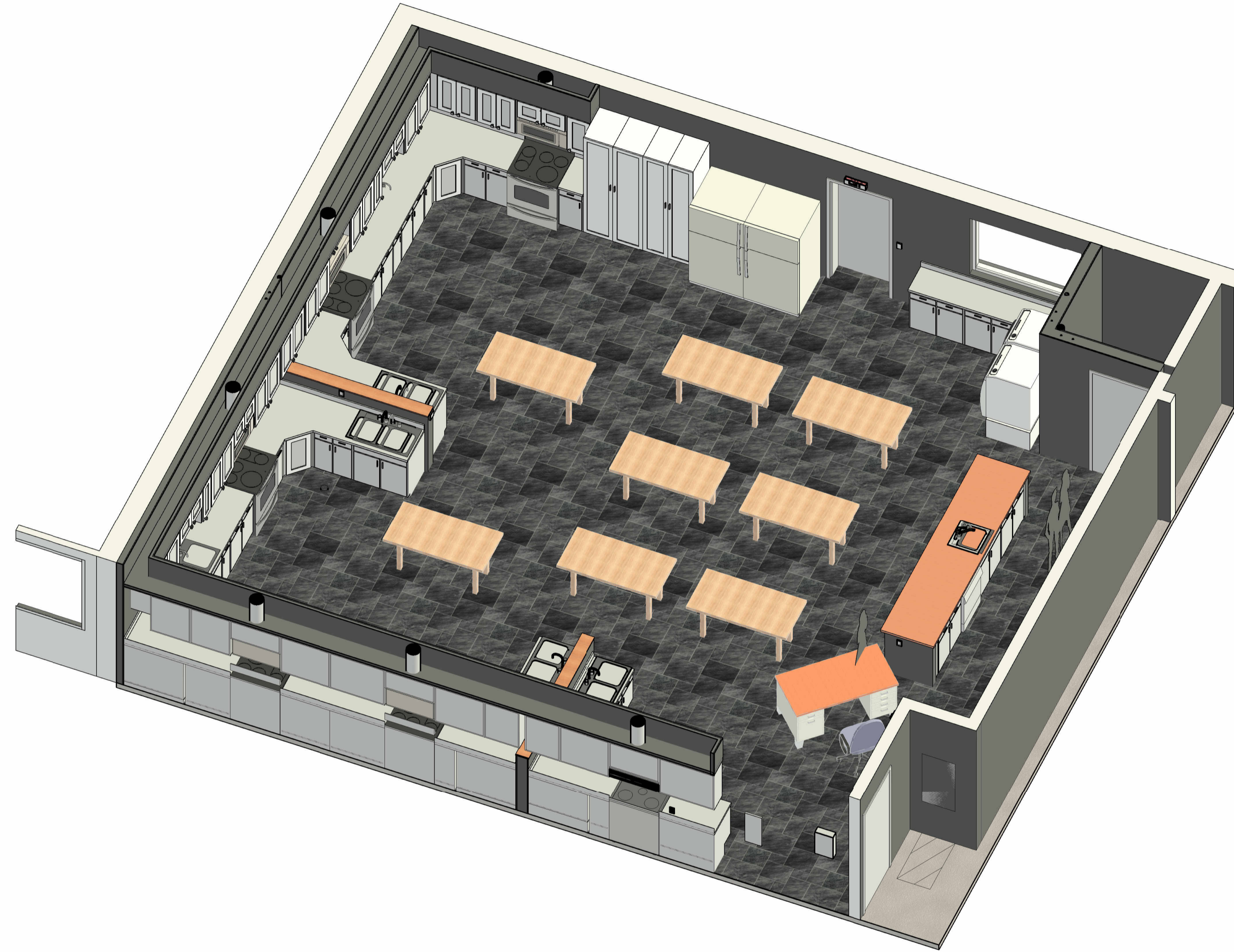


# SIMMONS MIDDLE SCHOOL FACS REMODEL

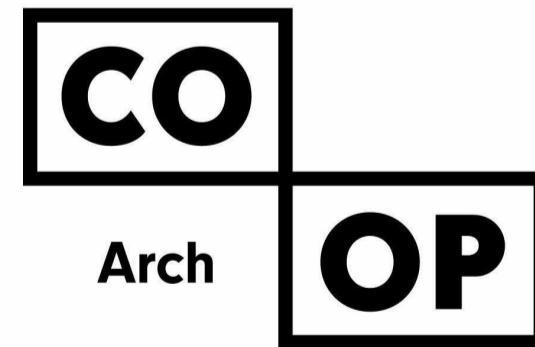
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA



DRAWING SHEET INDEX:

COVER	
A001	CODE STANDARDS
A002	CODE & ORIENTATION PLAN
ARCHITECTURAL	
A100	PLANS, ELEVATIONS, AND DETAILS
MECHANICAL	
EM100	MOTOR SCHEDULE, LEGEND & SHEET INDEX
M200	FIRST FLOOR - PLUMBING PLAN
M300	FIRST FLOOR - FIRE PROTECTION & HVAC PLAN
M400	PLUMBING FIXTURE & MECHANICAL SCHEDULES
ELECTRICAL	
E200	FIRST FLOOR - ELECTRICAL PLAN

ARCHITECT:



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

www.co-oparch.com

ELECTRICAL ENGINEER:



Professional Design  
Engineers

48371 265th Street  
Brandon, SD 57005  
(605)941-3337

48371 265TH Street  
Brandon, SD 57005  
Phone: 605-941-3337

OWNER:



1224 Third Street  
Aberdeen, SD 57401  
Phone: 605-725-7100

MECHANICAL ENGINEER:

SICHMELLER  
ENGINEERING

Mechanical and  
Electrical Engineering

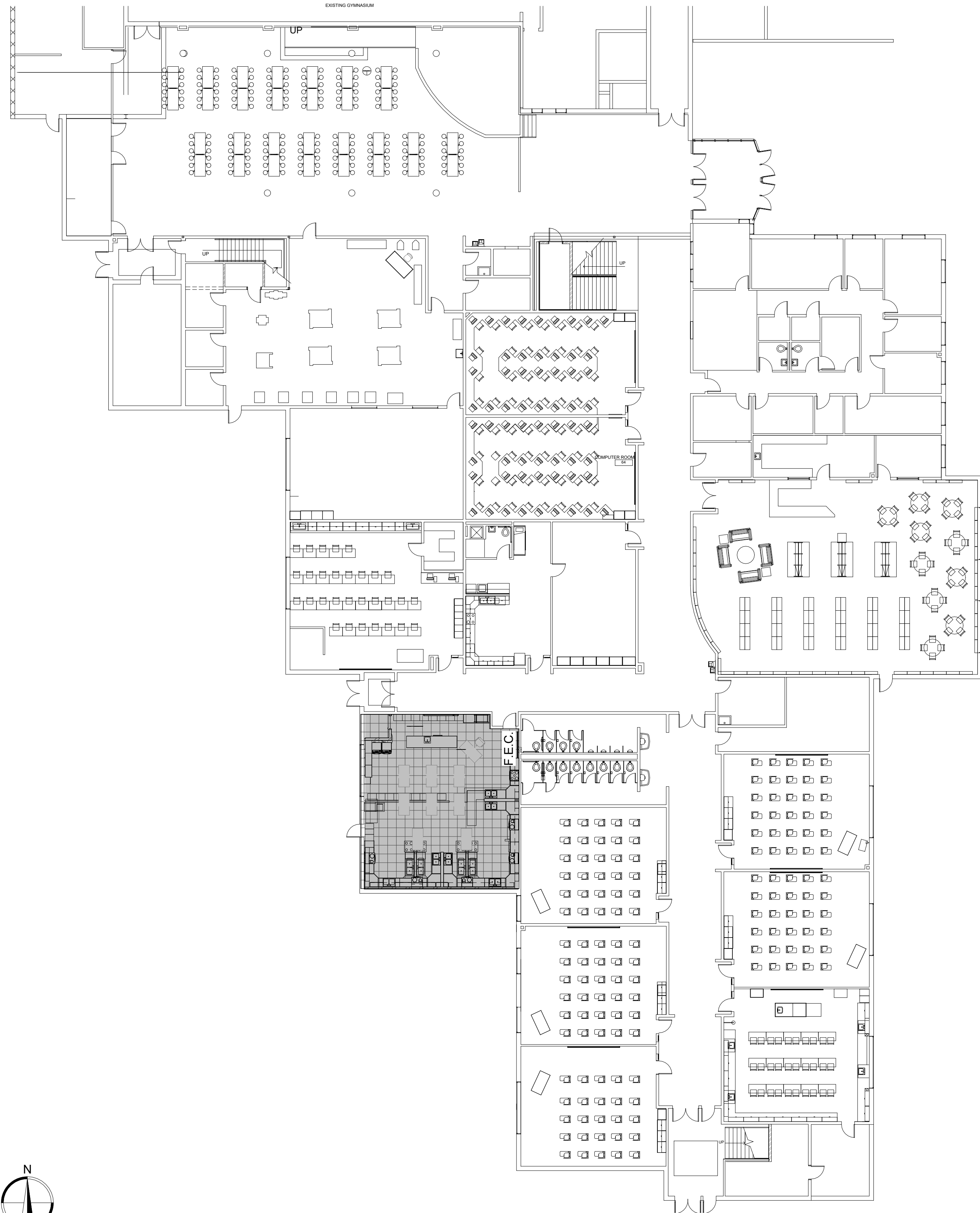
801 Railroad Ave SE  
Aberdeen, SD 57401  
Phone: 605-225-4344  
traviss@siceng.biz

100%  
CONSTRUCTION  
DOCUMENTS

11/19/24







### GENERAL NOTES

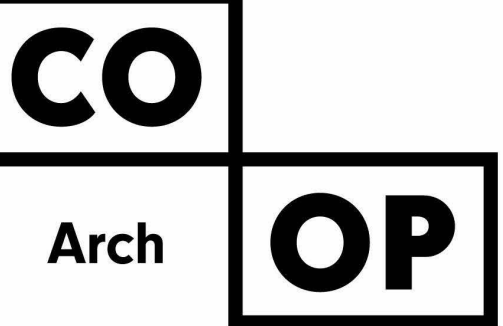
1. THE CONTRACTOR SHALL CONSTRUCT ALL ITEMS WITHIN THIS CONTRACT IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS AND CODES.
2. ALL WORK SHALL BE IN ACCORDANCE WITH OSHA CODES AND STANDARDS. NOTHING INDICATED ON THESE DRAWINGS SHALL RELIEVE THE CONTRACTOR FROM COMPLYING WITH ANY APPROPRIATE SAFETY REGULATIONS.
3. SQUARE FOOTAGES LISTED ARE FOR CODE REVIEW PURPOSES ONLY AND SHOULD NOT BE USED FOR OTHER PURPOSES.

### 2018 INTERNATIONAL BUILDING CODE

PROJECT AREA	OCCUPANCY TYPE	TYPE OF CONST.	NUMBER OF STORIES	BUILDING SPRINKLER	PERIMETER W/ 20' YARD (F)	PERIMETER BUILDING (P)	ALLOWABLE AREA/FLOOR	ACTUAL AREA/FLOOR	COMMENTS
1,395	E	II-B	1	Y	NA	NA	NA	NA	NA

### ARCHITECTURAL SYMBOLS LEGEND

	<b>VIEW NAME</b> 1/8" = 1'-0"	REFERENCED CALLOUT		BUILDING SECTION SECTION / DRAWING SHEET
	<b>VIEW NAME</b> 1/8" = 1'-0"	PLAN VIEW CALLOUT		WALL SECTION SECTION / DRAWING SHEET
	<b>FLOOR LEVEL</b> 100'-0"	ELEVATION NAME AND HEIGHT		DETAIL OR PLAN CALL OUT VIEW NUMBER / DRAWING SHEET
	GRID SYMBOL			KEYNOTE TAG
	GRID SYMBOL			DOOR & FRAME TAG
	ROOM 101 150 SF	ROOM NAME, NUMBER, & SQUARE FOOTAGE		WINDOW UNIT TAG
	ROOM NAME 150 SF	ROOM NAME & SQUARE FOOTAGE		STOREFRONT & CURTAIN WALL TAG
	1/A101 Ref	INTERIOR ELEVATION REFERENCE DETAIL NUMBER / DRAWING SHEET		ROOF TYPE TAG
	A101 Ref	EXTERIOR BUILDING ELEVATIONS ELEVATION / DRAWING SHEET		WALL TYPE TAG
				FLOOR TYPE TAG
				REVISION NUMBER TAG
				CENTER LINE
				NORTH ARROW



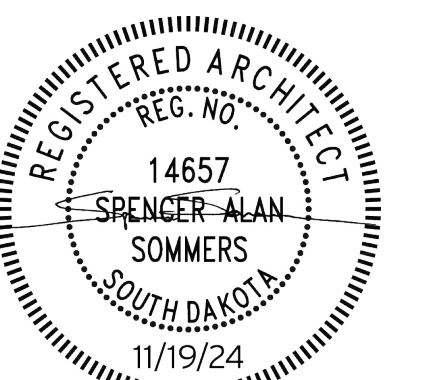
1108 S. Main St. 102  
Aberdeen, SD 57401  
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1113 St. Joseph Street  
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300 N. Phillips Ave. 120  
Sioux Falls, SD 57104  
Phone: 605-334-9999

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CO-OP PROJECT NO: 2415



ISSUE:  
11/19/24 100% CONSTRUCTION  
DOCUMENTS

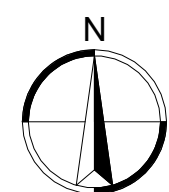
REVISION SCHEDULE:  
REV. # REV. DSC. REV. DATE

PROJECT:  
SIMMONS MIDDLE SCHOOL FAC  
REMODEL  
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA

SHEET TITLE:  
CODE & ORIENTATION PLAN

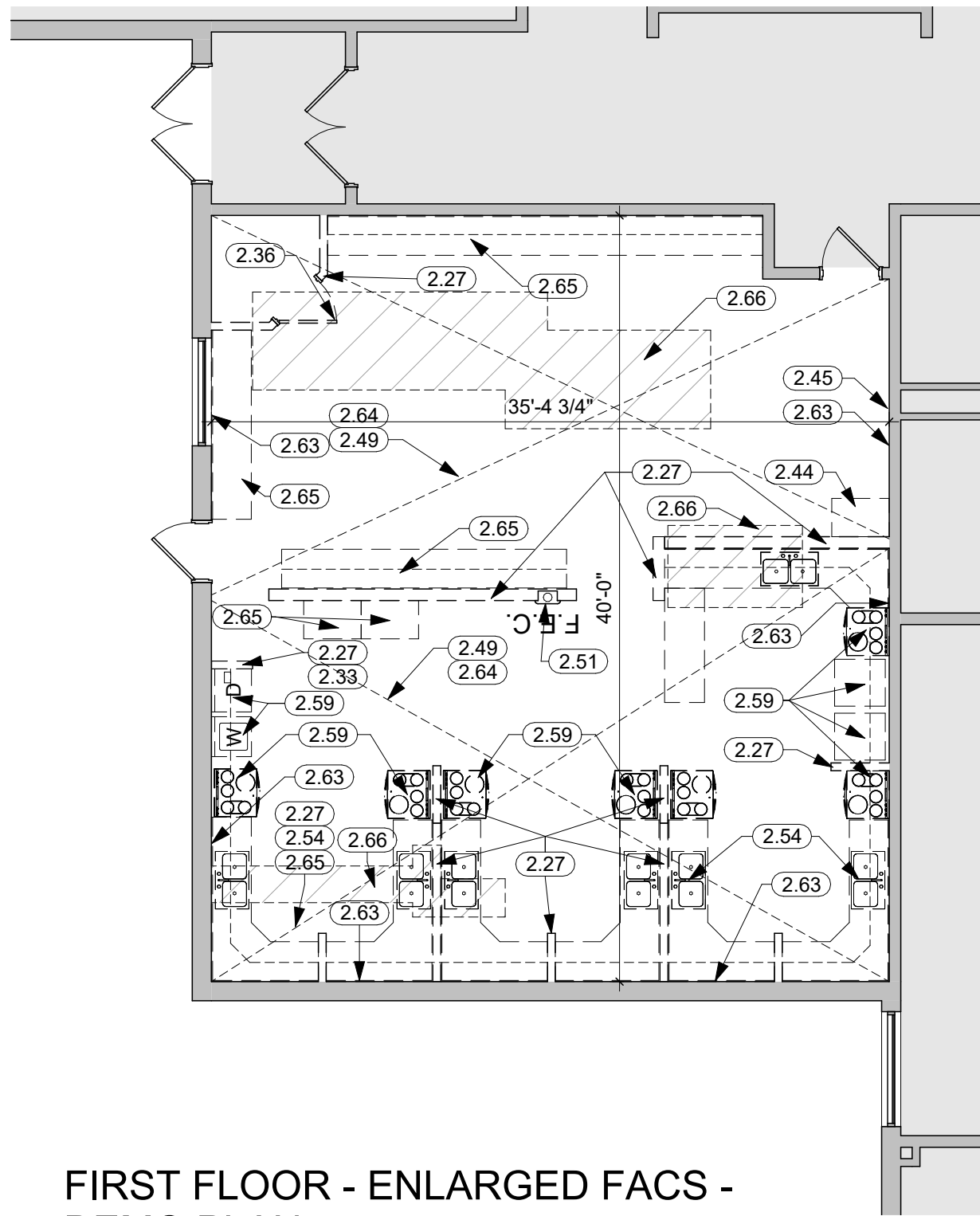
A002

1 SIMMONS SCHOOL FLOOR PLAN  
1/16" = 1'-0"

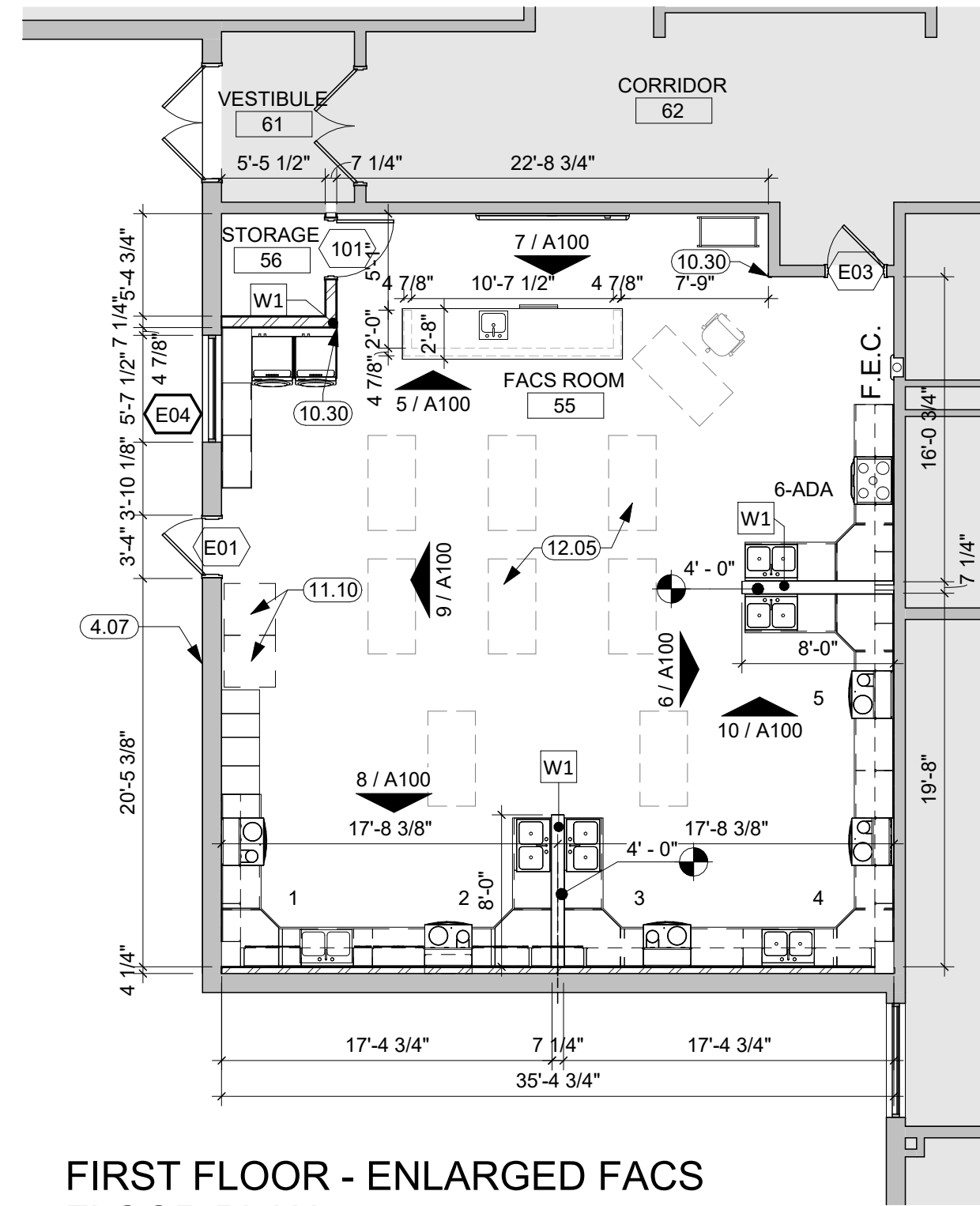


**GENERAL NOTES - DEMO**

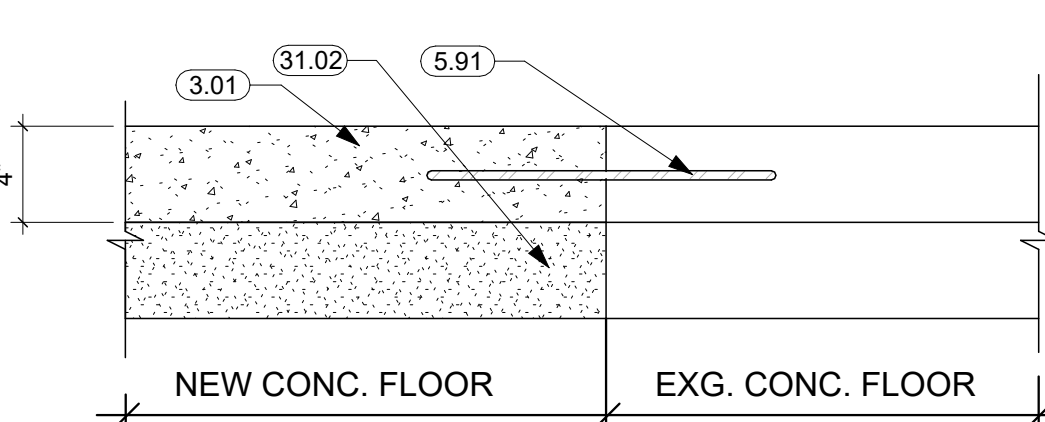
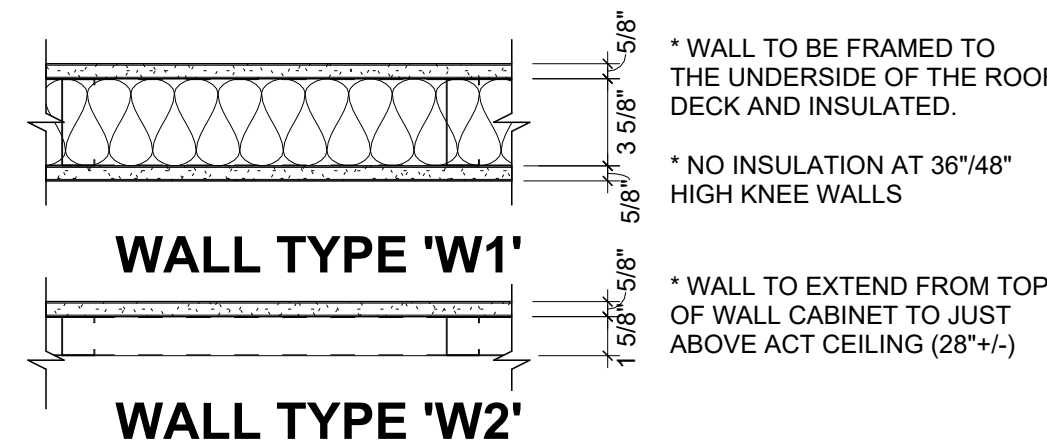
1. PATCH AND/OR REPAIR ANY ADJACENT EXISTING CONSTRUCTION AFFECTED BY DEMOLITION, TO MATCH EXISTING CONDITIONS U.O.N.
2. COORDINATE WITH THE OWNER ANY DEMO ITEMS TO BE SALVAGED BY THE GENERAL CONTRACTOR FOR THE OWNER'S RE-USE.
3. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS.



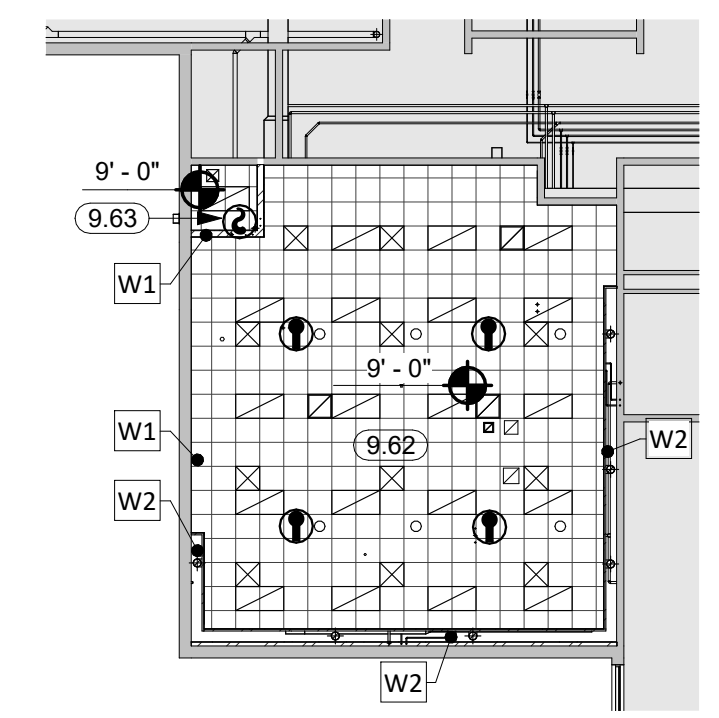
**1 FIRST FLOOR - ENLARGED FACs - DEMO PLAN**  
1/8" = 1'-0"



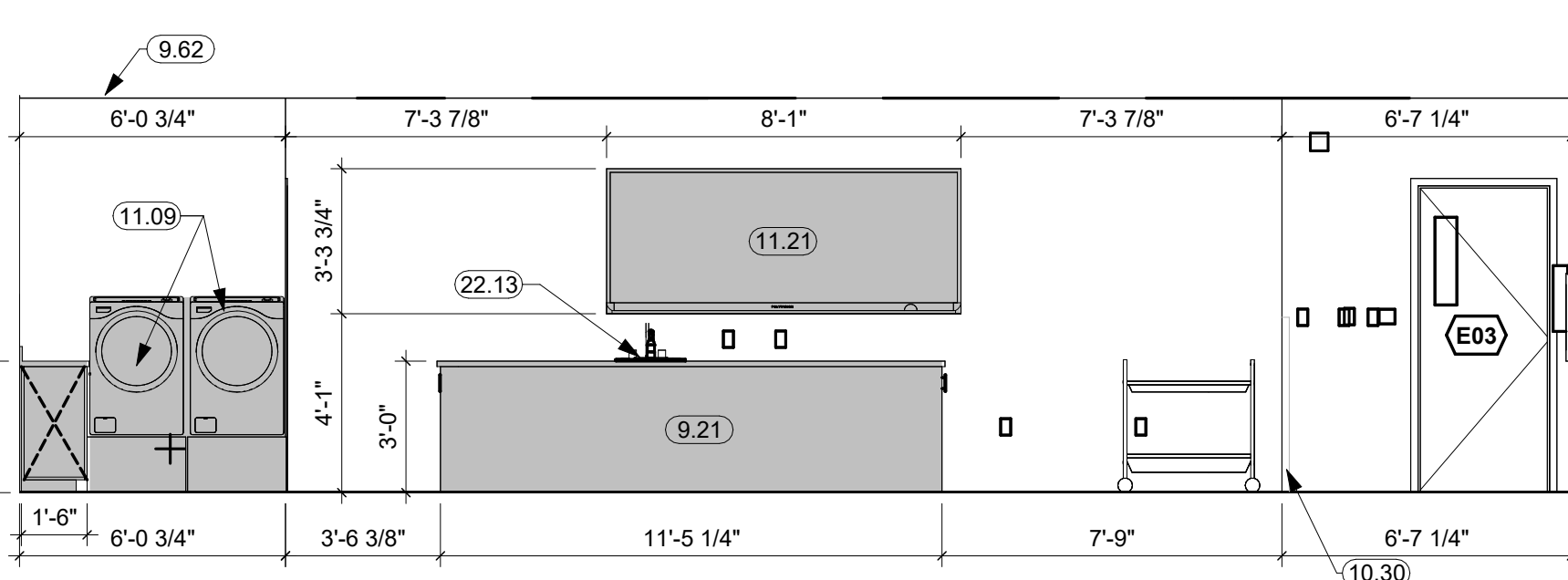
**2 FIRST FLOOR - ENLARGED FACs FLOOR PLAN**  
1/8" = 1'-0"



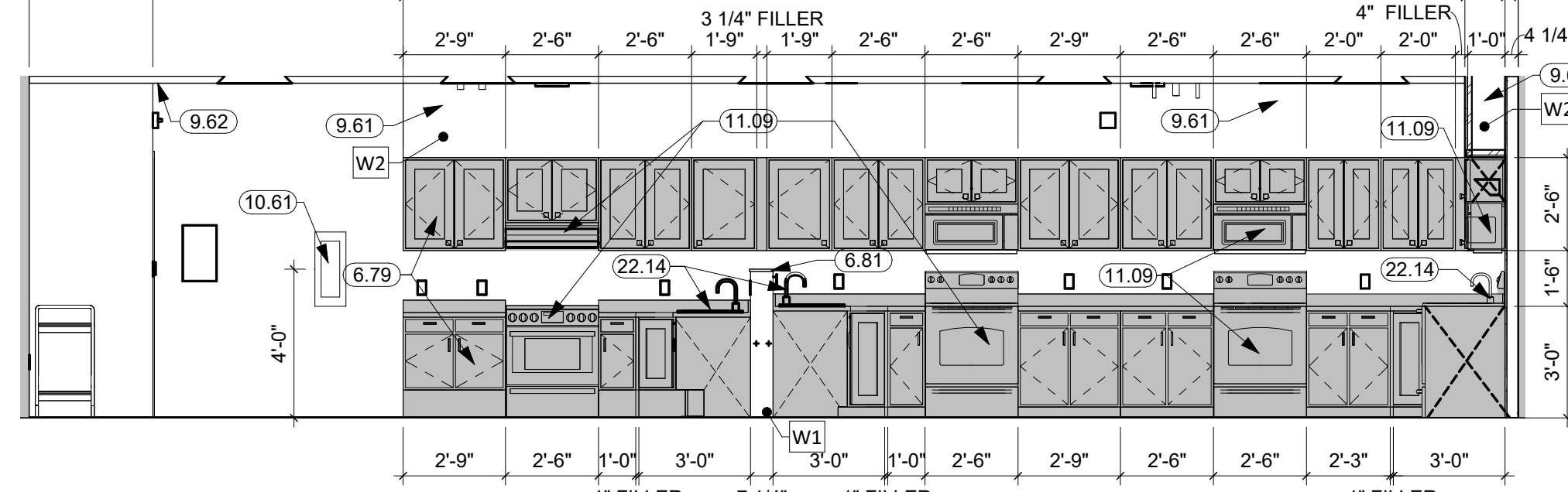
**3 CONCRETE JOINT DETAIL**  
1 1/2" = 1'-0"



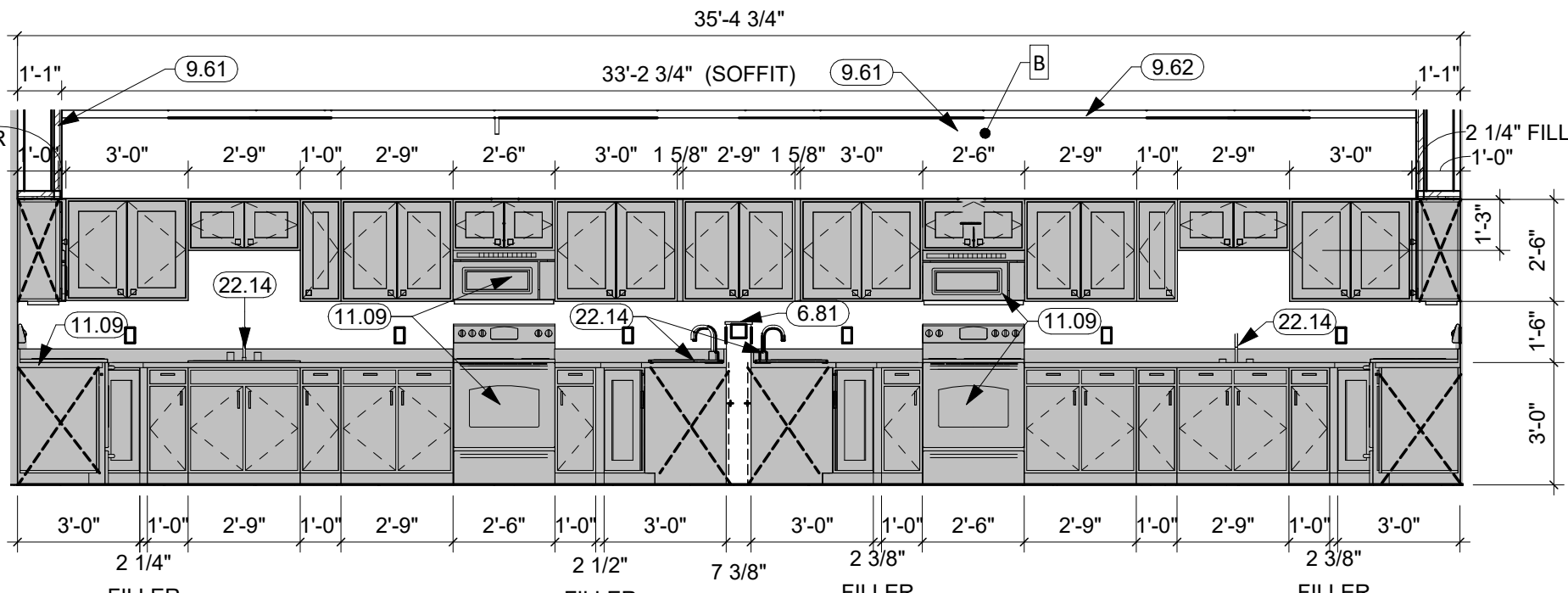
**4 FIRST FLOOR - ENLARGED FACs CEILING PLAN**  
1/16" = 1'-0"



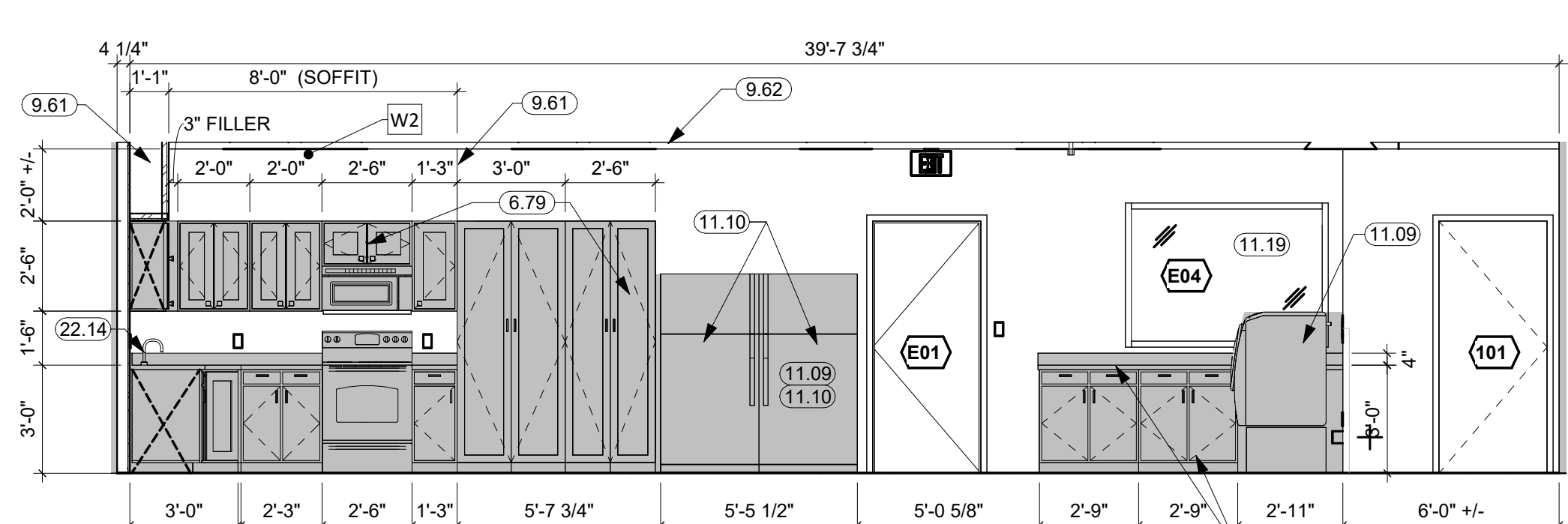
**5 NORTH INTERIOR ELEVATION**  
1/4" = 1'-0"



**6 EAST INTERIOR ELEVATION**  
1/4" = 1'-0"



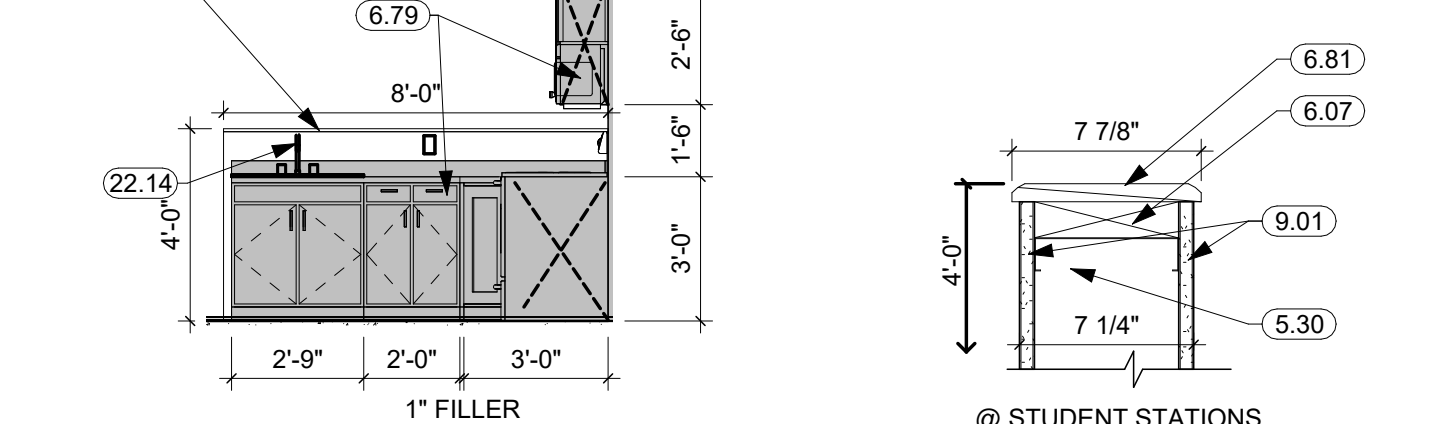
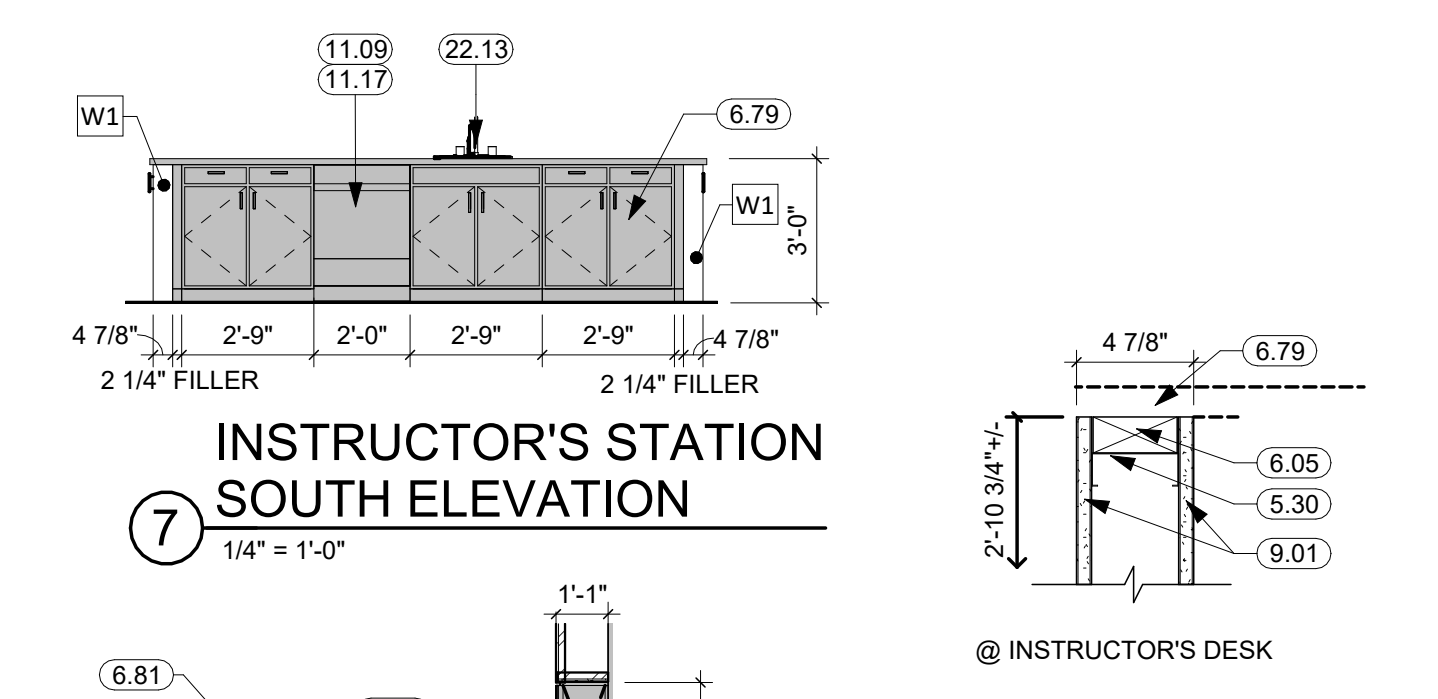
**8 SOUTH INTERIOR ELEVATION**  
1/4" = 1'-0"



**9 WEST INTERIOR ELEVATION**  
1/4" = 1'-0"

- GENERAL NOTES**
1. SEE ENLARGED PLAN FOR WALL TYPE.
  2. ALL DIMENSIONS ARE FROM FACE OF FRAMING U.N.O.
  3. INTERIOR WALL FINISHES ARE FULL HEIGHT, U.N.O.
  4. ALL WALLS ARE TO BE INSULATED AND EXTEND TO THE DECK, U.N.O.
  5. 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 EXPANSIONS. 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.
  6. SEE FLOOR PLAN FOR CASEWORK PLAN INFORMATION. FIELD VERIFY ALL CASEWORK OPENINGS. COORDINATE ALL CASEWORK DIMENSIONS WITH OWNER PROVIDED AND CONTRACTOR PROVIDED APPLIANCES/EQUIPMENT. ALL EXPOSED FACES TO BE FINISHED. (TYP)
  7. COORDINATE DEVICE PENETRATIONS AT COUNTERTOPS W/ MECHANICAL & ELECTRICAL.
  8. COORDINATE INSTALLATION OF OWNER PROVIDED EQUIPMENT WITH NEW CONSTRUCTION.
  9. ALL HM FRAMES IN STUD PARTITIONS SHALL BE WRAPPED AROUND BOTH SIDES OF PARTITION (U.N.O.) SEE PLAN FOR WALL THICKNESS.
  10. CAULK ENTIRE PERIMETER OF H.M. FRAMES (BOTH SIDES)
  11. PAINT ALL H.M. FRAMES AS DIRECTED. SPLIT PAINT COLOR AT DOOR GASKET AS REQ'D
  12. COORDINATE ALL CHASE SIZES AND LOCATIONS W/ MECHANICAL. PROVIDE CHASES AT ALL EXPOSED MECHANICAL & ELECTRICAL WITH ADJACENT WALL MATERIAL AS REQUIRED.
  13. ALL ITEMS INSTALLED IN CEILINGS, INCLUDING SPRINKLER HEADS, ARE TO BE CENTERED OR SYMMETRICALLY ARRANGED ON OR ABOUT CENTERLINES OF ROOMS AND CENTERED IN CEILING TILES.
  14. CENTER CEILING GRID IN AREAS SUCH THAT THERE WILL BE NO CEILING TILE LESS THAN 6" IN THE SMALLEST DIMENSION, UNLESS OTHERWISE NOTED.
  15. 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.
  16. REFER TO SPECIFICATIONS FOR CEILING AND FIXTURE SUSPENSION REQUIREMENTS.

- KEYNOTE SCHEDULE**
- |       |   |
|-------|---|
| 2.27  | REMOVE STUD FRAMED WALL   |
| 2.33  | REMOVE ACOUSTIC PANEL CEILING   |
| 2.36  | REMOVE DOOR & H.M. FRAME  |
| 2.44  | REMOVE TALL STORAGE CABINET   |
| 2.45  | REMOVE MARKER & TACK BOARDS   |
| 2.49  | REMOVE VCT  |
| 2.51  | REMOVE F.E. CABINET   |
| 2.54  | REMOVE SINK   |
| 2.59  | REMOVE ALL EXISTING EQUIPMENT (BY OWNER)  |
| 2.63  | REMOVE PORTION OF GYPSUM WALLBOARD AS NEEDED FOR MEP CHANGES. PATCH AND REPAIR TO MATCH EXISTING. SEE MEP DRAWINGS FOR MORE INFORMATION.  |
| 2.64  | REMOVE EXISTING ACOUSTICAL TILE - EXISTING GRID TO REMAIN   |
| 2.65  | OWNER TO REMOVE EXISTING CASEWORK & COUNTERTOPS   |
| 2.66  | HATCHED AREA INDICATES CUTTING FLOOR AS REQUIRED FOR NEW PLUMBING; SEE MEP FOR MORE INFORMATION AND ANY ADDITIONAL AREAS TO BE CUT/PATCHED. COORDINATE 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 |
| 3.01  | CONC. FLOOR SLAB ON GRADE REINF. w/ FIBERMESH w/ 10 MIL. VAPOR BARRIER BELOW  |
| 4.07  | PATCH EXISTING BRICK WHERE MEP COMPONENT HAS BEEN REMOVED (SEE MEP DOCUMENTS FOR MORE INFORMATION)  |
| 5.30  | STRUCTURAL STEEL STUD & TRACK FRAMING (SEE PLAN)  |
| 5.91  | #5 REBAR - PIN AND EPOXY  |
| 6.05  | DOUBLE SILL PLATE   |
| 6.07  | 2x WOOD BLOCKING  |
| 6.79  | CABINETS & COUNTERTOPS PROVIDED AND INSTALLED BY OWNER  |
| 6.81  | SOLID SURFACE   |
| 9.01  | GYPSUM SHAFT WALL   |
| 9.21  | 5/8" GYPSUM BOARD   |
| 9.61  | GYPSUM SOFFIT TO CONCEAL EXHAUST DUCT   |
| 9.62  | NEW ACOUSTICAL TILE - EXISTING GRID TO REMAIN   |
| 9.63  | NEW ACOUSTICAL TILE & GRID  |
| 10.30 | CORNER GUARDS   |
| 10.61 | FIRE EXTINGUISHER AND WALL CABINET  |
| 11.09 | APPLIANCES PROVIDED & INSTALLED BY OWNER (TYP)  |
| 11.10 | REFRIGERATOR  |
| 11.17 | DISHWASHER  |
| 11.19 | DRYER   |
| 11.21 | SMART BOARD (PROVIDED BY OWNER)   |
| 12.05 | DESK AND CHAIR (PROVIDED BY OWNER)  |
| 22.13 | SINGLE COMPARTMENT SINK   |
| 22.14 | DOUBLE COMPARTMENT SINK   |
| 31.02 | DRAINAGE FILL   |



**10 TYP OVEN WING** 1/4" = 1'-0"  
**11 LOW WALL SECTIONS** 1 1/2" = 1'-0"

**HARDWARE SET: 01**  
3 EA HINGES  
1 EA STOREROOM LOCK-ND80  
1 EA WALL STOP-WS406/407CCV

DOOR & FRAME SCHEDULE-FACS									
NO.	W	H	T	TYPE	MAT'L	FRAME	HDWRE	ADDITIONAL NOTES	
101	3'-0"	7'-0"	0'-1 3/4"	F	WOOD	HM	01		
E01	3'-0"	7'-0"	0'-1 3/4"		EXG HM	EXG HM		EXISTING DOOR TO REMAIN	
E03	3'-0"	7'-0"	0'-1 3/4"		EXG WOOD	EXG HM		EXISTING DOOR TO REMAIN	

ROOM FINISH SCHEDULE-FACS						
RM#	NAME	FLR FIN.	BASE FIN.	WALL FIN.	CLG FIN.	CLG HT.
55	FACS ROOM	BY OWNER	BY OWNER	P-1	NEW TILE IN EXG GRID	9'-0"
56	STORAGE	BY OWNER	BY OWNER	P-1	NEW TILE IN NEW GRID	9'-0"
61	VESTIBULE	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN
62	CORRIDOR	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN	EXISTING TO REMAIN

**CO-OP**  
Arch OP

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Sioux Falls, SD 57104  
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CO-OP PROJECT NO: 2415

REGISTERED ARCHITECT  
REG. NO. 14657  
SPENCER-ALAN SOMMERS  
SOUTH DAKOTA  
11/19/24

ISSUE:  
11/19/24 100% CONSTRUCTION DOCUMENTS

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

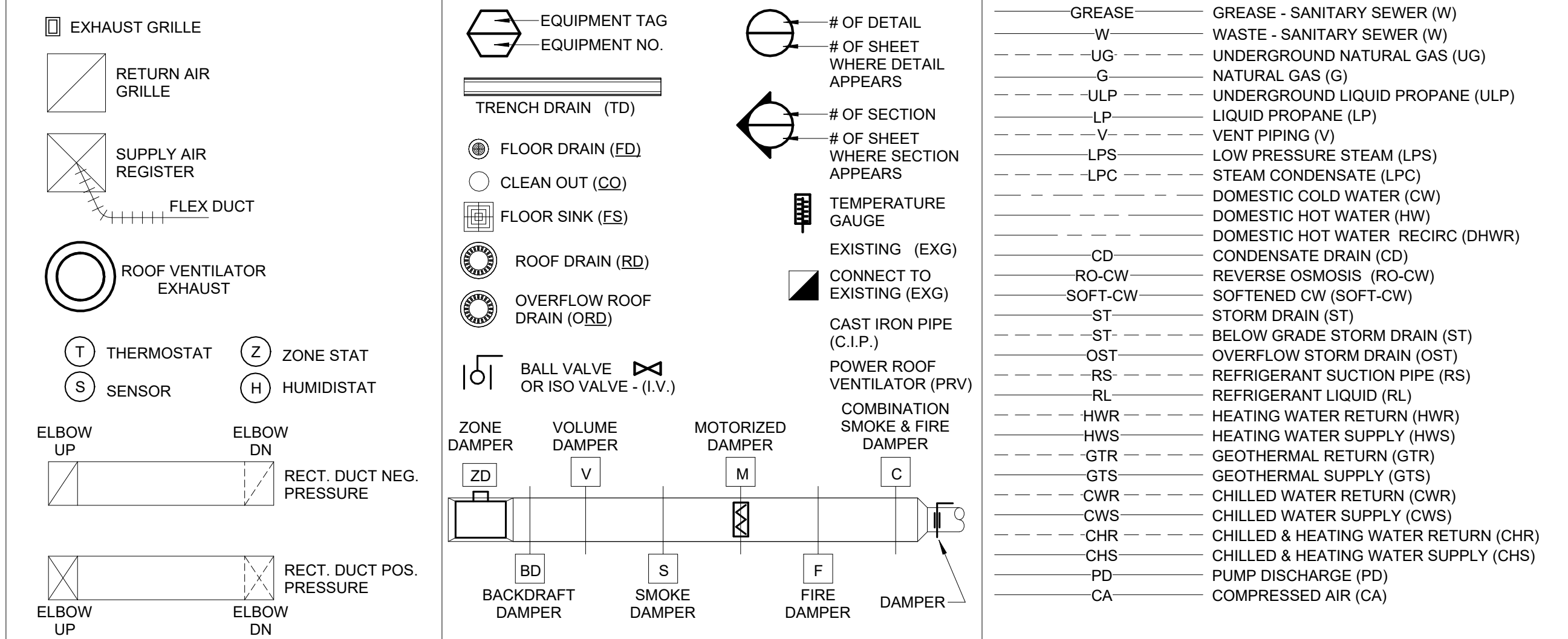
PROJECT:  
SIMMONS MIDDLE SCHOOL FACS REMODEL  
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA

SHEET TITLE:  
PLANS, ELEVATIONS, AND DETAILS

**A100**

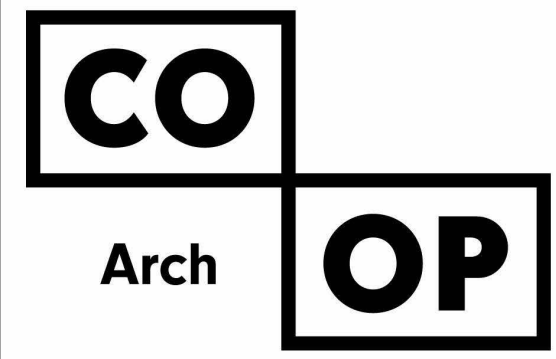


# MECHANICAL LEGEND



**ELECTRICAL & MECHANICAL SHEET INDEX**

Sheet Number	Sheet Name
EM100	MOTOR SCHEDULE, LEGEND & SHEET INDEX
M200	FIRST FLOOR - PLUMBING PLAN
M300	FIRST FLOOR - FIRE PROTECTION & HVAC PLAN
M400	PLUMBING FIXTURE & MECHANICAL SCHEDULES
E200	FIRST FLOOR - ELECTRICAL PLAN



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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

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# HVAC EQUIPMENT COORDINATION & MOTOR SCHEDULE

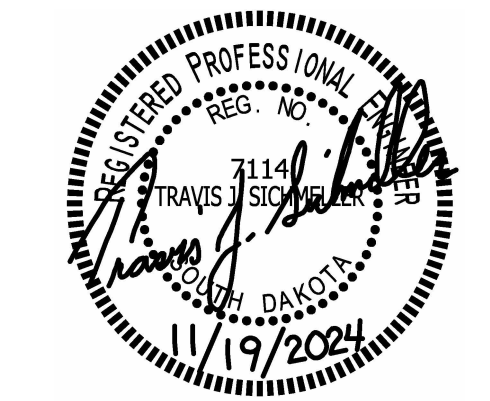
EQUIPMENT NUMBER	USE	LOCATION	FIRE ALARM INTERLOCK REQUIRED (F)	HP OR WATTAGE (KW) OR FRACTIONAL (F)	MCA	FLA	VOLTAGE	PHASE	TYPE	SIZE	BY	BY	BY	TEMPERATURE CONTROL WIRING	THERMOSTAT BY	ADJUST BY	SPEED SELECT SWITCH BY	THERM. CLOCK BY	BY	SIZE/TYPER/FUSE SIZE	MENA	NOTES	
																							POWER 60 CYC.
EXG EF-4	FACS ROOM GENERAL EXHAUST	EXG ROOF		(F)			115	1															NEW LIGHTED PILOT SWITCH BY EC; TC TO DISABLE IN UNOCCUPIED MODE
EF-13	PRV FOR RANGE HOOD & MICROWAVE EXHAUST	EXG ROOF	1/3		4.1	115	1																NEW LIGHTED PILOT SWITCH BY EC; TC TO MAINTAIN NEGATIVE PRESSURE IN COMMON EXHAUST DUCT, TC TO DISABLE IN UNOCCUPIED MODE
EF-A	RANGEHOOD	FACS ROOM 55 ADA STATION	(F)				115	1															ADA WALL SWITCH BY EC
EXG HP-7		FACS ROOM 55					208	3															NEW DDC SENSOR AT NEW HEIGHT
EXG HP-18	HVAC - FACS CLASSROOM	FACS ROOM 55					209	3															NEW FLAT PLATE DDC SENSOR

# ELECTRICAL LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
S	SINGLE POLE SWITCH	##	LIGHTING FIXTURE E = EMERGENCY BALLAST NL = NIGHT LIGHT ## = FIXTURE ID TAG a,b = CNTRL/RELAY ID TAG	[Symbol]	SMOKE DETECTOR
S3	THREE WAY SWITCH	[Symbol]	UNDER CABINET FIXTURE	[Symbol]	HEAT DETECTOR (FT = FIXED TEMPERATURE)
S4	FOUR WAY SWITCH	[Symbol]	WALL MOUNTED FIXTURE	[Symbol]	MANUAL PULL STATION
LV	LOW VOLTAGE PUSH BUTTON SWITCH	[Symbol]	RECESSED FIXTURE	[Symbol]	WALL MOUNTED HORN/STROBE
D	DIMMER SWITCH	[Symbol]	PHOTO CONTROL	[Symbol]	HORN/STROBE
T	TIMER SWITCH	[Symbol]	SECURITY CAMERA	[Symbol]	SPEAKER/STROBE
O	OCCUPANCY SENSOR	[Symbol]	WALL SPEAKER	[Symbol]	STROBE ONLY XX CANDELA RATING
P	PILOT LIGHT SWITCH	[Symbol]	EXIT FIXTURE	[Symbol]	FIRE ALARM WALL SPEAKER
K	KEYED SWITCH	[Symbol]	EMERGENCY WALL PACK	[Symbol]	FIRE ALARM CEILING SPEAKER
F	VARIABLE SPEED FAN SWITCH	[Symbol]	POLE MOUNTED LIGHT FIXTURE	[Symbol]	FIRE ALARM CONTROL PANEL
OS1	OCCUPANCY SENSOR - CEILING MOUNTED	[Symbol]	CLOCK	[Symbol]	FIRE ALARM ANNUNCIATOR PANEL
PR	POWER PACK FOR LOW VOLTAGE OCCUPANCY SENSOR	[Symbol]	NURSE CALL PULL STATION	[Symbol]	TAMPER SWITCH
[Symbol]	DUPLEX RECEPTACLE	[Symbol]	NURSE CALL DUTY STATION	[Symbol]	FLOW SWITCH
[Symbol]	GROUND FAULT CIRCUIT INTERRUPTER	[Symbol]	NURSE CALL CORRIDOR LIGHT	[Symbol]	BEAM TRANSMITTER
[Symbol]	DUPLEX RECEPTACLE	[Symbol]	NURSE CALL CONTROL PANEL	[Symbol]	BEAM RECEIVER
[Symbol]	DROP CORD RECEPTACLE (SEE DETAILS)	[Symbol]	THERMOSTAT	[Symbol]	SMOKE DAMPER
[Symbol]	250V 4-WIRE RECEPTACLE	[Symbol]	INTERCOM SPEAKER	[Symbol]	MOTORIZED DAMPER
[Symbol]	DOUBLE DUPLEX RECEPTACLE	[Symbol]	INTERCOM CALL STATION	[Symbol]	DSD
[Symbol]	TOP SWITCHED DUPLEX RECEPTACLE	[Symbol]	JUNCTION BOX	[Symbol]	DS
[Symbol]	SPECIAL OUTLET	[Symbol]	TIME CLOCK	[Symbol]	CR
XX	DATA/PHONE OUTLET	[Symbol]	VOLUME CONTROL	[Symbol]	[Symbol]
XX	XX INDICATES NO. OF JACKS	[Symbol]	TRANSFORMER	[Symbol]	[Symbol]
54*	WALL PHONE OUTLET	[Symbol]	CABLE TV - ONE CAT6 & ONE COAX CABLE	[Symbol]	[Symbol]
54*	CEILING DATA/PHONE OUTLET	[Symbol]	DOOR HOLDER	[Symbol]	[Symbol]
[Symbol]	FLOOR BOX WITH POWER AND DATA	[Symbol]		[Symbol]	[Symbol]
[Symbol]	FLOOR BOX WITH POWER ONLY	[Symbol]		[Symbol]	[Symbol]
M	MANUAL MOTOR STARTER	[Symbol]		[Symbol]	[Symbol]
[Symbol]	MOTOR CONNECTION	[Symbol]		[Symbol]	[Symbol]
VFD	VARIABLE FREQUENCY DRIVE	[Symbol]		[Symbol]	[Symbol]

### SPECIAL NOTES:

- IN AREAS WHERE EXISTING CEILINGS ARE TO REMAIN, EACH TRADE SHALL BE RESPONSIBLE FOR ANY DAMAGE OR REPAIR NEEDED TO EXISTING CEILINGS AS A RESULT OF THEIR WORK.
- EACH TRADE SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING AS NECESSARY TO ALLOW FOR COMPLETION OF THEIR WORK. REFER TO ARCHITECTURAL PLANS FOR SELECTIVE DEMOLITION BY OTHERS.
- ALL CONTRACTORS SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- ALL ROOFING WORK BY ROOFING CONTRACTOR, ALL TRADES TO COORDINATE.
- 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 SCHEDULE 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.
- ALL DDC TEMPERATURE CONTROL WORK TO BE COMPLETED BY JOHNSON CONTROLS (CONTACT GREG HINTGEN 605-362-5315).
- GLYCOL SOLUTION:  
a. NO HYDRONICS/GLYCOL WORK FOR EXISTING HYDRONICS AND GEOTHERMAL TO REMAIN.
- WHERE PEX PIPING IS USED, PIPING SHALL BE UPONOR PEX-A POTABLE WATER PIPING WITH UPONOR F1960 EXPANDABLE FITTINGS. NO CRIMP FITTINGS TO BE ACCEPTED, PROVIDED THE CONTRACTOR IS TRAINED AND FOLLOWING ALL MANUFACTURER'S RECOMMENDATIONS TO FULFILL ALL AVAILABLE UPONOR 25 YEAR WARRANTY COVERAGE.
- ORIGINAL PLANS ARE AVAILABLE. PLEASE CONTACT THE ENGINEER'S OFFICE TO REQUEST. CONTACT ISAAC @ 605-225-4344.



SE PROJECT NO: 240800840

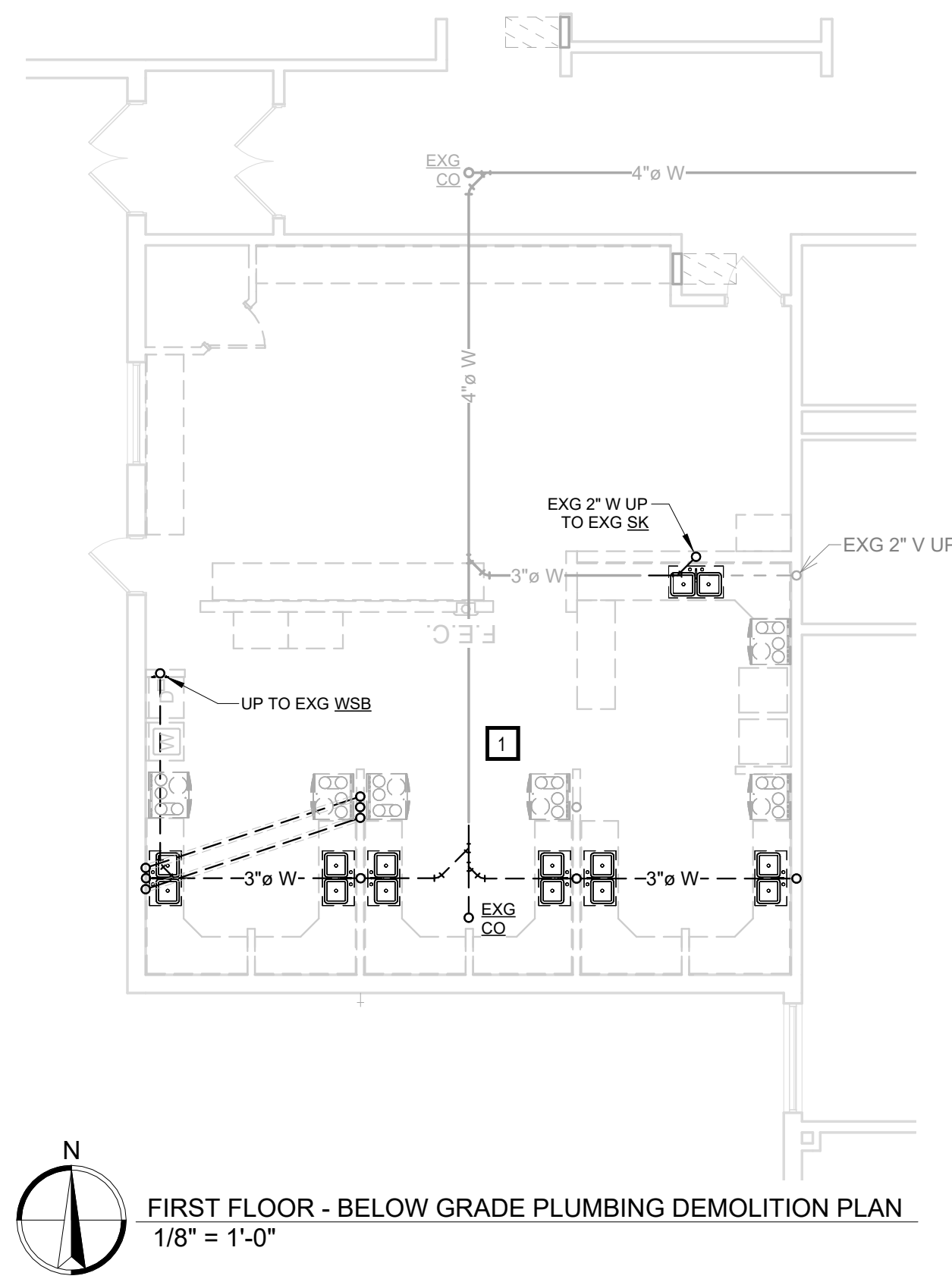
ISSUE:  
11/19/2024 CONSTRUCTION DOCUMENTS

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REV. # REV. DSC. REV. DATE

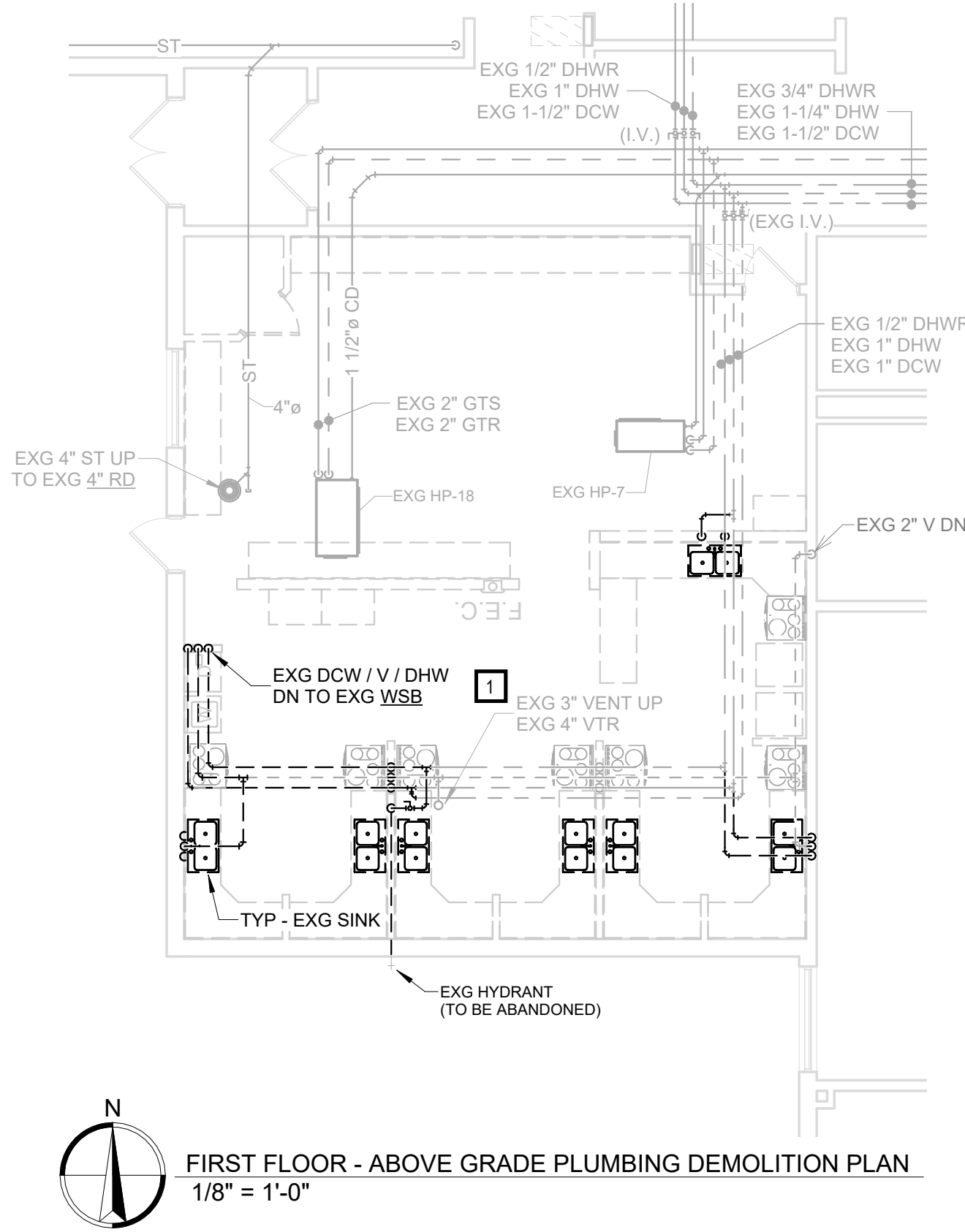
PROJECT:  
SIMMONS MIDDLE SCHOOL FACS REMODEL  
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA

SHEET TITLE:  
MOTOR SCHEDULE, LEGEND & SHEET INDEX

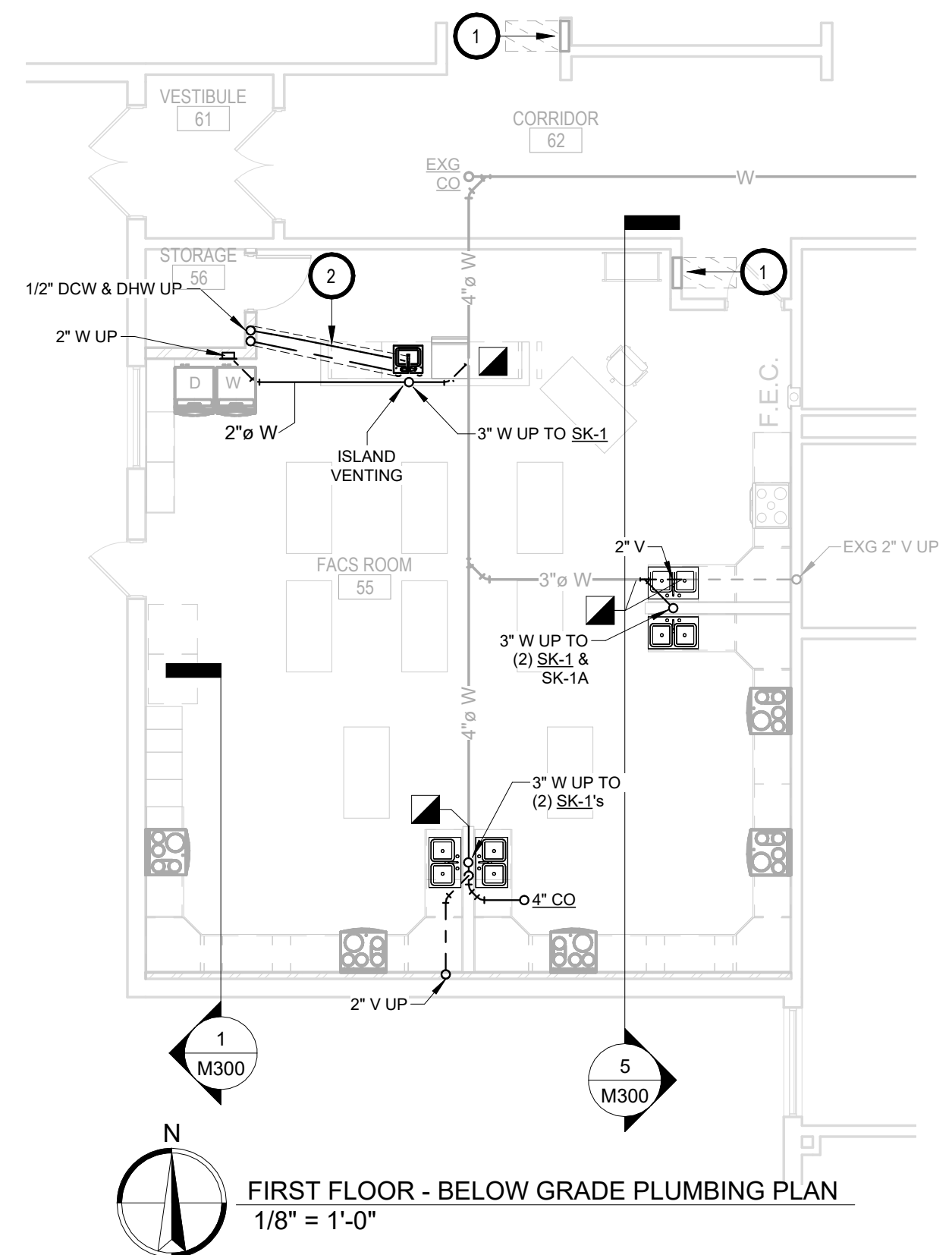
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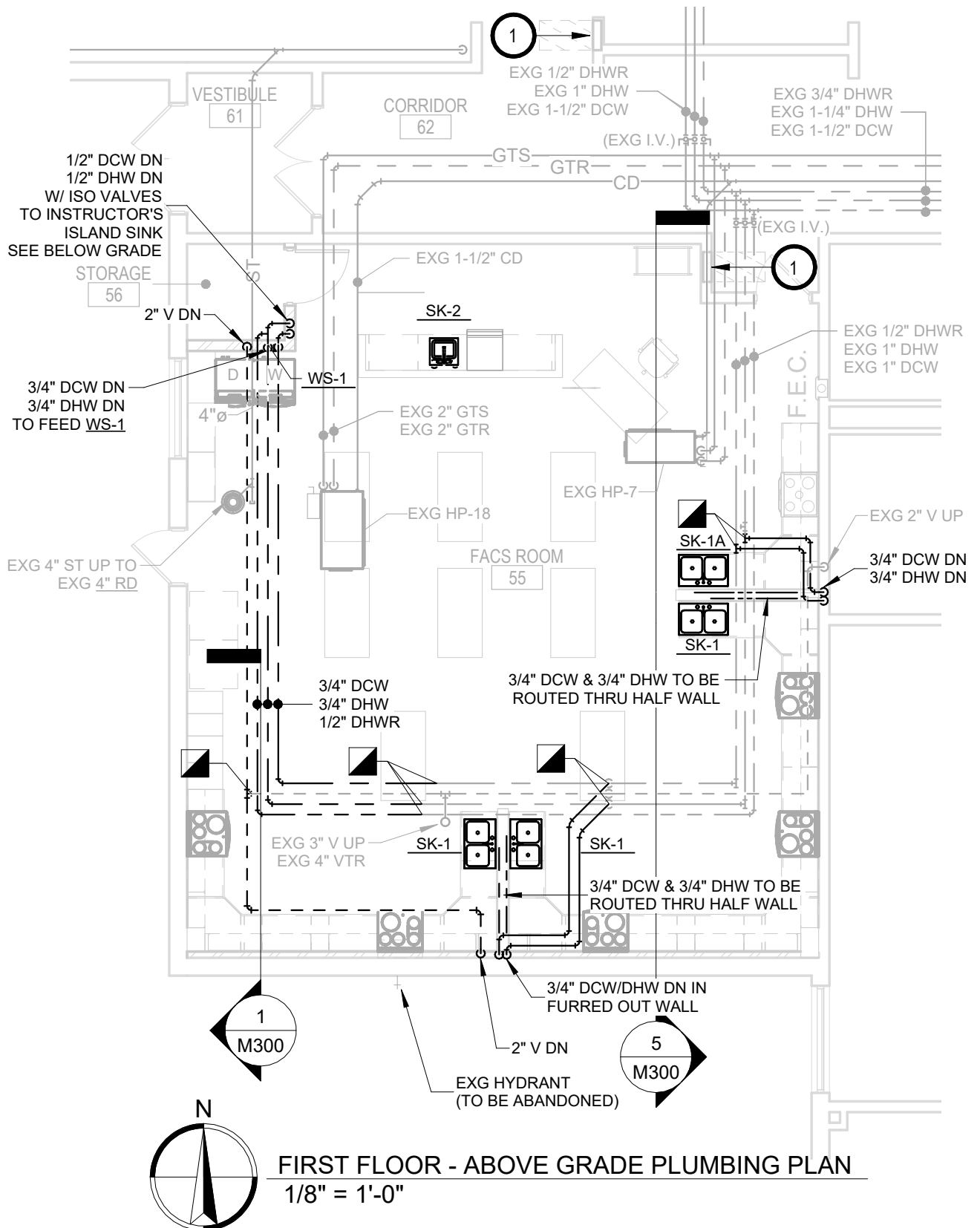
FIRST FLOOR - BELOW GRADE PLUMBING DEMOLITION PLAN  
1/8" = 1'-0"



FIRST FLOOR - ABOVE GRADE PLUMBING DEMOLITION PLAN  
1/8" = 1'-0"



FIRST FLOOR - BELOW GRADE PLUMBING PLAN  
1/8" = 1'-0"



FIRST FLOOR - ABOVE GRADE PLUMBING PLAN  
1/8" = 1'-0"

DEMOLITION KEYNOTES:

1. 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 ROUGH-INS UP THRU FLOOR SHALL BE REMOVED TO A POINT BELOW FLOOR AND CAPPED. FLOOR PATCHING BY PC.

DEMOLITION 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.

GENERAL NOTES:

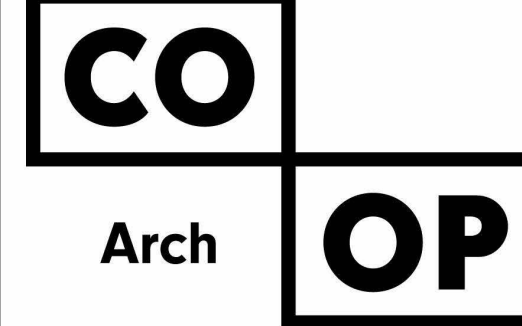
- A. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- B. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING ANY OPENINGS LEFT IN FLOORS, WALLS, AND CEILINGS THAT WERE CAUSED BY HIS/HER ACTIONS. PATCHING SHALL MATCH EXISTING SURFACE IN COLOR, TEXTURE AND QUALITY SO THAT PATCH 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.
- L. 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.
- M. 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. 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. 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.



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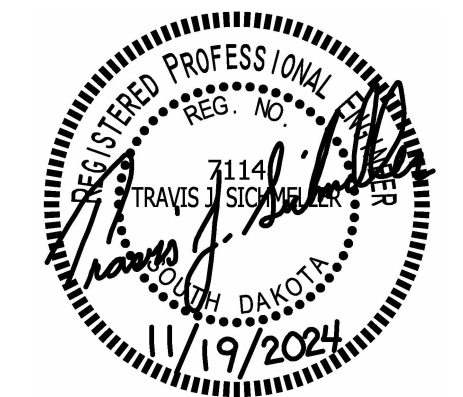
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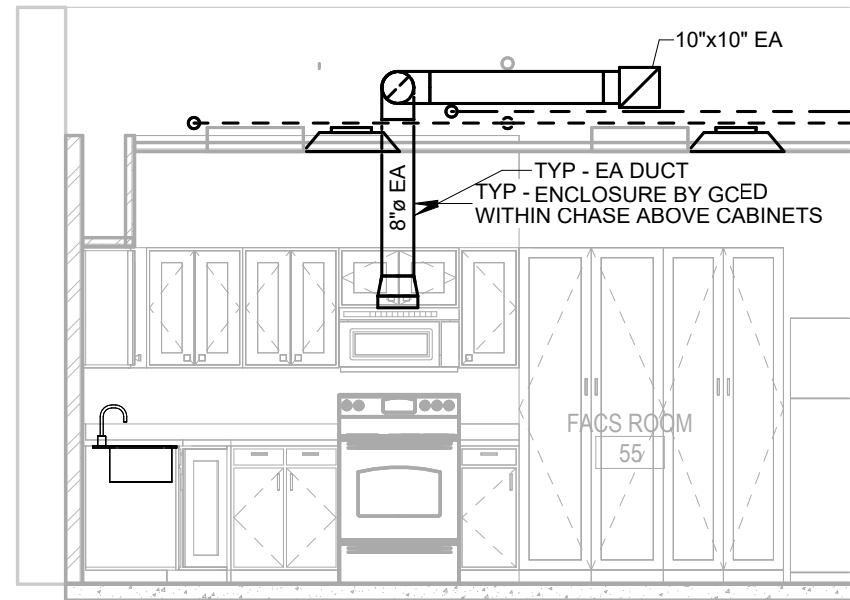
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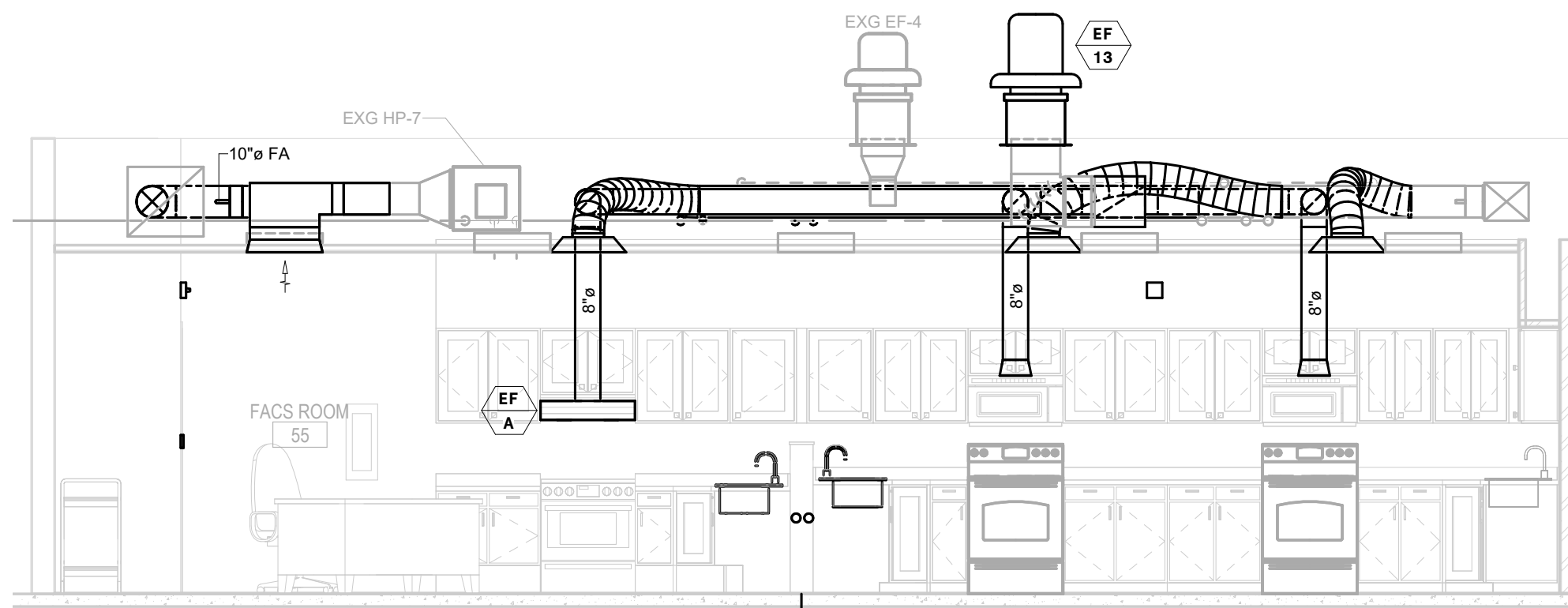
PROJECT:  
SIMMONS MIDDLE SCHOOL FACs  
REMODEL  
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR - PLUMBING PLAN

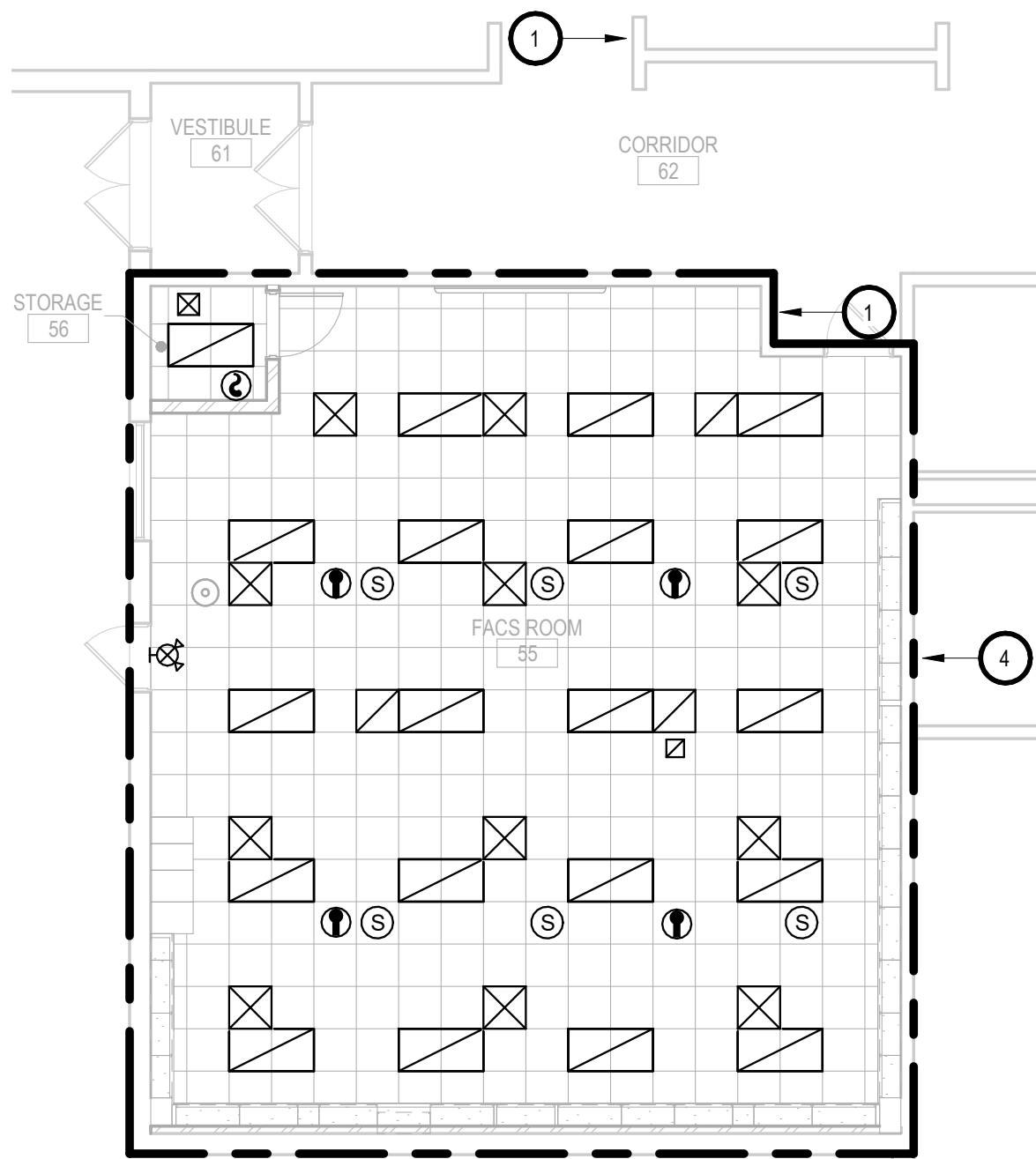
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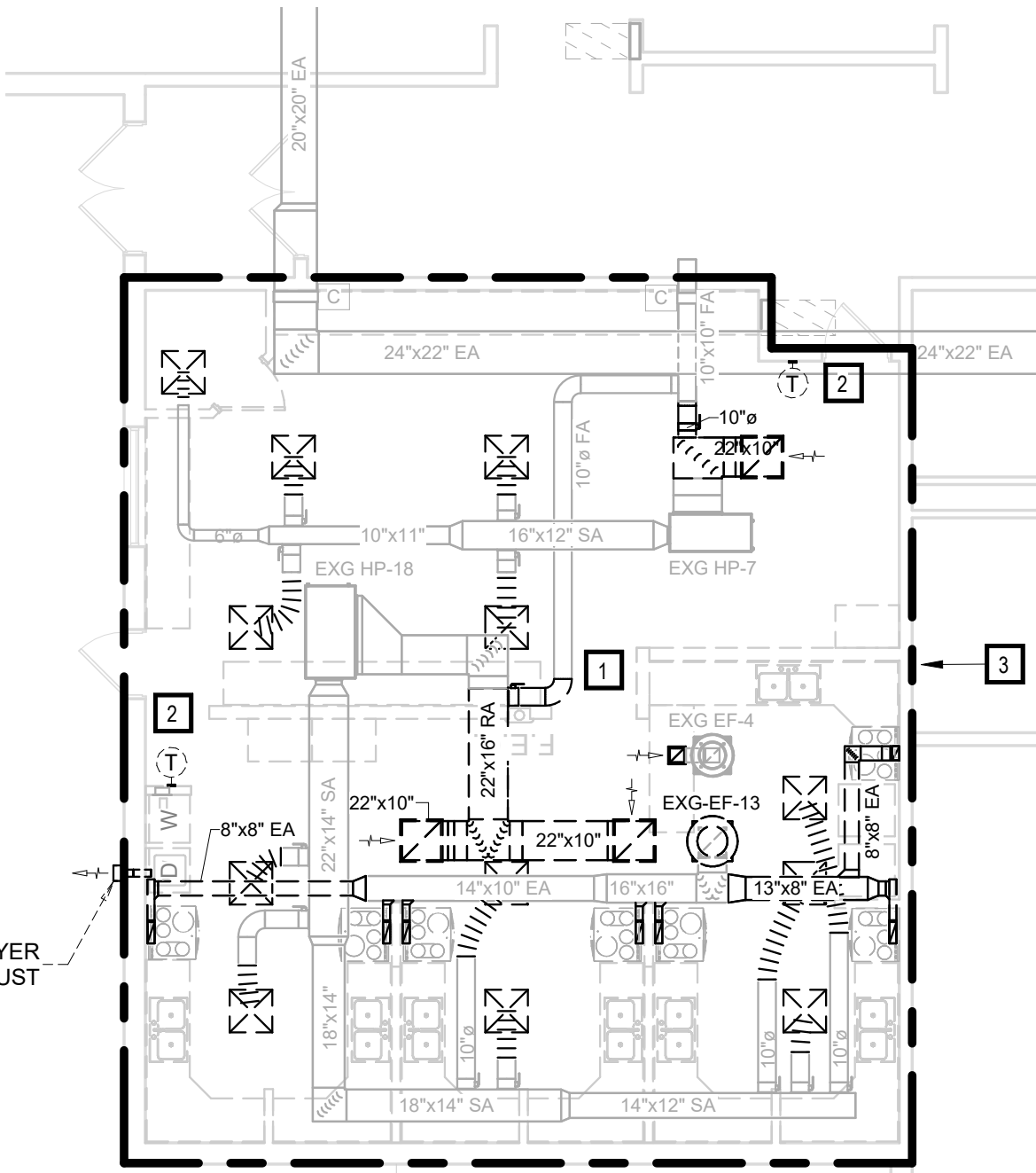
1 MECHANICAL SECTION #1  
M300 SCALE: 1/4" = 1'-0"



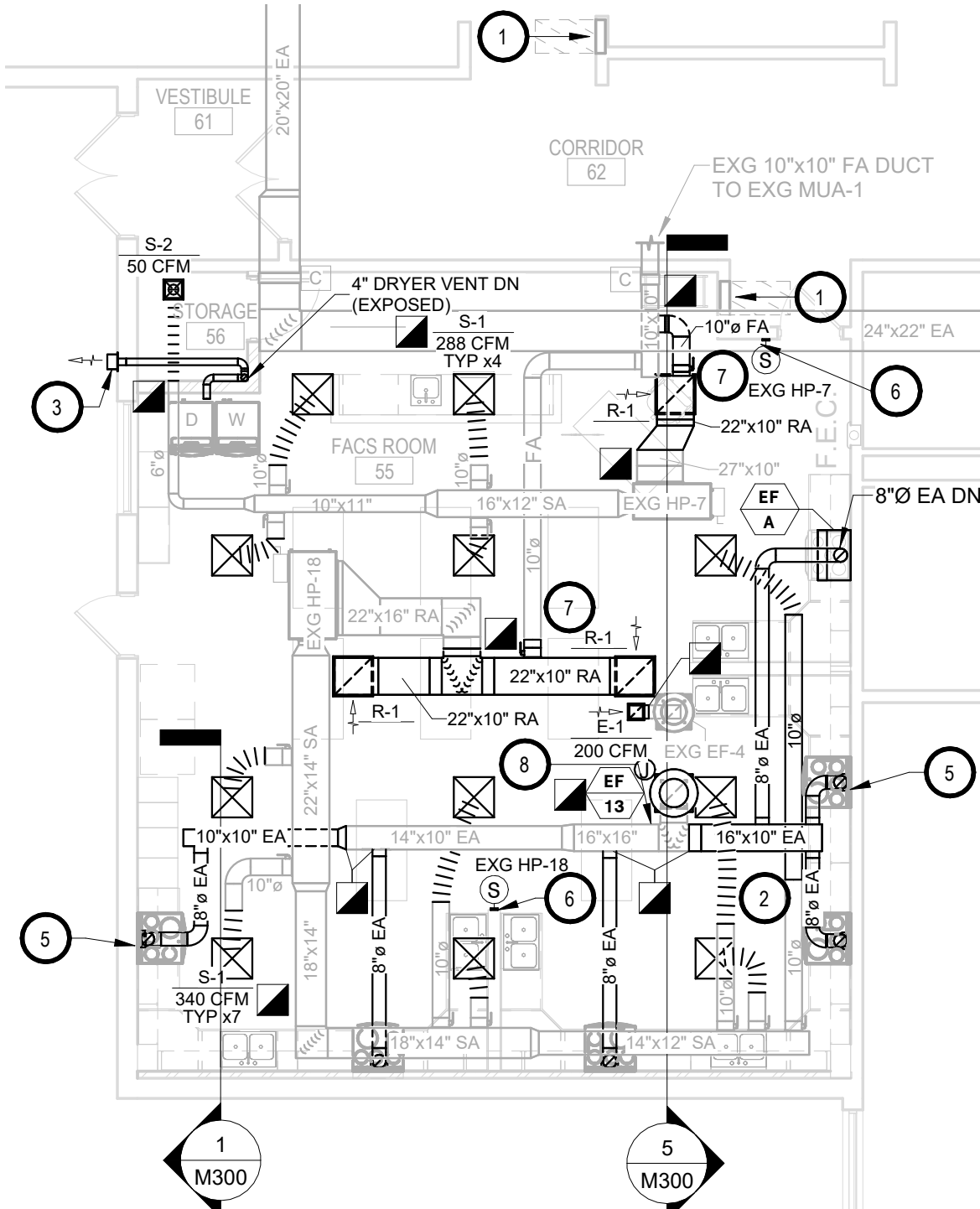
5 MECHANICAL SECTION #2  
M300 SCALE: 1/4" = 1'-0"



FIRST FLOOR - FIRE PROTECTION PLAN  
1/8" = 1'-0"



FIRST FLOOR - FIRE PROTECTION & HVAC DEMOLITION PLAN  
1/8" = 1'-0"



FIRST FLOOR - HVAC PLAN  
1/8" = 1'-0"

- DEMOLITION KEYNOTES:**
- VC TO DISCONNECT AND REMOVE EXISTING SA/EA RA CEILING REGISTERS AND ASSOCIATED DUCTWORK SHOWN DARK AND DASHED. SEE PROPOSED.
  - TC TO REMOVE EXISTING THERMOSTAT. SEE PROPOSED.
  - AREA WITHIN DASHED OUTLINE - FIRE SPRINKLER CONTRACTOR TO REMOVE AND REPLACE SEMI-RECESSED CHROME FINISH HEADS OF EXISTING FIRE SPRINKLER SYSTEM ORIGINALLY INSTALLED IN 2006. CENTER NEW HEADS WITHIN NEW 2X2 ACT. ORIGINAL FIRE SPRINKLER SYSTEM PLANS ARE AVAILABLE FROM ENGINEER'S OFFICE.

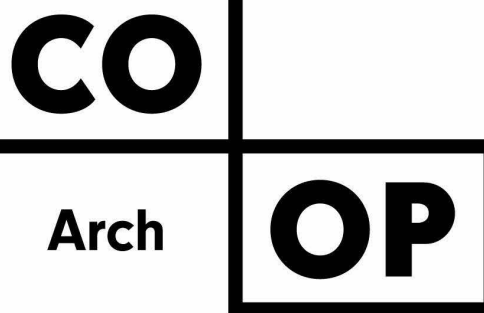
- FIRE PROTECTION GENERAL NOTES:**
- SPRINKLER HEADS IN THE FINISHED CEILING SHALL BE **CHROME SEMI-RECESSED TYPE**. CENTER HEADS IN CEILING TILE WHERE APPLICABLE. CONTRACTOR SHALL REFER TO ARCHITECTS REFLECTED CEILING PLAN FOR CEILING INSTALLATION & HEIGHTS.
  - COORDINATE INSTALLATION REQUIREMENTS WITH OTHER TRADES. PROVIDE DESIGN & INSTALLATION OF A COMPLETE FIRE PROTECTION SYSTEM.
  - FIRE PROTECTION SYSTEM SHALL NOT BE INTERRUPTED DURING TIMES WHEN THE BUILDING IS OCCUPIED. IF INTERRUPTING EXISTING FIRE PROTECTION SYSTEM, NOTIFY THE BUILDING OWNER OF THE TIME AND DURATION OF THE FIRE PROTECTION WORK. DO NOT LEAVE THE SYSTEM INOPERABLE OVERNIGHT.
  - AS LONG AS FIELD CONDITIONS ALLOW, THIS CONTRACTOR SHALL INSTALL ALL MAIN PIPING AND BRANCH PIPING A MINIMUM OF 12" ABOVE FINISHED CEILING HEIGHT OR GREATER AS REQUIRED BY FIELD CONDITIONS.
  - THIS CONTRACTOR SHALL COORDINATE WITH ALL TRADES INCLUDING CEILING CONTRACTOR, ELECTRICAL CONTRACTOR, VENTILATION CONTRACTOR, PLUMBING CONTRACTOR, BEFORE FABRICATION AND INSTALLATION.
  - AT NO TIME SHALL THE DROPS BE INSTALLED WITHOUT COORDINATION WITH THE CEILING CONTRACTOR.

- DEMOLITION GENERAL NOTES:**
- CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES, INCLUDING ANY NECESSARY REMEDIATION.
  - 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 AFFECTED BY THE INTERRUPTION AND BE RESPONSIBLE FOR RETURNING AUTOMATICALLY CONTROLLED EQUIPMENT TO THE SAME OPERATING CONDITION, WHICH EXISTED PRIOR TO THE INTERRUPTION.

- 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.
  - COORDINATE INSTALLATION OF ALL HVAC WITH PLUMBING, FIRE SPRINKLER, LIGHT FIXTURES, AND STRUCTURE TO ACCOMMODATE LIMITED CEILING SPACE.
  - FOR SIMPLICITY DUCT INSULATION NOT SHOWN. DUCT SIZES INDICATED ON DRAWING ARE INTERNAL DIMENSIONS. AS NEEDED ADJUST ACTUAL SIZE FOR INSULATION THICKNESS AS SPECIFIED.
  - ALL FLEXIBLE DUCTWORK AND CONNECTORS BETWEEN THE LOW PRESSURE DUCTWORK AND THE DIFFUSERS SHALL BE THE SIZE OF THE DIFFUSER INLET.

- 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.
  - VENTILATION CONTRACTOR TO PROVIDE AND INSTALL EXTERNAL INSULATION. REFER TO HVAC SHEET METAL DUCTWORK CONSTRUCTION & INSULATION SCHEDULE.
  - VC TO PROVIDE AND INSTALL DRYER VENT AS SHOWN. 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.
  - AREA WITHIN DASHED OUTLINE - FIRE SPRINKLER CONTRACTOR TO REMOVE AND REPLACE SEMI-RECESSED CHROME FINISH HEADS OF EXISTING FIRE SPRINKLER SYSTEM ORIGINALLY INSTALLED IN 2006. ORIGINAL FIRE SPRINKLER SYSTEM PLANS ARE AVAILABLE FROM ENGINEER'S OFFICE.
  - 5TP - 8"Ø EA DN TO SQUARE CONNECTION ON MICROWAVE WITH INTEGRAL CONTROLS BY OTHERS.
  - TC TO INSTALL SPACE SENSOR AT HEIGHT TO MATCH ELECTRICAL SWITCHES. (NO ADJUSTABLE T-STAT).
  - SEE EXISTING HEAT PUMP SCHEDULE FOR OA CFM VALUES.
  - PROVIDE & INSTALL 12X12 ACCESS DOOR IN EXISTING EA DUCT FOR NEW PRESSURE SENSOR BY TC. COORDINATE EXACT LOCATION WITH TC.

- SPECIAL NOTES:**
- ALL MECHANICAL SYSTEMS, EXCLUDING DROPS, TO BE INSTALLED AS HIGH AS POSSIBLE TO PROVIDE MAXIMUM CLEARANCES FOR OWNER.



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PROJECT:  
SIMMONS MIDDLE SCHOOL FACS  
REMODEL  
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR - FIRE  
PROTECTION & HVAC PLAN

**M300**



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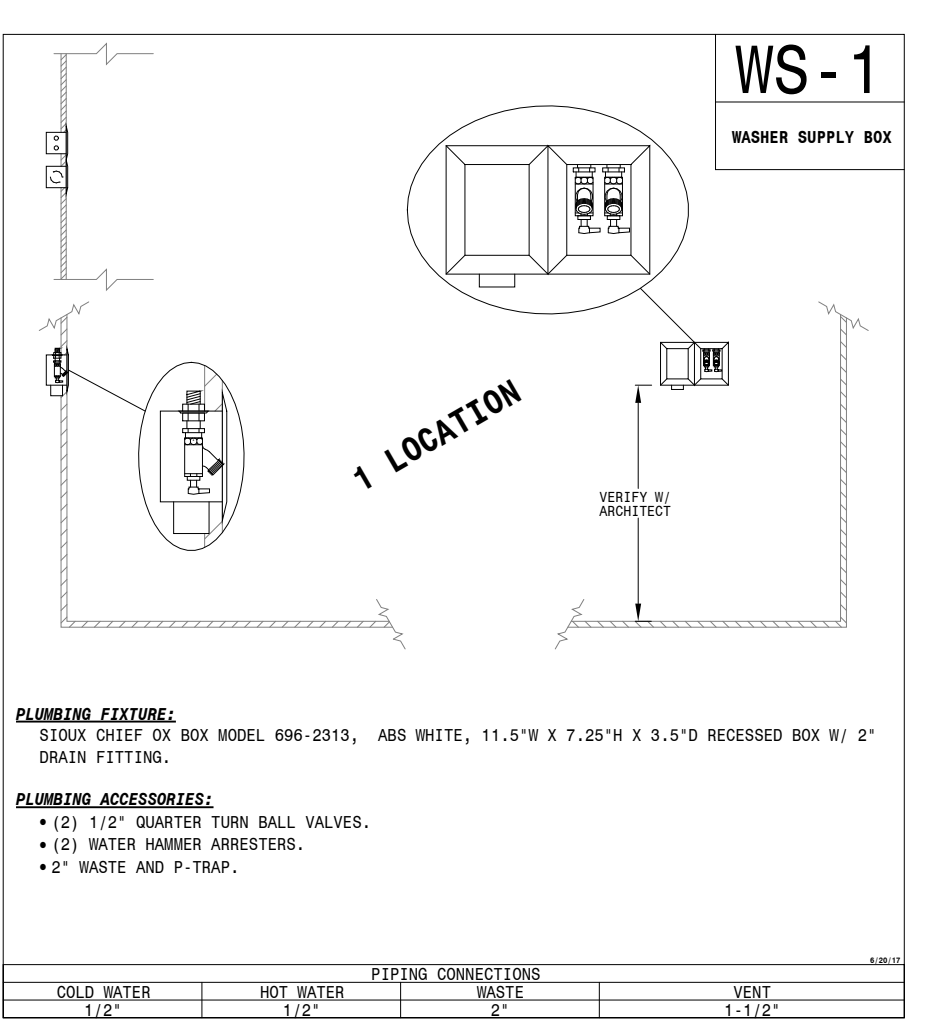
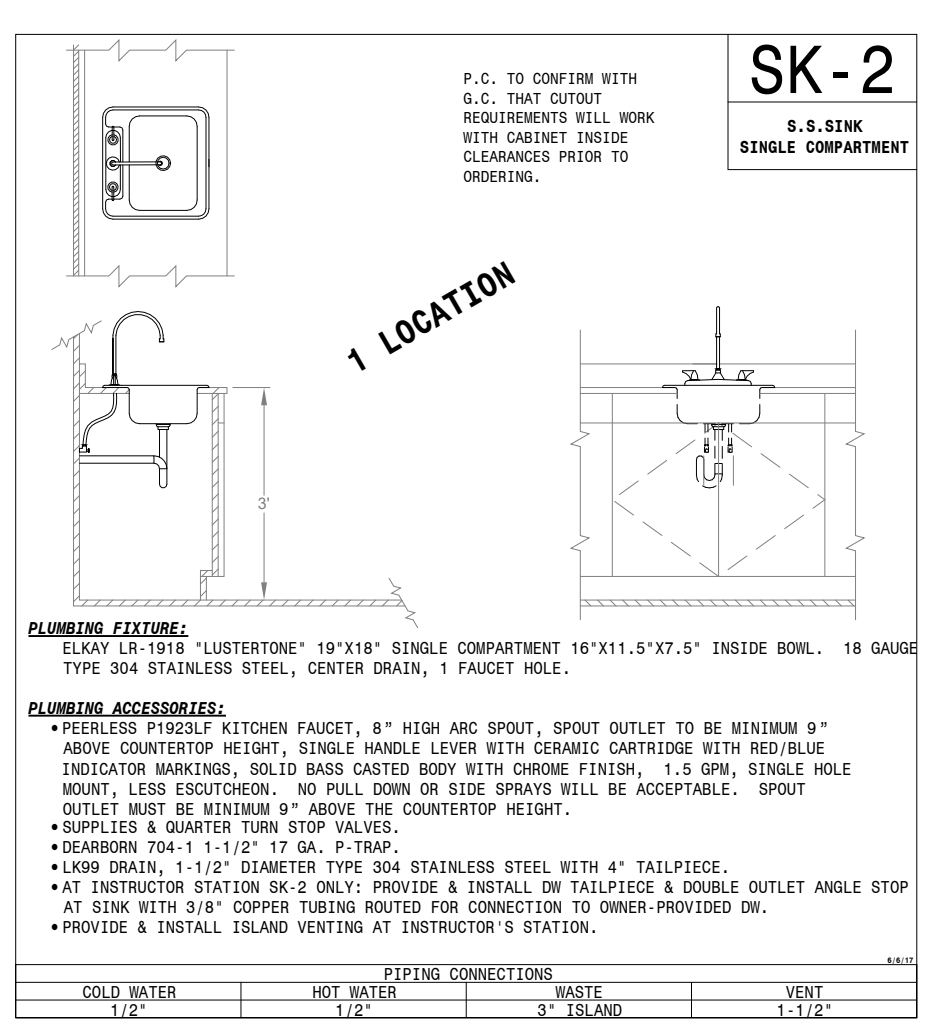
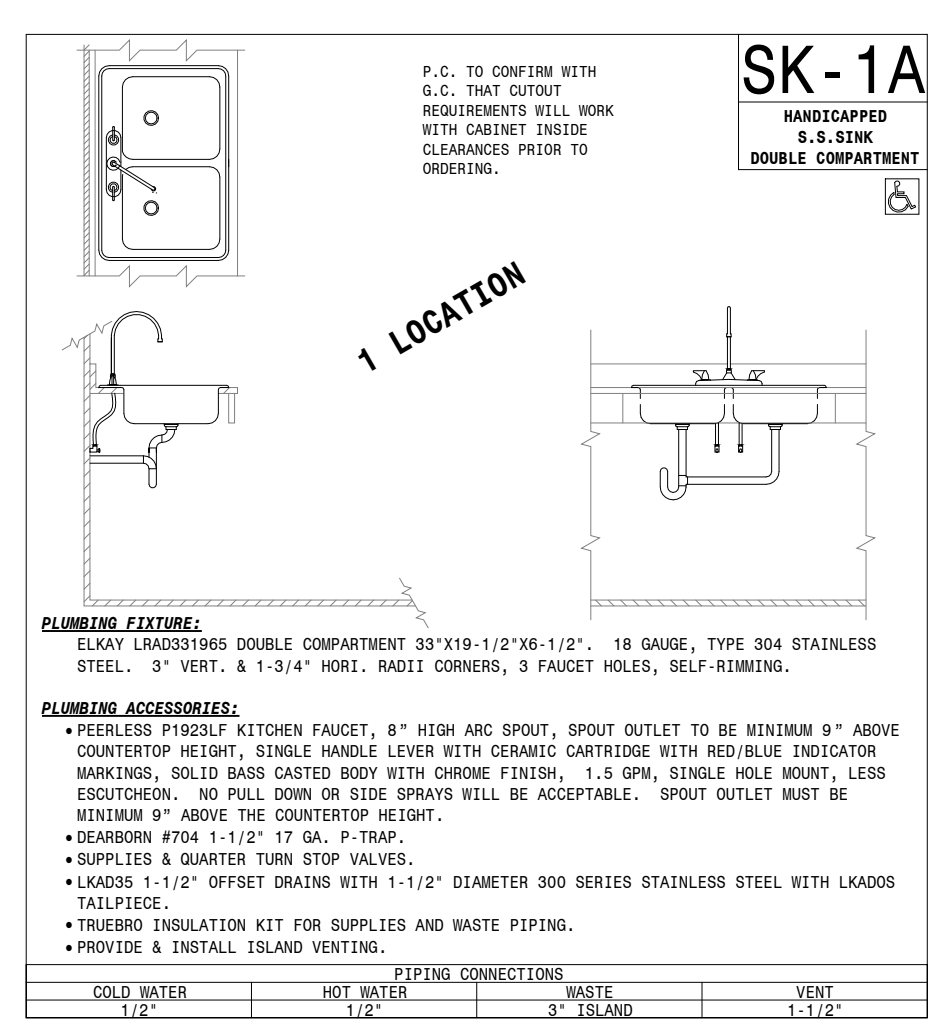
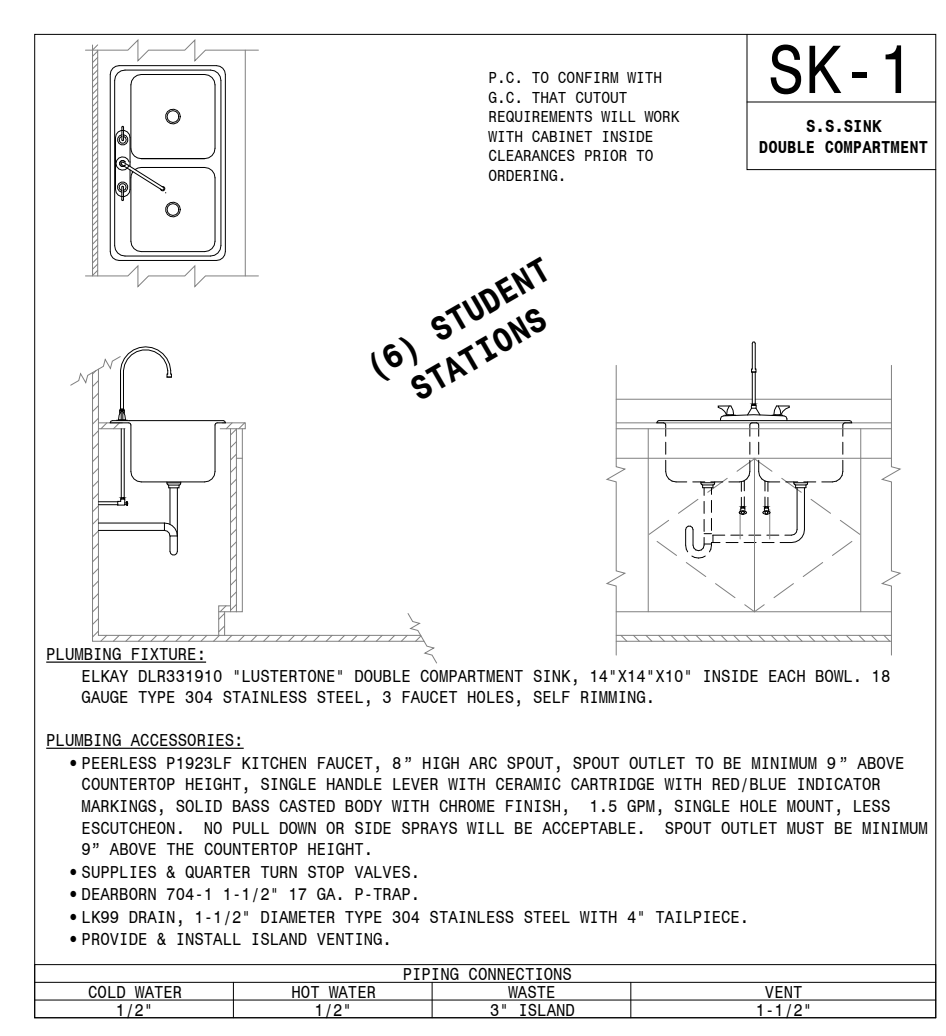
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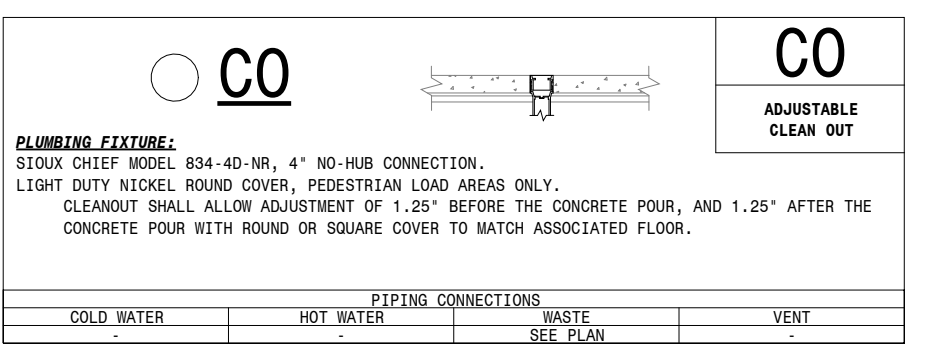
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PRIOR TO ALL PLUMBING ROUGH-INS FOR ALL PLUMBING FIXTURES COORDINATE WITH G.C. & REFER TO ARCHITECTURAL ELEVATIONS.

DOMESTIC PIPING SHALL BE INSTALLED WITH PROPER SAFEGUARDS TO PREVENT WATER HAMMER. THIS WILL BE DONE BY INSTALLING A SUFFICIENT NUMBER OF TRANSMANUFACTURED SHOCK ABSORBERS. SHOCK ABSORBERS SHALL BE WATTS OR EQUAL. EXACT MODEL TO BE INSTALLED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.



**EXISTING WATER TO AIR HEAT PUMP UNIT - GROUND SOURCE SCHEDULE**

EXG HP-X

EQUIP. NO.	MANUFACTURER & MODEL	SERVES	NOMINAL TONS	STAGES	SUPPLY CFM	O/A CFM	ESP (IN WG)	CONDENSER DATA				COOLING DATA			HEATING DATA		ELECTRICAL DATA				UNIT WEIGHT (LBS)	NOTES	
								EWT		PD (FT WG)	HOSE KIT SIZE (IN)	TOTAL CAP (MBH)	SENS CAP (MBH)	EAT DB/WB (°F)	TOTAL CAP (MBH)	EAT DB (°F)	V./PH./CY.	FLA	MCA	MOCP			
								CLG	HTG														GPM
EXG HP-7	MCQUAY WCRW1036	FACS CLASSROOM	3	1	1200	320	0.60	77.0	32.0	9.00	9.91	1-1/4"	37.3	13.03	80.0/67.0	26.6	70.0	208/60/3	14.7	20	-	221	1
EXG HP-18	MCQUAY WCRW1070	FACS CLASSROOM	6	1	2400	310	0.41	77.0	32.0	18.00	30.69	2"	35.1	22.5	80.0/67.0	27.4	70.0	208/60/3	19.7	23.9	40	223	1

NOTES: 1. SCHEDULE IS FOR REFERENCE ONLY. RE-BALANCE SUPPLY AIR AND OUTSIDE AIR AS NECESSARY.

**EXHAUST FAN SCHEDULE**

EXG EF-X

EQUIP. NO.	MANUFACTURER & MODEL (STYLE)	SERVING	LOCATION	CFM	STATIC PRESS. (IN W.G.)	SONES	MOTOR						UNIT WEIGHT (LBS)	NOTES
							WATTS	HP	RPM	FRPM	VOLT./PH./CY.	FLA		
EXG EF-4	COOK ACRU-D 90R10DL	EXHAUST FACS	EXG ROOF	200	0.15	4.2	-	1/25	1050	1130	120/1/60	1.5	57 + CURB	1,2
EF-13	COOK ACE-DVF 150C17D (VF)	EXHAUST - FACS RANGEHOODS	EXG ROOF	1720	0.5	9.6	-	1/3	1725	1068	120/1/60	4.1	93 + EXG CURB	3,4,5,6,8
EF-A	BROAN 433004	RANGEHOOD EXHAUST	FACS ROOM 55	220	0.1	7.0	207	-	-	-	120/1/60	1.8	-	9,10,11

NOTES: 1. EXISTING EXHAUST FAN.  
2. TO BE CONTROLLED WITH NEW LIGHTED PILOT SWITCH BY EC, TC TO DISABLE DURING UNOCCUPIED HOURS.  
3. PROVIDE AND INSTALL GRAVITY BACKDRAFT DAMPER  
4. PROVIDE WITH FACTORY INSTALLED DISCONNECT.  
5. PROVIDE WITH FACTORY INSTALLED ECM FAN MOTOR WITH FAN SPEED CONTROLLER FOR BALANCING.  
6. PROVIDE & INSTALL CURB ADAPTER, CONTRACTOR TO CONFIRM EXISTING CURB DIMENSIONS.  
7. NOT USED.  
8. T.C. TO PROVIDE & INSTALL DUCT PROBE SENSORS NEAR THE NEW EXHAUST AIR TEE TO CONTROL & MONITOR DUCT PRESSURE. THE SENSORS SHALL BE ACCESSIBLE VIA A 12"x12" ACCESS DOOR PROVIDED & INSTALLED BY VENTILATION CONTRACTOR. EC TO PROVIDE & INSTALL NEW LIGHTED PILOT SWITCH, TC TO ENABLE FAN WHEN SWITCH IS ENABLED. TC TO PROVIDE & INSTALL ALL NECESSARY CONTROLS TO MODULATE THE EXHAUST FAN BASED ON COMMON DUCT PRESSURE. AS THE PRESSURE VARIES, T.C. TO ADJUST THE SPEED OF THE FAN TO MAINTAIN THE PRESSURE SET-POINT (SEE SPECIFICATIONS).  
9. PROVIDE UNIT WITH INTEGRAL BACKDRAFT DAMPER AND INTEGRAL TWO-SPEED SWITCH. WHERE NOTED ON PLANS, WALL SWITCH CONTROL TO BE INSTALLED FOR ADA COMPLIANCE BY EC (REPLACES INTEGRAL TWO-SPEED SWITCH).  
10. SCHEDULED RANGEHOOD IS 30" WIDTH AND STAINLESS STEEL FINISH (COLOR SELECTION BY ARCHITECT). CONTRACTOR SHALL VERIFY EXACT WIDTH AND COLOR SELECTION BEFORE ORDERING.  
11. REFER TO ARCHITECTURAL PLANS FOR HOOD INSTALLATION HEIGHT ABOVE COOKING SURFACE (18" MINIMUM, 25" MAXIMUM ABOVE COOKING SURFACE).

**GRILLE - REGISTER - DIFFUSER SCHEDULE**

EQUIP. NO.	MANUFACTURER & MODEL	NOMINAL SIZE	THROAT SIZE	MAX CFM	MAX APD	THROW	MAX NC	FRAME	FINISH	NOTES
S-1	PRICE SCD	24X24	10"Ø	350	0.05	10	15	LAY-IN	WHITE	1
S-2	PRICE SMD	12X12	6X6	80	0.04	13	< 15	SURFACE	WHITE	1
R-1	PRICE 530	24X24	22X22	1550	0.08	---	22	LAY-IN	WHITE	1,3
E-1	PRICE 530	8X8	6X6	200	0.09	---	19	SURFACE	WHITE	1,2,3

NOTES: 1. M.C. SHALL COORDINATE MOUNTING AND SURFACE CONSTRUCTION PRIOR TO FURNISHING MATERIAL. M.C. SHALL ALSO COORDINATE EXACT LOCATION OF EQUIPMENT.  
2. PROVIDE WITH OPPOSED BLADE BALANCING DAMPER.  
3. PERFORMANCE BASED ON 45° DEFLECTION.

**HVAC SHEET METAL DUCTWORK CONSTRUCTION & INSULATION SCHEDULE**

SYSTEM	DUCTWORK				INSULATION THICKNESS (EXTERIOR WRAP UNLESS OTHERWISE NOTED)						NOTES
	MAX DIMENSION OF RECTANGULAR DUCTS OR DIAMETER OF ROUND DUCTS	GALVANIZED SHEET METAL GAUGE NUMBER	PRESSURE RATING	CONSTRUCTION	HEAT PUMPS				EXHAUST AIR DUCT RUNOUTS	LAUNDRY DRYER EXHAUST	
					RECTANGULAR SUPPLY AIR	ROUND SUPPLY AIR	RETURN AIR & REGISTER BOOTS	TRANSFER AIR & REGISTER BOOTS			
LOW PRESSURE DUCTWORK	UP THRU 12"	26	2" W.G.	WHEN LONGEST SIDE IS 36" OR GREATER, SHALL BE CONSTRUCTED USING DUCTMATE 35/25 SLIDE ON SYSTEM, TDF FLANGE	1/2" LINER	1-1/2"	1/2" LINER	1/2" LINER	NONE ON NEW EA RUNOUTS	1-1/2" ABOVE CEILING	1,2,3,4,5,6
	OVER 12" THRU 30"	24									
	OVER 30" THRU 54"	22									
	OVER 54" THRU 84"	20									
	OVER 84"	18									

NOTES: 1. FOLLOW ALL SMACNA STANDARDS, SEE SPECIFICATIONS.  
2. ALL DUCTWORK 18" AND GREATER IN WIDTH SHALL BE CROSS-BROKEN.  
3. ALL SYSTEMS TO BE COMPLETELY INSULATED UNLESS OTHERWISE NOTED.  
4. CONCEALED DUCTS MAY BE INSULATED WITH RIGID BOARD OR FLEXIBLE FIBERGLASS INSULATION. EXPOSED DUCTS SHALL BE INSULATED WITH RIGID BOARD FIBERGLASS INSULATION ONLY.  
5. AS APPLIES TO SHIFT SA & RA REGISTERS  
6. REINSULATE EXISTING EA DUCT MAINS AS REQUIRED FOR DEMO & PROPOSED.

**DOMESTIC PIPING MATERIAL & INSULATION SCHEDULE**

SYSTEM	TYPE/MATERIAL	FITTINGS	INSULATION THICKNESS			NOTES
			PIPE SIZES 1" OR SMALLER	PIPE SIZES 1-1/4" TO 2"	PIPE SIZES 2-1/2" AND LARGER	
DOMESTIC COLD, HOT, AND HOT RECIRC	TYPE L COPPER, UPONOR PEX-A	SOLDER, PRO-PRESS, UPONOR F1960 EXPANDABLE FITTINGS	1/2"	1"	1-1/2"	1,2
BELOW GRADE SANITARY WASTE & VENT PIPING	SEE SPECIFICATIONS (SCH 40 PVC WHERE PERMITTED)	SEE SPECIFICATIONS (SCH 40 DWV SOLVENT WELD WHERE PERMITTED)	NONE			1,3
ABOVE GRADE SANITARY WASTE & VENT PIPING	SEE SPECIFICATIONS (SCH 40 PVC WHERE PERMITTED)	SEE SPECIFICATIONS (SCH 40 DWV SOLVENT WELD WHERE PERMITTED)	NONE			1,3

NOTES: 1. SEE SPECIFICATIONS.  
2. IF USING UPONOR PEX-A PIPING, NO CRIMP FITTINGS SHALL BE ACCEPTED. CONTRACTOR MUST BE TRAINED AND FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS AND MUST FULFILL ALL AVAILABLE UPONOR 25 YEAR FITTING AND PIPE SYSTEM WARRANTY COVERAGE.  
3. NO PVC PIPING OR INSULATED PVC PIPING ALLOWED IN RETURN AIR PLENUMS.

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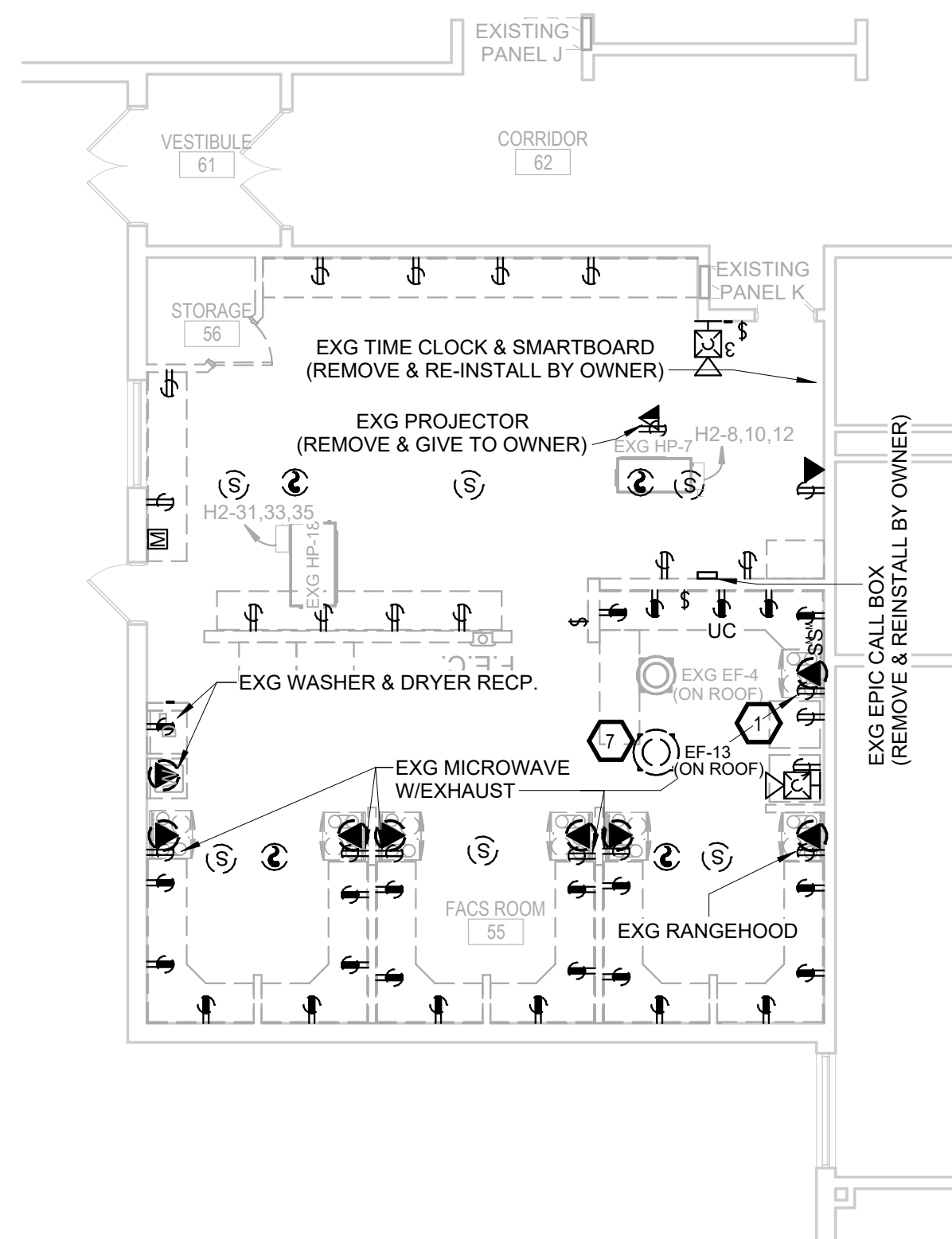
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REV. # REV. DSC. REV. DATE

PROJECT:  
SIMMONS MIDDLE SCHOOL FACS REMODEL  
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA

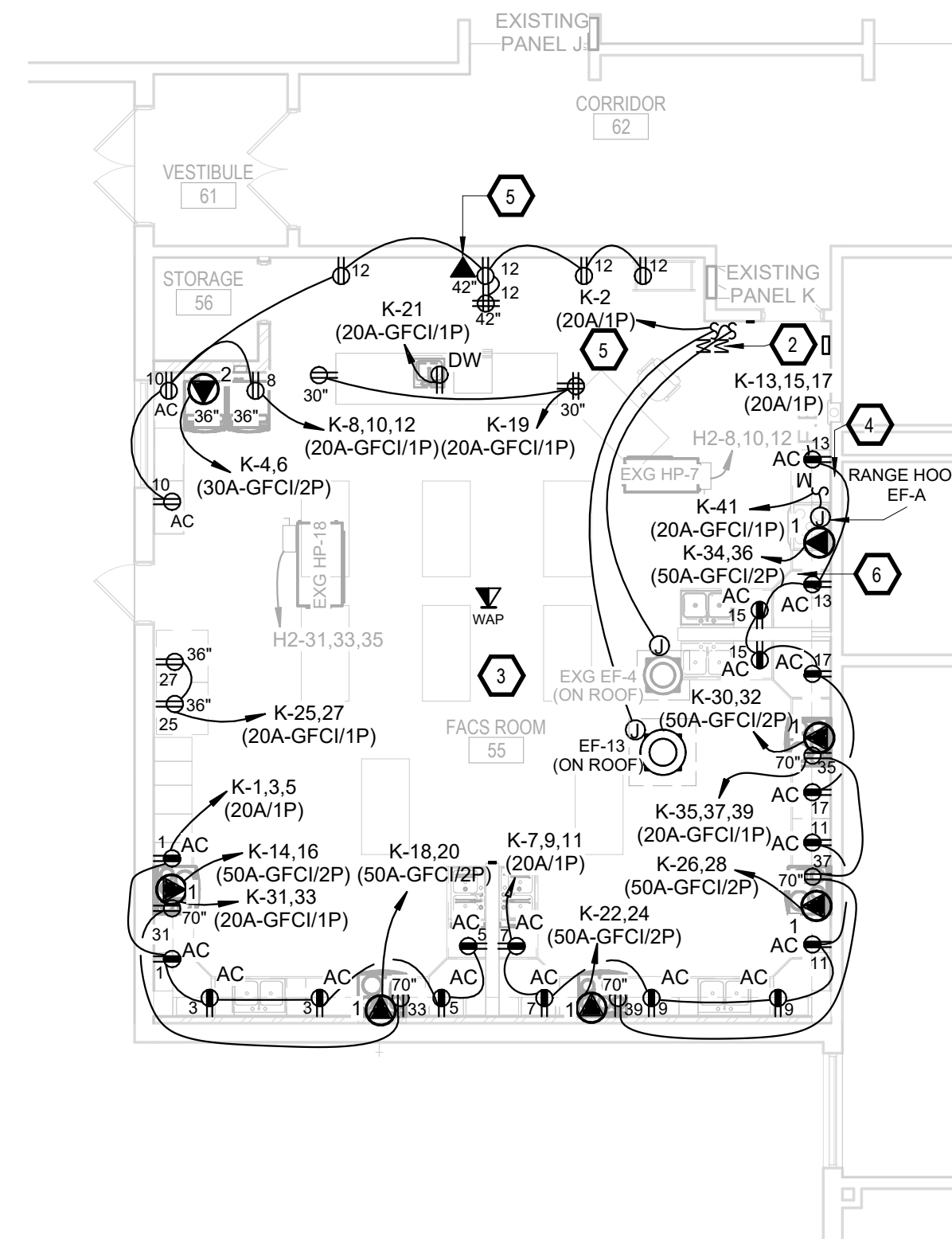
SHEET TITLE:  
PLUMBING FIXTURE & MECHANICAL SCHEDULES

**M400**

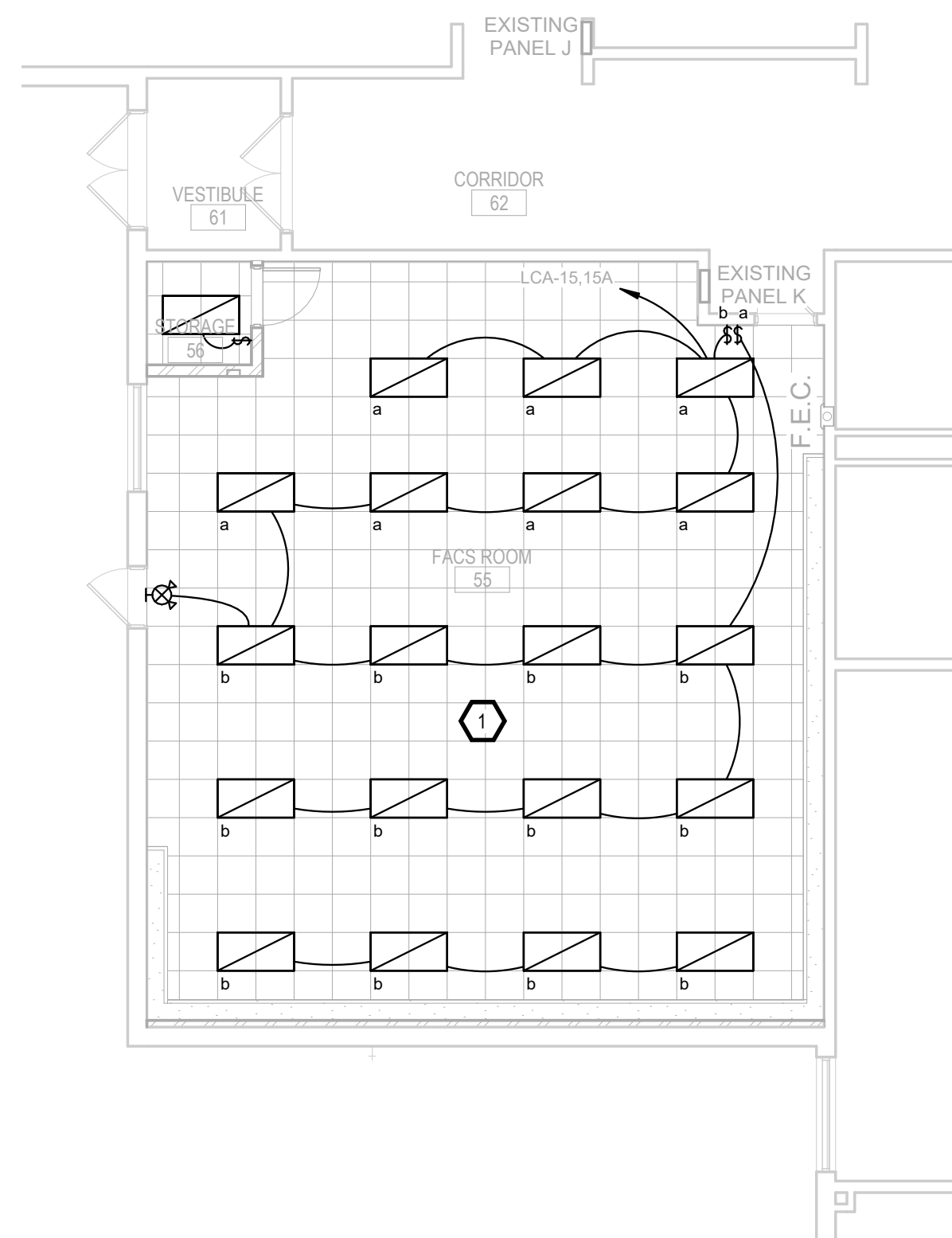




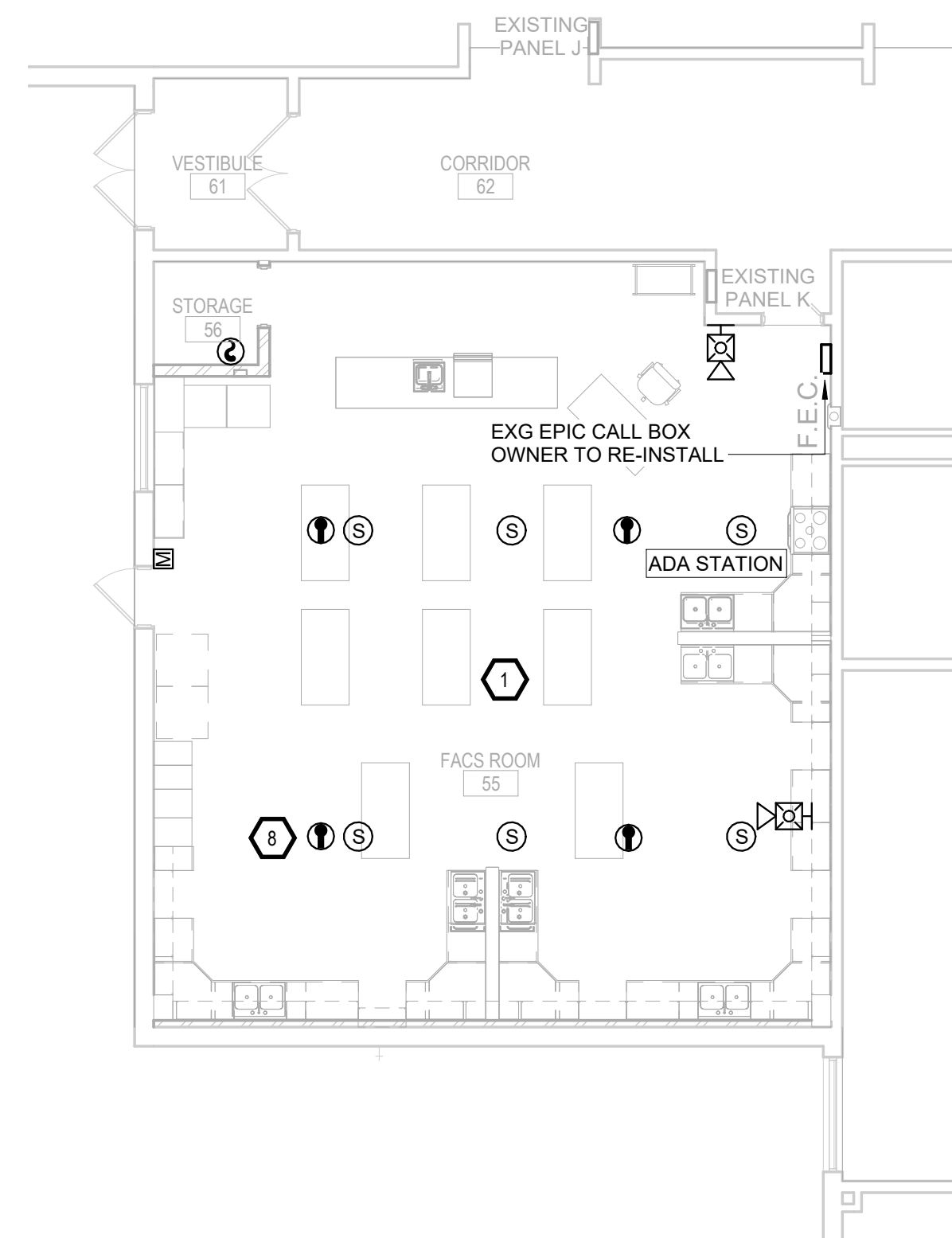
FIRST FLOOR - ELECTRICAL DEMOLITION PLAN  
1/8" = 1'-0"



FIRST FLOOR - POWER & DATA PLAN  
1/8" = 1'-0"



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



FIRST FLOOR - SPECIAL SYSTEMS PLAN  
1/8" = 1'-0"

## KEYNOTES:

- ALL EXG LIGHTING FIXTURES, FIRE ALARM HORN/STROBES, SPEAKERS AND CEILING MOUNTED ELECTRICAL DEVICES ARE TO REMAIN. REMOVE AND RE-INSTALL AS NECESSARY TO ALLOW FOR WALL AND CEILING WORK.
- PROVIDE AND INSTALL MOTOR RATED LIGHTED PILOT SWITCH.
- RE-WORK EXG 50A CIRCUITS TO MATCH PROPOSED. INSTALL NEW 50A GFCI 2 POLE SIEMENS TYPE QP BREAKERS IN PANEL K.
- PROVIDE MOTOR RATED LIGHTED PILOT SWITCH AT ADA HEIGHT MOUNTED ON WALL ADJACENT TO HOOD "EF-A" TO OPERATE THE HOOD AND LIGHT.
- TYPICAL: FOR EACH DATA/TELEPHONE OUTLETS SHOWN PROVIDE DEEP 4" SQUARE JUNCTION BOX WITH SINGLE GANG RING. PROVIDE A 1" CONDUIT ROUTED TO THE EXISTING CABLE TRAY LOCATION IN CORRIDOR 62. CABLE INSTALLATION, TESTING AND TERMINATIONS SHALL BE PROVIDED BY THE OWNER.
- MAINTAIN ADA REQUIREMENTS SEE ARCHITECTURAL.
- DISCONNECT EXG EF-13 FOR DEMO, EXG EF-4 TO REMAIN. TERMINATE NEW EF-13, PROVIDE AND INSTALL LIGHTED PILOT SWITCHES - SEE PROPOSED.
- INSTALL NEW SIEMENS COMBINATION RATE OF RISE HEAT DETECTORS.

## SPECIAL OUTLETS:

- 250V, 50A, 4 WIRE FOR RANGE - NEMA 1450R
- 250V, 30A, 4 WIRE FOR CLOTHES DRYER - NEMA 1430R

## SPECIAL NOTES:

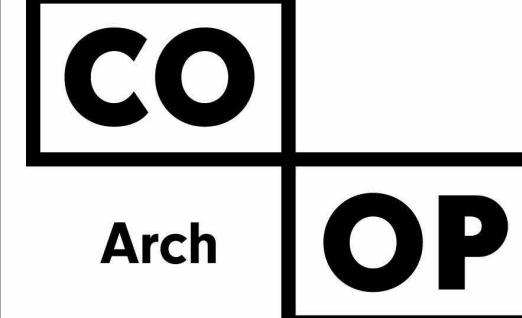
- IN AREAS WHERE EXISTING CEILINGS ARE TO REMAIN, EACH TRADE SHALL BE RESPONSIBLE FOR ANY DAMAGE OR REPAIR NEEDED TO EXISTING CEILINGS AS A RESULT OF THEIR WORK.
- EACH TRADE SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING AS NECESSARY TO ALLOW FOR COMPLETION OF THEIR WORK. REFER TO ARCHITECTURAL PLANS FOR SELECTIVE DEMOLITION BY OTHERS.
- ALL CONTRACTORS SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- 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.
- OWNER TO REMOVE AND SALVAGE EXG SMARTBOARD. OWNER TO INSTALL AND TERMINATE ALL DATA CABLES AND NEW CLEVERTOUCH BOARD.
- OWNER TO REMOVE AND RE-INSTALL EPIC CALL BOX.

## GENERAL NOTES:

- ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER.
- THE ELECTRICAL 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 ELECTRICAL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, NATIONAL ELECTRIC CODE, AND THE AUTHORITY HAVING JURISDICTION.
- THE ELECTRICAL DRAWINGS SHOW GENERAL ARRANGEMENT ONLY. EXACT LOCATION SHALL AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT & REQUIRED ELECTRICAL CLEARANCES.
- CONTRACTOR SHALL COORDINATE ALL ELECTRICAL WITH PLUMBING FIXTURES, HVAC, FIRE SPRINKLER, AND STRUCTURAL TO ACCOMMODATE LIMITED CEILING SPACE.

Panel: EXISTING PANEL K										
Location: CORRIDOR 62				Volts: 120/208 Wye			A.I.C. Rating: 10,000			
Mounting: Recessed				Phases: 3			Mains Type: MLO			
				Wires: 4			Rating: 200 A			
CKT	LOAD	CKT BRK	POLES	A	B	C	POLES	CKT BRK	LOAD	CKT
1	RM 55 WEST COUNTERTOP RECP	20 A	1	180 VA / 1500 VA			1	20 A	EXG EF-4 & EF-13	2
3	RM 55 S.W. COUNTERTOP RECP	20 A	1		180 VA / 2100 VA		2	30 A	* DRYER	4
5	RM 55 S.W. COUNTERTOP RECP	20 A	1			180 VA / 2100 VA				6
7	RM 55 S.E. COUNTERTOP RECP	20 A	1	180 VA / 500 VA			1	20 A	* WASHING MACHINE	8
9	RM 55 S.E. COUNTERTOP RECP	20 A	1		180 VA / 0 VA		1	20 A	* FACS ROOM 55 W. COUNTER RECP	10
11	RM 55 EAST COUNTERTOP RECP	20 A	1			180 VA / 180 VA	1	20 A	* FACS ROOM 55 N. WALL RECP	12
13	RM 55 EAST COUNTERTOP RECP	20 A	1	180 VA / 4200 VA						14
15	RM 55 EAST COUNTERTOP RECP	20 A	1		180 VA / 4200 VA		2	50 A	* RANGE	16
17	RM 55 EAST COUNTERTOP RECP	20 A	1			180 VA / 4200 VA				18
19	RM 55 TEACHER STATION RECP	20 A	1	180 VA / 4200 VA			2	50 A	* RANGE	20
21	* RM 55 TEACHER STATION D.W.	20 A	1		180 VA / 4200 VA		2	50 A	* RANGE	22
23	SPARE	20 A	1			180 VA / 4200 VA	2	50 A	* RANGE	24
25	* FACS ROOM 55 SW REFRIGERATOR	20 A	1	180 VA / 4200 VA						26
27	* FACS ROOM 55 NW REFRIGERATOR	20 A	1		180 VA / 4200 VA		2	50 A	* RANGE	28
29	SPARE	20 A	1			180 VA / 4200 VA				30
31	* FACS ROOM 55 MICROWAVE	20 A	1	1800 VA / 4200 VA			2	50 A	* RANGE	32
33	* FACS ROOM 55 MICROWAVE	20 A	1		1800 VA / 4200 VA					34
35	* FACS ROOM 55 MICROWAVE	20 A	1			1800 VA / 4200 VA	2	50 A	* RANGE	36
37	* FACS ROOM 55 MICROWAVE	20 A	1	1800 VA / 0 VA			1	20 A	SPARE	38
39	* FACS ROOM 55 MICROWAVE	20 A	1		1800 VA / 0 VA		1	20 A	SPARE	40
41	* FACS ROOM 55 RANGE HOOD	20 A	1			1800 VA / 0 VA	1	20 A	SPARE	42

**Notes:**  
 USE SEPARATE NEUTRAL FOR ALL CIRCUITS  
 \* INDICATES TO INSTALL NEW SIEMENS GFCI CIRCUIT BREAKER  
 EXISTING CIRCUIT BREAKERS ARE SHADED LIGHT - RE-LABEL CIRCUITS ACCORDINGLY



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REMODEL  
ABERDEEN SCHOOL DISTRICT  
ABERDEEN, SOUTH DAKOTA

SHEET TITLE:  
FIRST FLOOR - ELECTRICAL  
PLAN

E200