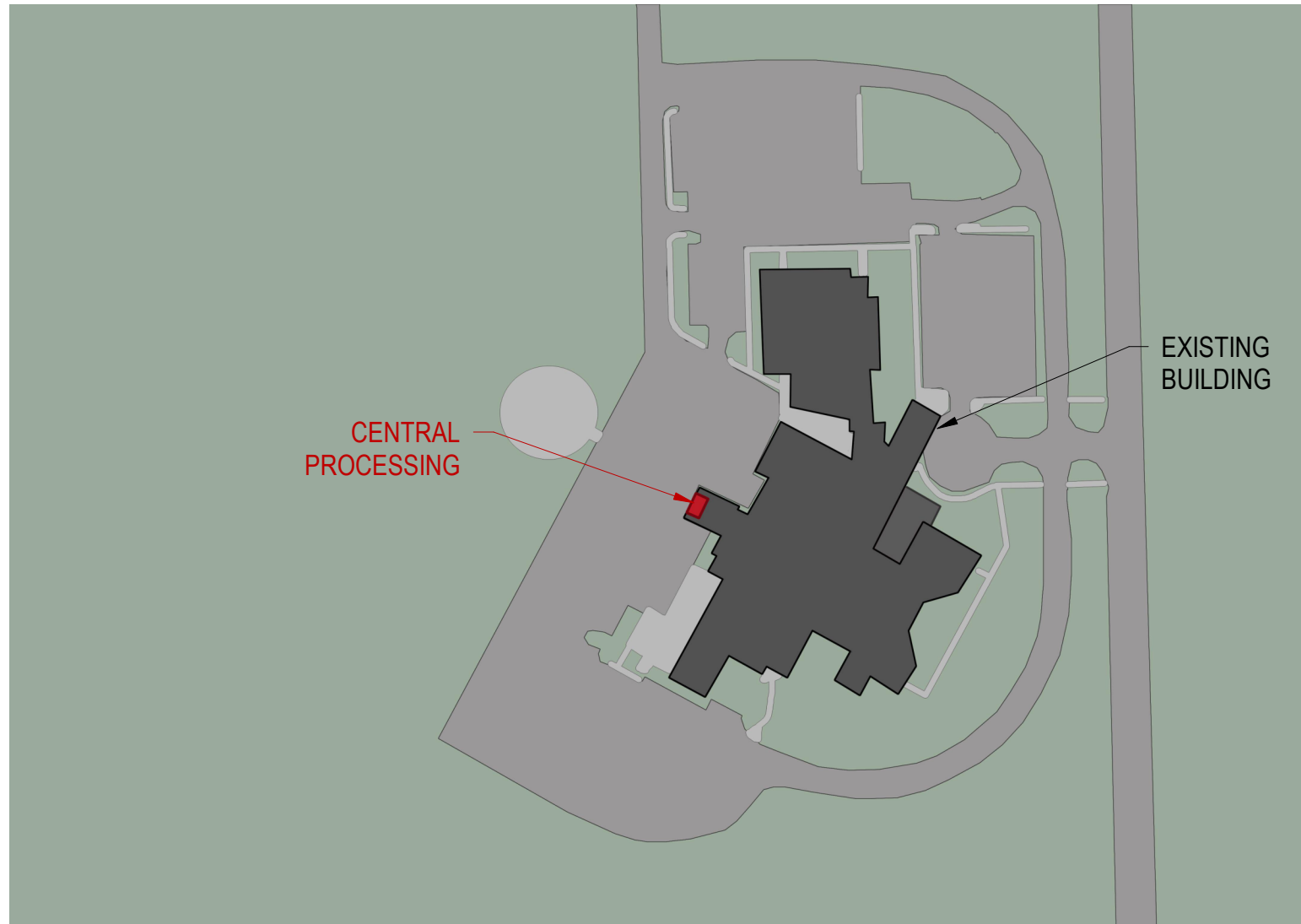


Bear River Valley Hospital - Central Processing Equipment Addition & Relocation

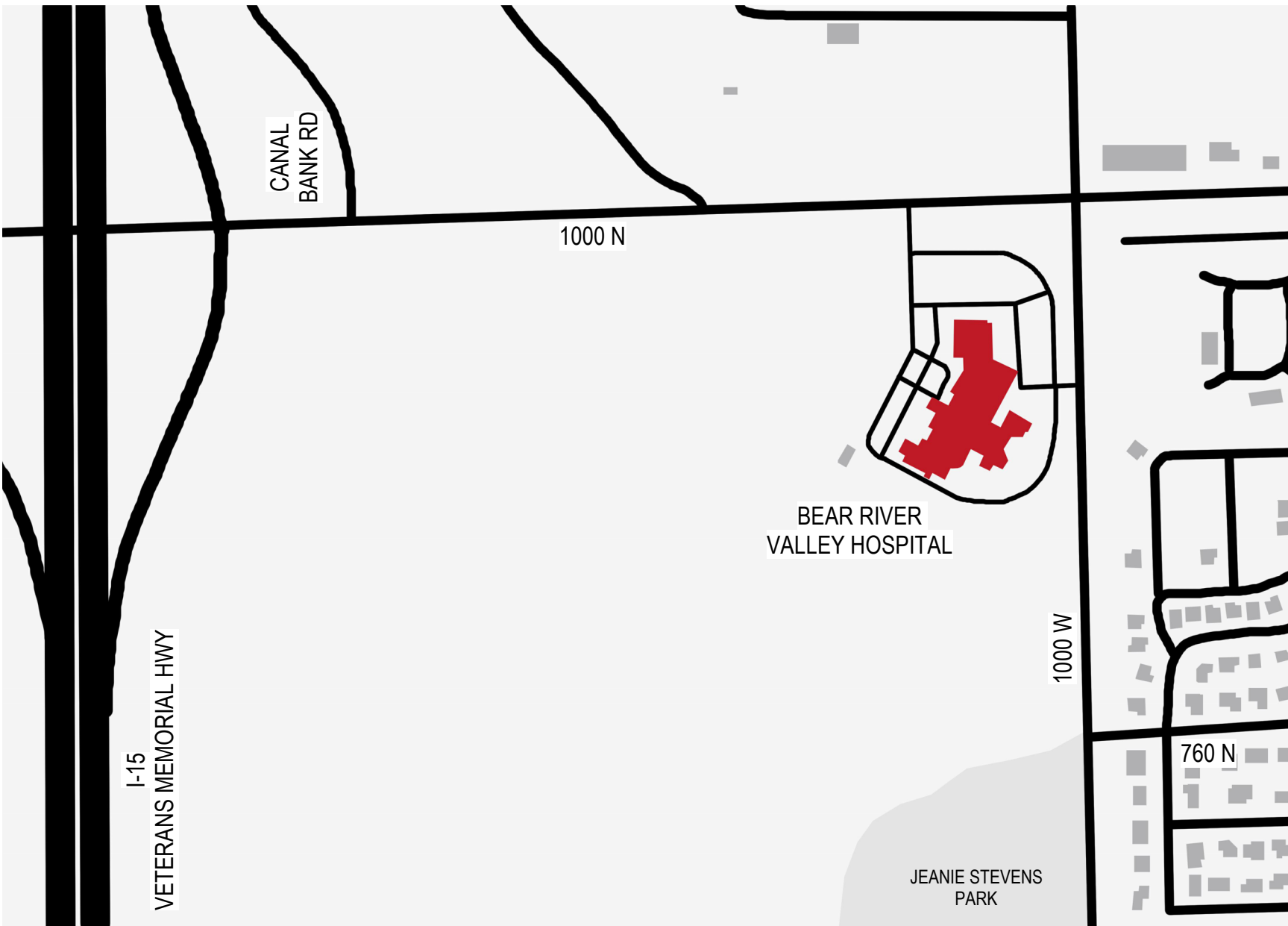
CONSTRUCTION DOCUMENTS



SITE MAP



VICINITY MAP



PROJECT TEAM

PROJECT ARCHITECT

FFKR ARCHITECTS
730 PACIFIC AVE S
SALT LAKE CITY, UT 84104
801-521-6186



MECHANICAL ENGINEER

RESOLUT
181 EAST 5600 SOUTH
MURRAY, UT 84107
801-530-3148



ELECTRICAL ENGINEER

SPECTRUM ENGINEERS
324 S STATE ST, SUITE 400
SALT LAKE CITY, UT 84111
801-328-5151



DRAWING INDEX

SHEET NO.	SHEET NAME
GENERAL	
G000	COVER SHEET
G001	SYMBOLS AND ABBREVIATIONS
G100	LIFE SAFETY PLAN & CODE ANALYSIS
STRUCTURAL	
S101	STRUCTURAL DETAILS
ARCHITECTURAL	
AD101	DEMO PLAN & ELEVATIONS
A101	FLOOR PLAN & CEILING PLAN
A401	INTERIOR ELEVATIONS
A501	TYPICAL PARTITION DETAILS
AF101	FINISH PLAN & SCHEDULES
MECHANICAL	
M001	MECH SYMBOLS NOTES
M090	MECHANICAL ZONING PLAN
M101	MECHANICAL PLANS
M201	MECHANICAL PIPING PLANS
M501	MECHANICAL DETAILS
M601	MECHANICAL SCHEDULES
PLUMBING	
P101	PLUMBING PLANS
P201	MED GAS PLAN
F101	FIRE PROTECTION PLAN
ELECTRICAL	
EE001	ELECTRICAL COVER SHEET
EE002	SYMBOLS LEGEND
EE501	ELECTRICAL DETAILS
EE701	TYPICAL MOUNTING DETAILS
ED101	ELECTRICAL DEMOLITION PLAN
EP100	LEVEL 1 OVERALL POWER PLAN
EP101	LEVEL 1 POWER PLAN
EP601	ONE-LINE DIAGRAM

BIDDING ALTERNATES

ALTERNATE	DESCRIPTION	BASE BID	ALTERNATE BID	SELECTION
ALTERNATE 1	PROVIDE FULL FLOORING REPLACEMENT IN STERILE AND DECONTAMINATION ROOMS	PATCH AND REPAIR EXISTING FLOORING TO THE EXTENT NEEDED FROM DEMOLITION WORK IN STERILE AND DECONTAM. ROOMS	REMOVE EXISTING FLOORING AND INSTALL NEW FLOORING IN STERILE AND DECONTAM. ROOMS	TBD

ABBREVIATIONS

A	MEDICAL AIR OUTLET	IBC	INTERNATIONAL BUILDING CODE
A/C	AIR CONDITIONING UNIT	ICRA	INFECTION CONTROL RISK ASSESSMENT
ADA	AMERICANS WITH DISABILITIES ACT	ICU	INTENSIVE CARE UNIT
ADAAAG	ADA ACCESSIBILITY GUIDELINES	ID	INSIDE DIAMETER
ACH	AIR CHANGES PER HOUR	INFO	INFORMATION
AFF	ABOVE FINISH FLOOR	INT	INTERIOR
AHA	AMERICAN HOSPITAL ASSOCIATION	LAV	LAVATORY
AHJ	AUTHORITY HAVING JURISDICTION	LBS	POUNDS
AHU	AIR HANDLING UNIT	MAX	MAXIMUM
ALG	ALIGN	MECH	MECHANICAL
ALT	ALTERNATE	MFR	MANUFACTURER
AII	AIRBORNE INFECTION ISOLATION	MIN	MINIMUM
ALUM	ALUMINUM	MRI	MAGNETIC RESONANCE IMAGING
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MSDS	MATERIAL SAFETY DATA SHEET
ARCH	ARCHITECT	N/A	NOT APPLICABLE
ASHE	AMERICAN SOCIETY OF HEALTHCARE ENGINEERING	NCID	NATIONAL CENTER FOR INFECTIOUS DISEASES
BD	BOARD	NEC	NATIONAL ELECTRICAL CODE
BLDG	BUILDING	NEG.	NEGATIVE
B.O.	BOTTOM OF	NIC	NOT IN CONTRACT
BSL	BIOSAFETY LEVEL	NICU	NEONATAL INTENSIVE CARE UNIT
CDC	CENTERS FOR DISEASE CONTROL AND PREVENTION	NIH	NATIONAL INSTITUTE OF HEALTH
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED	NIOSH	NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH
CFR	CODE OF FEDERAL REGULATIONS	NOM	NOMINAL
CG	CORNER GUARD	NRC	NOISE REDUCTION COEFFICIENT
CI	CONTINUOUS INSULATION	NTS	NOT TO SCALE
CJ	CONTROL JOINT	O, O2	OXYGEN
CL	CENTER LINE	O.C.	ON CENTER
CLG	CEILING	OD	OUTSIDE DIAMETER
CLR	CLEAR	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CMGC	CONSTRUCTION MANAGER GENERAL CONTRACTOR	OFD	OVERFLOW DRAIN
CMS	CENTERS FOR MEDICARE AND MEDICAID SERVICES	OFOI	OWNER FURNISHED OWNER INSTALLED
CMU	CONCRETE MASONRY UNIT	OFVI	OWNER FURNISHED VENDOR INSTALLED
CNTRL	CONTROL	OPP	OPPOSITE
C.O.	CLEAN OUT	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
COL	COLUMN	PE	PROTECTIVE ENVIRONMENT
CONC	CONCRETE	PLAM	PLASTIC LAMINATE
CONT	CONTINUOUS	PLUMB	PLUMBING
CORR	CORRIDOR	PPE	PERSONAL PROTECTIVE EQUIPMENT
CT	COMPUTERIZED TOMOGRAPHY	PR	PAIR
CT	CERAMIC TILE	PSI	POUNDS PER SQUARE INCH
DEMO	DEMOLISH / DEMOLITION	PSF	POUNDS PER SQUARE FOOT
DF	DRINKING FOUNTIAN	PSRA	PERSONAL SAFETY RISK ASSESSMENT
DHHS	DEPARTMENT OF HEALTH AND HUMAN SERVICES	PT	PATIENT
DIA	DIAMETER	PVC	POLYVINYL CHLORIDE
DIM	DIMENSION	RAD	RADIUS
DISP	DISPENSER	RCP	REFLECTED CEILING PLAN
DWG	DRAWING	RD	ROOF DRAIN
EA	EACH	REF	REFRIGERATOR
EC	ENVIRONMENT OF CARE	REV	REVISION
EJ	EXPANSION JOINT	RF	RADIO FREQUENCY
EL	ELEVATION	RO	REVERSE OSMOSIS
ELEC	ELECTRICAL	R.O.	ROUGH OPENING
ELEV	ELEVATOR	RM	ROOM
EOC	ENVIRONMENT OF CARE	RTU	ROOF TOP UNIT
EOS	EDGE OF SLAB	S	SMOKE DETECTOR
EPA	ENVIRONMENTAL PROTECTION AGENCY	SD	STORM DRAIN
EPS	EXPANDED POLYSTYRENE	SCH'D	SCHEDULED
EQ	EQUAL	SCHED	SCHEDULE
EQUIP	EQUIPMENT	SECT	SECTION
ESR	ENVIRONMENTAL SERVICES ROOM	SF	SQUARE FEET
EVS	ENVIRONMENTAL SERVICES	SFRM	SPRAY APPLIED FIRE RESISTIVE MATERIAL
EW	ELECTRIC WATER COOLER	SIM	SIMILAR
EXIST	EXISTING	SMS	SHEET METAL SCREW
EXT	EXTERIOR	SPEC	SPECIFICATION
FA	FIRE ALARM	SQ	SQUARE
FACP	FIRE ALARM CONTROL PANEL	SS	STAINLESS STEEL
FD	FLOOR DRAIN	STC	SOUND TRANSMISSION CLASS
FE	FIRE EXTINGUISHER	STD	STANDARD
FEC	FIRE EXTINGUISHER CABINET	STRUCT	STRUCTURAL
FGI	FACILITY GUIDELINES INSTITUTE	T	TREAD
FIN	FINISH	TDR	TECHNOLOGY DISTRIBUTION ROOM
FLR	FLOOR	TEC	TECHNOLOGY EQUIPMENT CENTER
FND	FOUNDATION	TEL	TELEPHONE
FO	FIBER OPTICS	TEMP	TEMPORARY
FOW	FACE OF WALL	TLT	TOILET
FT	FEET	T.O.	TOP OF
FV	FIELD VERIFY	TYP	TYPICAL
GA	GAUGE	UL	UNDERWRITER'S LABORATORY
GALV	GALVANIZED	U.N.O.	UNLESS NOTED OTHERWISE
GC	GENERAL CONTRACTOR	UPS	UNINTERRUPTABLE POWER SUPPLY
GYP	GYPSUM	UV	ULTRAVIOLET
HEIC	HOSPITAL EPIDEMIOLOGY / INFECTION CONTROL	UVGI	ULTRAVIOLET GERMICIDAL IRRADIATION
HEPA	HIGH EFFICIENCY PARTICULATE AIR	V	VACUUM
HIPPA	HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT	VAV	VARIABLE AIR VENTILATION
HM	HOLLOW METAL	VCT	VINYL COMPOSITION TILE
H.P.	HIGH POINT	VERT	VERTICAL
HT	HEIGHT	VIF	VERIFY IN FIELD
HOR	HORIZONTAL	W/	WITH
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	WD	WOOD
HWS	HAND WASHING STATION	W/O	WITH OUT
		WR	WATER RESISTANT
		WRB	WEATHER RESISTANT BARRIER
		XPS	EXTRUDED POLYSTYRENE

MATERIAL LEGEND

	GYPSUM BOARD SURFACE
	CONCRETE
	METAL STUD WALL
	DRAINAGE FILL
	COMPACTED FILL AND/OR EARTH
	CMU
	BATT INSULATION
	RIGID INSULATION
	PLYWOOD

SYMBOLS LEGEND

ROOM IDENTIFICATION NUMBER		ROOM NAME	ROOM NAME
DOOR TAG		NUM	ROOM NUMBER
REFERENCE NOTE		XXX	DOOR NUMBER
EQUIPMENT TAG		XX.XX	SPEC DIVISION
WINDOW TAG		XXx####	EQUIPMENT ID
GLAZING TAG			WINDOW TYPE
PARTITION /WALL TAG			GLASS TYPE
FLOOR TAG		XX	WALL ASSEMBLY CODE
ROOF TAG		F.#	FLOOR ASSEMBLY CODE
INTERIOR ELEVATION		R.#	ROOF ASSEMBLY CODE
BUILDING SECTION		A1	SHADE INDICATES ELEVATED WALL
WALL SECTION		A2	ELEVATION NUMBER
EXTERIOR ELEVATION		A3	SHEET NUMBER
DETAIL			
DETAIL TITLE			
REVISION DELTA			
FINISH TAG			

REFERENCE NOTES

GENERAL NOTES

- CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL PORTIONS OF THE DRAWINGS, SPECIFICATIONS, ADDENDA AND CHANGE ORDERS THAT PERTAIN TO THEIR WORK. THEY SHALL BE HELD RESPONSIBLE FOR ADHERING TO THOSE REQUIREMENTS AND SHALL NOT PREPARE ANY BIDS FROM PARTIAL SETS.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND SITE CONDITIONS AND SHALL REPORT ANY INCONSISTENCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- CODES GOVERNING THIS WORK ARE INDICATED ON THE CODE COMPLIANCE PLAN DRAWINGS. WHERE THE CONTRACT DOCUMENTS EXCEED (WITHOUT VIOLATING) CODE AND REGULATION REQUIREMENTS, CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE. WHERE CODES CONFLICT, THE MORE STRINGENT SHALL APPLY.
- ALL WORK SHALL COMPLY STRICTLY WITH THE INTERNATIONAL BUILDING CODE, LATEST ADOPTED EDITION, AND ALL LOCAL CODES AND ORDINANCES.
- ALL WORK SHALL COMPLY WITH THE LATEST "AMERICAN WITH DISABILITIES ACT GUIDELINES".
- ALL NUTS, BOLTS & MISCELLANEOUS METAL EXPOSED TO WEATHER SHALL BE GALVANIZED UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION AND SIZE OF OPENINGS FOR ALL TRADES AND SHALL COORDINATE ALL CONSTRUCTION AS INDICATED BY THE CONSTRUCTION DOCUMENTS, INCLUDING SHOP DRAWINGS REVIEWED BY THE ARCHITECT.
- ALL DIMENSIONS ARE SHOWN TO FACE OF FINISH OF EXISTING CONSTRUCTION & FACE OF FINISH OF WALL FOR NEW CONSTRUCTION, UNLESS NOTED OTHERWISE.
- ALL DRAWINGS, THOUGH NOTED TO SCALE, ARE FOR ILLUSTRATION ONLY. THE CONTRACTOR SHALL NOT SCALE DRAWINGS, UNLESS APPROVED BY ARCHITECT.
- WHEN A DETAIL IS IDENTIFIED AS TYPICAL, THE CONTRACTOR IS TO APPLY THIS DETAIL IN ESTIMATING AND CONSTRUCTION TO EVERY LIKE CONDITION WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE.
- ALL PENETRATIONS INTO SOUND OR FIRE RATED PARTITIONS, FLOORS OR CEILING ASSEMBLIES SHALL BE SEALED WITH APPROVED PERMANENT RESILIENT SEALANT FOR OPENINGS, LESS THAN 16 SQUARE INCHES. THE SPACE BETWEEN THE WALL AND THE ALLOWED PENETRATION MUST BE SEALED TO PREVENT THE MOVEMENT OF HOT FLAME OR GASES. ELECTRICAL DEVICES, RECESSED CABINETS, ETC. SHALL BE SEALED, LINED, INSULATED OR OTHERWISE TREATED TO MAINTAIN THE INTEGRITY OF THE ASSEMBLY.
- DRAWINGS HAVE BEEN DETAILED IN COMPLIANCE WITH U.L. LISTING REQUIREMENTS AND ICBO REPORTS FOR THE MATERIALS SPECIFIED. IF ANY ALTERNATE OR SUBSTITUTED MATERIAL IS ACCEPTED AS AN EQUAL BY THE GENERAL CONTRACTOR, THE CONTRACTOR WILL ASSUME THE RESPONSIBILITY FOR WHATEVER CONSTRUCTION MODIFICATION AND/OR ADDITIONAL COSTS ARE REQUIRED BY REASON OF THIS ACCEPTANCE.
- ALL TRASH SHALL BE REMOVED DAILY. BUILDING MATERIALS MAY NOT BE STORED IN THE CORRIDORS AT ANY TIME.
- THE CONTRACTOR SHALL VERIFY SIZES AND LOCATIONS OF WATER AND DRAIN INSTALLATIONS AND OTHER REQUIRED SERVICES WITH EQUIPMENT MANUFACTURERS.
- ABBREVIATIONS THROUGHOUT THE PLAN ARE THOSE IN COMMON USE. THE ARCHITECT SHALL DEFINE THE INTENT OF ANY IN QUESTION.
- INTERIOR FINISH SHALL CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE.
- INSTALL METAL CORNER BEADS AT ALL EXPOSED WALLBOARD EDGES. INSTALL CASING BEADS WHEREVER WALLBOARD, PLASTER, ETC. ABUTS A DISSIMILAR FINISH MATERIAL. PROVIDE SEALANT AS REQUIRED. ALL DOOR SIZES SHOWN ON DOOR SYMBOLS ARE OPENING SIZES. ALLOWANCE FOR THRESHOLDS, ETC. SHOULD BE CONSIDERED. ALL DOORS AND FRAMES SHALL BE REINFORCED WHERE REQUIRED FOR CLOSERS, STOPS AND HARDWARE.
- ALL WOOD TRIMS, SPACERS, FILLER, ETC. THROUGHOUT THE JOB SHALL BE FIRE RETARDANT PRESSURE-TREATED, AS PER I.B.C.
- ELEVATIONS ARE WITH RESPECT TO FINISH FLOOR ELEVATION. VERIFY FINISH FLOOR HEIGHT.
- CONTRACTOR SHALL REVIEW ALL DRAWINGS BEFORE COMMENCEMENT OF WORK. IF THERE IS ANY DISCREPANCY BETWEEN TWO DRAWINGS CONTRACTOR SHALL CONTACT THE ARCHITECT IMMEDIATELY.
- FINISH GRADE SHALL SLOPE AWAY FROM THE BUILDING AT 1/2" PER FOOT FOR A MINIMUM DISTANCE OF 3'-0".
- CONTRACTOR SHALL TAKE WHATEVER PROCEDURES ARE NECESSARY TO PREVENT EROSION DAMAGE ON OR OFF THE SITE AND SHALL REPAIR ANY DAMAGE RESULTING FROM THIS WORK AT NO COST TO THE OWNER.



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FFKR ARCHITECTS

BASIC IBC 2021 CODE ANALYSIS

APPLICABLE CODES			
International Building Code (IBC)	2021	International Energy Conservation Code (IECC)	2021
International Mechanical Code (IMC)	2021	National Electrical Code (NEC)	2020
International Plumbing Code (IPC)	2021	International Existing Building Code	2021
International Fire Code (IFC)	2021	ADA Accessibility Guidelines (ADAAG)	2010
NFPA 101 Life Safety Code (Federal)	2012	ICC / ANSI A117.1	2017
NFPA 101 Life Safety Code (State)	2018	Utah Administrative Code	2018
NFPA 99 Health Care Facilities Code	2018	FGI Health Care Guidelines	2010

PROJECT DESCRIPTION

EXPANSION SCOPE OF WORK:
This project will include the installation of new equipment and the relocation of some existing equipment in the Central Processing Unit. Selective demolition will be required for these changes.

EXISTING BUILDING:
The original building was designed in 2007. The existing building has both B occupancy and I-2 occupancy.

The existing Central Processing Unit is located in the I-2 occupancy. Elements pertaining to the existing I-2 code requirements shall be maintained and not altered.

This project is for an equipment addition and relocation.
There will be no change to the Building Area, Building Height, Occupancy Classification or Function.

BUILDING OCCUPANCY		IBC Section 508
Occupancy Group	I-2 (existing)	
Change in Use	No	

CONSTRUCTION TYPE		IBC Section 602 & Table 601
Construction Type	I-B (existing)	

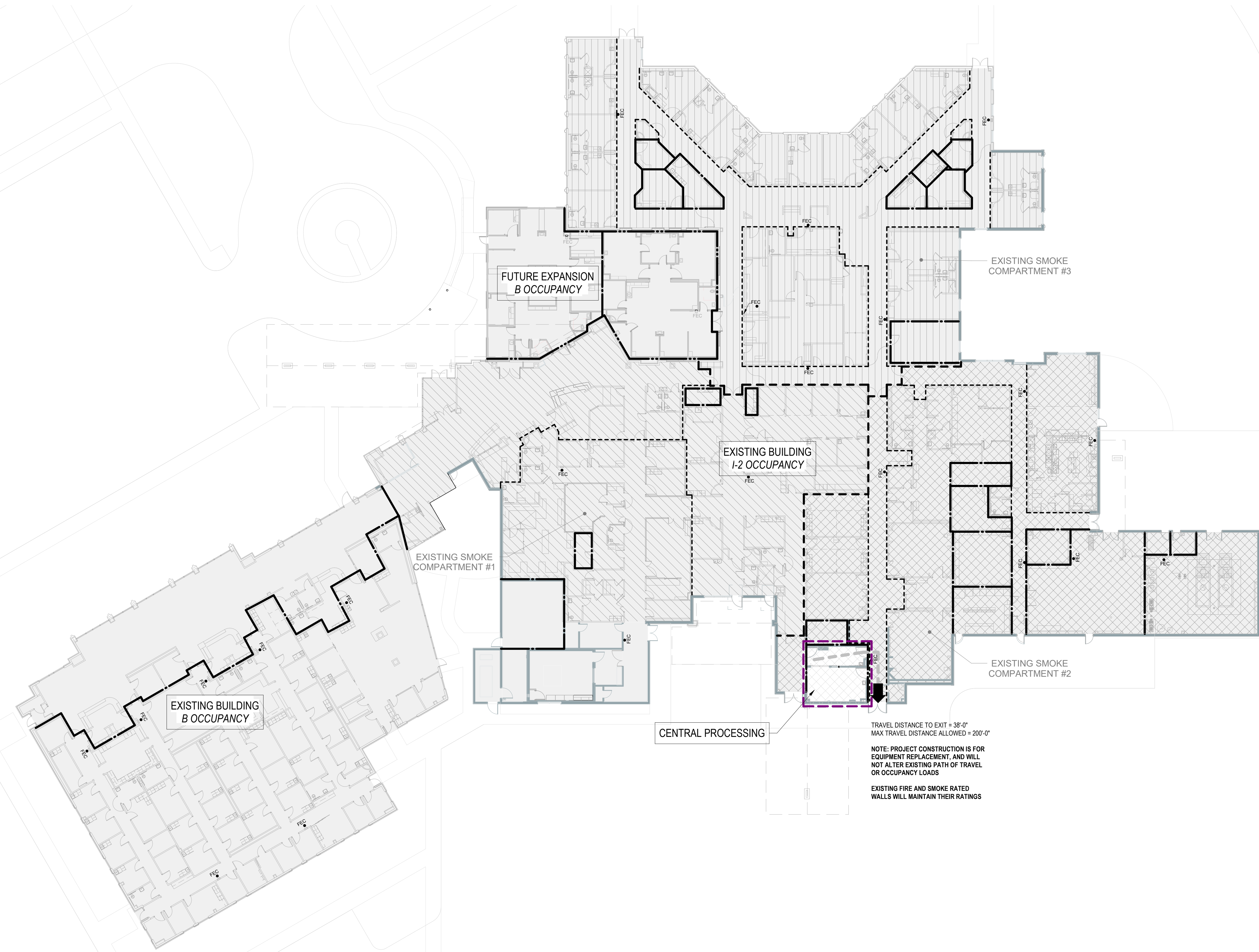
BUILDING AREA & BUILDING HEIGHT		IBC Section 506/ Table 506.2 and IBC Section 504/ Tables 504.3
Existing Building Area	65,498 SF	
Area of Scope	480 SF	
Existing Building Height (Ft)	35 Ft 9 In	

INTERIOR FINISHES			IBC Table 803.13
GROUP I-2, SPRINKLERED	Corridors & Enclosure for Exit Access Stairways	Class B	
	Rooms & Enclosed Spaces	Class C	

MEANS OF EGRESS		IBC Chapter 10
See Life Safety Plan below for Egress Pathways		

Fire resistance ratings will be maintained for new elements.

FIRE RESISTANCE RATINGS FOR BUILDING ELEMENTS		IBC Table 601
Sprinklers Required?	Yes	
Existing building is equipped with automatic sprinkler system		
BUILDING ELEMENT		REQUIRED RATING
Primary Structural Frame (See Section 202)		1 Hour (exception a)
Bearing Walls - Exterior		2 Hours
Bearing Walls - Interior		1 Hour (exception a)
Nonbearing Walls & Partitions - Exterior		0 Hours
Nonbearing Walls & Partitions - Interior		0 Hours
Floor Construction (See Section 202)		2 Hours
Roof Construction (See Section 202)		1 Hour
Allowable combustible material in Types I and II Construction (partial list from IBC Section 603)		
Fire-retardant-treated wood shall be permitted in		
• Nonbearing partitions where the required fire-resistance rating is 2 hours or less.		
• Nonbearing exterior walls where fire-resistance-rated construction is not required		
• Roof construction		
Other combustible materials include:		
• Millwork		
• Interior wall and ceiling finishes in accordance with Sections 801 and 803		
• Trim installed in accordance with Section 806		
• Blocking such as for millwork, cabinets, and window and door frames		
• Nailing and furring strip		



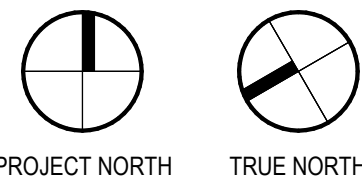
LIFE SAFETY PLANS
SHOULD BE VIEWED
IN COLOR

OCCUPANCY TYPES

EXISTING OCCUPANCY: I-2

LEGEND

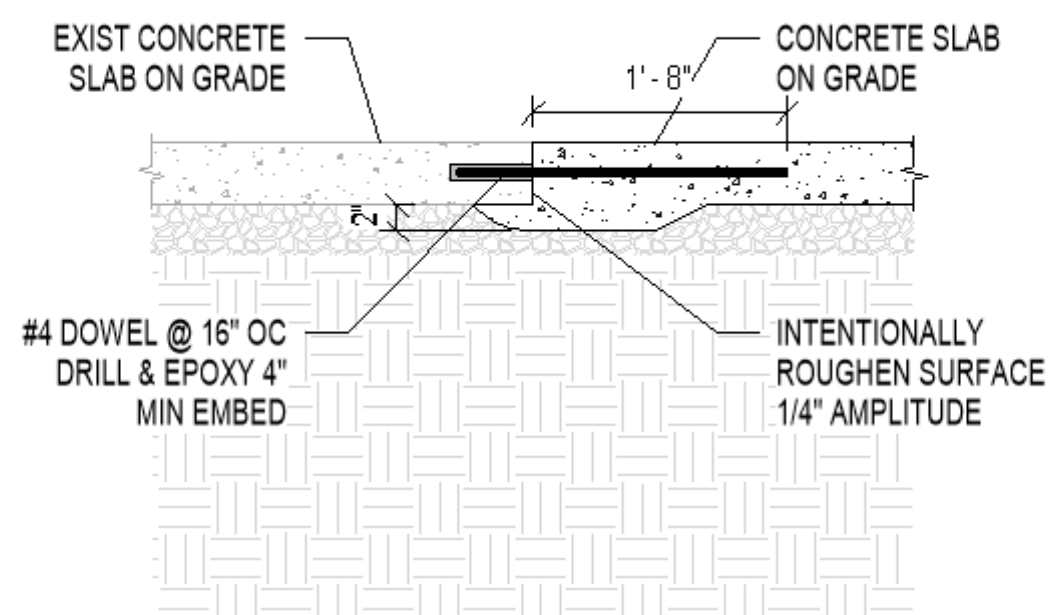
SMOKE PARTITION DOOR SMOKE CONTROL NEW EXISTING	---
SMOKE BARRIER (1 HOUR MIN) 1 1/2 HOUR FIRE-RESISTANCE-RATED DOOR NEW EXISTING	---
FIRE BARRIER - 1 HOUR 3/4 HOUR FIRE-RESISTANCE-RATED DOOR NEW EXISTING	---
FIRE BARRIER - 2 HOUR 1 1/2 HOUR FIRE-RESISTANCE-RATED DOOR NEW EXISTING	---
EXISTING SMOKE COMPARTMENT #1	---
EXISTING SMOKE COMPARTMENT #2	---
EXISTING SMOKE COMPARTMENT #3	---
OUT OF SCOPE / EXISTING	---
CONTRACT LIMIT LINE	---
PATH OF EGRESS	---
LIFE SAFETY ARROW FEC - NUMBER OF OCCUPANTS	---
FIRE EXTINGUISHER	---



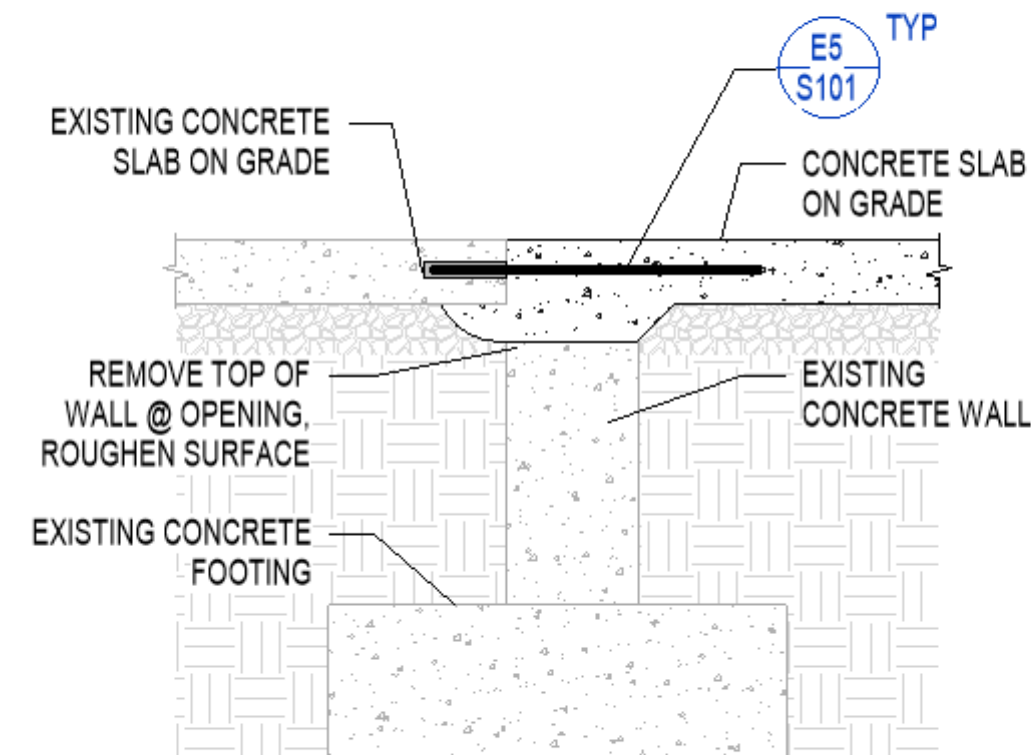
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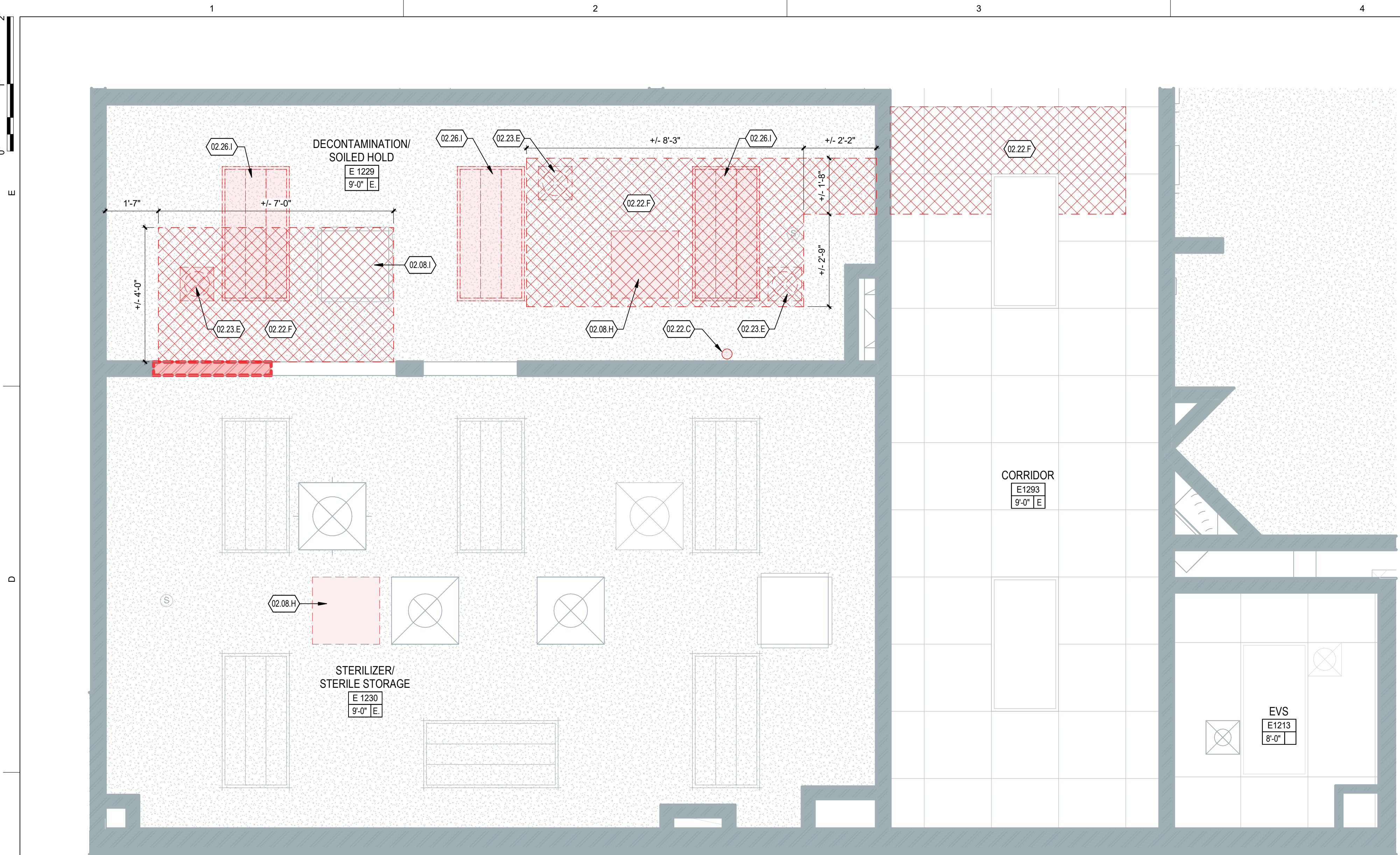
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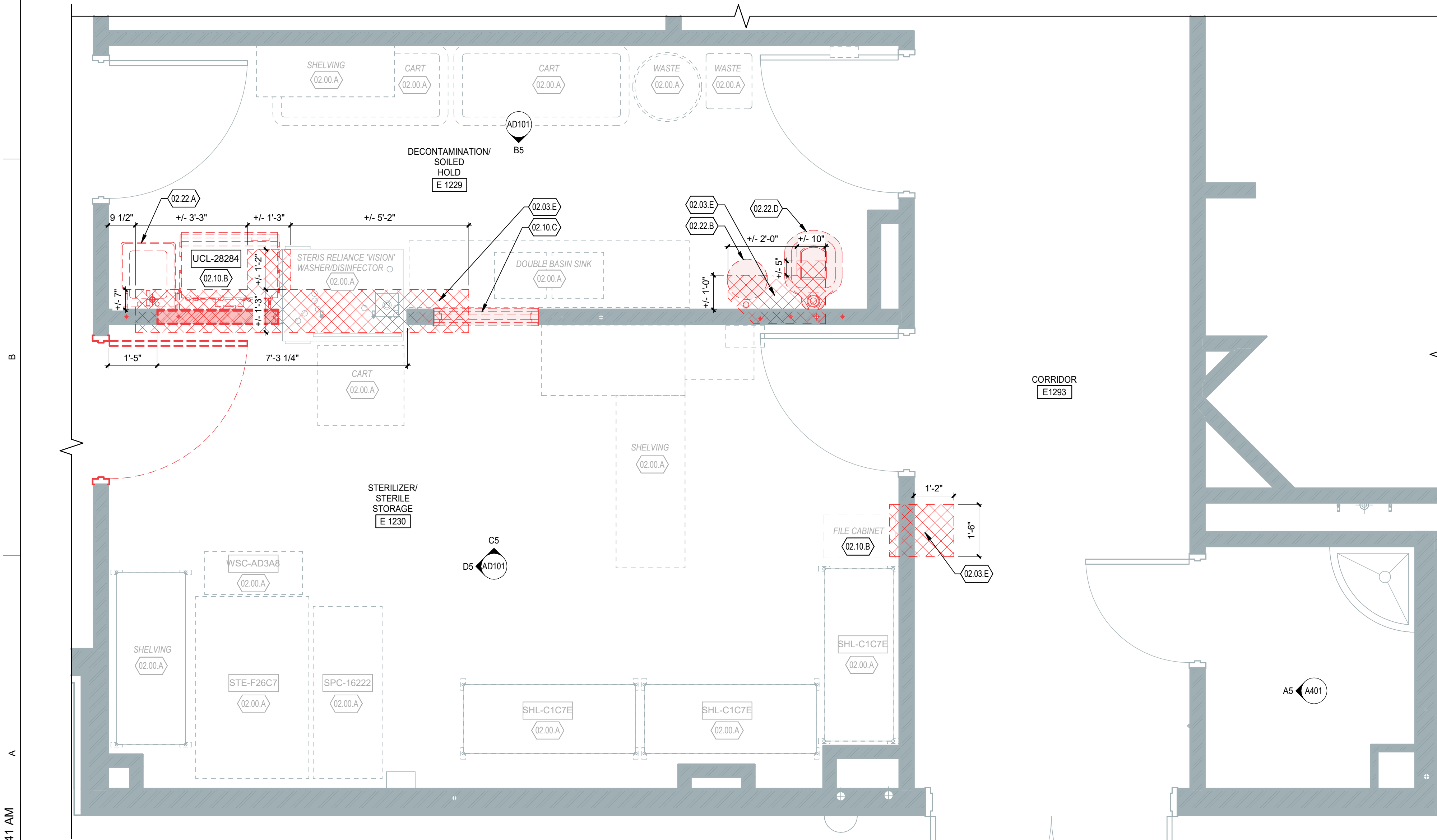
E5
S101
TYPICAL NEW TO EXISTING SLAB ON GRADE DETAIL
Scale: NTS



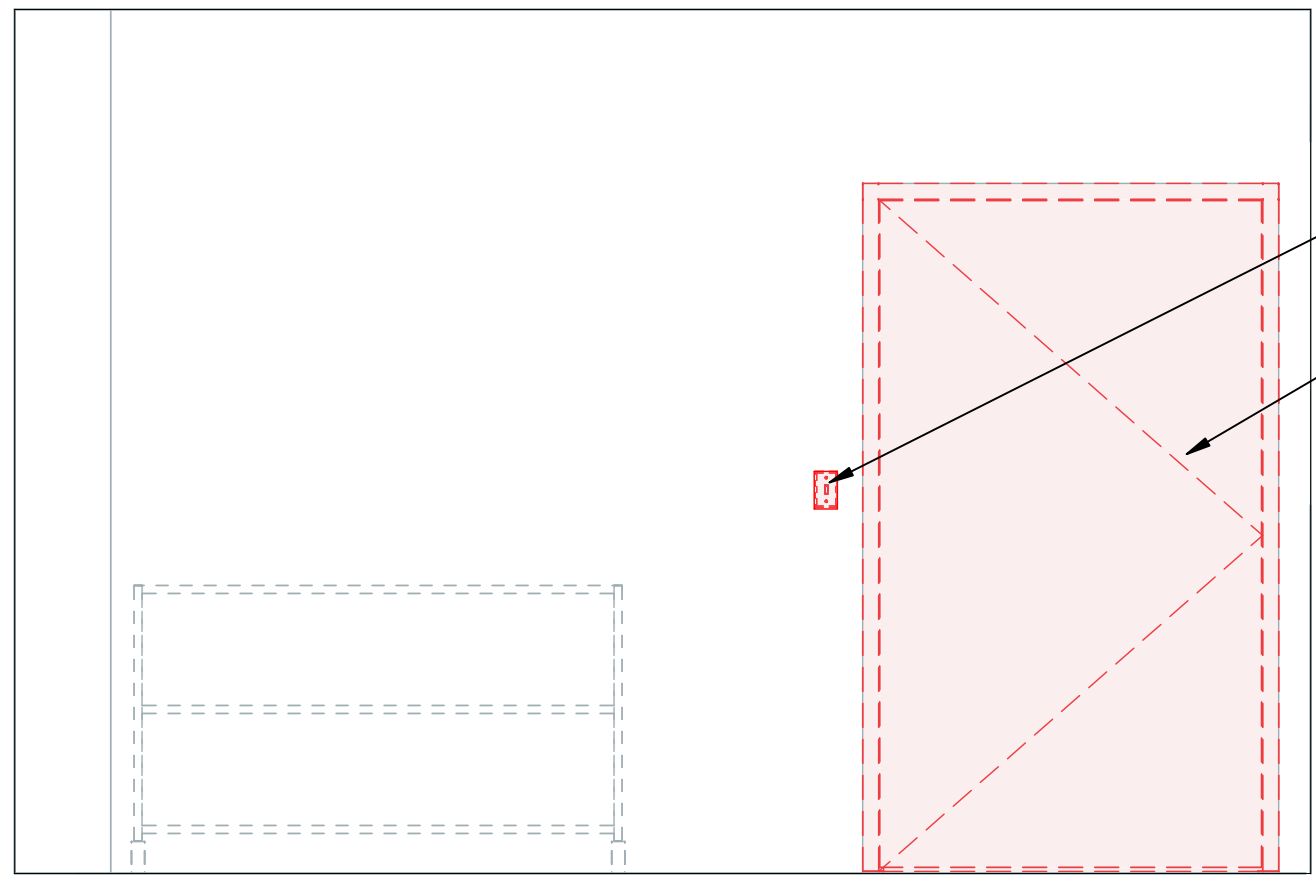
D5
S101
TYPICAL CONCRETE SLAB @ OPENING IN WALL
Scale: NTS



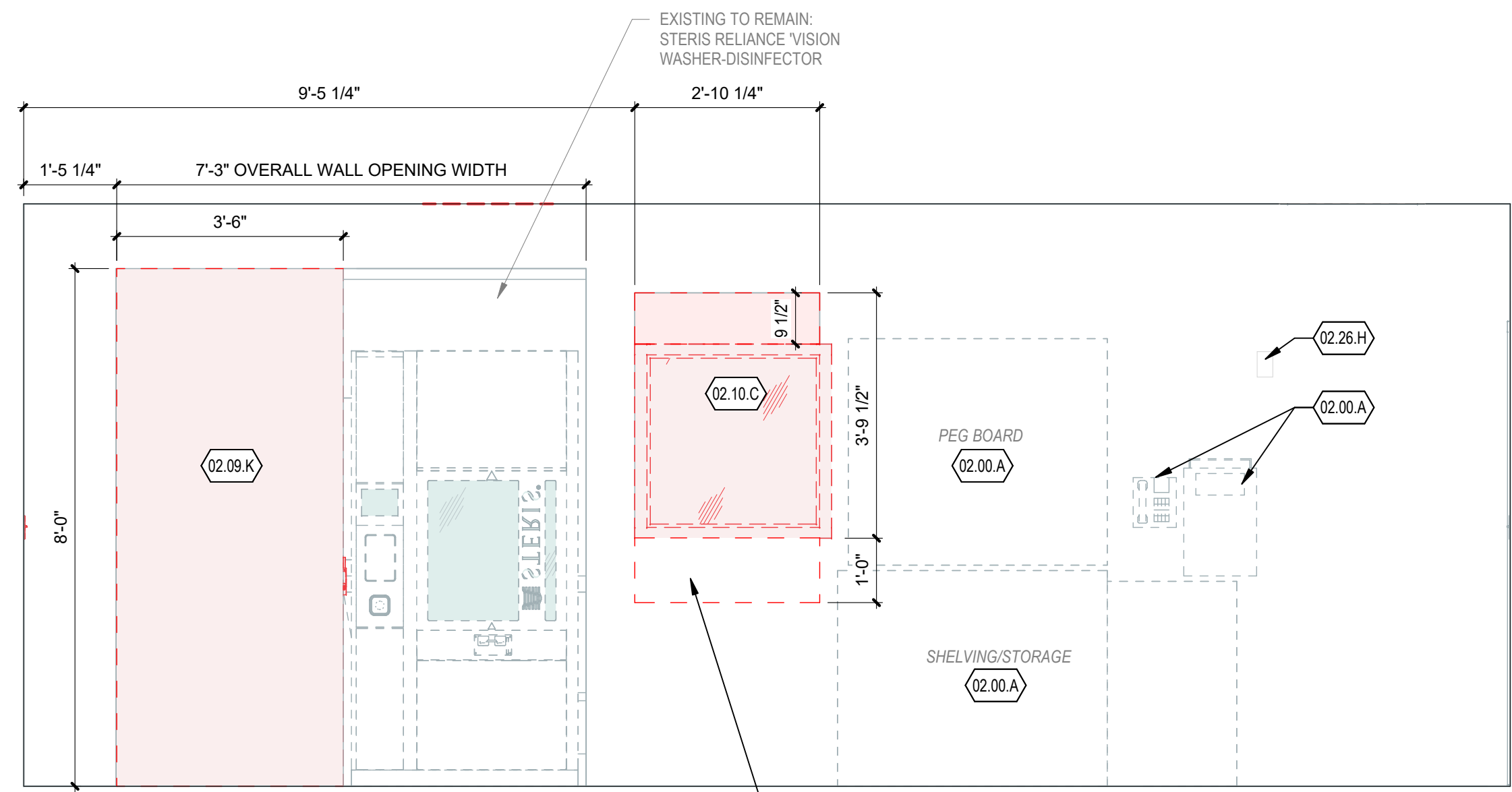
D1 CENTRAL STERILE - DEMO RCP
SCALE: 1/2" = 1'-0"



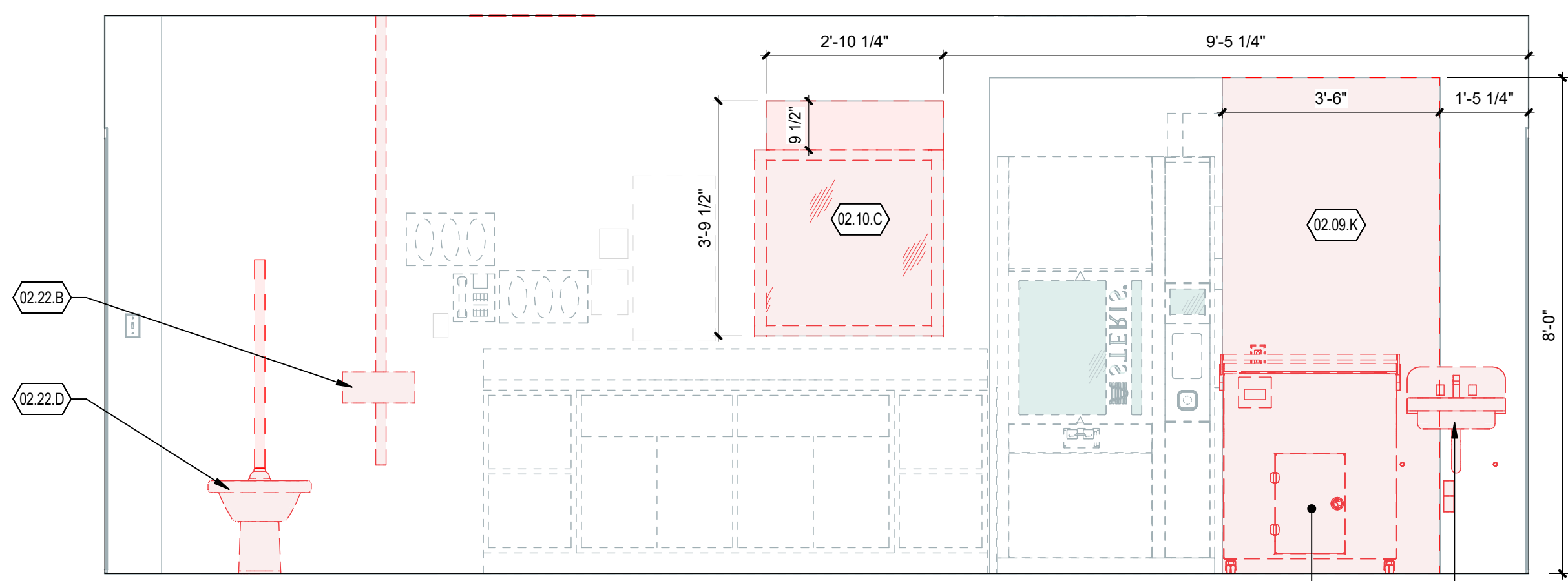
A1 CENTRAL STERILE - DEMO PLAN
SCALE: 1/2" = 1'-0"



D5 STERILE 4 - DEMO ELEVATION
SCALE: 1/2" = 1'-0"



C5 STERILE 1 - DEMO ELEVATION
SCALE: 1/2" = 1'-0"



B5 DECONTAM 3 - DEMO ELEVATION
SCALE: 1/2" = 1'-0"

EQUIPMENT LEGEND

SHL-C1C7E	SHELVING ALLOWANCE, SHELVING SYSTEM
SPC-16222	CART, SUPPLY, STERILE WRAP
STE-F26C7	STERILIZER, STEAM
UCL-28284	ULTRASONIC CLEANER, RINSER
WSC-AD348	CART, STERILIZER, TRANSFER CARRIAGE

REFERENCE NOTES

02.00.A	EXISTING TO REMAIN
02.03.E	AREAS INDICATED WITH RED CROSS HATCH WILL REQUIRE SAW CUTTING FOR UNDER SLAB WASTE PIPING WORK; RE: PLUMBING. CONTRACTOR TO FIELD VERIFY EXACT LOCATION PRIOR TO ANY CUTTING. TYPICAL SLAB DETAILS FOR SLAB REPLACEMENT CAN BE FOUND ON PROVIDED STRUCTURAL SHEET S101. PATCH AND REPAIR FLOORING AND ANY ADJACENT FINISHES AFFECTED BY THE WORK.
02.08.F	DEMOLISH EXISTING DOOR
02.08.H	DEMOLISH PORTION OF EXISTING CEILING FOR INSTALLATION OF NEW ACCESS PANEL. COORDINATE WITH MECHANICAL.
02.08.I	RELOCATE EXISTING ACCESS PANEL: RE: RCP. PATCH, REPAIR, AND REFINISH ANY OPENINGS IN CEILING
02.09.K	DEMOLISH PORTION OF WALL AS NEEDED FOR NEW EQUIPMENT
02.10.B	EXISTING EQUIPMENT, RELOCATED
02.10.C	REMOVE EXISTING PASS-THRU WINDOW (TO BE REPLACED WITH NEW). DEMO AND PATCH WALL AS REQUIRED FOR NEW PASS-THRU WINDOW.
02.10.D	1/2" STRAP BACKING REQUIRED UNDER WALL, OPENING ON UNLOADED SIDE OF PASS-THRU WINDOW FOR COUNTER SUPPORT. VERIFY IN FIELD. ADD BACKING IF NOT ALREADY IN PLACE FROM EXISTING WINDOW.
02.22.A	REMOVE EXISTING HAND WASH SINK
02.22.B	DEMOLISH EXISTING EYEWASH STATION; RE: PLUMBING.
02.22.C	DEMOLISH EXISTING EYEWASH STATION; RE: PLUMBING. PATCH AND REPAIR CEILING.
02.22.D	DEMOLISH EXISTING HOPPER SINK; RE: PLUMBING.
02.22.F	GENERAL AREA INDICATED IN RED CROSS HATCH WILL REQUIRE SELECTIVE DEMOLITION TO INSTALL PLUMBING CONNECTIONS FOR NEW WASHER. TO REMOVE AND REPLACE VAV AND ASSOCIATED DUCT WORK AND/OR TO REPLACE LIGHT FIXTURES; RE: MECHANICAL PLANS, PLUMBING PLANS, AND ELECTRICAL PLANS. PATCH, REPAIR AND REFINISH ALL AFFECTED AREAS.
02.23.E	DEMOLISH AND REPLACE EXISTING EXHAUST DUCT AND GRILLES; RE: MECHANICAL
02.26.E	REMOVE EXISTING LIGHT SWITCH; RE: ELECTRICAL. PATCH, REPAIR, AND REFINISH AT LOCATION WHERE SWITCH IS REMOVED.
02.26.H	EXISTING OUTLETS TO REMAIN
02.26.I	DEMOLISH AND REPLACE EXISTING LIGHT FIXTURES; RE: ELECTRICAL

PHASING NOTES

- CENTRAL PROCESSING MUST REMAIN ACTIVE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER TO ENSURE THAT STERILIZING WORK WILL NOT BE RESTRICTED.
- SHUT DOWNS MUST BE COORDINATED WITH OWNER AND PERFORMED DURING OFF HOURS (WEEKEND OR NIGHTS)
- CONTRACTOR IS RESPONSIBLE TO COORDINATE THE CONSTRUCTION OF ICRA BARRIERS TO PREVENT DUST/DEBRIS TRANSMISSION BETWEEN CONSTRUCTION AREA AND AREA OF ACTIVE STERILIZATION WORK AND TO MAINTAIN REQUIRED PRESSURIZATION.

CONSTRUCTION SHALL BE PERFORMED IN PHASES, AND IS TO BE COORDINATED WITH THE OWNER AND ARCHITECT PRIOR TO WORK BEGINNING. SUGGESTED CONSTRUCTION PHASES ARE LISTED BELOW:

- PHASE 1:
- DEMOLISH EXISTING CLINICAL SERVICE SINK, AND EYEWASH STATION IN DECONTAMINATION ROOM
 - INSTALL NEW FLOOR SINK AT NEW LOCATION OF ULTRASONIC IRRIGATOR IN DECONTAMINATION ROOM (RE: PLUMBING).
 - RELOCATE ULTRASONIC IRRIGATOR
 - INSTALL NEW HAND WASH SINK AND EYEWASH STATION IN SOILED HOLD
 - INSTALL NEW HAND WASH SINK IN STERILE STORAGE.
- PHASE 2:
- REMOVE DOOR AND PATCH OPENING IN STERILE STORAGE.
- PHASE 3:
- DEMOLISH EXISTING HAND WASH SINK IN DECONTAMINATION ROOM
 - DEMOLISH PORTION OF WALL TO ACCOMMODATE NEW WASHER/DISINFECTOR.
 - SAWCUT FLOOR AND REPLACE PIPING (RE: PLUMBING).
 - INSTALL NEW FLOOR SINK FOR NEW WASHER/DISINFECTOR (RE: PLUMBING).
 - PROVIDE ROUGH-INS THROUGH CEILING FOR NEW WASHER/DISINFECTOR (RE: PLUMBING).
 - PATCH AND REPAIR FLOORING
- PHASE 4:
- INSTALL NEW WASHER/DISINFECTOR.

GENERAL NOTES

- PRIOR TO STARTING ANY DEMOLITION WORK, REVIEW ENTIRE SET OF DRAWINGS PERTAINING TO THIS SCOPE OF WORK TO UNDERSTAND ENTIRE SCOPE OF DEMOLITION WORK AND ELEMENTS THAT ARE TO REMAIN IN THE COMPLETED PROJECT.
- DASHED RED LINES INDICATE EXISTING CONSTRUCTION TO BE REMOVED. TYPICAL.
- CONTRACTOR IS TO LIMIT WORK TO AREAS INDICATED WITHIN THE CONTRACT LIMIT LINE, UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL WORK IMPACTING SPACE THAT IS CURRENTLY OCCUPIED IS TO BE COORDINATED AND SCHEDULED WITH THE HOSPITAL PRIOR TO PERFORMING ANY WORK.
- WHERE WALL DEMOLITION INTERRUPTS POWER/DATA CONDUIT, REROUTE AS NECESSARY.
- ADDITIONAL DEMOLITION REQUIRED TO COMPLETE WORK IS SHOWN ON DRAWINGS OTHER THAN THE DEMOLITION PLANS. MISCELLANEOUS CUTTING, PATCHING, ETC. REQUIRED FOR THE NEW OR REMODEL WORK SHALL BE PERFORMED EVEN THOUGH NOT CALLED OUT OR DETAILED ON PLANS.
- WHERE MECHANICAL, ELECTRICAL AND PLUMBING WORK REQUIRES CEILING DEMOLITION, PATCH, REPAIR, AND REFINISH THE AREA WHERE SUCH WORK IS PERFORMED (AT GRID CEILINGS, REPLACE CEILING GRID, TILES AND LIGHTING FIXTURES WHERE SUCH WORK IS PERFORMED). RE: MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS. COORDINATE WITH REFLECTED CEILING PLAN.
- CONTRACTOR TO PROTECT ALL EXISTING ITEMS TO REMAIN THROUGHOUT DEMOLITION AND CONSTRUCTION ACTIVITIES.
- REPAIR / REPLACE ANY DAMAGE TO SPRAY APPLIED FIRE-PROOFING MATERIAL.
- ALL ITEMS TO BE SALVAGED TO BE REUSED OR DELIVERED TO THE OWNER ARE TO BE PROTECTED AND REMOVED AND/OR RE-INSTALLED WITHOUT DAMAGE.
- UNLESS OTHERWISE INDICATED, REMOVE ALL FLOORING AND BASE IN AREAS OF DEMOLITION. SEE CEILING PLAN FOR EXISTING CEILING ELEMENTS TO REMAIN.
- PATCH, REPAIR, AND REFINISH ALL LOCATIONS WHERE WALL ITEMS ARE REMOVED. SEE DEMO ELEVATIONS.
- THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL WALLS, EQUIPMENT, WIRING, DUCTWORK, PIPING AND OTHER EXISTING CONDITIONS THAT ARE NOT INCLUDED IN THE FINAL PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO, EXISTING EXISTING ENTRANCES, ELEVATORS, LOBBIES, CORRIDORS, AND EGRESS STAIRS OPEN AND AVAILABLE FOR SAFE PUBLIC ACCESS AT ALL TIMES WHEN THE BUILDING EXISTING TENANT SPACES ARE OCCUPIED. PROVIDE 7 DAYS NOTICE TO THE HOSPITAL WHEN ANY OF THESE AREAS REQUIRE INACCESSIBILITY TO COMPLETE THIS SCOPE OF WORK.



DATE REVISION

PROJECT NUMBER 25029

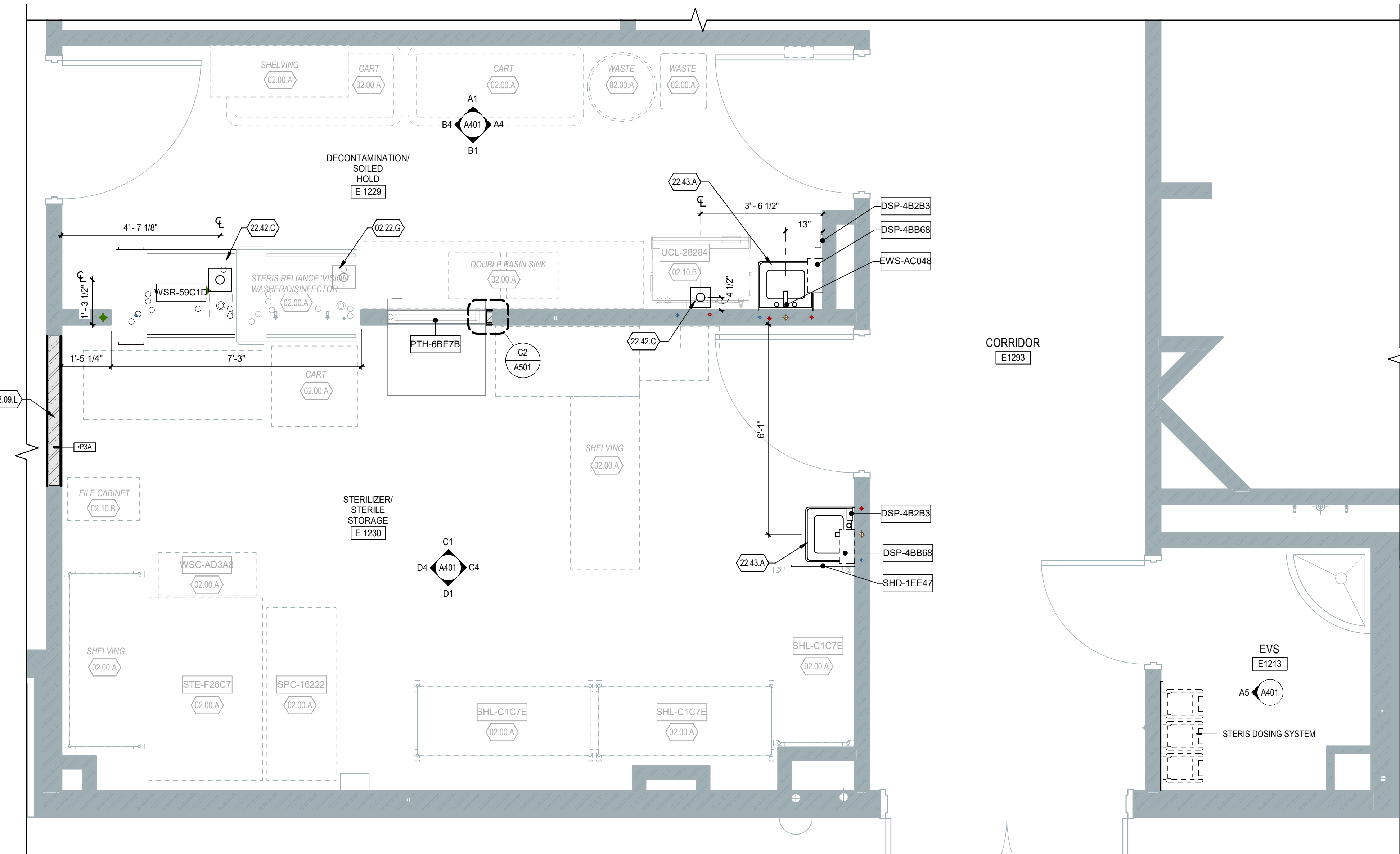
DEMO
PLAN &
ELEVATIONS

AD101

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D1 CENTRAL STERILE - RCP

SCALE: 1/2" = 1'-0"



A1 CENTRAL STERILE FLOOR PLAN

SCALE: 1/2" = 1'-0"

REFERENCE NOTES

- 01.00.A ALIGN
- 02.00.A EXISTING TO REMAIN
- 02.08.G EXISTING ACCESS PANEL (RELOCATED); RE: DEMO RCP
- 02.08.J EXISTING ACCESS PANEL
- 02.09.L INFILL WALL WHERE DOOR WAS REMOVED
- 02.10.B EXISTING EQUIPMENT, RELOCATED
- 02.22.G EXISTING FLOOR SINK; RE: PLUMBING
- 08.31.B ACCESS PANEL, COORDINATE WITH MECHANICAL
- 11.00.C NEW STERIS AIR MANAGEMENT SYSTEM
- 22.42.C FLOOR SINK; RE: PLUMBING
- 22.43.A HAND WASHING SINK; RE: PLUMBING

EQUIPMENT LEGEND

- DSP-4B2B3 DISPENSER: SOAP, WALL MOUNT
- DSP-4B6B6 DISPENSER: PAPER TOWEL, SURFACE MOUNT
- EWS-AC048 WASH STATION: EYE, SINK/COUNTER MOUNTED
- PTH-6BE7B PASS-THRU WINDOW
- SHD-1EE47 SHIELD: SPLASH, BENCHTOP
- SHL-C1C7E SHELVING: ALLOWANCE, SHELVING SYSTEM
- SPC-16222 CART: SUPPLY, STERILE WRAP
- STE-F26C7 STERILIZER: STEAM
- UCL-28284 ULTRASONIC CLEANER: RINSER
- WSC-AD3A8 CART: STERILIZER: TRANSFER CARRIAGE
- WSR-59C1D WASHER/DISINFECTOR: STEAM

PHASING NOTES

- CENTRAL PROCESSING MUST REMAIN ACTIVE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER TO ENSURE THAT STERILIZING WORK WILL NOT BE RESTRICTED.
- SHUT DOWNS MUST BE COORDINATED WITH OWNER AND PERFORMED DURING OFF HOURS (WEEKEND OR NIGHTS).
- CONTRACTOR IS RESPONSIBLE TO COORDINATE THE CONSTRUCTION OF ICRA BARRIERS TO PREVENT DUST/DEBRIS TRANSMISSION BETWEEN CONSTRUCTION AREA AND AREA OF ACTIVE STERILIZATION WORK AND TO MAINTAIN REQUIRED PRESSURIZATION.

CONSTRUCTION SHALL BE PERFORMED IN PHASES, AND IS TO BE COORDINATED WITH THE OWNER AND ARCHITECT PRIOR TO WORK BEGINNING. SUGGESTED CONSTRUCTION PHASES ARE LISTED BELOW:

- PHASE 1:
- a. DEMOLISH EXISTING CLINICAL SERVICE SINK, AND EYE WASH STATION IN DECONTAMINATION ROOM.
 - b. INSTALL NEW FLOOR SINK AT NEW LOCATION OF ULTRASONIC IRRIGATOR IN DECONTAMINATION ROOM (RE: PLUMBING).
 - c. RELOCATE ULTRASONIC IRRIGATOR.
 - d. INSTALL NEW HAND WASH SINK AND EYE WASH STATION IN SOILED HOLD.
 - e. INSTALL NEW HAND WASH SINK IN STERILE STORAGE.
- PHASE 2:
- a. REMOVE DOOR AND PATCH OPENING IN STERILE STORAGE.
- PHASE 3:
- a. DEMOLISH EXISTING HAND WASH SINK IN DECONTAMINATION ROOM.
 - b. DEMOLISH PORTION OF WALL TO ACCOMMODATE NEW WASHER/DISINFECTOR.
 - c. SAWCUT FLOOR AND REPLACE PIPING (RE: PLUMBING).
 - d. INSTALL NEW FLOOR SINK FOR NEW WASHER/DISINFECTOR (RE: PLUMBING).
 - e. PROVIDE ROUGH-INS THROUGH CEILING FOR NEW WASHER/DISINFECTOR (RE: PLUMBING).
 - f. PATCH AND REPAIR FLOORING.
- PHASE 4:
- a. INSTALL NEW WASHER/DISINFECTOR.

PARTITION LEGEND

- EXAMPLE: •P6An
- WALL HEIGHT: ——— ACOUSTIC RATED
PARTITION TYPE: ——— FIRE RATING
WALL THICKNESS: ———
- WALL HEIGHT:
• : WALL EXTENDS TO DECK
: WALL EXTENDS 6" PAST CEILING
- PARTITION TYPE:
P : TYPICAL METAL STUD PARTITION (GYP. BD. + STUD + GYP. BD.)
- WALL THICKNESS:
3 : 3 1/2" METAL STUD
6 : 6" METAL STUD
- FIRE RATING:
A : 1 HR FIRE BARRIER, FIRE PARTITION, OR FIRE WALL (eg. P6A)
B : 2 HR FIRE BARRIER, FIRE PARTITION, OR FIRE WALL (eg. T6B)
P : SMOKE PARTITION (eg. P6P)
- ACOUSTIC RATED:
n : ACOUSTIC RATED PARTITION (eg. P6n, P6An, etc.)



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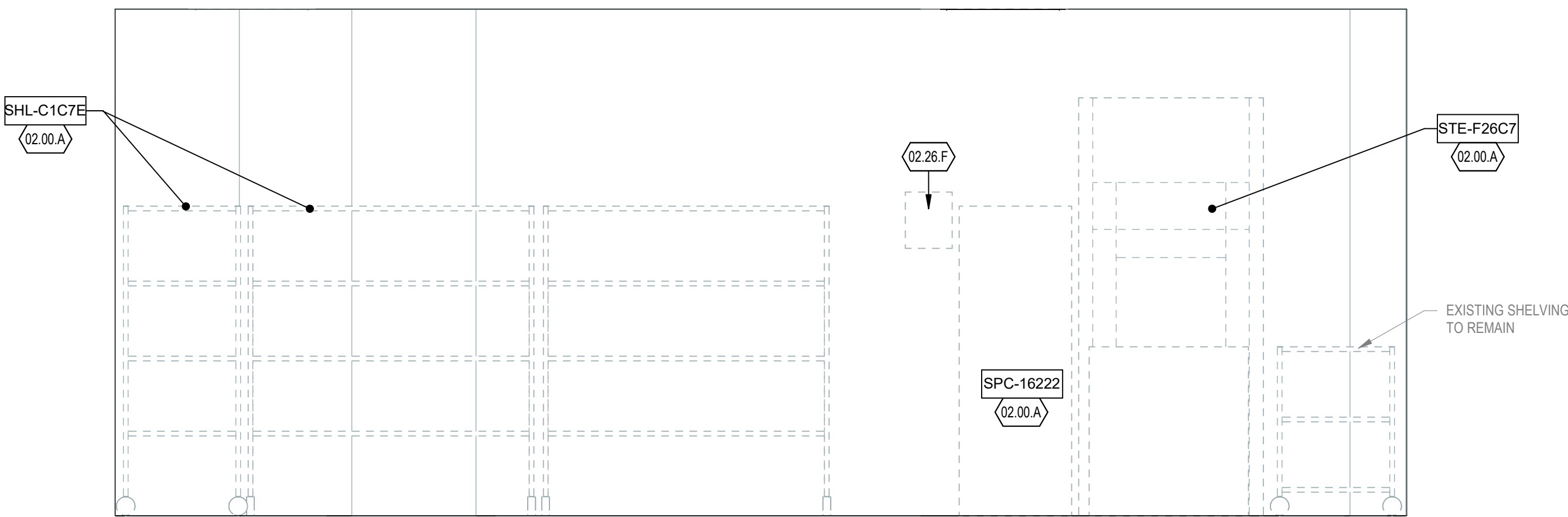
PROJECT NUMBER 25029

FLOOR
PLAN &
CEILING
PLAN

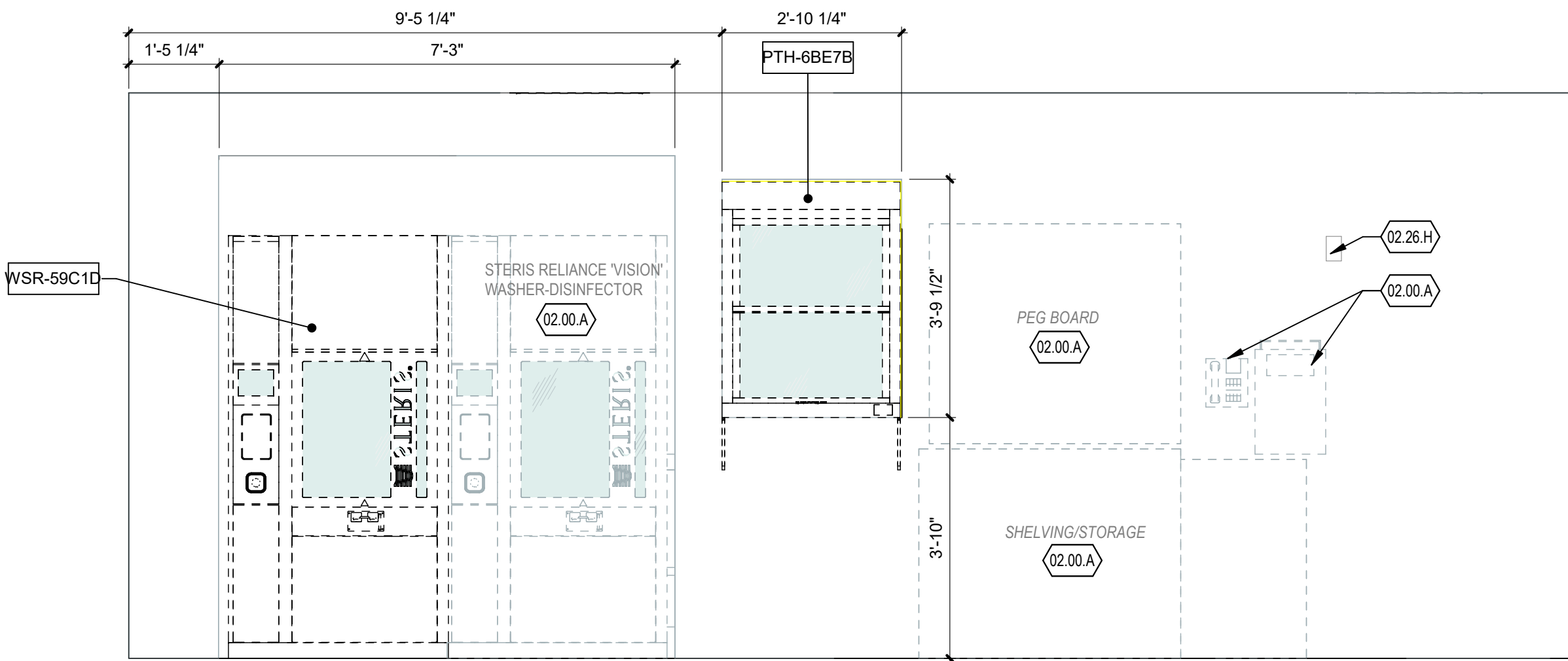
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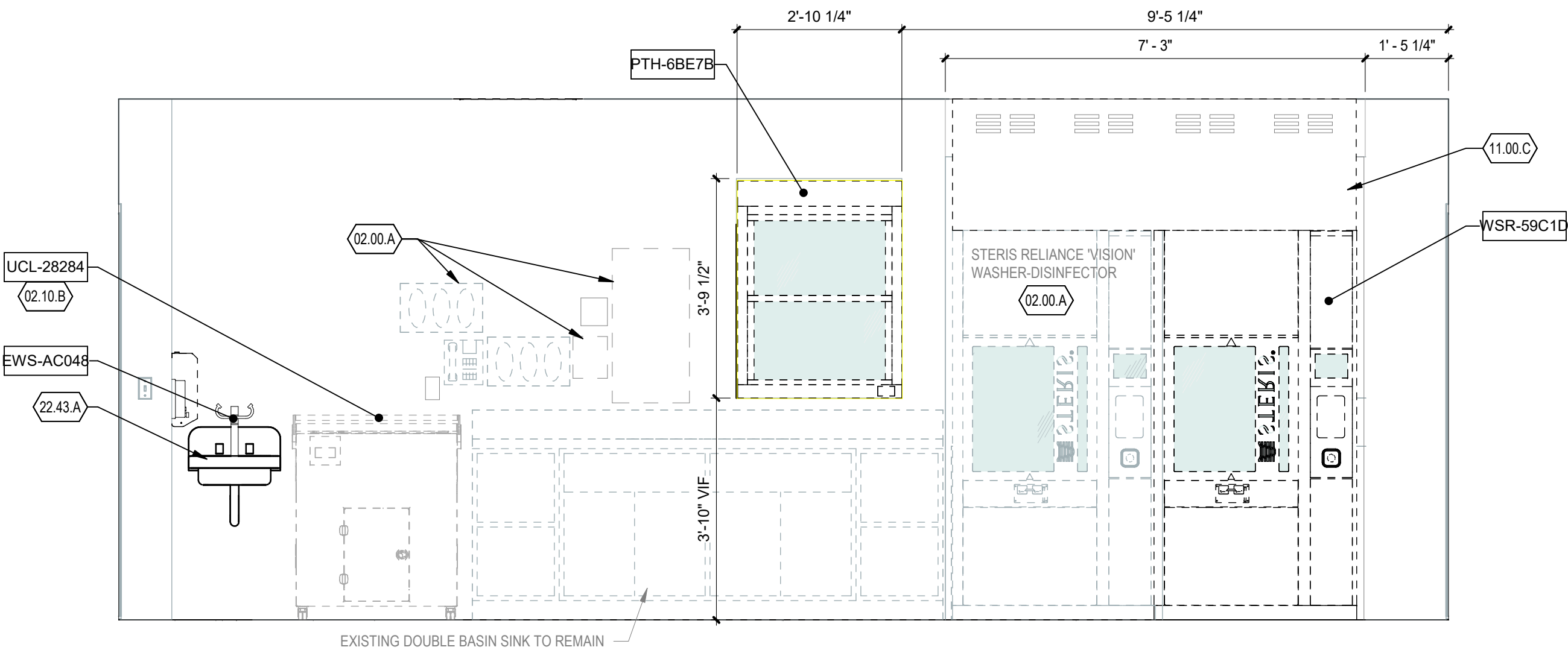
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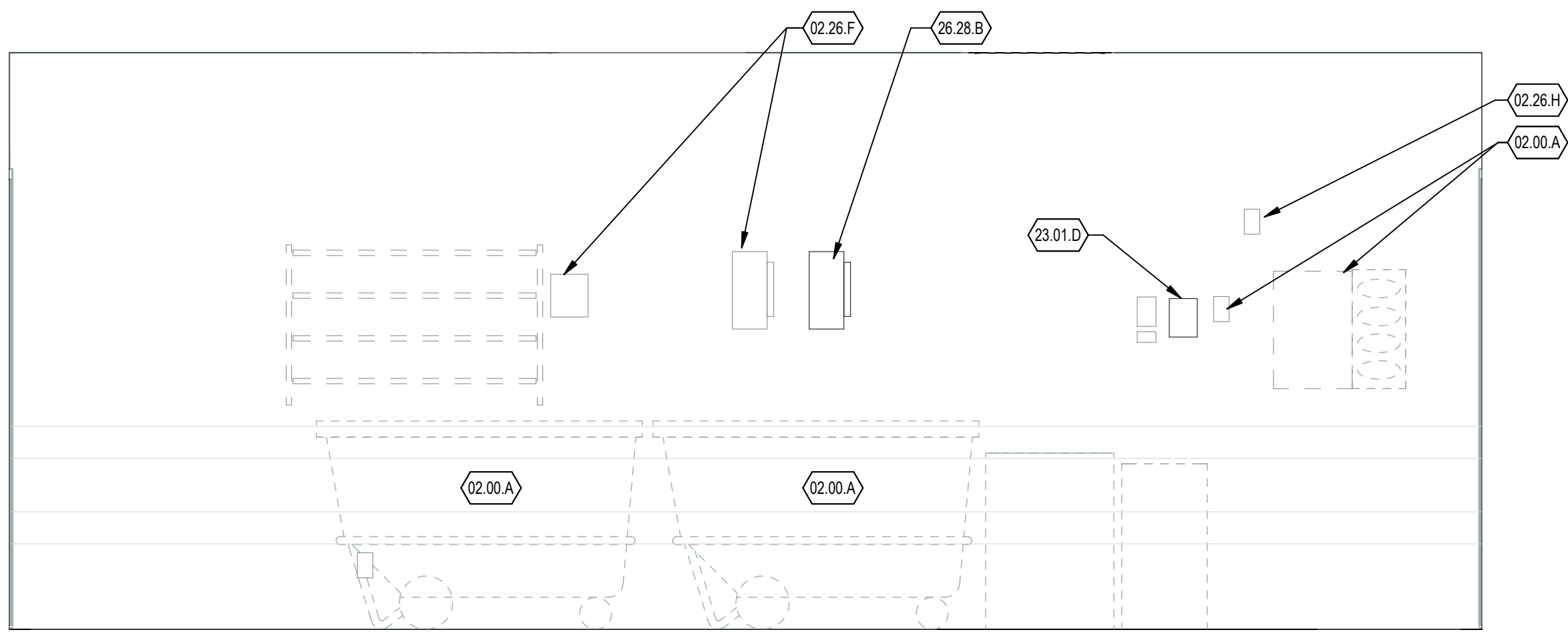
D1 STERILE 3
SCALE: 1/2" = 1'-0"



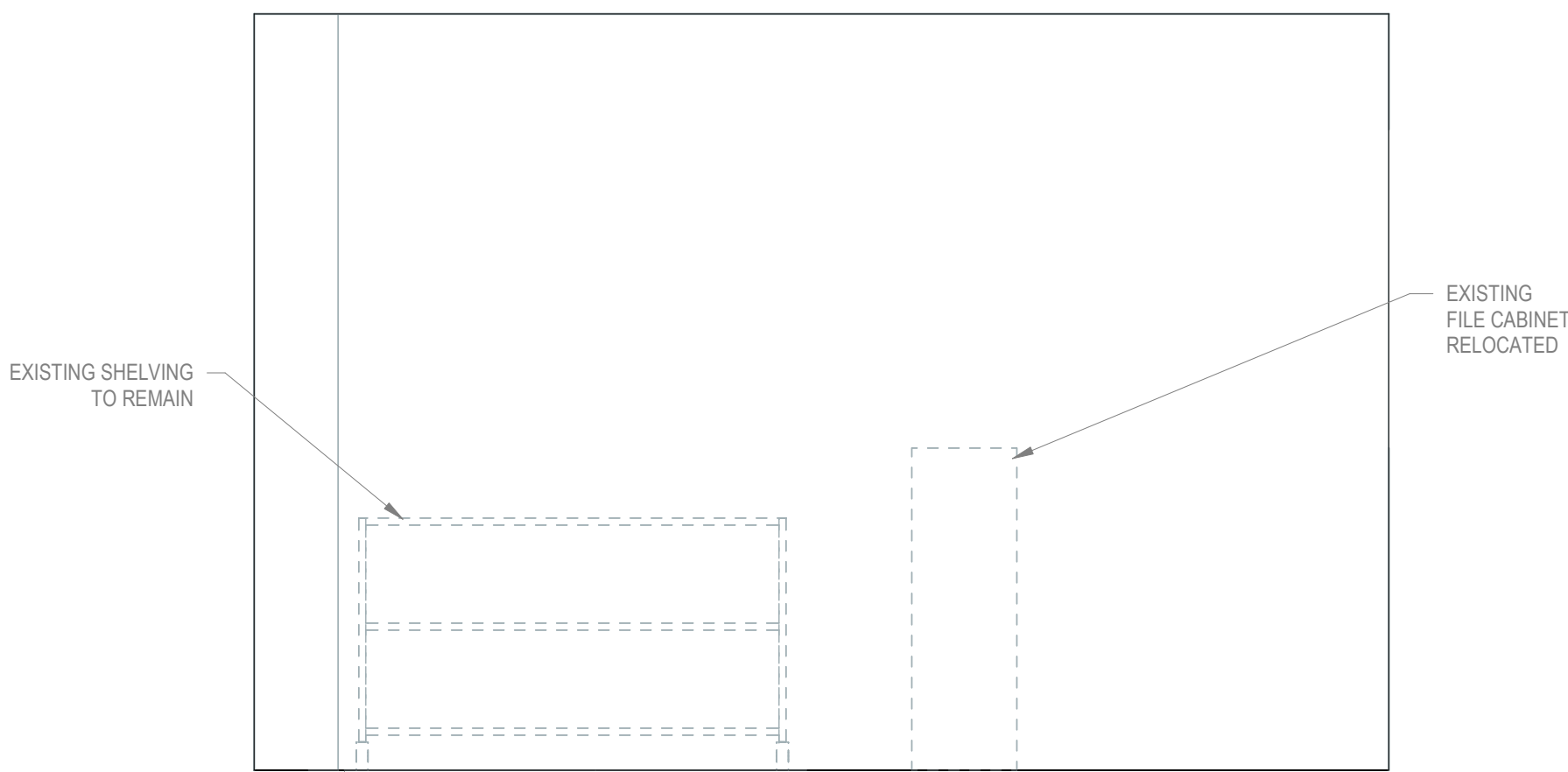
C1 STERILE 1
SCALE: 1/2" = 1'-0"



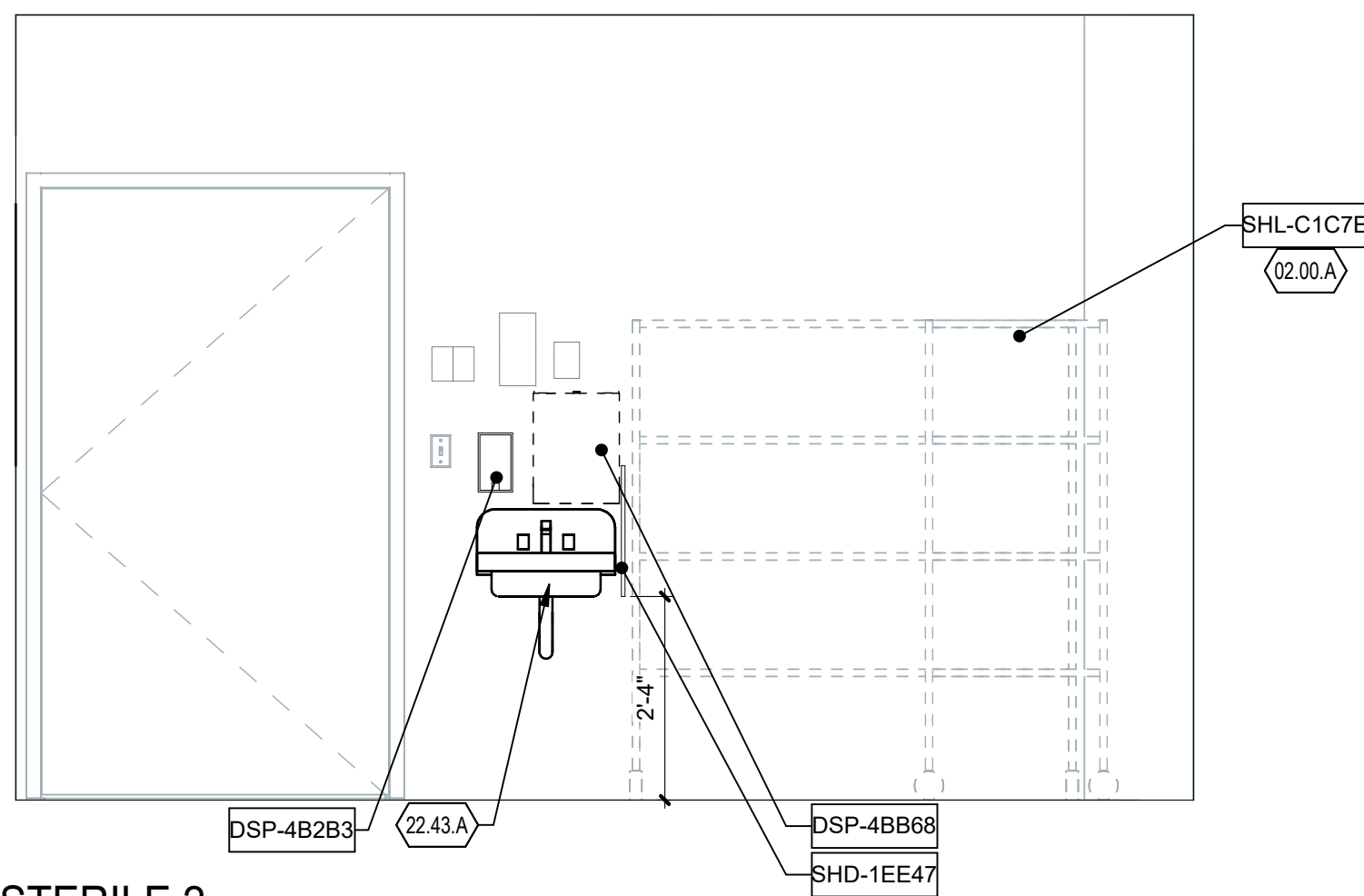
B1 DECONTAM 3
SCALE: 1/2" = 1'-0"



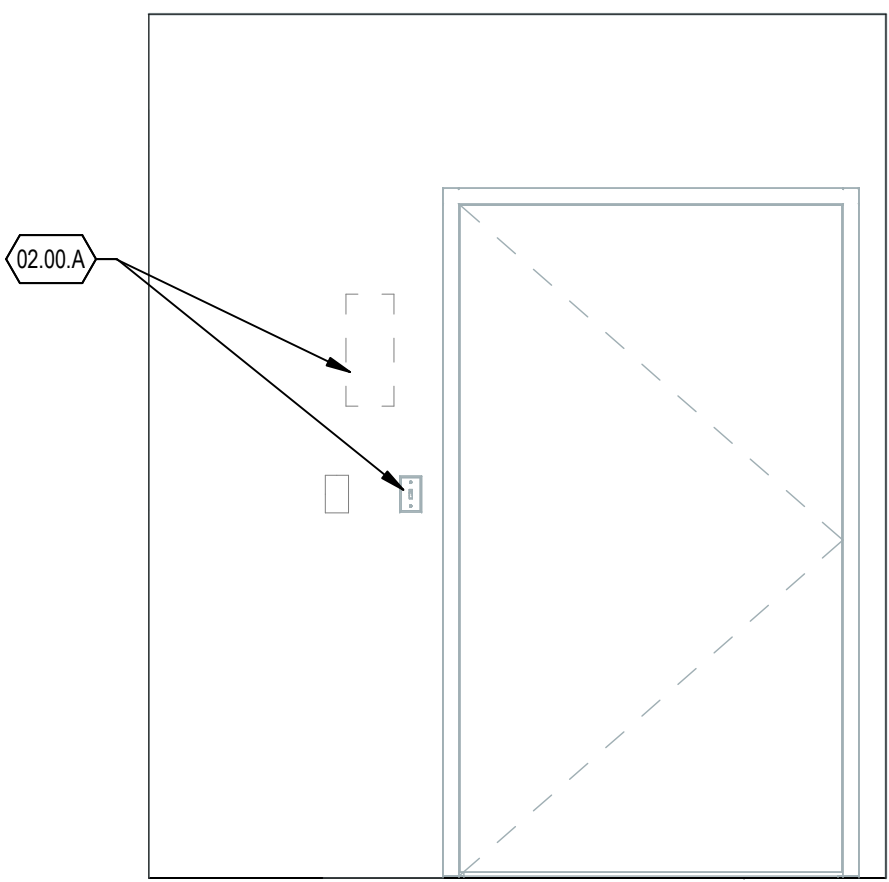
A1 DECONTAM 1
SCALE: 1/2" = 1'-0"



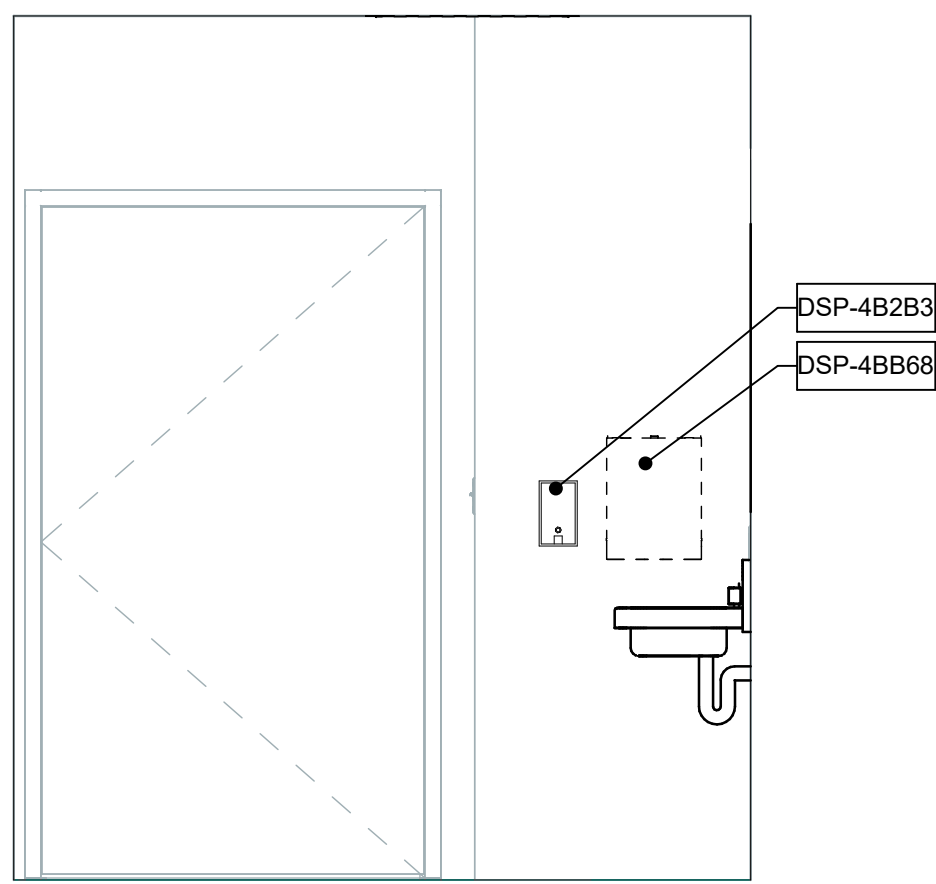
D4 STERILE 4
SCALE: 1/2" = 1'-0"



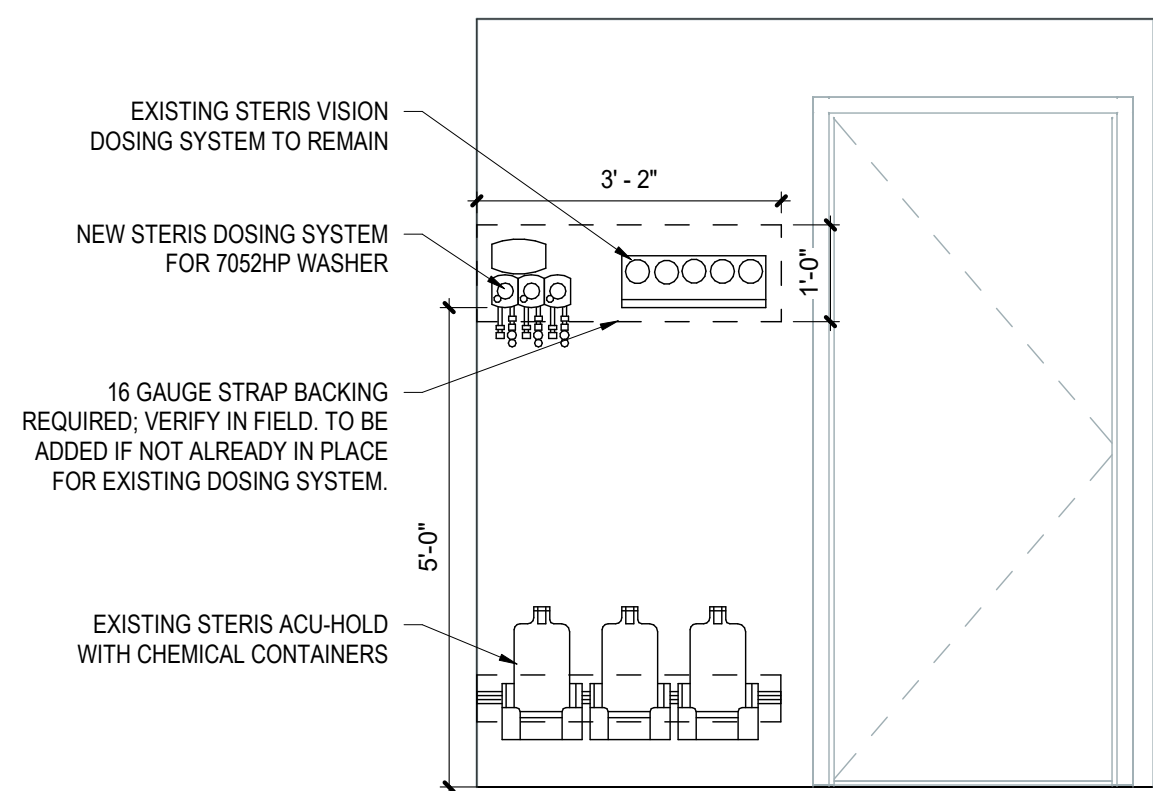
C4 STERILE 2
SCALE: 1/2" = 1'-0"



B4 DECONTAM 4
SCALE: 1/2" = 1'-0"



A4 DECONTAM 2
SCALE: 1/2" = 1'-0"



A5 EVS (CP) - ELEVATION
SCALE: 1/2" = 1'-0"

REFERENCE NOTES

- 02.00.A EXISTING TO REMAIN
- 02.10.B EXISTING EQUIPMENT, RELOCATED
- 02.26.F EXISTING DISCONNECT TO REMAIN, RE: ELECTRICAL
- 02.26.H EXISTING OUTLETS TO REMAIN
- 11.00.C NEW STERIS AIR MANAGEMENT SYSTEM
- 22.43.A HAND WASHING SINK, RE: PLUMBING
- 23.01.D NEW THERMOSTAT, RE: MECHANICAL. REMOVE AND REPLACE OLD THERMOSTAT, NEW TO BE INSTALLED IN SAME LOCATION.
- 26.28.B ELECTRICAL DISCONNECT SWITCH, RE: ELECTRICAL

EQUIPMENT LEGEND

- DSP-4B2B3 DISPENSER: SOAP, WALL MOUNT
- DSP-4BB68 DISPENSER: PAPER TOWEL, SURFACE MOUNT
- EWS-AC048 WASH STATION: EYE, SINK/COUNTER MOUNTED
- PTH-6BE7B PASS-THRU: WINDOW
- SHD-1EE47 SHIELD: SPLASH, BENCHTOP
- SHL-C1C7E SHELVING: ALLOWANCE, SHELVING SYSTEM
- SPC-16222 CART: SUPPLY, STERILE WRAP
- STE-F26C7 STERILIZER: STEAM
- UCL-28284 ULTRASONIC CLEANER: RINSER
- WSR-59C1D WASHER/DISINFECTOR: STEAM



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INTERIOR ELEVATIONS



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A

B

C

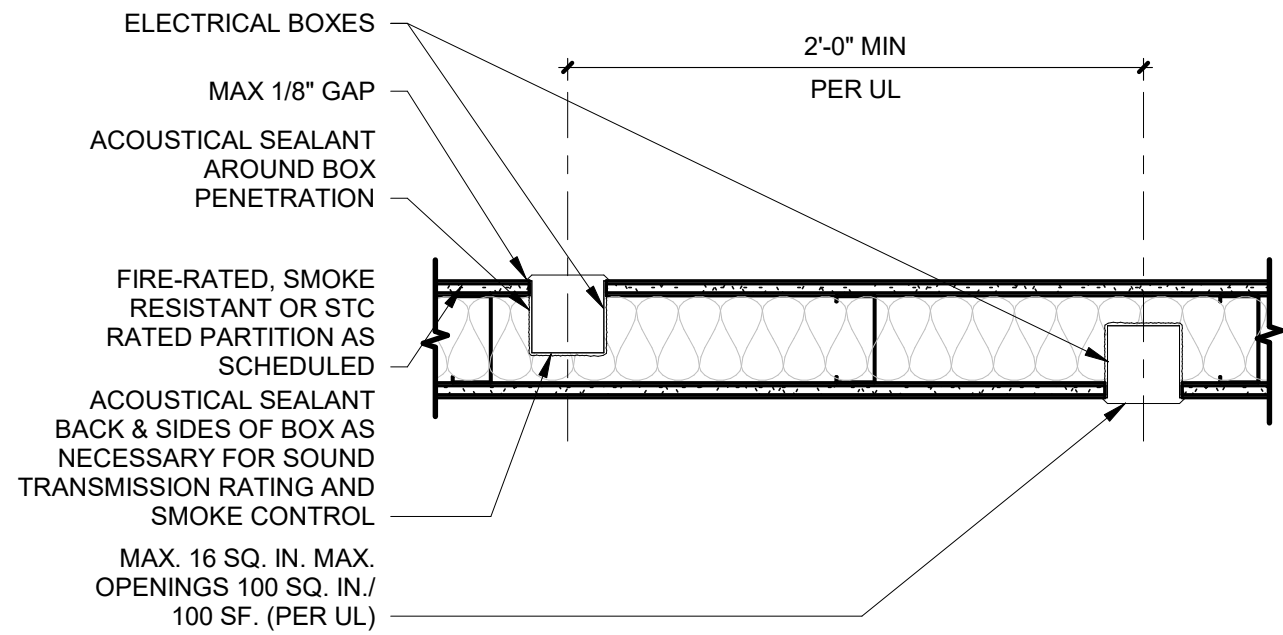
D

E

0' 1' 2' 3' 4' 5' 6'

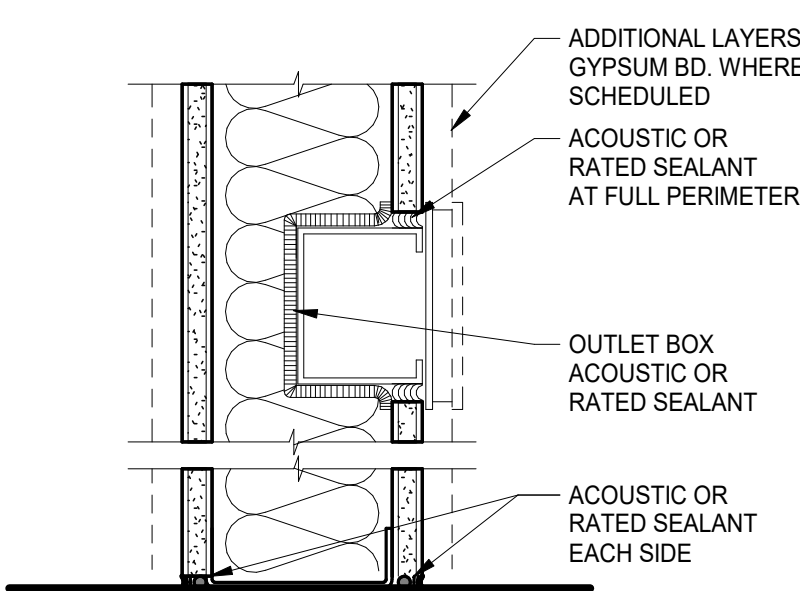
C1

WALL TYPES
SCALE: 1 1/2" = 1'-0"



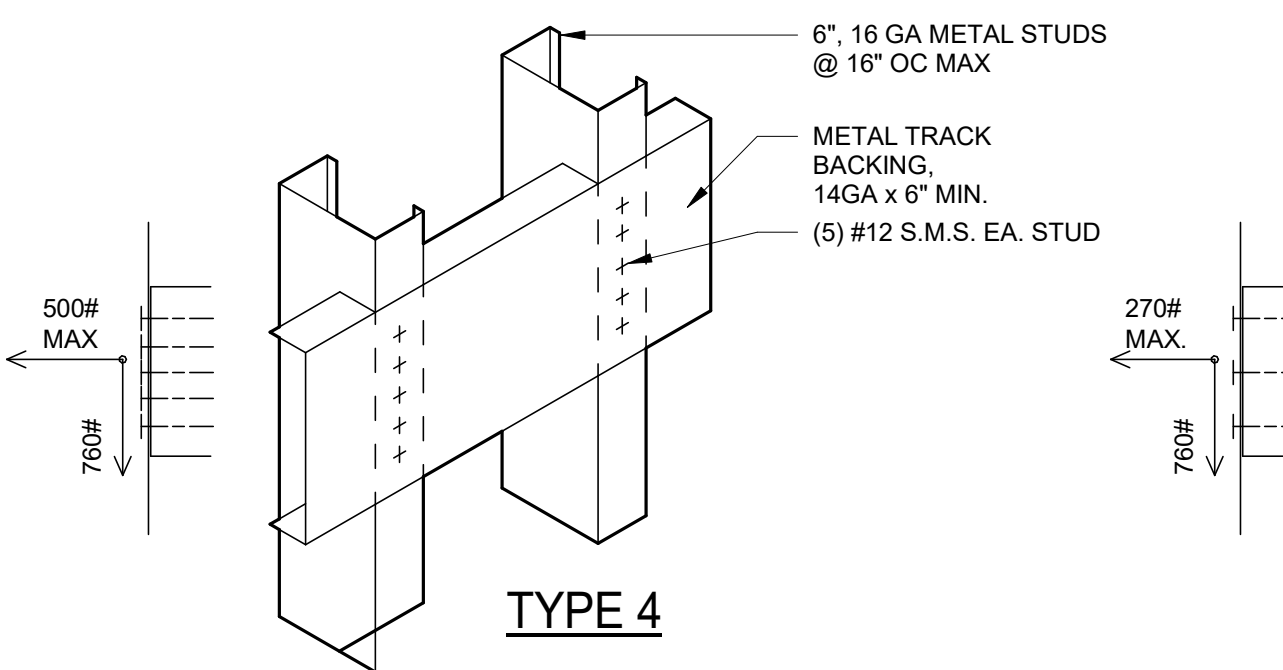
C2

PLAN DETAIL AT NEW PASS-THRU WINDOW
SCALE: 3" = 1'-0"



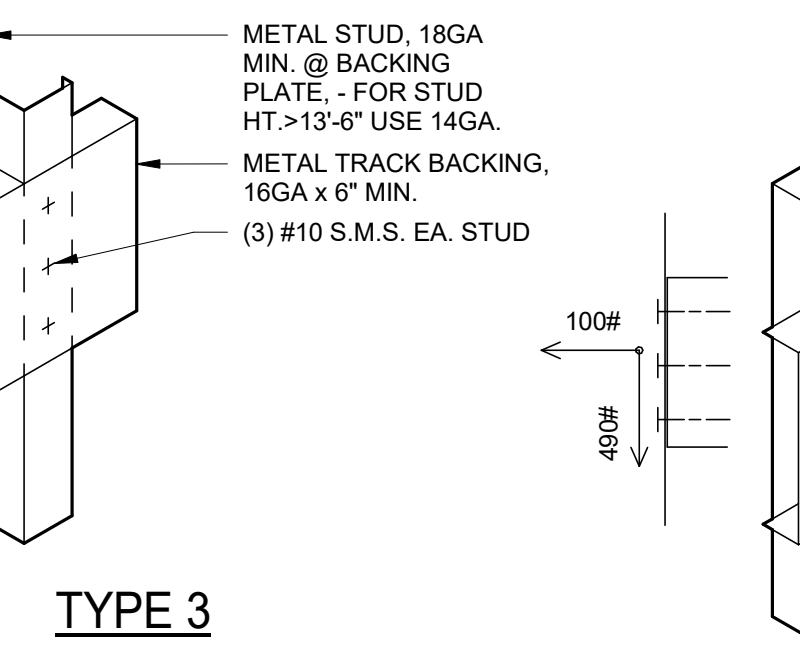
B1

ADJACENT ELECTRICAL BOXES
SCALE: 1 1/2" = 1'-0"



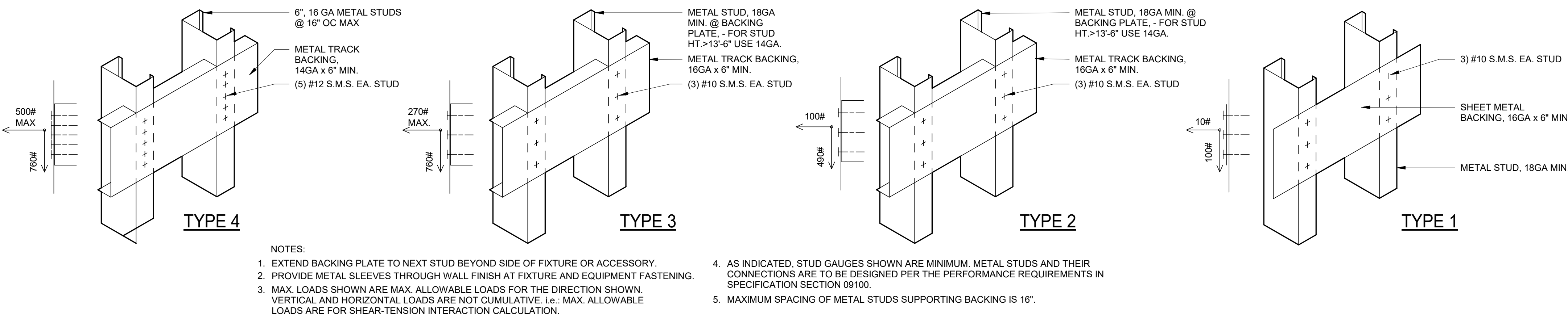
B2

ELECTRICAL BOX
SCALE: 3" = 1'-0"



A1

BACKING DETAILS
SCALE: 3" = 1'-0"



REFERENCE NOTES

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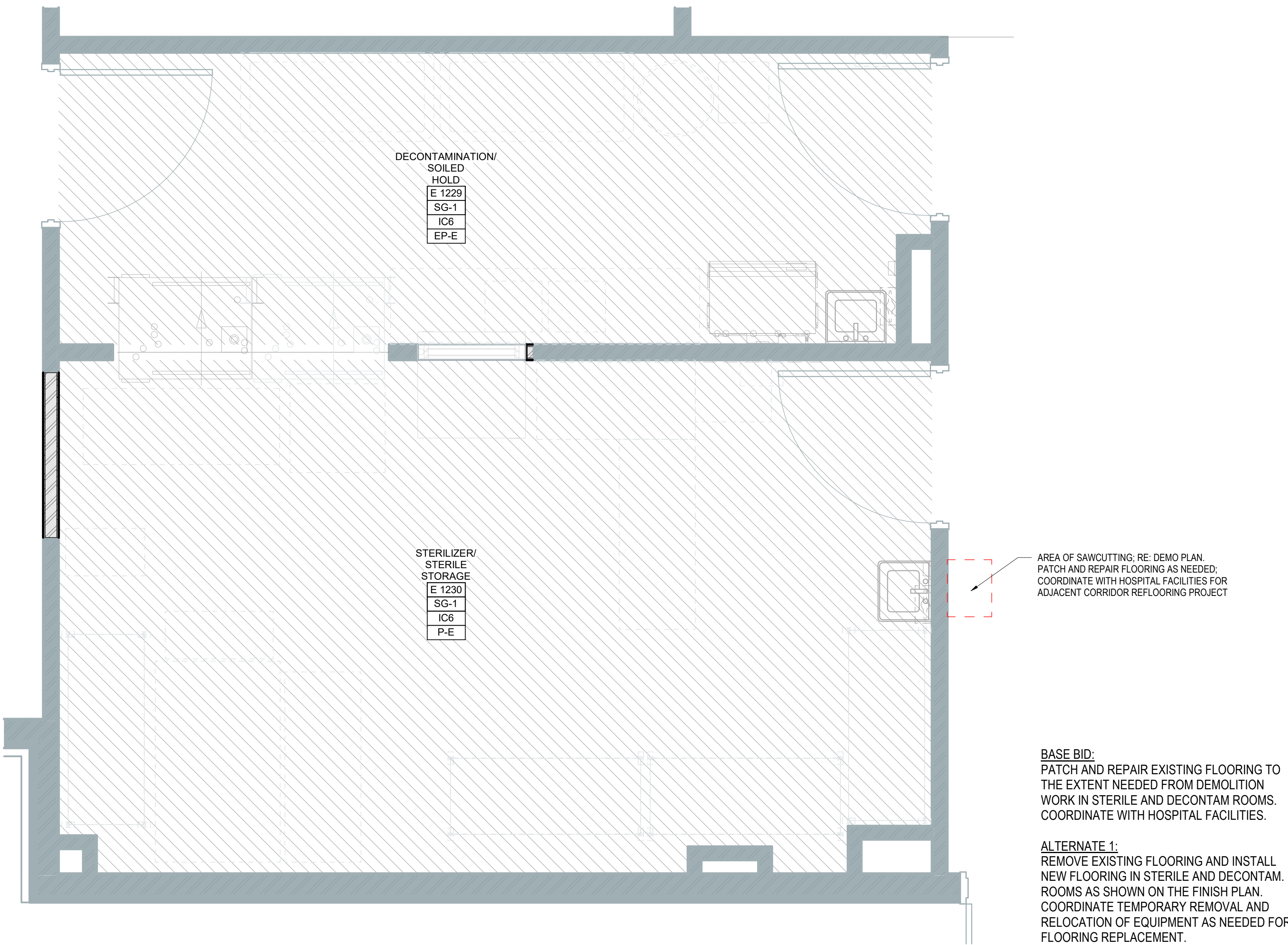
A B C D E F

EQUIPMENT SCHEDULE

Room Name	Atlas ID	Item Description	Manufacturer	Catalog #	Model Name	Status	Furnish Responsibility	Install Responsibility	Architectural Code	Item Qty
Decontamination/Soiled Hold	WSH-59C1D	Washer/Disinfector: Steam	STERIS Corporation - Healthcare	FH18-072	AMSCO 7052HP (2009)	New	Owner	Contractor	01-Fixed Equipment	1
Decontamination/Soiled Hold	UCL-282B4	Ultrasonic Cleaner: Rinser	STERIS Corporation - Healthcare	W52304BNPR	InnoWave Unity Ultrasonic Irrigator (15 Gal.)	Existing	Owner	Owner	02-Movable Electrical	1
Decontamination/Soiled Hold	DIS-D677C	Disposal, Sharps: Floor Cart	Stericycle	C-08BRCA-2004/D-08BLUE	8 Gal. w/ Wire Dolly	Existing	Owner	Owner	03-Movable Non-Electrical	1
Decontamination/Soiled Hold	DSP-F202A	Dispenser: Hand Sanitizer: Wall Mount	Solvectum	9236	3M Avagard D Instant	Existing	Owner	Contractor	01-Fixed Equipment	1
Decontamination/Soiled Hold	GLV-79F27	Dispenser, Glove: Triple Box	Medline Industries Inc.	MD5193008BH	MD5193008BH	Existing	Owner	Contractor	01-Fixed Equipment	2
Decontamination/Soiled Hold	DSP-482B3	Dispenser: Soap, Wall Mount	Henkel Consumer Goods, Inc.	1700016630	Dial FIT X2 Manual Slate 1.2L	Existing	Owner	Contractor	01-Fixed Equipment	1
Decontamination/Soiled Hold	PTH-48E78	Pass-thru Window	STERIS Corporation - Healthcare	PTWEND02100	Amisco Automated Ends - 34 inch W	New	Owner	Contractor	01-Fixed Equipment	1
Decontamination/Soiled Hold	EWS-AC148	Wash Station Eye, Sink/Counter Mounted	Bradley Corporation	S18-2008	S18-2008 Faucet Mounted	New	Owner	Contractor	01-Fixed Equipment	1
Decontamination/Soiled Hold	DSP-48868	Dispenser: Paper Towel, Surface Mount	Georgia Pacific	66650A	C-Fold/MultiFold (Black)	Existing	Owner	Contractor	01-Fixed Equipment	1
Sterilizer/Sterile Storage	STE-F26C7	Sterilizer: Steam, Recessed	STERIS Corporation - Healthcare	EF1201110	Amisco 600 26.5"x26.5"x51", 208/240V (1251V-1)	Existing	Owner	Contractor	01-Fixed Equipment	1
Sterilizer/Sterile Storage	UTC-64F34	Cart, Utility: Stainless	Jenico Products Inc.	ZE130-7A-AS	ZE130-7A-AS Stainless Steel Cart	Existing	Owner	Owner	03-Movable Non-Electrical	1
Sterilizer/Sterile Storage	SHL-C1C7E	Shelving: Allowance, Shelving System	Distribution Systems International (DSI)	KIT-D1-CART	24 X 60 X 79 WIRE CART WITH 8 SHELVES AND CASTERS	Existing	Owner	Owner	03-Movable Non-Electrical	3
Sterilizer/Sterile Storage	TN-43502	Table, Instrument: 30-36 inch	UMF Medical	S58010	S58010 Stainless Steel w/Sheff (36"W)	Existing	Owner	Owner	03-Movable Non-Electrical	2
Sterilizer/Sterile Storage	DSP-48868	Dispenser: Paper Towel, Surface Mount	Georgia Pacific	66650A	C-Fold/MultiFold (Black)	New	Owner	Contractor	01-Fixed Equipment	1
Sterilizer/Sterile Storage	SHD-1EE47	Shedlet: Splash, Benchtop	MarkLab, Inc	ML100836	Suction Cup Sink Splash Guard w/Easy Cutaway (Med)	New	Owner	Owner	03-Movable Non-Electrical	1
Sterilizer/Sterile Storage	WSC-AD3A8	Cart, Sterilizer: Transfer Cart	STERIS Corporation - Healthcare	AY1586603	Amisco 600 Loading Cart/Transfer Cart/Extra Shelf	Existing	Owner	Owner	03-Movable Non-Electrical	1
Sterilizer/Sterile Storage	DSP-482B3	Dispenser: Soap, Wall Mount	Henkel Consumer Goods, Inc.	1700016630	Dial FIT X2 Manual Slate 1.2L	New	Owner	Contractor	01-Fixed Equipment	1
Sterilizer/Sterile Storage	QPC-13252	Cart, Supply: Sterile Wrap	QC Storage, LLC	TEWC0558H	TEWC0558H	Existing	Owner	Owner	03-Movable Non-Electrical	1

FINISH SCHEDULE

TAG	PRODUCT TYPE	SPECIFICATIONS	NOTES
09 - BASE			
IC6	INTEGRAL COVE BASE - 6"	MANF: Match Adjacent SG Flooring COLOR/STYLE: Match Adjacent SG Flooring DIMENSIONS: 6" with metal cap, caulk from metal cap to wall	LOCATION: See Finish Plan REP INFORMATION: See SG Flooring
09 - FLOORING			
SG-1	SHEET GOODS	MANF: Tarkett STYLE/PATTERN: IQ Granite COLOR: 323 Light Sand	LOCATION: See Finish Plan REP: Lissa Ericson REP PHONE: 801.634.8089 REP EMAIL: lissa.ericson@mannington.com
09 - PAINT			
P-E	PAINT	MANF: Sherwin Williams COLOR: Match Existing	LOCATION: Repaint wall and ceiling at areas of patch and repair, see demo plans and elevations. Match existing paint color: coordinate with Facilities
EP-E	EPOXY PAINT	MANF: Sherwin Williams COLOR: Match Existing	LOCATION: Repaint wall and ceiling at areas of patch and repair, see demo plans and elevations. Match existing paint color: coordinate with Facilities



A1 CENTRAL STERILE FINISH PLAN
SCALE: 1/2" = 1'-0"

REFERENCE NOTES

FINISH LEGEND

Room
name
101
F-1
B
W

F = FLOOR FINISH
B = BASE FINISH
W = WALL FINISH
* = SEE ELEVATIONS FOR CLARIFICATIONS
SEE FINISH SCHEDULE IN AF SERIES FOR
FINISHES
P-X
ANNOTATES ACCENT PAINT EXTENTS
SG-1 (SHEET GOODS)



DATE REVISION

PROJECT NUMBER 25029

FINISH
PLAN &
SCHEDULES



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DUCTWORK/GRILLES

	POSITIVE PRESSURE DUCT - RISE
	POSITIVE PRESSURE DUCT - DROP
	NEGATIVE PRESSURE DUCT - RISE
	NEGATIVE PRESSURE DUCT - DROP
	ROUND DUCT - RISE
	ROUND DUCT - DROP
	UNDER FLOOR DUCT
	TURNING VANES
	FRESH AIR LOUVER
	RELIEF AIR OR EXHAUST AIR LOUVER
	CEILING SUPPLY DIFFUSER
	CEILING RETURN REGISTER
	CEILING EXHAUST REGISTER, (BALANCE TO MATCH SUPPLY IF RETURN CFM IS NOT SHOWN)
	SIDEWALL SUPPLY REGISTER
	SIDEWALL EXHAUST OR RETURN REGISTER
	CEILING SUPPLY DIFFUSER WITH FLEXIBLE DUCT
	CEILING AIR GRILLE WITH FLEXIBLE DUCT
	CEILING RETURN AIR GRILLE W/ SOUND BOOT
	LINEAR DIFFUSER WITH PLENUM AND FLEXIBLE DUCT CONNECTION, NO. OF SLOTS & SIZE OF SLOT ON TOP, ACTIVE LENGTH AND CFM ON BOTTOM
	FLEXIBLE DUCT CONNECTION
	FLEXIBLE DUCT
	FLAT OVAL DUCT WITH FREE AREA DIMENSIONS SHOWN IN INCHES.
	RECTANGULAR DUCT WITH FREE AREA DIMENSIONS SHOWN IN INCHES.
	ROUND DUCT WITH FREE AREA DIMENSIONS SHOWN IN INCHES.
	INCLINED RISE
	INCLINED DROP
	RW=1. ROUND DUCT SIMILAR TO RECTANGULAR
	RECTANGULAR TO RECTANGULAR OR ROUND TO ROUND DUCT TRANSFORMATION MAXIMUM 15° INCLUDED ANGLE EXCEPT WHERE SHOWN OTHERWISE.
	BRANCH DUCT SPLIT WITH 6" WIDTH AND MIN. R=WIDTH OF BRANCH DUCT DOWNSTREAM. ELBOW TURNING VANE OPTIONAL.
	TAP ENTRY AREA EQUALS 150% OF BRANCH AREA
	HIGH EFFICIENCY FITTING
	MANUAL VOLUME DAMPER
	FIRE DAMPER IN DUCT, W/ ACCESS PANEL REQD.
	COMBINATION FIRE/SMOKE DAMPER W/ ACCESS PANEL
	SMOKE DAMPER W/ ACCESS PANEL
	BACK DRAFT DAMPER
	ATC DAMPER
	ACCESS PANEL IN DUCT OR PLENUM
	HEATING OR COOLING COIL IN DUCT
	SINGLE DUCT AIR TERMINAL BOX VARIABLE OR CONSTANT VOLUME, MIN. 1-1/2" TERMINAL INLET SIZE STRAIGHT DUCT AT TERMINAL INLET.
	4-WAY BLOW PATTERN
	3-WAY BLOW PATTERN
	2-WAY BLOW PATTERN
	2-WAY BLOW PATTERN
	1-WAY BLOW PATTERN
	DUCT SMOKE DETECTOR

PIPING

	SHUT OFF VALVE
	BALL VALVE
	BUTTERFLY VALVE
	MOTOR OPERATED BUTTERFLY VALVE
	GATE VALVE
	GATE VALVE - NON RISING STEM
	ANGLE VALVE
	GLOBE VALVE
	PLUG VALVE
	SHUT OFF PLUG VALVE FOR FOR USE WITH PRESSURE GAUGE
	CHECK VALVE
	LATERAL STRAINER WITH BLOW-OFF VALVE, PROVIDE HOSE END WITH CAP WHERE DISCHARGE IS NOT PIPED TO DRAIN
	F&T=FLOAT & THERMOSTATIC
	REDUCED PRESSURE BACKFLOW PREVENTOR W/ DRAIN PAN
	PRESSURE REDUCING VALVE EXTERNAL PRESSURE
	PRESSURE REDUCING VALVE SELF CONTAINED
	ATC - 2 WAY VALVE
	ATC - 3 WAY VALVE
	SOLENOID VALVE
	CALIBRATED BALANCING VALVE WITH GPM INDICATED
	VENTURI FLOW METER
	FLOW METER ORIFICE
	RELIEF VALVE
	AIR VENT-MANUAL
	AIR VENT-AUTO
	FLOW SWITCH
	PRESSURE SWITCH
	TEMPERATURE AND PRESSURE TEST PORT
	THERMOMETER WELL
	THERMOMETER - TEMP RANGE AS INDICATED
	PRESSURE GAUGE WITH SHUT OFF PLUG VALVE
	PRESSURE GAUGE WITH PIGTAIL
	UNION
	FLANGE
	FLEXIBLE EXPANSION JOINT
	REDUCER
	ECCENTRIC REDUCER
	BRANCH - BOTTOM CONNECTION
	BRANCH - TOP CONNECTION
	BRANCH - SIDE CONNECTION
	RISE OR DROP
	RISE - DOWN (ELBOW)
	RISE - UP (ELBOW)
	PIPE CAP
	ARROW INDICATES DIRECTION OF FLOW IN PIPE
	LEADER INDICATES DOWNWORD SLOPE
	VALVE IN RISE
	90° ELBOW
	45° ELBOW
	ALIGNMENT GUIDE
	ANCHOR

PLUMBING

	THERMOSTATIC MIXING VALVE
	HOSE BIBB
	FLOOR SINK
	FLOOR DRAIN
	FLOOR CLEAN-OUT OR CLEAN-OUT TO GRADE
	ROOF DRAIN
	DOWNSPOUT NOZZLE
	VENT THRU ROOF
	WATER HAMMER ARRESTOR
	CLEAN-OUT
	FILL PORT
	DRAIN PAN AND P-TRAP
	FIXTURE FROM LEVEL ABOVE
	DEMOLITION

EQUIPMENT

	UNIT HEATER
	INLINE PUMP
	INLINE PUMP
	FAN

FIRE

	HOSE VALVE
	NRS GATE VALVE WITH SUPERVISION
	FLOW SWITCH
	FIRE RISER
	SPRINKLER HEAD
	FIRE SPRINKLER WATER

ANNOTATIONS

	PLUMBING FIXTURES
	POINT OF CONNECTION
	SECTION TAG - TOP FIGURE IS SECTION NO. BOTTOM FIGURE IS SHEET NO.
	DETAIL TAG - TOP FIGURE IS DETAIL NO. BOTTOM FIGURE IS SHEET NO.
	EQUIPMENT IDENTIFICATION
	KEYED NOTE IDENTIFICATION
	SWITCH
	SENSOR
	THERMOSTAT
	NIGHT THERMOSTAT

LINETYPES

	CARBON DIOXIDE
	COMPRESSED AIR
	CHEMICAL FEED
	CHILLED WATER SUPPLY
	CHILLED WATER RETURN
	CONDENSER WATER SUPPLY
	CONDENSER WATER RETURN
	DOMESTIC COLD WATER (DCW)
	DOMESTIC HOT WATER (DHW)
	DEIONIZED WATER SUPPLY
	DEIONIZED WATER RETURN
	EXISTING PIPING
	EXISTING PIPING TO BE REMOVED
	GLYCOL HEAT RECOVERY PIPING
	GLYCOL PIPING SOLUTION
	NATURAL GAS
	HIGH PRESSURE CONDENSATE
	HIGH PRESSURE STEAM
	HEATING HOT WATER RETURN
	HEATING HOT WATER SUPPLY
	INSTRUMENT AIR
	LOW PRESSURE CONDENSATE
	LOW PRESSURE STEAM
	MEDICAL AIR
	MEDIUM PRESSURE CONDENSATE
	MEDIUM PRESSURE STEAM
	MAKE UP WATER
	MEDICAL VACUUM
	NITROGEN
	NITROUS OXIDE
	MEDICAL OXYGEN
	PUMPED CONDENSATE
	REVERSE OSMOSIS WATER SUPPLY
	REVERSE OSMOSIS WATER RETURN
	ROOF DRAIN
	ROOF DRAIN OVERFLOW
	REFRIGERANT LIQUID
	REFRIGERANT SUCTION
	SEWER (BELOW GRADE)
	SEWER (ABOVE GRADE)
	SOFT DOMESTIC WATER
	VENT (SEWER)

SECTION 230993 - SEQUENCES OF OPERATION

- SCHEDULE
Although specific set points, time periods and reset values are listed in the sequence of operation, all values shall be changeable through the Building Management System. The initial occupied/unoccupied schedules shall be as designated by the owners representative.
 - VAV BOX WITH HOT WATER REHEAT (V/R-114)
The variable volume (VAV) terminal unit is controlled independent of system pressure fluctuations by an application specific DDC controller using electric actuation. The VAV terminal unit is controlled within user defined maximum and minimum supply air volume settings (see VAV Box Schedule). The controller monitors the room temperature sensor and VAV box air velocity sensor and modulates the supply air damper in sequence with the reheat valve to maintain the room temperature at set point. The space served by the VAV terminal unit is controlled in Occupied and Unoccupied modes as follows:

Occupied Mode
When the zone temperature is between the effective heating setpoint and the effective cooling setpoint (inside the bias), the VAV controller will be Satisfied and the airflow setpoint will be at minimum. The VAV air damper will modulate to maintain the airflow setpoint and there will be no mechanical heating.

On a rise in zone temperature above the effective cooling setpoint, the VAV controller will switch to Primary Cooling mode and the airflow setpoint will modulate up to the maximum cooling airflow setpoint. The VAV air damper will modulate to maintain the airflow setpoint and there will be no mechanical heating.

On a drop in zone temperature below the effective heating setpoint, the VAV controller will switch to the Box Heating mode:
• The first stage of heating (PID between 0% and 50%).
• When the heating PID is between 0% and 50%, the airflow setpoint will be at its minimum specified airflow. The VAV air damper will modulate to maintain the minimum airflow setpoint.
• The hot water control valve modulates to maintain the space temperature setpoint.
• When the heating PID is between 50% and 100%.
• The airflow setpoint will modulate from the minimum to the maximum specified heating airflow setpoint. The VAV air damper will modulate to maintain the airflow setpoint.
• The reheat control valve modulates to maintain the space temperature setpoint.
- Unoccupied
During normal operating conditions the air handler shall operate continuously in order to maintain air pressurization relationships and temperature requirements. The occupancy condition of the air handling system shall be handled on the zone level to allow for zones and departments to go to an unoccupied mode while critical areas on the same system can remain in operation continuously. The daily and weekly scheduling for each department shall be coordinated with the owner.
- When a zone (VAV Box) is scheduled to go into unoccupied mode the room air temperature setpoint shall be changed from an occupied setpoint to an unoccupied setpoint that increases the zone temperature dead band from 2°F-occupied to +/- 5°F-unoccupied (adjustable).

VAV Box Graphical Display Summary
A graphical summary interface showing all terminal units connected to the air handling system will be provided. The graphical summary shall include the following information (at a minimum): Box number, air handler system, cooling demand (%), damper position, airflow (CFM), space setpoint, space temperature, discharge air temperature, reheat valve position. The graphical summary shall also have an input for each box that will allow it to be added/removed from the air handler duct static pressure reset control sequence and air handler discharge air temperature setpoint reset schedule. The intent of this is to provide an easily viewable and changeable interface to identify rogue terminal units that drive the duct static pressure and discharge air temperature.

- ROOM PRESSURE MONITORS
Room pressure monitors shall be provided for visual and audible alarm if the pressure differential falls below the programmed limit. Each monitor shall be interlocked with the associated door switch (by this division) to prevent alarm if door is opened. Room pressure monitors shall be installed in the following locations as identified on the plans.
1. Decontamination/Soiled Hold E-1229 (OR Corridor)
2. Decontamination/Soiled Hold E-1229 (Emergency Dept Corridor)
3. Sterilizer/Sterile Storage E-1230

END OF SECTION

TEST & BALANCE NOTES

- EXISTING ROOF EXHAUST FAN (EF-10) AND ALL CONNECTED EXHAUST GRILLES (NEW & EXISTING) SHALL BE BALANCED IN ITS ENTIRETY. SEE NOTES ON SHEET M101.
- ROOM LEAKAGE TESTING: REMODEL AREAS INCLUDE AIR PRESSURIZATION REQUIREMENTS. SPACES SHALL BE LEAK TESTED USING A BLOWER APPARATUS TO MEASURE THE AIR LEAKAGE TO CONFIRM IT DOES NOT EXCEED THE SPECIFIED LIMIT. IF THE SPACE EXCEEDS THE LEAKAGE RATE THE ROOM SHALL BE SEALED AND RETESTED. THE FOLLOWING SPACES SHALL BE TESTED:
A. DECONTAMINATION/SOILED HOLD E1229
B. STERILIZER/STERILE STORAGE E 1230
C. REFER TO ZONING PLAN (M090) FOR LEAKAGE RATE AND TEST PRESSURE.

MECHANICAL GENERAL NOTES

- PROVIDE CD-1 TYPE DIFFUSER, AS SCHEDULED, FOR ALL CEILING SUPPLY DIFFUSERS UNLESS NOTED OTHERWISE. SEE DETAIL 1/M501 AND 2/M501.
- PROVIDE RG-1 TYPE GRILLE, AS SCHEDULED, FOR ALL CEILING RETURN GRILLES SHOWN AS SUCH. PROVIDE SIZE 24x24, 24x12, OR 12x12. SEE DETAIL 1/M501 AND 2/M501.
- PROVIDE EG-1 TYPE GRILLE, AS SCHEDULED, FOR ALL CEILING EXHAUST GRILLES, SHOWN AS SUCH.
- PROVIDE BALANCING DAMPERS AT EACH BRANCH TAKE OFF TO SERVE DIFFUSER OR GRILLE AS WELL AS WHERE INDICATED.
- COORDINATE EXACT LOCATION OF DUCTS WITH STRUCTURAL MEMBERS, LIGHTS, REFLECTED CEILING, CABLE TRAY, PLUMBING, MECHANICAL PIPING, ETC.
- BRANCH DUCTWORK SHALL BE SIZED TO MATCH THE NECK SIZE OF THE DIFFUSER, REGISTER OR GRILLE IT SERVES UNLESS NOTED OTHERWISE.
- INSTALL HARD ELBOWS AS SHOWN. HARD ELBOWS ARE REQUIRED FOR SOUND ATTENUATION.
- INSTALL EQUIPMENT WITH CLEARANCE PER MANUFACTURER'S RECOMMENDATIONS. MAINTAIN PROPER SPACE FOR COIL PULL, CONTROLS, AND MAINTENANCE ACCESS.
- INSTALL TURNING VANES IN ALL SQUARE AND RECTANGULAR LOW PRESSURE DUCTWORK.
- DETAILS REFERENCE ALL SHEETS.
- ALL FIRE DAMPERS ARE 1-1/2 HR RATED, UNLESS NOTED OTHERWISE.
- DO NOT ROUTE DUCTS OR PIPES ABOVE ELECTRICAL PANELS. DO NOT ROUTE DUCTS OR PIPES IN ELECTRICAL ROOMS, EXCEPT DUCTS AND PIPES SERVING THE ROOM.
- IF CONTRACTOR ENCOUNTERS MATERIAL WHICH MAY CONTAIN ASBESTOS, IMMEDIATELY STOP WORK IN THIS AREA AND NOTIFY THE OWNER.
- PROVIDE CEILING ACCESS PANELS AS REQUIRED WHERE MECHANICAL EQUIPMENT, VALVES, VAV BOXES, FIRE DAMPERS, ETC. ARE LOCATED ABOVE INACCESSIBLE CEILINGS.
- ALL DUCT DIMENSIONS ARE INSIDE FREE AREA DIMENSIONS. ADJUST SHEET METAL DIMENSION FOR LINED DUCT.

MECHANICAL PIPING GENERAL NOTES

- PIPING DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY ALL ROUTING AND COORDINATE WITH ALL OTHER TRADES.
- NO PIPING TO RUN DIRECTLY OVER ELECTRICAL PANELS, MCC'S, VFD'S. ROUTE AROUND AS REQUIRED.
- INSTALL MANUAL AIR VENTS AT ALL HYDRONIC SYSTEM HIGH POINTS.
- INSTALL ALL EQUIPMENT WITH SUFFICIENT CLEARANCE FOR MAINTENANCE PER MANUFACTURER'S RECOMMENDATION. PROVIDE A 24"x24" ACCESS DOOR BELOW EQUIPMENT BOX AND CONTROL VALVES WHERE INSTALL OVER HARD CEILING AREAS.
- COORDINATE EXACT LOCATION OF T-STATS WITH ARCHITECTURAL FURNISHINGS.
- INSTALL A 24"x24" ACCESS PANEL BELOW ALL VALVES, CIRCUIT SETTERS, AND CONTROL VALVES OVER HARD CEILINGS.
- MECHANICAL PIPING TO BE INSTALLED ABOVE DUCTWORK AND EQUIPMENT EXCEPT WHERE SHOWN.
- FIELD VERIFY ALL EQUIPMENT LOCATIONS.
- DETAILS REFERENCE ALL SHEETS.

PLUMBING GENERAL NOTES

- SLOPE PIPING AS FOLLOWS, UNLESS OTHERWISE NOTED. WASTE BRANCHES 1/4" PER FOOT WASTE MAINS: 1/8" PER FOOT.
- SLEEVE PIPING THRU WALLS/FOUNDATIONS WHERE REQUIRED.
- PLUMBING DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY EXACT ROUTING AND COORDINATE WITH ALL OTHER TRADES.
- ALL PIPING IN PLUMBING CHASES TO BE ARRANGED TO ALLOW MAINTENANCE ACCESS.
- NO PIPING TO RUN OVER ELECTRICAL PANELS, VFD'S, OR MCC'S.
- COORDINATE FAN ROOM FLOOR DRAIN LOCATIONS AND COOLING COILS.
- NO FIRE PROTECTION LINE IS TO BE DESIGNED OR INSTALLED PRIOR TO CLOSE COORDINATION WITH ALL OTHER DISCIPLINES: DUCTWORK, MECHANICAL PIPING, AND PLUMBING TAKE PRECEDENCE OVER FIRE PROTECTION PIPING. FAILURE TO COMPLY WILL RESULT IN FIRE PROTECTION REMOVAL AND REINSTALLATION AT THE CONTRACTOR'S EXPENSE.
- SLEEVE/CONFIGURE CMU WALLS FOR EMBEDDED PIPING AND PIPE PENETRATIONS AS REQUIRED.
- REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING HEIGHTS, DIMENSIONS, AND OTHER REQUIREMENTS.
- CONTRACTOR TO VERIFY CONNECTION SIDE OF ADA FIXTURES AND ADJUST ACCORDINGLY.
- LOCATE ALL VENTS MINIMUM 25 FT AWAY FROM AIR INTAKES.
- INSTALL DOMESTIC WATER LINES BELOW DUCTWORK.
- INSTALL A 24"x24" ACCESS DOOR BELOW ALL ISOLATION VALVES AND CIRCUIT SETTERS WHERE MOUNTED ABOVE HARD CEILINGS.
- MOUNT ALL CEILING TYPE ISOLATION VALVES, CONTROL VALVES, CIRCUIT SETTERS, ETC. NEAR CEILING FOR ACCESSIBILITY.
- DETAILS REFERENCE ALL SHEETS.
- EXISTING PIPING SHOWN HAS BEEN TAKEN FROM INFORMATION PROVIDED BY OTHERS. FIELD VERIFY ALL SYSTEMS, SIZES, LOCATIONS, AND ELEVATIONS PRIOR TO STARTING ANY NEW WORK.



DATE REVISION

PROJECT NUMBER 25029

MECH
SYMBOLS
NOTES

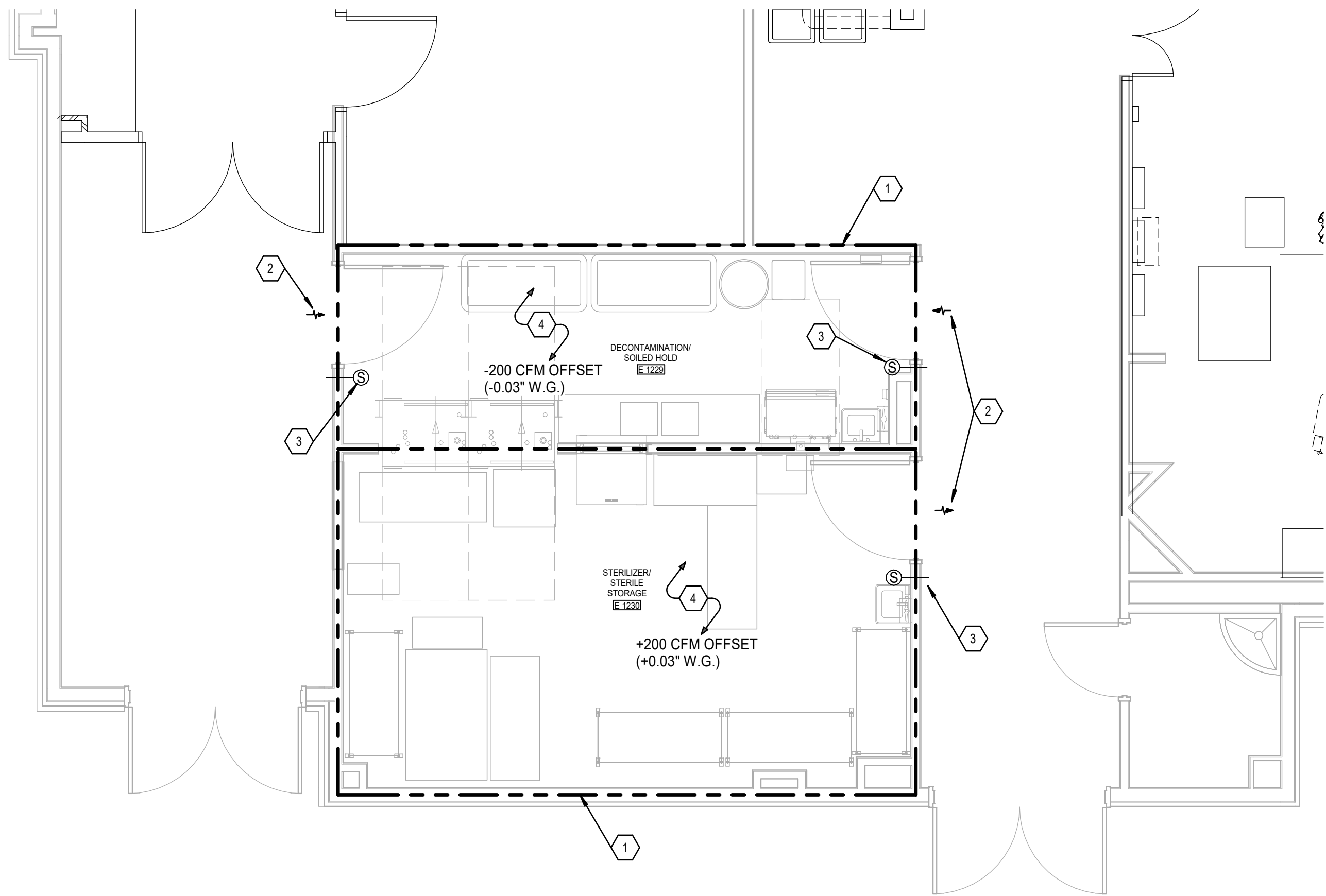
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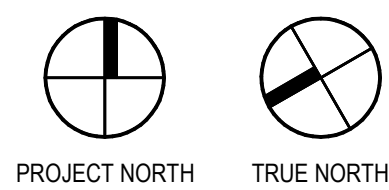
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1 CENTRAL PROCESSING MECHANICAL ZONING PLAN
SCALE: 1/4" = 1'-0"



- # KEYED NOTES
1.

DASHED LINES INDICATE OUTLINE THERMAL ZONES.
2.

ARROW INDICATES AIRFLOW PRESSURIZATION.
3.

NEW THROUGH THE WALL DIFFERENTIAL PRESSURE SENSOR WITH DIGITAL DISPLAY AND DOOR INTERLOCK SWITCH.
4.

THE CONTRACTOR SHALL PERFORM A ROOM PRESSURE TEST FOR THIS ROOM. THE ROOM MUST MAINTAIN A 0.03" W.G. PRESSURE DIFFERENTIAL WITH A MAXIMUM LEAKAGE RATE OF THE AIRFLOW OFFSET SHOWN. PROVIDE TEST REPORT AND INCLUDE IN O&M.



△ DATE REVISION

PROJECT NUMBER 25029

**MECHANICAL
ZONING
PLAN**

M090



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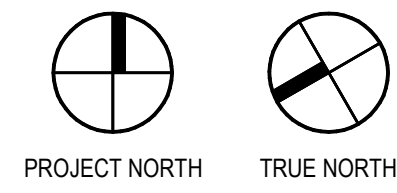
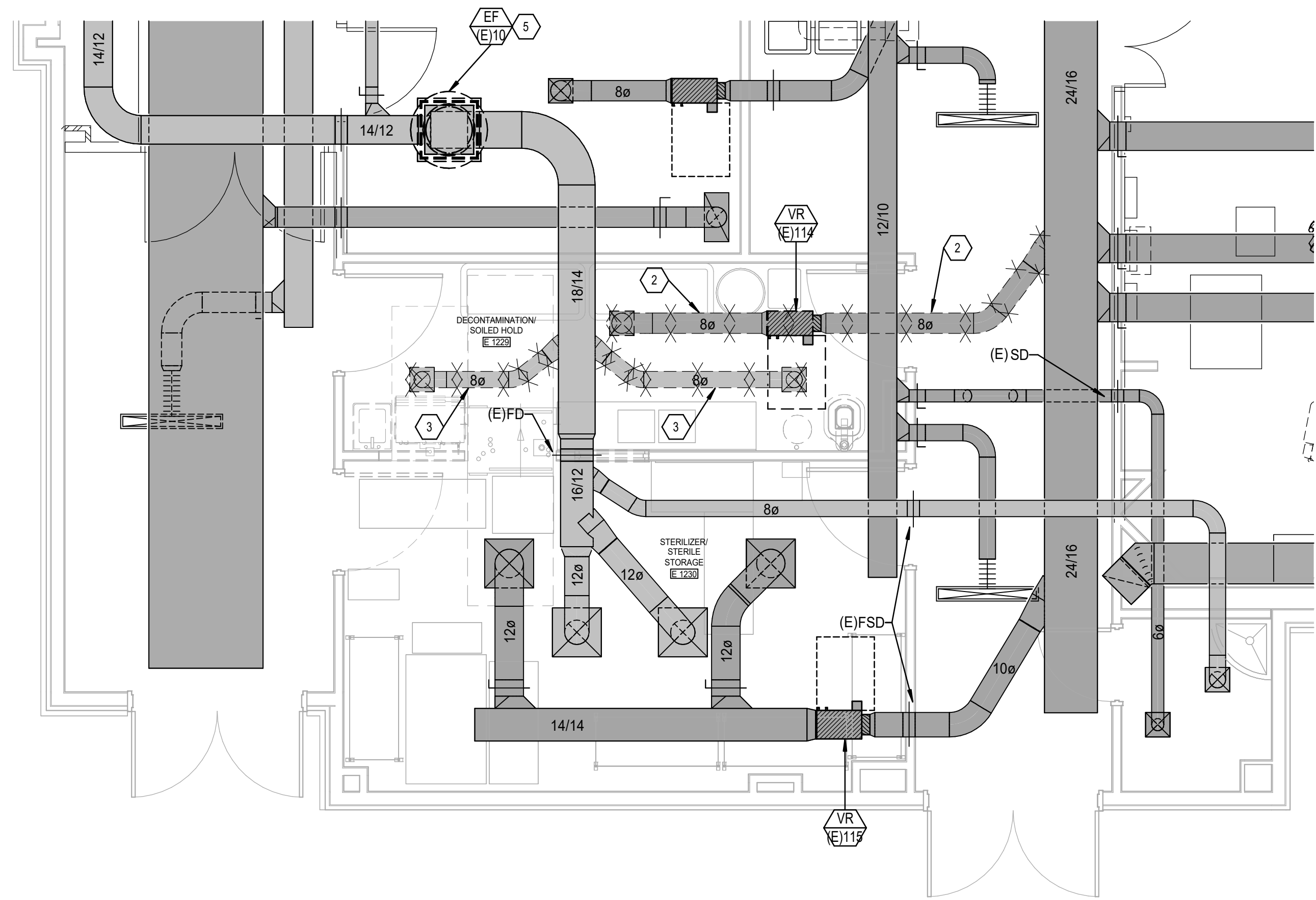
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1' 0"

1 2 3 4 5 6

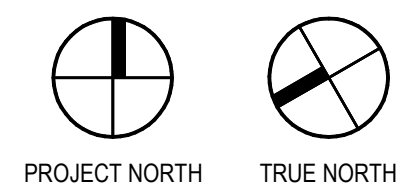
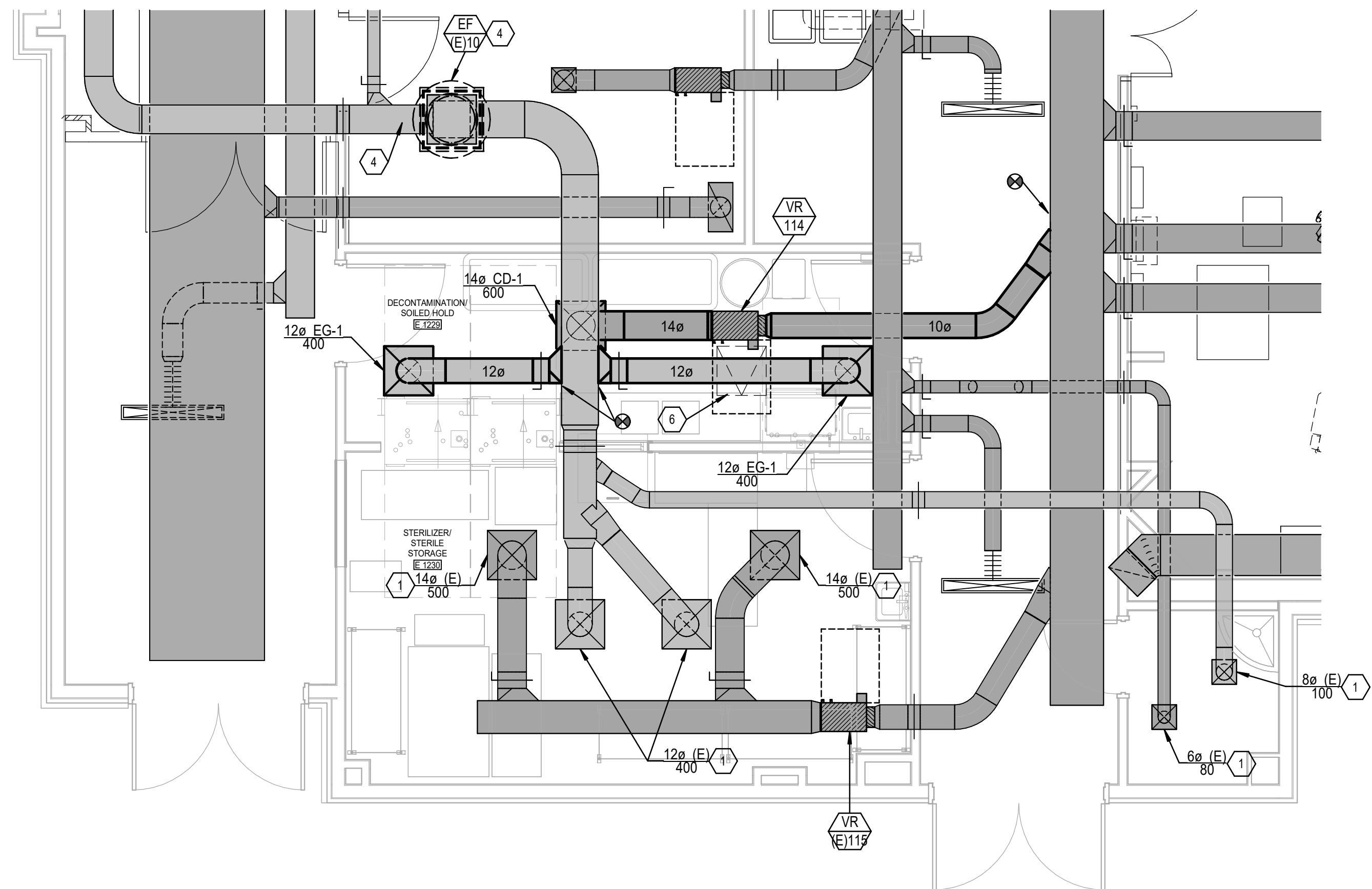
1 CENTRAL PROCESSING MECHANICAL DEMOLITION PLAN

SCALE: 1/4" = 1'-0"



2 CENTRAL PROCESSING MECHANICAL PLAN

SCALE: 1/4" = 1'-0"



KEYED NOTES

- BALANCE EXISTING DIFFUSER/GRILL TO AIRFLOW NOTED.
- DEMOLISH AND REPLACE EXISTING VAV BOX AND ASSOCIATED DUCT AS SHOWN.
- DEMOLISH AND REPLACE EXISTING EXHAUST DUCT AND GRILLES AS SHOWN.
- EXISTING ROOF EXHAUST FAN (EF-10) AND ALL CONNECTED EXHAUST GRILLES SHALL BE BALANCED IN ITS ENTIRETY. EXHAUST GRILLES SHOWN ON THIS SHEET AND (6) ADDITIONAL GRILLES LOCATED IN SURGERY & EMERGENCY DEPARTMENT SHALL BE BALANCED. EXISTING MECHANICAL RECORD DRAWING LISTING AIRFLOW RATES WILL BE PROVIDED ON REQUEST.
- EXISTING FAN (EF-10) INFORMATION AS FOLLOWS: 2450 CFM @ 0.75" W.C.; 0.45 BHP; 0.5 HP; 120V/1PH.
- CEILING ACCESS DOOR FOR VAV BOX ACCESS. COORDINATE EXACT LOCATION AND SIZING WITH ARCHITECTURAL RCP.

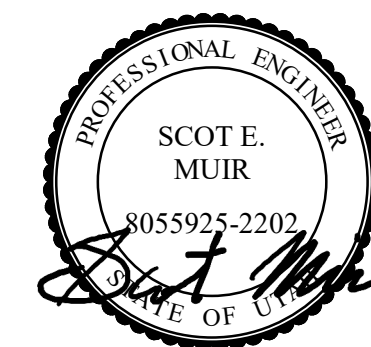
BALANCING NOTES

- EXISTING ROOF EXHAUST FAN (EF-10) AND ALL CONNECTED EXHAUST GRILLES SHALL BE BALANCED IN ITS ENTIRETY.
- EXHAUST GRILLES SHOWN ON THIS SHEET AND (6) ADDITIONAL GRILLES LOCATED IN SURGERY & EMERGENCY DEPARTMENT SHALL BE BALANCED. EXISTING MECHANICAL RECORD DRAWING LISTING AIRFLOW RATES WILL BE PROVIDED ON REQUEST.
- THE CONTRACTOR SHALL PERFORM A ROOM LEAKAGE TEST FOR THE DECONTAMINATION AND STERILE STORAGE ROOMS. AIR LEAKAGE RATE SHALL NOT EXCEED THE MAXIMUM LEAKAGE RATE. SEE MECHANICAL ZONING PLAN AND TAB SPECIFICATION FOR MORE INFORMATION.

PHASING NOTES

- CENTRAL PROCESSING MUST REMAIN ACTIVE DURING CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER TO ENSURE THAT STERILIZING WORK WILL NOT BE RESTRICTED.
- SHUT DOWNS MUST BE COORDINATED WITH OWNER AND PERFORMED DURING OFF HOURS (WEEKEND OR NIGHT TIME).
- CONTRACTOR IS RESPONSIBLE TO COORDINATE THE CONSTRUCTION OF ICRA BARRIERS TO PREVENT DUST/DEBRIS TRANSMISSION BETWEEN CONSTRUCTION AREA AND AREA OF ACTIVE STERILIZATION WORK AND TO MAINTAIN REQUIRED PRESSURIZATION.
- CONSTRUCTION SHALL BE PERFORMED IN THE FOLLOWING PHASES (SEE ARCHITECTURAL PLANS FOR MORE INFORMATION AND COORDINATE CONSTRUCTION PLAN PRIOR TO BEGINNING WORK):
 - PHASE 1:
 - DEMOLISH CLINICAL SERVICE SINK AND EYEWASH STATION.
 - INSTALL NEW FLOOR SINK AT NEW LOCATION OF SONIC IRRIGATOR.
 - INSTALL NEW HAND WASH SINK AND WALL MOUNTED EYEWASH STATION IN SOILED HOLD.
 - INSTALL NEW HAND WASH SINK IN STERILE STORAGE.
 - RELOCATE ULTRASONIC STERILIZER.
 - PHASE 2:
 - REMOVE STERILE DOOR AND PATCH OPENING.
 - PHASE 3:
 - DEMOLISH EXISTING HAND WASH SINK.
 - DEMOLISH WALL TO ACCOMMODATE NEW WASHER/DISINFECTOR.
 - SAWCUT FLOOR AND REPLACE WASTE PIPING WITH NEW 4" PIPING.
 - INSTALL NEW FLOOR SINK FOR NEW WASHER/DISINFECTOR.
 - PROVIDE ROUGH INS THROUGH CEILING FOR NEW WASHER/DISINFECTOR.
 - PHASE 4:
 - INSTALL NEW WASHER/DISINFECTOR.

Bear River Valley Hospital - Central Processing Equipment Addition & Relocation
905 N 1000 W, Tremonton, UT 84337
INTERMOUNTAIN HEALTHCARE
Construction Documents



DATE REVISION

PROJECT NUMBER 25029

MECHANICAL
PLANS

M101

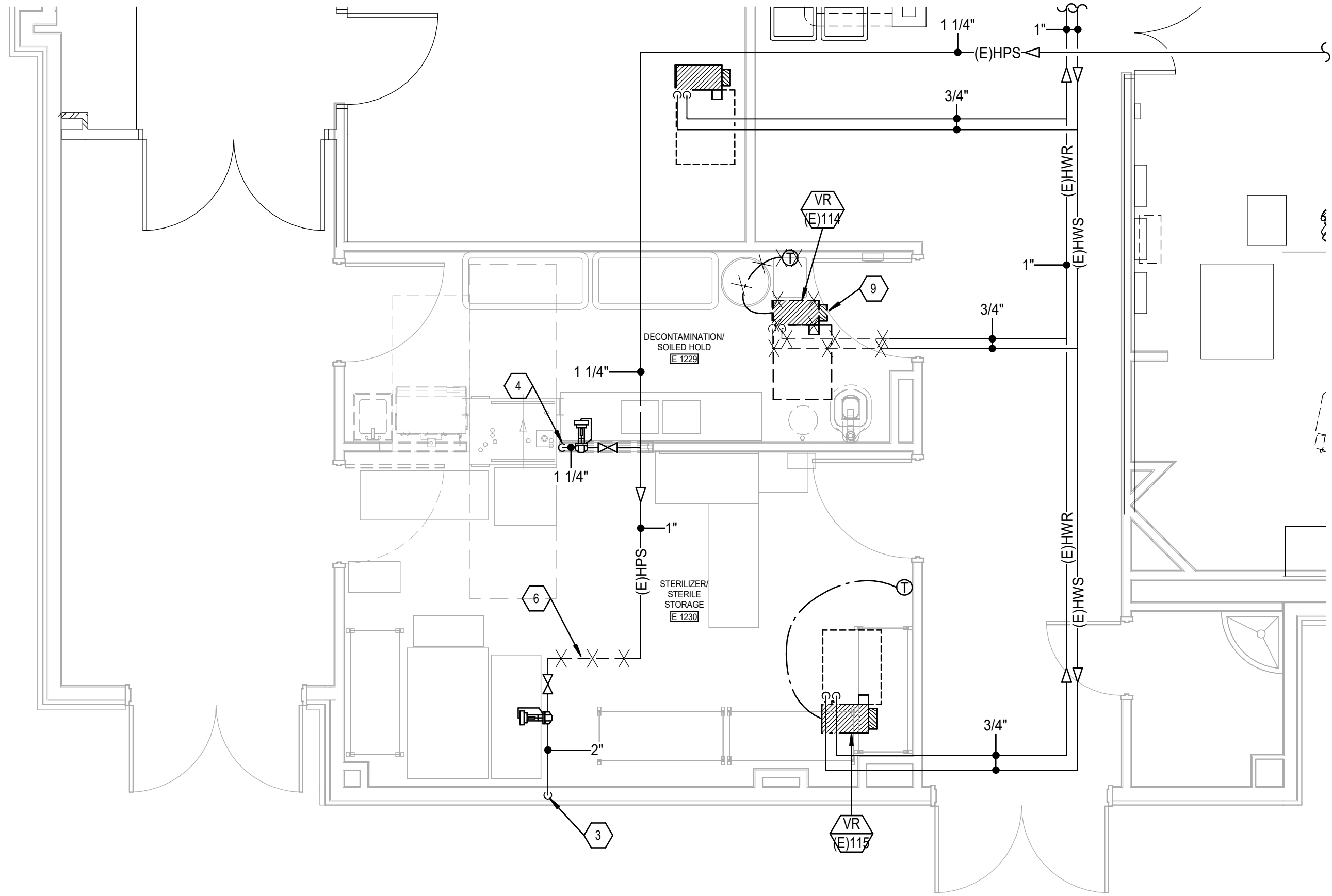


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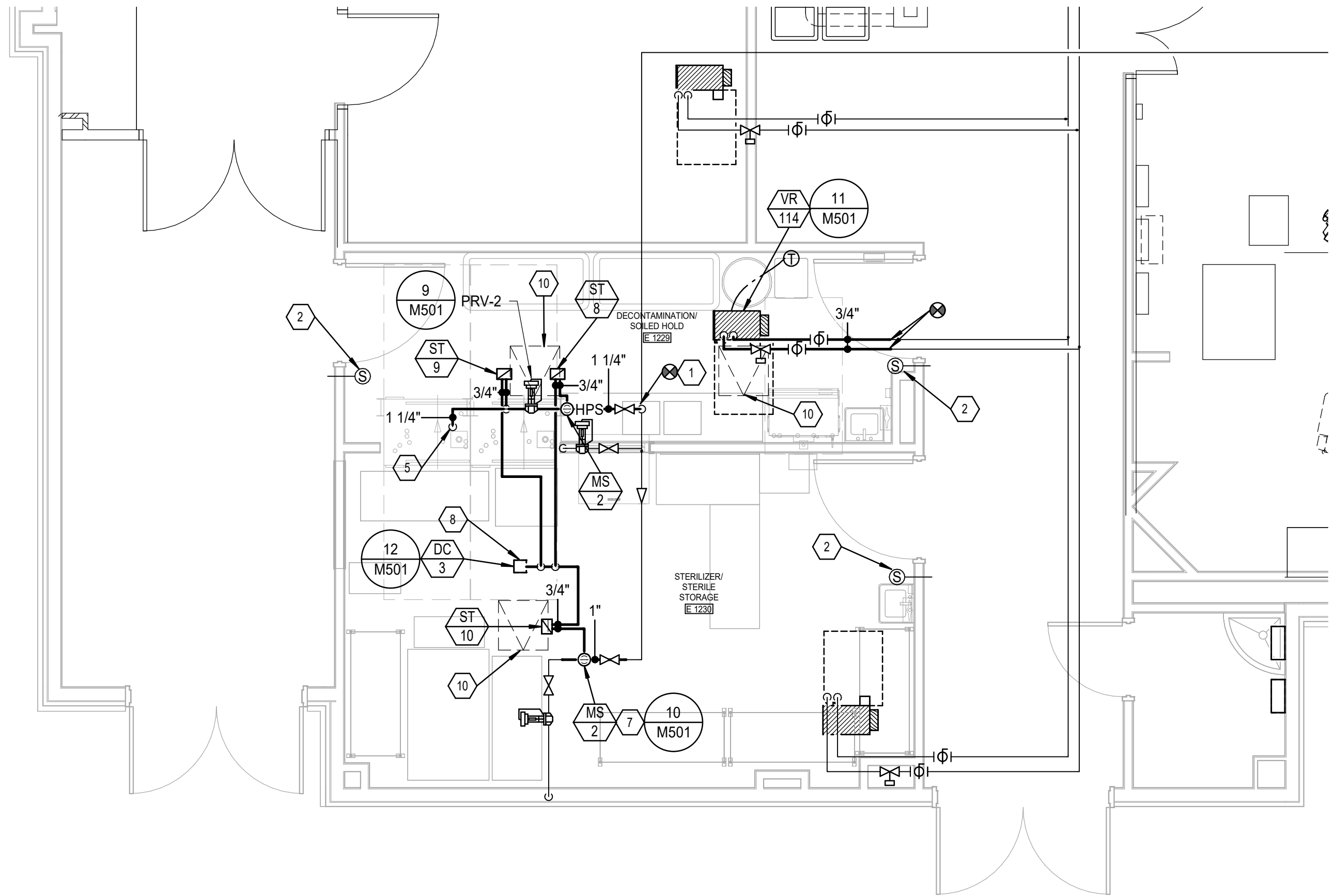
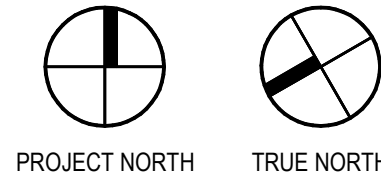
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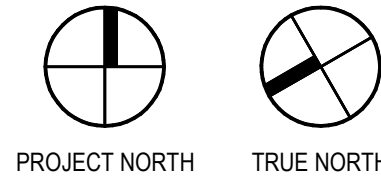
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1 CENTRAL PROCESSING MECHANICAL PIPING DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



2 CENTRAL PROCESSING MECHANICAL PIPING PLAN
SCALE: 1/4" = 1'-0"



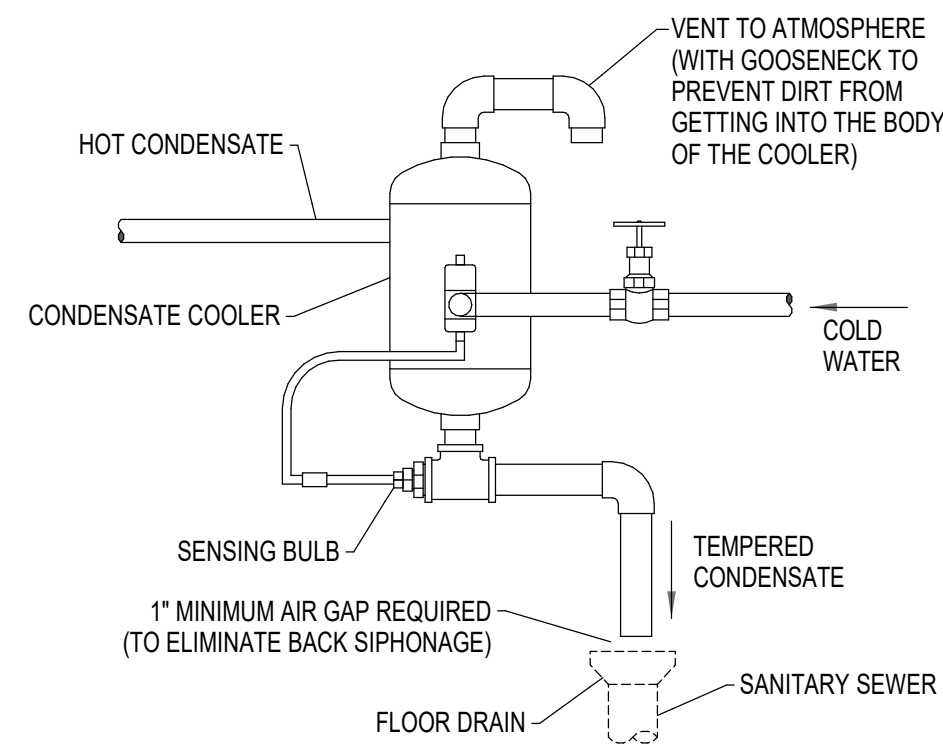
KEYED NOTES

1. NEW HIGH PRESSURE STEAM CONNECTION TO EXISTING PIPING MAIN. PROVIDE PRESSURE REGULATOR, MOISTURE SEPARATOR, STEAM FILTER, STEAM TRAPS, AND ISOLATION VALVES PER PIPING DETAIL. SYSTEM SHUTDOWN FOR TIE-IN TO OCCUR DURING NIGHT/WEEKEND. COORDINATE TIMING WITH OWNER.
2. NEW THROUGH THE WALL DIFFERENTIAL PRESSURE SENSOR WITH DIGITAL DISPLAY AND DOOR INTERLOCK SWITCH.
3. EXISTING 2" STEAM CONNECTION TO AMSCO 600 STERILIZER TO REMAIN. 310 LB/HR (PEAK); 50-80 PSIG STEAM.
4. EXISTING 1-1/4" STEAM CONNECTION TO RELIANCE VISION WASHER/DISINFECTOR TO REMAIN. 271 LB/HR @ 80 PSIG STEAM (PEAK FLOW).
5. NEW 1-1/4" STEAM CONNECTION TO STERIS AMSCO 7052HP WASHER/DISINFECTOR. 271 LB/HR @ 80 PSIG. LOCATE SHUTOFF VALVE ACCESSIBLE BELOW CEILING.
6. DEMOLISH EXISTING HIGH PRESSURE STEAM AND INSTALL NEW PIPING ACCESSORIES AS SHOWN ON NEW PLAN.
7. INSTALL NEW ISOLATION VALVE, STEAM MOISTURE SEPARATOR, AND STEAM TRAP FOR PIPING SERVING EXISTING STERILIZER. INSULATE PIPING AND VALVES.
8. CONNECT STEAM CONDENSATE PIPING TO DRAIN COOLER IN CEILING. SEE PLUMBING PLAN FOR DOMESTIC WATER AND DRAIN PIPING CONNECTIONS.
9. DEMOLISH AND REPLACE EXISTING VAV BOX. REPLACE EXISTING HOT WATER ISOLATION VALVES, CONTROL VALVE, CIRCUIT SETTER, THERMOSTAT, AND CONTROLS.
10. CEILING ACCESS DOOR. COORDINATE EXACT LOCATION AND SIZING WITH ARCHITECTURAL RCP.

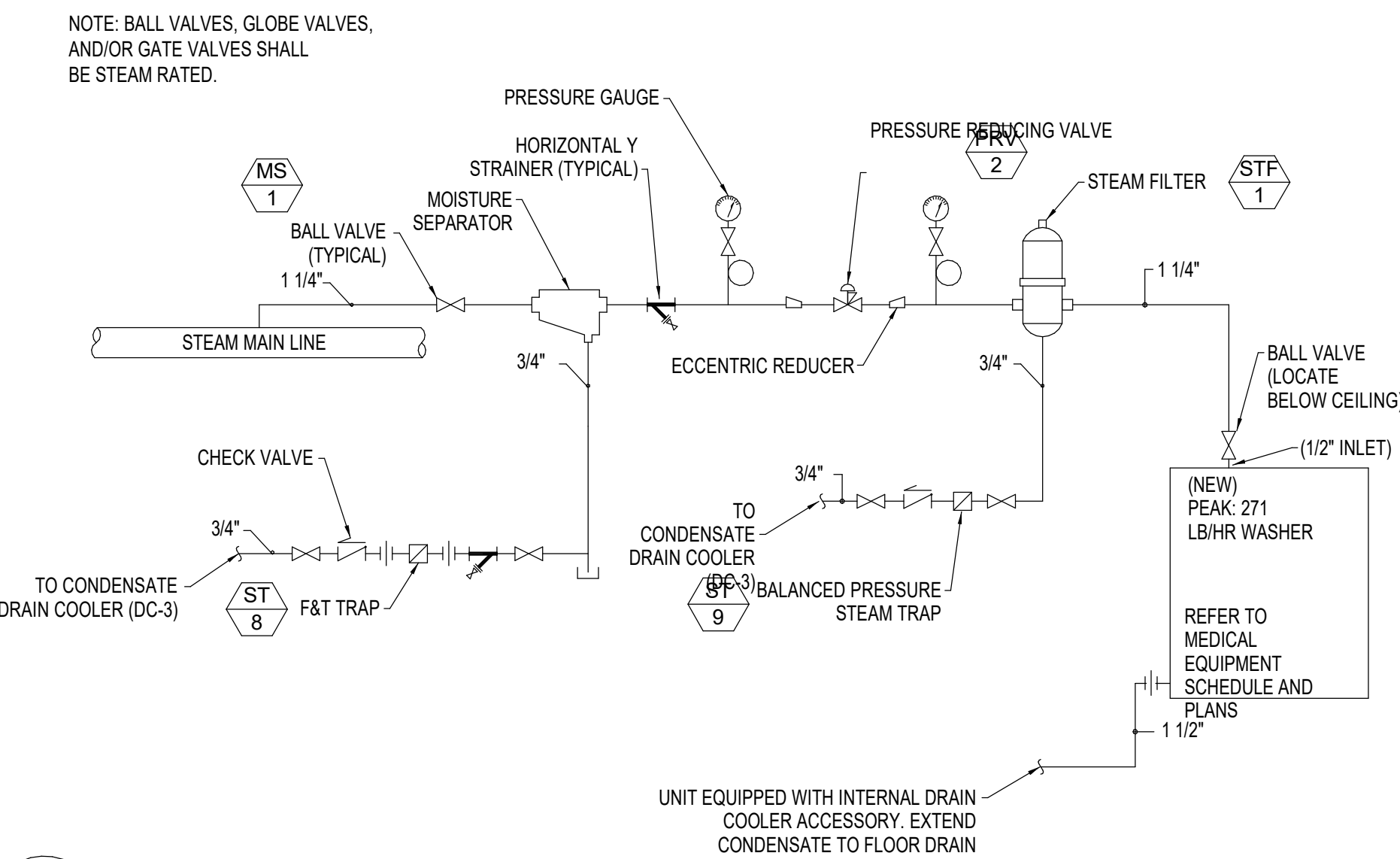
PHASING NOTES

1. CENTRAL PROCESSING MUST REMAIN ACTIVE DURING CONSTRUCTION.
2. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER TO ENSURE THAT STERILIZING WORK WILL NOT BE RESTRICTED.
3. SHUT DOWNS MUST BE COORDINATED WITH OWNER AND PERFORMED DURING OFF HOURS (WEEKEND OR NIGHT TIME).
4. CONTRACTOR IS RESPONSIBLE TO COORDINATE THE CONSTRUCTION OF ICRA BARRIERS TO PREVENT DUST/DEBRIS TRANSMISSION BETWEEN CONSTRUCTION AREA AND AREA OF ACTIVE STERILIZATION WORK AND TO MAINTAIN REQUIRED PRESSURIZATION.
5. CONSTRUCTION SHALL BE PERFORMED IN THE FOLLOWING PHASES (SEE ARCHITECTURAL PLANS FOR MORE INFORMATION AND COORDINATE CONSTRUCTION PLAN PRIOR TO BEGINNING WORK):
 - A. PHASE 1:
 - a. DEMOLISH CLINICAL SERVICE SINK AND EYEWASH STATION.
 - b. INSTALL NEW FLOOR SINK AT NEW LOCATION OF SONIC IRRIGATOR.
 - c. INSTALL NEW HAND WASH SINK AND WALL MOUNTED EYEWASH STATION IN SOILED HOLD.
 - d. INSTALL NEW HAND WASH SINK IN STERILE STORAGE.
 - e. RELOCATE ULTRASONIC STERILIZER.
 - B. PHASE 2:
 - a. REMOVE STERILE DOOR AND PATCH OPENING.
 - C. PHASE 3:
 - a. DEMOLISH EXISTING HAND WASH SINK.
 - b. DEMOLISH WALL TO ACCOMMODATE NEW WASHER/DISINFECTOR.
 - c. SAWCUT FLOOR AND REPLACE WASTE PIPING WITH NEW 4" PIPING.
 - d. INSTALL NEW FLOOR SINK FOR NEW WASHER/DISINFECTOR.
 - e. PROVIDE ROUGH INS THROUGH CEILING FOR NEW WASHER/DISINFECTOR.
 - D. PHASE 4:
 - a. INSTALL NEW WASHER/DISINFECTOR.

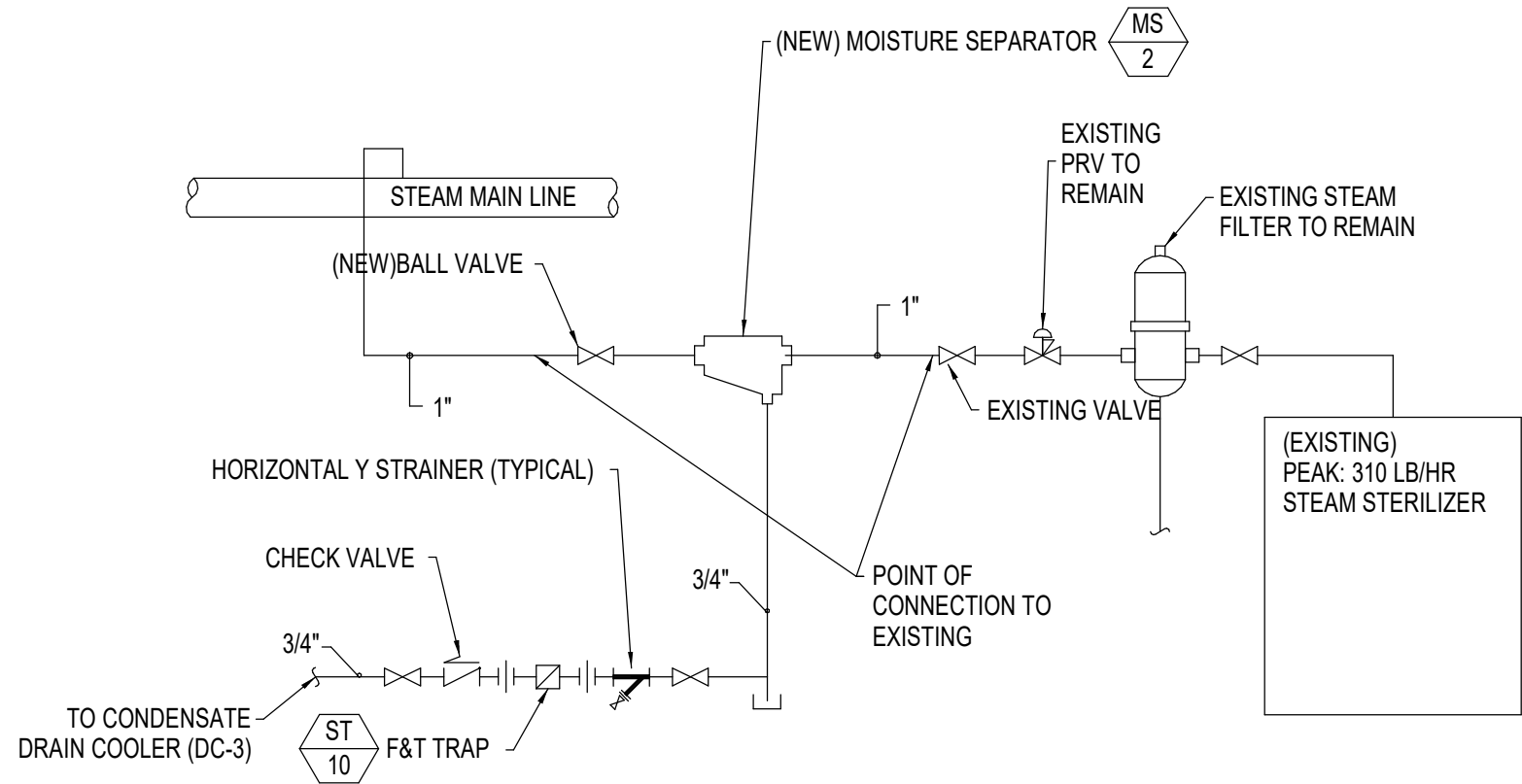
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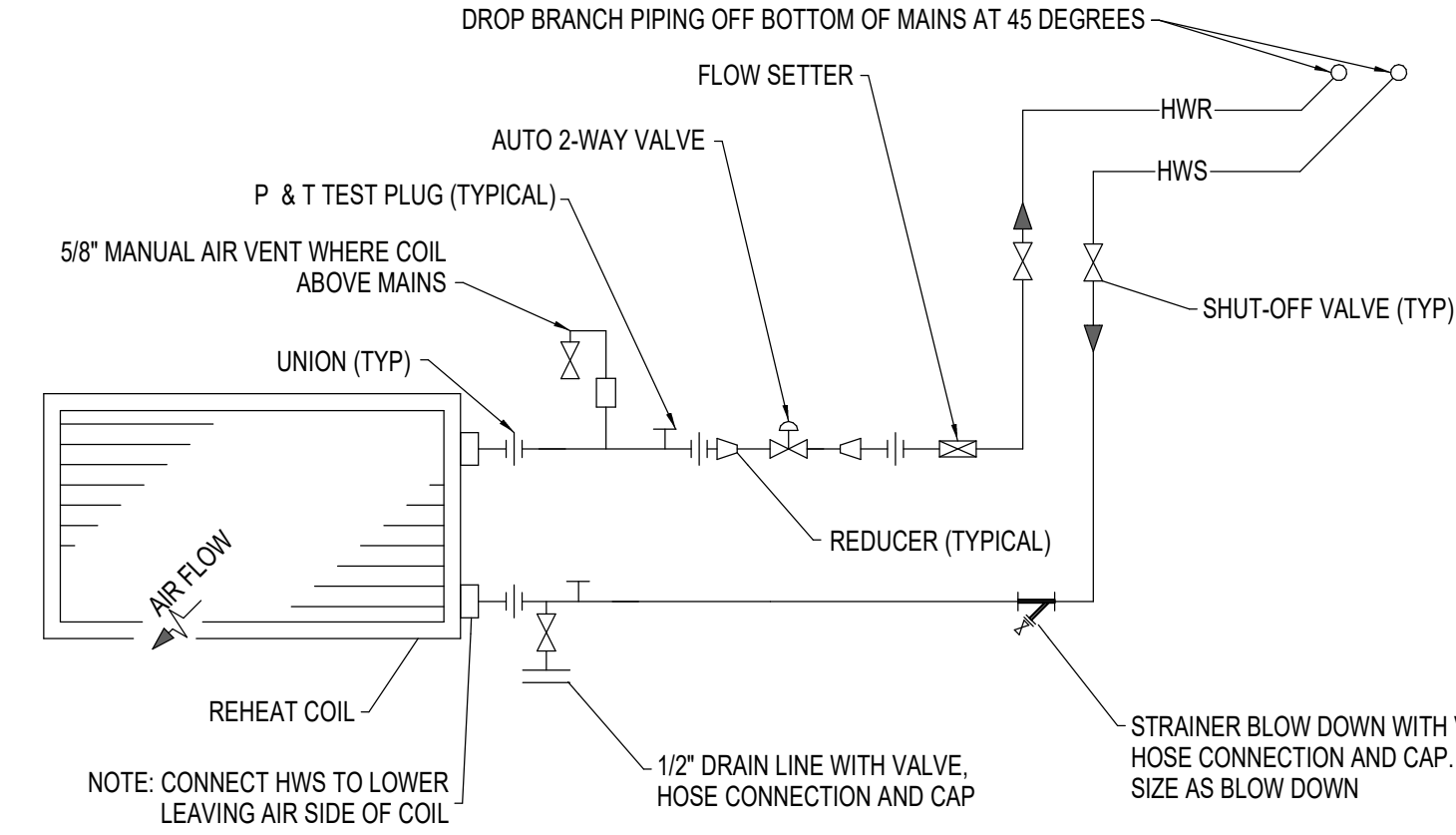
12 CONDENSATE COOLER DETAIL
NO SCALE



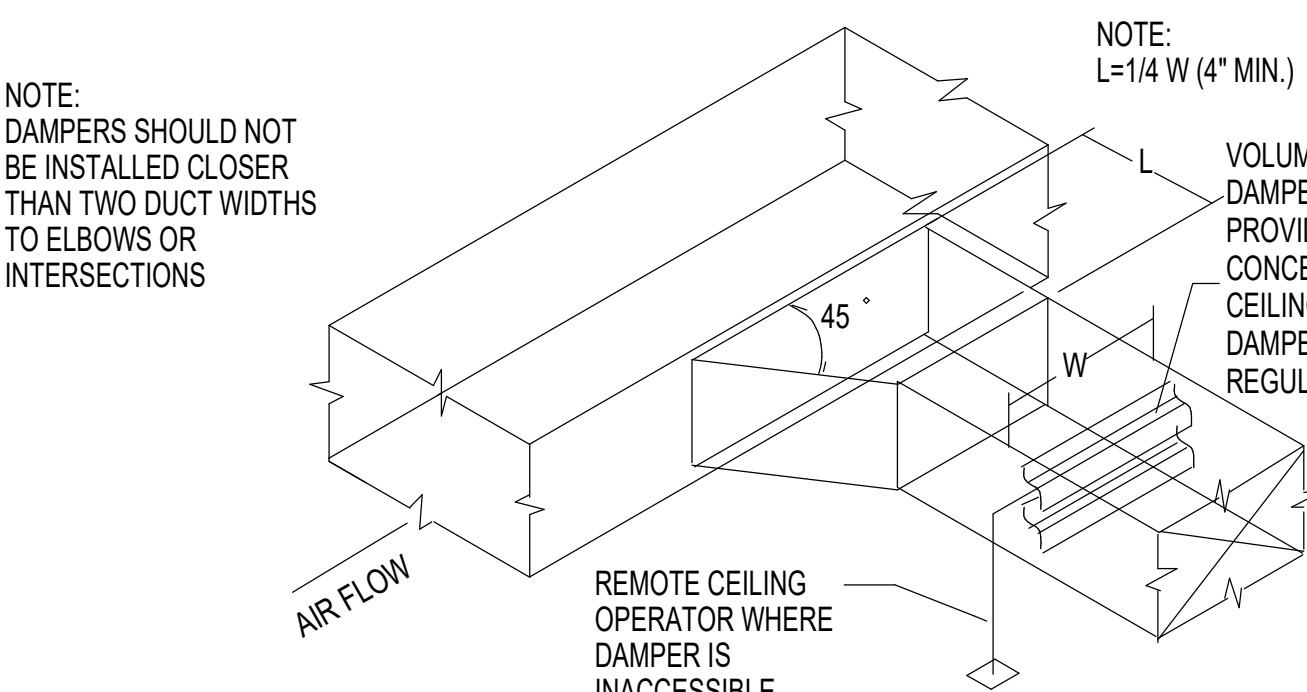
9 WASHER STEAM FITTING DETAIL
NO SCALE



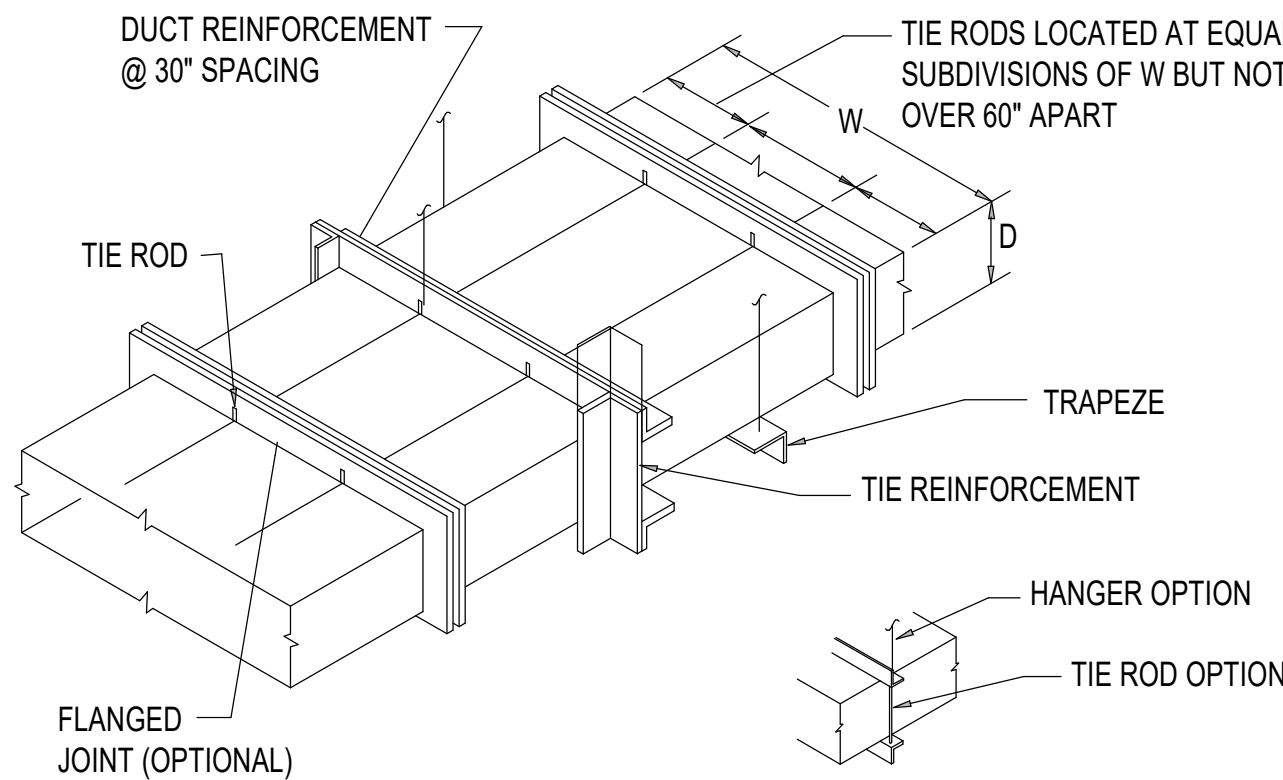
10 EXISTING STERILIZER STEAM FITTING DETAIL
NO SCALE



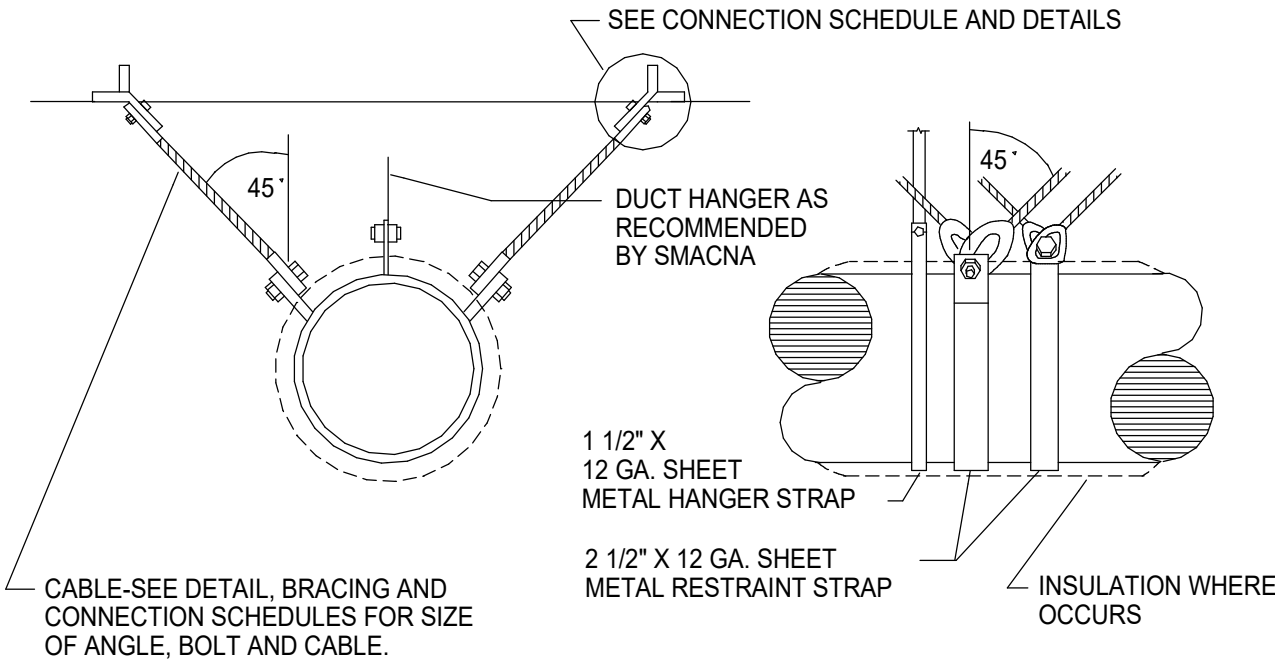
11 VAV/CV BOX PIPING DETAIL WITH 2-WAY AUTO-VALVE
NO SCALE



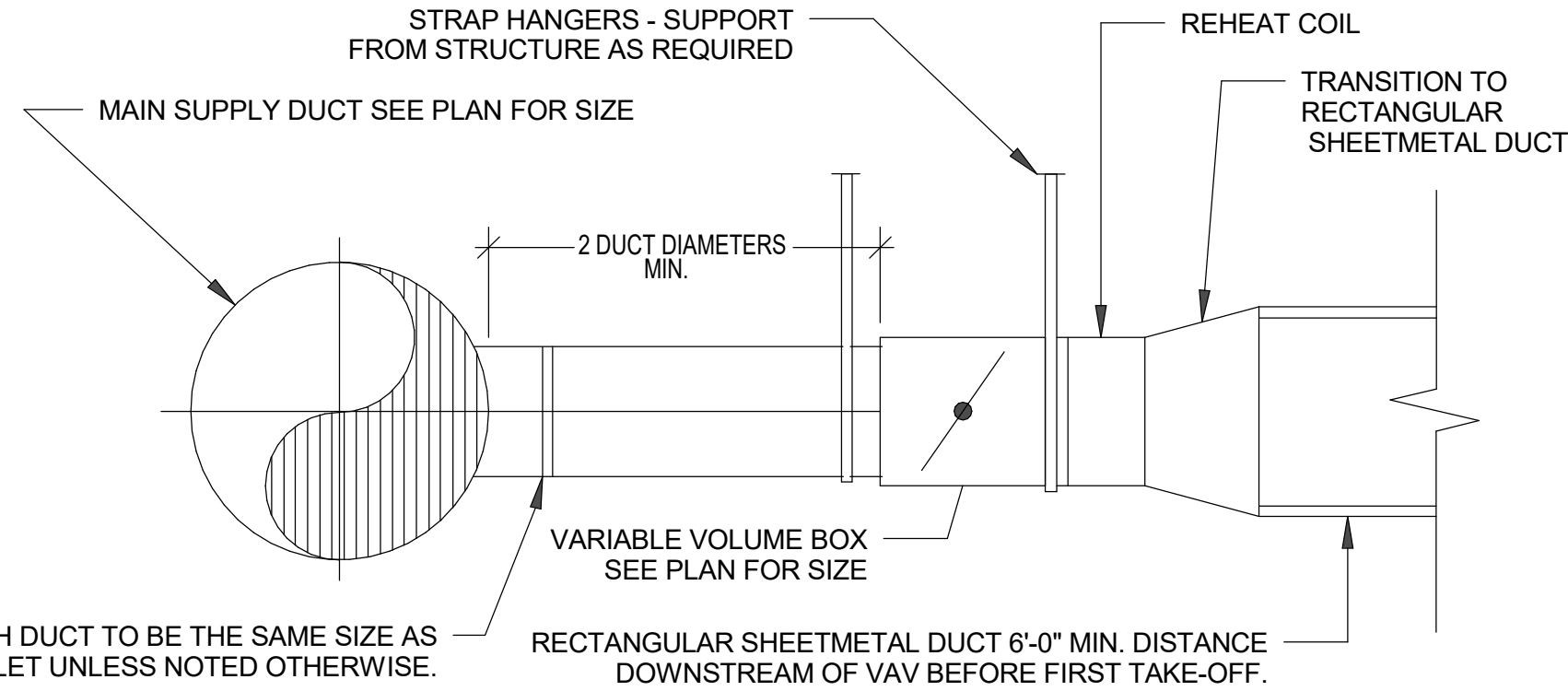
5 BRANCH DUCT TAKE-OFF & DAMPER
NO SCALE



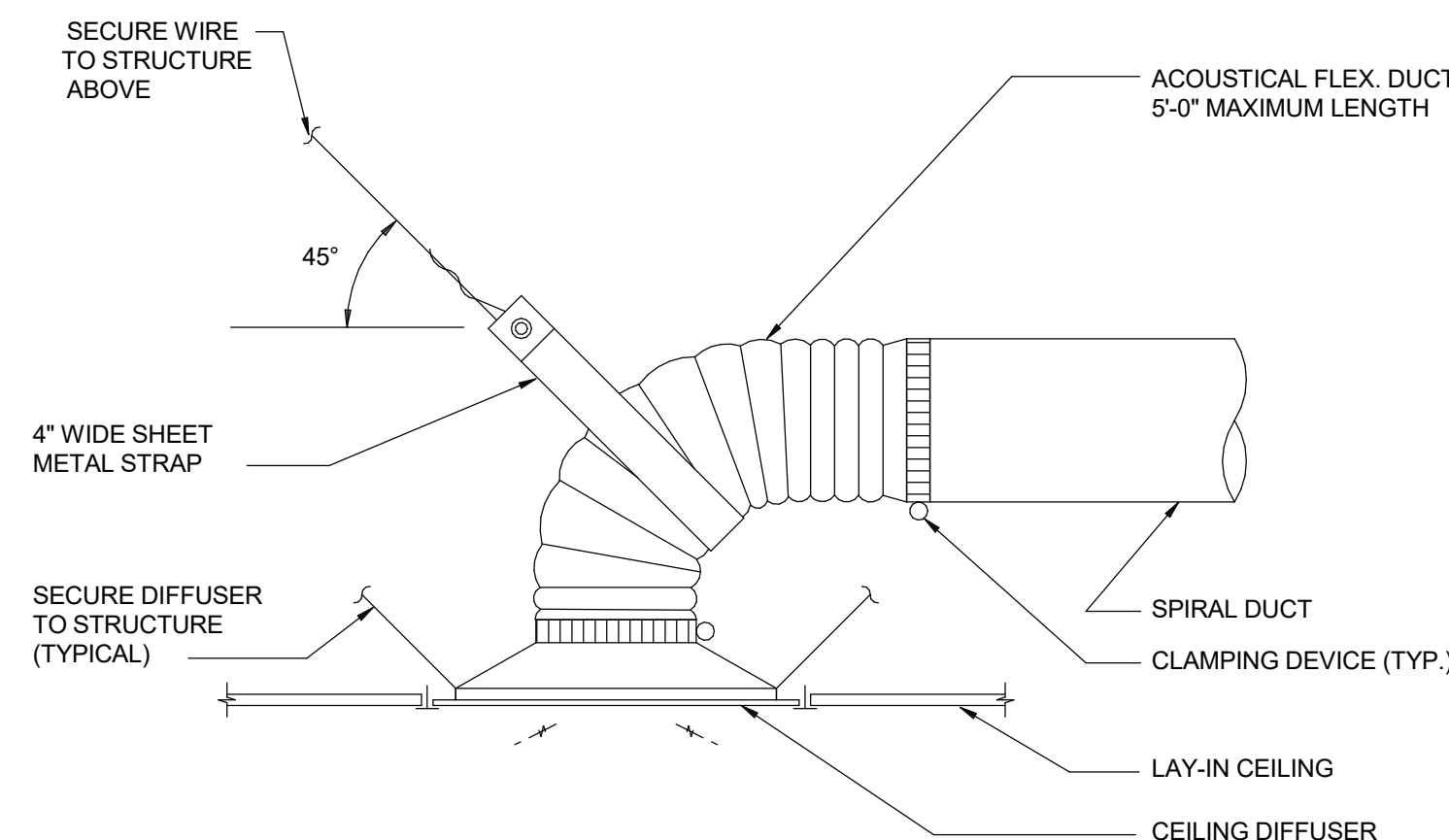
6 DUCT REINFORCEMENT DETAIL
NO SCALE



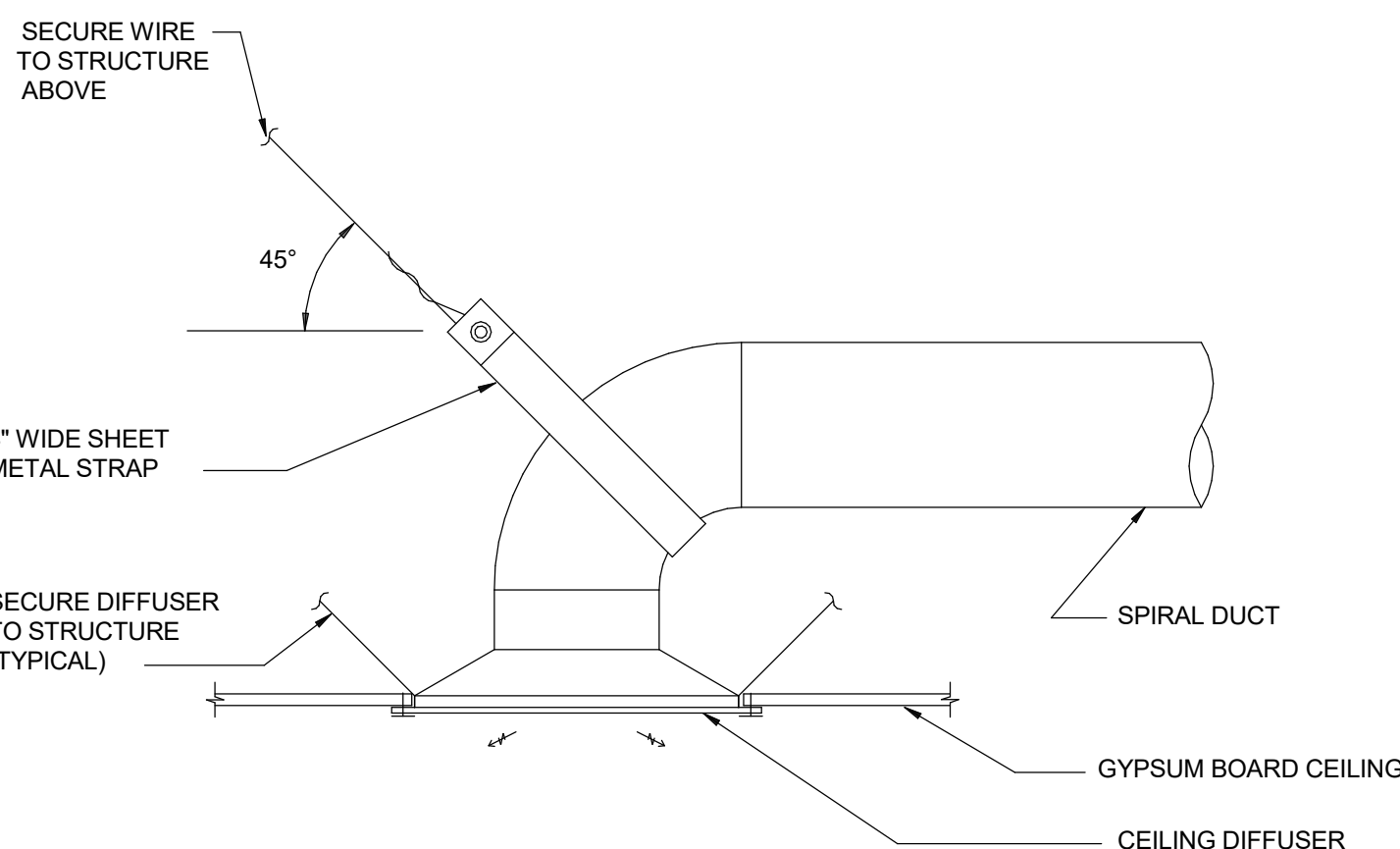
7 CABLE BRACING FOR ROUND AND OVAL DUCTS
NO SCALE



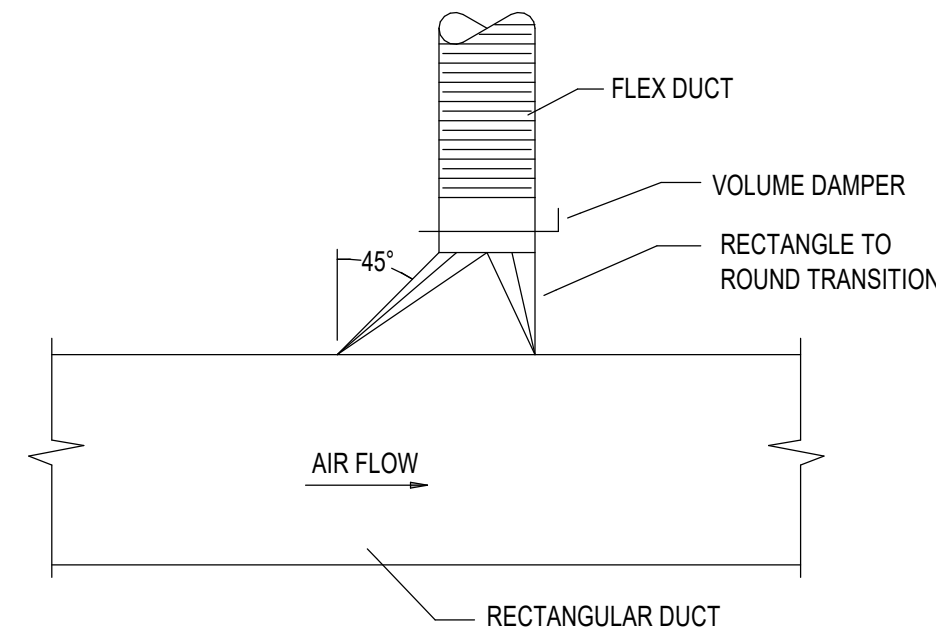
8 VARIABLE VOLUME BOX DETAIL
NO SCALE



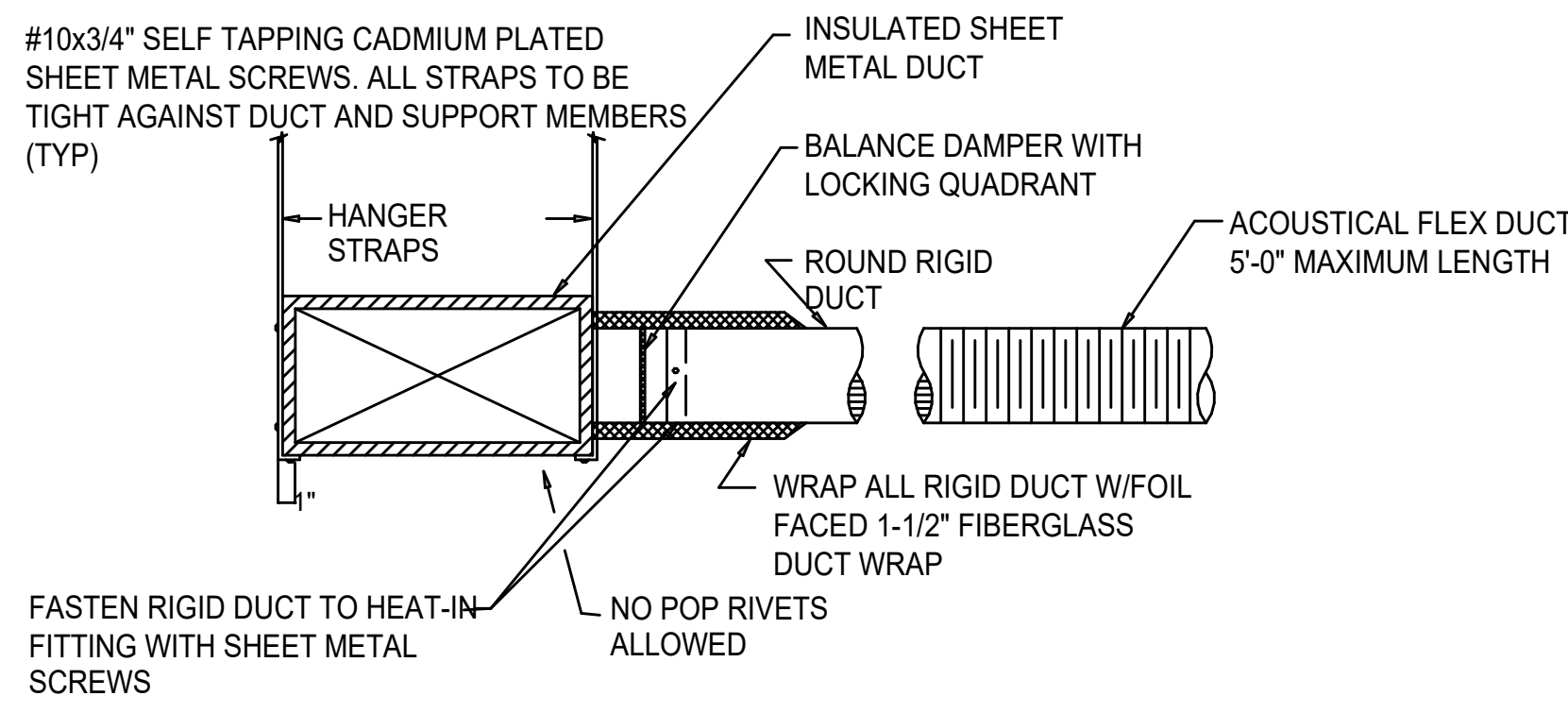
1 DIFFUSER/GRILLE (LAY-IN CEILING) CONNECTION DETAIL
NO SCALE



2 DIFFUSER/GRILLE (GYPSUM BOARD CEILING) CONNECTION DETAIL
NO SCALE



3 HIGH EFFICIENCY TAKE-OFF DETAIL
NO SCALE



4 FLEX DUCT / HIGH EFFICIENCY TAKEOFF FITTING
NO SCALE

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CONDENSATE COOLER SCHEDULE					
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	CAPACITY @ 180 DEG F CONDENSATE TEMP (GPM)	TEMPERED WATER DISCHARGE (DEG F)	NOTES
DC-3	ARMSTRONG CC-5	STERILE STORAGE E1230	5	135.0	(1)

(1) CAPACITY IS BASED ON COMBINED CONDENSATE & COOLING WATER

GRILLES, REGISTERS, DIFFUSERS, LOUVERS					
ID	MANUFACTURER	MODEL	SIZE	MAX CFM	MAX NC
CD-1	EH PRICE	SPD	6" DIA	110	30
			8" DIA	235	
			10" DIA	420	
			12" DIA	600	
			14" DIA	800	
RG-1 / EG-1	EH PRICE	PDDR	6" DIA	100	30
			8" DIA	210	
			10" DIA	380	
			12" DIA	600	
			14" DIA	750	

STEAM MOISTURE SEPARATOR SCHEDULE							
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	SERVICE	BODY CONSTRUCTION	STEAM DESIGN FLOW RATE (LB/H)	DESIGN STEAM PRESSURE (PSIG)	PHYSICAL CONNECT SIZE (IN)
MS-1	ARMSTRONG DS-1	DECONSOILED HOLD E1229	WASHER/INFECTOR	DUCTILE IRON	271	110	1-1/4
MS-2	ARMSTRONG DS-1	STERILE STORAGE E1230	STERILIZER	DUCTILE IRON	310	110	1

STEAM TRAP SCHEDULE								
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	SERVICE	TYPE	CAPACITY (LB/H)	PRESSURE DROP (PSI)	SYSTEM PRESSURE (PSI)	SIZE (IN)
ST-8	ARMSTRONG 175-A	DECONSOILED HOLD E1229	MOISTURE SEPARATOR (MS-1)	FLOAT & THERMOSTATIC	350	10	110	3/4
ST-9	ARMSTRONG 811	DECONSOILED HOLD E1229	STEAM FILTER (STF-1)	INVERTED BUCKET	350	10	80	3/4
ST-10	ARMSTRONG 175-A	STERILE STORAGE E1230	MOISTURE SEPARATOR (MS-2)	FLOAT & THERMOSTATIC	350	10	110	3/4

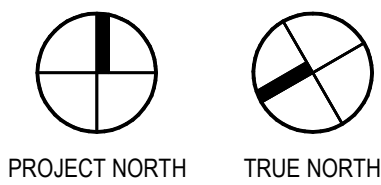
STEAM PRESSURE-REDUCING VALVE SCHEDULE							
ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	BODY CONSTRUCTION	STEAM FLOW RATE (LB/H)	INLET/OUTLET PRESSURE (PSIG)	PHYSICAL CONNECT SIZE (IN)
PRV-2	ARMSTRONG GD-30	DECONSOILED HOLD E1229	DIRECT ACTING	CAST BRONZE	271	110/80	1

VAV BOX SCHEDULE												
ID	MANUFACTURER AND MODEL NUMBER	AREA SERVED	INLET SIZE (IN)	AIR				LEAVING AIR TEMP. DB (DEG F)	FLUID (3)			REMARKS
				COOLING MAXIMUM AIR (CFM)	HEATING MAXIMUM AIR (CFM)	MINIMUM AIR (CFM)			NC LEVEL @ 1" S.P. AIR	HEAT LOAD (MBH)	TOTAL FLUID FLOW (GPM)	
VR-114	PRICE SDV	DECONSOIL HOLD	10	600	600	600	90	21	19.3	2.0	WATER	(2)(3)(4)
EV/R-115	EXISTING	STERILIZER/STERILE STORAGE	10	1000	1000	1000	90	21	32.2	2.0	WATER	(1)

(1) EXISTING VAV BOX TO REMAIN. PERFORMANCE CRITERIA INCLUDED FOR BALANCING PURPOSES.
(2) ENTERING AIR AT 55 DEG. F. @ 4,500 FEET ELEVATION.
(3) GPM BASED ON 180 DEG. F. ENTERING WATER TEMPERATURE; 160 DEG. F. LEAVING WATER TEMPERATURE.
(4) COIL MAXIMUM WATER P.D. AT 5.0 FT HD; MAXIMUM TOTAL AIR P.D. FOR THE BOX & COIL IS 0.75 IN. W.G.

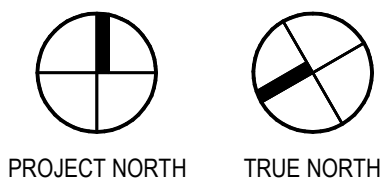


SCALE: 1/4" = 1'-0"



2

SCALE: 1/4" = 1'-0"



- ## PHASING NOTES

-

5/23/2025 11:23:37 AM

A B C D E

1 2 3 4 5 6

#

KEYED NOTES

1.

PROVIDE NEW 1/2" INSTRUMENT AIR CONNECTION TO WASHER.

1

CENTRAL PROCESSING MED GAS DEMOLITION PLAN

SCALE: 1/4" = 1'-0"

PROJECT NORTH

TRUE NORTH

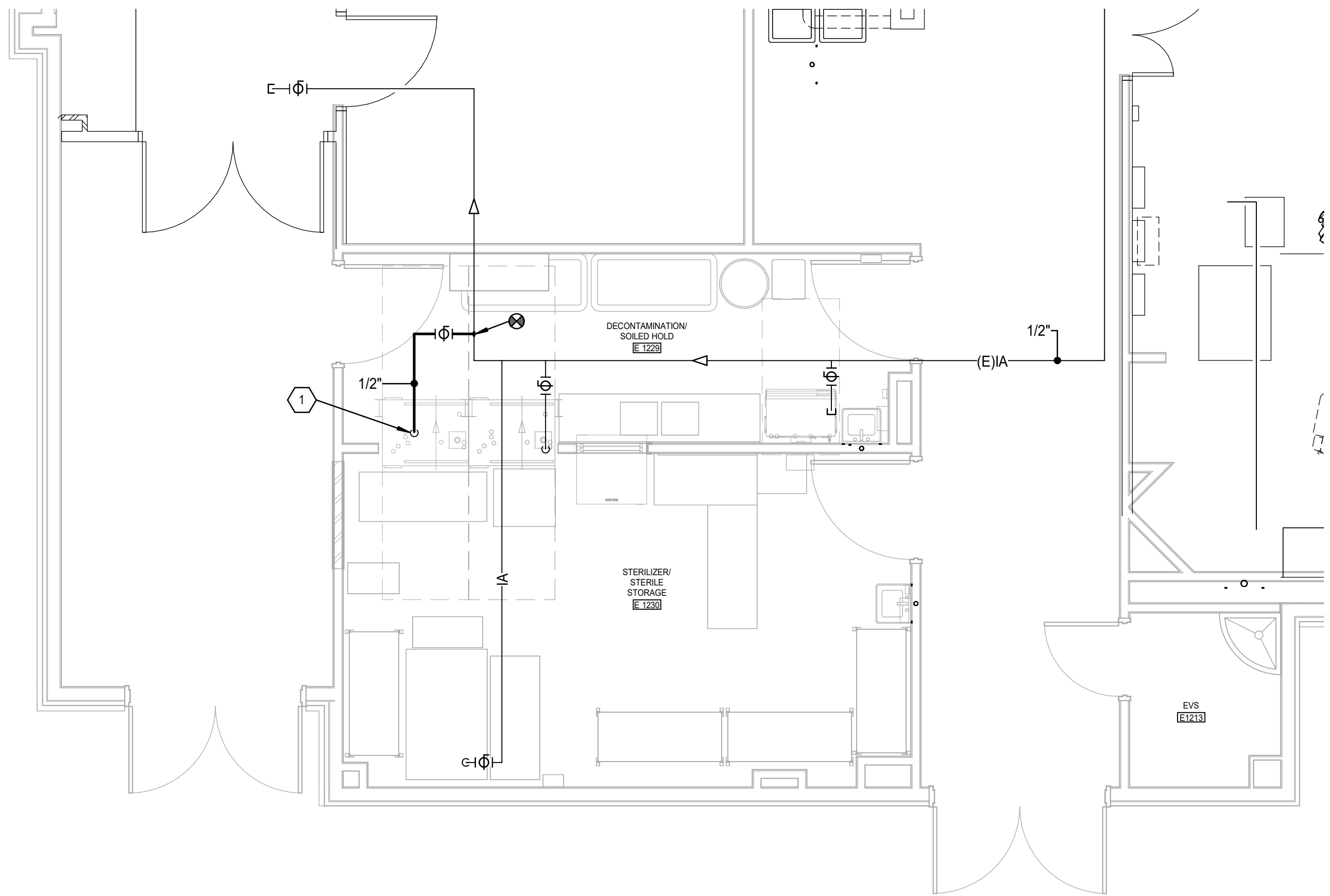
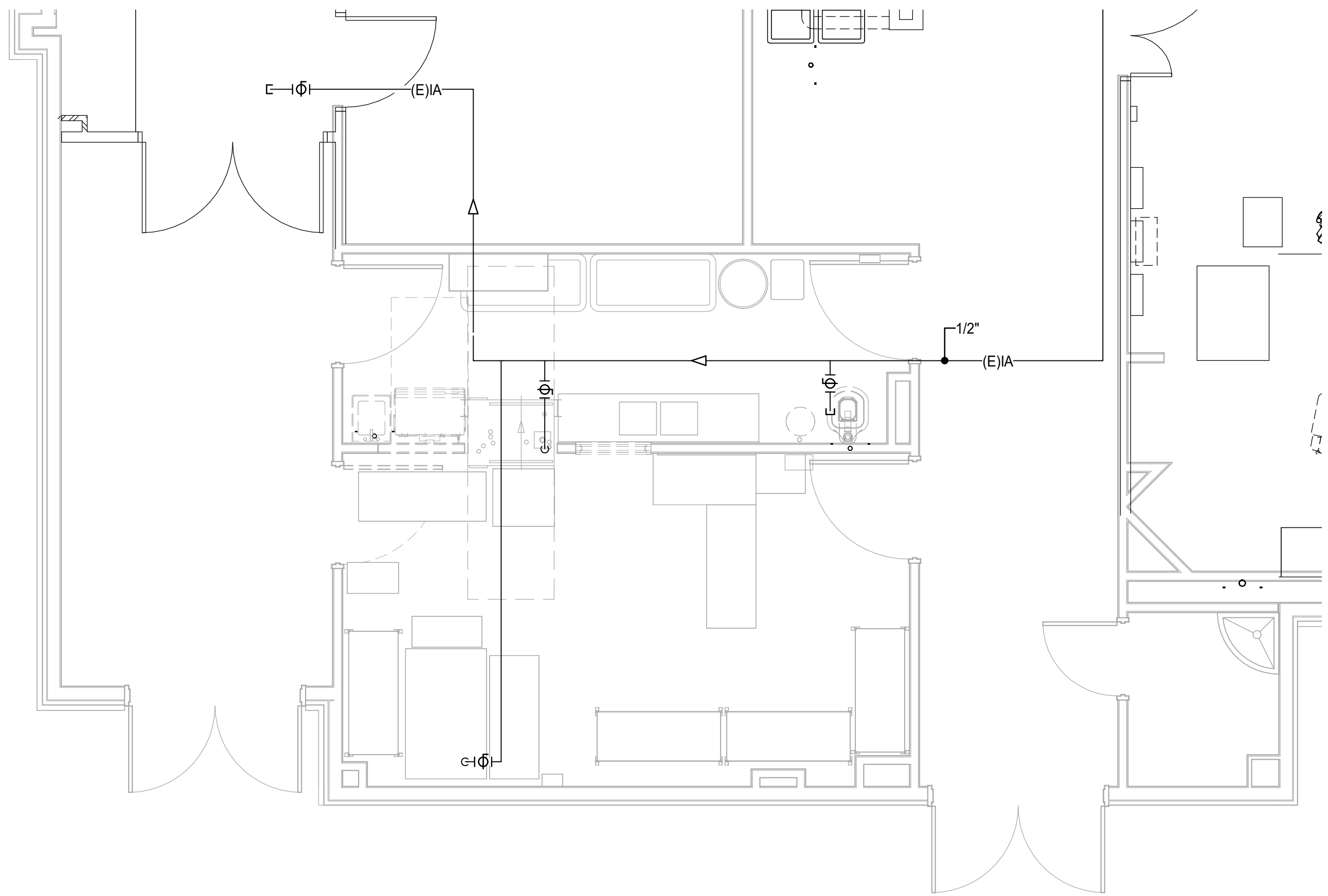
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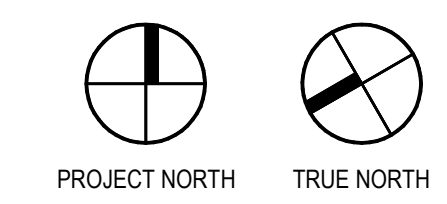
CENTRAL PROCESSING MED GAS PLAN

SCALE: 1/4" = 1'-0"

PROJECT NORTH

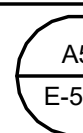







































TRUE NORTH


























































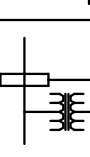
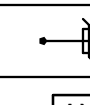




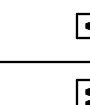
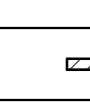

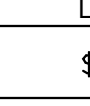

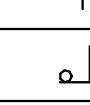
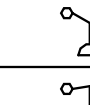

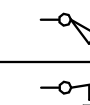
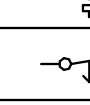
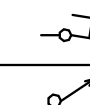
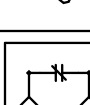






SCALE: 1/4" = 1'-0"

1. REMOVE AND REPLACE FIRE SPRINKLERS HEADS IN AREA OF REMODEL. ALL SPRINKLERS TO BE CONCEALED HEAD QUICK RESPONSE TYPE. SEE ARCHITECTURAL PLANS FOR CEILING HEIGHT AND TYPE. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND RELOCATE FIRE SPRINKLER PIPING AS NECESSARY TO ALLOW INSTALLATION OF ALL OTHER TRADES.
2. FIRE SPRINKLERS SHALL BE INSTALLED TO MEET NFPA

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
REFERENCE AND LINE SYMBOLS	
	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501 INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
	ELEVATION OR SECTION INDICATOR, EXTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
	ELEVATION OR SECTION INDICATOR, INTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
	ROOM IDENTIFIER WITH ROOM NAME AND NUMBER.
	KEYNOTE INDICATOR.
	REVISION INDICATOR.
	EQUIPMENT INDICATOR.
	MECHANICAL EQUIPMENT INDICATOR: "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "XMDP" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING
	BREAK, ROUND
	MATCH LINE INDICATOR: CENTER, EXTRA WIDE LINE.
	NEW LINE: MEDIUM LINE.
	HIDDEN FEATURES LINE: HIDDEN, THIN LINE
	EXISTING TO REMAIN LINE: THIN LINE.
	DEMOLITION LINE: DASHED, MEDIUM LINE.
	PROPERTY LINE: DASHED, WIDE LINE.
	CONTRACT LIMIT LINE: DASHDOT, WIDE LINE.
	ELECTRICAL EQUIPMENT INDICATOR: "XXX" INDICATES TYPE OF EQUIPMENT OR EQUIPMENT ID. "EF-X" IDENTIFIES MECHANICAL EQUIPMENT BEING SERVED. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
	EQUIPMENT INDICATOR: "X-X" INDICATES EQUIPMENT MARK SHOWN ON EQUIPMENT SCHEDULE. "ILA-3" IDENTIFIES PANEL EQUIPMENT IS CIRCUITED TO. REFER TO EQUIPMENT SCHEDULE FOR ADDITIONAL INFORMATION.
	IN-GRADE PULLBOX INDICATOR: "XXXET" INDICATES LABEL SHOWN ON SCHEDULE. "IF" IDENTIFIES SEQUENCE NUMBER SHOWN ON SITE AND RISER DIAGRAM. REFER TO PLANS AND EXTERIOR PULLBOX SCHEDULE FOR ADDITIONAL INFORMATION.
WIRING METHODS	
	WIRING.
	WIRING TURNED UP OR TOWARDS OBSERVER.
	WIRING TURNED DOWN OR AWAY FROM OBSERVER.
	SINGLE BRANCH CIRCUIT HOME RUN TO PANELBOARD WITH DEDICATED NEUTRAL CONDUCTOR. LETTER AND NUMBER NOTATION IDENTIFY PANEL AND CIRCUIT NUMBER.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. NUMBER IN BOX REFERS TO THE CONDUCTOR AND CONDUIT SCHEDULE.
	LOW VOLTAGE WIRING: DIVIDE. MEDIUM LINE.
	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER TO ONE-LINE DIAGRAM.
	ADA ACCESS PUSH PLATE
	JUNCTION BOX.
	JUNCTION BOX, CEILING.
	JUNCTION BOX, SYSTEMS FURNITURE COMMUNICATION CONNECTION.
	JUNCTION BOX, SYSTEMS FURNITURE POWER CONNECTION.
	PULL BOX.
	CABLE TRAY ABOVE ACCESSIBLE CEILING "A" DENOTES CABLE TRAY WIDTH, "B" DENOTES CABLETRAY DEPTH. +/C-D" DENOTES CABLE TRAY ELEVATION ABOVE OR BELOW FINISHED SURFACE.
	LADDER RACK.
	CABLE J-HOOKS ABOVE ACCESSIBLE CEILING.
	MECHANICAL EQUIPMENT CONNECTION. REFER TO EQUIPMENT SCHEDULE FOR REQUIREMENTS.
	ELECTRIC VEHICLE CHARGING STATION.
	GROUND BUSBAR. REFER TO GROUNDING RISER DIAGRAM FOR ADDITIONAL INFORMATION.

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
WIRING DEVICES	
	RECEPTACLE, SINGLE: NEMA 5-20R.
	RECEPTACLE, DUPLEX: NEMA 5-20R.
	RECEPTACLE, DUPLEX, ABOVE COUNTER: NEMA 5-20R.
	RECEPTACLE, DUPLEX, CEILING: NEMA 5-20R.
	RECEPTACLE, DUPLEX, DEDICATED CIRCUIT: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, DRINKING FOUNTAIN: CONCEAL WATER COOLER RECEPTACLE BEHIND WATER COOLER: SEE MECHANICAL PLUMBING SHOP DRAWINGS FOR INSTALLATION REQUIREMENTS.
	RECEPTACLE, DUPLEX, ISOLATED GROUND: NEMA 5-20R.
	RECEPTACLE, DUPLEX, SWITCHED: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WET LABEL, WEATHERPROOF IN USE: NEMA 5-20R.
	RECEPTACLE, DUPLEX, HOSPITAL GRADE: NEMA 5-20R.
	RECEPTACLE, DUPLEX ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, DUPLEX, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, DUPLEX, CONNECTED TO UPS: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, WEATHERPROOF: NEMA 5-20R.
	RECEPTACLE, DUPLEX, RECESSED: NEMA 5-20R.
	RECEPTACLE, DUPLEX, SWITCHED, RECESSED: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX, HOSPITAL GRADE: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX, CONNECTED TO UPS: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER: NEMA 5-20R.
	RECEPTACLE, SPECIAL PURPOSE. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
	RECEPTACLE, SPECIAL PURPOSE ON EMERGENCY POWER. PROVIDE RECEPTACLE TO MATCH EQUIPMENT PLUG.
	RECEPTACLE, DRYER: NEMA 14-30R.
	RECEPTACLE, RANGE: NEMA 14-50R.
	MULTI-OUTLET ASSEMBLY: NEMA 5-20R.
	DROP CORD. SEE DETAIL.
	THERMOSTAT.
	FLUSH FLOOR BOX. "IF" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
	POWER POLE. "IF" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
	FLUSH FIRE RATED POKE THRU. "IF" SHOWN ON DRAWINGS. REFER TO WIRING DEVICE SCHEDULE IN THE ELECTRICAL SPECIFICATIONS FOR CONFIGURATION AND DEVICES.
	SWITCH, DIMMER.
	SWITCH, SINGLE POLE ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, DOUBLE POLE ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, THREE-WAY ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, FOUR-WAY ("X" INDICATES FIXTURES CONTROLLED).
	SWITCH, DOOR.
	SWITCH, KEY OPERATED.
	SWITCH, PILOT LIGHT.
	SWITCH, TIMER OPERATED.
	SWITCH, WEATHERPROOF.
	RECEPTACLE, DUPLEX, TAMPER RESISTANT: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE: NEMA 5-20R.
	RECEPTACLE, QUADRAPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, HOSPITAL GRADE ON EMERGENCY POWER: NEMA 5-20R.
	RECEPTACLE, DUPLEX WITH GROUND FAULT CIRCUIT INTERRUPTER, CONNECTED TO UPS: NEMA 5-20R.
	RECEPTACLE, DUPLEX, WITH USB OUTLET
	RECEPTACLE, DUPLEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)
	RECEPTACLE, QUADRAPLEX, RECESSED, NEMA 5-20R, AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)
	INDICATES A RECEPTACLE IS AUTOMATICALLY CONTROLLED THROUGH TIME OR OCCUPANCY BASED CONTROLS (REFER TO PLANS FOR CONTROL METHOD)

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
SITE ELECTRICAL AND COMMUNICATIONS UTILITIES	
	ELECTRIC LINE: THIN LINE. 1Ø = SINGLE PHASE, 2Ø = 2-PHASE, 3Ø = 3-PHASE, Ø = OVERHEAD, U = UNDERGROUND, P = PRIMARY, S = SECONDARY
	LIGHTNING ARRESTOR.
	UTILITY POLE.
	UTILITY, DISTRIBUTION SWITCH OR SWITCHING STATION.
	UTILITY, PRIMARY ELECTRICAL HAND HOLE.
	UTILITY SERVICES, MANHOLE.
	UTILITY, COMMUNICATIONS MANHOLE.
	UTILITY, ELECTRICAL MANHOLE.
	UTILITY, TELEPHONE MANHOLE.
	PRECAST CONCRETE, COMMUNICATION VAULT.
	PRECAST CONCRETE, ELECTRICAL VAULT.
	PRECAST CONCRETE, TELEPHONE VAULT.
	PRECAST CONCRETE, MANHOLE VAULT.
	PRECAST CONCRETE, TRANSFORMER PAD.
	IN-GRADE PULLBOX, HAND HOLE. OPTIONS WITH SQUARE OR ROUND CORNERS. REFER TO PLANS AND EXTERIOR PULLBOX SCHEDULE FOR ADDITIONAL INFORMATION.
	SUBSTATION.
	TRANSFORMER.
ELECTRICAL POWER AND DISTRIBUTION	
	FUSE WITH RATING (ONE-LINE DIAGRAM).
	DISCONNECT, FUSED (ONE-LINE DIAGRAM).
	DISCONNECT, NONFUSED (ONE-LINE DIAGRAM).
	DISCONNECT WITH FUSE AND MOTOR STARTER COMBINATION (ONE-LINE DIAGRAM).
	OVERLOAD RELAY (ONE-LINE DIAGRAM).
	STARTER (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, MOLDED CASE WITH SHUNT TRIP (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, MOTOR CIRCUIT PROTECTION (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, ADJUSTABLE TRIP. "225AF" REPRESENTS THE RATING AND "150AT" REPRESENTS THE TRIP SETTING. (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, SOLID STATE (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, SOLID STATE WITH GROUND FAULT PROTECTION (ONE-LINE DIAGRAM).
	MOTOR.
	TRANSFORMER (ONE-LINE DIAGRAM).
	TRANSFORMER, CURRENT (ONE-LINE DIAGRAM).
	BATTERY (ONE-LINE DIAGRAM).
	CAPACITOR (ONE-LINE DIAGRAM).
	DELTA CONNECTION (ONE-LINE DIAGRAM).
	WYE CONNECTION (ONE-LINE DIAGRAM).
	DISTRIBUTION PANELBOARD, MOTOR CONTROL CENTER, PLUG-IN BUSWAY, MEDIUM VOLTAGE SWITCHBOARD (ONE-LINE DIAGRAM).
	PANELBOARD (ONE-LINE DIAGRAM).
	PANELBOARD WITH MAIN LUGS ONLY. BUS SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
	PANELBOARD WITH MAIN AND SUB FEED CIRCUIT BREAKER (ONE-LINE DIAGRAM).

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
ELECTRICAL POWER AND DISTRIBUTION	
	PANELBOARD WITH MAIN LUGS ONLY AND SURGE PROTECTION WITH CIRCUIT BREAKER (ONE-LINE DIAGRAM).
	PANELBOARD WITH SUB FEED LUGS (ONE-LINE DIAGRAM).
	PANELBOARD WITH CIRCUIT BREAKER AND SUB FEED LUGS (ONE-LINE DIAGRAM).
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM).
	CT CABINET PER UTILITY'S REQUIREMENTS (ONE-LINE DIAGRAM).
	TRANSFER SWITCH (ONE-LINE DIAGRAM).
	DIGITAL MULTIMETER (ONE-LINE DIAGRAM).
	EARTH GROUND (ONE-LINE DIAGRAM).
	SERVICE ENTRANCE SURGE PROTECTION (ONE-LINE DIAGRAM).
	GENERATOR, ANNUNCIATOR (ONE-LINE DIAGRAM).
	PUSH BUTTON, REMOTE EMERGENCY STOP.
	GENERATOR, POWER (ONE-LINE DIAGRAM).
	KIRK-KEY MECHANICAL INTERLOCK (ONE-LINE DIAGRAM)
	METER.
	BROAD BAND FILTER (ONE-LINE DIAGRAM).
	VARIABLE FREQUENCY MOTOR CONTROLLER (ONE-LINE DIAGRAM).
	DIODE (ONE-LINE DIAGRAM).
	DISCONNECT SWITCH, FUSED.
	DISCONNECT SWITCH, UNFUSED.
	STARTER, COMBINATION WITH DISCONNECT SWITCH.
	STARTER OR MOTOR CONTROLLER.
	PUSHBUTTON.
	PUSHBUTTONS, MOTOR CONTROL.
	PANELBOARD CABINET, FLUSH MOUNTED.
	PANELBOARD CABINET, SURFACE MOUNTED, 1 SECTION.
	PANELBOARD CABINET, SURFACE MOUNTED, 2 SECTION.
	DISTRIBUTION PANEL OR SWITCHBOARD.
	LIGHTING RELAY, CONTACTOR PANEL, OR DIMMING ENCLOSURE.
	SWITCH, TOGGLE MOTOR STARTER WITH OVERLOAD PROTECTION.
	TRANSFORMER (SEE ONE-LINE FOR SIZE)
	BUSWAY.
	RELAY CONTACT, NORMALLY CLOSED (ONE-LINE DIAGRAM).
	RELAY CONTACT, NORMALLY OPEN (ONE-LINE DIAGRAM).
	PUSHBUTTON, NORMALLY CLOSED (ONE-LINE DIAGRAM).
	PUSHBUTTON, NORMALLY OPEN (ONE-LINE DIAGRAM).
	PRESSURE SWITCH, CLOSE ON INCREASE (ONE-LINE DIAGRAM).
	PRESSURE SWITCH, OPEN ON INCREASE (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY CLOSED FLOAT (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY OPEN FLOAT (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY CLOSED LIMIT (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY OPEN LIMIT (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY CLOSED TEMPERATURE ACTIVATED (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY OPEN TEMPERATURE ACTIVATED (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY CLOSED TIME DELAY (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY OPEN TIME DELAY (ONE-LINE DIAGRAM).
	SWITCH, NORMALLY CLOSED FOOT OPERATED (ONE-LINE DIAGRAM).
	SWITCH, MULTIPOSITION (ONE-LINE DIAGRAM).
	SWITCH, SINGLE BREAK (ONE-LINE DIAGRAM).
	SPECIALIZED TRANSFER SWITCH (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, DRAW OUT (ONE-LINE DIAGRAM).
	GENERATOR ENGINE START MONITORING SYSTEM GENERATOR MODULE (ONE-LINE DIAGRAM).
	GENERATOR ENGINE START MONITORING SYSTEM ATS MODULE (ONE-LINE DIAGRAM).
	PHASE ROTATION MONITOR (ONE-LINE DIAGRAM).
	ARC ENERGY REDUCTION

ABBREVIATIONS		
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.		
1P	SINGLE POLE	K/VAR KILOVOLT AMPERE REACTIVE
1PH	SINGLE-PHASE	KW KILOWATT
1WAY	ONE-WAY	KWH KILOWATT HOUR
2W	TWO-CONDUCTOR	LE LIGHT EMITTING DIODE
2WAY	TWO-WAY	LFMC LIQUID TIGHT FLEXIBLE METAL CONDUIT
3W	THREE-CONDUCTOR	LFNC LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
3WAY	THREE-WAY	LPS LOW PRESSURE SODIUM
4OUT	FOUR-TERMINAL RECEPTACLE OUTLET	LRA LOCKED ROTOR AMPS
4PDT	FOUR-POLE DOUBLE THROW	LRT LIGHTING
4ST	FOUR-POINT SINGLE THROW	LTV LOW VOLTAGE
4W	FOUR-WAY	LAV MASTER ANTENNA TELEVISION SYSTEM
4WAY	FOUR-WIRE	MAX MAXIMUM
A	ABOVE COUNTER	MCA MINIMUM CIRCUIT AMPS
AC	ARMORED CABLE	MCB MINIMUM CIRCUIT BREAKER
ACS	ACCESS CONTROL SYSTEM	MCC MOTOR CONTROL CENTER
AD	ADJACENT	MCP MOTOR CIRCUIT PROTECTION
ADJ	ADJACENT	MMD MASTER DISTRIBUTION PANEL
AFG	ABOVE FINISHED FLOOR	MG MOTOR GENERATOR
AFG	ABOVE FINISHED GRADE	MH MANHOLE
ALC	AMPERE INTERRUPTING CAPACITY	MIN MINIMUM
ALUM	ALUMINUM	MLO MAX LUGS ONLY
AMP	AMPERE	MOC MAXIMUM OVERCURRENT PROTECTOR
ANN	ANNUNCIATOR	MNTS MANUAL TRANSFER SWITCH
AP	ACCESS POINT (WIRELESS DATA)	NA NOT APPLICABLE
AR	AS REQUIRED	NB NORMALLY CLOSED
AS	AMPS SHORT CIRCUIT	NCE NATIONAL ELECTRICAL CODE
ATC	AUTOMATIC TRANSFER SWITCH	NEMA NATIONAL ELECTRIC MANUFACTURERS ASSOCIATION
AV	AUDIO VISUAL	NFC NATIONAL FIRE CODE
AWG	AMERICAN WIRE GAGE	NFPA NATIONAL FIRE PROTECTION ASSOCIATION
B	BUCK-BOOST TRANSFORMER	NFC NOT IN CONTRACT
BFR	BELOW FINISHED FLOOR	NL NIGHT LIGHT
BF	BELOW FINISHED GRADE	NO NORMALLY OPEN
C	CEILING MOUNTED	NTS NOT TO SCALE
CAT	CATEGORY	NC ON CENTER
CATV	COMMUNITY ANTENNA TELEVISION	OC OVER CURRENT PROTECTION
CB	CIRCUIT BREAKER	O/E OWNER ELECTRONICS
CCBA	CUSTOM COLOR AS SELECTED BY ARCHITECT	O/FI OWNER FURNISHED/OWNER INSTALLED
CCF	CLOSED CIRCUIT TELEVISION	O/FI OWNER FURNISHED/OWNER INSTALLED
CF	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	OH OBTAIN FROM PLANS
CFB	CONTRACTOR FURNISHED/OWNER INSTALLED	OL OVERLOAD (COILING) DOOR
CFBA	CUSTOM FINISH AS SELECTED BY ARCHITECT	OP OVERLOAD
CI	CONTACT INDICATOR	PB PUSHBUTTON
CK	CIRCUIT	PF POWER FACTOR
CM	CONSTRUCTION MANAGER	PI PHASE
CND	CONDUIT	PNL PANEL
CO	CONVENIENCE OUTLET	PLN PLENUM
COR	CONTRACTING OFFICER'S REPRESENTATIVE	PR PAIR
CR	CONTROL PANEL	PS POWER SUPPLY
CR	CARD READER	PT POTENTIAL TRANSFORMER
CT	CURRENT TRANSFORMER	PTZ PANTILT/Zoom
CTV	CABLE TELEVISION	PV PHOTO VOLTAGE
CU	COPPER	Q QUANTITY
CD	CIRCUIT UNIT OF SOUND LEVEL	R REMOVE
DPDT	DOUBLE POLE, DOUBLE THROW	RCP REFLECTED CEILING PLAN
DS	DISCONNECT SWITCH	RMC RIGID METAL CONDUIT
EA	ENHANCED	RNM RIGID NONMETAL CONDUIT
ES	EACH	RD REMOTE DOOR
EM	EMERGENCY	RPM REVOLUTIONS PER MINUTE
EMT	ELECTRICAL METALLIC TUBING	RSP RISER PATCH PANEL
EPO	ELECTRIC NONMETALLIC TUBING	RN REMOVE AND RELOCATE
EQ	EQUIPMENT POWER OFF	RT STARTSTOP
EQUIP	EQUIPMENT	SCA SHORT CIRCUIT AMPS
EX	EXISTING	SCB STANDARD COLOR AS SELECTED BY ARCHITECT
EX	EXISTING	SF SQUARE FOOT (FEET)
F	FURNITURE MOUNTED	SFBA STANDARD FINISH AS SELECTED BY ARCHITECT
FA	FIRE ALARM	SFD SURGE PROTECTIVE DEVICE
FA	FIRE ALARM CONTROL PANEL	SPE SINGLE POLE, DOUBLE THROW SPECIFICATION
FMC	FULL LOAD AMPS	SPST STATION PATCH PANEL
FML	FLEXIBLE METAL CONDUIT	SPST SINGLE POLE, SINGLE THROW
FOB	FREEBIGHT ON BOARD	SWB SWITCHBOARD
FPF	FIBER PATCH PANEL	SWD SWITCHGEAR
FVNR	FULL VOLTAGE NON-REVERSING	TL TWIST LOCK
FVR	FULL VOLTAGE REVERSING	TL TELEPHONE POLE
GEN	GENERAL	TP TWISTED PAIR
GFI	GROUND FAULT INTERRUPTER	TR TELECOMMUNICATIONS ROOM
GFCI	GROUND FAULT PROTECTION	TTB TELEPHONE TERMINAL BOARD
GIG	GIGA HERTZ	TV TELEVISION
GRD	GROUND	TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR
HD	HEAVY DUTY	TYF TYPICAL
HI	HIGH INTENSITY DISCHARGE	UF UPFLOOR
HOA	HAND-OFF-AUTOMATIC	UGD UNDERGROUND
HP	HORSE POWER	UPS UNINTERRUPTIBLE POWER SUPPLY
HPF	HIGH POWER FACTOR	V VOLTS
HPS	HIGH PRESSURE SODIUM	VA VOLT AMPERE
HVM	HIGH VOLTAGE	VCVFD VARIABLE FREQUENCY MOTOR D
HW	HORIZONTAL WIRE MANAGEMENT	VIC VIDEO INTERCOM SYSTEM
HZ	HERTZ	VSS VIDEO SURVEILLANCE SYSTEM
IO	INPUT/OUTPUT	VWM VERTICAL WIRE MANAGEMENT
IS	ISOLATED GROUND	W WITH
ISOL	INSULATED ISOLATED	WO WITHOUT
INB	INFRARED	WP WEATHERPROOF
J	JUNCTION BOX	WPP WIRELESS PATCH PANEL
K	KILOVOLT	XFM TRANSFORMER
KVA	KILOVOLT AMPERE	

GENERAL ELECTRICAL NOTES

CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, OMISSIONS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC. SHALL BE SUBMITTED TO THE PROJECT ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT WILL BE USED. THE PROJECT ENGINEER'S INTERPRETATION SHALL BE THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.

OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUMMARY PRICE.

A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.

B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.

C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING EQUIPMENT AS INDICATED ON THE DRAWINGS. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.

EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE. INSTALL RACEWAYS BETWEEN CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS WOULD BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.

SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED, JOB NAME AND SUBCONTRACTOR NAME TO BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.

REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER TO DISCREPANCIES TO THE ARCHITECT AND ENGINEER.

ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND, IF: COMPLIANCE AND FINAL APPROVAL IS THE SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, SUCH AS PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS, WHERE TERMS "DRAWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED. IT IS TO HELP THE READER LOCATE THE REFERENCE. NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", "AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", "AS PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVED: THE TERM "APPROVED" WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION OPERATION, INCLUDING INSTALLATION, ERECTION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL" SYSTEMS. THESE SYSTEMS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC....

CP ELECTRICAL SHEET INDEX

FE001	ELECTRICAL COVER SHEET
FE002	SYMBOLS LEGEND
FE003	ELECTRICAL DETAILS
FE004	TYPICAL MOUNTING DETAILS
FE005	ELECTRICAL CONNECTIONS
EP101	LEVEL 1 OVERALL POWER PLAN
EP102	LEVEL 1 POWER PLAN
EP101	ONE-LINE DIAGRAM



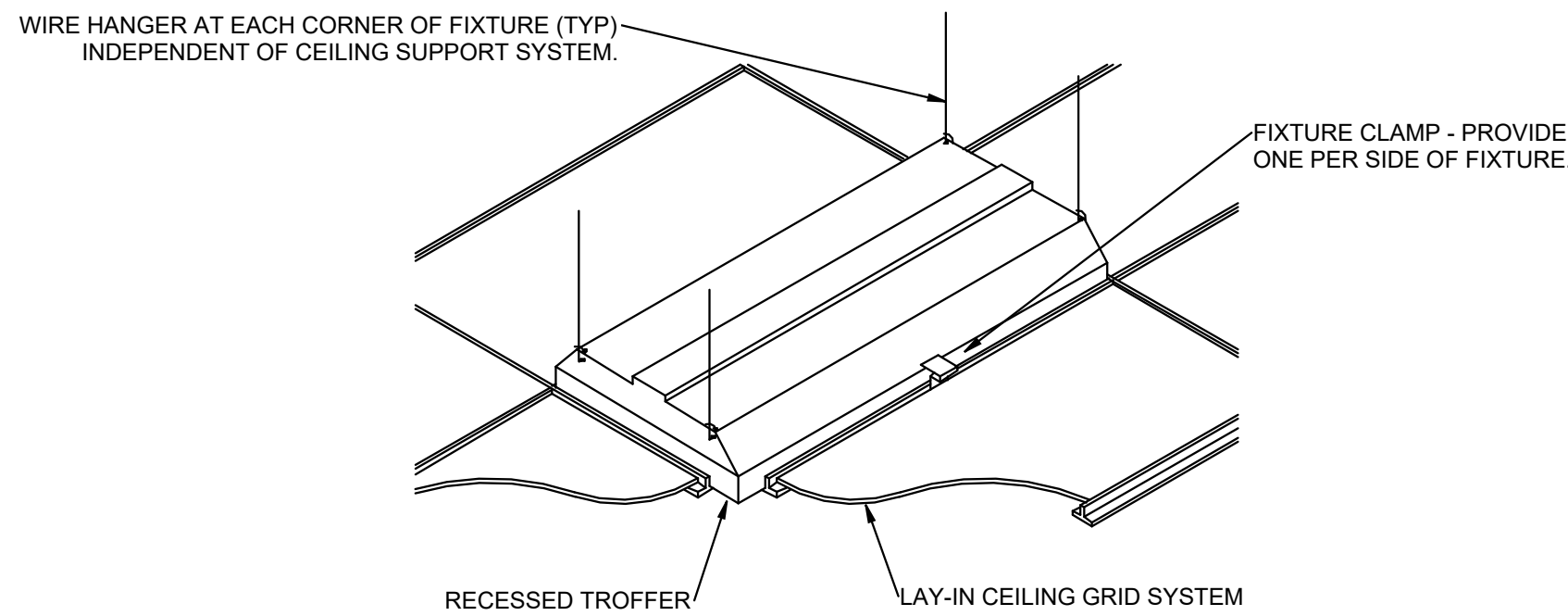
SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
LIGHTING	
(W-3)	FIXTURE IDENTIFICATION: (W-3) INDICATES FIXTURE TYPE AS SCHEDULED.
(W-3E)	FIXTURE IDENTIFICATION: EMERGENCY LIGHTING FIXTURE WITH BATTERY PACK AND/ OR GENERATOR AND/ OR CENTRALIZED INVERTER AND/ OR CENTRALIZED UPS CONNECTION AS INDICATED IN PLANS. (W-3E) INDICATES FIXTURE TYPE AS SCHEDULED.
EM	EMERGENCY.
NL	NIGHT LIGHT: DO NOT SWITCH.
↑	EGRESS DIRECTION ARROW (EXIT SIGNS).
⊗	EXIT SIGN: SINGLE FACE; CEILING MOUNTED
⊗ ↑	EXIT SIGN: SINGLE FACE; WALL MOUNTED
⊗ ↑ ↑	EXIT SIGN: DOUBLE FACE; CEILING MOUNTED
⊗ ↑ ↑ ↑	EXIT SIGN: DOUBLE FACE; WALL MOUNTED
LIGHTING CONTROL	
⋆	OCCUPANCY SENSOR, DUAL TECHNOLOGY, OMNI-DIRECTIONAL, CEILING.
⋆	OCCUPANCY SENSOR, DUAL TECHNOLOGY, WALL.
⋆ →	OCCUPANCY SENSOR, DUAL TECHNOLOGY, DIRECTIONAL.
(P)	PHOTOCELL.
(P)	PHOTOCELL, WALL MOUNTED.
⋆	VACANCY SENSOR, DUAL TECHNOLOGY, OMNI-DIRECTIONAL, CEILING.
⋆	VACANCY SENSOR, DUAL TECHNOLOGY, WALL.
⋆ ↻	CEILING FAN.
⋆ ↻	SWITCH/OCCUPANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
⋆ ↻	SWITCH/VACANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
⋆ ↻	DIMMER SWITCH/OCCUPANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
⋆ ↻	DIMMER SWITCH/VACANCY SENSOR COMBO, DUAL TECHNOLOGY, WALL.
a.b ⋆	LOW VOLTAGE DIGITAL LIGHTING CONTROL SWITCH: LETTER "a,b" INDICATES ZONING WHERE SHOWN (REFER TO PLANS, SCHEDULES, AND DETAILS FOR EXACT BUTTON CONFIGURATION AND PROGRAMMING REQUIREMENTS)
RC	DIGITAL LIGHTING ROOM CONTROLLER
DC	DIGITAL LIGHTING DIMMING CONTROLLER
LC	DIGITAL PLUG LOAD CONTROLLER
LS	LIGHTING NETWORK SWITCH.
NR	LIGHTING NETWORK ROUTER.
SM	LIGHTING NETWORK SEGMENT MANAGER
NB	LIGHTING NETWORK BRIDGE
ET	LIGHTING EMERGENCY TRANSFER DEVICE
(X)	LIGHTING SPACE CONTROL TYPE: X INDICATES TYPE. SEE SCHEDULE / DIAGRAM.
TWO-WAY COMMUNICATIONS	
ZWA	TWO-WAY COMMUNICATIONS MAIN CONTROL STATION (ANNUNCIATOR)
RCS	TWO-WAY COMMUNICATIONS REMOTE CALL STATION
▽	DATA CONNECTION, TWO-WAY EMERGENCY COMMUNICATION SYSTEM.

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
FIRE ALARM	
FAA	FIRE ALARM ANNUNCIATOR PANEL.
FACP	FIRE ALARM CONTROL PANEL, SEMI-RECESSED.
FATC	FIRE ALARM TERMINAL CABINET: NAC, SLC, SPEAKER CIRCUITS, AMPLIFIERS, BATTERIES
HVAC	CONTROL PANEL FOR HVAC: SMOKE CONTROL, STAIR PRESSURIZATION.
EVAC	VOICE EVACUATION PANEL.
PRE	PRE-ACTION CONTROL PANEL.
MIC	REMOTE VOICE EVACUATION MICROPHONE.
FPC	FIRE PUMP CONTROLLER.
JPC	JOCKEY PUMP CONTROLLER.
C	AUTOMATIC DOOR CLOSERS: DOOR CLOSERS SHALL BE FURNISHED WITH DOOR HARDWARE AND CONNECTED BY FIRE ALARM INSTALLER.
CM	CONTROL MODULE.
MM	MONITOR MODULE.
F	FIRE ALARM MANUAL PULL STATION.
R	SHUT DOWN RELAY: INSTALL RELAY IN CONTROL CIRCUIT OF EQUIPMENT TO BE CONTROLLED IN THE EVENT OF A FIRE.
FS	WATER FLOW SWITCH: FLOW SWITCHES SHALL BE PROVIDED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR AND SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS.
VS	VALVE SUPERVISORY SWITCH, TAMPER SWITCH. TAMPER SWITCHES SHALL BE PROVIDED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR AND SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS.
PS	PRESSURE SUPERVISORY SWITCH. PRESSURE SWITCHES SHALL BE PROVIDED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR AND SHALL BE CONNECTED TO LOCATIONS SHOWN ON THE FIRE SPRINKLER SHOP DRAWINGS.
⌀	MAGNETIC DOOR HOLDER.
②	DETECTOR, SMOKE.
H ②	DETECTOR, SMOKE, WALL MOUNTED.
② A	DETECTOR, SMOKE WITH AUXILIARY CONTACT.
② BR	DETECTOR, SMOKE, BEAM RECEIVER.
② BT	DETECTOR, SMOKE, BEAM TRANSMITTER.
② E	DETECTOR, SMOKE, ELEVATOR RECALL DESIGNATION.
② G	DETECTOR, SMOKE WITH GUARD.
② R	DETECTOR, SMOKE, RESIDENTIAL.
② S	DETECTOR, SMOKE WITH STROBE.
② RS	DETECTOR, SMOKE, RESIDENTIAL WITH SOUNDER BASE.
② AS	DETECTOR, SMOKE, AIR SAMPLING SYSTEM PORT LOCATION.
②	DETECTOR, SMOKE, DUCT WITH HOUSING AND SAMPLING TUBE.
SD	SMOKE DAMPER, 120V POWER FROM ELECTRICAL SYSTEM.
FSD	COMBINATION FIRE/SMOKE DAMPER, 120V POWER FROM ELECTRICAL SYSTEM.
RTS	REMOTE ALARM INDICATING AND TEST SWITCH.
①	DETECTOR, HEAT.
CO	DETECTOR, CARBON MONOXIDE.
75	STROBE, WALL MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
WP	ALARM, HORN/SPEAKER, WALL MOUNTED, WEATHERPROOF.
75	ALARM, HORN/STROBE, WALL MOUNTED, ONE ASSEMBLY. SUBSCRIPT INDICATES CANDELA RATING.
C	ALARM, HORN/STROBE, WALL MOUNTED, ONE ASSEMBLY.
G	ALARM, CHIME/STROBE, WALL MOUNTED, ONE ASSEMBLY.
M	ALARM, HORN/STROBE WITH GUARD, WALL MOUNTED, ONE ASSEMBLY.
	SPEAKER, WALL MOUNTED, EVACUATION.
75	SPEAKER, WALL MOUNTED, EVACUATION, COMBINATION STROBE. SUBSCRIPT INDICATES CANDELA RATING.
75	SPEAKER, WALL MOUNTED, EVACUATION, COMBINATION STROBE. SUBSCRIPT INDICATES CANDELA RATING.
75	ALARM, HORN/STROBE, ONE ASSEMBLY, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
75	ALARM, HORN, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
75	SPEAKER/STROBE, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
	SPEAKER, CEILING MOUNTED.
75	ALARM, STROBE, CEILING MOUNTED. SUBSCRIPT INDICATES CANDELA RATING.
	BELL, ELECTRIC, 120V FROM ELECTRICAL SYSTEM OR 24V FROM FIRE ALARM SYSTEM

SYMBOLS LEGEND	
SYMBOL	DESCRIPTION
CLOCK	
⌚	CLOCK.
⌚ G	CLOCK, SURFACE WITH WIRE GUARD.
NURSE CALL	
Ⓜ	JUNCTION BOX.
Ⓜ	CORRIDOR LIGHT.
B	BATHROOM PULL CORD STATION.
D	DUTY STATION.
E	EMERGENCY ASSISTANCE CALL STATION.
E CB	EMERGENCY ASSISTANCE CODE BLUE CALL STATION.
P	PATIENT STATION.
S	STAFF STATION.
NCM	TOUCH SCREEN NURSE CALL MASTER STATION.
ZLC	ZONE LIGHT CONTROLLER.
CU	NURSE CALL AREA CONTROL UNIT & POWER SUPPLIES.
CCTV	
P	CCTV CABLE, POWER.
V	CCTV CABLE, VIDEO SIGNAL.
CCTV	CCTV HEADEND EQUIPMENT.
M	CCTV MONITOR.
	CCTV CAMERA/ENCLOSURE WITH LENS, TYPICAL. SEE SCHEDULE.
PTZ	CCTV CAMERA WITH PAN, TILT AND ZOOM.
360°	PANNING CAMERA TRANSVERSE ANGLE.
SECURITY	
X	SECURITY CABLE. SEE EQUIPMENT SCHEDULE FOR CABLE TYPE.
ACC	ACCESS CONTROL HEADEND EQUIPMENT.
CTR	SECURITY CONTROL PANEL.
SEC	INTRUSION DETECTION HEADEND EQUIPMENT.
#1	CARD ACCESS DOOR TYPE #1 OR AS NOTED. SEE SCHEDULE.
CR	CARD READER.
KCR	KEYPAD/CARD READER COMBINATION.
⊖	DOOR SWITCH, BALANCED MAGNETIC CONTROL.
ER	EXIT REQUEST.
RL	REMOTE DOOR RELEASE BUTTON.
	BELL.
	BUZZER.
	BUZZER, COMBINATION BELL.
	SENSOR, BURIED VEHICULAR.
①	SENSOR, GLASS BREAK.
Ⓜ	SENSOR, VOLUMETRIC.
CA	CONTROLLED ACCESS POINT.
IC	INTERCOM STATION.
RU	DUAL TECHNOLOGY PASSIVE INFRARED SENSOR AND ULTRASONIC MOTION DETECTOR.
IR	PASSIVE INFRARED SENSOR.
P	PANIC DURESS SWITCH.
U	ULTRASONIC MOTION DETECTOR.
AP	ANNUNCIATOR PANEL.
MSI	MASTER STATION, INTERCOM.
TV DISTRIBUTION	
T	TV DISTRIBUTION CABLE, INDIVIDUAL DROPS.
TR	TV DISTRIBUTION CABLE, TRUNK.
CMB	COMBINER.
DC	DIRECTIONAL COUPLER.
DA	DISTRIBUTION AMPLIFIER (ONE-LINE DIAGRAM).
SPL	SPLITTER (ONE-LINE DIAGRAM).
●	TV OUTLET.
Ⓜ	SATELLITE ANTENNA.
T	TV ANTENNA (ONE-LINE DIAGRAM).
75	TERMINATOR, 75 OHM (TV DISTRIBUTION).
X	HDMI RECEPTACLE WITH SINGLE GANG BACKBOX AND 1.25" CONDUIT STUBBED TO ACCESSIBLE CEILING. PROVIDE 2.1 HDMI CABLE BETWEEN HDMI RECEPTACLES. "X" INDICATES QUANTITY OF HDMI PORTS WHEN GREATER THAN 1.

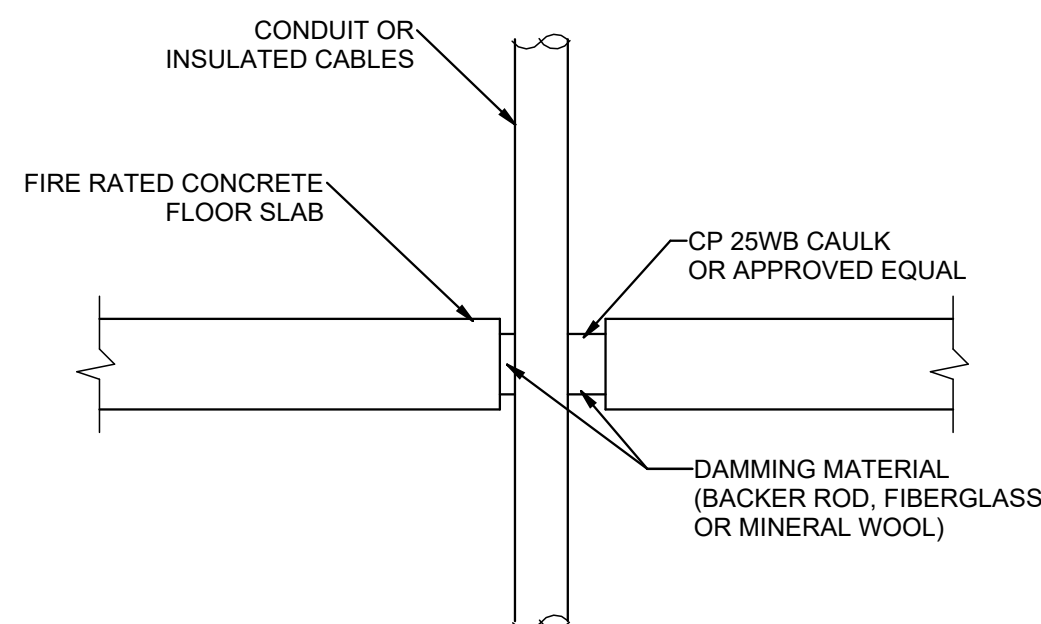
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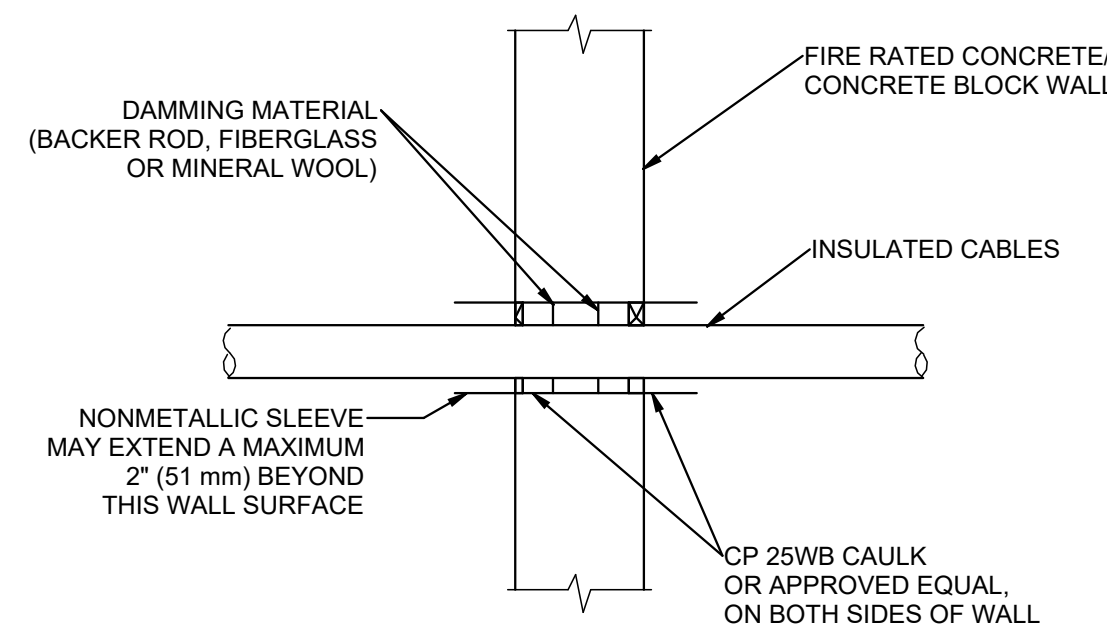
D1 RECESSED FIXTURE MOUNTING DETAIL

SCALE: NTS



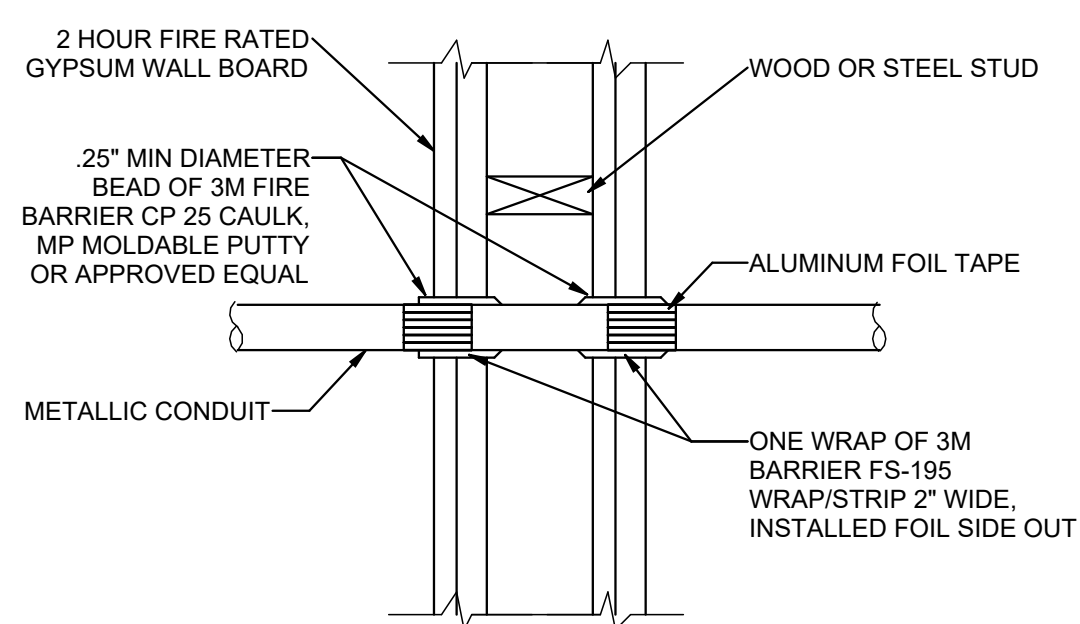
C1 TYPICAL FIRE STOP FOR CABLES/CONDUIT THROUGH CONCRETE FLOORING

SCALE: NTS



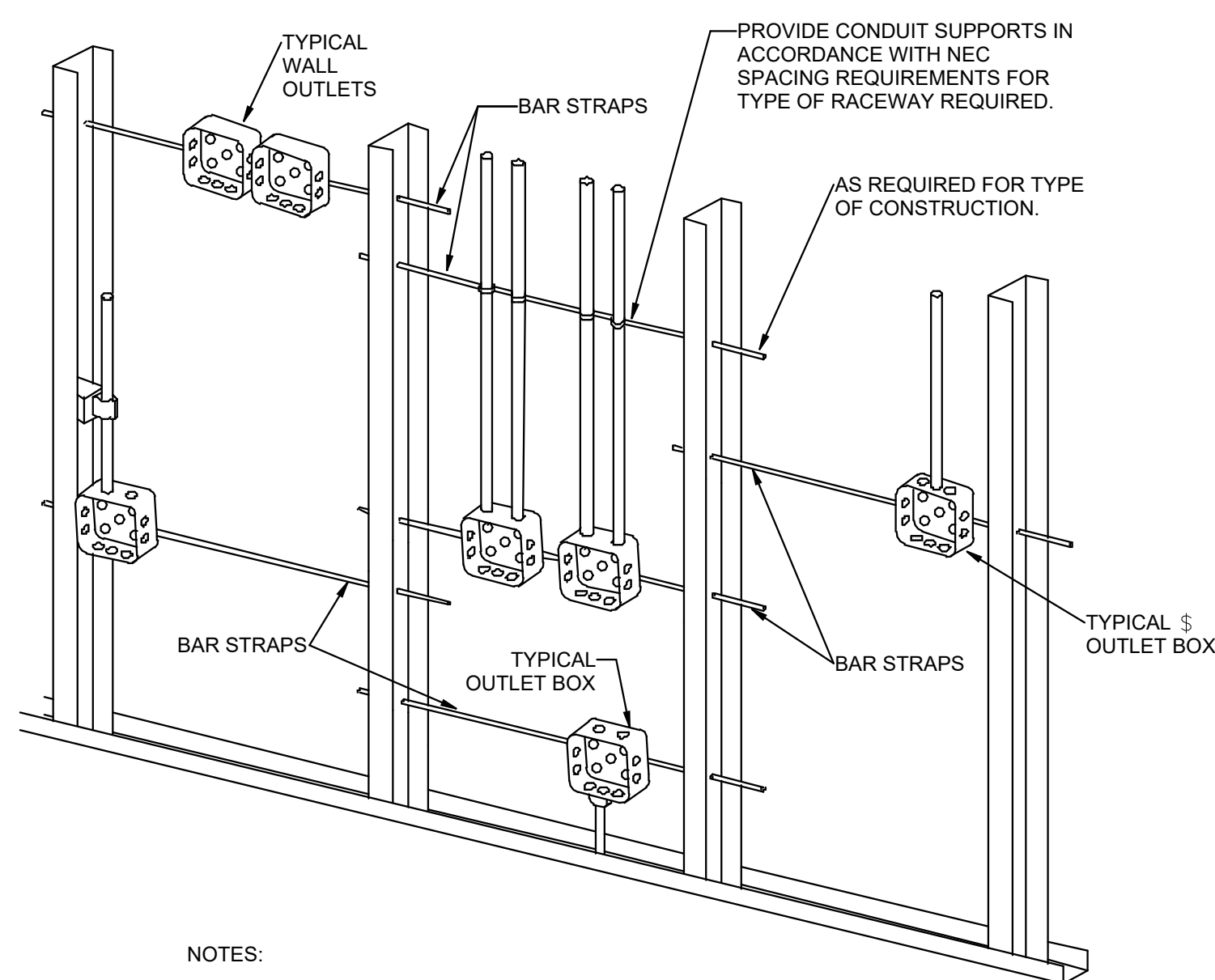
C3 TYPICAL FIRE STOP FOR CABLES/CONDUIT THROUGH CONCRETE WALLS

SCALE: NTS



C5 FIRE STOP FOR METAL CONDUIT THROUGH GYPSUM WALL BOARD

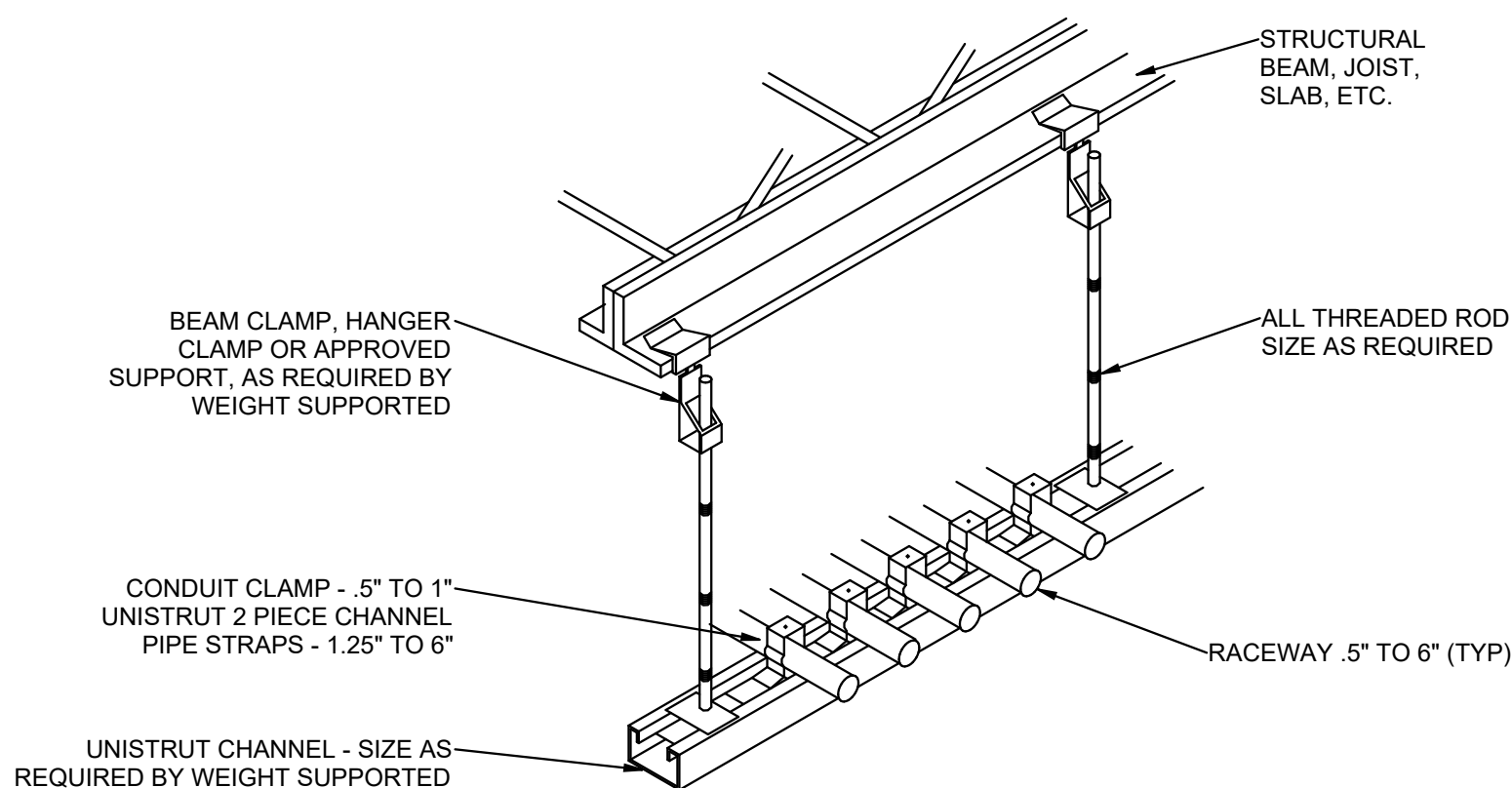
SCALE: NTS



- NOTES:
1. TYPICAL FOR WOOD AND METAL STUD ROUGH-IN.
 2. PLASTER RINGS NOT SHOWN.
 3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND WITH ALL APPLICABLE SHOP DRAWINGS.
 4. IN ACCORDANCE WITH IBC 714.3.2 EXCEPTION 1, OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS IN THE SAME STUD SPACE IN A RATED FIRE SEPARATION WALL MUST BE SEPARATED BY A MINIMUM OF 24\"/>
 5. IN NON-RATED WALLS, OUTLETS ON OPPOSITE SIDES OF WALLS OR PARTITIONS MUST BE SEPARATED BY 16\"/>

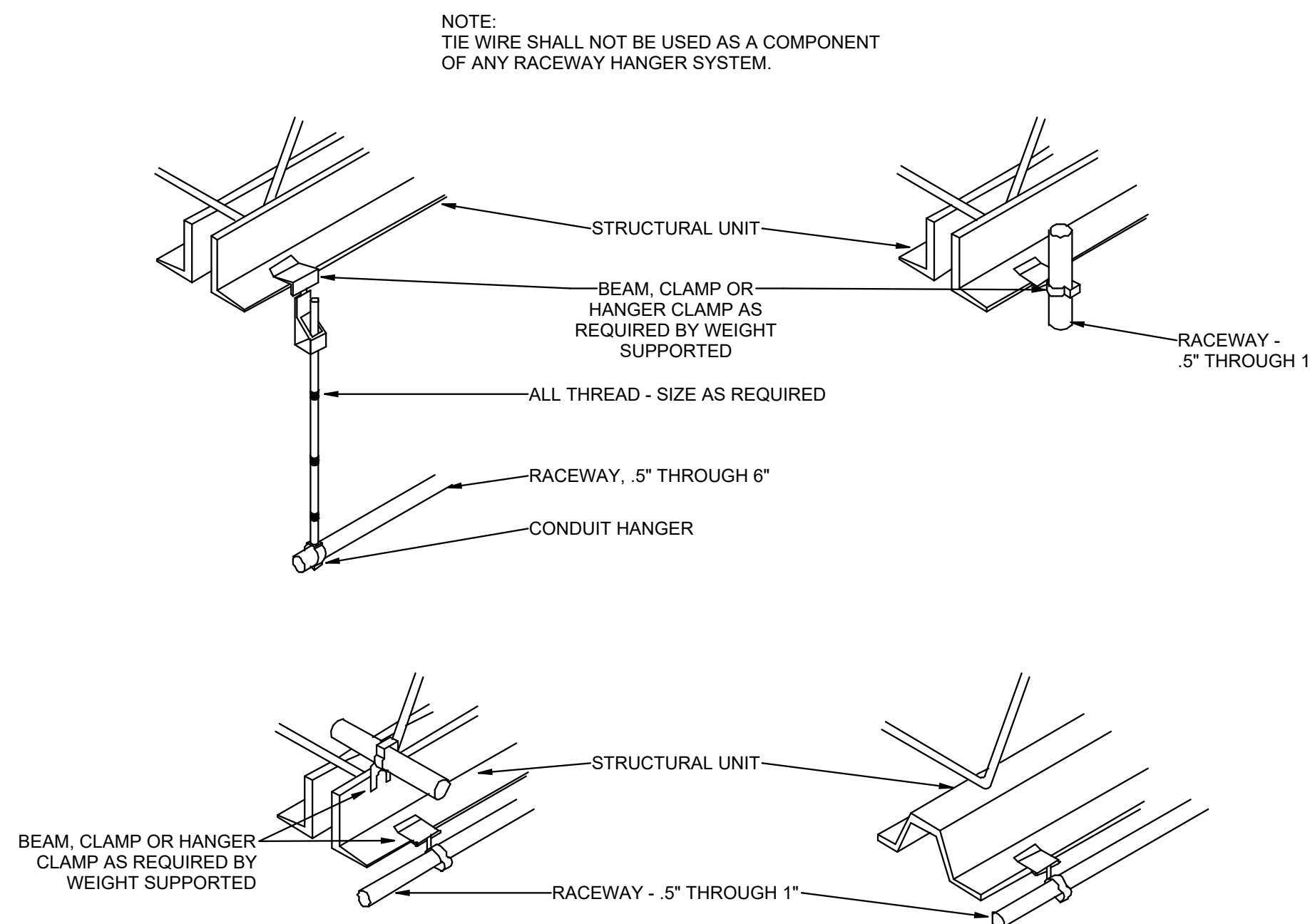
A1 TYPICAL ROUGH-IN REQUIREMENTS DETAIL

SCALE: NTS



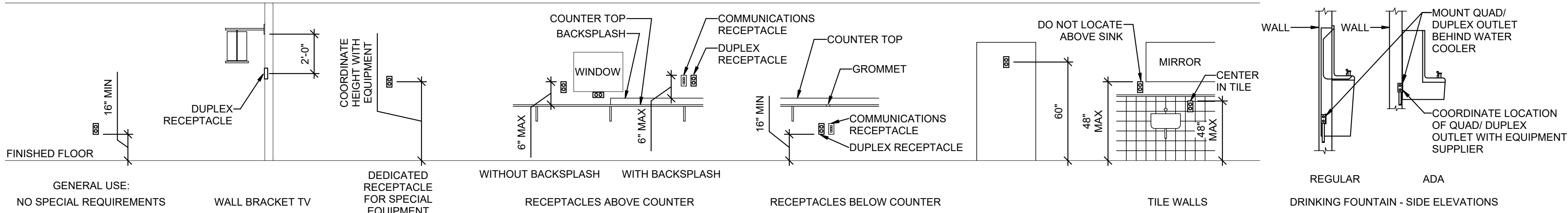
A3 TYPICAL CONDUIT RACK DETAIL

SCALE: NTS

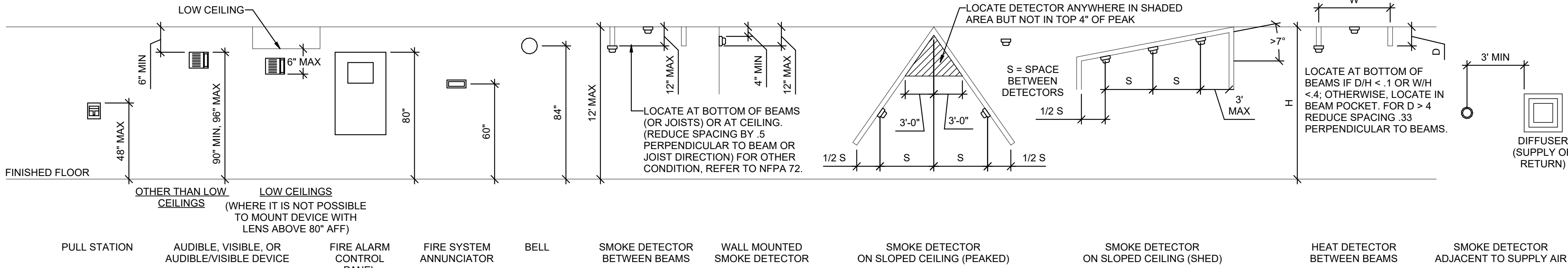


A5 TYPICAL RACEWAY SUPPORT METHODS DETAIL

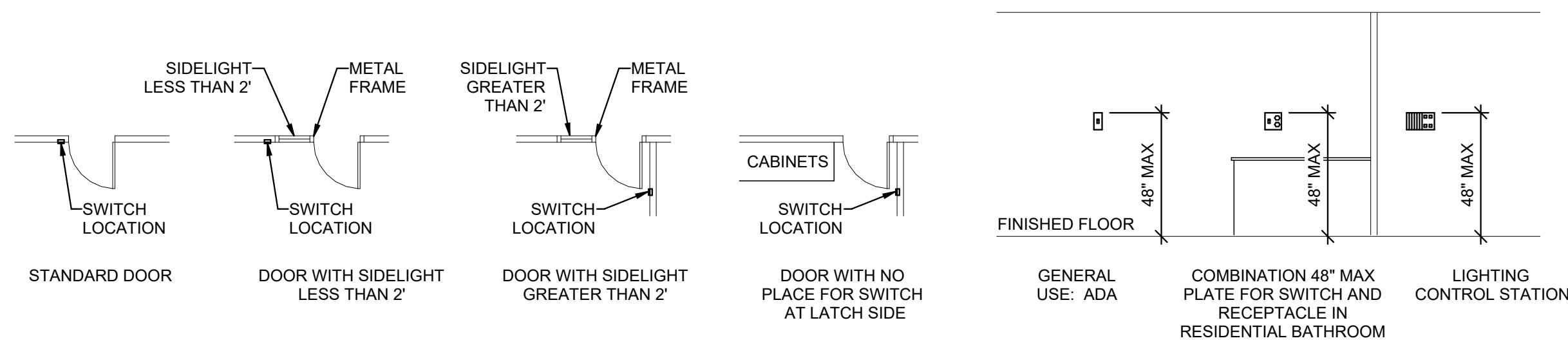
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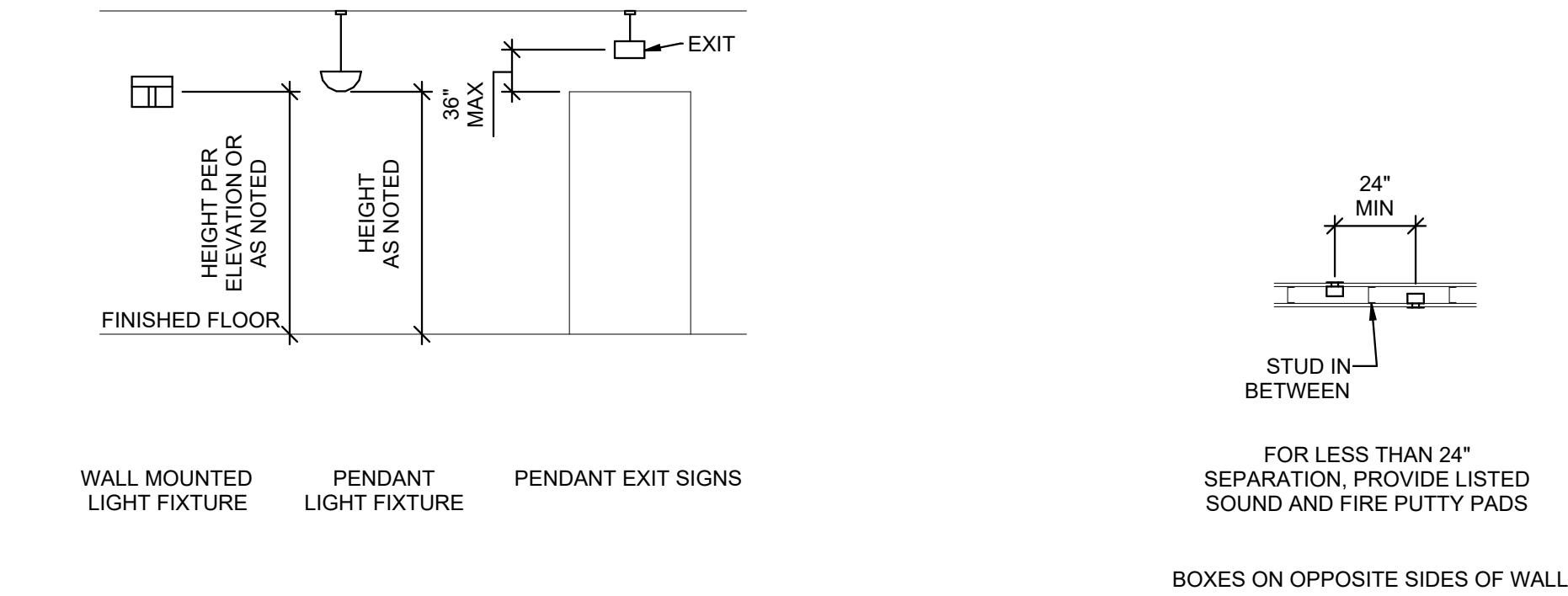
E2 RECEPTACLE MOUNTING DETAILS
SCALE: NTS



D2 FIRE ALARM MOUNTING DETAILS
SCALE: NTS

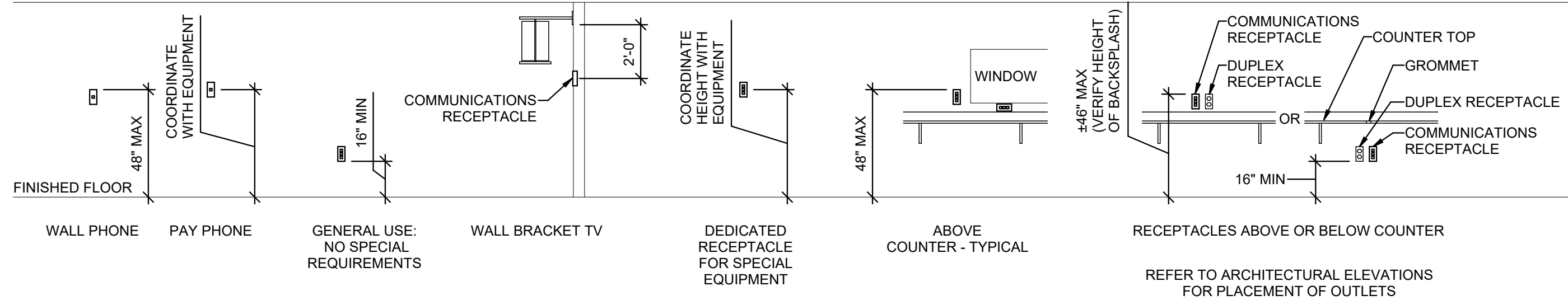


C2 SWITCH MOUNTING DETAILS
SCALE: NTS

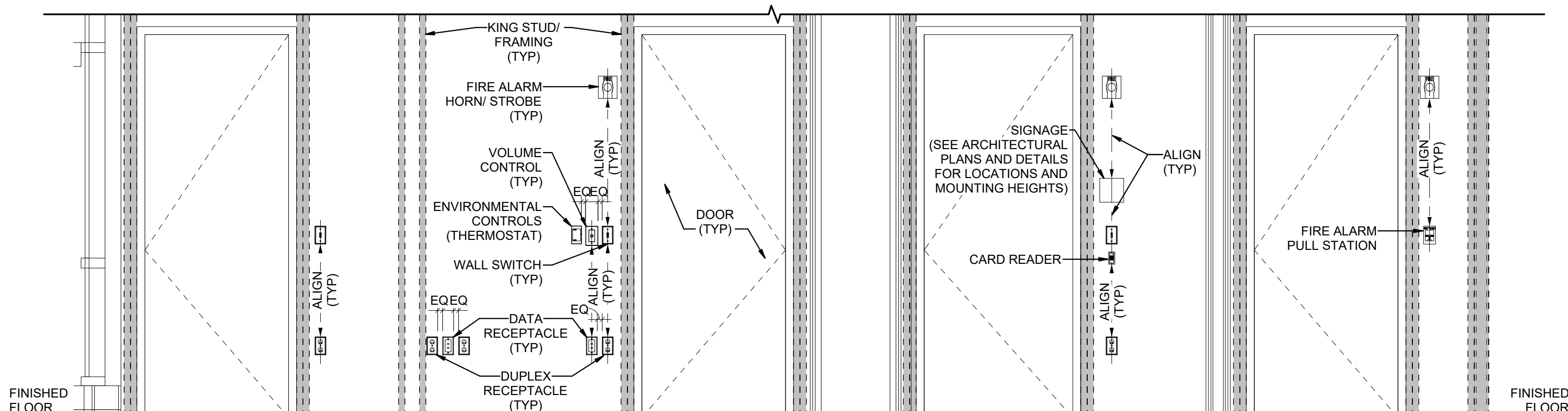


B2 LIGHTING MOUNTING DETAILS
SCALE: NTS

B3 BOX MOUNTING DETAILS
SCALE: NTS



C4 COMMUNICATIONS MOUNTING DETAILS
SCALE: NTS

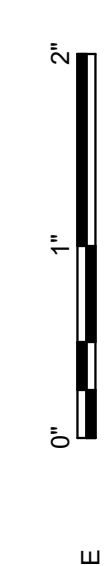


B4 TYPICAL WALL MOUNTED DEVICES ALIGNMENT DETAIL
SCALE: NTS

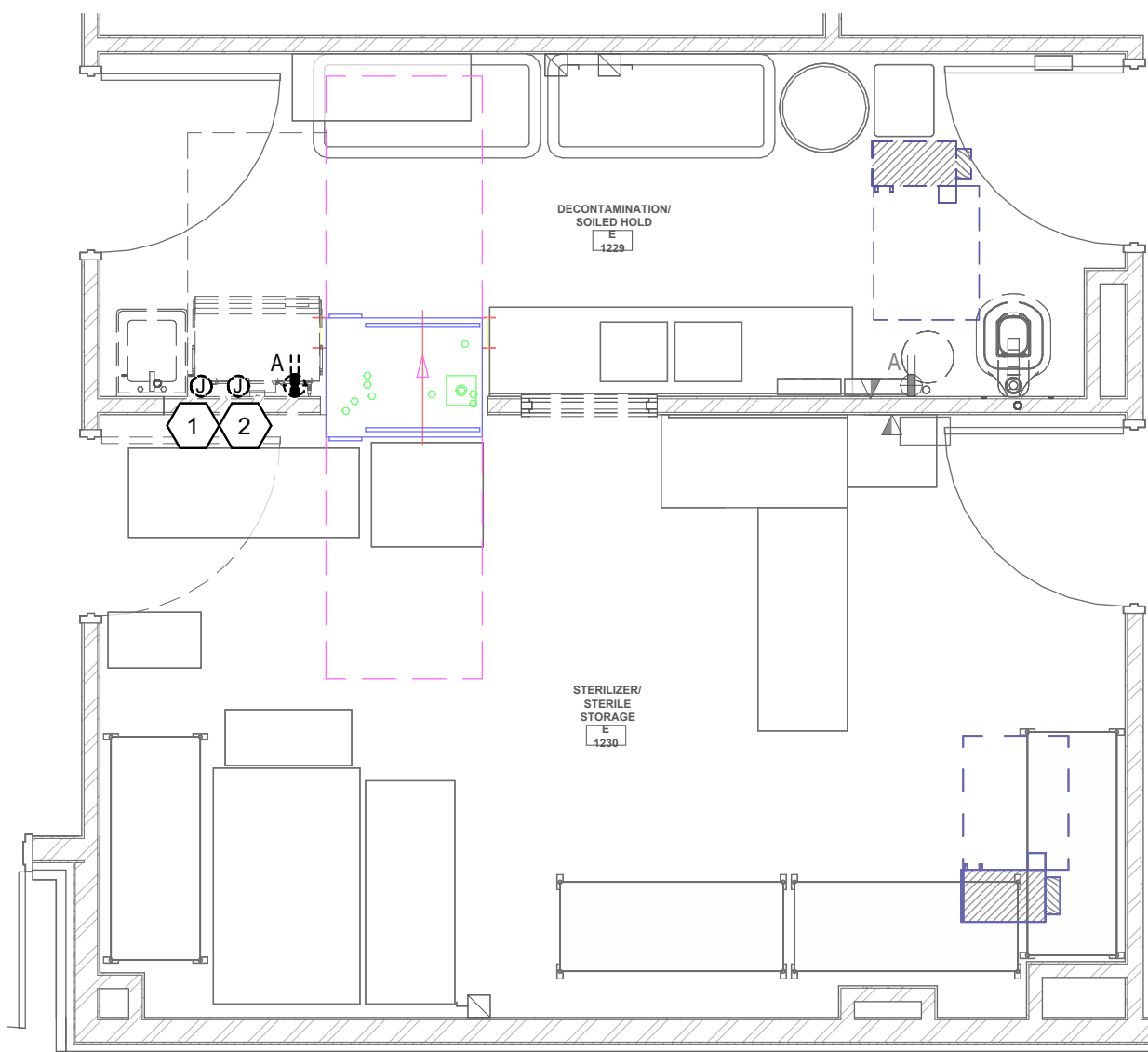
GENERAL SHEET NOTES

- 1 MOUNTING HEIGHTS OF ELECTRICAL AND ELECTRONIC EQUIPMENT IN THE FOLLOWING ORDER OF PRIORITY:
A - ELEVATIONS (ARCHITECTURAL, ELECTRICAL, MECHANICAL, ETC).
B - EQUIPMENT SHOP DRAWINGS.
C - FIELD INSTRUCTIONS.
- 2 LOCATE RECEPTACLES SERVING THE SAME TYPE OF USE AT A UNIFORM HEIGHT UNLESS DIRECTED OTHERWISE.
- 3 MECHANICAL, ELECTRICAL, AND COMMUNICATION ROOMS: COORDINATE LOCATION OF LIGHTING AND POWER RECEPTACLES WITH EQUIPMENT, PIPING, AND DUCTWORK. DO NOT INSTALL RECEPTACLES BEHIND EQUIPMENT OR WHERE OTHERWISE INACCESSIBLE. POSITION LIGHTING REGARDLESS OF WHERE SHOWN ON DRAWING TO PROVIDE PROPER ILLUMINATION.
- 4 MOUNT RECEPTACLE BOXES FOR SWITCHES AND RECEPTACLES WITH LONG AXIS OF THE DEVICE VERTICAL UNLESS OTHERWISE INDICATED.
- 5 SET BOXES WITH PLASTER RINGS FLUSH WITH FINISHED SURFACE.
- 6 LOCATE BOX COVERS OR DEVICE PLATES SO THEY WILL NOT SPAN DIFFERENT TYPES OF BUILDING FINISHES EITHER VERTICALLY OR HORIZONTALLY.
- 7 VERIFY ALL DOOR CONDITIONS ON ARCHITECTURAL DRAWINGS PRIOR TO INSTALLING SWITCHES.
- 8 LOCATE WIRING DEVICES WHICH ARE ADJACENT AND ARE COMPATIBLE VOLTAGES IN ONE PLATE.
- 9 WHERE DEVICES ARE LOCATED IN CLOSE PROXIMITY OF THE SAME VERTICAL PLANE, ALIGN DEVICES VERTICALLY PER THE TYPICAL WALL MOUNTED DEVICES ALIGNMENT DETAIL, UNLESS OTHERWISE INDICATED.

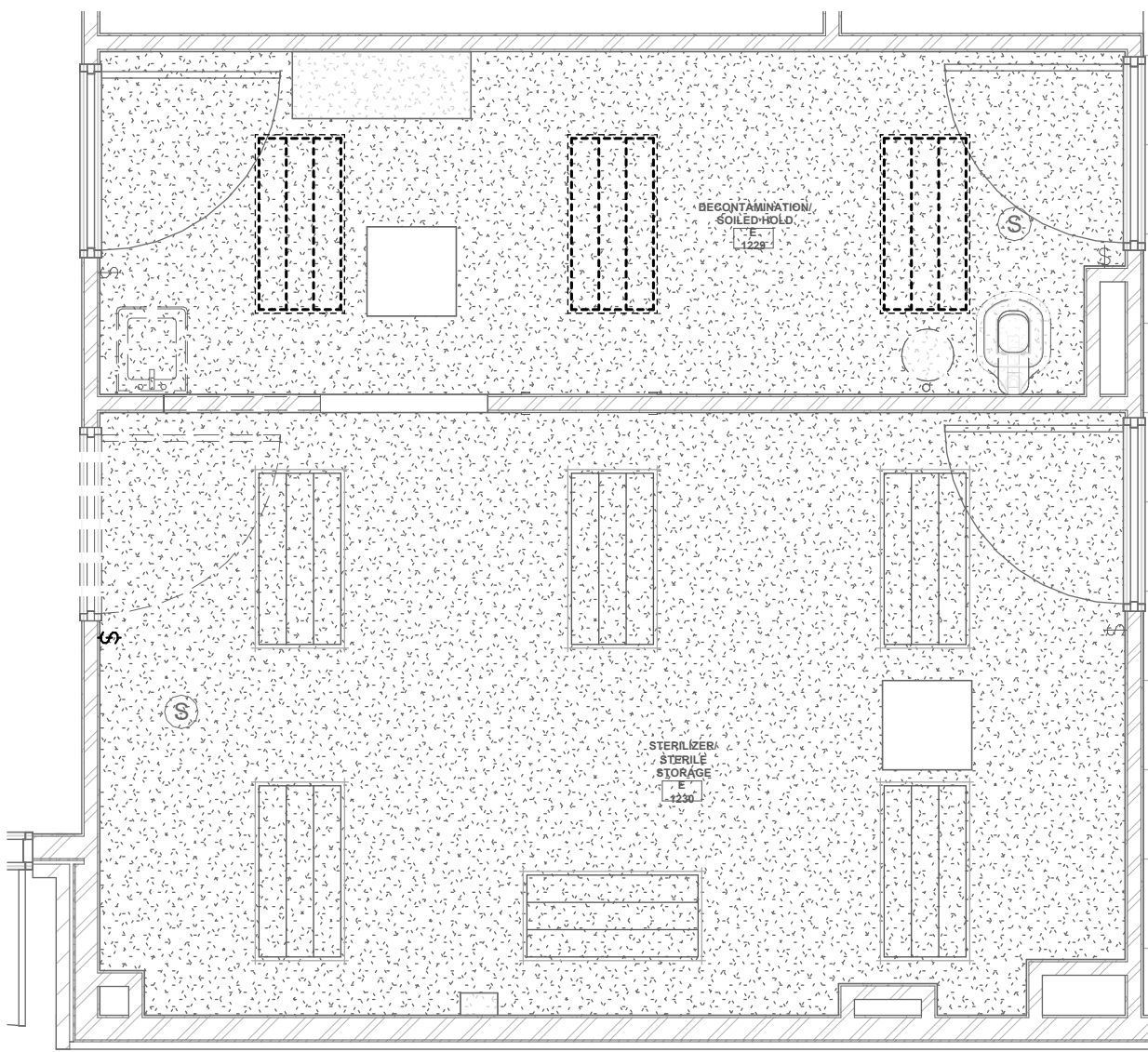
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1
2
3
4
5
6
A
B
C
D
E



1 LEVEL 1 ELECTRICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"



2 LEVEL 1 CEILING DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES

- 1 UNLESS NOTED OTHERWISE REMOVE ALL LIGHTING FIXTURES DEVICES AND EQUIPMENT SHOWN DASHED. REMOVE CONDUIT AND WIRING BACK TO PANELBOARD OF ORIGIN OR TO FIRST ACTIVE DEVICE THAT REMAINS.
- 2 SALVAGE ALL LIGHT FIXTURES, TWIST-LOCK RECEPTACLES AND WALLPLATES, CEILING SPEAKERS AND SECURITY AND FIRE ALARM DEVICES TO OWNER. PROTECT SALVAGED EQUIPMENT FROM DAMAGE.
- 3 PRIOR TO SUBMITTING BID, VISIT THE SITE AND FIELD VERIFY THE EXTENT OF ELECTRICAL DEMOLITION WORK TO MEET THE INTENT OF THE BID DOCUMENTS AND INCLUDE ALL COSTS IN BID.
- 4 PRIOR TO REMOVAL OF ANY ELECTRICAL EQUIPMENT OR WIRING, FIELD VERIFY THAT THE EQUIPMENT OR WIRING IS INACTIVE OR NO LONGER IN USE.
- 5 REMOVE ALL DEVICES, RACEWAYS AND WIRING FROM WALLS TO BE REMOVED. WHERE ACTIVE RACEWAYS OCCUR IN WALLS TO BE REMOVED, RE-ROUTE THE RACEWAY WITH ASSOCIATED WIRING TO KEEP THE CIRCUIT OPERATIONAL.
- 6 REMOVE ALL FIRE ALARM DEVICES WHERE EXISTING WALLS AND CEILINGS ARE BEING REMOVED. WITH ASSOCIATED CONDUIT AND WIRING. EXISTING FIRE ALARM DEVICES AND SYSTEM NOT INDICATED FOR REMOVAL SHALL REMAIN ACTIVE THROUGHOUT DEMOLITION AND CONSTRUCTION UNTIL THE NEW SYSTEM IS TESTED AND OPERATIONAL. MAINTAIN ALL CLASS A FIRE ALARM INITIATING AND INDICATING LOOPS WHERE EXISTING DEVICES ARE REMOVED.
- 7 REMOVE ALL ABANDONED RACEWAY, CONDUIT, WIRING AND CABLING WHETHER ABANDONED PREVIOUS TO THIS PROJECT OR AS A RESULT OF THIS PROJECT. NOT ALL ABANDONED ITEMS ARE SHOWN ON THESE PLANS AND FIELD VERIFICATION OF DEMOLITION SCOPE EXTENT IS REQUIRED.
- 8 DEVICES MARKED *RR* ARE TO BE REMOVED AND RELOCATED PER NEW PLANS. EXTEND CIRCUITING AS REQUIRED FOR RELOCATION.
- 9 REFER TO ARCHITECTURAL DRAWINGS FOR REMOVAL OF MOTORS, CONDUIT, CONDUCTOR AND CONTROL WIRING ASSOCIATED WITH EXISTING MOTORIZED DOORS, PARTITIONS AND LIGHTING.
- 10 REMOVE FEEDERS FOR ALL DEMOLISHED PANELS, DISCONNECTS, ETC. BACK TO SOURCE
- 11 ALL ITEMS INDICATED TO REMAIN SHALL BE PROTECTED DURING ALL PHASES OF CONSTRUCTION.
- 12 CONTRACTOR TO TRACE AND LABEL ALL EXISTING LOADS TO REMAIN, THAT ARE CURRENTLY FED FROM PANELS THAT ARE BEING DEMOLISHED IN THIS PHASE. THESE LOADS TO BE RE-FED FROM NEW PANELS IN NEXT PHASE.

SHEET KEYNOTES

- 1 EXISTING CIRCUIT FOR WASHER TO BE RELOCATED ABOVE THE EXISTING WASHER TO ALLOW FOR THE INSTALLATION OF THE NEW WASHER.
- 2 DEMOLISH CIRCUIT FOR ULTRASONIC CLEANER BACK TO THE DISCONNECT ON OPPOSITE SIDE OF THE ROOM. MAINTAIN DISCONNECT FOR USE AT NEW ULTRASONIC CLEANER LOCATION.



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INTERMOUNTAIN HEALTHCARE
Construction Documents



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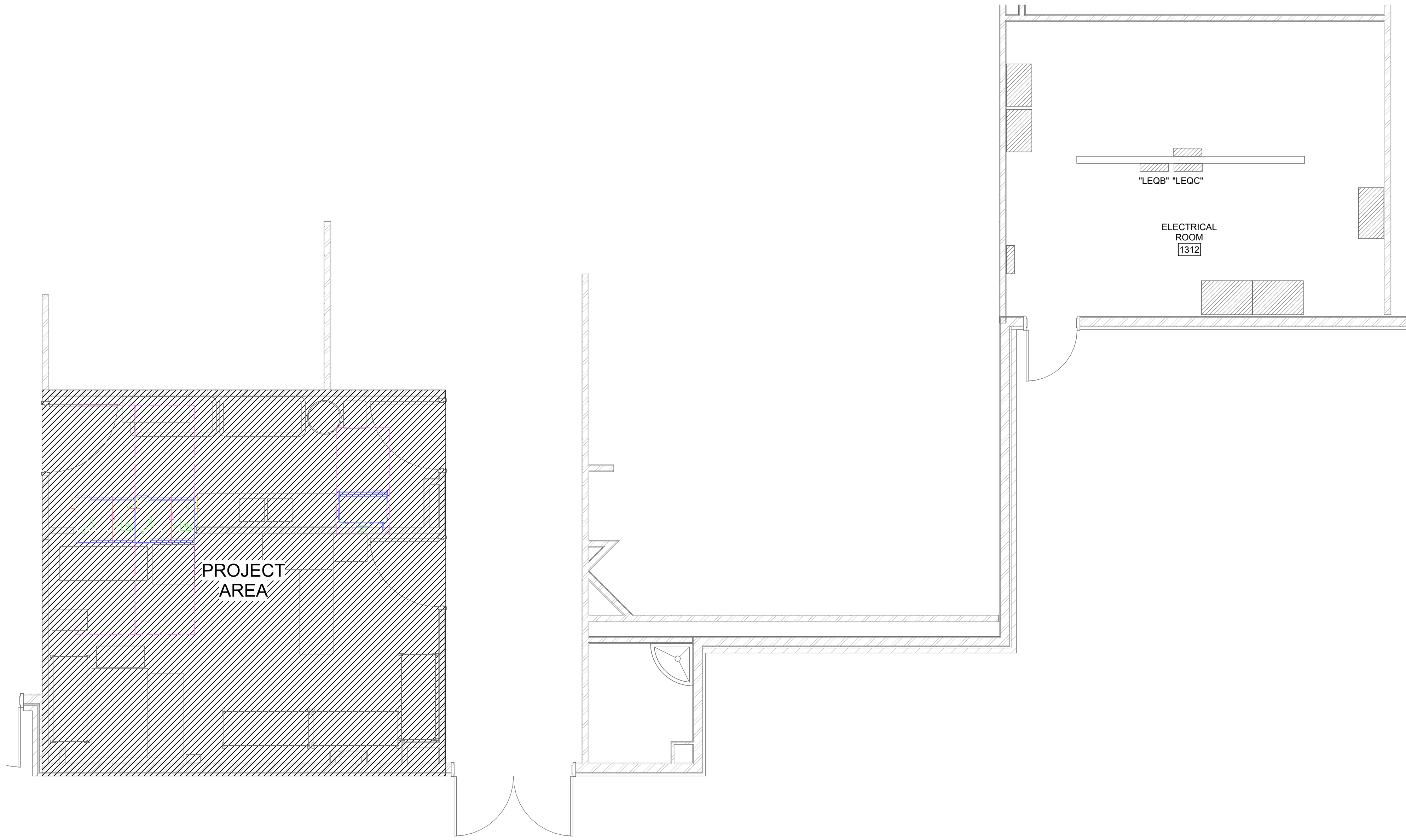
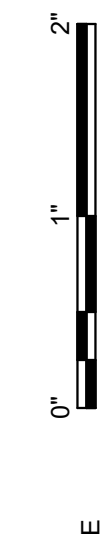
PROJECT NUMBER 25029

**ELECTRICAL
DEMOLITION
PLAN**

ED101



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1 LEVEL 1 POWER PLAN
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES

1. PROVIDE DEDICATED NATURALS FOR ALL BRANCH CIRCUITS.
2. ALL WIRING IN PATIENT CARE AREAS SHALL MEET THE REQUIREMENTS OF NEC 517.13.
3. RECEPTACLES INSTALLED WITHIN 6' OF THE EDGE OF A SINK SHALL BE GFCI PROTECTED.
4. CONTRACTOR TO PROVIDE NEW TYPED PANEL SCHEDULES FOR ALL PANELS AFFECTED BY THE PROJECT.

SHEET KEYNOTES



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Construction Documents

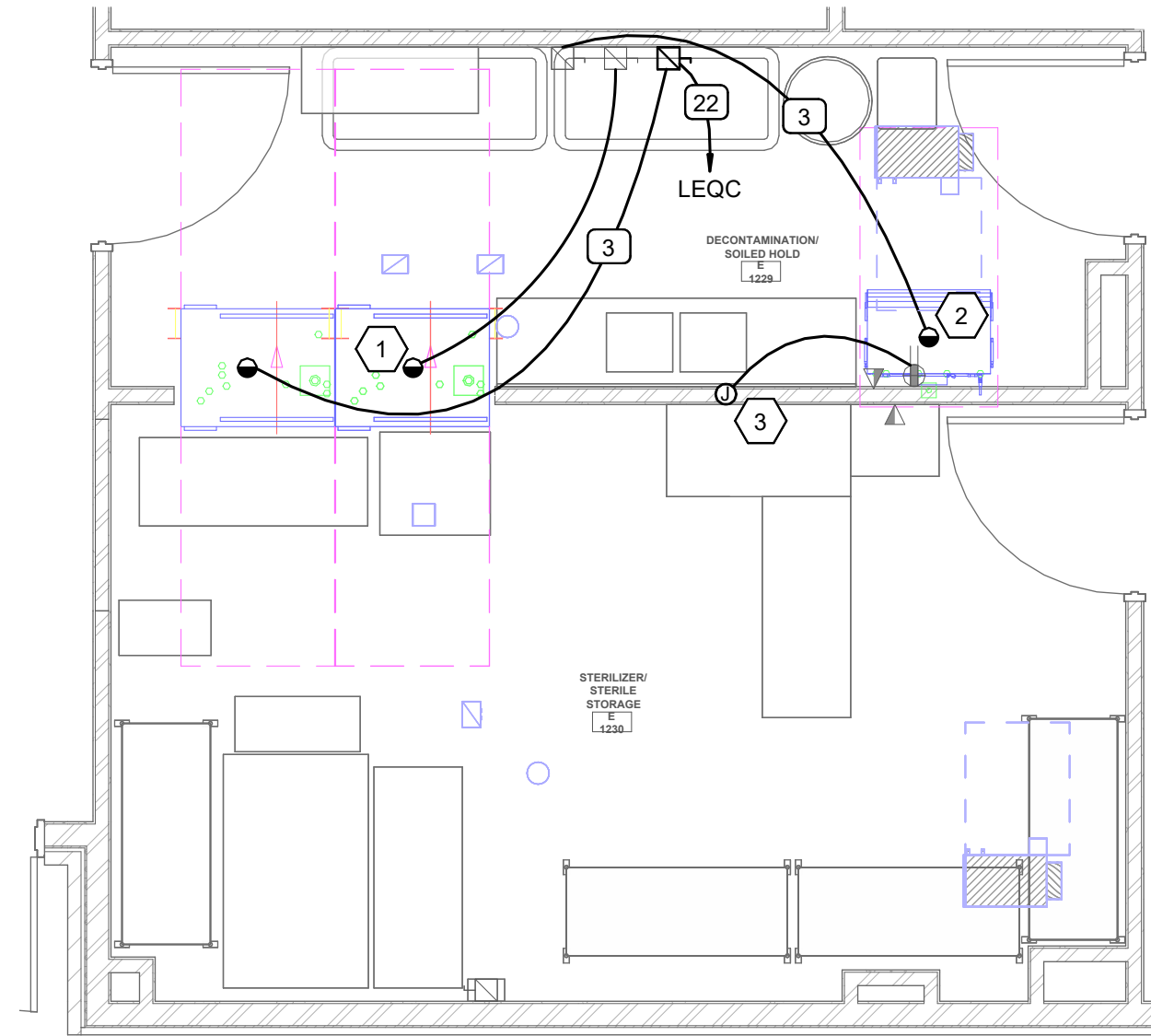


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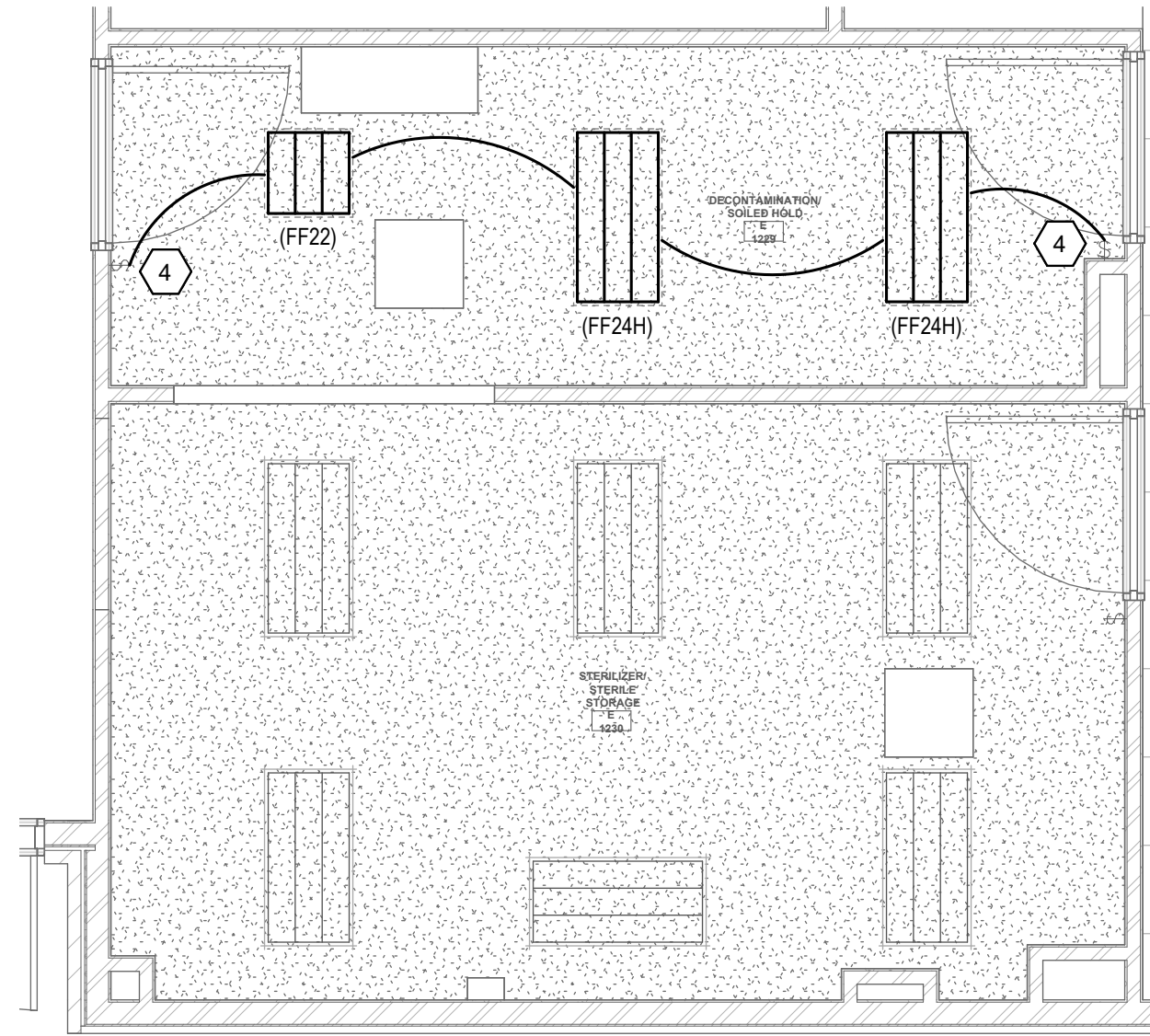
PROJECT NUMBER 25029

**LEVEL 1
OVERALL
POWER
PLAN**

EP100



1
LEVEL 1 POWER PLAN
SCALE: 1/4" = 1'-0"



2
LEVEL 1 LIGHTING PLAN
SCALE: 1/4" = 1'-0"

INTERIOR LIGHTING FIXTURE SCHEDULE											
GENERAL NOTES											
		1. SUBSTITUTIONS AND/OR EQUAL FIXTURES MUST RECEIVE APPROVAL PRIOR TO BIDDING, THEY MUST BE SUBMITTED TO THE ENGINEER NO LESS THAN 2 WEEKS PRIOR TO BID OPENING.									
		2. SAMPLES MUST BE PROVIDED FOR ANY AND ALL FIXTURES UPON A/E REQUEST PRIOR TO RELEASING FIXTURES.									
		3. ALL FIXTURES SHALL BE LISTED AND APPROVED FOR THEIR INTENDED USE AND LOCATION.									
		4. VERIFY THE PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS.									
		5. COMPLY WITH THE "INTERIOR LIGHTING" SECTION OF THE SPECIFICATIONS.									
		6. ALL LIGHT FIXTURES TO BE EITHER "DLC" OR "LIGHTING FACTS" LISTED OR TO BE APPROVED BY ARCHITECT/ENGINEER AND OWNER.									
		7. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES.									
ID	DESCRIPTION	SIZE (NOMINAL)	DELIVERED DIRECT LUMENS	LUMINAIRE DELIVERED INDIRECT LUMENS	COLOR TEMP	CRI	TYPE	VOLTAGE	WATTS	MANUFACTURER (CATALOG SERIES)	
(FF22)	DESCRIPTION: 2' X 2' LED FLAT PANEL, PROVIDE FLANGE KIT MOUNTING: CEILING, RECESSED FINISH: SCBA OPTICS: - OPTIONS: FLANGE KIT EM: -	LENGTH: 2' - 0" WIDTH: 2' - 0" DEPTH: -	5,400		3500K	90	0-10V DIMMING (1%)	120/277	40	DAYBRITE (2FP238L855 2 DS UNV DIM FMA22) LITHONIA (EPANL) TRULY GREEN SOLUTIONS (882440-35-S-F/8822-FMK) ILP (VPAN22)	
(FF24H)	DESCRIPTION: 2' X 4' LED FLAT PANEL, PROVIDE FLANGE KIT MOUNTING: CEILING, RECESSED FINISH: SCBA OPTICS: - OPTIONS: FLANGE KIT EM: -	LENGTH: 4' - 0" WIDTH: 2' - 0" DEPTH: -	6,700		3500K	90	0-10V DIMMING (1%)	120/277	60	DAYBRITE (FGR24T3560WDUNV DRY SILVER WHITE) LITHONIA (EPANL) TRULY GREEN SOLUTIONS (882440-35-S-F/8822-FMK)	

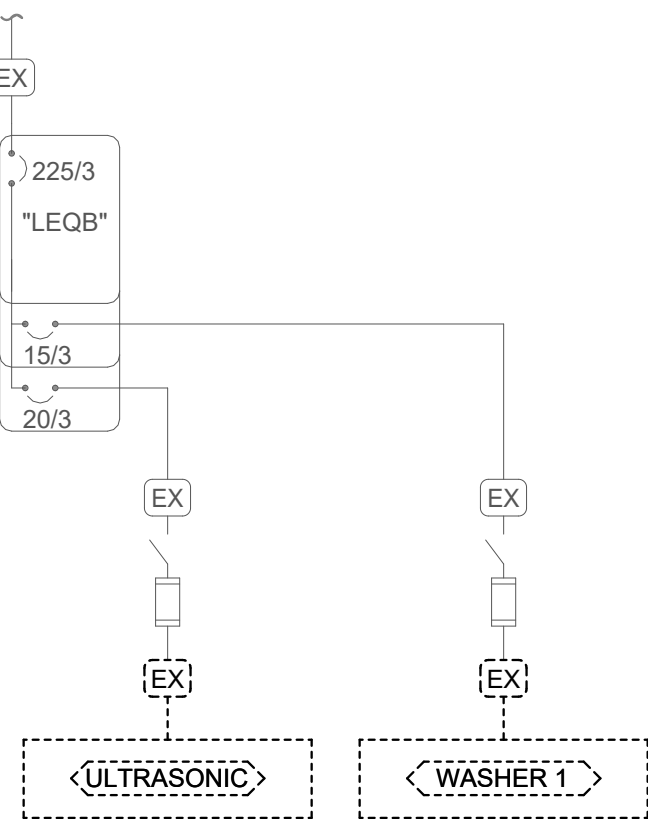
GENERAL SHEET NOTES

1. PROVIDE DEDICATED NATURALS FOR ALL BRANCH CIRCUITS.
2. ALL WIRING IN PATIENT CARE AREAS SHALL MEET THE REQUIREMENTS OF NEC 517.13.
3. RECEPTACLES INSTALLED WITHIN 6' OF THE EDGE OF A SINK SHALL BE GFCI PROTECTED.
4. CONTRACTOR TO PROVIDE NEW TYPED PANEL SCHEDULES FOR ALL PANELS AFFECTED BY THE PROJECT.

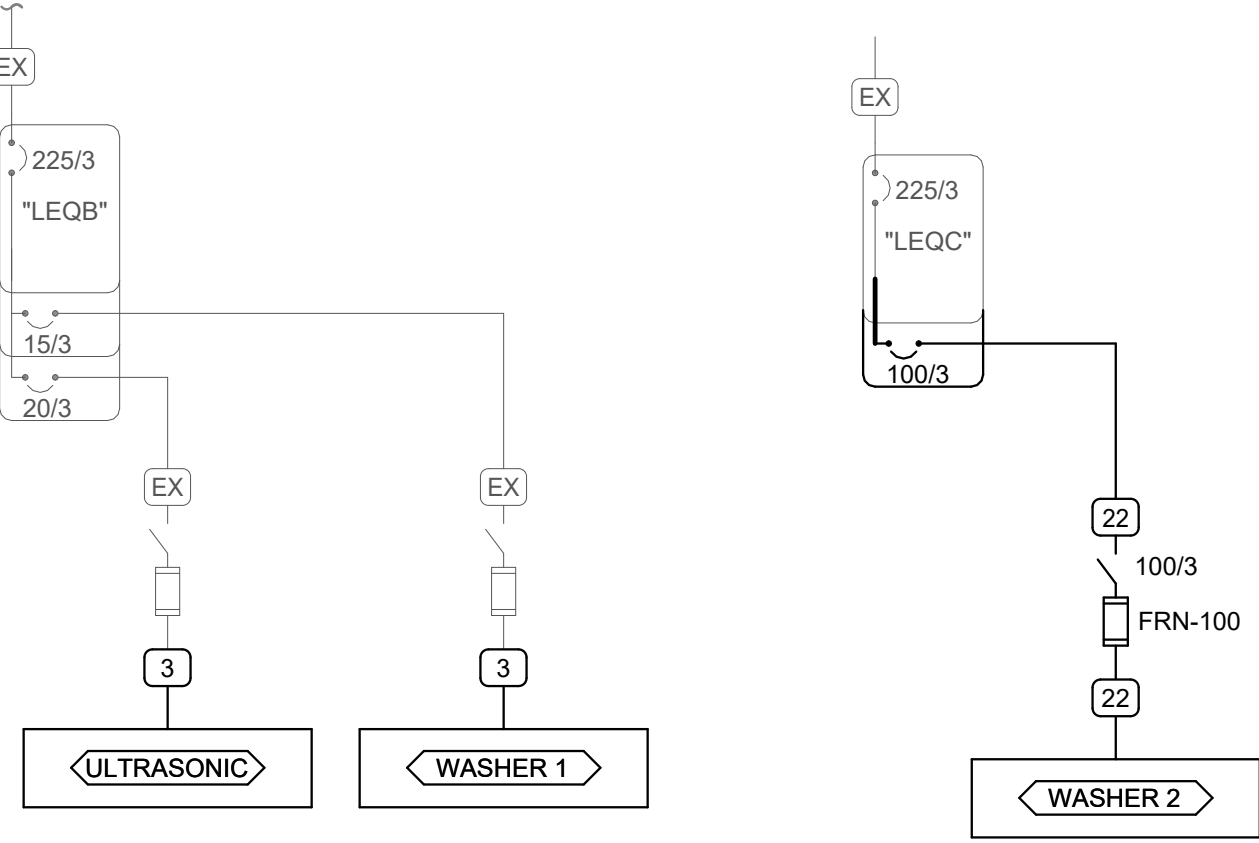
SHEET KEYNOTES

1. RELOCATE EXISTING CIRCUIT FOR THE EXISTING WASHER TO ACCOMMODATE THE INSTALLATION OF THE NEW WASHER.
2. RE-FEED THE EXISTING ULTRASONIC DISCONNECT FROM THE EXISTING DISCONNECT THAT FED IT PREVIOUSLY.
3. PROVIDE 120V CIRCUIT FOR PASS-THROUGH WINDOW.
4. CONNECT TO EXISTING LIGHTING CIRCUIT AND CONTROLS THAT PREVIOUSLY FED THIS SPACE.

1 DEMOLITION ONE-LINE DIAGRAM
SCALE: NTS



2 NEW ONE-LINE DIAGRAM
SCALE: NTS



BRANCH CIRCUIT CONDUCTOR
AND CONDUIT SIZING TABLE

CIRCUIT AMPACITY/VOLTAGE	CIRCUIT LENGTH	CONDUCTOR SIZE (PHASE, NEUTRAL AND GR)	CONDUIT SIZE
20A/120V	0' - 60'	#12 AWG	0.75" Ø
20A/120V	60' - 95'	#10 AWG	0.75" Ø
20A/120V	95' - 150'	#8 AWG	1" Ø
20A/120V	150' - 240'	#6 AWG	1.25" Ø
20A/277V	0' - 140'	#12 AWG	0.75" Ø
20A/277V	140' - 220'	#10 AWG	0.75" Ø
20A/277V	220' - 350'	#8 AWG	1" Ø
20A/277V	350' - 550'	#6 AWG	1.25" Ø

NOTES:

1. WIRE SIZING IS BASED ON COPPER CONDUCTORS SUPPLYING A 20A, 120V CIRCUIT AT THE INDICATED VOLTAGE, ASSUMED TO BE 80% LOADED (16A), WITH MAXIMUM VOLTAGE DROP OF 3% AT THE LOAD.

2. DOWN-SIZED WIRE AT DEVICE/LOAD AS REQUIRED AND TERMINATE CONDUCTORS IN A SAFE AND CODE COMPLIANT MANNER.

3. CONDUIT SIZE IS BASED ON A MAXIMUM OF 3 CIRCUITS PER CONDUIT, EACH WITH A SEPARATE NEUTRAL CONDUCTOR.

ALUMINUM CONDUCTOR
AND CONDUIT SCHEDULE

SCHEDULE NUMBER		SUBSCRIPT (NOTE 5)		(E.G. 5)G			
S/YM	AMP	CONDUIT SIZE	CONDUCTOR (NOTE 1) QTY SIZE	G	IG	SE	NOTES
(1)							
(2)							
(3)							
(4)							
(5)							
(6)							
(7)							
(8)							
(9)							
(10)							
(11)							
(12)							
(13)							
(14)							
(15)							
(16)							
(17)							
(18)							
(19)							
(20)							
(21)	130	2	3 2/0	4	1/0	4	2,7
(22)	130	2	4 2/0	4	1/0	4	2,7
(23)	150	2	3 3/0	4	1/0	4	2,7
(24)	150	2	4 3/0	4	1/0	4	2,7
(25)	175	2	3 4/0	4	1/0	2	2,7
(26)	175	2	4 4/0	4	1/0	2	2,7
(27)	200	2	3 250	4	1/0	2	2,7
(28)	200	3	4 250	4	1/0	2	2,7
(29)	230	2	3 300	2	1/0	1/0	2,7
(30)	230	3	4 300	2	1/0	1/0	2,7
(31)	250	3	3 350	2	2/0	1/0	2,7
(32)	250	3	4 350	2	2/0	1/0	2,7
(33)	310	3	3 500	1	3/0	1/0	2,7
(34)	310	4	4 500	1	3/0	1/0	2,7
(35)	380	2 EA 2	3 250	1	4/0	3/0	2,7
(36)	380	2 EA 3	4 250	1	4/0	3/0	2,7
(37)	400	2 EA 2	3 250	1/0	4/0	3/0	2,7
(38)	400	2 EA 2	4 250	1/0	4/0	3/0	2,7
(39)	500	2 EA 3	3 350	1/0	300	3/0	2,4,7
(40)	500	2 EA 3	4 350	1/0	300	3/0	2,4,7
(41)	620	2 EA 3	3 500	300	300	3/0	2,4,7
(42)	620	2 EA 4	4 500	300	300	3/0	2,4,7
(43)	750	3 EA 3	3 350	300	300	4/0	2,4,7
(44)	750	3 EA 3	4 350	300	300	4/0	2,4,7
(45)	810	3 EA 3	3 400	400	300	250	2,4,7
(46)	810	3 EA 4	4 400	400	300	250	2,4,7
(47)	1000	4 EA 3	3 350	400	300	250	4,7
(48)	1000	4 EA 3	4 350	400	300	250	4,7
(49)	-	-	-	-	-	-	-
(50)	1140	4 EA 4	4 500	250	300	250	4,7
(51)	1240	4 EA 4	3 500	350	300	250	4,7
(52)	1240	4 EA 4	4 500	350	300	250	4,7
(53)	1620	6 EA 4	4 400	400	350	250	4,7
(54)	2170	7 EA 4	4 500	400	400	500	4,7
(55)	2695	7 EA 4	4 750	600	750	750	4,7
(56)	3080	8 EA 4	4 750	600	750	750	4,7
(57)	4235	11 EA 4	4 750	800	750	750	4,7
(58)	1200	5 EA 4	-	-	-	-	6
(59)	3000	10 EA 6	-	-	-	-	6
(60)	-	10 EA 4	-	-	-	-	6

CONDUCTOR AND CONDUIT SCHEDULE NOTES

1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.

2. PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.

3. PROVIDE #10 NEUTRALS FOR MULTI-WIRE BRANCH CIRCUITS SERVING COMPUTERS.

4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.

5. SYMBOL SUBSCRIPTS:

"2N": INCLUDE TWO NEUTRAL CONDUCTORS SIZED AS SCHEDULED FOR PHASE AND NEUTRAL CONDUCTORS WHERE THE CONDUCTOR IS #10 OR LARGER. INCLUDE A SINGLE 200% RATED CONDUCTOR THAT IS TWICE THE AMPACITY OF THE SCHEDULED PHASE AND NEUTRAL CONDUCTOR WHERE THE CONDUCTOR IS BELOW #10 IN SIZE.

"CI": PROVIDE CIRCUIT INTEGRITY CABLE; TYPE TWO-HOUR FIRE RESISTIVE CABLES IN CONDUIT OR PROVIDE FEEDER ENCASED IN CONCRETE.

"FG": FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE SAME SIZE AS THE PHASE CONDUCTORS.

"HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE IG/HH SIZE FOR THE EQUIPMENT GROUNDING CONDUCTOR.

"IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.

"MC": PROVIDE FEEDER IN METAL-CLAD CABLE; TYPE MC IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.

"SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.

"SER": PROVIDE SERVICE-ENTRANCE CABLE; TYPE SE OR SER IN PLACE OF SINGLE CONDUCTORS IN CONDUIT.

6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.

7. ALUMINUM CONDUCTORS NOT TO BE USED FOR CONNECTION TO MOTORS OR MOTOR DRIVEN EQUIPMENT.

FAULT CURRENT TABLE

PROVIDE FULLY RATED CIRCUIT BREAKERS IN PANELBOARDS FOR THE FAULT CURRENT SHOWN. SERIES RATINGS WITH NEXT LEVEL UPSTREAM OVERCURRENT PROTECTIVE DEVICES ARE PERMITTED SUBJECT TO FACTORY UL DOCUMENTATION OF SERIES RATING SUBMITTED TO ENGINEER. IF DEVICE OR EQUIPMENT FAULT CURRENT RATING IS NOT SHOWN, ASSUME 100,000 AIC.		BUS		BUS	
		FAULT CURRENT		FAULT CURRENT	

GENERAL SHEET NOTES

- PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.
- REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.
- ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO ELECTRICAL SPECIFICATIONS FOR REQUIREMENTS.
- PROVIDE PERFORMANCE TESTING FOR GROUND-FAULT PROTECTION SYSTEMS ON SITE WITH A WRITTEN RECORD OF THIS TEST SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PER NEC 230.95(C).

SHEET KEYNOTES

COPPER CONDUCTOR
AND CONDUIT SCHEDULE

SCHEDULE NUMBER		SUBSCRIPT (NOTE 5)		(E.G. 5)G			
SYM	AMP	HH AMPS	CONDUIT SIZE	CONDUCTOR (NOTE 1)	IG/HH	SE	NOTES
1	20	-	.75	2 12 12 12	12 8 2		
2	20	-	.75	3 12 12 12	12 8 2.3		
3	20	24	.75	4 12 12 12	12 8 2.3		
4	30	-	.75	2 10 10 10	10 8 2		
5	30	-	.75	3 10 10 10	10 8 2		
6	30	32	.75	4 10 10 10	10 8 2		
7	40	-	1	2 8 10 8	8 6 2		
8	40	-	1	3 8 10 8	8 6 2		
9	40	44	1	4 8 10 8	8 6 2		
10	55	-	1	2 6 10 8	8 4 2		
11	55	-	1	3 6 10 8	8 4 2		
12	55	60	1.25	4 6 10 8	8 4 2		
13	70	-	1	2 4 8 4	4 2 2		
14	70	-	1.25	3 4 8 4	4 2 2		
15	70	76	1.25	4 4 8 4	4 2 2		
16	85	-	1.25	2 3 8 3	3 2 2		
17	85	-	1.25	3 3 8 3	3 2 2		
18	85	92	1.25	4 3 8 3	3 2 2		
19	95	-	1.25	3 2 8 2	2 2 2		
20	95	104	1.50	4 2 8 2	2 2 2		
21	130	-	1.50	3 1 6 2	2 2 2		
22	130	116	1.50	4 1 6 2	2 2 2		
23	150	-	2	3 1/0 6 2	2 1/0 2		
24	150	136	2	4 1/0 6 2	2 1/0 2		
25	175	-	2	3 2/0 6 2	2 2/0 2		
26	175	156	2	4 2/0 6 2	2 2/0 2		
27	200	-	2	3 3/0 6 2	2 2/0 2		
28	200	180	2.50	4 3/0 6 2	2 2/0 2		
29	230	-	2.50	3 4/0 4 2	2 2/0 2		
30	230	208	2.50	4 4/0 4 2	2 2/0 2		
31	255	-	2.50	3 250 4 1	2/0 2		
32	255	232	2.50	4 250 4 1	2/0 2		
33	310	-	3	3 350 3 1/0	3/0 2		
34	310	280	3	4 350 3 1/0	3/0 2		
35	380	-	3.50	3 500 3 3/0	3/0 2		
36	380	344	4	4 500 3 3/0	3/0 2		
37	400	-	2 EA 2	3 3/0 3 3/0	3/0 2		
38	400	360	2 EA 2.50	4 3/0 3 3/0	3/0 2		
39	510	-	2 EA 2.50	3 250 1 4/0	3/0 2		
40	510	464	2 EA 3	4 250 1 4/0	3/0 2		
41	620	-	2 EA 3	3 350 1/0 4/0	3/0 2.4		
42	620	560	2 EA 3	4 350 1/0 4/0	3/0 2.4		
43	760	-	2 EA 3.50	3 500 1/0 4/0	3/0 2.4		
44	760	688	2 EA 4	4 500 1/0 4/0	3/0 2.4		
45	855	-	3 EA 3	3 300 2/0 4/0	3/0 2.4		
46	855	768	3 EA 3	4 300 2/0 4/0	3/0 2.4		
47	1000	-	3 EA 3.50	3 400 2/0 4/0	3/0 4		
48	1000	912	3 EA 3.50	4 400 2/0 4/0	3/0 4		
49	1140	-	3 EA 4	3 500 3/0 4/0	3/0 4		
50	1140	1032	3 EA 4	4 500 3/0 4/0	3/0 4		
51	1240	-	4 EA 3	3 350 3/0 4/0	3/0 4		
52	1240	1120	4 EA 3	4 350 3/0 4/0	3/0 4		
53	1675	1520	5 EA 4	4 400 4/0 4/0	4/0 4		
54	2010	1824	6 EA 4	4 400 250 250	250 4		
55	2660	2408	7 EA 4	4 500 350 350	350 4		
56	3040	2752	8 EA 4	4 500 500 500	500 4		
57	4180	3784	11 EA 4	4 500 500 500	500 4		
58	1200	-	5 EA 4	- - - -	- 6		
59	3000	-	10 EA 6	- - - -	- 6		
60	-	-	10 EA 4	- - - -	- 6		

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