

# **HEALTH** INFECTION CONTROL RISK ASSESSMENT

ICRA Committee approval of an ICRA Permit is required for all Construction Activity

BASIC PROJECT INFORMATION				
Project Name:	Project Number:		Today's Date	
Impacted Department(s):	Building Number and	d Name:	Floor:	Suite/Room:
Estimated Construction Start Date:		Estimated Completi	on Date:	1
UCDH Project Manager:	UCDH PM Mobile Ph	none #:	UCDH PM Email:	
Construction Manager:	CM Mobile Phone:		CM Mobile Email:	
	GENERAL PR	OJECT SCOPE		
ATTACH DESCRIPT		LINARY TEAM	INIAGE TO PAC	CKLI
Identify the multidisciplinary team include	ded in this review and	d agree with the requ	irements identified	within the package.
Department	Na	ame	Er	nail
UCDH Project Manager				
Fire Marshal's Office				
Infection Prevention				
Environmental Health & Safety				
Contractor Representative				
Other Multidisciplinary Team Members				

	INFECTION CONTROL RISK ASSESSMENT
Step One: U	sing the table, identify the Construction Project Activity Type (A-E).
Type A	<ul> <li>Inspection and non-invasive activities. Includes but is not limited to:</li> <li>Removal of ceiling tile for visual inspection-limited to 1 tile per 50 square feet with limited exposure time.</li> <li>Limited building system maintenance (e.g., pneumatic tube station, HVAC system, fire suppression system, electrical and carpentry work to include painting without sanding) that does not create dust or debris.</li> <li>Clean plumbing activity limited in nature.</li> </ul>
Type B	<ul> <li>Small-scale, short duration activities that create minimal dust and debris. Includes but is not limited to:         <ul> <li>Work conducted above the ceiling (e.g., prolonged inspection or repair of firewalls and barriers, installation of conduit and/or cabling, and access to mechanical and/or electrical chase spaces).</li> <li>Fan shutdown/startup.</li> <li>Installation of electrical devices or new flooring that produces minimal dust and debris.</li> <li>The removal of drywall where minimal dust and debris is created.</li> <li>Controlled sanding activities (e.g., wet, or dry sanding) that produce minimal dust and debris.</li> </ul> </li> </ul>
Type C	<ul> <li>Large-scale, longer duration activities that create a moderate amount of dust and debris. Includes but is not limited to: <ul> <li>Removal of preexisting floor covering, walls, casework, or other building components.</li> <li>New drywall placement.</li> <li>Renovation work in a single room.</li> <li>Nonexistent cable pathway or invasive electrical work above ceilings.</li> <li>The removal of drywall where a moderate amount of dust and debris is created.</li> <li>Dry sanding where a moderate amount of dust and debris is created.</li> <li>Work creating significant vibration and/or noise.</li> <li>Any activity that cannot be completed in a single work shift.</li> </ul> </li> </ul>
Type D	Major demolition and construction activities. Includes but is not limited to:  Removal or replacement of building system component(s).  Removal/installation of drywall partitions.  Invasive large-scale new building construction.  Renovation work in two or more rooms.  Exterior Construction typical activities. include, but are not limited to:
Type E	<ul> <li>Excavation, Trenching, Grading, Boring, Pile Driving, Demolition</li> <li>Asphalt, Concrete, Stucco, Scaffolding</li> <li>Roofing</li> <li>Window washing, Caulking, Tuckpointing, Cleaning, Painting</li> <li>Landscaping, Planting</li> </ul>
Explain the	reasoning for this assessment:

Step Two: Using the table below, identify the Patient Risk Group(s) that will be affected. If more than one risk group is involved, select the higher-risk group.				
Low Risk Non-patient care areas such as:	Medium Risk Patient care support areas such as:	High Risk Patient care areas such as:	Highest Risk Procedural, invasive, sterile support and highly compromised patient care areas such as:	
□Office areas not on clinical units □Breakrooms not on clinical units □Bathrooms or locker rooms not on clinical units □Mechanical rooms not on clinical units □EVS closets not on clinical units □Corridors and gathering areas not near clinical units	□Waiting / Lobby areas □Clinical engineering □Materials management □Sterile processing department - dirty side □Cafeteria, gift shop, coffee shop, and food kiosks □Public hallways and gathering areas near clinical units	□Patient care rooms and areas □All acute care units □Emergency department □Employee health □Pharmacy: General Work Zone □Medication rooms and clean utility rooms □Imaging suites: diagnostic imaging □Laboratory □Kitchen	□ All transplant and intensive care units □ All oncology units and other areas with severely immunocompromised patients □ OR theaters and restricted areas □ Procedural suites □ Pharmacy compounding □ Sterile processing department: clean side □ Transfusion services □ Dedicated isolation units and isolation rooms □ Imaging suites: invasive imaging □ Dialysis unit	
Describe key patient risks:				

Step Three: Match the Patient Risk Group (Low, Medium, High, Highest) from Step Two with the planned Construction Activity Project Type (A, B, C, D, E) from Step One using the table below to find the Class of Precautions (I, II, III, IV or V) or level of infection control activities required. The activities are listed in the table below – Minimum Required Infection Control Precautions by Class.

	Construction Project Activity Type				
Patient Risk Group	TYPE A	TYPE B	TYPE C	TYPE D	TYPE E
LOW Risk	1	П	П	III*	
MEDIUM Risk	1	П	*	IV	□ F. Hawian
HIGH Risk	1	III	IV	V	☐ Exterior
HIGHEST Risk	Ш	IV	V	V	

All construction and maintenance activities as defined in Step 1 require a permit and approval unless the work does not expose patients or employees and the ICRA Committee determines there is no appreciable risk to patients for acquired infection due to the project. Such decisions must be documented.

Environmental conditions that could affect human health, such as sewage, Mold, asbestos, gray water, and black water will require Class of Precautions IV for LOW and MEDIUM Risk Groups and Class of Precautions V for HIGH and HIGHEST Risk Groups.

Class III\* Precautions - Type C [Medium Risk groups] and Type D [Low Risk Groups] work areas that cannot be sealed and completely isolated from occupied patient care spaces should be elevated to include negative air exhaust requirements as listed in Class IV Precautions.

# Surrounding Area Assessment

Step Four: Assess potential risk to areas surrounding the project. Using the table below, identify the surrounding areas that will be affected and the type of impact that will occur. If more than one risk group is impacted, select the higher risk group using Step 2 - Patient Risk Group.

	ipaci tilat will occur. Il illore	than one risk group is impac	ted, select the higher risk gr	oup using step 2 - I attent M.	sk droup.
Unit Location:	Below	Above	Lateral	Behind	Front
Unit Name:					
Risk Group:					
Unit Contact:					
Phone:					
Email:					
Additional	☐ Noise	☐ Noise	☐ Noise	☐ Noise	☐ Noise
Controls:	☐ Vibration	$\square$ Vibration	☐ Vibration	$\square$ Vibration	$\square$ Vibration
	☐ Dust control	☐ Dust control	☐ Dust control	☐ Dust control	☐ Dust control
	☐ Ventilation	$\square$ Ventilation	☐ Ventilation	☐ Ventilation	☐ Ventilation
	☐ Pressurization	$\square$ Pressurization	☐ Pressurization	$\square$ Pressurization	☐ Pressurization
Impact on other	☐ Data	☐ Data	☐ Data	☐ Data	□ Data
systems, such as:	☐ Mechanical	☐ Mechanical	☐ Mechanical	☐ Mechanical	☐ Mechanical
	☐ Med Gases	$\square$ Med Gases	☐ Med Gases	$\square$ Med Gases	☐ Med Gases
	☐ Water Systems	☐ Water Systems	☐ Water Systems	☐ Water Systems	☐ Water Systems
Notes:					
Ware there discove	l ries in surrounding areas tha	t would carve as a cause to i	ncrease the class of precaut	ions and necessitate addition	nal controls? If so inlease
summarize.	ries in surrounding areas the	it would serve as a cause to i	nicrease the class of precaut	ions and necessitate addition	iarcontrois: it so, piease
Summunze.					

	NOISE AND VIBRATION ASSESSMENT
Туре	Suggested Control Measures
☐ Drilling	☐ <b>Required for high-impact activities</b> – Notify PO&M, Building Coordinator and EH&S
☐ Heavy Equipment	☐ Always consider using Engineering solutions before using Personal Protective Equipment.
☐ Motors	☐ Coordinate disruption plan with PO&M and other stakeholders as necessary
☐ Pounding	☐ Deploy noise dampening blankets or other similar equipment
☐ Grinding	$\square$ Use tools or alternative methods designed to minimize noise and vibrations
☐ Other:	☐ Use diamond drills instead of powder-actuated fasteners
	☐ Use beam clamps instead of shot
	☐ Prefab where possible
	☐ Use tin snips to cut metal studs instead of using a chop saw
	☐ Install metal decking with vent tabs, then use cellular floor deck hangers
	☐ Consider pro-press instead of soldering, brazing, or welding
	☐ Wet core drill instead of dry core or percussion
	☐ Instead of jackhammering concrete, use wet diamond saws
	☐ Use HEPA vacuums instead of standard wet/dry vacuums
	☐ Use mechanical joining system sprinkler fittings instead of threaded
	☐ Where fumes are tolerated, use chemical adhesive remover instead of mechanical
	☐ To remove flooring, shot blast instead of using a floor scraper
	☐ Use electric sheers instead of reciprocating saw for ductwork cutting.
	☐ Install exterior man/material lifts.
	☐ Provide staff and/or patients with noise-reducing protective equipment (e.g., ear plugs)
	$\square$ Relocate members/staff to another area of the facility for the duration of the activity
	☐ Notify affected areas before noise or vibration-producing activity
	$\square$ Schedule activities during hours that minimize patient, visitor, and staff impact.
	Hours:
	□ Other:

AIR QUALITY IMPACT				
Туре	Suggeste	d Control Measures		
☐ Dust	☐ Restrict/shut down air handlers for th	e duration of the activity		
☐ Chemical (VOC)	$\square$ Install temporary partitions			
☐ Fugitive Emissions	☐ Install charcoal filters in HVAC or port	able units		
(Fumes)	$\square$ Install temporary ductwork and porta	able units		
☐ Potential Mold	☐ Prohibit idling of heavy equipment er	ngines		
Note: If Mold is encountered, follow work practices outlined in	☐ Provide local exhaust ventilation			
the General Requirements Division	☐ Substitute material with low VOC pro	duct		
1 Section 01561 Document.	☐ Notify area staff and EH&S before co	nstruction activity that ma	ıy impact air	quality
☐ Asbestos	☐ Provide negative pressure/HEPA filtra	ation		
☐ Paint Solvent/Cleaner	☐ Exhaust HEPA−99.97% to exterior			
☐ Roofing Tar	$\square$ Relocate members/staff to another a	rea of the facility for the o	Juration of t	he activity
□ Other:	☐ Schedule activities during hours that minimize patient, visitor, and staff impact.			
	Hours:	• • • • • • • • • • • • • • • • • • • •		
	☐ Provide Safety Data Sheets to EH&S for	or other recommended a	ctions	
	☐ Other:			
	LIAZADDOLIC BAA:	TEDIALC		
	HAZARDOUS MA	IEKIALS		
	the presence of hazardous materials in al	_		
	ished by existing surveys that identify the			
-	zardous materials assessment of the area	· · ·	act. All impa	acted
	be handled per the appropriate control m		malitian ar	ronovation
	Consultant must have conducted an asbe ptions based on the date of construction of	·	emolition of	renovation
activity. There are no exce	ACKNOWLEDGEMENT OF HAZARD			
Does the project contact h	azardous materials (e.g., asbestos, lead, n		□ Vee	□ No
Does the project contact in			☐ Yes	□ No
How was this verified?	☐ Hazmat Survey	☐ Personal Know	neage	
Male a constitue of the in-	☐ Other:			
Who verified this information?	☐ Company:			
iiiiOiiiiatioii:	☐ Person and Department:			
	☐ Other:			
Hazardous Materials Pres	ent Requi	red Control Measures		
in Project Work Area	·			
☐ Asbestos	Follow work practices outlined in the	ne General Requirements	Division 1 D	ocument.
Lead				
☐ PCBs				
☐ Universal Waste				

 $\square$  Other:

CONTAINMENT REQUIREMENTS WORKSHEET						
				is responsible for constructir m. Note: Interim Life Safety		
	☐ Full Containment (				, ,	
	,	•		solated and sealed by fi	re-rated six mil. poly	
	<del></del>			reater than 30 days and		
6				or work lasting less than		
Containment		be used where hot wo		_	1 30 days. 1 lastic	
Barrier				ply and return registers	s. etc.)	
				r 1-2 people; aka pop-u	•	
	☐ Shrouded Tool with				<u>,                                     </u>	
	☐ Glove Box Containment with HEPA-filtered exhaust					
	□ Other:					
		ed to maintain and docu	ıment negative a	air pressure. DOP Tested H	IEPA-filtered negative air	
			v) and a rating of	f 200 to 2000 cubic feet pe	er minute (CFM) is	
	required for constructio					
	☐ -0.020" WC always					
Negative				it the project, as display	ed on the manometer	
Pressure		of some negative roo	m pressure thr	oughout the project		
	☐ No negative room	•				
				rea (e.g., shrouded tool,	glove box)	
	☐ Additional Ante roo	om under negative pro	essure			
	□ Other:					
	☐ Air exhausted directly outside - Avoid exhausting air near air intakes or operable windows doors, and avoid exhausting air near walkways					
	□ For air exhausted inside, check any of the following conditions that are required:					
Air Exhaust		ration (ex. Charcoal, D		•	·u.	
All Extidust		·	•	•	t exhausted air will not	
		t the air balance of th		~	ic extrausted dir Will flot	
				fore containment setup	)	
	☐ Challenge Tested v	vithin last six months;	Equipment ha	s remained onsite at UC	CDH	
Additional		☐ Masonite Floor Prot		Protective Clothing	☐ Air Scrubber	
Containment	☐ Walk Off Mats	☐ Shoe Covers	☐ Collect Sam	ples During Work	☐ HEPA Vacuum	
Requirements	☐ Other:					
	☐ HEPA Equipment \	/erification	☐ EH&S ☐ (	Consultant 🗆 Other:		
	☐ Pre-Work Approva	Inspection	☐ PM ☐ EH	&S ☐ Consultant ☐ IO	R □ Other: Entek	
Varification of	☐ Daily Onsite Overs	ight	☐ PM ☐ EH&S ☐ Consultant ☐ IOR ☐ Other.Contracto			
Verification of Work	☐ Post Demolition/A	batement Inspection	☐ PM ☐ EH&S ☐ Consultant ☐ IOR ☐ Other: Entek			
WOIK	☐ ICRA Downgrade		☐ PM ☐ EH&S ☐ Consultant ☐ IOR ☐ Other:			
	☐ Final Visual Contain	nment Inspection	☐ PM ☐ EH	☐ PM ☐ EH&S ☐ Consultant ☐ IOR ☐ Other: Entek		
	☐ Air Sampling			Consultant  Other:		
Air Sampling		☐ Mold ☐ Asbestos ☐		Freque	<u>'</u>	
Air Balance in	The contractor is responsible Contact PO&M to verify the			gh and highest-risk areas per reas.	design/ASHKAE guidelines.	
Adjacent Areas:		High/Highest Risk Are			Requirements	
Aleas.						
					<del></del>	

ICRA Permit Number			ICRA Clas	SS
Project Number:	Project Name:			
Impacted Department:	Building Number and Name:		Floor:	Suite/Room:
UCDH Project Manager:	UCDH PM Mobile Phone #:		UCDH PM Email:	
Construction Manager:	CM Mobile Phone:		CM Mobile Email:	
General Contractor:	General Contractor Mobile Phone:		General Contracto	r Mobile Email:
Containment will be set up and maintained	by:	Third-Party Contain	nment Consultant:	
		1		

ICRA Class:		Project Start Date	Completion Date
Additional Requirements			<u>'</u>
Signatures	Project Manager	General Contractor	Infection Control and Prevention
Downgrade Requ	est – ICRA Class	Project Start Date	Completion Date
Additional Requirements			
Signatures	Project Manager	General Contractor	Infection Control and Prevention
Extension Reques	st – ICRA Class	Project Start Date	Completion Date
Additional Requirements			
Signatures	Project Manager	General Contractor	Infection Control and Prevention

Please include the appropriate Infection Prevention Requirement page(s) for the Class indicated in Step 3 of this package.

# **INFECTION PREVENTION REQUIREMENTS - CLASS I**

# Prior to and During Construction:

- Perform non-invasive work activities not to block or interrupt patient care.
- Perform non-invasive work activities in areas that are not directly occupied by patients.
- Perform non-invasive work activity in a manner that does not create dust.
- Immediately replace any displaced ceiling tile before leaving the area and/or at the end of non-invasive work activity.

# Upon Completion of Work:

#### Cleaning

- Clean work areas, including all environmental surfaces, high horizontal surfaces, and flooring materials.
- Check all supply and return air registers for dust accumulation on upper surfaces and air diffuser surfaces.

#### **HVAC Systems**

- Remove isolation of the HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational.
- Verify the HVAC systems meet original airflow and air exchange design specifications.

## **INFECTION PREVENTION REQUIREMENTS - CLASS II** Perform only limited dust work and/or activities designed for basic facilities and engineering work. Construction: Prior to and Perform limited dust and invasive work following standing precautions procedures approved by the organization. This Class of Precautions must never be used for construction or renovation activities. Cleaning: **Upon Completion of** • Clean work areas, including all environmental surfaces, high horizontal surfaces, and flooring materials. Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces. **HVAC Systems:** • Remove isolation of the HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational. Verify the HVAC systems meet original airflow and air exchange design specifications. Additional Infection Prevention Requirements:

# **INFECTION PREVENTION REQUIREMENTS - CLASS III**

- Provide active means to prevent airborne dust dispersion into the occupied areas.
- Means for controlling minimal dust dispersion may include hand-held HEPA vacuum devices, polyethylene plastic containment, or isolation of work area by closing room door.
- Remove or isolate return air diffusers to avoid dust from entering the HVAC system.
- Remove or isolate the supply air diffusers to avoid positive pressurization of the space,
- If work area is contained, then it must be neutrally to negatively pressurized at all times. \*If negative pressure is required, see additional requirements below.
- Seal all doors with tape that will not leave residue
- Contain all trash and debris in the work area.
- 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.
- 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.
- Maintain clean surroundings when area is not contained by damp mopping or HEPA vacuuming surfaces.

#### Additional requirements for Class III containments that require negative pressure:

- Maintain negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors. Exhaust discharged directly to the outdoors that is 25 feet or greater from entrances, air intakes and windows requires the highest degree of filtration feasible.
- If exhaust is directed indoors, then the system must be HEPA filtered. Prior to start of work, HEPA filtration must be verified by particulate measurement as no less than 99.97% efficiency and must not alter or change airflow/pressure relationships in other areas.
- Exhaust into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is not acceptable.
- Install digital monitoring manometer with one thousandth of inch of water pressure (eg. 0.024) exterior of work containment to continually monitor negative pressurization. The non-digital manometer monitors are not acceptable.

#### Cleaning:

- Clean work areas including all environmental surfaces, high horizontal surfaces, and flooring materials.
- Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces.

#### **HVAC Systems:**

- Remove isolation of the HVAC system in areas where work is being performed. Verify that HVAC systems are clean and operational.
- Verify the HVAC systems meet original airflow and air exchange design specifications.

# Class III precautions require inspection and documentation for downgraded ICRA precautions. Construction areas must be inspected by the designee on the containment requirements worksheet for discontinuation or downgrading of ICRA precautions.

#### Work Area Cleaning:

 Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials.

### **INFECTION PREVENTION REQUIREMENTS - CLASS III**

• Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces.

#### Removal of Critical Barriers:

- 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.
- 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:
  - Carefully remove screws and painter tape.
  - o If dust will be generated during screw removal, use hand-held HEPA vacuum.
  - o Drywall cutting is prohibited during removal process.
  - o Clean all stud tracks with HEPA vacuum before removing outer hard barrier.
  - Use a plastic barrier to enclose area if dust could be generated.

#### Negative Air Requirements:

- The use of negative air must be designed to remove contaminates from the work area.
- Negative air devices 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:

- Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed.
- Verify that HVAC systems are clean and operational.
- Verify the HVAC systems meets original airflow and air exchange design specifications.

# **INFECTION PREVENTION REQUIREMENTS - CLASS IV**

- 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.
- All (plastic or hard) barrier construction activities must be completed in a manner that
  prevents dust release. Plastic barriers must be effectively affixed to ground and ceiling and
  secure from movement or damage. Apply tape that will not leave a residue to seal gaps
  between barriers, ceiling or floor.
- Seal all penetrations in containment barriers, including floors and ceiling, using approved materials (UL schedule firestop if applicable for barrier type).
- Containment units or environmental containment units (ECUs) approved for Class IV precautions in small areas totally contained by the unit and that has HEPA-filtered exhaust air (MiniCube Mobile Containments).
- Remove or isolate return air diffusers to avoid dust entering the HVAC system.
- Remove or isolate the supply air diffusers to avoid positive pressurization of the space.
- Negative airflow pattern must be maintained from the entry point to the anteroom and into the construction area. The airflow must cascade from outside to inside the construction area. The entire construction area must remain negatively pressurized.
- Maintain negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors. Exhaust discharged directly to the outdoors that is 25 feet or greater from entrances, air intakes and windows requires the highest degree of filtration feasible.
- If exhaust is directed indoors, then the system must be HEPA filtered. Prior to start of work, HEPA filtration must be verified by particulate measurement as no less than 99.97% efficiency and must not alter or change airflow/pressure relationships in other areas.
- Exhaust into shared or recirculating HVAC systems, or other shared exhaust systems (e.g., bathroom exhaust) is not acceptable.
- Install digital monitoring manometer with one thousandth of inch of water pressure (eg. 0.024) exterior of work containment to continually monitor negative pressurization. The non-digital manometer monitors are not acceptable.
- Contain all trash and debris in the work area.
- 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.
- Worker clothing must be clean and free of visible dust before leaving the work area. HEPA vacuuming of clothing or use of cover suites is acceptable.
- Workers must wear shoe covers prior to entry into the work area. Shoe covers must be changed prior to exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be immediately changed.
- 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.
- Collection of particulate data during work may be collected to assure that contaminates do
  not enter the occupied spaces. Routine collection of particulate samples may be used to verify
  HEPA filtration efficiencies. Collection of particulate data may be collected by Environmental
  Health and Safety or approved third party consultant.

# **INFECTION PREVENTION REQUIREMENTS - CLASS IV**

#### Class IV precautions require inspection and documentation for downgraded ICRA precautions.

Construction areas must be inspected by the designee on the containment requirements worksheet for discontinuation or downgrading of ICRA precautions.

#### Work Area Cleaning:

- Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials.
- Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces.

#### Removal of Critical Barriers:

- 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.
- 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:
  - Carefully remove screws and painter tape.
  - o If dust will be generated during screw removal, use hand-held HEPA vacuum.
  - o Drywall cutting is prohibited during removal process.
  - o Clean all stud tracks with HEPA vacuum before removing outer hard barrier.
  - Use a plastic barrier to enclose area if dust could be generated.

#### Negative Air Requirements:

- The use of negative air must be designed to remove contaminates from the work area.
- Negative air devices 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:

- Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed.
- Verify that HVAC systems are clean and operational.
- Verify the HVAC systems meets original airflow and air exchange design specifications.

# **INFECTION PREVENTION REQUIREMENTS - CLASS V**

- 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.
- All (plastic or hard) barrier construction activities must be completed in a manner that prevents dust release. Plastic barriers must be effectively affixed to ground and ceiling and secure from movement or damage. Apply tape that will not leave a residue to seal gaps between barriers, ceiling or floor.
- Seal all penetrations in containment barriers, anteroom barriers, including floors and ceiling using approved materials (UL schedule firestop if applicable for barrier type).
- Construct anteroom large enough for equipment staging, cart cleaning, workers. The anteroom must be constructed adjacent to entrance of construction work area.
- Personnel will be required to wear coveralls at all times during Class V work activities. Coveralls must be removed before leaving the anteroom.
- Remove or isolate return air diffusers to avoid dust entering the HVAC system.
- Remove or isolate the supply air diffusers to avoid positive pressurization of the space.
- Negative airflow pattern must be maintained from the entry point to the anteroom and into the construction area. The airflow must cascade from outside to inside the construction area. The entire construction area must remain negatively pressurized.
- Maintain negative pressurization of the entire workspace by use of HEPA exhaust air systems directed outdoors. Exhaust discharged directly to the outdoors that is 25 feet or greater from entrances, air intakes and windows requires the highest degree of filtration feasible
- If exhaust is directed indoors, then the system must be HEPA filtered. Prior to start of work, HEPA filtration must be verified by particulate measurement as no less than 99.97% efficiency and must not alter or change airflow/pressure relationships in other areas.
- Exhaust into shared or recirculating HVAC systems, or other shared exhaust systems (bathroom exhaust) is not acceptable.
- Install digital monitoring manometer with one thousandth of inch of water pressure (eg. -0.024) exterior of work containment to continually monitor negative pressurization. The non-digital manometer monitors are not acceptable.
- Contain all trash and debris in the work area.
- 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.
- Worker clothing must be clean and free of visible dust before leaving the work area anteroom.
- Workers must wear shoe covers prior to entry into the work area. Shoe covers must be changed prior to
  exiting the anteroom to the occupied space (non-work area). Damaged shoe covers must be immediately
  changed.
- 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.
- Collection of particulate data during work may be collected to assure that contaminates do not enter
  the occupied spaces. Routine collection of particulate samples may be used to verify HEPA filtration
  efficiencies. Collection of particulate data may be collected by Environmental Health and Safety or
  approved third party consultant.

# **INFECTION PREVENTION REQUIREMENTS - CLASS V**

Class IV precautions require inspection and documentation for downgraded ICRA precautions.

Construction areas must be inspected by the designee on the containment requirements worksheet for discontinuation or downgrading of ICRA precautions.

#### Work Area Cleaning:

- Clean work areas including all environmental surfaces, high horizontal surfaces and flooring materials.
- Check all supply and return air registers for dust accumulation on upper surfaces as well as air diffuser surfaces.

#### Removal of Critical Barriers:

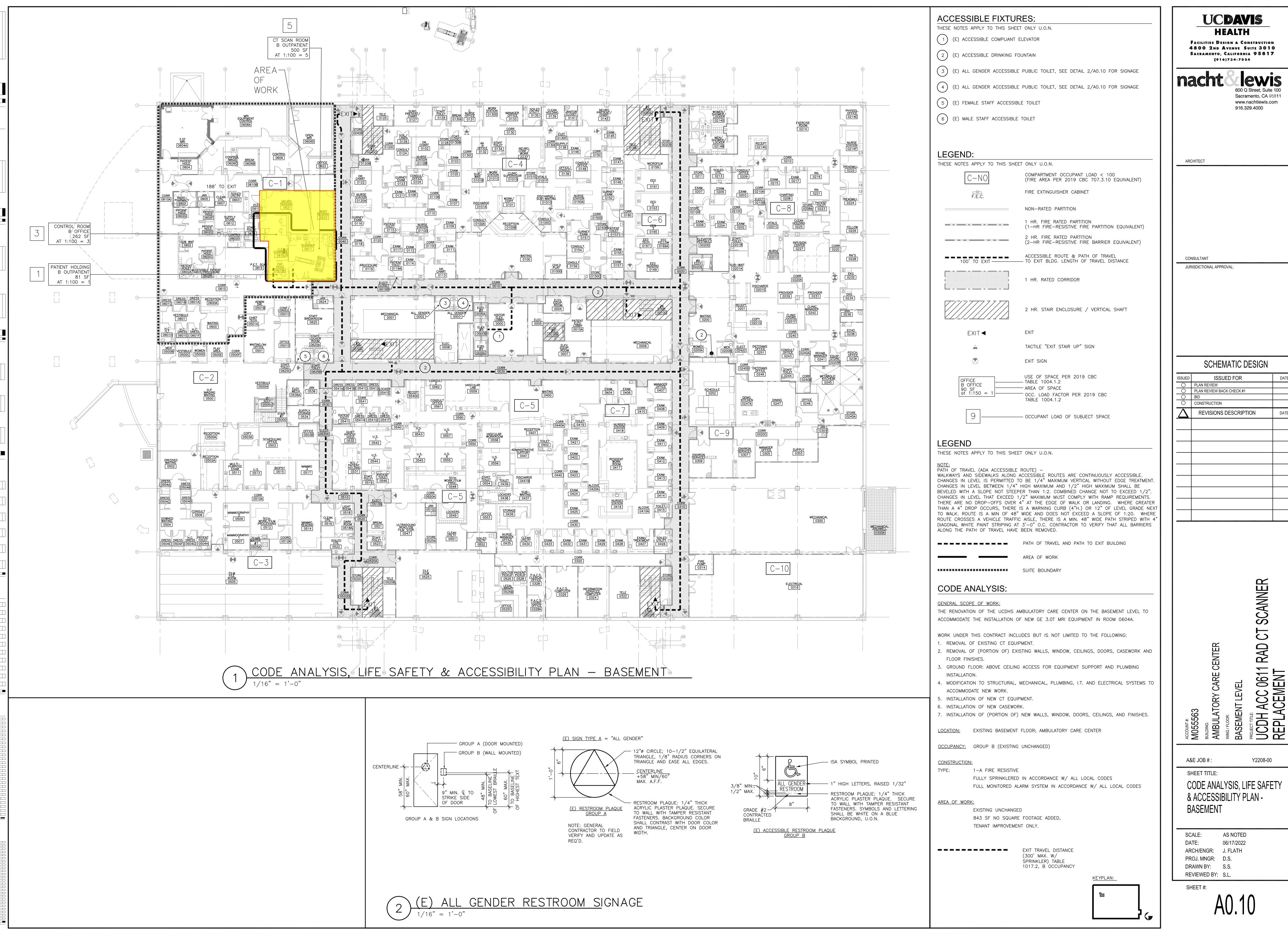
- Critical barriers must remain in place during all work involving drywall removal, creation of dust and activities beyond simple touch-up work. The barrier may NOT be removed until a work area cleaning has been performed.
- All (plastic or hard) barrier removal activities must be completed in a manner that prevents dust release. Use the following precautions when removing hard barriers:
  - o Carefully remove screws and painter tape.
  - o If dust will be generated during screw removal, use hand-held HEPA vacuum.
  - o Drywall cutting is prohibited during removal process.
  - o Clean all stud tracks with HEPA vacuum before removing outer hard barrier.
  - Use a plastic barrier to enclose area if dust could be generated.

#### Negative Air Requirements:

- The use of negative air must be designed to remove contaminates from the work area.
- Negative air devices 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:

- Upon removal of critical barriers, remove isolation of HVAC system in areas where work is being performed.
- Verify that HVAC systems are clean and operational.
- Verify the HVAC systems meets original airflow and air exchange design specifications.

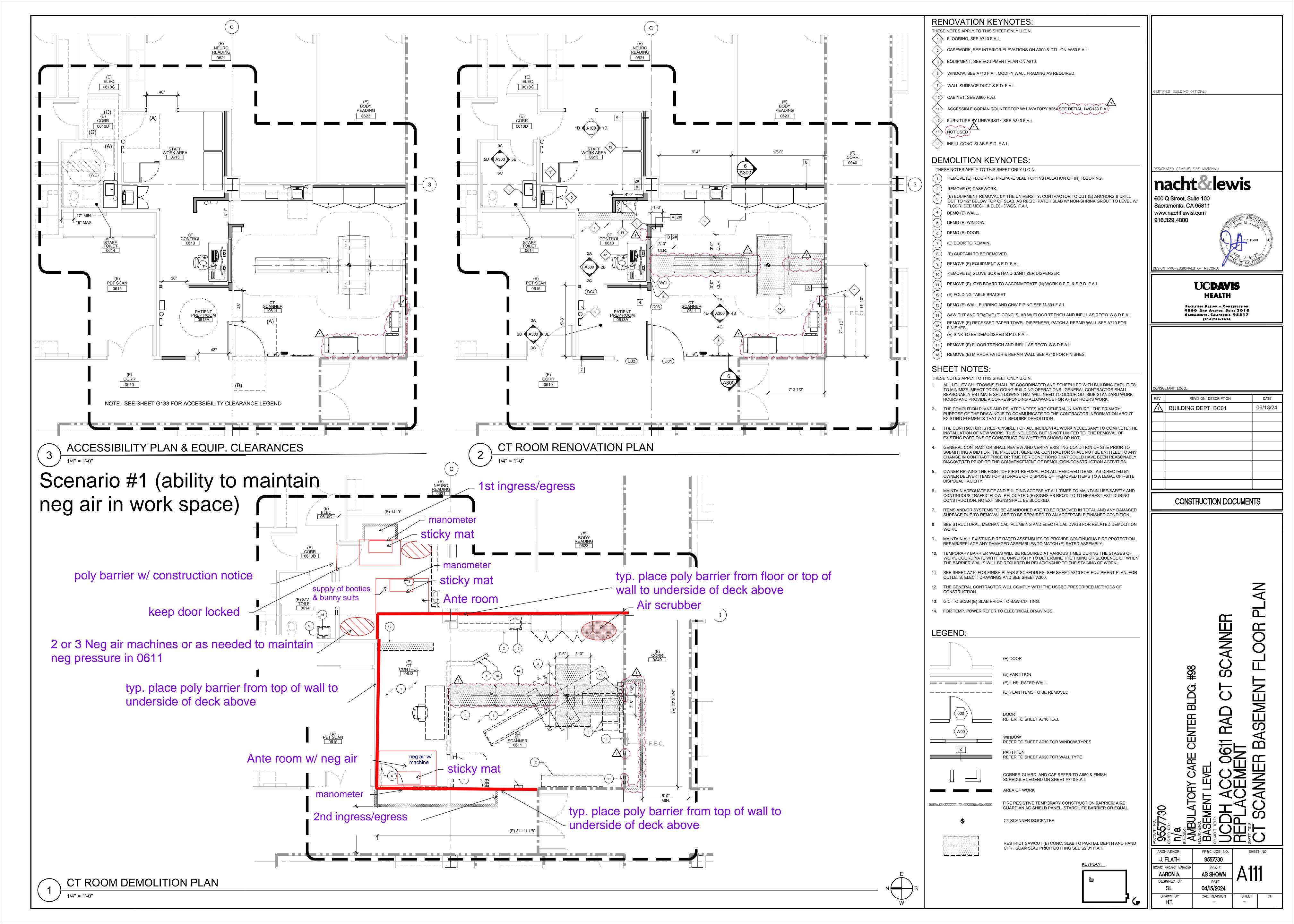


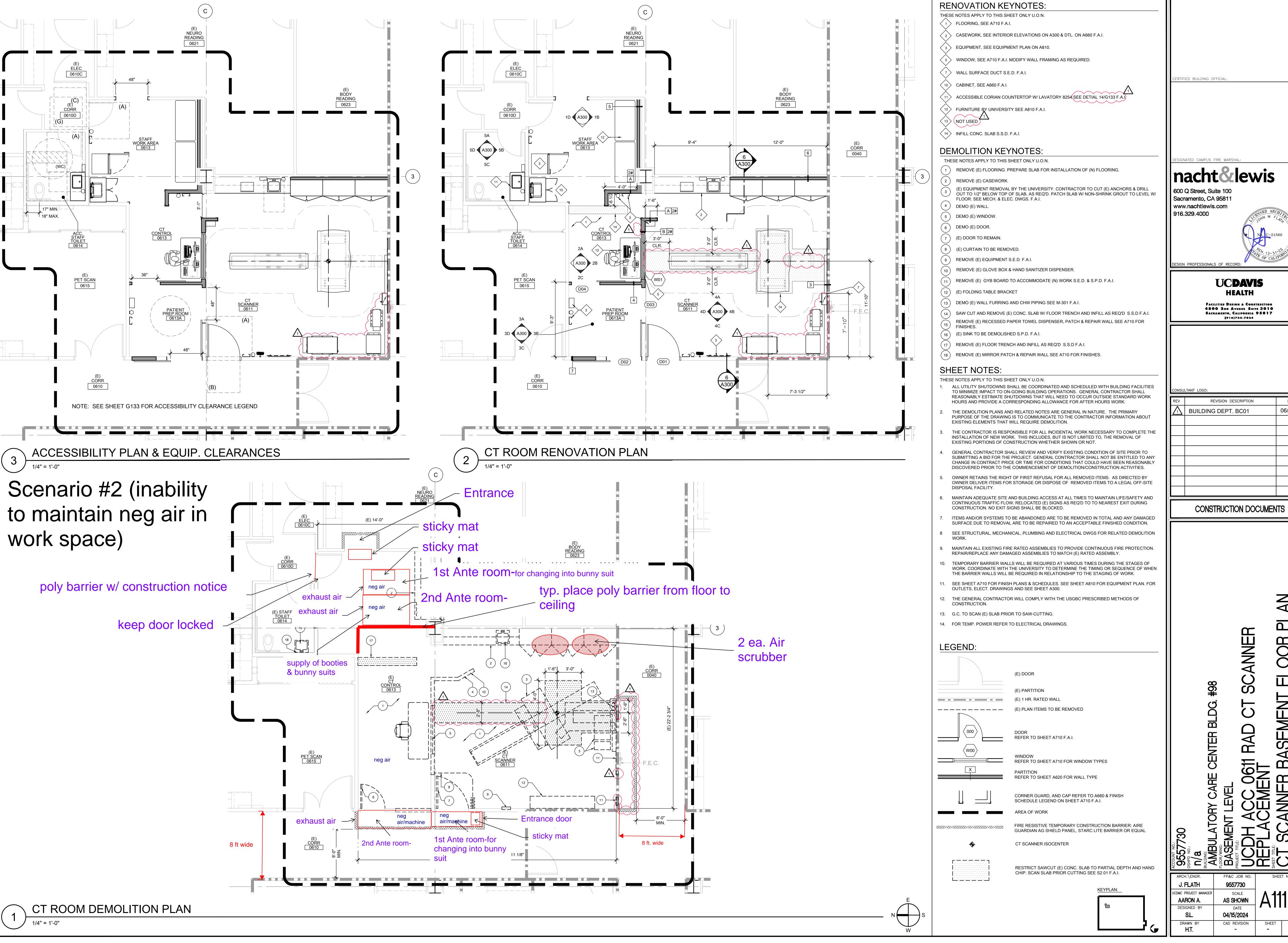
FACILITIES DESIGN & CONSTRUCTION

Sacramento, CA 95811

SCHEMATIC DESIGN

SCANNER 5 RAD





FACILITIES DESIGN & CONSTRUCTION 4800 2ND AVENUE SUITE 3010 SACRAMENTO, CALIFORNIA 95817

06/13/24