



**Minneapolis, Minnesota**

**Minneapolis VA Health Care System  
Expand Outpatient Mental Health  
618-16-111  
100% Issue For Construction**

May 5, 2017

Submitted by  
Benham  
60 E. Plato Blvd, Suite 300  
Saint Paul, MN 55107

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## **SCHEDULE**

- 65% Submittal .....2-24-17
- 65% Design Review Comments to Benham.....3-3-17
- 95% Submittal.....4-14-17
- 95% Design Review Comments to Benham.....4-21-17
- Final Issue for Construction.....5-5-17

## **SYSTEM NARRATIVES**

### **ARCHITECTURAL**

#### *DESIGN REFERENCES:*

IBC International Building Code, 2012 edition.  
NFPA 101-2015 Life Safety Code  
VA Architectural Design Manual (8/1/2014)  
VA Barrier Free Design Manual (1/1/2017)  
VA Interior Design Manual (5/2008)  
VA Mental Health Design Guide (12/2010)  
MPLS VA Design Standards (2/17/2017 printing)

#### *SCOPE:*

The spaces scheduled for remodel under this submission currently house outpatient psychiatric care spaces and an existing previously approved atrium with large planters. The Outpatient Mental Health Clinic currently houses a number of offices for the providers as well as admin and support areas such as conference rooms. The expansion project will replace the existing planter area with new group therapy rooms, a new reception area, and new offices for an additional team of providers. Approximately 70% of the existing spaces will be substantially renovated, the remainder will be repainted at a minimum. Existing bathrooms will primarily remain untouched.

#### *ARCHITECTURAL DEMOLITION:*

Existing First Floor Atrium: This area will have the existing planters removed in their entirety. Existing planters are a brick masonry construction with a sheet waterproofing liner over sloped light-weight concrete. They contain live plants, soil, and a drainage system.

Additionally, the area surrounding the planters currently has a quarry tile finish, set on a full thickness mud bed (as opposed to a thin-set installation). This tile and mud bed will be removed.

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The South and East as well as small portions of the West and North walls of the atrium will need to be shored and selectively demolished to allow for installation of the new structural framing and floor slabs. An existing fire shutter on the North wall will be removed. The walls on the NW side of the atrium (walls that extend to create the knee wall for the Surgery Waiting area on the second floor will need to be fully removed. On the first floor, these walls are a curtain wall system.

Existing Outpatient Mental Health Clinic (Area 1-P): Offices adjoining the existing atrium will be removed in their entirety. A selection of the other offices are selectively demolished, including the removal of a number of doors. These doors do not meet the current size or location required by the design. As such those doors and frames will be turned over to the owner or disposed of. Offices that experience partial demolition will have the existing ACT ceiling and flooring removed in their entirety. Existing corridors will have the vinyl wallcovering and carpeting removed in its entirety. Handrail/wall guard units will be selectively demolished as required.

*ARCHITECTURAL NEW CONSTRUCTION:*

First Floor: Construct a new waiting/reception area with space for 5 reception desks (millwork construction). Eight new group therapy rooms are added, the largest of which will have large built-in storage cabinets for the storage of supplies. The new reception area will have limited controlled access points into the provider office area. Offices for one new team of providers will consume the South “leg” of the infilled atrium area. The East ~1/3 off the existing offices are rebuilt per a new layout. A new breakroom is created, as well as (2) staff bullpens and (2) staff conference rooms. One of the conference rooms will be temporarily subdivided using demountable partitions. A number of doors are relocated/removed and the openings infilled. Most existing doors in the project are 3’x7’ doors.

Most new doors will be flush wood doors. However, all cross corridor doors will be wood doors with narrow lite in the door. Doors in the entry to the spaces will be “full lite” wood doors, with light having translucent film featuring a color gradient.

The wall separating the main admin “BizHub” from the reception desk will be full height with a decorative panels inset and back lit. Decorative panels are to decorative resin glass product made by Lumicore or approved equal.

The smoke control zones have been reconfigured. Walls separating the smoke control zones shall be built as or upgraded to 1-hour fire/smoke resistant barriers. All new walls will extend up to the underside of the interstitial slab.

Second Floor: Reconstruct (4) air distribution pilaster to match others already present on the second floor, in locations where the same were removed on the first floor. Rebuild the wall separating the surgery waiting area from the “new” 2<sup>nd</sup> floor slab area. **At this point**

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**in time, the VA is intending to decorate/infill on the “new” slab area as part of a separate project.**

The new interstitial and second floor slabs and their supporting structure shall be of 2hr fire rated construction.

## **INTERIORS**

Interior finishes will follow Minneapolis VA Standards wherever possible. In the event of a new selection is required due to availability or a discontinuation, one will be made with patient comfort, durability and ease of cleaning in mind. All new flooring as part of the scope of work will include a floor leveling compound in the specification as a result of the area being on the concrete slab that potentially has defects in the flatness that require repair.

All areas within the Outpatient Mental Health Clinic, except those that retained their existing floor finish, will receive a new carpet tile floor finish with a 4” vinyl base. Additional exceptions to that are the new restroom, breakroom and custodial closets. Those areas will receive ceramic tile (restroom) and VCT (others). An LVT accent in the main corridor in the space and through the waiting room is also provided. Walls in the interior corridors will have a vinyl wall covering wainscot and hand/guard rail. The walls will all be painted in a light neutral color with Egg Shell finish. The lighting will utilize new LED technologies and match that of the fixtures used in the previous project down the hall.

The corridor outside of Outpatient Mental Health Clinic will have a stone veneers wainscot, stainless steel base and hand/guard rail. The entry into the clinic will be clad with wood veneered panels.

New standard signage will be implemented for the rooms affected within this project. Any furniture shown on the drawings is intended for coordination and intent purposes only. Final furniture plans will be generated by furniture vender in an effort led by the owner.

## **STRUCTURAL**

### *DESIGN REFERENCES:*

IBC International Building Code, 2012 edition.  
VA Structural Design Manual for Hospital Projects (2/1/2014)  
VA Seismic Design Requirements H-18-8 (10/1/2016)

### *SCOPE:*

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The existing atrium will be infilled with new structure at the second floor and first interstitial levels.

***STRUCTURAL DEMOLITION:***

A portion of the basement floor slab will be demolished and reconstructed in order to access or construct a footing below. Portions of the intermediate level gypsum slab will be removed at edges abutting new construction.

***STRUCTURAL NEW CONSTRUCTION:***

Second Floor: The second floor will be constructed of lightweight concrete on metal deck and steel I-beams.

First Interstitial Level: The interstitial level will be constructed of lightweight concrete on metal deck and steel tee-beams. The tee-beams will be hung from the second floor beams above.

First Floor: New steel columns will support the new structure above.

Basement: One new steel column to support the new structure above. This column will bear on an abandoned tower crane footing if present or on a new footing if not.

**MECHANICAL SYSTEMS**

***SCOPE:***

The spaces scheduled for remodel under this submission include remodel of existing mental health (VA-MH) office space plus creation of new spaces on the First Floor. The new spaces will occupy what is currently the SW Atrium at VA-Minneapolis. The new spaces will reside in a new structure including a new interstitial space and a hard lid. The new interstitial space shall have a walkable hard surface and hard lid above. This interstitial area shall communicate to the existing first floor interstitial.

The new structure for the entirely new space shall occupy approximately 6500 SF at VA-MH.

The smoke control zones (SCZ) that serve VA-MH include SCZ-27 and SCZ-28. The SF of the two zones total 33,510 SF

Four field fabricated supply duct semi-circular shafts shall be retrofit to continue to serve Atrium supply air. These must be cut off at the first floor atrium and the large shafts replicated on the second floor above the new lid.

The VA-MH remodel shall include a number of group meeting rooms and large conference rooms.

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A bid alternate shall be entertained for the complete replacement of existing pneumatic controls and retrofit to electronic DDC control. This shall be described in the HVAC (NEW) below.

**MECHANICAL DEMOLITION:**

Existing mechanical systems shall be revised and supplemented as required to serve the new functions of the remodeled VA-MH.

Air Handler 70-AH1SW-9: 'AHU-09' shall be reused and retrofit to serve the spaces. A new fan system and a new cooling coil shall be employed. A duct take off shall be increased to 32" round from the existing discharge plenum. Total retrofit will involve the following activities in retrofit of AHU-9 at VA-MPLS:

- Open up the insulated 8' wide x 8' high fan section to accommodate the fan removal from the insulated double wall AHU section.
- Remove Existing fan, 22" diameter wheel, old 'Bayley' mfr fan and associated fan base, motor assembly, electrical connections, sheet metal wall and flex conn.
- Remove baffle plate in the downstream section after the fan.
- Remove a chilled water cooling coil and remove the 52 GPM piping up to the point of chilled water main.
- Provide temporary chilled water shut-off and after hour service for a cut-over to new 4" chilled water.
- Remove the coil section wall to accommodate the coil removal.
- Remove associated structural steel angle iron and intermediate drain pans inside the AHU holding up the coil.
- Remove existing 24" diameter supply air takeoff in the top of discharge plenum.

Return Fan RF-8: Fan nomenclature 70-RF-8: 'RF-8' shall be reused to serve the spaces. A new motor change and rebalance of RF-8 shall be required.

ATRIUM: Hydronic hot water cabinet unit heaters reside in the planter brickwork of the existing first floor atrium. Mark 70-CUH-39 through 42. These cabinet unit heaters shall be demolished. The HWS/HWR piping and associated controls for these units shall be demolished. Controls shall be removed. See plumbing notes below for demolition of floor drains and plumbing.

HVAC spaces: The existing HVAC shall be retrofit to achieve new supply and return air distribution. Some existing VAV boxes shall be retained, with new diffusers or distribution as indicated on plans.

The spaces on the existing perimeter wall shall continue to be served with hot water reheat coils in the VAV boxes plus control of the existing hydronic heating radiation at the floor. This equipment shall be reused and rebalanced. The controls for these are

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pneumatic and the base bid is to retain the pneumatic control. (Under the bid alternate #1 these shall be retrofit to DDC –see below).

The existing pneumatic thermostat and control valves shall be removed and replaced with electronic DDC for all VAV boxes slated for demolition and replacement with new VAV boxes.

Exhaust fan EF-20: The fan shall be rebalanced. The fan serves toilets and other spaces. Ductwork attached to EF-20 shall be modified as indicated on plans.

**HVAC (NEW):**

**VAV:**

New mechanical systems shall include new digital VAV boxes and interface to Johnson (JCI) DDC control system. Provide new supply air and exhaust/return air. VAV boxes shall have hot water reheat coils, electric actuators and digital sensors. Sensors shall have occupant up/down button for minor (DDC interface adjustable bias) adjustment of space set point.

- Provide new VAV boxes with reheat coils. Electronic actuators and DDC control. Titus DESV terminal boxes as a basis of design.

**VAV Existing boxes:**

- Mechanical systems shall include reuse of pneumatic VAV boxes with pneumatic thermostats. Retrofit of supply and return distribution systems as indicated on plans. Provide new downstream ductwork, diffusers or return grilles as indicated on plans.
- Boxes on the perimeter wall (11 thus) shall continue to have hot water radiation and pneumatic valves and control. The controls shall pneumatically operate the reheat coils and the floor radiation in concert to maintain room set point.
- Quantity as indicated on plans.

**AHU-09:**

Retrofit of existing Air handler including a new 4-fan array consisting of direct drive plenum fans in a fan wall, each with heavy duty backdraft dampers. System approach shall be 'N+1' redundancy. A new chilled water cooling coil shall be provided:

- Install new fan wall sheet metal panel to accommodate an 86.6" x 86.6" new fan wall array.
- Install new 4-fan array including misc. angle iron to hold up the 4 fans and the backdraft damper assembly that reside on the 'wall.'
- Install new 42" x 84" coils in a bank of 2 coils, with intermediate drain pans beneath each coil bank, and including structural angle iron stand and sheet metal blank-off from coils to AHU wall.



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- Reinstall / rebuild new AHU walls, 2” insulated double skin built up AHU construction for the fan section and the coil Section.
- Add new 32” round supply in place of existing at AHU discharge plenum. Provide new 32” dia. supply and connect to existing at mechanical room wall.
- Provide new (4”) piping to the cooling coil, and tie into the existing chilled water main, including isolation valves, balance valve, and a two-way control valve.
- Add wet-tap of the new 4” CWS and CWR to the existing 8” lines.
- Install 1 lot of DDC controls for control of analog-out for Fan VFD control, cooling coil control, analog-in leaving air temp sensors after coil, and freeze protection sensor. Approx. 10 points of DDC.
- New VFD drives, 4 thus; one for each fan (Div 26 shall provide the drives) each 20 HP variable speed drive as specified by Div. 26 for install by electrical contractor. Mechanical shall provide interface and control sequence for N+1 operation of the new 4-fan array. Under normal operation all 4 fans shall operate and ramp together to provide VAV control. If one fan is not operational the VFD shall modulate the remaining 3 fans to maintain duct pressure set-point.

RF-8:

Replace existing motor with new 15HP 480/60/3 motor.

- New variable speed drive as specified by Div. 26 for install by electrical contractor.
- Mechanical shall provide interface and control sequence for fan tracking of RF-8 with AHU-09. New DDC control to modulate RF-8.
- Provide rebalance of fan including sheave and belts as required to achieve scheduled CFM.

Atrium:

- Four field fabricated supply duct semi-circular shafts shall be retrofit to continue to serve Atrium supply air. These must be cut off at the first floor atrium and the large shafts replicated on the second floor above the new lid. The details for this assembly include curved grilles that reside at the bottom plenum of the construction. The architectural details including plaster outer covering of the shafts are shown on existing VA drawing 70-H181 detail 1, dated 7/2/1984. Replication of these semi-circular 4’ diameter supply systems shall be required.

EF-20:

Exhaust fan EF-20: The existing fan shall be rebalanced. The fan serves toilets and other spaces. Ductwork attached to EF-20 shall be modified as indicated on plans. Provide new exhaust ductwork and grilles as indicated.

HVAC Test and Balance:

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Provide TAB service for all systems attached to AHU-9 and RF-8. Provide TAB for entire AHU, RF-8, and VAV systems. Airside and hydronic system balancing shall be required.

Automatic Temperature Controls:

Provide DDC controls including control sequence and diagrammatic shop drawings for complete and operating DDC system. Provide modification of existing AHU and RF start/stop, Fan tracking and VFD modulation, and VAV box control.

**BID ALTERNATE:**

Quantity 29 existing VAV boxes (terminal control boxes) shall be retrofit from pneumatic to DDC. These reside in the interstitial space.

- VAV box remains.
- Pneumatic actuator on box gets removed and tubing gets demolished.
- Associated thermostat gets removed and tubing gets demolished.
- New DDC actuator gets installed on box in interstitial space. New DDC thermostat shall be installed in room.
- Quantity 29 thus.

Some of the above 29 boxes above have hot water reheat and floor radiation;

- Existing VAV boxes slated to remain: The reheat coils at VAV boxes in interstitial space shall be converted to DDC.
- Radiant heat (finned tube) at exterior rooms shall remain but shall be converted to DDC.
- Pneumatic control valve at reheat coil shall be removed in its entirety from the piping. A new DDC valve gets installed in same location.
- Pneumatic control valve at Radiant heat removed in its entirety from the piping. A new DDC valve gets installed in same location.
- Quantity 11 thus.

PLUMBING:

Plumbing demolition shall include removal of floor drains and piping in the SW Atrium at the planters. Wall hydrants at pilasters shall be demolished and domestic cold water plumbing removed back to mains. Demolition work shall encompass sanitary waste and vent piping in the interstitial space below.

Provide new wall mounted sinks and water closets as indicated on plans. Provide new mop sink in janitor's closet. Provide one new stainless steel sink and faucet in break room. Provide hot and cold water and connect to piping mains in interstitial space. Provide sanitary waste and vent and connect to existing.

Provide two new electric water coolers, one single and one dual-height ADA compliant.

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Plumbing work shall be performed as indicated on plans. No medical V/A/O work shall be required.

## **FIRE PROTECTION SYSTEMS**

### *DESIGN REFERENCES:*

International Building Code - 2015\*

VA Fire Protection Design Manual - 2015

NFPA 72 - 2016                National Fire Alarm and Signaling Code

NFPA 13 – 2016             Standard for the Installation of Sprinkler Systems.

NFPA 101 - 2015\*\*        Life Safety Code

**\*\*The state of Minnesota currently adopts an amended version of the 2012 IBC.**

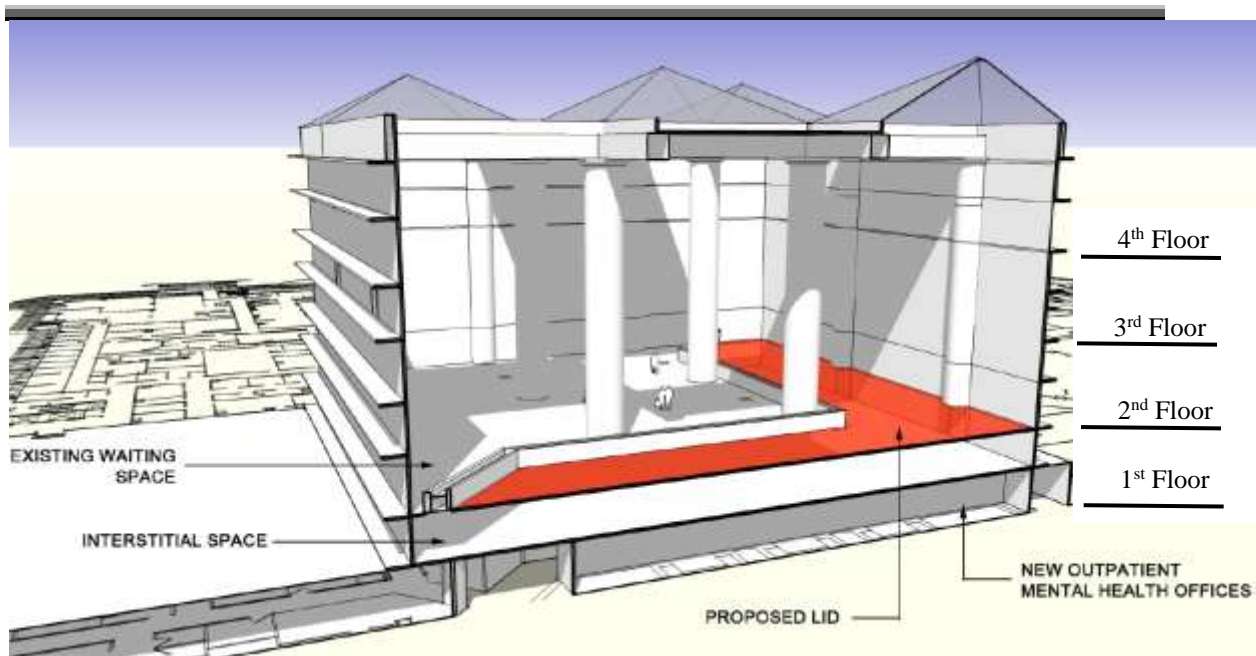
**Note: For design features that are addressed by both the IBC as well as by NFPA 101, the requirements of NFPA 101 shall be used exclusively (this applies even if the IBC requirements are different)**

### *SCOPE:*

The Mental Health clinic in the Minneapolis VA Medical Center is currently undersized and in need of additional space. The existing Mental Health clinic is located on the 1st floor and the space adjacent to the existing clinic is currently used as a seating area with benches and large planters. The seating area is located on the lowest level (street level) of a 4-story atrium. This atrium space is part of the original building structure built in 1984. The perimeter walls of the existing atrium are comprised of Aluminum curtain wall with metal panels and keyed, operable, non-rated glass windows, creating a smoke barrier classification of the entire shaft from the 1st floor slab to the roof. A passive smoke evacuation system is utilized and is accomplished through the use of motorized smoke hatches located at the roof that open upon smoke detection in the space. The existing atrium space is not sprinkler-protected.

The proposed renovation of the space would remove the seating area and planters on the first level to provide additional offices and training rooms for the existing Mental Health clinic. This renovation will include creating a new “lid” above the existing seating area, at the level of the existing 2nd floor waiting area, reducing the height of the entire space above from 4 stories to 3 stories, open from the 2nd to the 4th floor.

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### *OCCUPANCY CLASSIFICATION*

Per NFPA 101, the VA Medical Center is classified as a mixed-use building consisting of Health Care occupancy, Ambulatory Health Care occupancy, and Business occupancy. The Mental Health clinic will primarily consist of Business occupancy.

Per the International Building Code, the building is classified as a mixed-use occupancy consisting of Institutional Group I-2 and Business Group B occupancies. The Mental Health clinic will primarily consist of Business Group B occupancy.

### *BUILDING ALTERATIONS*

NFPA 101 classifies building alterations in different categories of increasing alteration work:

1. Repair - The patching, restoration, or painting of materials, elements, equipment, or fixtures for the purpose of maintaining such materials, elements, equipment, or fixtures in good or sound condition.
2. Renovation - The replacement in kind, strengthening, or upgrading of building elements, materials, equipment, or fixtures, that does not result in a reconfiguration of the building spaces within.

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3. Modification - The reconfiguration of any space; the addition, relocation, or elimination of any door or window; the addition or elimination of load-bearing elements; the reconfiguration or extension of any system; or the installation of any additional equipment.
4. Reconstruction - The reconfiguration of a space that affects an exit or a corridor shared by more than one occupant space; or the reconfiguration of a space such that the rehabilitation work area is not permitted to be occupied because existing means of egress and fire protection systems, or their equivalent, are not in place or continuously maintained.
5. Change of use or occupancy classification - A change in the purpose or level of activity within a structure that involves a change in application of the requirements of the *Code*, or the change in the occupancy classification of a structure or portion of a structure.
6. Addition - An increase in the building area, aggregate floor area, building height, or number of stories of a structure.

As previously mentioned, the scope of this project is to expand the existing mental health clinic on the first floor of the hospital. The expanded portion of the clinic will encroach into the first floor of the existing 4-story atrium. Based on the level of rehabilitation, this project will be classified as a “modification” and a “reconstruction” project.

The requirements in the code for “reconstruction” projects must also comply with the requirements for “modification” and “renovation” projects. NFPA 101 Section 43.5.1.3 states that:

*“Newly constructed elements, components, and systems shall comply with the requirements of other sections of the code applicable to new construction.”*

In other words, any newly constructed portion of the mental health clinic shall comply with requirements applicable to new healthcare and business occupancies. Therefore, since the remaining portion of the atrium will not be rehabilitated, the atrium will not be brought up to new codes. Additionally, it should be noted that the renovation work on the first floor will not adversely affect the atrium with regards to fire protection and life safety.

For example:

1. The planters on the first floor will no longer be within the atrium so the fuel load inside the atrium will be reduced.
2. The egress from within the atrium will remain unaffected

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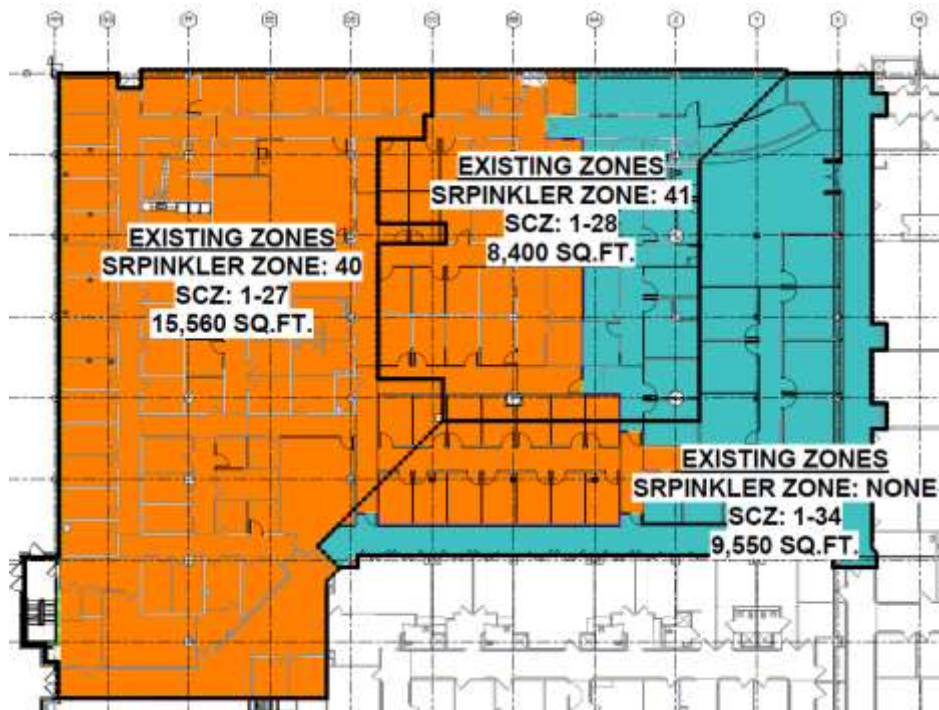
3. Fire suppression in the atrium will remain unchanged. The 1981 edition of NFPA 101 did not require sprinkler protection in atriums where the ceiling is greater than 55 feet above the floor. Once the mental health clinic is added to the first floor, the new floor to ceiling height will still be greater than 55 feet.

Any upgrades to the atrium are not explicitly required by the code, so any atrium upgrades are considered outside of the scope of this project.

***FIRE SPRINKLER:***

The existing mental health clinic is protected with a wet-pipe automatic sprinkler system. Sprinkler heads in these areas are of the “institutional” type. The atrium area on the first floor does not have sprinkler protection since it was not required at the time of original construction. Fire hose valves are provided throughout clinic in various locations. The feed main for the fire hose valves come from an adjacent zone.

The scope of work for this project will affect two different sprinkler zones: Sprinkler Zone 40 and Sprinkler Zone 41. These two zones are served by a dedicated 4-inch control valve assembly located in the interstitial space adjacent to Stair 10. Sprinklers within these zones will be relocated based on the architectural renovations.



*Existing Sprinkler Zones*



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The image above shows the new architectural floor plan with the zone boundaries. The existing zone boundaries are indicated by the dashed line, and the new zone boundaries are indicated by the color orange (new Zone 40) or teal (new Zone 41). Sprinklers within several offices will be re-zoned based on the image above. The majority of Zone 41 will be demolished to accommodate the expansion of the mental health clinic into the atrium.

Any impairments to the sprinkler system during construction will be coordinated with Building Management and the local Fire Department.

#### ***FIRE ALARM:***

The existing mental health clinic is protected by a Gamewell FCI fire alarm system. Notification appliances include clear-lens strobes and fire alarm horns. Fire detection is provided via the heat sensing element in the sprinklers. Smoke detection is provided via spot-type smoke detectors located throughout all rooms and common spaces. The scope of work for this project will affect three different smoke control zones (SCZ): SCZ 1-27, 1-28, and 1-34 (atrium).

The smoke control zone boundaries will be rearranged based on the renovation work. SCZ 1-34 will be eliminated from the project and replaced by SCZ 1-28. The address to any fire alarm equipment within the affected zone boundaries will be reprogrammed accordingly. All new mental health areas will be provided with smoke detection, and occupant notification.

Any impairments to the fire alarm system during construction will be coordinated with Building Management and the local Fire Department.

## **ELECTRICAL SYSTEMS**

#### ***DESIGN REFERENCES:***

Program Guide PG-18-15  
NFPA 70-2014  
IESNA

Volume C, November 2008  
National Electrical Code (NEC) 2014  
Illuminating Engineering Society of North  
America – 9<sup>th</sup> edition Lighting Handbook

#### ***SCOPE:***

The spaces scheduled for remodel under this submission currently house the Outpatient Mental Health department and the associated waiting space located on the first floor of the Southwest Atrium. The spaces are to be remodeled to accommodate a new lid and interstitial space over the 1<sup>st</sup> level of the Southwest Atrium, new offices and group rooms and a new reception area for the Outpatient Mental Health facility. The existing electrical and low voltage systems shall be revised and supplemented as required to serve the new functions of the space.

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*ELECTRICAL DEMOLITION:*

Power and Low Voltage Systems:

Existing electrical and low voltage systems serving functions that are no longer required will be disconnected and removed back to the source panel or telecommunications rack located in room 1P-111/1P-110/1P-110A. Light fixtures, switches, receptacles, junction boxes, voice/data devices, surface mounted raceway, fire alarm notification devices, security devices, and door holders are to be disconnected and removed. All associated conduit, wiring and cabling is to be removed back to source. Conduit and wiring shall be extended as necessary to maintain circuit continuity to all receptacles and systems that are shown as existing to remain. All existing voice/data cabling shall be removed and replaced with new CAT 6A cabling and terminated on existing telecommunication racks.

HVAC:

Existing electrical connections to Supply and Return fans in 1J-122 shall be disconnected and removed back to source. New electrical connections to larger fan/fan array shall be provided.

*POWER:*

New receptacles shall be provided at new workstation locations. (1) quad receptacle shall be provided behind workstation and (1) duplex shall be provided at all other walls in each office. New receptacles shall be provided for each new refrigerator, microwave, biz hub, kiosk, smart board, V-Tel station and printer. An existing wire way system is utilized to route lighting, general and emergency power through the interstitial space located above the 1st floor. A new wireway system shall be provided in the new interstitial space to route 120V power back to electrical room 1P-111. A new 120V panel “NL1J1-3” shall be provided to serve new reception desk, offices and group rooms.

*LIGHTING:*

2’x4’ recessed LED lighting is proposed for rooms new office spaces where new ceiling are provided. Dimmer switches will be provided in all rooms where new LED lighting is provided. All interior lighting levels will meet IESNA requirements. A bid alternate will provide replacement of all existing lighting not scheduled for removal.

*TELECOMMUNICATIONS:*

The rooms are served by existing Communications racks located in Electrical rooms 1P-109. A new cable tray system shall be provided to route new CAT 6A cabling through interstitial space back to telecom rack in room 1P-110/1P-110A.

An existing wire way system is utilized to route fire alarm and other low voltage systems through the interstitial space located above the 1st floor. A new wireway system shall be provided in the new interstitial space to route signal cabling back to telecom room 1P-110.



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*SECURITY:*

Access control devices (Keypad/Card Reader) will be provided at all secured entrances into Outpatient Mental Health Facility. Duress buttons will be provided at all office workstations and group rooms

*NURSE CALL (CODE BLUE):*

New emergency call stations will be provided at new bathrooms and group rooms. Existing emergency call stations will be replaced with new devices compatible with Rauland Responder V system.

*PA SYSTEM:*

Existing PA system zone serving Outpatient Mental Health shall be extended as necessary to accommodate new speakers in commons areas and corridors within the new space.