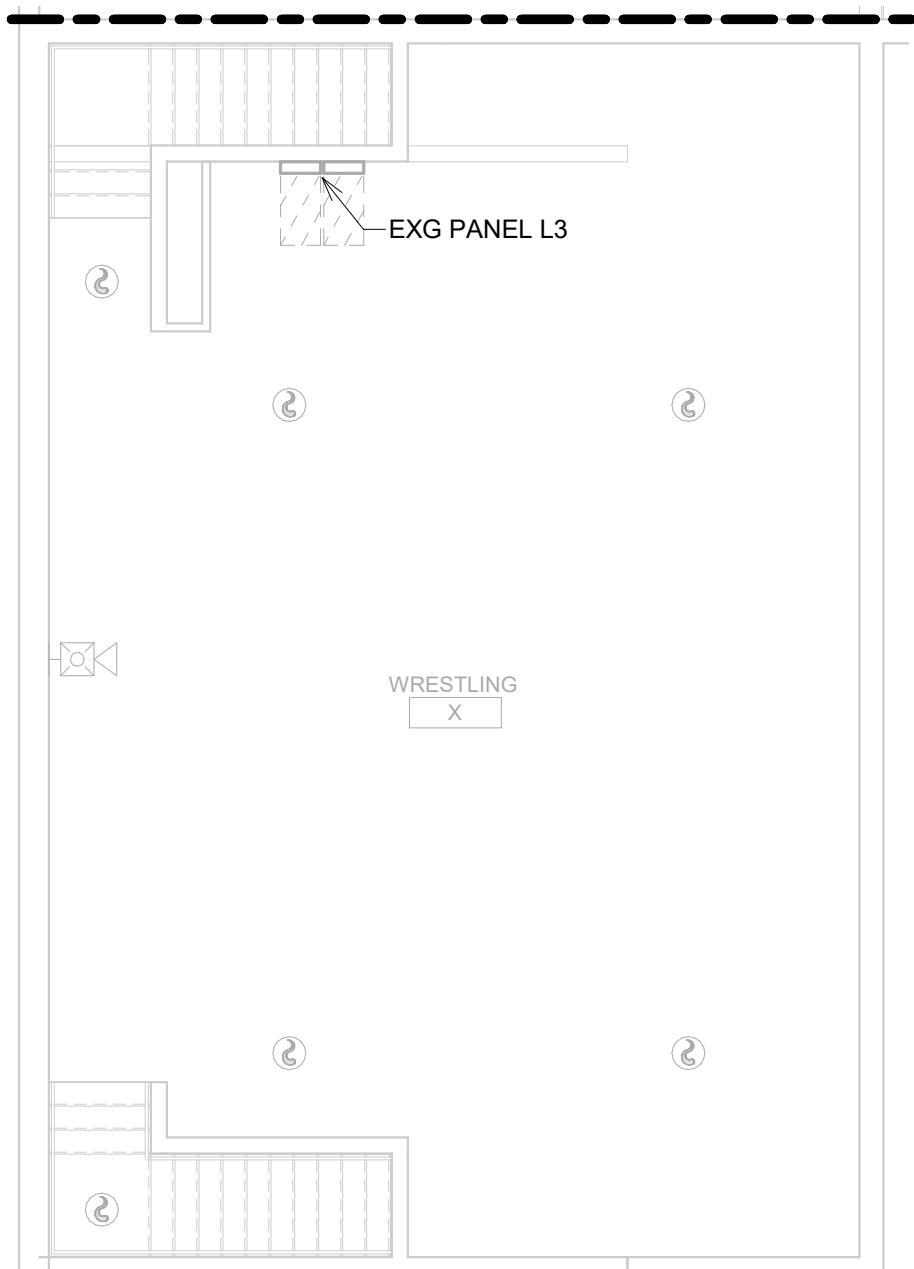
**KEYNOTES**

1. PROVIDE DISCONNECTION OF EXISTING HEATER AND REMOVE EXISTING BRANCH CIRCUIT BACK TO SOURCE.
2. ELECTRIC HEATER TO REMAIN.
3. PROVIDE DISCONNECTION OF WATER HEATER AND PUMP FOR RELOCATION. VERIFY FINAL REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO DISCONNECTION. UPDATE PANEL 'L3' SCHEDULE ACCORDINGLY WITH NEW PRINTED SCHEDULE.

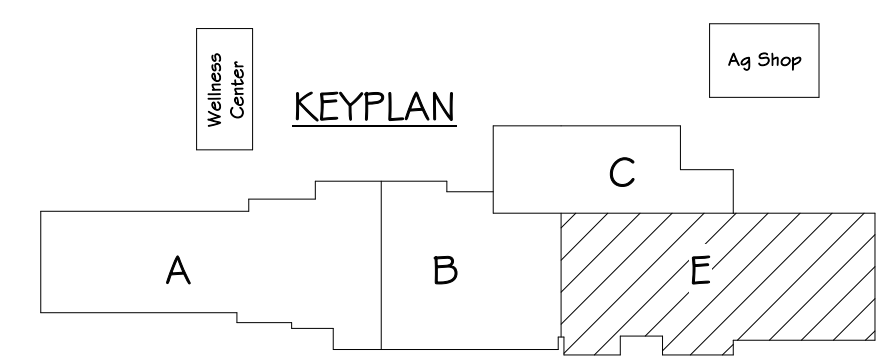
**ELECTRICAL GENERAL NOTES**

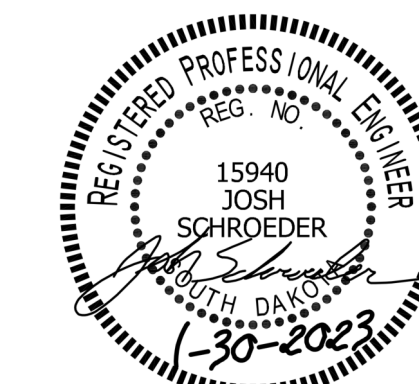
- A. CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE A/E IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY DEMOLITION.
- B. REMOVE ELECTRICAL EQUIPMENT IN THE AREAS SHOWN ON THE PLAN, DISCONNECT CIRCUITS AND CONDUITS AND REMOVE TO A POINT OUT OF THE WAY OF THE GENERAL DEMOLITION. MARK ON THE PLAN TO CLEARLY SHOW WHERE THESE CIRCUITS ARE STOPPED. DISCONNECT THE POWER AND LIGHTING CIRCUITS IN THE PANELS TO ASSURE THAT THERE IS NO DANGER FROM ELECTRICAL SHOCK HAZARD PRESENT. DEMOLITION WORK SHALL BE COORDINATED WITH THE OWNER. SHOULD QUESTIONS ARISE REGARDING THE REMOVAL OF EQUIPMENT, CONFER WITH THE OWNER BEFORE SUCH EQUIPMENT IS DEMOLISHED. MATERIALS REMOVED BY DEMOLITION SHALL REMAIN THE PROPERTY OF THE OWNER UNLESS OTHERWISE SPECIFICALLY NOTED. MATERIAL THE OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED AND DISPOSED OF PROPERLY BY THE CONTRACTOR.
- C. EQUIPMENT SHOWN ON DRAWINGS AS EXISTING IS BASED ON EXISTING PLANS AND LIMITED FIELD INVESTIGATION. THE FIELD SURVEY WAS CONDUCTED TO VERIFY, AS MUCH AS POSSIBLE, THE ACCURACY OF THE LOCATIONS SHOWN. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THE "EXISTING CONDITIONS" AS SHOWN ON THE DRAWINGS AS THE DEMOLITION WORK PROGRESSES. PERFORM MODIFICATIONS AND ADDITIONS AS NECESSARY TO CORRECT FOR THESE HIDDEN CONDITIONS AND ALLOW FOR THE COMPLETION OF THE NEW WORK.
- D. THE EXISTING BUILDING WILL BE IN USE DURING THIS CONSTRUCTION. SCHEDULE AND CARRY OUT THE WORK IN SUCH A MANNER AS TO CAUSE THE OWNER A MINIMUM OF INCONVENIENCE DUE TO SERVICE INTERRUPTIONS. TEMPORARY SERVICES SHALL BE INSTALLED IF ONE PHASE OF CONSTRUCTION DISRUPTS SERVICE TO ANOTHER AREA OF THE BUILDING OR IF EQUIPMENT HAS TO BE RELOCATED TO ALLOW CONSTRUCTION TO PROGRESS. SERVICE INTERRUPTIONS SHALL BE CONFINED TO THE SMALLEST AREA POSSIBLE AT ANY ONE TIME AND INTERRUPTIONS SHALL BE SCHEDULED WITH THE OWNER'S SITE REPRESENTATIVE. AFTER SERVICE HAS BEEN RESTORED FOLLOWING AN INTERRUPTION, INSPECT AREAS AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.
- E. PROVIDE PENETRATIONS TO THE BUILDING STRUCTURE AS REQUIRED FOR INSTALLATION. WHERE EXISTING OR TEMPORARY SYSTEMS ARE BEING DEMOLISHED, WHICH LEAVE OPENINGS IN THE EXISTING BUILDING STRUCTURE, THE BUILDING STRUCTURE SHALL BE PATCHED TO MATCH THE EXISTING CONSTRUCTION AND MAINTAIN THE EXISTING BUILDING FIRE RATINGS.
- F. ALL ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NFPA AND NEC CODES, AND THE AUTHORITY HAVING JURISDICTION.

**AREA E - MEZZANINE ELECTRICAL DEMOLITION PLAN**  
1/8" = 1'-0"

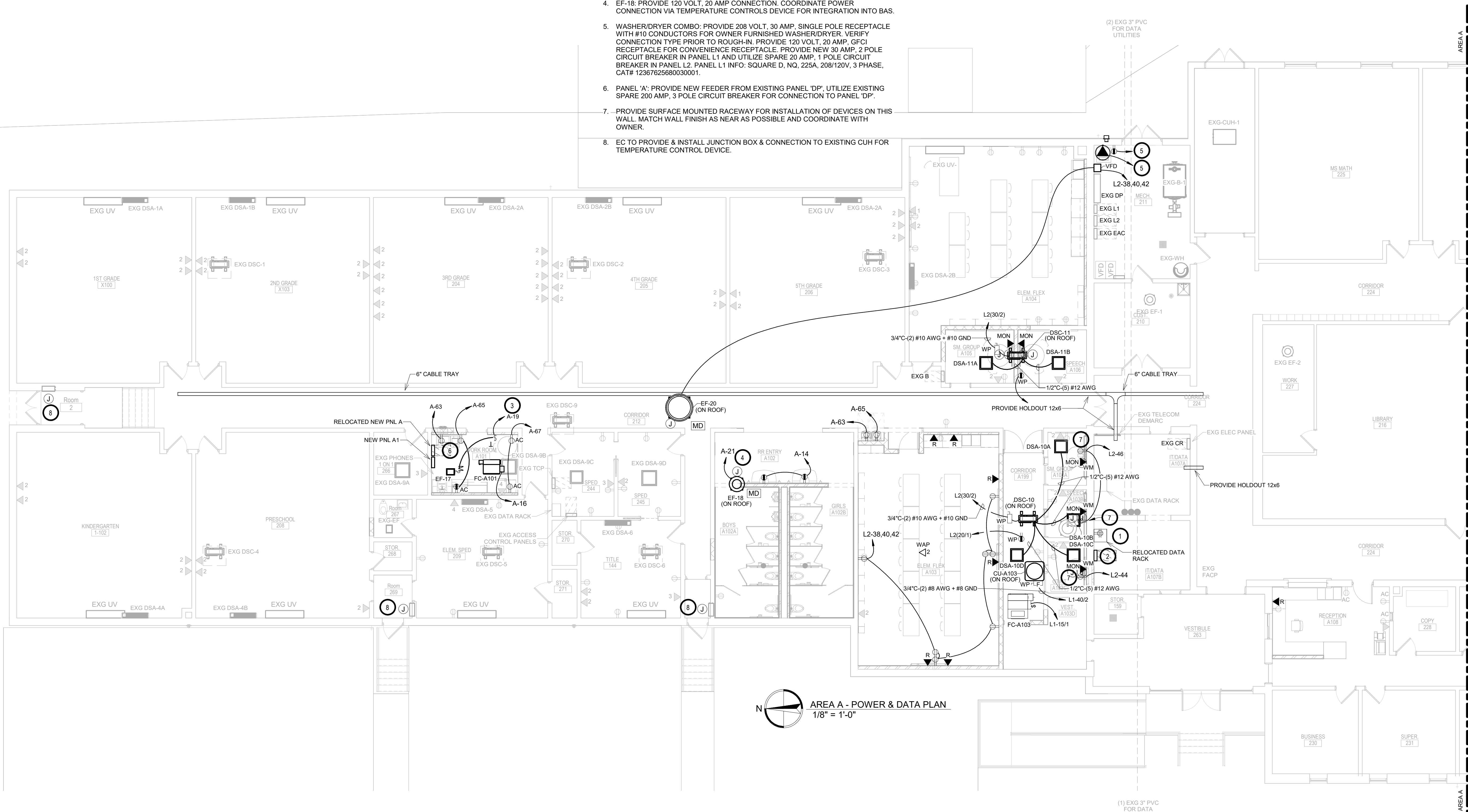


**AREA E - ELECTRICAL DEMOLITION PLAN**  
1/8" = 1'-0"

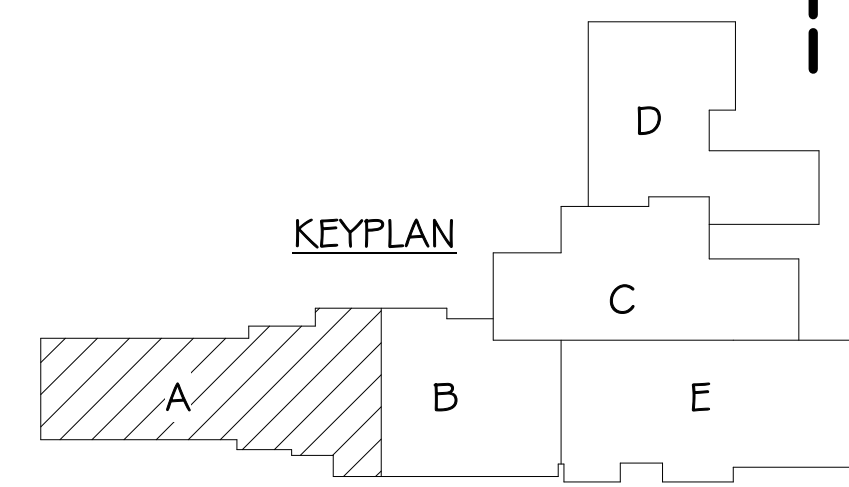




- KEYNOTES**
1. RELOCATED EXISTING DATA RACK FROM ELEMENTARY SPED ROOM. PROVIDE NEW DATA CABLING TO EXISTING DATA PORTS. PROVIDE DEDICATED 120V, 20 AMP RECEPTACLE FOR POWER CONNECTION FROM PANEL L1.
  2. ACCESS CONTROL - PROVIDE RELOCATION OF EXISTING ACCESS CONTROL PANELS TO NEW LOCATION SHOWN. PROVIDE NEW ACCESS CONTROL CABLING TO DOOR LOCATIONS. PROVIDE DEDICATED 120V, 20 AMP POWER CONNECTION FROM PANEL L1.
  3. EF-17: PROVIDE ELECTRONIC TIME SWITCH EQUAL TO INTERMATIC MODEL E1200 SERIES 5-30 MINUTE COUNTDOWN TIMER. VERIFY AND MATCH FINISH COLOR WITH DEVICES IN ROOM. PROVIDE CONNECTION.
  4. EF-18: PROVIDE 120 VOLT, 20 AMP CONNECTION. COORDINATE POWER CONNECTION VIA TEMPERATURE CONTROLS DEVICE FOR INTEGRATION INTO BAS.
  5. WASHER/DRYER COMBO: PROVIDE 208 VOLT, 30 AMP, SINGLE POLE RECEPTACLE WITH #10 CONDUCTORS FOR OWNER FURNISHED WASHER/DRYER. VERIFY CONNECTION TYPE PRIOR TO ROUGH-IN. PROVIDE 120 VOLT, 20 AMP, GFCI RECEPTACLE FOR CONVENIENCE RECEPTACLE. PROVIDE NEW 30 AMP, 2 POLE CIRCUIT BREAKER IN PANEL L1 AND UTILIZE SPARE 20 AMP, 1 POLE CIRCUIT BREAKER IN PANEL L2. PANEL L1 INFO: SQUARE D, NQ, 225A, 208/120V, 3 PHASE, CAT# 12367625680030001.
  6. PANEL 'A': PROVIDE NEW FEEDER FROM EXISTING PANEL 'DP', UTILIZE EXISTING SPARE 200 AMP, 3 POLE CIRCUIT BREAKER FOR CONNECTION TO PANEL 'DP'.
  7. PROVIDE SURFACE MOUNTED RACEWAY FOR INSTALLATION OF DEVICES ON THIS WALL. MATCH WALL FINISH AS NEAR AS POSSIBLE AND COORDINATE WITH OWNER.
  8. EC TO PROVIDE & INSTALL JUNCTION BOX & CONNECTION TO EXISTING CUH FOR TEMPERATURE CONTROL DEVICE.



**AREA A - POWER & DATA PLAN**  
1/8" = 1'-0"





1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

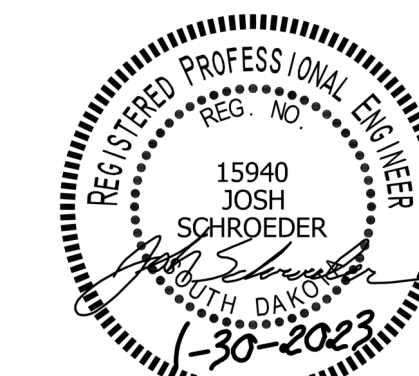
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHELLER  
ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



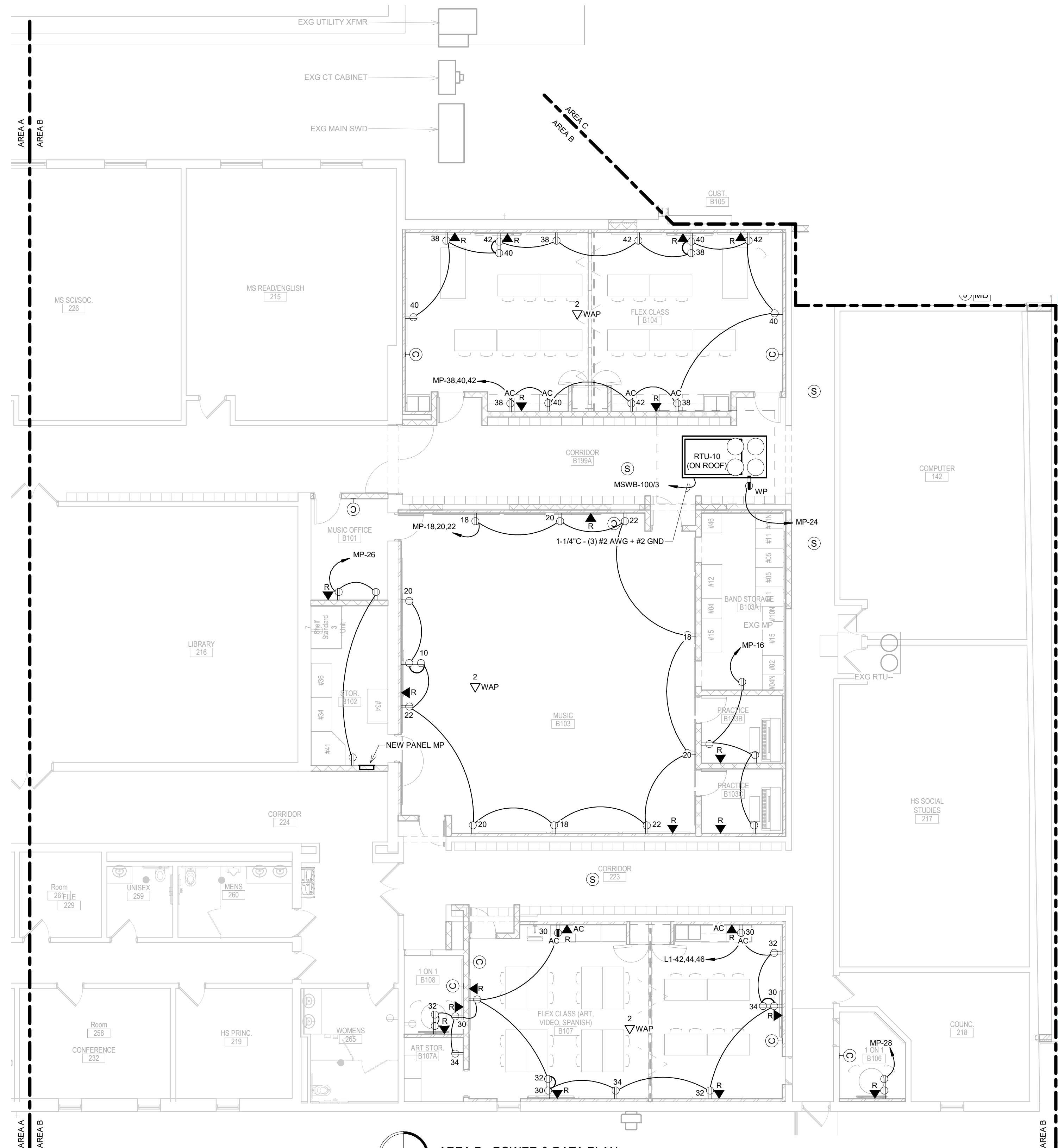
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

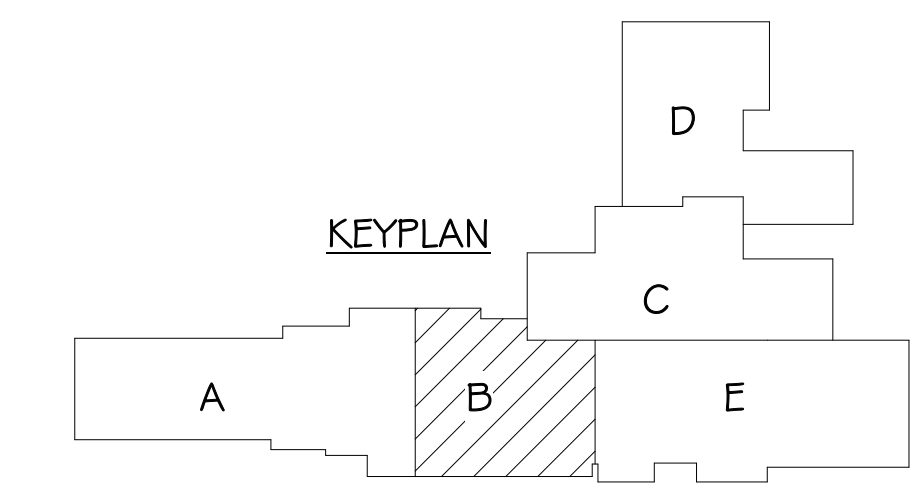
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA B - POWER & DATA PLAN

**E301B**



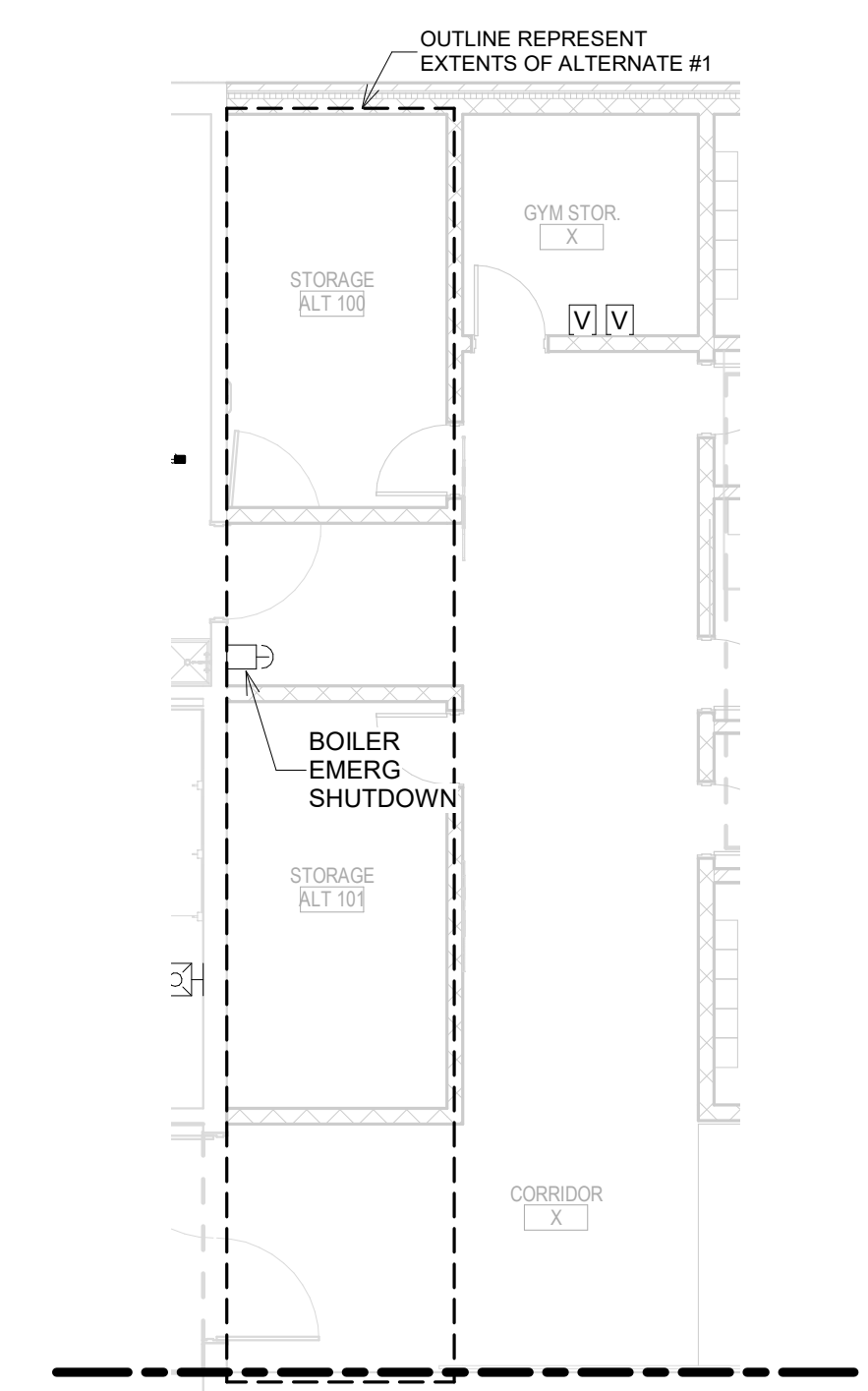
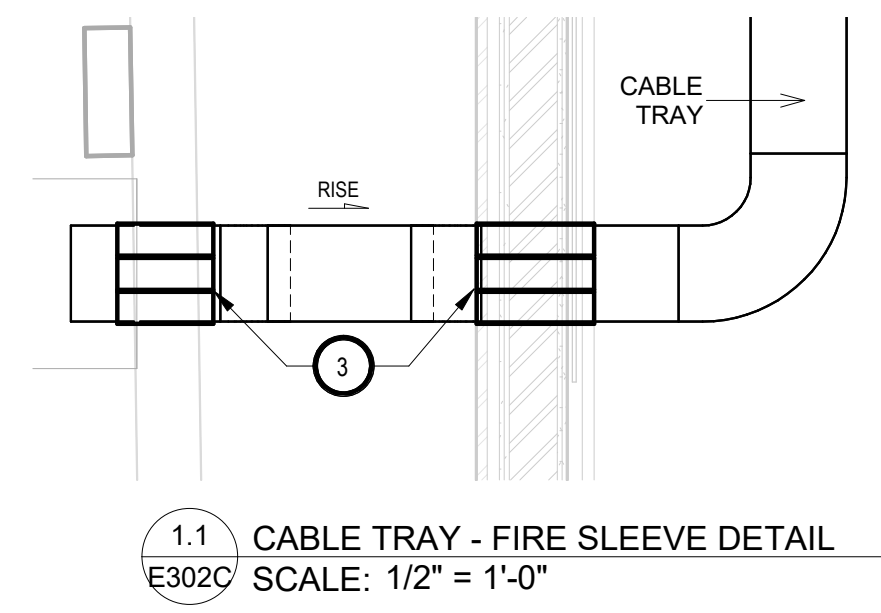
**AREA B - POWER & DATA PLAN**  
1/8" = 1'-0"



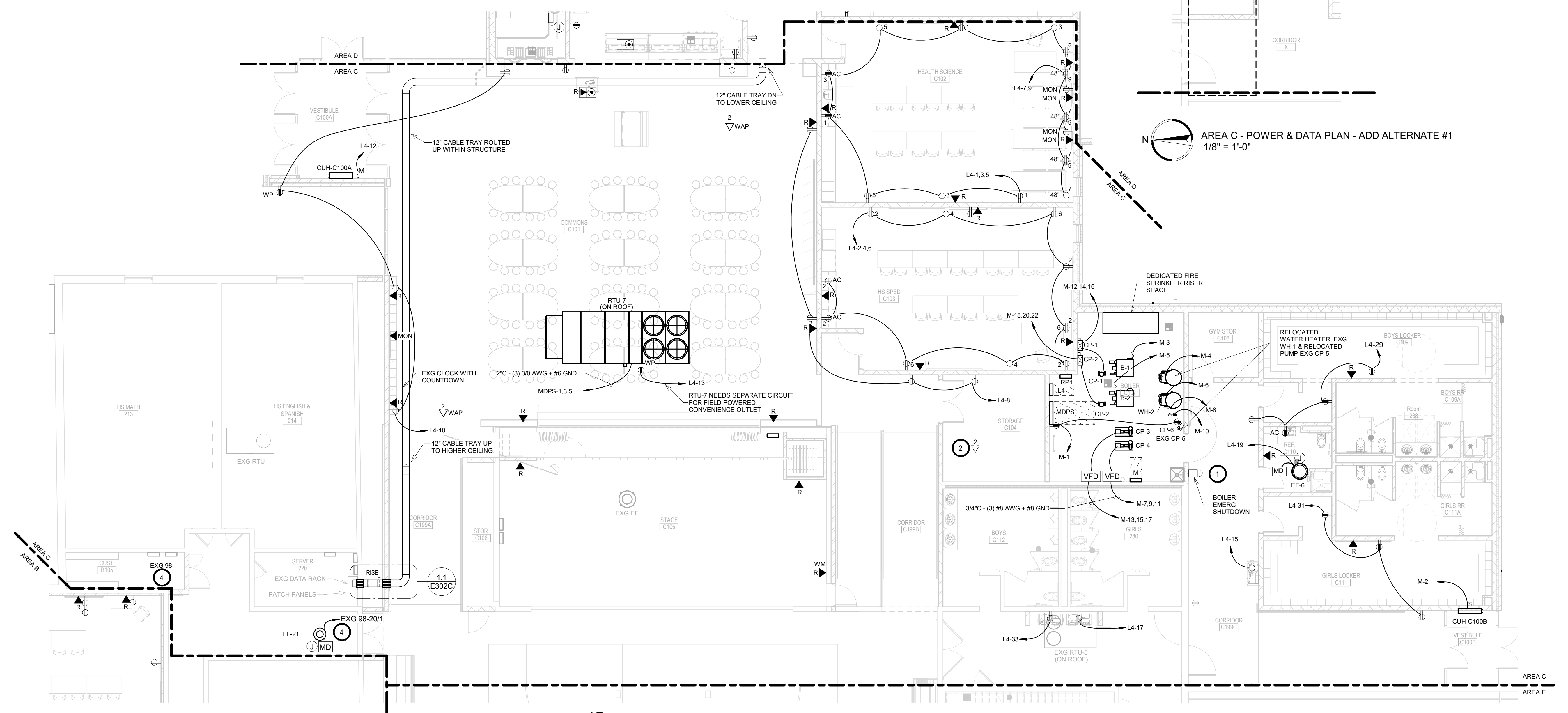


**KEYNOTES**

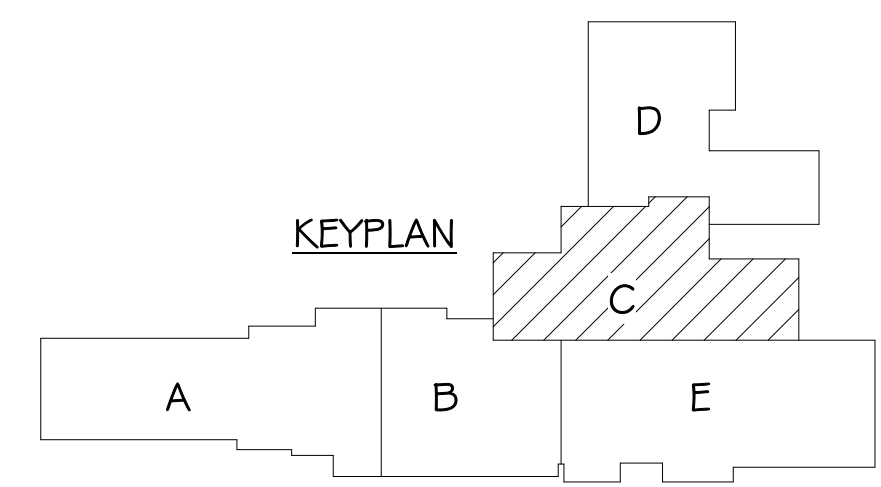
1. INSTALL STOPPER STATION SS22A1ZA-EN WITH TEXT "BOILER SHUTDOWN". SHUT DOWN ALL BOILERS AT THE SAME TIME. SWITCH TO BE MOUNTED AT 60" AFF.
2. PROVIDE 2 DATA CABLES ABOVE CEILING FOR FUTURE USE. PROVIDE 30' OF ADDITIONAL CABLING FOR ROUTING TO FUTURE LOCATION. NEATLY COIL AND TIE ABOVE CEILING SPACE, TERMINATE AND TEST CABLES.
3. FIRE SLEEVE: PROVIDE HILTI FIRE SLEEVES THROUGH FIRE WALLS FOR TELECOMMUNICATION CABLING. PROVIDE TOTAL OF (6) 4 INCH HILTI SPEED SLEEVES MODEL CFS-SL-GA-L.
4. PROVIDE 120 VOLT, 20 AMP CONNECTION TO EF-21 FROM CORRIDOR PANEL. PANEL INFO: SQUARE D, 208/120 VOLT, 400 AMP, NQOD PANELBOARD.

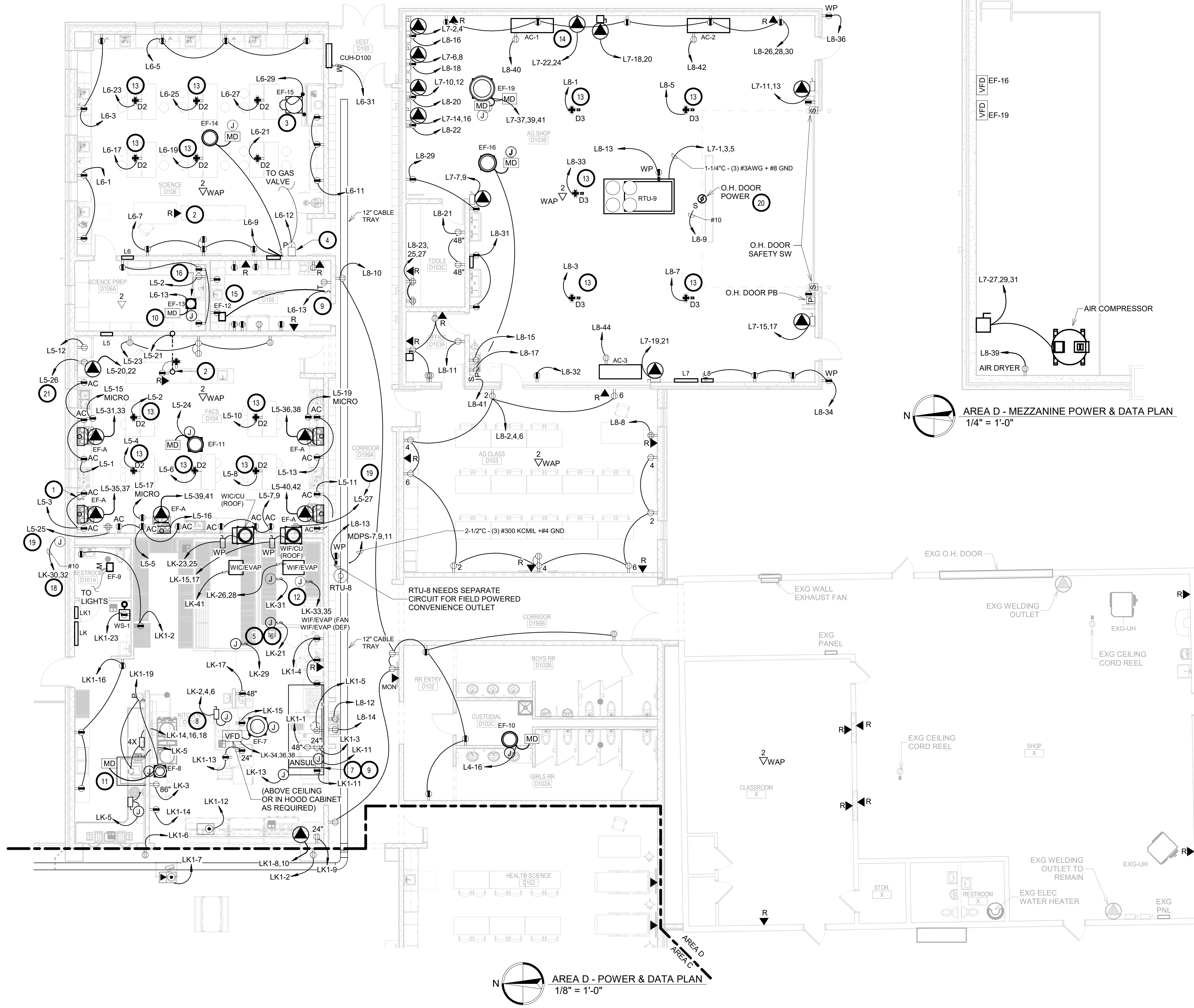


AREA C - POWER & DATA PLAN - ADD ALTERNATE #1  
1/8" = 1'-0"

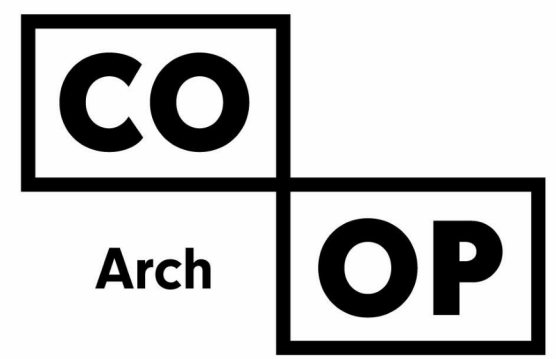
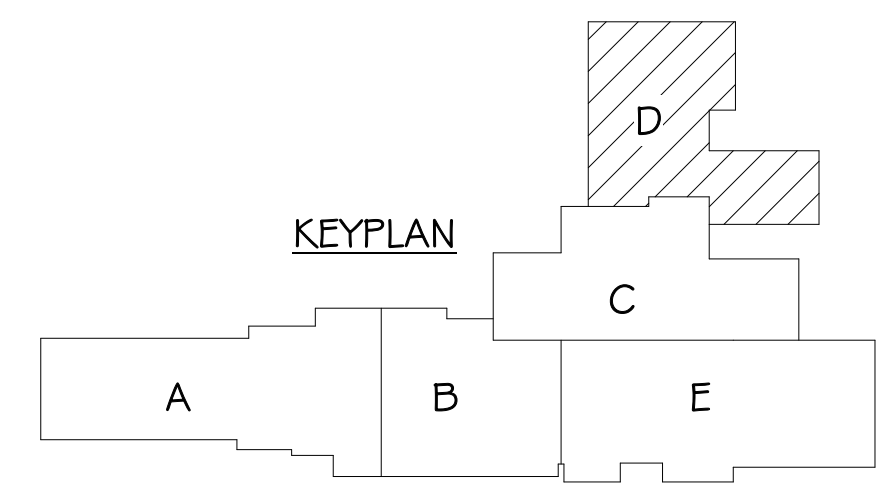


AREA C - POWER & DATA PLAN  
1/8" = 1'-0"





- KEYNOTES**
1. PROVIDE MOTOR RATED PILOT SWITCH AT ADA HEIGHT MOUNTED ON WALL BESIDE HOOD TO OPERATE THE HOOD.
  2. PROVIDE (2) 1 INCH CONDUITS TO TEACHERS STATION FOR POWER AND DATA CABLE ROUTING.
  3. FUME HOOD: PROVIDE INTERCONNECT BETWEEN HOOD CONTROLS AND EF-15. COORDINATE FINAL REQUIREMENTS WITH MECHANICAL CONTRACTOR AND HOOD SUPPLIER.
  4. EMERGENCY GAS SHUTDOWN - PROVIDE STI STOPPER STATION SS2241ZAE, OR EQUAL, WITH CUSTOM LABEL "GAS SHUTDOWN".
  5. COOLER: PROVIDE CONNECTION TO COOLER CONTROLLER, DEFROSTER, SOLENOIDS, AND COOLER LIGHTS.
  6. FREEZER: PROVIDE CONNECTION TO FREEZER CONTROLLER, DEFROSTER, SOLENOIDS, COOLER LIGHTS AND PROVIDE 8 WATT SR HEAT TRACE FOR CONDENSATE LINES.
  7. ANSUL SYSTEM: PROVIDE CONNECTION VIA ANSUL CONTROL CONTACTS FOR SHUNT-TRIP ACTIVATION OF PANEL 'LK1'. PROVIDE CONNECTION TO FIRE ALARM SYSTEM FOR MONITORING AND CONTROL.
  8. SINK DISPOSER: PROVIDE INSTALLATION OF DISPOSER CONTROLS VIA LIQUID-TITE FOOD GRADE FLEXIBLE RACEWAY. COMBINATION DISCONNECT/CONTROLLER FURNISHED BY FOOD SERVICE SUPPLIER.
  9. GAS VALVE SOLENOID: PROVIDE CONTROL WIRING FROM ANSUL SYSTEM FOR GAS VALVE CONTROL. PROVIDE 120 VOLT POWER CONNECTION AS REQUIRED FOR GAS VALVE. COORDINATE GAS VALVE LOCATION WITH MECHANICAL CONTRACTOR.
  10. NOT USED.
  11. DISHWASHER/HEATER: PROVIDE CONNECTION FROM DISCONNECT TO DISHWASHER VIA LIQUID-TITE FOOD GRADE FLEXIBLE RACEWAY. PROVIDE 60 AMP, 208V, 3 PHASE, NEMA 4X DISCONNECT BY EC. DRAIN TEMPERING: PROVIDE 120 VOLT 20 AMP CONNECTION TO UNIT. PROVIDE DISCONNECT AS REQUIRED.
  12. HEAT TAPE: PROVIDE 120 VOLT, 20 AMP CONNECTION TO DRAIN LINE HEAT TAPE (BY KITCHEN EQ. SUPPLIER). PROVIDE GFI PROTECTION PER 2020 NEC, PROVIDE SWITCH WITH LABEL IDENTIFYING "HEAT TAPE DISCONNECT".
  13. DROP CORD: SEE DETAILS PAGE FOR DROP CORD INFORMATION. VERIFY FINAL LOCATION IN FIELD WITH OWNER PRIOR TO ROUGH-IN.
  14. PROVIDE NEMA L7-20 RECEPTACLE FOR EQUIPMENT CONNECTION. VERIFY RECEPTACLE TYPE PRIOR TO ROUGH-IN.
  15. EF-12: PROVIDE ELECTRONIC TIME SWITCH EQUAL TO INTERMATIC MODEL E1200 SERIES 5-30 MINUTE COUNTDOWN TIMER.
  16. EF-13: PROVIDE 120 VOLT, 20 AMP CONNECTION FROM OCCUPANCY SENSOR. COORDINATE BAS CONNECTION WITH TEMPERATURE CONTROLS CONTRACTOR.
  17. NOT USED.
  18. HEAT TAPE: PROVIDE EASYHEAT SR TRACE HEAT TAPE MODEL SR52J, 8 WATTS PER FOOT, 208 VOLT, 1 PHASE OR EQUAL WITHIN DOWNSPOUT FOR ICE REMOVAL. PROVIDE 30MA GFI CIRCUIT BREAKER IN PANEL AS REQUIRED BY THE NEC. SEE MECHANICAL SHEETS FOR LENGTHS AND LOCATIONS. PROVIDE TOGGLE SWITCH CONTROL NEXT TO ELECTRICAL AND LABEL "HEAT TAPE DWNSPT".
  19. BABY CHARGING STATIONS: COORDINATE FINAL LOCATION IN FIELD WITH OWNER PRIOR TO ROUGH-IN.
  20. OVERHEAD DOOR: PROVIDE POWER RECEPTACLE, PUSHBUTTON CONTROLLER, INSTALLATION OF FURNISHED SAFETY EYES/STRIP. COORDINATE POWER REQUIREMENTS WITH GENERAL CONTRACTOR PRIOR TO ROUGH-IN.
  21. WASHER/DRYER COMBO: PROVIDE 208 VOLT, 30 AMP, SINGLE POLE RECEPTACLE WITH #10 CONDUCTORS FOR OWNER FURNISHED WASHER/DRYER. VERIFY CONNECTION TYPE PRIOR TO ROUGH-IN.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

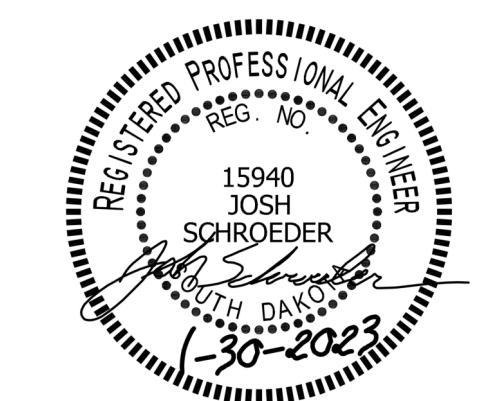
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



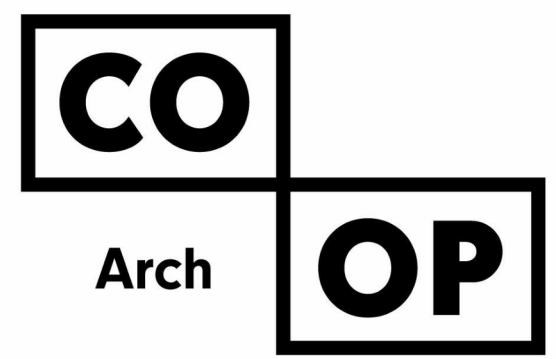
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA D - POWER & DATA PLAN

**E303D**



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER  
ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

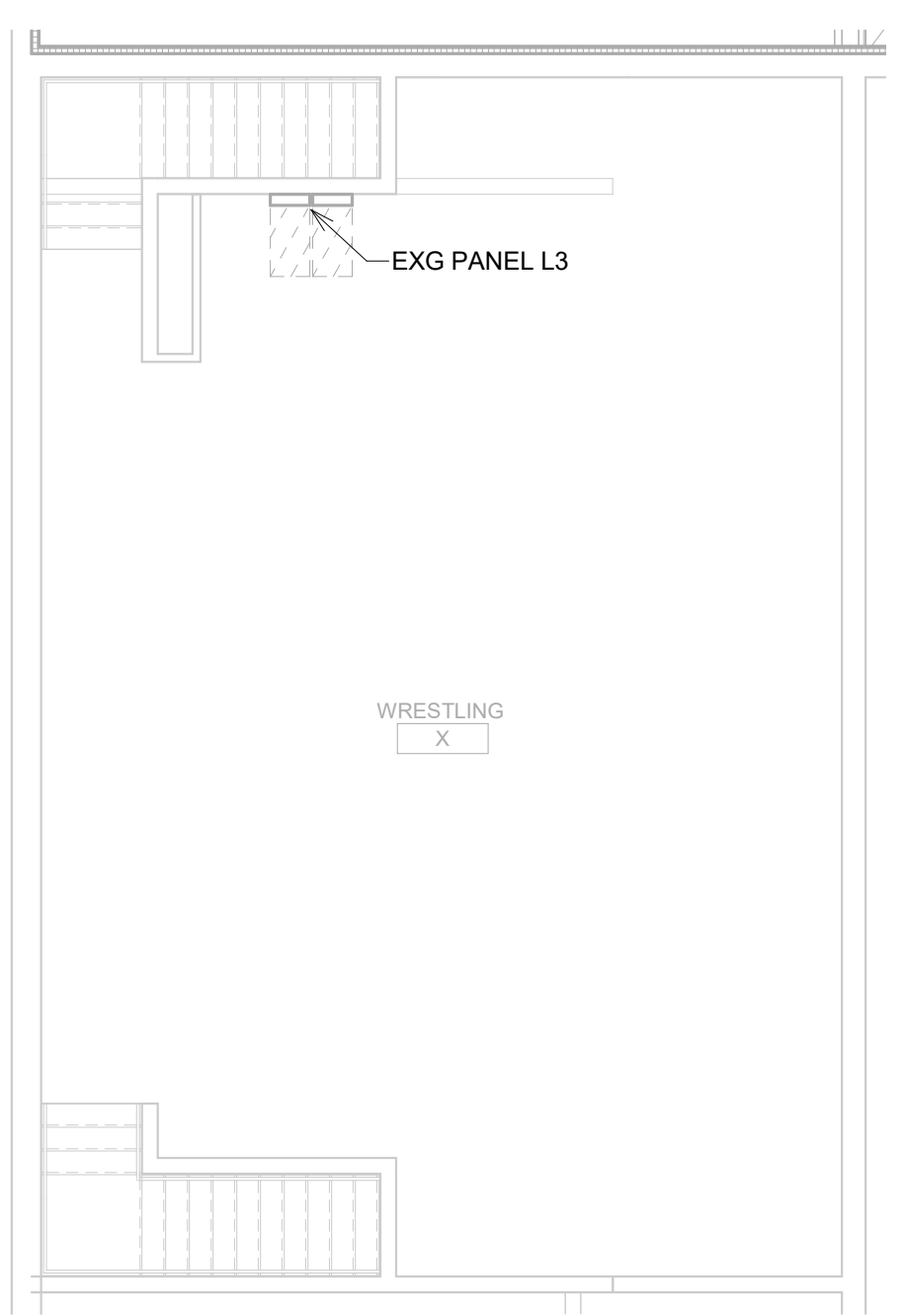
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA E - POWER & DATA PLAN

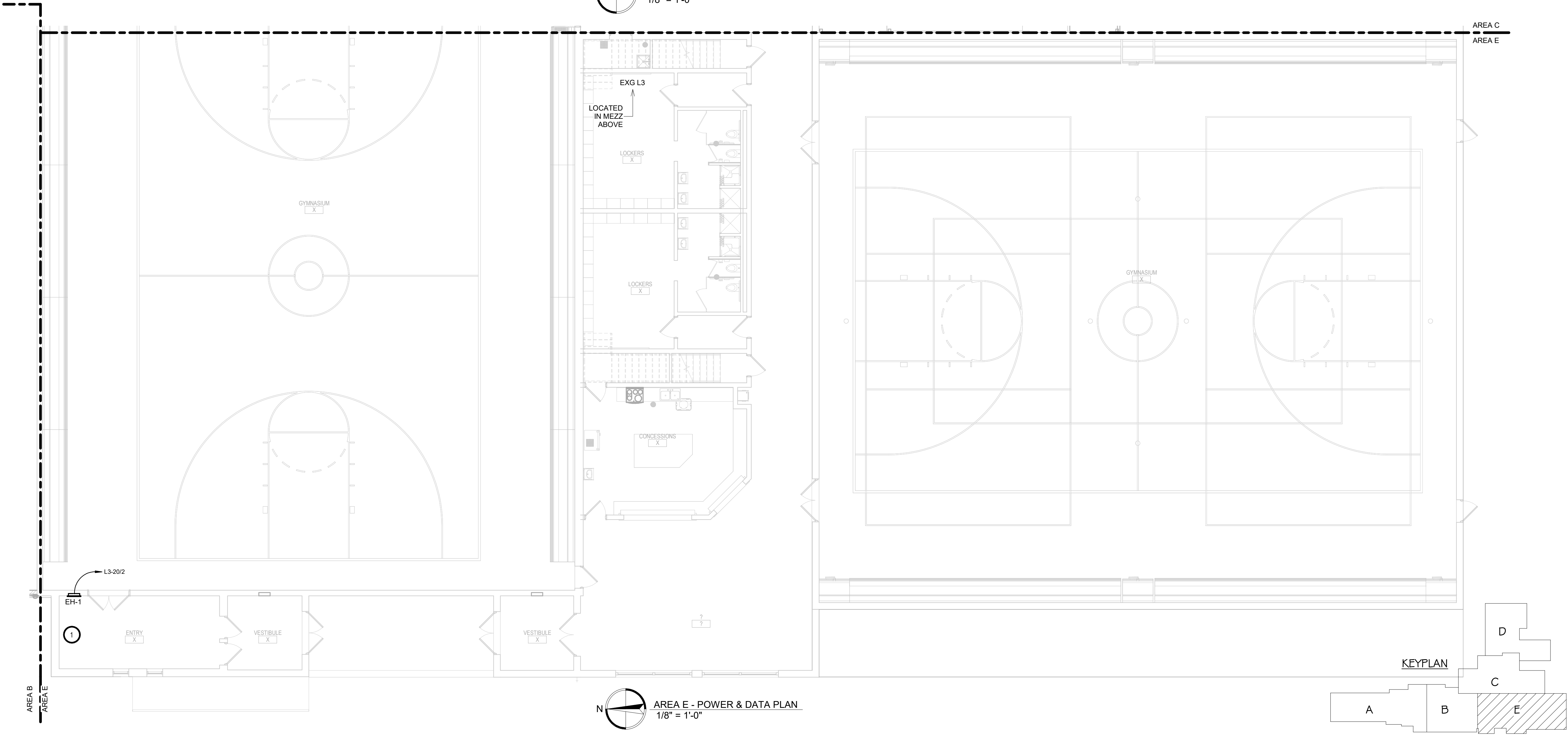
**E304E**

**KEYNOTES**

1. TYPICAL FOR EH-1. EC TO PROVIDE & INSTALL ELECTRIC HEATER, USE BERKO FRA4020 WITH A RELAY SO TC CAN CONTROL THE HEAT. PROVIDE NEW 20 AMP, 2 POLE CIRCUIT BREAKER IN EXISTING PANEL 'L3'.



**AREA E - MEZZANINE POWER & DATA PLAN**  
1/8" = 1'-0"

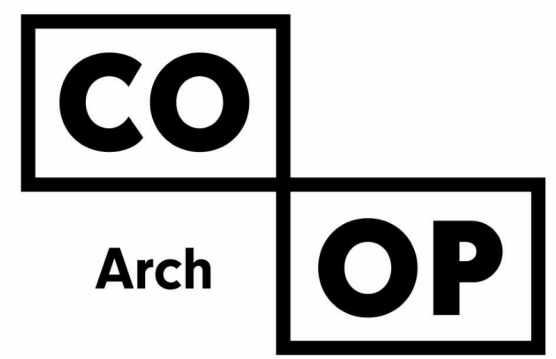


**AREA E - POWER & DATA PLAN**  
1/8" = 1'-0"

1/30/2023 5:17:17 PM

KEYNOTES

1. PROVIDE BRANCH CIRCUIT CONNECTION TO EXISTING LIGHTING BRANCH CIRCUIT FOR ROOM SALVAGED DURING DEMOLITION. VERIFY EXISTING BRANCH CIRCUIT LOADING IN FIELD AND NOTIFY ENGINEER OF ANY OVERLOAD CONDITIONS.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

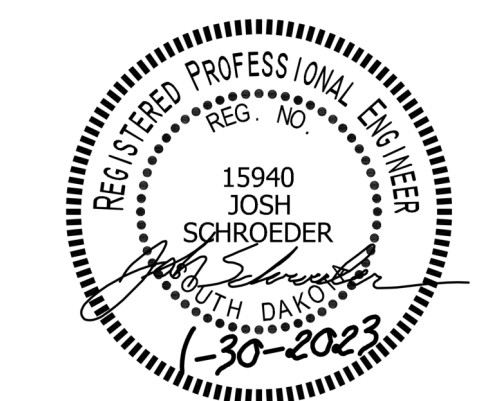
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



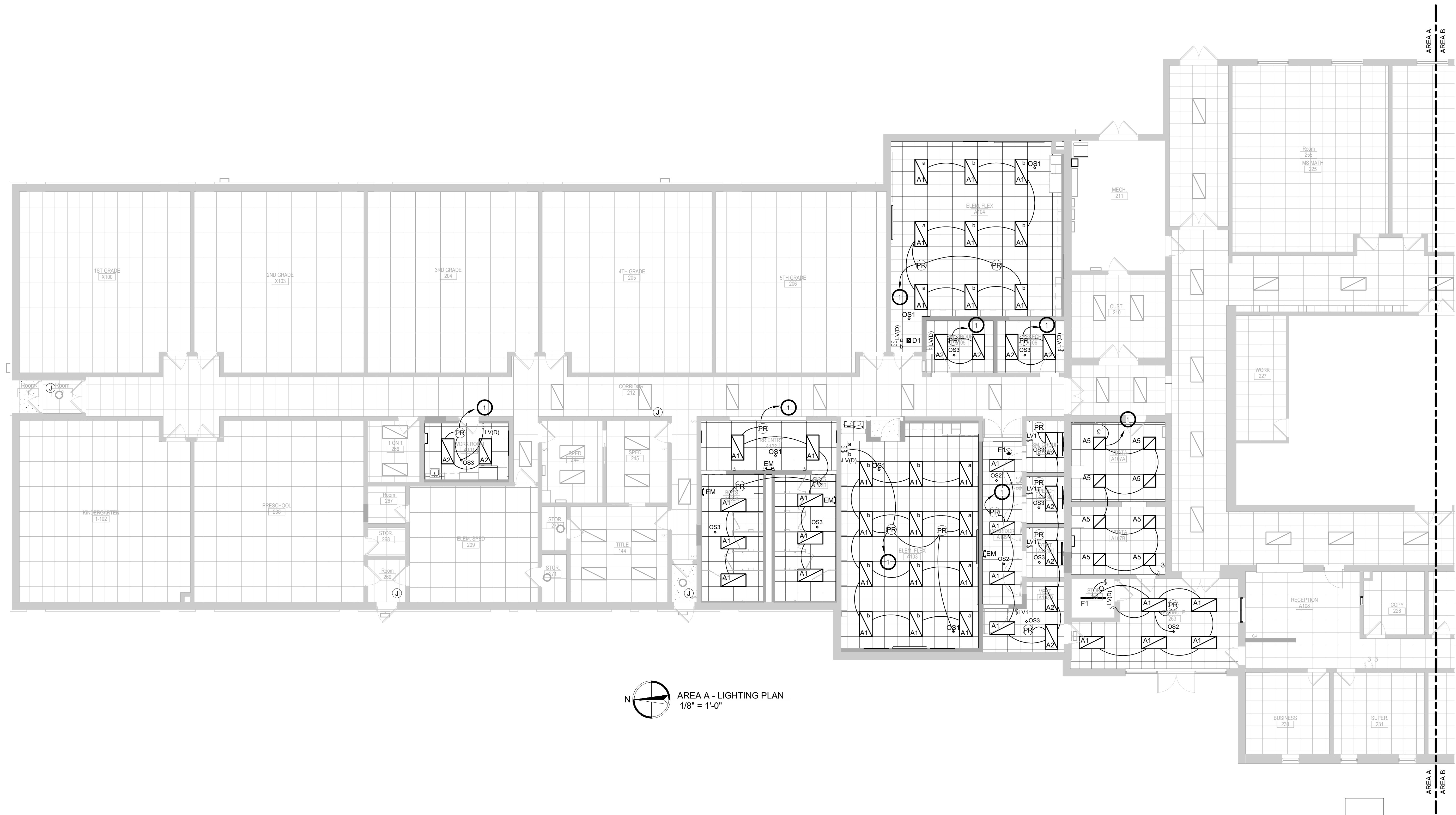
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

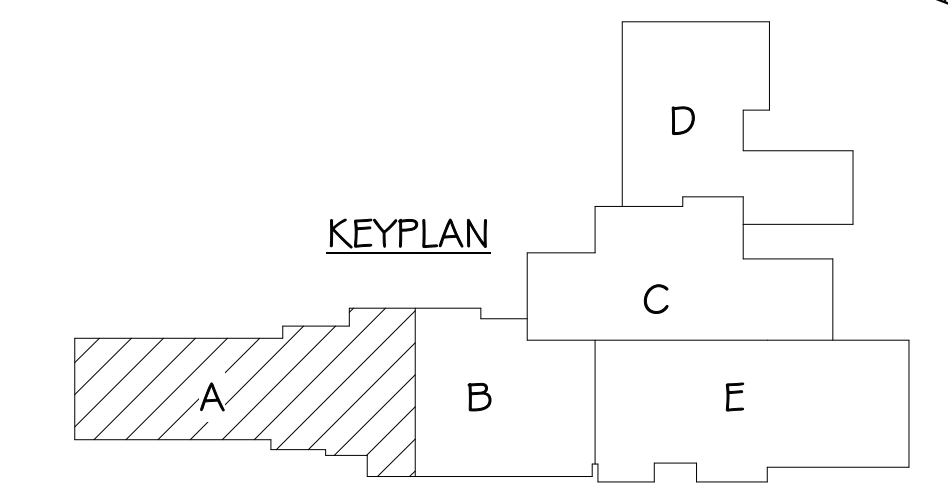
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA A - LIGHTING PLAN

**E400A**

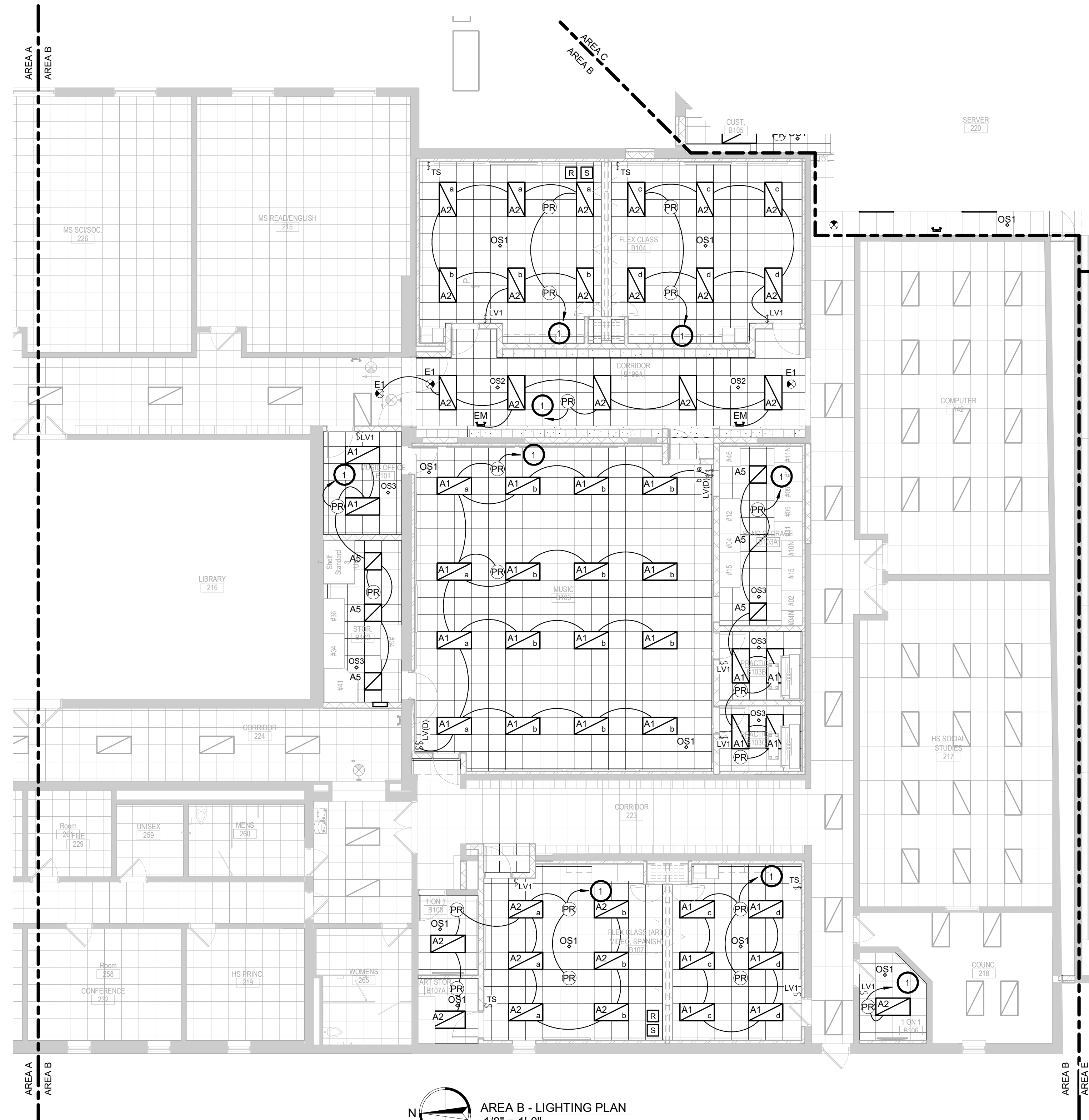


**AREA A - LIGHTING PLAN**  
1/8" = 1'-0"

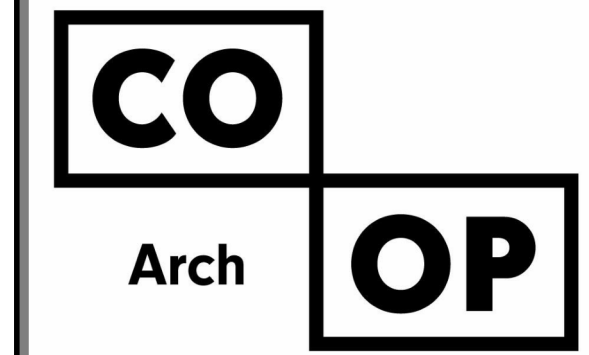
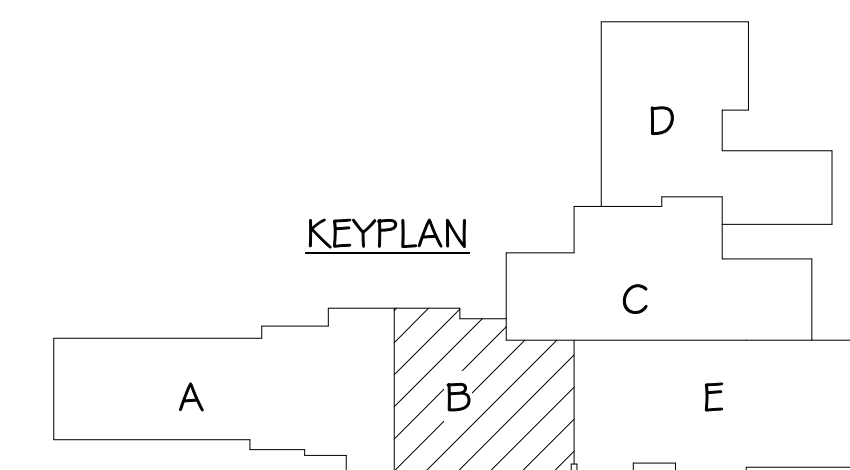


KEYNOTES

1. PROVIDE BRANCH CIRCUIT CONNECTION TO EXISTING LIGHTING BRANCH CIRCUIT FOR ROOM SALVAGED DURING DEMOLITION. VERIFY EXISTING BRANCH CIRCUIT LOADING IN FIELD AND NOTIFY ENGINEER OF ANY OVERLOAD CONDITIONS.



N  
AREA B - LIGHTING PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

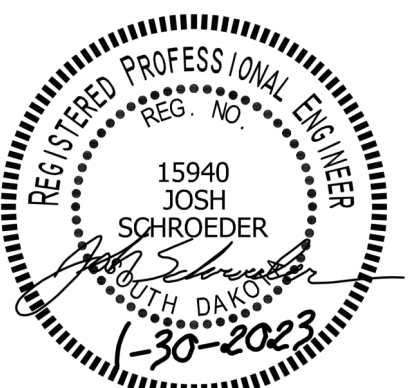
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

SICHMELLER  
ENGINEERING  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



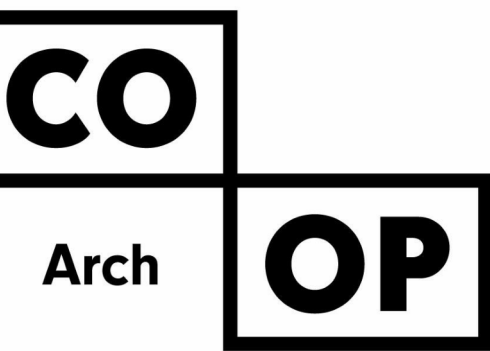
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA B - LIGHTING PLAN

E401B



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

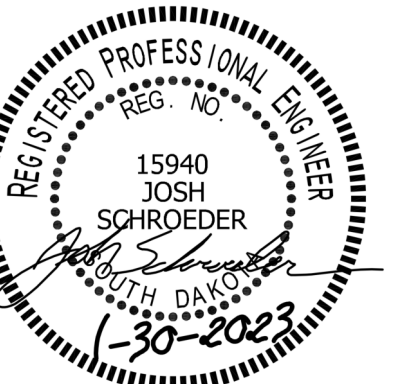
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER  
ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

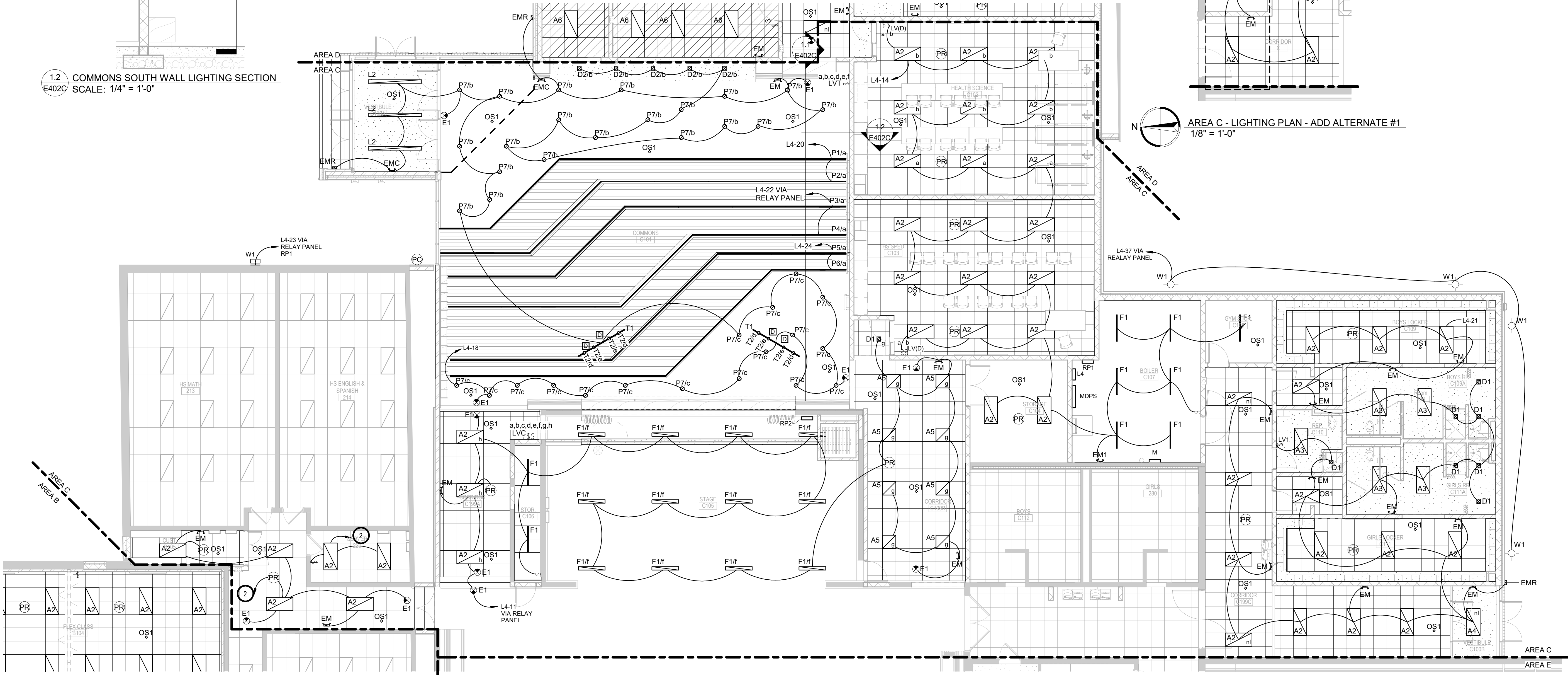
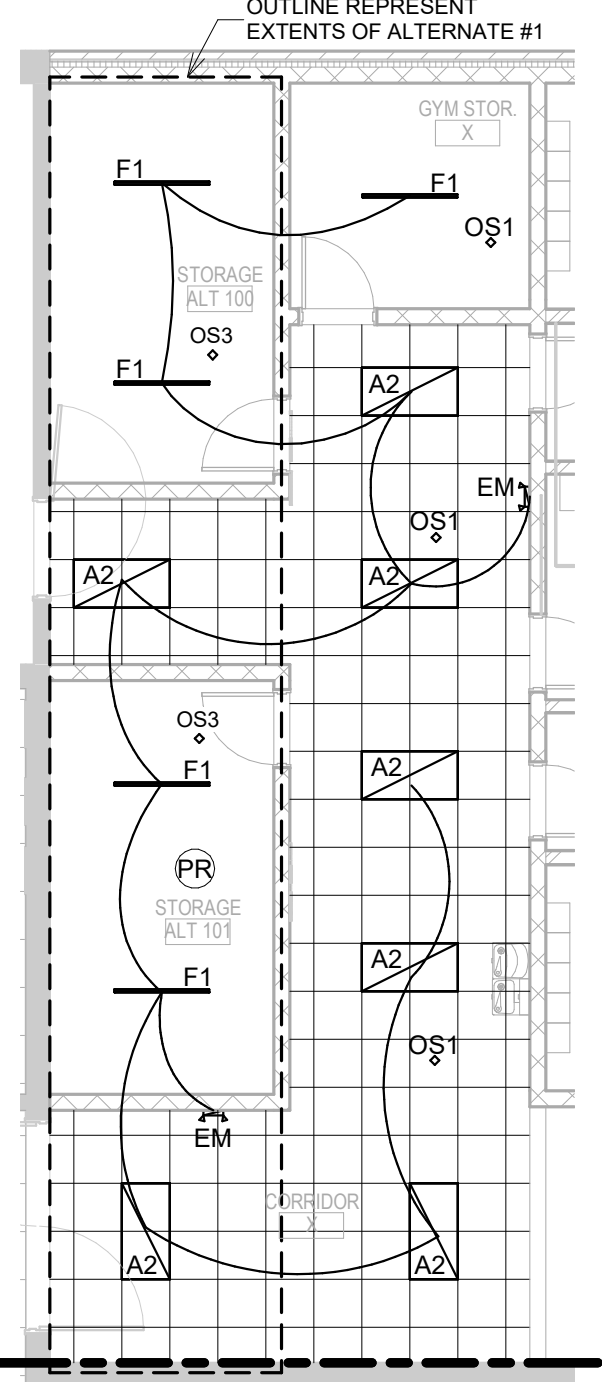
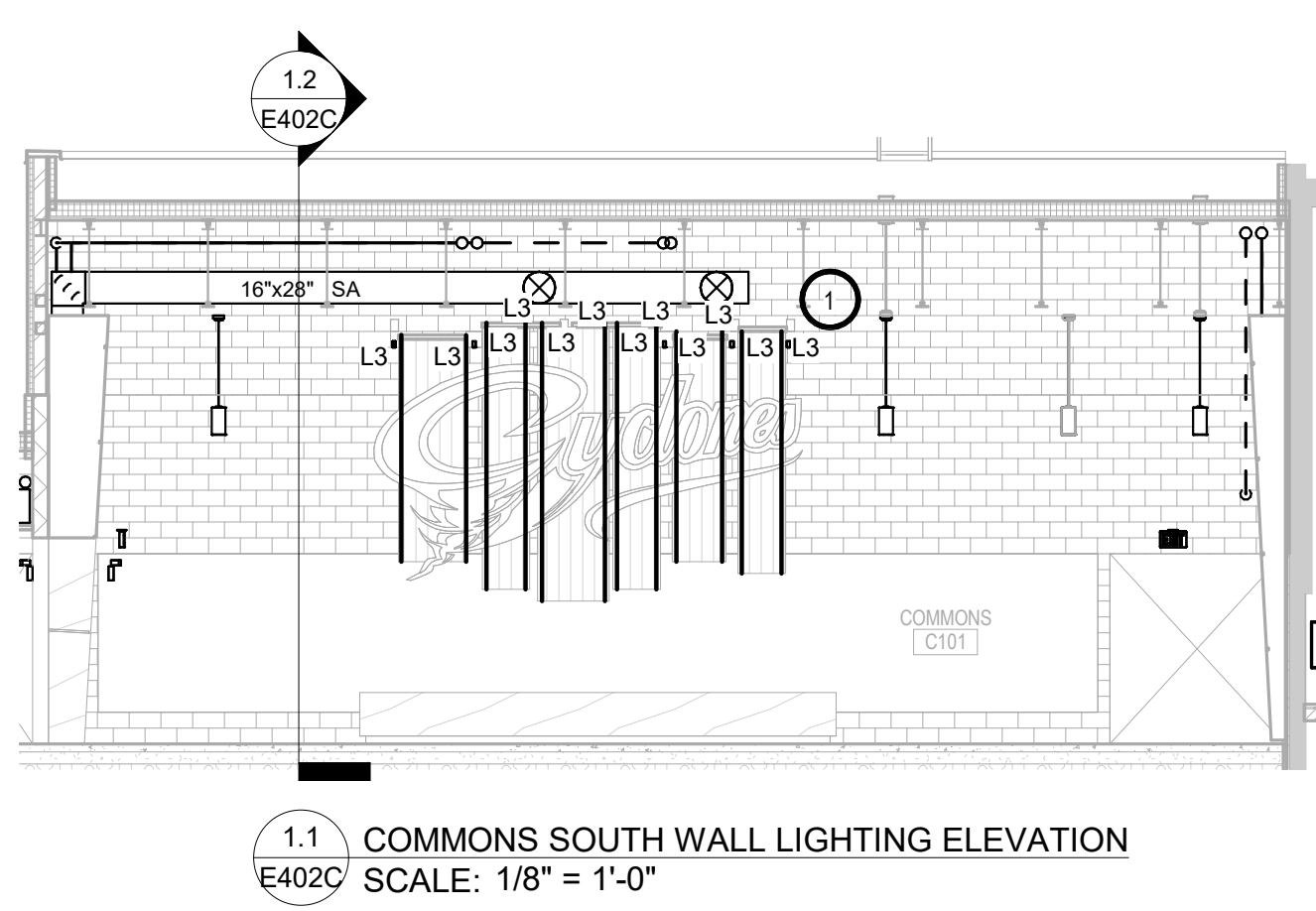
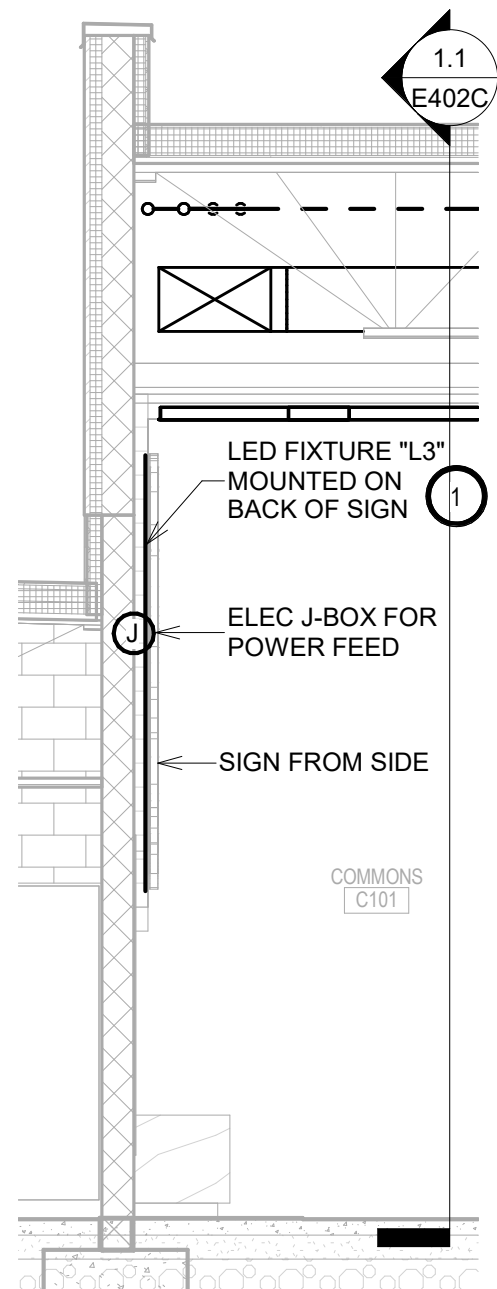
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

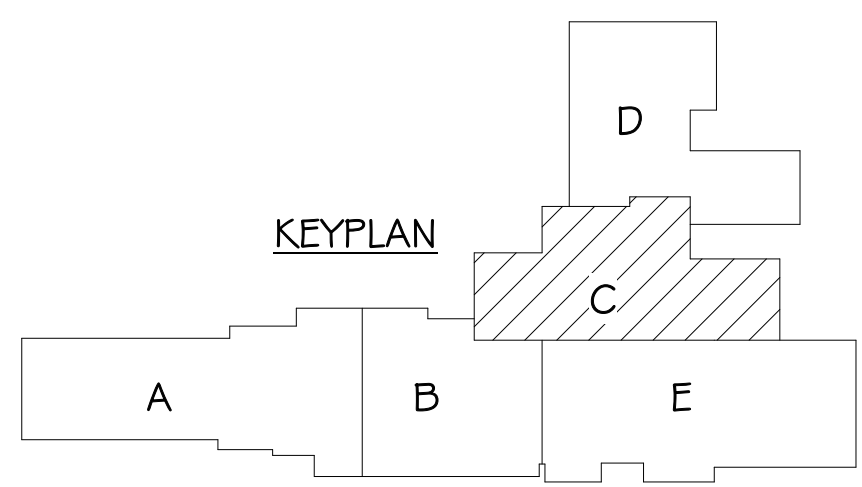
SHEET TITLE:  
AREA C - LIGHTING PLAN

# E402C

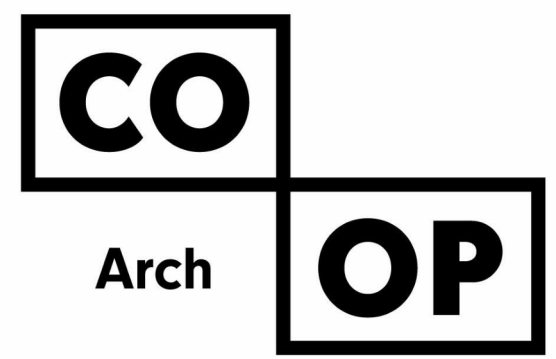
- KEYNOTES**
1. PROVIDE MOUNTING OF LINEAR LED FIXTURE TYPE 'L3' TO THE REAR OF CYCLONES SIGNAGE. COORDINATE FINAL REQUIREMENTS IN FIELD AND PROVIDE.
  2. PROVIDE BRANCH CIRCUIT CONNECTION TO EXISTING LIGHTING BRANCH CIRCUIT FOR ROOM SALVAGED DURING DEMOLITION. VERIFY EXISTING BRANCH CIRCUIT LOADING IN FIELD AND NOTIFY ENGINEER OF ANY OVERLOAD CONDITIONS.



AREA C - LIGHTING PLAN  
1/8" = 1'-0"



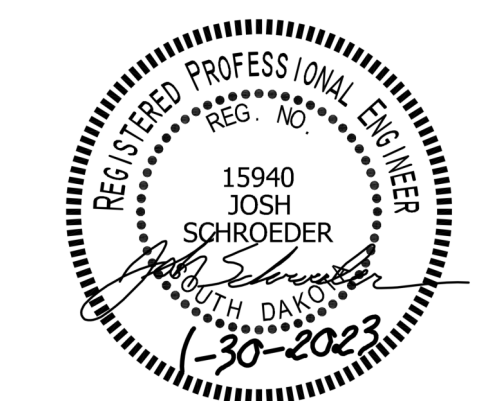
**KEYNOTES**  
 1. PROVIDE #10 AWG CONDUCTORS FOR ALL EXTERIOR LIGHTING BRANCH CIRCUITS.



1108 S. Main St. 102  
 Aberdeen, SD 57401  
 Phone: 605-725-4852  
  
 601 Kansas City St. 7  
 Rapid City, SD 57701  
 Phone: 605-716-3652  
  
 440 E. 8th St 221  
 Sioux Falls, SD 57103  
 Phone: 605-334-9999  
  
 co-oparch.com

**SICHMELLER ENGINEERING**  
 Mechanical & Electrical Engineering  
  
 801 Railroad Ave. SE  
 Aberdeen, SD 57401  
 Phone: 605-225-4344  
 www.siceng.biz

SE PROJECT NO: 220900771

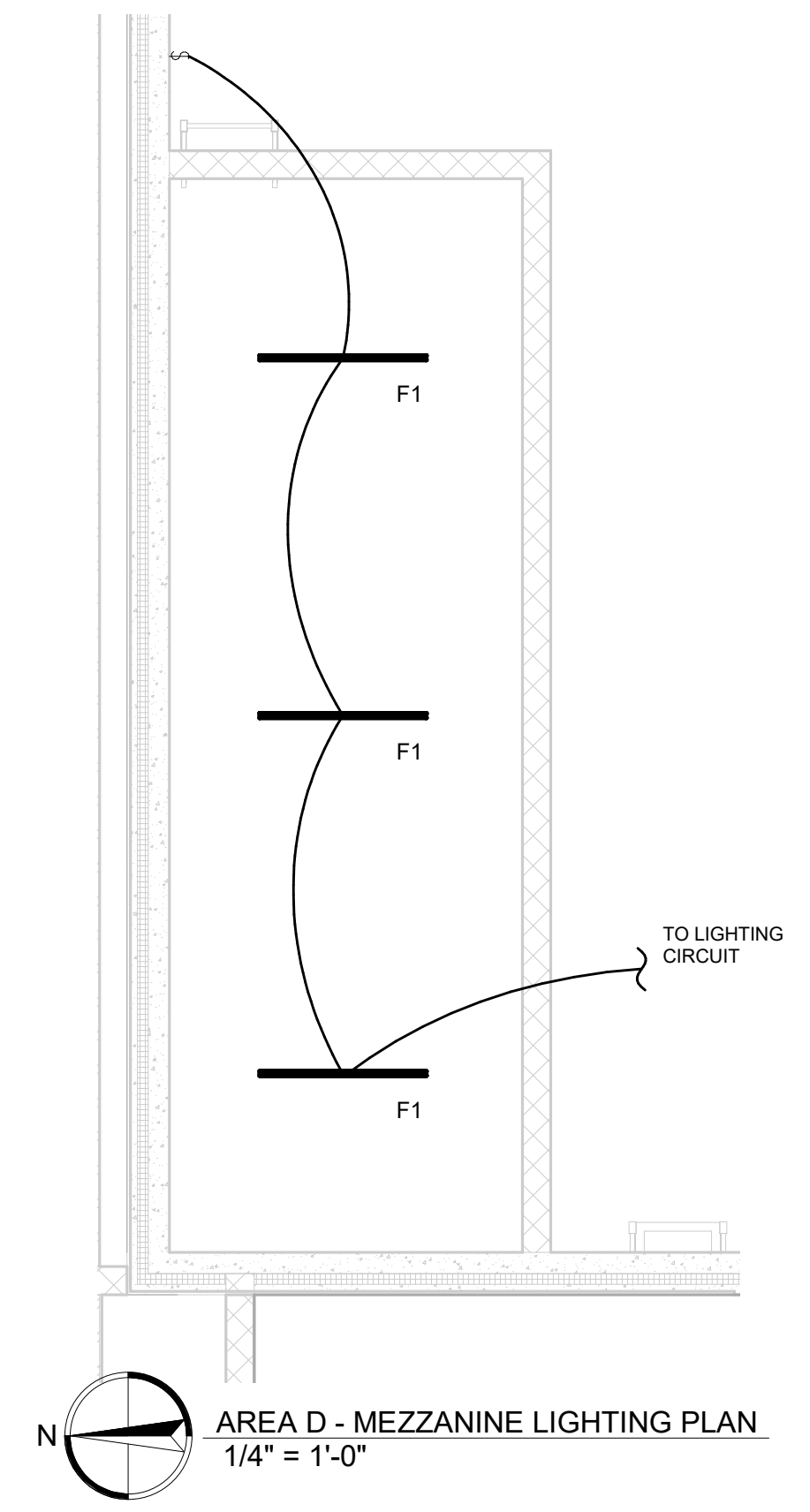


**ISSUE:**  
 1/30/23 CONSTRUCTION DOCUMENTS  
  
**REVISION SCHEDULE:**  
 REV. # REV. DSC. REV. DATE

**PROJECT:**  
 WILLOW LAKE SCHOOL ADDITION  
 WILLOW LAKESCHOOL DISTRICT  
 WILLOW LAKE, SOUTH DAKOTA

**SHEET TITLE:**  
 AREA D - LIGHTING PLAN

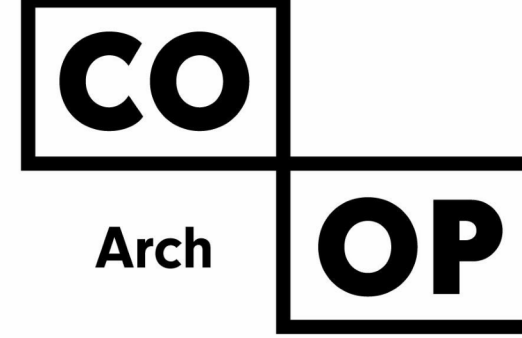
**E403D**



AREA D - LIGHTING PLAN  
 1/8" = 1'-0"

1/30/2023 5:17:45 PM





1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

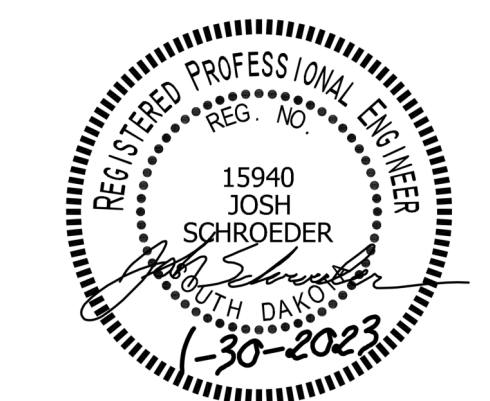
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER  
ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



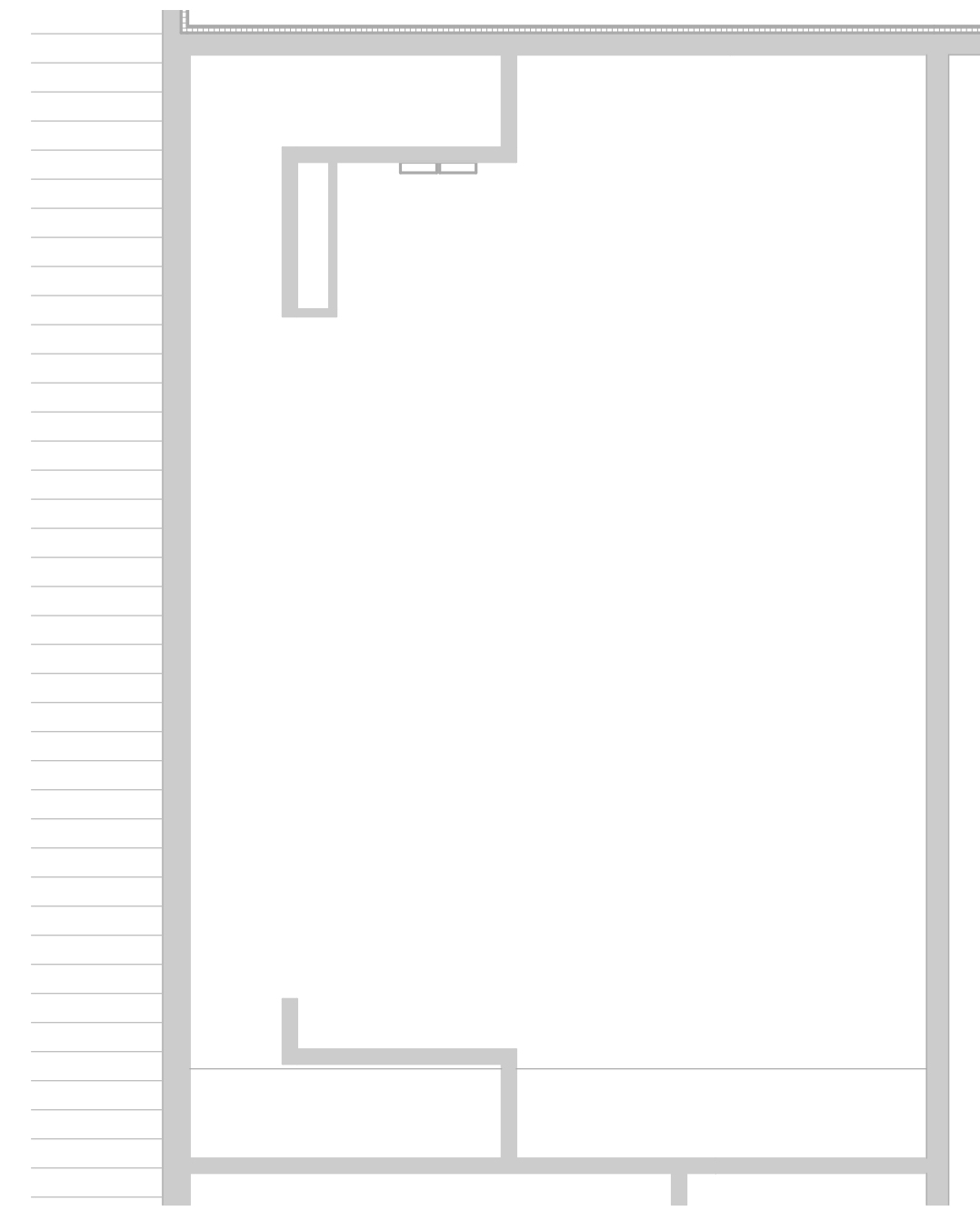
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA E - LIGHTING PLAN

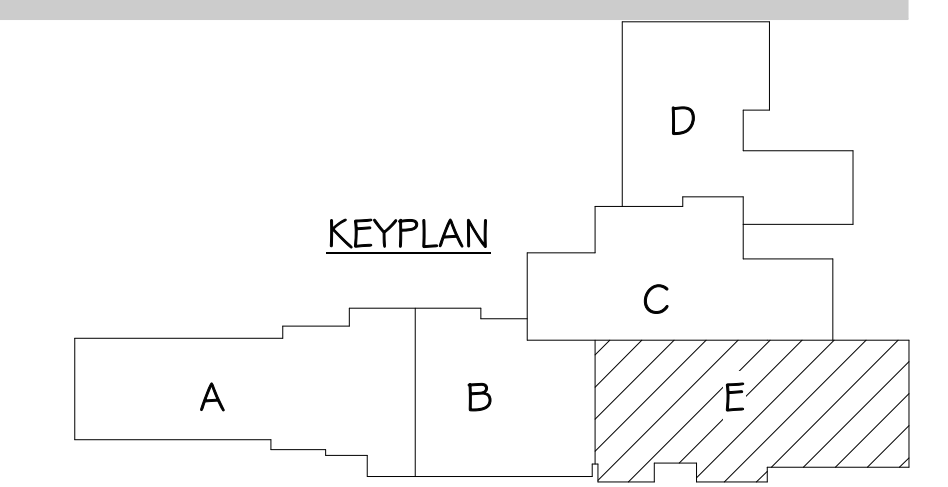
**E404E**



AREA E - MEZZANINE LIGHTING PLAN  
1/8" = 1'-0"

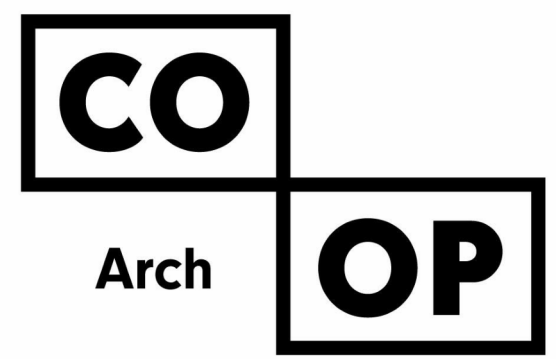


AREA E - LIGHTING PLAN  
1/8" = 1'-0"



**KEYNOTES**

1. A/V CABLING PATHWAY ROUGH-INS: PROVIDE JUNCTION BOXES WITH BLANK FACE PLATE COVERS FOR OWNER FURNISHED CABLING. PROVIDE 4 11/16" JUNCTION BOX WITH TWO GANG MUD RING BELOW TABLE AND AT MONITOR LOCATION. PROVIDE A 1-1/4" CONDUIT TO ABOVE CEILING WITH INSULATING BUSHING AND PULL-STRING.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

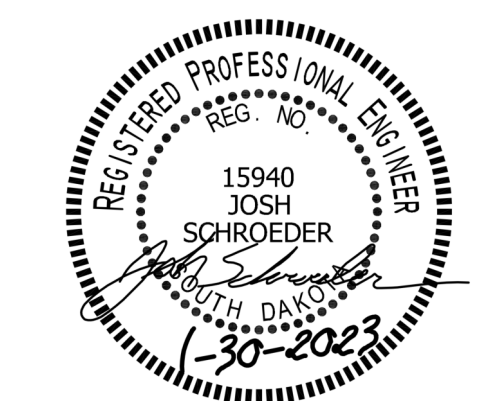
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



**ISSUE:**  
1/30/23 CONSTRUCTION DOCUMENTS

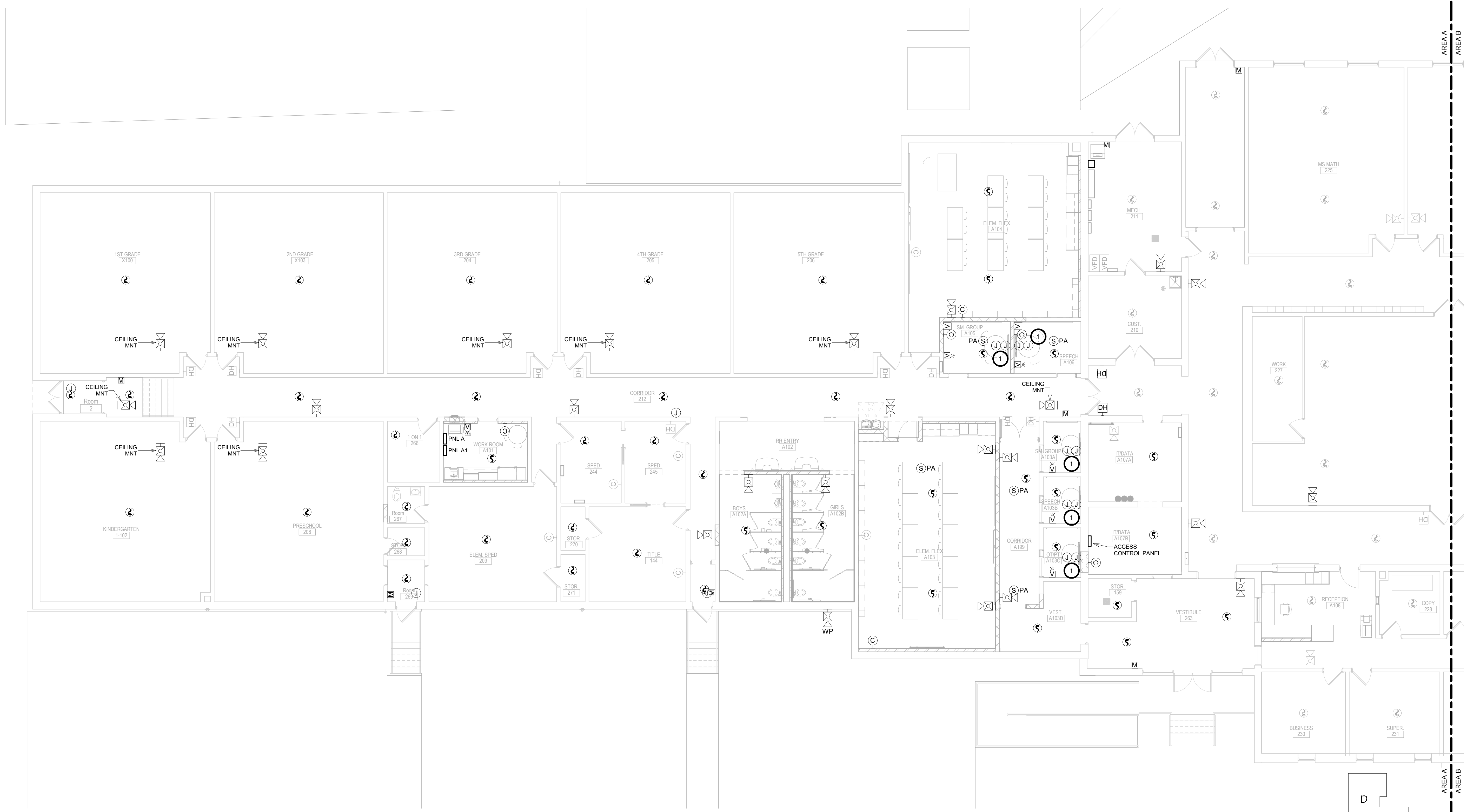
**REVISION SCHEDULE:**

REV. #	REV. DSC.	REV. DATE

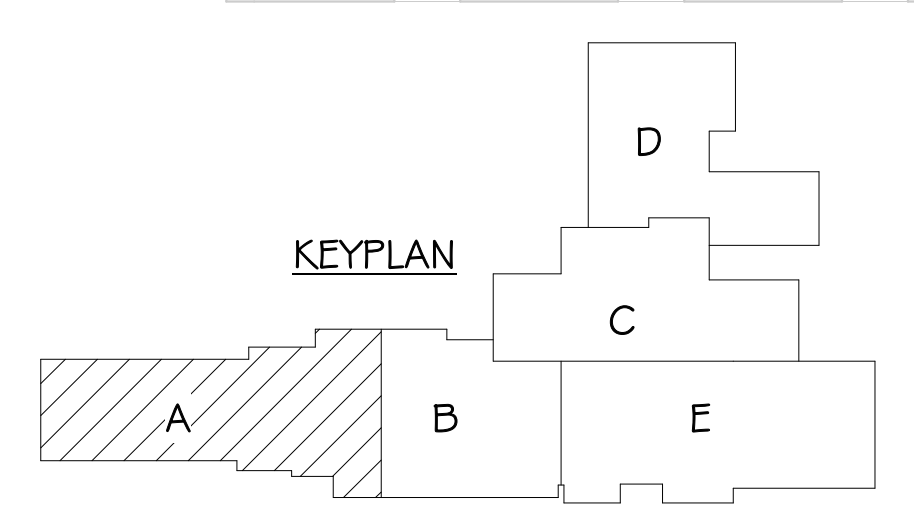
**PROJECT:**  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

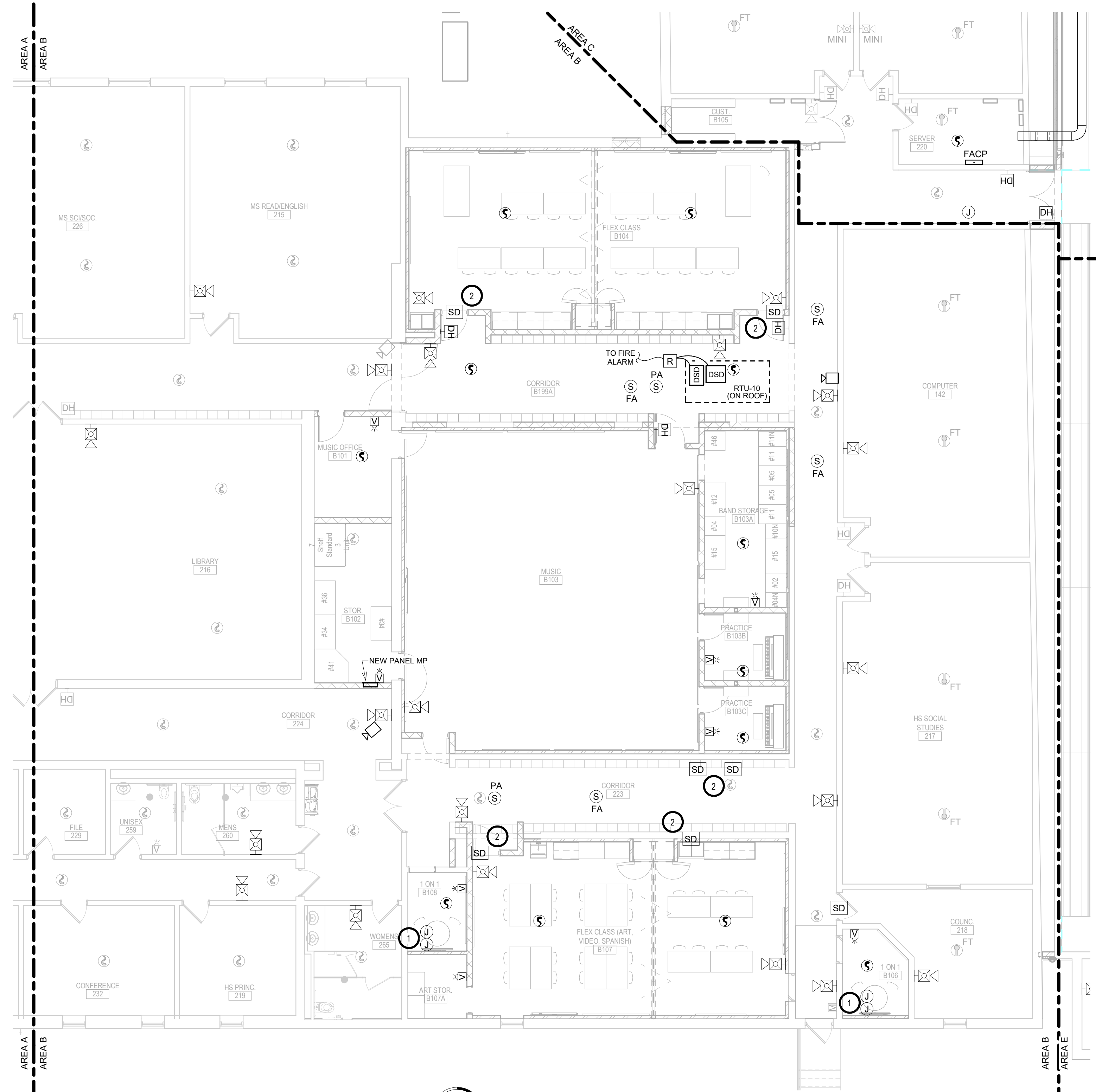
**SHEET TITLE:**  
AREA A - SPECIAL SYSTEMS PLAN

**E500A**



**AREA A - SPECIAL SYSTEMS PLAN**  
1/8" = 1'-0"

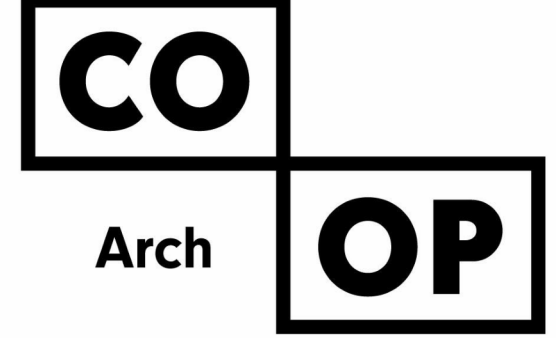




AREA B - SPECIAL SYSTEMS PLAN  
1/8" = 1'-0"

KEYNOTES

1. A/V CABLING PATHWAY ROUGH-INS: PROVIDE JUNCTION BOXES WITH BLANK FACE PLATE COVERS FOR OWNER FURNISHED CABLING. PROVIDE 4 1 1/16" JUNCTION BOX WITH TWO GANG MUD RING BELOW TABLE AND AT MONITOR LOCATION. PROVIDE A 1-1/4" CONDUIT TO ABOVE CEILING WITH INSULATING BUSHING AND PULL-STRING.
2. TYPICAL - SMOKE DAMPERS ARE 120V POWER OPEN. USE MONITOR MODULE/FIRE ALARM RELAY TO OPEN 120V POWER ON ALARM. PROVIDE BRANCH CIRCUIT WIRING TO NEAREST 120 VOLT PANEL. PROVIDE NO MORE THAN (3) DAMPERS PER 20 AMP CIRCUIT. SEE PANEL SCHEDULE FOR CIRCUIT LOCATIONS.



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

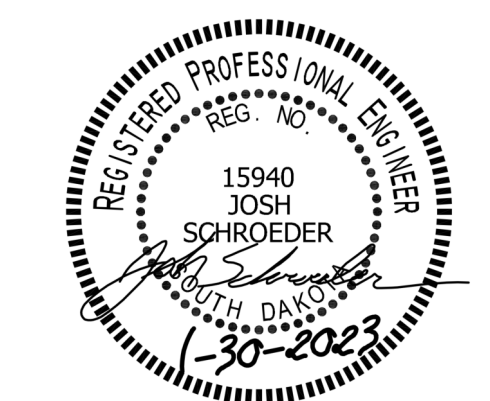
co-oparch.com

SICHELLER  
ENGINEERING

Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



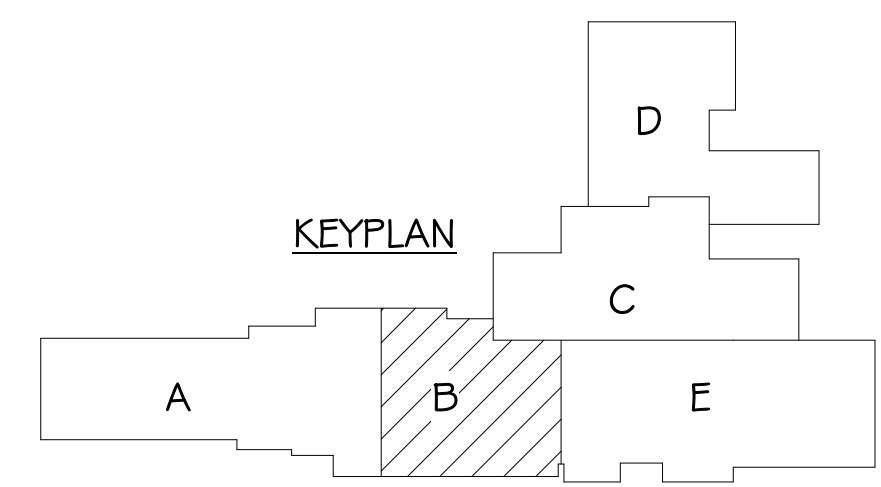
ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

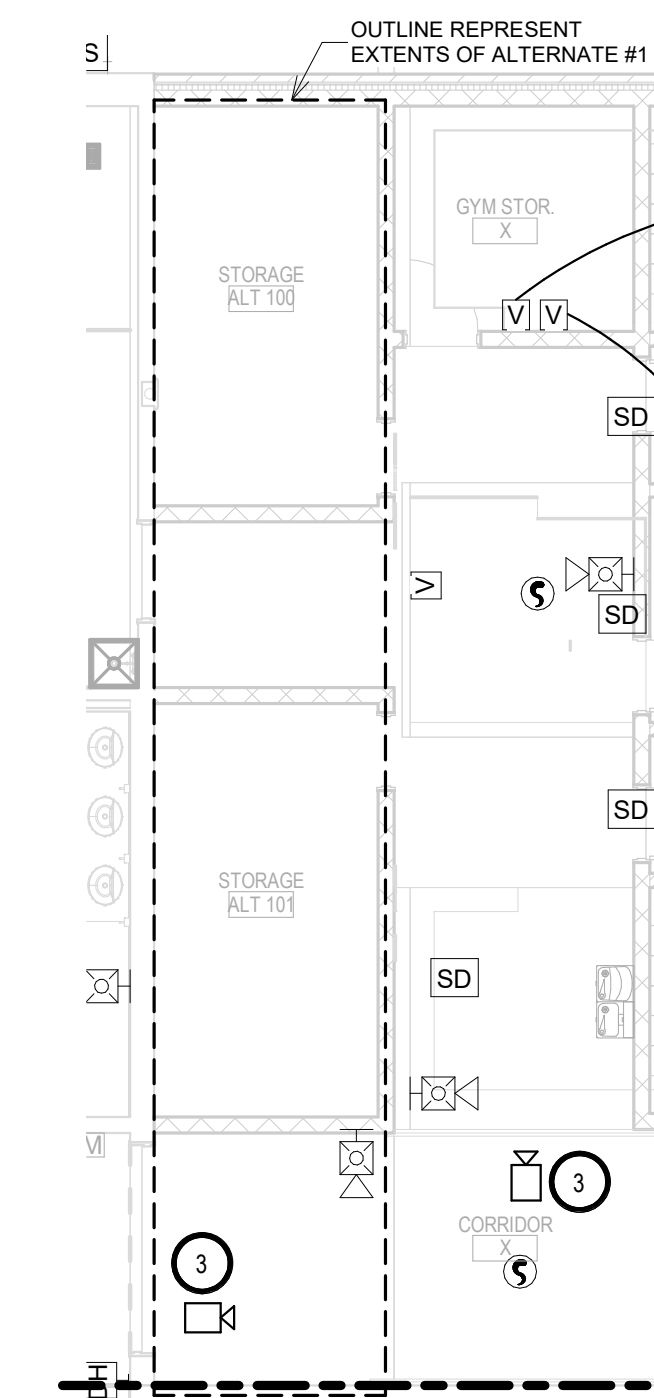
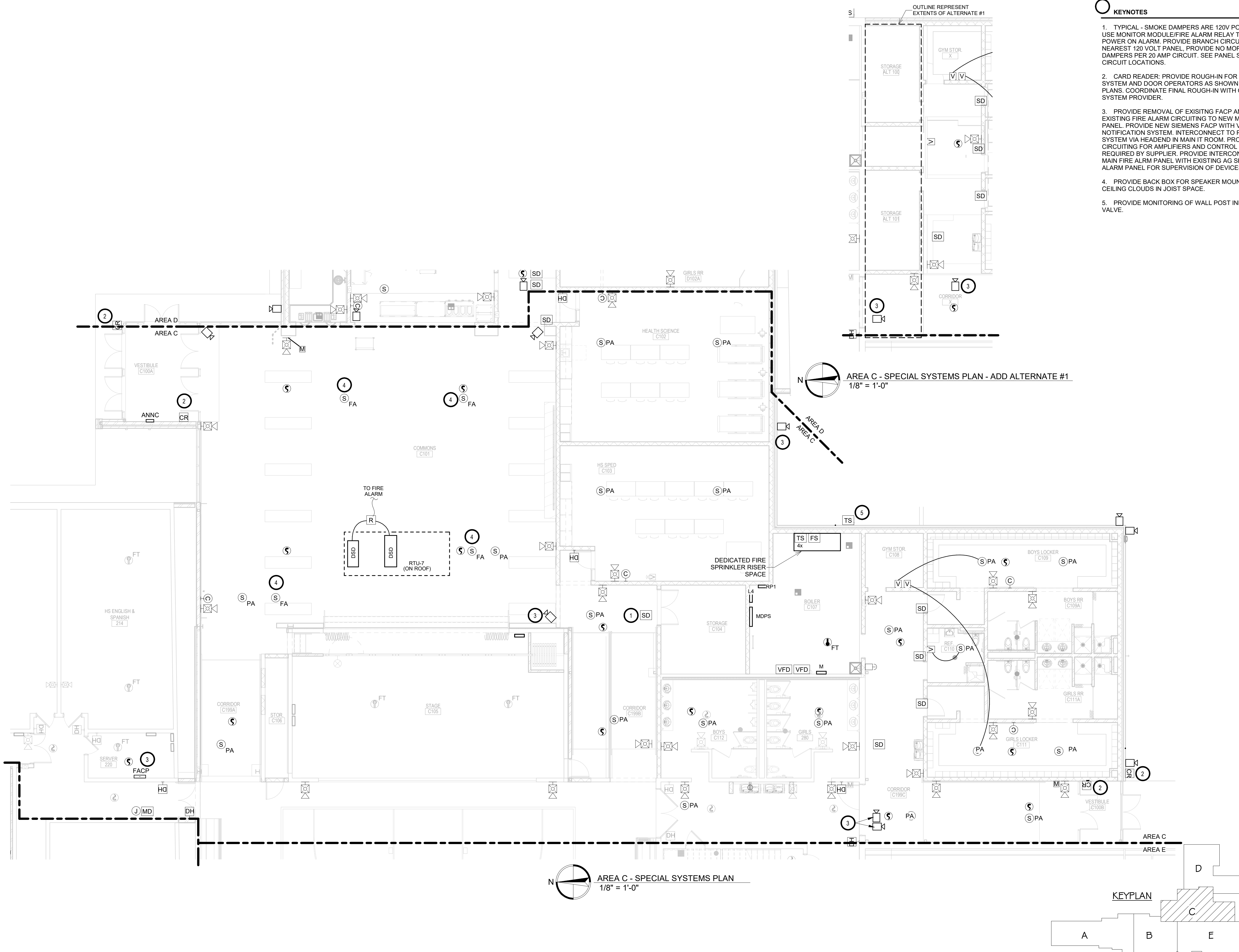
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA B - SPECIAL SYSTEMS  
PLAN

E501B

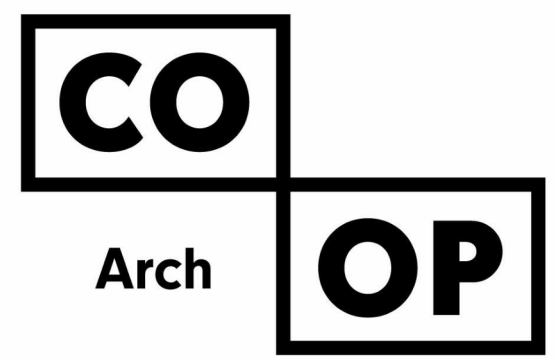
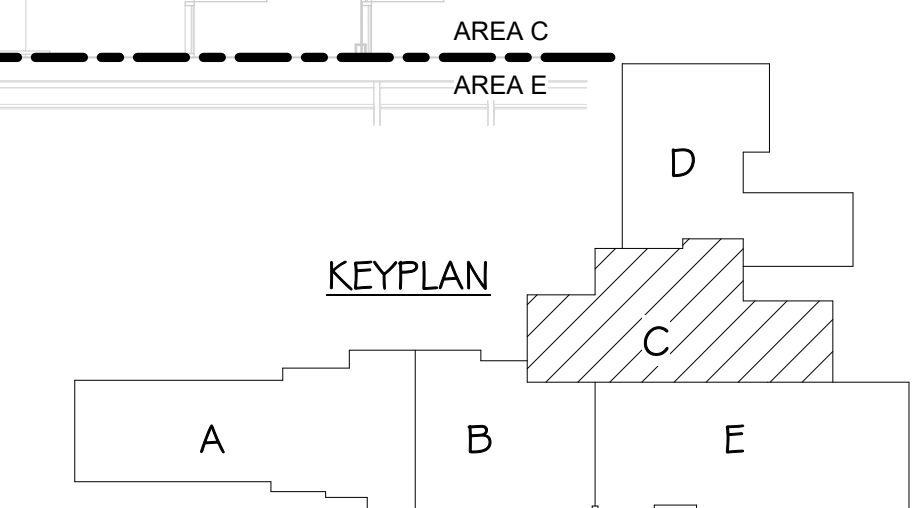




- KEYNOTES**
1. TYPICAL - SMOKE DAMPERS ARE 120V POWER OPEN. USE MONITOR MODULE/FIRE ALARM RELAY TO OPEN 120V POWER ON ALARM. PROVIDE BRANCH CIRCUIT WIRING TO NEAREST 120 VOLT PANEL. PROVIDE NO MORE THAN (3) DAMPERS PER 20 AMP CIRCUIT. SEE PANEL SCHEDULE FOR CIRCUIT LOCATIONS.
  2. CARD READER: PROVIDE ROUGH-IN FOR CARD READER SYSTEM AND DOOR OPERATORS AS SHOWN ON DETAILS PLANS. COORDINATE FINAL ROUGH-IN WITH OWNER'S SYSTEM PROVIDER.
  3. PROVIDE REMOVAL OF EXISTING FACP AND EXTEND EXISTING FIRE ALARM CIRCUITING TO NEW MAIN CONTROL PANEL. PROVIDE NEW SIEMENS FACP WITH VOICE NOTIFICATION SYSTEM. INTERCONNECT TO PAGING SYSTEM VIA HEADEND IN MAIN IT ROOM. PROVIDE POWER CIRCUITING FOR AMPLIFIERS AND CONTROL PANELS AS REQUIRED BY SUPPLIER. PROVIDE INTERCONNECTION OF MAIN FIRE ALARM PANEL WITH EXISTING AG SHOP FIRE ALARM PANEL FOR SUPERVISION OF DEVICES.
  4. PROVIDE BACK BOX FOR SPEAKER MOUNTING ABOVE CEILING CLOUDS IN JOIST SPACE.
  5. PROVIDE MONITORING OF WALL POST INDICATOR VALVE.

AREA C - SPECIAL SYSTEMS PLAN - ADD ALTERNATE #1  
1/8" = 1'-0"

AREA C - SPECIAL SYSTEMS PLAN  
1/8" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

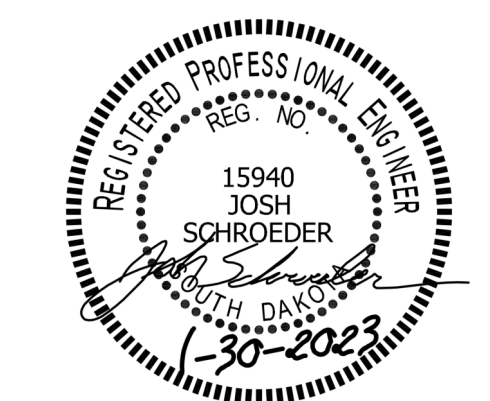
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA C - SPECIAL SYSTEMS PLAN

**E502C**

1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

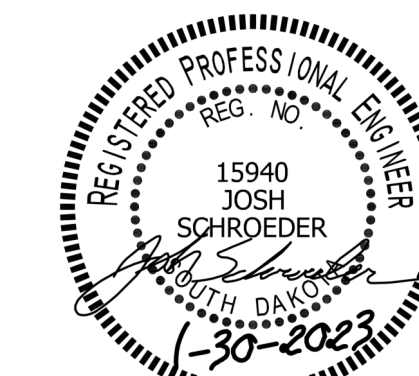
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER  
ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

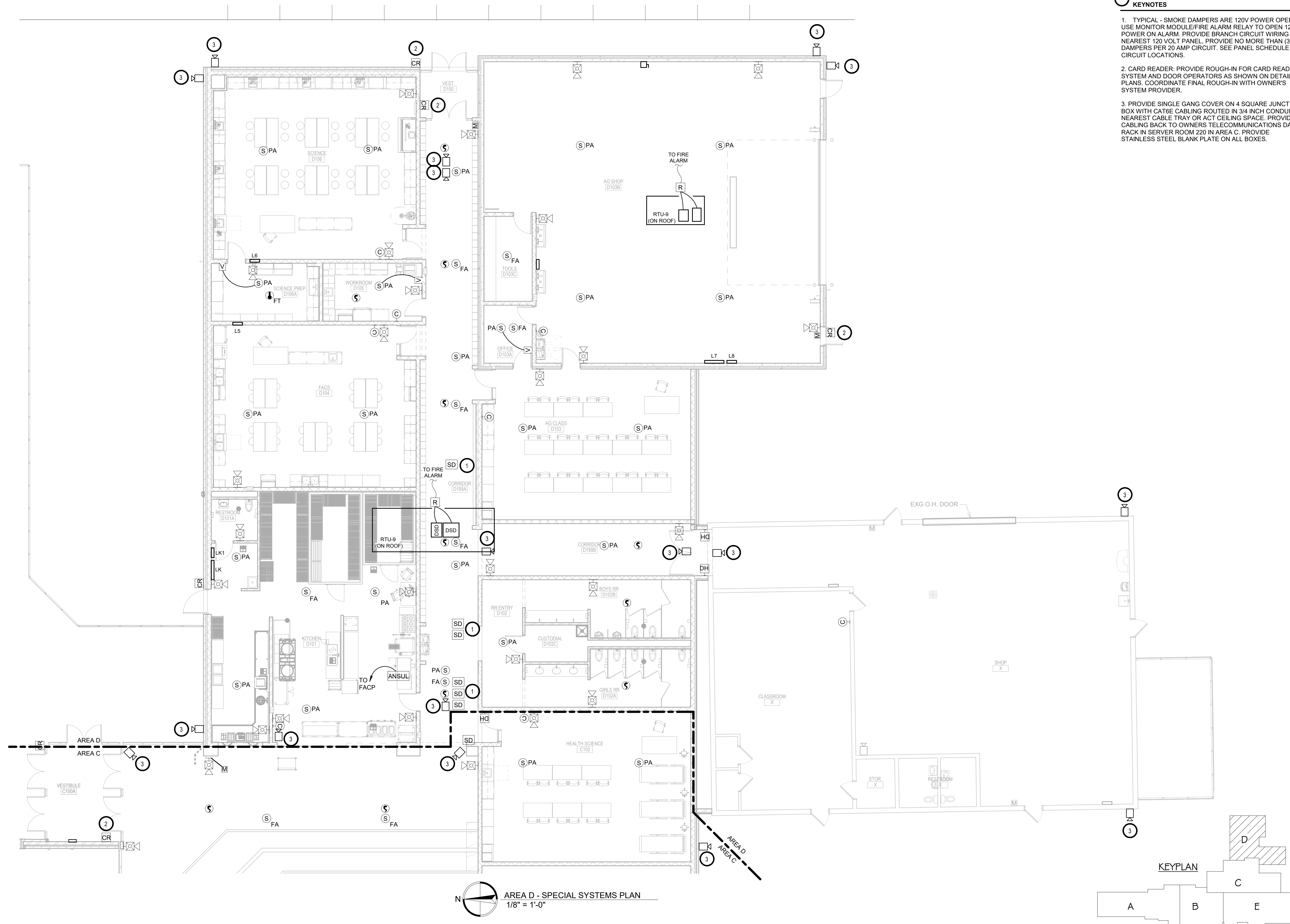
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
AREA D - SPECIAL SYSTEMS  
PLAN

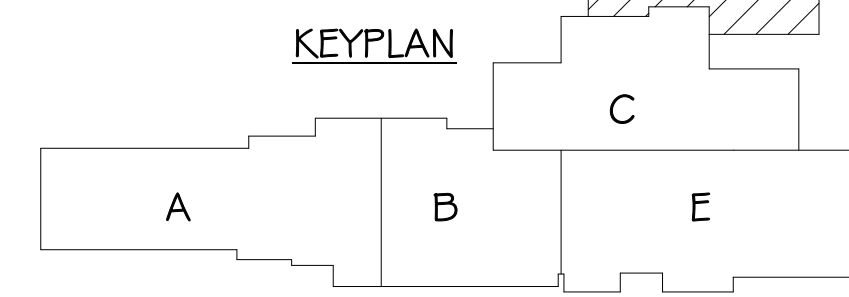
**E503D**

**KEYNOTES**

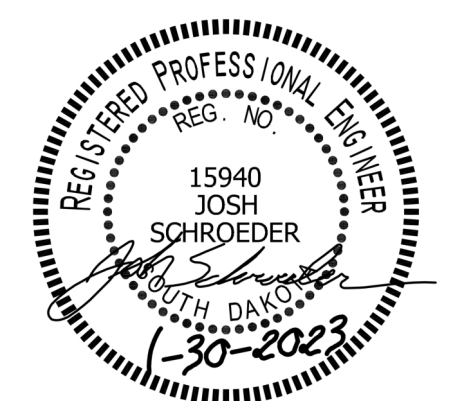
1. TYPICAL - SMOKE DAMPERS ARE 120V POWER OPEN. USE MONITOR MODULE/FIRE ALARM RELAY TO OPEN 120V POWER ON ALARM. PROVIDE BRANCH CIRCUIT WIRING TO NEAREST 120 VOLT PANEL. PROVIDE NO MORE THAN (3) DAMPERS PER 20 AMP CIRCUIT. SEE PANEL SCHEDULE FOR CIRCUIT LOCATIONS.
2. CARD READER: PROVIDE ROUGH-IN FOR CARD READER SYSTEM AND DOOR OPERATORS AS SHOWN ON DETAILS PLANS. COORDINATE FINAL ROUGH-IN WITH OWNER'S SYSTEM PROVIDER.
3. PROVIDE SINGLE GANG COVER ON 4 SQUARE JUNCTION BOX WITH CAT5E CABLING ROUTED IN 3/4 INCH CONDUIT TO NEAREST CABLE TRAY OR ACT CEILING SPACE. PROVIDE CABLING BACK TO OWNERS TELECOMMUNICATIONS DATA RACK IN SERVER ROOM 220 IN AREA C. PROVIDE STAINLESS STEEL BLANK PLATE ON ALL BOXES.



**AREA D - SPECIAL SYSTEMS PLAN**  
1/8" = 1'-0"



SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

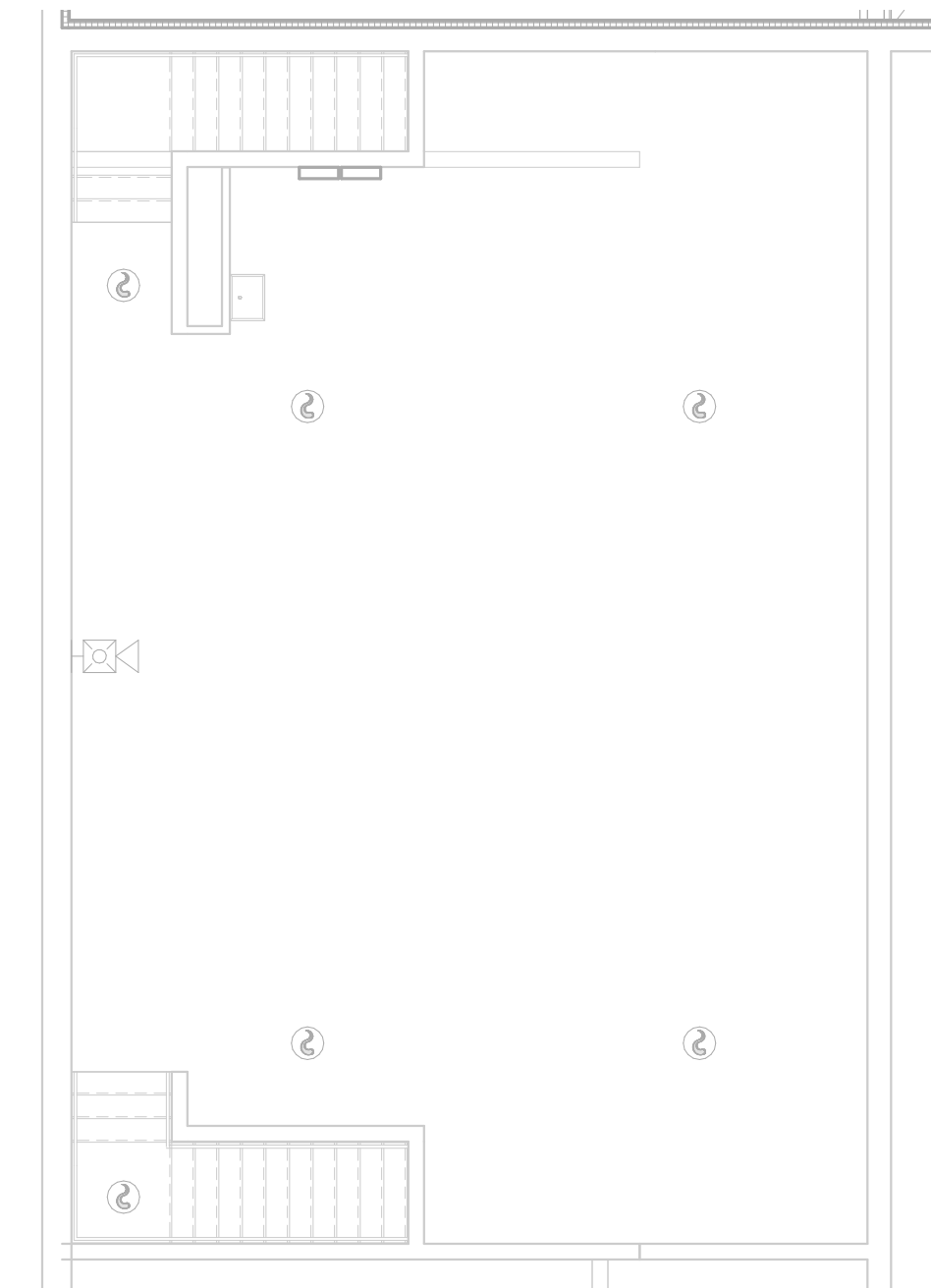
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

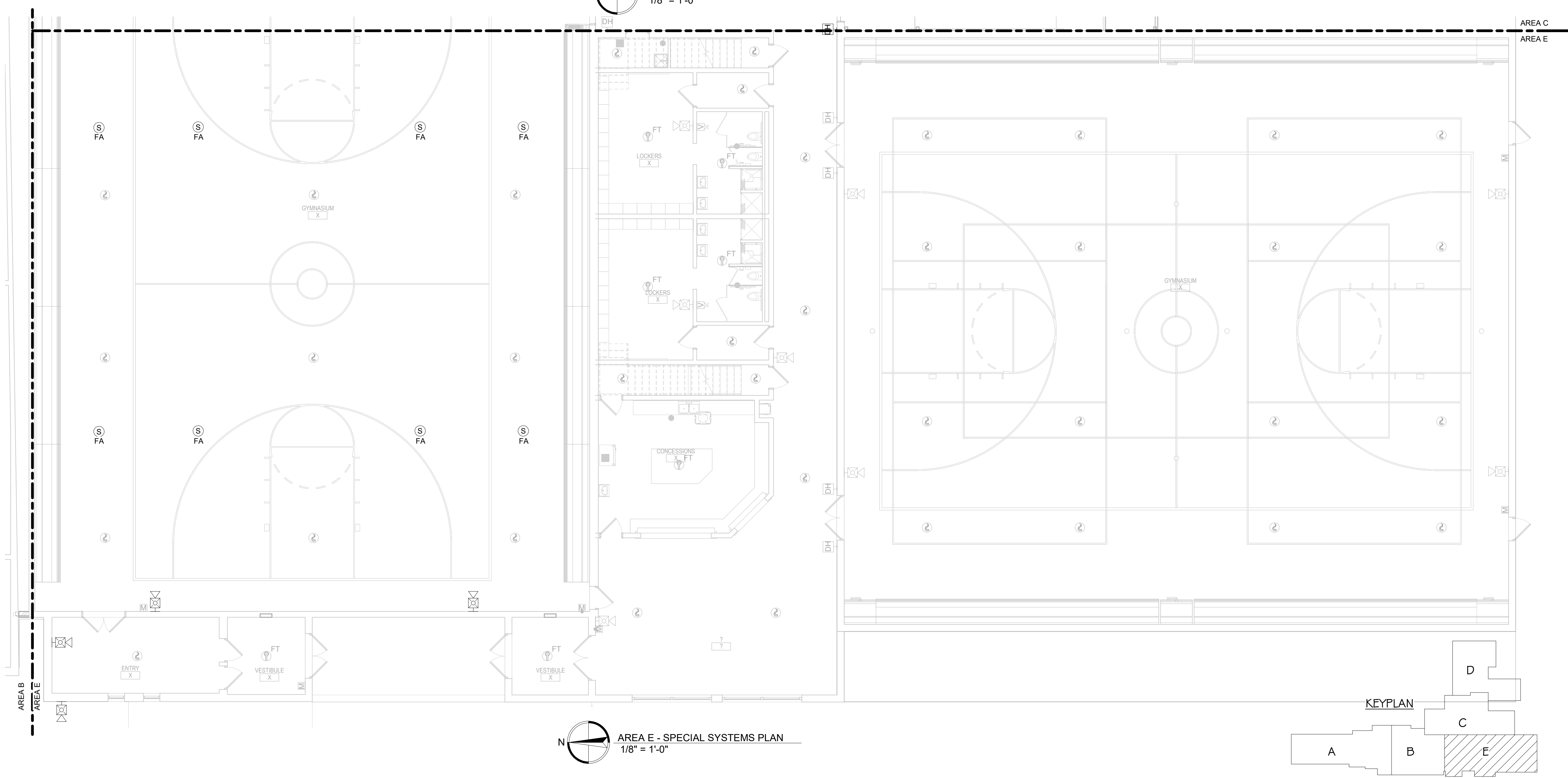
SHEET TITLE:  
AREA E - SPECIAL SYSTEMS PLAN

**E504E**

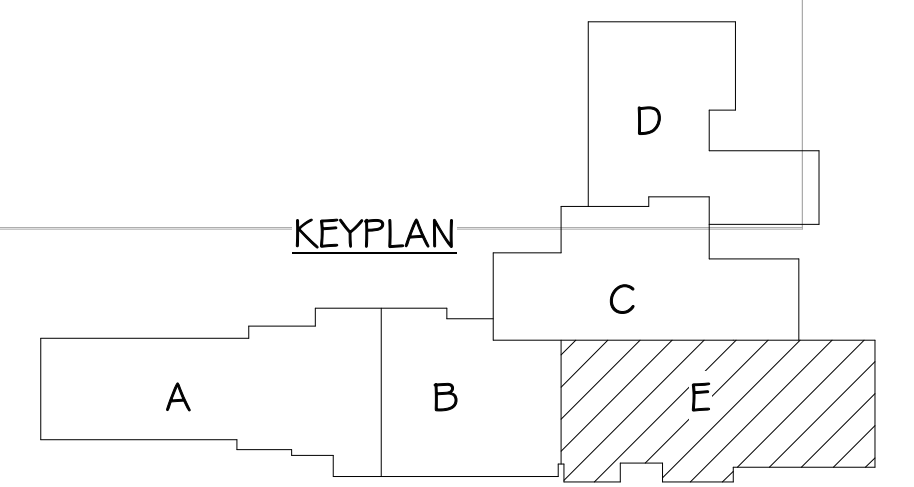
- KEYNOTES**
1. PROVIDE INSTALLATION OF SPRINKLER SYSTEM HORN/STROBE. CONNECT TO SPRINKLER FLOW SWITCH FOR MONITORING OF SPRINKLER.

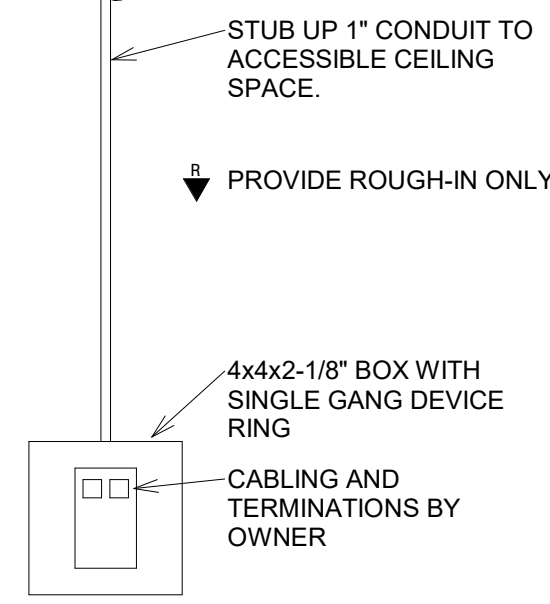


**AREA E - MEZZANINE SPECIAL SYSTEMS PLAN**  
1/8" = 1'-0"

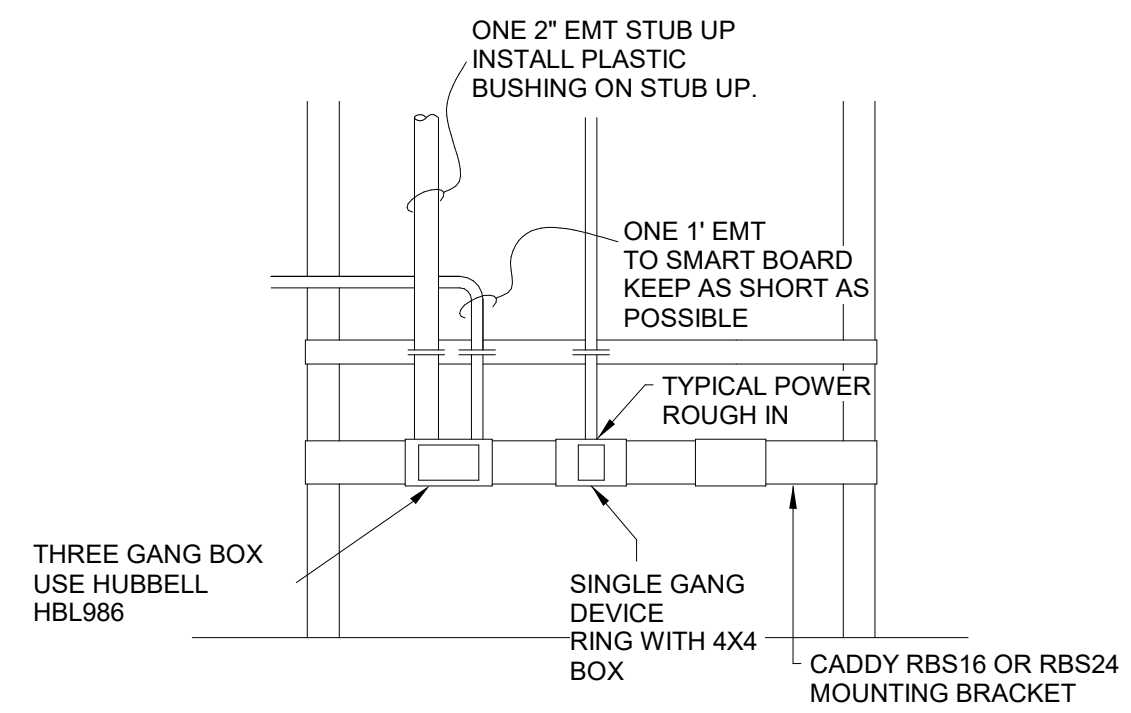


**AREA E - SPECIAL SYSTEMS PLAN**  
1/8" = 1'-0"

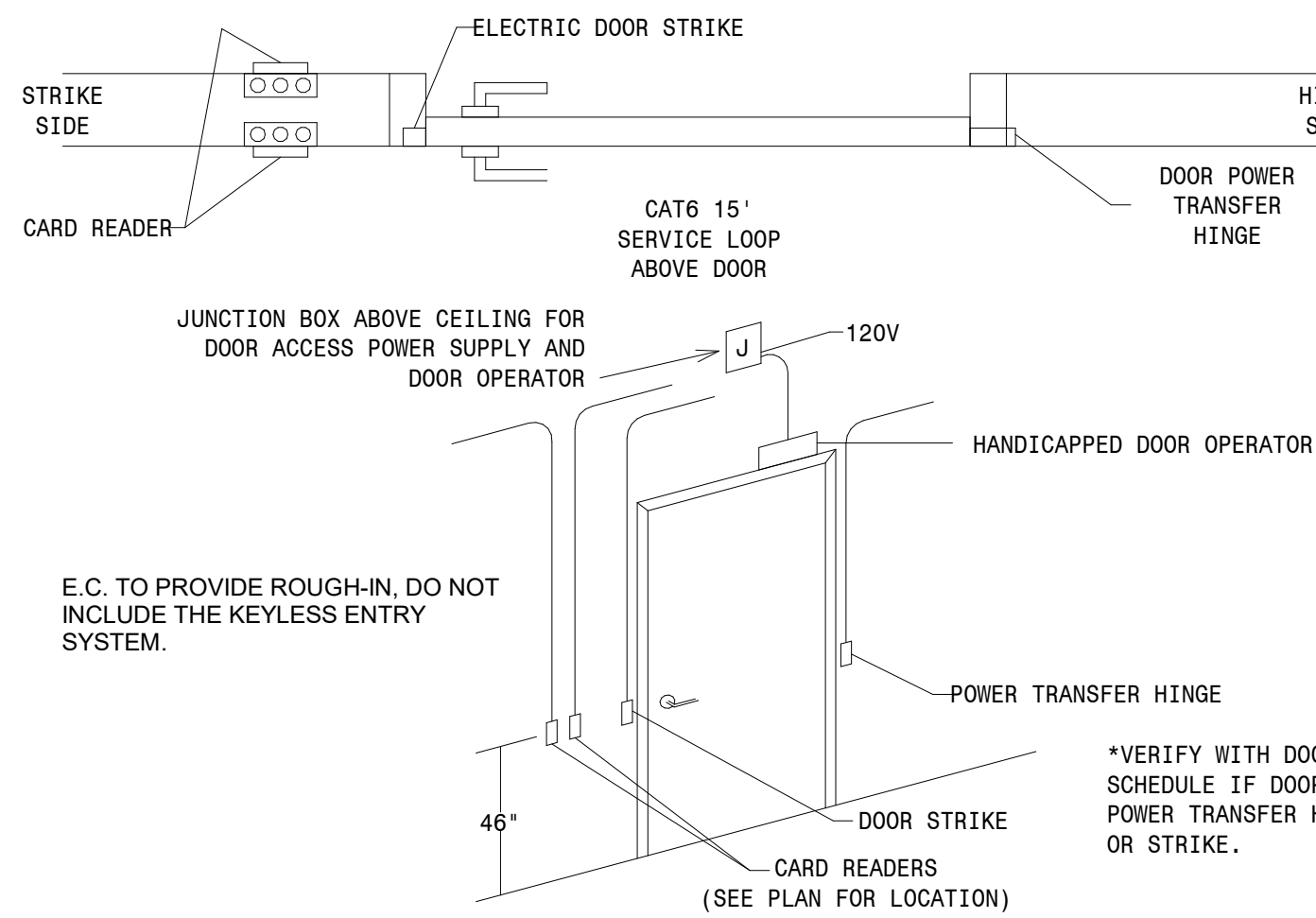




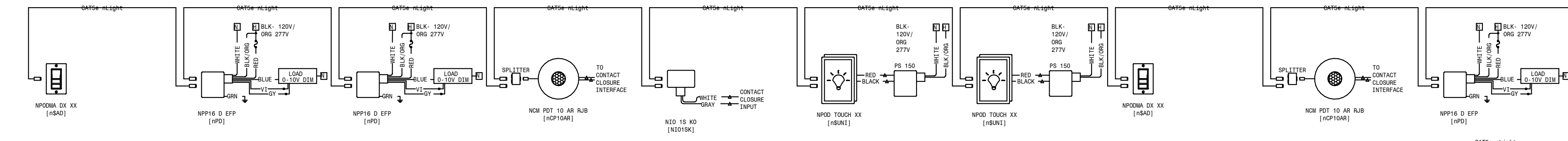
**Typical Data Location Detail**  
No Scale



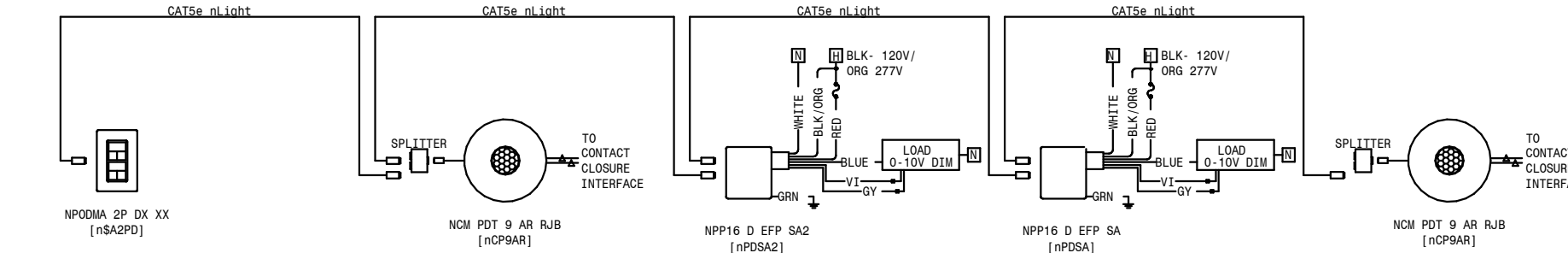
**Typical T/S Detail**  
NOT TO SCALE



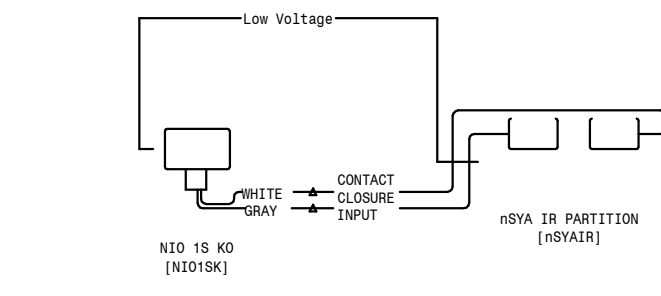
DEVICE	EC PROVIDE
DOOR STRIKE	1/2" CONDUIT FROM STRIKE TO ACCESSIBLE CEILING ABOVE DOOR
CARD READERS	3/4" CONDUIT TO ACCESSIBLE CEILING, 4X4X2 1/8 BOX WITH SINGLE GANG DEVICE RING
DOOR OPERATOR	120V CONNECTION TO OPERATOR, AND EMPTY 1/2" CONDUIT TO ABOVE CEILING FOR SECURITY CONTRACTOR
JUNCTION BOX	120V CIRCUIT TO J-BOX ABOVE DOOR FOR SECURITY/DOOR LOCK POWER SUPPLY
POWER TRANSFER HINGE	1/2" CONDUIT FROM FRAME TO ACCESSIBLE CEILING ABOVE DOOR



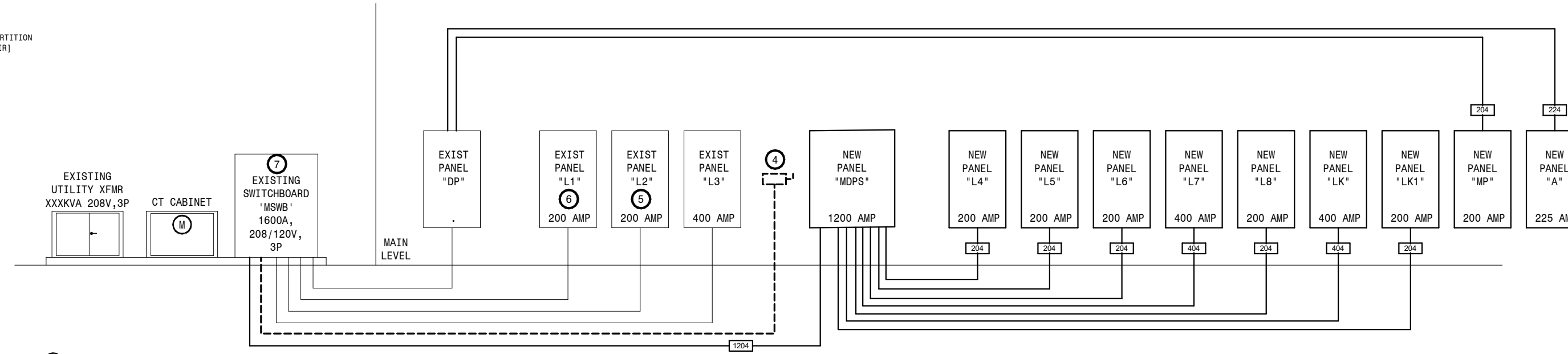
**1 nLight - Flex Rooms**  
E400



**2 nLight - Typical Classroom**  
E400



**3 Low Voltage - Flex Rooms**  
E400

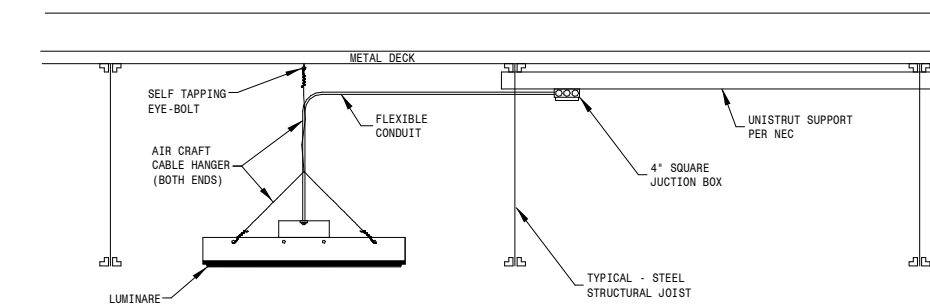


**RISER DIAGRAM NOTES:**

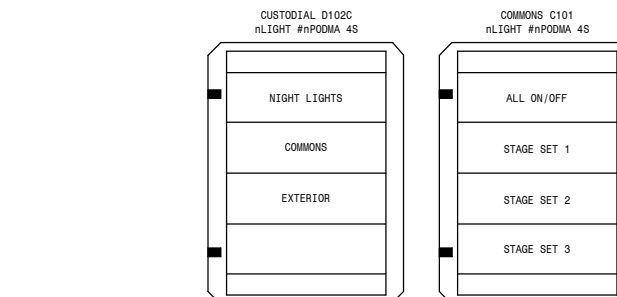
- SWITCHBOARD 'MH': PROVIDE NEW 480 VOLT, 200 AMP, 3 POLE CIRCUIT BREAKER FOR CONNECTION OF NEW FEEDER. SWITCHBOARD INFO: GENERAL ELECTRIC COMPANY, REG. NO. 38608604, JOB NO. 1786815133E01, SECTION 3 OF 3 2500 AMP.
- SWITCHBOARD 'ML': UTILIZE EXISTING SPARE 208 VOLT, 100 AMP, 3 POLE CIRCUIT BREAKER FOR CONNECTION OF NEW FEEDER.
- UTILIZE EXISTING 400 AMP 3 POLE FUSIBLE SWITCH FOR CONNECTION OF TRANSFORMER 'WL'. PROVIDE 300 AMP FUSES AS REQUIRED FOR CONNECTION.
- PROVIDE DEMOLITION AND REMOVAL OF EXISTING 200 AMP DISCONNECT AND FEEDER LOCATED IN AREA C BOILER ROOM.
- EXISTING PANEL 'L2': PROVIDE (2) NEW 80 AMP, 2 POLE CIRCUIT BREAKERS IN PANEL FOR CONNECTION OF DSC-10, DSC-11. PANEL INFO - SQUARE D SERIES NO. 225 MAX AMP, 208Y/120V, 3 PHASE, 4 WIRE, 10KA1C, CAT#45367625680040001.
- EXISTING PANEL 'L1': PROVIDE NEW (1) 40 AMP, 2 POLE CIRCUIT BREAKERS, AND (1) 15 AMP SINGLE POLE CIRCUIT BREAKER IN PANEL FOR CONNECTION OF FC-A10S AND CU-A10S. PANEL INFO - SQUARE D SERIES NO. 225 MAX AMP, 208Y/120V, 3 PHASE, 4 WIRE, 10KA1C, CAT#12367625680030001.
- EXISTING MAIN SMD 'MDP': PROVIDE NEW (1) 800AMP, 3 POLE CIRCUIT BREAKER AND (1) 100 AMP, 3 POLE CIRCUIT BREAKER IN SUB FOR CONNECTION OF PANEL 'MDPS' AND RTU-10. PANEL INFO - SQUARE D OED SERIES 2, 1600 AMP, 208Y/120V, 3 PHASE, 4 WIRE, CAT#36762568-00, PLANT 44.

**Power Riser Diagram**  
NOT TO SCALE

FEEDER TAG	AMPACITY	CONDUIT AND THIN WIRE (75 DEG C DU)
10A	100	1 1/2" C - 4 #10 & 1 #8 SMD
10A	100	2" C - 4 #10 & 1 #8 SMD
20A	200	2 1/2" C - 4 #10 & 1 #8 SMD
20A	200	2 1/2" C - 4 #10 & 1 #8 SMD
40A	400	4" C - 4 #10 & 1 #8 SMD
100A	1000	4" C - 3 1/2" C - 4 #10 & 1 #8 SMD



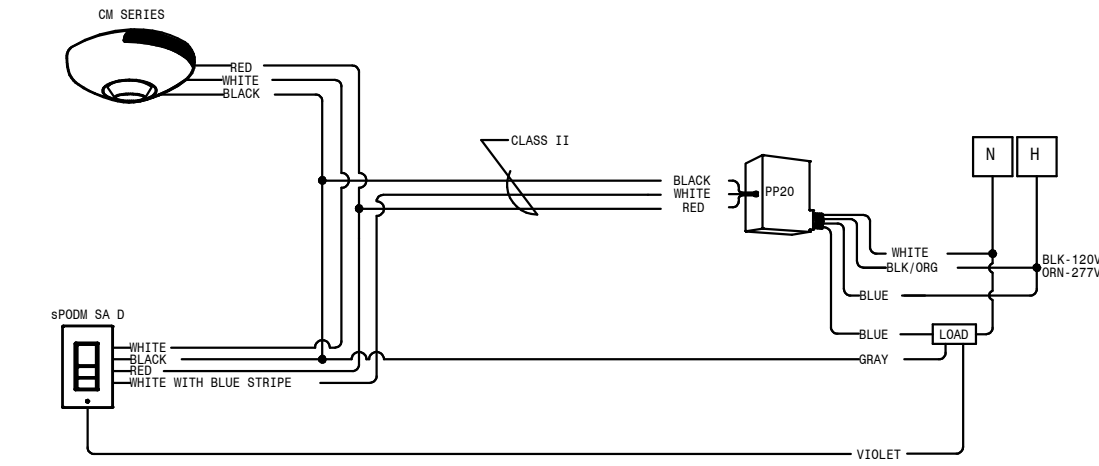
**Highbay Mounting Detail**  
NOT TO SCALE



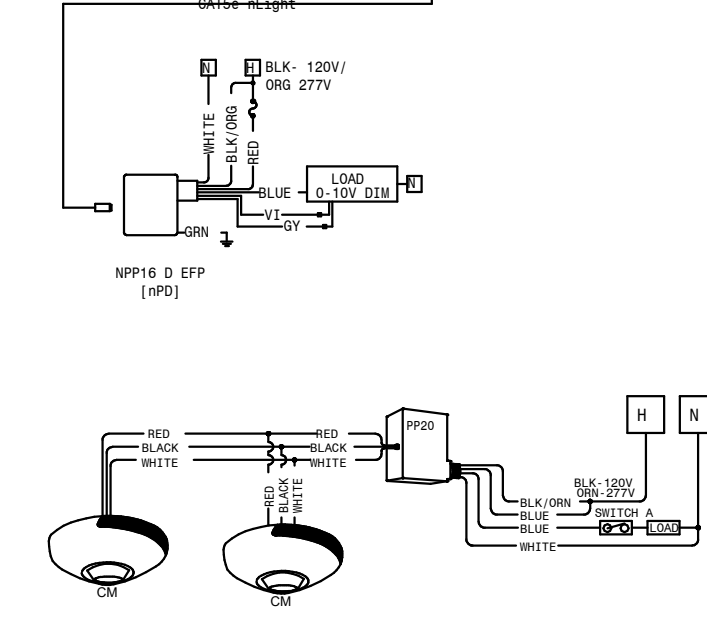
**NOTES:**

- PROVIDE ENGRAVED BUTTONS AS INDICATED, LABELS WILL NOT BE ACCEPTED.
- "ALL ON/OFF" SHALL TURN ON ALL LIGHTING COMMONS C101, OFF SHALL TURN OFF THE SAME LIGHT FIXTURES EXCEPT NIGHT LIGHTING CIRCUIT (NL) FOR ALL AREAS.
- "NIGHT LIGHTS" SHALL CONTROL ALL CORRIDOR NIGHT LIGHTS INCLUDING MAIN ENTRY FIXTURES.
- "COMMONS" SHALL TURN ON/OFF ALL LIGHT FIXTURE IN COMMONS EXCEPT TRACK LIGHTING.
- "EXTERIOR" SHALL CONTROL ALL EXTERIOR BUILDING LIGHT FIXTURES.
- "STAGE SET 1" PROGRAM TYPICAL STAGE LIGHTING FOR FLOODS ONLY.
- "STAGE SET 2" PROGRAM TYPICAL STAGE LIGHTING FOR FLOODS ONLY AND SPOT LIGHTS ON/OFF WITH SET DIMMING POINTS.
- "STAGE SET 3" PROGRAM TYPICAL STAGE LIGHTING PER OWNER REQUEST.

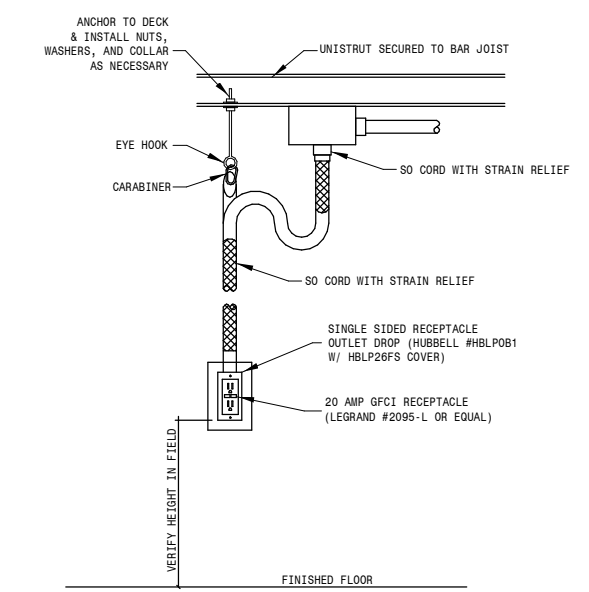
**4 Lighting Control Engraving Detail**  
NOT TO SCALE



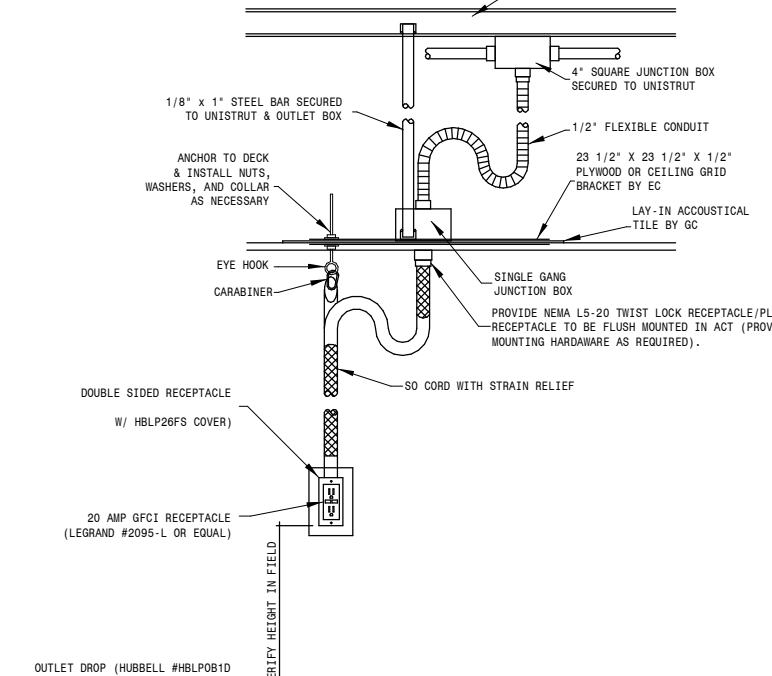
**CEILING MOUNT SENSOR, MANUAL ON AUTO OFF, DIMMING**  
NTR



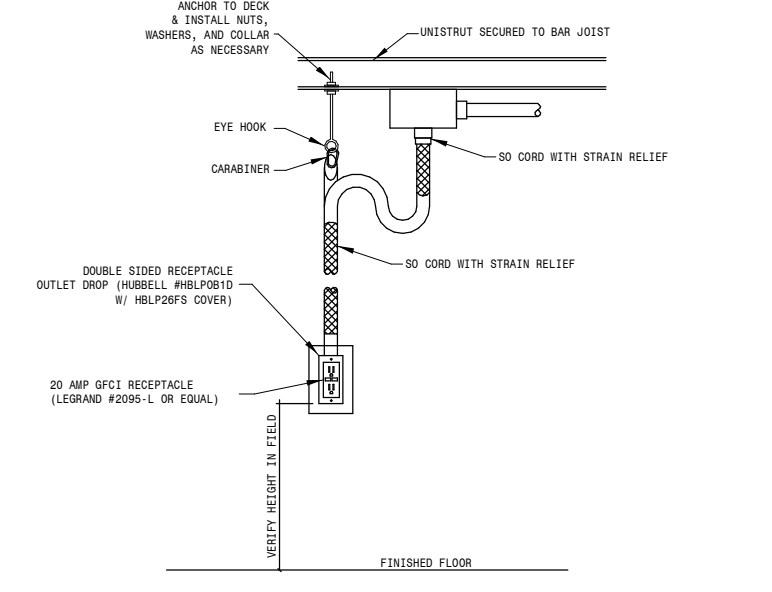
**PP20 SINGLE CIRCUIT W/MULTIPLE OCC SENSORS**  
NTR



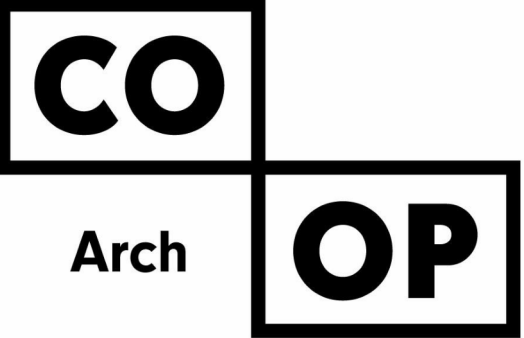
**1 Cord Drop Detail 'D1'**  
NOT TO SCALE



**2 Cord Drop Detail 'D2'**  
NOT TO SCALE



**3 Cord Drop Detail 'D3'**  
NOT TO SCALE



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

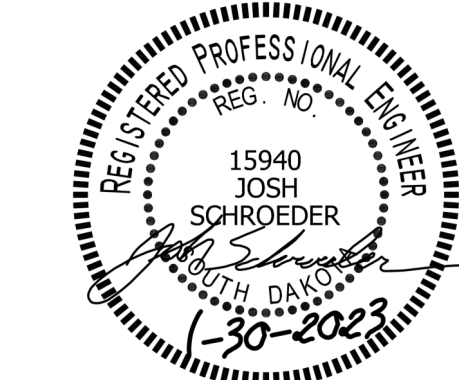
440 E. 8th St 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com

**SICHMELLER ENGINEERING**  
Mechanical & Electrical Engineering

801 Railroad Ave. SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
www.siceng.biz

SE PROJECT NO: 220900771



ISSUE:  
1/30/23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKESCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
ELECTRICAL DETAILS

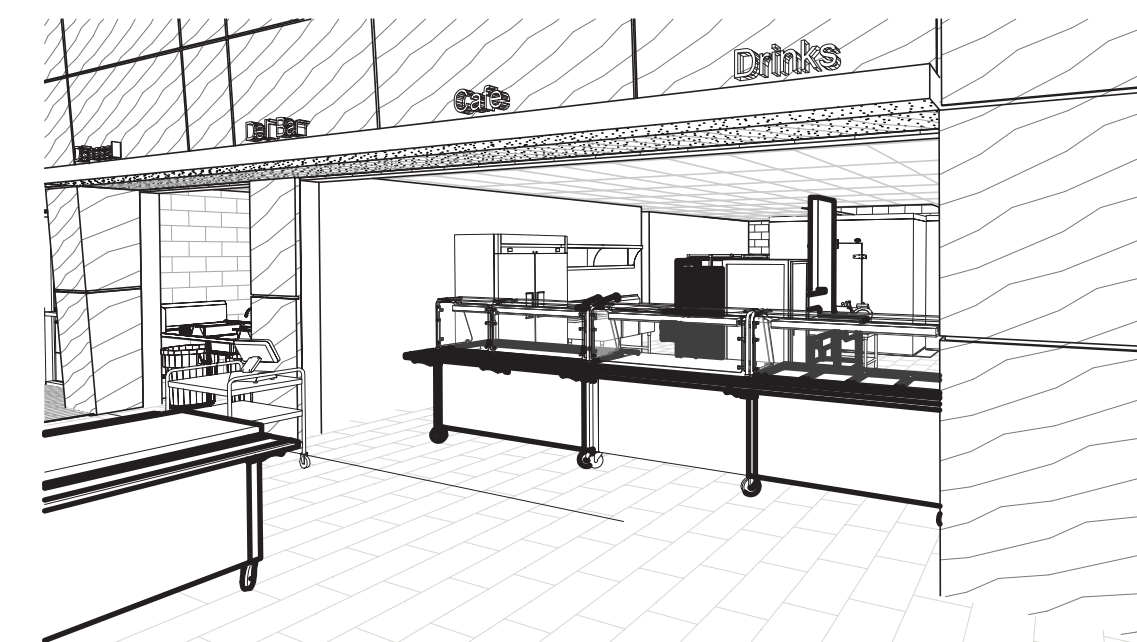
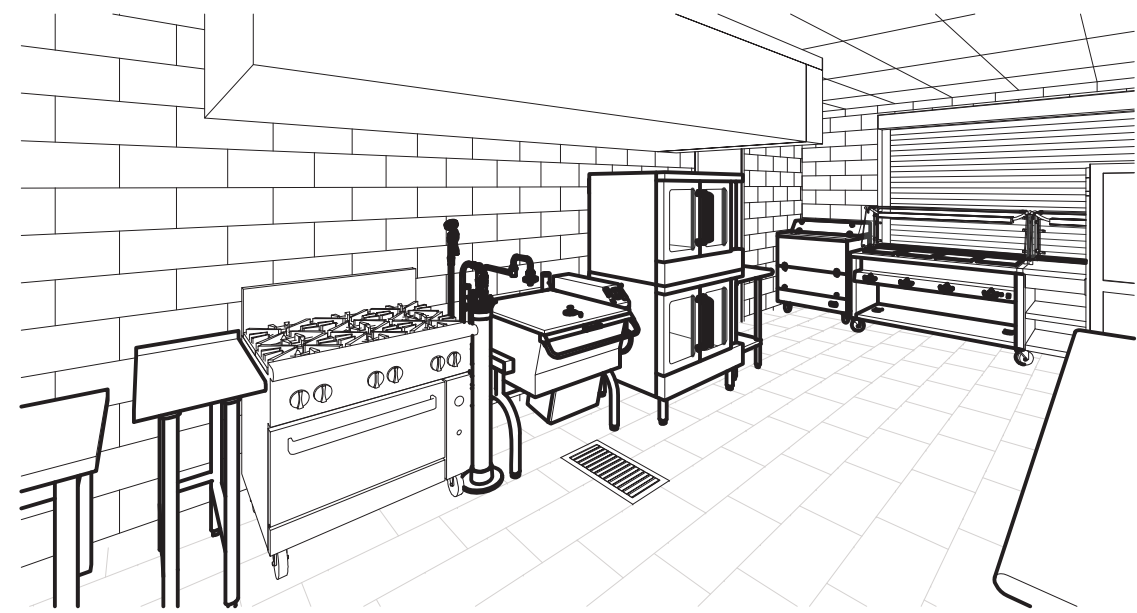
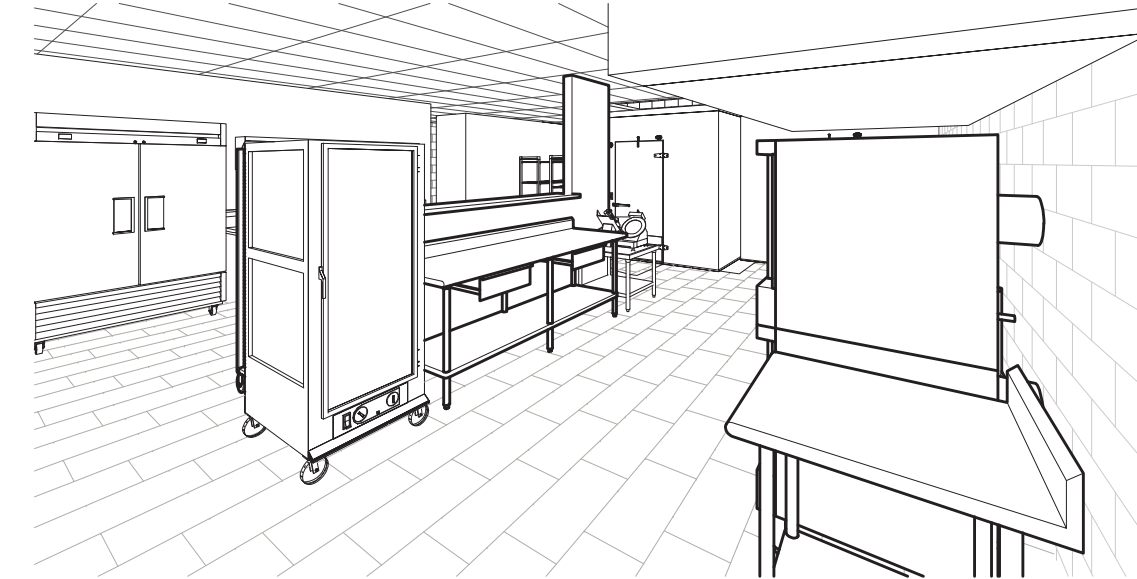
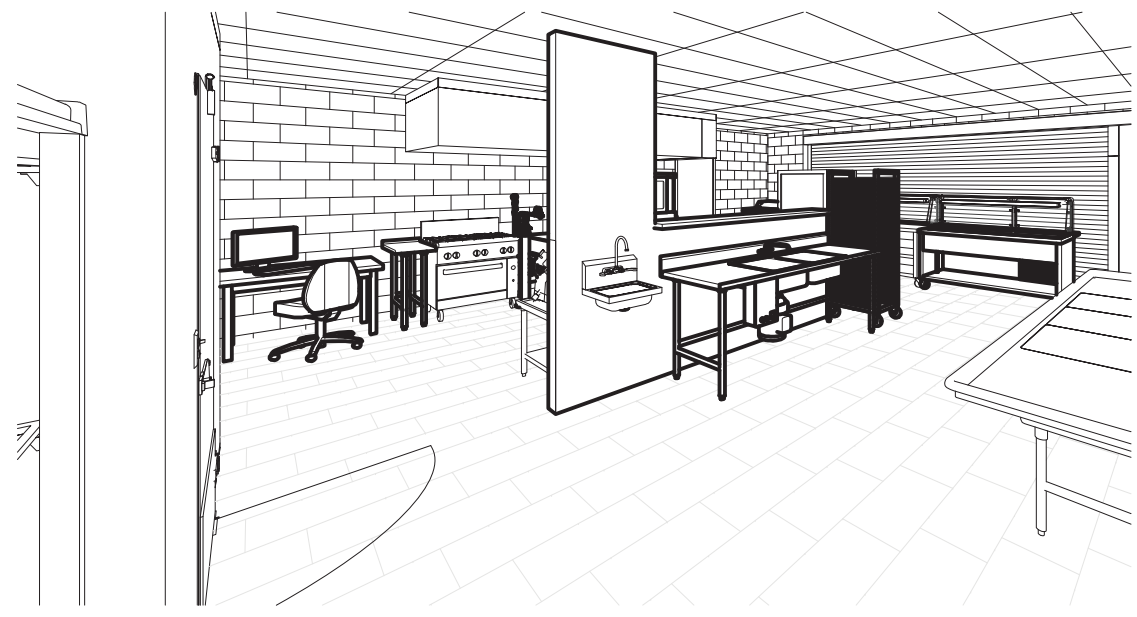
**E600**





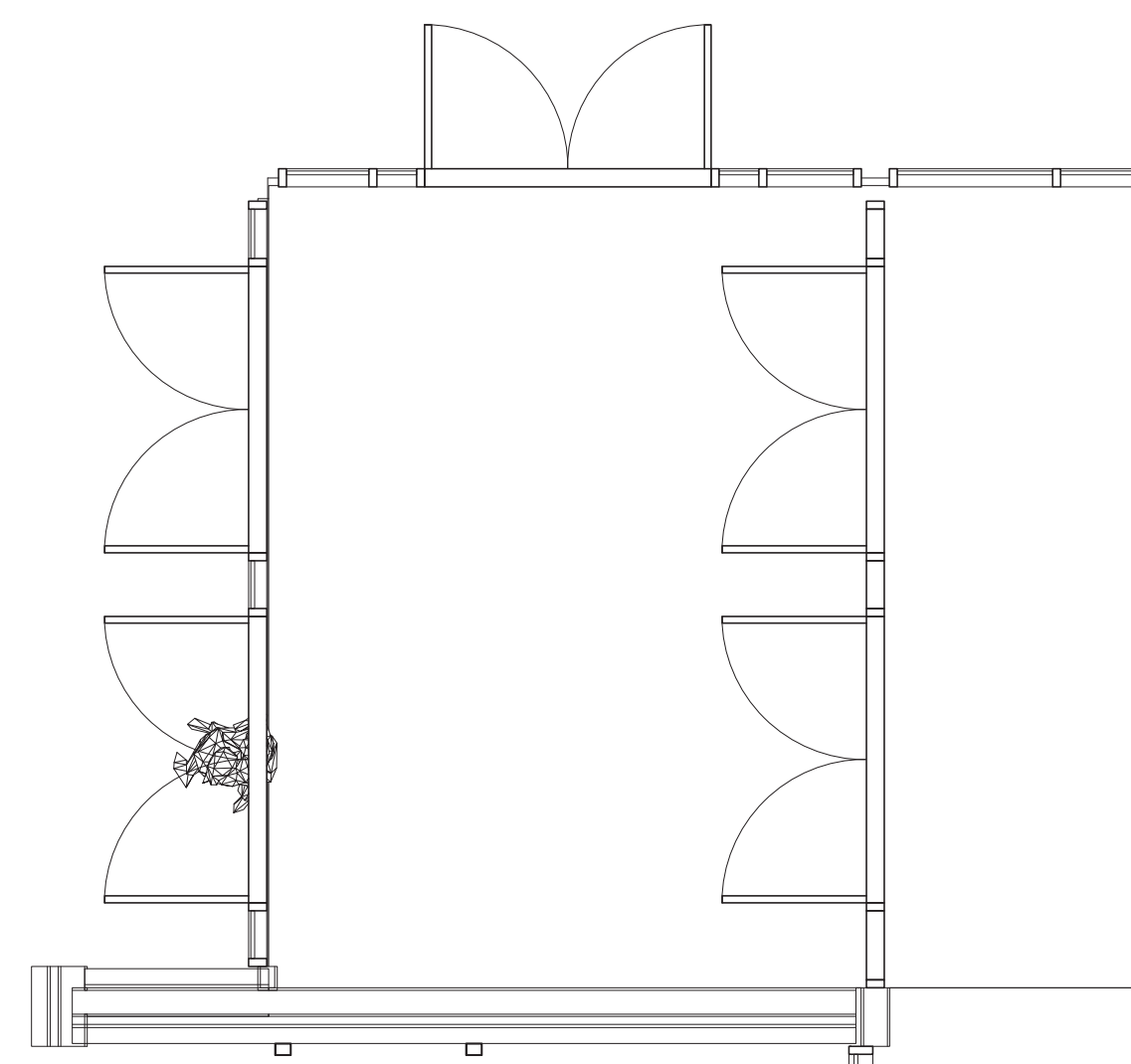






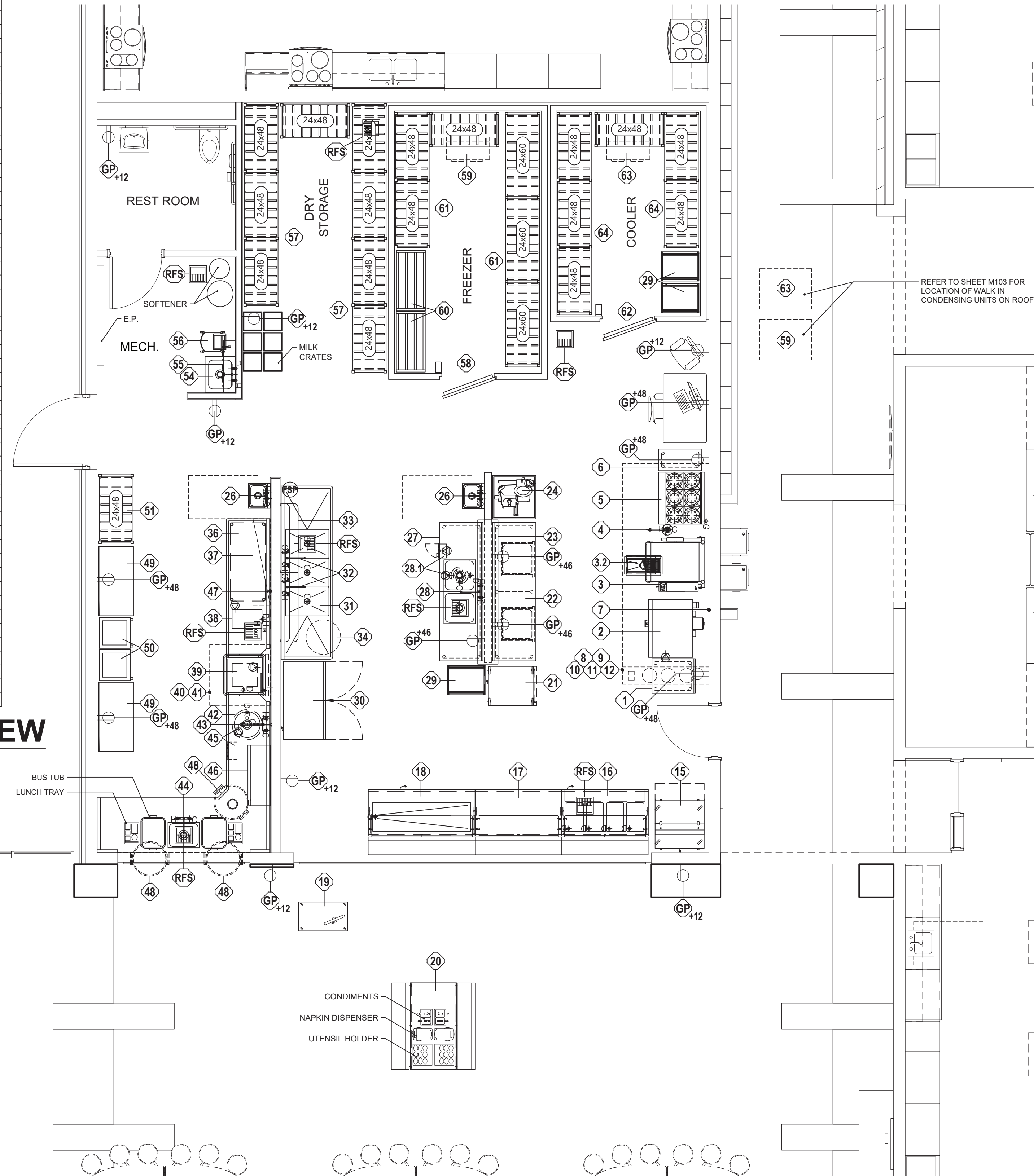
ITEM #	QTY	UNIT	CATEGORY
1	1	EA	S/S WORK TABLE
2	1	EA	CONVECTION OVEN, DOUBLE DECK (RELOCATE EXISTING)
2.1	1	KT	GAS HOUSE @ CONVECTION OVEN
3	1	EA	TILTING SKILLET (RELOCATE EXISTING)
3.1	1	KT	GAS HOUSE @ TILT SKILLET (RELOCATE EXISTING)
3.2	1	EA	FLOOR TROUGH
4	1	EA	KETTLE FILLER STANCHION
5	1	EA	RANGE, 6 BURNER (RELOCATE EXISTING)
5.1	1	KT	GAS HOSE @ RANGE
6	1	EA	S/S FILLER TABLE
7	1	LT	S/S WALL PANELS
8	1	EA	EXHAUST HOOD
9	1	EA	EXHAUST FAN (BY M/C)
10	1	EA	SUPPLY FAN (BY M/C)
11	1	EA	FIRE SUPPRESSION SYSTEM
12	1	EA	CONTROLS @ EXHAUST HOOD
13	-	-	SPARE NUMBER
14	-	-	SPARE NUMBER
15	1	EA	MILK COOLER (RELOCATE EXISTING)
16	1	EA	HOT FOOD SERVING COUNTER W/ SNEEZE GUARD
17	1	EA	SERVING COUNTER W/ SNEEZE GUARD
18	1	EA	COLD FOOD SERVING COUNTER W/ SNEEZE GUARD
19	1	EA	CASHIER STATION (RELOCATE EXISTING)
20	1	EA	SERVING COUNTER
21	1	EA	HEATED CABINET, MOBILE
22	1	EA	S/S WORK TABLE W/ (2) DRAWERS
23	1	EA	S/S SHELF
24	1	EA	FOOD SLICER W/ STAND (RELOCATE EXISTING)
25	-	-	SPARE NUMBER
26	2	EA	WALL MOUNT HAND SINK W/ FAUCET
27	1	EA	S/S WORK TABLE W/ TWO-COMPARTMENT SINK
28	1	EA	FAUCET @ ITEM 27
28.1	1	EA	DISPOSER & CONTROLS
29	3	EA	BUN / SHEET PAN RACK, MOBILE (RELOCATE EXISTING)
30	1	EA	REACH-IN REFRIGERATOR, 2-SECTION (RELOCATE EXISTING)
31	1	EA	THREE-COMPARTMENT SINK
32	2	EA	FAUCET @ ITEM 31
33	1	EA	S/S WALL MOUNT POT RACK
34	1	EA	GREASE INTERCEPTOR (BY PIC)
35	-	-	SPARE NUMBER
36	1	EA	CLEAN DISHTABLE
37	1	EA	S/S WALL MOUNT SHELF
38	1	EA	BOOSTER HEATER
39	1	EA	DISHWASHER, LOW TEMP (BY OWNER'S VENDOR)
40	1	EA	CONDENSATE EXHAUST HOOD
41	1	EA	CONDENSATE EXHAUST FAN (BY M/C)
42	1	EA	SOILED DISHTABLE, "L" SHAPED W/ SCRAP SINK
43	1	EA	PRE-RINSE FAUCET @ ITEM 42
44	1	EA	DECK MOUNT FAUCET @ ITEM 42
45	1	EA	DISPOSER & CONTROLS
46	1	EA	S/S WALL MOUNT SORTING SHELF
47	1	LT	S/S WALL PANELS @ DISH
48	3	EA	WASTE CONTAINER (BY OWNER)
49	2	EA	TABLE / TRAY CART (RELOCATE EXISTING)
50	2	EA	RACK DOLLY, MOBILE
51	1	EA	SHELVING UNIT, 4-TIER
52	-	-	SPARE NUMBER
53	-	-	SPARE NUMBER
54	1	EA	MOP SINK & FAUCET
55	1	EA	S/S WALL MOUNT UTILITY SHELF
56	1	EA	MOP BUCKET & WRINGER (BY OWNER)
57	8	SET	SHELVING UNIT, 4-TIER
58	1	EA	WALK-IN FREEZER
59	1	EA	REFRIGERATION SYSTEM AT WALK-IN FREEZER
60	2	EA	DUMNAGE RACK
61	6	SET	SHELVING UNIT, 4-TIER
62	1	EA	WALK-IN COOLER
63	1	EA	REFRIGERATION SYSTEM AT WALK-IN COOLER
64	6	SET	SHELVING UNIT, 4-TIER
GP	1	LT	GENERAL PURPOSE OUTLET

**FOODSERVICE PLAN VIEW**  
SCALE: 1/4" = 1'-0"

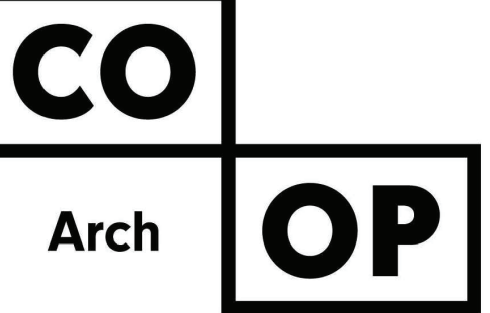


**FOODSERVICE GENERAL NOTES**

- ALL FS EQUIPMENT AND INSTALLATION SHALL COMPLY WITH CURRENT NATIONAL, STATE, AND LOCAL CODES, LAWS, RULES, AND REGULATIONS.
- ALL FS EQUIPMENT SHALL COMPLY WITH CURRENT EDITION OF CODES, RULES AND REGULATIONS OF THE GOVERNING HEALTH DEPARTMENT AND IF APPLICABLE BEAR THE SEAL OF UL, ETL, AGA, ASME, ANSI, NSF, AND NFPA.
- ALL DIMENSIONS NOTED ARE TAKEN FROM FINISHED FLOOR, FINISHED WALL, FINISHED CEILING, OR COLUMN CENTER LINE UNLESS OTHERWISE NOTED.
- HEIGHTS PROVIDED REPRESENT FINISHED FLOOR TO CENTER LINE OF ELECTRICAL OR MECHANICAL ROUGH IN.
- ALL EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS.
- ALL FS EQUIPMENT SHALL BE SET IN PLACE BY KEC READY FOR FINAL CONNECTION TO UTILITIES BY EC, PC, AND MC.
- COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT AND EQUIPMENT PROVIDED BY OWNER'S VENDORS SUCH AS SODA, COFFEE, ETC.
- ALL DUCTS, PIPING, CONDUIT AND WIRING SHALL BE CONCEALED UNLESS OTHERWISE NOTED.
- GC SHALL PROVIDE AND INSTALL WALL BACKING WHERE INDICATED IN THE DRAWINGS AND DETAILS.
- GC SHALL PROVIDE WALL BACKING ABOVE CEILING FOR CEILING SUPPORTED EQUIPMENT FURNISHED BY KEC, KEC TO PROVIDE LOCATIONS AND WEIGHT OF EQUIPMENT.
- CONTRACTORS SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.
- ALL FS EQUIPMENT PROVIDED SHALL BE NEW AND UNUSED UNLESS OTHERWISE NOTED.
- KEC IS RESPONSIBLE FOR FINAL FIELD VERIFICATION OF ALL DIMENSIONS AND SITE CONDITIONS TO FACILITATE INSTALLATION OF FS EQUIPMENT. NOTIFY ARCHITECT OF ANY DISCREPANCIES.



REFER TO SHEET M103 FOR LOCATION OF WALK-IN CONDENSING UNITS ON ROOF



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



PO BOX 90833  
SIOUX FALLS, SD 57109  
T: (605)-261-1916

CO-OP PROJECT NO: 2153

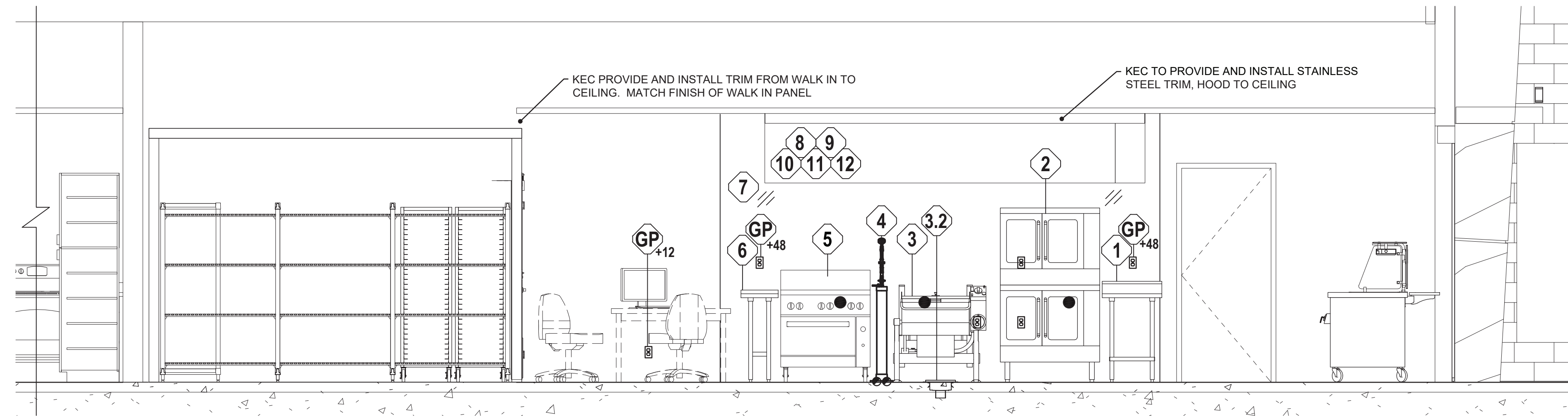
ISSUE:  
1-30-23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

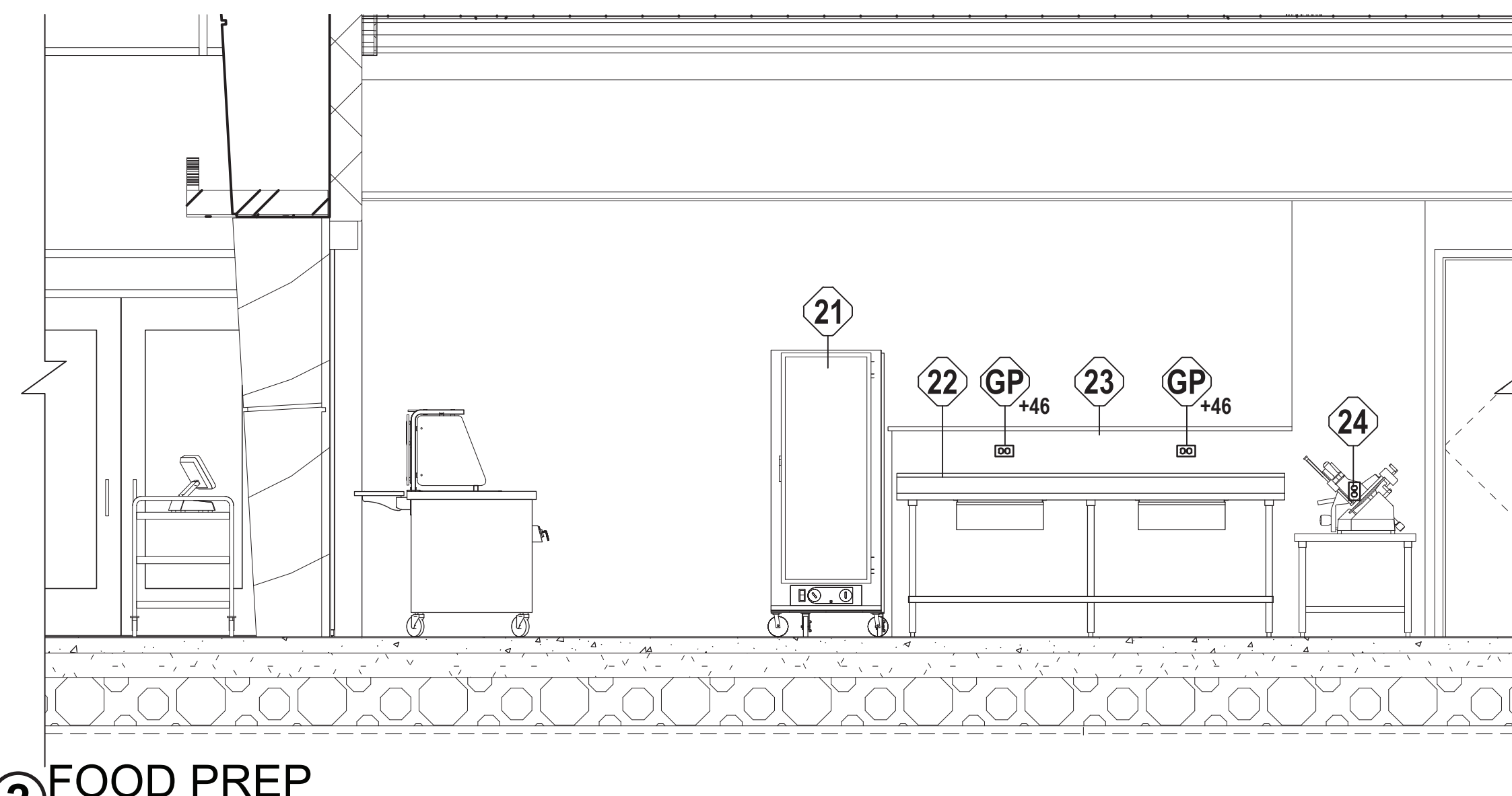
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FOOD SERVICE / PLAN VIEW

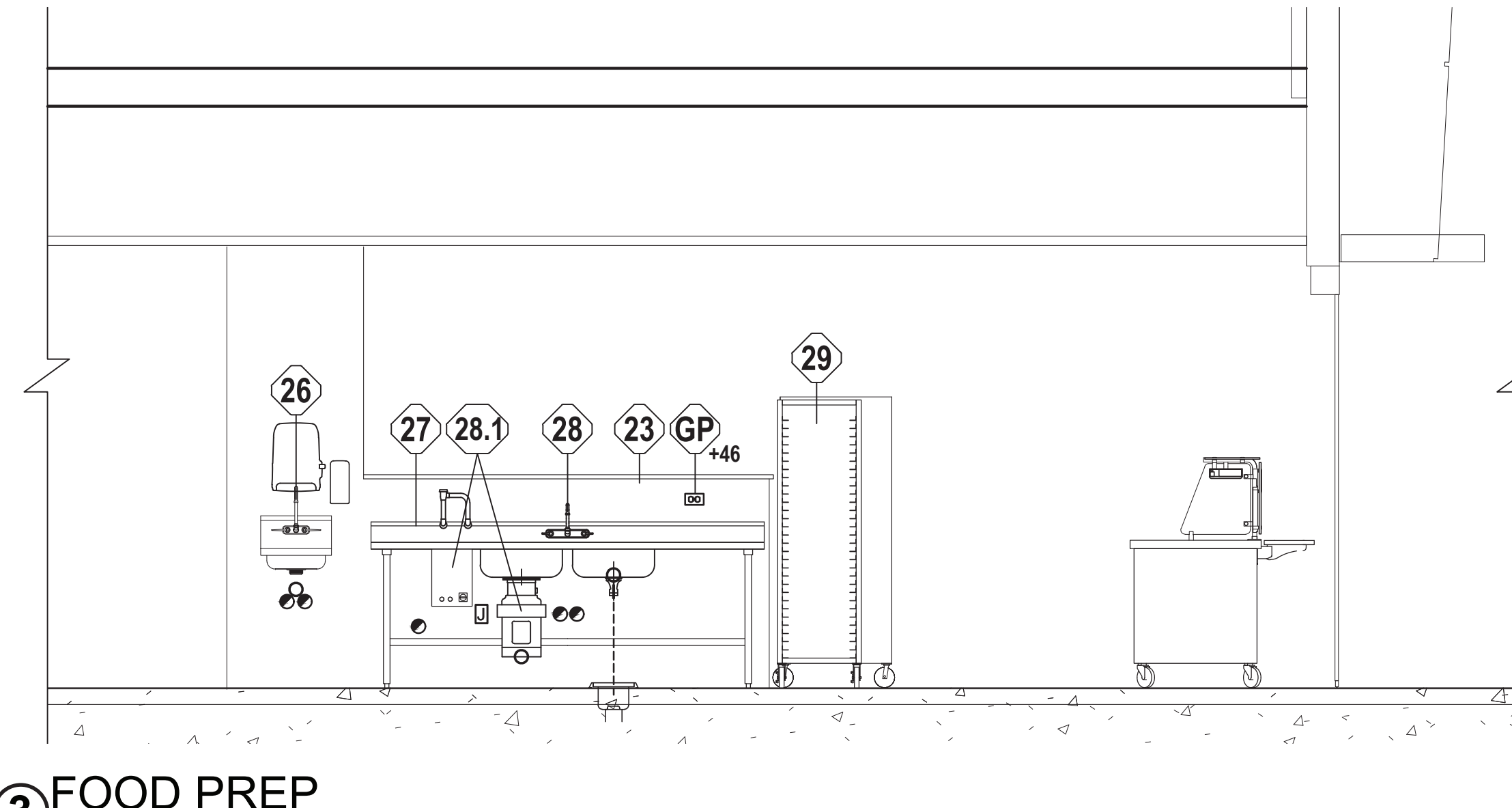
**F101**



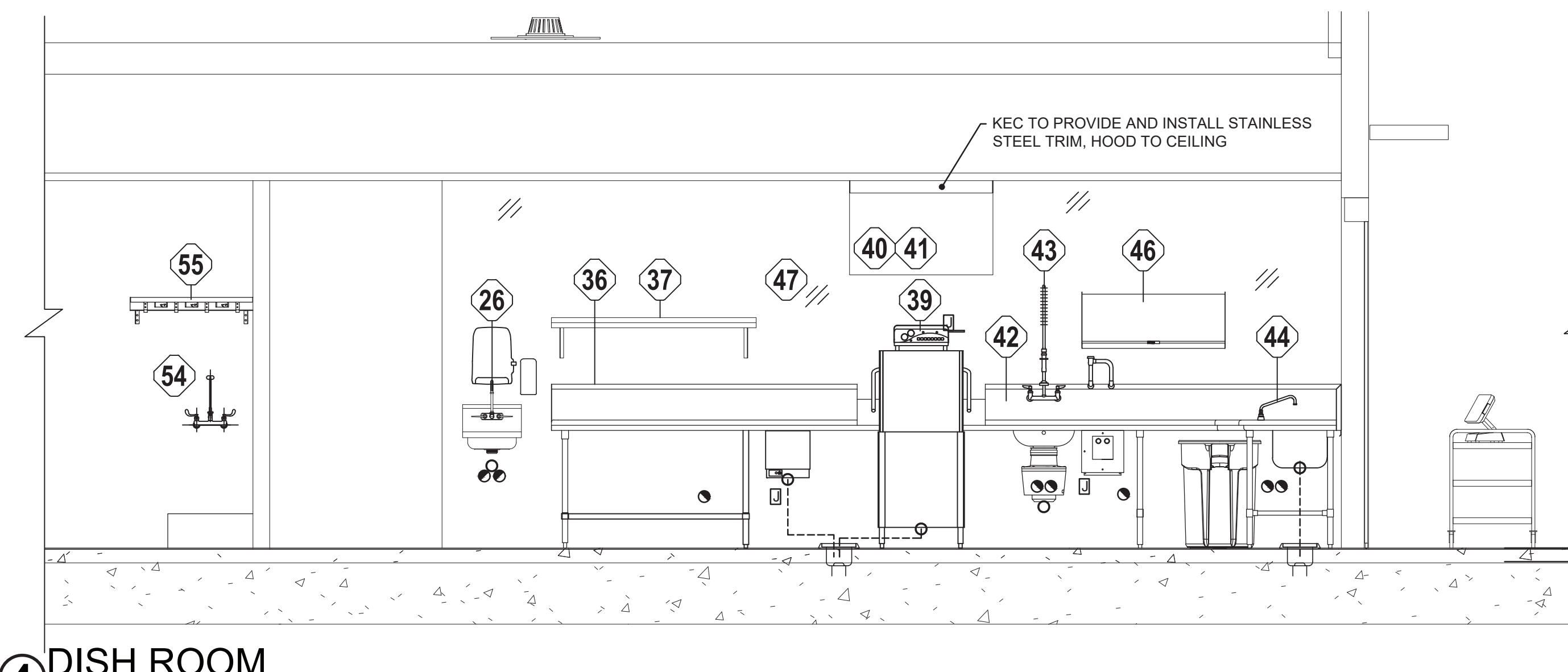
**1 COOK LINE**  
3/8" = 1'-0"



**2 FOOD PREP**  
3/8" = 1'-0"



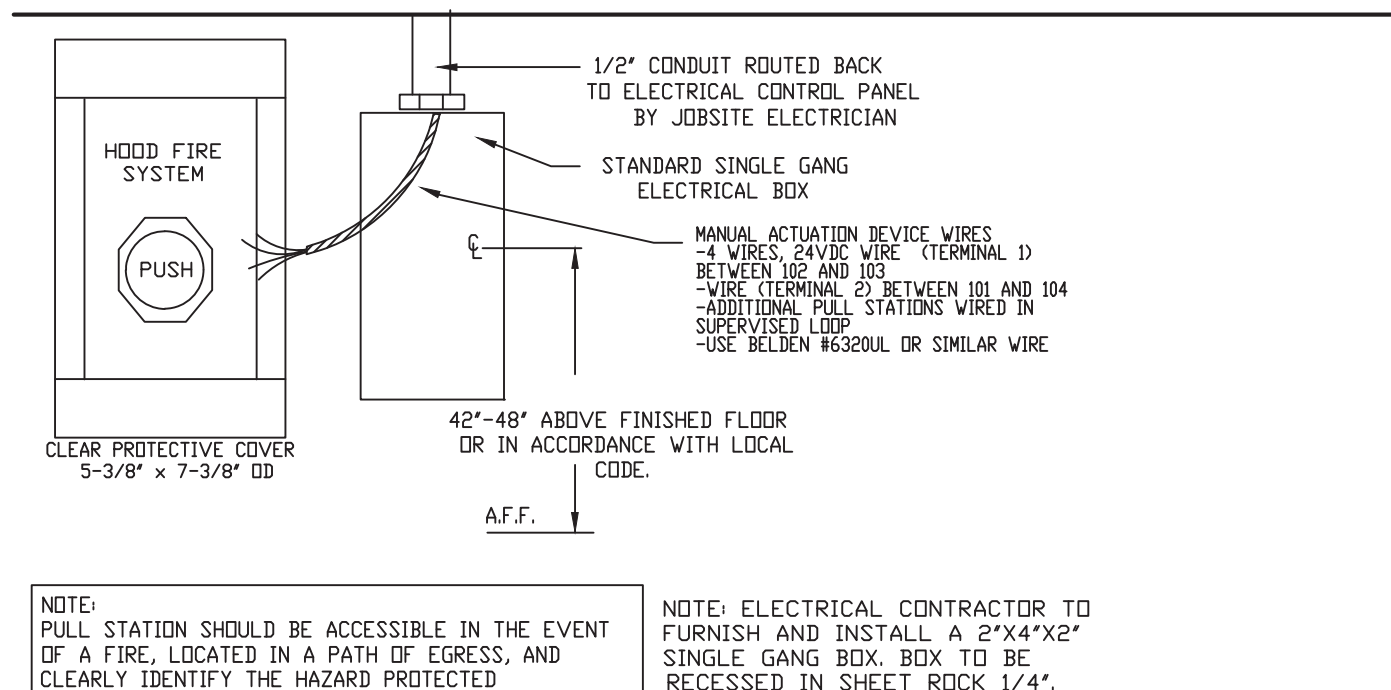
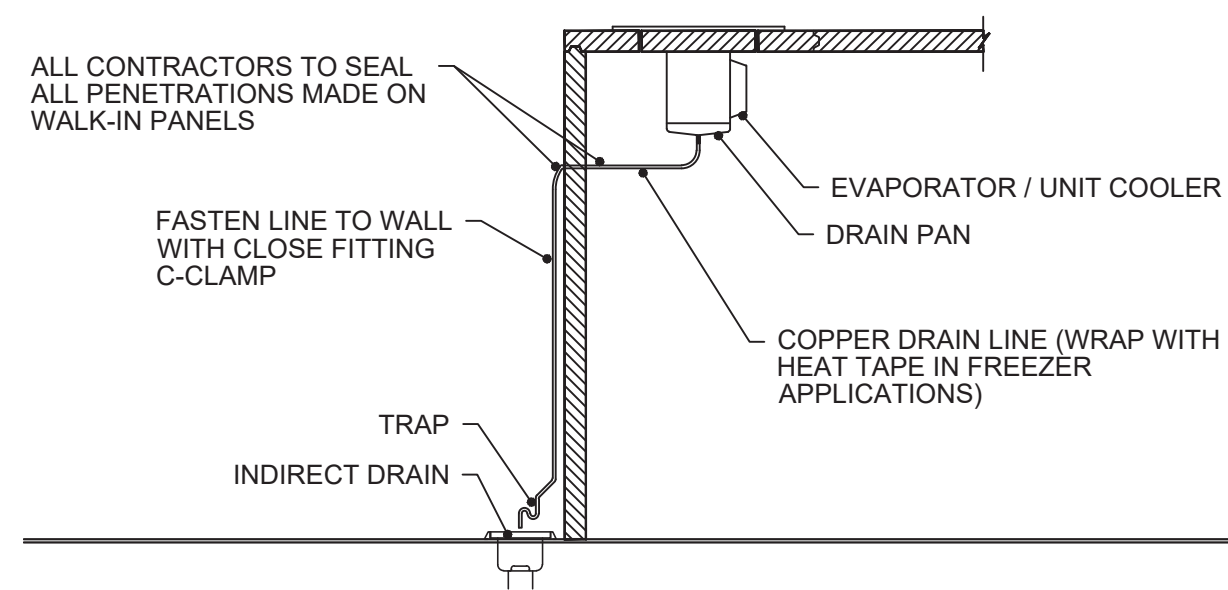
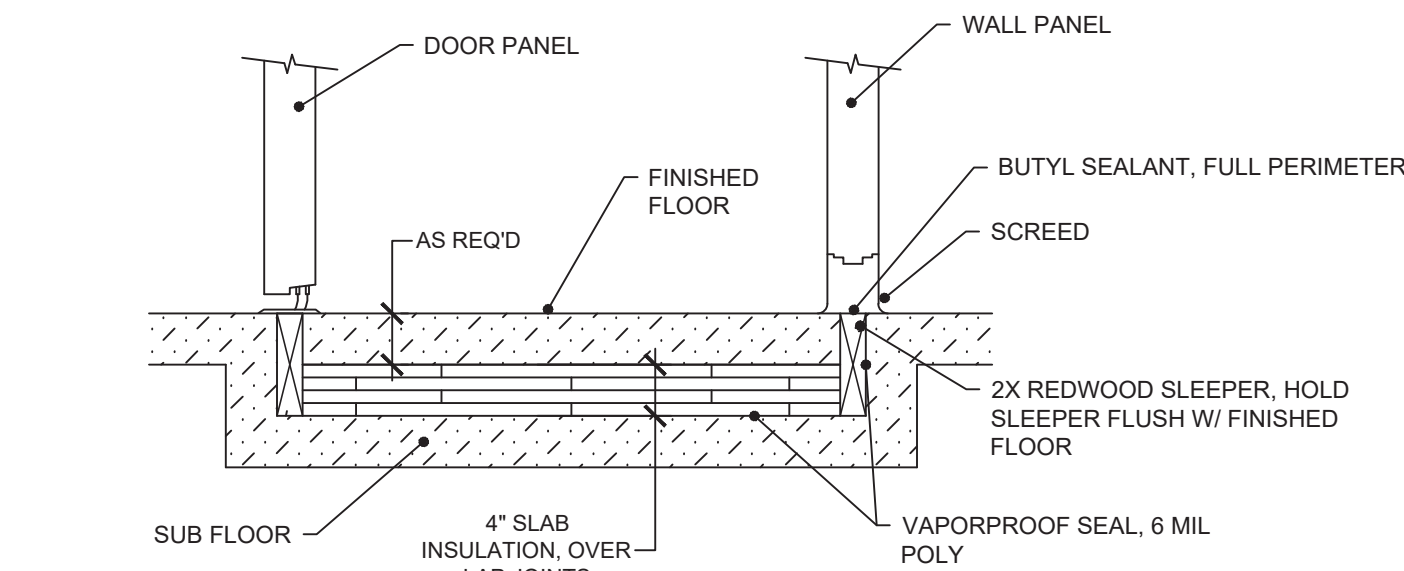
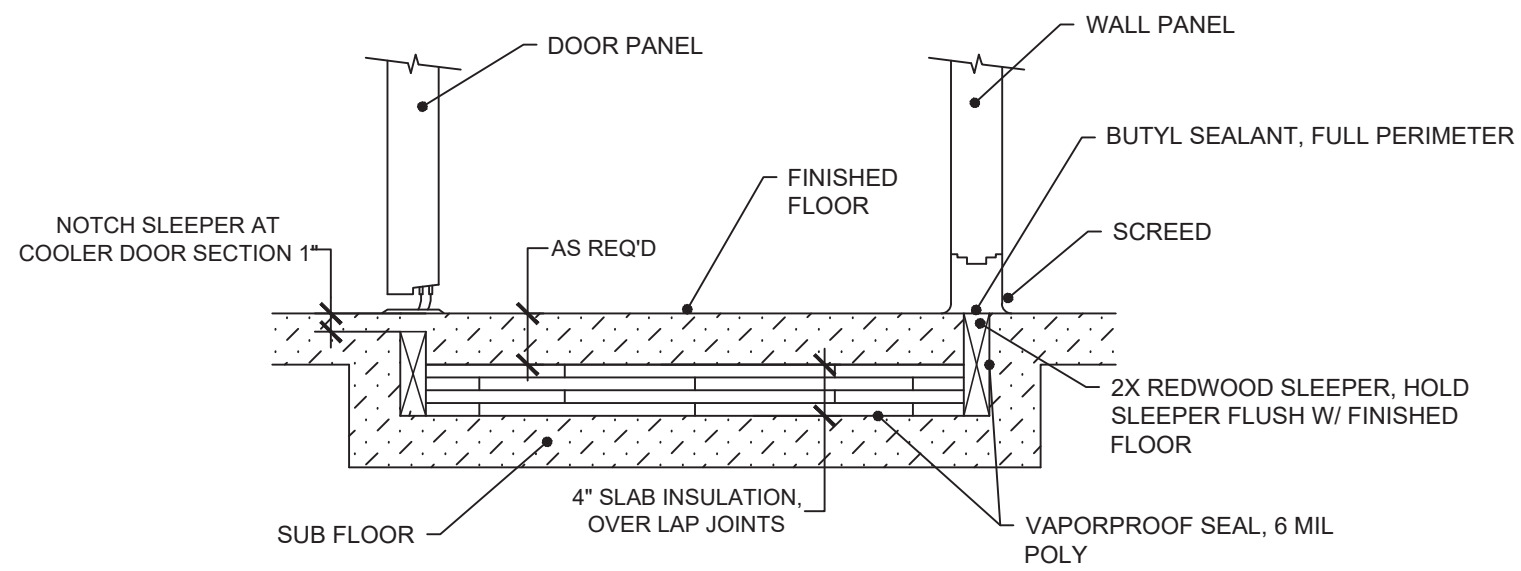
**3 FOOD PREP**  
3/8" = 1'-0"



**4 DISH ROOM**  
3/8" = 1'-0"

ELEVATION LEGEND	
	DUPLEX RECEPTACLE
	JUNCTION BOX
	RECESSED FLOOR SINK
	FLOOR MOUNTED RECEPTACLE
	HOT / COLD WATER
	DIRECT DRAIN / INDIRECT DRAIN
	NATURAL GAS





EVAPORATOR DRAIN LINE  
NOT TO SCALE

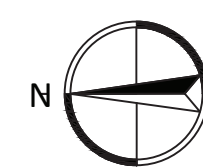
FIRE SUPPRESSION PULL  
NOT TO SCALE

**WALK-IN REFRIGERATION NOTES**

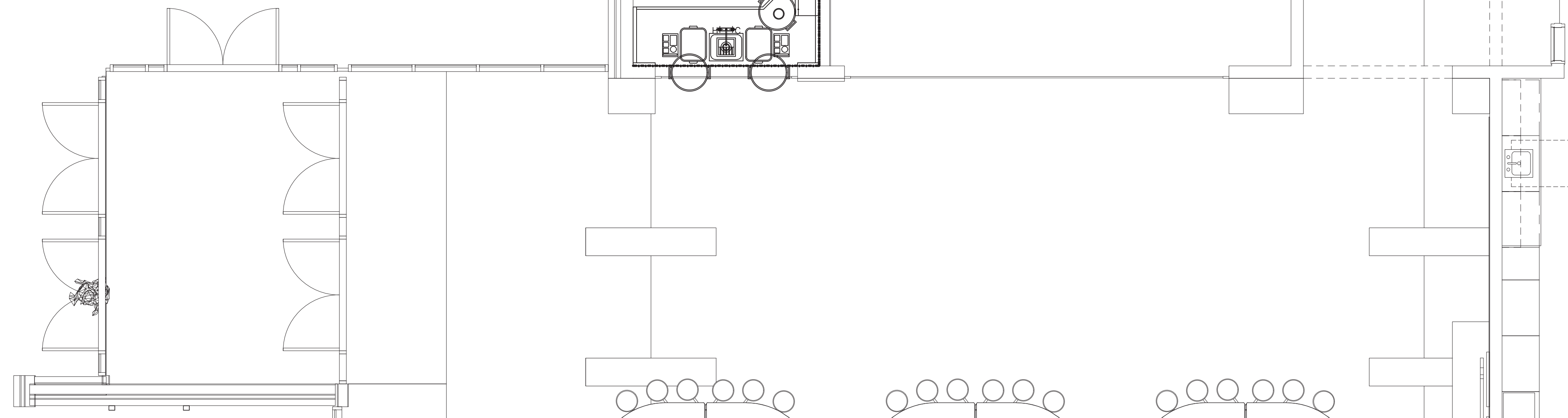
- GENERAL CONTRACTOR SHALL INSULATE THE SLAB PER THE DETAILS PROVIDED. BUILDING FLOOR MUST BE TRANSIT LEVEL FOR PROPER INSTALLATION OF WALK-IN PANELS.
- GENERAL CONTRACTOR SHALL PROVIDE STRUCTURAL SUPPORT FOR CEILING PANELS. KEC SHALL PROVIDE AND INSTALL CEILING SUPPORT SYSTEM AS PER MANUFACTURE'S INSTRUCTIONS.
- GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ROOF PAD FOR CONDENSING UNIT. KEC SHALL PROVIDE AND INSTALL CONDENSING UNIT AND RACK/STAND.
- GC TO PROVIDE PENETRATIONS AND SLEEVES THROUGH BUILDING AS NEEDED FOR DELIVERY OF UTILITIES TO FS EQUIPMENT TO INCLUDE DUCTS, PIPES, CONDUIT, ETC.
- ELECTRICAL CONTRACTOR SHALL ROUGH IN FOR AND MAKE FINAL CONNECTION TO ALL ELECTRICAL COMPONENTS OF WALK IN COOLER AND FREEZER.
- ALL TRADES SHALL SEAL PENETRATIONS OF WALK-IN PANELS INTERIOR AND EXTERIOR.
- ALL CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS, CLEARANCES, SERVICES AND DIMENSIONS PRIOR TO INSTALLATION.
- KEC SHALL PROVIDE AND INSTALL ALL COMPONENTS, PARTS, MATERIALS, AND LABOR FOR A COMPLETE AND OPERATIONAL SYSTEM.
- KEC SHALL PROVIDE AND INSTALL DRAIN LINES AT COOLER AND FREEZER. KEC SHALL WRAP FREEZER DRAIN LINE WITH HEAT TAPE.
- KEC SHALL INSTALL WALK-IN COOLER AND FREEZER AS PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS
- KEC SHALL PROVIDE AND INSTALL METAL TRIM AND CEILING CLOSURE PANELS TO MATCH WALK IN FINISH WHERE PANELS ABUT BUILDING WALLS AND CEILING.

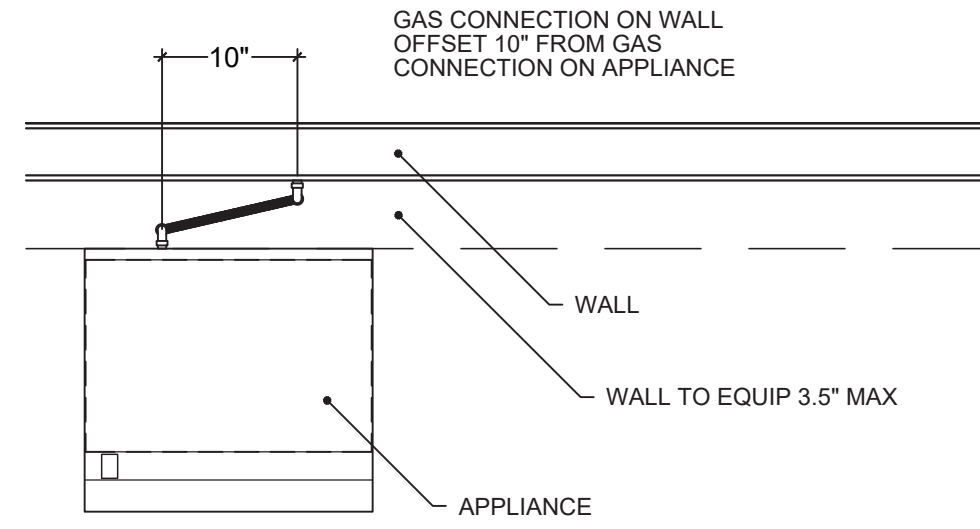
**KEYED NOTES**

- PROVIDE AND INSTALL STAINLESS STEEL WALL PANELS FLOOR TO CEILING. EXTEND PANELS A MINIMUM OF 18" BEYOND KITCHEN EXHAUST HOOD(S) IN ALL DIRECTIONS.
- NON-COMBUSTIBLE CONSTRUCTION NEEDED AT COOK LINE WALLS TO INCLUDE NON-COMBUSTIBLE TYPE WALL BACKING
- ROUGH-IN LOCATION FOR FIRE SUPPRESSION PULL STATION

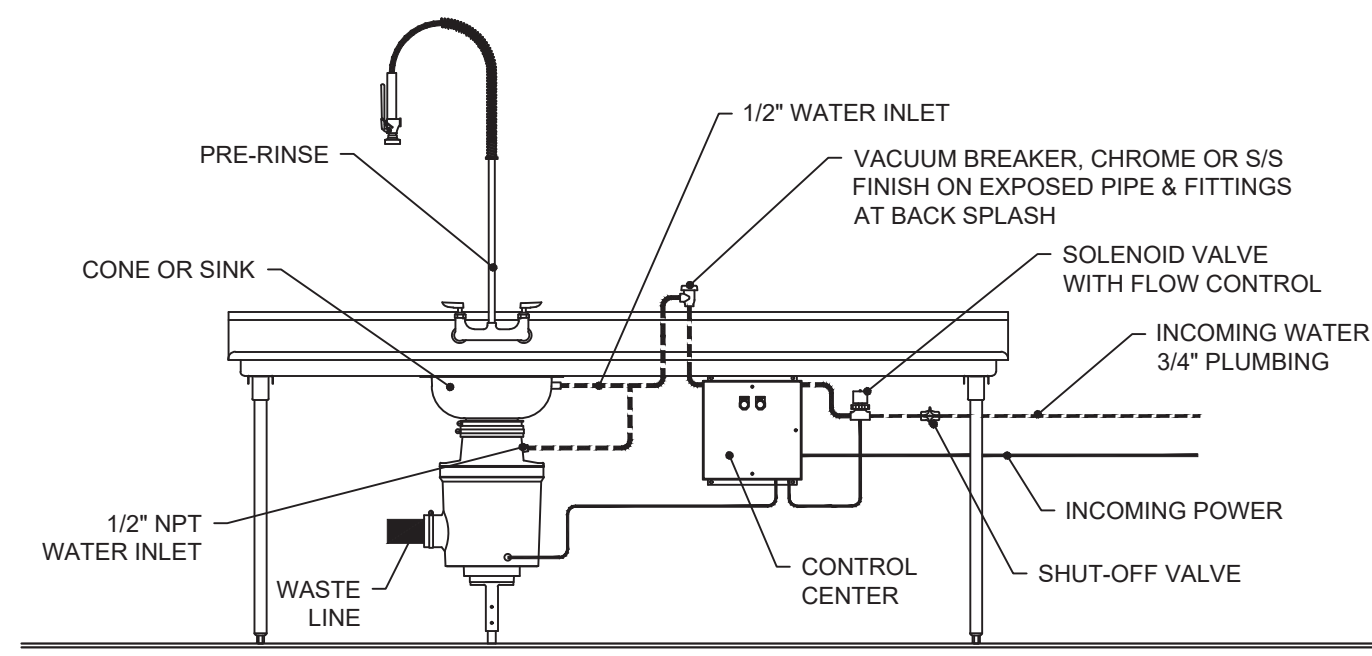


**FOODSERVICE SPECIAL CONDITIONS**  
SCALE: 1/4" = 1'-0"

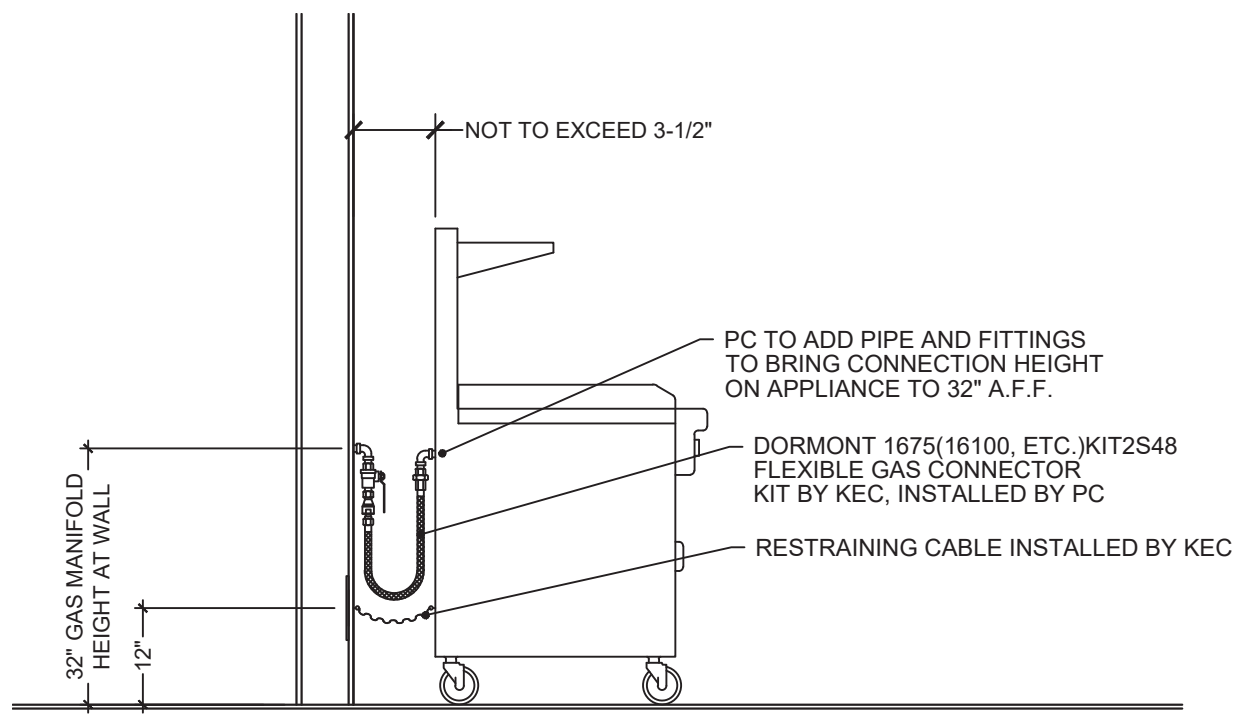




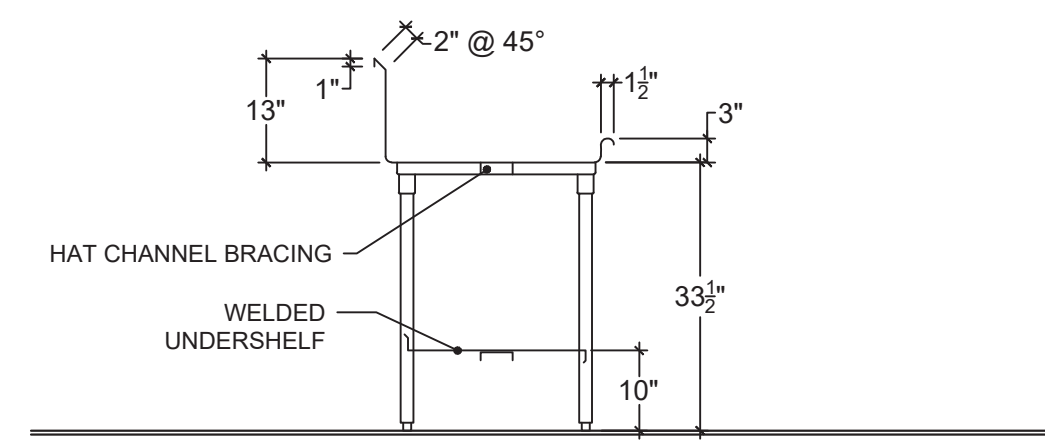
**1 FLEXIBLE GAS CONNECTOR**  
NOT TO SCALE



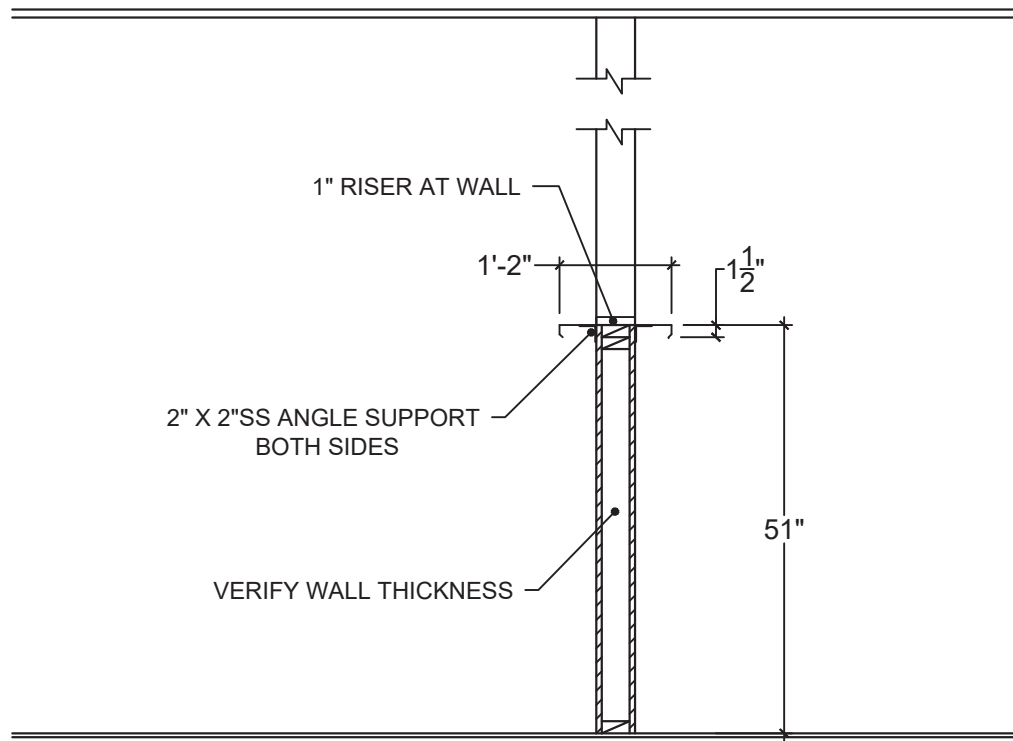
**2 TYPICAL DISPOSER DETAIL**  
NOT TO SCALE



**1A FLEXIBLE GAS CONNECTOR**  
NOT TO SCALE

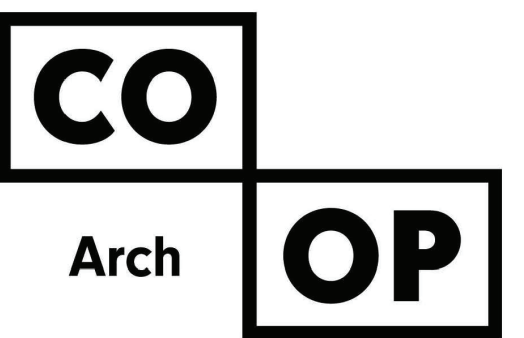
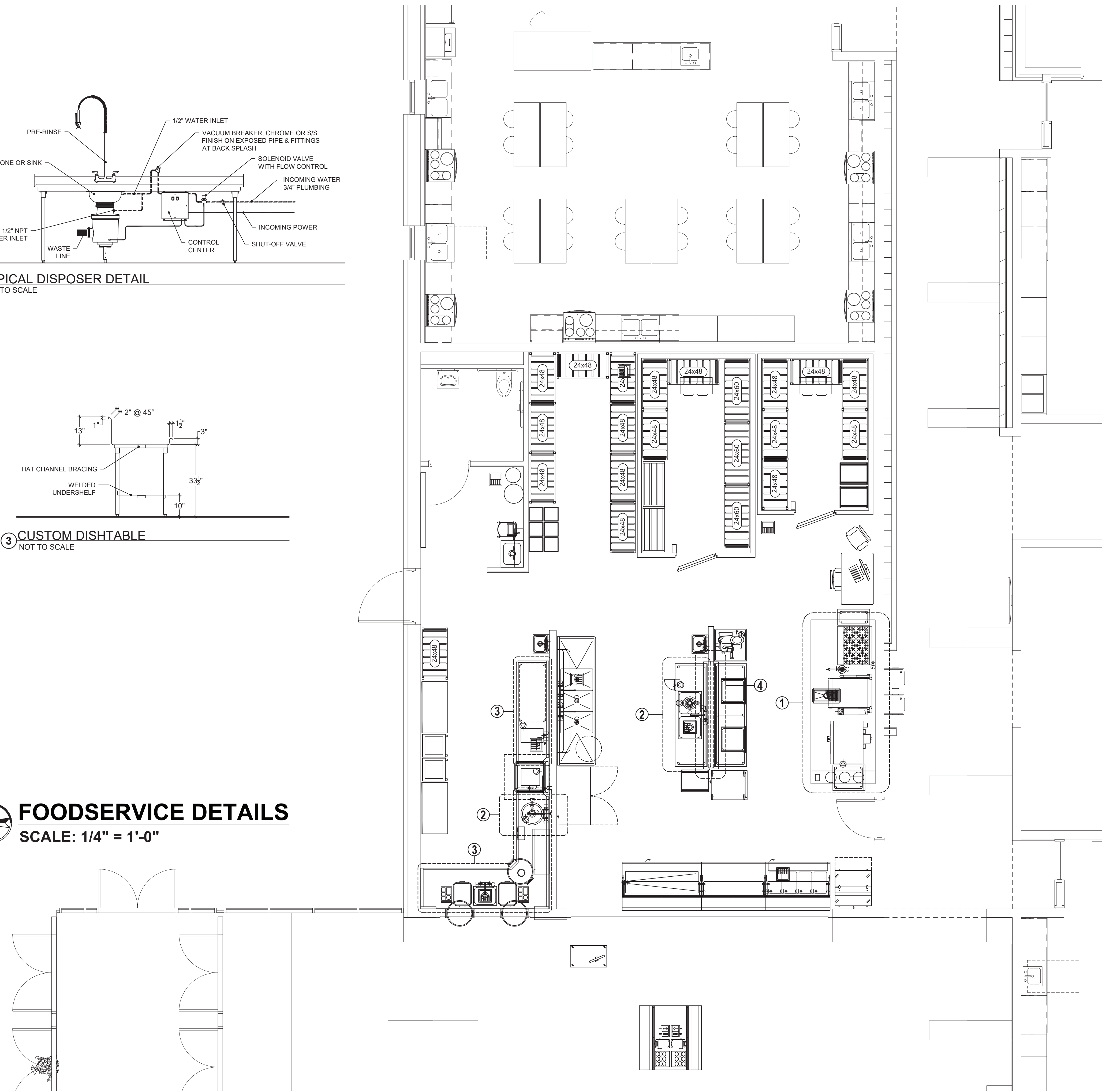


**3 CUSTOM DISHTABLE**  
NOT TO SCALE



**4 S/S PASS SHELF**  
NOT TO SCALE

**FOODSERVICE DETAILS**  
SCALE: 1/4" = 1'-0"



1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



PO BOX 90833  
SIOUX FALLS, SD 57109  
T: (605)-261-1916

CO-OP PROJECT NO: 2153

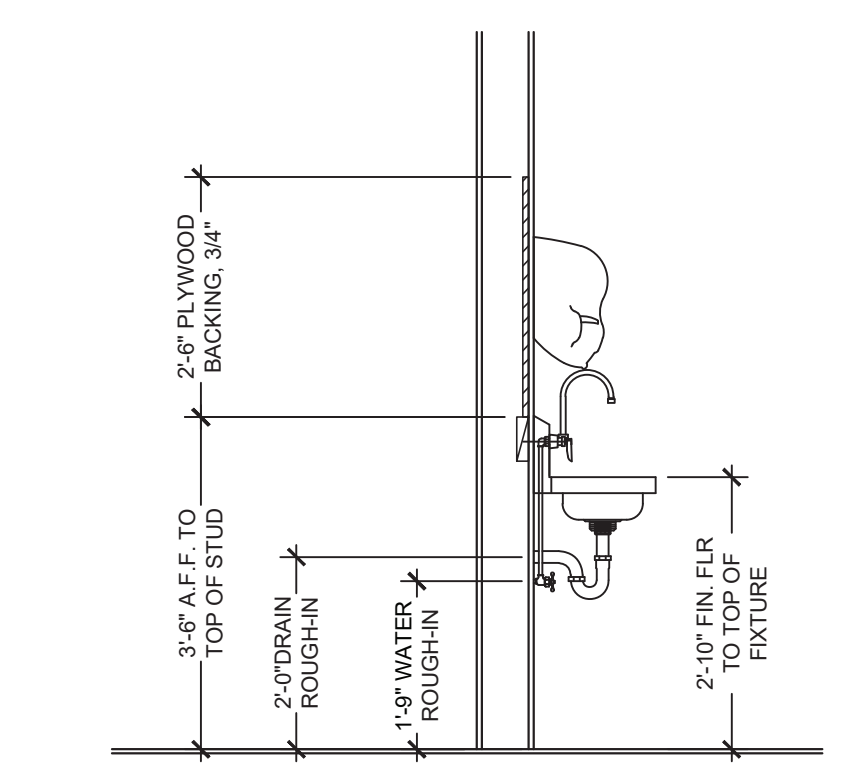
ISSUE:  
1-30-23 100% CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

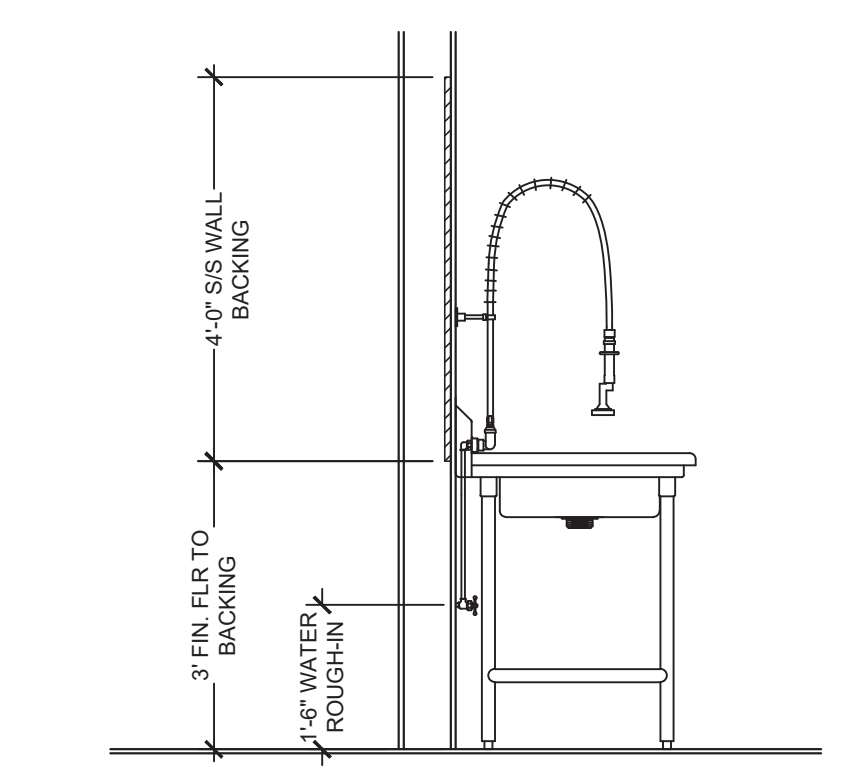
PROJECT:  
WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:  
FOOD SERVICE / DETAILS

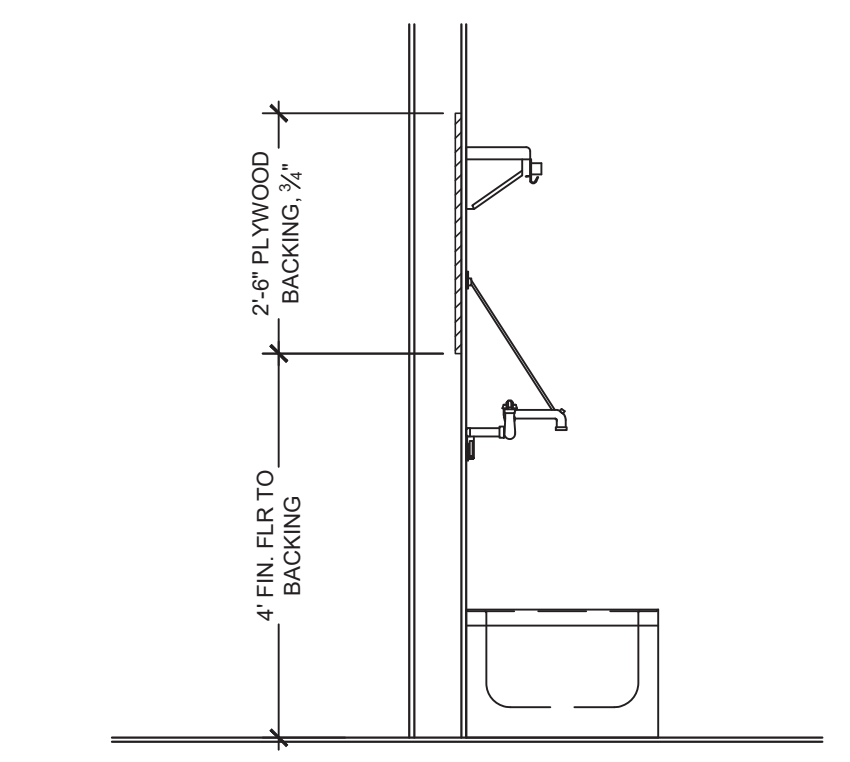
**F104**



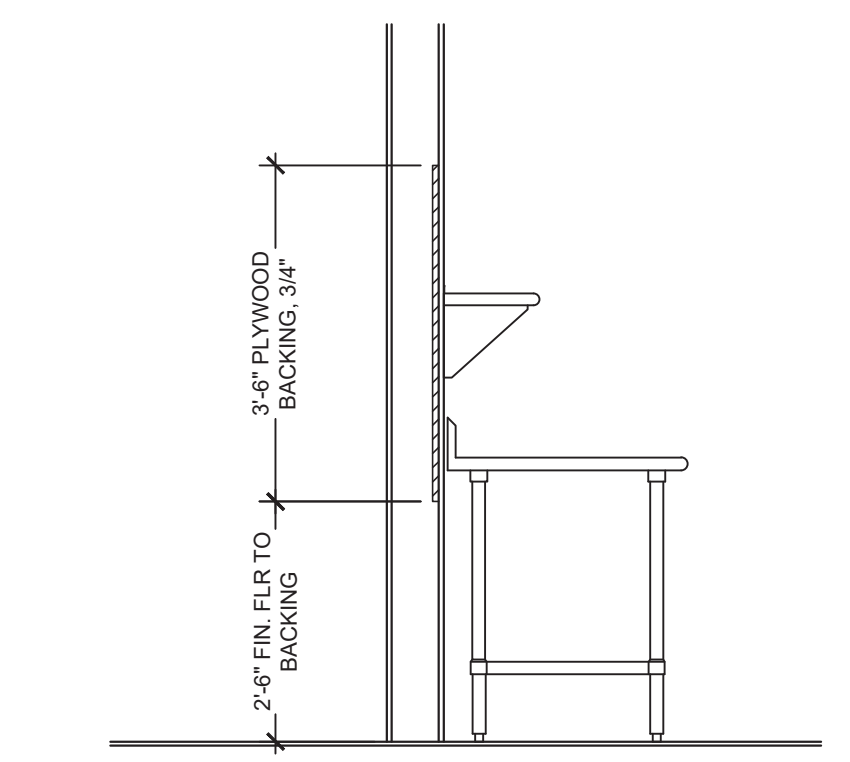
**A** HAND SINK  
1/2" = 1'-0"



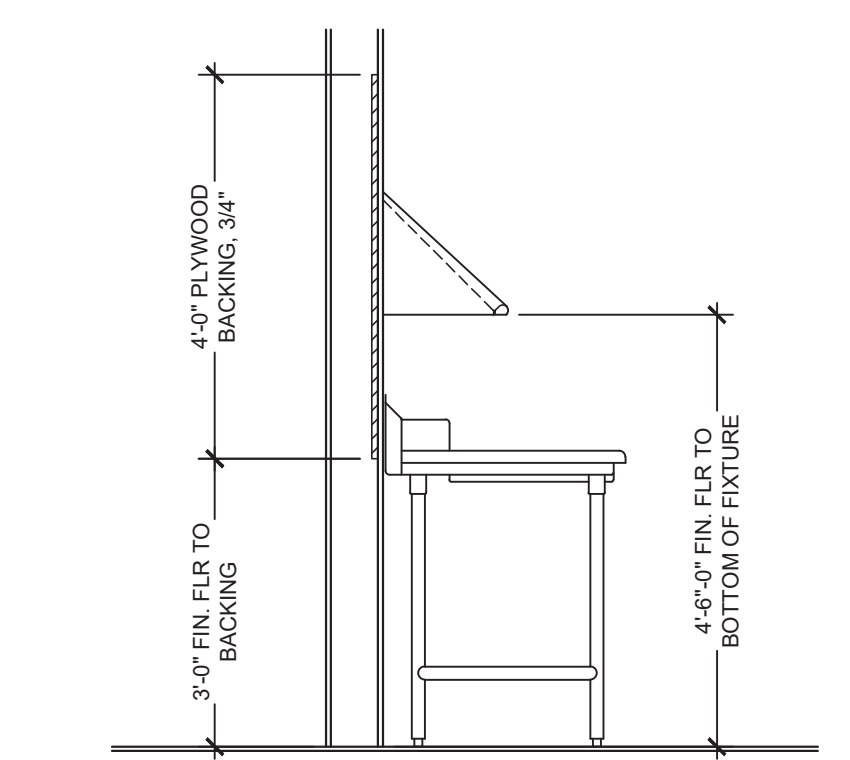
**B** PRE-RINSE FAUCET  
1/2" = 1'-0"



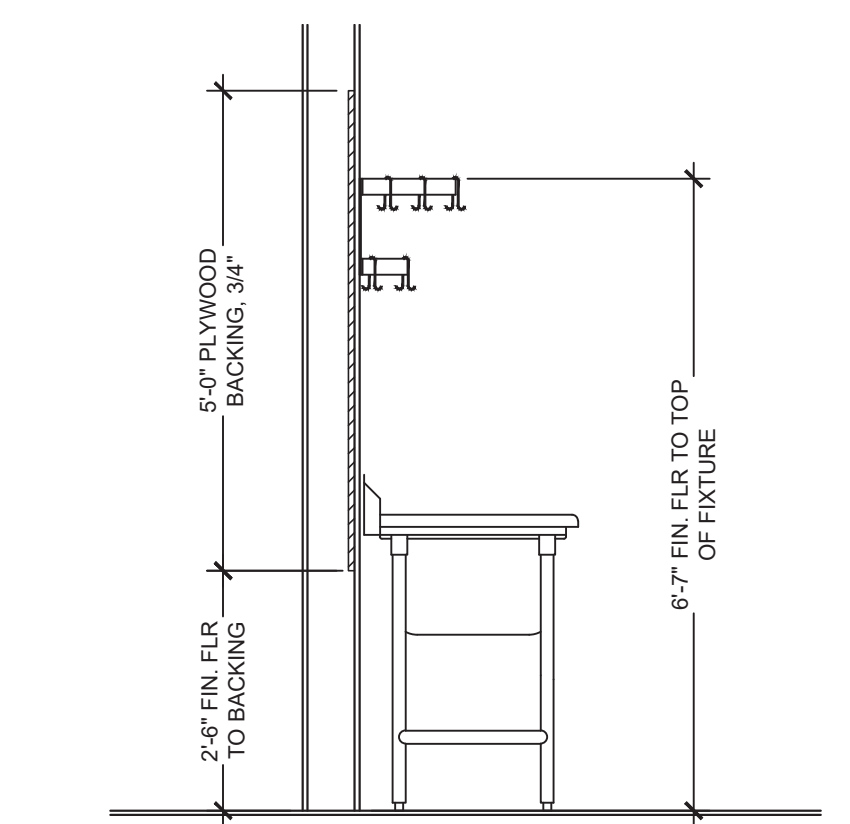
**C** SERVICE FAUCET  
1/2" = 1'-0"



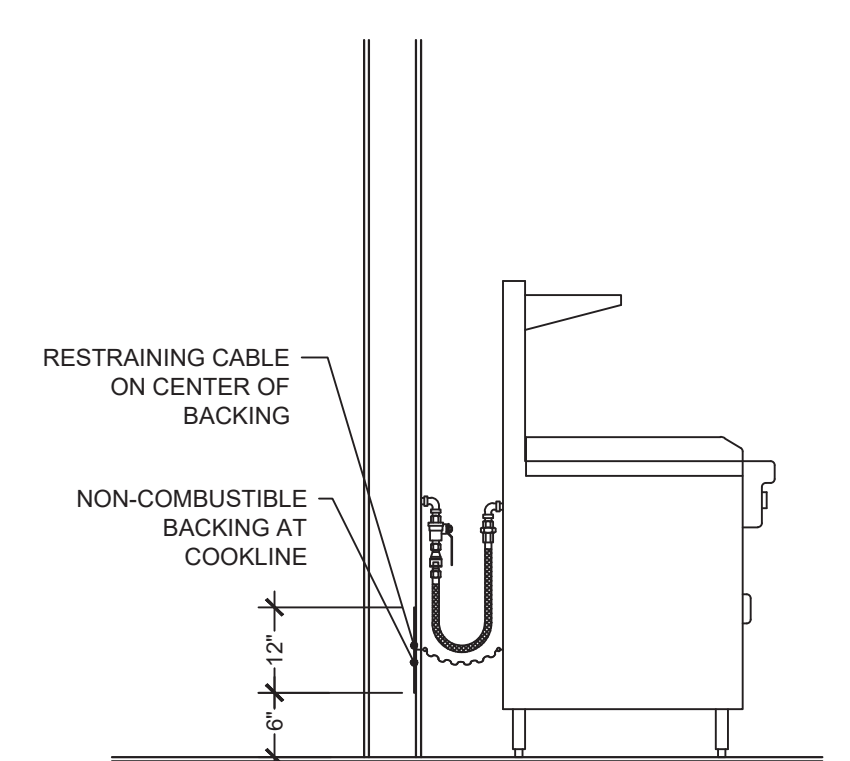
**D** S/S WALL SHELF  
1/2" = 1'-0"



**E** SORTING SHELF  
1/2" = 1'-0"

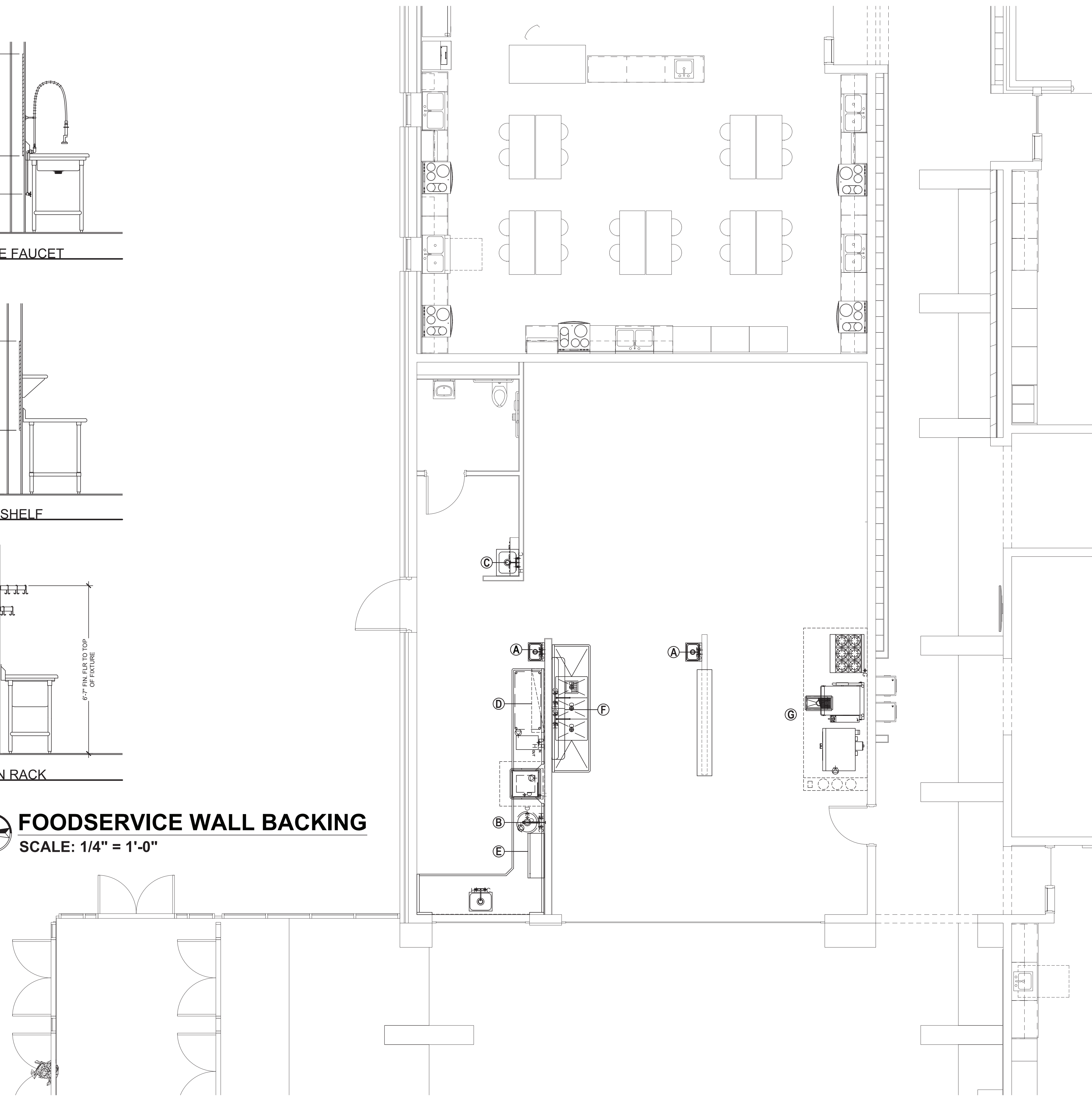


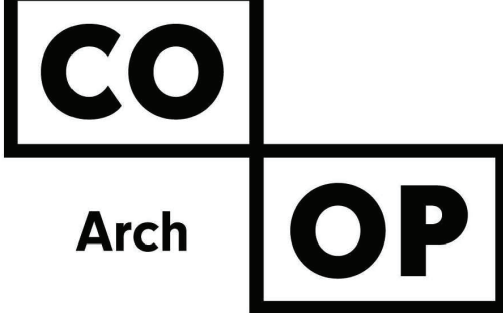
**F** POT & PAN RACK  
1/2" = 1'-0"



**G** GAS CONNECTOR  
NOT TO SCALE

**FOODSERVICE WALL BACKING**  
SCALE: 1/4" = 1'-0"





1108 S. Main St. 102  
Aberdeen, SD 57401  
Phone: 605-725-4852

601 Kansas City St. 7  
Rapid City, SD 57701  
Phone: 605-716-3652

440 E. 8th St. 221  
Sioux Falls, SD 57103  
Phone: 605-334-9999

co-oparch.com



PO BOX 90833  
SIOUX FALLS, SD 57109  
T: (605)-261-1916

## PLUMBING ROUGH-IN SCHEDULE

ITEM #	QTY	UNIT	CATEGORY	C.W. (ft)	H.W. (ft)	WATER ROUGH-IN HEIGHT	INDIRECT WASTE SIZE (in)	DIRECT WASTE SIZE (in)	DIRECT WASTE ROUGH-IN HEIGHT	GAS CONN. SIZE (in)	GAS ROUGH-IN HEIGHT	GAS MBTU	COMMENTS
2	1	EA	CONVECTION OVEN, DOUBLE DECK (RELOCATE EXISTING)							3/4"	32"	100	RELOCATE EXISTING, TWO OVENS @ 50 MBTU, MANIFOLD OVENS FOR ONE FLEXIBLE CONNECTOR
3	1	EA	TILTING SKILLET (RELOCATE EXISTING)							3/4"	32"	125	RELOCATE EXISTING, CONNECT GAS TO FLEXIBLE GAS CONNECTOR
3.2	1	EA	FLOOR TROUGH					4"	FLOOR				EXTEND DRAIN TO GREASE INTERCEPTOR
4	1	EA	KETTLE FILLER STANCHION	1/2"	1/2"	FLOOR							ROUGH IN FROM FLOOR ON 2" CENTERS TO A HEIGHT OF 6"
5	1	EA	RANGE, 6 BURNER (RELOCATE EXISTING)							3/4"	32"	215	RELOCATE EXISTING, CONFIRM UTILITY REQUIREMENTS. CONNECT GAS TO FLEXIBLE GAS CONNECTOR
16	1	EA	HOT FOOD SERVING COUNTER W/ SNEEZE GUARD				3/4"						EXTEND FLEXIBLE DRAIN LINE TO RFS
18	1	EA	COLD FOOD SERVING COUNTER W/ SNEEZE GUARD										FURNISHED W/CONDENSATE EVAPORATOR
26	2	EA	WALL MOUNT HAND SINK W/ FAUCET	1/2"	1/2"	21"		1-1/2"	24"				EXTEND INDIRECT DRAIN TO RFS
27	1	EA	S/S WORK TABLE W/ TWO-COMPARTMENT SINK				1-1/2"						EXTEND INDIRECT DRAIN TO RFS
28	1	EA	FAUCET @ ITEM 27	1/2"	1/2"	18"							
28.1	1	EA	DISPOSER & CONTROLS	1/2"		15"		2"	8"				TWO WATER CONNECTIONS, DISPOSER CONE & DISPOSER BODY
31	1	EA	THREE-COMPARTMENT SINK					(3) 1-1/2"					MANIFOLD DRAINS & EXTEND TO GREASE INTERCEPTOR, NOTE 3
32	2	EA	FAUCET @ ITEM 31	1/2"	1/2"	15"							
34	1	EA	GREASE INTERCEPTOR (BY P/C)										PROVIDED & INSTALLED BY P/C
38	1	EA	BOOSTER HEATER	3/4"		15"	1"						EXTEND 140 DEGREE WATER SUPPLY TO DISHMACHINE ITEM 39, EXTEND PRESSURE RELIEF DRAIN TO RFS
39	1	EA	DISHWASHER, LOW TEMP (BY OWNER'S VENDOR)					2"					HOT SOFT WATER SUPPLY AT 140 DEGREE MIN. TEMP FROM BOOSTER HEATER ITEM 38, EXTEND COPPER DRAIN LINE TO RFS, NOTE 4
42	1	EA	SOILED DISHTABLE, "L" SHAPED (SCRAP SINK)				1-1/2"						EXTEND INDIRECT DRAIN TO RFS
43	1	EA	PRE-RINSE FAUCET	1/2"	1/2"	18"							NOTE 2
44	1	EA	DECK MOUNT FAUCET @ ITEM 42	1/2"	1/2"	18"							ROUGH IN WATER AT WALL, EXTEND WATER SUPPLY ON UNDERSIDE OF DISH TABLE TO FAUCET
45	1	EA	DISPOSER & CONTROLS	1/2"		15"		2"	12"				TWO WATER CONNECTIONS, DISPOSER CONE & DISPOSER BODY
54	1	EA	MOP SINK & FAUCET	1/2"	1/2"	36"		2"	FLOOR				
59	1	EA	REFRIGERATION SYSTEM AT WALK-IN FREEZER				1"						EXTEND INDIRECT DRAIN TO RFS
63	1	EA	REFRIGERATION SYSTEM AT WALK-IN COOLER				1"						EXTEND INDIRECT DRAIN TO RFS

NOTES:

- P/C PROVIDE AND INSTALL DRAIN WATER TEMPERING KIT ON RIGHT SINK BOWL (TO BE USED AS A SANITIZER SINK)
- P/C PROVIDE AND INSTALL SHUT OFF IN HOT WATER LINE W/ 1/4" COMPRESSION FITTING AT 12" AFF, VENDOR TO EXTEND HOT WATER SUPPLY TO CHEMICAL DISPENSING EQUIPMENT
- P/C PROVIDE AND INSTALL SHUT OFF IN HOT WATER LINE W/ 3/8" COMPRESSION FITTING AT 12" AFF, VENDOR TO EXTEND HOT WATER SUPPLY TO CHEMICAL DISPENSING EQUIPMENT
- P/C PROVIDE AND INSTALL PRESSURE REDUCING VALVES, DISH MACHINE OPERATING PRESSURE RANGE 15 - 25 psi
- P/C PROVIDE AND INSTALL ALL RFS AND FD'S

## ELECTRICAL ROUGH-IN SCHEDULE

ITEM #	QTY	UNIT	CATEGORY	VOLTAGE	PHASE	AMPS	Hp	Kw	CONN. TYPE	NEMA	ELECTRIC ROUGH-IN HEIGHT	COMMENTS
2	1	EA	CONVECTION OVEN, DOUBLE DECK (RELOCATE EXISTING)	120	1	7.7			CORD & PLUG		24", 48"	RELOCATE EXISTING, TWO OVENS @ 7.7 AMPS
3	1	EA	TILTING SKILLET (RELOCATE EXISTING)	120	1	1.4			CORD & PLUG	5-15P	24"	RELOCATE EXISTING
8	1	EA	EXHAUST HOOD	120	1							DFA 20 AMP CIRCUIT, ROUGH-IN ABOVE UTILITY CABINET, REFER TO CA DRAWINGS FOR ADDITIONAL DETAILS
15	1	EA	MILK COOLER (RELOCATE EXISTING)	120	1	5.8	1/3		CORD & PLUG	5-15P	24"	RELOCATE EXISTING
16	1	EA	HOT FOOD SERVING COUNTER W/ SNEEZE GUARD	208	1	17.3		3.6	CORD & PLUG		FLOOR	
18	1	EA	COLD FOOD SERVING COUNTER W/ SNEEZE GUARD	120	1	6.8			CORD & PLUG	5-15P	FLOOR	
19	1	EA	CASHIER STATION (RELOCATE EXISTING)								FLOOR	RELOCATE EXISTING, CONFIRM UTILITY REQUIREMENTS
21	1	EA	HEATED CABINET, MOBILE	120	1	16.7		2.0	CORD & PLUG	5-20P	24"	
24	1	EA	FOOD SLICER W/ STAND (RELOCATE EXISTING)	120	1	6.0					36"	RELOCATE EXISTING
28.1	1	EA	DISPOSER & CONTROLS	208	3	3.6	2		DIRECT		18"	
30	1	EA	REACH-IN REFRIGERATOR, 2-SECTION (RELOCATE EXISTING)	120	1	9.2	1/2		CORD & PLUG	5-15P	86"	RELOCATE EXISTING
38	1	EA	BOOSTER HEATER	208	3	33.4		12.0	DIRECT		15"	
39	1	EA	DISHWASHER, LOW TEMP (BY OWNER'S VENDOR)	120	1	12.0			DIRECT		66"	
45	1	EA	DISPOSER & CONTROLS	208	3	3.6	2				18"	
58	1	EA	WALK-IN FREEZER, FRAME & LIGHTS	120	1	5.0					DFA	ROUGH-IN POWER ABOVE FREEZER, EXTEND POWER TO DOOR SECTION AND LIGHTS
59	1	EA	REFRIGERATION SYSTEM AT WALK-IN FREEZER, CONDENSING UNIT	208-230	3	12.3					ROOF	ROUGH-IN POWER ON ROOF FOR CONNECTION TO CONDENSING UNIT. SEE SHEET M103 FOR LOCATION
			REFRIGERATION SYSTEM AT WALK-IN FREEZER, EVAP COIL (DEFROST)	208-230	1	9.8					DFA	ROUGH-IN POWER ABOVE FREEZER, EXTEND TO EVAP COIL
			REFRIGERATION SYSTEM AT WALK-IN FREEZER, EVAP COIL (FAN)	208-230	1	2.0					DFA	ROUGH-IN POWER ABOVE FREEZER, EXTEND TO EVAP COIL
			REFRIGERATION SYSTEM AT WALK-IN FREEZER, DRAIN LINE HEAT TAPE	120	1	15.0					DFA	ROUGH-IN POWER ABOVE FREEZER, PROVIDE RECEP NEAR EVAP COIL FOR HEAT TAPE
62	1	EA	WALK-IN COOLER, FRAME & LIGHTS	120	1	5.0					DFA	ROUGH-IN POWER ABOVE COOLER, EXTEND POWER TO DOOR SECTION AND LIGHTS
63	1	EA	REFRIGERATION SYSTEM AT WALK-IN COOLER, CONDENSING UNIT	208-230	1	7.0					ROOF	ROUGH-IN POWER ON ROOF FOR CONNECTION TO CONDENSING UNIT. SEE SHEET M103 FOR LOCATION
			REFRIGERATION SYSTEM AT WALK-IN COOLER, EVAP COIL	120	1	1.6					DFA	ROUGH-IN POWER ABOVE COOLER, EXTEND TO EVAP COIL

### FOODSERVICE ABBREVIATIONS

CW	COLD WATER
DD	DIRECT DRAIN
DFA	DOWN FROM ABOVE
EC	ELECTRICAL CONTRACTOR
FD	FLOOR DRAIN (BY P/C)
FS	FOOD SERVICE
GP	GENERAL PURPOSE OUTLET (BY E/C)
HW	HOT WATER
IDD	INDIRECT DRAIN
KEC	KITCHEN EQUIPMENT CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
RFS	RECESSED FLOOR SINK (BY P/C)

### PLUMBING GENERAL NOTES

- ALL WORK SHALL COMPLY WITH NATIONAL, STATE, AND LOCAL CODES, LAWS, RULES AND REGULATIONS.
- CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS, CLEARANCES, SERVICES, AND DIMENSIONS PRIOR TO INSTALLATION
- PC SHALL PROVIDE ALL ROUGH IN AND FINAL CONNECTION TO FS EQUIPMENT.
- KEC SHALL UNCRATE, ASSEMBLE, SET IN PLACE, AND LEVEL ALL FS EQUIPMENT UNLESS OTHERWISE NOTED AND MAKE READY FOR FINAL CONNECTION TO UTILITIES.
- PC TO PROVIDE GAS PRESSURE REGULATOR TO REDUCE BUILDING GAS PRESSURE TO FS EQUIPMENT MFG'S SPECIFIED WATER COLUMN REQUIREMENTS. VENT REGULATOR PER MFG INSTRUCTIONS.
- PC TO PROVIDED RECESSED FLOOR SINKS WHERE SPECIFIED.
- GENERAL WATER PRESSURE IN THE KITCHEN IS NOT TO EXCEED 50 PSI. PC SHALL PROVIDE AND INSTALL DEVICES TO REDUCE PRESSURE TO MATCH MFG'S REQUIREMENTS OF THE FS EQUIPMENT.
- PC SHALL PROVIDE AND INSTALL PRESSURE REDUCING VALVES, BLACK FLOW PREVENTION DEVICES, FLOW CONTROLS, WATER HAMMER ARRESTOR, STOPS AND SHUT OFF VALVES AS SPECIFIED, NEEDED AND/OR REQUIRED BY CODE.
- KEC IS RESPONSIBLE FOR PENETRATIONS IN FS EQUIPMENT FOR ELECTRICAL LINES AND PLUMBING LINES.
- GC TO PROVIDE PENETRATIONS AND SLEEVES THROUGH BUILDING AS NEEDED FOR DELIVERY OF UTILITIES TO FS EQUIPMENT TO INCLUDE DUCTS, BEVERAGE LINES, PIPES, CONDUIT, ETC.
- KEC SHALL PROVIDE FAUCETS AS SPECIFIED, PC SHALL INSTALL THESE FAUCETS.
- KEC SHALL PROVIDE LEVER DRAIN ASSEMBLIES AS SPECIFIED, PC SHALL INSTALL ASSEMBLIES.
- KEC SHALL PROVIDE DISPOSER, PC SHALL INSTALL DISPOSER.
- KEC SHALL PROVIDE FLEXIBLE GAS CONNECTORS WHERE SPECIFIED, PC SHALL INSTALL CONNECTOR KITS (KEC TO INSTALL RESTRAINING DEVICES).
- CONNECTIONS SHOWN ARE RELATIVE TO FOOD AND BEVERAGE EQUIPMENT ONLY.
- HEIGHTS PROVIDED REPRESENT FINISHED FLOOR TO CENTER LINE OF MECHANICAL ROUGH IN.

### ELECTRICAL GENERAL NOTES

- ALL WORK SHALL COMPLY WITH NATIONAL, STATE, AND LOCAL CODES, LAWS, RULES AND REGULATIONS.
- CONTRACTORS SHALL FIELD VERIFY ALL CONDITIONS, CLEARANCES, SERVICES, AND DIMENSIONS PRIOR TO INSTALLATION
- EC SHALL PROVIDE ALL ELECTRICAL ROUGH IN, INTERWIRING AND FINAL CONNECTION TO FS EQUIPMENT.
- KEC SHALL UNCRATE, ASSEMBLE, SET IN PLACE, AND LEVEL ALL FS EQUIPMENT UNLESS OTHERWISE NOTED AND MAKE READY FOR FINAL CONNECTION TO UTILITIES.
- KEC IS RESPONSIBLE FOR PENETRATIONS IN FS EQUIPMENT FOR ELECTRICAL AND PLUMBING LINES AND CONNECTIONS.
- CONNECTIONS SHOWN ARE RELATIVE TO FOOD AND BEVERAGE EQUIPMENT ONLY.
- EC SHALL PROVIDE AND INSTALL ALL SWITCHES, SHUNT TRIPS, DISCONNECTS, STARTERS AND RELATED COMPONENTS AS NEEDED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- GC TO PROVIDE PENETRATIONS AND SLEEVES THROUGH BUILDING AS NEEDED FOR DELIVERY OF UTILITIES TO FS EQUIPMENT TO INCLUDE DUCTS, BEVERAGE LINES, PIPES, CONDUIT, ETC.
- EC TO PROVIDE GFCI RECEPTACLES AND/OR BREAKERS WHERE REQUIRED BY CODE.
- KEC SHALL PROVIDE DISPOSER CONTROLS, EC SHALL INSTALL DISPOSER CONTROLS.
- EC TO REVIEW GENERAL PURPOSE OUTLETS WITH OWNER.
- HEIGHTS PROVIDED REPRESENT FINISHED FLOOR TO CENTER LINE OF ELECTRICAL ROUGH IN.

CO-OP PROJECT NO: 2153

ISSUE:

1-30-23 CONSTRUCTION DOCUMENTS

REVISION SCHEDULE:

REV. # REV. DSC. REV. DATE

PROJECT:

WILLOW LAKE SCHOOL ADDITION  
WILLOW LAKE SCHOOL DISTRICT  
WILLOW LAKE, SOUTH DAKOTA

SHEET TITLE:

FOOD SERVICE / UTILITIES

# F106