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REPLACE DENTAL VACUUM PIPING

VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

VA PROJECT #: 593-22-103

DESIGN TEAM

OWNER

VA Souther Nevada Heath System
6900 N. Pecos Rd.
North Las Vegas NV 89086

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VA | U.S. Department of Veterans Affairs

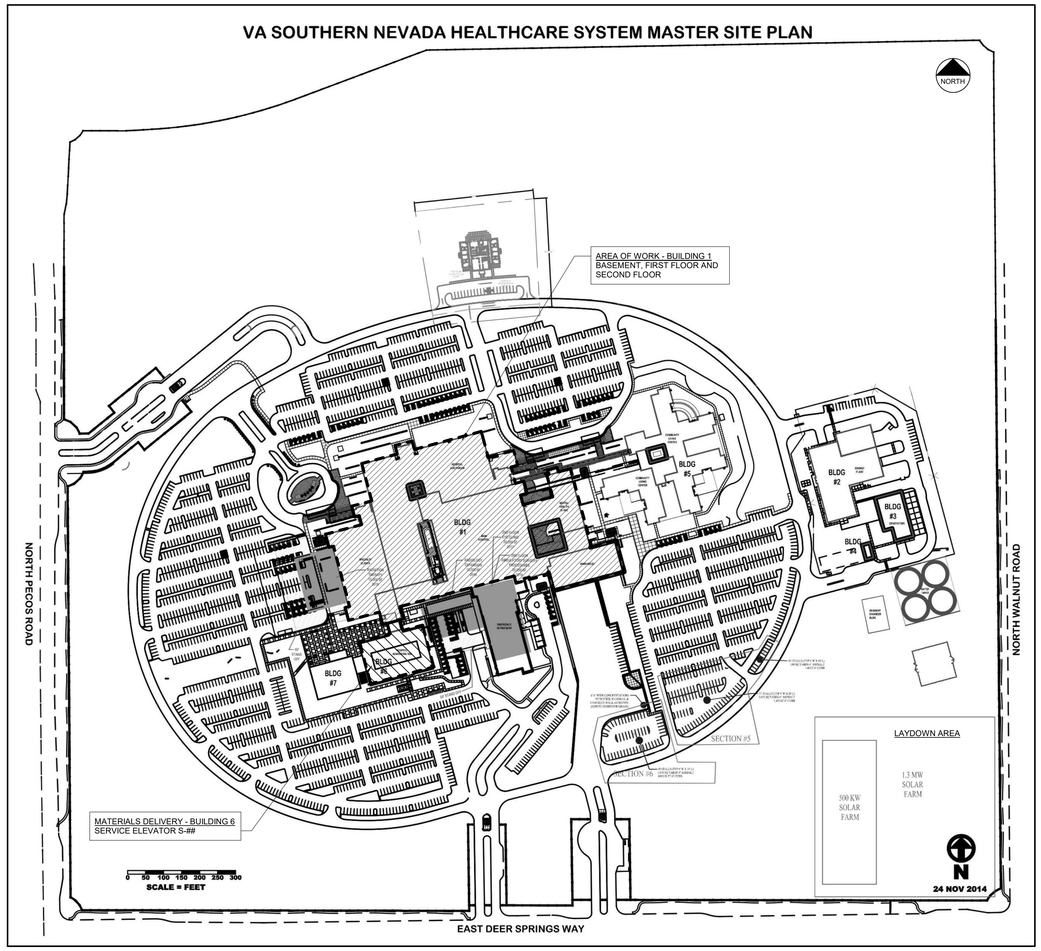
ARCHITECT / STRUCTURAL / MECHANICAL / ELECTRICAL / PLUMBING / FIRE PROTECTION ENGINEER

Apogee Consulting Group
1151 Kildaire Farm RD
Cary, NC 27511

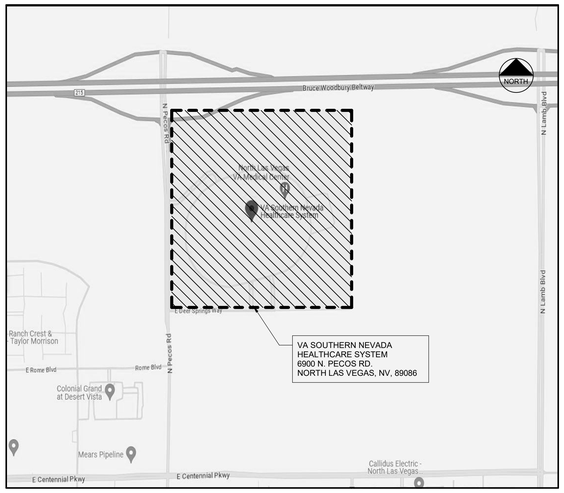
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(919) - 678 - 5815

APOGEE Engineers | Architects

PROJECT SITE MAP



PROJECT LOCATION MAP



SIGNATURE

TITLE	NAME	SIGNATURE AND DATE
PROJECT SUPERVISOR		
M + O SUPERVISOR		
FIRE DEPT. SUPERVISOR		
SAFETY ADVISOR		
PATIENT CARE SECTION		
GENERAL PROPERTIES SECTION		
GENERAL UTILITIES SECTION		
CONTRACTING OFFICE		
PATIENT SAFETY MANAGER		
INFECTION PREVENTION MANAGER		
CHIEF OF ENGINEERING		

DRAWING LIST

GENERAL			
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G-003	INFECTION CONTROL RISK ASSESSMENT - BASEMENT	3	6
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FULLY SPRINKLERED

100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO — WALTER DAVID VANSCOTER — ARC.1716954 — REGISTERED ARCHITECT — 5/30/2025

PROJECT MANAGER

ACG Project Number: 23-090

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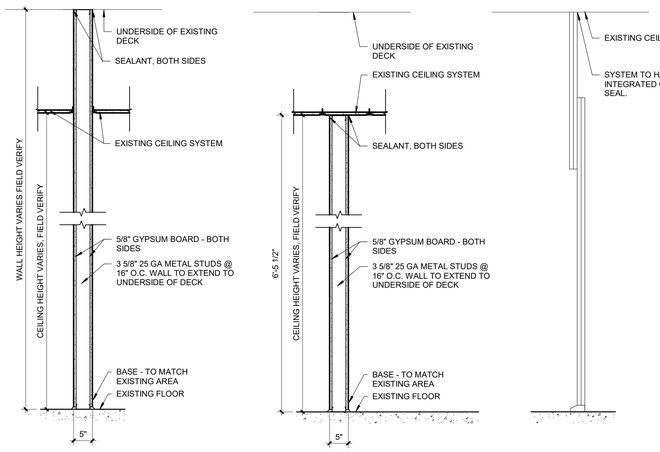
Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title	COVER
Project Title	REPLACE DENTAL VACUUM PIPING
VA PROJECT NUMBER	593-22-103
Building Number	1
Location	VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086
Approved	
Date	MAY 30, 2025
Checked	WVS
Drawn	CET
Drawing Number	G-001
Dwg	1 of 6

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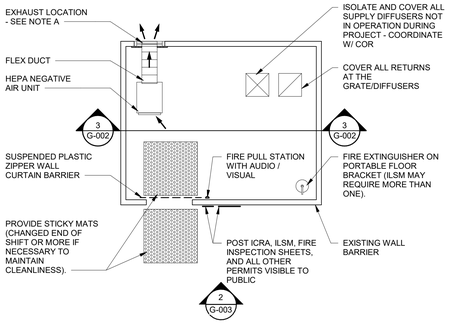
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AT ALL NON RATED TEMPORARY BARRIER LOCATIONS CONTRACTOR'S DISCRECTION TO USE PRE-MANUFACTURED SYSTEMS (TYPE C) OR BUILD HARD BARRIERS (TYPE A OR B)

6 ICRA BARRIER WALL TYPE

Scale: 3/4" = 1'-0"



NOTE:
A. TURN UP EXHAUST ON EXTERIOR ON SIDE. CONTRACTOR SHALL VERIFY LOCATION OF AIR INTAKES ARE AT THE PROPER DISTANCE FROM EXHAUST. VERIFY LOCAL JURISDICTION CODE AND VA REQUIREMENTS FOR DISTANCE PRIOR TO STARTING WORK.

1 TYPICAL CONSTRUCTION PLAN LAYOUT

Scale: No Scale

ICRA NOTES

DUST CONTROL PLAN NOTES

1. THE VAMC INFECTION CONTROL GROUP HAS CONFIRMED THE DESIGNATION FOR THIS PROJECT IS BASEMENT LEVEL I, FIRST FLOOR - LEVEL II, SECOND FLOOR LEVEL II FOR THE CLASS OF PRECAUTIONS OR LEVEL OF INFECTION CONTROL ACTIVITIES. HARD SURFACE BARRIERS SHALL BE USED EXCEPT IN THE AREA INDICATED ON THE PHASING PLAN WITH PLASTIC BARRIERS (MINIMUM 4MIL) TO SEAL AREA FROM NON-WORK AREA AS LONG AS THE SPRINKLER SYSTEM IS INTACT AND ACTIVE.
2. PROVIDE STICKY MATS AND BLANKET AT THE PLASTIC BARRIER ENTRANCE SPACES (CONSTRUCTION ANTEROOM) AND CHANGE DAILY OR MORE OFTEN AS NEEDED TO PREVENT THE SPREAD OF DUST AND DEBRIS INTO ADJACENT CLEAN SPACE.

INTERNAL DEMOLITION AND CONSTRUCTION ACTIVITIES DUST AND DEBRIS CONTROL

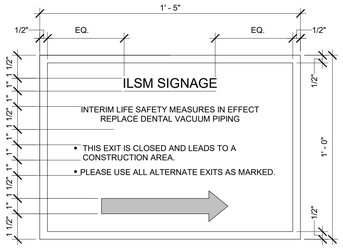
1. USE CORRIDORS AS PRIMARY CONSTRUCTION ACCESS.
2. TRAFFIC CONTROL: DESIGNATED ENTRY AND EXIT PROCEDURES SHALL BE DEFINED. EGRESS PATHS SHALL BE FREE OF DEBRIS; DESIGNATED ELEVATORS SHALL BE USED DURING SCHEDULED TIMES; AND ONLY AUTHORIZED PERSONNEL SHALL BE ALLOWED TO ENTER THE CONSTRUCTION ZONE. SIGNAGE SHALL DIRECT PEDESTRIAN TRAFFIC AWAY FROM THE CONSTRUCTION AREA AND MATERIALS.
3. CONTRACTOR SHALL USE TWO CARTS TO TRANSFER CONSTRUCTION MATERIAL IN AND OUT OF THE PROJECT - A CLEAN CART SHALL BE USED; A SECONDARY CART SHALL BE USED BETWEEN THE MAIN ENTRY AND THE CONSTRUCTION STAGING/PREP AREA.
4. DEMOLITION DEBRIS: DEBRIS SHALL BE REMOVED IN CARTS WITH TIGHTLY FITTED COVERS, USING DESIGNATED TRAFFIC ROUTES. EFFORTS SHALL BE MADE TO MINIMIZE USE OF ELEVATORS WITH AN EMPHASIS ON TRANSPORT DURING THE LOWEST PERIOD OF ACTIVITY. DEBRIS SHALL BE REMOVED DAILY AND AT TIMES SPECIFIED BY THE VAMC. IF CHUTES ARE USED TO DIRECT DEBRIS OUTSIDE, HIGH EFFICIENCY PARTICULATE AIR (HEPA) FILTERED NEGATIVE AIR MACHINES SHALL BE USED, AND THE CHUTE OPENING SHALL BE SEALED WHEN NOT IN USE. FILTERS SHALL BE BAGGED AND SEALED BEFORE BEING TRANSPORTED OUT OF THE CONSTRUCTION AREA. THE CONTRACTOR SHALL NOT HAUL DEBRIS THROUGH PATIENT-CARE AREAS WITHOUT PRIOR APPROVAL OF THE COR.
5. EXTERIOR WINDOWS: WINDOWS SHALL BE SEALED TO MINIMIZE INFILTRATION FROM ANY ADJACENT EXCAVATION DEBRIS.

VENTILATION AND ENVIRONMENTAL CONTROLS

1. AIR SYSTEM FLOW: THE COR SHALL VERIFY AND ACKNOWLEDGE TO THE CONTRACTOR WHETHER THE CONSTRUCTION AREA USES FRESH/OUTSIDE OR RE-CIRCULATED AIR. FILTERS SHALL BE ADDED OR RETURN VENTS COVERED AS NEEDED WITH FILTER MATERIAL OR PLASTIC. AIR MUST FLOW FROM CLEAN TO DIRTY AREAS.
2. NEGATIVE AIR PRESSURE: THE AIR WITHIN THE CONSTRUCTION AREA SHALL BE NEGATIVE WITH RESPECT TO SURROUNDING AREAS AND WITH NO DISRUPTION OF AIR SYSTEMS OF ADJACENT AREAS. USE OF THE NEGATIVE AIR PRESSURE SYSTEM WITHIN THE ENCLOSURE TO REMOVE DUST SHALL PASS AIR THROUGH AN INDUSTRIAL GRADE, PORTABLE HEPA FILTER CAPABLE OF FILTRATION RATES OF 300-800 CUBIC FEET PER MINUTE (FT3/MIN), OR EXHAUST AIR DIRECTLY TO THE OUTSIDE IF APPROVED BY VAMC.
3. FOR EXHAUST DUCT ROUTING THRU CORRIDOR: INSTALL HARD DUCT WITH NON-FLANGE HANGER HUNG FROM CEILING ABOVE, BOTTOM OF DUCT SHALL BE A MINIMUM OF 7'-2" A.F.F.
4. ADJACENT AREAS: THE STATUS OF SEALED PENETRATIONS AND INTACT CEILING SHALL BE VERIFIED DAILY.
5. AIR EXCHANGE RATES AND PRESSURE RELATIONSHIPS: VAMC AND CONTRACTOR SHALL VERIFY AND MAINTAIN PROPER RATES IN CRITICAL AREAS NEAR CONSTRUCTION ACTIVITY AND ENSURE AIR IS NOT BEING RE-CIRCULATED WITHOUT FILTRATION FROM THE CONSTRUCTION AREA ELSEWHERE. PROVIDE AIR PRESSURE TESTING THROUGHOUT THE PROJECT IN THE FREQUENCY AS IDENTIFIED BY THE COR.

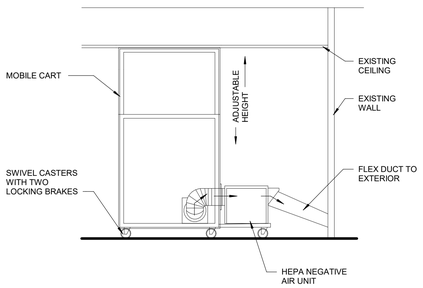
CONTAMINATION OF PATIENT ROOMS, SUPPLIES, EQUIPMENT AND RELATED AREAS

1. WORKSITE CLOTHING: CONTRACTOR PERSONNEL CLOTHING SHALL BE FREE OF LOOSE SOIL AND DEBRIS BEFORE LEAVING THE CONSTRUCTION AREA. IF PROTECTIVE APPAREL IS NOT WORN (E.G., COVERALLS, FOOTGEAR AND HEADGEAR) A HEPA-FILTERED VACUUM SHALL BE USED TO REMOVE DUST FROM CLOTHING BEFORE LEAVING THE BARRICADE. IF PROTECTIVE APPAREL IS UTILIZED, THE CONTRACTOR SHALL CONSTRUCT A SPACE OR ANTEROOM FOR CHANGING CLOTHING AND STORING EQUIPMENT (DESIGNATED AREA. ALL EQUIPMENT, TOOLS, TOOL CARTS, AND MATERIALS TRANSPORTED THROUGH OCCUPIED AREAS SHALL BE MADE FREE FROM DUST AND MOISTURE BY VACUUMING AND WET WIPING BEFORE THEIR REMOVAL FROM THE CONSTRUCTION ZONE OR WORK AREA.
2. POST CONSTRUCTION: DO NOT REMOVE BARRIERS AND KEEP ALL HVAC ISOLATION UNTIL CONTRACTOR HAS CLEANED CONSTRUCTION SITE. VA EMS STAFF HAS DONE A TERMINAL CLEANING, AND VA INFECTIOUS DISEASE CONTROL HAS INSPECTED AND APPROVED THE CLEANING. GC TO THOROUGHLY CLEAN PREVIOUS DAYS WORK AREA AT THE END OF THE SHIFT. VA SAFETY CREW AND ICRA STAFF TO INSPECT THE FIELD CONDITIONS PRIOR TO ACCEPTING THE SPACE FOR DAILY OPERATIONS. COORDINATE SCHEDULE WITH THE COR.



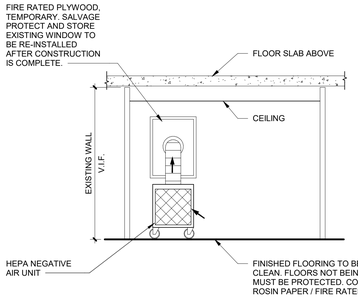
5 ILSM CONSTRUCTION EGRESS SIGNAGE

Scale: No Scale



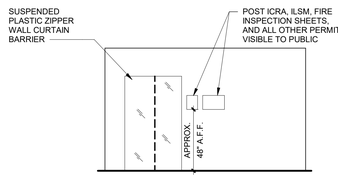
4 ICRA MOBILE CONTAINMENT CART

Scale: No Scale



3 CROSS SECTION "A"

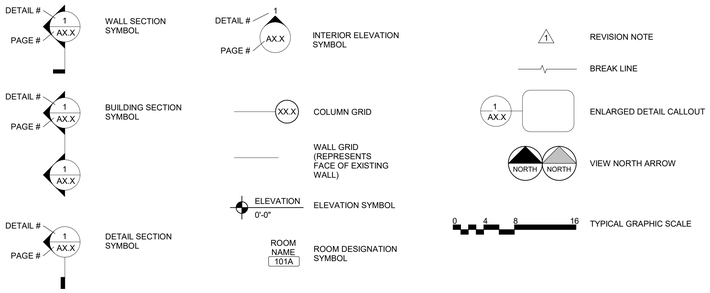
Scale: No Scale



2 ICRA ROOM ELEVATION

Scale: No Scale

GENERAL SYMBOL LEGEND



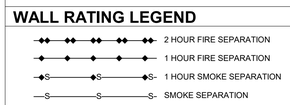
ARCHITECTURAL SYMBOL LEGEND



ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR
ACP/APC	ACOUSTIC CEILING PANEL/ ACOUSTIC PANEL CEILING
ACT	ACOUSTIC(AL) TILE
ADJ	ADJUSTABLE
ADT'L	ADDITIONAL
AGG	AGGREGATE
ALT	ALTERNATE
AL	ALUMINUM
APPROX	APPROXIMATE(LY)
ASPH	ASPHALT
AUTO	AUTOMATIC
B/O	BOTTOM OF
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOT	BOTTOM
BRG	BEARING
℄	CENTERLINE
C/C	CENTER TO CENTER
CJ	CONTROL JOINT
CLL	CONTRACT LIMIT LINE
CEM	CEMENT(ITIOUS)
CMU	CONCRETE MASONRY UNIT
CLG	CEILING
CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER(ED)
DF	DRINKING FOUNTAIN
DS	DOWNSPOUT
DBL	DOUBLE
DEG	DEGREE
DEMO	DEMOLITION
DET/DTL	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DWG(S)	DRAWING(S)
E	EAST
EC	ELECTRICAL CONTRACTOR
EHO	ELECTRICAL HOLD OPEN
EJ	EXPANSION JOINT
EW	EACH WAY
EA	EACH
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EL	ELEVATION
ELEC	ELECTRIC(AL)
ELEV	ELEVATOR
EMER	EMERGENCY
EQ	EQUAL
EQUIP	EQUIPMENT
EXIST	EXISTING
EXT	EXTERIOR
EWC	ELECTRIC WATER COOLER
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FFE	FINISH FLOOR ELEVATION
FV	FIELD VERIFY
FEC	FIRE EXTINGUISHER CABINET
FDN	FOUNDATION
FIN	FINISH
FLSHG	FLASHING
FLR	FLOOR
FRMG	FRAMING
FT	FOOT/FEET
FTG	FOOTING
GC	GENERAL CONTRACTOR
GA	GAUGE
GALV	GALVANIZED
GEN	GENERAL
GYP	GYPSUM
HM	HOLLOW METAL
HDWR	HARDWARE
HOL	HOLLOW
HOR	HORIZONTAL
HT	HEIGHT
HVAC	HEATING/VENTILATION/AIR CONDITIONING
ID	INSIDE DIAMETER
IN	INCH
INCL	INCLUDING
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
LAV	LAVATORY
LB(S)	POUND(S)
L/S	LANDSCAPE
LT	LIGHT
MO	MASONRY OPENING
MAS	MASONRY
MAT'L	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTD	MOUNTED
MTL	METAL
N	NORTH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NOM	NOMINAL
OC	ON CENTER
OD	OUTSIDE DIAMETER
O TO O	OUT TO OUT
OPNG	OPENING
OPP	OPPOSITE
OVHD	OVERHEAD
PEB	PRE-ENGINEERED BUILDING
PJF	PREFORMED JOINT FILLER
PT	PRESSURE TREATED
PERIM	PERIMETER
PL	PLATE
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLYWD	PLYWOOD
PNT	PAINT
PR	PAIR
PTD	PAINTED
PWR	POWER
RB	RUBBER BASE
RD	ROOF DRAIN
RO	ROUGH OPENING
RAD	RADIUS
REC	RECESSED
REINF	REINFORCED
REQ'D	REQUIRED
REV	REVISED (REVISION)
RM	ROOM
S	SOUTH
SB	SPLASH BLOCK
SF	SQUARE FEET
SS	STAINLESS STEEL
SIM	SIMILAR
SPEC	SPECIFICATIONS
SQ	SQUARE
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
T&G	TONGUE AND GROOVE
T/O	TOP OF
TELE	TELEPHONE
TRTD	TREATED
TS	TUBE STEEL
TYP	TYPICAL
UJC	UNIVERSAL JUNCTION BOX
UNFIN	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
VCT	VINYL COMPOSITION TILE
VIF	VERIFY IN FIELD
VERT	VERTICAL
W	WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WWF	WELDED WIRE FABRIC
WD	WOOD
WH	WATER HEATER
WT	WEIGHT

WALL RATING LEGEND



ILSM TEMPORARY BARRIER TAG	
PROJECT:	
PRIME CONTRACTOR:	
SUB CONTRACTOR:	
EMERGENCY CONTACT NO.:	
BARRIER INSTALLATION DATE:	
BARRIER EXPIRATION DATE:	

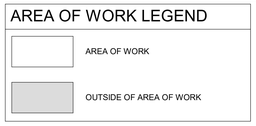
GENERAL NOTES

1. INDICATIONS OF PROJECT LIMITS OR LINES OF DEMARCATION ARE SHOWN FOR GENERAL SCOPE DEFINITION AND REFLECT THE UNDERSTANDING OF THE DESIGNER AS TO THE LIMITATIONS OF THE WORK AREA IN AN OCCUPIED AREA. ACTUAL CONTRACT LIMITS ARE TO BE DETERMINED BY AGREEMENT BETWEEN THE COR AND CONTRACTOR BEFORE THE START OF THE WORK.
2. DRAWINGS ARE PREPARED USING PRODUCT DIMENSIONS AND DETAILS FROM BASIS OF DESIGN PRODUCT. PRODUCTS MAY CHANGE IN DIMENSION AND DETAIL BEFORE THEY ARE INCORPORATED INTO WORK. PRODUCTS FROM OTHER MANUFACTURERS ARE ALSO ACCEPTABLE. DIMENSIONS AND DETAILS FOR ALTERNATE PRODUCTS MAY VARY FROM BASIS OF DESIGN. CONTRACTOR SHALL VERIFY INSTALLATION REQUIREMENTS FOR ALL PRODUCTS TO BE INCORPORATED INTO WORK (INCLUDING THICKNESS FOR RECESSED OR SEMI-RECESSED PRODUCTS) AND IS RESPONSIBLE FOR ACCOMMODATING AND COORDINATING CHANGES TO OTHER MATERIALS OR PRODUCTS THAT ARE NECESSARY BECAUSE OF THESE DIFFERENCES.
3. THE DRAWINGS AND SPECIFICATIONS ARE SEPARATED INTO DISCIPLINES FOR CONVENIENCE. THE SEPARATIONS ARE USED ONLY FOR THE PURPOSES OF CONVENIENCE AND REFERENCE AND IN NO WAY DO THEY DEFINE OR LIMIT THE SCOPE OR INTENT OF ANY PART OF THE DRAWINGS AND SPECIFICATIONS AS A WHOLE. THE FACT THAT THE DRAWINGS ARE SEPARATED IN NO WAY SUGGESTS THAT THE WORK IS NOT TO BE CONSTRUCTED AS A COMPLETE, INTEGRATED AND UNIFIED WHOLE.
4. THE DRAWINGS AND SPECIFICATIONS, INCLUDING DRAWINGS PREPARED BY SPECIFIC ENGINEERING DISCIPLINES ARE COMPLEMENTARY; ITEMS SHOWN IN ANY ONE LOCATION IN THE DRAWINGS SHALL BE CONSIDERED TO BE REQUIREMENTS OF THE CONTRACT FOR CONSTRUCTION. IN THE EVENT OF AN INCONSISTENCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT, THE CONTRACTOR SHALL SEEK CLARIFICATION OR INTERPRETATION FROM THE COR PRIOR TO BIDDING. WHERE INCONSISTENCIES ARE NOT CLARIFIED PRIOR TO BIDDING, AND WHERE THE ACTUAL SOLUTION OR INTENT CANNOT BE REASONABLY INFERRED, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK.
5. THE CONTRACTOR SHALL NOTIFY THE COR IMMEDIATELY SHOULD DISCREPANCIES BE FOUND IN THE DRAWINGS AND SPECIFICATIONS.
6. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL FIELD CONDITIONS AND DIMENSIONS AS THEY RELATE TO THIS PROJECT, FOR EACH PHASE. SHOULD DISCREPANCIES EXIST BETWEEN THE WORK INDICATED AND ACTUAL FIELD CONDITIONS, NOTIFY THE COR PRIOR TO PROCEEDING WITH THE WORK.
7. DO NOT SCALE THE DRAWINGS. DRAWING SCALES AS INDICATED ARE FOR REFERENCE ONLY AND ARE NOT INTENDED TO ACCURATELY DEPICT ACTUAL OR DESIGNATED CONDITIONS. WRITTEN DIMENSIONS SHALL GOVERN.
8. PROVIDE SEALANT AT ALL INTERSECTIONS BETWEEN DIFFERENT MATERIALS.
9. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH OTHER TRADES REGARDING THE LOCATION AND SIZE OF PIPES, EQUIPMENT, FIXTURE, CONDUIT, DUCTS, OPENINGS, SWITCHES, OUTLETS, ETC., SO THAT INTERFERENCE BETWEEN THE INSTALLATION OR THE PROGRESS OF THE WORK OF ANY CONTRACTOR OR THE SUBCONTRACTOR ON THE PROJECT CAN BE MINIMIZED IN THE FIELD. SEE SPEC SECTION 01 33 23 SHOP DRAWINGS.
10. REFER TO ALL OTHER TRADE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON THIS PROJECT.
11. PROVIDE BLOCKING AT PARTITIONS AS REQUIRED FOR MOUNTING OF WALL-MOUNTED ITEMS: PROVIDE SUPPLEMENTAL FRAMING AT WALL OPENINGS AS REQUIRED FOR COMPLETION OF THE WORK.
12. DIMENSIONS SHOWN ARE TO FACE OF FINISHED PARTITION, FACE OF CONCRETE/MASONRY WALLS, OR FINISHED FACE OF EXISTING WALL SURFACE.
13. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED.
14. SERVICE ELEVATOR S-4 IN BUILDING 1 SHALL BE USED AS MATERIALS DELIVERY.
15. DENTAL CLINIC AND PULMONARY WILL BE SHUT DOWN FOR THE DURATION OF THE PROJECT. ADJACENT AREAS MAY REQUIRE WEEKEND OR AFTER HOURS ACTIVITIES. COORDINATE WITH COR.
16. GENERAL CONTRACTOR THOROUGHLY CLEAN PREVIOUS DAYS WORK AREA AT THE END OF THE SHIFT. VA SAFETY CREW AND ICRA STAFF TO INSPECT THE FIELD CONDITIONS PRIOR TO ACCEPTING THE SPACE FOR DAILY OPERATIONS.
17. CONTRACTOR TO COMPLY WITH THE CURRENT VA SOUTHERN NEVADA HEALTHCARE SYSTEM'S (VASNHS) UTILITY SYSTEM SHUTDOWN (SOP-138-41), CONTRACTOR TO FILL OUT AND COORDINATE SHUTDOWN REQUEST FORM 14 CALENDAR DAYS PRIOR TO COMMENCING WORK.
18. CONTRACTOR TO COMPLY WITH THE CURRENT VA SOUTHERN NEVADA HEALTHCARE SYSTEM'S (VASNHS) LOCKOUT/ TAGOUT PROGRAM (SOP-138-30) LOTO TO BE FILLED OUT BY CONTRACTOR 14 CALENDAR DAYS PRIOR TO COMMENCING WORK.
19. COORDINATE LAYDOWN YARD WITH COR, COORDINATE DUMPSTER/RECYCLING BOX'S LOCATION.
20. COORDINATE WITH COR, PLACEMENT OF DUMPSTERS FOR CONSTRUCTION DEBRIS AND RECYCLABLE MATERIALS ARE PLACED IN DESIGNATED AREAS. PROVIDE A COPY OF RECYCLING BILL OF LADING TO COR.
21. COORDINATE WITH COR, PER HOMELAND SECURITY PRESIDENTIAL DIRECTIVE 12 (HSPD-12) WHICH MANDATED NEW STANDARDS FOR SECURE AND RELIABLE PERSONAL IDENTIFICATION FOR ALL FEDERAL EMPLOYEES AND CONTRACTORS. CONTRACTORS AND SUBCONTRACTOR TO SUBMIT REQUIRED DOCUMENTATION FOR BADGING.
22. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ATTAINING 3RD PARTY COMMISSIONING AGENT TO COMMISSION THE VACUUM SYSTEM. GENERAL CONTRACTOR TO PROVIDE A COMMISSIONING/RECERTIFICATION PLAN TO THE COR.

DEMOLITION NOTES

1. KEYNOTES AND DRAWINGS ARE INTENDED TO GRAPHICALLY REPRESENT GENERAL WORK AND DO NOT PORTRAY THE FULL SCOPE OF THE PROJECT. SEE SPECIFICATIONS FOR DETAILED REQUIREMENTS. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING ALL DEMOLITION REQUIRED FOR COMPLETION OF THE PROJECT.
2. REMOVE EXISTING CONSTRUCTION AS DESIGNATED AND CLEAR AREA OF DEBRIS PRIOR TO PROCEEDING WITH NEW CONSTRUCTION.
3. EXISTING EQUIPMENT REMOVAL SHALL BE COORDINATED WITH THE COR PRIOR TO REMOVAL. THE COR SHALL DETERMINE WHAT EQUIPMENT IS TO BE SALVAGED AND RETURNED TO VA FACILITY, AND WHICH EQUIPMENT IS TO BE DISPOSED OF PER SPECIFICATION SECTION 01 74 19 "CONSTRUCTION WASTE MANAGEMENT"
4. AT AREAS INDICATED TO BE PATCHED AND REPAIRED, FOR ADDITION AND RENOVATION PROJECTS: THE CONSTRUCTION AND ASSEMBLY OF THE PATCH OR REPAIR SHALL MATCH THE ASSEMBLY AND INTEGRITY OF THE ADJACENT EXISTING CONSTRUCTION, FOR FIRE RATING, MATERIALS, FINISH, THICKNESS, AND QUALITY.
5. COORDINATE WITH COR/VA FOR WORKING HOURS ALLOWED FOR DEMOLITION AND WASTE REMOVAL.
6. CONTRACTOR SHALL PROTECT AREA ADJACENT TO THE DEMOLITION AND NEW CONSTRUCTION WORK TO PREVENT DAMAGES, (IF DAMAGED PATCH, REPAIR, PAINT, SAND SMOOTH AND REFINISH TO MATCH EXISTING.) REPAIR OR REPLACE ITEMS DAMAGED DURING CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST.
7. THE INFORMATION CONTAINED IN THESE DEMOLITION DOCUMENTS DEFINES GENERAL SCOPE ONLY AND DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF PROVIDING ALL DEMOLITION REQUIRED FOR THE COMPLETION OF THE PROJECT.
8. DO NOT ENCROACH ON ADJACENT OCCUPIED AREAS NOT IDENTIFIED WITHIN THE SCOPE OF WORK. COORDINATE WITH THE COR IF ACCESS TO ADJACENT AREAS IS REQUIRED.
9. ALL DEMOLITION WORK SHALL BE PERFORMED WITH DUE CARE AND DILIGENCE IN ORDER TO PREVENT ARBITRARY DAMAGE OR INTERRUPTION OF SERVICE OR CONCEALED UTILITIES INTENDED TO REMAIN IN SERVICE. DISCOVERY OF UTILITIES OR CONDITIONS LOCATED DIFFERING FROM THOSE INDICATED OR THAT ARE NOT IDENTIFIED, SHALL BE REPORTED TO THE COR.
10. VERIFY ALL EXISTING CONDITIONS PRIOR TO BEGINNING WORK. NOTIFY COR AND ARCHITECT OF ANY CONFLICTS PRIOR TO PROCEEDING WITH DEMOLITION.
11. ALL ITEMS BEING SALVAGED OR REMOVED SHALL REMAIN THE PROPERTY OF THE OWNER UNTIL CONFIRMATION HAS BEEN MADE AS TO WHETHER THE OWNER WILL RETAIN SUCH ITEMS. ALL ITEMS NOT BEING RETAINED BY THE OWNER OR DESIGNATED ON THE DRAWINGS, ARE TO BE REMOVED.
12. CONTRACTOR SHALL NOTIFY COR OF ANY AREA REQUIRING DEMOLITION OTHER THAN SHOWN IN THESE DRAWINGS DUE TO UNFORESEEN CONDITIONS, TO ACCOMMODATE INSTALLATION OF ALL OTHER TRADES (INCLUDING ROOF PENETRATIONS). AFTER SUCH DEMOLITION AND INSTALLATION, PATCH OR REPLACE MATERIALS AND FINISHES TO MATCH EXISTING.
13. COORDINATE WITH COR FOR CONSTRUCTION ACCESS ROUTE AND LOCATIONS OF DUMPSTER AREA. COORDINATE WITH COR FOR SCHEDULE OF USE OF ACCESS ROUTE FOR WASTE REMOVAL AND CONTRACTOR USE OF FREIGHT ELEVATOR (AS REQUIRED).
14. WHERE INSTALLATION OF NEW FIXTURES, EQUIPMENT, DEVICES, OR SYSTEMS REQUIRES REMOVAL OF EXISTING WALL SURFACE, CONTRACTOR SHALL COORDINATE THE EXTENT OF SUCH REMOVAL AND PATCH/ REPAIR THE EXISTING WALL AFTER INSTALLATION.
15. ANY DAMAGED CEILING GRID OR TILE FROM CONSTRUCTION ACTIVITIES TO BE REPLACED AT NO COST TO THE VA.

AREA OF WORK LEGEND



FULLY SPRINKLERED

100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO
WALTER DAVID VANSCOTER
ARC.1716954
REGISTERED ARCHITECT
5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

Headquarters:
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Cary, North Carolina 27511
www.acg-pa.com 919-858-7420

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Office of Construction and Facilities Management

VA | U.S. Department of Veterans Affairs

Drawing Title: ICRA AND GENERAL INFORMATION AND DETAILS

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086

Approved

Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

Drawing Number: G-002

Dwg 2 of 6

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Introductory Information and Instructions

Use this template as a baseline for performing facility Infection Control Risk Assessments (ICRAs) for construction, renovation, and maintenance work (referred to as the "activity" in this document). The template provides minimum requirements for categorizing activity types and patient risk to determine the level of precautions needed to prevent infection risks. Facilities may customize this template to incorporate site-specific information and/or to add more stringent criteria.

This VHA ICRA template pertains specifically to infection prevention. It must be used if required by the VHA Pre-Construction Risk Assessment (PCRA) for the activity. *NOTE: The PCRA addresses other activity-related safety concerns (e.g., vibration, noise, hazardous materials) outside the scope of the ICRA.*

To complete the template:

1. Use **Table 1** to identify the category of the construction, renovation and/or maintenance activity.
2. Use **Table 2** to identify the areas affected by the activity.
3. Use **Table 3** to identify the overall patient risk category that will be affected by the activity.
4. Use **Table 4** to determine the level of infection prevention and control precautions needed for the activity.

Once all 4 steps above are completed: Refer to **Table 5** for the minimum required control measures for the level of infection prevention and control precautions needed for the activity. Refer to **Table 6** for the minimum infection prevention and control measures required on completion of the activity.

PERMIT: See the last page of this document for a fillable permit form to be used for posting at the activity site as needed.

Table 1 - Construction, Renovation, and/or Maintenance Activity Category

NOTE: *If any of the bulleted criteria in a higher activity category pertains to the work that will be done (even if the other criteria are in a lower category), use the higher activity category for the VHA ICRA.*

Activity Category determined from Table 1 (*A, B, C, or D*): C

Category A	**Inspection and/or facility upkeep generally defined as follows**: • Work can be completed in a single shift, not to exceed 10 hours. • Patients and/or employees may be in the area depending on the activity. • Work that does not create dust or debris. • Removal of ceiling tile or access to mechanical or electrical chase for visual inspection limited to 1 tile per 50 square feet with limited exposure time (not to exceed an hour for each tile) within the shift. • Minor interior updates (e.g., replacing floor or ceiling tiles, carpentry work to include hanging signage, and painting without sanding) that do not create dust or debris. • Limited building system maintenance such as basic plumbing on potable systems (e.g., faucet replacement) or basic electrical work such as replacement of light bulbs, receptacles, or switches.
Category B	**General maintenance and repair work generally defined as follows:** • Prolonged inspection and work that may take longer than a single shift but not exceeding a week. • Patients and employees are not to be in the area until activity is completed. • Work that creates minimal dust and debris.

Category C	• Interior finish or surface repairs, updates, or modifications such as repair of firewalls and barriers, and new flooring that produces minimal dust and debris. Controlled • Plumbing work such as installation or replacement of a single fixture or piping for a single fixture. Any work on sanitary plumbing including snaking of drains. • Electrical work such as installation of cabling/wiring/conduit for a single device, installation of new device such as a light fixture that produces minimal dust and debris. • Air Handler and/or fan shutdown/startup and HVAC work such as replacement of a single diffuser, single terminal unit or a single device that produces minimal dust and debris.
Category C	**Small-scale construction, renovation, or maintenance generally defined as follows**: • Work requiring longer than a single week to complete but not exceeding 6 months. • Patients and employees are not to be in the area until activity is completed. • Demolition/removal of preexisting floor covering, casework, lay-in ceiling, or other architectural elements. • Demolition/removal of more than 32 ft^2 of drywall/framing, hard ceilings, and doors/framing and minimal infrastructure such as electrical circuits and branch piping. • Installation of new walls, ceilings and doors including framing, drywall/plaster and associated work. • Plumbing work such as the installation of new sinks, showers and toilets and associated plumbing. • Shut down of sections of potable water systems. • Electrical work such as installation of conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Modification of existing fire alarm and suppression systems. • Mechanical work such as the installation of ductwork, diffusers, and terminal units for an area.
Category D	**Large-scale construction, renovation, or maintenance generally defined as follows**: • Work exceeding 6 months in duration. • Patients and employees are not to be in the area until activity is completed. • Large-scale demolition of building components and infrastructure including removal of multiple doors, walls, framing, ceilings, flooring, piping, electrical and HVAC. • The installation building components such as new walls, ceilings and doors including framing, drywall and associated plaster work. • Plumbing work such as the installation of: ○ new medical gas systems, ○ steam/heating hot water, condensate systems, ○ multiple sinks, showers and toilets including associated plumbing. • Shutdown of potable water, steam/heating hot water, condensate, and medical gas systems. • Electrical work such as installation of electrical feeders, distribution panels, conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Installation of fire alarm and suppression systems. • Electrical shutdown of multiple panels. • Mechanical work such as the installation of air handling equipment, associated ductwork, diffusers, heat exchangers, terminal units and controls.

Table 2 - Affected Area Assessment

Identify the areas and associated patients that will be affected by the construction/renovation/maintenance activity (see the Figure for a visual representation of adjacent affected areas).

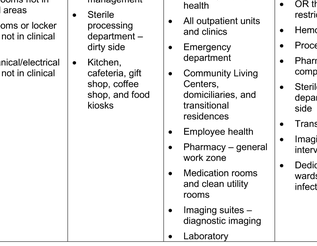


Figure: Isometric drawing of affected area assessment

Area	Service(s)/Type(s) of Area(s) *(e.g., OR, Unit/Ward, Sterile Processing, Administrative, etc.)**	Point of Contact (POC)	POC Contact Information
Activity Area**	BD160(Mechanical Rm.), Corridor CB-2, (BD101)Electrical Rm.	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov
Area Above	N/A	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov
Area Below	1D101(Electrical Rm), Corridor C1-71	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov
Adjacent Area 1	N/A	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov
Adjacent Area 2	N/A	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov
Adjacent Area 3	Stair 2	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov
Adjacent Area 4	BD125,BD123,BD121	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov

* There may be more than one Service/type of area for each row. List all.

** List the area(s) in which the construction/renovation/maintenance activity will occur. ***NOTE: When the Activity Category is B, C, or D, the control measures are determined by the Patient Risk in the adjacent affected areas.***

Table 3 - Patient Risk Category

Using Table 3, identify the patient risk category for each area listed in Table 2. Of the patient risk categories identified, select the one with the greatest risk as the overall Patient Risk Category for the activity.

Overall Patient Risk Category determined from Table 3 (*Low, Medium, High, or Highest*): Low

Low Risk	Medium Risk	High Risk	Highest Risk
Non-patient care areas such as:	Patient care support areas such as:	Patient care areas such as:	Procedural, invasive, sterile support and highly compromised patient care areas such as:
• Public hallways and gathering areas not in clinical areas • Office areas not in clinical areas • Breakrooms not in clinical areas • Bathrooms or locker rooms not in clinical areas • Mechanical/electrical rooms not in clinical areas	• Waiting areas • Clinical engineering (biomedical) • Materials management • Sterile processing department – dirty side • Kitchen, cafeteria, gift shop, coffee shop, and food kiosks	• Patient care rooms and areas, including spinal cord injury units • All acute care units, including mental health • All outpatient units and clinics • Emergency department • Community Living Centers, domiciliaries, and transitional residences • Employee health • Pharmacy – general work zone • Medication rooms and clean utility rooms • Imaging suites – diagnostic imaging • Laboratory	• All transplant units • All intensive care units • All oncology units and chemotherapy/infusion centers • OR theaters and restricted areas • Hemodialysis units • Procedural rooms* • Pharmacy compounding area • Sterile processing department – clean side • Transfusion services • Imaging suites – interventional imaging • Dedicated isolation wards/units for infectious diseases

* Procedural Rooms are designated for the performance of patient care activities that may require high-level disinfected or sterile instruments and some environmental controls but is not required to be performed with the environmental controls of an operating room (OR). The room is intended for procedures that are performed in an aseptic surgical field and penetrates the protective surfaces of a patient's body (e.g., subcutaneous tissue, mucous membranes, cornea) or entry into or opening of a sterile body cavity. Examples of these spaces include, and are not limited to, Cardiac Catheterization Suites, Electrophysiology Suites, Endovascular/GI Suites, Angio Suites and other spaces which may have high risk patient populations.

Table 4 - Level of Infection Prevention and Control Precautions

Match the Overall Patient Risk Category (*Low, Medium, High, Highest*) determined from Table 3 with the planned Construction/Renovation/Maintenance Activity Category (*A, B, C, D*) from Table 1 to determine the minimum Level of Infection Prevention and Control Precautions (*I, II, III, or IV*) using Table 4 below.

Level of Precautions determined from Table 4 (*I, II, III, or IV*): II

Patient Risk Category	Activity Category A	B	C	D
Low Risk	I	II	II	III
Medium Risk	I	II	III	IV
High Risk	I	II	IV	IV
Highest Risk	II	III	IV	IV

An infection prevention and control permit is required for Level III and Level IV. Consult with Infection Prevention and Control for Level I and Level II.

Table 5 - Required Infection Prevention and Control Measures, by Level of Precautions

Controls defined below for the Level of Precautions identified for the activity must be in place before the activity begins and maintained until work is completed and the area is activated. Control measures for each Precaution Level must also include the control measures in the preceding Level(s).

As the activity progresses, a full re-evaluation of remaining activity type and patient risk is required prior to downgrading the Level of Precautions.

Level of Precautions	Control Measures
Level I	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation.

	4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system. 5. Seal doors to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled, 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
Level III	**All control measures in Levels I and II and the following:** 1. Ensure availability of equipment for cleaning hands. 2. Construct and complete critical barriers meeting NFPA 241 requirements. Barriers must extend to the ceiling or if ceiling tile is removed, to the deck above. 3. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to floor and ceiling (or floor/roof deck above) and secure from movement or damage. 4. Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type). 5. Maintain .01 inches /water gauge negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors, or comply with the alternative method outlined in Appendix A of this document. These control measures must be maintained continuously 24/7 for the duration of the project. HEPA filtered exhaust if discharged directly to the outdoors must be at a distance of 25 feet or greater from entrances, air intakes and operable windows. Exhausting discharged air into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is prohibited. 6. Install a differential pressure sensing device (e.g., magnehelic, manometer, or digital monitoring) on exterior of work containment to continually monitor and document negative pressurization. The "ball in the wall" or similar apparatus are not acceptable.
Level IV	**All control measures in Levels I, II and III and the following:** 1. Barriers must be hard barriers unless temporary to install final barrier. 2. Containment must include an anteroom to ensure pressure control. Anteroom must be large enough for equipment staging, cart cleaning, workers' PPE and cleaning. 3. Worker clothing and/or PPE must be removed or clean and free of visible dust before leaving the work area anteroom. HEPA vacuuming of clothing or use of cover suits is acceptable. 4. Workers must wear shoe covers or have a method to clean shoes in anteroom. Shoe covers must be removed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be changed immediately.

Table 6 - Minimum Infection Prevention and Control Measures Required Upon Completion of the Activity

Controls defined below shall be completed upon completion of the activity and inspected prior to terminating measures defined in Table 5.

Level of Precautions	Measures
Levels I - II	**Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **HVAC Systems:** 1. Remove isolation of HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational. 2. Verify the HVAC systems meet original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.
Levels III - IV	Construction areas must be inspected by an infection preventionist and engineering representative (and others as determined by the facility) for final activity/project close out and removal of infection prevention and control measures. **Work Area Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **Removal of Critical Barriers:** 1. Critical barriers must remain in place during all work involving drywall removal, creation of dust and activities beyond simple touch-up work. The barrier may NOT be removed until a work area cleaning has been performed. Additional cleaning may be needed after removal of barrier. 2. All (plastic or hard) barrier removal activities must be completed in a manner that prevents dust release. Use the following precautions when removing hard barriers: i. Carefully remove screws and painter tape. ii. If dust will be generated during screw removal, use hand-held HEPA vacuum. iii. Drywall cutting is prohibited during removal process. iv. Clean all stud tracks with HEPA vacuum before removing outer hard barrier. v. Use a plastic barrier to enclose area if dust could be generated. **Negative Air Requirements:** 1. The use of negative air must be designed to remove contaminants from the work area. 2. Negative air devices (fans, filters, monitoring and documentation equipment) must remain operational at all times and in place for a period after completion of dust creating activities to remove contaminants from the work area and before removal of critical barriers. **HVAC systems:** 1. Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed. 2. Verify that HVAC systems are clean and operational. 3. Verify and document through a TAB the HVAC systems meets original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.

Infection Prevention and Control Construction/Renovation/Maintenance Permit

This page must be posted at the entrance to the project area for Level III and Level IV activities.

Unique permit number:			
Location of construction/renovation/maintenance	BD160 (Mechanical Rm.), Corridor CB-2, BD101 (Electrical Rm.)		
Project manager	Tikisha Slan/ Jesus Rangel	Project start date	Unknown
Contact phone number	702-791-9000 x14980/14184	Completion date	Unknown
Contractor		Permit expiration date	

Activity Category (*A, B, C, or D*)	C	Overall Patient Risk Category (*Low, Medium, High, or Highest*)	Low	Level of Infection Prevention and Control Precautions (*I, II, III, or IV*)	II

Level of Precautions	Control measures to be in place for the duration of the activity *(Check the box for the activity's Level of Precautions to indicate the Control Measures)*
Level I ☐	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II ☑	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation. 4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system 5. Seal doors, to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled. 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
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Additional requirements:	This is a preliminary ICRA to meet design requirement/s.				
Project Manager signature	TIKISHA SLAN	Digitally signed by TIKISHA SLAN Date: 2025.03.04 11:52:41 -05'00'	Date		
Infection Preventionist signature	PAOLO CARLO CUBELO	Digitally signed by PAOLO CARLO CUBELO Date: 2025.03.04 13:10:22 -05'00'	Date		

ICRA MATRIX - BASEMENT

FULLY SPRINKLERED
100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO
WALTER DAVID VANSCOTER
ARC.1716954
REGISTERED ARCHITECT
5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

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Cary, North Carolina 27511
www.acg-pa.com 919-858-7420

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: INFECTION CONTROL RISK ASSESSMENT - BASEMENT

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Approved:

Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

Drawing Number: G-003

Dwg 3 of 6

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VA FORM 08-6231

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VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Introductory Information and Instructions

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3. Use **Table 3** to identify the overall patient risk category that will be affected by the activity.
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PERMIT: See the last page of this document for a fillable permit form to be used for posting at the activity site as needed.

Table 1 - Construction, Renovation, and/or Maintenance Activity Category

NOTE: *If any of the bulleted criteria in a higher activity category pertains to the work that will be done (even if the other criteria are in a lower category), use the higher activity category for the VHA ICRA.*

Activity Category determined from Table 1 (*A, B, C, or D*): C

Category A	**Inspection and/or facility upkeep generally defined as follows**: • Work can be completed in a single shift, not to exceed 10 hours. • Patients and/or employees may be in the area depending on the activity. • Work that does not create dust or debris. • Removal of ceiling tile or access to mechanical or electrical chase for visual inspection limited to 1 tile per 50 square feet with limited exposure time (not to exceed an hour for each tile) within the shift. • Minor interior updates (e.g., replacing floor or ceiling tiles, carpentry work to include hanging signage, and painting without sanding) that do not create dust or debris. • Limited building system maintenance such as basic plumbing on potable systems (e.g., faucet replacement) or basic electrical work such as replacement of light bulbs, receptacles, or switches.
Category B	**General maintenance and repair work generally defined as follows:** • Prolonged inspection and work that may take longer than a single shift but not exceeding a week. • Patients and employees are not to be in the area until activity is completed. • Work that creates minimal dust and debris.

	• Interior finish or surface repairs, updates, or modifications such as repair of firewalls and barriers, and new flooring that produces minimal dust and debris. Controlled sanding activities (e.g., wet or dry sanding) that produce minimal dust and debris. • Plumbing work such as installation or replacement of a single fixture or piping for a single fixture. Any work on sanitary plumbing including snaking of drains. • Electrical work such as installation of cabling/wiring/conduit for a single device, installation of new device such as a light fixture that produces minimal dust and debris. • Air Handler and/or fan shutdown/startup and HVAC work such as replacement of a single diffuser, single terminal unit or a single device that produces minimal dust and debris.
Category C	**Small-scale construction, renovation, or maintenance generally defined as follows**: • Work requiring longer than a single week to complete but not exceeding 6 months. • Patients and employees are not to be in the area until activity is completed. • Demolition/removal of preexisting floor covering, casework, lay-in ceiling, or other architectural elements. • Demolition/removal of more than 32 ft² of drywall/framing, hard ceilings, and doors/framing and minimal infrastructure such as electrical circuits and branch piping. • Installation of new walls, ceilings and doors including framing, drywall/plaster and associated work. • Plumbing work such as the installation of new sinks, showers and toilets and associated plumbing. • Shut down of sections of potable water systems. • Electrical work such as installation of conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Modification of existing fire alarm and suppression systems. • Mechanical work such as the installation of ductwork, diffusers, and terminal units for an area.
Category D	**Large-scale construction, renovation, or maintenance generally defined as follows**: • Work exceeding 6 months in duration. • Patients and employees are not to be in the area until activity is completed. • Large-scale demolition of building components and infrastructure including removal of multiple doors, walls, framing, ceilings, flooring, piping, electrical and HVAC. • The installation building components such as new walls, ceilings and doors including framing, drywall and associated plaster work. • Plumbing work such as the installation of: o new medical gas systems, o steam/heating hot water, condensate systems, o multiple sinks, showers and toilets including associated plumbing. • Shutdown of potable water, steam/heating hot water, condensate, and medical gas systems. • Electrical work such as installation of electrical feeders, distribution panels, conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Installation of fire alarm and suppression systems. • Electrical shutdown of multiple panels. • Mechanical work such as the installation of air handling equipment, associated ductwork, diffusers, heat exchangers, terminal units and controls.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 2 - Affected Area Assessment

Identify the areas and associated patients that will be affected by the construction/renovation/maintenance activity (see the Figure for a visual representation of adjacent affected areas).

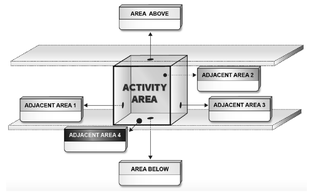


Figure: Isometric drawing of affected area assessment

Area	Service(s)/Type(s) of Area(s) *(e.g., OR, Unit/Ward, Sterile Processing, Administrative, etc.)* *	Point of Contact (POC)	POC Contact Information
Activity Area**	Eye Clinic, 1D101(Electrical Rm.), Corridor C1-71	Lane Fujimoto	Lane.fujimoto@va.gov
Area Above	Audiology	Brian Baumgartner	Brian.baumgartner@va.gov
Area Below	BD101, Corridor(CB-2)	N/A	N/A
Adjacent Area 1	Corridor C1 -1	N/A	N/A
Adjacent Area 2	Corridor C1-71	N/A	N/A
Adjacent Area 3	None	N/A	N/A
Adjacent Area 4	Main Corridor C1-28	N/A	N/A

* There may be more than one Service/type of area for each row. List all.

** List the area(s) in which the construction/renovation/maintenance activity will occur. ***NOTE: When the Activity Category is B, C, or D, the control measures are determined by the Patient Risk in the adjacent affected areas.***

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 3 - Patient Risk Category

Using Table 3, identify the patient risk category for each area listed in Table 2. Of the patient risk categories identified, select the one with the greatest risk as the overall Patient Risk Category for the activity.

Overall Patient Risk Category determined from Table 3 (*Low, Medium, High, or Highest*): High

Low Risk	Medium Risk	High Risk	Highest Risk
Non-patient care areas such as:	Patient care support areas such as:	Patient care areas such as:	Procedural, invasive, sterile support and highly compromised patient care areas such as:
• Public hallways and gathering areas not in clinical areas • Office areas not in clinical areas • Breakrooms not in clinical areas • Bathrooms or locker rooms not in clinical areas • Mechanical/electrical rooms not in clinical areas	• Waiting areas • Clinical engineering (biomedical) • Materials management • Sterile processing department – dirty side • Kitchen, cafeteria, gift shop, coffee shop, and food kiosks	• Patient care rooms and areas, including spinal cord injury units • All acute care units, including mental health • All outpatient units and clinics • Emergency department • Community Living Centers, domiciliaries, and transitional residences • Employee health • Pharmacy – general work zone • Medication rooms and clean utility rooms • Imaging suites – diagnostic imaging • Laboratory	• All transplant units • All intensive care units • All oncology units and chemotherapy/infusion centers • OR theaters and restricted areas • Hemodialysis units • Procedural rooms* • Pharmacy compounding area • Sterile processing department – clean side • Transfusion services • Imaging suites – interventional imaging • Dedicated isolation wards/units for infectious diseases

* Procedural Rooms are designated for the performance of patient care activities that may require high-level disinfected or sterile instruments and some environmental controls but is not required to be performed with the environmental controls of an operating room (OR). The room is intended for procedures that are performed in an aseptic surgical field and penetrates the protective surfaces of a patient's body (e.g., subcutaneous tissue, mucous membranes, cornea) or entry into or opening of a sterile body cavity. Examples of these spaces include, and are not limited to, Cardiac Catheterization Suites, Electrophysiology Suites, Endovascular/GI Suites, Angio Suites and other spaces which may have high risk patient populations.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 4 - Level of Infection Prevention and Control Precautions

Match the Overall Patient Risk Category (*Low, Medium, High, Highest*) determined from Table 3 with the planned Construction/Renovation/Maintenance Activity Category (*A, B, C, D*) from Table 1 to determine the minimum Level of Infection Prevention and Control Precautions (*I, II, III, or IV*) using Table 4 below.

Level of Precautions determined from Table 4 (*I, II, III, or IV*): IV

Patient Risk Category	Activity Category A	B	C	D
Low Risk	I	II	II	III
Medium Risk	I	II	III	IV
High Risk	I	II	**IV**	IV
Highest Risk	II	III	IV	IV

An infection prevention and control permit is required for Level III and Level IV. Consult with Infection Prevention and Control for Level I and Level II.

Table 5 - Required Infection Prevention and Control Measures, by Level of Precautions

Controls defined below for the Level of Precautions identified for the activity must be in place before the activity begins and maintained until work is completed and the area is activated. Control measures for each Precaution Level must also include the control measures in the preceding Level(s).

As the activity progresses, a full re-evaluation of remaining activity type and patient risk is required prior to downgrading the Level of Precautions.

Level of Precautions	Control Measures
Level I	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

	4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system. 5. Seal doors to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled. 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
Level III	**All control measures in Levels I and II and the following:** 1. Ensure availability of equipment for cleaning hands. 2. Construct and complete critical barriers meeting NFPA 241 requirements. Barriers must extend to the ceiling or if ceiling tile is removed, to the deck above. 3. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to floor and ceiling (or floor/roof deck above) and secure from movement or damage. 4. Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type). 5. Maintain .01 inches /water gauge negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors, or comply with the alternative method outlined in Appendix A of this document. These control measures must be maintained continuously 24/7 for the duration of the project. HEPA filtered exhaust if discharged directly to the outdoors must be at a distance of 25 feet or greater from entrances, air intakes and operable windows. Exhausting discharged air into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is prohibited. 6. Install a differential pressure sensing device (e.g., magnehelic, manometer, or digital monitoring) on exterior of work containment to continually monitor and document negative pressurization. The "ball in the wall" or similar apparatus are not acceptable.
Level IV	**All control measures in Levels I, II and III and the following:** 1. Barriers must be hard barriers unless temporary to install final barrier. 2. Containment must include an anteroom to ensure pressure control. Anteroom must be large enough for equipment staging, cart cleaning, workers' PPE and cleaning. 3. Worker clothing and/or PPE must be removed or clean and free of visible dust before leaving the work area anteroom. HEPA vacuuming of clothing or use of cover suits is acceptable. 4. Workers must wear shoe covers or have a method to clean shoes in anteroom. Shoe covers must be removed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be changed immediately.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 6 - Minimum Infection Prevention and Control Measures Required Upon Completion of the Activity

Controls defined below shall be completed upon completion of the activity and inspected prior to terminating measures defined in Table 5.

Level of Precautions	Measures
Levels I - II	**Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **HVAC Systems:** 1. Remove isolation of HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational. 2. Verify the HVAC systems meet original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.
Levels III - IV	Construction areas must be inspected by an infection preventionist and engineering representative (and others as determined by the facility) for final activity/project close out and removal of infection prevention and control measures. **Work Area Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **Removal of Critical Barriers:** 1. Critical barriers must remain in place during all work involving drywall removal, creation of dust and activities beyond simple touch-up work. The barrier may NOT be removed until a work area cleaning has been performed. Additional cleaning may be needed after removal of barrier. 2. All (plastic or hard) barrier removal activities must be completed in a manner that prevents dust release. Use the following precautions when removing hard barriers: i. Carefully remove screws and painter tape. ii. If dust will be generated during screw removal, use hand-held HEPA vacuum. iii. Drywall cutting is prohibited during removal process. iv. Clean all stud tracks with HEPA vacuum before removing outer hard barrier. v. Use a plastic barrier to enclose area if dust could be generated. **Negative Air Requirements:** 1. The use of negative air must be designed to remove contaminants from the work area. 2. Negative air devices (fans, filters, monitoring and documentation equipment) must remain operational at all times and in place for a period after completion of dust creating activities to remove contaminants from the work area and before removal of critical barriers. **HVAC systems:** 1. Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed. 2. Verify that HVAC systems are clean and operational. 3. Verify and document through a TAB the HVAC systems meets original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.

Infection Prevention and Control Construction/Renovation/Maintenance Permit

This page must be posted at the entrance to the project area for Level III and Level IV activities.

Unique permit number:			
Location of construction/renovation/maintenance	Eye Clinic,1D101(Electrical Rm.), Corridor C1-71, Approximate Duration: 30 days		
Project manager	Tikisha Slan / Jesus Rangel	Project start date	Unknown
Contact phone number	702-791-9000x14980/14184	Completion date	Unknown
Contractor		Permit expiration date	

Activity Category (*A, B, C, or D*)	C	Overall Patient Risk Category (*Low, Medium, High, or Highest*)	High	Level of Infection Prevention and Control Precautions (*I, II, III, or IV*)	IV

Level of Precautions	Control measures to be in place for the duration of the activity *(Check the box for the activity's Level of Precautions to indicate the Control Measures)*
Level I ☐	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II ☐	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation. 4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system 5. Seal doors, to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled. 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
Level III ☐	**All control measures in Levels I and II and the following:** 1. Ensure availability of equipment for cleaning hands. 2. Construct and complete critical barriers meeting NFPA 241 requirements. Barriers must extend to the ceiling or if ceiling tile is removed, to the deck above. 3. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to floor and ceiling (or floor/roof deck above) and secure from movement or damage. 4. Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type). 5. Maintain .01 inches /water gauge negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors, or comply with the alternative method outline in Appendix A of the VHA ICRA template. These control measures must be maintained continuously 24/7 for the duration of the project. Exhausting discharged air into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is prohibited. **Check box to indicate exhaust method:** Exterior ☐ Alternative Interior Method ☐ 6. Install a differential pressure sensing device (e.g., magnehelic, manometer, or digital monitoring) on exterior of work containment to continually monitor and document negative pressurization. The "ball in the wall" or similar apparatus are not acceptable.
Level IV ☑	**All control measures in Levels I, II and III and the following:** 1. Barriers must be hard barriers unless temporary to install final barrier. 2. Containment must include an anteroom to ensure pressure control, Anteroom must be large enough for equipment staging, cart cleaning, workers' PPE and cleaning. 3. Worker clothing and/or PPE must be removed or clean and free of visible dust before leaving the work area anteroom. HEPA vacuuming of clothing or use of cover suits is acceptable. 4. Workers must wear shoe covers or have a method to clean shoes in anteroom Shoe covers must be removed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be changed immediately.

Additional requirements:	This is a preliminary ICRA to meet design requirement/s. Need to verify exhaust method.				
Project Manager signature	TIKISHA SLAN	Digitally signed by TIKISHA SLAN Date: 2025.03.04 11:49:44 -08'00'	Date		
Infection Preventionist signature	PAOLO CARLO CUBELO	Digitally signed by PAOLO CARLO CUBELO Date: 2025.03.04 13:00:43 -08'00'	Date		

ICRA MATRIX - FIRST FLOOR - EYE CLINIC

FULLY SPRINKLERED
100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO
WALTER DAVID VANSCOTER
ARC.1716954
REGISTERED ARCHITECT
5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

Headquarters:
Apogee Consulting Group, P.A.
1151 Kildaire Farm Road, Suite 120
Cary, North Carolina 27511
www.acg-pa.com 919-858-7420

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: INFECTION CONTROL RISK ASSESSMENT - FIRST FLOOR - EYE CLINIC

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086

Approved:

Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

Drawing Number: G-004

Dwg 4 of 6

5/29/2025 1:15:06 PM C:\Users\dthompson\Documents\A_23-090-VA Las Vegas-Dntl Vac Pipe_R23_dthompsonBV42E.rvt

VA FORM 08-6231

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Introductory Information and Instructions

Use this template as a baseline for performing facility Infection Control Risk Assessments (ICRAs) for construction, renovation, and maintenance work (referred to as the "activity" in this document). The template provides minimum requirements for categorizing activity types and patient risk to determine the level of precautions needed to prevent infection risks. Facilities may customize this template to incorporate site-specific information and/or to add more stringent criteria.

This VHA ICRA template pertains specifically to infection prevention. It must be used if required by the VHA Pre-Construction Risk Assessment (PCRA) for the activity. *NOTE: The PCRA addresses other activity-related safety concerns (e.g., vibration, noise, hazardous materials) outside the scope of the ICRA.*

To complete the template:

1. Use **Table 1** to identify the category of the construction, renovation and/or maintenance activity.
2. Use **Table 2** to identify the areas affected by the activity.
3. Use **Table 3** to identify the overall patient risk category that will be affected by the activity.
4. Use **Table 4** to determine the level of infection prevention and control precautions needed for the activity.

Once all 4 steps above are completed: Refer to **Table 5** for the minimum required control measures for the level of infection prevention and control precautions needed for the activity. Refer to **Table 6** for the minimum infection prevention and control measures required on completion of the activity.

PERMIT: See the last page of this document for a fillable permit form to be used for posting at the activity site as needed.

Table 1 - Construction, Renovation, and/or Maintenance Activity Category

***NOTE:** If any of the bulleted criteria in a higher activity category pertains to the work that will be done (even if the other criteria are in a lower category), use the higher activity category for the VHA ICRA.*

Activity Category determined from Table 1 (*A, B, C, or D*): C

Category A	**Inspection and/or facility upkeep generally defined as follows**: • Work can be completed in a single shift, not to exceed 10 hours. • Patients and/or employees may be in the area depending on the activity. • Work that does not create dust or debris. • Removal of ceiling tile or access to mechanical or electrical chase for visual inspection limited to 1 tile per 50 square feet with limited exposure time (not to exceed an hour for each tile) within the shift. • Minor interior updates (e.g., replacing floor or ceiling tiles, carpentry work to include hanging signage, and painting without sanding) that do not create dust or debris. • Limited building system maintenance such as basic plumbing on potable systems (e.g., faucet replacement) or basic electrical work such as replacement of light bulbs, receptacles, or switches.
Category B	**General maintenance and repair work generally defined as follows:** • Prolonged inspection and work that may take longer than a single shift but not exceeding a week. • Patients and employees are not to be in the area until activity is completed. • Work that creates minimal dust and debris.

	• Interior finish or surface repairs, updates, or modifications such as repair of firewalls and barriers, and new flooring that produces minimal dust and debris. Controlled sanding activities (e.g., wet or dry sanding) that produce minimal dust and debris. • Plumbing work such as installation or replacement of a single fixture or piping for a single fixture. Any work on sanitary plumbing including snaking of drains. • Electrical work such as installation of cabling/wiring/conduit for a single device, installation of new device such as a light fixture that produces minimal dust and debris. • Air Handler and/or fan shutdown/startup and HVAC work such as replacement of a single diffuser, single terminal unit or a single device that produces minimal dust and debris.
Category C	**Small-scale construction, renovation, or maintenance generally defined as follows**: • Work requiring longer than a single week to complete but not exceeding 6 months. • Patients and employees are not to be in the area until activity is completed. • Demolition/removal of preexisting floor covering, casework, lay-in ceiling, or other architectural elements. • Demolition/removal of more than 32 ft^2 of drywall/framing, hard ceilings, and doors/framing and minimal infrastructure such as electrical circuits and branch piping. • Installation of new walls, ceilings and doors including framing, drywall/plaster and associated work. • Plumbing work such as the installation of new sinks, showers and toilets and associated plumbing. • Shut down of sections of potable water systems. • Electrical work such as installation of conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Modification of existing fire alarm and suppression systems. • Mechanical work such as the installation of ductwork, diffusers, and terminal units for an area.
Category D	**Large-scale construction, renovation, or maintenance generally defined as follows**: • Work exceeding 6 months in duration. • Patients and employees are not to be in the area until activity is completed. • Large-scale demolition of building components and infrastructure including removal of multiple doors, walls, framing, ceilings, flooring, piping, electrical and HVAC. • The installation building components such as new walls, ceilings and doors including framing, drywall and associated plaster work. • Plumbing work such as the installation of: o new medical gas systems, o steam/heating hot water, condensate systems, o multiple sinks, showers and toilets including associated plumbing. • Shutdown of potable water, steam/heating hot water, condensate, and medical gas systems. • Electrical work such as installation of electrical feeders, distribution panels, conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Installation of fire alarm and suppression systems. • Electrical shutdown of multiple panels. • Mechanical work such as the installation of air handling equipment, associated ductwork, diffusers, heat exchangers, terminal units and controls.

Table 2 - Affected Area Assessment

Identify the areas and associated patients that will be affected by the construction/renovation/maintenance activity (see the Figure for a visual representation of adjacent affected areas).

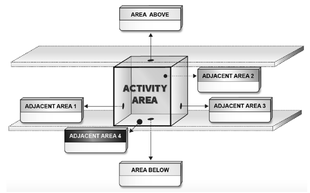


Figure: Isometric drawing of affected area assessment

Area	Service(s)/Type(s) of Area(s) *(e.g., OR, Unit/Ward, Sterile Processing, Administrative, etc.)**	Point of Contact (POC)	POC Contact Information
Activity Area**	Pulmonary	Waseem Ahmed	waseem.ahmed2@va.gov
Area Above	Dental Clinic	Yessinia Fields	yessenia.fields@va.gov
Area Below	None	N/A	N/A
Adjacent Area 1	Oncology	N/A	N/A
Adjacent Area 2	Corridor C1-34	N/A	N/A
Adjacent Area 3	None	N/A	N/A
Adjacent Area 4	Main Corridor C1-28	N/A	N/A

* There may be more than one Service/type of area for each row. List all.
** List the area(s) in which the construction/renovation/maintenance activity will occur. ***NOTE: When the Activity Category is B, C, or D, the control measures are determined by the Patient Risk in the adjacent affected areas.***

Table 3 - Patient Risk Category

Using Table 3, identify the patient risk category for each area listed in Table 2. Of the patient risk categories identified, select the one with the greatest risk as the overall Patient Risk Category for the activity.

Overall Patient Risk Category determined from Table 3 (*Low, Medium, High, or Highest*): High

Low Risk	Medium Risk	High Risk	Highest Risk
Non-patient care areas such as:	Patient care support areas such as:	Patient care areas such as:	Procedural, invasive, sterile support and highly compromised patient care areas such as:
• Public hallways and gathering areas not in clinical areas • Office areas not in clinical areas • Breakrooms not in clinical areas • Bathrooms or locker rooms not in clinical areas • Mechanical/electrical rooms not in clinical areas	• Waiting areas • Clinical engineering (biomedical) • Materials management • Sterile processing department – dirty side • Kitchen, cafeteria, gift shop, coffee shop, and food kiosks	• Patient care rooms and areas, including spinal cord injury units • All acute care units, including mental health • All outpatient units and clinics • Emergency department • Community Living Centers, domiciliaries, and transitional residences • Employee health • Pharmacy – general work zone • Medication rooms and clean utility rooms • Imaging suites – diagnostic imaging • Laboratory	• All transplant units • All intensive care units • All oncology units and chemotherapy/infusion centers • OR theaters and restricted areas • Hemodialysis units • Procedural rooms* • Pharmacy compounding area • Sterile processing department – clean side • Transfusion services • Imaging suites – interventional imaging • Dedicated isolation wards/units for infectious diseases

* Procedural Rooms are designated for the performance of patient care activities that may require high-level disinfected or sterile instruments and some environmental controls but is not required to be performed with the environmental controls of an operating room (OR). The room is intended for procedures that are performed in an aseptic surgical field and penetrates the protective surfaces of a patient's body (e.g., subcutaneous tissue, mucous membranes, cornea) or entry into or opening of a sterile body cavity. Examples of these spaces include, and are not limited to, Cardiac Catheterization Suites, Electrophysiology Suites, Endovascular/GI Suites, Angio Suites and other spaces which may have high risk patient populations.

Table 4 - Level of Infection Prevention and Control Precautions

Match the Overall Patient Risk Category (*Low, Medium, High, Highest*) determined from Table 3 with the planned Construction/Renovation/Maintenance Activity Category (*A, B, C, D*) from Table 1 to determine the minimum Level of Infection Prevention and Control Precautions (*I, II, III, or IV*) using Table 4 below.

Level of Precautions determined from Table 4 (*I, II, III, or IV*): IV

Patient Risk Category	Activity Category A	B	C	D
Low Risk	I	II	II	III
Medium Risk	I	II	III	IV
High Risk	I	II	IV	IV
Highest Risk	II	III	IV	IV

An infection prevention and control permit is required for Level III and Level IV. Consult with Infection Prevention and Control for Level I and Level II.

Table 5 - Required Infection Prevention and Control Measures, by Level of Precautions

Controls defined below for the Level of Precautions identified for the activity must be in place before the activity begins and maintained until work is completed and the area is activated. Control measures for each Precaution Level must also include the control measures in the preceding Level(s).

As the activity progresses, a full re-evaluation of remaining activity type and patient risk is required prior to downgrading the Level of Precautions.

Level of Precautions	Control Measures
Level I	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation.

	4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system. 5. Seal doors to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled. 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
Level III	**All control measures in Levels I and II and the following:** 1. Ensure availability of equipment for cleaning hands. 2. Construct and complete critical barriers meeting NFPA 241 requirements. Barriers must extend to the ceiling or if ceiling tile is removed, to the deck above. 3. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to floor and ceiling (or floor/roof deck above) and secure from movement or damage. 4. Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type). 5. Maintain .01 inches /water gauge negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors, or comply with the alternative method outlined in Appendix A of this document. These control measures must be maintained continuously 24/7 for the duration of the project. HEPA filtered exhaust if discharged directly to the outdoors must be at a distance of 25 feet or greater from entrances, air intakes and operable windows. Exhausting discharged air into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is prohibited. 6. Install a differential pressure sensing device (e.g., magnehelic, manometer, or digital monitoring) on exterior of work containment to continually monitor and document negative pressurization. The "ball in the wall" or similar apparatus are not acceptable.
Level IV	**All control measures in Levels I, II and III and the following:** 1. Barriers must be hard barriers unless temporary to install final barrier. 2. Containment must include an anteroom to ensure pressure control. Anteroom must be large enough for equipment staging, cart cleaning, workers' PPE and cleaning. 3. Worker clothing and/or PPE must be removed or clean and free of visible dust before leaving the work area anteroom. HEPA vacuuming of clothing or use of cover suits is acceptable. 4. Workers must wear shoe covers or have a method to clean shoes in anteroom. Shoe covers must be removed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be changed immediately.

Table 6 - Minimum Infection Prevention and Control Measures Required Upon Completion of the Activity

Controls defined below shall be completed upon completion of the activity and inspected prior to terminating measures defined in Table 5.

Level of Precautions	Measures
Levels I - II	**Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **HVAC Systems:** 1. Remove isolation of HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational. 2. Verify the HVAC systems meet original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.
Levels III - IV	Construction areas must be inspected by an infection preventionist and engineering representative (and others as determined by the facility) for final activity/project close out and removal of infection prevention and control measures. **Work Area Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **Removal of Critical Barriers:** 1. Critical barriers must remain in place during all work involving drywall removal, creation of dust and activities beyond simple touch-up work. The barrier may NOT be removed until a work area cleaning has been performed. Additional cleaning may be needed after removal of barrier. 2. All (plastic or hard) barrier removal activities must be completed in a manner that prevents dust release. Use the following precautions when removing hard barriers: i. Carefully remove screws and painter tape. ii. If dust will be generated during screw removal, use hand-held HEPA vacuum. iii. Drywall cutting is prohibited during removal process. iv. Clean all stud tracks with HEPA vacuum before removing outer hard barrier. v. Use a plastic barrier to enclose area if dust could be generated. **Negative Air Requirements:** 1. The use of negative air must be designed to remove contaminants from the work area. 2. Negative air devices (fans, filters, monitoring and documentation equipment) must remain operational at all times and in place for a period after completion of dust creating activities to remove contaminants from the work area and before removal of critical barriers. **HVAC systems:** 1. Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed. 2. Verify that HVAC systems are clean and operational. 3. Verify and document through a TAB the HVAC systems meets original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.

Infection Prevention and Control Construction/Renovation/Maintenance Permit

This page must be posted at the entrance to the project area for Level III and Level IV activities.

Unique permit number:			
Location of construction/renovation/maintenance	Pulmonary Clinic , Approximate Duration: 66days		
Project manager	Tikisha Slan	Project start date	Unknown
Contact phone number	702-791-9000x14980/14184	Completion date	Unknown
Contractor		Permit expiration date	

Activity Category (*A, B, C, or D*)	C	Overall Patient Risk Category (*Low, Medium, High, or Highest*)	High	Level of Infection Prevention and Control Precautions (*I, II, III, or IV*)	IV

Level of Precautions	Control measures to be in place for the duration of the activity *(Check the box for the activity's Level of Precautions to indicate the Control Measures)*
Level I ☐	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II ☐	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation. 4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system 5. Seal doors, to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled. 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
Level III ☐	**All control measures in Levels I and II and the following:** 1. Ensure availability of equipment for cleaning hands. 2. Construct and complete critical barriers meeting NFPA 241 requirements. Barriers must extend to the ceiling or if ceiling tile is removed, to the deck above. 3. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to floor and ceiling (or floor/roof deck above) and secure from movement or damage. 4. Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type). 5. Maintain .01 inches /water gauge negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors, or comply with the alternative method outline in Appendix A of the VHA ICRA template. These control measures must be maintained continuously 24/7 for the duration of the project. Exhausting discharged air into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is prohibited. **Check box to indicate exhaust method:** Exterior ☐ Alternative Interior Method ☐ 6. Install a differential pressure sensing device (e.g., magnehelic, manometer, or digital monitoring) on exterior of work containment to continually monitor and document negative pressurization. The "ball in the wall" or similar apparatus are not acceptable.
Level IV ☑	**All control measures in Levels I, II and III and the following:** 1. Barriers must be hard barriers unless temporary to install final barrier. 2. Containment must include an anteroom to ensure pressure control, Anteroom must be large enough for equipment staging, cart cleaning, workers' PPE and cleaning. 3. Worker clothing and/or PPE must be removed or clean and free of visible dust before leaving the work area anteroom. HEPA vacuuming of clothing or use of cover suits is acceptable. 4. Workers must wear shoe covers or have a method to clean shoes in anteroom Shoe covers must be removed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be changed immediately.

Additional requirements: This is a preliminary ICRA to meet design requirement/s. Need to verify exhaust method.

Project Manager signature	TIKISHA SLAN	Digitally signed by TIKISHA SLAN Date: 2025.03.04 11:55:24 -06'00'	Date	
Infection Preventionist signature	PAOLO CARLO CUBELO	Digitally signed by PAOLO CARLO CUBELO Date: 2025.03.04 12:59:57 -06'00'	Date	

ICRA MATRIX - SECOND FLOOR - PULMONARY

FULLY SPRINKLERED
100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO
WALTER DAVID VANSCOTER
ARC.1716954
REGISTERED ARCHITECT
5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: INFECTION CONTROL RISK ASSESSMENT - SECOND FLOOR - PULMONARY

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Approved:

Date: MAY 30, 2025 Checked: WVS Drawn: CET

Drawing Number: G-005

Dwg 5 of 6

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VA FORM 08-6231

Docusign Envelope ID: EE3BC82D-40DD-4B3E-94F4-20B5CFB7DB50

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Introductory Information and Instructions

Use this template as a baseline for performing facility Infection Control Risk Assessments (ICRAs) for construction, renovation, and maintenance work (referred to as the "activity" in this document). The template provides minimum requirements for categorizing activity types and patient risk to determine the level of precautions needed to prevent infection risks. Facilities may customize this template to incorporate site-specific information and/or to add more stringent criteria.

This VHA ICRA template pertains specifically to infection prevention. It must be used if required by the VHA Pre-Construction Risk Assessment (PCRA) for the activity. *NOTE: The PCRA addresses other activity-related safety concerns (e.g., vibration, noise, hazardous materials) outside the scope of the ICRA.*

To complete the template:

1. Use **Table 1** to identify the category of the construction, renovation and/or maintenance activity.
2. Use **Table 2** to identify the areas affected by the activity.
3. Use **Table 3** to identify the overall patient risk category that will be affected by the activity.
4. Use **Table 4** to determine the level of infection prevention and control precautions needed for the activity.

Once all 4 steps above are completed: Refer to **Table 5** for the minimum required control measures for the level of infection prevention and control precautions needed for the activity. Refer to **Table 6** for the minimum infection prevention and control measures required on completion of the activity.

PERMIT: See the last page of this document for a fillable permit form to be used for posting at the activity site as needed.

Table 1 - Construction, Renovation, and/or Maintenance Activity Category

NOTE: *If any of the bulleted criteria in a higher activity category pertains to the work that will be done (even if the other criteria are in a lower category), use the higher activity category for the VHA ICRA.*

Activity Category determined from Table 1 (*A, B, C, or D*): C

Category A	**Inspection and/or facility upkeep generally defined as follows**: • Work can be completed in a single shift, not to exceed 10 hours. • Patients and/or employees may be in the area depending on the activity. • Work that does not create dust or debris. • Removal of ceiling tile or access to mechanical or electrical chase for visual inspection limited to 1 tile per 50 square feet with limited exposure time (not to exceed an hour for each tile) within the shift. • Minor interior updates (e.g., replacing floor or ceiling tiles, carpentry work to include hanging signage, and painting without sanding) that do not create dust or debris. • Limited building system maintenance such as basic plumbing on potable systems (e.g., faucet replacement) or basic electrical work such as replacement of light bulbs, receptacles, or switches.
Category B	**General maintenance and repair work generally defined as follows:** • Prolonged inspection and work that may take longer than a single shift but not exceeding a week. • Patients and employees are not to be in the area until activity is completed. • Work that creates minimal dust and debris.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

	• Interior finish or surface repairs, updates, or modifications such as repair of firewalls and barriers, and new flooring that produces minimal dust and debris. Controlled sanding activities (e.g., wet or dry sanding) that produce minimal dust and debris. • Plumbing work such as installation or replacement of a single fixture or piping for a single fixture. Any work on sanitary plumbing including snaking of drains. • Electrical work such as installation of cabling/wiring/conduit for a single device, installation of new device such as a light fixture that produces minimal dust and debris. • Air Handler and/or fan shutdown/startup and HVAC work such as replacement of a single diffuser, single terminal unit or a single device that produces minimal dust and debris.
Category C	**Small-scale construction, renovation, or maintenance generally defined as follows**: • Work requiring longer than a single week to complete but not exceeding 6 months. • Patients and employees are not to be in the area until activity is completed. • Demolition/removal of preexisting floor covering, casework, lay-in ceiling, or other architectural elements. • Demolition/removal of more than 32 ft^2 of drywall/framing, hard ceilings, and doors/framing and minimal infrastructure such as electrical circuits and branch piping. • Installation of new walls, ceilings and doors including framing, drywall/plaster and associated work. • Plumbing work such as the installation of new sinks, showers and toilets and associated plumbing. • Shut down of sections of potable water systems. • Electrical work such as installation of conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Modification of existing fire alarm and suppression systems. • Mechanical work such as the installation of ductwork, diffusers, and terminal units for an area.
Category D	**Large-scale construction, renovation, or maintenance generally defined as follows**: • Work exceeding 6 months in duration. • Patients and employees are not to be in the area until activity is completed. • Large-scale demolition of building components and infrastructure including removal of multiple doors, walls, framing, ceilings, flooring, piping, electrical and HVAC. • The installation building components such as new walls, ceilings and doors including framing, drywall and associated plaster work. • Plumbing work such as the installation of: o new medical gas systems, o steam/heating hot water, condensate systems, o multiple sinks, showers and toilets including associated plumbing. • Shutdown of potable water, steam/heating hot water, condensate, and medical gas systems. • Electrical work such as installation of electrical feeders, distribution panels, conduit and wire for lighting, receptacles and switches for an area, the installation of conduit and wire for new devices such as terminal units, fans etc. • Installation of fire alarm and suppression systems. • Electrical shutdown of multiple panels. • Mechanical work such as the installation of air handling equipment, associated ductwork, diffusers, heat exchangers, terminal units and controls.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 2 - Affected Area Assessment

Identify the areas and associated patients that will be affected by the construction/renovation/maintenance activity (see the Figure for a visual representation of adjacent affected areas).

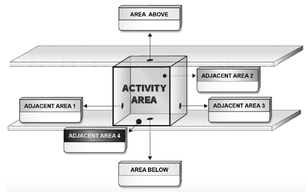


Figure: Isometric drawing of affected area assessment

Area	Service(s)/Type(s) of Area(s) *(e.g., OR, Unit/Ward, Sterile Processing, Administrative, etc.)**	Point of Contact (POC)	POC Contact Information
Activity Area**	Dental Clinic	Yessina Fields	yessina.fields@va.gov
Area Above	Occupational Health/Compensation and Pension	Marek Korzeniowski	Marek.korzeniowski@va.gov
Area Below	Pulmonary Clinic	Wassem Ahmed	waseem.admed@va.gov
Adjacent Area 1	Dermatology	James Solomon	James.Soloman@va.gov
Adjacent Area 2	2A146,2A144,2A142,2A140	Tikisha Slan/ Jesus Rangel	tikisha.slan@va.gov/jesus.rangel@va.gov
Adjacent Area 3	N/A	N/A	N/A
Adjacent Area 4	Corridor C2-2	N/A	N/A

* There may be more than one Service/type of area for each row. List all.
** List the area(s) in which the construction/renovation/maintenance activity will occur. ***NOTE: When the Activity Category is B, C, or D, the control measures are determined by the Patient Risk in the adjacent affected areas.***

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 3 - Patient Risk Category

Using Table 3, identify the patient risk category for each area listed in Table 2. Of the patient risk categories identified, select the one with the greatest risk as the overall Patient Risk Category for the activity.

Overall Patient Risk Category determined from Table 3 (*Low, Medium, High, or Highest*): High

Low Risk	Medium Risk	High Risk	Highest Risk
Non-patient care areas such as:	Patient care support areas such as:	Patient care areas such as:	Procedural, invasive, sterile support and highly compromised patient care areas such as:
• Public hallways and gathering areas not in clinical areas • Office areas not in clinical areas • Breakrooms not in clinical areas • Bathrooms or locker rooms not in clinical areas • Mechanical/electrical rooms not in clinical areas	• Waiting areas • Clinical engineering (biomedical) • Materials management • Sterile processing department – dirty side • Kitchen, cafeteria, gift shop, coffee shop, and food kiosks	• Patient care rooms and areas, including spinal cord injury units • All acute care units, including mental health • All outpatient units and clinics • Emergency department • Community Living Centers, domiciliaries, and transitional residences • Employee health • Pharmacy – general work zone • Medication rooms and clean utility rooms • Imaging suites – diagnostic imaging • Laboratory	• All transplant units • All intensive care units • All oncology units and chemotherapy/infusion centers • OR theaters and restricted areas • Hemodialysis units • Procedural rooms* • Pharmacy compounding area • Sterile processing department – clean side • Transfusion services • Imaging suites – interventional imaging • Dedicated isolation wards/units for infectious diseases

* Procedural Rooms are designated for the performance of patient care activities that may require high-level disinfected or sterile instruments and some environmental controls but is not required to be performed with the environmental controls of an operating room (OR). The room is intended for procedures that are performed in an aseptic surgical field and penetrates the protective surfaces of a patient's body (e.g., subcutaneous tissue, mucous membranes, cornea) or entry into or opening of a sterile body cavity. Examples of these spaces include, and are not limited to, Cardiac Catheterization Suites, Electrophysiology Suites, Endovascular/GI Suites, Angio Suites and other spaces which may have high risk patient populations.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 4 - Level of Infection Prevention and Control Precautions

Match the Overall Patient Risk Category (*Low, Medium, High, Highest*) determined from Table 3 with the planned Construction/Renovation/Maintenance Activity Category (*A, B, C, D*) from Table 1 to determine the minimum Level of Infection Prevention and Control Precautions (*I, II, III, or IV*) using Table 4 below.

Level of Precautions determined from Table 4 (*I, II, III, or IV*): IV

Patient Risk Category	Activity Category A	B	C	D
Low Risk	I	II	II	III
Medium Risk	I	II	III	IV
High Risk	I	II	IV	IV
Highest Risk	II	III	IV	IV

An infection prevention and control permit is required for Level III and Level IV. Consult with Infection Prevention and Control for Level I and Level II.

Table 5 - Required Infection Prevention and Control Measures, by Level of Precautions

Controls defined below for the Level of Precautions identified for the activity must be in place before the activity begins and maintained until work is completed and the area is activated. Control measures for each Precaution Level must also include the control measures in the preceding Level(s).

As the activity progresses, a full re-evaluation of remaining activity type and patient risk is required prior to downgrading the Level of Precautions.

Level of Precautions	Control Measures
Level I	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

	4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system. 5. Seal doors to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled. 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
Level III	**All control measures in Levels I and II and the following:** 1. Ensure availability of equipment for cleaning hands. 2. Construct and complete critical barriers meeting NFPA 241 requirements. Barriers must extend to the ceiling or if ceiling tile is removed, to the deck above. 3. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to floor and ceiling (or floor/roof deck above) and secure from movement or damage. 4. Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type). 5. Maintain .01 inches /water gauge negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors, or comply with the alternative method outlined in Appendix A of this document. These control measures must be maintained continuously 24/7 for the duration of the project. HEPA filtered exhaust if discharged directly to the outdoors must be at a distance of 25 feet or greater from entrances, air intakes and operable windows. Exhausting discharged air into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is prohibited. 6. Install a differential pressure sensing device (e.g., magnehelic, manometer, or digital monitoring) on exterior of work containment to continually monitor and document negative pressurization. The "ball in the wall" or similar apparatus are not acceptable.
Level IV	**All control measures in Levels I, II and III and the following:** 1. Barriers must be hard barriers unless temporary to install final barrier. 2. Containment must include an anteroom to ensure pressure control. Anteroom must be large enough for equipment staging, cart cleaning, workers' PPE and cleaning. 3. Worker clothing and/or PPE must be removed or clean and free of visible dust before leaving the work area anteroom. HEPA vacuuming of clothing or use of cover suits is acceptable. 4. Workers must wear shoe covers or have a method to clean shoes in anteroom. Shoe covers must be removed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be changed immediately.

VHA Infection Control Risk Assessment for Construction, Renovation and Maintenance

Table 6 - Minimum Infection Prevention and Control Measures Required Upon Completion of the Activity

Controls defined below shall be completed upon completion of the activity and inspected prior to terminating measures defined in Table 5.

Level of Precautions	Measures
Levels I - II	**Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **HVAC Systems:** 1. Remove isolation of HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational. 2. Verify the HVAC systems meet original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.
Levels III - IV	Construction areas must be inspected by an infection preventionist and engineering representative (and others as determined by the facility) for final activity/project close out and removal of infection prevention and control measures. **Work Area Cleaning:** 1. Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials. 2. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **Removal of Critical Barriers:** 1. Critical barriers must remain in place during all work involving drywall removal, creation of dust and activities beyond simple touch-up work. The barrier may NOT be removed until a work area cleaning has been performed. Additional cleaning may be needed after removal of barrier. 2. All (plastic or hard) barrier removal activities must be completed in a manner that prevents dust release. Use the following precautions when removing hard barriers: i. Carefully remove screws and painter tape. ii. If dust will be generated during screw removal, use hand-held HEPA vacuum. iii. Drywall cutting is prohibited during removal process. iv. Clean all stud tracks with HEPA vacuum before removing outer hard barrier. v. Use a plastic barrier to enclose area if dust could be generated. **Negative Air Requirements:** 1. The use of negative air must be designed to remove contaminants from the work area. 2. Negative air devices (fans, filters, monitoring and documentation equipment) must remain operational at all times and in place for a period after completion of dust creating activities to remove contaminants from the work area and before removal of critical barriers. **HVAC systems:** 1. Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed. 2. Verify that HVAC systems are clean and operational. 3. Verify and document through a TAB the HVAC systems meets original airflow and air exchange design specifications. **Water systems:** 1. Until the potable water system is activated and in use, flushing shall continue at least twice per week in accordance with VHA Directive 1061.

Infection Prevention and Control Construction/Renovation/Maintenance Permit

This page must be posted at the entrance to the project area for Level III and Level IV activities.

Unique permit number:			
Location of construction/renovation/maintenance	Dental Clinic, Approximate project duration:135 days		
Project manager	Tikisha Slan/Jesus Rangel	Project start date	Unknown
Contact phone number	702-791-9000x14980/14184	Completion date	Unknown
Contractor		Permit expiration date	

Activity Category (*A, B, C, or D*)	C	Overall Patient Risk Category (*Low, Medium, High, or Highest*)	High	Level of Infection Prevention and Control Precautions (*I, II, III, or IV*)	IV

Level of Precautions	Control measures to be in place for the duration of the activity *(Check the box for the activity's Level of Precautions to indicate the Control Measures)*
Level I ☐	1. Perform work activity in a manner that does not create dust. 2. Immediately replace any ceiling tile, close access panels, etc., upon completion of work. 3. Any materials and equipment being brought into the facility must be free of contaminants and loose material.
Level II ☐	**All control measures in Level I and the following:** 1. Provide active means to control airborne dust from dispersing into occupied areas and/or water mist surface to control dust (e.g., Mobile Dust Containment Cart or some other system). 2. Ensure worker clothing is clean and free of visible dust before leaving the work area. 3. Remove or isolate air diffusers (supply and return) to protect the HVAC system from dust and reduce air turbulence. Rebalance system to address diffuser isolation. 4. When the work involves or impacts potable water systems including stagnation due to reduced usage, the piping shall be flushed twice a week or isolated from the main system 5. Seal doors, to prevent dust migration. 6. Contain all trash and debris in the work area. Perform daily cleaning and disposal of trash (covered) from work area using an identified exit route. 7. Any equipment, tools, or materials removed from the work area must be in sealed containers and/or cleaned of dust and debris prior to removal from the area. 8. Nonporous/smooth and cleanable containers (with a hard lid) must be used to transport trash and debris from the construction areas. These containers must be damp-wiped cleaned and free of visible dust/debris before leaving the contained work area. 9. Install a sticky (dust collection) mat at entrance of contained work area based on facility policy. Sticky mats must be changed routinely and when visibly soiled. 10. Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces at least daily.
Level III ☐	**All control measures in Levels I and II and the following:** 1. Ensure availability of equipment for cleaning hands. 2. Construct and complete critical barriers meeting NFPA 241 requirements. Barriers must extend to the ceiling or if ceiling tile is removed, to the deck above. 3. All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to floor and ceiling (or floor/roof deck above) and secure from movement or damage. 4. Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type). 5. Maintain .01 inches /water gauge negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors, or comply with the alternative method outline in Appendix A of the VHA ICRA template. These control measures must be maintained continuously 24/7 for the duration of the project. Exhausting discharged air into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is prohibited. **Check box to indicate exhaust method:** Exterior ☐ Alternative Interior Method ☐ 6. Install a differential pressure sensing device (e.g., magnehelic, manometer, or digital monitoring) on exterior of work containment to continually monitor and document negative pressurization. The "ball in the wall" or similar apparatus are not acceptable.
Level IV ☑	**All control measures in Levels I, II and III and the following:** 1. Barriers must be hard barriers unless temporary to install final barrier. 2. Containment must include an anteroom to ensure pressure control; Anteroom must be large enough for equipment staging; cart cleaning, workers' PPE and cleaning. 3. Worker clothing and/or PPE must be removed or clean and free of visible dust before leaving the work area anteroom; HEPA vacuuming of clothing or use of cover suits is acceptable. 4. Workers must wear shoe covers or have a method to clean shoes in anteroom Shoe covers must be removed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be changed immediately.

Additional requirements:	This is a preliminary ICRA only to meet design requirement/s. Need to verify exhaust method.				
Project Manager signature	TIKISHA SLAN Digitally signed by TIKISHA SLAN Date: 2025.03.04 12:03:08 -08'00'		Date		
Infection Preventionist signature	PAOLO CARLO CUBELO Digitally signed by PAOLO CARLO CUBELO Date: 2025.03.04 12:57:17 -08'00'		Date		

ICRA MATRIX - THIRD FLOOR - DENTAL CLINIC

FULLY SPRINKLERED

100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO — WALTER DAVID VANSCOTER — ARC.1716954 — REGISTERED ARCHITECT — 5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

Headquarters:
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www.acg-pa.com 919-858-7420

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: INFECTION CONTROL RISK ASSESSMENT - THIRD FLOOR - DENTAL CLINIC

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086

Project Title: REPLACE DENTAL VACUUM PIPING

Approved

Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Drawing Number: G-006

Dwg 6 of 6

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TEMPORARY DOOR SCHEDULE

DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICK	DOOR MAT'L	FRAME ELEV	FRAME MAT'L	HDWR SET	REMARKS
TD01	3' - 0"	7' - 0"	1 3/4"	HM	E1	F1	HM	1.0	
TD02	3' - 0"	7' - 0"	1 3/4"	HM	E1	F1	HM	1.0	
TD03	3' - 0"	7' - 0"	1 3/4"	HM	E1	F1	HM	1.0	
TD04	3' - 0"	7' - 0"	1 3/4"	HM	E1	F1	HM	2.0	

HARDWARE SET 1.0

3	HINGES	TA2714	630	MK
1	DUST PROOF STRIKE PLATE	570	32D	RO
1	CYLINDRICAL LOCK	28LC-7G04 LP	26D	SA
1	DOOR CLOSER	DC6210XA11	689	CO
2	KICK PLATES	K1050F	32D	RO
1	GASKETING	S888 X HEAD & JAMBS		PE

HARDWARE SET 2.0

3	HINGES	TA2714	630	MK
1	DUST PROOF STRIKE PLATE	570	32D	RO
1	MANUAL EXIT DEVICE	22 SERIES	SP28	VD
1	DOOR CLOSER	DC6210XA11	689	CO
1	KICK PLATES	K1050F	32D	RO
1	GASKETING	S888 X HEAD & JAMBS		PE

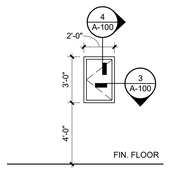
MANUFACTURER'S

CORBIN RUSSWIN	CO
MCKINNEY	MK
PEMKO	PE
ROCKWOOD	RO
SARGENT	SA
VON DUPRIN	VD

REMARKS:

HARDWARE MANUFACTURER'S LISTED AS BASIS OF DESIGN. ALTERNATE MANUFACTURERS ACCEPTABLE, SUBJECT TO REVIEW BY ARCHITECT AND C.O.R. FOR EQUAL QUALITY COMPLIANCE.

CORE TO SUPPORT THAT WHICH ARE USED AT THIS FACILITY, COORDINATE WITH C.O.R.

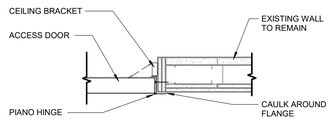


BASE OF DESIGN: ACCESS PANEL

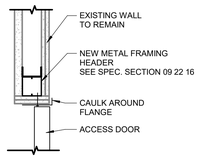
90 MIN RATED 2'X3' ACCESS DOOR
BEST ACCESS DOORS
BA-PFI-2424 OR EQUAL

NOTE:
24 X 36 INSULATED FIRE-RATED ACCESS DOOR WITH EXPOSED FLANGE. PAINT GRADE FINISH.

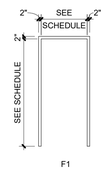
2 ACCESS PANEL ELEVATION
Scale: 1/4" = 1'-0"



3 JAMB DETAIL @ SHAFT WALL
Scale: 1 1/2" = 1'-0"

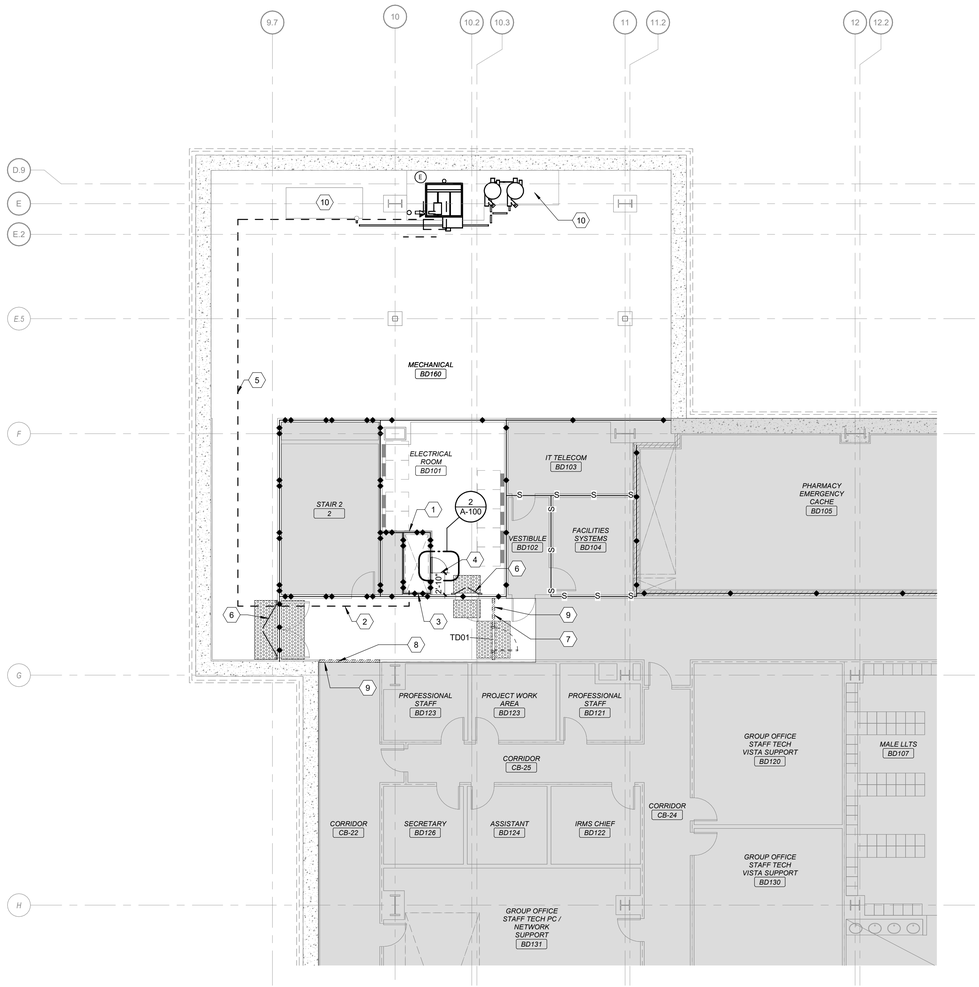


4 HEAD DETAIL @ SHAFT WALL
Scale: 1 1/2" = 1'-0"



6 FRAME ELEVATIONS
Scale: 1/4" = 1'-0"

5 DOOR ELEVATIONS
Scale: 1/4" = 1'-0"



1 BASEMENT FLOOR PLAN
Scale: 1/8" = 1'-0"

0 4 8 16 NORTH

SHEET NOTES:

A. ALIGN NEW WORK WITH EXISTING CONSTRUCTION, EXCEPT WHERE OTHERWISE INDICATED.

B. WHERE DEMOLITION WORK OR RELOCATION OF EXISTING ITEMS LEAVES UNFINISHED SURFACES AND/OR SUBSTRATES, CUT AND PATCH AS REQUIRED TO RESTORE SUBSTRATE AND/OR FINISH MATERIAL EVEN AND FLUSH WITH ADJOINING SURFACES. TEXTURE AND REFINISH TO MATCH EXISTING ADJACENT FINISHES.

C. ALL BUILDING SYSTEMS SERVING OCCUPIED AREAS OF THE BUILDING SHALL REMAIN FULLY OPERATIONAL AT ALL TIMES. PROTECT AND MAINTAIN ALL EXISTING BUILDING SYSTEMS INCLUDING SYSTEMS PASSING THROUGH AND ADJACENT TO AREAS REQUIRING DEMOLITION. WHERE NECESSARY RE-ROUTE OR CAP AS REQUIRED ALL WIRING, CONDUITS, PIPING, DUCTWORK AND OTHER UTILITIES TO SERVE OCCUPIED AREAS.

D. ALL CONSTRUCTION DEBRIS IS TO BE REMOVED FROM SITE EACH DAY AND DEPOSED OF PROPERLY PER CONTRACT REQUIREMENTS.

E. PATCH ANY WORK TO REMAIN THAT WAS DAMAGED DURING DEMOLITION TO MATCH EXISTING.

F. ENSURE TO NOT DAMAGE RATED SHAFT WALLS OR FIRE / SMOKE RATED PARTITIONS. ANY RATED WALLS DAMAGED DURING CONSTRUCTION ARE TO BE REPAIRED PER RATED PARTITION REQUIREMENTS.

G. CONTRACTOR SHALL COORDINATE ANY WORK THAT PRODUCES EXCESSIVE NOISE WITH THE COR TO BE PERFORMED DURING OFF HOURS.

H. CONTRACTOR TO VERIFY WITH COR ALL ICRA MEASURES PRIOR TO THE START OF ANY DEMO.

I. COMPLETE CLEANING OF LEVEL PRIOR TO WORK BEGINNING ON LEVEL ABOVE.

NEW KEY NOTES:

1 LOCATION OF SHAFT WHERE NEW VACUUM PIPING WILL BE RUN FROM BASEMENT UP TO INTERSTITIAL SPACE ABOVE FIRST FLOOR CEILING
2 PIPING FROM VACUUM PUMPS UP TO DENTAL SUITE ON LEVEL TWO. PIPING TO BE INSTALLED IN EXPOSED CEILING.
3 NEW VACUUM PIPING PENETRATION POINT INTO EXISTING SHAFT. ENSURE NEW PENETRATION FIRE STOPPED WITH MATERIAL PROVIDING EXISTING RATING.
4 INSTALL NEW RATED ACCESS PANEL INTO SHAFT WALL. PAINT TO MATCH ADJACENT SURFACES.
5 PIPING FROM VACUUM PUMPS TO BE INSTALLED UP AGAINST FLOOR STRUCTURE ABOVE IN THE BASEMENT MECHANICAL ROOM. SEE MECHANICAL DRAWINGS FOR THE EXACT MOUNTING HEIGHTS AND REQUIREMENTS.
6 ICRA BARRIER - ZIPPER PLASTIC BARRIER, STICKY MATS EACH SIDE.
7 ICRA BARRIER TYPE A WITH TEMPORARY DOOR AND STICKY MATS.
8 ICRA BARRIER TYPE B.
9 CONSTRUCTION SIGN LOCATION. VERIFY WITH COR.
10 EXISTING EQUIPMENT PAD TO REMAIN.

AREA OF WORK LEGEND

AREA OF WORK

OUTSIDE OF AREA OF WORK

ICRA LEGEND

TEMPORARY WALL

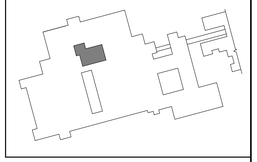
TEMPORARY DOOR

PLASTIC BARRIER

KEY PLAN

SCALE: NO SCALE

AREA OF WORK



FULLY SPRINKLERED

100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO
WALTER DAVID VANSCOTER
ARC.1716954
REGISTERED ARCHITECT
5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: BASEMENT FLOOR PLAN AND TEMPORARY DOOR SHEDULE AND DETAILS

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Approved:

Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

Drawing Number: A-100

Dwg 1 of 5

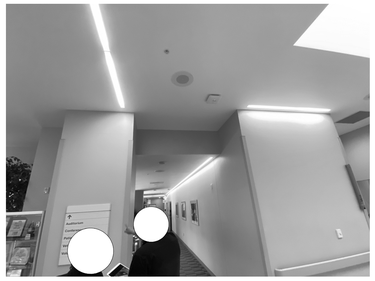
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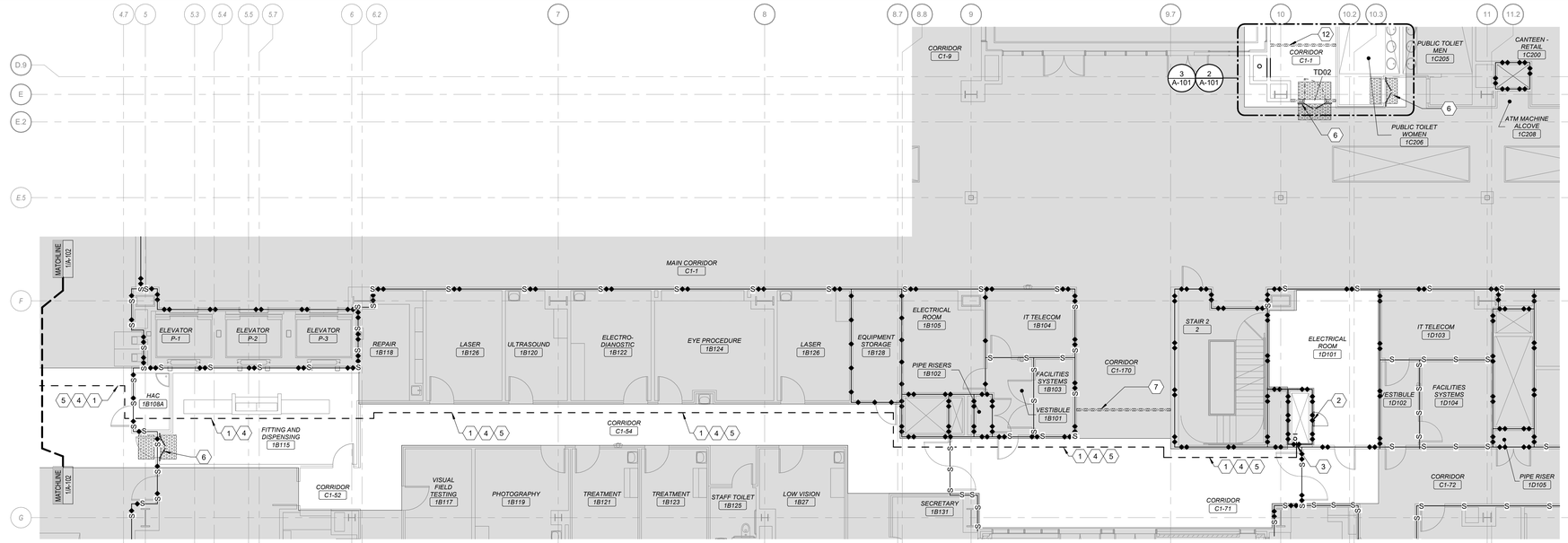
4 ENTRANCE TO FIRST FLOOR BATHROOMS

Scale: No Scale



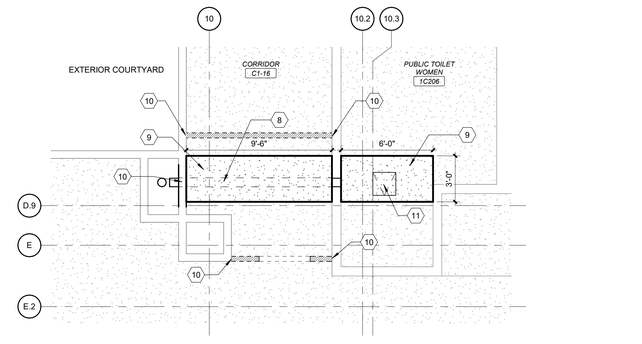
5 HALLWAY TO THE LEFT OF FIRST FLOOR BATHROOMS

Scale: No Scale



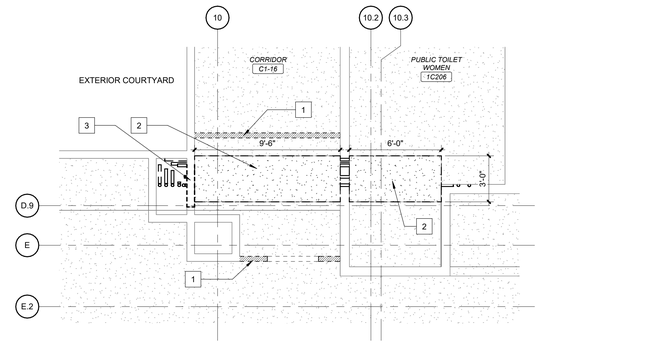
1 FIRST FLOOR PLAN - AREA A

Scale: 1/8" = 1'-0"



3 FIRST FLOOR REFLECTED CEILING PLAN - AREA A

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



2 FIRST FLOOR REFLECTED CEILING DEMOLITION PLAN - AREA A

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

SHEET NOTES:

A. ALIGN NEW WORK WITH EXISTING CONSTRUCTION, EXCEPT WHERE OTHERWISE INDICATED.

B. REPORT CONDITIONS THAT DEVIATE FROM CONTRACT DOCUMENTS TO COR.

C. WHERE DEMOLITION WORK OR RELOCATION OF EXISTING ITEMS LEAVES UNFINISHED SURFACES AND/OR SUBSTRATES, CUT AND PATCH AS REQUIRED TO RESTORE SUBSTRATE AND/OR FINISH MATERIAL EVEN AND FLUSH WITH ADJOINING SURFACES. TEXTURE AND REFINISH TO MATCH EXISTING ADJACENT FINISHES.

D. ALL BUILDING SYSTEMS SERVING OCCUPIED AREAS OF THE BUILDING SHALL REMAIN FULLY OPERATIONAL AT ALL TIMES. PROTECT AND MAINTAIN ALL EXISTING BUILDING SYSTEMS INCLUDING SYSTEMS PASSING THROUGH AND ADJACENT TO AREAS REQUIRING DEMOLITION. WHERE NECESSARY RE-ROUTE OR CAP AS REQUIRED ALL WIRING, CONDUITS, PIPING, DUCTWORK AND OTHER UTILITIES TO SERVE OCCUPIED AREAS.

E. ALL CONSTRUCTION DEBRIS IS TO BE REMOVED FROM SITE EACH DAY AND DEPOSED OF PROPERLY PER CONTRACT REQUIREMENTS.

F. PATCH ANY WORK TO REMAIN THAT WAS DAMAGED DURING DEMOLITION TO MATCH EXISTING.

G. ENSURE TO NOT DAMAGE RATED SHAFT WALLS OR FIRE / SMOKE RATED PARTITIONS. ANY RATED WALLS DAMAGED DURING CONSTRUCTION ARE TO BE REPAIRED PER RATED PARTITION REQUIREMENTS.

H. CONTRACTOR SHALL COORDINATE ANY WORK THAT PRODUCES EXCESSIVE NOISE WITH THE COR TO BE PERFORMED DURING OFF HOURS.

I. CONTRACTOR TO VERIFY WITH COR ALL ICRA MEASURES PRIOR TO THE START OF ANY DEMO.

J. TEMPORARY DOOR SCHEDULE AND DETAILS LOCATED ON SHEET A-100.

K. COMPLETE CLEANING OF LEVEL PRIOR TO WORK BEGINNING ON LEVEL ABOVE.

DEMO KEY NOTES:

1 ICRA BARRIER TYPE B
2 REMOVE GYP CEILING TO REPLACE PIPPING.
3 DEMOLISH WALL FROM 4'-0" A.F.F TO CEILING TO ALLOW ACCESS TO PLUMBING.

NEW KEY NOTES:

1 PIPING FROM VACUUM PUMPS TO DENTAL SUITE. PIPING TO BE INSTALLED ABOVE CEILING, SEE MECHANICAL, PLUMBING PLANS FOR EXACT INSTALLATION REQUIREMENTS AND LOCATIONS. PENETRATIONS THROUGH FIRE RATED AND SMOKE WALLS SEAL WITH APPROVED FIRE SEALANT.
2 INSTALL NEW 2-HOUR RATED ACCESS PANEL INTO SHAFT WALL AS INDICATED. SEE SHEET A-100.
3 NEW VACUUM PIPING PENETRATION POINT INTO EXISTING SHAFT. ENSURE NEW PENETRATION FIRE STOPPED WITH MATERIAL PROVIDING EXISTING RATING.
4 REMOVE ACOUSTICAL CEILING TILES AND GRID FOR THE INSTALLATION OF NEW VACUUM SYSTEM PIPING. SALVAGE ALL COMPONENTS OF CEILING FOR REINSTALLATION AFTER PIPING INSTALL.
5 ICRA MOBILE CONTAINMENT CART IN CORRIDOR. COORDINATE WITH COR.
6 ICRA BARRIER - ZIPPER PLASTIC BARRIER, STICKY MATS EACH SIDE.
7 PLASTIC ICRA BARRIER
8 DENTAL EXHAUST PIPING FROM BASEMENT, CROSSING THE CORRIDOR AND UP TO THE ROOF FROM THE WOMEN'S PUBLIC TOILET. SEE PLUMBING FOR DETAILS.
9 NEW GYPSUM BOARD CEILING WITH FLAT CEILING PAINT TO MATCH EXISTING ADJACENT CEILING.
10 PATCH AND REPAIR WALLS TO MATCH ADJACENT FINISHES AFTER TEMPORARY BARRIERS REMOVED. PAINT WALLS TO MATCH EXISTING. REPLACE ANY BASE, BUMPER GUARD, HANDRAIL IF REMOVED FOR WALL INSTALL TO MATCH EXISTING IN STYLE, MATERIAL AND COLOR.
11 18"X18" FLUSH ACCESS PANEL. BASIS OF DESIGN: BEST BA-UF-5000-PC-18-18 OR EQUAL.
12 ICRA BARRIER TYPE B.

AREA OF WORK LEGEND

AREA OF WORK

OUTSIDE OF AREA OF WORK

REFLECTED CEILING PLAN LEGEND

EXISTING GYP

NEW GYP

ICRA LEGEND

TEMPORARY WALL

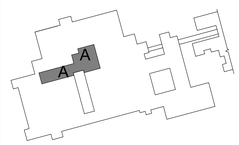
TEMPORARY DOOR

PLASTIC BARRIER

KEY PLAN

SCALE: NO SCALE

AREA OF WORK



FULLY SPRINKLERED

100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO — WALTER DAVID VANSCOTER — ARC.1716954 — REGISTERED ARCHITECT — Walter Van Scoter — 5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

Headquarters:
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Cary, North Carolina 27511
www.acg-pa.com 919-858-7420

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRST FLOOR PLAN - AREA A

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM, 6900 N. PECOS RD., NORTH LAS VEGAS, NV, 89086

Approved:

Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

Drawing Number: A-101

Dwg 2 of 5

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

0 4 8 16 NORTH

SHEET NOTES:

A. CONTRACTOR TO VERIFY ALL ICRA MEASURES WITH COR PRIOR TO THE START OF ANY DEMO.

B. CONTRACTOR SHALL COORDINATE ANY WORK THAT PRODUCES EXCESSIVE NOISE WITH THE COR TO BE PREFORMED DURING OFF HOURS.

C. ALL CONSTRUCTION DEBRIS IS TO BE REMOVED FROM SITE EACH DAY AND DEPOSED OF PROPERLY.

D. CONTRACTOR TO COORDINATE WITH VA TO PROTECT EXISTING FLOORING AND/OR FURNITURE.

E. MAJORITY OF THE WORK FOR THIS FLOOR IS ABOVE THE CEILING. CONTRACTOR TO REMOVE CEILING TILES TO GAIN ACCESS TO INSTALL NEW PIPE AND FLOOR PENETRATIONS ABOVE.

F. TEMPORARY DOOR SCHEDULE AND DETAILS LOCATED ON SHEET A-100.

G. COMPLETE CLEANING OF LEVEL PRIOR TO WORK BEGINNING ON LEVEL ABOVE.

(#) NEW KEY NOTES:

1 PIPING FROM VACUUM PUMPS TO DENTAL SUITE. PIPING TO BE INSTALLED ABOVE CEILING, SEE MECHANICAL, PLUMBING PLANS FOR EXACT INSTALLATION REQUIREMENTS AND LOCATIONS. PENETRATIONS THROUGH FIRE RATED AND SMOKE WALLS SEAL WITH APPROVED FIRE SEALANT.

2 REMOVE ACOUSTICAL CEILING TILES AND GRIDS AS NECESSARY FOR THE INSTALLATION OF NEW VACUUM SYSTEM PIPING. SALVAGE ALL COMPONENTS OF CEILING FOR REINSTALLATION AFTER PIPING INSTALL.

3 ICRA MOBILE CONTAINMENT CART IN CORRIDOR. COORDINATE WITH COR.

4 ICRA BARRIER - ZIPPER PLASTIC BARRIER, STICKY MATS EACH SIDE.

5 APPROXIMATE LOCATION OF EXISTING EQUIPMENT FOR WORK ON SECOND FLOOR. GENERAL CONTRACTOR TO CONFIRM BEFORE BEGINNING WORK AND COORDINATE WITH COR.

6 PLASTIC ICRA BARRIER

7 ROOM 1A170 IS PART OF ONCOLOGY DEPARTMENT. CONTRACTOR TO COORDINATE WITH COR FOR ALL WORK BEING DONE IN ROOM.

AREA OF WORK LEGEND

AREA OF WORK

OUTSIDE OF AREA OF WORK

ICRA LEGEND

TEMPORARY WALL

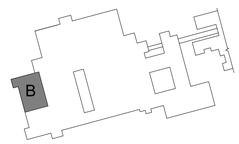
TEMPORARY DOOR

PLASTIC BARRIER

KEY PLAN

SCALE: NO SCALE

AREA OF WORK



FULLY SPRINKLERED

100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO
WALTER DAVID VANSCOTER
ARC.1716954
REGISTERED ARCHITECT
5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

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www.acg-pa.com 919-858-7420

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRST FLOOR PLAN - AREA B

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Approved:

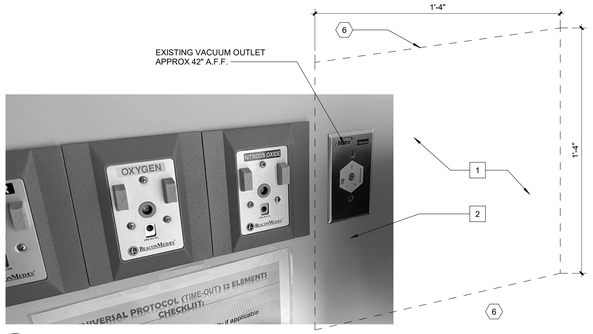
Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

Drawing Number: A-102

Dwg 3 of 5

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2 TYPICAL VACUUM OUTLET IN DETAL EXAM ROOMS

Scale: No Scale



1 SECOND FLOOR - DETAL

Scale: 1/8" = 1'-0"

SHEET NOTES:

A. ALIGN NEW WORK WITH EXISTING CONSTRUCTION, EXCEPT WHERE OTHERWISE INDICATED.

B. WHERE DEMOLITION WORK OR RELOCATION OF EXISTING ITEMS LEAVES UNFINISHED SURFACES AND/OR SUBSTRATES, CUT AND PATCH AS REQUIRED TO RESTORE SUBSTRATE AND/OR FINISH MATERIAL EVEN AND FLUSH WITH ADJOINING SURFACES. TEXTURE AND REFINISH TO MATCH EXISTING ADJACENT FINISHES.

C. ALL BUILDING SYSTEMS SERVING OCCUPIED AREAS OF THE BUILDING SHALL REMAIN FULLY OPERATIONAL AT ALL TIMES. PROTECT AND MAINTAIN ALL EXISTING BUILDING SYSTEMS INCLUDING SYSTEMS PASSING THROUGH AND ADJACENT TO AREAS REQUIRING DEMOLITION. WHERE NECESSARY RE-ROUTE OR CAP AS REQUIRED ALL WIRING, CONDUITS, PIPING, DUCTWORK AND OTHER UTILITIES TO SERVE OCCUPIED AREAS.

D. CONTRACTOR TO VERIFY WITH COR ALL ICRA MEASURES PRIOR TO THE START OF ANY DEMO.

E. ALL CONSTRUCTION DEBRIS IS TO BE REMOVED FROM SITE EACH DAY AND DEPOSED OF PROPERLY PER CONTRACT REQUIREMENTS.

F. PATCH ANY WORK TO REMAIN THAT WAS DAMAGED DURING DEMOLITION TO MATCH EXISTING.

G. ENSURE TO NOT DAMAGE RATED SHAFT WALLS OR FIRE / SMOKE RATED PARTITIONS. ANY RATED WALLS DAMAGED DURING CONSTRUCTION ARE TO BE REPAIRED PER RATED PARTITION REQUIREMENTS.

H. CONTRACTOR SHALL COORDINATE ANY WORK THAT PRODUCES EXCESSIVE NOISE WITH THE COR TO BE PERFORMED DURING OFF HOURS.

I. CONTRACTOR TO VERIFY WITH COR ALL ICRA MEASURE PRIOR TO THE START OF ANY DEMO.

J. ALL HOLES FROM PIPE DEMOLITION THROUGH FLOOR ASSEMBLY SHALL BE PATCHED WITH 2 HOUR FIRE STOPPING. BASIS OF DESIGN: 3M FIRE BARRIER WATER TIGHT SEALANT 3000WT OR EQUAL.

DEMO KEY NOTES:

1 DEMOLISH A 16"X16" AREA OF GYPSUM BOARD AROUND EXISTING OUTLET TO BE REMOVED. INSTALL BLACKING AND 16"X16" GYP BOARD PATCH. FINISH TO MATCH ADJACENT SURFACE. PAINT ENTIRE WALL, PAINT AROUND COUNTER AND SUPPORTS, AND BUILT IN BASE. REMOVE, PAINT, AND RE-INSTALL MISCELLANEOUS REMOVABLE DEVICES. PAINT TWO COATS INTERIOR LATEX. COLOR TO BE SELECTED BY VA INTERIOR DESIGNER.

2 CUT VACUUM PIPING BELOW VALVE AND BELOW FLOOR. REMOVE PIPE SECTION FROM ABOVE CEILING ON FLOOR BELOW.

NEW KEY NOTES:

1 PROVIDE ICRA BARRIER/ENCLOSURES INSIDE THE DENTAL EXAM ROOMS FOR THE CONNECTIONS OF THE NEW PIPING TO THE EXISTING EQUIPMENT LOCATED IN THOSE ROOMS, SEE MECHANICAL DRAWINGS FOR EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS.

2 ICRA BARRIER - ZIPPER PLASTIC BARRIER, STICKY MATS EACH SIDE.

3 ICRA BARRIER TYPE A.

4 CONSTRUCTION SIGN LOCATION. VERIFY WITH COR.

5 6 MIL ICRA PLASTIC BARRIER.

6 PROVIDE FTPT BLOCKING FOR REPAIR.

AREA OF WORK LEGEND

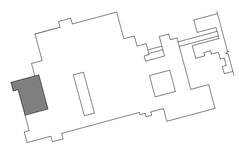
AREA OF WORK

OUTSIDE OF AREA OF WORK

KEY PLAN

SCALE: NO SCALE

AREA OF WORK



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#	Revisions:	Date

CONSULTANTS:

STATE OF OHIO
WALTER DAVID VANSCOTER
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REGISTERED ARCHITECT
5/30/2025

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: SECOND FLOOR PLAN - DENTAL

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER 593-22-103

Building Number 1

Approved

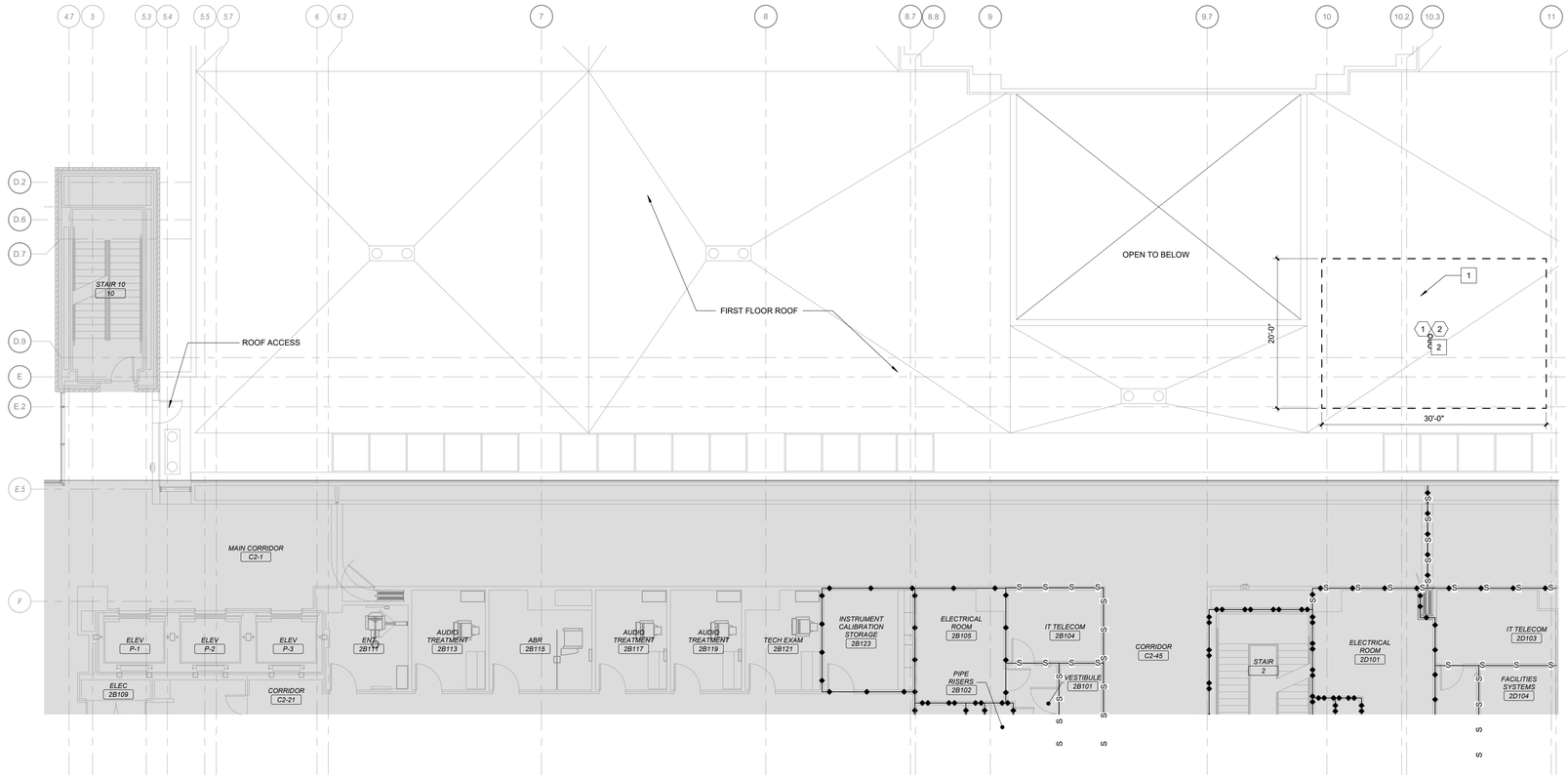
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Drawing Number A-103

Dwg 4 of 5

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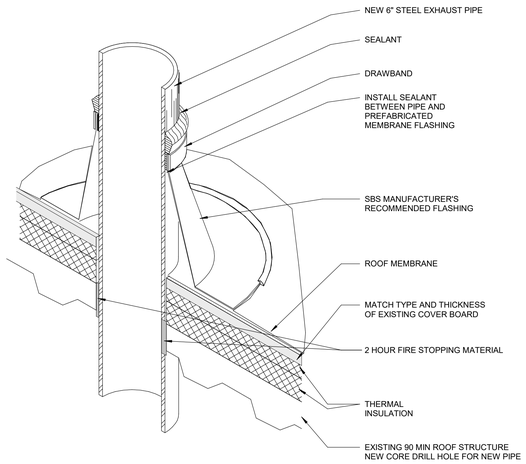
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1 SECOND FLOOR AND FIRST FLOOR ROOF PLAN

Scale: 1/8" = 1'-0"

0 4 8 16 NORTH



3 EXHAUST SBS THROUGH ROOF DETAIL

Scale: No Scale



2 DAMAGE ON FIRST FLOOR ROOF

Scale: No Scale

SHEET NOTES:

ROOFING STATUS:

A. THE AREA IN WHICH ROOFING REPAIR WORK IS TO TAKE PLACE HAS A SCHEDULED RE-ROOFING PROJECT. IT IS UNKNOWN AT THIS TIME IF THE PROJECT WILL BEGIN CONSTRUCTION BEFORE OR AFTER THE CONSTRUCTION OF THIS PROJECT.

B. AT THE TIME OF DESIGN FOR THIS PROJECT, THE EXISTING ROOF SYSTEM IS A 2 PLY SBS MODIFIED (COLD ADHESIVE APPLIED) ROOFING MEMBRANE ON COVER BOARD, OVER 6" POLY-ISO INSULATION. THIS SYSTEM SHALL BE DEEMED "EXISTING."

C. THE RE-ROOFING PROJECT LEAVES THE EXISTING SYSTEM IN PLACE AND APPLIES A LIQUID APPLIED BASE COAT AND A TOP COAT OVER THE EXISTING SYSTEM. THIS SYSTEM SHALL BE DEEMED "NEW."

D. CONTRACTOR TO PRICE REPAIRS FOR CURRENT INSTALLED SYSTEM AT THE TIME OF BIDDING. COR TO CLARIFY SYSTEM IN PLACE AT THE TIME OF BIDDING.

E. IF NEW SYSTEM IS IN PLACE, CONTRACTOR TO PERFORM REPAIR WORK AS PER LIQUID APPLIED MANUFACTURER'S STANDARD DETAILS AND RECOMMENDATIONS SO THAT THE LIQUID APPLIED WARRANTY REMAINS IN PLACE. VA TO PROVIDE MANUFACTURER AND WARRANTY AT THE TIME OF BIDDING.

F. THE EXTENT OF THE AREA OF REPAIRS REMAINS THE SAME WITH EITHER EXISTING OR NEW ROOFING SYSTEMS. IF THE NEW SYSTEM IS IN PLACE. CONTRACTOR TO INCLUDE REPAIRS FOR THE SBS "EXISTING" SYSTEM AND SUBSEQUENT LIQUID APPLIED "NEW" SYSTEM.

DEMO KEY NOTES:

1 REMOVE EXISTING SBS 2 PLY ROOFING MEMBRANE AND COVER BOARD (APPROX. AREA 30'X20') INSTALL MATCHING THICKNESS AND TYPE OF COVER BOARD. INSTALL NEW 2 PLY ROOFING, MATCHING MANUFACTURER AND SPLICE INTO EXISTING ROOFING PER MANUFACTURER'S INSTRUCTIONS AND DETAILS. REPLACE ALL WALKWAY PADS WITHING THE AREA INDICATED.

2 REMOVE AND REPLACE EXISTING PIPING. SEE PLUMBING DRAWINGS FOR DETAILS. PATCH ALL EXISTING ROOF DECK CORES NO LONGER IN USE WITH 2 HOUR FIRE STOPPING. BASIS OF DESIGN: 3M FIRE BARRIER WATER TIGHT SEALANT 3000WT OR EQUAL..

NEW KEY NOTES:

1 DENTAL VACUUM EXHAUST ROOF PENETRATION.

2 FILL ALL ROOF PENETRATIONS NO LONGER IN USE WITH 2 HOUR FIRE STOPPING. BASIS OF DESIGN: 3M FIRE BARRIER WATER TIGHT SEALANT 3000WT OR EQUAL.

AREA OF WORK LEGEND

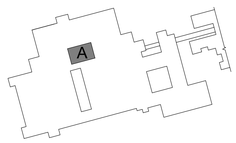
AREA OF WORK

OUTSIDE OF AREA OF WORK

KEY PLAN

SCALE: NO SCALE

AREA OF WORK



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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: SECOND FLOOR AND FIRST FLOOR ROOF PLAN

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086

Approved

Date: MAY 30, 2025 | Checked: WVS | Drawn: CET

Drawing Number: A-104

Dwg 5 of 5

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VA FORM 08-6231

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PLUMBING ABBREVIATIONS

A/E	ARCHITECT/ENGINEER	F	FAHRENHEIT	O2	OXYGEN
AC	ABOVE CEILING	FA	FROM ABOVE	OC	ON CENTER
AD	AREA DRAIN	FB	FROM BELOW	OD	OUTSIDE DIAMETER
AFF	ABOVE FINISHED FLOOR	FBO	FURNISHED BY OTHERS	OSD	OVERFLOW STORM DRAIN
AG	AIR GAP	FCO	FLOOR CLEANOUT	OR	OPERATING ROOM
AMG	AMALGAM SEPERATOR	FCW	FILTERED COLD WATER	OVFL	OVERFLOW
AP	ACCESS PANEL	FD	FLOOR DRAIN		
AS	AUTOMATIC SPRINKLER	FDC	FIRE DEPARTMENT (HOSE) CONNECTION	PA	PASCAL
AFG	ABOVE FINISHED GRADE	FM	FLOW METER	PC	PLUMBING CONTRACTOR
ASD	ADJUSTABLE SPEED DRIVE	FOP	FUEL OIL PUMP	PD	PRESSURE DROP
ASHRAE	AMERICAN SOCIETY HEATING, REFRIGERATING, AIR CONDITIONING ENGINEERS	FOR	FUEL OIL RETURN	PDI	PLUMBING AND DRAINAGE INSTITUTE
		FOS	FUEL OIL SUPPLY	PG	PRESSURE GAUGE
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	FOV	FUEL OIL VENT	PP	PLUMBING PUMP
		FS	FLOOR SINK	PPM	PARTS PER MILLION
ASPE	AMERICAN SOCIETY PLUMBING ENGINEERS	FU	FIXTURE UNITS	PRS	PRESSURE REDUCING STATION
				PRV	PRESSURE REDUCING VALVE
ASR	AUTOMATIC SPRINKLER RISER	G	GALLON	PSI	POUNDS PER SQUARE INCH
AV	ACID VENT	GC	GENERAL CONTRACTOR	PSIA	POUNDS PER SQUARE INCH - ABSOLUTE
AW	ACID WASTE	GCO	GRADE CLEANOUTS	PSIG	POUNDS PER SQUARE INCH - GAUGE
		GD	GARBAGE DISPOSAL	PTRV	PRESSURE TEMPERATURE RELIEF VALVE
BAS	BUILDING AUTOMATION SYSTEM	GPD	GALLONS PER DAY	PW	POTABLE WATER
BF	BELOW FLOOR	GPH	GALLONS PER HOUR		
BFP	BACKFLOW PREVENTER	GPM	GALLONS PER MINUTE	RD	ROOF DRAIN
BG	BELOW GRADE	GPR	GAS PRESSURE REGULATOR	RDL	ROOF DRAIN LEADER
BH	BOOSTER HEATER	GRS	GAS REGULATOR STATION	RL	ROOF LEADER
BHP	BREAK HORSEPOWER	GT	GREASE TRAP	RO	REVERSE OSMOSIS
BJ	BETWEEN JOISTS	GVTR	GAS VENT THROUGH ROOF	RWL	RAIN WATER LEADER
BOP	BOTTOM OF PIPE	GWH	GAS FIRED WATER HEATER		
BSP	BLACK STEEL PIPE			SAN	SANITARY SEWER
BT	BATHTUB	H&CW	HOT AND COLD WATER	SCFM	STANDARD CUBIC FOOT/MIN
BTUH	BRITISH THERMAL UNITS PER HOUR	HB	HOSE BIBB (INTERIOR)	SCW	SOFTENED COLD WATER
		HD	HUB DRAIN	SD	STORM DRAIN
C	CELSIUS	HEX	HEAT EXCHANGER	SDMH	STORM DRAIN MANHOLE
CF	COMBINATION FIXTURE	HP	HORSEPOWER	SP	SUMP PUMP
CGA	COMPRESSED GAS ASSOCIATION	HS	HAND SINK	SPR	SPRINKLER LINE
CI	CAST IRON	HST	HOT WATER STORAGE TANK (DOMESTIC)	SPT	SEPARETION TANK
CO	CLEANOUT	HWB	HOT WATER BOILER	SQFT	SQUARE FOOT
COND	CONDENSATE	HWCP	HOT WATER CIRCULATING PUMP	SS	STAINLESS STEEL
CP	CONDENSATE PUMP	HWP	HOT WATER PUMP	ST	STORAGE TANK
CS	CLINICAL SINK	HYD	HYDRANT	SW	STORM WATER
CV	CONTROL VALVE				
		ICW	INDUSTRIAL COLD WATER	TCV	TEMPERATURE CONTROL VALVE
DA	DENTAL COMPRESSED AIR	INV	INVERT	TD	TRENCH DRAIN
DCW	DOMESTIC COLD WATER	IPC	INTERNATIONAL PLUMBING CODE	TDH	TOTAL DYNAMIC HEAD
DHW	DOMESTIC HOT WATER	IRW	IRRIGATION WATER	TDL	TEMPERATURE DIFFERENTIAL
DHWR	DOMESTIC HOT WATER RETURN	IW	INDIRECT WASTE	TEMP	TEMPERATURE
DHWS	DOMESTIC HOT WATER SUPPLY	IWH	INSTANTANEOUS WATER HEATER	TMV	THERMOSTATIC MIXING VALVE
DF	DRINKING FOUNTAIN	IWR	INDUSTRIAL WATER RETURN	TP	TRAP PRIMER
DI	DEIONIZED WATER	IWS	INDUSTRIAL WATER SUPPLY	TSTAT	THERMOSTAT
DN	DOWN			TWR	TEMPERED WATER RETURN
DOE	DEPARTMENT OF ENERGY	KW	KILOWATT	TWS	TEMPERED WATER SUPPLY
DS	DOWNSPOUT	KWHR	KILOWATT-HOUR	TYP	TYPICAL
DV	DENTAL VACUUM				
DVE	DENTAL VACUUM EXHAUST	L/S	LITER PER SECOND	UPC	UNIFORM PLUMBING CODE
DVT	DENTAL VACUUM PUMP	LA	LABORATORY AIR	UJC	UTILITY JUNCTION CENTER
DW	DISHWASHER	LAV	LAVATORY		
DWG	DRAWING	LBS/HR	POUNDS PER HOUR	V	SANITARY VENT
DWH	DOMESTIC WATER HEATER	LCW	LABORATORY COLD WATER	VAC	VACUUM
DWR	DRINKING WATER RETURN	LHW	LABORATORY HOT WATER	VB	VACUUM BREAKER
DWS	DRINKING WATER SUPPLY	LNG	LIQUID NATURAL GAS	VCO	VACUUM CLEANER OUTLET
DWT	DOMESTIC WATER TEMPERED	LOX	LIQUID OXYGEN	VP	VACUUM PUMP
DWV	DRAIN WASTE VENT	LV	LABORATORY VACUUM	VS	VENT STACK
		LW	LOW WATER	VTR	VENT THROUGH ROOF
EC	ELECTRICAL CONTRACTOR	M	METER	W	WASTE
EL	ELEVATION	MA	MEDICAL AIR	WC	WATER CLOSET
EMCS	ENERGY MONOSERRAT AND CENTRAL SYSTEM	MAV	MANUAL AIR VENT	WCO	WALL CLEANOUT
		MBH	THOUSANDS OF BTU PER HOUR	WG	WATER GAUGE
EPA	ENVIRONMENTAL PROTECTION AGENCY	MC	MECHANICAL CONTRACTOR	WH	WATER HEATER
EPACT	ENERGY POLICY ACT	MED	MEDICAL	WHA	WATER HAMMER ARRESTOR
ESC	ESCUTCHEON	MER	MECHANICAL EQUIPMENT ROOM	WHD	WALL HYDRANT
ESH	EMERGENCY SHOWER	MH	MANHOLE	WL	WATER LINE
ET	EXPANSION TANK	MOU	MEMORANDUM OF UNDERSTANDING	WM	WATER METER
EWC	ELECTRIC WATER COOLER	MSB	MOP SINK BASIN	WO	WALL OUTLET
EWH	ELECTRIC WATER HEATER	MV	MEDICAL VACUUM	WPD	WATER PRESSURE DROP
EWS	EYEWASH STATION			WS	WASTE STACK
EX	EXISTING	N2	NITROGEN		
		N2O	NITROUS OXIDE	YCO	YARD CLEANOUT
		NC	NORMALLY CLOSED	YH	YARD HYDRANT
		NG	NATURAL GAS		
		NIC	NOT IN CONTRACT		
		NO	NORMALLY OPEN		
		NOM	NOMINAL		
		NPW	NON POTABLE WATER		
		NTS	NOT TO SCALE		

PLUMBING SYMBOLS

- PIPE SLOPE ARROW
- FLOW ARROW
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER
- 3-WAY CONTROL VALVE
- ANGLE GATE VALVE
- ANGLE GLOBE VALVE
- BALL VALVE
- BUTTERFLY VALVE
- CHECK VALVE
- CIRCUIT SETTER
- CONTROL VALVE
- GATE VALVE
- GLOBE VALVE
- SERVICE VALVE
- PLUG VALVE
- PRESSURE REDUCING VALVE (WATER)
- PRESSURE REGULATOR (GAS)
- SAFETY RELIEF VALVE
- TWO POSITION CONTROL VALVE
- BACKFLOW PREVENTER
- HOSE BIBB / SILLCOCK
- AUTOMATIC AIR VENT
- PRESSURE GAUGE
- THERMOMETER
- (F) FLOW SWITCH
- (P) PRESSURE SWITCH
- (T) TEMPERATURE SWITCH
- PIPE UNION
- WYE STRAINER
- WYE STRAINER WITH DRAIN VALVE
- PUMP
- OR FLOOR DRAIN - ROUND OR SQUARE
- FLOOR CLEANOUT
- CO SUSPENDED CLEANOUT
- WCO WALL CLEANOUT
- PIPE CAP
- PIPE TURNING DOWN
- PIPE TURNING UP
- TEE UP
- TEE DOWN
- DROP AND RUN
- DROP AND TURN
- TEE OFF TOP
- TEE OFF BOTTOM
- CROSS AND RISER
- PLAN 90° ELBOW
- PIPE TEE
- FLEXIBLE PIPE CONNECTOR
- PIPE ANCHOR
- PIPE GUIDES
- (M) WATER METER
- UTILITY JUNCTION CENTER
- WALL OUTLET
- VACUUM RELIEF VALVE

PLUMBING SYMBOLS

	PIPING SYSTEM
—AW—	AW ACID WASTE
—CA—	CA COMPRESSED AIR
—CD—	CD CONDENSATE DRAIN
—CO2—	CO2 CARBON DIOXIDE
—NG—	NG NATURAL GAS
—DV—	DV DENTAL VACUUM
—DVE—	DVE DENTAL VACUUM EXHAUST
—GW—	GW GREASE WASTE
—MA—	MA MEDICAL AIR
—N2—	N2 NITROGEN
—N2O—	N2O NITROUS OXIDE
—OFD—	OFD OVERFLOW STORM DRAIN
—OW—	OW OIL WASTE
—O2—	O2 OXYGEN
—PD—	PD PUMP DISCHARGE
—PG—	PG PROPANE GAS
—ST—	ST STORM
—VAC—	VAC VACUUM
—WAGD—	WAGD WASTE ANESTHETIC GAS DISPOSAL
—SAN—	SAN SANITARY WASTE
—AV—	AV ACID VENT
—OV—	OV OIL VENT
—V—	V SANITARY VENT
—DCW—	DCW DOMESTIC COLD WATER
—DI—	DI DE-IONIZED WATER
—NPCW—	NPCW NONPOTABLE COLD WATER
—RO—	RO REVERSE OSMOSIS WATER
—DSCW—	DSCW DOMESTIC SOFT COLD WATER
—DHW—	DHW DOMESTIC HOT WATER
—HW 140—	DHW 140 DOMESTIC HOT WATER (OTHER TEMP)
—DCWR—	DCWR DOMESTIC CW RECIRCULATION
—DHWR—	DHWR DOMESTIC HW RECIRCULATION
—DWT—	DWT DOMESTIC WATER TEMPERED
—DCW—	DCW DOMESTIC CW BELOW THE FLOOR
—SD—	SD STORM BELOW THE FLOOR
—SAN—	SAN SANITARY WASTE BELOW THE FLOOR

ANNOTATION SYMBOLS

#	NEW WORK KEYNOTE
#	DEMOLITION KEYNOTE
NEW	BOLD TEXT INDICATES NEW ITEM
EXISTING	ITALICIZED TEXT INDICATES EXISTING ITEM
## / #	DETAIL MODULE NUMBER / DETAIL OR SECTION MARK / SHOWN ON DRAWING
	CONNECT TO EXISTING
	LIMIT OF DEMOLITION
P-###	NEW PLUMBING EQUIPMENT MARK
P-###	EXISTING PLUMBING EQUIPMENT MARK

MED GAS LEGEND

	OXYGEN OUTLET
	NITROUS OXIDE OUTLET
	ENTONOX OUTLET
	MEDICAL AIR OUTLET
	MEDICAL VAC OUTLET
	DENTAL VAC OUTLET

SEISMIC PROTECTION NOTE

PROVIDE SEISMIC PROTECTION IN ACCORDANCE WITH SPECIFICATIONS. REFER TO SPEC SECTION 130541 FOR SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCURAL COMPONENTS.

PLUMBING DEMOLITION GENERAL NOTES

1. VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK. NOTIFY COR REGARDING CONFLICTS BEFORE PROCEEDING WITH WORK.
2. REMOVED ITEMS REMAIN PROPERTY OF GOVERNMENT UNTIL COR DETERMINES THAT THEY ARE NOT REQUIRED. REMOVE FROM SITE ITEMS NOT BEING RETAINED BY GOVERNMENT OR REINSTALLED AS PART OF THIS WORK.
3. DO NOT DISTURB ITEMS NOT INDICATED FOR DEMOLITION.
4. VERIFY SIZE AND LOCATION OF EXISTING UTILITIES PRIOR TO START OF DEMOLITION. RELOCATE, REMOVE AND ADJUST MECHANICAL AND ELECTRICAL ITEMS AS NECESSARY TO COORDINATE WITH NEW WORK.
5. AFTER DEMOLITION IS COMPLETE, PATCH AND REPAIR FINISHES TO MATCH EXISTING ADJACENT CONDITIONS.
6. COORDINATE DEMOLITION WITH COR. SUBMIT SHUTDOWN PLAN AND SCHEDULE TO COR FOR REVIEW AND APPROVAL.
7. PROTECT EXISTING UTILITIES TO REMAIN FROM DAMAGE DURING DEMOLITION. REPAIR UTILITIES AND SERVICES DAMAGED AT NO ADDITIONAL COST.
8. TEMPORARILY MOVE OR TAKE EQUIPMENT OUT OF SERVICE AS NECESSARY TO COMPLETE WORK.
9. SAWCUT CONCRETE FLOOR AS REQUIRED FOR DEMOLITION WORK INDICATED. COORDINATE WITH NEW PLUMBING WORK AND WORK OF OTHER TRADES.

PLUMBING GENERAL NOTES

1. WORK SHALL CONFORM TO APPLICABLE LOCAL, STATE, AND NATIONAL CODES AND APPLICABLE VA STANDARDS.
2. INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
3. OBTAIN AND PAY FOR PERMITS, FEES, AND INSPECTIONS REQUIRED FOR THIS WORK.
4. PROVIDE NEW MATERIALS, EQUIPMENT AND PRODUCTS INCORPORATED IN THE WORK, OF A SUITABLE GRADE FOR THE PURPOSES INTENDED.
5. EQUIPMENT OR MATERIAL DEVIATIONS FROM INDICATED CONTRACT REQUIREMENTS ARE SUBJECT TO THE APPROVAL OF THE COR. SUBMIT PROPOSED EQUIPMENT DEVIATIONS THAT ARE SIMILAR BOTH IN QUALITY AND CAPACITY TO THAT EQUIPMENT SPECIFIED, AS SOLELY DETERMINED BY THE COR.
6. INSTALL EQUIPMENT AS INDICATED, ALLOWING FOR SUFFICIENT ACCESS AND CLEARANCE SPACE FOR EQUIPMENT MAINTENANCE, REPAIRS, AND REPLACEMENT.
7. SUPPORT PIPING SYSTEM AS REQUIRED BY APPLICABLE LOCAL, STATE, AND NATIONAL CODES ALONG WITH SPECIFICATIONS, VA STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
8. FIRESTOP AND SEAL PIPING PENETRATIONS THROUGH WALLS AND FLOORS EQUAL TO THE RATING OF WALLS AND FLOORS.
9. TEST PLUMBING SYSTEM IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND NATIONAL CODES AND APPLICABLE VA STANDARDS.
10. COORDINATE PLUMBING PIPING WITH WORK OF OTHER DISCIPLINES.
11. COORDINATE PLUMBING WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION. COORDINATE ROUTING OF PIPING WITH EXISTING CONDITIONS.
12. PROVIDE ALL NECESSARY OFFSETS, TEES, ELBOWS, ETC. FOR A COMPLETE AND COORDINATED WORKING PLUMBING SYSTEM. DRAWING PLANS, SCHEMATICS, AND DIAGRAMS INDICATE GENERAL LOCATION AND ARRANGEMENT OF PIPING SYSTEMS.
13. CONTRACTOR SHALL COORDINATE ANY PLUMBING SYSTEM REQUIRED SHUTDOWN WITH THE COR 2 WEEKS IN ADVANCE AND CONFIRM 48 HOURS PRIOR.
14. PATCH, PAINT AND CLEAN SURFACES SUSTAINING DAMAGE ASSOCIATED WITH PLUMBING WORK OF THIS CONTRACT, UNLESS NOTED OTHERWISE.
15. INSTALL ESCUTCHEONS IN ALL PLACES WHERE PIPING PENETRATES A WALL IN AN EXPOSED LOCATION.
16. DO NOT INSTALL PIPES ABOVE TELECOM OR ELECTRICAL EQUIPMENT.
17. COMMISSION DENTAL VACUUM SYSTEM IN ACCORDANCE WITH SPECIFICATION SECTION 22 08 00 COMMISSIONING OF PLUMBING SYSTEMS.

WALL RATING LEGEND

- 2 HOUR FIRE SEPARATION
- 1 HOUR FIRE SEPARATION
- S S S SMOKE RATED

Dental Vacuum Equipment Sizing Criteria

Description	Value	Reference
Air flow sizing criteria per UJC (scfm)	15	VA Plumbing Design Guide item 8.4.4.b
Number of UJC	23	Drawing PG-102
Minimum source flow rate at 8 in Hg	345 scfm	

Notes:
1. Basis of Design - VacStar VS90

Dental Vacuum Piping Sizing Criteria

Description	Value	Reference
Overall system pressure drop ("Hg)	1	VA Specification 22 62 19.74 section 1.5.A
Minimum pipe size (inches)	1.5	VA Specification 22 62 19.74 section 3.1 E
HVE Floor mounted UJC (#)	23	Drawing PG-102
Design Airflow (scfm)	7	VA Plumbing Design Guide item 8.4.2.a
Diversity	None	VA Plumbing Design Guide item 8.4.2.d
Safety factor for piping design	15%	VA Plumbing Design Guide item 8.4.4.e
Total airflow for piping design (scfm)	185	

Notes:
1 Pipe sizing criteria: ASPE Plumbing Engineering Design Handbook 2023-2024, Volume 3, Chapter 2, Volume 3, Chapter 10.

VACUUM PUMP SCHEDULE

MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	TYPE UNIT	RECEIVER SIZE X 2	VACUUM PRESSURE	CFM DELIVERY @ VACUUM PRESSURE	ELECTRIC POWER				REMARKS
								NO. PUMPS	POWER EACH	PHASE	VOLT	
					GAL	in Hg	SCFM		HP			
DVP-1	MECH BD160	DENTAL CLINIC	DENTAL VACUUM	DRY VACUUM	80	8	370	6	6	[3]	480	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, A, B, C

NOTES:
1. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2. PUMP OPERATIONS SHALL ALTERNATE TO ACHIEVE EQUAL WEAR.
3. SYSTEM SHALL BE VACSTAR VS90 CLINICAL DRY VACUUM SYSTEMS, OIL-LESS REGENERATIVE SIDE CHANNEL PUMPS OR EQUAL.
4. PROVIDE WITH TWO (2) 80 GAL. SEPARATOR TANKS.
5. PROVIDE ALL ACCESSORIES FOR FULLY FUNCTIONAL SYSTEM.
6. PROVIDE WITH A DISPLAY PANEL.
7. UNIT SHALL BE ABLE TO DEVELOP 15" HG.
8. LISTED CAPACITY IS WITH ALL PUMPS IN OPERATION.
9. PROVIDE GAUGES, SENSORS AND SAFETY DEVICES.
10. PROVIDE ONE ADDITIONAL AMALGAM SEPARATOR OF THE SAME TYPE AND SIZE AS EXISTING. INSTALL IN PARALLEL. BASIS OF DESIGN: NXT HG5 HIGH VOLUME AMALGAM SEPARATOR.

CONTROLS NOTE:
A. PROVIDE DDC CONTROLS AND CONNECT TO THE EXISTING BAS SYSTEM.
B. REFER TO SPECIFICATION SECTION 22 62 19.74
C. EXISTING CONTROL SYSTEM IS MANUFACTURED BY JCI.

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100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

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5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: PLUMBING LEGEND

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086

Approved

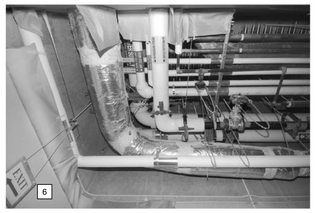
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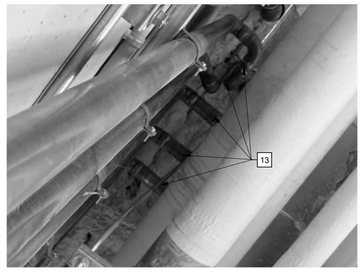
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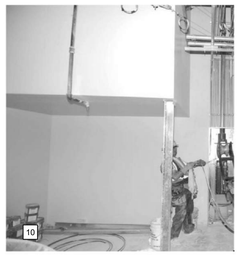


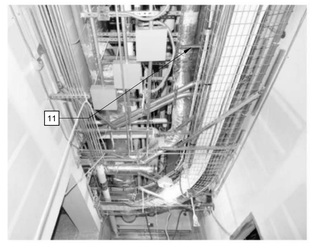


INDIVIDUAL EXHAUST PIPES FROM EACH PUMP TO BE DEMOED.



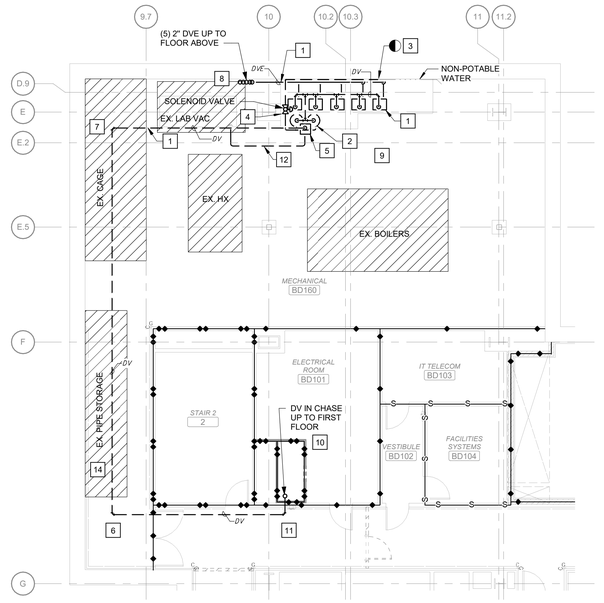






2 BASEMENT EXISTING PHOTOS

Scale: No Scale



1 BASEMENT DENTAL VACUUM DEMOLITION PLAN - AREA A

Scale: 1/8" = 1'-0"

0 4 8 16 NORTH

SHEET NOTES:

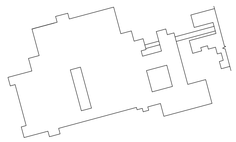
A. DEMOLITION WORK SHALL BE PERFORMED SUCH THAT ALL PIPES, HANGERS, SUPPORTS, AND VALVES IN SCOPE ARE REMOVED COMPLETELY. REMOVE ALL ITEMS TO ENSURE NOTHING IS ABANDONED IN PLACE.

B. REFER TO EXISTING PHOTOS SHEET FOR SITE CONDITION. EXISTING PIPING LOCATIONS SHOWN ARE APPROXIMATE.

DEMO KEY NOTES:

1 DEMOLISH DENTAL VACUUM PUMPS, DENTAL VACUUM PIPING, AND DENTAL VACUUM EXHAUST PIPING COMPLETELY AS INDICATED.
2 DEMOLISH EXISTING SEPARATION TANKS AND ASSOCIATED MAIN HEADER AND INDIVIDUAL BRANCH PIPING TO EACH PUMP.
3 DEMOLISH NON-POTABLE WATER SUPPLY SERVING SEPARATOR TANKS AS INDICATED AND PREPARE TO RECONNECT TO NEW SEPARATOR TANKS.
4 DEMOLISH SOLENOID VALVE SERVING SEPARATORS.
5 REMOVE AMALGAM SEPARATOR AND PREPARE TO RELOCATE.
6 VIEW OF MECHANICAL ROOM BD160 - ENTRY.
7 VIEW OF MECHANICAL ROOM BD160 - NW CORNER.
8 VIEW OF MECHANICAL ROOM BD160 - NORTH WALL.
9 VIEW OF MECHANICAL ROOM BD160 - VACUUM PUMPS.
10 VIEW OF CHASE UP TO FIRST FLOOR.
11 VIEW OF CORRIDOR WHERE VACUUM PIPE ENTERS CHASE.
12 DEMOLISH EXISTING DRAIN PIPING FOR SEPARATOR TANK.
13 EXHAUST PIPING FLOOR PENETRATION TO FIRST FLOOR.
14 EXISTING PIPE STORAGE RACK AND ASSOCIATED PIPING SHALL BE BROKEN DOWN AND STORED IN AN ALTERNATE AREA APPROVED BY THE COR DURING CONSTRUCTION AND REASSEMBLE AFTER WORK IS COMPLETED IN BASEMENT.

KEY PLAN
SCALE: NO SCALE
AREA OF WORK



FULLY SPRINKLERED
100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

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5/30/2025

PROJECT MANAGER
ACG Project Number 23-090

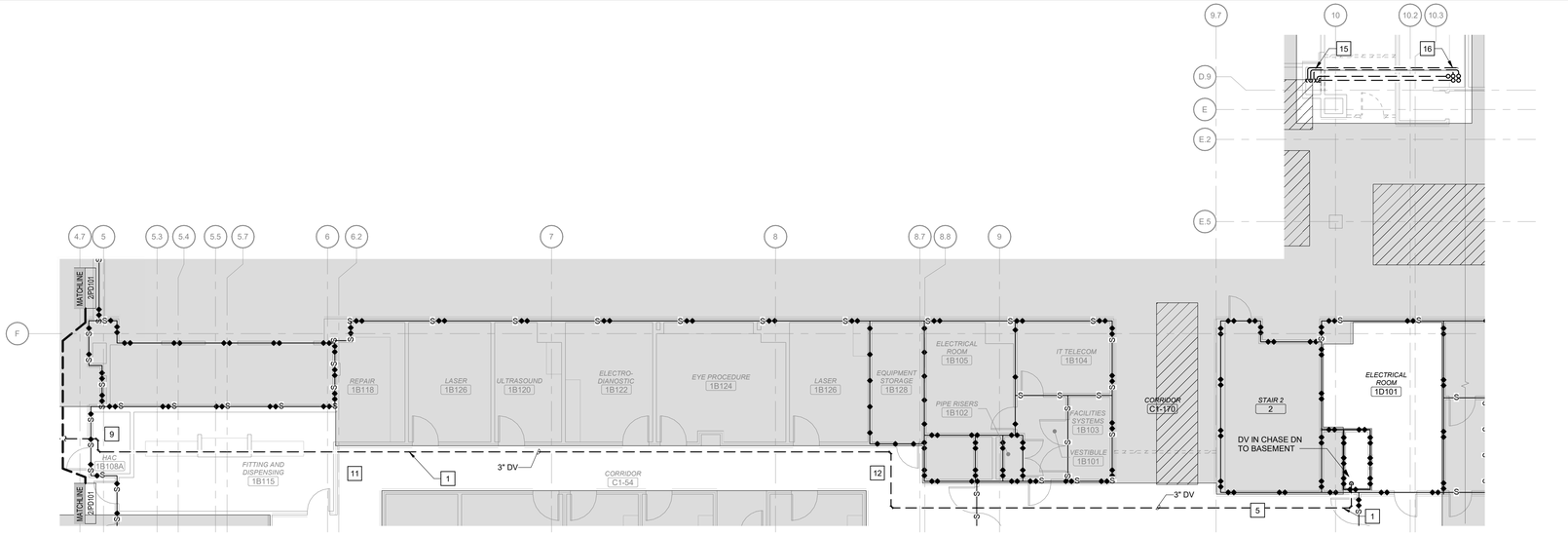
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Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BASEMENT DENTAL VACUUM DEMOLITION PLAN - AREA B
Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086
Project Title: REPLACE DENTAL VACUUM PIPING
Approved:
Date: MAY 30, 2025
Checked: SMR
Drawn: NSM
VA PROJECT NUMBER: 593-22-103
Building Number: 1
Drawing Number: PD100
Dwg 2 of 10

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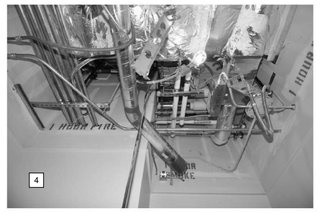
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1 FIRST FLOOR DENTAL VACUUM DEMOLITION PLAN - AREA A

Scale: 1/8" = 1'-0"

0 4 8 16 NORTH



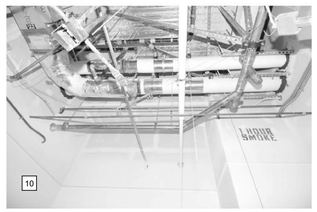








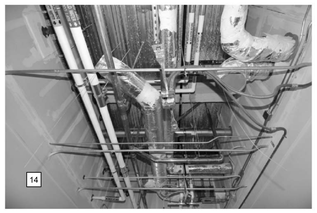






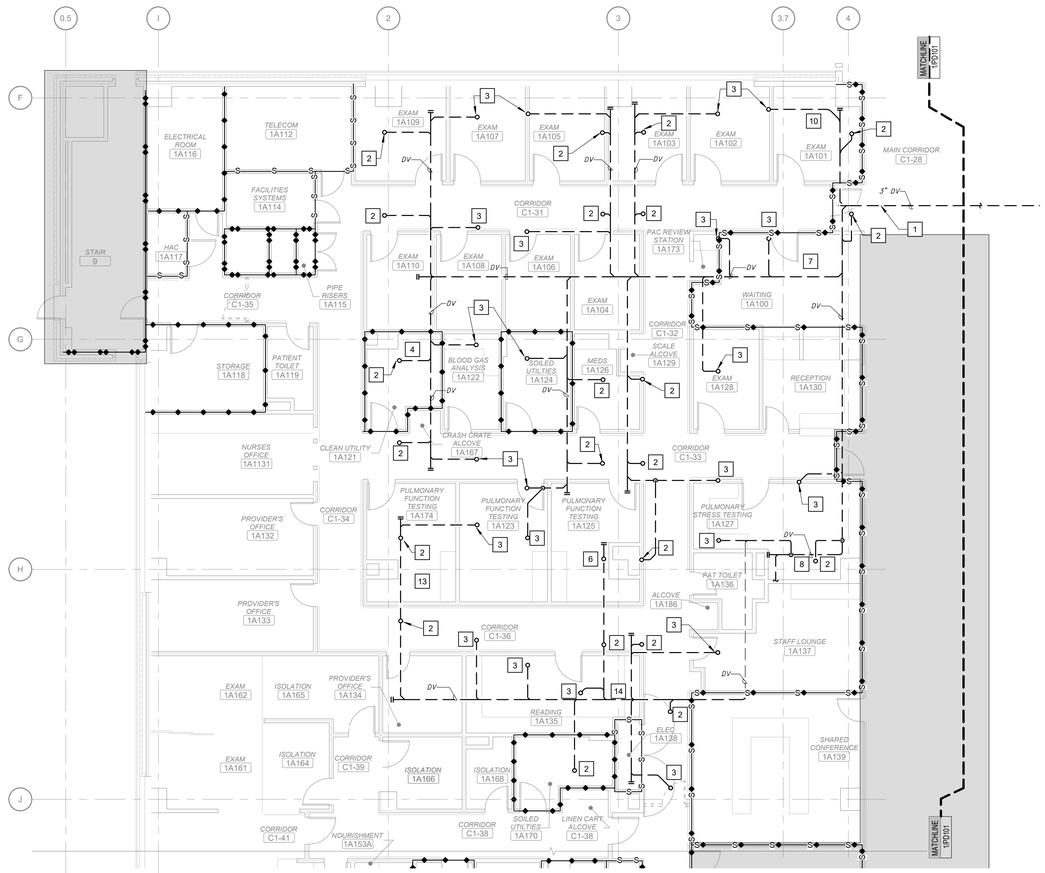






3 FIRST FLOOR EXISTING PHOTOS

Scale: No Scale



2 FIRST FLOOR DENTAL VACUUM DEMOLITION PLAN - AREA B

Scale: 1/8" = 1'-0"

0 4 8 16 NORTH

SHEET NOTES:

A. DEMOLITION WORK SHALL BE PERFORMED SUCH THAT ALL PIPES, HANGERS, SUPPORTS, AND VALVES IN SCOPE ARE REMOVED COMPLETELY.

B. PIPING SHOWN ON FIRST FLOOR IS LOCATED IN ABOVE CEILING. THIS PIPING CONNECTS THROUGH THE FLOOR SLAB OF THE DENTAL CLINIC LOCATED ON THE SECOND FLOOR.

DEMO KEY NOTES:

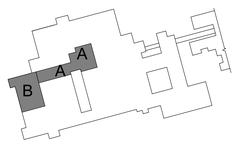
1 DEMOLISH DENTAL VACUUM MAIN PIPING AS INDICATED.
2 DEMOLISH BRANCH PIPING SERVING UJC BOX LOCATED ABOVE/NEAR DENTAL CHAIR. UP TO FLEXIBLE VACUUM TUBE CONNECTED TO DENTAL CHAIR.
3 DEMOLISH BRANCH PIPING SERVING WALL OUT. SEE PGS01 #2 AND ARCHITECTURAL DRAWINGS FOR DEMOLITION AND WALL REPAIR INSTRUCTIONS.
4 VIEW OF EXISTING CONDITIONS IN ROOM 1A121 - CLEAN UTILITY.
5 VIEW OF EXISTING CONDITIONS IN CORRIDOR C1-54 @ STAIR 2.
6 VIEW OF EXISTING CONDITIONS IN ROOM 1A125 - PULMONARY TESTING.
7 VIEW OF EXISTING CONDITIONS IN ROOM 1A100 - WAITING ROOM.
8 VIEW OF EXISTING CONDITIONS IN ROOM 1A127 - PULMONARY TESTING.
9 VIEW OF EXISTING CONDITIONS IN ROOM 1B101A.
10 VIEW OF EXISTING CONDITIONS IN ROOM 1A101 - EXAM.
11 VIEW OF EXISTING CONDITIONS IN CORRIDOR C1-54 @ 1B118 REPAIR.
12 VIEW OF EXISTING CONDITIONS IN CORRIDOR C1-54 @ EQUIP. STORAGE 1B128.
13 VIEW OF EXISTING CONDITIONS IN ROOM 1A174 - PULMONARY TESTING.
14 VIEW OF EXISTING CONDITIONS IN ROOM 1A135 - READING ROOM.
15 DEMOLISH ALL DENTAL VACUUM EXHAUST PIPING DOWN CHASE TO BASEMENT. SEE PD100 FOR CONTINUATION.
16 DEMOLISH ALL DENTAL VACUUM EXHAUST PIPING UP TO ROOF. SEE PD102 FOR CONTINUATION.

KEY PLAN

SCALE: NO SCALE

N

AREA OF WORK



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100% BID DOCUMENTS

#	Revisions:	Date

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5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

APOGEE Engineers | Architects

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRST FLOOR DENTAL VACUUM DEMOLITION PLAN - AREA A AND B

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Approved:

Date: MAY 30, 2025 | Checked: SMR | Drawn: NSM

Drawing Number: PD101

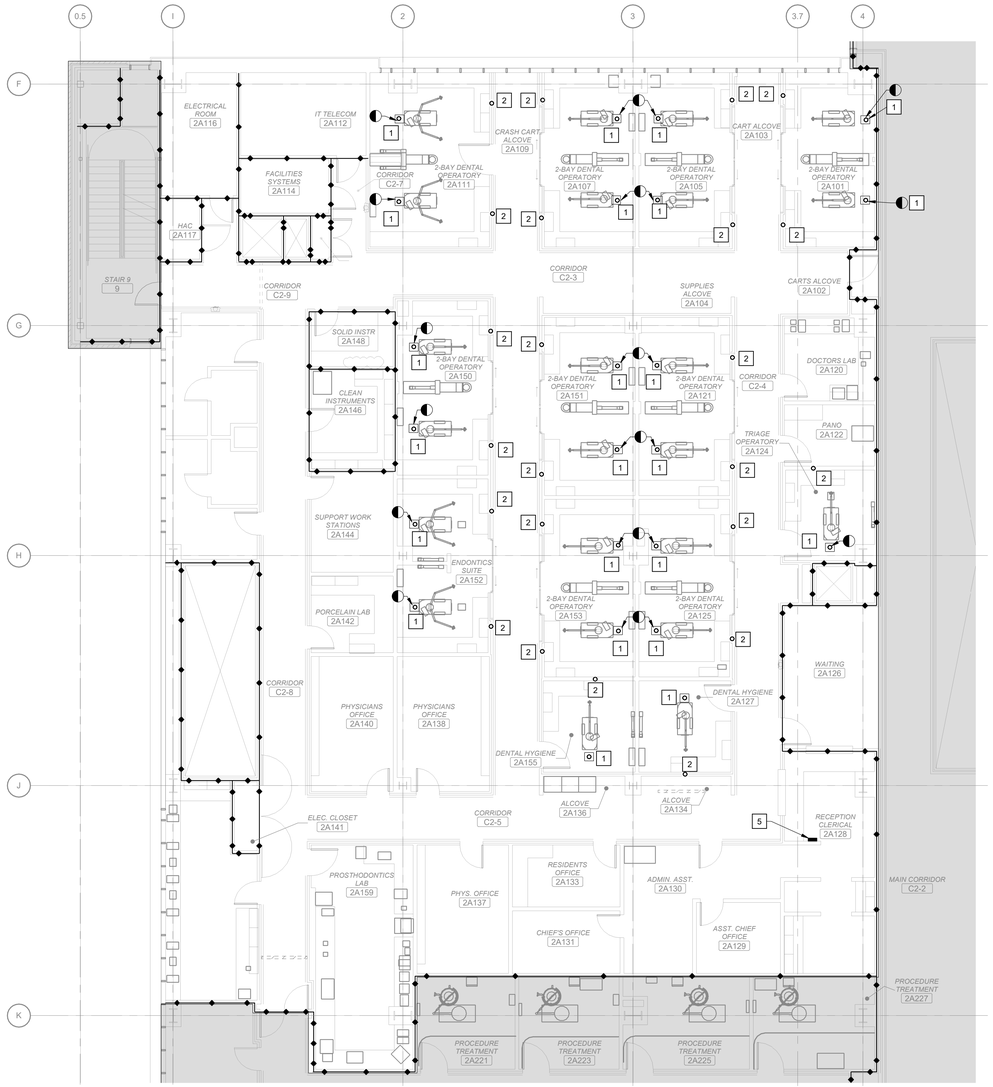
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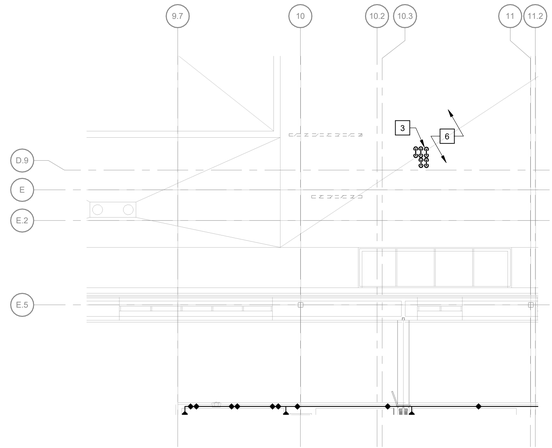
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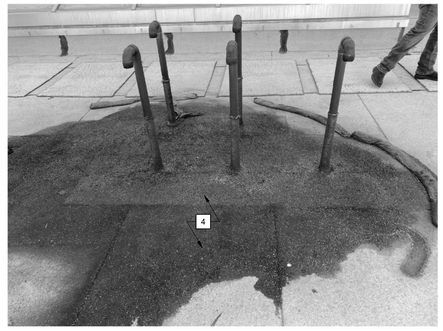
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3 SECOND FLOOR DENTAL VACUUM PIPING DEMOLITION PLAN - AREA B
Scale: 1/8" = 1'-0"



1 SECOND FLOOR AND ROOF DENTAL VACUUM DEMOLITION PLAN - AREA A
Scale: 1/8" = 1'-0"



2 DENTAL EXHAUST ROOF PENETRATION
Scale: No Scale



4 EXISTING DENTAL VACUUM REMOTE PANEL
Scale: No Scale

SHEET NOTES:

A. DEMOLITION WORK SHALL BE PERFORMED SUCH THAT ALL PIPES, HANGERS, SUPPORTS, AND VALVES IN SCOPE ARE REMOVED COMPLETELY. REMOVE ALL ITEMS TO ENSURE NOTHING IS ABANDONED IN PLACE.

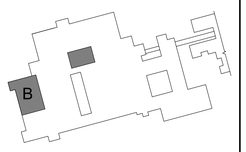
B. REFER TO EXISTING PHOTOS SHEET FOR SITE CONDITION. EXISTING PIPING LOCATIONS SHOWN ARE APPROXIMATE.

C. CUT AND PATCH WALL FOR TUBING REMOVAL AND MATCH EXISTING FINISH.

DEMO KEY NOTES:

1 DEMOLISH DENTAL VACUUM PIPING WITHIN THE UJC UP TO FLEXIBLE TUBE.
2 DEMOLISH DENTAL VACUUM WALL OUTLET AND ASSOCIATED PIPING INSIDE WALL CAVITY COMPLETELY. REFER TO ARCHITECTURAL DRAWINGS FOR WALL CUTTING.
3 DEMOLISH DENTAL VACUUM PIPING MAINS FROM SEPARATOR UP TO THE FIRST FLOOR CEILING. DEMOLISH DENTAL VACUUM EXHAUST PIPING FROM PUMPS TO PIPE TERMINATION ON SECOND FLOOR ROOF.
4 EXISTING CONDITIONS OF ROOF AND ROOF PENETRATION.
5 DEMOLISH EXISTING AREA PANEL LOCATED ON SOUTH WALL OF 2A128.
6 REFER TO A-104 FOR ROOF WORK AND STATUS.

KEY PLAN
SCALE: NO SCALE
AREA OF WORK



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#	Revisions:	Date

CONSULTANTS:

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5/30/2025

PROJECT MANAGER
ACG Project Number 23-090

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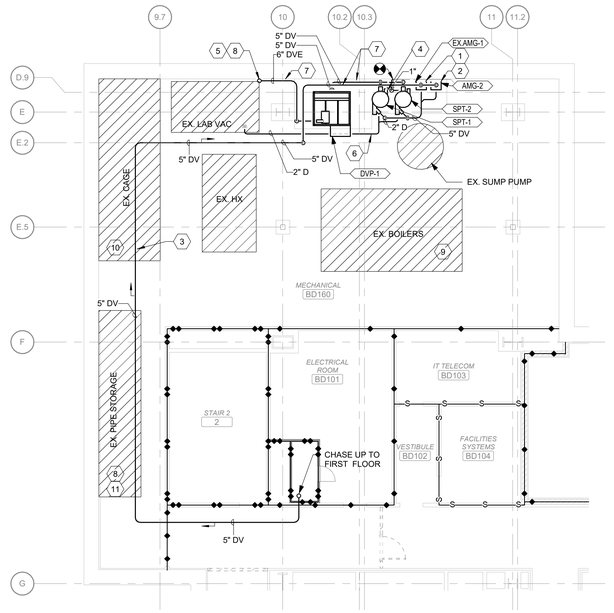
Drawing Title: SECOND FLOOR DENTAL VACUUM DEMOLITION PLAN - AREA A AND B
Project Title: REPLACE DENTAL VACUUM PIPING
VA PROJECT NUMBER: 593-22-103
Building Number: 1
Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086
Approved
Date: MAY 30, 2025
Checked: SMR
Drawn: NSM
Drawing Number: PD102
Dwg 4 of 10

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2 PG100 IMAGES
Scale: No Scale



1 BASEMENT DENTAL VACUUM PLAN - AREA A
Scale: 1/8" = 1'-0"

0 4 8 16 NORTH

SHEET NOTES:

A. PROVIDE ALL NEW SUPPORTS AND SLOPE NEW DENTAL VACUUM PIPING 1/4" PER 10' TOWARDS SOURCE EQUIPMENT.

B. FINAL CONNECTION OF NEW PIPING TO THE EXISTING EQUIPMENT TO BE REUSED SHALL BE DONE DURING SYSTEM SHUT DOWN.

C. SLEEVE ALL PENETRATIONS. FIRESTOP AND SEAL WATER TIGHT.

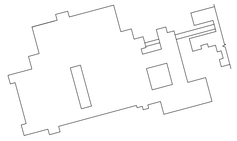
D. SLOPE DENTAL VACUUM EXHAUST PIPING TOWARDS THE SOURCE EQUIPMENT. PROVIDE DRIP LEG IN THE MECHANICAL ROOM PER DETAIL 4 / PG501.

E. DVV FITTINGS SHALL BE USED. TEES, 4-WAY CROSS, SPLIT WYE, OR SHORT ELBOW CONNECTIONS ARE NOT ALLOWED.

(#) NEW KEY NOTES:

1 PROVIDE NEW AMALGAM SEPARATOR CONNECTED IN PARALLEL WITH RELOCATED EXISTING AMALGAM SEPARATOR. MOUNT ON WALL MAXIMUM 7 FT AFF TO THE TOP OF SEPARATOR.
2 REINSTALL EXISTING AMALGAM SEPARATOR REMOVED AND STORED DURING DEMOLITION.
3 PROVIDE NEW 5" PVC VACUUM PIPING SLOPED TOWARDS SEPARATOR TANKS.
4 PROVIDE NEW 1" COPPER PIPING FROM EXISTING NON-POTABLE WATER TO INTEGRATED SOLENOID VALVE AT SEPARATOR TANK. PROVIDE WITH WATER FILTER, FILTER BYPASS, AND WATER HAMMER ARRESTER.
5 NEW FLOOR PENETRATION WILL BE NEEDED FOR NEW VACUUM EXHAUST PIPING. X-RAY OF SLAB IS REQUIRED TO ENSURE CORE DRILL WILL NOT CUT REBAR IN FLOOR SLAB.
6 PROVIDE NEW 2" PVC DRAIN PIPING FROM SEPARATOR TO FLOOR DRAIN.
7 PIPING IN THIS AREA IS ALL RACKED ON WALL. PIPING IS OFFSET FOR CLARITY.
8 VIEW OF MECHANICAL ROOM BD160 - PIPE STORAGE.
9 VIEW OF MECHANICAL ROOM BD160 - SUMP PUMP.
10 VIEW OF MECHANICAL ROOM BD160 - CAGE.
11 EXISTING PIPE STORAGE RACK AND ASSOCIATED PIPING SHALL BE BROKEN DOWN AND STORED IN AN ALTERNATE AREA APPROVED BY THE COR DURING CONSTRUCTION AND REASSEMBLE AFTER WORK IS COMPLETED IN BASEMENT.

KEY PLAN
SCALE: NO SCALE
AREA OF WORK
N



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100% BID DOCUMENTS

#	Revisions:	Date

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Svetlana M. Reid
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5/30/2025

PROJECT MANAGER
ACG Project Number 23-090

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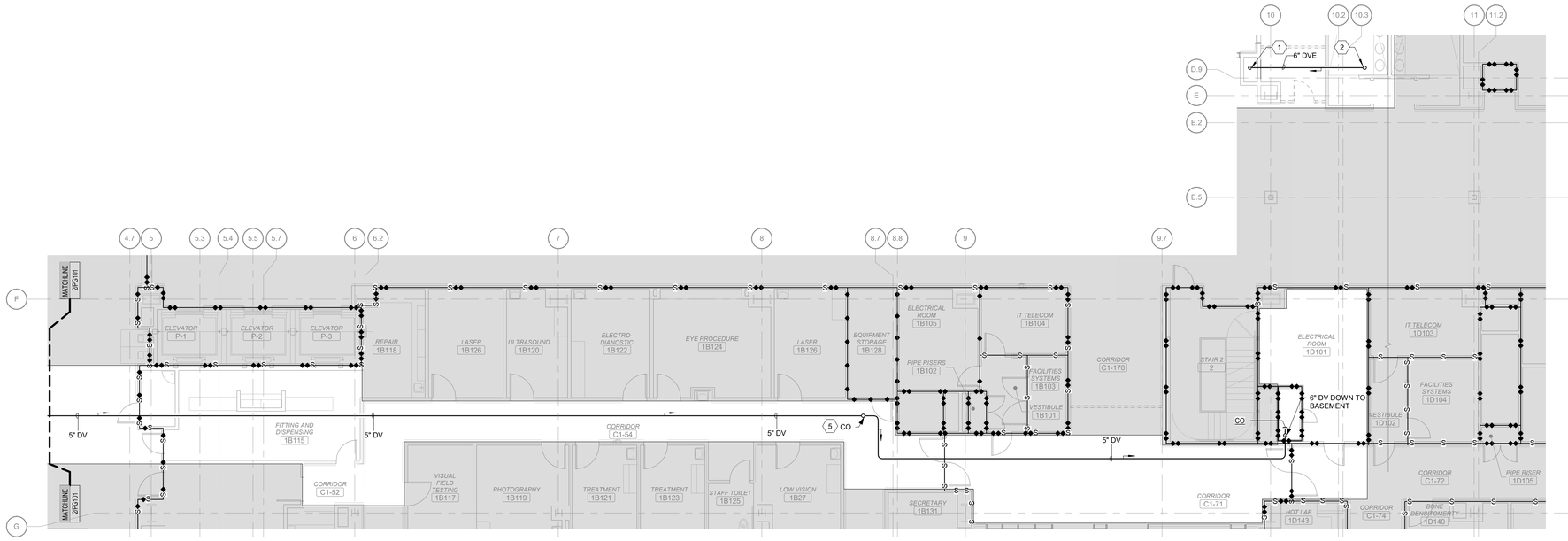
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Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BASEMENT DENTAL VACUUM PLAN
Project Title: REPLACE DENTAL VACUUM PIPING
VA PROJECT NUMBER: 593-22-103
Building Number: 1
Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086
Approved:
Date: MAY 30, 2025
Checked: SMR
Drawn: NSM
Drawing Number: PG100
Dwg 5 of 10

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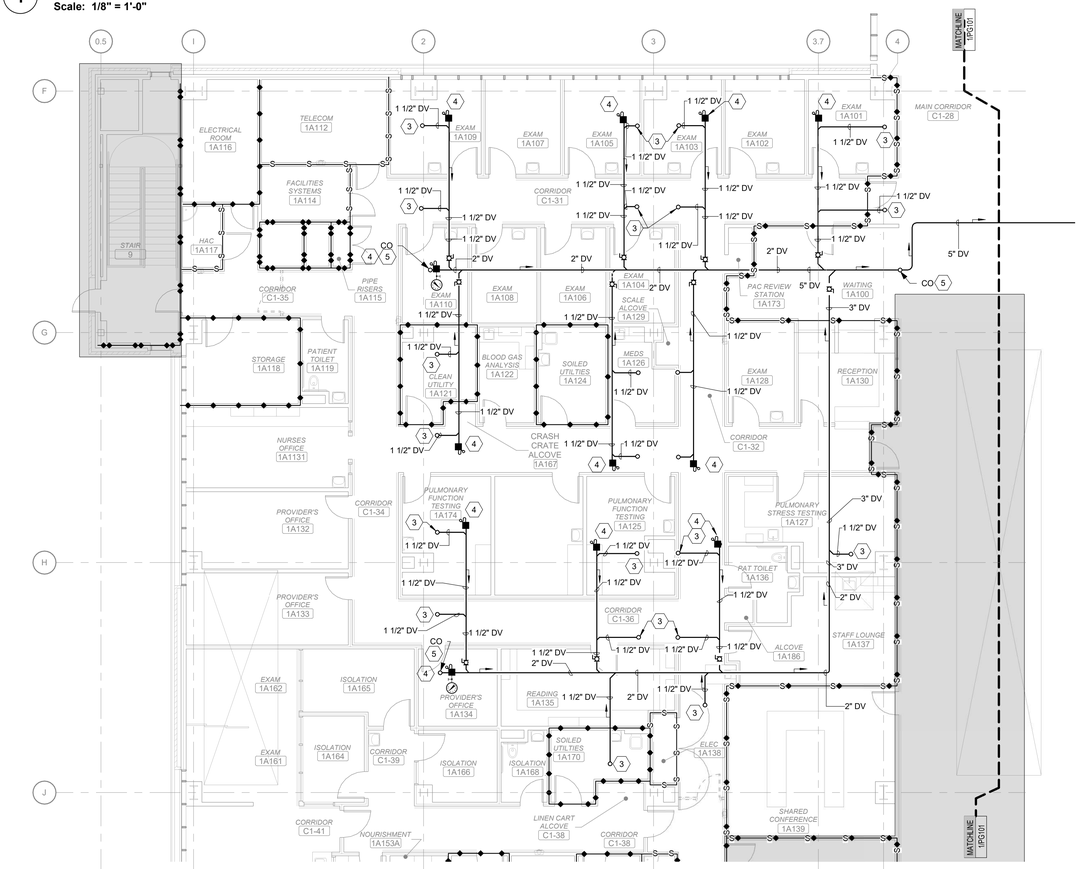
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1 FIRST FLOOR DENTAL VACUUM LAYOUT AREA A

Scale: 1/8" = 1'-0"

0 4 8 16 NORTH



2 FIRST FLOOR DENTAL VACUUM LAYOUT AREA B

Scale: 1/8" = 1'-0"

0 4 8 16 NORTH

SHEET NOTES:

A. PROVIDE ALL NEW SUPPORTS AND SLOPE NEW DENTAL VACUUM PIPING 1/4" PER 10' TOWARDS SOURCE EQUIPMENT.

B. SLEEVE ALL PENETRATIONS. FIRESTOP AND SEAL WATER TIGHT.

C. ALL PIPING SHOWN ON FIRST FLOOR PLAN IS LOCATED ABOVE CEILING AND SERVING SECOND FLOOR DENTAL CLINIC.

D. SLOPE DENTAL VACUUM EXHAUST PIPING TOWARDS THE SOURCE EQUIPMENT. PROVIDE DRIP LEG IN THE MECHANICAL ROOM PER DETAIL 4 / PG501.

E. DVV FITTINGS SHALL BE USED. TEES, 4-WAY CROSS, SPLIT WYE, OR SHORT ELBOW CONNECTIONS ARE NOT ALLOWED.

(#) NEW KEY NOTES:

1 DENTAL EXHAUST PIPING DOWN TO BASEMENT. SEE PG100 FOR CONTINUATION.

2 DENTAL EXHAUST PIPING UP TO ROOF PENETRATION. SEE PG102 FOR CONTINUATION.

3 UIC CONNECTION. DENTAL VACUUM PIPING UP TO 2ND FLOOR. SEE PG102 FOR CONTINUATION

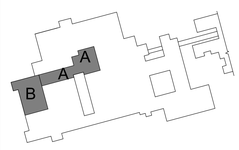
4 PROVIDE A VACUUM RELIEF VALVE AT THE END OF EACH TRUNK LINE

5 VERTICAL DENTAL VACUUM CLEAN OUT. SEE PG501 DETAIL 6.

KEY PLAN

SCALE: NO SCALE

AREA OF WORK



FULLY SPRINKLERED

100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

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5/30/2025

PROJECT MANAGER

ACG Project Number 23-090

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: FIRST FLOOR DENTAL VACUUM PIPING LAYOUT - AREA A AND B

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086

Approved:

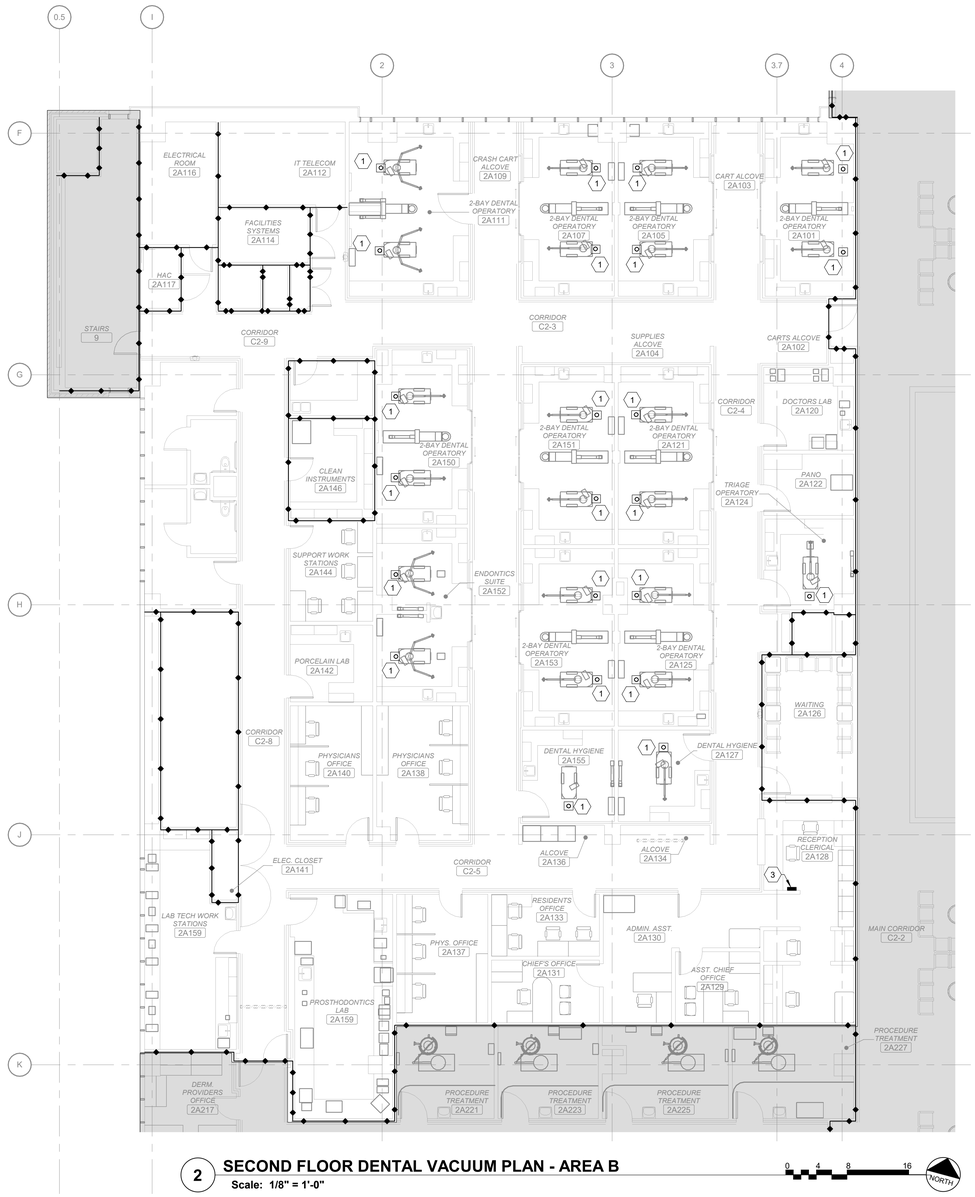
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Drawing Number: PG101

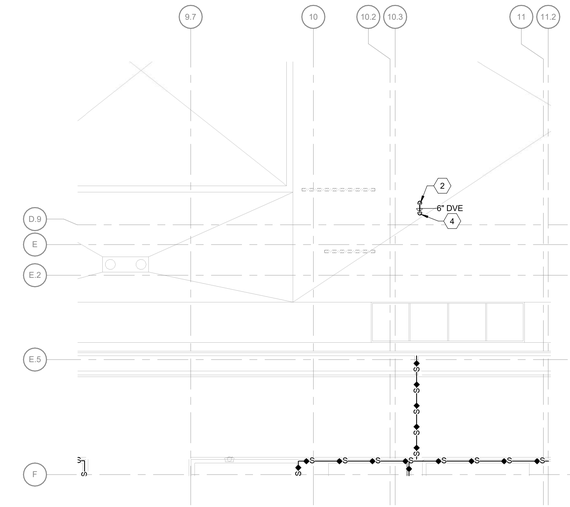
Dwg 6 of 10

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2 SECOND FLOOR DENTAL VACUUM PLAN - AREA B
Scale: 1/8" = 1'-0"

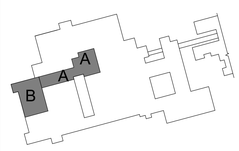


1 SECOND FLOOR ROOF DENTAL VACUUM EXHAUST PIPING LAYOUT AREA A
Scale: 1/8" = 1'-0"

NEW KEY NOTES:

1. CONNECT 1 1/2" PVC PIPE FROM BELOW TO FLEXIBLE TUBE WITHIN UJC. PROVIDE ALL FITTINGS REQUIRED FOR MAKING AIR TIGHT JOINT. PIPE DOWN TO FIRST FLOOR CEILING SPACE SEE PG101 FOR CONTINUATION.
2. ANGLE DENTAL EXHAUST PIPING DOWN AND PROVIDE SCREEN ON OPEN END. TOP OF 90 DEGREE ELBOWS SHALL BE 1' 6" ABOVE TOP OF ROOF.
3. PROVIDE NEW LOW VOLTAGE REMOTE CONTROL PANEL.
4. NEW ROOF PENETRATION IS REQUIRED FOR NEW VACUUM EXHAUST PIPING. X-RAY OF SLAB IS REQUIRED TO ENSURE CORE DRILL WILL NOT CUT REBAR IN ROOF SLAB.

KEY PLAN
SCALE: NO SCALE
AREA OF WORK



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100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

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ACG Project Number 23-090

Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: SECOND FLOOR DENTAL VACUUM PIPING PLAN - AREA A AND B

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

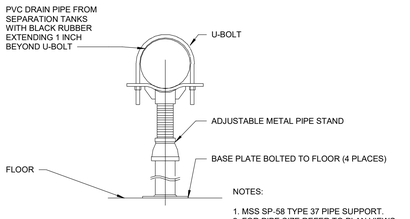
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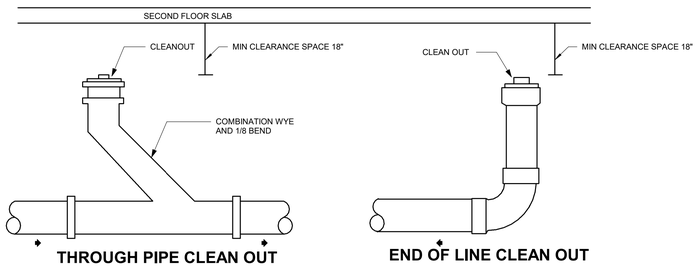
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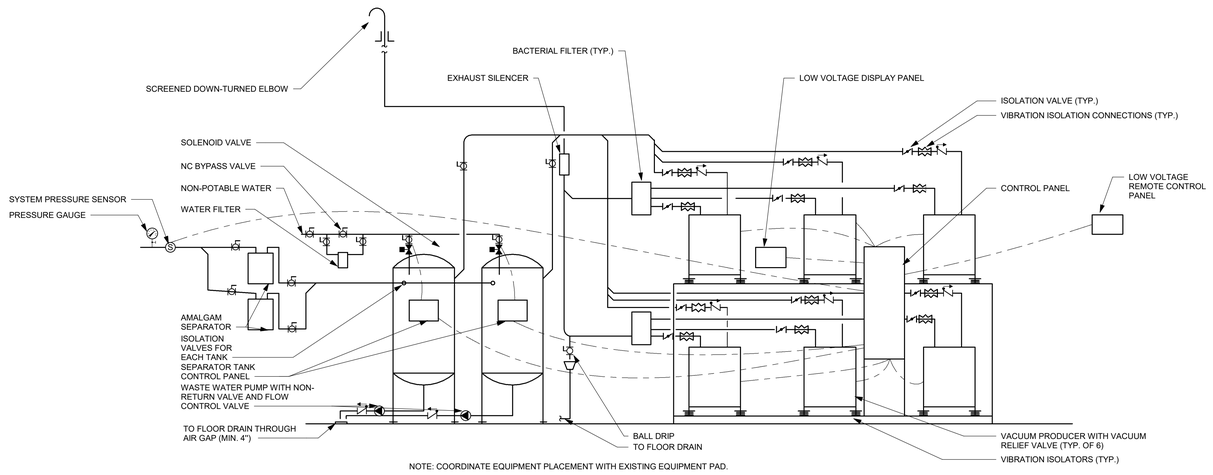
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4 ADJUSTABLE SADDLE SUPPORT DETAIL
Scale: No Scale

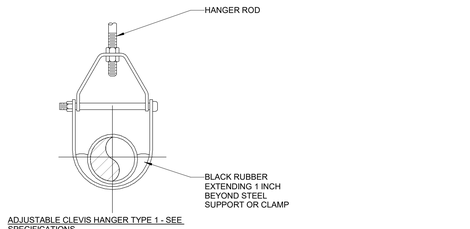


5 DENTAL VACUUM VERTICAL CLEAN OUT
Scale: No Scale

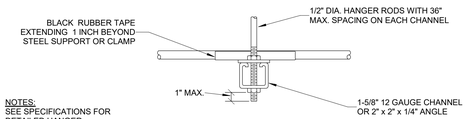


NOTE: COORDINATE EQUIPMENT PLACEMENT WITH EXISTING EQUIPMENT PAD.

6 ORAL EVACUATION SYSTEM DIAGRAM
Scale: No Scale



ADJUSTABLE CLEVIS HANGER TYPE 1 - SEE SPECIFICATIONS



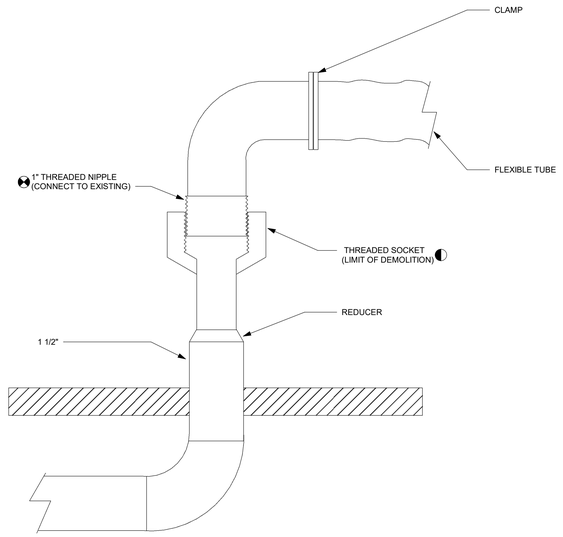
NOTES:
SEE SPECIFICATIONS FOR DETAILED HANGER REQUIREMENTS.

SIDE VIEW TRAPEZE HANGER FOR UP TO 1000 LB. UNIFORM LOAD

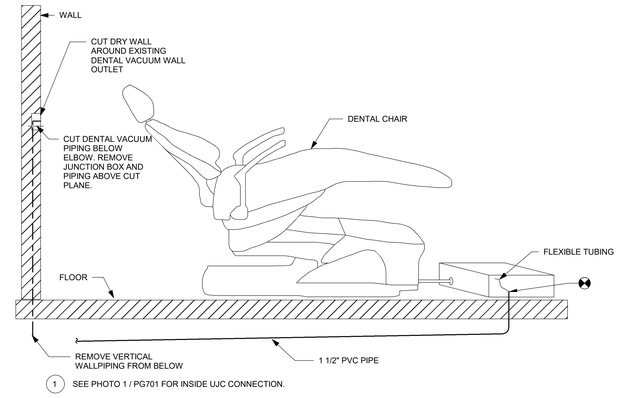
MAXIMUM PIPE/TUBING SUPPORT SPACING							
NOM. SIZE (IN.)	1 1/2	2	2 1/2	3	4	5
PIPE (FT.)	4.66	4.66	5	5	5	5

NOTES:
1. FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.
2. PROVIDE PIPE SUPPORTS MAXIMUM 10 FT APPART FOR VERTICAL RISERS.
3. REFER TO SPECIFICATION SECTION 22 05 11 COMMON WORK REQUIREMENTS FOR PLUMBING, PARAGRAPH 2.11 PIPE AND EQUIPMENT SUPPORT AND RESTRAINTS.

3 PIPE HANGER DETAIL
Scale: No Scale



1 DENTAL VACUUM CONNECTION DETAIL
Scale: No Scale



2 DENTAL CHAIR UJC VACUUM CONNECTION DETAIL
Scale: No Scale

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#	Revisions:	Date

CONSULTANTS:

COMMONWEALTH OF VIRGINIA — Svetlana M. Reid — SVETLANA MISEVICH REID Lic. No. 0402068436 — PROFESSIONAL ENGINEER — 5/30/2025

PROJECT MANAGER

ACG Project Number: 23-090

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Office of Construction and Facilities Management

VA U.S. Department of Veterans Affairs

Drawing Title: PLUMBING DETAILS

Project Title: REPLACE DENTAL VACUUM PIPING

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Approved:

Date: MAY 30, 2025 | Checked: SMR | Drawn: NSM

Drawing Number: PG501

Dwg 8 of 10

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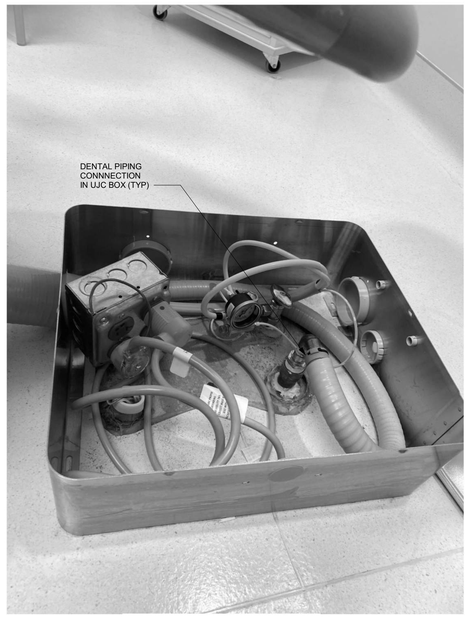
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6 EXISTING VACUUM PUMPS
Scale: No Scale



3 BASEMENT MECHANICAL ROOM
Scale: No Scale



1 TYPICAL DENTAL CHAIR UJC
Scale: No Scale



7 SEPARATOR WITH DRAIN TO FLOOR DRAIN
Scale: No Scale



4 TYPICAL DENTAL SUITE
Scale: No Scale



2 FIRST FLOOR DVE PIPE SHAFT
Scale: No Scale



8 DENTAL VACUUM EXHAUST PIPING
Scale: No Scale



5 EXISTING VACUUM PUMP EXHAUST PIPING
Scale: No Scale

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#	Revisions:	Date

CONSULTANTS:

COMMONWEALTH OF VIRGINIA — Svetlana M. Reid — SVETLANA MISEVICH REID Lic. No. 0402068436 PROFESSIONAL ENGINEER
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VA U.S. Department of Veterans Affairs

Drawing Title: EXISTING CONDITIONS PHOTOS
Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086

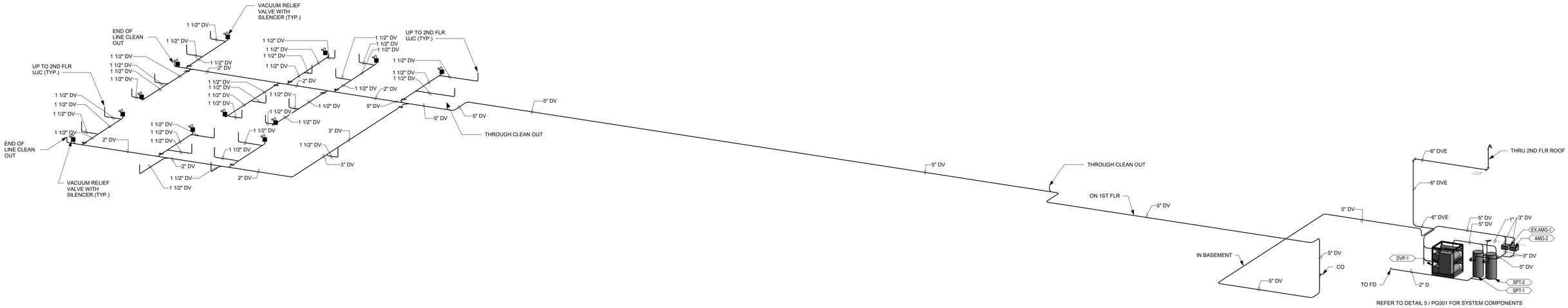
Project Title: REPLACE DENTAL VACUUM PIPING
Approved:
Date: MAY 30, 2025 | Checked: SMR | Drawn: NSM

VA PROJECT NUMBER: 593-22-103
Building Number: 1
Drawing Number: PG701
Dwg 9 of 10

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REFER TO DETAIL 5 / PG501 FOR SYSTEM COMPONENTS

1 DENTAL VACUUM ISOMETRIC VIEW

Scale: No Scale

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#	Revisions:	Date

CONSULTANTS:

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VA U.S. Department of Veterans Affairs

Drawing Title: DENTAL VACUUM PIPING ISOMETRIC VIEW

Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM
6900 N. PECOS RD.
NORTH LAS VEGAS, NV, 89086

Project Title: REPLACE DENTAL VACUUM PIPING

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Date: MAY 30, 2025 | Checked: SMR | Drawn: NSM

VA PROJECT NUMBER: 593-22-103

Building Number: 1

Drawing Number: PG901

Dwg 10 of 10

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ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)
1PH	1 PHASE
2/C	TWO-CONDUCTOR (3/C, 4/C, ETC.)
2W	TWO-WIRE (3W, 4W, ETC.)
3PH	3 PHASE
A	AMPERE
AAP	ALARM ANNUNCIATOR PANEL
AC	ABOVE COUNTER
	AIR CONDITIONER
	ALTERNATING CURRENT
ACC	ACCESSIBLE
ACLG	ABOVE CEILING
ADO	AUTOMATIC DOOR OPENER
A/E	ARCHITECT/ENGINEER
AF	AMP FRAME
AFC	AVAILABLE FAULT CURRENT (KILOAMPS)
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ALT	ALTERNATE
AMP	AMPERE
APPROX	APPROXIMATELY
ARCH	ARCHITECT, ARCHITECTURAL
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BATT	BATTERY
BC	BARE COPPER
BD	BOARD
BFF	BELOW FINISHED FLOOR
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
BYP	BYPASS
C	CONDUIT
CAB	CABINET
CALC	CALCULATED
CAP	CAPACITY
CAT	CATALOG, CATEGORY
CATV	COMMUNITY ANTENNA TELEVISION
CB	CIRCUIT BREAKER
CCR	CONTROL CONTACTOR
CCT	CORRELATED COLOR TEMPERATURE
CCTV	CLOSED CIRCUIT TELEVISION
cd	CANDELA
CD	CONSTRUCTION DOCUMENTS
CF	CONTRACTOR-FURNISHED
CKT	CIRCUIT
CLG	CEILING
CO	CONTRACTING OFFICER
COAX	COAXIAL CABLE
COMM	COMMUNICATION
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUATION OR CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CPT	CONTROL POWER TRANSFORMER
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION
CTR	CENTER
CU	COPPER
CU FT	CUBIC FEET
D	DEMOLITION
dB	DECIBEL
DB	DIRECT BURIAL
DC	DIRECT CURRENT
DEG C	DEGREES CELSIUS
DEG F	DEGREES FAHRENHEIT
DEMO	DEMOLISH/DEMOLITION
DEPT	DEPARTMENT
DIA	DIAMETER
DISC	DISCONNECT
DIST	DISTRIBUTION
DN	DOWN
DS	SAFETY DISCONNECT SWITCH
DT	DOUBLE THROW
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EG	EQUIPMENT GROUND
ELEC	ELECTRIC, ELECTRICAL
ELEV	ELEVATOR
EM	EMERGENCY
EMI	ELECTROMAGNETIC INTERFERENCE
EMS	ENERGY MANAGEMENT SYSTEM
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
ESMT	EASEMENT
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WALL HEATER
	ELECTRIC WATER HEATER
E	EXISTING
EXP	EXPLOSION PROOF
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FC	FOOTCANDLE
FCU	FAN COIL UNIT
FIXT	FIXTURE
FLR	FLOOR
FPN	FUSED PER NAMEPLATE
FU	FUSE
FUSD	FUSED SAFETY DISCONNECT SWITCH
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
GAL	GALLON
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL (CONDUIT)
GYP BD	GYPSUM BOARD
HID	HIGH-INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSEPOWER
HT	HEIGHT
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HW	HARD WIRED
IES	ILLUMINATION ENGINEERING SOCIETY
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
IR	INFRARED
I/W	INTERLOCK WITH
IWH	INSTANTANEOUS WATER HEATER
J-BOX	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KVAR	KILOVOLT-AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT HOUR
LED	LIGHT-EMITTING DIODE
LF	LINEAR FEET/FOOT
LM	LUMEN
LRA	LOCKED ROTOR AMPS
LT	LIGHT
LTG	LIGHTING
LTNG	LIGHTNING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION SYSTEM
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
	METAL-CLAD (CONDUIT)
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MFR	MANUFACTURER
MFS	MAIN FUSED DISCONNECT SWITCH
MH	MANHOLE
MIC	MICROPHONE
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUGS ONLY
MOA	MULTIOUTLET ASSEMBLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MSBD	MAIN SWITCHBOARD
MT	MOUNT
MV	MEDIUM VOLTAGE
MTR	MOTOR, MOTORIZED
MTS	MANUAL TRANSFER SWITCH
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NFSD	NON-FUSED SAFETY DISCONNECT SWITCH
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OL	OVERLOAD
PA	PUBLIC ADDRESS
PB	PULL BOX OR PUSHBUTTON
PBPU	PREFABRICATED BEDSIDE PATIENT UNIT
PCB	POLYCHLORINATED BIPHENYL
PC	PHOTOELECTRIC CELL
PDU	POWER DISTRIBUTION UNIT
PED	PEDESTAL
PEND	PENDANT
PF	POWER FACTOR
PH	PHASE
PIV	POST INDICATING VALVE
PNL	PANEL
POE	POWER-OVER-ETHERNET
PR	PAIR
PRI	PRIMARY
PROJ	PROJECTION
PRV	POWER ROOF VENTILATOR
PT	POTENTIAL TRANSFORMER
PV	PHOTOVOLTAIC
PVC	POLYVINYL CHLORIDE (CONDUIT)
PWR	POWER
QTY	QUANTITY
RL	RELOCATE/RELOCATED
RCP	REFLECTED CEILING PLAN
RCPT	RECEPTACLE
REQD	REQUIRED
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RMS	ROOT MEAN SQUARE
RTU	ROOF TOP UNIT
SC	SURFACE CONDUIT
SEC	SECONDARY
SF	SQUARE FEET/FOOT
SHT	SHEET
SI	INTERNATIONAL SYSTEM OF UNITS
SIM	SIMILAR
S/N	SOLID NEUTRAL
SPEC	SPECIFICATION
SPKR	SPEAKER
SP	SPARE
SR	SURFACE RACEWAY
SS	STAINLESS STEEL
SSTV	SECURITY SURVEILLANCE TELEVISION
SSW	SELECTOR SWITCH
STD	STANDARD
SURF	SURFACE MOUNTED
SW	SWITCH
SWBD	SWITCHBOARD
SYM	SYMMETRICAL
SYS	SYSTEM
TC	TIMECLOCK
TEL	TELEPHONE
TEL/DATA	TELEPHONE/DATA
TERM	TERMINAL
TP	TWISTED PAIR
TPS	TWISTED PAIR SHIELDED
TR	TAMPER RESISTANT
T-STAT	THERMOSTAT
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
TV	TELEVISION
TYP	TYPICAL
UC	UNDER COUNTER
UE	UNDERGROUND ELECTRICAL
UG	UNDERGROUND
UH	UNIT HEATER
UL	UNDERWRITER'S LABORATORY
UT	UNDERGROUND TELEPHONE
UTP	UNSHIELDED TWISTED PAIR
UTIL	UTILITY
UV	UNIT VENTILATOR OR ULTRAVIOLET
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
VA	VOLT-AMPERES
VAMC	VETERANS ADMINISTRATION MEDICAL CENTER
VD	VOLTAGE DROP
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
W	WATT
W/	WITH
WH	WATER HEATER
W/O	WITHOUT
WP	WEATHER-PROTECTED
XFMR	TRANSFORMER
XFR	TRANSFER
∠	ANGLE
@	AT
Δ	DELTA
'	FEET
"	INCHES
#	NUMBER
Φ	PHASE
℄	CENTER LINE
ℙ	PLATE

ELECTRICAL GENERAL NOTES

1. ALL ELECTRICAL DEVICES, FIXTURES, EQUIPMENT AND FEEDERS SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDED PROCEDURES, ALL APPLICABLE LOCAL AND STATE CODES, AMERICANS WITH DISABILITIES ACT AND WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND VA STANDARDS.
2. PROVIDE ADDITIONAL SUPPORT FOR DEVICES, FIXTURES, EQUIPMENT AND FEEDERS WHERE THE BUILDING CONSTRUCTION IS NOT SUITABLE FOR DIRECT MOUNTING.
3. FIRESTOP, DRAFTSTOP, SMOKESTOP AND/OR PROTECT THE ANNULAR SPACE AROUND ALL PENETRATIONS THROUGH WALLS, PARTITIONS, FLOORS, CEILING, AND ROOFS IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, UL LISTING REQUIREMENT, SPECIFICATIONS, AND THE APPLICABLE BUILDING CODES.
4. VERIFY CEILING SYSTEMS AND PROVIDE MOUNTING ACCESSORIES, TRIMS AND ALL REQUIRED MOUNTING HARDWARE TO SUIT THE PARTICULAR INSTALLATION.
5. PROTECT EXISTING UNDERGROUND AND BUILDING INTERIOR UTILITIES DURING CONSTRUCTION.
6. BRANCH CIRCUIT CONDUCTORS SHALL BE 12 AWG COPPER MINIMUM.
7. COORDINATE ANY AND ALL WORK WITH ALL OTHER TRADES PRIOR TO INSTALLATION SO AS TO AVOID CONFLICT DURING CONSTRUCTION.
8. ALL PANELS SHALL HAVE TYPED, COMPLETED DIRECTORIES INDICATING EQUIPMENT SERVED AND ROOM NUMBER (AS INDICATED ON FINAL BUILDING ROOM SIGNAGE) OF EQUIPMENT LOCATION, OR SPARE, OR SPACE.
9. MANUFACTURER'S NAME AND MODEL NUMBER ARE GIVEN FOR DESCRIPTIVE PURPOSES, TO INDICATE A QUALITY STANDARD, AND ARE NOT INTENDED TO LIMIT PRODUCTS TO A PARTICULAR MANUFACTURER. PRODUCTS DEEMED EQUAL AND APPROVED BY THE DESIGNER WILL BE ACCEPTED. ALL PRODUCTS MUST COMPLY WITH "BUY AMERICAN ACT".
10. ALL FEEDERS AND CIRCUITRY SHALL BE TORQUED PER THE PANEL, BREAKER, AND/OR PARTICULAR EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
11. CIRCUITRY TO SWITCHES, RECEPTACLES, AND ALL OTHER DEVICES SHALL BE TERMINATED ON THE DEVICE'S SCREW TERMINALS.
12. MOUNTING HEIGHTS INDICATED ARE TO CENTER OF DEVICE, OUTLET, FIXTURE, OR EQUIPMENT UNLESS NOTED OTHERWISE.
13. ALL WIRE TERMINATIONS SHALL BE RATED FOR 75 DEGREES C.
14. ALL CONDUCTORS SHALL HAVE THHN/THWN INSULATION, UNLESS OTHERWISE NOTED.
15. ALL CONDUIT SHALL BE RGS OR EMT UNLESS OTHERWISE NOTED. FMC CONDUIT SHALL BE USED ON VIBRATING EQUIPMENT (MAXIMUM LENGTH OF 6 FEET). PVC SHALL BE USED FOR UNDERGROUND CONDUIT OR WHERE CONCRETE-ENCASED. WHERE VIBRATING EQUIPMENT IS LOCATED OUTSIDE, LFMC CONDUIT SHALL BE USED (MAXIMUM SIX FEET) FOR FINAL CONNECTIONS.
16. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES AND EQUIPMENT SHALL BE LABEL LISTED BY AN APPROVED THIRD PARTY TESTING AGENCY.
17. IN CASE OF CONFLICTS OR DISCREPANCIES WITHIN OR AMONG THE CONTRACT DRAWINGS, THE BETTER QUALITY, MORE STRINGENT REQUIREMENTS OR GREATER QUANTITY OF WORK , AS DETERMINED BY THE GOVERNMENT, SHALL BE PROVIDED.
18. COMPRESSION COUPLINGS SHALL BE USED. NO SET SCREW FITTINGS ARE ALLOWED.
19. MINIMUM CONDUIT SIZE TO BE USED IS 3/4".
20. FEEDER TAGS APPENDED WITH 'VD' ARE UPSIZED IN AMPACITY DUE TO VOLTAGE DROP.
21. ALL ITEMS AND MATERIALS SHOWN, INDICATED, OR REQUIRED FOR A COMPLETE PROJECT SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR, UNLESS NOTIFIED OTHERWISE.
22. CONTRACTOR SHALL COORDINATE ANY ELECTRICAL SYSTEM REQUIRED SHUTDOWN WITH THE COR TWO WEEKS IN ADVANCE AND CONFIRM 48 HOURS PRIOR.
23. CONTRACTOR SHALL OBTAIN A VA HOSPITAL DIRECTOR ISSUED, HOT WORK PERMIT FROM THE COR OR APPROVED REPRESENTATIVE. CONTRACTOR SHALL OBTAIN THE PERMIT A MINIMUM OF TWO WEEKS PRIOR TO ANY WORK THAT WILL CAUSE A POWER OUTAGE OR WORK THAT IS CONSIDERED "HOT WORK".
24. PROVIDE REVISED TYPED ELECTRICAL PANEL SCHEDULE FOR EACH PANELBOARD AFFECTED BY THIS REVISION, PER SPECIFICATIONS.

ELECTRICAL SYMBOL LEGEND

SYMBOL	HEIGHT	DESCRIPTION
⏀	18"	120V SIMPLEX RECEPTACLE
⏁	18"	120V DUPLEX RECEPTACLE
⏂	18"	120V DUPLEX RECEPTACLE EMERGENCY OUTLET AND COVER PLATE SHALL BE RED IN COLOR
⏃	18"	120V QUADRUPLEX RECEPTACLE
⏄	18"	120V QUADRUPLEX RECEPTACLE EMERGENCY OUTLET AND COVER PLATE SHALL BE RED IN COLOR
⏅	18"	208V DUPLEX RECEPTACLE
⏆	18"	SPECIAL RECEPTACLE
⏇		120V DUPLEX RECEPTACLE FLOOR BOX
⏈		120V DUPLEX RECEPTACLE EMERGENCY FLOOR BOX OUTLET AND COVER PLATE SHALL BE RED IN COLOR
⏉		120V QUADRUPLEX RECEPTACLE FLOOR BOX
⏊		120V QUADRUPLEX RECEPTACLE EMERGENCY FLOOR BOX OUTLET AND COVER PLATE SHALL BE RED IN COLOR
		RECEPTACLE MODIFIERS: AC: 10" ABOVE COUNTERTOP GFI: GROUND FAULT CURRENT INTERRUPTER WP: WEATHERPROOF ENCLOSURE DED: DEDICATED CIRCUIT
J	AS NOTED	JUNCTION BOX, WALL MOUNTED, PURPOSE AS NOTED
J C/MG		JUNCTION BOX, CEILING MOUNTED, PURPOSE AS NOTED
J		JUNCTION BOX, FLOOR MOUNTED, PURPOSE AS NOTED
(E)	AS NOTED	EQUIPMENT CONNECTION
	72" TOP	DISCONNECT SWITCH NON-FUSED
	72" TOP	DISCONNECT SWITCH FUSED
$	48"	SINGLE POLE WALL SWITCH: 48" AFF STANDARD UNO
		SWITCH MODIFIERS: M: MOTOR-RATED
VFD	AS NOTED	VERIABLE FREQUENCY DRIVE
(M)	AS NOTED	MOTOR

ALL HEIGHTS ARE TO CENTER OF DEVICE UNLESS NOTED OTHERWISE.
TOP: HEIGHT TO TOP OF DEVICE
ANY HEIGHTS INDICATED IN PLANS SHALL SUPERSEDE THOSE LISTED HERE.

ELECTRICAL SYMBOL NOTES

A1 b — THE LIGHTING FIXTURE TYPE IS INDICATED BY AN UPPER CASE LETTER OR AN UPPER CASE LETTER AND NUMBER.
THE SWITCH DESIGNATION (IF NEEDED) IS INDICATED BY A LOWER CASE LETTER.

EXAMPLE: LIGHTING FIXTURE TYPE 'A1' IS CONTROLLED BY SWITCH 'b'.

EXIT SIGNS: STEM INDICATES WALL MOUNTING. NO STEM INDICATES CEILING MOUNTING. SHADED AREA INDICATES ILLUMINATED FACE(S). ARROW INDICATES DIRECTIONAL ARROW ON ILLUMINATED FACE(S).

HALF SHADED LIGHTING FIXTURES SHALL BE DESIGNATED AS EMERGENCY.

E1 — EXAMPLE 1: WALL MOUNTED EXIT SIGN TYPE 'E1' WITH SINGLE FACE AND DIRECTIONAL ARROW.

E2 — EXAMPLE 2: CEILING MOUNTED EXIT SIGN TYPE 'E2' WITH DOUBLE FACE AND DIRECTIONAL ARROWS.

DEVICES: THE SWITCH DESIGNATION IS INDICATED BY A LOWER CASE LETTER.

c — EXAMPLE: SPLIT DUPLEX RECEPTACLE; ONE RECEPTACLE OUTLET IS CONTROLLED BY SWITCH 'c'.

THE CONTROL DEVICE DESIGNATION IS INDICATED BY A LOWER CASE LETTER.

d — EXAMPLE: SINGLE POLE SWITCH 'd' TO CONTROL LIGHTING FIXTURES INDICATED BY 'd'.

TRANSFORMERS: THE TRANSFORMER TYPE IS INDICATED BY A NUMBER FOLLOWING THE UPPER CASE LETTER 'T'. SEE THE TRANSFORMER SCHEDULE OR THE SINGLE LINE DIAGRAM FOR THE TRANSFORMER DESCRIPTION AND REQUIREMENTS.

T1 — EXAMPLE: TRANSFORMER TYPE 'T1'.

'LPN' — PANELBOARDS: PANELBOARD DOORS MAY BE SHOWN TO INDICATE OPENING SIDE OF RECESSED PANELBOARDS. SEE PANELBOARD IDENTIFICATION FOR DESIGNATION CODES.

— SHEET KEY NOTE: SEE THE SHEET KEY NOTES ON THAT SHEET FOR THE NOTE NUMBER INDICATED IN THE HEXAGON.

— DEMOLITION KEY NOTE: SEE THE SHEET KEY NOTES ON THAT SHEET FOR THE NOTE NUMBER INDICATED IN THE SQUARE.

HOME RUN TO BRANCH CIRCUIT PANEL: THE PANEL DESIGNATION AND CIRCUIT DESIGNATION ARE SHOWN ADJACENT TO THE HOME RUN ARROW. CIRCUIT BREAKER SIZES (AMPS/NUMBER OF POLES) ARE SHOWN IN THE PANEL SCHEDULE WITH THE CORRESPONDING PANEL AND CIRCUIT DESIGNATION.

'LPN'-1,3,5 — EXAMPLE: HOME RUN TO PANELBOARD 'LPN'; CIRCUITS 1, 3, 5.

SYMBOL NOTATIONS: UPPER CASE LETTERS ADJACENT TO SYMBOLS INDICATE A UNIT TYPE. SEE APPROPRIATE SCHEDULE OR SPECIFICATIONS.

GENERAL ELECTRICAL DEMOLITION NOTES

1. RETURN REMOVED MATERIAL DEEMED SALVAGEABLE BY THE COR. MATERIALS DEEMED NOT SALVAGEABLE SHALL BE REMOVED FROM THE PREMISES.
2. ALL EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO EQUIPMENT, DEVICES, FIXTURES, CONDUIT AND CIRCUITS, ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF SURVEY AND VISUAL INSPECTION.
3. REMOVE ALL EXISTING WIRING DEVICES, LIGHT FIXTURES, WIRE, CONDUIT, ETC., AS NOTED OR INDICATED WITHIN DEMOLITION AREA (ALL ITEMS MAY NOT BE SHOWN). REWORK, AS NECESSARY, CIRCUITING WHICH REQUIRES CONTINUATION THROUGH THE AREA.
4. ELECTRICAL CONTRACTOR TO PROVIDE ALL NECESSARY LABOR, CONDUIT, WIRE, CONNECTIONS, ETC., FOR DEVICES, FIXTURES, ETC., NOTED AS "EXISTING TO REMAIN" SUCH THAT EXISTING CIRCUIT CONTINUITY IS MAINTAINED.
5. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK REQUIRED TO REMOVE/RELOCATE ANY EXISTING ELECTRICAL EQUIPMENT SUCH THAT ELECTRIC SHOCK HAZARDS TO WORKMEN ARE ELIMINATED DURING DEMOLITION AND NEW CONSTRUCTION.
6. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK IN REMOVING AND REPLACING "EXISTING TO REMAIN" FIXTURES, DEVICES, ETC., AS REQUIRED SO THAT THESE DEVICES ARE NOT DAMAGED DURING DEMOLITION. RELOCATED TO NEAREST APPROPRIATE LOCATION TO AVOID CONFLICTS WITH OTHER TRADES' WORK. REPLACE WITH NEW ANY "EXISTING TO REMAIN" FIXTURE, DEVICE, ETC., NOT DEEMED SALVAGEABLE BY THE COR.
7. REMOVED OR DAMAGED CONDUIT, WIRE, AND FITTINGS SHALL NOT BE REUSED FOR RELOCATED OR NEW DEVICES.
8. MAKE AS-BUILTS WITH NEW TYPED DIRECTORIES FOR ALL PANELBOARDS, INDICATING CIRCUIT DESCRIPTION (USED OR SPARE), CIRCUIT BREAKERS AND CIRCUIT LOAD.
9. WORK REQUIRED FOR EXISTING EQUIPMENT NOTED AS "EXISTING TO BE REMOVED" SHALL INCLUDE:
   A. REMOVAL OF FEEDER FROM EQUIPMENT TO POINT OF FEED.
   B. REMOVAL OR RE-CIRCUITING OF ALL BRANCH CIRCUITING.
   C. REMOVAL OF ALL FITTINGS, SUPPORTS, BRACKETS, ETC.
   D. PATCHING OF WALLS, FLOORS, CEILINGS, EARTH, PAVEMENT AND CONCRETE, PER ARCHITECT'S INSTRUCTIONS.
   E. CAPPING OF FEEDER CONDUIT AT 6" ABOVE OR BELOW FLOOR/CEILING AS REQUIRED AND MARKING LOCATION OF POINT OF FEED WITH AN ENGRAVED BRASS TAG.
   F. REMOVAL OF FEEDER CONDUIT IF FOUND TO BE UNSALVAGEABLE BY ARCHITECT, ENGINEER OR THE COR.
10. EXISTING EQUIPMENT NOT IMPLICITLY SHOWN ON THE DRAWINGS IS INTENDED TO BE "EXISTING TO REMAIN UNCHANGED", UNLESS NOTED OTHERWISE.

METHOD OF VOLTAGE DROP CALCULATIONS

USING OHM'S LAW AND THE KNOWN RESISTIVITY CONSTANT OF CONDUCTOR METAL (CIRCULAR MIL-OHM PER FOOT) FOR COPPER CONDUCTORS, CALCULATE THE REQUIRED WIRE SIZE NECESSARY SO AS NOT TO EXCEED THE RECOMMENDED VOLTAGE DROP OF 3% FOR BRANCH CIRCUIT CONDUCTORS.

METHOD OF SHORT CIRCUIT CURRENT CALCULATIONS

SHORT CIRCUIT CURRENT CALCULATIONS SHALL BE PERFORMED ON THE ELECTRICAL SYSTEM USING A BOLTED THREE PHASE FAULT CONDITION FOR CALCULATIONS TO ACHIEVE MAXIMUM THERMAL AND MECHANICAL STRESS TO THE SYSTEM FOR CALCULATIONS PURPOSES. EXISTING SHORT CIRCUIT VALUES WILL BE USED OUTSIDE THE WORK AREA, FOR THE STARTING POINT OF THE CALCULATIONS.

WALL RATING LEGEND

2 HOUR FIRE SEPARATION
1 HOUR FIRE SEPARATION
S S S SMOKE RATED

GENERAL ELECTRICAL REMODELING NOTES

1. PRIOR TO SUBMITTING PROPOSAL, BIDDER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS.
2. CERTAIN REMODELING OF ELECTRICAL FACILITIES WILL BE REQUIRED IN THE EXISTING BUILDING. EXISTING CONDUIT RUNS ARE GENERALLY NOT SHOWN. ALTHOUGH A FULL ATTEMPT HAS BEEN MADE TO SHOW SOME EXISTING CONDITIONS, OF WHICH INFORMATION HAS BEEN TAKEN FROM EXISTING RECORD DRAWINGS OF THIS PROJECT. THE DRAWINGS SHOWING LOCATION OF EXISTING EQUIPMENT, OUTLETS, FIXTURES, ETC., IN EXISTING AREAS ARE APPROXIMATE ONLY (FIELD VERIFY).
3. BRANCH CIRCUITS SHALL BE REUSED WHERE PRACTICAL AND SHALL, IN ADDITION, BE REMODELED AS REQUIRED. THE CONTRACTOR SHALL CONCEAL ALL WORK WHERE POSSIBLE.
4. EXISTING ELECTRICAL WIRING WHICH WILL NOT BE MADE OBSOLETE AND WHICH WILL BE DISTURBED DUE TO CONSTRUCTION CHANGES REQUIRED BY THIS CONTRACT SHALL BE RESTORED TO OPERATING CONDITION, AS REQUIRED AND/OR DIRECTED. WHERE REQUIRED, SHOWN AND/OR DIRECTED, OUTLETS AND CONDUIT RUNS SHALL BE RELOCATED. IN SOME CASES IT MAY BE NECESSARY TO EXTEND CONDUITS AND PULL IN NEW WIRING OR INSTALL JUNCTION BOXES AND SPLICE IN NEW WIRING OR REPLACE OLD WIRING WITH NEW.
5. OUTLETS FROM WHICH FIXTURES, SWITCHES, RECEPTACLES, AND/OR OTHER ELECTRICAL DEVICES ARE MOVED AND WHICH ARE NOT REPLACED OR REUSED SHALL BE REMOVED OR, IF IT IS NOT POSSIBLE TO REMOVE, PLACE A BLANK COVER ON THE OUTLET BOX. WHERE OUTLETS, BOXES, ETC., ARE COMPLETELY REMOVED, THE CONTRACTOR SHALL CUT OFF CONDUITS AND REMOVE WIRING.
6. WHERE EXISTING LIGHT FIXTURES ARE TO BE REUSED, THE ELECTRICAL CONTRACTOR SHALL CLEAN AND REPLACE LAMPS, REPAIR OR REPLACE DEFECTIVE PARTS, LENS, BALLAST, ETC. AS REQUIRED.
7. WHERE CONDUITS EXTENDING THROUGH FLOORS ARE TO BE ABANDONED, THE CONTRACTOR SHALL CUT AND CAP OR PLUG CONDUIT, THAT IT WILL NOT PROTRUDE ABOVE THE FLOOR.
8. WHERE EXISTING CONDUIT IS TO BE ABANDONED, THE CONDUIT SHALL BE REMOVED IF IT IS EXPOSED, IN A CRAWL SPACE OR IN AN ACCESSIBLE CEILING. WHERE IT IS IMPOSSIBLE TO REMOVE THE CONDUIT, IT SHALL BE CUT OFF AND CAPPED OR PLUGGED.
9. THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR THE PROPER RESTORATION OF ALL EXISTING SURFACES REQUIRED PATCHING, PLASTERING, PAINTING AND/OR OTHER REPAIR DUE TO THE INSTALLATION OF ELECTRICAL WORK UNDER THE TERMS OF THIS SPECIFICATION. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED. THE CONTRACTOR SHALL EMPLOY QUALIFIED AND EXPERIENCED WORKMEN FOR THIS WORK. ALL RESTORATION WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND/OR THE COR/VA.
10. ALL TEMPORARY AND REMODELING WORK SHALL BE CONSIDERED A PART OF THIS CONTRACT AND NO EXTRA CHARGES WILL BE ALLOWED. THIS SHALL INCLUDE MINOR ITEMS OF MATERIAL OR EQUIPMENT NECESSARY TO MEET THE REQUIREMENTS AND INTENT OF THE PROJECT.
11. EXAMINE ARCHITECTURAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE SEQUENCE OF CONSTRUCTION THROUGHOUT THE PROJECT, INCLUDING EXISTING, TEMPORARY, REMODELED AND NEW AREAS.
12. ALL ELECTRICAL CONNECTIONS REQUIRING AN OUTAGE SHALL BE MADE DURING AN APPROVED TIME LIMIT. CHANGEOVERS SHALL BE AS SHORT A DURATION AS POSSIBLE AND SHALL NOT INTERFERE WITH NORMAL OPERATION OF THE COR/VA FACILITIES. NOTIFY COR/VA NO LESS THAN 14 DAYS (TWO WEEKS) IN ADVANCE OF A SHUTDOWN OF ANY ELECTRICAL CIRCUIT FOR CHANGEOVER, AND SUCH A CHANGEOVER SHALL BE DONE DURING HOURS AS DIRECTED BY COR/VA. WORK SHALL BE SCHEDULED SO THAT AT NO TIME WILL ANY EMERGENCY FEEDER, CIRCUIT, OR FIRE ALARM ZONE BE OUT OF SERVICE. PROVIDE NECESSARY TEMPORARY FEEDERS TO ACCOMPLISH THIS REQUIREMENT.
13. EXISTING LOW VOLTAGE WIRING WHICH WILL NOT BE MADE OBSOLETE AND WHICH WILL BE DISTURBED DUE TO CONSTRUCTION CHANGES REQUIRED BY THIS CONTRACT SHALL BE RESTORED TO CONDITION, OR POSITION, AS REQUIRED. PROPERLY RE-SECURE CABLE IN CHASES, CRAWL SPACES, TUNNELS, AND CEILING SPACES AS REQUIRED BY NEC. IN SOME CASES IT MAY BE NECESSARY TO ADD SUPPORTING HARDWARE TO ACCOMPLISH THIS REQUIREMENT.
14. IF POSSIBLE, ALL NEWLY INSTALLED ELECTRICAL BOXES SHALL BE INSTALLED IN SEPARATE OR ADJACENT STUD SPACES TO AVOID SOUND TRANSMISSION AND WALL INTEGRITY ISSUES. IF NOT POSSIBLE, ALL NEWLY INSTALLED ELECTRICAL BOXES LOCATED IN COMMON STUD SPACES INSTALLED ON OPPOSITE SIDES OF FIRE-RESISTANCE-RATED WALLS SHALL BE EQUIPPED WITH FIRE-RESISTANT PUTTY PADS AT THE BACK OF EACH BOX IN ACCORDANCE WITH NEC 300.21 AND IBC 714.4.2.

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100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

NORTH CAROLINA PROFESSIONAL SEAL 23894 ENGINEER Kevin Mason JOHN KEVIN MASON
5/30/2025

PROJECT MANAGER
ACG Project Number 23-090

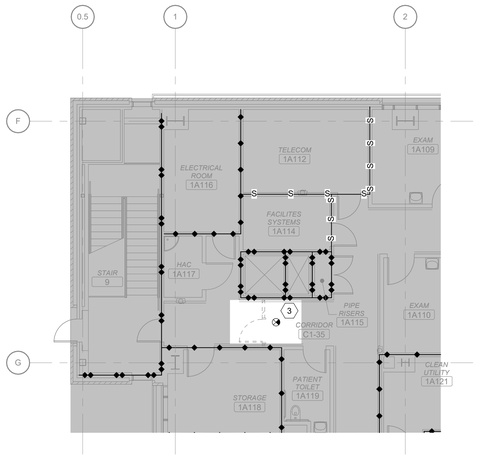
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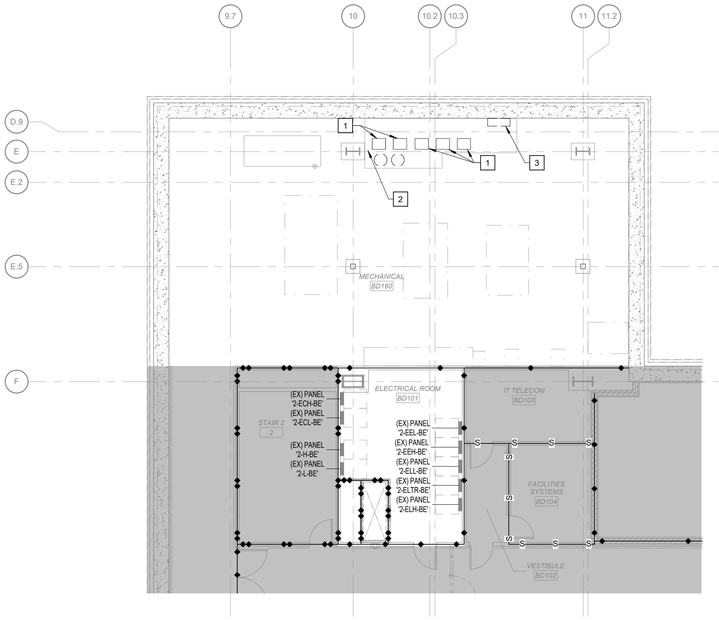
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Project Title: REPLACE DENTAL VACUUM PIPING
VA PROJECT NUMBER: 593-22-103
Building Number: 1
Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086
Approved:
Date: MAY 30, 2025 | Checked: JKM | Drawn: JWB
Drawing Number: E-001
Dwg 1 of 3

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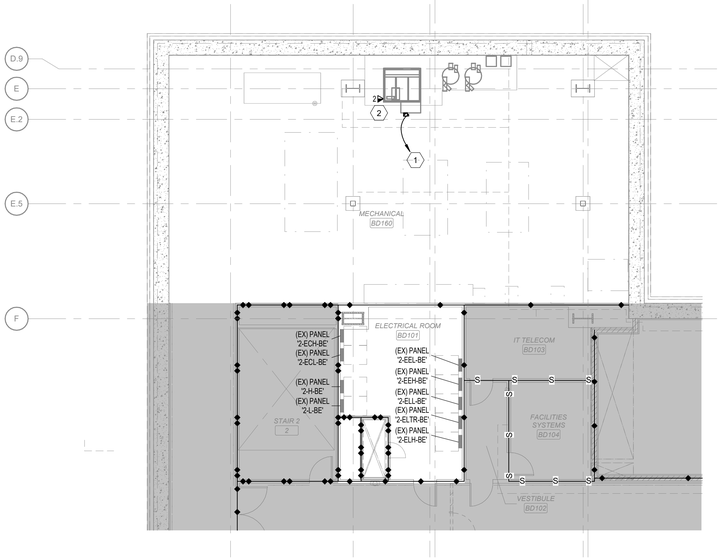
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3 FIRST FLOOR POWER PLAN
Scale: 1/8" = 1'-0"



1 BASEMENT FLOOR PLAN - A - MECHANICAL ROOM ELECTRICAL DEMOLITION
Scale: 1/8" = 1'-0"



2 BASEMENT FLOOR PLAN - A - MECHANICAL ROOM ELECTRICAL NEW WORK
Scale: 1/8" = 1'-0"

SHEET NOTES:

A. CONTRACTOR SHALL BE RESPONSIBLE FOR TRACING AND IDENTIFYING ALL CIRCUITS AND CONDUITS THAT ORIGINATE, PASS THROUGH, OR TERMINATE IN THE AREA OF WORK. DEMOLISH ALL CIRCUITS THAT ARE NO LONGER IN USE. MAINTAIN CIRCUIT CONTINUITY TO ALL CIRCUITS WHICH ARE NOT COMPLETELY REMOVED.

B. CONTRACTOR TO DISCONNECT AND REMOVE ELECTRICAL CONNECTION TO OUTLETS, RECEPTACLES, HVAC EQUIPMENT AND OTHER ELECTRICAL DEVICES. REMOVE CONDUCTORS AND CONDUIT BACK TO PANELBOARD SERVING EQUIPMENT OR TO THE POINT WHERE OTHER REMAINING LOADS ARE CONNECTED. MARK EXISTING OVERCURRENT PROTECTION DEVICE AS "SPARE (UNUSED)".

C. CONTRACTOR SHALL REMOVE ALL ELECTRICAL CONDUIT, CABLE, WIRING, DEVICE, JUNCTION BOXES, FITTINGS, AND RELATED ITEM FROM ALL PORTIONS OF THE AREA OF WORK INCLUDING WALL, CEILING AND FLOORS. THIS SHALL BE FOR ALL WALLS, EVEN WALLS NOT SUBJECT TO REMOVAL.

D. FOR ELECTRICAL CIRCUITS BEING DEMOLISHED REMOVE BOXES, CONDUIT AND CONDUCTORS BACK TO SOURCE, INCLUDING THOSE CONCEALED WITHIN WALLS, LEAVING NO ABANDONED ITEMS.

E. WHERE CONDUIT IS REMOVED FROM AN EXISTING RATED ASSEMBLY NOT SUBJECT TO DEMOLITION, THE REMAINING HOLE SHALL BE PATCHED/REPAIRED TO MAINTAIN THE RATING OF THE ASSEMBLY.

F. EACH PHASE OF THE CONSTRUCTION IS TO BE PERFORMED WHILE LEAVING WORK AREAS OF OTHER PHASES ACTIVE, TO THE GREATEST EXTENT POSSIBLE. NOTIFY COR IF ANY WORK IS REQUIRED THAT WILL CROSS MULTIPLE PHASES OF THE WORK AREA, PRIOR TO PERFORMING THE WORK.

G. ELECTRICAL CONTRACTOR SHALL FOLLOW SITE LOCK-OUT/TAG-OUT GUIDELINES TO DEENERGIZE EQUIPMENT.

H. ELECTRICAL CONTRACTOR TO CONTACT SITE MANAGER FOR DISPOSAL OF REMOVED ELECTRICAL EQUIPMENT.

I. DEVICES INDICATED WITH DARK, DASHED LINES ARE TO BE REMOVED, UNLESS NOTED OTHERWISE.

J. SCHEDULED SHUTDOWNS FOR DEVICE DEMOLITION TO BE APPROVED BY COR AND DEVICE REMOVAL TO ALIGN WITH PROJECT PHASING PLAN.

K. COORDINATE ALL INSTALLATIONS WITH OTHER DISCIPLINES PRIOR TO ROUGH-IN.

DEMO KEY NOTES:

1 EXISTING VACUUM PUMPS, DISCONNECT AND DEMOLISH ALL ELECTRICAL CONNECTIONS, BACK TO THE EXISTING SOURCE (PANEL 2-EEH-BE).
2 DEMOLISH EXISTING ELECTRICAL CONNECTION TO SOLENOID VALVE. RETAIN CIRCUIT IN A JUNCTION BOX MOUNTED ON THE COLUMN LABELED "SPARE"
3 DISCONNECT AND REMOVE CONDUIT AND CONDUCTORS FROM UTILITY CONTROL PANEL BACK TO SOURCE OR NEAREST JUNCTION BOX SERVING ITEMS NOT SUBJECT TO DEMOLITION.

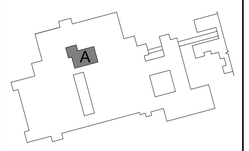
NEW KEY NOTES:

1 100A 3 POLE FUSIBLE DISCONNECT SWITCH AT PUMP RACK. CIRCUIT TO PANEL '2-EEH-BE' CIRCUITS 8, 10, 12 USING (3) 1 AWG, (1) 8 AWG EG IN 1-1/2" CONDUIT. FUSE AT 80A.
2 ADD DATA OUTLET TO PUMP SKID FOR COMMUNICATION WITH BMS SYSTEM. ROUTE DATA WIRING BACK TO EXISTING IT TELECOM ROOM BD103 AND TERMINATE.
3 CONTRACTOR TO PROVIDE A 90 MIN BATTERY BACKED-UP EXIT SIGN FOR TEMPORARY CONSTRUCTION EGRESS, CONNECTED INTO LOCAL LIGHTING CIRCUIT, DURING CONSTRUCTION. SIGNAGE IS TO BE REMOVED AT REMOVAL OF CONSTRUCTION WALL.

KEY PLAN

SCALE: NO SCALE

AREA OF WORK



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#	Revisions:	Date

CONSULTANTS:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 23894 KEVIN MASON
5/30/2025

PROJECT MANAGER
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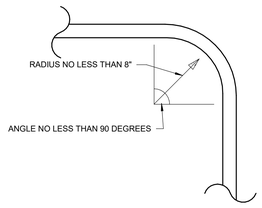
Office of Construction and Facilities Management
VA U.S. Department of Veterans Affairs

Drawing Title: BASEMENT FLOOR PLAN - A - MECHANICAL ROOM ELECTRICAL DEMOLITION & NEW WORK
Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086
Project Title: REPLACE DENTAL VACUUM PIPING
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VA PROJECT NUMBER 593-22-103
Building Number 1
Drawing Number EP101
Dwg 2 of 3

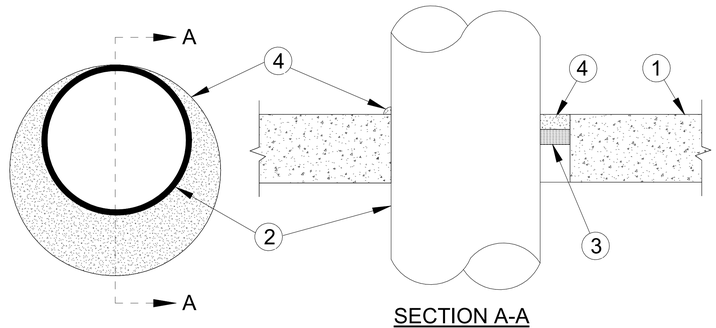
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5 BONDING CONDUCTOR BEND RADIUS
Scale: No Scale

System No. C-AJ-1001
June 15, 2005
F Rating - 3 Hr
T Rating - 0 Hr
W Rating - Class I (See Item 4)



SECTION A-A

1. FLOOR OR WALL ASSEMBLY - MIN 4-1/2 IN. (114 MM) THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF OR 1600-2400 KG/M3) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED **CONCRETE BLOCKS***. MAX DIAM OF CIRCULAR THROUGH OPENING IS 32-1/2 IN. (826 MM).

SEE **CONCRETE BLOCKS** (CAZT) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE (OPTIONAL, NOT SHOWN) - NOM 12 IN. (305 MM) DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO CONCRETE FLOOR OR WALL. SLEEVE TO BE FLUSH WITH OR PROJECT MAX 2 IN. (51MM) FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL.

2. THROUGH PENETRANT - ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN. (0 MM)(POINT CONTACT) TO MAX 1-3/8 IN. (35 MM). PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. STEEL PIPE - NOM 30 IN. (762 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
A1. IRON PIPE - NOM 30 IN. (762 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
B. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) RIGID STEEL CONDUIT.
C. CONDUIT - NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.

3. PACKING MATERIAL - POLYETHYLENE BACKER ROD OR NOM 1 IN. (25 MM) THICKNESS OF TIGHTLY-PACKED CERAMIC (ALUMINA SILICA) FIBER BLANKET, MINERAL WOOL BATT OR GLASS FIBER INSULATION MATERIAL USED AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF SOLID CONCRETE OR CONCRETE BLOCK WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4). AS AN ALTERNATE WHEN MAX PIPE SIZE IS 10 IN. (254 MM) DIAM AND WHEN MAX ANNULAR SPACE IS 1 IN. (25 MM), A MIN 1 IN. (25 MM) THICKNESS OF TIGHTLY-PACKED CERAMIC FIBER BLANKET OR MINERAL WOOL BATT PACKING MATERIAL MAY BE RECESSED MIN 1/2 IN. (13 MM) FROM BOTTOM SURFACE OF FLOOR OR FROM EITHER SIDE OF SOLID CONCRETE WALL.

4. FILL,VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - APPLIED TO FILL THE ANNULAR SPACE TO THE MIN THICKNESS SHOWN IN THE FOLLOWING TABLE:

MAX PIPE DIAM IN. (MM)	MAX ANNULAR SPACE IN. (MM)	PACKING MATL TYPE (a)	MIN. CAULK THKNS IN. (MM)
10 (254)	1 (25)	BR, CF, GF OR MW	1/2 (13) (b)
10 (254)	1 (25)	CF OR MW	1/2 (13) (c)
30 (762)	2-1/2 (64)	BR, CF, GF OR MW	1 (25) (b)

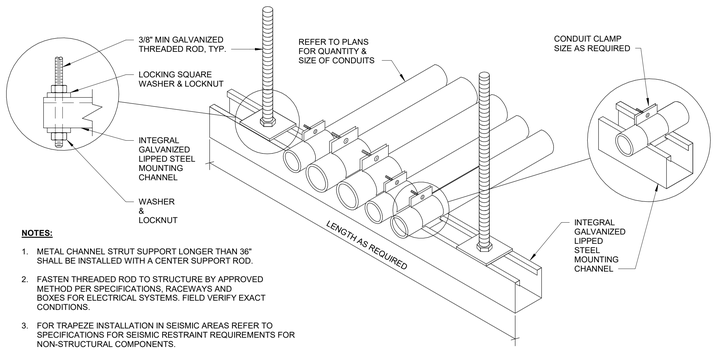
(A) BR = POLYETHYLENE BACKER ROD.
CF = CERAMIC FIBER BLANKET.
GF = GLASS FIBER INSULATION.
MW = MINERAL-WOOL BATT.
(B) CAULK INSTALLED FLUSH WITH TOP SURFACE OF FLOOR OR BOTH SURFACES OF WALL.
(C) CAULK INSTALLED FLUSH WITH BOTTOM SURFACE OF FLOOR OR ONE SURFACE OF SOLID (NON- CONCRETE BLOCK) WALL.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT.
(NOTE: W RATING APPLIES ONLY WHEN FB-3000 WT SEALANT IS USED.)

*BEARING THE UL CLASSIFICATION MARKING

2 UL PENETRATION DETAIL C-AJ-1001
Scale: No Scale

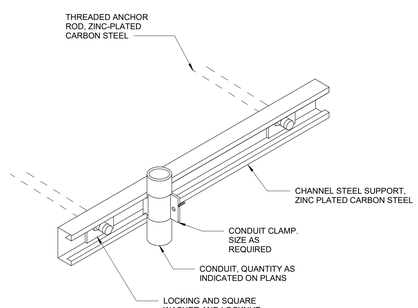
6 SINGLE LINE
Scale: No Scale



NOTES:

1. METAL CHANNEL STRUT SUPPORT LONGER THAN 36" SHALL BE INSTALLED WITH A CENTER SUPPORT ROD.
2. FASTEN THREADED ROD TO STRUCTURE BY APPROVED METHOD PER SPECIFICATIONS, RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS. FIELD VERIFY EXACT CONDITIONS.
3. FOR TRAPEZE INSTALLATION IN SEISMIC AREAS REFER TO SPECIFICATIONS FOR SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS.

3 CONDUIT TRAPEZE MOUNTING
Scale: No Scale

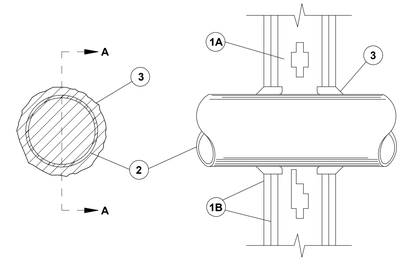


NOTE:

1. INSTALL THREADED ANCHOR ROD IN MASONRY WALL WITH INJECTABLE ADHESIVE ANCHOR, SUCH AS HILTI HIT INJECTABLE ADHESIVE MORTARS.
2. PAINT ASSEMBLY AFTER INSTALLATION TO MATCH BRICK COLOR.

4 CONDUIT SUPPORT
Scale: No Scale

SYSTEM NO.W-L-1001
JUNE 15, 2005
F RATINGS - 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS - 0, 1, 2, 3, AND 4 HR (SEE ITEM 3)
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT



SECTION A-A

1. **WALL ASSEMBLY** - THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

   a. **STUDS** - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 HR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.

   b. **GYPSUM BOARD*** - NOM 1/2 OR 5/8 IN. (13 OR 16 MM) THICK, 4 FT. (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 26 IN. (660 MM).

2. **THROUGH PENETRANT** - ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIP, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN. OF 0 IN. (0 MM) (POINT CONTACT) TO MAX 2 IN. (51 MM). PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES MAY BE USED:

   a. **STEEL PIPE** - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.

   b. **IRON PIPE** - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN. (305 MM) DIAM (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.

   c. **CONDUIT** - NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING

   d. **COPPER TUBING** - NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.

   e. **COPPER PIPE** - NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

   f. **THROUGH PENETRATING PRODUCT* - FLEXIBLE METAL PIPING** - THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:

      - NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
      - **OMEGA FLEX INC** - NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
      - **TITEFLEX CORP, A BUNDY CO** - NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
      - **WARD MFG, INC.**

3. **FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT** - MIN 5/8. 1-1/4,1-7/8 AND 2-1/2 IN. (16, 32, 48 AND 64 MM) THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY, APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

MAX PIPE OR CONDUIT DIAM IN. (mm)	F RATING HR	T RATING HR
1 (25)	1 OR 2	0+, 1 OR 2
1 (25)	3 OR 4	3 OR 4
4 (102)	1 OR 2	0
6 (152)	3 OR 4	0
12 (305)	1 OR 2	0

+WHEN COPPER PIPE IS USED, T RATING IS 0 HR.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT,

*BEARING THE UL CLASSIFICATION MARKING

1 UL PENETRATION DETAIL W-L-1001
Scale: No Scale

FULLY SPRINKLERED
100% BID DOCUMENTS

#	Revisions:	Date

CONSULTANTS:

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 23894 KEVIN MASON
5/30/2025

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Office of Construction and Facilities Management
VA | U.S. Department of Veterans Affairs

Drawing Title: ELECTRICAL DETAILS
Location: VA SOUTHERN NEVADA HEALTHCARE SYSTEM 6900 N. PECOS RD. NORTH LAS VEGAS, NV, 89086
Project Title: REPLACE DENTAL VACUUM PIPING
Approved
Date: MAY 30, 2025 | Checked: JKM | Drawn: JWB
VA PROJECT NUMBER: 593-22-103
Building Number: 1
Drawing Number: E-501
Dwg 3 of 3

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