KENNEWICK, WASHINGTON

COLUMBIA VALLEY CENTER FOR RECOVERY

VALIDATION REPORT

BOULTEN CONSTRUCTION COMPANY NAC

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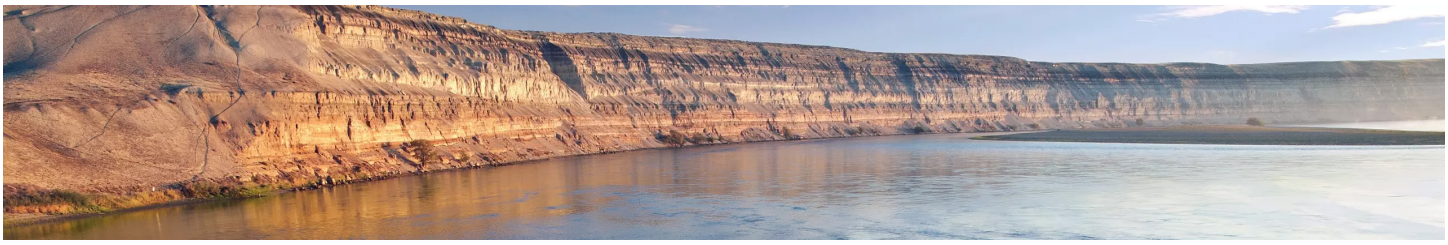
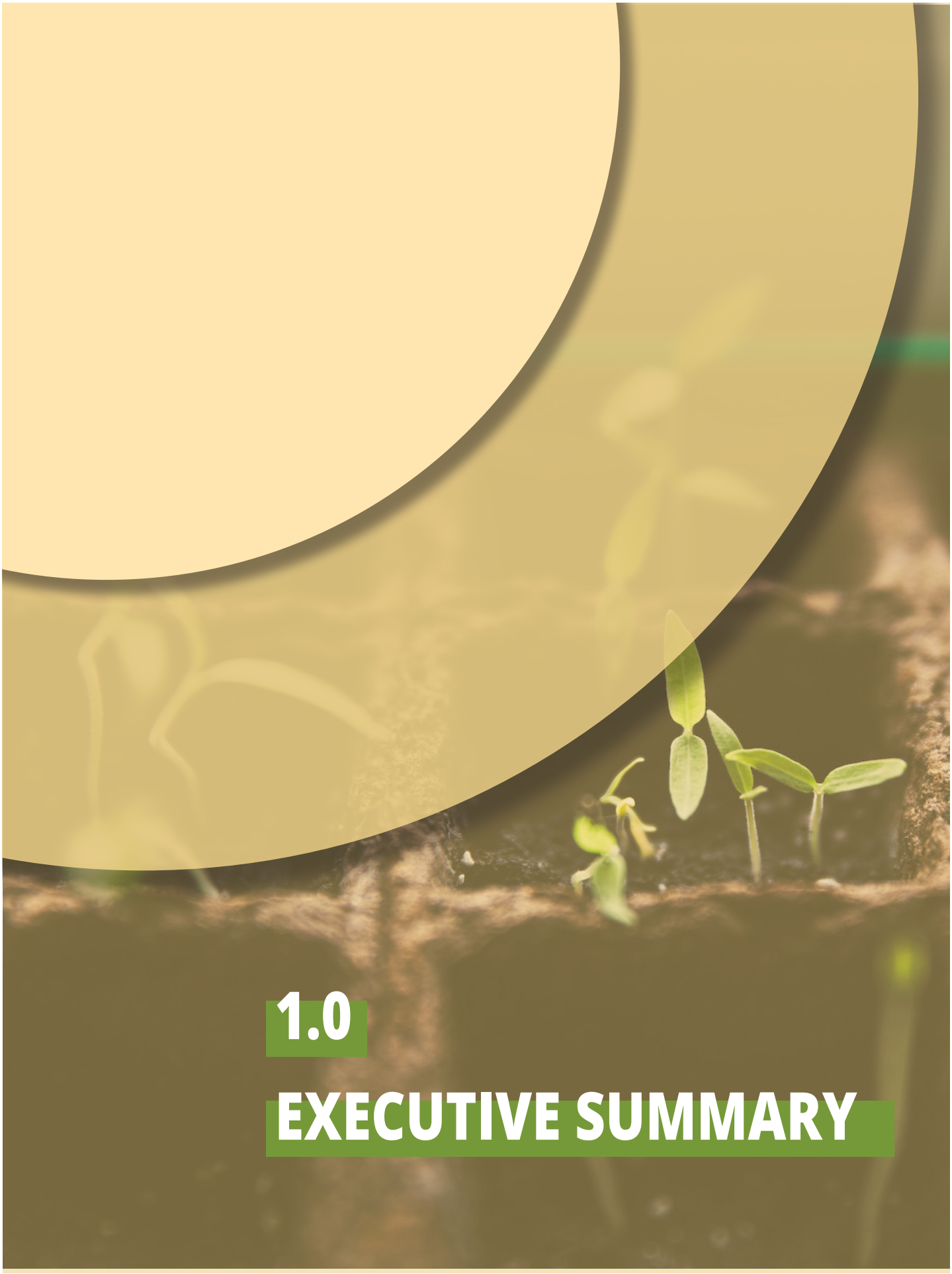




1.0 EXECUTIVE SUMMARY

1.0 Executive Summary

1.0 Executive Summary

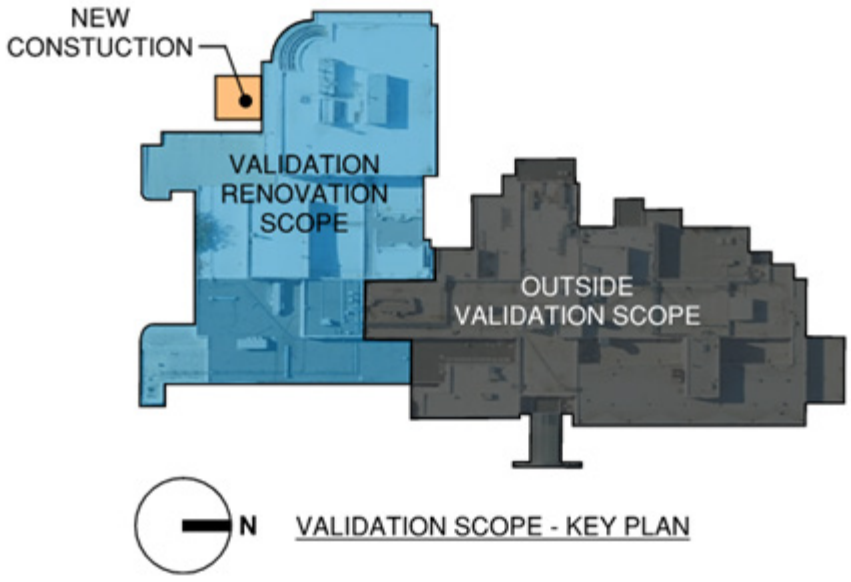
A health needs assessment and health improvement plans completed by the Benton Franklin Health District and Kadlec Hospital both concluded that behavioral health challenges, such as mental health, substance abuse, and suicide, constitute the greatest unmet needs in Benton and Franklin Counties. Both the health needs assessment and health improvement plans call for increased access for services and strongly support a community-wide effort to improve access to services for detox, recovery, and substance abuse treatment within the region.

In September 2023, Benton County retained Bouten Construction Company as the design-build team to work with Benton County to achieve the most cost-effective, creative, operationally efficient, and programmatically balanced project within a $20.6 million dollar budget (later revised to $23.0 million), and to select a site to accommodate the program and needs.

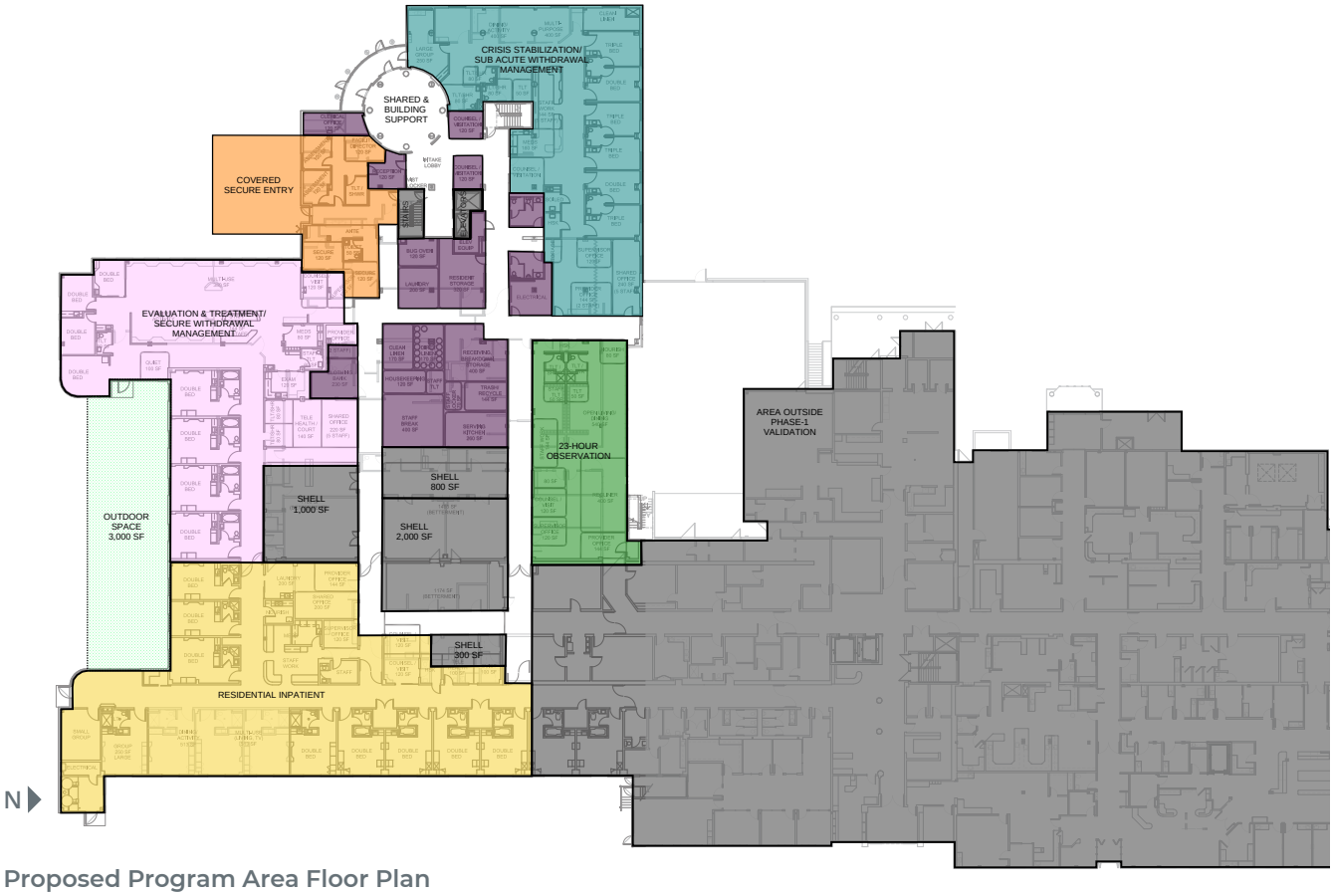
Through the work completed in the validation phase of this project, a summary outlining the validity and feasibility of delivering this project is provided as follows:

SITE SELECTION

The Auburn site appears to be best suited to accommodate the program space and future programs. The program area planned will consist of approximately 39,000 SF within the 151,774 SF Auburn building, which means several areas within the building would not be used for the current, planned program. At the time the project commenced, it is was noted that a deed restriction is tied to the property. They will address the Deed Restriction separate from the design-build team programming to meet the owner project criteria, which states from Exhibit C – Use Restrictions from the RFP 1.3.b.ii "the operation of a short term facility licensed or certified by the Washington State Department of health or its successors to access, diagnose, and treat patients experiencing an acute crisis without the use of long term hospitalization, currently known as a "single crisis stabilization unit" under Washington law; subject to the limitation that any patient's stay in such crisis stabilization unit may not extend to more than 72-consecutive hours". Benton County has noted that they will address this deed restriction separate from the design-build team's efforts and this is no longer a restraint for the design-build team.



VALIDATION SCOPE - KEY PLAN



Proposed Program Area Floor Plan

For full size plan, refer to Exhibit W: Phase 1 Level 1 Floor Plan

PROGRAM AREA AND PRELIMINARY DESIGN

The current planned program area of approximately 39,000 SF is situated mainly within the first floor of the Spaulding Building (constructed in 1992), the existing surgery suite which was constructed at the same time as the Spaulding Building, and a portion of the existing hospital in the LDRP addition completed in 1986. This area of the hospital is most conducive to our budget and program.

EXISTING BUILDING CONDITIONS

The existing building consists of the original hospital. The exact year of construction is currently unknown, but our assumption is some time in the late 1940's. Several additions and remodels have been completed over the years. While the Mechanical systems are outdated, portions are assumed to be in a condition suitable for re-use. A new HVAC system will be required due to the age and corrosion of the existing steam and chilled water systems. The plumbing system shows signs of aging and corrosion and there is a concern with the conditions of the underground waste lines which will be addressed in design. The electrical service area is sufficient to accommodate the program. The exterior envelope and roof will require repair and, in some cases, replacement. The site areas will need to be addressed to accommodate City of Kennewick standards.

TARGET BUDGET

A target budget, including design and construction of $23.0 million, has been developed to support and accommodate the building needs and program space located within the Auburn facility. This budget includes provisions to upgrade the building to accommodate occupancy of the existing facility for this program space as well as provisions to complete alterations to the mechanical system to make it functional. The existing interior spaces will be upgraded to incorporate the behavioral health program.

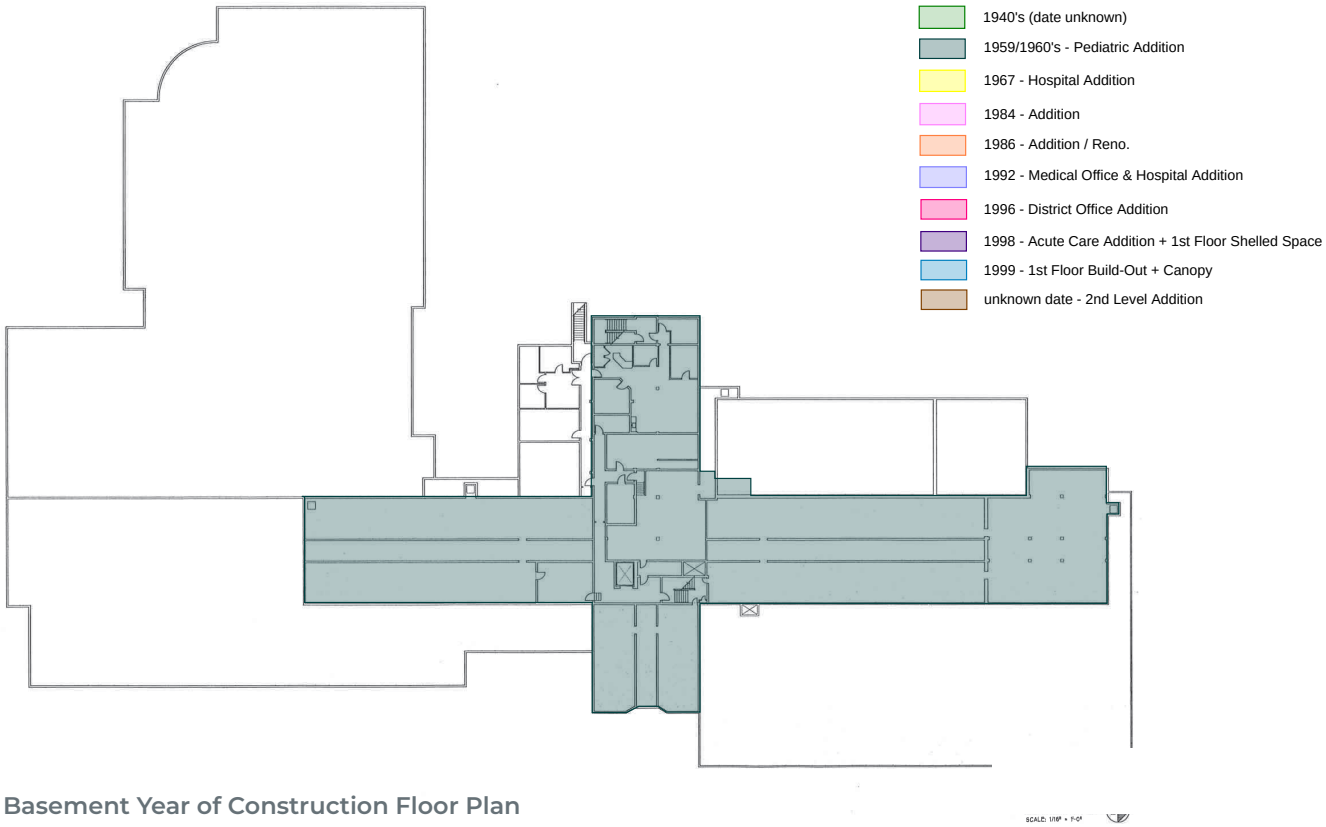
SCHEDULE

The schedule currently represents Phase 1 - Design and Preconstruction, commencing May through September, 2024, with select demolition and construction starting in September. The planned completion is December 2025.

PERMITTING

The renovation work to accommodate the program space will require permitting through DOH and the City of Kennewick, including reviews by the Fire Marshall. The entire facility will be required to meet fire code.

Existing Auburn Building Years of Construction for Reference

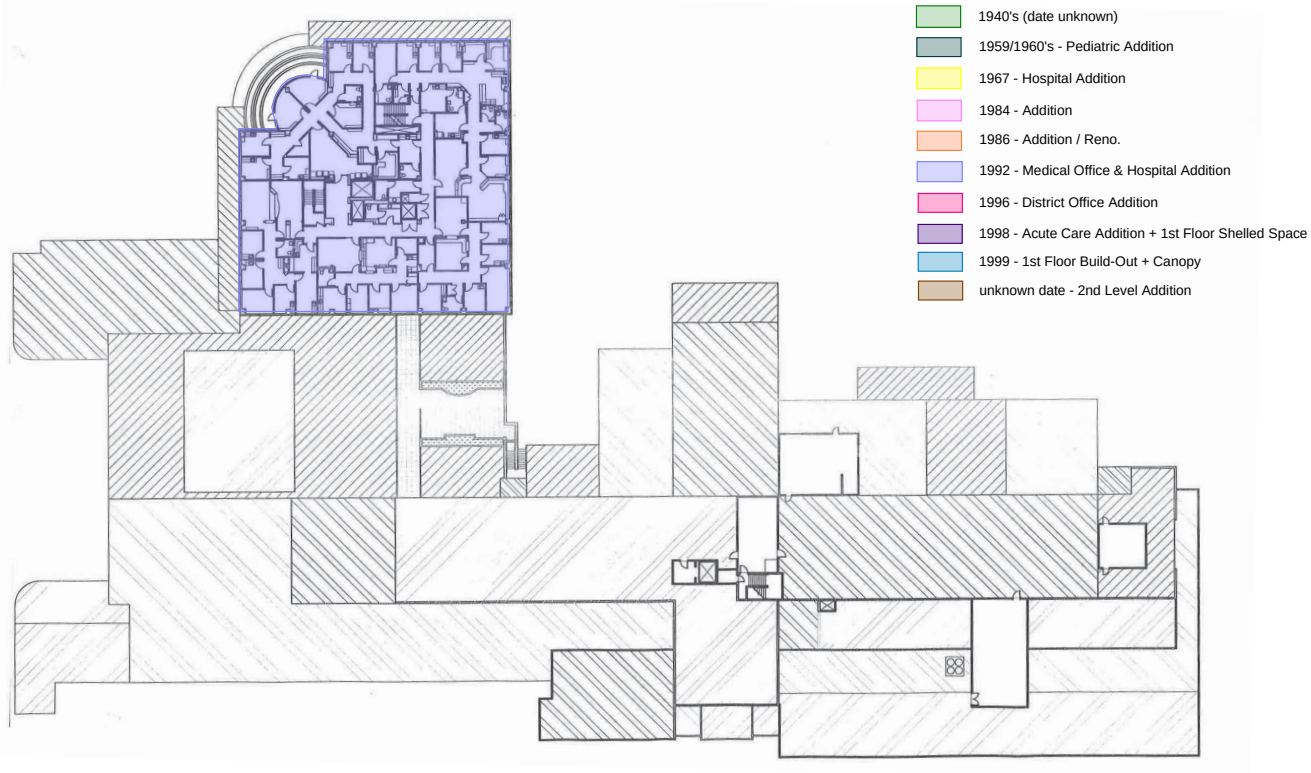


Basement Year of Construction Floor Plan

Level 1 Year of Construction Floor Plan

Existing Auburn Building Years of Construction for Reference

Level 2 Year of Construction Floor Plan



Level 3 Year of Construction Floor Plan

1.1 Introduction

1.2 Phase 1 Validation Scope of Work

1.3 Design-Build Team Review of Owner Reliable Information

1.4 Existing Conditions Observations and Reports

1.4.1 Bruneau

1.4.2 Auburn

1.5 Site and Area Selection

1.6 Phase 1 Design and Preconstruction Scope of Work

1.6.1 Design-Build Team Work to be Performed

1.6.2 Design & Preconstruction Hours and Cost

1.6.3 Work Groups

1.6.4 Owner and Design-Build Team Responsibility Matrix

1.1 Introduction

The design-build team consisting of Bouten Construction Company and NAC Architecture held a project kick-off meeting in September 2023 along with Benton County, the Benton Franklin Recovery Coalition, and Comprehensive Healthcare to define the conditions of excellence and the program requirements; setting the stage for the team to complete the validation phase of this design-build project.

The following tasks are now completed:
1. Developed conditions of excellence
2. Reviewed owner's project criteria
3. Confirmed program requirements, needs, and wants.
4. Developed a preliminary program and space needs.
5. Developed components of an overall master plan related to the program and future needs.
6. Completed a review of owner reliable information .
7. Evaluated both the Bruneau and Kennewick General Hospital (Auburn) sites.
8. Completed several estimates to develop and support a target budget of $23.0 million
9. On-boarded of civil, structural, mechanical, plumbing, electrical, and envelope consultants, and trade partners
10. Evaluated the KGH site and building, including civil, structural, mechanical, plumbing, electrical, and envelope
11. Held several meetings with the City of Kennewick to confirm requirements for both sites.
12. Held meetings with Comprehensive Healthcare to understand their operational needs.
13. Developed a project milestone schedule with key dates and durations.
14. Developed a subcontracting and diverse business inclusion plan.

This validation report provides a summary of these tasks and deliverables, along with the design-build team's recommendation as to the validity and feasibility of delivering this project on the selected site, within the owner's anticipated time and budget.

Conditions of Excellence

A project the entire **community** can be **proud** of.

Fully understand—and help communicate—the wants and needs of those it serves.

An environment of peaceful **support** and **recovery**.

Develop a design program that prioritizes both comfort and safety.

COLUMBIA VALLEY CENTER FOR RECOVERY

A facility that serves as a **model** for others to **emulate**.

Promote and foster collaboration among all stakeholders.

An **exemplary** progressive design-build **process**.

Ensure the project team is driving outcomes that provide the best possible value.

COUNTY OF BENTON EST. 1905 WASHINGTON

BOULTEN CONSTRUCTION COMPANY

NAC ARCHITECTURE

1.2 Phase 1 Validation Initial Project Scope- Summary

(Section 3.04.B)

OWNER'S PROJECT CRITERIA RECAP

The new Columbia Valley Center for Recovery is intended to provide care for those suffering from behavioral health and SUD concerns. Long-term desires are to provide Benton County with an integrated behavioral health campus. One of the first steps toward this endeavor is to implement four programs for recovery:. a crisis stabilization facility, an evaluation and treatment facility, a residential inpatient unit, and a twenty-three-hour observation unit. These programs would be licensed in the state of Washington as Residential Treatment Facilities (RTF)—except for the twenty-three-hour observation unit, for which the state is currently writing requirements.

LICENSING IMPACTS RELATED TO OWNER'S PROJECT CRITERIA

There is currently a Washington State waiver in place to allow multiple RTFs to share space and services and continue to receive CMS reimbursements. If this waiver were not in place, each individual RTF would need to be a complete stand-alone unit. Our current budget does not support these RTFs to be completely independent from each other. The design is taking this into account and our design build team is developing a plan that would allow the expansion of each of these RTFs to be independent if the state were to eliminate this waiver. RTFs licensed with the state allow for a maximum of sixteen beds. This places the three RTFs at a forty-eight-bed count. For the twenty-three-hour unit, the desire is to have capacity for twelve patients.

FEASIBILITY OF OWNER'S PROJECT CRITERIA WITHIN THE BUDGET AND SCHEDULE

Our design-build team evaluated the facilities at Bruneau and Auburn. The existing conditions of each can be reviewed in section 1.4 of this report. It has been determined that, in order to stay within the $23 million budget and provide the desired program space, only one of these facilities can be renovated. Through the site and area selection process, it became apparent that Auburn was the most cost-effective solution. It was determined from initial reviews that the second floor of the hospital may be the best location to accommodate the program. Upon further evaluation of the Auburn facility with the onboarded mechanical, electrical, and plumbing trade partners, it was determined that renovating the second floor of the hospital (north wing) would not fit within the budget and desired program space.

The team then took a holistic look at the entire Auburn facility and determined that the most cost-effective solution isthe first floor of the Spaulding building, the old surgery area (which was built at the same time as Spaulding), and the LDR wing, which was also was built more recently. The validation design is taking advantage of the existing floor layout as much as practical to maximize program space and align with the target budget.

PROPOSED INITIAL PROJECT SCOPE

Using the first floor of the Spaulding building, the old surgery area, and the LDR wing enables us to meet the owner's project criteria and align with the $23 million target budget. This area represents approximately 39,000 SF, using the existing patient rooms and allowing for shared rooms. In addition to the program area, the target budget currently includes the necessary upgrades to the existing facility—within the program area—to include scope such as window replacements, roof repair or replacements, exterior repairs and painting, city-required site upgrades, and life safety requirements for the entire facility.

PROJECT SCOPE DEFERRAL (BETTERMENTS)

The desire of the Coalition and Comprehensive is to provide single-occupancy rooms. Since this is not currently feasible within the target budget, the design-build team has created an option for single rooms as a betterment, which is further outlined in section 5.3. The goal of the design-build team will be to incorporate this betterment into design within the target budget as the design-build process progresses. This will be achieved through further reduction of potential risks, which will help reduce costs and will allow the team to pull from the design and estimating contingency to begin adding betterments to the project scope.

1.3 Design-Build Team Review of Owner Reliable Information

(Section 2.01b-d)

The following Owner Reliable information per section 2.01.C of the Task Order (Contract Exhibit C) has been reviewed. The listing of owner reliable information below includes confirmation of receipt and review of this information as well as any potential impacts these may have on design and construction.

Bruneau – Record Survey
The record survey has been reviewed and is not needed due to no further consideration of the Bruneau site.

Bruneau – Hazardous Materials Survey – NVL
The Hazardous materials survey has been reviewed for Bruneau and was utilized in the analysis for site selection purposes.

Bruneau – Asbestos Roof Survey
The Asbestos roof survey has been reviewed for Bruneau and was utilized in the analysis for site selection purposes.

Auburn – Exhibit C - Deed Restrictions
It is of our understanding and confirmed by Benton County that the design-build team is to continue investigating the Auburn site with the understanding that Benton County (Owner) will address the deed restrictions outside of the design-build team scope of work.

Auburn – Record Survey
The record survey has been reviewed by PBS and will be used as required for incorporation into project documents.

Auburn Hazardous Materials Survey - PBS
The Hazardous materials survey has been reviewed for Auburn and was utilized in the analysis for site selection purposes. Onsite walkthroughs with an abatement trade partner have been completed to verify abatement scope of work.

Auburn – Fire Safety Plan (Building Layout Reference Only)
The Fire Safety Plan was reviewed and utilized for the area selection analysis.

Kennewick Hospital District Feasibility Study
The Feasibility Study was reviewed and provided to all consultants for their review and analysis for the site and area selections in addition to onsite reviews by each consultant.

1.4 Existing Conditions Observations and Reports

1.4.1 BRUNEAU SUMMARY

OVERVIEW

An existing conditions assessment was completed with the design-build team at the building located at 10 E. Bruneau. Several components were evaluated for feasibility with the program including, building accessibility, utilities, structure, mechanical systems, and overall condition to renovate this building for the program needs within the $23.0 million budget. There are currently no mechanical systems present, and the existing structure would require significant upgrades to the frame and roof in order to create the program space. Additional challenges include the significant volume/cost of abatement required, as well as the potential for having to re-connect or upgrade the existing utility services to this building. Based on our existing conditions assessment, upgrades required, and cost for these upgrades, we do not believe that renovating the Bruneau facility would be an effective use of costs; furthermore, it would allow for less than 27,000 SF of program space within the $23 million budget. Further detail on the existing conditions can be found in each of the existing conditions reports provided by NAC and Coffman Engineers.

ARCHITECTURAL

The building condition, footprint, and allowable area creates a challenge to create program are for the current (4) programs that are being implemented. The driving concern at this location is that each sleeping room needs an exterior window. The Bruneau building is physically abutted the adjacent building, which eliminated the placement of windows in this location and limited the adjacent walls within fifteen feet of the connection to the existing adjacent buildings have openings. Another challenge with the Bruneau location is the lack of adequate outdoor space for clients, parking, drop-off, and circulation.

CIVIL

Upgrades to asphalt parking areas, curbs, gutters, accessible concrete walks, and full street improvements to Alder Street between E. Bruneau Avenue and E. Columbia Avenue would need to be provided. An eighteen-foot easement on the eastern side of the road would be required by the city for dry utilities. The additional public right of way needed for the widening of Alder Street would be required from four separate properties not currently owned by Benton County. The total right of way acquisition would total approximately 7,010 SF.

Ingress and egress movements in and out of the site are limited due to existing site grading and existing gates for the Public Market @ CRW, located on both ends of Bruneau street between Alder Street and Beech Street.

The existing water and sewer utility stubs for the building are located to the south on the parcel that is not owned by Benton County. The new utilities in Alder Street would need to consist of a new eight-inch water line and eight-inch sanitary sewer line. The upgraded Alder Street would also require storm drainage upgrades to comply with City of Kennewick stormwater requirements. Overhead power would have to be relocated—most likely underground—to accommodate the widening of the roadway and sidewalk improvements.

All ADA facilities onto Washington Street as well as Columbia Avenue would have to be brought up to code or established to provide pedestrian connectivity in the area.

The existing alley along the north boundary would not meet fire access requirements for secondary access to the site. To gain secondary access, a new roadway connection would have to be constructed through the adjacent car wash property at 216 N. Washington Street to connect Washington Street and Alder Street.

For the full report, reference Exhibit T: Bruneau Civil Site Exhibits

STRUCTURAL

The Bruneau location will need extensive framing upgrades to meet current codes. The roof framing is rolled steel with a metal deck spanning between beams and does not rely on the perimeter walls. Existing columns are in-board of the perimeter walls, and the steel roof framing appears to cantilever out to the walls. The connection between the roof and walls will need to be strengthened. The perimeter walls consist of a concrete frame with CMU infill and have not historically performed well during seismic events. A fully detailed report and three options for strengthening the wall roof connection can be found in the appendix.

For the full narrative, reference Exhibit H: Structrual Narrative

ENVELOPE

The current exterior envelope is a CMU substrate with no finish materials applied and is insufficient for re-use as a finished exterior assembly due to the lack of any waterproofing or moisture barriers. The existing envelope would require removal of the CMU infill for the addition of windows and a new exterior framing and substrate system would be required to accommodate the windows and a weather barrier. The existing roof does not currently meet the energy code and would require full replacement.

MECHANICAL

There are currently no mechanical systems or infrastructure to support mechanical systems at Bruneau. All new mechanical systems would need to be installed at this site. The location of the HVAC equipment would need to be evaluated. The roof structure currently would not allow for the load of the air handler or chillers. These new systems would all need to adhere to the new energy code.

PLUMBING

There is currently little to no infrastructure for plumbing at the Bruneau location. A challenge for plumbing installations at this facility includes the existing thick floor slab and the necessary removals to accommodate waste lines and to provide underground plumbing lines to the needed fixtures.

ELECTRICAL

Electrical systems were not evaluated due to the several other constraints identified that prohibit the Bruneau site to be renovated to meet the program requirements.

1.4.2 AUBURN SUMMARY

OVERVIEW

The site in addition to several areas within the Auburn facility located at 900 S. Auburn have been evaluated to determine the best fit, feasibility for program, and budget alignment. The two major areas considered included the main hospital (north wing),the newer portions of the hospital building (LDRP), and the Spaulding building. The mechanical systems have not been operational, which has led to corrosion and would require significant costs to upgrade. The electrical service is sufficient to allow for the program needs; however, it would require upgrades to life safety, lighting, and low-voltage systems. The exterior walls, windows, and roof will require repair and patching for the program areas, while any or future needs. Scope related to the existing non-program areas is yet to be determined. The site and landscaping appears to not have been maintained, and would require repairs and upgrades to meet city code requirements. Further detail on the existing conditions can be found in each of the existing conditions reports provided by RDH, TEM, BNB, and Energized.

ARCHITECTURAL

The greatest challenge of this facility is the sheer size and the necessary MEP system upgrades. The older hospital patient room wing. This portion of the building is designed for individual patient rooms with windows just as our program will require. However, with more investigation into this area–along with other locations within the facility—it has become apparent that this second-floor area is not the most cost-effective location. With the help of our trade partners and design consultants, we've determined that the best location is the first floor of the Spaulding building, surgery area, and LDR wing of the hospital. This area will accomodate the program to fit into these spaces and re-use certain portions of rooms. At this location we are also able to provide shelled space for betterments or future needs.

CIVIL

A portion of the site will need ADA upgrades, concrete walkways, driveways, landscaping, parking lot striping and restoration, and utilities. These would include standard asphalt patching and seal coating, curbing, parking stalls, and landscaping. Accessible pedestrian ramps compliant with ADA requirements will also be constructed on the interior of the site.

City mapping indicates that water services for both domestic use and fire use are already routed to the building from the public right of way. Installation of additional on-site fire hydrants may be required depending on reconfigured site layout. No additional fire hydrants have been requested by the city fire department at this time.

Installation of additional sanitary laterals is not currently anticipated.

City GIS shows an existing dry well in the northeastern corner of the site, with another in the northwestern corner. There is no reported failure of any existing storm facilities on the site, and additional impervious surface creation that would require the development and construction of any new storm facilities—beyond what is currently on-site–is not anticipated.

For the full narrative, reference Exhibit E: Civil Narrative and Exhibit S: Auburn Civil Site Exhibit

STRUCTURAL

The most recent additions to the hospital are composed of structural steel post and beam with composite metal decking and concrete. There are no anticipated structural upgrades needed in these areas and the design can be the most flexible. There isn't a desire to move existing column locations. The older areas of the hospital are a little more challenging. The existing structure in these areas is concrete post and beam. The corridor walls are structural concrete that shouldn't be moved or modified. We also have several areas where concrete beams and decks have been compromised and would need to be analyzed and reviewed, for further for potential corrective actions refer to.

For the full narrative, reference Exhibit H: Structural Narrative

ENVELOPE

The building is an unoccupied former hospital built in various phases. The original hospital building is a two-story cross-shaped structure built circa 1952 and consists of painted concrete walls with interior metal framed furring walls behind the concrete. There are also mechanical and elevator penthouses that are metal framed with stucco cladding as well as mass masonry. The original floors and roof structure are also concrete.

There have been multiple additions to the original building, primarily in 1980 and 1990, which now comprise the majority of the exterior enclosure. These additions occur at each quadrant of the original cross-shaped structure. These newer additions consist of metal-framed walls clad with a face-sealed exterior insulation and finish system (EIFS). The newer additions are steel structures with composite metal/concrete decks. The glazing consists of mostly fixed metal-clad and single-hung metal-clad wood windows, with some limited areas of aluminum storefront and glass block. There is also a sloped glazing canopy system over the main entrance on the east elevation. Doors are primarily hollow metal frames, and larger entrances are aluminum-framed sliding doors throughout the building.

For the full report, reference Exhibit A: Envelope Existing Conditions Report and Exhibit N: Envelope Existing Conditions Report Plans

FIRE PROTECTION

The current fire protection system is non-operable. Based on information received from Benton County, several lines had frozen and burst, requiring the system to be shut down. Further evaluation describing the anticipated approach to bringing these systems back to code can be found in section 2.5—Fire Protection.

For the full narrative, reference Exhibit I: Fire protection

MECHANICAL

For a variety of reasons, very little of the existing HVAC and control systems at the Auburn location is suitable for reuse. The majority of the systems are interconnected with central chilled water, heating water, and steam systems that are not easily separated or reconfigured to serve only a fraction of the building, for further for potential corrective actions refer to full report Exhibit H: Structural Narrative. However, depending on where in the facility the program is located and what system adaptations are needed for the program, there may be certain elements of the existing systems (air handlers, ductwork, or exhaust systems, for example) that may be able to be repurposed to various degrees.

For the full narrative, reference Exhibit J: Mechanical & Plumbing Narrative

PLUMBING

The facility at Auburn has the plumbing infrastructure that would normally support the program in various locations; however, the age and condition of piping materials throughout the older portions of the facility, including the majority of the under-slab piping, remain questionable as to their suitability for continued service. It is likely that new plumbing piping would be required to a large

extent in those areas. Overall, the plumbing systems in the Spaulding and LDR areas are better suited to support potential re-use. Further investigations will be completed during design to confirm specific re-use or replacement needs. This approach is currently included within the target budget.

For the full narrative, reference Exhibit J: Mechanical & Plumbing Narrative

ELECTRICAL

Four existing electric utility services provide 480/277V and 208/120V power to the facility.

- Service 1: 480/277V, 1200A (located in the equipment yard)
- Service 2: 208/120V, 2000A (located in the equipment yard)
- Service 3: 480/277V, 800A (located north end)
- Service 4: 480/277V, 800A (located at the Spaulding building)

Electrical distribution panel boards are primarily fed by the nearest service and electrical room; however, mechanical equipment is spread across all services irrespective of areas served. Therefore, no portion of the building is served by a dedicated electrical service. Electrical service 3 is not currently code-complaint, and the utility transformer is not located per utility guidelines. A service upgrade would be expected for service 3. Service 4 serves the newest distribution equipment while services 1, 2, and 3 all have a mix of newer and older equipment requiring varying degrees of replacement. Previous projects completed since the original construction have used the rooftop for electrical raceway, which would all need to remain to continue use of the existing services and distribution equipment.

All interior lighting, lighting controls, electrical and communications devices, access control, and security systems are unsuitable for re-use.

Existing generators are considered non-functioning and would not be recommended for repair and re-use. However, the existing generator distribution equipment, including transfer switches, is in suitable working condition.

For the full narrative, reference Exhibit K: Electrical Narrative

1.5 Site and Area Selection

To bring alignment with the owner's project criteria and with the potential site options, the design-build team used Choosing by Advantages, a tool that employs a "good," "better," "best" approach to site, building, and area selection. The goal was to bring forward the current conditions (where the best value could be achieved with each condition) and provide a summary to communicate to the entire project team and Benton County. Components evaluated through this process included:

1. Alignment with conditions of excellence
2. Meeting program requirements
3. Schedule duration
4. Construction requirements
5. Mechanical and electrical systems
6. Structure
7. Site and civil impacts
8. Cost modeling
9. Abatement/remediation impacts
10. Permitting and AHJ requirement

A3 DOCUMENTS FOR REFERENCE

D A3 - Pre-validation - Program & Budget Alignment Summary
P A3 - Existing Building & Site Selection
Q A3 - Pre-validation - Program & budget alignment
C Electrical Existing Conditions Report
J Mechanical & Plumbing Narrative

1.6 Phase 1 Design and Preconstruction Scope of Work

(Section 3.04c)

1.6.1 DESIGN-BUILD TEAM WORK TO BE PERFORMED IN PHASE-1 (3.04c)

The Phase-1 scope of work will entail further development of design, construction, and the target budget to continue alignment towards the first Guaranteed Maximum Price to be set with 50% design documents for Mid-September 2024. This first package will include the exterior envelope provisions, site improvements, abatement, demolition and early MEP or material procurement. The design-build team work to be performed in Phase 1 can be found in section 11.1 Contract Amendment Scope of work.

1.6.2 DESIGN AND PRECONSTRUCTION HOURS AND COST (3.04c)

The following items are included within the Contract Amendment Level of Effort found in section 11.2:

1. Design Hours for phase 1 to GMP submittal package 1
2. Phase 1 Preconstruction NTE Costs to GMP 1
3. Other Costs of the Work required to complete phase 1 to GMP 1

1.6.3 WORK GROUPS (3.04d)

The following work groups will be established to correspond with the Work Breakdown structure and the design submittal packages. Any scope outside of these work groups will be developed with the design-build team, at the appropriate milestone and will include any applicable consultants or subject matter experts.

1. Site, Civil and Landscape:
This proposed work group will confirm scope and budget related to renovating the existing site to meet City of Kennewick standards as well as to align with our target budget. The proposed work group would include a representative from each of the following firms: Benton County, PBS Civil, Bouten Construction, NAC Architects, and the landscape designer – TBD.

2. Exterior Envelope:
This proposed work group will confirm scope and budget related to the exterior envelope modifications such as new windows, EIFS repair and repainting, the roof repairs or replacements and any additional needs required to align with our target budget and building needs at the program area. The proposed work group would include a representative from each of the following firms: Benton County, RDH Consultants, Roofing trade partner, Glazing trade partner, Bouten Construction and NAC Architects.

3. Fire Protection:
This proposed work group will confirm scope and budget related to the fire protection system for program area as well as the existing building as required by the Fire Marshall. The proposed work group would include a representative from each of the following firms: Benton County, Fire protection trade partner - TBD, Fire Marshall, Bouten Construction and NAC Architects.

4. Interior Tenant Improvement:
This proposed work group will confirm scope and budget related to the tenant improvements, including mechanical systems for program area The proposed work group would include a representative from each of the following firms: Benton County, TEM Mechanical, BNB Plumbing, Energized Electric, Bouten Construction and NAC Architects.

1.6.4 OWNER AND DESIGN-BUILD TEAM RESPONSIBILITY MATRIX

The project scope of work and target budget is currently based on scope of work responsibilities to define areas of work within the Auburn facility, the scope of work associated with these areas and owner responsibilities outside of the program area.

At the kick off of Phase 1 the design-build team will review the Scope Matrix for alignment with Benton County.

2.0
DESIGN SUBMITTALS

2.0 Design Submittals

2.0 Design Submittals

The design-build team will provide the following basis of design submittal packages per phase.
Phase 1 Design & Preconstruction: Schematic Design, 50% Interior buildout, 80% (Permit set) Interior build out & 100% (Permit set) site, building envelope, abatement & demolition.

Phase 2 Final design & Construction: 100% design interior buildout package. Once we have received all AHJ comments and incorporated them into the documents, the drawings will be assembled into a conformed set that will then be issued.

After each submission the owner will be given the opportunity to review the submission and provide comments. Dates for all these submissions are provided on Exhibit 4.0 Milestone Schedule.

The following sections provide more information regarding what is to be included in the design per discipline.

2.1 CIVIL

Civil work covers ADA upgrades to concrete walkways, driveways, landscaping, parking lot striping and restoration, and utilities. This includes design scope associated with domestic water, fire hydrants, sanitary sewer & stormwater requirements.

For the full narrative, reference Exhibit E: Civil Narrative

2.2 LANDSCAPE

Landscape Architecture work will consist of site design for hardscape, materials, planting, irrigation, and detailing of design elements. This scope will be organized into three main categories: street frontages and parking areas, site work between the right of way and face of building & at-grade courtyards.

For the full narrative, reference Exhibit F: Landscape Narrative

2.3 ARCHITECTURAL

The Validation design scope focuses on the south half of the Auburn building from the Spaulding 3-story tower on the southwest to what was the KGH labor and delivery wing on the southeast. The basis of design includes upgrades to the exterior program area of the building. These upgrades include roofing, exterior painting, EIFS patching, new glass at existing storefront and new windows at patient areas. The program scope on the interior of the building consists of a first-floor interior remodel. The second & third floors of the Spaulding building will be tenant ready unrenovated space. In addition to the renovation, a new covered secure drop off will be built on the southwest side of the building. The remaining north wing of the hospital building is not part of the scope for basis of design other than necessary life safety measures of fire alarm, sprinkler system and freeze protection. It is our understanding that these areas of the building, (interior & exterior) may be upgraded at a future date as determined by Benton County.

As a part of the validation process a Master Plan was developed for the Auburn Facility.

For the full narrative, reference Exhibit G: Architectural Narrative and Exhibit V: Master Plan

2.4 STRUCTURAL

The most recent additions to the hospital are comprised of structural steel post and beam with composite metal decking and concrete. There are no anticipated structural upgrades needed in these areas and the design can be flexible. There is currently not a desire to move existing column locations.

The older areas of the hospital which will not be part of the scope of this phase of design are more challenging. The existing structure in these areas are concrete post and beam. The existing corridor walls are structural concrete walls that would not want to be moved or modified. Also, we have serval areas where concrete beams and decks have been comprised and would need to be analyzed and reviewed.

For the full narrative, reference Exhibit H: Structural Narrative

2.5 FIRE PROTECTION

The fire protection system consists of a wet system in the validation scope areas. A dry system with freeze protection will be provided in the basement where the fire risers are located and in the area of the Auburn site not in the scope of this validation.

For the full narrative, reference Exhibit I: Fire Protection Narrative

2.6 MECHANICAL

The HVAC system will be designed as a cost effective & energy efficient Variable Refrigerant Flow (VRF) system with a Dedicated Outside Air System (DOAS). Supply air will be distributed from the VRF fan coils and DOAS units by galvanized Steel sheet metal ducts. The remainder of the building outside of the renovated area will be heated for freeze protection only.

The plumbing design will reuse the existing domestic water system. The condition of the sanitary waste lines will require further site verification with potential selective floor demolition to finalize if they need to be replaced, lined, or reused. A new gas fired storage tank with a Direct Digital Controlled (DDC) recirculating hot water ready loop will be provided. The existing roof & overflow drains are to be reused. Horizontal pipe runs will be insulated & if needed in renovated areas new cast iron piping will be provided.

For the full narrative, reference Exhibit J: Mechanical & Plumbing Narrative

2.7 ELECTRICAL

The design strategy is to maintain the existing electrical utility services and to re-use the existing electrical distribution system(s) when possible. The interior build out will utilize the existing electrical service #2 & #4. The existing main service switchgear and electrical rooms will remain with new energy source and end-use metering per code requirements. Inside the program space panelboards and equipment will be reused where possible and new provided where required by code.

Electrical service outside the program areas will be left existing on service #1 & #3 and disconnected from services #2 & #4. This service will provide Fire alarm, egress lighting and freeze protection heating will be maintained.

All interior lighting, lighting controls, electrical and communications devices and systems are to be removed and replaced.

Backup generators are not part of project scope. Existing generators are considered non-functioning and would not be recommended for repair and re-use. However, the existing generator distribution equipment including transfer switches will remain as-is and are suitable for re-use at a future date to provide backup power.

For the full narrative, reference Exhibit K: Electrical Narrative

3.0
SUSTAINABILITY APPROACH

3.0 Sustainability Approach

3.0 Sustainability Approach

(Section 2.01E)

Benton County has received four grants for the project:

The Department of Commerce – Behavioral Health Facilities – State Capital Budget Grants for the project name: “Three Rivers Behavioral Health Recovery Center” COM Contract #22-96655-121

The Department of Commerce – Behavioral Health Facilities – State Capital Budget Grants for the project name: “Three Rivers Behavioral Health Recovery Center” COM Contract #22-96655-006

The Department of Commerce – Behavioral Health Facilities – State Capital Budget Grants for the project name: “Benton County DA” COM Contract #24-96657-017

The Department of Commerce – Behavioral Health Facilities – State Capital Budget Grants for the project name: “Benton County Recliners” COM Contract #22-96663-001

These projects require LEED silver certification; however the County has provided a “LEED Certification Declaration” requesting a ‘not practicable exemption” to be exempt from the LEED silver requirement. The request statement submitted:

“This project will renovate an estimated 45,000 SF of an existing 193,000 SF facility, which is roughly 25 percent of the overall building square footage. There is no timeline on renovating the remaining portions of the facility and will be contingent upon available funding and space needs. Therefor the facility renovation is piecemeal in nature and would make LEED requirements not feasible in achieving. The existing facility is 70 years old and is comprised of concrete exterior walls and minimum windows. The facility today is comprised of several additions and modifications throughout the past 70 years and adds to the challenges in meeting LEED requirements.”

4.0
TARGET SCHEDULE

4.0 Target Schedule

Target Schedule

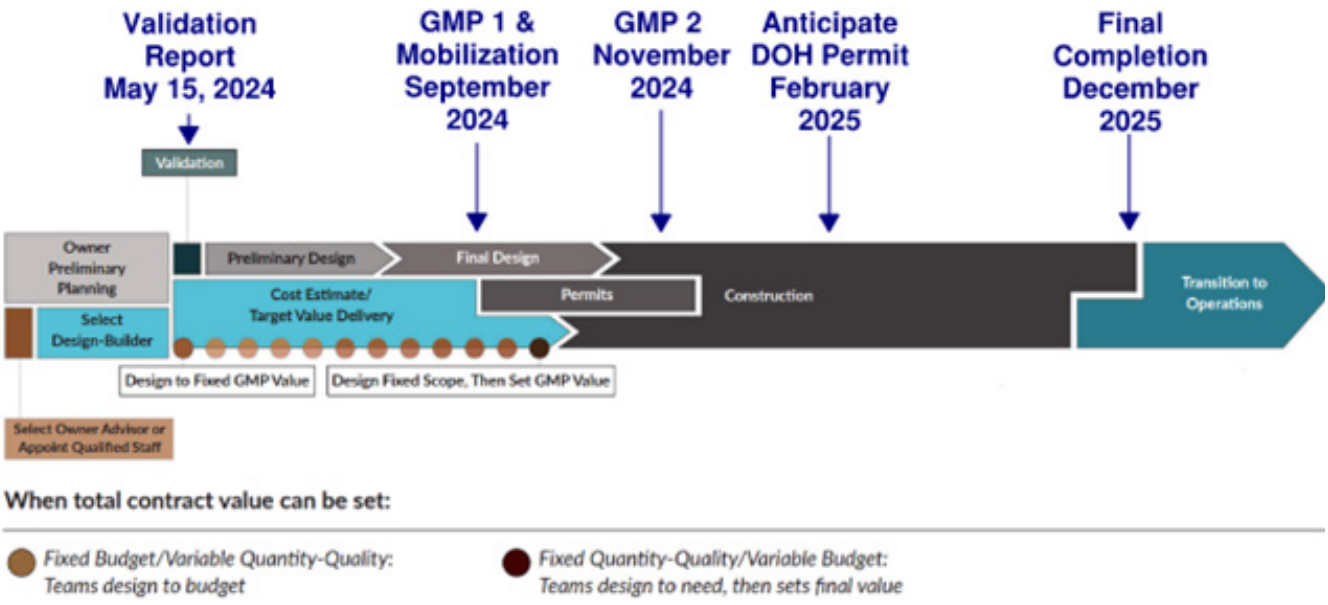
(Section 3.02c)

The target schedule has been developed based on the activities completed to date, the sequence of design and construction activities to include procurement and timing for setting of the GMP packages. Upon owner review, our design-build team will work with Benton County to adjust or revise this schedule accordingly to align with owner objectives.

Note: See applicable contract sections below:
Section 3.01C: Validation Report Deliverables: (Bouten)

The target schedule has been developed based on the activities completed to date, with the sequence of design and construction activities to include procurement and timing for the setting of the gmp packages. Upon owner review, our design-build team will work with Benton County to make adjustments or revise this schedule accordingly to align with owner objectives.

As an overview to the entire progressive design-build process; below is a graphic depicting where we are at in the process as well as the GMP and completion milestones:



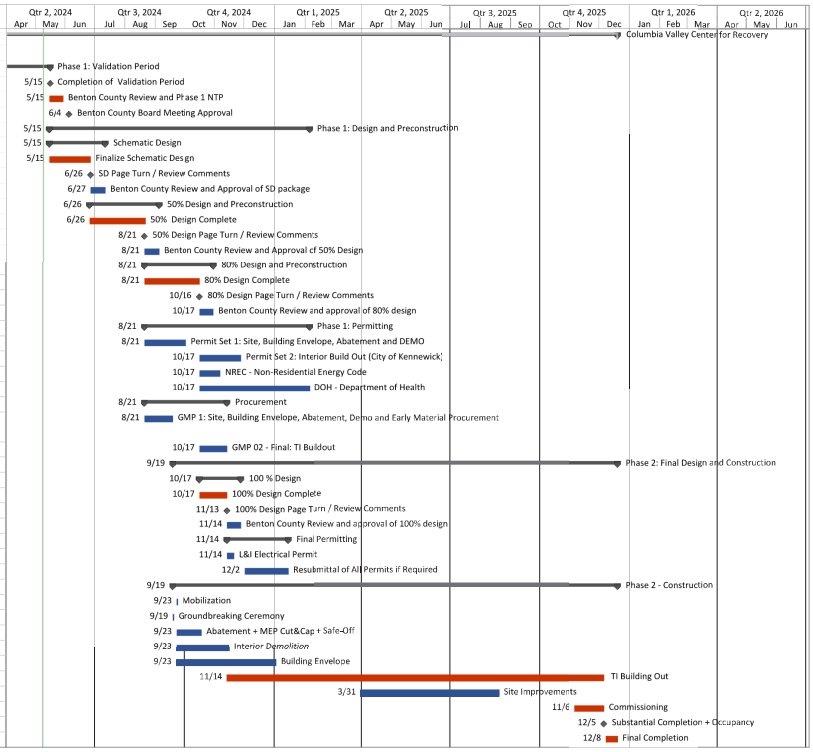
Further schedule development activities will occur during Phase 1 Design and Preconstruction to include pull planning to each milestone.

Below is the Milestone schedule for reference:

BOULTEN CONSTRUCTION COMPANY NAC ARCHITECTURE BENTON

Columbia Valley Center for Recovery
Milestone Schedule

ID	Task Name	Dur	Start	Finish
0	**Columbia Valley Center for Recovery**	**658 days**	**Tue 5/16/23**	**Fri 12/19/25**
1	**Design-Builder Procurement + Selection**	**93 days**	**Tue 5/16/23**	**Wed 9/27/23**
16	**Phase 1: Validation Period**	**156 days**	**Wed 10/4/23**	**Wed 5/15/24**
57	***Completion of Validation Period***	***0 days***	***Wed 5/15/24***	***Wed 5/15/24***
58	Benton County Review and Phase 1 NTP	10 days	Wed 5/15/24	Wed 5/29/24
59	***Benton County Board Meeting Approval***	***0 days***	***Tue 6/4/24***	***Tue 6/4/24***
60	**Phase 1: Design and Preconstruction**	**183 days**	**Wed 5/15/24**	**Wed 2/5/25**
61	**Schematic Design**	**40 days**	**Wed 5/15/24**	**Thu 7/11/24**
62	Finalize Schematic Design	6 weeks	Wed 5/15/24	Wed 6/26/24
63	***SD Page Turn / Review Comments***	***0 days***	***Wed 6/26/24***	***Wed 6/26/24***
64	Benton County Review and Approval of SD package	2 weeks	Thu 6/27/24	Thu 7/11/24
65	**50% Design and Preconstruction**	**49 days**	**Wed 6/26/24**	**Wed 9/4/24**
66	50% Design Complete	8 weeks	Wed 6/26/24	Wed 8/21/24
67	***50% Design Page Turn / Review Comments***	***0 days***	***Wed 8/21/24***	***Wed 8/21/24***
68	Benton County Review and Approval of 50% Design	2 weeks	Wed 8/21/24	Wed 9/4/24
69	**80% Design and Preconstruction**	**50 days**	**Wed 8/21/24**	**Wed 10/30/24**
70	80% Design Complete	8 weeks	Wed 8/21/24	Wed 10/16/24
71	***80% Design Page Turn / Review Comments***	***0 days***	***Wed 10/16/24***	***Wed 10/16/24***
72	Benton County Review and approval of 80% design	2 weeks	Thu 10/17/24	Wed 10/30/24
73	**Phase 1: Permitting**	**115 days**	**Wed 8/21/24**	**Wed 2/5/25**
74	Permit Set 1: Site, Building Envelope, Abatement and DEMO	6 weeks	Wed 8/21/24	Wed 10/2/24
75	Permit Set 2: Interior Build Out (City of Kennewick)	6 weeks	Thu 10/17/24	Wed 11/27/24
76	NREC - Non-Residential Energy Code	3 weeks	Thu 10/17/24	Wed 11/6/24
77	DOH - Department of Health	15 weeks	Thu 10/17/24	Wed 2/5/25
78	**Procurement**	**60 days**	**Wed 8/21/24**	**Wed 11/13/24**
79	GMP 1: Site, Building Envelope, Abatement, Demo and Early Material Procurement	4 weeks	Wed 8/21/24	Wed 9/18/24
80	GMP 02 - Final: TI Buildout	4 weeks	Thu 10/17/24	Wed 11/13/24
81	**Phase 2: Final Design and Construction**	**317 days**	**Thu 9/19/24**	**Fri 12/19/25**
82	**100 % Design**	**30 days**	**Thu 10/17/24**	**Wed 11/27/24**
83	100% Design Complete	4 weeks	Thu 10/17/24	Wed 11/13/24
84	***100% Design Page Turn / Review Comments***	***0 days***	***Wed 11/13/24***	***Wed 11/13/24***
85	Benton County Review and approval of 100% design	2 weeks	Thu 11/14/24	Wed 11/27/24
86	**Final Permitting**	**40 days**	**Thu 11/14/24**	**Tue 1/14/25**
87	L&I Electrical Permit	1 week	Thu 11/14/24	Wed 11/20/24
88	Resubmittal of All Permits if Required	6 weeks	Mon 12/2/24	Tue 1/14/25
89	**Phase 2 - Construction**	**317 days**	**Thu 9/19/24**	**Fri 12/19/25**
90	Mobilization	1 day	Mon 9/23/24	Mon 9/23/24
91	Groundbreaking Ceremony	1 day	Thu 9/19/24	Thu 9/19/24
92	Abatement + MEP Cut&Cap + Safe-Off	4 weeks	Mon 9/23/24	Fri 10/18/24
93	Interior Demolition	8 weeks	Mon 9/23/24	Fri 11/15/24
94	Building Envelope	3.5 months	Mon 9/23/24	Thu 1/2/25
95	TI Building Out	13.35 month	Thu 11/14/24	Fri 12/5/25
96	Site Improvements	5 months	Mon 3/31/25	Tue 8/19/25
97	Commissioning	4 weeks	Thu 11/6/25	Fri 12/5/25
98	***Substantial Completion + Occupancy***	***0 weeks***	***Fri 12/5/25***	***Fri 12/5/25***
99	Final Completion	2 weeks	Mon 12/8/25	Fri 12/19/25



Prepared By: Bouten Construction

Printed: Thu 6/9/24

5.0
TARGET BUDGET

5.0 Target Budget

5.0 Target Budget
5.1 Estimate
5.2 TVD Scope Alignment Documents
5.3 Betterments
5.4 Proposed GMP Packages

(Section 3.05d)

5.0 Target Budget

The proposed target budget has been developed to anticipate the full project scope include the program area, addressing existing conditions at Auburn and project contingencies, allowances and betterments This section provides further detail of the components of the target budget including the detailed estimate.

5.1 Target Budget & Estimate Detail

In development of the target value budget summary, Bouten proposes to use Construction Specifications institute (CSI) Masterformat Level 1 (2020 Edition) as the primary estimate and schedule organizational structure to communicate cost and scope. The complimentary CSI Masterformat Level 2 work breakdown structure will be used categorize successively smaller scope categories within the estimate and schedule detail to provide additional granularity to estimated costs and scopes. As the project moves closer to the final GMP, we propose to align our estimate and schedule work breakdown structures to match our procurement packages to tie estimated bid package values to actual bids received.

In development of the validation estimate, conceptual scopes of work were identified on the following visuals aids: Refer to Exhibit L (Budget Scope Sketches).

- 5.1.1 B2010: Exterior Cladding
- 5.1.2 B2020: Exterior Windows
- 5.1.3 B2030: Roofing
- 5.1.4 C1010: Partitions
- 5.1.5 C1030: Doors
- 5.1.6 C2010: Wall Finishes
- 5.1.7 C2050: Ceiling Finishes
- 5.1.8 E1010: Fixed Furnishings
- 5.1.9 G2000: Site Improvements

The target budget includes several components to bring up the existing building to a usable condition. Please reference the summary on following page for these estimate break outs:

BREAKOUT COSTS TO BRING UP THE EXISTING BUILDING TO OCCUPANCY

ITEM	DESCRIPTION	BUDGET
1	Exterior envelope and windows	$ 982,173
2	North Wing fire protection, ceilings, egress lighting and temp heat at bsmnt	611,156
3	Roof repairs / replacements	577,302
4	Site upgrades	826,081
5	Existing underslab waste lining	223,900
	Total budget for scope items to prepare the building to occupancy	**$ 3,220,612**

5.2 TVD Scope Alignment Documents

While addressing the existing building conditions and identifying the scope of work required, we have created scoping documents to support the early estimates to anticipate the full scope, create alignment with Benton County, and align with the initial, proposed design. These scope documents can be found in Exhibit L – Budget Scope Sketches. These documents provide further detail of assumptions for the exterior, roof, and interior remodel areas.

5.3 Betterments

In the processes of developing the initial program budget the Exec. team, along with the design-build teams, have identified potential project enhancements to aid in future scope opportunities. These enhancements are currently listed as Rough-Order of Magnitude costs.

ITEM	DESCRIPTION	TYPE	TOTAL ROM	DECISION DATE	PRIORITY LEVEL
1	Single Client Rooms - Convert approximately 8-10 rooms to create 16 single rooms	Program	$ 937,500	6/27/2024	TBD
2	Single Client Rooms - Create up to 32 single rooms	Program	$ 2,350,000	6/27/2024	TBD
3	Commercial Kitchen (est. 5850 sqft)	Program	$ 3,900,000	6/27/2024	TBD
4	Security System in North Wing	Program	$ 220,000	6/27/2024	TBD
5	Servicing Generators 1 & 3	Program	$ 102,000	8/30/2024	TBD
6	Replace Generator 1 & 3	Program	$ 520,000	7/18/2024	TBD
7	Paging System Rough-In	Program	$ 70,000	6/27/2024	TBD
8	Indoor Fitness Area (est. 2000 sqft <12' ceiling in existing building)	Coalition	$ 320,000	7/18/2024	TBD
9	Game Room / Art Therapy / Library (est. 1000 sqft)	Coalition	$ 130,000	7/18/2024	TBD
10	Outdoor Space	Coalition	$ 110,000	6/27/2024	TBD
11	Technical Skills Classroom & Training Space – (est. 700 sqft)	Coalition	$ 150,000	8/30/2024	TBD
12	Family Areas (2 rooms for a estimated 1800 sqft)	Coalition	$ 250,000	8/30/2024	TBD
13	Restore Spaulding Elevator Service	Facility	$ 60,000	8/30/2024	TBD
14	Painting North Wing	Facility	$ 100,000	6/27/2024	TBD
15	Repair EIFS in North Wing	Facility	$ 1,100,000	6/27/2024	TBD
16	Reroof North Wing (full section replacement & fireproofing repair)	Facility	$ 1,500,000	6/27/2024	TBD
17	Reroof remainder of Spaulding	Facility	$ 220,000	6/27/2024	TBD
18	Replace Sprinkler on North Wing With True Dry System	Facility	$ 1,100,000	6/27/2024	TBD
19	DCR / Outreach Program (est. 2800 sqft office space)	Master Plan	$ 460,000	TBD	TBD
20	Respite or Diversion Beds (16 beds each approx. 7800 sqft.)	Master Plan	$ 3,500,000	TBD	TBD
21	Youth Inpatient & Children's Long Term (16 beds each approx. 7800 sqft.)	Master Plan	$ 3,500,000	TBD	TBD
22	Transitional Housing (16 beds each approx. 7800 sqft.)	Master Plan	$ 3,500,000	TBD	TBD
23	Day Treatment for Youth and Adults (est. 10,000 out patient)	Master Plan	$ 3,200,000	TBD	TBD
24	Eating Disorder Treatment (est. 10,000 out patient)	Master Plan	$ 3,200,000	TBD	TBD
25	Intensive Outpatient Program (est. 10,000 out patient)	Master Plan	$ 3,200,000	TBD	TBD
26	Battelle Building Renovation	Master Plan	$ 5,500,000	TBD	TBD

NOTES

1 Values shown are Rough Order of Magnitude. Final values to be updated upon further discussions to align scope and requirements for the betterment.
2 Dates shown are for intitial discussions and may be adjusted based on timing of further design meetings and space planning.
3 Priority is shown to start the dicussion on betterments and will require further input from Benton County and the Coalition to define priority

DESCRIPTION		COST/SF	TOTAL
01 00 00 GENERAL REQUIREMENTS		$19.62	$766,294
02 00 00 EXISTING CONDITIONS		$13.46	$526,006
03 00 00 CONCRETE		$0.54	$21,207
05 00 00 METALS		$3.79	$148,111
06 00 00 WOOD, PLASTICS, AND COMPOSITES		$7.65	$298,716
07 00 00 THERMAL AND MOISTURE PROTECTION		$22.61	$883,102
08 00 00 OPENINGS		$31.39	$1,226,318
09 00 00 FINISHES		$56.77	$2,217,922
10 00 00 SPECIALTIES		$13.58	$530,323
11 00 00 EQUIPMENT		$8.98	$350,664
12 00 00 FURNISHINGS		$1.97	$77,133
21 00 00 FIRE SUPPRESSION		$11.86	$463,386
22 00 00 PLUMBING		$58.28	$2,276,661
23 00 00 HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)		$46.77	$1,827,253
26 00 00 ELECTRICAL		$69.78	$2,726,010
27 00 00 COMMUNICATIONS		$2.41	$94,000
31 00 00 EARTHWORK		$0.67	$26,228
32 00 00 EXTERIOR IMPROVEMENTS		$13.80	$539,092
33 00 00 UTILITIES		$0.51	$20,000
Direct Cost		**$384.44**	**$15,018,426**
Design & Estimating Conting	10.00%	$38.44	$1,501,843
General Conditions (15 mos)		$45.10	$1,761,886
Cost of The Work Contingency	3.50%	$16.38	$639,875
Design & Preconstruction (Less MEP Design Fees in COW)		$55.36	$2,162,701
Fee	5.25%	$28.34	$1,106,948
Building Permit & Plan Review Fees		$3.84	$150,000
General Liability Insurance	1.00%	$4.68	$182,822
Builder's Risk Insurance	0.50%	$2.34	$91,411
P&P Bond	0.59%	$3.46	$135,068
Retainage Bond	0.05%	$0.29	$11,438
Design Builder's Contingency	0.50%	$2.91	$113,812
B&O Tax	0.47%	$2.77	$108,257
Indirect Cost		**$203.91**	**$7,966,061**
Total Cost		**$588.35**	**$22,984,487**

6.0
SCHEDULE OF VALUES

6.0 Schedule of Values

6.0 Schedule of Values

6.1 Phase 1 Schedule of Values (3.05b)

Below is the preliminary schedule of values for Phase 1. These values are subject to adjustment based on the target budget, contract values and agreed upon values.

This SOV will be reviewed with Benton County further upon acceptance of Validation.

A full-size document can be provided upon request from Benton County.

CONTINUATION SHEET *AIA DOCUMENT G703*

AIA Document G702, APPLICATION AND CERTIFICATION FOR PAYMENT, containing Contractor's signed certification is attached.
In tabulations below, amounts are stated to the nearest dollar.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO: 4
APPLICATION DATE: 05/14/24
PERIOD TO: 03/31/24
PROJECT NOS: K-945-01

A	B	C	C.1	C.2	C.3	D	E	F	G		H	I
ITEM NO.	DESCRIPTION OF WORK	SCHEDULED VALUE	TRANSFERS	ADD/CREDITS (CHANGE ORDER)	REVISED SCHEDULED VALUE	WORK COMPLETED FROM PREVIOUS APPLICATION (D + E)	WORK COMPLETED THIS PERIOD	MATERIALS PRESENTLY STORED (NOT IN D OR E)	TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G ÷ C)	BALANCE TO FINISH (C - G)	RETAINAGE (IF VARIABLE RATE)
	Validatoin Costs											
1	Bouten Construction	182,284.00	0.00	0.00	180,290.00	153,267.09	41,876.44	0.00	195,143.53	108%	(14,853.53)	1,951.44
2	NAC Architecture	189,540.00	0.00	0.00	193,040.00	98,765.92	31,609.11	0.00	130,375.03	68%	62,664.97	1,303.75
3	Mechanical Design Build - Total Energy	17,920.00	0.00	0.00	48,000.00	0.00	0.00	0.00	0.00	0%	48,000.00	0.00
4	Electrical Design Build - Energized	17,920.00	0.00	0.00	40,000.00	0.00	28,000.00	0.00	28,000.00	70%	12,000.00	280.00
5	Printing	600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0%	600.00	0.00
6	Travel and Fuel	5,000.00	0.00	0.00	1,500.00	1,092.22	403.51	0.00	1,495.73	99%	4.27	14.96
7	Technology and Software	12,000.00	0.00	0.00	12,000.00	625.45	190.56	0.00	816.01	7%	11,183.99	8.16
8	Design Assist Procurement/ Trade Partner Validation Cost	10,000.00	0.00	0.00	7,840.00	0.00	7,000.00	0.00	7,000.00	89%	840.00	70.00
9	Other Consultants - TBD	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
10	Bouten Fee	25,731.00	0.00	0.00	25,731.00	13,321.91	5,726.68	0.00	19,048.59	74%	6,682.41	190.49
11	Payment and Performance Bond	5,183.00	0.00	0.00	7,177.00	7,177.00	0.00	0.00	7,177.00	100%	0.00	71.77
12	Insurance	4,853.00	0.00	0.00	4,853.00	2,742.50	1,148.06	0.00	3,890.56	80%	962.44	38.91
13	B&O Tax	2,476.00	0.00	0.00	2,476.00	1,304.63	546.15	0.00	1,850.78	75%	625.22	18.51
14	**Validation Scope Sub Total**	523,507.00	0.00	0.00	523,507.00	278,296.72	116,500.51	0.00	394,797.23	75%	128,709.77	3,947.99
	Phase 1: Design and Preconstruction											
15	01 00 00 General Requirements	766,294.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
16	02 00 00 Existing Conditions	526,006.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
17	03 00 00 Concrete	21,207.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
18	05 00 00 Metals	148,111.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
19	06 00 00 Wood, Plastics, And Composites	298,716.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
20	07 00 00 Thermal And Moisture Protection	883,102.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
21	08 00 00 Openings	1,226,318.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
22	09 00 00 Finishes	2,217,922.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
23	10 00 00 Specialties	530,323.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
24	11 00 00 Equipment	350,664.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
25	12 00 00 Furnishings	77,133.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
26	21 00 00 Fire Suppression	463,386.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
27	22 00 00 Plumbing	2,276,661.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
28	23 00 00 (Hvac)	1,827,253.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
29	26 00 00 Electrical	2,726,010.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
30	27 00 00 Communications	94,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
31	31 00 00 Earthwork	26,228.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
32	32 00 00 Exterior Improvements	539,092.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
33	33 00 00 Utilities	20,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
34	Design & Estimating Conting	1,501,843.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
35	General Conditions (15 mos)	1,761,886.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
36	Cost of The Work Contingency	639,875.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
37	Design & Preconstruction (less MEP Design Fees in COW)	1,677,437.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
39	Fee	1,081,217.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
40	Building Permit & Plan Review Fees	150,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
41	General Liability Insurance (Contract Rate)	177,969.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
42	Builder's Risk Insurance	91,411.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
43	P&P Bond	129,885.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
44	Retainage Bond	11,438.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
45	Design Builder's Contingency	113,812.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
46	B&O Tax	105,781.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
47	**Phase 1: Design and Preconstruction Sub Total**	22,460,980.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
48	**Change Orders**											
49	PCCO 001 - RDH Further Enclosure Investigation	14,492.00	0.00	0.00	14,492.00	0.00	0.00	0.00	0.00	0%	14,492.00	0.00
50		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
51		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
52		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00
60	**Change Order Sub Total**	14,492.00	0.00	0.00	14,492.00	0.00	0.00	0.00	0.00	0%	14,492.00	0.00
	Total	22,998,979.00	0.00	0.00	537,999.00	278,296.72	116,500.51	0.00	394,797.23	73%	143,201.77	3,947.99

7.0
BIM EXECUTION PLAN

7.0 BIM Execution Plan

7.0 BIM Execution Plan

(Section 3.03b)

Section A—Project Overview
Section B—BIM Goals
Section C—Implementation

Section A - Project Overview

A.1 Columbia Valley Center for Recovery – Benton County owned facility
A.2 Remodel a portion of the existing Kennewick General Hospital
A.3 Progressive Design Build Delivery
A.4 Design Team BIM Manager – Mark Chouinard / NAC Architecture
A.5 REVIT 2024 – Autodesk Construction Cloud
A.6 Model to be published weekly on Friday AM

Section B – BIM Goals

B.1 Major BIM Goals/Objectives
B.1.1 - To utilize BIM software to identify and resolve potential construction conflicts
B.1.2 - Minimize cross referencing errors in callouts
B.1.3 - To link room areas with program space requirements in the BIM model
B.1.4 - To use as a presentation tool as the model develops
B.2 BIM Tools & Deliverables
B.2.1 - Design options
B.2.2 - Live tracking of actual to base square footage
B.2.3 - Align client area parameters with Revit elements
B.2.4 - Owner project requirements
B.2.5 - Existing conditions modelling
B.2.6 - Design reviews
B.2.7 - Presentation
B.2.8 - 3D coordination
B.2.9 - Visual coordination
B.2.10 - Clash detection
B.2.11- Quantity take-off
B.2.12 - Visualization/rendering (Enscape or similar?)
B.2.13 - Construction documents
B.2.14 - Mechanical analysis
B.2.15 - Cost estimation
B.3 Multi-discipline Coordination Method
B.3.1 - PDFs (Bluebeam)
B.3.2 - Revit coordination
B.3.3 - Cloud-based coordination
B.3.4 - Bluebeam Studio
B.3.5 - Third-party applications:
B.3.6 - NAC will utilize Newforma for file exchange, email storage, CA, etc.

Section C—Implementation

C.1 Standard Model Building
C.1.1 - Sheet numbering, naming and titleblocks
C.1.2 - NAC will provide template titleblock
C.1.3 - Utilize industry standard best practices for cleanliness and streamlining of model. Keep model size to a minimum while conveying the necessary information to the contractor.
C.1.4 - Model accuracy and tolerances: model with 1/256" accuracy and dimension to 1/8" accuracy.
C.1.5 - Use tags or labels over text
C.1.6 - Keynote legend is per drawing sheet
C.1.7 - Use schedules over legends wherever possible
C.1.8 - Architectural model will be set up as a facilities model with existing and multiple new construction phases available for future projects.

C.2 Model Maintenance
C.2.1 - All teams should practice the following model maintenance best practices once weekly and prior to sharing models.
C.2.2 - NAC recommends purging all unused elements in each model prior to distributing models to entire team
C.2.3 - Each team member will resolve review warnings as they appear
C.2.4 - Team member(s) performing weekly maintenance will spend 1 hour reducing review warnings.

8.0

PERMIT STRATEGY

8.0 Permit Strategy

Permit Strategy

(Section 3.09)

Our team understands the added value of being proactive with our AHJ's and bringing them onto the project early and often. It is important to have this open communication early in the project to reduce the risk of re-design and obtain alignment on code interpretation and requirements. We have outlined our permit process for each Authority having Jurisdiction that we are required to obtain permit approvals from.

CITY OF KENNEWICK

We are currently planning to obtain (2) separate building permits from the City of Kennewick.

1st permit application would include all site/landscape work, utilities, exterior finish and roof repair, exterior window replacement and the new addition of a secure exterior drop-off for police and ambulance.
2nd permit application would be the remainder of the project which would be all interior remodeled spaces for our program area.

We have currently already met with the City on February 28, 2024 to introduce them to our project and get their initial comments. Their first initial comments are included in Exhibit M - Pre-Development - City Comments.

DEPARTMENT OF HEALTH

The team has initiated contact with the Department of Health. Our application and fees have been submitted. We currently have obtained an official CRS# that will allow communication and documentation uploads to the Department of Health. Paul Clark with the Department of Health will be our reviewer and we can communicate, ask questions and get his feedback as we move forward with design.

- Application and Fee have been submitted.
- CRS# 61544360 and link to DOH BOX account for communication with CRS reviewers has been issued.
- Schedule of Next Steps
  06/19/24 - Schematic design to CRS
  06/26/24 - Review Schematic design with CRS
  08/08/24 - Design Development Drawings to CRS
  10/30/24 - Submit Final Construction Drawings, Specifications, Plumbing Cut Sheets, Functional Narrative Program to CRS
  02/18/25 – Receive Comments from CRS
  02/25/25 – Respond to CRS Comments
  04/02/25 – Receive Approval from CRS

NREC REVIEW

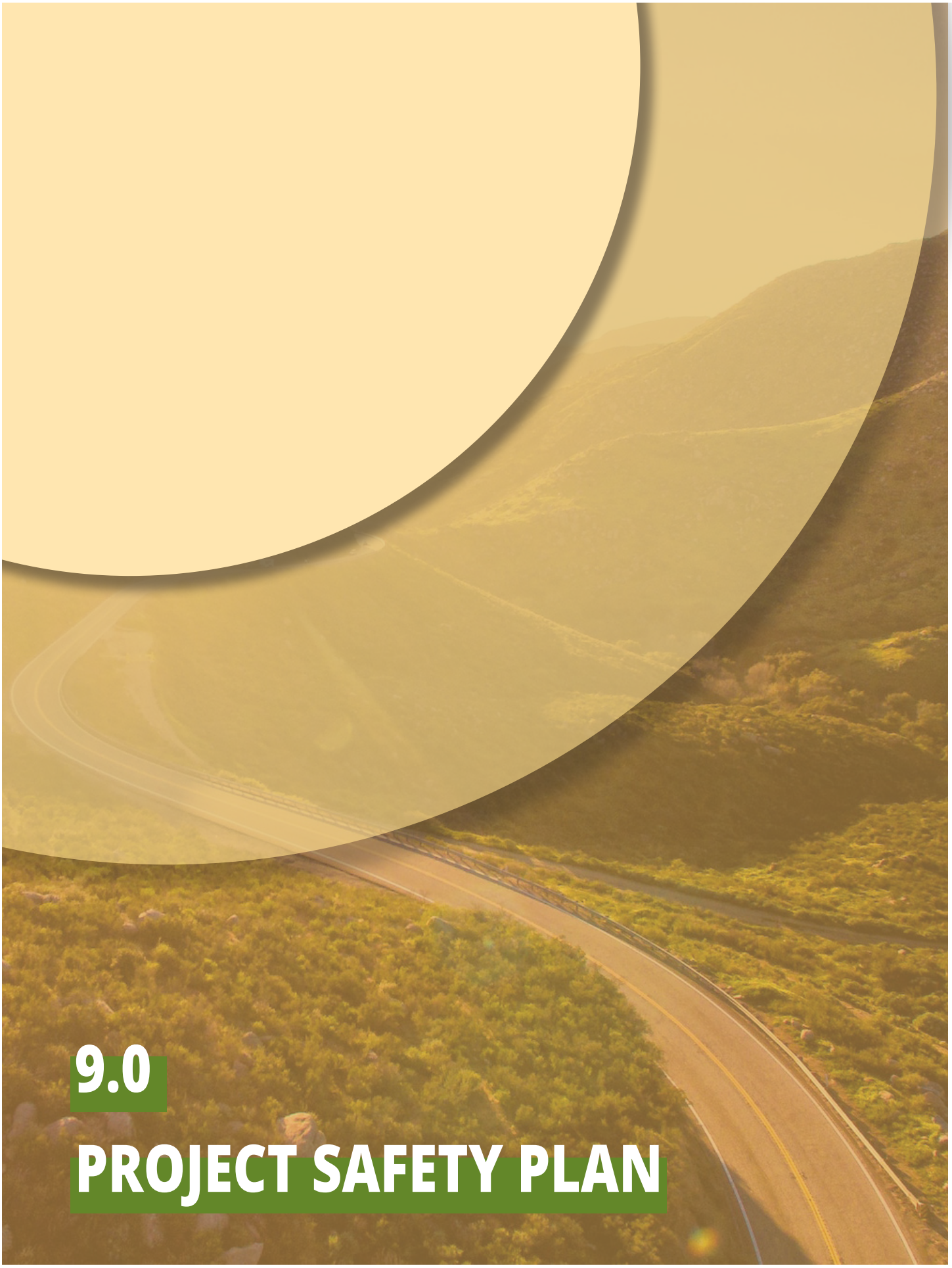
NAC will be submitting our 80% drawings and specifications to NRg Edge Consulting for compliance with the Washington Energy Code. This is a third-party review that is required. This review typically takes about 4 weeks for review. We have confirmed with the State that our facility would not need to meet the entire requirements of the 2021 New Construction Energy Code. We will be following the 2021 Existing Building Energy Code Chapter 5.

DEPARTMENT OF ECOLOGY

There is currently a Well on our site that is still under investigation and determination as to the extent that it can be re-used. If the Well were to be decommissioned, the department of ecology would need to be notified and approve our plan for decommissioning.

L&I SUBMISSION

L&I submission will be completed by Coffman and requires 100% CD drawings to be completed. Once L&I approved and stamped drawings are completed, any drawing changes that alter electrical distribution or increase panel loading will require a revision be submitted to L&I. Review is typically 1 week.



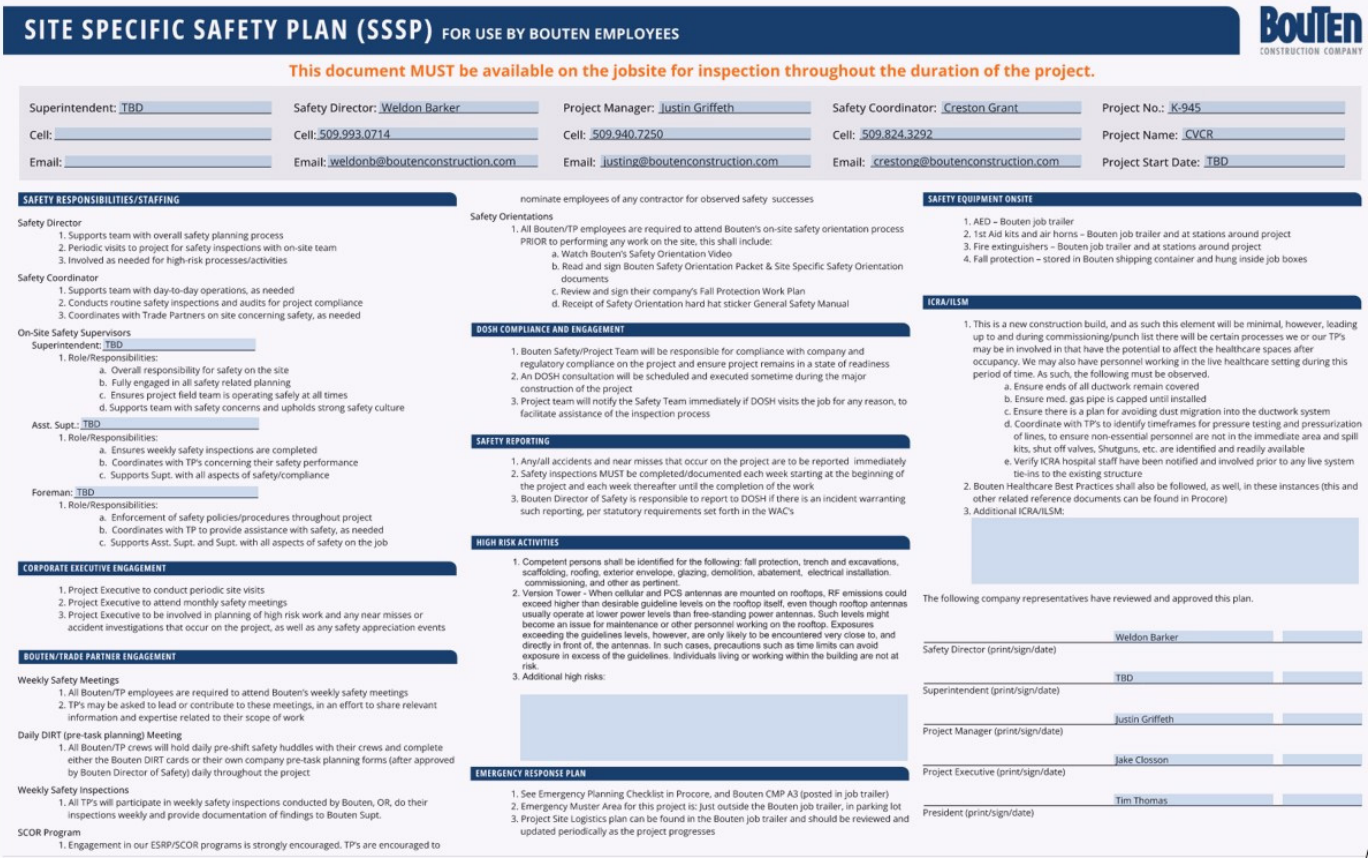
9.0
PROJECT SAFETY PLAN

9.0 Project Safety Plan

(Section 3.07a)

Project Safety Plan

The project specific safety plan and jobsite hazard analysis shown below outlines specific project related safety objectives to include identification of project safety risks, safety responsibilities, high risk activities, ongoing training, and regular safety checks to protect everyone involved. With open communication and a strong commitment to safety, we aim for zero accidents, making sure ensuring every worker and visitor stays safe throughout the project.



SITE SPECIFIC SAFETY PLAN (SSSP) FOR USE BY BOUTEN EMPLOYEES

BOUTEN CONSTRUCTION COMPANY

This document MUST be available on the jobsite for inspection throughout the duration of the project.

Superintendent: TBD	Safety Director: Weldon Barker	Project Manager: Justin Griffeth	Safety Coordinator: Creston Grant	Project No.: K-945
Cell:	Cell: 509.993.0714	Cell: 509.940.7250	Cell: 509.824.3292	Project Name: CVCR
Email:	Email: weldonb@boutenconstruction.com	Email: justing@boutenconstruction.com	Email: crestong@boutenconstruction.com	Project Start Date: TBD

SAFETY RESPONSIBILITIES/STAFFING

Safety Director
1. Supports team with overall safety planning process
2. Periodic visits to project for safety inspections with on-site team
3. Involved as needed for high-risk processes/activities

Safety Coordinator
1. Supports team with day-to-day operations, as needed
2. Conducts routine safety inspections and audits for project compliance
3. Coordinates with Trade Partners on site concerning safety, as needed

On-Site Safety Supervisors

Superintendent: TBD
1. Role/Responsibilities:
   a. Overall responsibility for safety on the site
   b. Fully engaged in all safety related planning
   c. Ensures project field team is operating safely at all times
   d. Supports team with safety concerns and upholds strong safety culture

Asst. Supt.: TBD
1. Role/Responsibilities:
   a. Ensures weekly safety inspections are completed
   b. Coordinates with TP's concerning their safety performance
   c. Supports Supt. with all aspects of safety/compliance

Foreman: TBD
1. Role/Responsibilities:
   a. Enforcement of safety policies/procedures throughout project
   b. Coordinates with TP to provide assistance with safety, as needed
   c. Supports Asst. Supt. and Supt. with all aspects of safety on the job

CORPORATE EXECUTIVE ENGAGEMENT

1. Project Executive to conduct periodic site visits
2. Project Executive to attend monthly safety meetings
3. Project Executive to be involved in planning of high risk work and any near misses or accident investigations that occur on the project, as well as any safety appreciation events

BOUTEN/TRADE PARTNER ENGAGEMENT

Weekly Safety Meetings
1. All Bouten/TP employees are required to attend Bouten's weekly safety meetings
2. TP's may be asked to lead or contribute to these meetings, in an effort to share relevant information and expertise related to their scope of work

Daily DIRT (pre-task planning) Meeting
1. All Bouten/TP crews will hold daily pre-shift safety huddles with their crews and complete either the Bouten DIRT cards or their own company pre-task planning forms (after approved by Bouten Director of Safety) daily throughout the project

Weekly Safety Inspections
1. All TP's will participate in weekly safety inspections conducted by Bouten, OR, do their inspections weekly and provide documentation of findings to Bouten Supt.

SCOR Program
1. Engagement in our ESRP/SCOR programs is strongly encouraged. TP's are encouraged to nominate employees of any contractor for observed safety successes

Safety Orientations
1. All Bouten/TP employees are required to attend Bouten's on-site safety orientation process PRIOR to performing any work on the site, this shall include:
   a. Watch Bouten's Safety Orientation Video
   b. Read and sign Bouten Safety Orientation Packet & Site Specific Safety Orientation documents
   c. Review and sign their company's Fall Protection Work Plan
   d. Receipt of Safety Orientation hard hat sticker General Safety Manual

DOSH COMPLIANCE AND ENGAGEMENT

1. Bouten Safety/Project Team will be responsible for compliance with company and regulatory compliance on the project and ensure project remains in a state of readiness
2. An DOSH consultation will be scheduled and executed sometime during the major construction of the project
3. Project team will notify the Safety Team immediately if DOSH visits the job for any reason, to facilitate assistance of the inspection process

SAFETY REPORTING

1. Any/all accidents and near misses that occur on the project are to be reported immediately
2. Safety inspections MUST be completed/documented each week starting at the beginning of the project and each week thereafter until the completion of the work
3. Bouten Director of Safety is responsible to report to DOSH if there is an incident warranting such reporting, per statutory requirements set forth in the WAC's

HIGH RISK ACTIVITIES

1. Competent persons shall be identified for the following: fall protection, trench and excavations, scaffolding, roofing, exterior envelope, glazing, demolition, abatement, electrical installation. commissioning, and other as pertinent.
2. Version Tower - When cellular and PCS antennas are mounted on rooftops, RF emissions could exceed higher than desirable guideline levels on the rooftop itself, even though rooftop antennas usually operate at lower power levels than free-standing power antennas. Such levels might become an issue for maintenance or other personnel working on the rooftop. Exposures exceeding the guidelines levels, however, are only likely to be encountered very close to, and directly in front of, the antennas. In such cases, precautions such as time limits can avoid exposure in excess of the guidelines. Individuals living or working within the building are not at risk.
3. Additional high risks:

EMERGENCY RESPONSE PLAN

1. See Emergency Planning Checklist in Procore, and Bouten CMP A3 (posted in job trailer)
2. Emergency Muster Area for this project is: Just outside the Bouten job trailer, in parking lot
3. Project Site Logistics plan can be found in the Bouten job trailer and should be reviewed and updated periodically as the project progresses

SAFETY EQUIPMENT ONSITE

1. AED – Bouten job trailer
2. 1st Aid kits and air horns – Bouten job trailer and at stations around project
3. Fire extinguishers – Bouten job trailer and at stations around project
4. Fall protection – stored in Bouten shipping container and hung inside job boxes

ICRA/ILSM

1. This is a new construction build, and as such this element will be minimal, however, leading up to and during commissioning/punch list there will be certain processes we or our TP's may be in involved in that have the potential to affect the healthcare spaces after occupancy. We may also have personnel working in the live healthcare setting during this period of time. As such, the following must be observed.
   a. Ensure ends of all ductwork remain covered
   b. Ensure med. gas pipe is capped until installed
   c. Ensure there is a plan for avoiding dust migration into the ductwork system
   d. Coordinate with TP's to identify timeframes for pressure testing and pressurization of lines, to ensure non-essential personnel are not in the immediate area and spill kits, shut off valves, Shutguns, etc. are identified and readily available
   e. Verify ICRA hospital staff have been notified and involved prior to any live system tie-ins to the existing structure
2. Bouten Healthcare Best Practices shall also be followed, as well, in these instances (this and other related reference documents can be found in Procore)
3. Additional ICRA/ILSM:

The following company representatives have reviewed and approved this plan.

Weldon Barker
Safety Director (print/sign/date)

TBD
Superintendent (print/sign/date)

Justin Griffeth
Project Manager (print/sign/date)

Jake Closson
Project Executive (print/sign/date)

Tim Thomas
President (print/sign/date)

A full-size copy of this Site Specific Safety Plan is available upon request

10.0

SUBCONTRACTING & DEI PLAN

10.0 Subcontracting & DEI Plan

(Sections 3.06a & 3.10)

10.01 Diverse Business and Subcontracting Plan

SUBCONTRACTING & DIVERSITY APPROACH

Building off of the Subcontracting and DEI Plan highlighted in our RFP response, the subcontracting and DEI plan has been updated to reflect anticipated bid packages and basis for awarding of these packages. The updated plan is provided below. The following process will be followed for creating competition and engaging new and diverse businesses:

COMPETITIVE PROCESS & OWNER ENGAGEMENT

The proposed plan is to onboard trade partners using either a qualifications-based RFP, lump-sum bid, or fee and rates with a not-to-exceed (NTE), our trade partner on-boarding process is always competitive.

- **Best-Value RFP** We've created an A3 asking how trade partners will differentiate themselves, with scoring heavily weighted toward best value and a pricing component that includes a preconstruction fee and total fee percentage.
- **Lump-Sum Bid** Several qualified trades and scopes in our market perform very well with a lump-sump bid approach. We'll use our detailed bidder's instructions to create competition, verifying that the full scope is captured for each work package.
- **Fee and Rates with an NTE** For smaller or yet-to-be-defined scopes of work, we'll request fee and rates with an NTE value.

Each approach will be reviewed in detail prior to procurement, and we encourage Benton County to participate in the selection process.

STRATEGIES FOR NEW DIVERSE BUSINESSES

The current list of certified diverse businesses is small. We have indicated which bid categories have certified businesses in this region. Based on this information, we believe that a project goal of 3-5 percent of the total GMP for certified business use makes sense for the project. We'll confirm this with Benton County during the validation phase.

SPECIFIC DIVERSE BUSINESS APPROACH FOR BENTON COUNTY

- Focus on Small Scopes of Work Our focus will be to target design, engineering or survey, remediation, miscellaneous steel, and accessories partners.
- Create Breakout Scope Packages We'll look at breaking out what traditionally would have been a small scope within a larger scope package to see where opportunities exist for diverse businesses, e.g., mechanical insulation, parking lot striping or signage, or testing and balancing.
- Outreach and Communication We see a tremendous opportunity with this project—to support and build relationships with diverse businesses that will, in turn, become a vital part of our industry—and will engage as many partners in the conversation as early as possible.

10.01 Diverse Buisness and Subcontracting Plan

BOUTEN CONSTRUCTION COMPANY

Columbia Valley Center For Recovery
TRADE PARTNERING AND DIVERSITY PLAN
Wednesday, May 8, 2024

PACKAGE NO.	WORK PACKAGE DESCRIPTION	ESTIMATED VALUE*	SUB OR SELF-PERFORM	DIVERSE BUSINESS**	SUB OR SELF-PERFORM	INCLUSION %	PROCUREMENT (SELECTION) TYPE
	Validation						
1	Design-Build HVAC + Controls	TBD	Sub	P	Sub	TBD	Best Value RFP
2	Design-Build Plumbing	TBD	Sub	N	Sub	TBD	Best Value RFP
3	Design-Build Electrical, Fire Alarm, Telecommunication, + Security	TBD	Sub	N	Sub	TBD	Best Value RFP
	Phase 1 - Design & Preconstruction						
4	Benchmarks and ROW Survey	TBD	Sub	P	Sub	TBD	Lump Sum Bid
5	Professional Land Surveying	TBD	Sub	Y	Sub	<1%	Lump Sum Bid
6	Acoustical Engineer	TBD	Sub	Y	Sub	TBD	Best Value RFP
7	Scanning and Construction Layout	TBD	Self-perform	N	Self-perform	TBD	N/A
8	Abatement	TBD	Sub	N	Sub	TBD	Best Value RFP
9	Demolition	TBD	Sub	N	Sub	TBD	Best Value RFP
10	Design-Build Fire Protection	TBD	Sub	N	Sub	TBD	Best Value RFP
11	Aluminum + Glass	TBD	Sub	N	Sub	TBD	Best Value RFP
12	Roofing + Above Grade Waterproofing	TBD	Sub	N	Sub	TBD	Best Value RFP
13	Cladding	TBD	Sub	N	Sub	TBD	Best Value RFP
14	Earthwork + Utilities	TBD	Sub	N	Sub	TBD	Best Value RFP
15	Plumbing	TBD	Sub	N	Sub	TBD	GMP
16	Mechanical	TBD	Sub	N	Sub	TBD	GMP
17	Electrical	TBD	Sub	N	Sub	TBD	GMP
	Phase 2 - Final Design and Construction						
18	Structural Concrete	TBD	Self-perform	N	Self-perform	TBD	N/A
1	Non-Structural Concrete	TBD	Sub	Y	Sub	1.00%	Lump Sum Bid
19	Miscellaneous Metals	TBD	Sub	P	Sub	TBD	Lump Sum Bid
2	Structural Steel Fabricator (if Applicable)	TBD	Sub	P	Sub	TBD	Lump Sum Bid
20	Structural Steel Erector (if Applicable)	TBD	Sub	N	Sub	TBD	Lump Sum Bid
3	Rough Carpentry + Backing	TBD	Self-perform	N	Self-perform	TBD	N/A
21	Casework Supply	TBD	Sub	N	Sub	TBD	Lump Sum Bid
4	Casework Install	TBD	Self-perform	N	Self-perform	TBD	Lump Sum Bid
22	Fireproofing	TBD	Sub	N	Sub	TBD	Lump Sum Bid
5	Below Grade Waterproofing	TBD	Sub	N	Sub	TBD	Lump Sum Bid
23	Specialty Doors	TBD	Sub	N	Sub	TBD	Lump Sum Bid
6	DFH Supplier	TBD	Sub	N	Sub	TBD	Lump Sum Bid
24	DFH Installer	TBD	Self-perform	N	Self-perform	TBD	Lump Sum Bid
7	Finish Flooring + Wall Base	TBD	Sub	N	Sub	TBD	Lump Sum Bid
25	Finish Floor + Wall Tiling	TBD	Sub	N	Sub	TBD	Lump Sum Bid
8	Metal Stud + GWB	TBD	Sub	Y	Sub	5.00%	Lump Sum Bid
26	Painting	TBD	Sub	P	Sub	TBD	Lump Sum Bid
9	Ceilings	TBD	Sub	N	Sub	TBD	Lump Sum Bid
27	Signage	TBD	Sub	Y	Sub	<1%	Lump Sum Bid
10	Acoustical Wall Panels	TBD	Sub	N	Sub	TBD	Lump Sum Bid
28	Markerboards	TBD	Sub	N	Sub	TBD	Lump Sum Bid
11	Miscellaneous Specialties	TBD	Sub	Y	Sub	<1%	Lump Sum Bid
29	Lockers	TBD	Sub	Y	Sub	<1%	Lump Sum Bid
12	Foodservice Equipment/Appliances	TBD	Sub	N	Sub	TBD	Lump Sum Bid
30	Design-Build Landscaping + Irrigation	TBD	Sub	P	Sub	TBD	Lump Sum Bid
13	Fencing	TBD	Sub	N	Sub	TBD	Lump Sum Bid
31	Synthetic Surfacing	TBD	Sub	N	Sub	TBD	Lump Sum Bid
14	Asphalt/ Striping	TBD	Sub	Y	Sub	<1%	Lump Sum Bid
32	Testing, Adjusting, and Balancing	TBD	Sub	Y	Sub	<1%	Lump Sum Bid
15	Final Cleaning	TBD	Sub	Y	Sub	<1%	Lump Sum Bid
		$ -				7.00%	

NOTES

** Y = Yes, known certified businesses
P = Probable, non-certified & certified business may exist for these scopes of work within the Tri-Cities Region. Trades to be confirmed during outreach meetings
N = No known certified or non-certified DBE Business. Further outreach will be completed during validation to identify potential businesses

11.0

CONTRACT AMENDMENT/ LEVEL OF EFFORT

11.0 Contract Amendment/ Level of Effort

(Sections 3.08a-b)

11.1 Scope of Work

11.2 Level of Effort

11.1 Contract Amendment Scope of Work

DESIGN SCOPE OVERVIEW

The design will have an efficient floor plan that is client centered and staff sensitive. The facility will use durable materials inside and out, provide a safe healing environment to clients, and ease of supervision for staff. Once our room sizes and adjacencies are validated, the room and space specifics can be addressed. Below is a list of scope that will be completed in Phase 1 Design and Preconstruction:

1. Casework and Countertops – amounts, locations, & types
2. Doors and Hardware – types, locations, & functions
3. Ceilings – types & heights
4. Lighting – types, locations, & functions
5. Electrical outlets and data types & locations
6. Plumbing Fixtures – types & accessories
7. Mechanical zones, controls, & options
8. Kitchen equipment & function
9. Equipment Coordination – printers, pyxis, medical testing, servers (IT needs), laundry, & shelving
10. Access Control – types, locations, & functions
11. Security Devices – cameras and intrusion detection
12. Site – drop off zones, garages/carports, courtyards, truck deliveries, waste management, fire truck access, utilities, existing well, sidewalks, pedestrian/vehicle circulation, landscaping, & parking
13. Interior Finishes – flooring, wall protection, color palette scheme, & artwork
14. Exterior finishes – windows, exterior skin, roofing, and color palette scheme/extent

PRECONSTRUCTION SCOPE OVERVIEW

In addition to the design scope of work outlined above, the following preconstruction scope of work items will be completed to support GMP development:

1. Pull planning sessions to detail the schedule for each milestone activity
2. Continuous estimating and target budget updates
3. Review and refinement of betterments
4. Choosing by advantages for the envelope, mechanical systems and finishes
5. Identify any long lead items and timing for procurement
6. Milestone schedule adjustments and refinement
7. Further on-site investigations to support design
8. Onboarding of qualifications based trade partners per the subcontracting plan
9. Site logistics planning
10. Minor selective demolition performed by Bouten to support design needs
11. Continued design and target budget alignment
12. Owner and design-build team scope alignment for both program areas and building areas outside of the program area

These tasks will be completed to support development of GMP 1 – Site, Exterior and Early Procurement and to prepare for Phase 2 – Final design and construction for the final GMP to include the Interior build-out.

11.2 Contract Amendment Level of Effort

The detailed level of effort to include design and precon-struction costs, lump sums, allowances, design-build team contingencies and total costs for completion of Phase 1 – Design and Preconstruction to development of GMP 1 – Site, Exterior and Early Procurement is being provided to Benton County as a seperate document.

12.0
QUALITY MANAGEMENT

12.0 Quality Management

(Sections 3.11a)

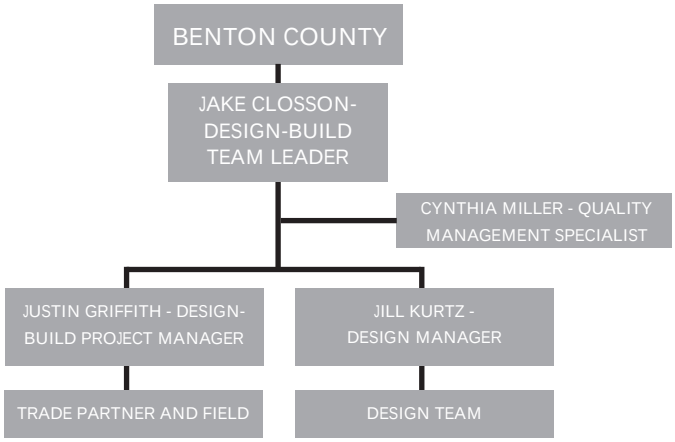
12.1 Design-Build Team QMS (A3)

12.2 Design Quality Management

12.1 Design-Build Team Quality Management Plan (3.11a)

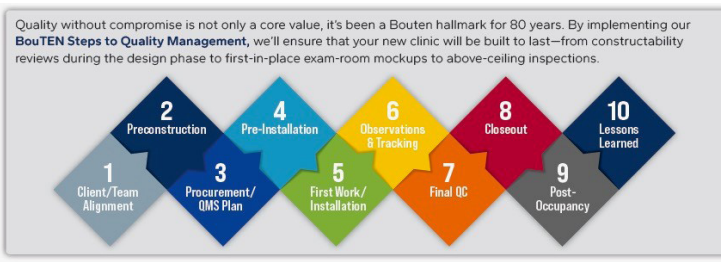
Our standard is doing things the best they can be done. Period. Our teams pride themselves on upholding Bouten's Legacy for delivering exceptional quality and workmanship. We will use our quality management plan to develop and define project specific quality measures related to this project. Specific components of this plan include:

- Project Quality Management Process from team alignment to Occupancy
- Critical Quality management checkpoints throughout the process
- Measurement of quality objectives through documentation of steps completed
- Key team members and trade partners as they are on-boarded.
- Org Chart for key team member responsibilities



Cynthia Miller will serve as the project's Quality Management Specialist and will complete the following tasks:

- Support design quality review and constructability
- Continually update and track the project Quality Management System (QMS)
- Incorporate scope of work specific best practices which are applicable to this project
- Initiate periodic project reviews, monthly
- Develop corrective action plans
- Track quality management measures



Quality Management System – Columbia Valley Center for Recovery

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Quality Without Compromise

Our standard is doing things the best they can be done. Period. Our teams pride themselves on upholding Bouten's Legacy for delivering exceptional quality and workmanship. This quality management plan is a tool for project teams to use to develop and define project specific quality measures. Each team will discuss and fill out this plan at each of the quality management milestones listed.

Procore QR Codes

PE to create and place QR codes from Procore.

Project Information	QC/QA Dashboard

Major Quality Management Areas of Risk and Focus

No.	Risk	BCC Lead	Trade Partners	Current Stage	Comments
1.	Exterior Envelope	Superintendent	Procurement Process	Precon	Tying into Existing Conditions
2.	Roofing	Superintendent	Procurement Process	Precon	Tying into Existing Conditions
3.	Version Tower	Superintendent	Procurement Process	Precon	Tying into Existing Conditions
4.	Fire Sprinkler System	Superintendent	Procurement Process	Precon	Tying into Existing Conditions
5.	Glazing	Superintendent	Procurement Process	Precon	Tying into Existing Conditions
6.					

Project Life Cycle Quality Management Milestones

CLIENT/TEAM ALIGNMENT	TRANSITION TO CONSTRUCTION	CONSTRUCTION	MID-PROJECT CHECK IN	PRE-CLOSEOUT	CLOSEOUT	RETROSPECTIVE
Follow project setup checklist for QA/QC related steps in preconstruction.	Follow project setup checklist for team kick-offs, lean workflow, and execution process.	Follow Last Planner System® for Lean workflow and execution process.	Mid-project QC lessons learned and meeting. No more than 30% into project.	Closeout meeting to be conducted no greater than 75% complete.	30-days prior to substantial completion—identify final requirements for handing over the keys	To be held within 30 days of substantial completion
Planned Date: / Completed Date:	Planned Date: / Completed Date:	Planned Date: / Completed Date:	Planned Date: / Completed Date:	Planned Date: / Completed Date:	Planned Date: / Completed Date:	Planned Date: / Completed Date:

Project Life Cycle Quality Management Milestones

CLIENT/TEAM ALIGNMENT | TRANSITION TO CONSTRUCTION | CONSTRUCTION | MID-PROJECT CHECK IN | PRE-CLOSEOUT | CLOSEOUT | RETROSPECTIVE

Follow project setup checklist for QA/QC related steps in preconstruction. | Follow project setup checklist for team kick-offs, lean workflow, and execution process. | Follow Last Planner System® for Lean workflow and execution process. | Mid-project QC lessons learned and meeting. No more than 30% into project. | Closeout meeting to be conducted no greater than 75% complete. | 30-days prior to substantial completion—identify final requirements for handing over the keys | To be held within 30 days of substantial completion

Planned Date: / Completed Date:

BouTEN Steps of Quality Management	1 CLIENT/TEAM ALIGNMENT	2 PRECONSTRUCTION	3 PROCUREMENT/ QMS PLAN	4 PRE-INSTALL	5 FIRST WORK/INSTALL	6 OBSERVATIONS & TRACKING	7 FINAL QC	8 CLOSEOUT	9 POST OCCUPANCY	10 LESSON LEARNED
QUALITY MANAGEMENT CHECKLIST	• Perform initial client interface and alignment expectations • Review and understand design team quality management approach	• Review design team expectations • Incorporate Bouten standards • Perform constructability reviews • Determine overall project approach and QMS impacts • Identify and engage proper quality consultants • Incorporate quality requirements into the construction documents • Review VDC approach and confirm QMS related steps	• Develop project specific quality plan • Hold the all project and trade partner kick-off meeting • Hold Pre-Job start up meetings • AHJ project review and approach kick-off meeting • Execute submittal process • Perform mock-ups • Hold the commissioning kick-off meeting	• Create and updated pre-installation agenda's • Hold trade partner pre-installation meetings	• First work definition is viewing / observing the work immediately upon start • Complete a pre-first work huddle • Complete first work final product inspections	• Execute Bouten QC inspection process and documentation • Execute pre-cover photo and QR code observation process • Complete AHJ third party inspections	• Execute trade partner final quality check program • Identify work to complete and perform pre-punch final quality check • Execute commissioning process and scope • Complete the punch-list	• Initiate and execute the close out process • Complete closeout documents	• Post occupancy preparation and follow-up • Schedule one-year warranty walk	• Document lessons learned during the project • Schedule the project retrospective • Quality management systems follow up and best practice implementation
TOOLS / DOCUMENTATION OR REFERENCE	• Conditions of Satisfaction • Quality Control Major Areas of Focus (QMS A3)	Bouten Standards • Best Practices - Preconstruction / Constructability Review • Best Practices - Construction • Decisions Log / Betterments / Alternates • Bid Packages • QMS Workbook and A3 • Master Schedule • BIM / REVIT access • Reference QMS Best Practice documents	• Project set-up checklist • Roles and responsibilities (QMS specific) • Best practices - construction • QMS Master Inspections workbook • Procurement log (Procore functions?) • Submittal log (Procore generation) • Bouten firewall mock-up (future) • Procore meeting minute templates	• QMS Master Inspections workbook • Listing and schedule of required pre-install meetings • Procore pre-install meeting minutes • Reference QMS Best Practice documents	• Procore inspections tool • Project schedule • Last Planner System © • Reference QMS Best Practice documents	• Procore inspection templates • Procore observations (created individually and via inspection tool) • Daily inspection logs for city inspectors. • Detailed city inspection list • Reference QMS Best Practice documents	• Procore meeting minute templates • Project schedule • Commissioning log • Best practices • Lean final quality check • Reference QMS Best Practice documents	• Procore meeting minute templates • Bouten standard closeout checklist • O&M tracking log • Commissioning log • Lean final quality check	• Warranty log • Outlook invitations	• Lessons learned log • Retrospective meeting template
TRAINING/ IMPLEMENTATION	• Training for Bouten Key Employees - to navigate process (Record All company meeting on October 6)	• Case Studies [in progress]	• Record PE training on how to set up the inspections templates	• Trade partner procore training (Use procore videos and publish to trades)	• Video of a first work install example	• Develop Procore video training for BCC/trade partners to demonstrate observation tool. • Develop Procore video training for BCC to demonstrate QR codes/inspection template tool &process.	• Procore video training for owner, architect, and trade partner to demonstrate punch list tool and observation tool		• Training for Bouten key employees - to navigate process	

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PLAN — The project specific QMS plan will be mutually developed by the project manager, project engineer, and superintendent. The quality management specialist is to be included in the plan development.

DO — Review the plan in detail with the project team, assigning roles and responsibilities and who is responsible for which scope.

CHECK — Each milestone from page one can be used to check progress and effectiveness of the QMS plan. Review the Procore QMS Dashboard for specific accomplishments and outstanding items.

ACT — The Project Team shall follow through on nonconformities and make sure they are addressed. Track any lessons learned during the project.

Field Execution Tips and Tricks

1. Walk with trade partners.
2. Walk the site entering at a new location or walk in reverse of your typical job walk.
3. Visit another project and volunteer a quality control walk.
4. Walk as a team—complete a Gemba walk.
5. Be curious—inspect something you know nothing about.
6. Quality management needs to be intentional—make time for it.

Definable Features of Work-Responsibility

The matrix below is a quick reference guide to identify which project team members are leading each scope of work section. For a detailed review of Quality Management System Roles and Responsibilities, reference the complete project roles and responsibilities matrix.

		PROCUREMENT/ QMS PLAN	PRE-INSTALL	FIRST WORK/ INSTALL	OBSERVATIONS/ ONGOING TRACKING	FINAL QC
SITE WORK						
1	Grading, excavation, soils, & compaction					
2	Underground utilities					
3	Curb, asphalt, concrete					
STRUCTURE						
4	Concrete foundations, slabs, and elevated decks					
5	Structural steel					
6	Precast or architectural concrete					
7	Misc. steel, decorative steel					
BUILDING ENVELOPE						
8	Exterior framing, sheeting, and air barrier					
9	Windows and flashings					
10	Exterior cladding, metal panels, EFIS, or masonry					
11	Roofing and flashings					
MECHANICAL (ROUGH AND FINAL)						
12	Fire protection					
13	Plumbing					
14	HVAC and controls					
15	Electrical					
16	Commissioning					
FINISHES						
17	Casework and mill-work					
18	Ceilings					
19	Special systems					
20	Flooring, paint, and other finishes					

Design Team and Owner Project Inspection Contacts and Frequency

	OWNER/ARCHITECT	MECHANICAL ENGINEER	ELECTRICAL ENGINEER	CIVIL ENGINEER	STRUCTURAL
Inspection type(s)					
Frequency					
Responsibility					
Report format					
Report uploaded to Procore					
Defiency follow-up responsibility					

Project Inspection Requirements and Contacts

The matrix below provides a quick reference for each of the inspection agencies typical to a project. The project team is responsible to verify and modify this listing to be inclusive with the project requirements. Reference the Quality Management System workbook for additional details and criteria.

AUTHORITY HAVING JURISDICTION

The Authorities Having Jurisdiction (AHJ) includes all agencies with jurisdictional authority of any particular aspect of the project. The AHJs would typically include the city, county, state, fire department, Department of Health, and Labor and Industris (for elevators and electrical). These AHJs will be responsible for completeing plan reviews (if required), periodic project inspections, final inspections, and sign-off for receiving certificates of occupancy.

ITEM	INPSECTION	AHJ	CONTACT	EMAIL	PHONE
1	Public Works				
2	Storm Water				
3	Water				
4	Sanitary				
5	Gas/Electric				
6	Building				
7	Mechanical				
8	Electrical				
9	Fire				
10	Planning/Site				
11					

SPECIAL INSPECTIONS

Special inspections typically include 3rd party inspections required per code or the construction documents. Special inspections may include earthwork and soils, underground utilities, soils compactions, concrete, steel, or fireproofing. It will include reports which must be documented in parallel to the Bouten QA and QC inspections.

ITEM	INPSECTION	AHJ	CONTACT	EMAIL	PHONE
1	Site/Soils				
2	Concrete				
3	Steel				
4	Fireproofing				
5	Fire Sealants				
6	Structural Supports				
7	Flooring Moisture				
8					

CONSULTANTS OR THIRD-PARTY INSPECTIONS

Additional consultants may be retained, and are recommended, for systems such as the exterior envelope, air barriers, curtainwall systems, roofing, and acoustical systems. These consultants will be responsible to assist with constructability reviews, provide input on latest trends and successes with specific project details, review submittals, mock-ups, complete site visits to verify installations, and complete performance testing. It is important to involve consultants early in the process to help indentify and address and potential conflicts with design and performance requirements.

ITEM	INPSECTION	AHJ	CONTACT	EMAIL	PHONE
1	Envelope				
2	Roofing				
3	Acoustics				
4	Curtainwall				
5					
6					

12.2 Design Quality Management (3.11c)

ORGANIZATION

NAC is a corporation performing professional services. Principals are shareholders (owners of the Company) and manage the Company's operations. Staff working for the Company includes project managers, project architects, engineers, construction administrators, specification writers, and other technical support personnel.

All staff report to Principals-In-Charge of individual projects. Within the Company there are no permanent assignments or fixed hierarchies. Every project is assigned a unique team led by the Principal-In-Charge, with the team size and composition determined by the project size, type, and complexity. Additional administrative and corporate staff members provide support to all project teams.

In some cases the same team may continue on multiple projects for a particular client, or on multiple projects of a particular type. Experience shows this leads to excellent quality control by applying any lessons learned to subsequent projects of a similar nature.

Depending on the size and complexity of a project, the project team may be as small as one person, or comprised of a large number of team members. In smaller projects, team members may fill multiple roles described in this QA/QC program. The descriptions which follow should not be interpreted to mean that every project team must consist of a specific number of individuals with specific and singular titles and responsibilities. It is not uncommon for a relatively small number of team members to fulfill multiple roles simultaneously.

To a limited extent afforded by the degree of control given to NAC over other parties involved in the design and construction process, the QA/QC plan extends to the work of consulting engineers and designers employed by NAC under NAC's prime contract with the client, and to a lesser extent to the work of other consultants working directly for the client. NAC's control over these other parties is limited by the extent of professional responsibility and control defined in agreements between NAC and its consultants, and to the extent of professional control assigned to NAC by clients' agreements with those consultants under the direct control of the clients. NAC endeavors to elevate the work of all parties contributing to the design effort to the highest level possible.

DOCUMENTATION

Document control is the cornerstone of an effective QA/QC plan to ensure that only the latest and most accurate documents, specifications, and standards are used throughout the design and construction teams to perform the work related to the project. It is essential to properly document project events, conversations, decisions, conditions and/or outside influences affecting the project. When documents are no longer relevant or are outdated, the process of archiving and disposing of obsolete and unnecessary documents is systematic and orderly.

All pertinent records related to the Company's projects are retained at least 7 years from the final completion date of each project. The Company has established written policies regarding file organization, filing documents related to projects, and conversion of hard copy / physical documents to electronic format for long-term storage. These policies are reviewed and updated periodically as new technology emerges to facilitate efficient storage and retrieval of filed project documents.

All communications with attorneys and insurers representing NAC and its clients are kept separate from other project files.

All team members are directed to maintain thorough and accurate records of discussions, visits, meetings, and any other communications regarding the project.

While good faith efforts are made to abide by these procedures, due to the volume of documents involved, the complexities of professional practice, and the inevitability of Murphy's Law, there may be instances where documents will be retained for longer or shorter periods than described in NAC's document retention policies. Failure to comply with these policies should be presumed to be inadvertent. No duty or obligation, beyond those imposed by law, is made or inferred to any third-party regarding retention of documents pertaining to any project.

QA and QC program implementation processes are documented and retained for each project. The extent of documentation and retention varies by the size and complexity of the project.

OPERATING PROCEDURES

Principals-in-Charge, or a delegated project manager, assign project roles to members of each project team. Particularly on large or complex projects, each person (and sometimes consultants hired for such purposes) may have

a distinct and solitary role in development and execution of the QA/QC plan for the project. On smaller projects, a limited number of people may fulfill multiple roles.

One or more team representatives will be responsible for developing a QA plan for the project, often following draft plans or templates developed by NAC for this purpose. And one or more team representatives will be responsible for checking the work of internal and external team members to verify the QA plan has been executed to ensure control over the quality of the finished product.

Responsibilities vary during the various phases of design and construction of a project. During early phases of design, many team members may be involved in QA and QC. Often, many team members ensure QC during preparation of construction documents such as drawings and specifications for bidding or procurement of the construction contract. During the later phases of a project, such as construction administration and closeout, the number of team members responsible for QC may be limited. Roles and responsibilities of the project team are described below under "Roles and Responsibilities".

The QA plan for each project consists of the program elements described below, under "QA/QC Program Elements".

ROLES & RESPONSIBILITIES

Key roles assigned to team members at various stages of development and implementation of the QA/QC plan are:

- Developing the QA/QC Budget
  - How much of the team's resources are dedicated to QA/QC.
- Staffing
  - Ensure the necessary team members, both individuals and consultants, are assigned to the project, and assign roles and responsibilities for development and implementation of the QA/QC plan for the project. This may include one or more persons with the following responsibilities:
    - Principal-In-Charge or Delegated Project Manager
      - Responsible for staffing and assignment of roles and responsibilities. Manages contracts with clients and consultants. In conjunction with the client, is responsible for establishment of the scope of services, budget, schedule, and any other duties necessary to satisfy the requirements of the agreement between the Owner and the Architect/Engineer.
    - Project Leader
      - Responsible for coordination of all QA/QC efforts by the entire project team, including consultants and other contributors. Typically, this person also has primary responsibility to ensure project budgets, estimates, schedules, and scopes of work are consistent with the agreed goals of the client and the design team. This ensures a solid connection between adherence to the QA/QC program and evolution of the design and construction process, for a comprehensive approach to fulfilment of the agreement between the Owner and the Architect/Engineer. The Project Leader is also typically responsible for ensuring the design team does not exceed the authority or responsibility given to them in the role of design professionals. Examples: 1) Performance of work beyond the scope of professional services in their agreement with the client. 2) Giving directions to contractor(s) regarding means and methods of performing the construction work.
    - Document Control
      - Responsible for coordination and distribution of all design documents, including drawings, specifications, addenda, clarifications, changes, and other related documents. Also includes management of project files, correspondence, and similar collateral produced by all members of the project team.
    - Building Information Management (BIM)
      - Responsible for adherence to standards, best practices, and client-specific or project-specific requirements for all documents produced by the design team.
    - Design Lead (Originator)
      - Responsible for design intent, and extent to which documentation of that intent is complete.
    - Checker (Reviewer)
      - Responsible for checking the work of others, including the Design Lead, to ensure the design intent is clearly conveyed for others unfamiliar with the Originator's intent.
    - Back-Checker
      - Reviews corrections identified by the Checker.
    - Construction Administrator
      - Responsible for checking the work of the contractor to ensure it conforms to the intent of the design team.

- Assigning Responsibilities and Deadlines
  - A number of design team members may assign responsibilities to execute the QA/QC plan, and establish the schedule or deadlines for completion of those responsibilities. In general, the Project Leader is responsible for major responsibilities and milestone deadlines, while responsibilities and deadlines for specific tasks may be delegated to other team members by those responsible for major responsibilities and deadlines. Example: The project leader may assign responsibility to complete the checklist for the Design Development phase to another team member, and may establish the deadline for completion of the checklist prior to the date deliverables are scheduled to be presented to the client. A member of the design team is also assigned responsibility to document information required from others, including the client, and a timeline for receipt of this information so that the design team can respond efficiently to this information.

QA/QC PROGRAM ELEMENTS

- Quality Control Budget
  - A budget for development of a QA/QC plan, and implementation of that plan, is included in every level of the Company, and in every project. Unless special requirements are stipulated in the agreement between the client and the Architect/Engineer, the budget is included within the basic A/E fee and is commensurate with the size and complexity of the project.
- Staffing
  - Dedication of personnel resources to address individual project needs, development of the QA plan, and QC monitoring.
- Checking and Review Procedures
  - Starting with the proposal, continuing through Schematic Design, Design Development, Construction Documents, Construction Administration, and Closeout phases, to ensure high-quality design and construction documentation. This includes the following tools, deliverables, and/or services.
- Checklists for Services and Deliverables, as outlined in the next section.
  - Documentation and Records
  - Consultant Procurement and Collaboration
  - Reports & Calculations
  - Drawings
  - Specifications
  - Cost Control and Cost Estimates
  - Schedule Management
  - Contacts With and Approvals from Authorities Having Jurisdiction (AHJs)
  - Bid / Procurement Support
  - Construction Administration
  - Closeout
- Peer Review Procedures
  - Consistent with the QA/QC plan, these are the procedures for internal checking and backchecking both within individual disciplines and throughout the entire design effort.
- Client Quality Assurance Procedures
  - Procedures to verify the design, deliverables, and services rendered are consistent with the contractual requirements and clients' expectations.

CHECKLISTS FOR SERVICES & DELIVERABLES

The Company has adopted a series of outlines or templates to facilitate checking of services and deliverables. At each stage of design and construction, the checklists provide guidelines for evaluation of completeness, technical accuracy, conformance with project and code requirements, and to identify where third-party reviews may be required. Each project is unique, and consequently each team is responsible for review and customization of these checklists as necessary to plan and execute a QA/QC plan that is commensurate with the size and complexity of the project. The team must determine the level of accuracy necessary to satisfy the requirements of the QA/QC plan for the project, and any comments or approvals needed from project leaders or the client, before proceeding from one phase of the design and construction process to the next.

BASIC OBJECTIVES OF CHECKLIST

The scope of the QA/QC plan will vary for each project. The following are basic objectives for all reviews:

• Services and deliverables accurately reflect the information provided to guide the design process.
• Services and deliverables are following requirements for the project.
• Services and deliverables are clear, understandable, and technically accurate.
• Underlying assumptions and allowances are clearly documented; risks have been identified and managed.
• Grammar and spelling are correct.

FEEDBACK & ONGOING DEVELOPMENT OF THE QA/QC PROGRAM

An over-arching goal of the QA/QC program is the continuous improvement in the knowledge base of every member of every design team, and the quality of work produced by NAC. The Company maintains an interactive website for internal communications. This includes several tools for continuous self-improvement, some of which leverage the knowledge and experience gathered by and from all employees of the Company. Those tools include:

- A "Lessons Learned database" used to document and share what we learn from our projects during planning, design, construction, closeout, and/or post-occupancy.
- Communities of Practice consisting of NAC staff interested in subjects that are central to our work, such as sustainability, design excellence, project management, and our target markets. These core groups are central repositories for information to be shared, and for issues needing collaborative resolution.

We have an active continuing education program led by seasoned Company leaders, covering a wide range of subjects including the topics of interest to our Communities of Practice as well as building materials and systems, codes and regulations, and others relevant to our professional practice. We also organize tours of projects under construction or recently completed, to share lessons learned and celebrate successful project results.

Periodically, the Company reviews all documentation, procedures, processes, standards, and best practices, to ensure that all employees will refer to accurate, up-to-date information that is consistent with the collective knowledge we have gathered over the life of the entire NAC organization.

LIMITATIONS OF QA/QC PROGRAM

This QA/QC program is meant as a guideline only. The provisions contained herein, and QA/QC plans developed in accordance with this program are not a substitute for, or modification of, specific contract requirements. Nothing in this QA/QC program is intended to create a warranty, express or implied, regarding the professional services of the Company or its consultants. It is not meant to replace or modify the applicable standard of care governing the performance of professional services on any given project.

Footnotes:

(1) ISO 9000:2015: Quality Management Systems – Fundamentals and Vocabulary.

13.0

EXHIBITS

13.0 Exhibits: A-M

A	Envelope Existing Conditions Report
B	Mechanical Existing Conditions Report
C	Electrical Existing Conditions Report
D	A3 - Pre-validation - Program & Budget Alignment Summary
E	Civil Narrative
F	Landscape Narrative
G	Architectural Narrative
H	Structural Narrative
I	Fire Protection Narrative
J	Mechanical & Plumbing Narrative
K	Electrical Narrative
L	Budget Scope Sketches
M	Permit Strategy - Pre-Dev - City Comments

EXHIBIT A:
ENEVELOPE EXISTING CONDITIONS REPORT

Building Enclosure Condition Assessment Report Addendum | Project 29573.000

CV Center for Recovery, 900 South Auburn St, Kennewick, WA

To: Jake Closson
Bouten Construction
1060 Jadwin Ave, Suite 300
Richland, WA 99352

Submitted April 5, 2024 by
RDH Building Science Inc.
2101 N 34th Street #150
Seattle WA 98103

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Refer to Exhibit N: Envelope Existing Constitution Report Plans

1 Introduction

1.1 Terms of Reference

RDH Building Science Inc. (RDH) was retained by Bouten Construction to undertake an assessment of the current condition of the building enclosure of the building located at 900 South Auburn St, Kennewick, WA.

This report documents the current condition of elements of the building enclosure. It may also provide information related to the specific sources of moisture or other physical factors which have resulted in the observed conditions.

This report has been undertaken for Bouten Construction and is not to be relied on by others.

1.2 Report Organization

Background information relevant to this building and the condition assessment is provided in Section 1 of this report.

The report is organized in accordance with four primary elements of the building enclosure as well as interior operating conditions:

- → Walls
- → Fenestration
- → Roofs
- → At-Grade Assemblies
- → Below Grade Walls

Our specific observations and other factual data related to these elements are contained in an appendix that corresponds to each of these elements. Section 2 discusses our observations and the implications with respect to current and future building enclosure performance. Recommendations for rehabilitation and renewal of building enclosure assemblies are provided where appropriate. Further, observations regarding specific maintenance items may be made if they relate to a proposed rehabilitation or renewals recommendation; however, this report does not constitute an overall maintenance and renewals plan.

The recommendations for rehabilitation and renewal are summarized in Section 3. Proposed timing associated with the recommendations made are presented with a discussion of alternate conceptual approaches, phasing and advantages of various implementation scenarios where appropriate.

1.3 Documents Reviewed

The documents provided to and reviewed by RDH are listed in Table 1.1.

TABLE 1.1 DOCUMENTS REVIEWED	
DOCUMENT DESCRIPTION	
Property Condition Assessment Report by Wave Design Group	Issued 08/19/2021
Architectural Floor Plans by ALD Architects	Issued 04/09/2013

1.4 Building Description

A description of the buildings is provided in Table 1.2.

TABLE 1.2 DESCRIPTION OF BUILDING	
Name	Trios Auburn Property / Central Valley Center for Recovery
Address	900 South Auburn Street, Kennewick WA
Date of construction	Original construction in 1952, with multiple additions since
Number of stories	3, with partial basement
Type of construction	Concrete/steel
Principal occupancy	Unoccupied, formerly a hospital

RDH reviewed the whole building during two separate dates (February 9, and March 27, 2024). The initial visit consisted of interior openings and a review of the whole building except for what is referred to as the Spaulding addition. The second visit consisted of exterior openings through the EIFS and roof assembles as well as review of the Spaulding addition. This report includes information from both reviews as an addendum which includes new sections for the various new review areas in addition to all the information in the original report dated March 15, 2024. All new information is shown in blue.

The building is an unoccupied former hospital built in various phases. The original hospital building is a two-story cross-shaped structure built circa 1952 and consists of painted concrete walls with interior metal framed furring walls behind the concrete. There are also mechanical and elevator penthouses that are metal framed with stucco cladding as well as mass masonry. The original floors and roof structure are also concrete.

There have been multiple additions to the original building, primarily in 1980 and 1990, which now comprise the majority of the exterior enclosure. These additions occur at each quadrant of the original cross-shaped structure. These newer additions consist of metal framed walls clad with a face-sealed exterior insulation and finish system (EIFS). The newer additions are steel structures with composite metal/concrete decks. The glazing consists of mostly fixed metal-clad wood windows and single-hung metal-clad wood windows, with areas of aluminum storefront and glass block. There are also sloped glazing canopy systems over the main entrance on the east elevation and the west elevation. Doors are primarily hollow metal frames, and larger entrances are aluminum framed sliding doors.

The Spaulding addition was completed between 1987-90, which also is comprised of a steel structure with composite metal/concrete decks. The enclosure consists of EIFS cladding, aluminum storefront ribbon windows and punched openings, and a

thermoplastic roof membrane. Doors are also hollow metal frames and larger entrances are aluminum framed sliding doors.

Overall observation mark-ups are included in Appendix A, Roof locations and notes in Appendix B, and Photographs in Appendix C.

1.5 Building History

Although we do not have a detailed timeline of events related to the building enclosure, we did note several key events as reported to us.

1.5.1 Roof replacements

There is evidence of several roof replacements and repairs over much of the roof area. A mixture of low slope membranes (built-up roof, PVC, and TPO) with varying degrees of weathering indicates that portions of the roof have been replaced at different times throughout the life of the building.

2 Discussion of Building Enclosure Performance

2.1 Interior Operating Conditions

The building is unoccupied and there is limited heating that is operational during our review. Portions of interior finishes have been demolished, and there have been numerous previous roof leaks and plumbing leaks that have resulted in damage to interior finishes. We understand that the intended scope of work to repurpose this building will include complete removal of interior finishes.

2.2 Walls

Conditions and performance of the wall assemblies at interfaces that occur between the walls and other major elements of the enclosure (windows, doors, and roofs) are discussed in later sections of this report. This section therefore focuses on the wall assembly itself as well as penetrations and other features within the wall areas.

The bulk of the exterior walls are made up of a steel stud wall with a face sealed EIFS system over it. There are also exterior walls that are made up of painted concrete with interior metal framed backup walls, as well as two rooftop penthouses that are metal framed with stucco cladding. There is also a limited amount of mass masonry wall (brick and CMU) at the elevator overrun.

2.2.1 EIFS

After review of limited as-built drawings and several interior and exterior openings we confirmed the assembly to consist of the following:

- → Painted drywall
- → Polyethylene vapor barrier
- → 6” metal studs filled with fiberglass batt insulation
- → Paper-faced gypsum sheathing
- → 2-inch extruded polystyrene insulation adhered to sheathing with rows of adhesive (1.75-inch at the Spaulding building addition)
- → Reinforced modified cementitious outer coating (aka Lamina)
- → Exterior paint coating

This wall assembly is considered a face-sealed system in which the primary water control layer plane is at the outermost face of the system. The intactness and continuity of the outer lamina layer is directly related to the water penetration resistance and airtightness of the overall wall system.

We noted small but widespread cracking of the lamina throughout the areas we reviewed, most commonly originating from corners of windows and at the base of wall where the EIFS extends down to meet the exterior sidewalk (see Photos 01 through 09). We also noted several locations with significant cracks ranging from 1/16” to ¼” as well multiple

penetrations that lack sealant. We also noted that there are very few movement joints within the EIFS walls, which may be contributing to the lamina cracking.

At the ground level we noted signs of mechanical damage of varying degrees, from small scuffs to large holes in the lamina.

In our experience, these types of fine cracks tend to allow for the localized accumulation of water within the EIFS assembly which results in concealed damage to the gypsum sheathing.

At several interior locations, small cuts were made at the interior drywall finish to make observations within the concealed stud cavity. We observed damp gypsum sheathing facing the stud cavity, and also observed with small test cuts that the paper facer on the gypsum sheathing debonds from the gypsum core which indicates prior moisture exposure. At two locations we also observed signs of prior sealant and spray foam application made from the interior of the wall cavity, which may have been a prior attempt at addressing a water leak. Our overall findings with associated frequency at the eight (8) exploratory openings are as follows:

- → Isolated dark organic staining (1/8, 13%)
- → Light surface corrosion observed at fasteners or steel framing (3/8, 38%)
- → Prior water stains at interior side of paper-faced sheathing (5/8, 63%)
- → Active moisture measured (1/8, 13%)
- → Signs of prior repair attempts in wall cavity (2/8, 25%)
- → No observed signs of water or water-related damage (2/8, 25%)

Using a non-destructive moisture meter, we measured elevated moisture readings at multiple locations along the exterior base of wall, indicating there is potentially water migrating past the face sealed system and becoming trapped within the inner portion of the assembly. These observations correlated with the observed dampness at one of the exploratory openings performed.

In addition, we also made the following key discrete observations at the EIFS:

- → Gypsum sheathing is visible at the underside of the EIFS system at several locations at the exterior of the building (see Photo 10). This indicates a potential gap in the building's air barrier at these locations.
- → The majority of the EIFS walls are capped with metal flashings, however some small discrete coping areas are formed by the EIFS itself, and these exhibit more concentrated signs of damage. These areas are showing organic growth, damage, and significant cracking (see Photo 70
- → At the EIFS coping at the top of the ICU mechanical penthouse the outer layer of lamina has failed and the reinforcing mesh is visible at many locations.
- → EIFS cladding adjacent to the entry sloped glazing exhibits moisture staining and signs of water saturation (see Photos 47, 48 and 51).

2.2.2 EIFS Spaulding Building Review

We reviewed the Spaulding building EIFS during the second day of review. We observed that overall condition of the assembly is consistent with what was previously noted at the rest of the building, which includes cracking (typically at window sill locations), mechanical damage, and a lack of control joints in the assembly.

We made the following additional key discrete observations at the Spaulding Building EIFS:

- There are multiple locations where the EIFS extends below the exterior grade or concrete sidewalks (Photos 77-78).
- There are sloped EIFS used at the SW corner of the Spaulding building over the terraces, the coating is failing at this location and there is significant signs of staining of the EIFS (Photo 79).
- Multiple failed sealant joints at inside corners (Photo 80).
- Cracking occurring at inside corners at SW corner terraces (Photo 81).
- At the SW corner L2 terrace when viewed into the soffit there are signs of leaks at the base of the exterior wall above the soffit (Photo 82).

2.2.3 EIFS Exterior Openings

We performed 8 follow-up EIFS exploratory openings from the exterior at base of wall conditions where cracks occur and where elevated moisture meter readings are present. We used a Delmhorst moisture meter to confirm the moisture content of the wall sheathing at each opening. We observed staining, organic growth, damage to the sheathing, and high moisture readings at the wall sheathing at locations where the EIFS is damaged or where large cracks occur (three locations, 37.5%) (Photos 83-84). At other non-damaged EIFS areas, we observed no staining and low moisture readings (5 locations, 62.5%).

Discussion and Recommendations

Due to the face-sealed nature of the EIFS system, these walls are highly sensitive to any breaches of the exterior lamina or failed exterior sealant or any other water ingress pathways such as window installations or other cladding transitions. In our experience, these walls tend to perform poorly when the outer moisture barriers are not maintained, and when the wall is subject to an imbalance between wetting and dry such that damage occurs over time.

The conditions observed at the EIFS indicate that while the steel stud framing is sound, isolated water damage has occurred at the wall, with the base of the wall being a known issue at some locations. This water damage is concentrated at the exterior gypsum sheathing, and manifests as isolated areas of organic growth, as well as signs that the gypsum sheathing is deteriorating.

The exterior openings indicate that concealed wall sheathing damage is typically correlated to outwardly visible damaged EIFS locations and base of wall conditions. At intact EIFS locations the assembly and wall sheathing are intact. There are locations where EIFS is used in locations which are not recommended, such as in sloped conditions, and

below exterior grade. At these locations the coating is damaged and there are high moisture readings at the EIFS.

Overall, this wall cladding is nearing the end of its effective service life and various repair and rehabilitation options are possible. These include:

- → Comprehensive Approach: This would entail replacing all of the EIFS and exterior sheathing with a new system. This could be a new modern EIFS system which incorporates a drainage system and concealed water barrier, or a modern rainscreen wall consisting of a new air and water barrier on new sheathing, exterior insulation, as well as a new cladding material such as metal panels.
- → Targeted Approach: Targeted replacement and EIFS repairs are likely possible given the limited extent of damage observed at openings to-date. Replacement should occur where damage is found, such as along base of wall conditions, at parapets, and around windows where replacement is planned. The wall system would be replaced with a system as noted in the comprehensive option, and the remainder of the original EIFS would be renewed to provide a new face-seal system with control joints added into the assembly at key areas.
- → Overcladding Approach: As a more long-lasting alternative to renewing portions of the EIFS barrier system, overcladding may be possible depending on the condition of exterior sheathing. In this approach the EIFS would remain in place with some localized replacement of the cladding where damaged, and a new drained cavity would be created between new cladding and existing EIFS. More architectural review is recommended for this approach from an aesthetic standpoint.

RECOMMENDATION	
1	Investigate EIFS with exterior openings in order to determine the extent of concealed damage to the exterior sheathing. (Completed)
2	Plan to address EIFS with either a comprehensive replacement or targeted repair.
3	As part of a comprehensive exterior wall plan, add cap flashings over EIFS where it occurs at parapets
4	As part of a comprehensive exterior wall plan, improve air barrier detailing at base of EIFS walls
5	As part of a comprehensive exterior wall plan, plan to add waterproof flashing at sidewalk interfaces, and counter flash with new replacement wall cladding.

2.2.4 Painted Concrete

The original hospital walls are painted concrete with a framed interior-insulated furring wall. The paint appears aged and is exhibiting cracking and flaking in several areas. There are also two locations with large cracks in the concrete with signs of spalling (see Photos 25 through 28).

Discussion and Recommendations

The concrete walls are less sensitive to moisture than EIFS, but still rely on the exterior surface as the primary water control layer. Cracking and spalling should be addressed prior to re-painting. Any spalled areas should have all loose material removed and any exposed rebar should be cleaned of any rust prior to patching with new concrete. Spalled

areas can be patched with a high strength repair mortar. Smaller surface cracks can be routed and sealed. After repairs are made, new paint can be applied.

These concrete walls are also good candidates for over-cladding with new water barrier membranes, exterior insulation and cladding in order to improve overall energy performance of the building.

RECOMMENDATION	
6	Remove existing paint coating from concrete walls and repair spalls at concrete. Install new silicone elastomeric coating and silicone sealants at transitions and exterior joints.
7	Consider upgrading the energy performance of repaired concrete walls by over-cladding them with a new air and water barrier, exterior insulation and finish material.

2.2.5 Stucco

There are two mechanical penthouses and are clad with stucco. All are in fair to poor condition, with many cracks (see Photo 34), failed paint, and unsealed penetrations that have been roughly cut through the walls. These all present pathways for water ingress and should be addressed. Stucco of this vintage also largely relies on the exterior surface as the primary air and water control layer, and based on its condition it is not an effective air or water barrier.

At the Spaulding building there is stucco applied over the exterior concrete columns at the southwest entrance. We observed cracking and sections of stucco delaminating from the base of each column (Photo 93).

Discussion and Recommendations

We recommend fully replacing the stucco at these penthouses and installing a more modern cladding system with a concealed air and water barrier, exterior insulation and exterior cladding.

At the exterior columns we recommend removing the failing stucco and coating the concrete with an elastomeric coating or cladding over the columns with a new system.

RECOMMENDATION	
8	Replace existing stucco cladding at penthouses with a new modern rainscreen wall system.
9	Replace the stucco cladding at the southwest entrance concrete columns with an elastomeric coating on the concrete.

2.2.6 Brick

There are two small areas of painted brick at the elevator penthouse. There are multiple stair-step cracks throughout the mortar joints (see Photos 30 through 33) These cracks present a pathway for water ingress and should be addressed.

Discussion and Recommendations

We recommend re-pointing the brick where there is cracking in the mortar, followed by re-painting. Alternatively, a lightweight rainscreen cladding system could be installed over

the existing brick following structural repairs. This would also present an opportunity to add exterior insulation for improved thermal performance of this assembly.

RECOMMENDATION	
10	Remove existing paint coating from brick walls, perform repointing and repair at damaged mortar joints, and apply a new silicone elastomeric coating. Alternately, overclad or replace the repaired masonry wall with new exterior cladding for a more durable finish.

2.2.7 Concrete Masonry

The south side of the elevator penthouse is constructed of concrete masonry units (CMU) which has been painted. The paint is in fair condition but is showing minor cracking and appears aged. Similar to the concrete walls, the CMU is primarily reliant on the exterior surface as the primary water control layer.

Discussion and Recommendations

The CMU walls should be repainted within the next 5 years. Alternatively, a lightweight rainscreen cladding could be installed over the CMU.

RECOMMENDATION	
11	Remove existing paint coating from CMU walls, perform repointing as required and apply a new silicone elastomeric coating. Alternately, overclad or replace the repaired CMU wall with new exterior cladding for a more durable finish.

2.3 Windows & Doors

2.3.1 Windows

During our review, the majority of windows in the building are covered with temporary plywood sheathing at the exterior, and therefore our review of the windows and associated exterior detailing is limited.

There are several types of windows on the building. The majority of the windows are clad wood windows, with single hung windows in the original building within the concrete walls, and fixed windows within the newer EIFS-clad portion of the building. There are also aluminum storefront windows in the old ICU portion of the building and at least one glass block window.

At the Spaulding addition the windows are primarily comprised of aluminum storefront ribbon windows. These are also boarded up at the first two levels therefore limited review is performed from the exterior. From the interior we observed numerous cracked or fully broken IGUs within the window frames.

The clad wood windows include a removable interior pane of glass (see Photo 35 and 36), and therefore lack the more common sealed insulated glass unit (IGU) which is the norm for contemporary windows today. We found evidence of some condensation-related moisture staining on the wood frames (see Photo 37 and 38), but they are otherwise in fair condition.

Exterior sealants between clad frames and adjacent EIFS are typically weathered and beginning to fail. Exterior sills at windows generally include painted precast concrete (see Photo 39 through 46), or a shallow EIFS return detail. Often this sill exhibits hairline cracks visible through the paint coating, or at the EIFS itself below the jambs of the window.

Window installations of this vintage generally lack any sub-sill flashing or waterproofing. We find that the windows themselves can often be a source for water ingress at the EIFS itself, but in this case the degree of observed water ingress is fairly limited.

We understand that part of the upcoming scope of renovation will include a full replacement of all windows with more modern code-compliant and tamper-resistant models. As such we recommend you take advantage of the opportunity to improve the installation of the new windows by incorporating rough opening waterproofing and flashing around window perimeters.

2.3.2 Sloped Glazing

A section of sloped glazing occurs above the main entry driveway. This glazing consists of a barrel-style aluminum frame supporting glass units (see Photos 47 through 49). There are general signs of water ingress below the window frames at the EIFS-clad structure. We recommend planning to at minimum replace exterior seals between sections of glazing, and to improve the flashing detail at the EIFS-clad structure. As noted previously, the EIFS cladding at this structure should be replaced in order to address any concealed structural damage.

Discussion and Recommendations

During removal of windows, we recommend removing a portion of the EIFS around the windows to allow for the installation of membrane flashing and a sill pan in the rough opening. This will provide a drainage path for any water ingress through exterior perimeter sealant or through future window frames to safely escape to the exterior. Depending on the EIFS repair/renewal option chosen, it may also be prudent to remove sections of EIFS between windows to provide better compartmentalization between new and existing wall types.

RECOMMENDATION	
12	Plan to replace windows with a modern energy-efficient frame with insulated glass units. In association with the new windows, include new waterproofing and flashing membranes at the rough opening in order to provide additional protection against water ingress and to promote airtight construction.
13	Plan to renew seals at sloped glazing, and to improve the sill flashing condition at the sub-structure to better manage water.

2.3.3 Doors

The majority of exterior doors are hollow metal frames with opaque hollow metal doors. Many of these doors are showing failed paint and significant corrosion, especially at the bottom of the doors (see Photo 54).

There are also aluminum-framed storefronts which are also boarded up at the main entry. We were unable to fully review these storefronts, but based on their age you should

expect them to require at minimum replacement of all gaskets and sealants, and likely renewal of insulated glass units.

The Spaulding building doors are consistent with the above noted observations.

RECOMMENDATION	
14	Plan to refinish hollow-metal doors with a high-performance exterior paint coating and renew exterior sealant joints.
15	For aluminum-framed storefront entries, plan to replace entirely or renew all exterior gaskets and sealant joints. Provide enhanced sill detailing at base of system with new flashings and membrane to protect structure below. Additional review will be necessary to confirm which insulated glass units require replacement.

2.4 Roofs

This section contains information related to our review of the various roof areas. We performed a review of 25 roof areas at the original hospital building as well as the addition wings. There are three main types of roof systems installed which consist of the following based on our visual review.

- Built-up roofing
- Single-ply roofing (TPO)
- Single-ply roofing (PVC)

Six openings are made through the various roof assemblies. The description of the findings are discussed in Section 2.4.6

During the walkthrough of the interior 2nd floor, RDH was made aware of 4 active leak locations associated with the single-ply roof of Roof Area D and K (see Photos 55 through 58). While on-site, some repairs were performed by the building maintenance staff to puncture damaged areas of the PVC roof membrane.

Each roof consists of the following:

Asphalt Based Built-Up Roofs (BUR)

- Hot asphalt felt reinforced roof membrane with gravel ballast covering
- Smooth polymer modified asphalt based base flashings
- Multiple layers of perlite board insulation (assumed)
- Metal roof deck
- Dropped ceiling
- Interior space

Thermoplastic Polyolefin (TPO) Roofs

- TPO roof membrane mechanically attached and adhered
- Insulation layers both adhered and mechanically attached (assumed)
- Roof substrate (assumed to be metal roof deck)
- Dropped ceiling

→ Interior space

Polyvinyl Chloride (PVC) Roofs

→ PVC roof membrane mechanically attached and adhered

→ Insulation layers both adhered and mechanically attached (assumed)

→ Roof substrate (assumed to be metal roof deck)

→ Dropped ceiling

→ Interior space

The roof areas include roof drains and through-wall scuppers to capture draining water. Overflow scuppers are located at the BUR roofs. Most of the roofs have 12-inch high parapets that transition to the EIFS cladding system. Three-foot high parapets are present at the higher elevation roofs that have sheet metal coping caps that cover the top of the concrete walls. Large air handler units, exhaust vent curbs and routed electrical lines are present on the higher elevation roof areas. We have included a description of each roof area reviewed on the attached roof plan for location of each roof area in Appendix B. Please refer to Photos 60 through 76 for select photos of roof conditions described below.

2.4.1 Roof Area A

There are 2 roof sections with the same roof system located at the lowest roof level at the southeast end of the side entrance of the building. The 2 roof sections are comprised of a tan colored mechanically attached thermoplastic roof system. Powered exhaust vents rooftop curbs, pipe penetrations and exhaust vents are located on the raised roof section to the east with a canopy roof to the west. EIFS wall cladding system is present at the canopy portion of the roof section and provides the parapet wall coping for the raised roof area. Through-wall scuppers provide the primary drainage for the raised roof section with roof drains present at the canopy roof. In general, the roof membrane is in fair to poor condition with items in need of repair to maintain. The following items were observed during the site visit.

→ Voids or openings in the seams of the wall flashings.

→ Cracked damaged EIFS coping.

→ Open termination at EIFS interface with canopy roof edge flashing.

→ Punctures to membrane.

2.4.2 Roof Areas B, C, R, U and X

These roof areas are located at the large south end addition (B), third floor south end (C), side and main entrance small roof sections (R, U, X). These roof areas are comprised of built-up asphalt with felt reinforcement roof system with gravel ballast covering. The insulation appears to be multiple layers of perlite 1-inch-thick insulation where it can be seen through an open pipe penetration lead flashing. Perimeter base and wall flashings are a smooth surface polymer modified asphalt reinforced membrane. At Roof Area B, large air handlers, exhaust vent curbs, pipe penetrations and routed piping are located on the roof. An expansion joint is present along the southwest side of roof area B. At Roof Area C, rooftop curbs for routed piping, rooftop exhaust vents, power exhaust vent curbs, pipe penetrations and metal support stands are present on the roof section. EIFS coping is

present along the roof perimeter edges of roof areas B, C, U and X while Roof Area R a sheet metal coping cap is present at the tops of the concrete walls on the north and south sides of the small roof section. Roof drains are present as the primary drainage points for the roof areas with overflow scuppers present at the primary roof drains at Roof Area B. In general, the roofs are in fair to poor condition with the following items observed in need of repairs:

- Openings in seams of perimeter base and wall flashings. Common to all roof areas reviewed.
- Openings at seams of rooftop curb flashings. Common to all roof areas reviewed.
- Deteriorated sealant at rooftop curb sheet metal flashings. Common to all roof areas reviewed.
- Lead flashing missing pipe penetration and is open to the interior (roof Area B).
- Improperly installed lead flashing at pipe penetration with openings at top edge of penetration (Roof Area B and C).
- Lead flashing installed without pipe penetration and improperly sealed to the roof membrane (Roof Area B).
- Damaged EIFS coping. Common to all roof areas reviewed.
- Open laps at roof drain repair (Roof Area B).
- Rooftop vent curb missing roof flashing (Roof Area B).
- Damaged wood sleeper curbs roof flashing (Roof Area C).
- Rooftop penetration sheet metal flashings and rooftop vent curb sealed with asphalt roof mastic and missing proper roof membrane flashing (Roof Area C).
- Metal support frame posts in direct contact to roof membrane surface (Roof Area C).
- Glass canopy gutter trough drains onto the main entrance roof at Roof Area R. The stainless steel gutter trough ends are sealed with asphalt roof mastic where the roof area perimeter interfaces with the trough draining edge.
- Open top of sheet metal flashing for ganged pipe penetrations (Roof Area X).

2.4.3 Roof Areas E, F, G, H, I, J, P, S and Y

These roof sections are along the original portions of the building as well as the additions to the east and west sides of the building. These roof sections are comprised of TPO roof membranes that are both mechanically attached and adhered. We understand that some of the TPO roof installed date to 1996 based on the Firestone Building Products manufacturer's production date stamp observed on the membrane sheets. Various rooftop HVAC equipment, exhaust vent curbs, pipe penetrations and powered exhaust vent curbs are present at each roof area. Through-wall scuppers provide the primary water drainage for Roof Areas E, F, G and H with roof drains located at Roof Areas I, J, P, S and Y. Wall flashings are present at all the roof areas with sheet metal coping caps at the top of the parapet walls with the exception of Roof Area I which has EIFS coping. 2 custom built fiberglass skylights are present at Roof Area S. In general, the roofs are in fair to poor condition with the following items observed in need of repairs:

- → Voids or openings in the seams of the wall flashings. Common to all roof areas reviewed.
- → Puncture damage to roof membrane. Common to all roof areas reviewed.
- → Collected water and debris on surface of TPO membrane at mid-level penthouse roof. (Roof Area G).
- → Sealant applied base flashing vertical terminated edge at mid-level penthouse roof. (Roof Area G).
- → Unsealed pipe penetration through sheet metal coping cap at parapet wall. (Roof Area H).
- → Collected water with dirt accumulation at 1 through wall scupper. (Roof Area H).
- → Openings in wall flashings at through-wall pipe penetration. (Roof Area H).
- → Collected HVAC unit debris on roof membrane surface. (Roof Area H).
- → Small areas of accelerated heat aging of roof membrane surface. (Roof Area H and I).
- → Damaged EIFS coping. (Roof Area I).
- → Large openings in metal framed EIFS wall for routed conduit piping where the TPO wall flashing is unadhered and open. (Roof Area J).
- → 2-inch TPO flashing height with termination bar along window sill of roof area. (Roof Area P).
- → Openings in pourable sealer at field fabricated pipe penetration TPO flashing (Roof Area Y).
- → Missing pipe penetration flashing. (Roof Area Y).
- → Open sealant joint at perimeter sheet metal counterflashing. (Roof Area Y).

2.4.4 Roof Area W

Roof Area W is located at the central section adjacent to the Spaulding Building and is the open air courtyard area. A mechanically attached single-ply roof system is installed at the west and east open roof areas with a single-ply roof membrane installed at the open roof areas planter boxes. At the courtyard walkways areas, 24-inch by 24-inch 2-inch thick concrete paver overlay a single-ply roof membrane system. An additional separation sheet of a roof membrane is present between the concrete pavers of the underlying single-ply roof system at the walkways. At the east and west planter boxes, the roof membrane appears to be installed over a fiber board insulation layer. In general, the roof is in fair to poor condition with the following items observed in need of repairs:

- → Puncture damage to roof membrane.
- → Sealant used to seal handrail post to roof membrane curb flashing.
- → Voids or openings in the seams of the base flashings.
- → Collected water with dirt accumulation on surface of single-ply roof membrane at planter boxes.
- → Open edge of membrane flashing at vent pipe penetration.

2.4.5 Roof Areas D, K, L, M, N, O, Q, T and V

These roof sections are along the original portions of the building as well as the additions to the east and west sides of the building. These roof sections are comprised of PVC roof membranes that are both mechanically attached and adhered. We understand that the majority of the roof membranes are Sarnafil roof based on the manufacturer's product stamp on the membrane sheets. Roof Area M does not have an identifying marker on the installed roof membrane sheets but is presumed to be a PVC roof membrane as the sheets tie onto the PVC roof membrane at Roof Area N. Rooftop HVAC equipment, exhaust vent curbs, pipe penetrations and powered exhaust vent curbs are present at each roof area. Primary water drainage for the roof areas are roof drains with overflow scuppers with the exception of Roof Areas L and O that have overflow drains, Areas of replaced roof membrane sections were observed at the north end of Roof Area D and south end of Roof Area K. Parapet walls are present at Roof Areas D, K, M, N, Q, T and V with wall flashings and sheet metal coping caps. In general, the roofs are in fair to poor condition with the following items observed in need of repairs:

- → Puncture damage to roof membrane. Common to all roof areas reviewed.
- → Voids or openings in the seams of the wall flashings. Common to all roof areas reviewed.
- → Openings in perimeter wall flashing from dislodged conduit pipe supporting bracket. (Roof Area D).
- → PVC flashing terminated to side of concrete pad with an elastomeric coating applied to topside of concrete pad. The elastomeric coating is deteriorated and has openings. (Roof Area D).
- → Modified concrete parapet wall top for routed conduit piping. A sheet metal cover provides coverage of parapet wall top but the terminated edge of the wall flashing is not properly sealed. (Roof Area D).
- → Water behind concrete pad base flashing. (Roof Area M).
- → Open top of sheet metal flashing for ganged pipe penetrations (Roof Area Q).
- → Unadhered pipe penetration flashing. (Roof Area Q).
- → Damaged base flashing at door threshold. (Roof Area T).
- → Openings in pourable sealer at field fabricated pipe penetration sheet metal flashing (Roof Area T).

2.4.6 Spaulding Roof Observations – Roofs Z, AA, BB, CC, DD, EE, FF

We performed a visual review of the existing roofs of the Spaulding Building and Spaulding additions as noted and updated on the roof plan as Roof Areas Z, AA, BB, CC, DD, EE and FF in Appendix B. Roof Areas Z, AA, BB, CC, DD and FF are mechanically attached single-ply roof membrane installed over an assumed insulation system. We understand that Roof Areas Z and BB date to 1993 based on the Firestone Building Products manufacturer's production date stamp observed on the membrane sheet. Roof Area FF has Firestone's production stamp marking dating to 2002. No identifying markings were observed at Roof Areas CC and DD. Roof Area AA is a tan colored single-ply membrane that ties onto Roof Area Z to the east and Roof Area CC to the north.

Roof Area EE includes terrace decks on the second and third floors of the Spaulding Building. The terrace decks are radius decks covered with 24-inch by 24-inch concrete pavers set on rubber pedestals and shims. Under the concrete pavers is a single-ply roof membrane with the Firestone production markings dated 09/93. The single-ply roof system terminates to the concrete sill of the storefront windows for the interior spaces with a separate EIFS parapet wall on the exterior side of the deck. Adjoining the terrace decks is an outer planter/well. The planter/well consists of a metal liner with solder laps that is coated with a coating. An additional reinforcing strip membrane flashing is installed along the horizontal laps of the metal liner. Each planter/well has drainage outlets at either end. These planter/well areas are highlighted orange on the updated Roof Area roof plan.

In general, the roof areas are in fair condition with the exposed roof membrane experiencing puncture damage and aging as observed on other roof areas. The roof membranes located at the terrace decks which are covered with the concrete pavers are in better condition. The termination of the terrace deck roofs is in poor condition and will need to be repaired. It should be noted that our visual review of Roof Area FF (Spaulding Building Main Roof) was limited to cordoned sections as actively broadcasting cellular towers are located on this roof area.

2.4.7 Roof Opening Observations

Six openings were performed into various roof areas from our initial visual roof review. The purpose of the openings was to confirm the roof system components and existing conditions of the roof system components. We have included the location of the roof openings in Appendix B for ease of review.

Exploratory Opening 1 – Roof Area B (BUR Roof)

At Roof Area B, we observed the following roof system components and condition of each from top to bottom:

- Gravel ballast.
- 4-layer fiberglass reinforced felt set in asphalt bitumen (roof membrane).
  - Weathered and aging.
- 1-inch kraft with asphalt backing laminated fiberglass insulation coverboard.
- 2-ply fiberglass reinforced felt set in asphalt bitumen (night seal).
- 2-inch mauve colored insulation board spot adhered in asphalt to roof deck surface.
  - This is an older type of insulation, which is no longer used.
- Galvanized sheet metal roof deck.

The roof system components at this location are in fair to poor condition (Photo 85).

Exploratory Opening 2 – Roof Area D (PVC Roof)

At Roof Area D, a roof opening was performed where a section of the roof appeared to have been replaced. Two openings were performed on the replace section as well as the

original section and have been separated here as Part A and Part B. We observed the following roof system components from top to bottom:

Part A (Original)

- PVC roof membrane with Sarnafil markings (adhered).
  - Chalking and aging of the membrane observed.
- 3-inches of a black core insulation board with heavy laminated paper facer.
  - This is an older type of insulation, which is no longer used.
- 3-inches of expanded polystyrene (EPS) foam insulation board.
- Concrete roof deck.
  - Spot areas of dampness at concrete with high moisture readings.

Part B (Replaced Section)

- Single-ply roof membrane (presumed PVC) adhered.
  - Chalking and aging of the membrane observed.
- ½-inch Gypsum coverboard.
- 3 ¼-inch polyisocyanurate insulation board.
- 2 ¾-inches of expanded polystyrene (EPS) foam insulation board.
- Concrete roof deck.
  - Spot areas of dampness at concrete with high moisture readings.

The roof system components at this location are in fair to poor condition (Photos 86-87).

Exploratory Opening 3 – Roof Area W (Open Courtyard Area)

At Roof Area W, we observed the following roof system components from top to bottom at the open area adjacent the Spaulding Building:

- Single-ply roof membrane mechanically attached with Firestone markings.
  - Chalking and aging of the membrane observed.
- 2-layers of 2 ¼-inches of polyisocyanurate insulation boards.
- Galvanized sheet metal roof deck.

The roof system components at this location are in fair to poor condition (Photo 88).

Exploratory Opening 4 – Roof Area W (Planter Area)

At Roof Area W, we observed the following roof system components from top to bottom at the planter area of the courtyard:

- Single-ply roof membrane with Firestone markings.
- 1-inch fiber board insulation (labeled Carlisle).
  - This is saturated with water.
- Concrete roof deck.
  - The concrete surface is wet.

The roof system components at this location are in poor condition (Photo 89).

Exploratory Opening 5 – Roof Area K (PVC Roof)

At Roof Area K, we observed the following roof system components from top to bottom:

- PVC roof membrane with Sarnafil markings (adhered).
  - Chalking and aging of the membrane observed.
- 3 ½-inches of a black core insulation board with heavy laminated paper facer.
  - This is an older type of insulation, which is no longer used.
- 1 ½-inches of expanded polystyrene (EPS) foam insulation board.
- Concrete roof deck

The roof system components at this location are in fair to poor condition (Photo 90).

Exploratory Opening 6 – Roof Area H (TPO Roof)

At Roof Area H, we observed the following roof system components from top to bottom:

- TPO roof membrane with Firestone markings (adhered).
- 2 ½-inch polyisocyanurate insulation board spot adhered in asphalt.
- 2 ¾-inch polyisocyanurate insulation board adhered in asphalt.
  - Bottom ½-inch of insulation is saturated with water.
- Asphalt layer on top of concrete roof deck.
  - Surface is wet.

The roof system components at this location are in fair to poor condition (Photos 91-92).

All system components that were removed were reinstalled on the same day. Target patches were hot air welded over the respective roof single-ply roof membranes. Each repair target patch was probed for openings and adhesion with no discontinuities observed. We were informed during the site visit that PVC was used to repair the roof membrane at exploratory openings 3 and 4.

The following is a summary of the key findings at the roof openings:

- High moisture content or wet concrete deck surfaces at 3 locations (50% of locations).
- Wet insulation observed at 2 locations (33% of locations).
- Dry insulation and concrete deck substrate at 3 locations (50% of locations).
- Weathered membranes at all locations. Brittle and weathered at BUR and Chalking and weathered at PVC/TPO membranes (100%).
- Older style insulation, which may include toxic chemicals or corrosive properties if they get wet (50% of locations).

Summary and Recommendations

A majority of the thermoplastic single-ply roofs are experiencing widespread puncture damage from objects being dropped on the surface and from heat related aging fractures. The exception to these roof areas are the ones which are covered with concrete pavers.

From our visual review and follow-up openings, the single-ply membranes vary between being stiff and brittle to having some flexibility remaining. Other signs of heat related aging are present with top laminate surfacing separation or “alligatoring”. Surface “chalking” or plasticizer polymer release was observed during the cleaning process of the PVC membrane when repaired after the openings were performed. Past repairs were performed at Roof Area D and K where large sections of the single-ply roof membrane were replaced. Most of the surface of the asphalt-based BUR roof membrane could not be observed due to the gravel rock ballast covering with the exception of the opening performed at Roof Area B. We noted that the roof membrane is in fair condition with the felt layers adhered to the asphalt bitumen. Perimeter and rooftop curb flashings are in poor condition due to age and heat related damage. Spot repairs were performed at various roof areas that now have open overlapping seams and repair edges becoming unadhered. Sheet metal rooftop curb and penetrations at Roof Area C were observed installed to the surface of the BUR membrane with edges sealed with roofing mastic where a roof membrane flashing is needed to provide a proper seal to the roof system.

During the walkthrough of the 25 hospital roof areas as well as the remaining 7 roof areas of the Spaulding Building with additions, the roof systems that are installed are aged and have reached the point where extensive repairs will need to be performed to maintain past their useful life. From our visual of Firestone product manufacturing date stamp, the TPO roof areas are approximately 28 to 31 years old. We assume that the Sarnafil PVC roof membranes were within the same timeframe with the BUR roofs being older based on system configuration and system components.

The openings confirmed that water is penetrating through the membrane and since we observed water at 50% of the 6 openings and consistent puncture damage and perimeter termination failures we anticipate many other parts of the roof will have trapped water.

The older style insulation we observed potentially contains chemicals which are no longer approved for use and/or will become corrosive if they react with water. We recommend sending these two types (the black and mauve colored insulation in openings 1,2, and 5) in for testing to confirm.

Given the state of the membrane via visual review and openings we anticipate the following two possible options for roof renewal:

Option 1:

Installing an overlay to prolong the life of the current assembles at select locations on the roof where water is not trapped within the assembly. This will require confirming the locations of trapped water with additional openings and a complete thermal camera scan roof. This would also include updating parapet and base of wall transition detailing during this work with new wall transitions, new cap flashings and high-temperature membrane underneath the coping cap.

Option 2:

Alternatively, we recommend planning on renewing all of the roof areas in the complex if it is not desired to do additional openings to confirm the extend of the trapped water in the assemblies. As part of roof renewal, additional insulation can be added to improve slope on the roofs and to increase the overall energy efficiency of the building. Depending on the extent of the planned renovations, energy code provisions will likely require additional insulation. We recommend the following basis of design for consideration:

- → New 2-ply torch-applied modified bitumen membrane
- → New fully-adhered coverboard
- → New fully-adhered tapered insulation
- → New torch-applied air/vapor barrier

In addition, we recommend that parapet caps be detailed with new wood blocking, high-temperature resistant self-adhered membranes as well as new sheet metal cap flashings.

In the short term, we recommend planning to renew failed sealant joints at penetrations and termination bars. Consider also applying a maintenance coating to the roofs to provide a short-term service life extension.

RECOMMENDATION	
16	Send in samples of the older style mauve and black rigid roof insulation for chemical testing.
17	Option 1 – Perform additional roof openings and thermal imaging to confirm all trapped water locations. Replace complete assembly at these locations and install an overlay at dry locations.
18	Option 2 – Plan to replace all roof assemblies at the complex, including scuppers and downspouts. Renew exterior steel coatings throughout roof areas.
19	In the near term, renew sealants at penetrations and terminations at the roof, and perform targeted patches at damaged areas.
20	Consider applying a maintenance coating at roof areas for a temporary service life extension.

2.5 At-Grade and Below-Grade Assemblies

A limited basement area occurs below the main hospital area. We observed signs of water seepage at the south wall of the basement, but the structure otherwise appears sound.

The typical at-grade condition around the building consists of a concrete sidewalk (see Photo 52 and 53). In various locations we documented signs of water-related damage near the base of the EIFS walls, and as such we recommend planning to remove portions of the EIFS around the base of wall areas in order to repair damage, add membranes, protective flashings, and improve the overall detail.

Additionally, as noted in section 2.2.2, we observed areas at the Spaulding building where the EIFS extends below the exterior grade and sidewalk. At these areas the soil and sections of the concrete will need to be removed in order to remove the existing EIFS cladding and install a new detail which includes below-grade rated membranes on the wall substrate and a base of wall metal flashing.

RECOMMENDATION	
21	Repair water seepage at basement area with hydraulic cement and/or urethane grout injection
22	Improve at-grade detailing by replacing existing cladding near base of the wall. Incorporate new waterproof membranes and protective flashings to limit wetting of new wall assemblies.

RECOMMENDATION	
23	To address EIFS sections which extend below exterior grade and sidewalks remove soil and sections of concrete in order to install a below-grade rated membrane and then a base of wall flashing.

3 Recommendations

3.1 Summary of Rehabilitation Needs

Our recommendations are based on a combination of factors including a review of design drawings and other available documentation, information collected at the building through visual observations and exploratory openings, as well as experience and knowledge gained from investigations of many other buildings with similar assemblies and details.

Overall the building enclosure is in a weathered condition, but the underlying structure where reviewed is sound. Main roof membranes are generally at the end of their effective service life, although we are only aware of limited water ingress at this point in time. The exterior wall assemblies all rely on exterior paint coatings and sealants in order to maintain watertightness. At this point, the paint coating is weathered and failing, and the underlying substrate, whether it be EIFS, concrete, or masonry, exhibits localized deterioration. This type of face-sealed exterior wall water management approach is highly sensitive to regular maintenance and the soundness of the underlying substrate. Therefore, in order to improve the performance of the exterior walls widespread localized substrate repairs are required prior to applying new paint and sealant. Some areas which warrant EIFS replacement include base of wall areas where water damage is present, as well as other areas such as parapet caps and sloped EIFS sections where damage to the lamina is concentrated.

These observations and recommendations are consistent also for the Spaulding building and in addition there are sections of EIFS which extend below-grade which will require removal of soil and sidewalk demo to correct the assembly.

As part of the planned repair work, we recommend you plan to replace the existing windows to suit the new building program, which would require removal of a portion of the EIFS to integrate new flashings and modern perimeter detailing.

To maximize the future service life of the wall systems, we recommend you consider full replacement of the wall assemblies with new rainscreen-type systems which have more redundancy in terms of water management, or a more uniform targeted replacement of key details such as at the base of exterior walls and adjacent to windows.

Further targeted approaches and phased approaches to the repair and maintenance work can be possible, but this will come with an increased risk of water ingress compared with a brand-new enclosure.

Two roof repair methods are outlined, either whole roof replacement or targeted replacement and an installation of a roof overlay. The overlay would require additional investigation to confirm the extent of trapped water in the roof to confirm where this would be possible.

3.2 Summary of Recommendations

The following table lists all building enclosure rehabilitation and renewal tasks that were identified in Section 3 of this report.

TABLE 3.1 SUMMARY OF RECOMMENDATIONS	
1	Investigate EIFS with exterior openings in order to determine the extent of concealed damage to the exterior sheathing. (Completed)
2	Plan to address EIFS with either a comprehensive replacement or targeted repair.
3	As part of a comprehensive exterior wall plan, add cap flashings over EIFS where it occurs at parapets
4	As part of a comprehensive exterior wall plan, improve air barrier detailing at base of EIFS walls
5	As part of a comprehensive exterior wall plan, plan to add waterproof flashing at sidewalk interfaces, and counter flash with new replacement wall cladding.
6	Remove existing paint coating from concrete walls and repair spalls at concrete. Install new silicone elastomeric coating and silicone sealants at transitions and exterior joints.
7	Consider upgrading the energy performance of repaired concrete walls by overcladding them with a new air and water barrier, exterior insulation and finish material.
8	Replace existing stucco cladding at penthouses with a new modern rainscreen wall system.
9	Replace the stucco cladding at the southwest entrance concrete columns with an elastomeric coating on the concrete.
10	Remove existing paint coating from brick walls, perform repointing and repair at damaged mortar joints, and apply a new silicone elastomeric coating. Alternately, overclad or replace the repaired masonry wall with new exterior cladding for a more durable finish.
11	Remove existing paint coating from CMU walls, perform repointing as required and apply a new silicone elastomeric coating. Alternately, overclad or replace the repaired CMU wall with new exterior cladding for a more durable finish.
12	Plan to replace windows with a modern energy-efficient frame with insulated glass units. In association with the new windows, include new waterproofing and flashing membranes at the rough opening in order to provide additional protection against water ingress and to promote airtight construction.
13	Plan to renew seals at sloped glazing, and to improve the sill flashing condition at the sub-structure to better manage water.
14	Plan to refinish hollow-metal doors with a high-performance exterior paint coating and renew exterior sealant joints.
15	For aluminum-framed storefront entries, plan to replace entirely or renew all exterior gaskets and sealant joints. Provide enhanced sill detailing at base of system with new flashings and membrane to protect structure below. Additional review will be necessary to confirm which insulated glass units require replacement.
16	Send in samples of the older style mauve and black rigid roof insulation for chemical testing.
17	Option 1 – Perform additional roof openings and thermal imaging to confirm all trapped water locations. Replace complete assembly at these locations and install an overlay at dry locations.

TABLE 3.1 SUMMARY OF RECOMMENDATIONS	
18	Option 2 – Plan to replace all roof assemblies at the complex, including scuppers and downspouts. Renew exterior steel coatings throughout roof areas.
19	In the near term, renew sealants at penetrations and terminations at the roof, and perform targeted patches at damaged areas.
20	Consider applying a maintenance coating at roof areas for a temporary service life extension.
21	Repair water seepage at basement area with hydraulic cement and/or urethane grout injection
22	Improve at-grade detailing by replacing existing cladding near base of the wall. Incorporate new waterproof membranes and protective flashings to limit wetting of new wall assemblies.
23	To address EIFS sections which extend below exterior grade and sidewalks remove soil and sections of concrete in order to install a below-grade rated membrane and then a base of wall flashing.

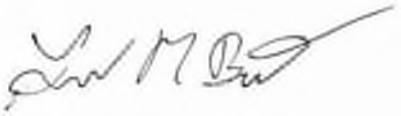
3.3 Next Steps

The condition assessment report presents conceptual level recommendations with respect to rehabilitation and renewal activities. It is important to understand that these recommendations do not provide a basis for implementing remedial work. Conceptual recommendations need to be developed, refined, and documented in detail before the construction work can be tendered to contractors or a building permit obtained.

The next step typically begins with the design process where the consultant and team review alternative ways of addressing existing problems and in consultation with the Owner to make decisions with respect to specifics of the rehabilitation program. Once decisions are made, the selected design is developed and documented in greater detail in the form of drawings and specifications. These documents indicate the exact extent and nature of the remedial work including materials to be used.

We look forward to meeting with you to review in more detail.

Yours truly,



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Appendices A through C

573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 01

Photo 02

Photo 03

Photo 04

Photo 05

Photo 06

573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 07

Photo 08

Photo 09

Photo 10

Photo 11

Photo 12

573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 13

Photo 15

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573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 20

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Photo 22

Photo 23

Photo 24

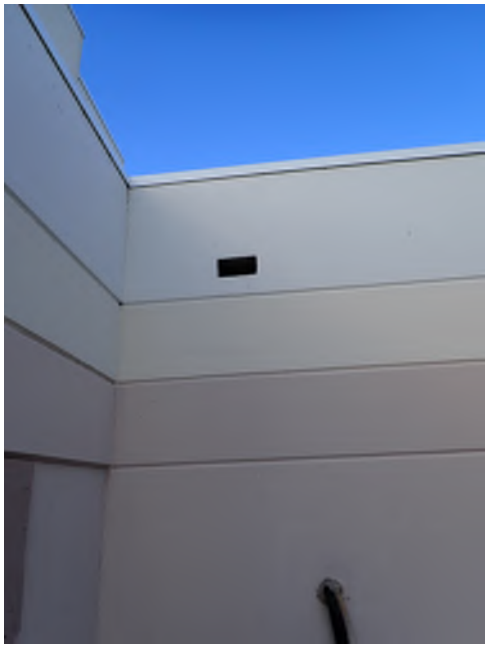

Photo 25

573.000 - CV Center for Recovery BECA Appendix C - Photographs

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Photo 31

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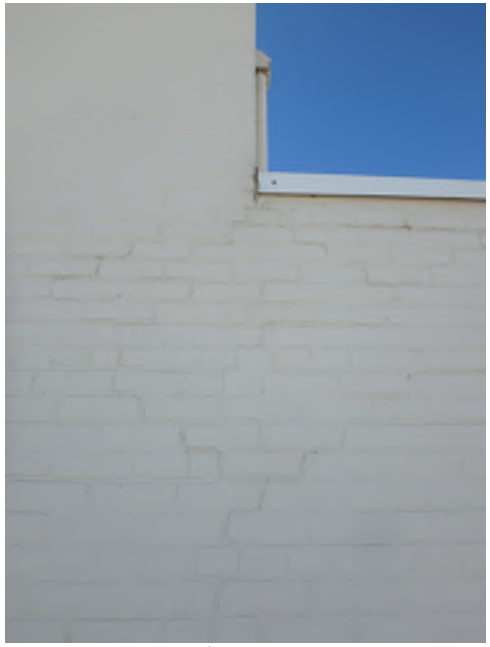

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Photo 49

573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 50

Photo 51

Photo 52

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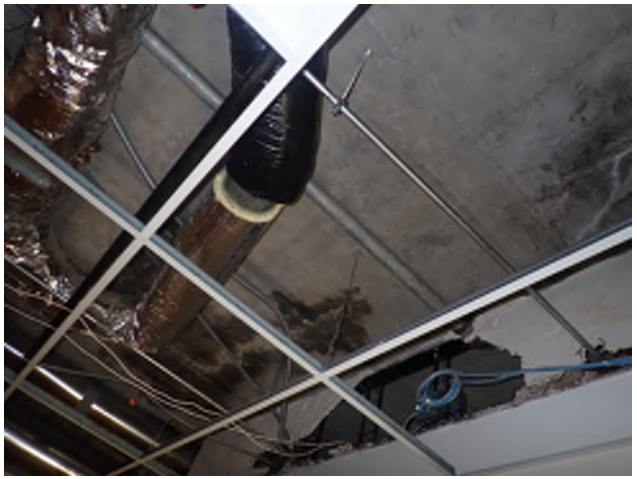
Photo 54

Photo 55

573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 56



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573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 86

Photo 87

Photo 88

Photo 89

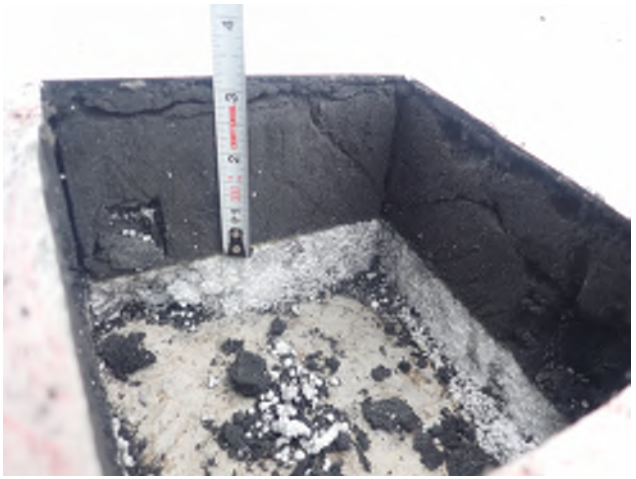

Photo 90

Photo 91

573.000 - CV Center for Recovery BECA Appendix C - Photographs

Photo 92

Photo 93

EXHIBIT B:
MECHANICAL EXISTING CONDITONS REPORT

SITE OBSERVATION REPORT

Date: 4/1/2024
Project: CVCR – Kennewick General Hospital
Date Observed: 03/29/2024
Observed By: TEM / BNB / MSI

GENERAL

The purpose of the site observation performed by the mechanical trade partner team of TEM, BNB and MSI was to expand on the 2021 WAVE assessment report with an eye toward what, if anything, could be reused and identify areas within the facility that are preferred from a mechanical standpoint for the new behavioral health program.

The following narrative and associated observation reports focus on areas of the building that are relevant to the proposed project (i.e., small zones with atypical equipment are not a focus).

MECHANICAL SYSTEMS NARRATIVE

The building has had several additions and remodels that have led to just as many separate mechanical systems and various generations of equipment, all of which were described in the WAVE report. While the air distribution for the different additions is mostly isolated to those areas, the heating (steam and hot water), cooling (chilled water) and plumbing systems are very much intertwined.

Heating:

- Much of the facility's heating is through low pressure steam distributed to air handler coils. With some exceptions, these air handlers are coupled with zone level terminal units with hot water reheat coils.

- Steam Boilers: The steam source is the central boilers in the basement. In addition to being well beyond their expected life as noted in the WAVE report, these boilers are now abandoned in place with all fluids drained exposing wetted surfaces to the elements and accelerated degradation / corrosion. From a life span, condition, reliability, energy and safety standpoint, these boilers should not be considered practical for continued operations.

- Heating Water: The heating hot water is generated from the low-pressure steam through shell-and-tube heat exchangers or in some cases by dedicated gas-fired hot water boilers. The hot water boilers are also abandoned in place with fluids drained and surfaces exposed to the elements. While some of these units may technically have a few years of life left, their condition (see WAVE report) makes future operability highly unlikely. In addition, any future use would require they pick up the additional heating load left by a loss of the central steam plant, which they are not sized for.

- Air Handler Coils: The heating coils in the various air handlers are largely steam. With the systems abandoned in place and obvious signs of pipe failures due to freezing elsewhere around the building, the

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condition of the heating coils within the air handlers is highly suspect. In addition, any future projects would be without steam in which case these coils cannot be used.

- Terminal Units: Terminal units with hot water reheat coils found throughout the building are in questionable condition due to the likelihood that the coils are fouled from extended exposure to both untreated water and the likelihood they are plugged from sediment running through the system prior to being drained. Any future work should consider replacing these terminal units to ensure they are functional and right sized for revised zoning.

Cooling:

- Much of the facility's cooling is provided by air cooled chillers which distribute chilled water to air handler coils.

- The chillers have been abandoned in place and all fluids drained. In addition to being near end-of-life as noted in the wave report, their condition has degraded more quickly as they've sat empty suggesting they are not viable for continued operations.

- The above grade piping has visibly failed in several places and was cut off in others. The interior of these pipes has now been exposed to the elements for some time and is showing signs of corrosion. This condition is presumed to extend into the chiller internals.

Ventilation:

- Ventilation throughout the facility is typical of a hospital with a high percentage of outdoor air. In some areas the systems are 100% outdoor air with dedicated exhaust and heat recover coils.

- The ventilation and air distribution in general appears to be in reasonable condition. Any new project could consider reuse where it makes sense if coupled with selective pressure testing on the medium pressure ductwork and a thorough duct cleaning.

Controls:

- Control systems throughout the building are mostly obsolete and, with a few exceptions, not reusable. The Spaulding building does have some DDC controls that might be able to integrate with new DDC systems but would need verification from the controls supplier.

HVAC Piping Systems

- The steam, condensate return, heating water, and chilled water piping systems that distribute heating and cooling throughout the building have all been essentially abandoned in place which has accelerated their degradation. As such, all steam traps, valves, strainers, pumps tanks, heat exchangers, etc. are likely internally corroded, seized, or plugged and no longer reliable. In some instances, the piping has clearly failed and even fallen apart. While there are some areas that appear in usable condition, replacing the systems in a piecemeal fashion would be more costly.

Plumbing:

- Plumbing fixtures were not thoroughly assessed as any new project will likely include new fixtures.

- Assessment of the plumbing piping is limited by what is visible and what can be scoped under-slab. Visual inspection of the piping throughout the building indicates some sections might be in usable condition with typical piping materials and hangers, while other areas appeared in poor condition showing signs of leakage, corrosion at unprotected hangers, and incorrect materials (galvanized for example). In general, the Birthing Center area was in slightly better condition. The Spaulding building

ceiling was still in place limiting visual inspection but is new enough that the plumbing isn't as much of a concern.

- One of the few areas that could be accessed for scoping was in the Birthing Center which did not indicate any structural integrity concerns. The interior of the pipe appeared reasonable as well. However, the true condition of the pipe requires exposing a section of it. The sewer line where the scoping was performed was 8-ft deep. Further assessment of the under-slab piping at that depth will require extensive demolition.

DETAILED OBSERVATION REPORTS:

- See TEM observation report.

- See BNB plumbing and hydronic observation report.

CONCLUSIONS AND RECOMMENDATIONS:

With an eye toward areas of the building that are practical for a single tenant of the size proposed for the behavioral health program, two areas of the building are most practical from a mechanical systems standpoint.

1- Spaulding
   a. This area of the building has the newest systems and the greatest amount of ceiling space to work within. The systems consist of steam heat to the air handlers, hot water boilers for the terminal unit reheat coils, and chilled water from the chillers. To occupy this area, the steam would be eliminated, the hot water boilers would be replaced and upsized, and new heating water pumps, piping and controls would be installed. A new chiller water system would also be needed.
   b. The plumbing systems are independent of the older parts of the hospital.

2- Birthing Center
   a. This area is next to the Spaulding building and has a similar mechanical system configuration with steam, hot water boilers, and chilled water. To occupy this area, the steam would be eliminated, the hot water boilers would be replaced and upsized, and new heating water pumps, piping and controls would be installed. A new chiller water system would also be needed.
   b. The heating water piping in this area is interconnected to the older section of the hospital. This connection would need to be severed.
   c. The plumbing systems are interconnected with the older section of the hospital. Short of all new services, separating the two will require further evaluation.

While there are several other areas that individually could accommodate small parts of the program, the mechanical systems in those areas (everything north of the Birthing Center) are largely served by multizone systems that are significantly more complex to replace and rezone, and are located in areas of the building with extremely tight ceiling spaces to work within.

End of Report

TOTAL ENERGY MANAGEMENT, INC.

HVAC · ELECTRICAL · CONTROLS

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Bouten Construction

Mechanical Conditional Assessment Report

Date:
3/29/2024

Prepared for:
Bouten Construction
900 S Auburn St
Kennewick, WA 99228

Prepared by:
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cfetcho@teminc.com

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Scope:

Inspect and give a summation of overall unit condition and age.

Most units surveyed have either disconnects turned to the off position or are not currently functioning. Many units show signs of neglect and less than ideal maintenance activities.

Roof Top Package/Air Handling Units - Air handling units have disconnects in various positions. Witnessed very few units running or energized. Status of heating and cooling is unknown as most units are currently inoperable. This may be due to no power supplied, building controls, boiler operational condition or chiller operational condition. No major defects were noted other than age, lack of functionality, lack of maintenance and cabinet conditions.

Building Controls – Most of the building is served by older JCI controls. Operational status of these controls is unknown. A small portion of the building is served by Alerton controls of unknown age or operational status.

Typical life expectancy of equipment of this style is approximately 20 years. Over 85% of equipment surveyed has surpassed that useful life expectancy. As well, building controls operations is unknown. Water and steam treatment or contamination is also unknown. This can have a sever effect on the interior piping and coil structures.

Following is the list of equipment surveyed. Tag numbers have been changed from old numbers to new numbers to correlate with the WAVE report as necessary. Some units were not accessible during this visit.

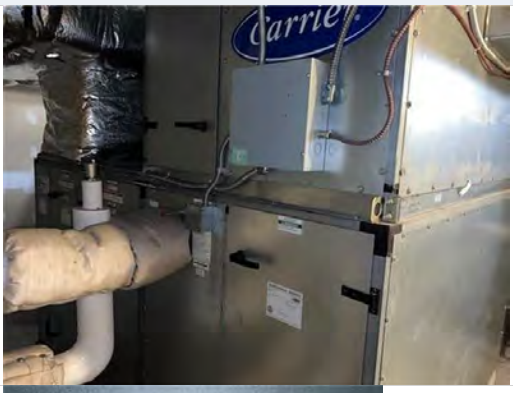
Inventory of Equipment

Assets

Qty	Equipment	Manufacturer	Model	Serial#	Location	Area Served	Asset Note
1	AHU-01	Carrier	39MHSTW05KB DBKXX1X	2911U30977	1ST Floor Mechanical Room		Per Wave Report
1	AHU-02	Unknown	Unknown	461204-04	Penthouse Central		Could Not Gain Access to Penthouse **No Pictures**
1	AHU-03	Trane	MCCB010UA0D OUB	K03K54631A	Penthouse Central		Could Not Gain Access to Penthouse **No Pictures**
1	AHU-04	Trane	MCCA025GAVO ACA000J0CCA00 BAA0000AC000A 0000000	K98L23127A	Penthouse		Per Wave Report
1	AHU-05	Trane	MCCA017GAVO ABA000GOCCA0 0BAA0000AC000 8000000A0-	K98L23235A	Penthouse		Per Wave Report
1	AHU-06	Trane	MCCB012UADO UA	K02F87541	Penthouse North	Imaging	Per Wave Report
1	AHU-07	Temtrol	WF-DV6	79655	Penthouse NW		Could Not Gain Access to Penthouse **No Pictures**
1	AHU-08	Temtrol	WF-RD5	79656	Penthouse NW		Could Not Gain Access to Penthouse **No Pictures**
1	AHU-09	Trane	CCMB21WURFR 40	K88E16225	Penthouse ICU		Per Wave Report
1	AH-10	York	XTO-39X57	N/A	ICU Stepdown Roof	Kitchen	Per Wave Report
1	AHU-11	Trane	CLCH-IM-16A	N/A	ICU Stepdown Roof	Kitchen	Per Wave Report
1	AHU-12	York	CP125DWDEAF1 50208	AALM010916	Pediatric Roof		Per Wave Report
1	AHU-13	York	XT-042X060JEHG017 A	AGPM XT 0238	Pediatric Roof		Per Wave Report
1	AHU-14	Trane	CBDB21503EA50 3P	K88E16341	Penthouse FBC	FBC	Per Wave Report
1	AHU-15	York	CP125DWDIAF15 0460	ADNM014281	FBC Roof	FBC	Per Wave Report
1	AHU-16	York	XTO-48X75JAKA046A	ACUM XT0036	FBC Roof	FBC	Per Wave Report
1	AHU-19	Haakon Industries		93666-03	Spaulding Roof	Spaulding Facility	Per Wave Report
1	MAU-1	Greenheck	DG-109-H10HDBC		Dining Room Roof	Dining Room/Kitchen	Per Wave Report Could Not Gain Access to Roof
1	RTU1	Trane	WCH090C300BC	L31103766D	Administration Roof	Admin	Per Wave Report
1	RTU2	Trane	WCD075C300BC	L301029510	Administration Roof	Admin	Per Wave Report

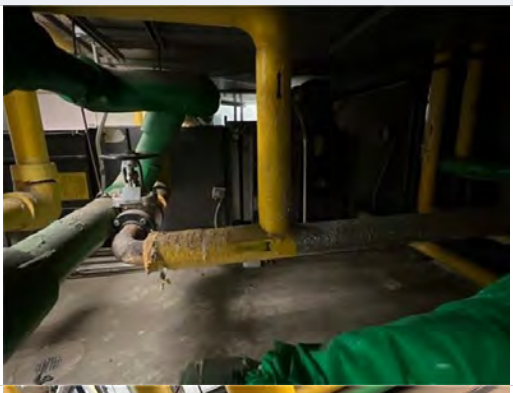
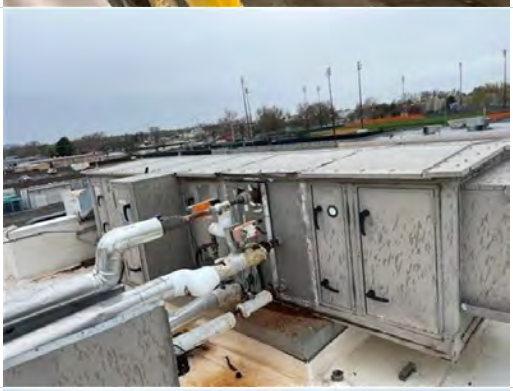
1	RTU-3	Carrier	38ARZ008---611--	1709G50042	Spaulding Roof	Cath Lab	Per Wave Report
1	AHU-U2	Temptrol	??-RD5	79656	Lower Roof		Per Wave Report No old tag or new tag # Unknown Air Handler 2

Asset Pictures

Unit	Description	Picture
AHU-01	Unit age is 10 years. System Condition: Fair	
AHU-01		
AHU-04	System age is 17 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	

Unit	Description	Picture
AHU-04		
AHU-05	System age is 22 years. This exceeds useful life expectancy of 20 years. System Condition: Poor	
AHU-05		
AHU-06	System age is 17 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	

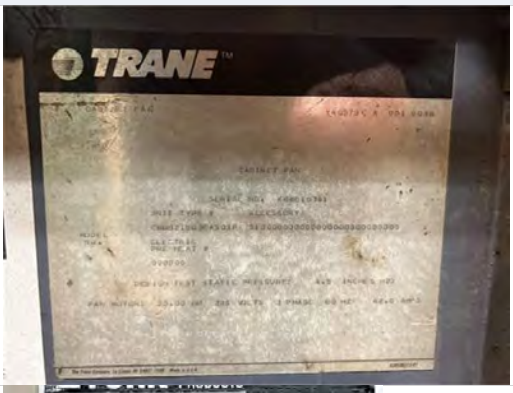
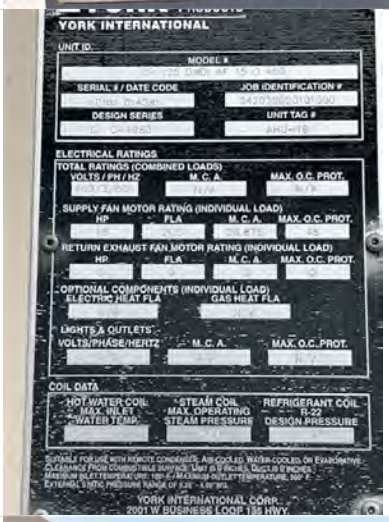
Unit	Description	Picture
AHU-06		
AHU-06		
AHU-09	System age is 33 years. This exceeds useful life expectancy of 20 years. System Condition: Poor	

Unit	Description	Picture
AHU-09		
AHU-09		
AH-10	System age is 16 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	
AHU-11	System age is 17 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	

Unit	Description	Picture
AHU-11		
AHU-12	System age is 20 years. This is right at the useful life expectancy of 20 years. System Condition: Poor	
AHU-12		

Unit	Description	Picture
AHU-13	System age is 16 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	
AHU-13		
AHU-13		
AHU-13		

Unit	Description	Picture
AHU-13		
AHU-13		
AHU-14	System age is 33 years. This exceeds useful life expectancy of 20 years. System Condition: Poor	
AHU-14		

Unit	Description	Picture
AHU-14		
AHU-15	System age is 17 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	
AHU-15		

Unit	Description	Picture
AHU-16	System age is 12 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	
AHU-16		
AHU-19	System age is 27 years. This exceeds useful life expectancy of 20 years. System Condition: Poor	

Unit	Description	Picture
AHU-19		
AHU-19		
AHU-19		

Unit	Description	Picture
AHU-19		
MAU-1	System age is 16 years. This is nearing the end of the useful life expectancy of 20 years. System Condition: Poor	
RTU1	System age is 25 years. This exceeds useful life expectancy of 12-15 years. System Condition: Poor	
RTU1		

Unit	Description	Picture
RTU2	System age is 25 years. This exceeds useful life expectancy of 12-15 years. System Condition: Poor	
RTU2		
RTU-3	System age is 15 years. This is at the end of the useful life expectancy of 12-15 years. System Condition: Poor	

Unit	Description	Picture
RTU-3		
AHU-U2	System age is ?? years. Useful Life Expectancy: 20 years System Condition: Poor	
AHU-U2		

EXHIBIT C:
ELECTRICAL EXISTING CONDITIONS REPORT

Site Observation Validation Report

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COFFMAN ENGINEERS

Site Visit Observation Report

Date:	03-29-24	**Project and Location:**	Kennewick General Hospital 900 S Auburn, Kennewick WA
CEI Project No:	233131	**People Contacted On-Site:**	Tyler Cavanaugh & Brian Lee Energized Electric
Date of Visit:	03-27-24		

Coffman performed a site visit for the purposes of validation and assessment of the existing electrical distribution system.

VALIDATION CRITERIA

Current Project Assumptions:

- Electrical assumes that above all the intent is to re-use existing distribution regardless of which utility service(s) are utilized and that there will be no thought or consideration to the future use of any building space outside of the program area. Additionally, it's assumed that program space loads may be served by any of, and as many of, the existing services as needed to maximize re-use of equipment and minimize cost.
- Electrical assumes that the only requirement for the non-program space is fire alarm and minimum egress and safety lighting. No other electrical power is required and existing power distribution to non-program spaces can be disconnected and removed as needed for this project. Maintaining current power to equipment and devices outside of the program space, if it creates more scope or cost to do so, will not be required.
- Non program space lighting will be maintained wherever possible and re-circuited if necessary to meet minimum levels for egress and security. Emergency fixtures batteries will be tested and replaced if required to meet code.
- It is assumed that all code issues beyond the scope of our project will not be addressed.
- Mechanical equipment to be re-used or replaced in-kind to be re-fed from existing equipment feeder source.
- Voltage and ampacity requirements for new mechanical equipment assumed to be fed by existing distribution equipment. Electrical capacity assumed available.
- Rooftop electrical raceways will remain and be re-used where already utilized for distribution to program space.
- New branch wiring will be provided for our program space only

SITE ASSESSMENT

General Observations:

- The condition of the existing electrical distribution equipment does not imply a definitive preference either for, or against, a chosen program location.
- The condition of the existing electrical utility services does imply a desire to avoid utility service (3), due to anticipated utility upgrades including transformer upgrade and relocation.

Panelboards

- All isolated panelboards within the program space should be removed and associated feeders demoed back to source unless re-used for new distribution.
- Existing normal power panelboards will mostly be in sufficient condition for re-use. Demolition and replacement of panelboards will be dependent on final programming layout and desired panel locations.

Utility Services:

- Service 3 480/277V, 800A (if utilized) will require new service disconnect due to code issues with existing installation.
- Service 1 480/277V, in the equipment yard (if utilized), will require replacement of PDP-1 gear due to condition and code constraints.
- Service 2, 208/120V, anticipated to be utilized and feeds the panelboards found in the currently planned program space. Water issues will need to be resolved in the penthouse electrical room.
- Service 4 (Spalding) program space not anticipated to be in Spalding. No issues with distribution equipment observed.

Emergency Power

- Existing transfer switches and generator distribution panels are in sufficient condition for re-use.
- Existing generator 1 is not suitable for use. Generators 2 and 3 condition was provided in 2019 with last service. No discernable updates to add. Project can be designed to feed specific critical loads from existing generator distribution for future considerations. (Previous Generator Report Attached)

RECOMMENDATION

Electrical recommendation is that the current programming space utilizing the labor and delivery wing is the best option. This location provides the most options to avoid the use of utility service 3 and utilizes more existing electrical distribution equipment than other potential locations.

END OF REPORT

Site Observation
Generator Report

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WSE GENERATOR SET INSPECTION NORTHERN REGION

Dealer Process

● 0 ● 0 ● 58 ● 3

Inspection Number	7083672		
Make	ONAN	Customer No	0025747
Serial Number	H980786638	Customer Name	RCCH Trios Health LLC
Model	500DFED	Equipment Family	GENERATOR
Completed On	10/18/2021 2:19:09 PM	SMU	735.2 Hours
Inspector	Braden Likness	Location	900 S Auburn St, Kennewick
Work Order	SC312551	Coordinates	121.121870040894, 46.1999388603265, -119.120158291861
PDF Generated On	10/19/2021		
Technician			

General Info & Comments

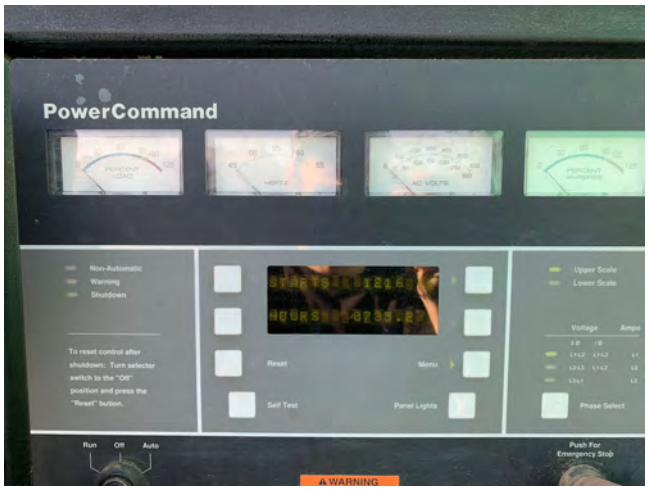
● **General info/Comments** *NORMAL*

Green - PHOTOGRAPH GENERATOR SET

● **1.1 TAKE FOUR CORNER PICTURES OF GENERATOR SET.** *YES*

1.2 PHOTOGRAPH ALL DATA PLATES, CONTROL PANEL, ATS AND SWITCH GEAR

YES

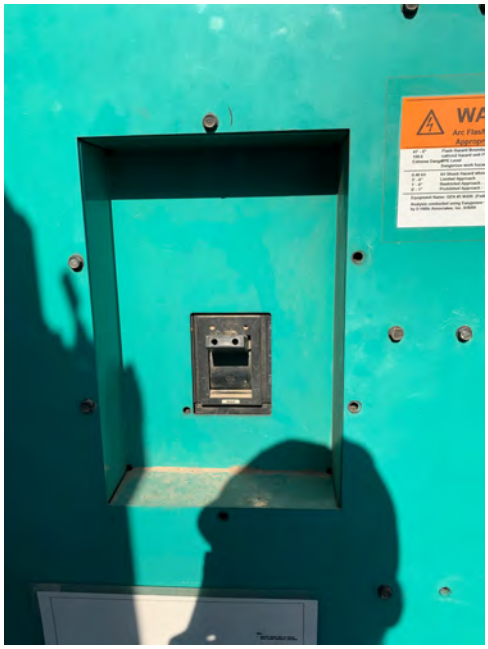



Engine No. 37184435
Model KTA19-G4
S.O. No. 65306
Date of Mfg. 08/96
Ref. No. 190-3311-01
Advert. HP 755 at 1800 RPM
Advert. HP at RPM
Valve Lash Cold .014 .027
Inj. Set 90 INCH-LBS
Manufactured by: Cummins Engine Co., Inc. Made in U.S.A.


755
.014 .027
90 INCH-LBS
K-19
WARNING: Injury may result and warranty is voided if fuel rate, RPM, or attitudes exceed published maximum values for this model and application.
Warranty St. Date


SENS IBC SEISMIC LABEL OF COMPLIANCE
Battery charger models beginning with FC, FCA, LC, NRG, Q
Best battery selector models beginning with BBS
Approved Performance Characteristics: Maximum S_{ds} of 2.28 g
SENS
LONGMONT, CO USA
(303) 678-7500
BATTERY CHARGER
MODEL: NRG22-10-RC
SERIAL NO: 271691 05 09
2009 Feb 05
AC INPUT: 120/208-240 VAC
DC OUTPUT: 12/24 VDC (NOM)
80 Hz 1 Ø 50 AMPS
18 AMPS
CAUTION
FOR SUPPLY CONNECTIONS USE WIRES SUITABLE FOR AT LEAST 90° C
REPLACE DEFECTIVE CORDS OR WIRES IMMEDIATELY
CHARGE ONLY LEAD ACID OR LIQUID ELECTROLYTE NICKEL-CADMIUM BATTERIES. OTHER TYPES OF BATTERIES MAY BURST CAUSING PERSONAL INJURY AND DAMAGE
DO NOT EXPOSE TO RAIN
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
c UL us LISTED File# E109740
2627
BATTERY CHARGER


Carbonator Pump Motor
MOD NO 6K160D
E47479
HP 1/4 RPM 1725/1425 BRG Sleeve PH 1
ENCL ODP MAX AMB 40 °C KVA CODE T
VOLTS 115/230 HZ 60/50 DUTY Cont INS CL B
AMPS 4.8/2.4/6.0/3.0 SF 1.0 SFA 4.8/2.4/6.0/3.0
MTR REF 5K50DMZN-6936 MFG NO MM98C
HUT REQ'D WITH CONDUIT FITTING
Thermally Protected Automatic
Relubricate With 30 Drops S.A.E. 20 Non-detergent Oil Once A Year
Manufactured for Dayton Electric Mfg. Co.



Green - MAINTENANCE INFORMATION

2.1 ENTER DATE AND HOURS AT LAST OIL AND FILTER CHANGE — *PASS*

Comments: 10-12-20
713 Hrs

2.2 ENGINE OIL AND FILTERS CONDITION / PART NUMBERS — *PASS*

Green - PRE CHECK LIST

3.1 GENERATOR BREAKER CLOSED — *PASS*

3.2 CONTROL SWITCH IN THE AUTO POSITION — *PASS*

3.3 CHECK CONTROL PANEL FOR ACTIVE ALARMS — *PASS*

3.4 CHECK BATTERY CHARGER OPERATION / RECORD CHARGE DC VOLTAGE — *PASS*

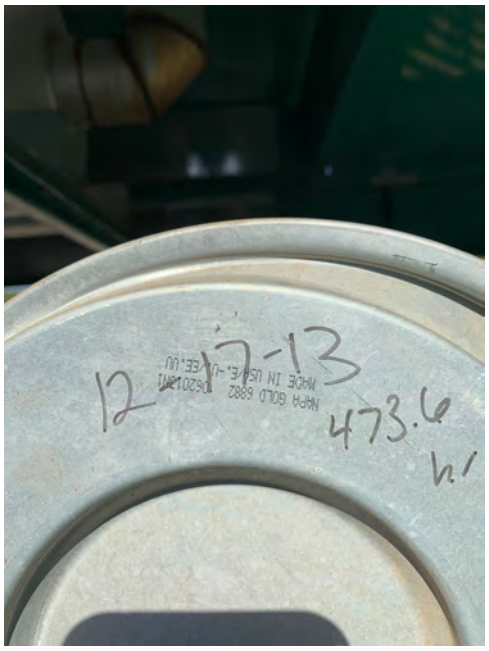
Comments: 25.5 VDC

3.5 CHECK ALL DRIVE BELTS / CONDITION AND PART NUMBERS — *PASS*

3.6 CHECK ALL BELT PULLEY CONDITION — *PASS*

●	**3.7 CHECK ALL BELT / FAN GUARDS**	*PASS*
●	**3.8 CHECK GENERATOR SET MOUNTS AND HARDWARE FOR CONDITION AND SECURITY**	*PASS*
●	**3.9 CHECK CONDITION OF VIBRATION ISOLATION EQUIPMENT**	*PASS*
●	**3.10 VISUALLY INSPECT AIR INTAKE SYSTEM**	*PASS*
●	**3.11 CHECK INTAKE AIR FILTERS / DOCUMENT PART NUMBERS**	*PASS*

Comments: Recommend replacement



●	**3.12 INSPECT ALL INTAKE AIR HOSE CLAMPS**	*PASS*
●	**3.13 VISUALLY CHECK EXHAUST SYSTEM**	*PASS*
●	**3.14 INSPECT EXHAUST RAIN CAP**	*PASS*
●	**3.15 CHECK STARTER CONNECTIONS**	*PASS*

Green - ENGINE STARTING BATTERIES

●	**4.1 BATTERY GROUP NUMBER / CCA / QUANTITY / DATE INSTALLED**	*YES*

Comments: #153-5700
1125 CCA
06/2020
2 batteries

●	**4.2 BATTERY CONNECTIONS**	*YES*
●	**4.3 INSTALL BATTERY ANTI-CORROSION PROTECTION**	*PASS*
●	**4.4 BATTERY LOAD TEST. LIST VOLTAGE AND AMPS FOR EACH BATTERY IN THE COMMENTS BELOW.**	*PASS*

Comments: Battery 1: 10.3 VDC @ 575 amps
Battery 2: 10.4 VDC @ 575 amps

Green - COOLING SYSTEM

●	**5.1 CHECK ENGINE COOLANT LEVEL**	*PASS*
●	**5.2 INSPECT RADIATOR CAP**	*PASS*
●	**5.3 INSPECT BLOCK HEATER**	*PASS*
●	**5.4 CHECK COOLING SYSTEM FREEZE POINT**	*PASS*

Comments: -65 F

5.5 CHECK COOLING SYSTEM CONDITIONER LEVEL *PASS*

5.6 TYPE OF COOLANT IN SYSTEM? STANDARD OR EXTENDED LIFE COOLANT (ELC). ENTER RESULTS IN COMMENT *PASS*

Comments: Standard

5.7 CHECK FOR COOLANT SYSTEM CONTAMINANTS *PASS*

5.8 INSPECT COOLING SYSTEM HOSES, CLAMPS AND WATER PUMP FOR CONDITION AND LEAKS *PASS*

5.9 VISUALLY INSPECT ENGINE RADIATOR *PASS*

5.10 CHECK FOR EXTERNALLY PLUGGED RADIATOR *PASS*

Comments: Small areas have blockage

5.11 IS THE COOLING SYSTEM OVERDUE FOR FLUSH AND REPLACEMENT *PASS*

Comments: No

Green - FUEL SYSTEM

6.1 FUEL SYSTEM TYPE / TANK LEVEL / CAPACITY *PASS*

Comments: Diesel
3/4 full

6.2 VISUALLY CHECK FUEL SYSTEM FOR LEAKS	*PASS*
6.3 CHECK ALL FUEL SYSTEM HOSE FOR CONDITION AND SECURITY	*PASS*
6.4 CHECK OPERATION OF THE DAY TANK IF INSTALLED	*PASS*
6.5 PRIMARY AND SECONDARY FUEL FILTERS CONDITION / PART NUMBERS	*PASS*

Green - LUBE SYSTEM

7.1 CHECK LUBE OIL LEVEL	*PASS*
7.2 CHECK FOR ENGINE OIL LEAKS	*PASS*
7.3 CHECK CONDITION OF EXTERIOR OIL LINES AND HOSES	*PASS*
7.4 PULL ENGINE OIL SAMPLE	*YES*

Green - AUTOMATIC TRANSFER SWITCH

8.1 CHECK OPERATION OF ENGINE STARTING SYSTEM	*PASS*
8.2 RECORD ATS VOLTAGE ON LINE AND EMERGENCY SOURCES	*PASS*

●	**8.3 VISUALLY INSPECT ALL CONNECTIONS**	*PASS*
●	**8.6 CHECK AND/OR REPLACE BACKUP BATTERY**	*PASS*

Green - GENERATOR SET RUNNING CHECKS

●	**9.1 CHECK OPERATION OF ENGINE STARTING SYSTEM**	*PASS*
●	**9.2 CHECK OPERATION OF ENGINE CHARGING ALTERNATOR**	*PASS*
●	**9.3 CHECK OPERATION OF ALL METERS AND GAUGES**	*PASS*
●	**9.4 RECORD GENERATOR A/C VOLTAGE AND FREQUENCY**	*PASS*

Comments: 480 VAC
60.0 Hz

●	**9.5 CHECK FOR EXCESSIVE ENGINE / GENERATOR NOISE**	*PASS*
●	**9.6 CHECK OPERATION OF SAFETY SHUTDOWNS**	*PASS*
●	**9.7 CHECK OPERATION OF REMOTE ANNUNCIATORS**	*PASS*

Green - POST INSPECTION

●	**10.1 CHECK THAT ALL BREAKERS ARE IN THE CLOSED POSITION**	*PASS*
●	**10.2 RETURN GENERATOR CONTROL SWITCH TO THE AUTO POSITION**	*PASS*

Green - ITEMS FOUND DURING CURRENT INSPECTION

●	**11.1 LIST ANY ITEMS FOUND DURING THIS INSPECTION THAT REQUIRE ADDITIONAL ACTION**	*PASS*

Grey - AUTOMATIC TRANSFER SWITCH

●	**8.4 CHECK OPERATION OF TRANSFER SWITCH**	*N/A*

●	**8.5 CHECK EXERCISER OPERATION**	*N/A*

Grey - GENERATOR SET RUNNING CHECKS

●	**9.8 CHECK PROPER OPERATION OF LOUVERS**	*N/A*

Site Observation Photos

Service 1 - MDP-1 800A (277/480V)

Service 2 - MDP-2A 2000A (120/208V)

PDP-1 800A (277/480V) Only feeding
1ea 30A trash compactor load

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Electrical Room #2

MDP-2B 2000A (120/208V)

Electrical Room #2

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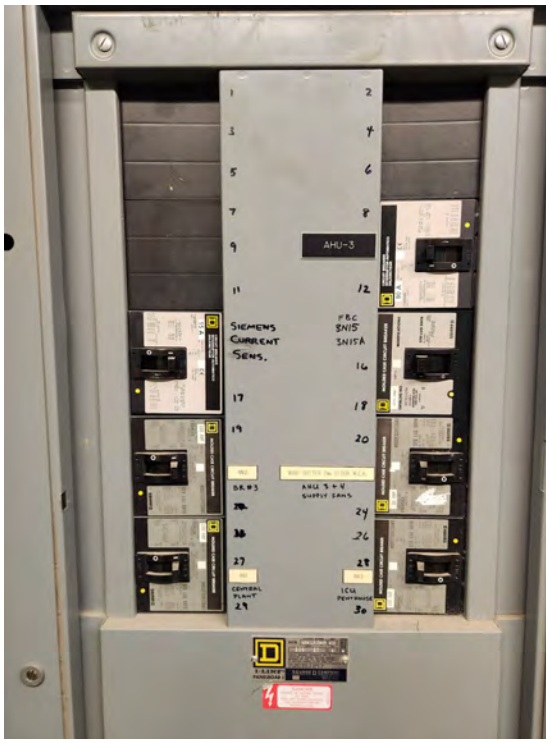
Electrical Room #2

MEDP-3 1000A (120/208V)

EDP-2 800A (120/208V)

NDP-4 400A (120/208V)

NDP-4 400A (120/208V)



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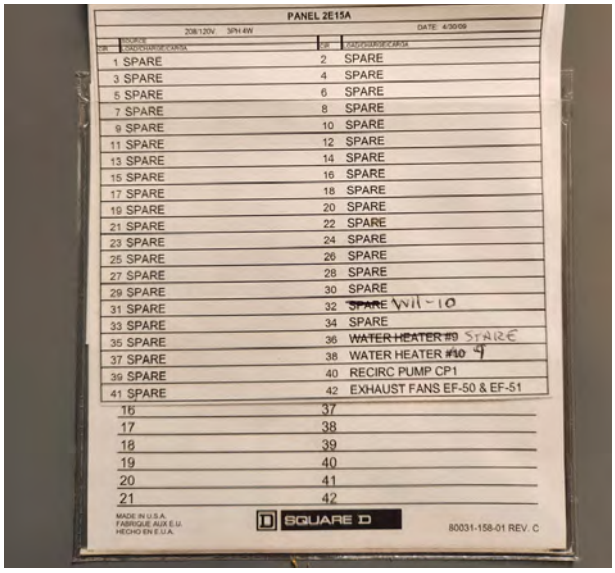
Family Birthing Electric Room (Main floor, exterior access)

Would need to covert these panels to normal power, but lots of capacity

PANEL 1E5

208/120V. 3PH 4W DATE: 4/30/09

CIR	SOURCE LOAD/CHARGE/CARGA	CIR	LOAD/CHARGE/CARGA
1	SPARE	2	LTG CORRS 126, 100B
3	NURSE CALL CABINET	4	LTG CORR 127
5	SPARE	6	SPARE
7	SPARE	8	SPARE
9	SPARE	10	SPARE
11	SPARE	12	SPARE
13	SPARE	14	SPARE
15	SPARE	16	SPARE
17	SPARE	18	SPARE
19	SPACE FOR FUTURE USE	20	SPACE FOR FUTURE USE
21	SPACE FOR FUTURE USE	22	SPACE FOR FUTURE USE
23	SPACE FOR FUTURE USE	24	SPACE FOR FUTURE USE
25	SPACE FOR FUTURE USE	26	SPACE FOR FUTURE USE
27	SPACE FOR FUTURE USE	28	SPACE FOR FUTURE USE
29	SPACE FOR FUTURE USE	30	SPACE FOR FUTURE USE
31		32	
33		34	
35		36	
37		38	


PANEL 2E15A

208/120V. 3PH 4W DATE: 4/30/09

CIR	SOURCE LOAD/CHARGE/CARGA	CIR	LOAD/CHARGE/CARGA
1	SPARE	2	SPARE
3	SPARE	4	SPARE
5	SPARE	6	SPARE
7	SPARE	8	SPARE
9	SPARE	10	SPARE
11	SPARE	12	SPARE
13	SPARE	14	SPARE
15	SPARE	16	SPARE
17	SPARE	18	SPARE
19	SPARE	20	SPARE
21	SPARE	22	SPARE
23	SPARE	24	SPARE
25	SPARE	26	SPARE
27	SPARE	28	SPARE
29	SPARE	30	SPARE
31	SPARE	32	~~SPARE~~ WH-10
33	SPARE	34	SPARE
35	SPARE	36	~~WATER HEATER #9~~ SPARE
37	SPARE	38	WATER HEATER #10
39	SPARE	40	RECIRC PUMP CP1
41	SPARE	42	EXHAUST FANS EF-50 & EF-51
16		37	
17		38	
18		39	
19		40	
20		41	
21		42	

MADE IN U.S.A. FABRIQUE AUX E.U. HECHO EN E.U.A. SQUARE D 80031-158-01 REV. C

Basement Electrical Room

PDP-2 600A (277/480V)
Could use for new mechanical loads

EDP-5 800A (120/208V)

PDP-3 225A (277/480V) Could use as our lighting panel

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Family Birthing Electric Room Conduit Installation. All conduit installed on the roof will remain as is.

Electrical Room #2 Conduit Installation.
All conduit installed on the roof will remain as is.

4444 N Freya St, Spokane, WA 99217 | 509-483-6447 | Tyler@energizedelectric.com

EXHIBIT D:

A3 - PRE-VALIDATION - PROGRAM & BUDGET ALIGNMENT SUMMARY

Pre-Validation Program and Building Area Evaluation Executive Summary

Columbia Valley Center for Recovery

Progressive Design-Build | Validation Phase

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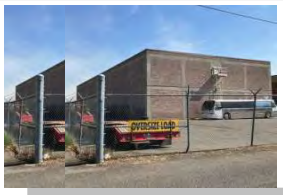
March 19, 2024

OPTION 1 - BRUNEAU PROPERTY



PROGRAM AND COST

BLDG & PROGRAM AREA
Building
20,000
Program Area
22,500 - 27,000
*Cost/SF Values based on 24,500SF

BUDGET BREAKDOWN

ITEM	TOTAL	COST/SF
Site and Demolition	$ 1,349,273	$ 55
Structure	1,395,372	57
Envelope	1,699,677	69
Interiors	4,181,750	171
Equip. & Specialties	852,535	35
Mechanical	2,888,798	118
Electrical	2,366,768	97
Subtotal	$ 14,734,173	$ 601
D/B Fees, GC's, Cont.	$ 8,255,744	$ 337
Total	$ 22,989,917	$ 938

GRADING

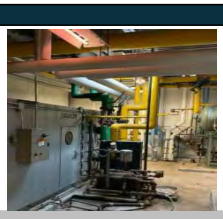
PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

DESIGN AND COST FACTORS

*costs shown represent direct cost values

1 $500k in additional site improvement costs compared to other options
2 $1.2M in additional structural costs based on structural analysis; includesa mezzanine
3 Site does not work without purchasing adjacent property and/or major code variances from City
4 Significant program challenges with lack of ability to add windows, courtyards and natural daylight. One of our conditions of excellence.
5 $800k in additional skin costs compared to other options
6 $2.5M total in added cost as compared to other options equates to 4k-5k in less program

OPTION 2 - HOSPITAL AREA



PROGRAM AND COST

BLDG & PROGRAM AREA
Building
27,000 - 45,000
Program Area
27,000 - 32,000
*Cost/SF Values based on 29,000SF

BUDGET BREAKDOWN

ITEM	COST	COST/SF
Site and Demolition	$ 822,879	$ 28
Structure	161,491	6
Envelope	891,881	31
Interiors	4,129,769	142
Equip. & Specialties	1,882,992	65
Mechanical	4,026,506	139
Electrical	2,644,000	91
Subtotal	$ 14,559,518	$ 502
D/B Fees, GC's, Cont.	$ 8,426,944	$ 291
Total	$ 22,986,462	$ 793

GRADING

PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

DESIGN AND COST FACTORS

*costs shown represent direct cost values

1 $800k in additional costs to upgrade the existing, adjacent building fire alarm and fire sprinkler
2 $500k in interior demolition
3 $500k in repairs to roof and addressing exterior envelope, sealants and painting
4 $800k in window replacements
5 $250k included exterior site improvements

OPTION 3 - SPAULDING AREA

PROGRAM AND COST

BLDG & PROGRAM AREA
Building
29,000 - 50,000
Program Area
29,000 - 36,000
*Cost/SF Values based on 34,500SF

BUDGET BREAKDOWN

ITEM	TOTAL	COST/SF
Site and Demolition	$ 686,568	$ 20
Structure	51,325	1
Envelope	893,595	26
Interiors	4,160,273	121
Equip. & Specialties	1,581,128	46
Mechanical	4,509,547	131
Electrical	2,732,557	79
Subtotal	$ 14,614,993	$ 424
D/B Fees, GC's, Cont.	$ 8,378,769	$ 243
Total	$ 22,993,762	$ 666

GRADING

PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

DESIGN AND COST FACTORS

*costs shown represent direct cost values

1 $700k to upgrade the existing, adjacent building fire alarm and fire sprinklers
2 $425k in interior demolition
3 $500k in repairs to roof and addressing exterior sealants and painting
4 $850k in window replacements
5 $250k included exterior site improvements

OPTION 4 - NEW BUILDING (FOR COMPARISON ONLY)

PROGRAM AND COST

BLDG & PROGRAM AREA
Building
24,500
Program Area
24,500
*Cost/SF Values based on 24,500SF

BUDGET BREAKDOWN

	TOTAL	COST/SF
Direct Costs	$ 14,600,000	$ 596
D/B Fees, GC's, Cont.	$ 8,378,769	$ 342
Total	$ 22,978,769	$ 938

GRADING

PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

NEXT STEPS - ASSUMING ONE OR BOTH AREAS OF AUBURN CARRIED THROUGH TO VALIDATION

1 Further visual mechanical assessment. Timeframe: 3-4 weeks
   i. Go through as-builts
   ii. Identify usable / non-usable MEP systems at KGH facility
   iii. Site walk to observe any visible constraints (includes opening panels, covers, testing power, etc.)
   iv. Produce equipment schedule / grading of equipment / assessment
2 Provide report on feasibility and plan to get MEP systems operating (at validation)
3 Confirm RDH comments and plan to address exterior envelope issues (at validation)
4 Update program, specific to findings (2 weeks)
5 Provide validation report with target budget, scope and program alignment (Total duration 6-8 weeks)

EXHIBIT E:
CIVIL NARRATIVE

10 E. Bruneau Ave Site

SITE

Civil work will consist of upgrading asphalt parking areas, accessible concrete walks, and full street improvements to Alder Street between E. Bruneau Avenue and E. Columbia Avenue. Existing Alder Street is a 20' paved alleyway with no curb, gutter, or sidewalk improvements. Improved Alder Street would extend the ROW from 20' to 40', with a 36' roadway, curb, gutter, and attached 5' sidewalk on the eastern side. An 18' easement on the eastern side of the road would be required by the City for dry utilities. The additional public right of way needed for the widening of Alder Street would be required from four (4) separate properties not currently owned by Benton County. The total right of way acquisition would total approximately 7,010 square feet.

Based on site analysis and the existing building footprint size, there is a minimal amount of room for required parking spaces in the redeveloped parking lot along the east face of the building. Ingress and egress movements in and out of the site are limited due to existing site grading and existing gates for the Public Market @ Columbia River Warehouse located on both ends of Bruneau street between Alder Street and Beech Street.

UTILITIES

The Bruneau Site existing building is the old Welch's Grape Juice warehouse, the building is built on two different parcels and the existing water and sewer utility stubs for the building are located to the south on the parcel that is not owned by Benton County. Utility stubs will need to be built to the portion of the building owned by the County and would be placed under the roadway improvements being made to Alder Street.

The new utilities in Alder Street would consist of a new 8-inch waterline and 8-inch sanitary sewer line. From these lines new utility connections would be made to the building owned by the County. These utility lines will be connected from existing lines on Bruneau Street. The upgraded Alder St would also require storm drainage upgrades to comply with City of Kennewick stormwater requirements, in addition to the stormwater improvements that would need to be made on-site to retain water within the project boundaries.

Overhead power currently exists along the east boundary of Alder Street. This power would have to be relocated and most likely placed underground to accommodate the widening of the roadway and sidewalk improvements.

ADA/ROADWAY ACCESS CONSTRAINTS

All ADA facilities onto Washington Street as well as Columbia Avenue would have to be brought up to code or established to provide pedestrian connectivity in the area.

There would be potential site distance concerns at the intersection of Alder Street and Columbia Avenue. The access currently operates as an alley between two existing buildings. The existing buildings block driver site distances and would require the improved future access to operate as a right in right out only access.

The existing alley along the north boundary of the site is currently only 20 feet wide. There are concerns that this would not meet fire access requirements for secondary access to the site. There are limited opportunities to widen access as it is fully built out on the north side of the roadway. To gain secondary access a new roadway connection would have to be constructed through the adjacent car wash property at 216 N. Washington Street to connect Washington Street and Alder Street.

900 S. Auburn St Site

SITE

Civil work will consist of ADA upgrades, concrete walkways, driveways, landscaping, parking lot striping and restoration, and utilities described below. Accessible concrete walkways will be used to collect and route pedestrian traffic from public walks and parking areas to and from the portions of the building that are being improved. Approximately 40,000 square feet of parking lot will be upgraded adjacent to the building on the southwestern portion of the site that will acess from W. 10th Avenue. Standard asphalt patching and seal coating, curbing, parking stalls, landscaping, and accessible pedestrian ramps compliant with ADA requirements will also be constructed on the interior of the site.

DEMOLITION

The site was once the old Kennewick General Hospital building and is currently unoccupied. The civil demolition involved in upgrading the site will include removing and replacing broken panels of sidewalk along the perimeter of site within the City of Kennewick ROW, removing unnecessary driveways and replacing them with sidewalk.

DOMESTIC WATER

The city has water infrastructure along W 8th Ave and W 10th Ave. An 8-inch water line crosses the site connecting the water mains on W 8th Ave and W 10th Ave, this line consists of segments of PVC 900, while a majority of the line is asbestos concrete. Replacement of the asbestos concrete water line should be considered to mitigate potential negative health effects. The City mapping indicates that water services for both domestic use and fire use are already routed to the building from the public right of way. Confirmation of the meters and backflow assembly's being up to current code and standards needs to be completed.

FIRE HYDRANTS

Five fire hydrants are located on-site. Two are located near W 8th Ave, two are located near W 10th Ave and one is located northeast of the heli-pad. Installation of additional on-site fire hydrants may be required depending on reconfigured site layout. The most distant portion of any proposed buildings will need to be within 400-feet of a fire hydrant, and within 90 feet of the Fire Department Connection. No additional fire hydrants have been requested by the City fire department at this time.

SANITARY SEWER

The City has sanitary sewer infrastructure along W 8th Ave and W 10th Ave. A 24-inch concrete sanity sewer along W 8th Ave, and a 12-Inch concrete sanity sewer along W 10th Ave. There is an existing sanitary sewer of unknown size on the north side of the building which is served by the 24-inch sanitary sewer. An existing 8-inch PVC sanitary lateral is located on the east side of the building, which is served by the 12-inch sanitary sewer on W 10th Ave. An existing 6-inch sanitary lateral of unknown material on the west side of the building, which is served by the 8-inch PVC sanitary sewer located within the shared access easement. Installation of additional sanitary laterals is not anticipated at this time.

STORMWATER

All stormwater generated on-site is required to be retained on-site in accordance with the City of Kennewick stormwater requirements. Stormwater runoff from existing impervious surface areas is managed using drywells. City GIS shows an existing drywell in the northeast corner of the site and another drywell in the northwest corner of the site.

The City of Kennewick Municipal Code prioritizes on-site infiltration as the primary form of stormwater management which can be accomplished with Underground Injection Control (UIC) facilities.

Currently there is no reported failure of any existing storm facilities on the site and additional impervious surface creation beyond what is currently on-site are not anticipated that would require the development and construction of any new storm facilities.

TEMPORARY EROSION & SEDIMENTATION CONTROL (TESC) PLAN

A TESC plan will be developed to control erosion and off-site migration of sediment-laden water. The TESC plan will address practices, methodologies, and requirements for erosion control, as is required by the City of Kennewick. The TESC plan will be developed during the design process and be followed during construction.

EXHIBIT F:
LANDSCAPE NARRATIVE

SITE

Landscape Architecture work will consist of site design including hardscape, materials, planting, irrigation, and detailing of design elements. This work can be organized into three main categories:

1. Street frontages and parking areas.
2. Site work between the right of way and face of building.
3. At-grade courtyards.

STREET FRONTAGES PARKING AREAS

This work will consist of code-required planting and irrigation for street frontages and parking areas. Topsoil, shrubs, grasses, groundcovers, and trees will meet City of Kennewick requirements for installation and species selection. Drip irrigation will be provided where planting material is installed. Rock mulch will be provided in areas without planting.

SITE WORK

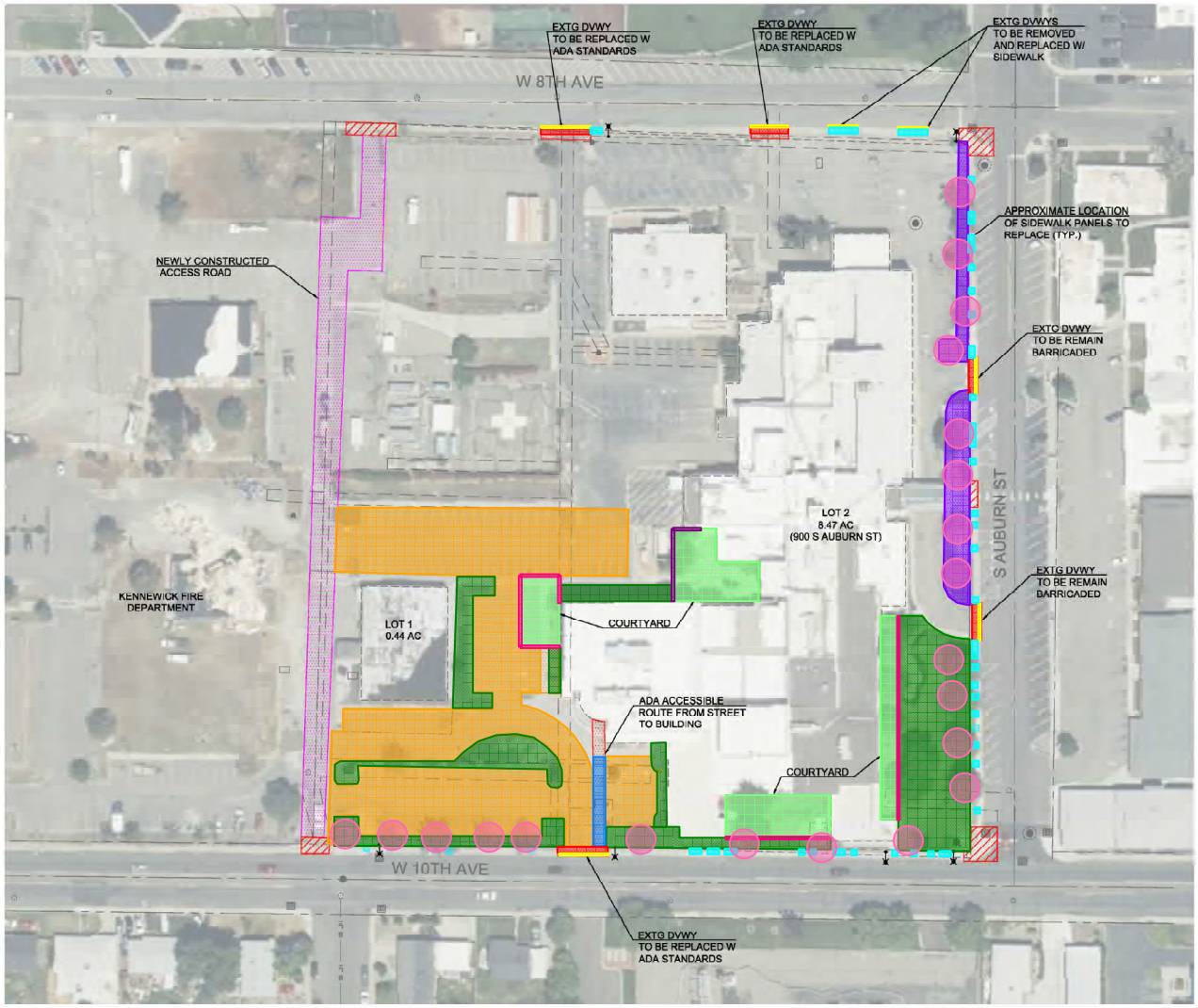
This work will consist of accessible paving associated with site circulation, foundational plantings, and site planting. Topsoil, shrubs, grasses, groundcovers, and trees will meet City of Kennewick requirements for installation and species selection. Drip irrigation will be provided where planting material is installed.

COURTYARDS

Three code-required courtyards will be included in the project. Controlled access into these courtyards will be provided from within the building, and there will be no external access unless required by code for emergency egress. These courtyards will consist of a ground plane constructed from durable, low-maintenance materials such as synthetic turf or poured-in-place rubberized surfacing. These courtyards shall contain no planting material or irrigation. Site furnishings such as immovable seat walls or anchored benches may be provided depending upon future programming requirements. Design of these spaces will consider user safety as the highest priority.

IRRIGATION

An on-site well previously provided water for irrigation. At some point the system either failed or was decommissioned, leading to the death of on-site plants and trees which were then removed. An exploration of the existing well system is currently underway to determine viability. Irrigation will either be provided by the well system, or via a new domestic water service. This decision is currently TBD.



- 32 1200 Asphalt Seal Coat - Q1 41,597 SF
- 32 1800 Artificiatl Turf - Q1 11,473 SF
- 32 3100 Fence/Screen - Q1 415 LF
- 32 3100 Fence/Screen (Reuse Existing) - Q1 86 LF
- 32 9000 Landscaping - Q1 24,016 SF
- 32 9000 Aggregate Surfacing - Q1 5,751 SF
- 32 1600 Replace Concrete Drive Apron - Q1 900 SF
- 32 1600 Replace Curb & Gutter - Q1 231 LF
- 32 1600 Replace Concrete Sidewalk - Q1 1,490 SF
- 32 1600 New Concrete Sidewalk - Q1 799 SF
- 32 9000 Street Trees - Q1 21 EA

PBS Engineering and Environmental Inc.
400 Bradley Blvd, Ste 108
Richland, WA 99352
509.942.1600
pbsusa.com

	ADA - UPGRADED - DOES NOT NEED TO BE REPLACED
	ADA - TO BE UPGRADED
	ASPHALT & PARKING AREA (APPROX. 40,000 SF, 99 STALLS)
	LANDSCAPE (APPROX. 27,550 SF)
	ROCK MULCH (APPROX. 5,500 SF)
	SIDEWALK PANELS TO REPLACE (APPROX. 65, 5'x5')
	NEWLY CONSTRUCTED ACCESS RD - DOES NOT NEED UPGRADE
	STREET LIGHTS TO UPGRADE (6)

Scale 1" = 50'

0 25 50 100

THREE RIVERS BEHAVIORAL HEALTH RECOVERY CENTER - KGH PROPERTY

Filename: L:\Projects\6500\6520\6520-000\CIVIL\CAD\Working\Exhibits\ConstructionExhibit_KGH.dwg Layout Tab: 1 User: Amy.Nikolaus CAD Plot Date/Time: 4/15/2024 2:47:03 PM

EXHIBIT G:
ARCHITECTURAL NARRATIVE

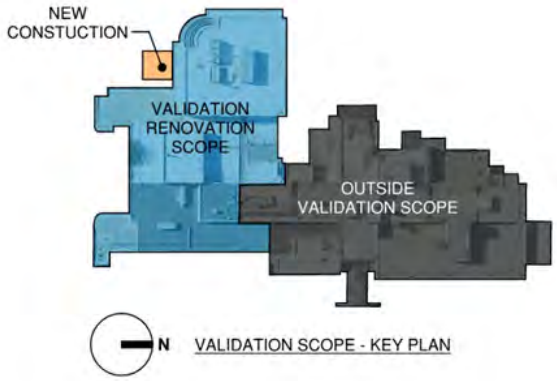
Introduction

The new Columbia Valley Center for Recovery, (CVCR) is the first step tward providing Southeast Washington State an integrated behavioral health campus. There is a great need in the region for such services. CVCR will start by providing four services to include crisis stabilization subacute withdrawal management, evaluation and treatment secure withdrawal management, 23-hour observation, and residential inpatient treatment. Three of these programs will be licensed in the State of Washington as Residential Treatment Facilities, (RTF). The State is currently in the process of writing requirements for 23-hour observation units. There is a Washington State waiver in place to allow multiple RTF's to share space and services and continue to receive CMS reimbursements. If this waiver is not in place, each individual RTF would need to be a complete standalone unit. Under this validation per the direction of Benton County, it is assumed that the waiver will be in place and spaces can be shared. If in the future the waiver was no longer available, then renovation and expansion would need to be done to the units to provide standalone services as required per RTF.

Validation Scope Area

The Validation design scope focuses on the south half of the Auburn building from the Spaulding 3-story tower on the southwest to what was the old KGH labor and delivery wing on the southeast. The validation scope includes upgrades to the exterior in the area indicated in blue on the validation scope key plan. These upgrades include roofing, exterior painting, EIFS patching, new glass at existing storefront and new windows at patient areas. The validation scope on the interior of the building consists of a first-floor interior remodel of the areas indicated in blue on the plan below. The second & third floors of the Spaulding building will be tenant-ready unrenovated space. In addition to the renovation, a new covered secure drop off will be built on the southwest side of the building.

The remaining north half of the building is not part of the scope of this validation other than necessary life safety measures including fire alarm, sprinkler system and freeze protection. The intention is that these areas of the building (interior & exterior) will be upgraded in a future phase of construction under a separate scope of work.



Exterior Scope of Work

ROOFING

The roofing renovations under the validation scope include the south side of the Auburn building only. The northern portions of roof will be upgraded as part of future renovations. During validation, an exterior envelope consultant and a roofing contractor visited the building and evaluated the condition of the roofing. To see the full report reference Exhibits A & N. The roof was installed in many phases of construction through the years and different portions received different types of roofing and are in varying degrees of disrepair. The specific approach was defined for each condition and shown on the roofing renovation key plan. In some areas the existing TPO roofing was in fair to good condition and the intent is to patch existing TPO and flashing as needed, while other areas of the roof are ballasted and appear to be in good condition with only flashing repairs needed. In one area water has made its way into the insulation and it must be removed and replaced with new insulation, TPO & flashing. In this area the new roofing will need to meet the new energy code requirements, which will increase thickness of the insulation crickets and require added height at the parapet wall.

Roof Plan

EXTERIOR ENVELOPE

The scope of exterior renovations includes the south half of the Auburn building. The northern portions of the building exterior will be upgraded as part of future renovations and are not included in this validation effort. As part of validation an exterior envelope consultant did a thorough investigation of the existing conditions, including the condition of the Exterior Insulation & Finish System (EIFS), windows, & storefront. To see the full report reference Exhibits A & N.

EIFS

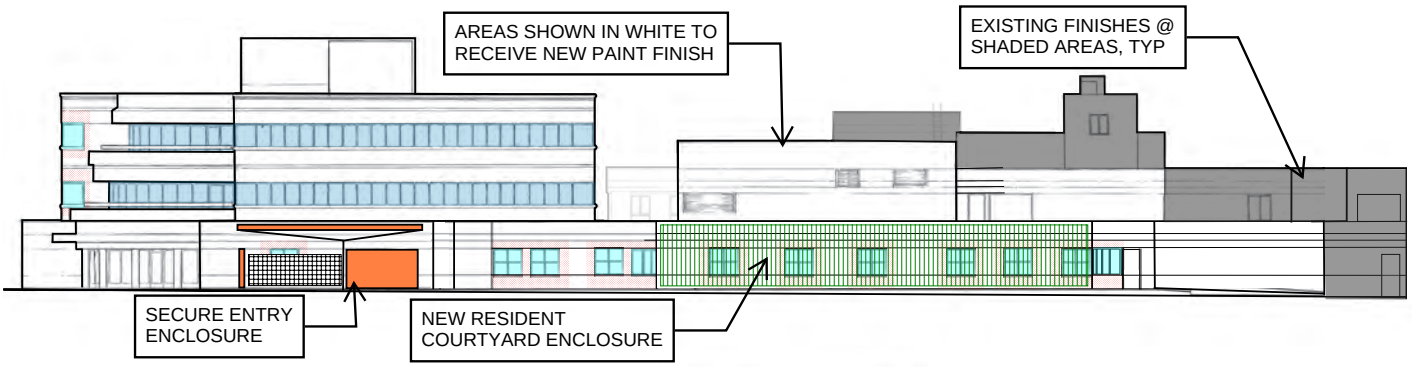
For the most part the EIFS is in fair condition. The most water damage was found on the east side of the labor and delivery wing where there were signs that the site irrigation had been hitting the surface of the building. In that area a new skim coat will be needed over the existing EIFS surface. All the parapet flashing will need to be upgraded. In general, miscellaneous spot patching and repair will be required. At locations where windows are to be replaced, EIFS will need to be removed around the window to install the window flashing and these areas will need to be patched back in. The validation approach is to paint the existing EIFS. Refer to building elevations for extent.

WINDOWS

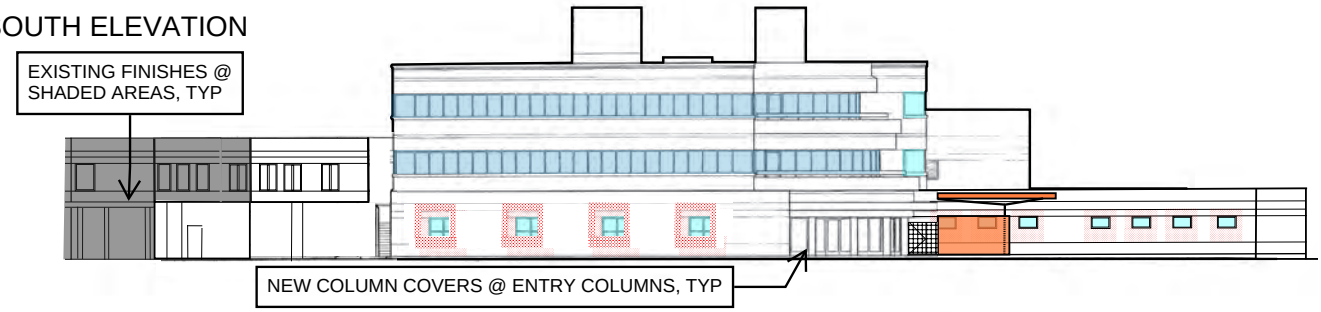
While the hospital building was sitting vacant, vandals broke some of the glass out of the existing windows and storefront that now needs to be replaced. In patient rooms, the existing wood-cased windows will need to be replaced with tamperproof windows with laminated glass and integral blinds. All replacement windows will need to meet the requirements of the current energy code. The windows and glazing on the north half of the building are not part of this validation scope and will remain boarded over until that portion of the building is renovated under a future scope of work.

NEW CONSTRUCTION

The CVCR requires a secure 24 hour covered drop off area. This will be a new open-air covered structure on the southwest side of the building.

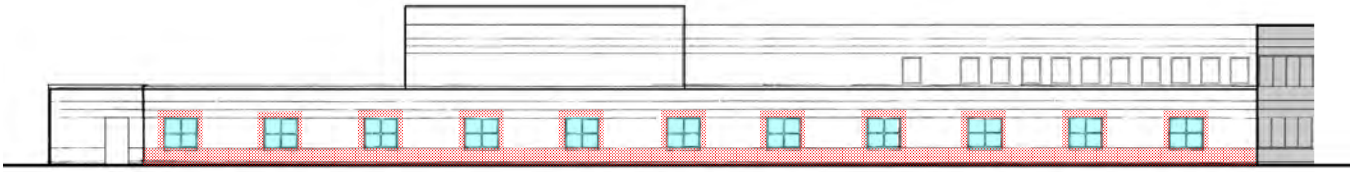


A SOUTH ELEVATION



B WEST ELEVATION

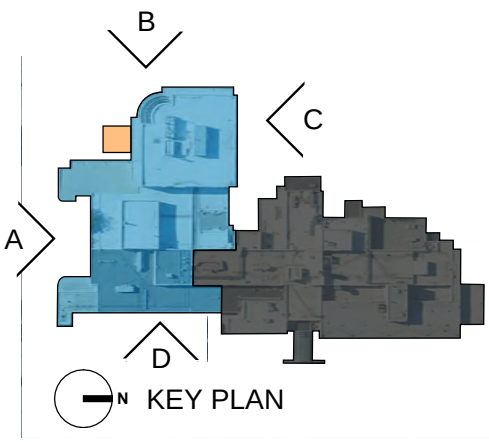
C NORTH ELEVATION



D EAST ELEVATION

ELEVATION LEGEND

- EXISTING STOREFRONT REPLACE BROKEN GLASS
- NEW WINDOW
- EIFS PATCH
- SECURE ENTRY ENCLOSURE
- COURTYARD ENCLOSURE



Programming

One of the design efforts during validation was to define a program that met both the requirements of the State of Washington and the functional needs of the servicers of the facility. The design build team met numerous times with the stakeholders to better understand their ideal space count and functionality. The fruit of this effort was the validation program on the following pages. This program is divided into departments and required support spaces including Secure Entry/ Intake, Public Entry/ Discharge, 23-Hour Observation, Evaluation & Treatment, Crisis Stabilization & Withdrawal management, Residential inpatient, & Building support/ Staff Support. Under each of these categories the room types are listed, with room quantities, target square footage, and specific associated remarks related to the space types from our stockholder meetings. At the bottom of each section the estimated square footage is listed for that category. The final space estimate is the aggregate of all these numbers multiplied by a 25% circulation and partition factor.

NAC ARCHITECTURE

Columbia Valley Center for Recovery
Program of Requirements - Validation

Secure Entry/Intake

6-Mar

No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
1.1	Sally Port	0.0	850.0	0	*2 Cars or 1 car 1 ambulance - Exterior space*
1.2	Intake Lobby Client	1.0	120.0	120	
1.3	Reception/ Control station	0.0	120.0	0	*shared with public enry discharge control st*
1.4	Client Storage	1.0	320.0	320	*Good Exhaust w/bedbug oven*
1.5	Assessment Rooms	2.0	120.0	240	*Chairs and counter w/computer*
1.6	Toilet & Shower	1.0	100.0	100	
1.7	Seclusion Ante & Toilet	1.0	220.0	220	
1.7	Seclusion/Restraint	2.0	120.0	240	
1.8	Clothing Bank	1.0	230.0	230	
1.9	Laundry	1.0	200.0	200	
	Subtotal			**1,670**	
	Circulation/partitions	15%		251	
1.0	**Total**			**1,921**	**1,921 SF in renovation area provided**

Public Entry/Discharge

No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
2.1	Entry Vestibule	1	225.0	225	
2.2	Entry/Discharge Lobby Visitor	1	600.0	600	*can also contain seating for waiting*
2.3	Control Station	1	120.0	120	
2.4	Visitor Lockers	1	20.0	20	*8 lockers*
2.5	Visitation/Counseling	2	120.0	240	*(1) larger*
2.6	Public Toilets	2	120.0	240	
2.7	Conference Room	0	380.0	0	
2.8	Offices	2	144.0	288	*Facility Director / Clerical*

Columbia Valley Center for Recovery
Program of Requirements - Validation

23-Hour Observation

6-Mar

No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
3.1	Recliners	10	40	400	
3.5	Toilet	1	50.0	50	
3.6	Toilet/Shower	2	80.0	160	
3.7	Staff Work	1	144.0	144	*Accommodate 5 staff*
3.8	Staff Toilet	1	50.0	50	
3.9	Medication Room	1	80.0	80	
3.15	Counseling / Visitation	1	120.0	120	
3.17	Dining	1	540.0	540	*combine w/multi-use*
3.19	Offices	1	120.0	120	*supervisor*
3.20	Clean Linen	1	60.0	60	*Shared with other programs*
3.21	Soiled Hold	1	60.0	60	*Shared with other programs*
3.22	Housekeeping	0	60.0	0	*Shared with other programs*
3.25	Storage	1	24.0	24	*Lockable for wallets - cell phone etc*
3.26	Nourishment	1	80.0	80	
3.28	Offices	1	144.0	144	*Provider*
3.29	Laundry	0	120.0	0	
	Subtotal			**2,032**	
	Circulation/partitions	35%		711	
3.0	**Total**			**2,743**	**2,545 SF in renovation area provided**

Columbia Valley Center for Recovery
Program of Requirements - Validation

Evaluation & Treatment Facility *6-Mar*

No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
4.3	Double Beds w/toilet - shower	4	260.0	1,040	
4.5	Double Room	4	220.0	880	
4.6	Toilet	1	50.0	50	
4.7	Toilet/Shower	2	80.0	160	
4.8	Staff Work	1	144.0	144	*Accommodate 5 staff*
4.9	Staff Toilet	1	50.0	50	
4.10	Medication Room	1	120.0	120	
4.11	Quiet Room	1	100.0	100	
4.12	Seclusion Room	0	110.0	0	*shared with other programs*
4.13	Seclusion Ante	0	100.0	0	*shared with other programs*
4.14	Seclusion Toilet	0	50.0	0	*shared with other programs*
4.15	Exam	1	120.0	120	*Shared with other programs*
4.16	Counseling / Visitation	1	120.0	120	
4.19	Dining / Activity Room	1	380.0	380	*40 sqft per bed required by WAC*
4.20	Multi-Use Day room	1	380.0	380	*Included with above to get 640 sqft*
4.21	Tele-Health / Court / Conf	1	150.0	150	*Shared with other programs*
4.22	Offices	1	120.0	120	*Supervisor*
4.24	Clean Linen	0	60.0	0	*shared with other programs*
4.25	Soiled Hold	0	60.0	0	*shared with other programs*
4.26	Housekeeping	0	60.0	0	*shared with other programs*
4.29	Office	1	144.0	144	*2 Provider*
4.30	Shared Office	1	240.0	240	*5 people*
4.31	Storage	0	120.0	0	
	Subtotal			**4,198**	
	Circulation/partitions	25%		1,050	
4.0	**Total**			**5,248**	**7,079 SF in renovation area provided**

Columbia Valley Center for Recovery
Program of Requirements - Validation

Crisis Stabilization & Withdrawl Management *6-Mar*

No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
5.3	Triple Beds w/toilet - shower	3	380.0	1,140	
5.5	Double Room	2	220.0	440	
5.7	Toilet/Shower	3	80.0	240	
5.8	Staff Work	1	144.0	144	*Accommodate 5 staff*
5.9	Staff Toilet	1	50.0	50	
5.10	Medication Room	1	120.0	120	
5.16	Counseling / Visitation	1	120.0	120	
5.19	Dining / Activity Room	1	380.0	380	
5.20	Multi-Use Day room	1	380.0	380	
5.21	Tele-Health	1	120.0	120	*shared with other programs*
5.22	Offices	1	200.0	200	4 people
5.24	Clean Linen	1	60.0	60	
5.25	Soiled Hold	1	60.0	60	
5.26	Housekeeping	1	60.0	60	
5.29	Storage	1	24.0	24	
5.30	Office	1	144.0	144	*Provider Office*
5.31	Office	1	120.0	120	*Supervisor Office*
	Subtotal			**3,802**	
	Circulation/partitions	25%		951	
5.0	**Total**			**4,753**	**5,368 SF in renovation area provided**

Residential Inpatient

6-Mar

No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
6.2	Double Beds w/toilet - shower	8	260.0	2,080	
6.6	Toilet/Shower	1	80.0	80	*Only 2 required for 16 residents total*
6.7	Staff Work	1	144.0	144	*Accommodate 5 staff*
6.8	Staff Toilet	1	50.0	50	
6.9	Medication Room	1	144.0	144	
6.10	Quiet Room	1	100.0	100	
6.15	Counseling / Visitation	2	120.0	240	
6.16	Large Group Room	1	250.0	250	
6.17	Small Group Room	1	180.0	180	
6.18	Dining / Activity Room	1	380.0	380	*telephone needed*
6.19	Multi-Use Day room	1	380.0	380	*games / library / computer*
6.21	Tele-Health	1	120.0	120	
6.22	Offices	1	200.0	200	*4 people*
6.23	Resident Laundry	1	144.0	144	
6.24	Clean Linen	1	60.0	60	*shared with other programs*
6.25	Soiled Hold	1	60.0	60	*shared with other programs*
6.26	Housekeeping	1	60.0	60	
6.30	Office	1	120.0	120	*Supervisor*
6.31	Office	1	144.0	144	*Provider*
	Subtotal			**5,056**	
	Circulation/partitions	35%		1,770	
6.0	**Total**			**6,826**	**9,230 SF in renovation area provided**

Building Support / Staff Support

6-Mar

No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
7.1	Mechanical	1	700	700	
7.2	Fire Riser	1	48.0	48	
7.3	Electrical	1	216.0	216	
7.4	Electrical	2	80.0	160	*2nd floor - distance limitations*
7.5	MDF (Data)	1	144.0	144	
7.6	IDF	1	80.0	80	*2nd floor distance limitations*
7.7	Receiving / Breakdown	1	400.0	400	
7.8	Storage	1	200.0	200	
7.9	Trash / Recycle	1	144.0	144	
7.10	Main Housekeeping	1	144.0	144	
7.11	Dirty Bulk Linen Storage	1	250.0	250	
7.12	Clean Bulk Linen Storage	1	250.0	250	
7.13	Kitchen / Support Spaces	1	500.0	500	
7.14	Staff Break	1	450.0	450	20 people + cabinetry
7.15	Staff Locker	1	120.0	120	
7.16	Staff Toilets	1	80.0	80	
7.17	Staff Showers	0	80.0	0	
7.18	Laundry	1	288.0	288	
7.19	Stairs	2	400.0	800	
7.20	Elevator	2	400.0	800	
	Subtotal			**5,774**	
	Circulation/partitions	25%		1,444	
7.0	**Total**			**7,218**	
	Total Programed Areas			**31,046**	**Actual renovation area 39,000 SF SF**

Exterior Spaces

6-Mar

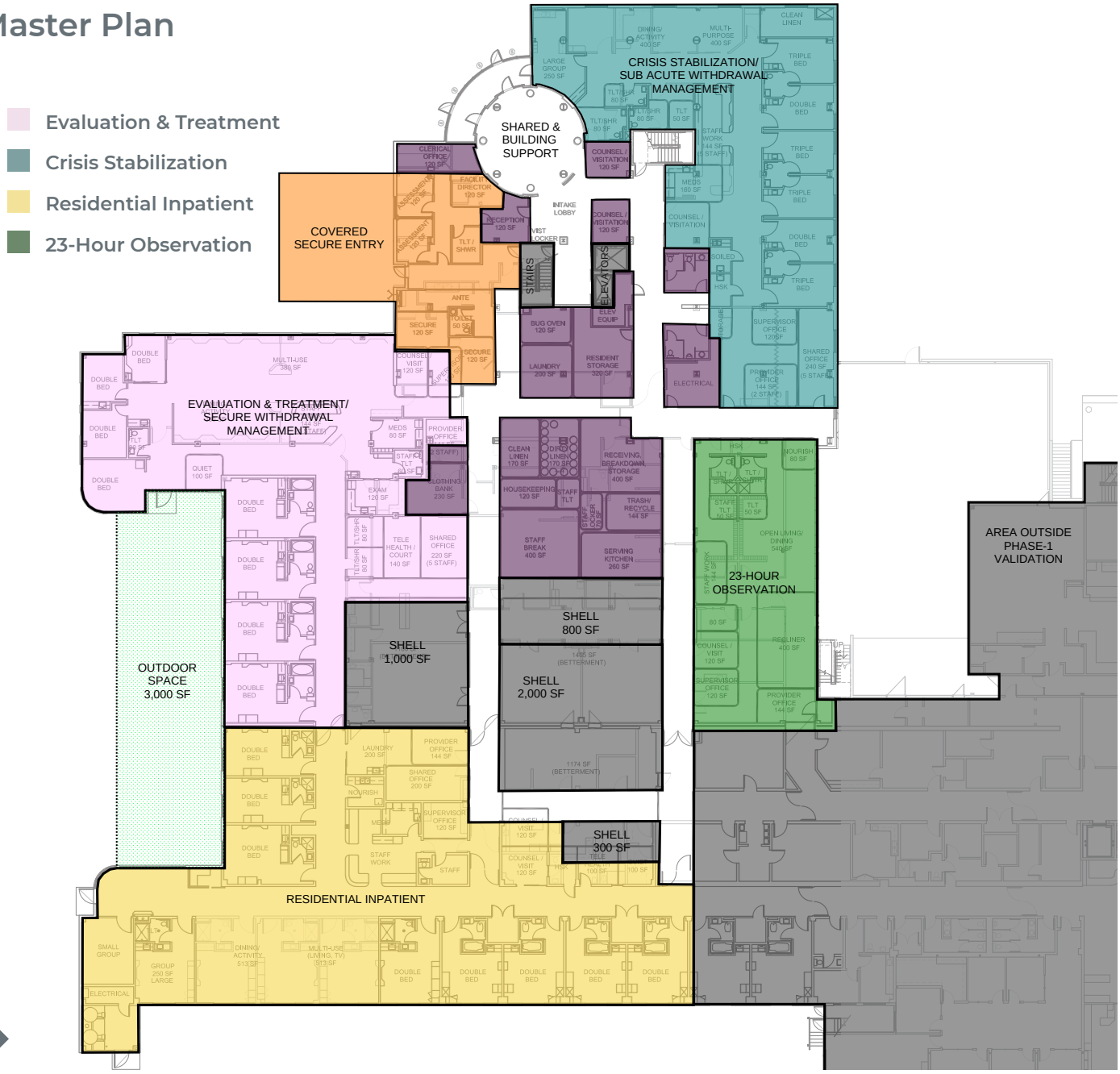
No.	Description	Quantity	Unit Area (sf)	Total Area (sf)	Remarks
8.1	Secure Courtyard	1	1,000	1,000	
8.2	Courtyard	1	2,400.0	2,400	
8.3	Exterior Maintenance Bldg	1	900.0	900	
	Total All Areas			**4,300**	

Space Planning

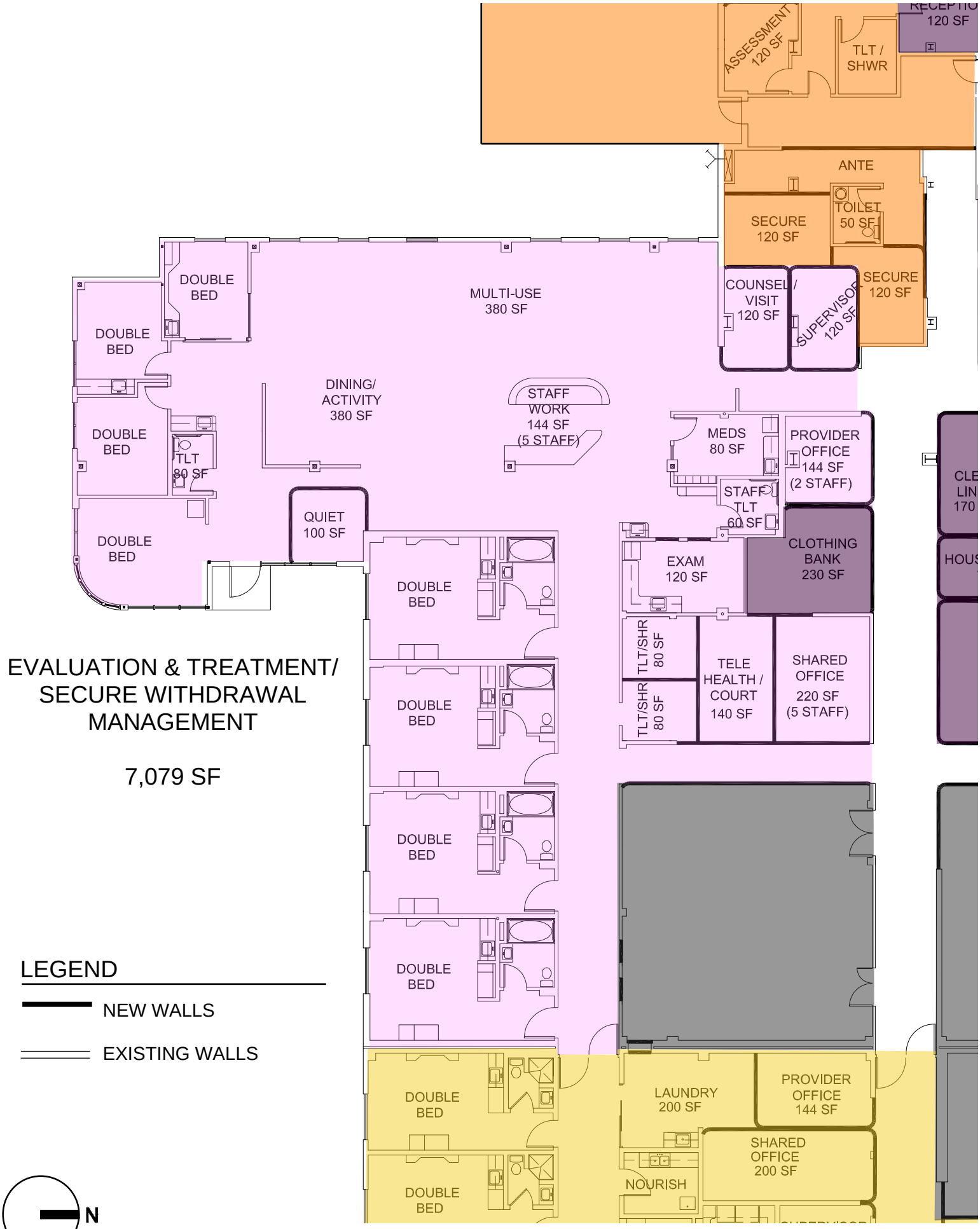
Once the design-build team had established a working program, we started looking at how these spaces may be laid out in the designated area of the building. It had by this time been established that the most feasible area of the building was the south end of the Auburn building. It had also been established that the most cost-effective approach would be to save as much of the existing walls, ceilings, fixtures & casework as possible. It must be understood that utilizing existing spaces versus starting with a clean slate is a trade-off when it comes to square footage. This is because the task became to fit the program into the existing spaces. In addition, the layout of the spaces is less efficient than a new build where everything can be exactly as prescribed in the program. But in this case the benefits of reusing existing outweighed the inefficiencies. The design-build team managed to take this challenge and provide a highly functional layout that meets the requirements of the stakeholders and will serve the project well.

This space planning effort is on the following pages. The walls indicated as heavy lines are new walls where the existing area will need to be demolished to accommodate new functions.

Master Plan



For enlarged plan, refer to Exhibit W: Phase 1 Level 1 Floor Plan



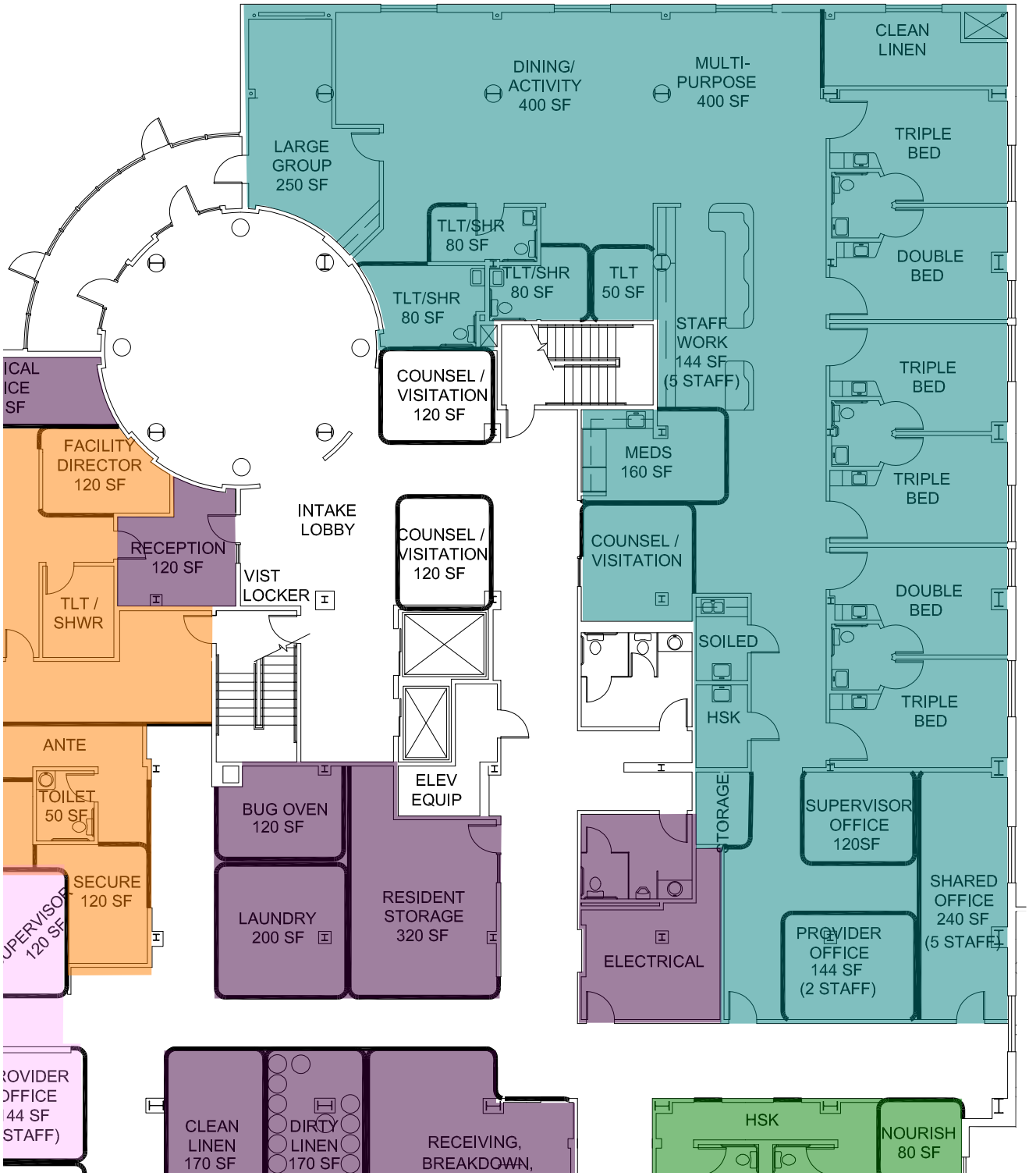
EVALUATION & TREATMENT/ SECURE WITHDRAWAL MANAGEMENT

7,079 SF

LEGEND

NEW WALLS

EXISTING WALLS



LEGEND

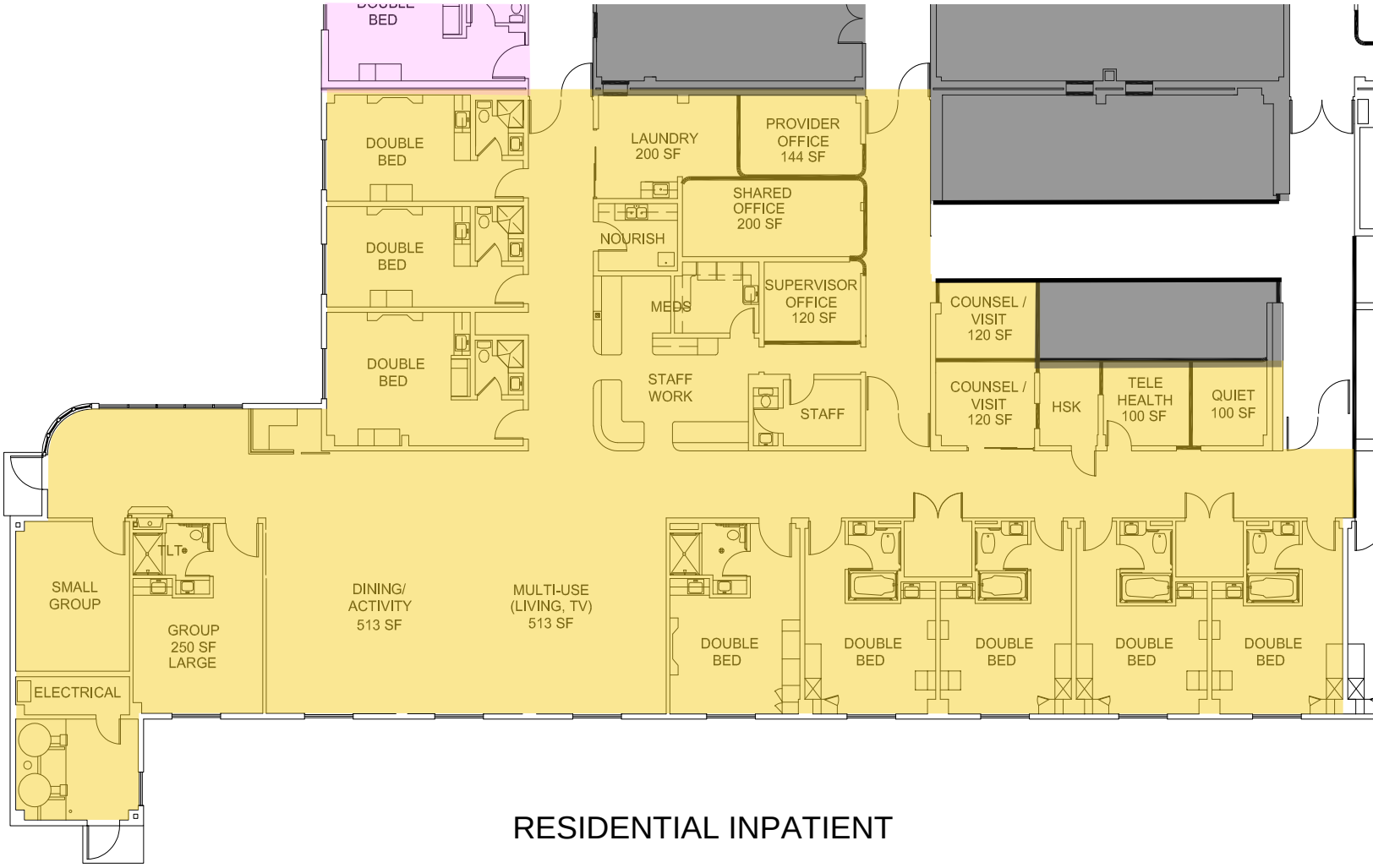
NEW WALLS

EXISTING WALLS

N

CRISIS STABILIZATION/ SUB ACUTE WITHDRAWAL MANAGEMENT

5,368 SF



RESIDENTIAL INPATIENT

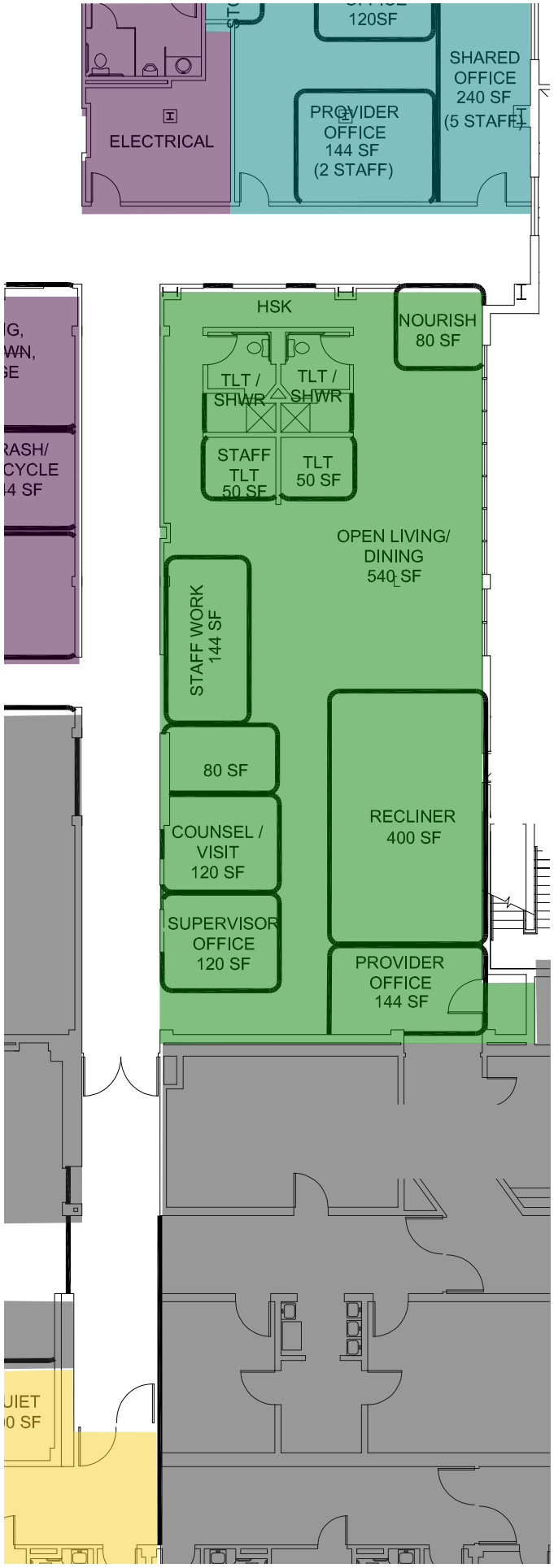
9,230 SF

LEGEND

NEW WALLS

EXISTING WALLS

N



23-HOUR OBSERVATION

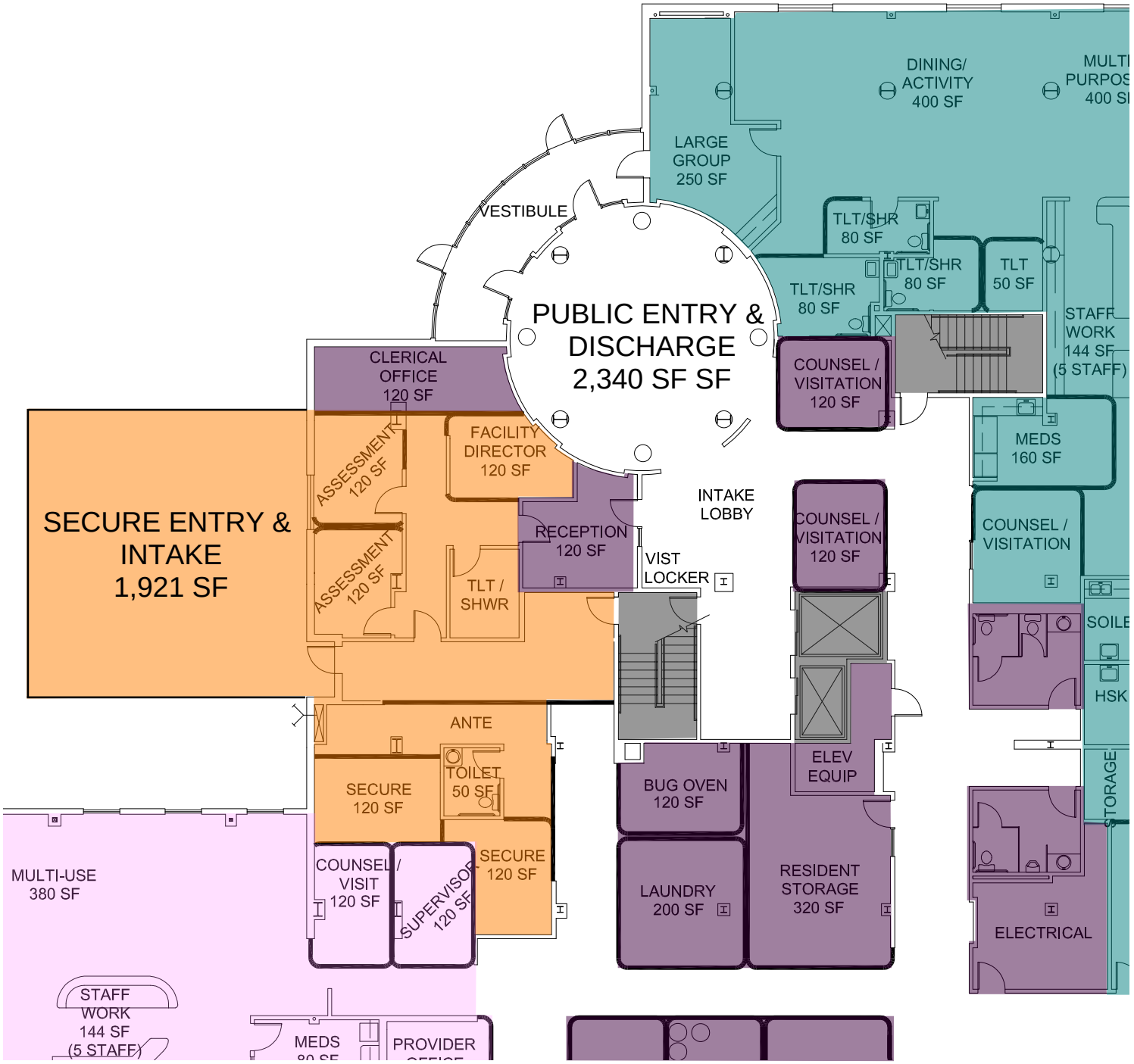
2,545 SF

LEGEND

NEW WALLS

EXISTING WALLS

N



LEGEND

NEW WALLS

EXISTING WALLS

N

Master Planning

The new Columbia Valley Center for Recovery (CVCR) long term plan is to be a comprehensive behavioral health campus. The intention is to expand the program to add two new RTFs including Youth Inpatient & Children's Long Term and Respite/ Diversion units. Additionally, there is a desire to incorporate transitional housing into the facility. An outpatient treatment component to support the long-term recovery of the residents is also a goal. The services may include outpatient day treatment for youth and adults, intensive outpatient programs & eating disorder treatment. In addition, there is a desire to provide patient amenities such as an indoor fitness area, a technical skills classroom, a multi-purpose space and a family area. A commercial kitchen and dining area are also on the list of potential renovations is. To support all this future activity there will be the need for ample additional office space for the building servicers.

The validation package includes a list of betterments with all these master planning goals for future phases of construction. The design-build team has also provided a preliminary master planning layout showing how these spaces could potentially fit in this building. Refer to the master plans in Exhibit V.

Interior Design Concepts

The new CVCR aims to become a hub of community-centric programs that will be centrally located in Benton County to help individuals with substance abuse and detox chal

lenges. With Benton County landscape serving as a guiding inspiration, the interior design mirrors the distinctive regional aesthetics, capturing the essence of the surrounding environment.

Drawing from nature's artistry, the meandering Columbia River and the gentle curves of Badger Mountain serve as inspiration, which will influence the interior architecture and interior design. The regional landmarks will inspire a harmonious blend of colors and textures that will aim to evoke a sense of tranquility and connection to nature.

Prioritizing the well-being of those seeking treatment, the interiors will be thoughtfully crafted to foster a holistic healing environment. Every design element will be meticulously chosen and coordinated to promote safety and comfort, instilling a sense of hope and optimism in patients. The goal is to cultivate a positive experience upon entry, encouraging a focus on wellness and recovery throughout an individual's stay at CVCR.

By infusing the space with positivity and support for healthy living, the renovated spaces will strive to empower individuals on their healing journey, fostering a conducive environment for growth and transformation. These items will be seen in the finish selection, lighting, and furniture selection, all strategically chosen to accomplish these goals.

The vision for the new CVCR will aspire to be a beacon of hope in the Benton County area where healing takes precedence. The next phase of design will make these items described above come to life. Space types, finishes, and interior design will all be part of the next design phase where the interior starts to take shape and the design intent is developed further.

Interior Design - Room Finishes

This next portion describes the schematic level basis of design interior finishes and features. Space types are broken down into recommended material surface selections. During the next design phase, these space type sheets get further developed.further.

3.4 Interior Design

*This section includes schematic level basis of design interior materials and features. Included images are for reference only an are meant to display finish level of interior spaces.

PUBLIC SPACES	PG. 29
CLIENT SPACES	PG. 38
SUPPORT SPACES	PG. 51

TYPICAL: Group Room
Ceiling: Suspended acoustical tile
Floor: LVT/Carpet
Base: 4” Rubberbase
Walls: Paint
Lighting: Task 2x2
Special Features: Casework TBD

TYPICAL: Storage
Ceiling: Suspended acoustical tile
Floor: Resilient sheet
Base: 4” Rubberbase
Walls: Paint
Wall Protection: Sheet wall protection to 34” with trim
Lighting: Task 2x2

TYPICAL: Nourish
Ceiling: Gypsum ceiling
Floor: LVT
Base: 4” Rubberbase
Walls: Paint
Lighting: Task 2x2
Special Features: Casework: 6” lowers and uppers with sink

TYPICAL: Laundry
Ceiling: Gypsum ceiling
Floor: Sheet vinyl flooring
Base: 6” Covebase
Walls: Epoxy paint
Wall Protection: FRP 48”
Corner Guards: Surface mounted, full height
Lighting: Anti-ligature recessed can lighting
Special Features: Wall hung sink and counter

TYPICAL: Office
Ceiling: Suspended acoustic tile
Floor: Carpet
Base: 4” Rubberbase
Walls: Paint
Lighting: Task 2x2
Special Features:

TYPICAL: Conference Rooms
Ceiling: Suspended acoustical tile
Floor: Carpet
Base: 4” Rubberbase
Walls: Paint
Windows: Manual roller shades
Lighting: Task 2x2
Special Features:

TYPICAL: Visitation/Counseling
Ceiling: Suspended acoustical tile
Floor: Carpet
Base: 4” Rubberbase
Walls: Paint
Windows: Manual roller shades
Lighting: Task 2x2

TYPICAL: Medication Room
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4” Rubberbase
Walls: Paint
Wall Protection: Sheet wall protection to 48”
Lighting: Task 2x2
Special Features: Casework with sink and solid surface, and access control

TYPICAL: Staff Work
Ceiling: Suspended acoustical tile, gypsum ceiling
Floor: Resilient sheet flooring
Base: 4" Rubberbase
Walls: Paint
Windows: Manual rollershades, security windows
Corner Guards: Surface mounted, full height at all corners
Lighting: Task 2x2
Special Features: Solid Surface counter with sink, and panic button

TYPICAL: Quiet Room
Ceiling: Gypsum ceiling
Floor: Carpet
Base: 4" Tarkett Mandalay
Walls: Paint
Wall Protection: Sheet wall protection at 48" AFF
Lighting: Anti-ligature recessed lighting
Special Features: Wall mural, anti-ligature

SECURE ENTRY/INTAKE: Sally Port
Ceiling: Open to above
Floor: Concrete
Base: 4" Rubberbase
Walls: Paint
Lighting: Suspended lighting
Special Features: Client security lockers

SECURE ENTRY/INTAKE: Intake Lobby
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint
Wall Protection: Sheet wall protection to 48" AFF
Lighting: Task 2x2
Windows: Manual rollershades

SECURE ENTRY/INTAKE: Control Station
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint
Wall Protection: Sheet wall protection to 48" AFF
Lighting: Task 2x2

SECURE ENTRY/INTAKE: Client Storage
Ceiling: Suspended acoustical tile, gypsum ceiling
Floor: Sheet vinyl flooring
Base: 4" Rubberbase
Walls: Paint
Wall Protection: Sheet wall protection to 34"

SECURE ENTRY/INTAKE: Client Storage (continued)
Lighting: Task 2x2
Special Features: Client Storage Lockers

SECURE ENTRY/INTAKE: Assessment Rooms
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint
Wall Protection: Sheet wall protection to 48" AFF
Corner Guards: Corner guards to 48"
Lighting: Task 2x2

SECURE ENTRY/INTAKE: Clothing Bank
Ceiling: Acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint
Lighting: Task 2x2
Special Features: Casework TBD

PUBLIC ENTRY/DISCHARGE: Entry Vestibule
Ceiling: Suspended acoustical tile
Floor: Concrete
Base: 4" Rubberbase
Walls: Paint
Lighting: Suspended light
Special Features: Access controll

PUBLIC ENTRY/DISCHARGE: Entry/Discharge Lobby
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint
Wall Protection: Wall protection to 48"
Corner Guards: Corner guards to 48"
Lighting: Ambient suspended lighting
Special Features: Access control

PUBLIC ENTRY/DISCHARGE: Reception
Ceiling: Suspended acoustical tile, gypsum ceiling
Floor: Walk-off carpet, carpet
Base: 4" Rubberbase
Walls: Paint
Wall Protection: Sheet wall protection to 36"
Corner Guards: Corner guards to 36"
Lighting: Ambient and task
Special Features: Casework TBD

PUBLIC ENTRY/DISCHARGE: Public Toilets
Ceiling: Gyspum ceiling
Floor: 12x24 Porcelain tile
Base: 6" Integral
Walls: Full height porcelain tile behind toilet and sinks, Epoxy paint on other walls
Transitions and Trim: Provide appropriate floor to wall transition and finish pieces on tile
Toilet Accessories: Coat hooks
Corner Guards: Surface mounted, full height
Lighting: Ambient recessed cans
Special Features: Casework with solid surface couter and sink

23 HOUR OBSERVATION: Toilets
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: Armor cove base
Walls: Walls painted above 48" wall protection, patient showers to have large format tile
Wall Protection: Wall protection up to 48"
Transitions and Trim: Provide appropriate floor to wall transitions and finish pieces on tile
Toilet Accessories: Ligature resistant
Corner Guards: Full height corner guards
Lighting: Ambient recessed cans
Special Features: Casework with solid surface coutner and sink. Door hardware to be ligature resistant and have top door sensors. Door to have double acting hardware

23 HOUR OBSERVATION: Toilet/Shower
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: Armor cove base
Walls: Walls painted above 48" wall protection. Patient showers to have large format tile
Wall Protection: 48" Wall protection. Showers to have solid surface wall protection
Toilet Accessories: All shall be ligature resistant including grab bars at toilet rooms
Lighting: Ambient recessed cans
Special Features: Casework with solid surface counter and sink. Door hardware to be ligature resistant and have top door sensors. Doors to have double acting hardware.

23 HOUR OBSERVATION: Open Living/Dining
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint

CRISIS STABILIZATION/SUB ACUTE WM: Single Bed w/ Toilet/Shower
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: Armor cove base
Walls: Epoxy paint. In shower area walls painted above 48" wall protection. Patient showers to have large format tile.
Wall Protection: Wall protection to 48"
Plumbing Fixtures and Accessories: All should be ligature resistant including grab bars in shower and toilet area
Corner Guards: Full height corner guards
Lighting: Anti-ligature recessed can lighting
Special Features: Door hardware to be ligature resistant and have top door sensors. Doors to have double acting hardware.

CRISIS STABILIZATION/SUB ACUTE WM: Toilet
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: Armor cove base
Walls: Walls painted above 48" wall protection
Wall Protection: 48" wall protection
Corner Guards: Full height corner guards
Toilet Accessories: All shall be ligature resistant including grab bars at toilet rooms.
Lighting: Anti-ligature recessed can lighting
Special Features: Door hardware to be ligature resistant and have top door sensors. Doors to have double acting hardware.

CRISIS STABILIZATION/SUB ACUTE WM: Dining/Activity Room
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Painted above 36"
Wall Protection: Wall protection up to 36"
Corner Guards: Corner guards up to 36"
Lighting: Task 2x2
Special Features: Casework TBD

CRISIS STABILIZATION/SUB ACUTE WM: Multi-Use Day Room
Ceiling: Suspended acoustical tile
Floor: Carpet
Base: 4" Rubberbase
Walls: Paint
Lighting: Task 2x2

CRISIS STABILIZATION/SUB ACUTE WM: Tele-Health
Ceiling: Suspended acoustical tile
Floor: Carpet
Base: 4" Rubberbase
Walls: Walls painted above 48" wall protection
Lighting: Task 2x2
Special Features: Monitor and casework TBD

EVAL & TREATMENT/SECURE WM: Single Bed
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: Armor cove base
Walls: Painted above 48"
Wall Protection: Wall protection up to 48"
Corner Guards: Full height corner guards
Lighting: Anti-ligature recessed lighting
Special Features: Door hardware to be ligature resistant and have top door sensors. Doors to ahve double acting hardware.

EVAL & TREATMENT/SECURE WM: Seclusion Room
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: Armor cove base
Walls: Paint above 48"
Wall Protection: Wall protection to 48", wall padding
Corner Guards: Full height corner guards
Lighting: Anti-ligature recessed lighting
Special Features: Door hardware to be ligature resistant and have top door sensors. Doors to have oduble acting hardware.

EVAL & TREATMENT/SECURE WM: Seclusion Ante
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: Armor cove base
Walls: Paint above 48"
Wall Protection: Wall protecton up to 48"
Corner Guards: Full height corner guards
Lighting: Anti-ligature recessed lighting
Special Features: Door hardware to be ligature resistant and have top door sensors. Doors to ahve double acting hardware.

EVAL & TREATMENT/SECURE WM: Seclusion Toilet
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: Armor cove base
Walls: Walls painted above 48" wall protection
Wall Protection: Wall protection to 48"
Corner Guards: Full height corner guards

EVAL & TREATMENT/SECURE WM: Seclusion Toilet (continued)
Toilet Accessories: All shall be ligature resistant including grab bars and toilet rooms
Lighting: Anti-ligature recessed can lighting
Special Features: Door hardware to be ligature resistant and have top door sensors. Doors to ahve double acting hardware.

EVAL & TREATMENT/SECURE WM: Tele-Health/Court
Ceiling: Suspended acoustical tile
Floor: Carpet
Base: 4" Rubberbase
Walls: Walls painted above 48" wall protection
Lighting: Task 2x2
Special Features: Monitor and casework TBD

RESIDENTIAL INPATIENT: Physical Activity
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint, acoustical panels
Wall Protection: Wall protection to 48"
Corner Guards: Full height corner guards
Lighting: Task 2x2
Windows: Manual rollershades

BUILDING SUPPORT/STAFF SUPPORT: Mechanical
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Epoxy paint
Wall Protection: Wall protection to 48"
Corner Guards: Corner guards up to 48"
Lighting: Suspended linear pendant
Special Features: Casework TBD

BUILDING SUPPORT/STAFF SUPPORT: Fire Riser
Floor: Concrete
Base: Tarkett Mandalay
Walls: Epoxy paint
Lighting: Suspended linear pendant

BUILDING SUPPORT/STAFF SUPPORT: Electrical
Floor: Static dissipative flooring
Base: 4" Rubberbase
Walls: Paint
Lighting: Suspended linear pendant

BUILDING SUPPORT/STAFF SUPPORT: MDF (Data)
Floor: Static dissipative flooring
Base: 4" Rubberbase

BUILDING SUPPORT/STAFF SUPPORT: MDF (Data) (continued)
Walls: Paint
Lighting: Suspended linear pendant

BUILDING SUPPORT/STAFF SUPPORT: IDF
Floor: Static dissipative flooring
Base: 4" Rubberbase
Walls: Paint
Lighting: Suspended linear pendant

BUILDING SUPPORT/STAFF SUPPORT: Recieving/Breakdown/Loading Dock
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: Tarkett Mandalay
Walls: Epoxy paint
Lighting: Task 2x2
Special Features: Casework TBD

BUILDING SUPPORT/STAFF SUPPORT: Trash/Recycle
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 6" Rubberbase
Walls: Epoxy paint above 48"
Wall Protection: Rolled sheet wall protection to 48"
Corner Guards: Surface mounted, full height
Lighting: Task 2x2

BUILDING SUPPORT/STAFF SUPPORT: Housekeeping
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: Integral cove base
Walls: Epoxy paint above 48"
Wall Protection: Rolled sheet wall protection to 48"
Corner Guards: Corner guards to 48"
Lighting: Task 2x2
Special Features: Casework 6' of uppers and lowers with solid surface counter and mop sink

BUILDING SUPPORT/STAFF SUPPORT: Dirty Linen
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Epoxy above 48"
Wall Protection: Wall protection up to 48"
Corner Guards: Corner guards to 48"
Lighting: Task 2x2
Special Features: Casework with solid surface coutner and sink

BUILDING SUPPORT/STAFF SUPPORT: Clean Linen
Ceiling: Gypsum ceiling
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Epoxy above 48"
Wall Protection: Wall protection up to 48"
Corner Guards: Corner guards to 48"
Lighting: Task 2x2
Special Features: Casework with solid surface coutner and sink

BUILDING SUPPORT/STAFF SUPPORT: Kitchen/Support Services
Ceiling: Gypsum ceiling
Floor: Safety kitchen flooring
Base: Integral cove base
Walls: Paint above 48"
Wall Protection: FRP up to 48", stainless steel wall panels
Lighting: Task 2x2
Special Features: Stainless steel counter with 3 compartment sink

BUILDING SUPPORT/STAFF SUPPORT: Staff Break
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint
Lighting: Task 2x2
Special Features: Casework 6' of upper and lower cabinets with solid surface counter and sink

BUILDING SUPPORT/STAFF SUPPORT: Staff Locker
Ceiling: Suspended acoustical tile
Floor: Sheet vinyl
Base: 4" Rubberbase
Walls: Paint
Lighting: Task 2x2
Special Features: Staff lockers

BUILDING SUPPORT/STAFF SUPPORT: Staff Toilet w/ Shower
Ceiling: Gypsum ceiling
Floor: Porcelain tile
Base: Porcelain tile cove base
Walls: Porcelain tile to 48", wall painted above 48"
Toilet Accessories: Robe hook
Lighting: Recessed can lighting
Special Features: Shower unit

BUILDING SUPPORT/STAFF SUPPORT: Stairs
Floor: Rubber flooring
Base: 6" Rubberbase
Walls: Paint
Lighting: Suspended pendant
Special Features: Railing

BUILDING SUPPORT/STAFF SUPPORT: Elevator
Ceiling: Suspended acoustical tile
Floor: LVT
Base: 4" Rubberbase
Walls: Paint, plastic laminate panels
Wall Protection: Chair rail
Lighting: Recessed can lighting
Special Features: Grab railing

EXTERIOR SPACES: Secure Courtyard
Covering: Partial cover to be impact resistant
Walls:
Flooring: Artificial turf and conrete paving

EXTERIOR SPACES: Courtyard
Covering: Partial cover to be impact resistant glazing
Walls:
Flooring: Artificial turf and conrete paving

EXTERIOR SPACES: Exterior Maintenance Bldg
Floor: Concrete
Base: 4" Rubberbase
Walls: Epoxy paint
Wall Protection: Wall protection to 48"
Corner Guards: Corner guards up to 48"
Lighting: Suspended pendant
Special Features: Equipment TBD

BETTERMENTS: Gymnasium
Ceiling: Suspended acoustical tile
Floor: Rubber gym flooring
Base: 4" Rubberbase
Walls: Acoustical panels
Wall Protection: Wall protection to 36"
Lighting: Recessed can lighting
Special Features: Grab railing

BETTERMENTS: Game Room/Art Therapy/Library
Ceiling: Suspended acoustical tile, gypsum soffits, acoustical felt clouds
Floor: Carpet and LVT
Base: 4" Rubberbase
Walls: Paint, acoustical panels, custom wall graphic/covering

BETTERMENTS: Game Room/Art Therapy/Library (continued)
Lighting: Recessed can lighting/pendant lighting
Special Features: Built-in shelving, built-in seating

BETTERMENTS: Outdoor Space
Covering: Partial cover to be impact resistant glazing
Walls: Fencing
Flooring: Artificial turf and concrete pavers
Special Features: Community raised garden beds, built-in seating, basketball court, volleyball court

BETTERMENTS: Technical Skills Classroom & Training Space
Ceiling: Suspended acoustical tile
Floor: Carpet
Base: 4" Rubberbase
Walls: Paint
Lighting: 2x2 Recessed cans
Special Features: Projector

EXHIBIT H:
STRUCTURAL NARRATIVE

10 E. Bruneau Ave Site

This narrative addresses the re-use of an existing building located at the "Bruneau Site" in Kennewick, WA. Drawings of the existing building have not been made available. The age of the building is not known but appears to be several decades old. The last use of the building was for industrial purposes.

It is important to point out that with the change in use and occupancy, the existing building will need to meet current codes.

The existing roof framing consists of rolled steel framing with a metal deck spanning between beams. Beams are supported at girder lines that run the length of the building. Steel "H" shapes support the girder lines. It appears the gravity support for the roof framing does not rely on the perimeter walls. Existing columns are in-board of the perimeter walls, and the steel roof framing appears to cantilever out to the walls. The perimeter walls consist of a concrete frame with CMU infill. The perimeter walls appear to be providing resistance to lateral wind and seismic forces. The steel roof framing could be strengthened locally to support the addition of rooftop equipment. An exception to requirements for roof solar ready hopefully could be granted otherwise the roof would need to be analyzed and possibly strengthened.

The existing one-story building is tall enough that a second floor could be added inside the building. A likely structural system for supporting the second floor would be a composite structural steel system consisting of 6.5-inches total thickness of concrete on 3-inch composite metal deck supported by composite wide-flange steel framing. Column spacing would typically be 25 to 32 feet on center each way. Weight of the steel framing for this system would be around 8-10 pounds per square foot including columns and braced frames. Column footings using IBC presumptive soil bearing values would be around 8-feet square. Braced frames would require grade beams. Geotechnical analysis could provide better soil bearing values and reduce footing size. It is speculated that the existing slab on grade is very thick and may be heavily reinforced. If this could be confirmed it is possible the existing slab could support column loads.

It is recommended that columns and braced frames for the new second floor be no closer than 8-feet from the perimeter wall so that new footings don't conflict with existing perimeter wall footings. Structural steel can cantilever to the existing perimeter so that little gravity loading is added to the existing perimeter walls.

OPTIONS FOR RENOVATING THE EXISTING BUILDING

Concrete frames with masonry infill have historically not performed well during seismic events. We understand the existing perimeter wall will require several new openings for windows in offices and patient rooms. This will weaken the wall. Openings will need to be cut in existing walls and these openings strengthened with loose lintels. Current codes have become more restrictive on how heavy perimeter walls are connected to roof framing. It is likely the connection between the existing wall and existing roof will need to be strengthened.

More information regarding the perimeter wall system is needed such as field measurements, scanning for rebar, and performing of material tests. Analysis of the perimeter wall system to determine the load carrying capacity for in-plane and out-of-plane forces (with new penetrations) for current code requirements is needed. It is likely the existing system will need to be strengthened or replaced.

OPTION "A": Completely remove the existing perimeter walls and replace them with cold-formed steel studs. The existing perimeter footing could be utilized to support the new wall. Lateral forces due to wind and seismic could be transferred to the new second floor structure. The new perimeter wall would need to include bracing that would transfer the roof forces to the second floor. Several lightly loaded braces could be added around the perimeter to keep brace loads to a minimum. Smaller brace loads will help with the challenge of achieving ductility with connections as required by the current code. This would also help minimize the amount of strengthening required at the existing perimeter wall footings.

OPTION "B": Keep the existing perimeter wall and use the system to transfer roof lateral forces to the second floor system. Loads imposed on the perimeter wall would be transferred to the second floor structure. Verification of the existing wall would be required and strengthening of the wall may be needed. Options for strengthening include external application of carbon fiber reinforcement and/or structural steel strong-backs. New openings would require lintels. Confirmation of this option would require extensive field verification of materials including measurements, rebar scanning, and material testing, followed by structural analysis to confirm existing wall capacity and requirements

for strengthening where needed.
OPTION "C": Keep the existing perimeter wall in place but selectively remove portions and replace with reinforced CMU shear walls to work in conjunction with the second floor bracing to resist building lateral forces. The remaining existing wall construction may need strengthening (including lintels at openings), and to be tied back to the second floor for support. This would require field work and analysis as described in option "B".

900 S. Auburn Street Kennewick, WA

The most recent additions to the hospital are comprised of structural steel post and beam with composite metal decking and concrete. There are no anticipated structural upgrades needed in these areas and the design can be the most flexible. There is currently not a desire to move existing column locations. The older areas of the hospital are a little more challenging. The existing structure in these areas are concrete post and beam. The existing corridor walls are structural concrete walls that would not want to be moved or modified. Also, we have serval areas where concrete beams and decks have been comprised and would need to be analyzed and reviewed.

EXHIBIT I:
FIRE PROTECTION NARRATIVE

10 E. Bruneau Ave Site

The Fire Protection System narrative is based on reviews with the Fvire Marshall and utlizing a local trade partner to support the best approach for bringing the fire protection system up to city and fire marshall requirements. The narratives below outlines the approach to fire protection.

WET SYSTEM

Spaulding/Labor and Delivery Area:

First Floor:

- Fully remodeled based on the final construction documents.
- System will be completely feed from the riser located in the Spaulding Building.
    * Where the current wet system feeds the labor and delivery areas from the old hospital will be cut and caped at the back of wall that will separate program space from shelled space.

2nd and 3rd Floor:

Both floors of the Spaulding building must be conditioned space and maintain a 40 degree minimum.

- Current plan is to use electric furnaces to maintain the minimum temperature, but these floors will have full operational fire sprinkler and fire alarm systems per your request.
- All ceiling tiles will need to be reinstalled in these spaces.
    * We are looking at a possible fire resistant/ rated barrier that we might be able to install vs. ceiling tile. Still working on this and will update you as we validate this option.

DRY SYSTEM

The basement where the fire risers is in the old hospital MUST be always conditioned to a minimum of 40 degrees. The rest of the 1st, 2nd and 3rd floors will be converted to a dry system with the following allowances/understandings.

- Ceiling tiles will be reinstalled, so sprinklers are at ceiling level.
    * We are looking at a possible fire resistant/rated barrier that we might be able to install vs. ceiling tile. Still working on this and will update you as we validate this option.
- Converting a wet system to a dry system will NOT be a full code compliant system as it will not have proper slope, pendent heads will not be dry pendants as required on dry systems, and there are areas that are currently installed as a gridded fire system. This will require allowances from the Fire Marshall.

SCOPE TO CONVERT SHELLED SPACE TO DRY SYSTEM

- Create an accurate survey of the fire sprinkler system and produce drawings that show elevations, pipe sizes, and scale.
- Identify all low points and trapped water areas within the system. At these locations, drum drips will be installed and accurately shown on the plans.
- Risers will be replaced with dry valve risers with accelerators for faster water delivery to each part of the system.
- System integrity will be restored from any broken lines due to prior freezes.
- Replace all fire sprinklers throughout this space with new as they have been compromised with freezing conditions (estimated to be around 875 sprinklers).
- Dvisconnect the sprinkler system in 1982 and 1996 renovation areas to be connected to Spaulding building.
- Submit plans to the Fire Marshall for approval prior to work commencing (plans will require FPE review and letter).

EXHIBIT J:
MECHANICAL & PLUMBING NARRATIVE

HVAC SYSTEMS

The HVAC System selection and design has been and will continue to be a collaboration with the architect, owner, and trade partners in order to best fit the needs of the users, patients, and the building while also balancing the goals of the budget, efficiency, sustainability, life expectancy and maintainability.

After extensive team evaluation, comparative studies, field assessments, code analysis, and preliminary engineering, it has become clear that there are two viable HVAC system options; (1) VRF w/ DOAS, and (2) VAV reheat with chilled/ hot water. Refer to previous A3's and assessment reports. However, subsequent budgetary exercises have concluded that the VAV reheat approach is cost prohibitive, so the team is proposing a VRF solution.

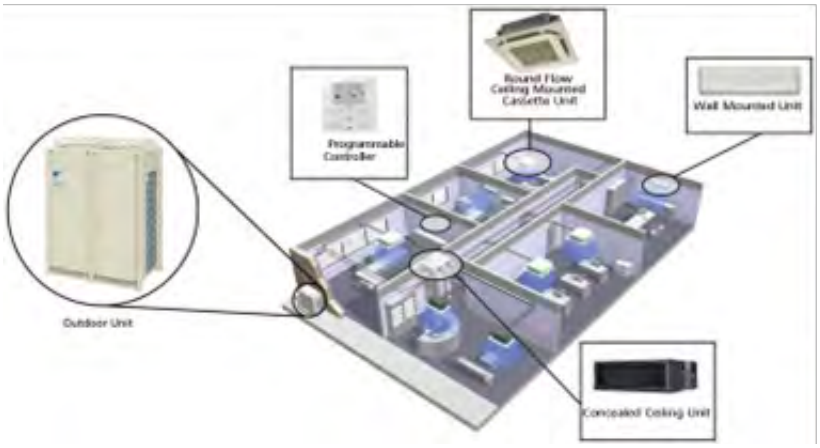
VRF HVAC SYSTEMS

Variable Refrigerant Flow (VRF) Systems are energy-efficient cost-effective HVAC systems that have rapidly become more prevalent throughout the country over the past 20 years, but most notably in Washington State with the push toward electrification and increasingly restrictive energy codes. At its core, VRF systems are an air-to-air heat pump system using refrigerant as the heat transfer medium for both cooling and heating duty. Fossil fuel boilers or heaters are not required (except as backup) as heating is provided by electrically operated heat-pump compressors.

The heat pumps in a VRF system get an efficiency boost by manifolding the refrigerant piping for a multitude of indoor fan coil units into a single shared heat pump network which allows for simultaneous heating and cooling within the network. This also provides the opportunity for heat recovery where the heat rejected in cooling mode from one space can then be utilized to heat another space. The manifold is then connected to an outdoor air-to-air heat pump unit consisting of multiple modules, each with multiple variable capacity compressors, all working as a single unit. This outdoor heat pump system interacts with the ambient air to reject or extract heat as needed to satisfy the system demand.

VRF ZONE LEVEL EQUIPMENT

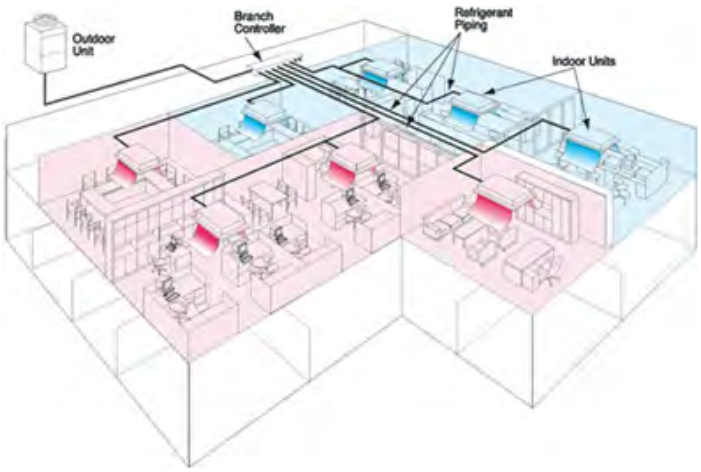
The indoor mounted fan coil terminal units come in several styles and configurations, allowing for a high degree of design flexibility. In the case of this project, it is anticipated that concealed (above ceiling) ducted fan coil type units will be used as the first choice. However patient rooms may be candidates for small ductless ceiling mounted units (cassettes) due to the small size of the rooms and the number of them in one given area. Other utility areas such as equipment rooms are likely to have exposed sidewall units. All these units have intelligent controller type room thermostats, and operate at variable speeds, allowing for good comfort, efficiency, and extremely quiet operation.



Proposed HVAC System - VRF System – Example Terminal Units and Network Schematic

VRF SYSTEM ENERGY SHARING/ HEAT RECOVERY

As described above, the indoor units of a VRF system are interconnected through a manifold which manufacturers have their own terminology for (branch box, branch selector, branch connector, etc.). This refrigerant piping network allows the multiple heat pumps in a system to "share" energy, thereby allowing efficient operation at times where zones in a cooling mode can transfer their rejected heat to other zones that may be in the heating mode, and vice versa. At times when internal heating and cooling loads are not "balanced", heating or cooling is provided by the outdoor heat-pump compressor modules.



VRF System – Example of Heat Sharing and Recovery

VRF SYSTEM OUTDOOR HEAT-PUMP COMPRESSOR MODULES

The air-to-air heat-pump compressor modules serve as the central plant of the VRF system, providing the heating or cooling capacity to the network of indoor units. The components of these outdoor heat-pump modules resemble typical residential type air conditioning condenser units but are generally much larger and higher quality. The heat-pump modules are often mounted on the roof of the facility, behind screen walls, or at ground level on the service side of the building. They can also be mounted inside a mechanical room with the appropriate amount of ventilation louvers and ducting.

The outdoor heat-pump modules are arranged in banks for an efficient foot print. Clearances around the units are necessary for good air flow and service access, but module-to-module clearances are generally not required allowing for a streamlined arrangement. Mounting stands or bases are needed to elevate the units above typical snow levels and allow for drainage of water that runs off the units when in defrost mode in cold weather. It should be noted that while the technology and controls in VRF units allow them to extract heat from even sub-zero outdoor temperatures, the coil defrost as it gets colder can shed a substantial amount of water that needs to be accounted for with adequate area drained and potential ice buildup.

TYPICAL VRF SYSTEM BENEFITS

- Highly energy efficient.
- Cost effective.
- Indoor units come in a variety of styles and give the

Typical VRF Outdoor Heat-Pump Module

- Systems are quiet and have good user interface "smart" controllers.
- Don't require large indoor mechanical rooms.

TYPICAL VRF SYSTEM CHALLENGES

- Requires a thoughtful design of auxiliary heating capacity and control for very low ambient conditions.
- Requires good area drainage for prevention of ice buildup around the outdoor modules.
- Requires highly qualified installation contractor to ensure the consequences of poor piping practices are not a long-term problem (refrigerant leaks, oil return, compressor problems, etc.)
- Requires special attention on the controls, particularly if interfacing with the DDC system. Owner training

must be a priority on the VRF proprietary controls.

DEDICATED OUTLINE AIR SYSTEM (DOAS)

Although the VRF system provides an efficient method of heating and cooling the facility, it does not provide the necessary outdoor ventilation air that is also required to maintain a comfortable and healthy.

indoor air environment (i.e. indoor air quality, IAQ). The most common, and efficient, method to deliver the necessary ventilation air is by means of a Dedicated Outdoor Air System, or DOAS. This system provides the fresh outdoor air to the spaces while also exhausting used, stale, ventilation air. Because this system is independent of the heating and cooling system and delivers ventilation air directly to the spaces, the quantity of ventilation air can be tailored to each individual space much more precisely and is therefore more energy efficient.

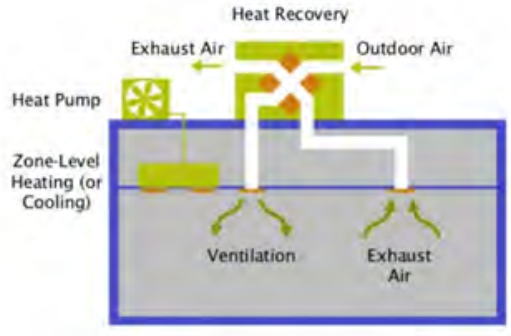
Also typical of DOAS systems is the inclusion of energy recovery where heat from the outgoing stale exhaust air stream is recovered via heat exchanger internal to the DOAS which pre-conditions the incoming ventilation air making the ventilation cycle more efficient.

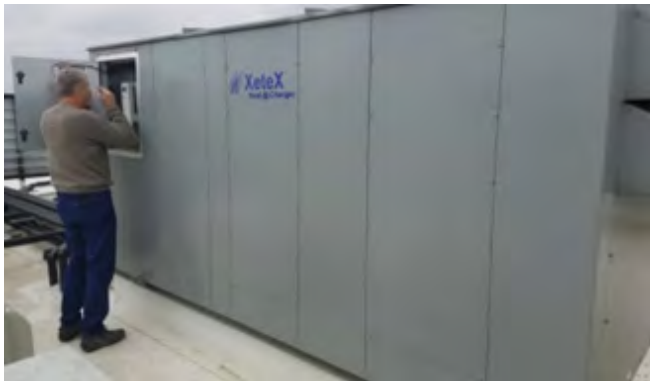
BUILDING AUTOMATION AND HVAC TEMPERATURE CONTROL SYSTEMS

VRF systems require their own internal control system to function. These systems vary between manufacturers but are all proprietary. Each manufacturer provides their own version of a "front end" control interface where the user can make individual or global adjustments to settings, schedules, and other basic program functions. Multiple thermally similar spaces such as patient rooms or small offices, may be grouped together on a single zone.

All other mechanical systems (DOAS, makeup air units, backup heat, misc exhaust fans, recirc pumps, etc.) will be controlled by a Direct Digital Controls (DDC) system. DDC occupancy sensors and/or CO2 sensors will be used to regulate ventilation air from the DOAS based on the measured space population.

If desired, the VRF control system can be monitored through the DDC control interface, however any control functions would still be performed at the VRF front end.





Example DOAS Ventilation Units and Heat Recovery Core

MECHANICAL EQUIPMENT LOCATIONS

The VRF outdoor units will be located on the roof, the exact location of which will be determined based on visibility, vibration and noise considerations, and accessibility. The DOAS unit will be located in the existing penthouse mechanical room, likely in the location of one of the existing air handlers that will no longer be utilized. VRF indoor units will be located primarily above the ceilings within the space.

AIR DISTRIBUTION

Supply air will be distributed from the VRF fan coils and DOAS units by galvanized steel sheet metal ducts. For overhead supply air, adjustable core ceiling diffusers will be utilized in areas with lay-in ceilings. Areas without lay-in ceilings will utilize rigid round ductwork constructed for exposed views. Existing ductwork may be reused where feasible.

ACOUSTICS

The location of mechanical systems relative to occupied spaces will be critical in limiting the transmission of noise and vibration. Mechanical equipment will be provided with vibration isolation mounts and hangers. HVAC generated noise levels will be generally low with a VRF system, but acoustic best practices such as low duct velocities, acoustic duct liner and flexible connections will be designed into the system to maintain sound levels below 45 dBA (approx. NC 35).

MAINTAINABILITY

Maintainability is of primary concern for mechanical systems. The design will carefully consider access areas, service clearances, filter, and coil removal. To the extent possible, the design will avoid requiring access to concealed ceiling spaces. Where it is unavoidable, the equipment will be located with 24" of the ceiling grid to avoid excessively talk ladders. Roof mounted equipment will be provided with access pathways and appropriate clearances.

REDUNDANCY

While redundancy of equipment and generator backed HVAC systems are not a requirement of the project, the VRF systems do have a degree of redundancy built in to the outdoor units with their arrays of compressors. A compressor array allows for the failure of individual compressors without the complete loss of system capacity. Backup or auxiliary electric resistance heat will also be provided for the VRF indoor units.

COMMISSIONING

The commissioning effort will be led by an agent hired directly by the owner. The Contractor will designate a member of the construction team responsible for assisting with the commissioning program including the development and execution of test procedures.

ENERGY CODE CONSIDERATIONS

Washington State Energy Code analysis has determined the repurposing of the hospital facility for a behavioral health program does not constitute a change in occupancy as both occupancies are classified as Group R by Section 1. This determination alleviates the need to bring all the systems into compliance with the current code. Instead, systems can be replaced in-kind if capacity is not being increased as required under the "Alterations" section of Chapter 5.

While that doesn't impact the decision to utilize a VRF/DOAS HVAC system which is already a fully code compliant system, it does allow for less costly replacement of other systems like domestic water heating where fossil fuel or electric resistance may remain in use.

CLEAN BUILDING ACT CONSIDERATIONS

The Clean Building Act is focused solely on the total energy consumption of a building. It does not delineate between different programs, tenants, or otherwise. In that regard, the energy consumption or savings associated with this project will only be a contribution to the total for the building. Where desired and feasible, metering will be added to assist with determining energy consumption of specific systems or areas of the building.

Areas of the building which remain unoccupied with heat only for freeze protection will naturally have a very low energy consumption rate and will only drive the total consumption further below the threshold at which high energy consumption penalties are assessed.

UNOCCUPIED SPACES

The remainder of the building outside of the renovated area will be heated for freeze protection only until future tenants renovate those spaces. This is likely to utilize electric resistance heat (allowed by the energy code if heating only to 45 degrees) as the existing steam and hydronic heating systems are mostly abandoned and non-functional. In some areas this may include unit heaters, while others may include the addition of electric or gas furnaces using the existing air distribution ductwork.

HVAC Design Criteria

BUILDING CODES

The mechanical systems will be designed to conform, at a minimum, to the following codes and standards. As an alteration of an existing building, the areas and systems of the existing building that are not directly impacted will not necessarily be required to be brought into compliance with the current codes.

- 2021 International Building Code (IBC)
- 2021 International Mechanical Code (IMC)
- 2021 Washington State Energy Code (WSEC)
- 2021 Uniform Plumbing Code (UPC)
- 2021 International Fire Code (IFC).
- 2021 International Fuel Gas Code (IFGC)
- 2021 National Electrical Code (NEC); NFPA 70.
- 2018 FGI / ASHRAE 170 (guideline only)
- National Fire Protection Association (NFPA) Standards
- Washington Administrative Code (WAC) amendments to the above codes
- Other local codes, laws, and ordinances

Environmental Design Criteria

The HVAC system sizing and selection will be based on the following environmental design conditions:

Indoor Design Conditions:
- Summer (cooling): 75˚F
- Winter (heating): 70˚F
- Relative Humidity: 35%-50% RH desired. (No active humidification is planned.)

Outdoor dry bulb temperature:
- Summer: 110°F DB/ 62°F WB (WSEC states 101°F)
- Winter: 5°F (WSEC states 11°F)

Prevailing Wind Direction: Northeast

OUTSIDE AIR VENTILATION CRITERIA

Ventilation rates will be in accordance ASHRAE 170 and IMC requirements with the following additional features:

- Demand Control Ventilation (DCV) measures will be implemented in all high-density spaces (conference rooms) as a means to reduce ventilation during low occupancy periods using CO2 sensors as a proxy for occupancy level.
- Restrooms and Custodian Rooms will be exhausted per the IMC.

PRESSURIZATION CRITERIA

Pressurization of individual spaces, whether negative, positive, or neutral, will follow the FGI guidelines as a basis if design whether required by DOH or not. The owner and design team will then evaluate whether deviations from that basis. Where space pressurization deemed necessary, this will be achieved through air balancing rather than active DDC space pressure controls.

HUMIDITY CRITERIA

As this project is not bound by the FGI requirements, there are no particular humidity design requirements and therefore no active control, humidification or dehumidification systems intended. Normal summertime dehumidification of incoming ventilation air will be a byproduct of the refrigerant based cooling provided at the VRF fan coil units. The DOAS will not have cooling of its own.

SEISMIC CRITERIA

Seismic restraints will be provided in accordance with IBC requirements for the project location specific seismic levels, and as based on system and equipment importance factors.

FIRE & LIFE SAFETY

HVAC systems will be provided with life safety elements, such as smoke and fire dampers, and fan shut-downs, as required by IBC and NFPA, and as dictated by the fire resistive construction elements in the project. Active smoke control systems are not anticipated to be required on this project.

ANTI-LIGATURE

Where required, anti-ligature features will be included in the HVAC design. This may include remote locating thermostats in return ducts to avoid having a wall mounted stat. Flat plate room sensor may also be used. Air supply and return grills, and ceiling cassettes where they are used, will be anti-ligature compliant designs. Fan coils will be placed outside the patient rooms to avoid needing to access them through the patient room.

Plumbing Systems

DOMESTIC WATER

The existing domestic water service will be reused and extended as needed for the renovated portion of the building. The existing backflow preventer will be verified and tested prior to being put into service.

New zone valving will be provided to isolate defined plumbing zones throughout the building. Valves will also be provided for each toilet room, bank of fixtures and equipment.

Domestic cold and hot water piping will be type K or L hard-drawn copper with solder joints or pressed fittings above grade. Type K copper tubing or PEX (trap primer lines only) installed below slab will have no joints.

All piping will be insulated to meet or exceed the minimum values per the Energy Code. Domestic cold water will be insulated with ½" fiberglass insulation to protect against condensation damage.

SANITARY WASTE

The condition of the existing main building waste will be verified prior to being put back into service. Soil, Waste, and Vent Piping within the building will be cast iron with no-hub couplings with heavy duty bands.

DOMESTIC HOT WATER

Domestic hot water will be provided by a new storage-tank type gas-fired water heater located in the mechanical penthouse. A DDC controlled recirculating hot water piping loop will be provided to maintain ready hot water at each use point.

STORM DRAIN

The existing roof drains and overflows will remain. If drain piping is to be rerouted to suit the renovation the new piping will be cast iron with no-hub couplings with heavy duty bands.

Roof drainage and overflow drainage piping routed horizontally within the building shall be insulated with ½" fiberglass insulation to avoid condensation.

NATURAL GAS

The existing natural gas service will be reused primarily for the domestic hot water heater.

PLUMBING FIXTURE

All plumbing fixtures will be commercial grade and anti-ligature where required. Water closets, urinals and lavatories in restrooms will be constructed of vitreous china with chrome plated brass, sensor operated flush valves and faucets. All other spaces will have lever-operated manual faucets. Lavatories, sinks and showers will have low flow, water–conserving faucets. Other sinks will be 18 GA. stainless steel with chrome plated brass, two handle lever-operated faucets with goose neck spouts. Water coolers will be commercial grade stainless steel with bottle filling option. Where required for barrier-free access, fixtures will comply with Americans with Disabilities Act (ADA) guidelines. Fixture selection will be coordinated with the owner and architect.

Floor drains will be provided at each restroom, mechanical room and for equipment condensate drains where required. All floor drains, except those provided within shower enclosures, will be provided with p-traps and trap primers.

Hose Bibs with vacuum breakers will be provided in all gang restrooms.

LABORATORY GAS SYSTEM

Lab gas systems (medical air, vacuum, oxygen, etc.) will not be used on this project. Any existing systems will be removed and capped outside of the renovated area.

EXHIBIT K:
ELECTRICAL NARRATIVE

SITE

At Kennewick General Hospital the condition of the existing electrical service #3 was the primary consideration regarding the location of program space within the facility. This service is not currently code complaint, and the utility transformer is not located per utility guidelines.

POWER DISTRIBUTION

The objective of this project is to maintain the existing electrical utility services and to re-use the existing electrical distribution system(s) to the extent possible. The proposed program space would utilize existing electrical services #2 and #4.

Existing electric utility services include:

- Service 1 480/277V, 1200A, located in the equipment yard, (if utilized) will require replacement of PDP-1 gear due to condition and code constraints.
- Service 2, 208/120V, 2000A, located in the equipment yard, anticipated to be utilized, feeds panelboards in the currently planned program space. Isolation panelboards within the program space should be removed and associated feeders demoed back to source unless re-used for new distribution. Existing normal power panelboards will mostly be in sufficient condition for re-use. Demolition and replacement of panelboards will be dependent on final programming layout and desired panel locations. Water issues will need to be resolved in the penthouse electrical room.
- Service 3 480/277V, 800A, located on the north end (if utilized) will require new service disconnect due to code issues with existing installation.
- Service 4 480/277V, 800A, located at the Spaulding building, No issues with distribution equipment observed. feeds panelboards in the currently planned program space. Service 4 distribution equipment is the newest and modifications would only be required as project dictates.

The existing main service switchgear and electrical rooms will remain. New energy source and end-use metering will be added to the existing switchgear and distribution breakers to meet the current Washington State Energy Code (WSEC) and upcoming Clean Building Performance Standards (CBPS).

Within the program space existing panelboards will be utilized where available with new branch circuiting to dedicated load types as defined by WSEC. Electrical one-lines and floor plans provided, highlight equipment anticipated to be utilized for the proposed program space. Electrical distribution panelboards and equipment outside of the program space will be left as existing on electrical services #1 and #3 or electrically disconnected and removed from distribution systems #2 and #4. Equipment or branch circuit loads required to maintain the non-program space with fire alarm, egress lighting, and freeze protection heating will be maintained.

EMERGENCY POWER

Existing generators are considered non-functioning and will not be repaired or replaced under this project scope. However, the existing transfer switches and emergency distribution systems will remain and can be utilized at a future date to provide backup power. Life-safety emergency power will be provided utilizing battery packs and integral UPSs for the proposed program space.

LIGHTING

New WSEC compliant LED lighting and controls will be provided throughout the program space. Anti-ligature luminaires will be utilized in patient rooms where required. General illumination and lighting levels will be designed to meet IES guidelines at a minimum.

New lighting controls will generally consist of fixture level sensors with individually addressable and networked luminaires and devices providing system wide programming and scheduling. Additional local control stations provided where appropriate for manual on/off, dimming, and scene selection. Interface with the building management system and security panel will be provided.

Daylight harvesting will be provided in compliance with WSEC.

Egress lighting in the program space will utilize integral batteries. Outside the program space egress fixtures and batteries will be tested and re-used, repaired, or replaced as needed.

Existing exterior site lighting will remain. Replacement of luminaires and light poles is suggested as a project betterment. Exterior lighting controls will be modified or replaced to meet current WSEC requirements and provide integration with new program area lighting control system.

TELECOMMUNICATIONS

The existing telecommunications utility service and de-marc will remain. From the basement communications fiber optic backbone cabling is anticipated to serve (2) IDF racks/ cabinets located in the program space. IDF Rooms will be spaced for CAT6 cabling throughout the program area with a maximum distance of 300ft.

VOIP phones are assumed to be the basis of design requiring no separate telephone cabling. Wireless access points and a public address or intercom system are not included in the current scope but are suggested betterments.

Rough-in will be provided for owner provided audio visual equipment as needed. AV equipment could include displays, speakers, projectors, video conferencing equipment and cameras. Cable TV service and coaxial cable distribution is not provided in current project scope.

EMERGENCY COMMUNICATIONS

ERRS/DAS system to be installed, repaired, or modified as required by the AHJ.

ACCESS CONTROL & SECURITY

Access control and security systems will be installed in the program area, including card readers, IP-based surveillance cameras, and intrusion detection devices according to the specifications. Non program areas excluded from the current project scope. Monitoring software and licensing to be provided by the owner.

FIRE ALARM

A new addressable fire alarm system with carbon monoxide monitoring will be installed meeting Washington State and local Fire Department requirements for the facility. Monitoring and Licensing to be provided by the owner.

COLLABORATION & COMMUNICATION

- **Open Communication:** We maintain open communication channels with the design team, owner representatives, and all stakeholders throughout the project. This fosters transparency and allows for prompt resolution of any issues that may arise.
- **Detailed Records Management:** We maintain meticulous records of all inspections, tests, as built drawings, and maintenance activities related to the reused equipment. This ensures traceability and facilitates future maintenance and troubleshooting.

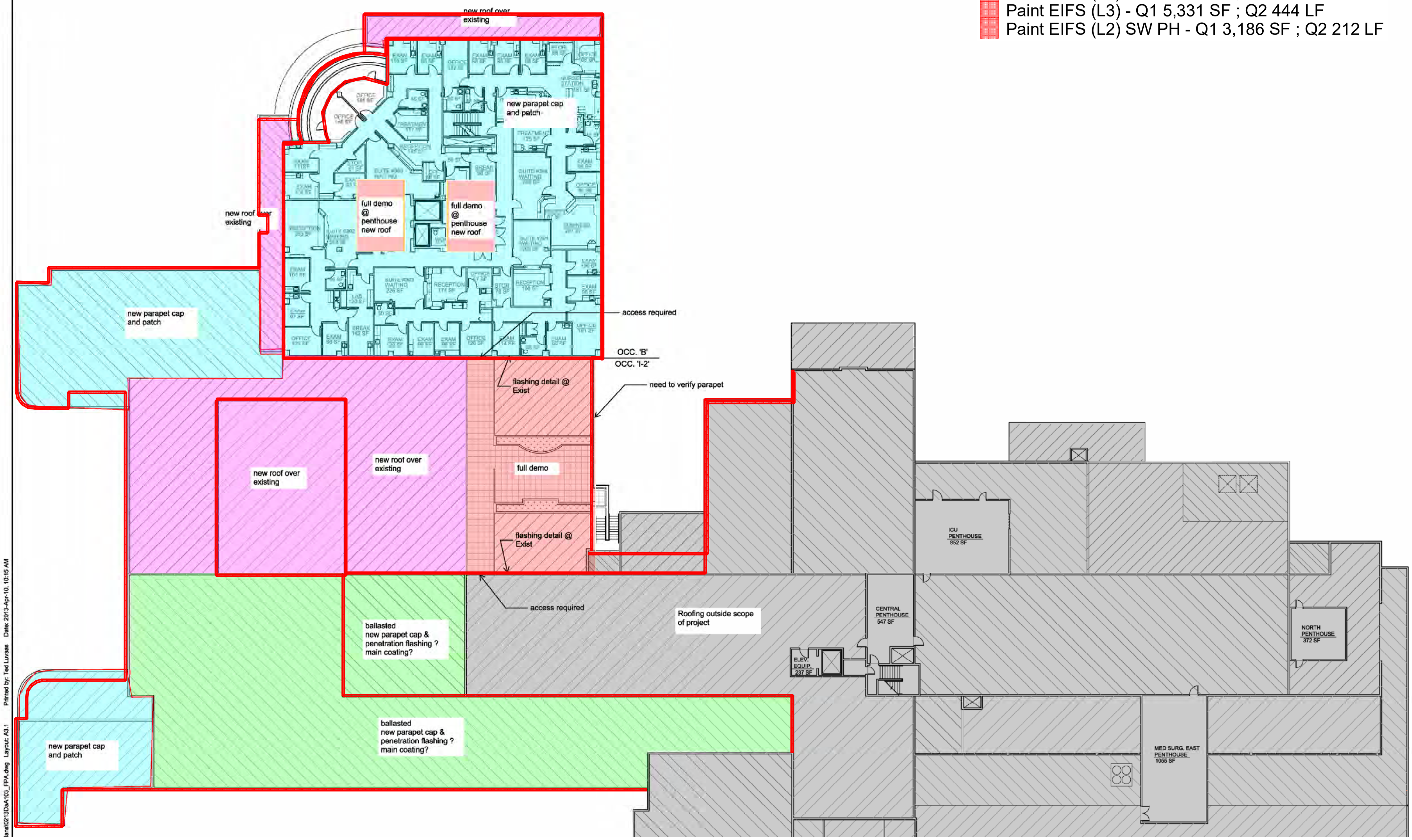
EXHIBIT L:
BUDGET SCOPE SKETCHES

Exterior Cladding

07 2400 EIFS Repair (Skim Coat Veneer to Existing) - Q1 556 SF ; Q2 185 LF

Exterior Painting

Paint EIFS (L1) - Q1 13,500 SF ; Q2 1,125 LF
Paint EIFS (L2) - Q1 7,707 SF ; Q2 771 LF
Paint EIFS (L3) - Q1 5,331 SF ; Q2 444 LF
Paint EIFS (L2) SW PH - Q1 3,186 SF ; Q2 212 LF



ARCHIBALD • LITTLE • DILLMAN
ARCHITECTS, P.S.
660 Symons Street | Richland, WA 99354
Tel 509.946.4189 | Fax 509.943.1796
www.ALDarchitects.com

KENNEWICK GENERAL HOSPITAL
ROOM AREA PLAN
900 SOUTH AUBURN ST | KENNEWICK, WA

- THIRD FLOOR ROOM AREA PLAN

CAD FILE: 0213DaA103_FPA.dwg
DESIGNED: LTL
DRAWN: LTL
CHECKED:

2024.04.24 NAC Roof Concept for Validation Pricing.pdf (30% of Scale); Takeoff in Active Area: All Areas; CVC for Recovery, Spaulding Test Fit - SG; OST; 4/25/2024 08:24 AM

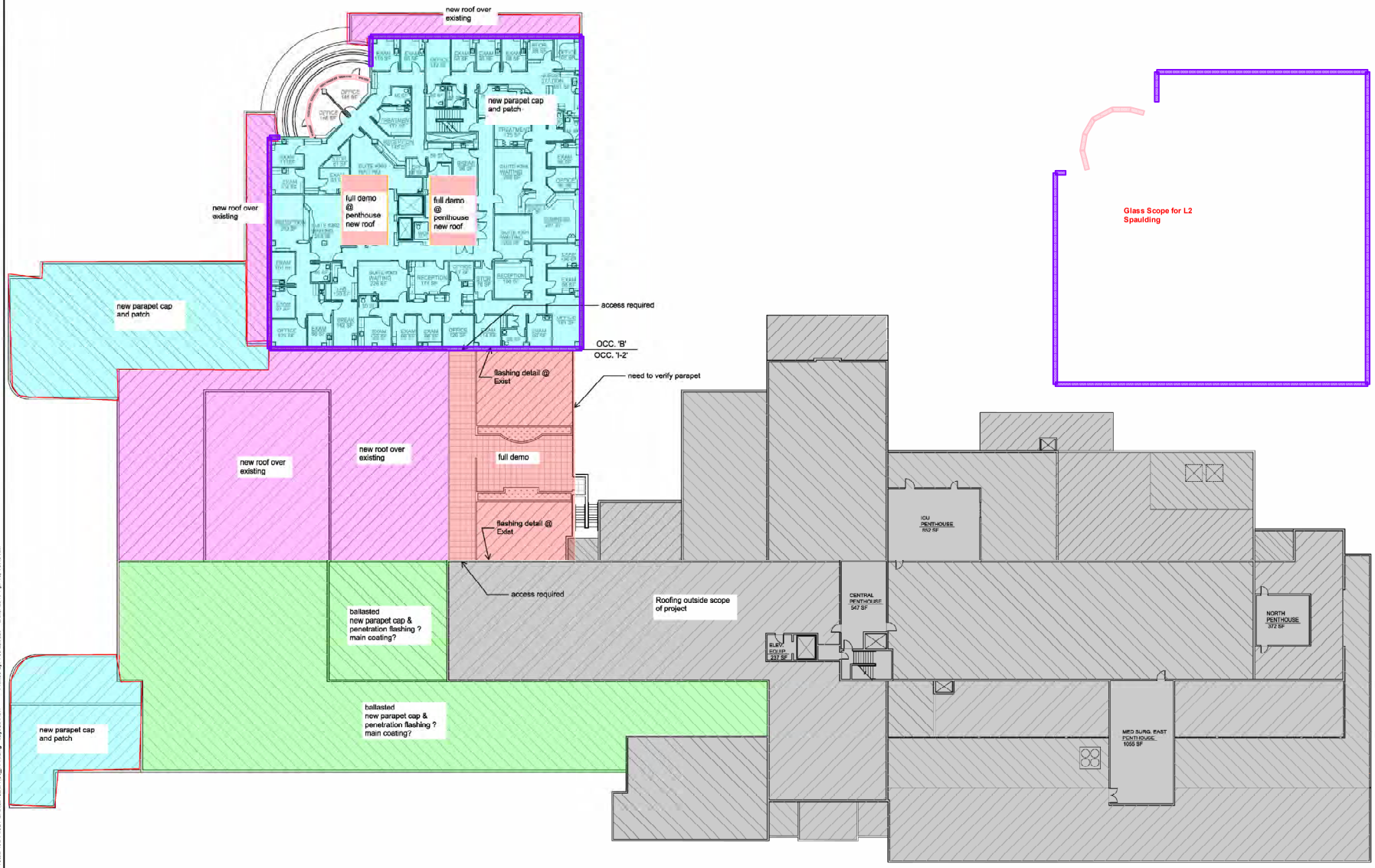
Exterior Windows

- 08 4000 Existing Storefront 8'-0" (Replace Seals) - Q1 370 SF ; Q2 46 LF
- 08 5100 Replace Existing Window w/Detn (6'-0"' x 5'-6") - Q1 990 SF ; Q2 30 EA
- 08 5100 Replace Existing Window w/Detn (4'-0"' x 5'-6") - Q1 44 SF ; Q2 2 EA
- 08 5100 Replace Existing Window w/Detn (4'-0"' x 2'-6") - Q1 70 SF ; Q2 7 EA
- 08 4000 Existing Storefront 8'-0" (Reglaze with Shatter Resistant) - Q1 244 SF ; Q2 31 LF
- 08 5100 Replace Existing Window w/Detn (17'-9"' x 5'-6") - Q1 98 SF ; Q2 1 EA
- 08 5100 Replace Existing Window w/Detn (2'-0"' x 5'-6" - Segmented Radius) - Q1 88 SF ; Q2 8 EA

Exterior Windows

08 4000 Existing Alum Storefront 4'-0" (Replace Broken Glass) Factor 25% of - Q1 3,096 SF ; Q2 774 LF

08 4000 Existing Storefront 8'-0" (No Work) - Q1 607 SF ; Q2 76 LF



THIRD FLOOR ROOM AREA PLAN

1/16" = 1'-0"

ARCHIBALD · LITTLE · DILLMAN ARCHITECTS, P.S.
660 Symons Street | Richland, WA 99354
Tel 509.946.4189 | Fax 509.943.1796
www.ALDarchitects.com

KENNEWICK GENERAL HOSPITAL

ROOM AREA PLAN

900 SOUTH AUBURN ST | KENNEWICK, WA

THIRD FLOOR ROOM AREA PLAN

CAD FILE: 0213DaA103_FPA.dwg
DESIGNED: LTL
DRAWN: LTL
CHECKED:
DATE: 2013.APR.09
REVISION:

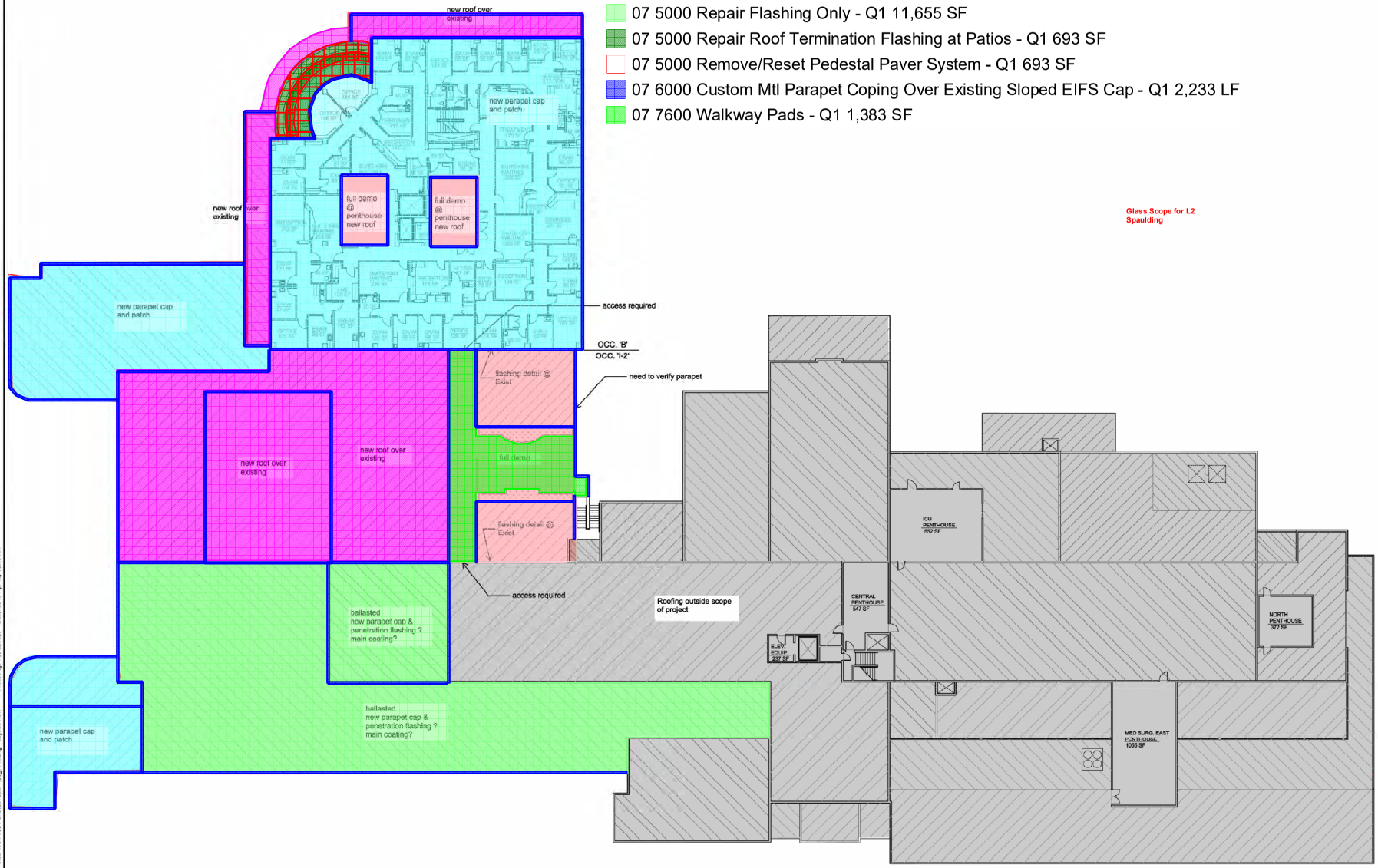
DRAWING: **A3.1**

02-13D

P:\2013 Projects\02-13\02-13D-Area Plans\02135DaA103_FPA.dwg Layout: A3.1 Printed by: Ted Luvsan Date: 2013-Apr-10, 10:15 AM

Roofing

- 07 5000 Patch Existing TPO Roof/Flashing - Q1 16,663 SF
- 07 5000 New TPO Roof/Flashing Over Existing - Q1 10,156 SF
- 07 5000 New TP Roof + Insulation - Q1 4,221 SF
- 07 5000 Repair Flashing Only - Q1 11,655 SF
- 07 5000 Repair Roof Termination Flashing at Patios - Q1 693 SF
- 07 5000 Remove/Reset Pedestal Paver System - Q1 693 SF
- 07 6000 Custom Mtl Parapet Coping Over Existing Sloped EIFS Cap - Q1 2,233 LF
- 07 7600 Walkway Pads - Q1 1,383 SF



Glass Scope for L2 Spaulding

THIRD FLOOR ROOM AREA PLAN
1/16" = 1'-0"

ARCHIBALD · LITTLE · DILLMAN
ARCHITECTS, P.S.
660 Symons Street | Richland, WA 99354
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KENNEWICK GENERAL HOSPITAL
ROOM AREA PLAN
900 SOUTH AUBURN ST | KENNEWICK, WA

THIRD FLOOR ROOM AREA PLAN

CAD FILE: 0213DaA103_FPA.dwg
DESIGNED: LTL
DRAWN: LTL
CHECKED:
DATE: 2013.APR.09
REVISION:

DRAWING: A3.1

02-13D

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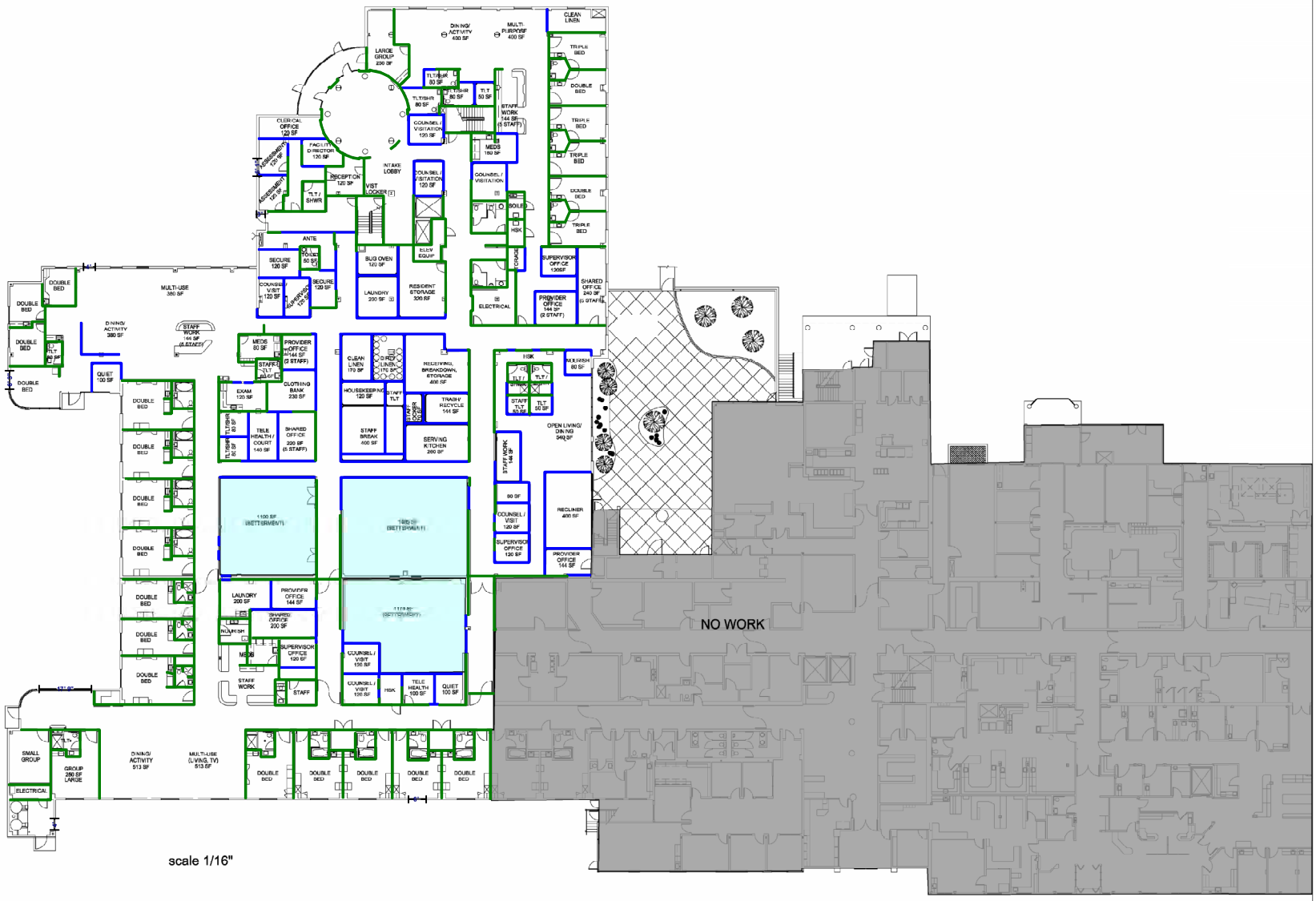
Partitions

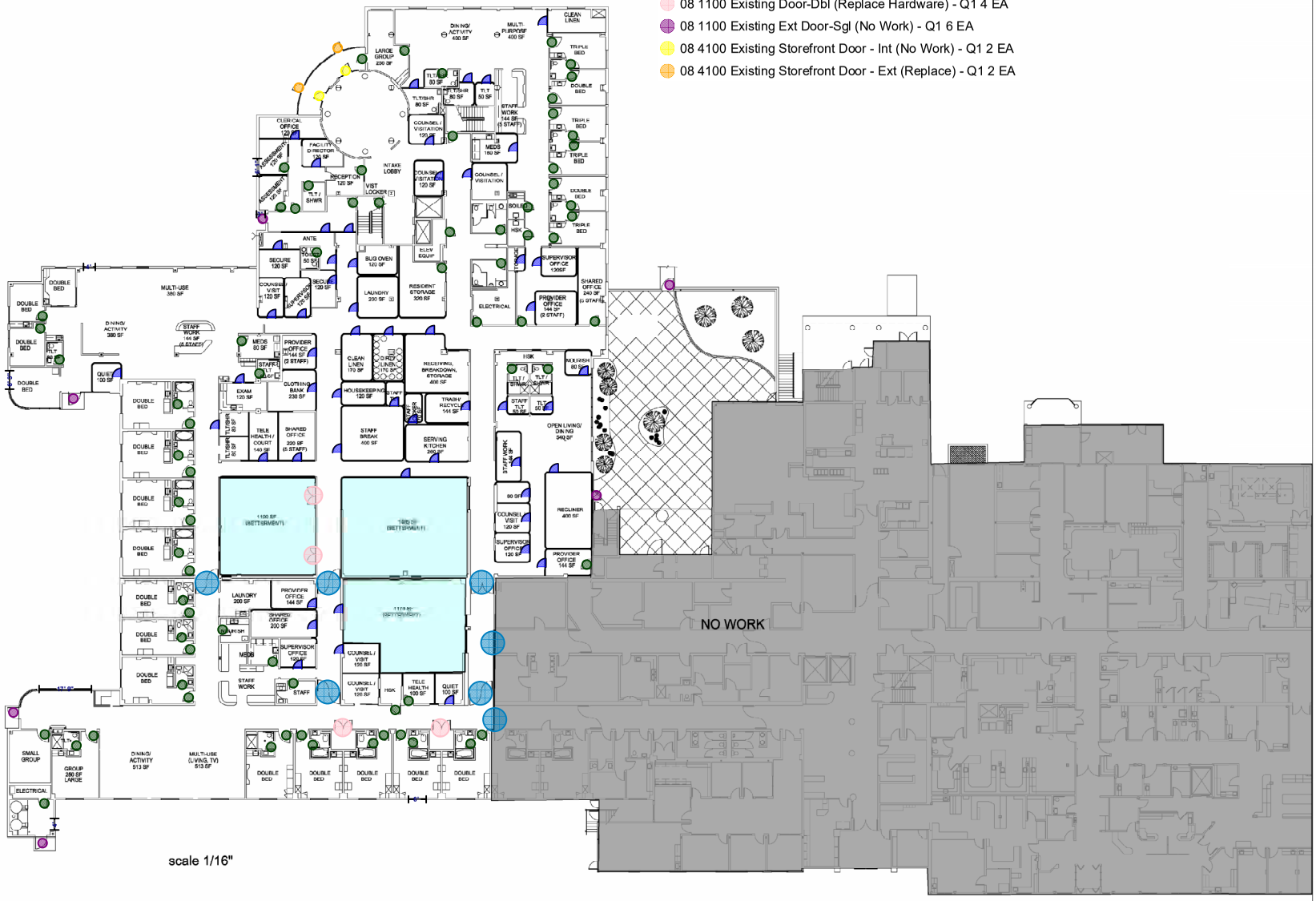
09 2900 New Walls - Q1 1,547 LF

09 2900 Existing Walls (Patch & Repair) - Q1 2,912 LF



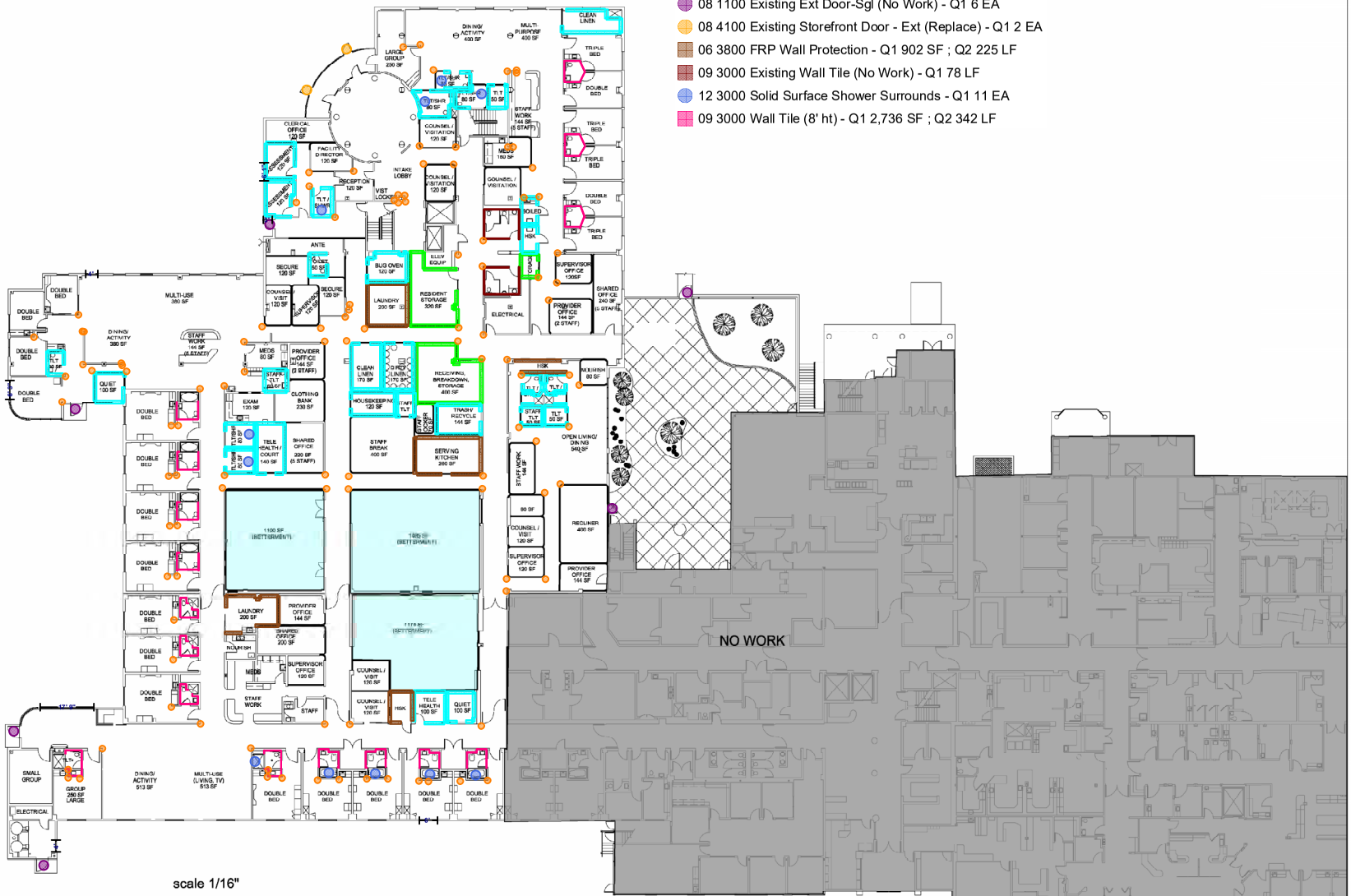
Doors

- 08 1100 New Door/Frame/Hardware - Q1 54 EA
- 08 1100 Existing Door-Sgl (Replace Hardware) - Q1 74 EA
- 08 1100 Replace Fire Door (Set) - Q1 7 EA
- 08 1100 Existing Door-Dbl (Replace Hardware) - Q1 4 EA
- 08 1100 Existing Ext Door-Sgl (No Work) - Q1 6 EA
- 08 4100 Existing Storefront Door - Int (No Work) - Q1 2 EA
- 08 4100 Existing Storefront Door - Ext (Replace) - Q1 2 EA



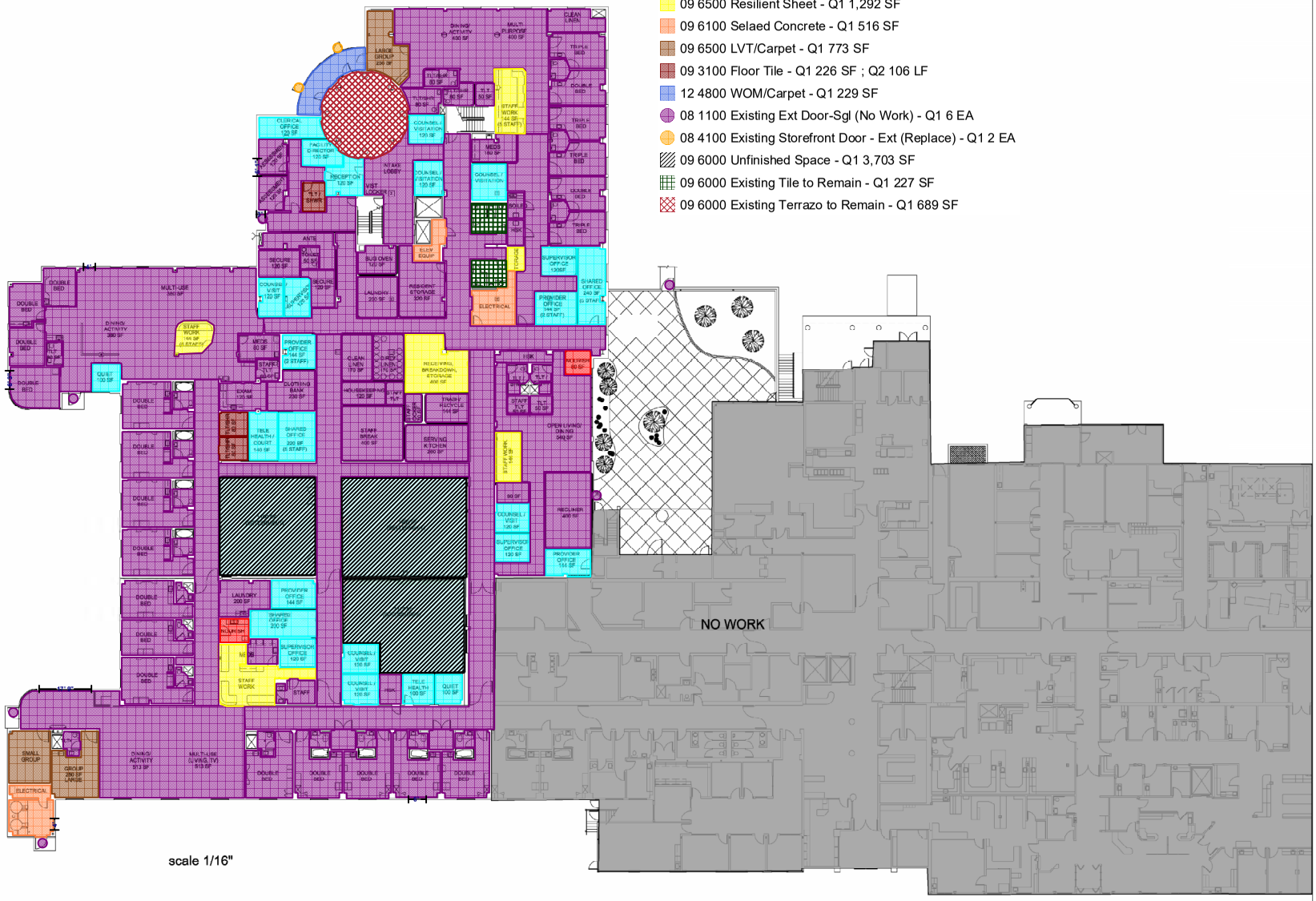
Wall Finishes

- 10 2600 Corner Guards - Q1 110 EA
- 10 2600 Wall Protection 48" - Q1 957 LF
- 10 2600 Wall Protection 34" - Q1 184 LF
- 08 1100 Existing Ext Door-Sgl (No Work) - Q1 6 EA
- 08 4100 Existing Storefront Door - Ext (Replace) - Q1 2 EA
- 06 3800 FRP Wall Protection - Q1 902 SF ; Q2 225 LF
- 09 3000 Existing Wall Tile (No Work) - Q1 78 LF
- 12 3000 Solid Surface Shower Surrounds - Q1 11 EA
- 09 3000 Wall Tile (8' ht) - Q1 2,736 SF ; Q2 342 LF



Wall Finishes

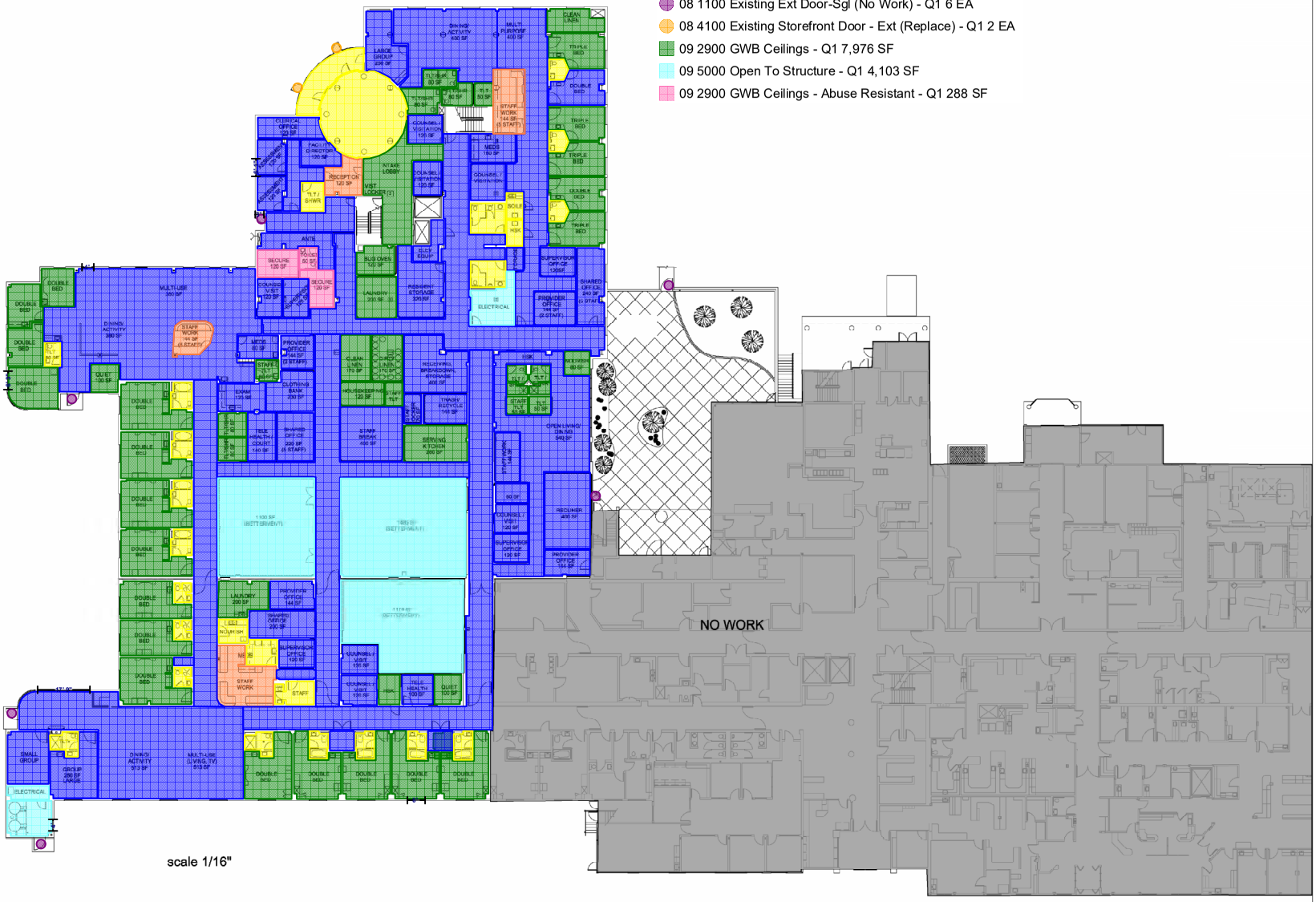
- 09 6800 Carpet - Q1 3,301 SF
- 09 6500 LVT - Q1 148 SF
- 09 6500 Sheet Vinyl - Q1 24,607 SF
- 09 6500 Resilient Sheet - Q1 1,292 SF
- 09 6100 Selaed Concrete - Q1 516 SF
- 09 6500 LVT/Carpet - Q1 773 SF
- 09 3100 Floor Tile - Q1 226 SF ; Q2 106 LF
- 12 4800 WOM/Carpet - Q1 229 SF
- 08 1100 Existing Ext Door-Sgl (No Work) - Q1 6 EA
- 08 4100 Existing Storefront Door - Ext (Replace) - Q1 2 EA
- 09 6000 Unfinished Space - Q1 3,703 SF
- 09 6000 Existing Tile to Remain - Q1 227 SF
- 09 6000 Existing Terrazo to Remain - Q1 689 SF



scale 1/16"

Ceiling Finishes

- 09 5100 Suspended Acoustical Ceiling - Q1 20,347 SF
- 09 2900 Existing to Remain (Patch & Repair) - Q1 2,443 SF
- 09 5000 ACT/GWB - Q1 843 SF
- 08 1100 Existing Ext Door-Sgl (No Work) - Q1 6 EA
- 08 4100 Existing Storefront Door - Ext (Replace) - Q1 2 EA
- 09 2900 GWB Ceilings - Q1 7,976 SF
- 09 5000 Open To Structure - Q1 4,103 SF
- 09 2900 GWB Ceilings - Abuse Resistant - Q1 288 SF

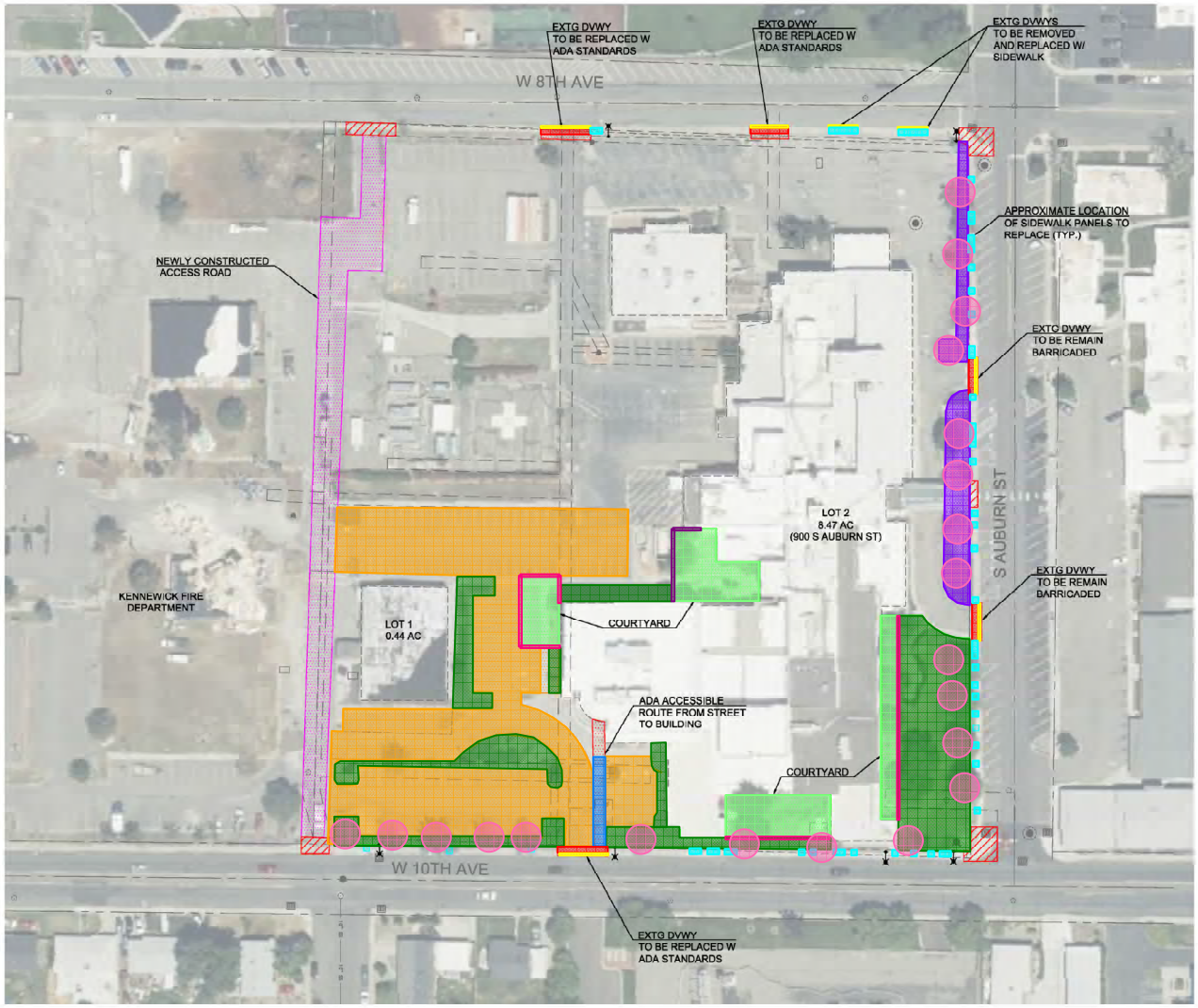


scale 1/16"

Fixed Furnishings

06 4100 New Casework - Q1 129 LF
06 4100 Repair Existing Casework + New Countertops - Q1 250 LF
06 4100 Repair Existing Built-In Wardrobes (Modify) - Q1 89 LF

Site Improvements



- 32 1200 Asphalt Seal Coat - Q1 41,597 SF
- 32 1800 Artificiatl Turf - Q1 11,473 SF
- 32 3100 Fence/Screen - Q1 415 LF
- 32 3100 Fence/Screen (Reuse Existing) - Q1 86 LF
- 32 9000 Landscaping - Q1 24,016 SF
- 32 9000 Aggregate Surfacing - Q1 5,751 SF
- 32 1600 Replace Concrete Drive Apron - Q1 900 SF
- 32 1600 Replace Curb & Gutter - Q1 231 LF
- 32 1600 Replace Concrete Sidewalk - Q1 1,490 SF
- 32 1600 New Concrete Sidewalk - Q1 799 SF
- 32 9000 Street Trees - Q1 21 EA

PBS Engineering and Environmental Inc.
400 Bradley Blvd, Ste 108
Richland, WA 99352
509.942.1600
pbsusa.com

	ADA - UPGRADED - DOES NOT NEED TO BE REPLACED
	ADA - TO BE UPGRADED
	ASPHALT & PARKING AREA (APPROX. 40,000 SF, 99 STALLS)
	LANDSCAPE (APPROX. 27,550 SF)
	ROCK MULCH (APPROX. 5,500 SF)
	SIDEWALK PANELS TO REPLACE (APPROX. 65, 5'x5')
	NEWLY CONSTRUCTED ACCESS RD - DOES NOT NEED UPGRADE
⟷	STREET LIGHTS TO UPGRADE (6)

Scale 1" = 50'
0 25 50 100

THREE RIVERS BEHAVIORAL HEALTH RECOVERY CENTER - KGH PROPERTY

Filename: L:\Projects\6500\6520\6520-000\CIVIL\CAD\Working\Exhibits\ConstructionExhibit_KGH.dwg Layout Tab: 1 User: Amy.Nickelaus CAD Plot Date/Time: 4/16/2024 2:47:03 PM

EXHIBIT M:

PERMIT STRATEGY - PRE-DEV - CITY COMMENTS

SIGN IN SHEET

Time: 11:00 AM TO 11:50 AM
PRE-2024-0018

RECORDER FILE # _____

February 28, 2024
900 S. AUBURN ST.
remodel 43,000 sq ft of the old Kennewick General Hospital
Jill Kurtz (509) 838-8240 jkurtz@nacarchitecture.com

Name Phone Number	*Company or Department*	E-Mail
Anthony Muai 585-4386 Steve Donovan 585-4361 Matt Halitsky 585-4416 Alisha Piper 585-4463 Joseph Laris 585-4558	City of Kennewick Community Planning & Development Services	anthony.muai@ci.kennewick.wa.us steve.donovan@ci.kennewick.wa.us matt.halitsky@ci.kennewick.wa.us alisha.piper@ci.kennewick.wa.us joseph.laris@ci.kennewick.wa.us
Dan Wilson 585-4548 Thomas Woods 585-4281 Tony Ostoja 585-4387 Dan Woolsey 585-44384	City of Kennewick Building Department	dan.wilson@ci.kennewick.wa.us thomas.woods@ci.kennewick.wa.us tony.ostoja@ci.kennewick.wa.us dan.woolsey@ci.kennewick.wa.us
Martin Nelson 585-4306	City of Kennewick Storm Wtr/SW Program Engineer	martin.nelson@ci.kennewick.wa.us
Levi Tipps 585-4481	City of Kennewick Engineering Tech I	levi.tipps@ci.kennewick.wa.us
Kristin Stowe 585-4349	City of Kennewick Development Review Supervisor	kristin.stowe@ci.kennewick.wa.us
Kendrick Glover 585-4464	City of Kennewick Construction Services Manager	kendrick.glover@ci.kennewick.wa.us
Ethan Bishop 585-4426	City of Kennewick Fire Department	ethan.bishop@ci.kennewick.wa.us
Rohana Carmichael 585-4532	City of Kennewick Economic Development	rohana.carmichael@ci.kennewick.wa.us
Kevin Biersner 585-4524 Josh Hazlett 585-4342	City of Kennewick Traffic Department	kevin.biersner@ci.kennewick.wa.us joshua.hazlett@ci.kennewick.wa.us
Jill Kurtz 509 991 9653	NAC Architecture.com	jkurtz@nacarchitecture.com
Amy Nickolaus	PBS	anickolaus@pbsusa.com
Jake Closson	Bouten Construction	jakec@boutenconstruction.com
Justin Griffeth	Bouten Construction	justing@boutenconstruct.on.com
Riley Allen	Benton County	riley.allen@co.benton.wa.us

Pre-Development Meeting with City Department Comments

To: Jill Kurtz, NAC Architecture

From: Steve Donovan, Planning Manager

Date: February 28, 2024

Re: 900 S Auburn Street

Project: Pre Application Review, PRE-2024-0018

The following are applicable Planning Requirements:

- Proposal is subject to the requirements of KMC Chapter 18.21 – Landscaping. Landscaping will be required in areas that are operating
- Proposal is subject to KMC Chapter 18.36 – Off Street Parking.
- No Planning Permits required as long as the building is not expanded.

Building Safety Division
210 West 6th Avenue
Kennewick, WA 99336
Phone: (509) 585-4276
onestop@ci.kennewick.wa.us

Date: 02/28/2024
Subj. PRE-2024-0018

Building Comments
Commercial Alterations

1. All submittals are online.
2. In the submittal, please indicate the planned primary use (occupancy) of the building.
3. All non-residential structures over 4000 square feet in area, or projects that alter the fire and life safety components of the structure require an architectural stamp and signature.
4. All design and construction will comply with the 2018 Washington State Amended International Building Code (IBC), International Mechanical Code (IMC), International Existing Building Code (IEBC),
5. Uniform Plumbing Code (UPC) and the Washington State Energy Code (WSEC).
6. Effective March 15, 2024 the 2021 version of the Washington State Amended Codes will go into effect. All **complete** permit submittals will be vested in the code in effect on the day of submittal.
7. A complete permit package will be require at submittal. This consists of a Commercial Alteration Building permit (BLDC), a commercial plumbing permit (PLBC) and a commercial mechanical (MECC)
8. This project will require the establishment of the required fire separation between the area to be occupied by the Recovery Center and the unoccupied and non- fire sprinkler portions of the structure.
9. Two toilet/shower rooms and the Multipurpose room are not within the confines of the planned fire separation.
10. On the site plan, identify the location of the accessible pathway from the public way to the accessible entrance(s).
11. On the site plan, show the location of the pathway connecting accessible elements on the site.
12. On the site plan, show the location of the accessible parking as close as possible to the accessible entrance(s).
13. If food service business are anticipated, show the location of the grease interceptor.

Tony Ostoja ICC CBO
Building Official
Tony.Ostoja@ci.kennewick.wa.us
(509) 585-4387

The solemn duty of a Building Official, is the protection of health, safety and welfare of the public by creating safe buildings and communities

MEMORANDUM

Fire Department

To: Planning
From: Ethan Bishop, Deputy Fire Marshal
Date: February 28, 2024
Re: We would like to remodel about 43,000 sq ft of the existing old Kennewick General Hospital
Project: PRE-2024-0018

1. Site Plan when submitted should clearly show the following for fire review.

    a. Location of all existing Fire Hydrants.
    b. Location of Proposed Fire Hydrants.
    c. Height of proposed structures.
    d. Square Footage of proposed structures.
    e. Width of Roadways, Drives, Access routes.
    f. Turning radius at all corners for Emergency Vehicles, 24' inside and 44' outside.

2. Civil Plan when submitted should clearly show the following for fire review.

    a. Fire Flow Block for each proposed structure.
    b. Existing Fire Hydrants.
    c. Proposed Fire Hydrants.
    d. Fire Line, PIV, and FDC location.
    e. Turning Radius at corners for Emergency Vehicles, 24' inside and 44' outside.
    f. Outline of proposed Structure, which includes square footage and height.
    g. Outline of drives, access points and paths.
    h. Provide all required information on a page dedicated for review by the Fire Plans Examiner.

3. Addressing of structures shall conform to COK standards. Location and final size (18") to be affixed shall be approved by FD, prior to installation.

4. Emergency vehicle access is required within 150' of all points of the proposed structure.

5. Based on the information provided this project will require the establishment of the required fire separation between the area to be occupied by the Recovery Center and the proposed unoccupied and non-fire sprinklered portions of the structure. All areas of the building regardless of established fire separation areas shall be equipped throughout with an NFPA 72 compliant fire alarm system. The following are additional requirements for the installation of fire sprinkler and fire alarm systems:

    - The Fire Department Connection (FDC) shall be located within 90' of a Fire Hydrant.
    - FDC to be capped with Knox locking caps after flush of underground line, if not already installed.
    - DCVA for the Fire Sprinkler System shall be installed within the Fire Sprinkler Riser Room, and accepted by City of Kennewick Cross Connection specialist.
    - The Sprinkler Riser Room shall be accessible through an exterior door.
    - A Knox Box is required to be installed on structures that are equipped with a fire protection system.
    - Visual and Audible Fire Alarm Notification is required throughout the structure in accordance with KMC 15.30.180

6. Questions on Fire Permits can be found here www.go2kennewick.com/fire

7. Questions can be directed to fireprevention@ci.kennewick.wa.us

Ethan W. Bishop

Captain/Deputy Fire Marshal
509-585-4426
ethan.bishop@ci.kennewick.wa.us

MEMORANDUM

PUBLIC WORKS DEPARTMENT

To: Planning Department

From: Levi Tipps, Public Works Development Review Engineering Technician

Date: February 27, 2024

Re: Public Works Utility Comments

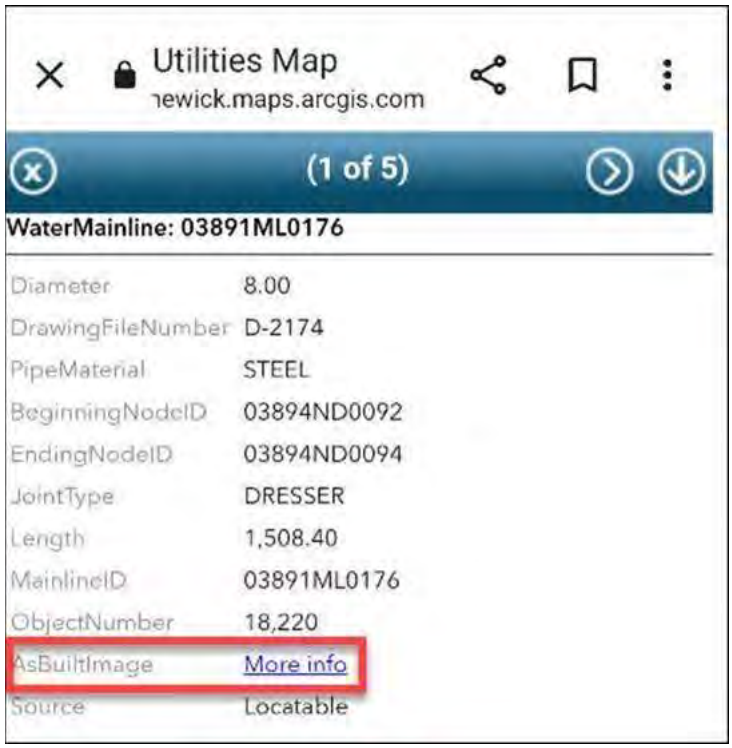
Project: PRE-2024-0018 – 900 S Auburn St

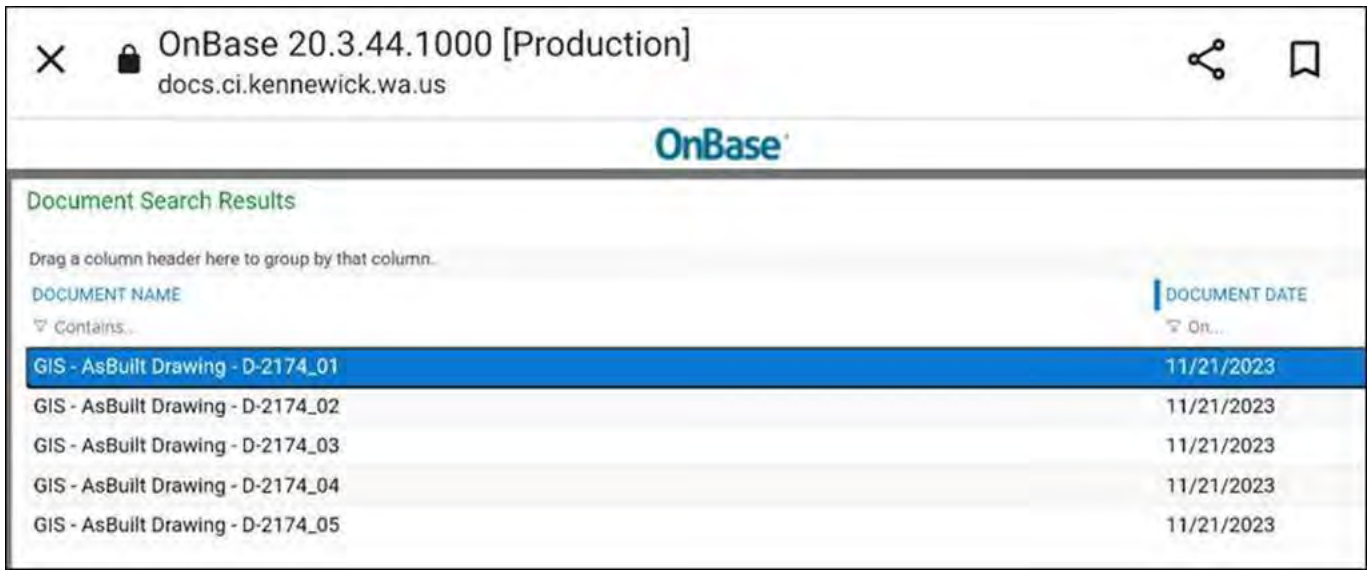
1. The building on site is currently served by existing utilities. Unless there are changes to the utility connections or public mainlines for the proposed interior remodel, Public Works Utility Division has no other comments. Please see the following comments for civil design requirements.
2. Liquid waste containing grease shall be intercepted prior discharge to the public sewer system by the installation and operation of pretreatment facilities. Ensure that there is a pretreatment device in the kitchen or install a grease interceptor. Grease interceptor output shall be 6-inch diameter and connect to a sanitary sewer manhole per Section 3 of the COK Standard Specifications, COK Standard Detail 3-8, KMC14.23.020, together with the Uniform Plumbing Code Section 1014.0. Contact the COK Pretreatment Coordinator, Gina Morgan at Gina.Morgan@ci.kennewick.wa.us, with any questions.
3. City potable water is not available for irrigation purposes unless special permission is given by the Public Works Director. Contact the Kennewick Irrigation District in order to provide irrigation water to irrigate the parcels.
4. There are no known water or sewer service line disconnections from the building.
5. One 3-inch water meter serves the existing building on site from the 12-inch water main located in W 8th Ave. See COK Record Drawing C-2439_03.
6. One 3-inch water meter serves the existing building on site from the 6-inch water main on site stubbed from the main in W 10th Ave. See COK Record Drawing C-2409_02.
7. One 6-inch water meter serves the existing building on site from the 6-inch A.C. water main located in W 10th Ave. No Record Drawing is available.
8. One 6-inch private sewer line serves the existing building on site from the 12-inch sewer main located in W 8th Ave. See COK Record Drawing C-2439_03.
9. One 6-inch private sewer line serves the existing building on site from the 8-inch sewer main on site stubbed from the main in W 10th Ave. See COK Record Drawing C-2395.
10. There is an existing 8-inch sewer main stubbed at the southeast corner of the site. See Record Drawing C-2455.
11. There are two sewer laterals stubbed to the south side of the building from the 8-inch main located in W 10th Ave. No Records Drawing available.
12. The existing private stormwater management system serving the site must meet the Washington State Underground Injection Control Program (Chapter 173-218 WAC). Contact

the Washington State Department of Ecology for details on how to register and maintain the existing infiltration system. If you plan to make modifications to the existing storm system or the type of use of the site, a stormwater design review may be required. If required, you will need to provide a storm design report meeting the City of Kennewick Standard Specifications Section 5-9, the 2019 Stormwater Management Manual for Eastern Washington and Appendix 1 of the 2019 Eastern Washington Phase II Municipal Stormwater Permit. Contact Martin Nelson at 509-585-4306, martin.nelson@ci.kennewick.wa.us for questions.

13. If the Traffic Division requires frontage improvements, there are utility changes, a grease interceptor is proposed, and/or a storm report is required, this site will require a separate DPW permit. You may apply for this by submitting the information below for Civil Plan Review through the City of Kennewick's Citizen Self Service Portal:
    a. PDF copy of the Application for Civil Review and Storm Calculations.
    b. One full size (24"x36") PDF copy of the construction plans.
14. All plans showing existing utilities shall call out the Record Drawing set number that installed the utilities. All plans need to clearly identify the size and type of water/sewer utility that is being proposed or connected to (i.e. "Existing 8-inch Water" or similar). Label private lines "Private".
15. Construct all projects using current City Survey Data. After project completion, Record Drawings showing improvements made on the property will be required prior to acceptance of the construction permit(s). For detailed information on Kennewick Survey Data and Record Drawings go to COK website at https://www.go2kennewick.com/314/Civil-Plan-Review.

The City of Kennewick has added a link to our as-built images in the Utilities Map located on the COK website.





PUBLIC WORKS DEPARTMENT
1010 S. Chemical Drive * PO Box 6108* Kennewick, WA 99336-0108
509-585-4419 * 509-585-4451 Fax

MEMORANDUM

Traffic Engineering Division

To: Steve Donovan, Development Service Manager

From: Joshua Hazlett, Traffic Engineering Tech II

Date: February 27, 2023

Re: Traffic Engineering Comments for 900 S Auburn St

Project: PRE-2024-0018

Project Description

Remodel 43,000SF of the existing, vacant Kennewick General Hospital.

KMC 13.16 Transportation Impact Fees

1. The Transportation Impact Fee (TIF) is a one-time charge for direct impacts caused by the traffic generated from the proposed development and used to pay for transportation projects needed to address said impacts. The TIF amendment on June 5 2018 (effective June 14 2018) created Traffic Impact Fee Districts, which allows fees be remitted to projects congruent with the area where the impact is realized.
2. The 2024 District 3 TIF may be required, dependent on the Final Land Use. Proposed Land Use is a Behavioral Health Recovery Center.
3. TIF assessed at building permit issuance is due prior to Certificate of Occupancy issuance.

Traffic Operations

1. A Trip Generation and Distribution Analysis Letter is required. The proposed development is expected to exceed the trip threshold limits > 30 new peak trips.

Development Level	Trip Generation [a]	Analysis Requirement
Level 1	≤ 30 peak hour trips	None
Level 2	>30 < 100 new peak hour trips	Trip Generation and Distribution Letter
Level 3 [b]	≥ 100 new peak hour trips	Traffic Impact Analysis (TIA) Study

2. COK Traffic Department reserves the right to require a Traffic Impact Analysis after the Trip Generation and Distribution Analysis Letter is submitted.

Proposed Driveway(s)

1. Sightline setback triangles for driveway, per KMC 18.27.060, are required with no view obstruction permitted between 30 inches and 84 inches above the top of curb grade for both sides of the setback triangles.
2. On the site plan, please provide dimensions and details of the driveway entrance. Refer to COK Std. 2-9 for driveway standards.

Right of Way and Easement

1. Please show on site plans the Access Easements for the shared driveway at Canal Drive.
2. Show on Site Plan, all access agreement with 244 W 10th Ave and 302 W 10th Ave.
3. W 8th Ave is dedicated as a Residential Local road, please establish and show on Site plans to 15' Utility, Irrigation and Sidewalk Easement. Combine the current 5' irrigation easement and the 10' Sidewalk, utility easement together for a total 15ft easement.
4. S Auburn St is a private road, please establish and show on Site plans to 10' Utility, Irrigation and Sidewalk Easement.
5. W 10th Ave is a private road, please establish and show on Site plans to 5' Utility, Irrigation and Sidewalk Easement.

American Disability Act (ADA) Compliance

1. All proposed pedestrian facilities within the public right of way and easement, including but not limited to driveways, sidewalks, curb ramps, etc, shall be ADA compliant.
2. Evaluate existing sidewalks (along W 8th Ave, S Auburn St and W 10th Ave) for existing damage and verify if the sidewalks meet current COK standard. See COK Std 2-9 for sidewalk standards and details. Damaged and uncompliant sidewalk panels must be replaced.
3. All Curb Cuts and Transition Ramps are required to be upgraded to Current COK standards. See COK Std 2-9
4. Show all Sidewalks, Curbs, Pedestrian Transition Ramps and Driveways dimensions on all submitted plans.

Street lighting

1. The Street Light Luminaire Head fronting the property on W 8th Ave, S Auburn St. and W 10th Ave. are required to be upgraded to current COK Standards, see COK Std. 6-2 for street light requirements. Please call out upgrade on site plan.

13.0 Exhibits: N-W

N	Envelope Existing conditions Report Plans
O	Electrical Switchgear Report
P	Plumbing Existing Conditions Report
Q	A3 - Existing Building & Site Selection
R	A3 - Pre-validation - Program & Budget Alignment
S	Auburn - Civil Site Exhibit
T	Bruneau - Civil Site Exhibits
U	Electrical One-Line Diagrams
V	Master Plans
W	Phase 1 Level 1 Floor Plan

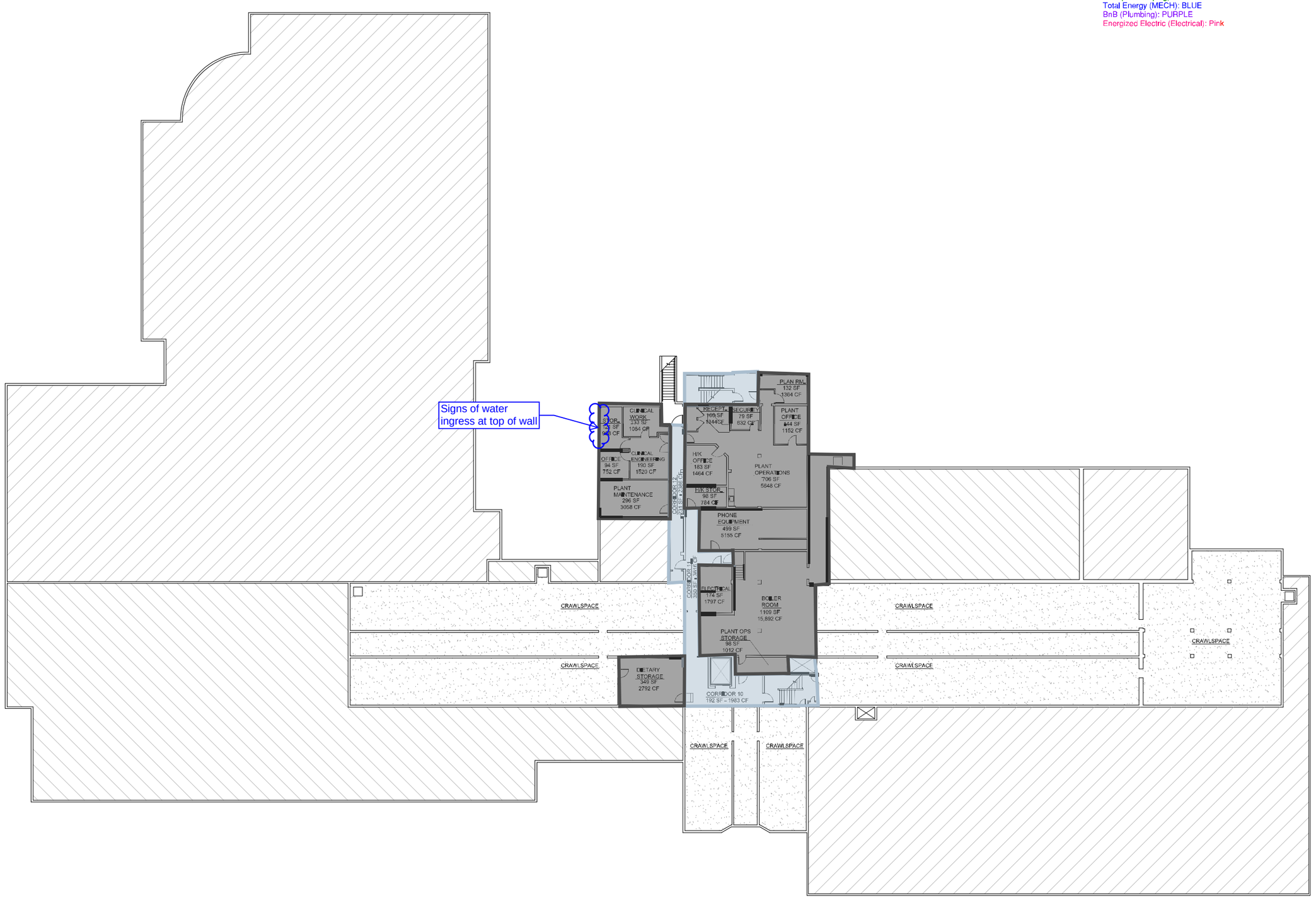
EXHIBIT N:
ENVELOPE EXISTING CONDITIONS REPORT PLANS

29573.000 - CV Center for Recovery BECA - Appendix A

PHASE #1 CONSTUCTION
LAYOUT OPTION #1

MARKUP COLOR HEY:

NAC (Architecture): RED
Bouten (GC Comments): BROWN
Coffman (Structural): DARK GREY
PBS (Landscaping): GREEN
Total Energy (MECH): BLUE
BnB (Plumbing): PURPLE
Energized Electric (Electrical): Pink



BASEMENT ROOM AREA PLAN
1/16" = 1'-0"

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KENNEWICK GENERAL HOSPITAL
ROOM AREA PLAN
900 SOUTH AUBURN ST | KENNEWICK, WA

BASEMENT ROOM AREA PLAN

CAD FILE: 0213DaA104_FPA.dwg
DESIGNED: LTL
DRAWN: LTL
CHECKED:
DATE: 2013.APR.09
REVISION:

DRAWING: A4.1

12-13D

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PHASE #1 CONSTUCTION LAYOUT OPTION #1

MARKUP COLOR HEY:

NAC (Architecture): RED
Bouten (GC Comments): BROWN
Coffman (Structural): DARK GREY
PBS (Landscaping): GREEN
Total Energy (MECH): BLUE
BnB (Plumbing): PURPLE
Energized Electric (Electrical): Pink

Utility X-Former 500kva 277/480V

Utility X-Former 120/208V

MDP-1 2000A 120/208V

MDP 800A 277/480V

Gen 1

Gen 2 - Feeds the Spalding Building

Gen 3

IS building 200A space enclosure

Existing 480V service is under sized

- EM Power should be an add alternate

Verizon single phase transformer

This building is well suited for out patient services

Existing Spalding Building Service. Utility X-Former 300kva. 800A 277/480V.

Existing Verizon Service for rooftop repeaters. 200A 120/240V.

Need a location for the new central energy plant.

Exterior Opening #7 made through EIFS at the base of wall. High moisture content of EIFS insulation. Low moisture content of sheathing and no organic growth.

Damaged EIFS at base of wall

Sheathing visible at base of EIFS. No air barrier connection between EIFS and concrete. (TYP)

Two coat stucco over concrete columns. Stucco cracking and flacking off concrete.

EIFS extends below the exterior grade

EIFS extends below the exterior concrete sidewalk

Conduits and boxes are set into EIFS and not sealed around EIFS. Staining around EIFS

Water draining out of side of scupper and staining EIFS

Signs of leak at ceiling

Damaged EIFS at side wall

Courtyard can be used by Adult inpatients who are free to come and go.

Staining at underside of soffit

Crack in EIFS at base of window corner

Elevated moisture readings at base of EIFS

EIFS extends down directly against sidewalk

Failed inside corner sealant joint

Concrete sidewalk is placed against EIFS

Damage to EIFS

Area easily carved out for courtyard for youth program.

Staining/streaking down from soffit interface above

Exterior Opening #4 made through EIFS at the base of wall where the finish is damaged. High moisture content of sheathing and localized organic growth.

Alum storefront glazing w/door

Expansion joint does not include a base of wall air seal.

Exterior Opening #3 made through EIFS at the base of wall. Low moisture content of sheathing and no organic growth.

Exterior Opening #5 made through EIFS at the base of wall where a crack is located below a window. Organic growth and deterioration noted on the sheathing and corrosion on fasteners.

Cracks at base of window corners in EIFS

Exterior Opening #2 made through EIFS at the base of wall adjacent to a window. No organic growth and low moisture content of sheathing.

Exterior opening #1 made through the exterior EIFS at the crack in the EIFS below the window sill. Sheathing is also cracked and there is a high moisture content in sheathing and staining and organic growth.

Elevated moisture readings at base of EIFS

Opening #2 made at interior drywall at base of wall. No visible signs of moisture

Opening #3 made at interior drywall at base of wall. Moisture at sill track and bottom of exterior sheathing

Opening #1 made at interior drywall at base of wall and under window. Moisture at sill track and bottom of exterior sheathing. Below window is dry but shows staining and signs of previous water ingress

Large crack at base of window sill in EIFS and above window

Large crack at base of window sill in EIFS

Large crack at base of window sill in EIFS and above window to parapet

Heavily corroded base of wall flashing

Elevated moisture readings at base of EIFS

Window uncovered for review, incomplete exterior sealant at jambs

Window uncovered for review

Large cracks in EIFS below windows

This area would be new conduction of a secure drive through entry

This area can be back of house transport for residents & staff.

Existing utility transformer. Researching today. 1-8-24

This could be an alternative location for the secure entry. However, this is an ideal spot secondary entry for another program in the future. (homeless housing). It is also preferable to keep the secure entry on the of house side of the building.

SECURE STAFF PARKING

SECURE ENTRY INTAKE

1,854.8 sf

SHELL

16,717.08 sf

SHELL

61,224.55 sf

SHELL

907.87 sf

SURGERY

FAMILY BIRTHING

ADMINISTRATION

LABORATORY

PUBLIC ENTRY/ DISCHARGE

23-HOUR OBSERVATION

COURTYARD RESIDENTIAL INPATIENT USE

STAFF ENTRY

STAFF LOCKERS

KITCHEN

MAIN ENTRANCE

AMBULANCE ENTRANCE

BLDG #1

BLDG #2

MAIN FL PLAN

1/16" = 1'-0"

FIRST FLOOR ROOM AREA PLAN

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DRAWN: LTL
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DATE: 2013.APR.09

DRAWING: A1.1

02-13D

29573.000 - CV Center for Recovery BECA - Appendix A

PHASE #1 CONSTUCTION
LAYOUT OPTION #1

Crack at inside corner of EIFS

Failing EIFS and organic growth on parapet

Crack in canopy glazing

EIFS parapet. Lamina showing and organic growth forming.

Signs of previous plant growth up side of EIFS, damage to surface.

Crack at inside corner of EIFS

Previous signs of water at top of window and down window frame.

In soffit staining on back of sheathing view from the interior

Crack in EIFS at base of louver opening

MECHANICAL PENTHOUSE

MECHANICAL PENTHOUSE

COURTYARD

OPEN AIR BELOW

In patient courtyard use with access to courtyard below

OCC. 'B'
OCC. 'E-2'

14 SINGLE TLT/SHWR

Alum storefront windows

Limited ceiling space. Fitting the duct and piping will be challenging.

Opening #8 at interior drywall below window. Minor rust observed at screws below sill

RESIDENTIAL INPATIENT

EVALUATION & TREATMENT/ SECURE WM

Exterior Opening #6 through EIFS at base of wall. No signs of damage or organic growth. Low moisture content of sheathing.

Failed sealant at expansion joint to EIFS transition

BLDG # 1

BLDG # 2

Holes in EIFS and mechanical penetrations stuffed with insulation only

Failed sealant joint

Concrete

EIFS

Plenty of ceiling space in this long as the existing water pipe mains don't conflict with the new ducting they can be reused.

Failed sealant joint

Vertical cracking in concrete above and below window jamb

Horizontal cracking in concrete between windows and parapet

CRISIS STABILIZATION/ SUB ACUTE WM

Opening #4 & #5 at interior drywall below windows. Staining observed at interior side of sheathing and at sill track below

Opening #6 at interior drywall below window. Minor staining observed at interior side of sheathing

Opening #7 at interior drywall below window. Minor staining observed at interior side of sheathing

UNASSIGNED

This area will be built out with the second level not shelled. a full bubble diagramming exercise will define its use.

Plenty of ceiling space in this wing. As long as the existing water pipe mains don't conflict with the new ducting they can be reused.

SECOND FLOOR FIRE ALARM PLAN

1/16" = 1'-0"

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KENNEWICK GENERAL HOSPITAL
ROOM AREA PLAN
900 SOUTH AUBURN ST | KENNEWICK, WA

SECOND FLOOR ROOM AREA PLAN

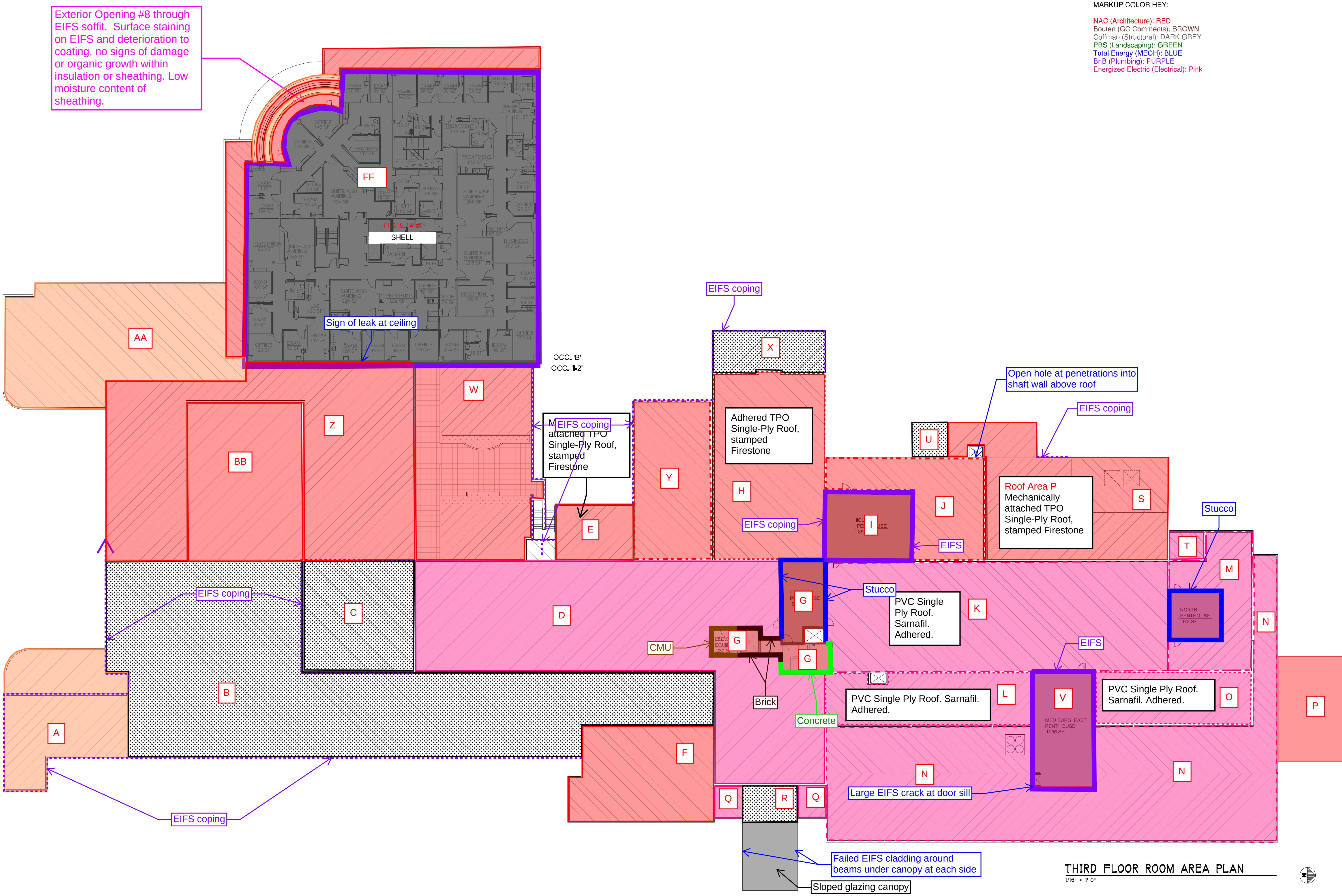
CAD FILE: 0213DaA102_FPA.dwg
DESIGNED: LTL
DRAWN: LTL
CHECKED:
DATE: 2013.APR.09
REVISION:

DRAWING: **A2.1**

02-13D

29573.000 - CV Center for Recovery BECA - Appendix A

PHASE #1 CONSTUCTION LAYOUT OPTION #1


Exterior Opening #8 through EIFS soffit. Surface staining on EIFS and deterioration to coating, no signs of damage or organic growth within insulation or sheathing. Low moisture content of sheathing.
FF
11,315.14 sf
SHELL
Sign of leak at ceiling
AA
OCC. 'B'
OCC. 'I-2'
W
Z
BB
EIFS coping
Adhered TPO Single-Ply Roof, stamped Firestone
X
Open hole at penetrations into shaft wall above roof
EIFS coping
U
Mechanically attached TPO Single-Ply Roof, stamped Firestone
Y
H
E
EIFS coping
I
J
Roof Area P Mechanically attached TPO Single-Ply Roof, stamped Firestone
S
EIFS
Stucco
T
M
EIFS coping
C
D
G
Stucco
PVC Single Ply Roof. Sarnafil. Adhered.
K
CMU
G
G
N
EIFS
B
Brick
Concrete
PVC Single Ply Roof. Sarnafil. Adhered.
L
V
PVC Single Ply Roof. Sarnafil. Adhered.
O
P
A
F
N
N
Large EIFS crack at door sill
Q
R
Q
EIFS coping
Failed EIFS cladding around beams under canopy at each side
Sloped glazing canopy
THIRD FLOOR ROOM AREA PLAN
1/16" = 1'-0"

MARKUP COLOR HEY:

NAC (Architecture): RED
Bouten (GC Comments): BROWN
Coffman (Structural): DARK GREY
PBS (Landscaping): GREEN
Total Energy (MECH): BLUE
BnB (Plumbing): PURPLE
Energized Electric (Electrical): Pink

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KENNEWICK GENERAL HOSPITAL
ROOM AREA PLAN
900 SOUTH AUBURN ST | KENNEWICK, WA

THIRD FLOOR ROOM AREA PLAN

CAD FILE: 0213DaA103_FPA.dwg
DESIGNED: LTL
DRAWN: LTL
CHECKED:
DATE: 2013.APR.09
REVISION:
DRAWING: A3.1
02-13D

29573.000 - CV Center for Recovery BECA - Appendix B

PHASE #1 CONSTUCTION LAYOUT OPTION #1

MARKUP COLOR HEY:

NAC (Architecture): RED
Bouten (GC Comments): BROWN
Coffman (Structural): DARK GREY
PBS (Landscaping): GREEN
Total Energy (MECH): BLUE
BnB (Plumbing): PURPLE
Energized Electric (Electrical): Pink

Roof Area EE
Terrace levels 2 and 3 Single-Ply Roof, stamped Firestone 09/93 w/ outer coated metal liner planter area.

Roof Area DD
Mechanically attached Single-Ply Roof

Mechanically attached Single-Ply Roof, stamped Firestone 06/02

Roof Area CC
Mechanically attached Single-Ply Roof.

FF

11,515.14 sf

SHELL

Roof Area W
Mechanically attached Single-Ply Roof @ open areas w/ paver covered walk pathways. Single-ply overlay @ planter boxes, stamped Firestone 03/93

Roof Area Y
Mechanically attached TPO Single-Ply Roof, stamped Firestone 06/96

Roof Area X
BUR Roof

Roof Area I
Mechanically attached TPO Single-Ply Roof, stamped Firestone

Roof Area J
Mechanically attached TPO Single-Ply Roof, stamped Firestone

Roof Area U
BUR Roof

Roof Area T
PVC Single Ply Roof. Sarnafil. Adhered.

Roof Area M
PVC Single Ply Roof. Adhered.

Roof Area P
Mechanically attached TPO Single-Ply Roof, stamped Firestone

Mechanically attached Tan Thermoplastic single-ply Roof

AA

OCC. 'B'
OCC. 'E2'

W

EO3

Z

BB

Mechanically attached Single-Ply Roof, stamped Firestone 03/93

Mechanically attached Single-Ply Roof, stamped Firestone 09/93

EO4

Mechanically attached TPO Single-Ply Roof, stamped Firestone

E

Y

Adhered TPO Single-Ply Roof, stamped Firestone

H

EO6

X

U

I

J

S

T

M

N

P

BUR Roof

C

BUR Roof

PVC Single Ply Roof. Sarnafil. Adhered.

D

EO2

G

PVC Single Ply Roof. Sarnafil. Adhered.

K

EO5

NORTH PENTHOUSE 372 SF

Mechanically attached Tan Thermoplastic single-ply Roof

B

EO1

A

L

V

MED SURG EAST PENTHOUSE 1059 SF

PVC Single Ply Roof. Sarnafil. Adhered.

O

Roof Area V
PVC Single Ply Roof. Sarnafil. Mechanically attached.

Mechanically attached TPO Single-Ply Roof, stamped Firestone 06/96

F

Q

R

Q

N

N

PVC Single Ply Roof. Sarnafil. Mechanically attached.

Roof Area Q
PVC Single Ply Roof. Sarnafil. Mechanically attached.

Roof Area R
BUR Roof

Sloped glazing canopy

THIRD FLOOR ROOM AREA PLAN
1/16" = 1'-0"

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KENNEWICK GENERAL HOSPITAL
ROOM AREA PLAN
900 SOUTH AUBURN ST | KENNEWICK, WA

THIRD FLOOR ROOM AREA PLAN

CAD FILE: 0213DaA103_FPA.dwg
DESIGNED: LTL
DRAWN: LTL
CHECKED:
DATE: 2013.APR.09
REVISION:

DRAWING: A3.1

02-13D

EXHIBIT O:
ELECTRICAL SWITCHGEAR REPORT

Site Observation Existing Switchgear Report

Equipment Name	Location	Voltage	Ampacity	Visual Inspection	Year of Equipment	Manufacturer	Catalog #	Serial #	Functional Testing	Breaker or Fuse	Voltage Reading	Current Load Capacity
MDP-1	Energy Plant	277/480v	800A	Good / Dirty	1988?	Square D	0130285-C	MA36800	N/A	Breakers	Pass	800A available
PDP-1	Energy Plant	277/480v	800A	Bad / Dirty /Rusty	70's?	GE	CMR365		N/A	Fused	Pass	800A available
MDP-2A	Energy Plant	120/208v	2000A	Good / Dirty	1988	Square D	PEC2036LIG		GFI Tested in 1987	Breakers	Pass	None
MDP-2B	Elec Rm 2	120/208v	2000A	Good / Dirty	N/A	Square D	0130285-D		N/A	Breakers	Pass	TBD
PDP-4	CEP	277/480v	1200A	Good / Dirty	1994	Cutler Hammer	KB412B	LF4430310-A	GFI Tested in 1994	Fused	Pass	TBD
DATS-8	Elec Rm 2	120/208v	800A	Good	2006	Cummins	0TPCD-55499	A020323363	N/A	Breaker	Pass	TBD
PDP-3	Basement	277/480v	225A	Good	N/A	Square D	NEHB4MW		N/A	Breaker	Pass	225A
PDP-2	Basement	277/480v	600A	Old / Dirty	N/A	GE				Fused	Pass	TBD
2E15A	Exterior Rm	120/208v	225A	Great	2009	Square D	NQ		N/A	Breakers	Pass	TBD
2E15B	Exterior Rm	120/208v	225A	Great	2009	Square D	NQ		N/A	Breakers	Pass	TBD

Equipment Name	Wire Visual Inspection	Grounding Integrity	Environmental Conditions	Compliance with NEC	Maintenance History	Recommendations/Actions Required
MDP-1	Good - No cracks	Yes	Outside on Pad	Yes	N/A	Clean out
PDP-1	Good - No cracks	Corrosion	Outside on Pad	Yes	N/A	Demo/remove only feeding a 30A trash compator
MDP-2A	Good - No cracks	Yes	Outside on Pad	TBD	N/A	Needs a new GFCI test
MDP-2B	Good 2006	Yes	Inside	Yes	N/A	Needs cleaned
PDP-4	Good 1994	Yes	Outside on Pad	TBD	N/A	Needs a new GFCI test
DATS-8	Needs replaced	Yes	Inside	Yes	N/A	Wire bend radius exceeded & damaged
PDP-3	Good	Yes	Inside	Yes	N/A	Could use this as our lighting panel
PDP-2	N/A	N/A	Inside	Yes	N/A	Could use this for Mech equipment
0						
2E15A	Good 2009	Yes	Inside	Yes	N/A	Clean
2E15B	Good 2009	Yes	Inside	Yes	N/A	Clean
0						

EXHIBIT P:
PLUMBING EXISTING CONDITIONS REPORT

Spalding building is steam mechanically, new hot water boilers would tie into existing system in place

Fire alarm maybe able to remain in existing area we are not touching

- 1940's (date unknown)
- 1959/1960's - Pediatric Addition
- 1967 - Hospital Addition
- 1984 - Addition
- 1986 - Addition / Reno.
- 1992 - Medical Office & Hospital Addition
- 1996 - District Office Addition
- 1998 - Acute Care Addition + 1st Floor Shelled Space
- 1999 - 1st Floor Build-Out + Canopy
- unknown date - 2nd Level Addition

22

main electrical room

Green is shown as existing on 1987 drawing. 6" main. Did not see any indications of cleanouts on this run.

Could not scope drains in this area. Clean out plugs could not be removed.

Parallel run shown on 1987 drawing of 4".

Could not scope drains in this area. Clean out plugs could not be removed. Not sure if this is the 1940's line or 1983.

Rough estimate of sewer main. Blue is from the 87 and 93 remodel.

26
25
23
24
1
2
3
4
5
6
14
13
12
11
10
9
8
7

Could not scope drains in this area. Clean out plugs could not be removed.

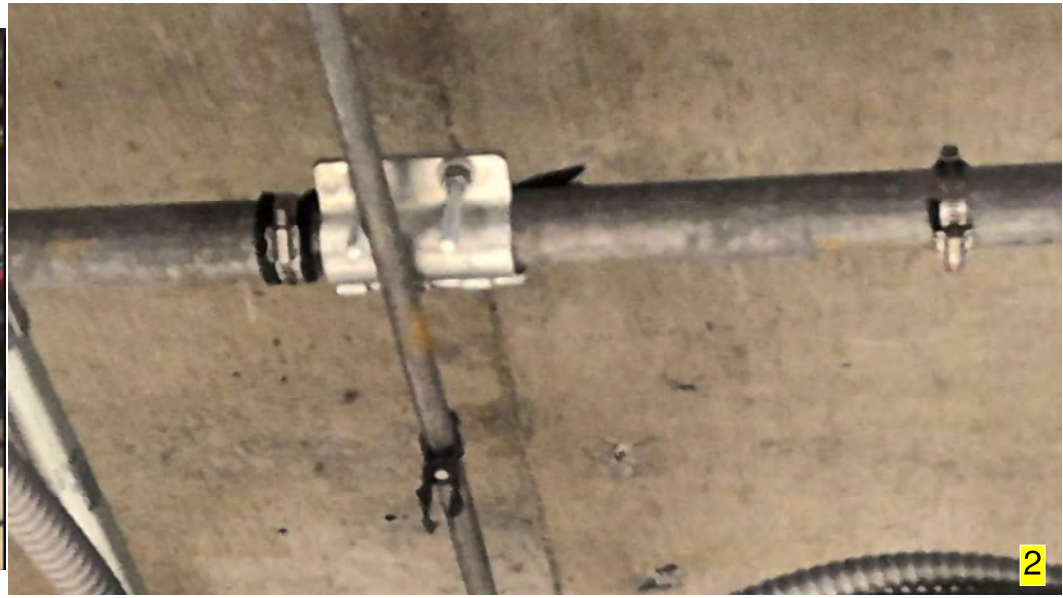
This is the only area we were able to scope sewer. Sewer depth in this area roughly 8'-0" Below Finish Floor.

Columns + exterior walls were built in 1998 and shelled. Full interior build-out was in 1999


1940's (date unknown)
1959/1960's - Pediatric Addition
1967 - Hospital Addition
1984 - Addition
1986 - Addition / Reno.
1992 - Medical Office & Hospital Addition
1996 - District Office Addition
1998 - Acute Care Addition + 1st Floor Shelled Space
1999 - 1st Floor Build-Out + Canopy
unknown date - 2nd Level Addition
16, 17
ECH
thouse
18
19, 20, 21, 22

Photo #	Description
1	Galvanized pipe used for main water line. No longer industry standard. Typical material is pex or copper.
2	Patches on galvanized water line. Water line is failing. Recommend changing all galvanized water line out to new material.
3	Patches on galvanized water line. Water line is failing. Recommend changing all galvanized water line out to new material.
4	Dissimilar metals, no isolator causing electrolysis. Failure point in pipe.
5	Dissimilar metals causing electrolysis. Failure point in pipe.
6	Patches on galvanized water line. Water line is failing. Recommend changing all galvanized water line out to new material.
7	Old Galvanized piped into cast iron drain line. Dissimilar material causing pipe to breakdown.
8	Hydronic piping is leaking. Black iron pipe is breaking down do to improper use of treated water. Not recommend for use.
9	Dissimilar metals causing electrolysis. Failure point in pipe.
10	Dissimilar metals causing electrolysis. Failure point in pipe.
11	Dissimilar metals causing electrolysis. Failure point in pipe.
12	Dissimilar metals causing electrolysis. Failure point in pipe.
13	Dissimilar metals causing electrolysis. Failure point in pipe.
14	Dissimilar metals causing electrolysis. Failure point in pipe.
15	Dissimilar metals causing electrolysis. Failure point in pipe.
16	Picture of a hydronic line showing corrosion and breaking down from inside of pipe. Internal pipe has been exposed to the elements.
17	Old aged equipment that is breaking down and piping connected to this equipment. All should be replaced. Past its life expectancy.
18	Old aged equipment that is breaking down and piping connected to this equipment. All should be replaced. Past its life expectancy.
19	Old aged equipment that is breaking down and piping connected to this equipment. All should be replaced. Past its life expectancy.
20	Existing steam generator indicating the age of the equipment, past its life expectancy.
21	Leaking pipe and causing corrosion. Needs replaced.
22	Dissimilar metals causing electrolysis. Failure point in pipe.
23	Broken black pipe of hydronic system. Shows corrosion and failure of pipe.
24	Dissimilar metals and old waste lines that needs replaced.
25	Dissimilar metals and old waste lines that needs replaced.


OXYGEN
1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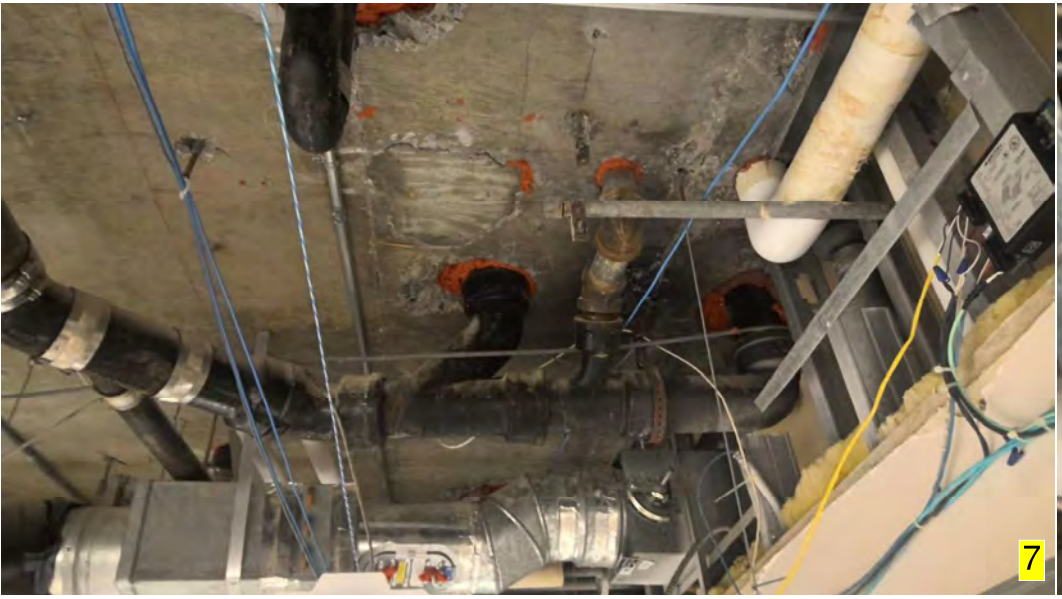
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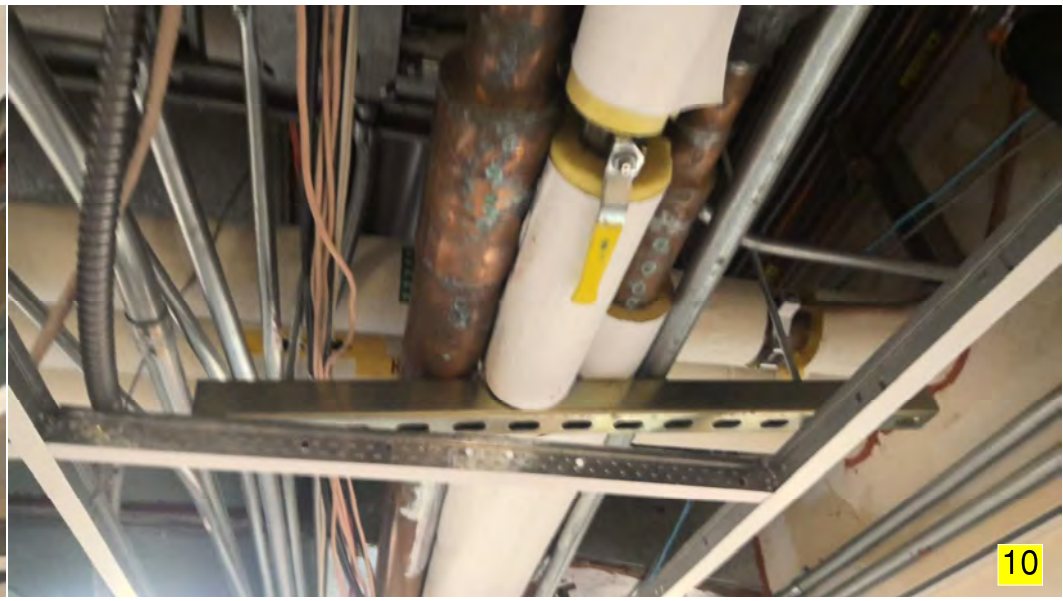
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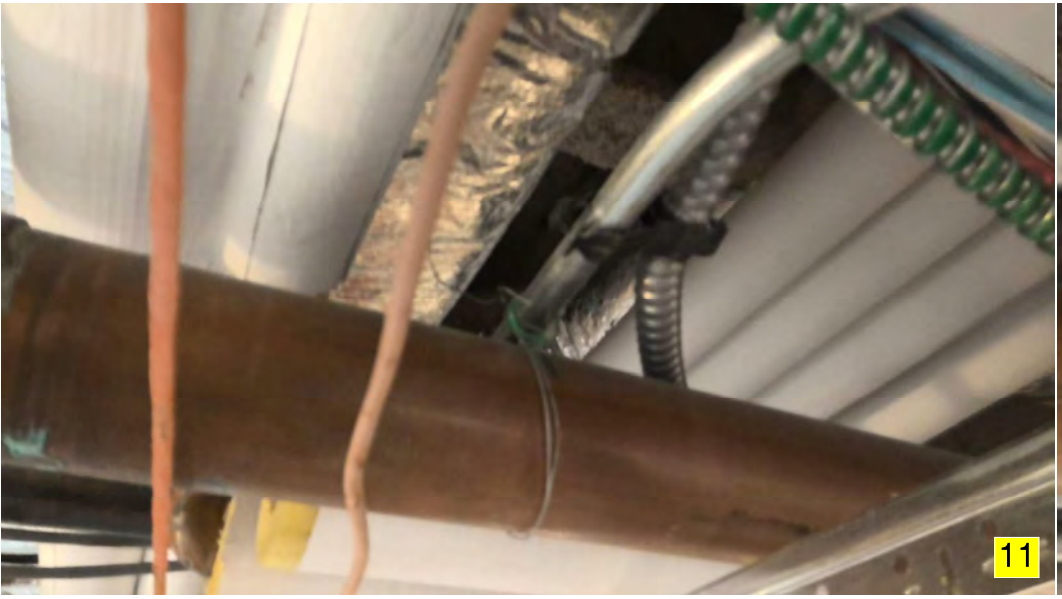
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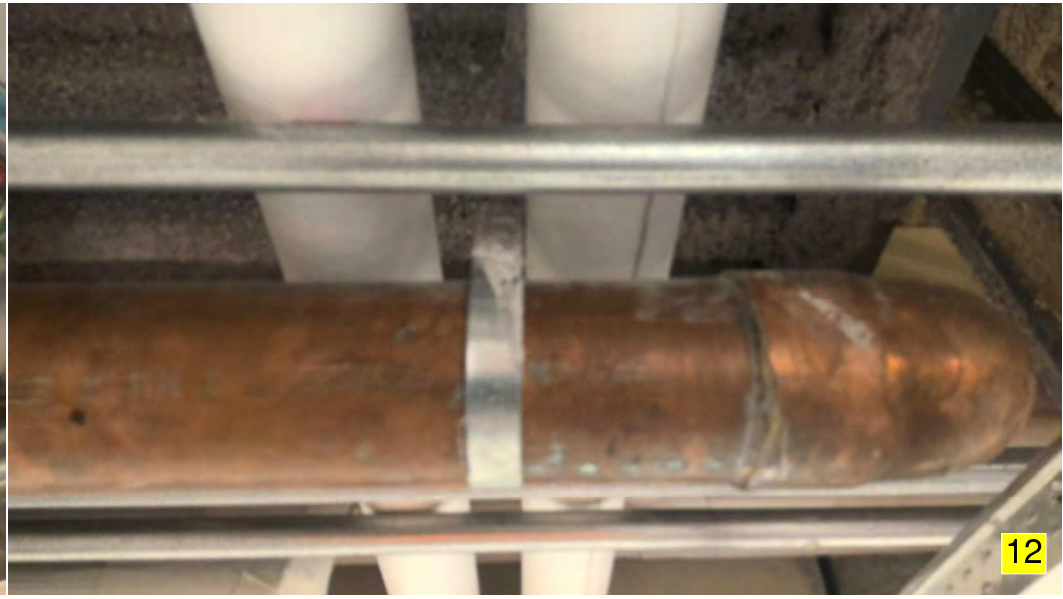
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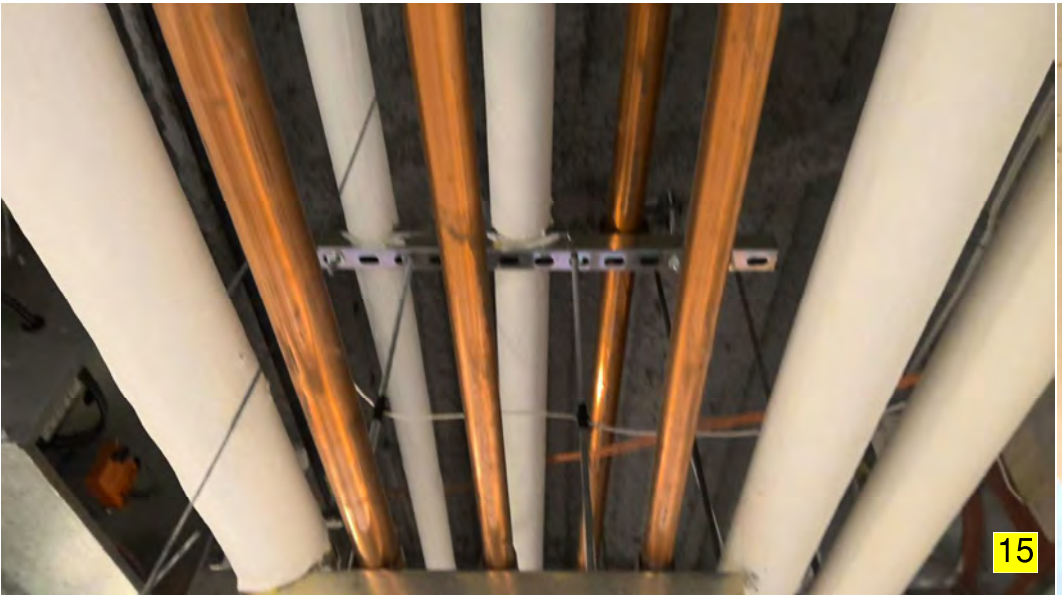
13


14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17


18


19

20


21


22


HEATING RETURN
23


24


25

EXHIBIT Q:
A3 - EXISTING BUILDING & SITE SELECTION

Columbia Valley Center for Recovery
Benton County

CHOOSING BY ADVANTAGES - EXISTING BUILDING & SITE SELECTION
December 22, 2023 REV 3

BACKGROUND:
Bouten Construction has been retained by Benton County as the progressive design-builder (PDB) for the Columbia Valley Center for Recovery, a project that will consist of multiple sites and program components.

This behavioral health facility will provide both medical withdrawal management services and inpatient residential substance use disorder treatment for persons with and without co-occurring mental health issues.

The sites selected for possible renovation are located at 10 E. Bruneau Ave. and/or 900 S. Auburn St., both in Kennewick. At the Bruneau site is an existing 20,000 SF warehouse that would be repurposed into a two-story, 40,000 SF facility. Site work would include all utilities, parking lot, landscaping, lighting, and access. The Auburn site would include the build-out of a residential treatment facility using 40,000 SF of the existing hospital, with some renovation of the parking lot and entrance if budget allows. Both sites contain hazardous materials and will be further evaluated.

OBJECTIVE:
Utilize the Progressive Design Build delivery method to identify the best value solution for the Behavioral Health Facility for Benton County. The PDB team has been tasked to review two sites to identify and optimize the programing that can be located at one or both sites.

This A3 outlines several criteria and options to identify the best fit solution. Not all criteria or options have been identified herein and further investigation will occur during the validation phase.

CRITERIA:

2021 IBC
2021 WA amendments (WAC 51-50)
- 308.3.3
RTF WAC 246-337
2009 Ansi A117.1-09
2021 WSEC

2018 Mechanical Code
2018 Fuel & Gas code
2018 Plumbing Code
2018 Sprinkler – NFPA 13
2018 Electrical NFPA 70
WAC 246-338 Generator if used

Chapter 18 - Zoning Ordinance of the City of Kennewick

Health Care Authority Requirements

ANALYSIS

EXISTING BUILDING & SITE SELECTION OPTIONS	CONDITIONS OF SATISFACTIONS	PROGRAM REQUIREMENTS & MASTER PLAN READY (Assumes deed restriction is addressed through operational planning)	SCHEDULE DURATION (Approximate)	CONSTRUCTION REQUIREMENTS & OCCUPANCY TYPE	MECHANICAL AND ELECTRICAL SYSTEM IMPACTS	STRUCTURAL IMPACTS	SITE/ CIVIL IMPACTS	ABATEMENT/ REMEDIATION IMPACT	COST MODELING *(first construction costs)*	PERMITTING & AHJ
OPTION 1: **Bruneau Facility** 	**BETTER** - A project the entire COMMUNITY can be PROUD of. - An environment of peaceful SUPPORT and RECOVERY. - A facility that serves as a MODEL for others to EMULATE. - An EXEMPLARY progressive design-build PROCESS.	**BEST** **PROGRAM REQUIREMENTS:** - 23 Hour Observation - Crisis Stabil/Sub Acute WM - Secure WM / E&T - Residential Inpatient - Reference programming information received from Benton County per memo dated 12/11/2023 **MASTER PLAN READINESS:** - No restrictions on program / use. - Limited space for future development - Disruption to neighboring tenants	**BETTER** **Design:** Schematic Design - 6 weeks Design Develop - 8 weeks Construction Documents - 10 weeks Total: 24 weeks ~ 6 months Shortest design duration since existing building is a blank slate **Construction:** 15 Month duration Potentially for a shorter schedule duration (dependent on extent of required structural/utility upgrades, utilities and MEPF with neighboring tenants) Overall duration - 21 months	**BETTER** **CONSTRUCTION REQUIREMENTS:** - 20,000 sf addition needed to accommodate program. - 2-hr fire wall at adjacent building & where building is on the property line needs to be added and extended 30" above roof. - Significant code required structural upgrades (See structural impacts) - Significant Site & Utility upgrades (See Site / Civil Impacts) **OCCUPANCY TYPE:** -Occupancy type Group I-1 Condition 2 - IIB Construction type - Non combustible construction, no need to fireproof structural frame, floors or roof. - Allowable floor area: 30,000 sf/floor in fully sprinklered building.	**BETTER** - Currently no existing MEP systems - All new MEPF systems needed - Design to include utility connections - Design per new energy code - Limited flexibility due to existing structure, envelope and roof assembly	**GOOD** - Assumes no need for immediate structural upgrades. - Newer area of building comprised of structural steel/SOMD has potential to avoid major structural upgrades and provide the most design flexibility without much rework overall - Noticed several areas where concrete beams or decks may be compromised. and will need to be extensively analyzed/reviewed - Potential of unknown structural conditions and surprises buried within the building.	**GOOD** - Unknown utilities and viability – upgrading to allow for 40+ units/bathrooms may pose significant cost/schedule impacts - Access issues - Parking issues - Limited space available for future development and programs - Potential to uncover impacted soils while upgrading underground infrastructure - Water and Sewer Easement needed - 10' apart. Sewer line 30" dia and 20' deep. - Parcel C does not front a roadway - Alder is an alley. Alley also to the North. - Site improvements are under discussion - Is the Car wash site an option for purchase to allow for Bruneau access in the event the alleyways are not feasible or allowable?" Benton County would not like to explore this option. - County to determine if owner's to north and owner to south are willing to have Benton County dedicate per city access requirements. This will require easements, relocation of overhead power, street, and curb upgrades." Benton County would not like to explore this option.	**BETTER** - See abatement report for details - Abatement to include caulking, fibrous material on the floors, - Black mastic on the plastic panels and cork boards - Roof membrane - Lead paint, flourescent lights, ballasts with PCB's	**BETTER** **Design-Build Cost:** ROM $25.8MM - $33MM **Design Cost:** High due to structural, envelope and MEP **Construction Cost:** High **Owner Soft Cost:** TBD	**BETTER** **City:** - Pre-application Review - Considerable site and access needs with Bruneau **Fire Marshall:** - Pre-application Review - Site walkthrough prior to permitting - Need to determine how to handle fire speration and access with existing adjacent buildings **DOH:** Requires DOH approval and functional plan (all options / sites same)
OPTION 2: **Bruneau plus Auburn**  	**GOOD** - A project the entire COMMUNITY can be PROUD of. - An environment of peaceful SUPPORT and RECOVERY. - A facility that serves as a MODEL for others to EMULATE. - An EXEMPLARY progressive design-build PROCESS.	**BETTER** **Programs at Bruneau:** - 23 Hour Observation - Crisis Stabil/Sub Acute WM - Secure WM / E&T **Program at Auburn:** - Residential Inpatient - Reference programming information received from Benton County per memo dated 12/11/2023 **MASTER PLAN READINESS:** **Bruneau:** - Would have room for added services (current program split between Auburn and Bruneau). - No restrictions on program / use. - Disruption to neighboring tenants **Auburn:** - Would have room for added services and possible infrastructure ready for added services and expansion of services. - No neighboring tenants. - Current deed restriction limits program use.	**GOOD** **Design:** Schematic Design - 9 Weeks Design Develop - 10 Weeks Construction Documents - 16 Weeks Total: 35 weeks ~ 8 months Longest design duration due to: -As-building and working within an existing facility -Two separate buildings require separate design documents, added work and cost **Construction:** 18 month duration Both sites would be built concurrently, phased starts / finish Overall duration - 26 months (longest duration)	**GOOD** **CONSTRUCTION REQUIREMENTS:** **Bruneau:** - See above description in Option 01 **Auburn:** - Separation of occupied / unoccupied areas w/ 1-hour fire barrier may not align with existing rated walls. - Occupied areas need independent circulation & exiting from unoccupied areas. This may require including additional space in the occupied side to use existing exit paths and stairways. - Building needs active fire sprinkler system, including unoccupied areas. - All walls, rated or non-rated, must be stripped down to bear studs to rework MEPF and bring back up within code compliance (all visible rated assemblies were compromised if not destroyed above ceiling height) - All doors and hardware removed and replaced to meet current applicable code and facility demand/occupancy requirements - Window replacement - Exterior skin update and rework - Roofing replacement **OCCUPANCY TYPE:** **Bruneau:** - IIB Construction type - Non combustible construction, no need to fireproof structural frame, floors or roof **Auburn:** - Assumed type 1A - Non combustible construction, fireproofed structure & floors, and roof. Unlimited building area - Newer portions of the building suite I-1 occupancy.	**GOOD** **Bruneau:** - Currently no existing MEP systems - All new MEPF systems needed - Design to include utility connections - Design per new energy code **Auburn:** - Assessment of existing with the understanding 90% of the system and components will need to be upgraded. - Vandalism may require full gut of MEPF systems. - Older portions of the building costly to update - All systems likely to require replacement - May not be able to use 'campus' infrastructure	**GOOD** **Bruneau:** - See Above. **Auburn:** - Assumes no need for immediate structural upgrades. - Older portions of the building costly to update - Increase risk of unknowns (multiple additions). - Compromised structure observed in some areas	**GOOD** **Bruneau:** - Unknown utilities and viability – upgrading to allow for 40+ units/bathrooms may pose significant cost/schedule impacts - Access issues - Parking issues - Limited space available for future development and programs - Potential to uncover impacted soils while upgrading underground infrastructure - Water and Sewer Easement needed - 10' apart. Sewer line 30" dia and 20' deep. - Parcel C does not front a roadway - Alder is an alley. Alley also to the North. - Site improvements are under discussion - Is the Car wash site an option for purchase to allow for Bruneau access in the event the alleyways are not feasible or allowable?" Benton County would not like to explore this option. - County to determine if owner's to north and owner to south are willing to have Benton County dedicate per city access requirements. This will require easements, relocation of overhead power, street, and curb upgrades." Benton County would not like to explore this option. - Water and Sewer Easement needed - 10' apart. Sewer line 30" dia and 20' deep. - Parcel C does not front a roadway - Alder is an alley. Alley also to the North. **Auburn:** - Existing infrastructure will support 40+ units. - Utilities need to be validated - Irrigation Well currently not working (per owner available reports)	**GOOD** **Bruneau:** - See abatement report for details - Abatement to include caulking, fibrous material on the floors, - Black mastic on the plastic panels and cork boards - Roof membrane - Lead paint, flourescent lights, ballasts with PCB's **Auburn:** - See abatement report for details - HVAC duct lining in basement - Fire doors and fire frames - Mastic behind mirrors - Roofing systems	**GOOD** **Design-Build Cost:** ROM $26.5MM - $33.8MM **Design Cost:** High due to multiple sites and permit sets **Construction Cost:** High due to multiple sites **Owner Soft Cost:**TBD	**GOOD** **City:** - Pre-application Review - Requires in-depth review of existing building separations - Considerable site and access needs with Bruneau **Fire Marshall:** - Pre-application Review - Site walkthrough prior to permitting / separation **DOH:**Requires DOH approval and functional plan (all options / sites same)
OPTION 3: **Auburn** 	**BEST** - A project the entire COMMUNITY can be PROUD of. - An environment of peaceful SUPPORT and RECOVERY. - A facility that serves as a MODEL for others to EMULATE. - An EXEMPLARY progressive design-build PROCESS.	**GOOD** **Program:** - 23 Hour Observation - Crisis Stabil/Sub Acute WM (Pending DEED Restriction) - Secure WM / E&T - Residential Inpatient - Reference programming information received from Benton County per memo dated 12/11/2023 **MASTER PLAN READINESS:** **Auburn:** - Would have room for added services and possible infrastructure ready for added services and expansion of services. - No neighboring tenants. - Current deed restriction limits program use.	**BEST** **Design:** Schematic Design - 8 weeks Design Develop - 9 weeks Construction Documents - 13 weeks Total: 30 weeks ~ 7 months **Construction:** 12 Month Duration Shortest Construction duration Overall duration - 19 months (shortest duration)	**BETTER** **CONSTRUCTION REQUIREMENTS:** - Separation of occupied / unoccupied areas w/ 1-hour fire barrier may not align with existing rated walls. - Occupied areas need independent circulation & exiting from unoccupied areas. This may require including additional space in the occupied side to use existing exit paths and stairways. -Building needs active fire sprinkler system, including unoccupied areas. - All walls, rated or non-rated, must be stripped down to bear studs to rework MEPF and bring back up within code compliance (all visible rated assemblies were compromised if not destroyed above ceiling height) - All doors and hardware removed and replaced to meet current applicable code and facility demand/occupancy requirements - Window replacement - Exterior skin update and rework - Roofing replacement **OCCUPANCY TYPE:** - Occupancy type Group I-1 Condition 2 - Assumed type 1A - Non combustible construction, fireproofed structure & floors, and roof. Unlimited building area	**BETTER** - Assessment of existing with the understanding 90% of the system and components will need to be upgraded. - Existing utility infrastructure will likely support 40+ units/bathrooms with minimal rework/updating - Need to design MEPF to met new energy code. - Assumes requirment for nearly the entire building to be updated with fire protection systems regardless of whether they are occupied or not as they are connected to each other. - Potential of so many more unknowns and surprises buried within the building.	**BEST** - Assumes no need for immediate structural upgrades. - Newer area of building comprised of structural steel/SOMD has potential to avoid major structural upgrades and provide the most design flexibility without much rework overall - Noticed several areas where concrete beams or decks may be compromised. and will need to be extensively analyzed/reviewed - Potential of unknown structural conditions and surprises buried within the building.	**BEST** - Existing infrastructure will support 40+ units. - Utilities need to be validated - Irrigation Well currently not working (per owner available reports) - Can re-use and re-fresh most of the existing site	**BEST** - See abatement report for details - HVAC duct lining in basement - Fire doors and Fire frames - mastic behind mirrors - Roofing systems	**BEST** **Design-Build Cost:** ROM $19.2MM - $24.6MM **Design Cost:** High due to separation design, as-builting and MEP re-design **Construction Cost:** Mid range **Owner Soft Cost:** TBD	**BETTER** **City:** - Pre-application Review - Requires in-depth review of existing building separations **Fire Marshall:** - Pre-application Review - Site walkthrough prior to permitting / separation **DOH:**Requires DOH approval and functional plan (all options / sites same)
OPTION 4: 40K SF New Building at Either Site 	**BEST** - A project the entire COMMUNITY can be PROUD of. - An environment of peaceful SUPPORT and RECOVERY. - A facility that serves as a MODEL for others to EMULATE. - An EXEMPLARY progressive design-build PROCESS.	**GOOD** **Program:** - 23 Hour Observation - Crisis Stabil/Sub Acute WM (Pending DEED Restriction) - Secure WM / E&T - Residential Inpatient - Reference programming information received from Benton County per memo dated 12/11/2023 **MASTER PLAN READINESS:** -Allows for new, efficently layed out program and support space, maximizing sf use at either site.	**BETTER** **Design:** Schematic Design - 8 weeks Design Develop - 9 weeks Construction Documents - 13 weeks Total: 30 weeks ~ 7 months **Construction:** 18 Month duration Overall duration - 25 months	**BEST** **CONSTRUCTION REQUIREMENTS:** **Bruneau:** - New Construction **Auburn:** - New Construction **OCCUPANCY TYPE:** **Bruneau:** - IIB Construction type - Non combustible construction, no need to fireproof structural frame, floors or roof **Auburn:** - Assumed type 1A - Non combustible construction, fireproofed structure & floors, and roof. Unlimited building area	**BEST** - All new MEP systems - Allows for most effiecent MEP design with new energy code - Can incorproate exterior envelope and roof insulation systems to support new energy code - May allow for longer term energy savings to owner	**BETTER** - All new foundations and structural. Can incorporate best structural design into new facilities - Requires full structural design with permitting	**BETTER** - Would require demolition of existing site components and possible portions of existing buildings and site infrastructure - All new site work required, may be able to re-use portions of the site	**BEST** - Minimal abatement needed for new buildings - Bruneau site would require full abatement - Need to determine if there are any site hazardous materials with geotech - May or may not include abatement of existing facilities	**GOOD** **Design-Build Cost:** ROM $27.7MM - $35.4MM **Design Cost:** All new construction, foundation, utilities, exterior, etc. **Construction Cost:** High - all new construction **Owner Soft Cost:** TBD	**BEST** **City:** - Pre-application Review - Standard permitting process - Would require split permit packages (IE Civil, Structural to meet schedule timeframes) **Fire Marshall:** - Pre-application Review - Site walkthrough prior to permitting **DOH:**Requires DOH approval and functional plan (all options /

EXHIBIT R:
A3 - PRE-VALIDATION - PROGRAM & BUDGET ALIGNMENT

Pre-Validation Program and Building Area Evaluation Summary
Columbia Valley Center for Recovery
Progressive Design-Build | Validation Phase

March 19, 2024

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OPTION 1 - BRUNEAU PROPERTY

PROGRAM AND COST

BLDG & PROGRAM AREA
Building
20,000
Program Area
22,500 - 27,000

*Cost/SF Values based on 24,500SF

BUDGET BREKDOWN

ITEM	TOTAL	COST/SF
Site and Demolition	$ 1,349,273	$ 55
Structure	1,395,372	57
Envelope	1,699,677	69
Interiors	4,181,750	171
Equip. & Specialties	852,535	35
Mechanical	2,888,798	118
Electrical	2,366,768	97
Subtotal	$ 14,734,173	$ 601
D/B Fees, GC's, Cont.	$ 8,255,744	$ 337
Total	$ 22,989,917	$ 938

GRADING

PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

DESIGN AND COST FACTORS

*costs shown represent direct cost values

1. $500k in additional site improvement costs compared to other options
2. $1.2M in additional structural costs based on structural analysis; includes adding a mezzanine
3. $800k in additional skin costs compared to other options
4. $2.5M total in added cost as compared to other options equates to 4k-5k in less program
5. Site does not work without purchasing adjacent property and/or major code variances from City
6. Significant program challenges with lack of ability to add windows, courtyards and natural daylight. One of our conditions of excellence.

BUDGET AND SCOPE SUMMARY

Significant renovation to the existing warehouse building and site at the Bruneau site to accommodate program.

1. Change of occupancy does require WSEC full compliance
2. Utilization of primarily the main level due to the high cost of structure to create a full second floor
3. Mezzanine or second floor space figured at roughly 2,500 sf to accommodate absolute minimum program area(s)
4. All new MEP systems
5. Removal of existing slab (up to 2' thick) to expose existing foundations and install underground plumbing
6. Abatement and select demolition of the existing interior and infill panels and walls
7. New structural system to support roof and tie-in existing walls to roof structure
8. Removal of existing CMU and infill of envelope with framing and cladding system
9. Addition of canopy / drop off and entry area
10. Utility connections to alley or adjacent street
11. New roof system
12. Build up of parapets for roof insulation requirements and safety on roof
13. New exterior framing and cladding system

Excludes
1. Full new street or access from main streets
2. Utility connections beyond existing adjacent access points or right of way
3. Protection or select removal of adjacent structures if required
4. Removal, replacement or repair of existing roof mechanical raceways or supports

EXISTING CONDITIONS ASSESSMENT

BUILDING ASSESSMENT
1. Significant renovation required to the existing warehouse at the Bruneau site to accommodate program
2. Thick or large (unknown) foundations may complicate under-slab utilities.
3. The building does not meet current code requirements
4. The gravity support for the roof framing does not rely on the perimeter walls.
5. The roof structural assembly does not currently allow for roof top units or solar ready accommodations
6. The existing one-story building is tall enough that a second floor could be added inside the building
7. Concrete frames with masonry infill have historically not performed well during seismic events
8. It is likely the connection between the existing wall and existing roof will need to be strengthened.

MECHANICAL ASSESSMENT
1. There are no existing mechanical systems therefore not assessed

ADVANTAGES
1. No known restrictions on program/use

RISKS
1. Extensive structural & envelope upgrades
2. Limited site area for parking/drop-off
3. Access challenges from street
4. Limited space for future development
5. Disruption to neighboring businesses

OPTION 2 - HOSPITAL AREA

PROGRAM AND COST

BLDG & PROGRAM AREA
Building
27,000 - 45,000
Program Area
27,000 - 32,000

*Cost/SF Values based on 29,000SF

BUDGET BREKDOWN

ITEM	COST	COST/SF
Site and Demolition	$ 822,879	$ 28
Structure	161,491	6
Envelope	891,881	31
Interiors	4,129,769	142
Equip. & Specialties	1,882,992	65
Mechanical	4,026,506	139
Electrical	2,644,000	91
Subtotal	$ 14,559,518	$ 502
D/B Fees, GC's, Cont.	$ 8,426,944	$ 291
Total	$ 22,986,462	$ 793

GRADING

PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

DESIGN AND COST FACTORS

*costs shown represent direct cost values

1. $800k in additional costs to upgrade the existing, adjacent building fire alarm and fire sprinklers
2. $500k in interior demolition
3. $500k in repairs to roof and addressing exterior envelope, sealants and painting
4. $800k in window replacements
5. $250k included exterior site improvements

BUDGET AND SCOPE SUMMARY

Renovation and build-out of existing space within the original Hospital. Includes reuse of the existing layout and building systems to their fullest extent if possible, repair or replace failed systems, and provide repairs to the exterior.

1. Change of occupancy does not require WSEC full compliance
2. Assumes MEP budgets may allow re-use of existingMEP systems OR new MEP with design to budget approach
3. Exterior EIFS repairs include 'targeted approach' per RDH
4. Penthouses require a full stucco replacement
5. Re-coating of CMU walls
6. Replace exterior joints and seals
7. All new windows for program area only
8. Sloped glazing area to remain with new sealants only
9. New waterproofing and flashing around windows with window replacements
10. Patch and re-finish exterior doors and replace storefront entries for program area only
11. Exterior renovations limited to program areas
12. Renew roof and joint sealants and provide targeted repairs (not recommended)
13. Existing parking lights to remain
14. Includes abatement and demo within program area
15. Exterior envelope consultant and mockup
16. Allowance of EIFS and stucco repair of 10% and includes resealing and repainting building
17. 70K allowance for roof repairs or roughly 5000SF
18. Assuming pre-action system for shelled space. Will need AHJ approval for this approach
19. Emergency radio antenna system per pre-dev meeting. Will need confirmation from Fire Marshall
20. $250K for site restoration: restore landscape at 10th and Spaulding only
21. Entrance drive aprons and sidewalk repair to bring these areas up to code, asphalt seal and patch
22. Assumes existing utilities are adequate to support infrastructure and new program area
23. No repairs to glazing, EIFS, stucco, roofing or building structure outside of program area
24. Non program space to remain as is, with exception to sprinkler, fire alarm and DAS
25. 75K allowance for structural repair for deficiencies noted

Excludes
1. Comprehensive envelope replacement or over cladding of exterior envelope
2. Roof replacements
3. Replacement or removal and re-building of exterior penthouses
4. Removal, replacement or repair of existing roof mechanical raceways or supports

EXISTING CONDITIONS ASSESSMENT

BUILDING ASSESSMENT
1. Reference RDH report dated March 15, 2024
2. Exterior wall cladding is nearing the end of its effective service life
3. Roof membrane - fair to poor condition
4. Exterior sealants weathered and beginning to fail
5. Evidence of condensation at wood windows, however in fair condition
6. Water damaged and light corrosion of fasteners observed at interior wall of gypsum and steel studs
7. Roof exhibits widespread puncture damage and signs of heat related aging factors
8. Targeted and phased repair and maintenance work may be possible, risk of future maintenance costs
9. Indications from abatement trad partner with ceilings removed may require further abatement than PBS survey
10. Examples of other areas to abate include caulking, vermiculite CMU fill (if present), MEP insulation, flooring adh.

MECHANICAL ASSESSMENT
1. The mechanical trade partner (TEM, BNB, MSI) performed a brief visual survey of the existing mechanical systems in the Auburn facility. The observations noted in the WAVE report were generally consistent with our team's observations. Most notably was the age, condition and status of the equipment. Aside from several critical items having already irreparably failed (steam boiler for example), and others in varying states of failure (chillers, pumps, piping, etc.), the vast majority of the equipment is at or beyond the end of service life. This was also consistent with the WAVE report which noted on average most equipment had 1 to 3 yrs of service life remaining, three years ago.
2. While the WAVE report suggests some equipment could be repaired (complete rebuild of Chiller #3 for example), such an approach the entire system would be cost prohibitive and would saddle the owner with ongoing and escalating repair costs as well as system outages as other parts of the system continue to fail.
3. In addition to the equipment, the piping condition is also highly suspect as some is sitting empty (chilled water piping to the yard) and other areas ran with untreated water for several years. Without good service records, it is impossible to know the condition of all the piping, but we are confident that it will prove to be highly problematic going forward. Even if leaks do not become an issue, the internal corrosion will create sediment in the system that will absolutely cause problems with any new control valves and will foul any new coils in air handlers, and these types or problems are difficult to diagnose by maintenance staff so we could expect on-going calls to contractors and engineers for years to come as the system performance drops off and becomes erratic.
4. It is therefore the trade partner's professional opinion that the entire steam/heating water/chilled water systems need to be replaced at a minimum. The exact cost is not known at this early stage, but in comparison to other options a boiler/chiller system is always more expensive than a VRF system for example. And given the complexities and logistics specific to the Auburn facility, that difference in cost could be substantial. We suggest the team/owner consider all options before committing to a new boiler chiller system.

ADVANTAGES
1. Renovation and re-use of the existing facility consistent with public communications to date
2. Replacement of equipment with like-in-kind may minimize the cost impacts of the 2021 Energy Code
3. Multiple floors / areas allows for current / future RTF configuration
4. May be able to utilize existing windows with with city noting that WSEC compliance for existing facilities is not required

RISKS
1. Life expectancy of equipment that remains - well into or past service life.
2. Systems have been sitting idle for several years - corrosion and other damage.
3. Future "Clean Building" upgrades to MEP systems may still be required by 2028.
4. Cost expended for exploration and repair (depends on the amount of equipment that can be reused vs replaced)
5. Older systems and envelope will be more costly to operate and maintain.
6. Exterior envelope enclosure repair vs. replace; lacks full system warranty and potential need for annual repairs
7. Multiple roof systems; require 3-6 separate manufacturer details and repair requirements
8. Repair of partial exterior areas and new windows and doors at program areas pose a risk with existing conditions
9. Schedule impacts pending unknown risks

OPTION 3 - SPAULDING AREA

PROGRAM AND COST

BLDG & PROGRAM AREA
Building
29,000 - 50,000
Program Area
29,000 - 36,000

*Cost/SF Values based on 34,500SF

BUDGET BREKDOWN

ITEM	TOTAL	COST/SF
Site and Demolition	$ 686,568	$ 20
Structure	51,325	1
Envelope	893,595	26
Interiors	4,160,273	121
Equip. & Specialties	1,581,128	46
Mechanical	4,509,547	131
Electrical	2,732,557	79
Subtotal	$ 14,614,993	$ 424
D/B Fees, GC's, Cont.	$ 8,378,769	$ 243
Total	$ 22,993,762	$ 666

GRADING

PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

DESIGN AND COST FACTORS

*costs shown represent direct cost values

1. $700k to upgrade the existing, adjacent building fire alarm and fire sprinklers $ 0.57
2. $425k in interior demolition
3. $500k in repairs to roof and addressing exterior sealants and painting
4. $850k in window replacements
5. $250k included exterior site improvements

BUDGET AND SCOPE SUMMARY

Renovation and build-out of existing space within the Spaulding building, delineation between the hospital space to be determined. This option may include the first floor only or partial or full use of other floors.

1. Change of occupancy does not require WSEC full compliance
2. Includes multiple options for layout vs. the hospital area
3. No abatement within space
4. Exterior envelope consultant and mockup
5. Allowance of EIFS repair 10% but includes resealing and repainting Building
6. Allowance for Roof repairs 25%
7. Assuming pre-action system for shelled space. Will need AHJ approval for this approach
8. Emergency radio antenna system per pre-dev meeting. Will need confirmation from Fire Marshall
9. $250K for site restoration: restore landscape at 10th and Spaulding only
10. Entrance drive aprons and sidewalk repair to bring these areas up to code, asphalt seal and patch
11. Assumes existing utilities are adequate to support infrastructure and new program area
12. Existing parking lights to remain
13. No repairs to glazing, EIFS, stucco, roofing or building structure outside of program area
14. Non program space to remain as is, with exception to sprinkler, fire alarm and DAS
15. Demolition of partial program area; assumes some areas / walls may be re-used

Excludes
1. Comprehensive envelope replacement or over cladding of exterior envelope
2. Roof replacements
3. Replacement or removal and re-building of exterior penthouses
4. Removal, replacement or repair of existing roof mechanical raceways or supports
5. Temporary removal, relocation or replacement of Verizon antenna during construction

EXISTING CONDITIONS ASSESSMENT

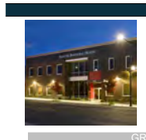
BUILDING ASSESSMENT
1. RDH has not completed an ASSESSMENT of Spaulding. Assume 'better' condition than hospital based on team review
2. Exterior wall cladding is nearing the end of its effective service life
3. Roof membrane - fair to poor condition
4. Exterior sealants weathered and beginning to fail
5. Evidence of condensation at some windows, however in fair condition
6. No visible water damage noticed on exterior to the extent found at the hospital
7. Roof and penthouse exhibits widespread puncture damage and signs of heat related aging factors
8. Targeted and phased repair and maintenance work may be possible, risk of future maintenance costs

MECHANICAL ASSESSMENT
1. The mechanical trade partner (TEM, BNB, MSI) performed a brief visual survey of the existing mechanical systems in the Auburn facility. The observations noted in the WAVE report were generally consistent with our team's observations. Most notably was the age, condition and status of the equipment. Aside from several critical items having already irreparably failed (steam boiler for example), and others in varying states of failure (chillers, pumps, piping, etc.), the vast majority of the equipment is at or beyond the end of service life. This was also consistent with the WAVE report which noted on average most equipment had 1 to 3 yrs of service life remaining, three years ago.
2. While the WAVE report suggests some equipment could be repaired (complete rebuild of Chiller #3 for example), such an approach the entire system would be cost prohibitive and would saddle the owner with ongoing and escalating repair costs as well as system outages as other parts of the system continue to fail.
3. In addition to the equipment, the piping condition is also highly suspect as some is sitting empty (chilled water piping to the yard) and other areas ran with untreated water for several years. Without good service records, it is impossible to know the condition of all the piping, but we are confident that it will prove to be highly problematic going forward. Even if leaks do not become an issue, the internal corrosion will create sediment in the system that will absolutely cause problems with any new control valves and will foul any new coils in air handlers, and these types or problems are difficult to diagnose by maintenance staff so we could expect on-going calls to contractors and engineers for years to come as the system performance drops off and becomes erratic.
4. It is therefore the trade partner's professional opinion that the entire steam/heating water/chilled water systems need to be replaced at a minimum. The exact cost is not known at this early stage, but in comparison to other options a boiler/chiller system is always more expensive than a VRF system for example. And given the complexities and logistics specific to the Auburn facility, that difference in cost could be substantial. We suggest the team/owner consider all options before committing to a new boiler chiller system.

ADVANTAGES
1. Renovation and re-use of the existing facility consistent with public communications to date
2. Replacement of equipment with like-in-kind may minimize the cost impacts of the 2021 Energy Code
3. Multiple floors / areas allows for current / future RTF configuration
4. May be able to utilize existing windows with with city noting that WSEC compliance for existing facilities is not required
5. Utilizes power from both the Hospital and existing Spaulding building to reduce new power service needs

RISKS
1. Safety concerns with Verizon cellular equipment needs to be mitigated.
2. Needs new roof system and glazing
3. Exposing exterior wall
4. Inefficiency for program layout from exist building configuration
5. Schedule impacts pending unknown risks
6. Life safety upgrades required in shelled space
7. Energy code update to existing building

OPTION 4 - NEW BUILDING (FOR COMPARISON ONLY)



PROGRAM AND COST

BLDG & PROGRAM AREA
Building
24,500
Program Area
24,500

*Cost/SF Values based on 24,500SF

BUDGET BREKDOWN

	TOTAL	COST/SF
Direct Costs	$ 14,600,000	$ 596
D/B Fees, GC's, Cont.	$ 8,378,769	$ 342
Total	$ 22,978,769	$ 938

GRADING

PROGRAM AREA	COST
RISKS (UNKNOWNS)	DURATION

DESIGN AND COST FACTORS

1. New building TBD

BUDGET AND SCOPE SUMMARY

New building comparison while leaving the existing facility in place as is.

1. Requires full compliance with the 2021 WSEC
2. Structural steel frame, slab on grade, frost footings, single or two-story meeting code required occupancy needs
3. Site area within 20' of building to match to existing site
4. Mechanical systems and service to meet current codes
5. Exterior and roof assemblies meeting current codes
6. Design to accommodate future growth to add to building
   Further detail for building systems (if selected) to accommodate validation report

Excludes
1. Demoltion or abatement of existing buildings
2. Site revisions or landscaping beyond new building

EXISTING CONDITIONS ASSESSMENT

BUILDING ASSESSMENT
1. No existing site conditions ASSESSMENT for potential building locations has been completed

MECHANICAL ASSESSMENT
1. Not applicable

ADVANTAGES
1. New building on same site
2. Ability to locate the building and entrances wherever creates best use of the existing site
3. Utilizes existing parking lot grades and potential entrances.
4. Can plan for future RTF designations and design building around this requirement
5. Most efficient program space
6. Increased energy efficiency and long term reduction of operational costs (Benton County to verify)
7. Eliminates need to maintain existing central plant / chillers or electrical service for program space

RISKS
1. Demo of or portions of the existing facility may be required
2. Connections to existing utility locations >20' from building
3. Traffic study
4. Hazardous materials at area of new building

EXHIBIT S:
AUBURN - CIVIL SITE EXHIBIT

THREE RIVERS BEHAVIORAL HEALTH RECOVERY CENTER - KGH PROPERTY

Scale 1" = 50'

0 25 50 100

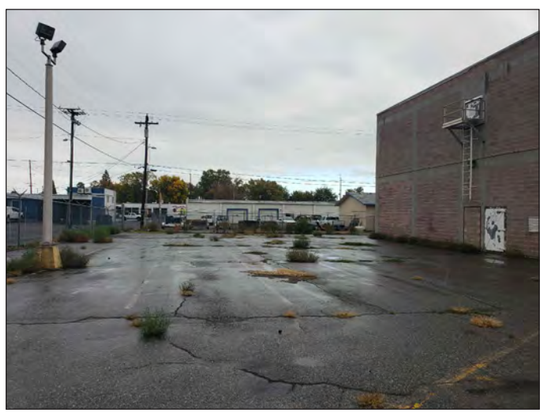
PBS Engineering and Environmental Inc.
400 Bradley Blvd. Ste 106
Richland, WA 99352
509.942.1600
pbsusa.com

Filename: L:\Projects\66000\66520\66520-000\Civil\CAD\Working\Exhibits\SiteExhibit_KGH.dwg Layout Tab: LAYOUT1 (2) User: Amy Nickaus CAD Plot Date/Time: 2/7/2024 6:27:49 PM

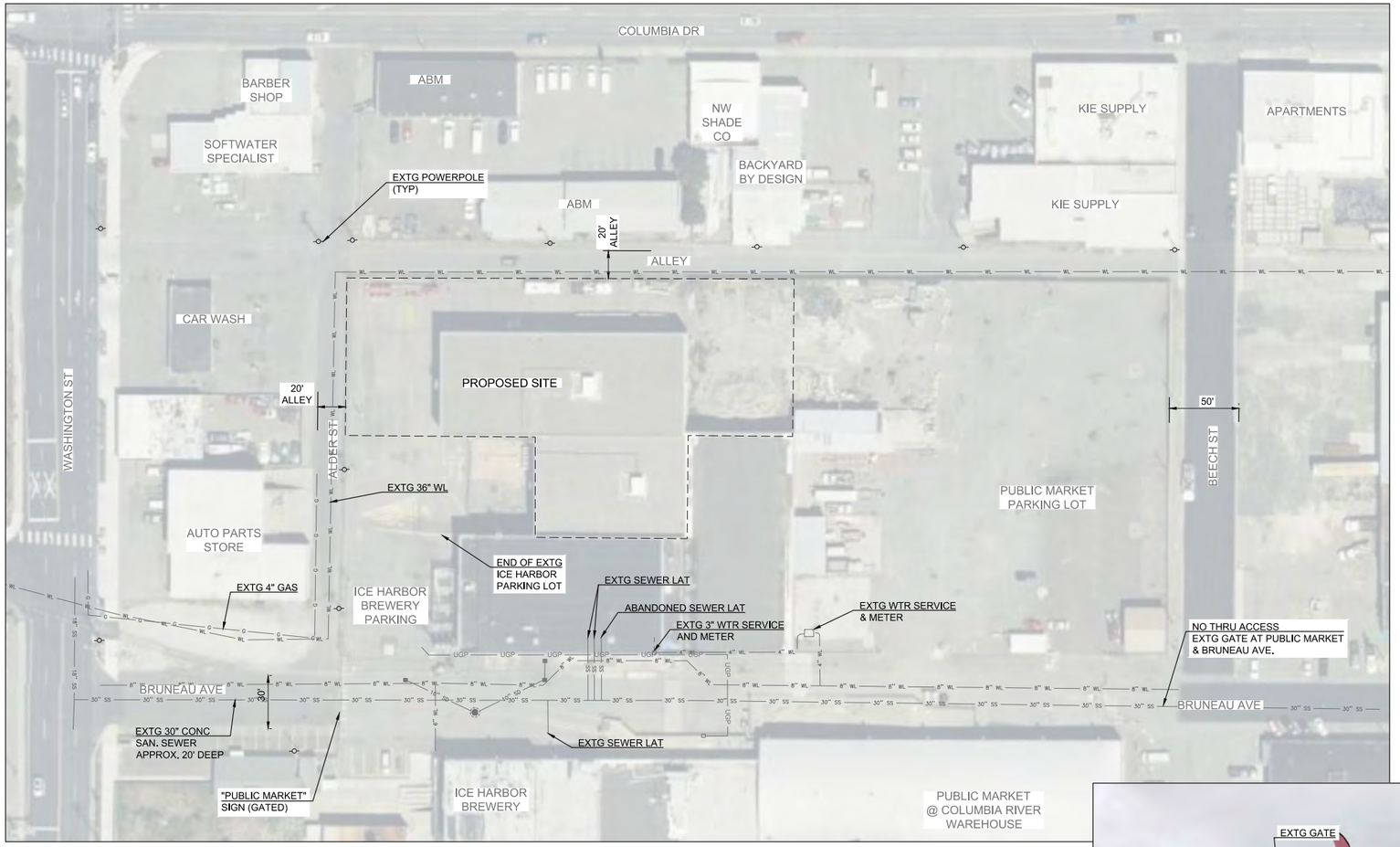
EXHIBIT T:
BRUNEAU - CIVIL SITE EXHIBITS

EXTG POWERPOLE AT ALDER ST & ALLEY INTX.
(FACING NORTH)

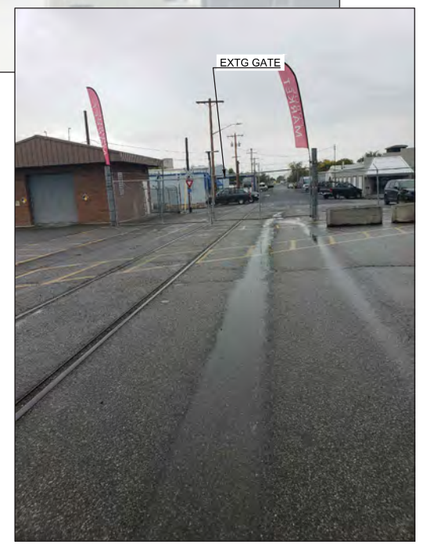
PROPOSED SITE - EXTG NORTH PARKING LOT
(FACING EAST)



PROPOSED SITE - EXTG WEST PARKING LOT
(FACING NORTH)



SITE BORDERS ICE HARBOR BREWERY PARKING LOT
EXTG ELEVATION CHANGE BETWEEN PARKING LOTS
(PROPOSED SITE FACING NORTH TOWARD ICE HARBOR)



EXTG GATE AT BRUNEAU AVE. & PUBLIC MARKET
(FACING EAST)

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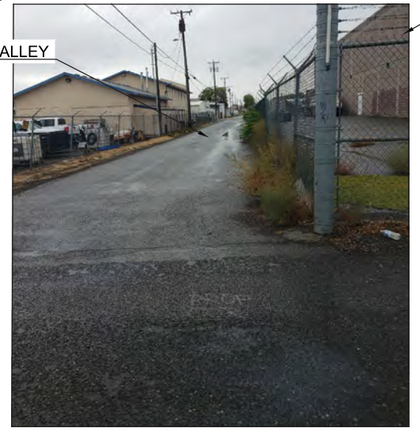
400 Bradley Blvd. Ste 106
Richland, WA 99352
509.942.1600
pbsusa.com

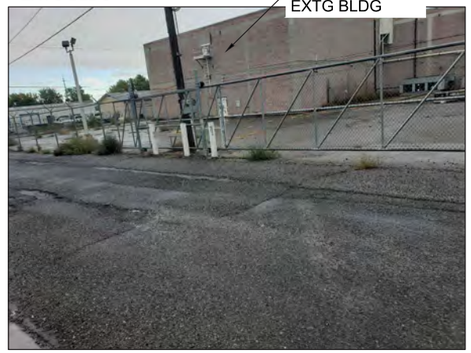
Scale 1" = 50'
0 25 50 100

THREE RIVERS BEHAVIORAL HEALTH RECOVERY CENTER - BRUNEAU PROPERTY

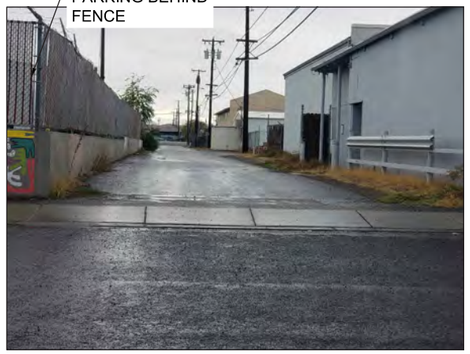
Filename: \\pbsenv.lan\LPProjects\68000\68520\68520-000\Civil\CADWorking\Exhibits\SiteExhibitWAsBuilt.dwg Layout Tab: EXTGSITE1 User: Amy NickoBaus CAD Plot Date/Time: 11/2/2023 3:20:32 PM



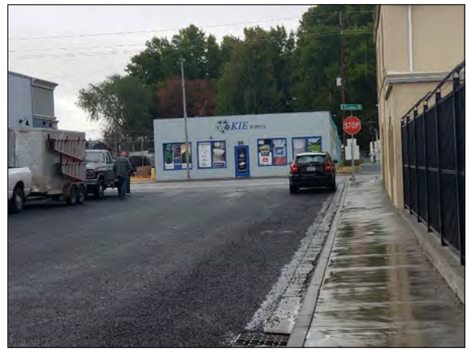
ALDER ST & 20' WIDE ALLEY
(FACING EAST LOOKING TOWARD ALLEY)



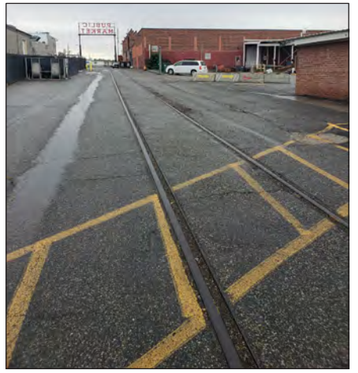
ALDER ST & PROPOSED SITE AT GATE
(FACING EAST)



BEECH ST & 20' ALLEY (FACING WEST)



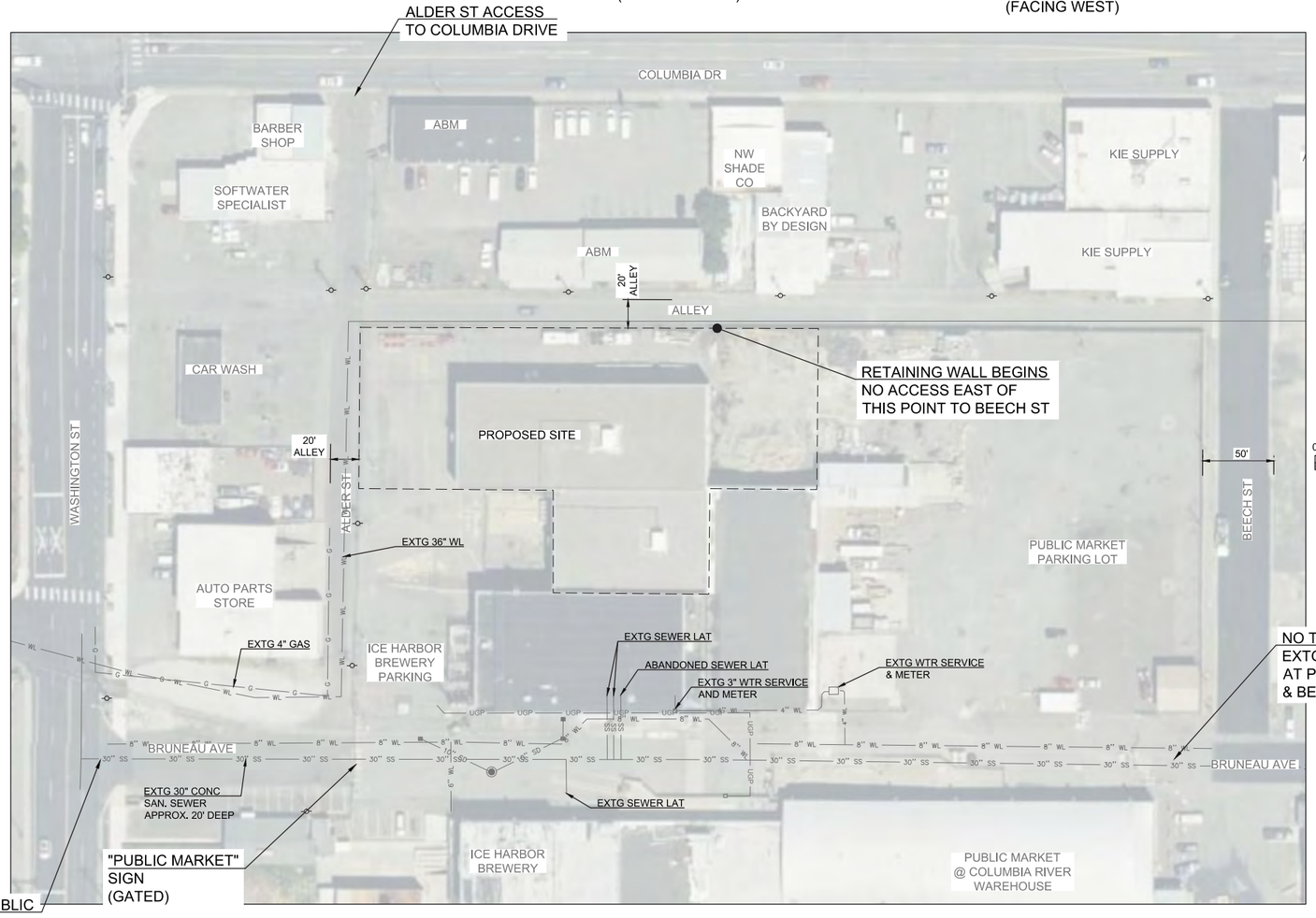
BEECH ST & COLUMBIA DRIVE INTERSECTION
(FACING NORTH)



BRUNEAU AVE AT PUBLIC MARKING
(FACING WEST)

ALDER ST & BRUNEAU AVE
(FACING NORTH ON ALDER ST, STANDING AT PUBLIC MARKET SIGN)

ALDER ST & BRUNEAU AVE INTERSECTION
(FACING SOUTH)



Scale 1" = 50'
0 25 50 100

THREE RIVERS BEHAVIORAL HEALTH RECOVERY CENTER - BRUNEAU PROPERTY

PBS Engineering and Environmental Inc.
400 Bradley Blvd. Ste 106
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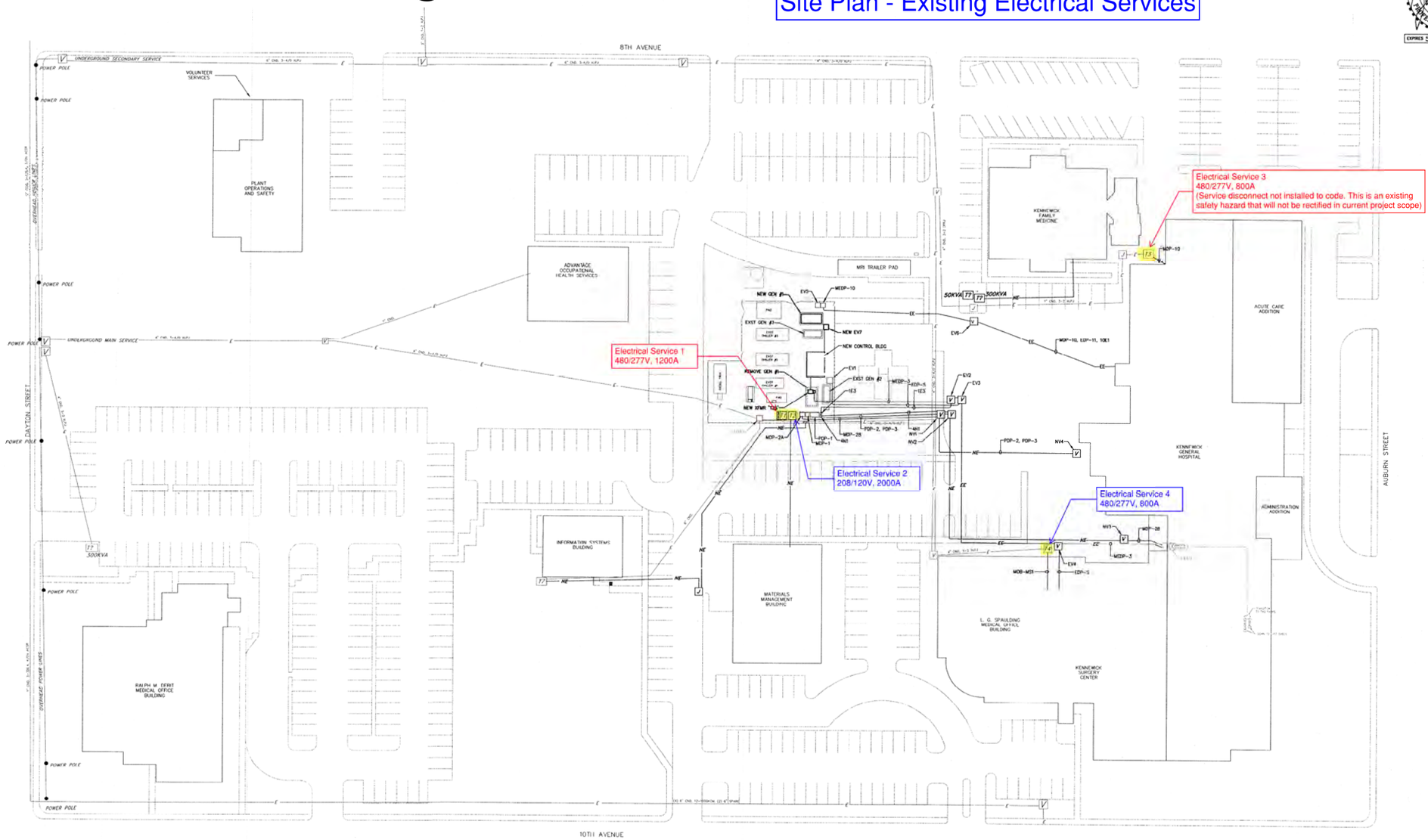
Filename: \\pbsenv.lan\L\Projects\66000\66520\66520-000\Civil\CAD\Working\Exhibits\SiteExhibitWAsBuilt.dwg Layout Tab: EXTGSITE2 User: Amy Nickolaus CAD Plot Date/Time: 11/2/2023 3:23:09 PM

EXHIBIT U:
ELECTRICAL ONE-LINE DIAGRAMS

EE ENERGIZED ELECTRIC INC

One Line Drawings

Site Plan - Existing Electrical Services



SITE PLAN
SCALE: 1"=40'

NORTH

JEFFREY A. SMITH
STATE OF WASHINGTON
20243
REGISTERED
PROFESSIONAL ENGINEER
9/4/02
EXPIRES 5-11-2002

DITTE & ASSOCIATES, INC.
Engineers and Consultants
815 COLUMBIA PARK TRAIL
RICHLAND, WA. 99352
(509) 827-4719

DILLMAN-LUVAAS ARCHITECTS, P.S.
MEMBERS OF THE AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTS AND PLANNERS 509-946-4189
660 SYMONS STREET, RICHLAND, WASH. 99352

KENNEWICK GENERAL HOSPITAL
ICU STEPDOWN
900 SOUTH AUBURN
KENNEWICK, WASHINGTON

• SITE PLAN

CAD FILE:	E-SITE
DESIGN:	AMM
DRAWN:	AMM
CHECKED:	PBE
DATE:	02/MAR/04

SHT. NO. E4.1

Existing Electrical Distribution - Program Space

PANEL LOCATION PLAN

1" = 20'-0"

1. SEE E1.1 FOR NOTES, LEGEND AND SCHEDULES.

NOTES

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Tel 509.946.4189 Fax 509.943.1796
www.ALDarchitects.com

KENNEWICK GENERAL HOSPITAL
FAMILY BIRTHING REMODEL
900 S AUBURN
KENNEWICK, WASHINGTON

• PANEL LOCATION PLAN

REV	DATE	BY	APP'D	DESCRIPTION
2	08/14/08	JRH	PAA	ADDENDUM #2
1	06/18/08	JRH	PAA	ADDENDUM #1
0	05/30/08	JRH	PAA	ORIGINAL BID SET

ABSOLUTE ENGINEERING
7525 W. DESCHUTES PL, #2B
KENNEWICK, WA 99336
PH: 509-734-9767
FX: 509-734-9877
WWW.ABS-ENG.COM

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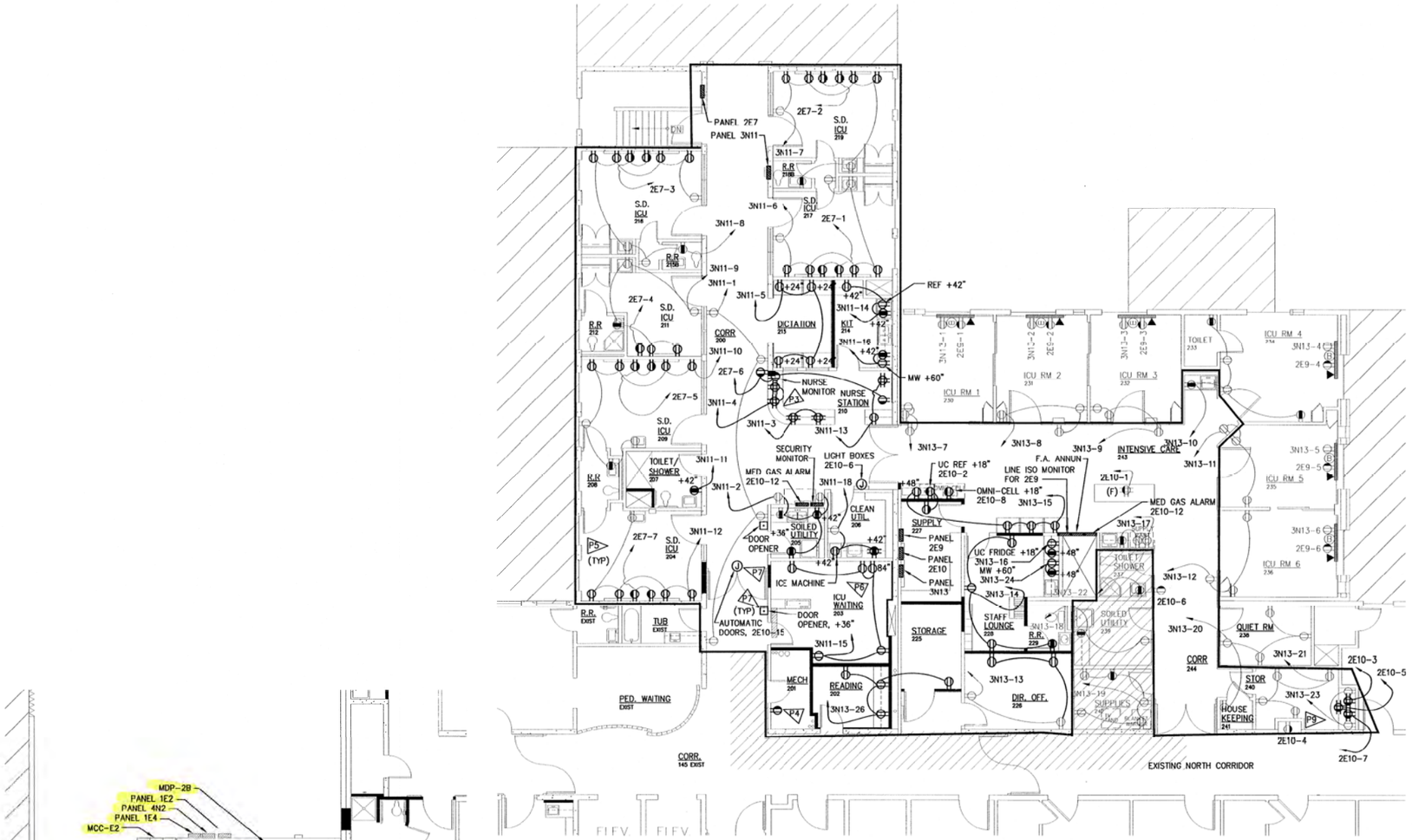
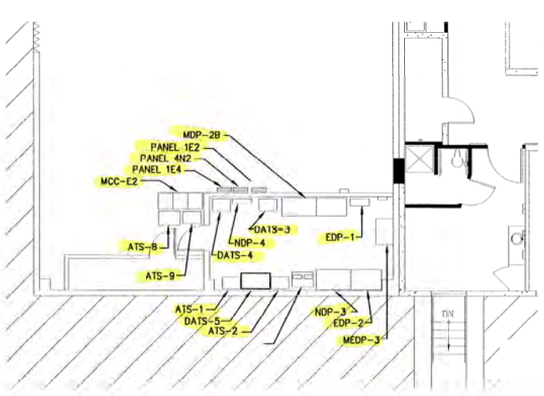
AE JOB #: 07-015-02 AE FILE: 0701502E103.RV02.DWG

CAD FILE:	0701502E103
DESIGNED:	PAA
DRAWN:	JRH
CHECKED:	PAA
DATE:	05/27/08
REVISION:	
DRAWING:	E1.3

55-07





Existing Electrical Distribution - Elec Service 2

ICU STEPDOWN POWER PLAN

1/8" = 1'-0"

POWER NOTES:

P1> CONTRACTOR TO FIELD VERIFY ALL CIRCUITING PRIOR TO WORK.

P2> ALL REMAINING EXISTING SWITCHES, OUTLETS, COVERPLATES, ETC. WITHIN THE SCOPE OF THIS PROJECT SHALL BE REPLACED WITH NEW WHITE DEVICES AND COVER PLATES.

P3> NURSE STATION:
PROVIDE (1) 3/4" CND. FOR NORMAL POWER. ROUTE FROM CEILING SPACE DOWN CHASE TO J-BOX. REFER TO SHT. A.7 FOR DETAILS. PROVIDE 1/2" FLEX FROM J-BOX TO NORMAL POWER OUTLETS VIA CHASE IN DESK.
PROVIDE (1) 3/4" CND. FOR EMERGENCY POWER. ROUTE FROM CEILING SPACE DOWN CHASE TO J-BOX. REFER TO SHT. A.7 FOR DETAILS. PROVIDE 1/2" FLEX FROM J-BOX TO EMERGENCY POWER OUTLETS VIA CHASE IN DESK.
PROVIDE (1) 1" CND. FOR DATA/COMM. ROUTE FROM CEILING SPACE DOWN CHASE TO J-BOX. REFER TO SHT. A.7 FOR DETAILS. PROVIDE 1" FLEX FROM J-BOX TO DATA/COMM OUTLETS VIA CHASE IN DESK.

P4> MECHANICAL ROOM:
PROVIDE CONDUIT AND WIRE TO 2E10-13. EXTEND CIRCUIT TO INCLUDE LIGHTING.

P5> SEE NOTE 11 ON SHT. E1.1.

P6> PROVIDE TAMPERPROOF RECEPTACLES AS REQUIRED BY WAC 246-320.

P7> AUTOMATIC DOOR/DOOR OPENERS: CONTRACTOR TO EXTEND EXISTING CIRCUIT TO NEW DOOR AND DOOR OPENER CONTROL LOCATIONS. DOOR CONTROL HARDWARE TO BE PROVIDED BY DOOR HARDWARE SUPPLIER. COORDINATE WITH SUPPLIER AND PROVIDE ALL NECESSARY ELECTRICAL DEVICES, CONDUIT AND WIRING REQUIRED FOR COMPLETE INSTALLATION.

P8> REFER TO NOTE 11 ON SHT. E1.2 FOR ADDITIONAL DESIGN CRITERIA.

P9> MONITOR SYSTEM HEADEND: COORDINATE DEVICE LOCATIONS WITH HOSPITAL.

P10> NO WORK IN ICU ROOMS 1-6. INFORMATION FOR REFERENCE ONLY.

7/23/02
ISSUED FOR DOH REVIEW:
- GFCI OUTLET IN ROOM 205 ADJACENT TO HOPPER SINK.
- GFCI OUTLET IN ROOM 239 ADJACENT TO SINK.

2/13/03
ISSUED FOR DOH REVIEW:
- SEPARATION BETWEEN ICU STEPDOWN AND ICU.

KGH
Kennewick General Hospital
900 South Auburn
P.O. Box 6128
Kennewick, WA 99336

JEFFREY A. SHIP
STATE OF WASHINGTON
22243
REGISTERED PROFESSIONAL ENGINEER
EXPIRES 5-11-2004

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KENNEWICK GENERAL HOSPITAL
ICU STEPDOWN
900 SOUTH AUBURN
KENNEWICK, WASHINGTON

• ICU STEPDOWN POWER PLAN

CAD FILE:	E2-DOH2
DESIGN:	AMM
DRAWN:	AMM
CHECKED:	PBE
DATE:	02/MAR/04
REV-1	3/22/02
REV-2	2/13/03

SHT. NO. E2.1

Electrical Service 2 - One Line Diagram

TRANSFER SWITCHES TO BE PLACED IN BYPASS MODE. PREVENT FROM TRANSFERING TO GENERATOR. (TYPICAL)

GENERATOR NOT OPERATIONAL

MECHANICAL EQUIPMENT NOT UTILIZED FOR PROGRAM SPACE TO BE DISCONNECTED FROM ELECTRICAL SERVICE 2

ISOLATION PANELS TO BE REMOVED (TYPICAL)

SERVICE 2 OF 4

REMOVE EXISTING CURRENT LIMITERS. REPLACE EXISTING CIRCUIT BREAKER WITH NEW 1000A CIRCUIT BREAKER.

FLAG NOTES

REV	DATE	BY	APP'D	DESCRIPTION
2	08/14/08	JRH	PAA	ADDENDUM #2
1	06/18/08	JRH	PAA	ADDENDUM #1
0	05/30/08	JRH	PAA	ORIGINAL BID SET

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7525 W. DESCHUTES PL, #2B
KENNEWICK, WA 99336
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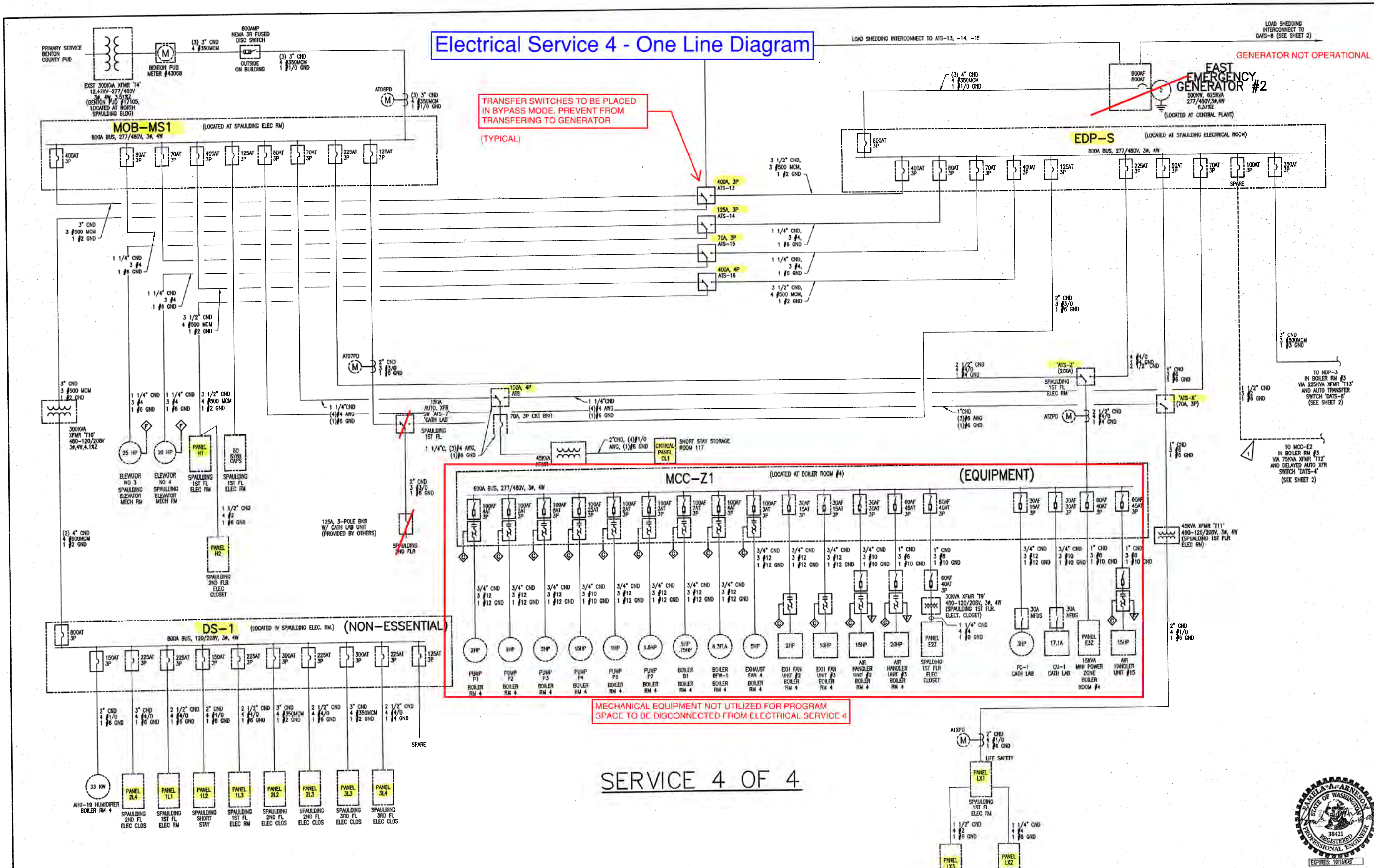
KENNEWICK GENERAL HOSPITAL
FAMILY BIRTHING REMODEL
900 S AUBURN
KENNEWICK, WASHINGTON

SERVICE #2 1-LINE DIAGRAM

CAD FILE:	0701502E104
DESIGNED:	PAA
DRAWN:	JRH
CHECKED:	PAA
DATE:	05/27/08
REVISION:	

DRAWING: E1.4 (2) 55-07

P:\07\07-015 - KGH FAMILY BIRTHING REMODEL\DRAWINGS\PHASE 1\07015021E104.RVD2.dwg, Layout1, 8/14/2008 2:03:44 PM, JRH



FLAG NOTES

1. RE-FEED MCC-E2 FROM MEDP-3.

REV	DATE	BY	APP'D	DESCRIPTION
1	06/18/08	JRH	PAA	ADDENDUM #1
0	05/30/08	JRH	PAA	ORIGINAL BID SET

ABSOLUTE ENGINEERING
7525 W. DESCHUTES PL. #2B
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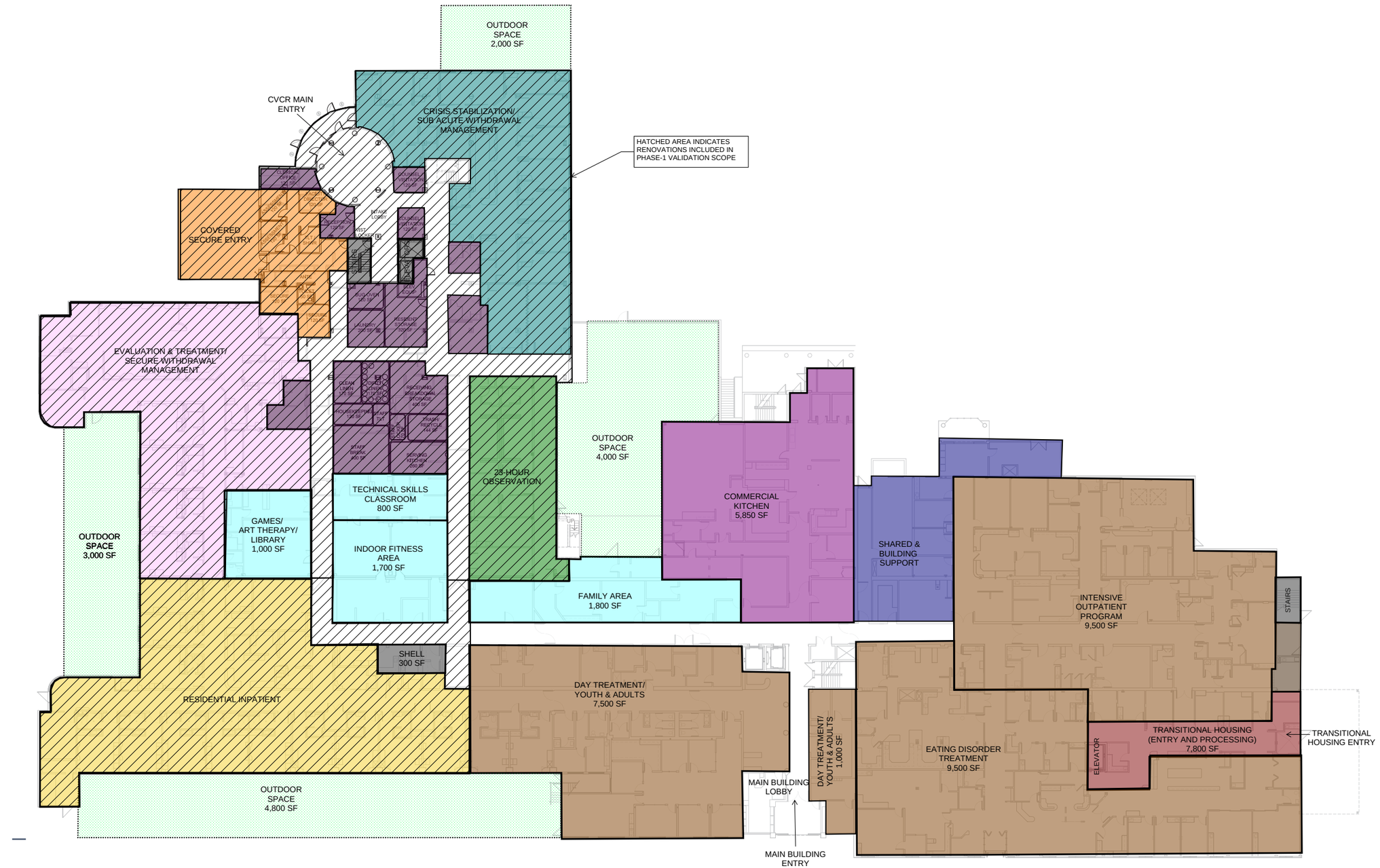
KENNEWICK, WASHINGTON

SERVICE #4 1-LINE DIAGRAM

CAD FILE: 0701502E105
DESIGNED: PAA
DRAWN: JRH
CHECKED: PAA
DATE: 05/27/08
REVISION:
DRAWING: E1.5

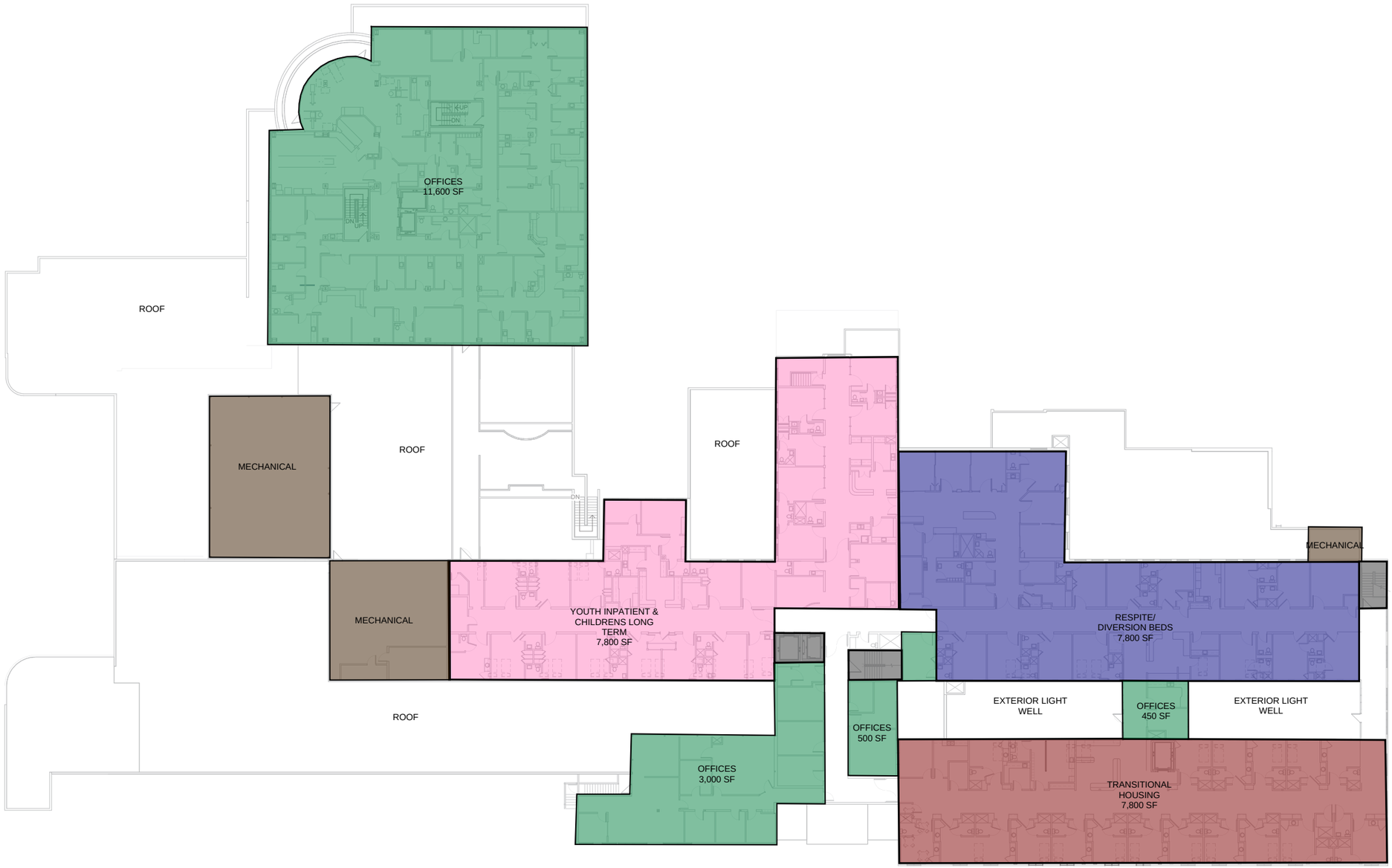
55-07

EXHIBIT V:
MASTER PLANS



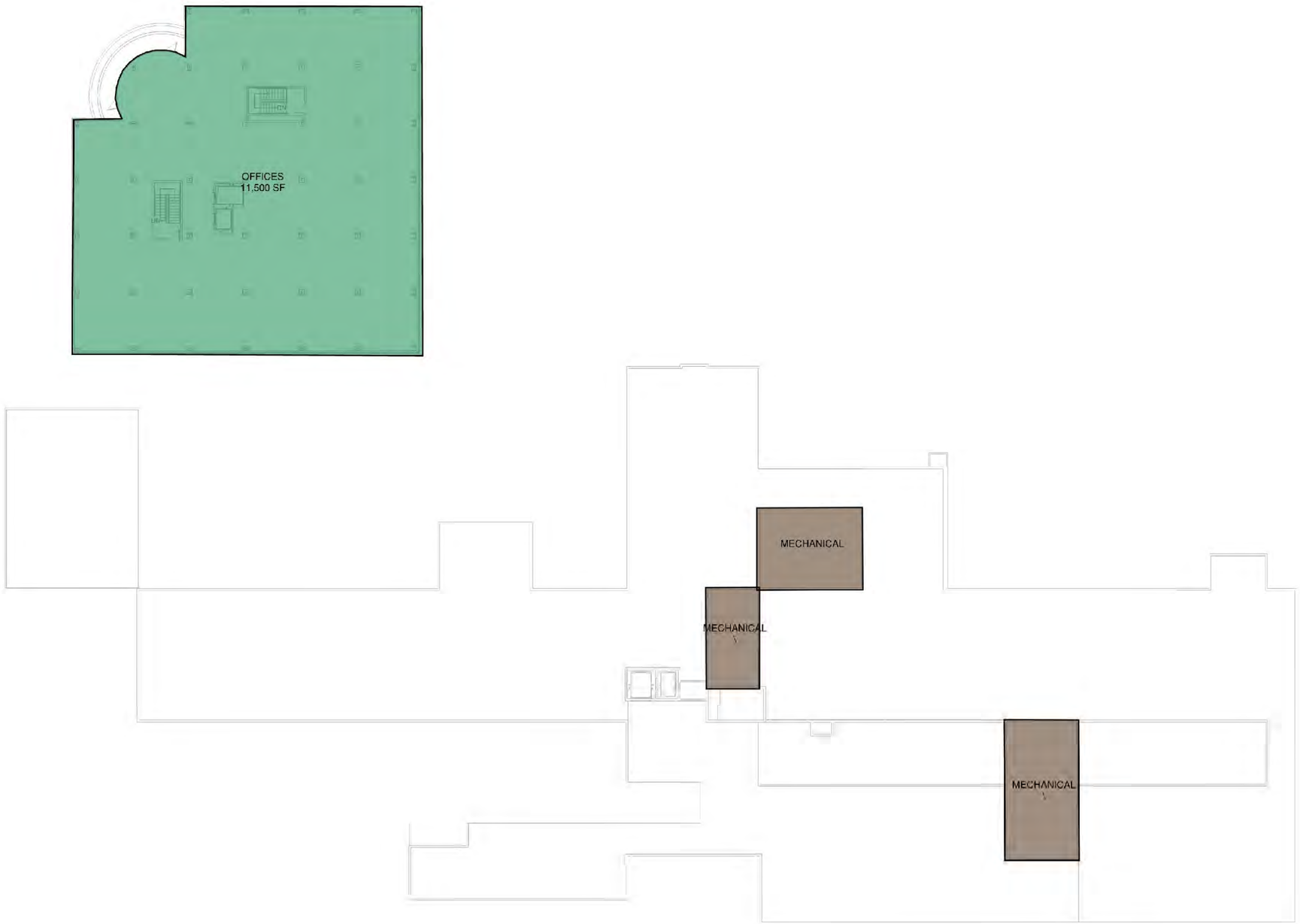
LEVEL 1 - MASTER PLAN FLOOR PLAN

Scale: 1/16" = 1'-0"



LEVEL 2 - MASTER PLAN FLOOR PLAN

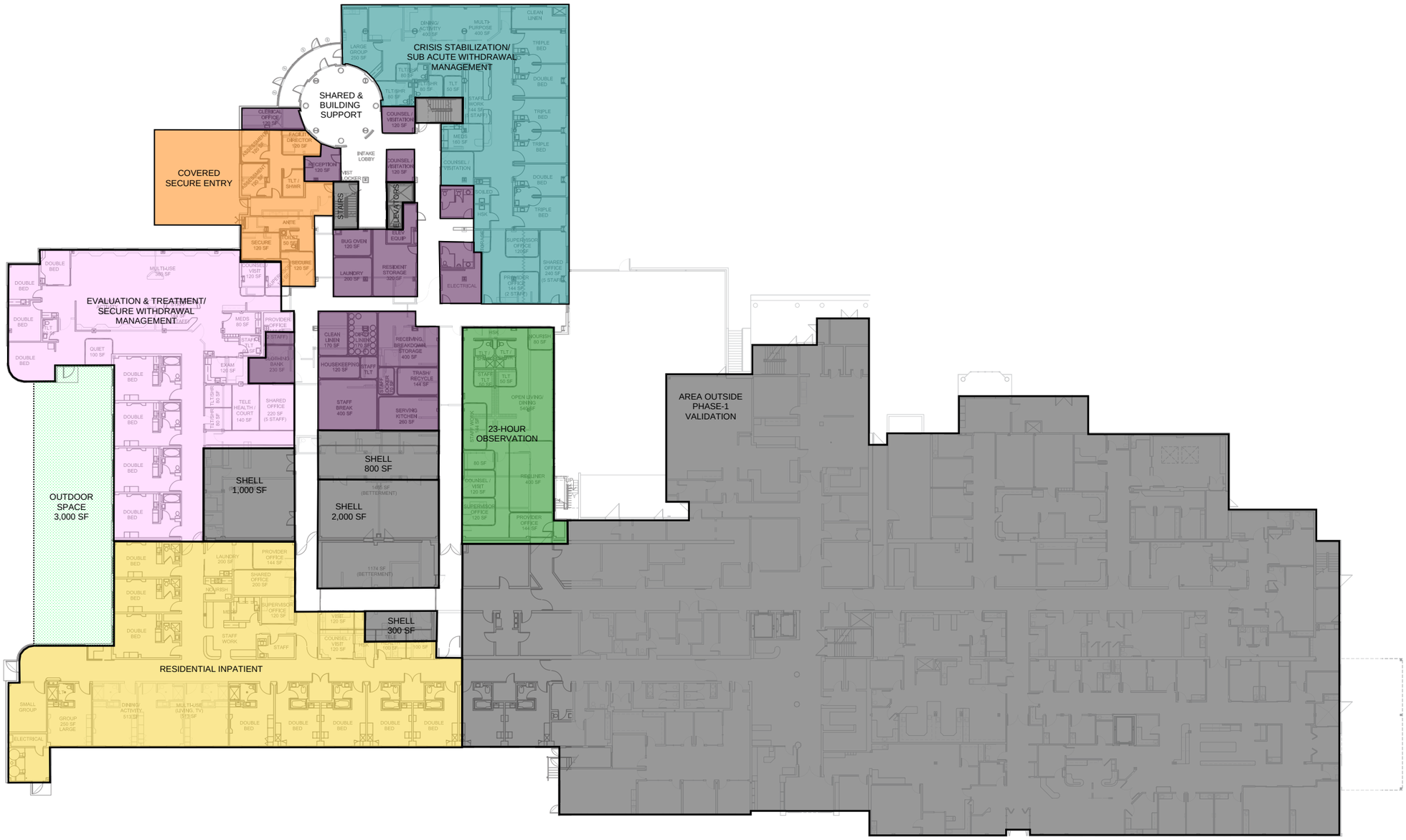
Scale: 1/16" = 1'-0"



1 LEVEL 3 - MASTER PLAN FLOOR PLAN

Scale: 1/16" = 1'-0"

EXHIBIT W:
PHASE 1 LEVEL 1 FLOOR PLAN



LEVEL 1 - PHASE-1 VALIDATION FLOOR PLAN

Scale: 1/16" = 1'-0"