

**SPECIAL MEETING OF THE
CLINTON REGIONAL HOSPITAL GOVERNING BOARD
TUESDAY, MARCH 30, 2023, 12:00 P.M.**

The Special Meeting of the Board Members of the Clinton Regional Hospital Governing Board of the City of Clinton, Oklahoma, Custer County, held in the Conference Room of the Clinton City Hall on Tuesday, March 30, 2023, at 12:00 p.m. A notice of this agenda was posted on the bulletin board in the lobby of the Clinton City Hall on March 28, 2023, at 12:00 p.m.

Members: Ken Baker, Chris Jones, Kelly Cornell, Kevin Wolters (absent), and David Mosburg

CARRUS: COO/CRH CEO Jon Rains

Manager: Robert Johnston

Secretary/Clerk: Amy Jones

Others: Nydia Campbell, David Berrong, Jill Atchley, Heather Roulet, Gwen Fuchs, Dewberry Architect Representatives - Cassandra Franco & Breanna Hasenkamp, PEC Engineers Representatives - Lance Brummett, Project Manager, Jessica Zvonek, Mechanical Engineer, Jessica Barnett, Electrical Engineer.

AGENDA ITEMS:

1. CALL TO ORDER

Chairman Kenneth Baker called the meeting to order at 12:02 p.m.

2. CONSIDER APPROVAL OF CONSENT AGENDA

(This item is placed on the agenda so the Clinton Hospital Governing Board, by unanimous consent, can designate those routine items they wish to be approved by one motion. If an item does not meet the approval of all members, that item will be heard in regular order.)

A. Approval of Minutes from February 28, 2023, meeting.

The minutes from the February 28, 2023 meeting were presented for review and approval.

Motion was made by Board Member Chris Jones and seconded by Board Member Kevin Wolters to approve the minutes of the February 28, 2023 meeting.

Chairman Ken Baker put the motion to roll call vote:

Aye: Cornell, Jones, Mosburg, Baker

Nay: None

Chairman declared the motion carried.

3. DISCUSSION, CONSIDERATION, AND POSSIBLE ACTION REGARDING:

A. Financial Report for month ending February 28, 2023

Jon Rains, President of Carrus Health, Inc presented a summary report to the Governing Board of the financial information for the month ending February 28, 2023. He provided Profit/Loss Report, check detail, and balance sheet for the month ending February 2023. He stated that in April he will be able to provide additional financial information on Urgent Care Clinic.

No action taken. Information only.

B. Clinton Regional Urgent Care Clinic Services Update

Jon Rains presented a report for the Clinton Regional Urgent Care Clinic Services Update. He reported that the urgent care clinic opened on March 13, 2023, at 7:00 a.m. The clinic is being staffed by hospital employees and a CARRUS nurse practitioner. He is in the process of credentialing local provider Jessica Wright. He stated that the clinic has provided service to 213 patients and 6 were true emergency room patients their care was transferred to emergency responders via air evac or ambulance.

No action taken. Information only.

C. Boiler Inspection

Jon Rains provided information regarding the boiler inspection. An invoice from Johnson Controls was provided for the boiler maintenance and inspection. Jon stated that this is continued maintenance that will need to be ongoing for the boilers.

Motion was made by Board Member Kelly Cornell and seconded by Chris Jones to approve the Annual Boiler Inspection invoice in the amount of \$8,208.38.

Chairman Ken Baker put the motion to roll call vote:

Aye: Cornell, Jones, Mosburg, Baker

Nay: None

Chairman declared the motion carried.

D. Chilled Water Pump Proposal

Jon Rains then provided a proposal for the Chiller HVAC Controls from Jackson Mechanical Services for replacement of the motor in a pump. The information was reviewed by the Board.

Motion was made by Board Member David Mosburg and seconded by Chris Jones to approve the replacement of the motor in pump that operates the Chiller HVAC at the

Clinton Regional Hospital from Jackson Mechanical an invoice in the amount of \$24,316.00.

Chairman Ken Baker put the motion to roll call vote:

Aye: Cornell, Jones, Mosburg, Baker

Nay: None

Chairman declared the motion carried.

E. Fire Suppression System Proposal by Johnson Controls

Jon Rains then presented a proposal from Johnson Controls for the Fire Suppression System. This is a one-year agreement. The agreement will maintain testing to meet the OSDH and CMS requirements. He recommended this agreement to the Board.

Motion was made by Board Member Chris Jones and seconded by David Mosburg to approve the Fire Suppression Proposal from Johnson Controls for a 1-year agreement in the amount of \$8,477.00.

Chairman Ken Baker put the motion to roll call vote:

Aye: Cornell, Jones, Mosburg, Baker

Nay: None

Chairman declared the motion carried.

F. Dewberry Architects: Presentation Regarding Clinton Regional Hospital Physical Plant in Regard to the hospital Re-Licensing Plan.

Cassandra Franco, Senior Healthcare Architect, Dewberry Architects, Inc. presented a Power Point deck of photographs, charts and text regarding their review of the Clinton Regional Hospital's present condition and compliance status with the most current codes enforced by the OK State Department of Health.

Representatives of Professional Engineering Consultants (PEC) then presented their comments regarding the mechanical/plumbing and electrical systems presently in place and the needs for updating to meet the most current codes enforced by the OK State Department of Health.

The Executive Summary of the OSDH Assessment completed by Dewberry & PEC Is, as follows:

The City of Clinton 'lost' its hospital when AllianceHealth ceased operations on December 31, 2022. The existing building does not meet current building codes. Before issuing a hospital license Oklahoma State Department of Health (OSDH) requires a building to be brought up to current building codes. Dewberry was hired to conduct a study outlining the

modifications required to meet the code. Due to the desire to open as quickly as possible, this study focuses on emergency, Imaging, food service, lab, Pharmacy, and the nursing unit, the minimum departments required to open a hospital. The city plans to engage Carrus/Health as the hospital operator.

General maintenance should be done before any inspection by OSDH: repair door and wall dings, repair leaking faucets, replace rusted and broken fixtures, prime plumbing traps, cap vacated piping, remove or repair broken equipment, remove food from coolers, repair door hardware, set up rooms for their intended use and address musty odor in Imaging.

General overall code-required upgrades to get a hospital license include: modifying existing walls to meet code-required sound ratings, replacing carpet with monolithic flooring, modifying walls in storage rooms to meet code-required fire rating, adding ADA-accessible toilets, adjusting public circulation to bypass surgery, replacing or installing various sinks and faucets, replacing flooring and ceilings in isolation rooms, replacing exhaust fans on the roof, create electrical branch separation, balance the mechanical systems, and replace the mechanical unit having a plenum return.

Department code-required upgrades:

Emergency - Replace the ambulance entry doors, modify the decontamination rooms entry, flooring, and plumbing, add consultation rooms, reconfigure the staff toilet to be accessible, add an ADA patient toilet, seek an exception to square footage requirements for an exam room from the Oklahoma State Department of Health (OSDH), replace carpet with monolithic flooring, replace flooring and ceilings in isolation rooms, add medical gases where required, add electrical outlets where required, and upgrade lighting as required.

Imaging - Relocate nurse call in patient toilets, add accessible toilets, remove or repair broken equipment, install or replace sinks and faucets in various locations, seek an exception to clearance requirements at the CT table from the Oklahoma State Department of Health (OSDH), modify dressing room bench to be accessible, replace carpet with monolithic flooring, address odor, remove and repair issue in nuclear medicine room, repair CT door, add medical gases where required, add outlets where required, replace the mechanical unit, and provide all code required rooms.

Food Service - Modify flooring and doors in walking coolers, repair staff toilet and modify to be accessible, add lockers, install sinks, modify counters to be accessible, install flooring in dry storage, remove the elevated floor in kitchen, provide redundancy in the water system, and add electric outlets where required.

Lab - Modify toilets to be accessible, install sinks and counters, and add mechanical unit and exhaust fan.

Pharmacy - Replace carpet with monolithic flooring.

Nursing Unit (in L&D) - Replace flooring and ceilings in the isolation room and toilet, modify or relocate family waiting and staff lounge to meet square footage requirements, add medical gases where required, replace or install sinks and faucets in various locations, upgrade lighting where required, add staff assist and emergency call devices, and add electrical outlets where required.

We estimate the ROM for the work outlined above to be 6.7M; this reflects an estimated construction cost of \$6.2M, with estimated design fees, ODSH fees, and reimbursable expenses making up the difference. We recommend that the city engage a construction manager that is experienced working in a hospital environment to assist with pre-design services and investigation of the existing facility. We recommend proceeding with the mechanical and electrical testing outlined in this report as quickly as possible to verify the assumptions made here. All testing must be completed before we proceed with the design. We estimate design and construction to take fifteen to eighteen months from notice to proceed.

We understand the importance of a community hospital in rural Oklahoma and share your desire to open your hospital as quickly and efficiently as possible. Don't hesitate to contact us with any questions or comments on this report. We are excited to work with you on this endeavor.

When obtained a copy of the final written report will be filed with the City Clerk for review.

The Hospital Governing Board members asked questions of the Dewberry & PEC representatives.

Information only. No action taken.

G. Request for Executive Session Pursuant to Section 307 (B)1 of the Oklahoma Open Meeting Act for the purpose of discussing the employment, hiring, appointment, promotion, demotion, disciplining or resignation of any individual salaried public officer or employee: Chief Operating Officer

Motion was made by Chris Jones and seconded by Chris Jones to move into Executive Session Pursuant to Section 307 (B)1 of the Oklahoma Open Meeting Act for the purpose of discussing the employment, hiring, appointment, promotion, demotion, disciplining or resignation of any individual salaried public officer or employee: Chief Executive Officer at 1:210 p.m. and invited the City Manager Robert Johnston, City Clerk Amy Jones, and Jon Rains, CEO Carrus Heath.

Chairman Ken Baker put the motion to roll call vote:

Aye: Cornell, Jones, Mosburg, Baker

Nay: None

Chairman declared the motion carried.

H. Reconvene from Executive Session

Motion was made by Kelly Cornell and seconded by Chris Jones to reconvene from Executive Session at 1:41 p.m.

Chairman Ken Baker put the motion to roll call vote:

Aye: Cornell, Jones, Mosburg, Baker

Nay: None

Chairman declared the motion carried.

I. Any Actions Arising Out of the Executive Session

Chairman Baker reported No Action taken.

J. NEW BUSINESS (If any, pursuant to Section 311.9 of the Oklahoma Open Meeting Act.)

None

K. HGB Member Comments

None

L. Management Comments

None

M. Audience Participation (According to Audience Participation Decorum Guidelines at the Clinton City Council Public Meeting effective 2/14/2017)

None

N. Adjourn

Motion was made by Member Chris Jones and seconded by Member Kelly Cornell to adjourn.

Chairman Baker put the motion to roll call vote:

Aye: Cornell, Jones, Mosburg, Baker

Nay: None

Chairman declared the motion carried and meeting was adjourned at 1:42 p.m.

Date Approved

Ken Baker, Chairman

Clinton Regional Hospital, located at 100 N 30th Street, in Clinton, Oklahoma, is a 93,500 sf single-story building constructed in phases between 1975 and 1999. The facility remained operational until December 31, 2022, when AllianceHealth ceased operations, leaving the facility without a license. The city of Clinton, with Carrus Health, is seeking to reopen the hospital, requiring a new license. A new hospital license requires that a building meets current codes. Dewberry was hired by the Clinton Medical Authority to conduct a study outlining the modifications required to bring the facility up to the current building code. Services include a multi-step approach, with the initial phase focusing on the departments required to open the hospital. The Emergency Department, Imaging, Lab, Pharmacy, Nursing Unit, and Food Service are the minimum requirements of a hospital and are addressed in this report. This report focuses on reviewing the following.

- Evaluate the facility to determine requirements for improvements
- Breaks improvements into categories:
 - o Code Required,
 - o Carrus Branding
 - o Wish List.
- Review of applicable codes include:
 - o FGI Guidelines for Design and Construction of Hospitals and Outpatient Facilities, 2018 edition.
 - o NFPA 101 Life Safety Code, 2012 edition
 - o Americans with Disabilities Act.
- As a subconsultant of Dewberry, PEC will provide preliminary recommendations based on a non-destructive evaluation of the existing mechanical, electrical, plumbing, medical gases, and fire protection infrastructure.
- Conduct non-destructive site observations to evaluate the architectural, mechanical, electrical, plumbing, fire protection, and medical gas infrastructure (MEP)
- The Deliverable will be in narrative form with recommended modifications and additions required open a hospital.
- Provides a rough magnitude of costs. A review of Surgery, ICU, Labor & Delivery, Rehab, Physical Therapy, and oncology will be done in a future phase. The initial Surgery, ICU, and Labor & Delivery walk-through indicated they would likely require physical modification to meet the current code. Dewberry, PEC Consultant, Oklahoma State Department of Health, Carrus Health, and hospital staff evaluated the facility on walk-throughs on February 15, 2023, and March 1, 2, 7, and 8, 2023, to observe conditions related to compliance with current building codes. Existing building and life safety plans were provided but didn't represent a complete history of the construction of the building.

General Observations:

Overall, the facility appears to be in fair condition and in need of general maintenance.

Maintenance observations include:

- General cleaning throughout
- Leaking flush valves

- Sewer odors in various locations, possibly from unprimed P traps
- Rusted drains
- Toilet room completely shut due to a drain issue
- Missing flooring in various locations
- Chipped and peeling laminate
- A musty odor in Imaging. A hose from above the ceiling into a trash can on the floor
- Trip hazard in the kitchen
- Uncapped abandoned drains
- Rooms that were not accessible to facility and maintenance staff
- Nonfunctioning medical equipment
- Spaces were filled with miscellaneous items that need to be removed
- Painted floors were scuffed down to the concrete
- Food is still in the freezers
- Doors and frames are chipped
- Stained ceiling tiles

Facility Compliance Issues

- Lacks accessible toilets for patients and staff
- Carpet in clinical areas and public corridors
- Isolation rooms and toilets missing cove base and hard ceiling
- Lack of handwashing sinks
- Plenum air return
- No outside air in patient rooms

Single Electrical Power

- Waiting rooms don't meet the size and air pressure requirement
- Walls missing required sound ratings
- Walls and doors are missing required fire-ratings

Assumptions include:

- Radiation protection in place meets protection requirements
- Food Service equipment is in working order and includes alarms, and monitors required to meet the current code

Observations & Recommendations

General:

1. Observation: **Carpet** in clinical areas, staff areas, and public corridors
Recommendation: Replace carpet throughout the facility with sheet vinyl with welded seams
2. Observation: **Sound Rating** - Walls don't meet the required sound rating

Recommendation: Add sound insulation to the wall in toilets, patient rooms, exam rooms, treatment rooms, and medication rooms.

3 Observation: **Electrical power** is supplied from a single location

Recommendation: Refer to MEP for additional information

4. Observation: **Plenum** air return in Imaging and oncology

Recommendation: Refer to MEP section. Extend existing walls to the deck to meet sound and fire rating requirements

5. Observation: No **Outside Air Intake** in patient areas

Recommendation: Refer to MEP for additional information

6. Observation: **Keys** unavailable for all rooms Recommendation: Establish a master key system and re-keying existing locks

7. Observation: **Surgery** suite doesn't restrict the public from

Recommendation: This will be addressed in a future phase but should inform the decision made in this phase

Emergency Department:

1. Observation: **Ambulance Entry** doors are not 6'0" clear

Recommendation: Replace doors with bifold doors

2. Observation: **Decontamination** room door is not 10'-0" from another entry door

Recommendation: Option 1. Request an exception from OSDH. Option 2. Relocate door

3. Observation: **Decontamination** requires two hand-held shower heads

Recommendation Install additional hand-held shower head

4. Observation: **Decontamination** requires a cove base and nonporous surfaces

Recommendation: Coat all surfaces with an epoxy coating.

5. Observation: **Staff Toilet** not accessible

Recommendation: Modify to meet ADA

6. Observation: **Consultation** room not provided

Recommendation: Room near admission to be a consultation room

7. Observation: **Isolation** room lacks a vision panel, sweeps, and closers on patient room doors.

Recommendation: Install window, sweeps, and closers on the existing door

8. Observation: **Isolation** room doesn't have an integral cove base

Recommendation: Replace the flooring and include an integral base

9. Observation: **Isolation** room ceiling appears to be a standard tile and grid system that allows air exfiltration

Recommendation: Replace ceiling tiles with a gyp board ceiling

10. Observation: **Patient Toilet** is not accessible and doesn't meet the code-required ratios.

Recommendation: Add an ADA patient toilet

11. Observation: **Exam** rooms are too small and lack the exam light and vision panel.

Recommendation: Exam rooms become fasttrack

rooms. Submit for an OSDH exception to the 100 sf requirement for a fast-track room (96 sf provided) Add exam light and vision panel.

12. Observation: **ER Waiting** room doesn't appear to have negative air pressure
Recommendation: Change medication room to ER waiting with negative air pressure.

13. Observation: **Fast Track** rooms don't meet minimum sf requirements
Recommendation: Request an OSDH exception

14. Observation: **Flooring** - Carpet in various locations.
Recommendation: Replace all carpet with monolithic flooring

Imaging Department:

1. Observation: The Imaging department has an overall musty odor
Recommendation: Further exploration is required. Potential for a partial new roof.

2. Observation: **Patient Toilet** nurse call located on the wet wall. It is required to be on the side wall

Recommendation: Relocate the nurse call to the side wall

3. Observation: **Patient Toilet** is not accessible
Recommendation: Modify one patient toilet to be ADA accessible

4. Observation: **X-ray** room missing a handwashing sink
Recommendation: Install a handwashing sink

5. Observation: **Fluoroscopy** equipment is not functioning
Comment: We understand this service will not be continued leaving this space available for a different use

6. Observation: **Nurse Station** requires handwashing
Recommendation: Use hand sanitizer stations to meet this requirement

7. Observation: **Nuclear Medicine** equipment is not functioning
Recommendation: We understand this service will not be continued leaving this space available for a different use

8. Observation: **Nuclear Medicine** has a hose from the ceiling leading to a can on the floor

Recommendation: Identify the issue and correct it as required

9. Observation: **CT** equipment doesn't have required clearances around the table
Recommendation: Option 1. Request an exception from OSDH. Option 2. Relocate millwork and wall as required

10. Observation: **CT room** entry door won't close
Recommendation: Modify the door as required to close

11. Observation: **MRI** missing a sink near the scan room entry
Recommendation: Option 1. Request an exception from OSDH. Option 2. Install sink

12. Observation: **MRI** HC dressing room bench doesn't meet ADA
Recommendation: Modify the bench as required

13. Observation: **MRI Patient Toilet** nurse call located on the wet wall.
Recommendation: Relocate the nurse call to the side wall

14. Observation: **MRI Scan room** required 4'-0" around the table
Comment: MRI table is not fixed, and assume this meets the intent of the code

15. Observation: **Flooring** - Carpet in various locations.
Recommendation: Replace all carpet with monolithic flooring
16. Observation: **Flooring** - Carpet in various locations.
Recommendation: Replace all carpet with monolithic flooring
17. Observation: **Plenum** space is used for return air Comment: Refer to the MEP section
- 18 . Observations: The following Code Required Spaces are not currently in Imaging: Patient holding, Pre & Post Procedure area, Medication room, Clean Supply, Solid Holding and evs room
Recommendation: Use available space to create these rooms.
19. Observation: Ultrasound and mammography contained no equipment
Recommendation: Addressed in a future phase

Food Service:

We've assumed that food service equipment is in working order and meets code requirements.

1. Observation: **Walk-in Coolers** missing cove base
Recommendation: Install new flooring with an integral base in coolers
2. Observation: **Walk-in Coolers** require a vision panel in each section
Recommendation: Replace cooler doors with doors that have a vision panel
3. Observation: **Staff Toilet** adjacent to the food service was locked and not functioning. We were told that it was closed because when the toilet flushes, it backs up into the kitchen
Recommendation: Repair and modify the drainage issue as required to meet AD.
4. Observation: **Dishwash Room** missing handwash sink
Recommendation: Install a handwash sink
5. Observation: **Dishwash Room** missing soak sink
Comment: Assume the soak sink in the kitchen can be used to meet this requirement
6. Observation: **Staff Lockers** were removed from the kitchen toilet room
Recommendation: Install new lockers in the kitchen toilet room
7. Observation: **Serving Area** drink station is not ADA accessible
Recommendation: Install a new counter at the drink station
8. Observation: **Dry Storage** floor is damaged, and the concrete below is exposed.
Recommendation: Install new flooring
9. Observation: **Elevated Floor** area under the hood is elevated.
Recommendation: Field exploration of the floor before removing the step

Lab Department:

1. Observation: **Handwashing** stations are not provided in each enclosed room
Recommendation: Install a handwashing station in each enclosed room (two locations)
2. Observation: **Blood Draw** is missing a handwashing station, work counter, and storage
Recommendation: Install upper and lower cabinets with a sink
3. Observation: **Patient Toilet** is not ADA accessible
Recommendation: Convert the Men's toilet to a unisex ADA patient toilet

4. Observation: **Staff Toilet** is not ADA accessible
Recommendation: Convert the Women's toilet to a unisex ADA staff toilet

Pharmacy Department:

1. Observation: **Flooring** - Carpet in various locations.
Recommendation: Replace all carpet with monolithic flooring

Nursing Unit – Existing

1. Observation: **Isolation** room doesn't have an integral cove base
Recommendation: Replace the flooring and include an integral base
2. Observation: **Isolation** room ceiling appears to be a standard tile and grid system that allows air exfiltration
Recommendation: Replace ceiling tiles with a gyp board ceiling
3. Observation: **Isolation** room door lacks sweeps and closers
Recommendation: Install sweeps, and closers on the existing door
4. Observation: **Isolation** Toilet doesn't have an integral cove base
Recommendation: Replace the flooring and include an integral base
5. Observation: **Patient Room Toilet** doesn't have a Handwash sink
Recommendation: Request an OSDH exception
6. Observation: **Patient Room** beds don't have 3'-0" clearance on all sides
Recommendation: removing counters along the exterior wall
7. Observation: **Patient Rooms** Mechanical Systems
Recommendation: Refer to the MEP section for recommendations
8. Observation: **Nourishment** is not accessible and is missing a hand washing sink
Recommendation: Replace millwork with accessible millwork and install a sink
9. Observation: **Storage** for equipment and supplies is not 100 square feet
Recommendation: Relocate storage into
10. Observation: **Waiting Room** is too small to meet the code
Recommendation: Relocate waiting to an available space
11. Observation: **Staff Toilet** is not accessible and doesn't meet the code-required ratios.
Recommendation: Add an ADA staff toilet
12. Observation: Patient rooms

Nursing Unit – OB as Med Surge

1. Observation: **Isolation** room doesn't have an integral cove base
Recommendation: Replace the flooring and include an integral base
2. Observation: **Isolation** room ceiling appears to be a standard tile and grid system that allows air Exfiltration
Recommendation: Replace ceiling tiles with a gyp board ceiling
3. Observation: **Isolation** Toilet doesn't have an integral cove base
Recommendation: Replace the flooring and include an integral base
4. Observation: **Patient Rooms** Mechanical Systems
Recommendation: Refer to the MEP section for recommendations

5. Observation: **Nourishment** is not missing microwave and ice machine
Recommendation: install microwave and ice and water machine
6. Observation: **Staff Lounge** is not 100 square feet
Recommendation: Relocate Staff Lounge
7. Observation: **Medication** Alcove is missing the medication dispensing unit, and locked refrigerator
Recommendation: Install medication dispensing unit, and locked refrigerator
8. Observation: **Waiting Room** is too small to meet the code
Recommendation: Relocate waiting to an available space

Professional Engineering Consultants, P.A. (PEC) was engaged by Dewberry Architects to perform a visual observation of the current unlicensed Clinton Hospital. The facility is located in Clinton, OK. PEC's responsibility is to determine minimum code requirements to be able to re-open the existing hospital as the existing license has lapsed. The hospital will be re-opened in a phased approach. Phase 1 will include the following areas along with overall general MEP systems to serve these areas:

Inpatient Areas:

- Emergency Department
- Imaging
- Food Service
- Lab
- Pharmacy
- Med Surg

Outpatient Areas:

- Physical Therapy
- Oncology/Infusion

The existing hospital was opened under OSDH Chapter 667 requirements and licensed at that time. The new license for the hospital will refer to the FGI 2018 Hospital Facilities Guidelines as well as CMS 2012 NFPA 99 and 101 requirements. The rest of the existing hospital services will be evaluated in a later phase and are not included in this assessment. Please refer to architectural drawings for reference of current areas within the scope of this assessment.

All available As-Built drawings have been provided by the owner.

Professional Engineering Consultants, PA discloses that our visual observations were made solely to determine the observed condition of the existing building systems at the time of the site visit. This report represents statements regarding the condition of the subject building and components as they were observed on the date of this site visit. The observations made are limited to what was visible and accessible at the time of the site visit. Any changes that have occurred after this date should be noted and a supplemental visual observation may be necessary.

EXECUTIVE SUMMARY:

Finish for final draft.

GENERAL MEP COMMENTS:

In order to license the unlicensed spaces, OSDH will evaluate from a new building perspective. This means the following will be required for the spaces being newly licensed:

COMMISSIONING:

FGI 2018, 1.2-8.1 Commissioning Requirements on projects involving installation of new or modification to existing physical environment elements critical to patient care and safety or facility energy utilization,

at minimum the following systems shall be commissioned:

- 1.2-7.1.1 HVAC
- 1.2-7.1.4 Automatic Temperature Control
- 1.2-7.1.3 Domestic Hot Water
- 1.2-7.1.4 Fire alarm and fire protection systems (integration with other systems)
- 1.2-7.1.5 Essential electrical power systems

Documentation of commissioning should be provided at the time of inspection. Provide documentation stating the system complies on items above.

OSDH FINAL INSPECTION CERTIFICATES AND TESTING REQUIREMENTS:

All documents must be signed and dated at the final inspection. Failure to have all documents present may result in the project not being approved. The design engineers/professionals shall review the data for their respective disciplines and certify that the commissioning reports meet the design criteria within industry standard acceptable tolerances of OAC 310 and the intent of the design professionals. Documentation shall be provided as to the reason any documents shown below are not required. The following documentation should be provided at the final inspection.

- Fire Marshall final approval.
- Certificate of Occupancy from AHJ
- Architect's Certificate of Substantial Completion
- Fire Sprinkler Certification per NFPA 13
- Fire Alarm Certification per NFPA 72
- Essential Electrical System (emergency generator) installation acceptance requirements per NFPA 110
- HVAC Test and Balance report – **(Reviewed, noted, approved, and signed by EOR)**
- Medical Gas Certification
- Electrical Impedance Testing per NFPA 99 – **(Reviewed, noted, approved, and signed by EOR)**
- Breaker Coordination Study
- Boiler Testing and Certification
- Backflow Preventer Testing and Certification
- Nurse Call Certification

MECHANICAL COMMENTS:

GENERAL MECHANICAL COMMENTS:

OSDH enforces the FGI Guidelines for Design and Construction of Outpatient Facilities, NFPA 101-2012, NFPA 99-2012, and all referenced codes and standards. Mechanical modifications will also be needed depending on the architectural impacts required to meet FGI 2018. Refer to architectural assessment. The existing unlicensed spaces not included in Phase 1 are excluded from this assessment.

ASHRAE 170 COMMENTS:

The current spaces within scope have been evaluated based on FGI 2018 Outpatient Requirements. This guideline refers to ASHRAE 170-2017. However, OSDH requires compliance with ASHRAE 170-2008 to match CMS requirements. For the purposes of this assessment, both Standards were reviewed. The following were observed:

- Ventilation upon loss of normal utility electrical power is required in all All (Airborne Isolation) rooms Phase 1 All rooms include a med surg All room as well as an ED (Emergency Department) All room. The ED is served by a dedicated RTU, and the new med surg wing (old OB wing) is also served by a dedicated RTU.

The Owner's facilities team stated on site that the ED RTU was served by generator power to provide the ventilation required during a loss of utility power. It could not be determined that the OB wing dedicated RTU was served by generator power. If it is verified that this RTU is not connected to generator power, there appears to be sufficient capacity on the generator to support this RTU and additional mechanical equipment that is supporting the All rooms throughout this phase.

- Reserve heating (dual fuel) and redundant equipment is required for dietary purposes as well as heating for inpatient rooms. The existing boilers are natural gas fired only and do not meet the requirements of dual fuel.

A new electric hot water heater will be provided dedicated to serving the kitchen that will be tied into the existing hot water system serving the area to serve as back up. The inpatient rooms in the new med surg wing (old OB wing) will be provided with electric ceiling radiant panels that will be tied into the existing room controls. It appears that there is sufficient power available to support this new mechanical equipment.

- Cooling for the hospital is by (2) water cooled chillers with associated pumps and cooling tower located in the CUP (Central Utility Plant). Chilled water capacity over 400 tons requires more than one chiller.

No changes required.

- Outdoor intakes for the AHU's and RTU's serving the spaces within the project are required to be located more than 6' above the ground or 3' above the roof. The existing RTU's serving ED, Med Surg (old OB), and physical therapy meet this requirement. The outside air intakes serving the existing AHU's serving food service, imaging, oncology/infusion, imaging, and lab will need to be modified to be 6' above the ground.

The outside air intake for the existing AHU's will need to be modified to 6' above the ground where applicable by modifying the OSA louver and re-routing ductwork as needed.

- Only existing roof mounted general exhaust fans serve the spaces within scope. All rooms and ED Waiting/Triage rooms appear to be provided with dedicated exhaust fans; however, they do not terminate 10' above the roof. Most of the existing exhaust fans are 25' away from OSA intake of the AHU's and RTU's within Phase 1 scope.

New isolation type utility set exhaust fans will be needed to serve any All type spaces as well as ED waiting/triage. The fans will discharge 10' above the roof. Any existing fans that are within 25' of the outside are intake of the RTU's serving the emergency department, med surg (old OB), and physical therapy will need to be replaced with a utility set type fan that can be extended on the roof so that it can meet the 25' requirement.

· All AHUs and RTU's within scope appear to have a filter pressure monitor at the prefilter and final filter position. Although it could not be confirmed exactly what the filtration value was, everything is in place to be able to replace the filters with MERV 7 prefilters and MERV 14 final filters or just MERV 13 prefilters depending on the requirement of each unit.

New MERV 7 and MERV 14 pre and final filters will need to be installed in the units serving the new med surg wing, imaging, emergency department, and pharmacy. New MERV 13 prefilters will need to be installed in the units serving the lab, physical therapy, and food services. These should be installed prior to the pre-TAB needed to confirm required ACH's.

· The supply diffusers serving the spaces within Phase 1 scope are Group A type outlets as required by ASHRAE. There are some ED exam rooms that were actually designed as Trauma rooms, but then downgraded to exam rooms because they were not able to maintain required airflow or pressure. If these rooms are converted back to Trauma rooms, the supply grilles in these rooms will need to be replaced with laminar flow type supply diffusers (ASHRAE Group E).

No changes required.

· None of the spaces within Phase 1 require a low limit relative humidity to be maintained. There are currently no humidifiers serving the existing AHU's or RTU's. Although it is not a code minimum requirement, many times imaging equipment requires a low humidity limit to maintain warranty of the imaging equipment. Depending on final scope of the imaging scope, a new electric generated humidifier will be needed to serve the AHU serving the imaging spaces.

No changes required per code minimum. A new humidifier will be required to serve imaging.

· Based on site observation of the ductwork located in the mechanical room, the existing ductwork is wrapped downstream of the Filter Bank No. 2.

No changes required.

· Based on site observation of the ductwork located in the mechanical room, the existing AHU's and RTU's serving the food services, emergency department, lab, pharmacy, med surg (old OB wing), and physical therapy appears to be ducted. The AHU that serves imaging and oncology/infusion is plenum return and does not meet code requirements of being ducted within the mechanical room.

Replace the existing AHU that serves imaging and oncology/infusion. Refer to architect on other options to provide imaging in Phase 1 that would not require the existing AHU to be replaced during Phase 1.

· The spaces within the scope will be required to be commissioned and balanced as if it was a new facility and meet ASHRAE 170 air changes, temperature, humidity, and pressurization requirements.

In order to confirm whether the existing system to be re-used will meet ASHRAE 170, a pre-design TAB report will be needed. The TAB measurements will be compared to ASHRAE 170 calculations and further recommendations will be made at that time.

PLUMBING COMMENTS:

GENERAL PLUMBING COMMENTS:

OSDH enforces the FGI Guidelines for Design and Construction of Outpatient Facilities, NFPA 101- 2012, NFPA 99-2012, and all referenced codes and standards. Plumbing modifications will also be needed depending on the architectural impacts required to meet FGI 2018. Refer to architectural assessment. The existing unlicensed spaces not included in Phase 1 are excluded from this assessment.

WATER:

The domestic water entry feed is located in the CUP (Central Utility Plant). It currently does not have the required parts to meet code with the required backflow preventers. Additionally, there is only one water entrance. After the water entry, the line then feeds the domestic cold water throughout the building. It supplies cold water to the hot water system which is a single steam to hot water heat exchanger with associated pumps and recirculation pumps. The steam to the heat exchanger is served by the boilers.

An additional electric water heater and recirc pump will need to be added for redundancy and dual fuel requirements that will be dedicated to the kitchen and dietary needs per ASHRAE 170 requirements. The domestic and hot water routing will need to be modified to accommodate the new water heater.

WASTE:

Existing waste piping appears to be working and in good condition.

Waste will be modified as needed to meet any architectural changes.

PLUMBING FIXTURES:

In general, most of the existing plumbing fixtures are located where required to meet FGI guidelines based on the current layout of the space for Phase 1 and appear to be in good working order.

Refer to architectural assessment for any additional plumbing fixture requirements or relocations and coordination with new architectural plan requirements. Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.

MEDICAL GAS:

The existing manifold room is designed to contain a nitrous oxide manifold. There is an existing oxygen farm that also enters this room. The high and low louvers in the room are currently smaller than the required louver size. The vacuum pump and medical air compressor are located in the CUP. The vacuum pump and compressor appear to be in good condition, and per facilities there are no known issues. The MAP (master alarm panel) is located in the office adjacent to the CUP. **Larger louvers will need to be installed in the manifold room to meet NFPA requirements. A second MAP will need to be located in an area that is manned 24/7. The medical gas system will need to be modified to coordinate with updated Architectural drawings and outlets added per code requirements.**

FIRE PROTECTION:

The existing sprinkler system appears to have multiple entries into the building, and a fire pump was not observed. Per yearly fire protection certifications, it is assumed that the existing system met requirements.

The existing wet fire sprinkler system that currently serves the building will be modified as required based on any architectural requirements per performance-based specifications. Quick release sprinkler heads shall be used.

GENERAL ELECTRICAL COMMENTS:

Below are general electrical observations applicable to the areas within scope of this assessment that need to be corrected:

UTILITY/NORMAL POWER:

The facility is served by a 1000kVA, 480/277V 3PH utility transformer. The utility transformer serves (2) Main Distribution Boards, they are each 1600A 480/277V 3 PH 4 Wire Switchboards. "MSB Original" is original to the facility and currently serves (5) 400A 480/277V 3PH 4 Wire Distribution Panels. "MSB New" was installed more recently and serves the normal side of the Essential Electrical System (EES) automatic transfer switches.

There are (2) existing chillers that are directly fed from the utility transformer.

Each of these feeds served directly from the Utility Transformer are considered to be individual service disconnects. Although (6) individual service disconnects are permitted, NFPA 70 allows for multiple services and their disconnects to be located separately. **However, these service disconnects need to be permanently marked using signage per NFPA 70 requirements and will require written variance from the Authority Having Jurisdiction.**

It is our opinion that from observations that the distribution and the branch distribution should be replaced as the existing equipment has exceeded its useful life and the branch circuit capacity is lacking for additional electrical loads.

Per NEC, Ground Fault Protection is required on the main service disconnect as well as the devices in the main distribution electrical gear. **It was observed that Ground Fault Protection was provided on the "MSB New" but was not provided for the "MSB Original". It is required that this protection be provided.**

EMERGENCY POWER:

It is our opinion from observation that the required selective coordination for the Life Safety branch cannot be achieved with the existing electrical equipment. **The existing Life Safety distribution equipment should be replaced to accommodate adjustable trip devices that can easily be coordinated.**

It could not be verified that the required panel bonding per NEC was present at the panels that serve the same patient care areas. **It is required that these panels be inspected for the required grounding and the grounding conductors should be installed as required per NEC.**

Generator:

Located in a dedicated generator room is a 400kW / 500KVA 480/277V 3PH 4W diesel generator. This unit is still in use, serving the existing unlicensed hospital as a Type 10 Class 48 Level 1 generator set. Regular testing and maintenance has been conducted on the existing generator. The maintenance logs provided by the facilities staff states the generator transfers within 10s.

The generator has a 600A output circuit breaker and feeds a 1200A Distribution Panel "E". This distribution panel serves the emergency side of the (4) existing Automatic Transfer Switches and (1) load bank outlet. As required per NFPA 99 & NFPA 70, this Category 1 facility has existing Normal, Critical, Life Safety and Equipment Branches for a Type 1 Essential Electrical System (EES).

It was observed that the generator annunciator and stop switch were located in a corridor between the equipment rooms.

NFPA 110 requires the annunciator panel be located in a normally manned area. It is recommended to hire a factory authorized service agency perform a full inspection on the existing generator. This should include, at minimum, a 100% load bank test to determine peak output, along with running a triennial test at 75-90% load for a minimum of 4 hours.

Transfer Switches:

As described above, the genset feeds into a distribution panel that feeds (4) 480/277V 3PH, 4W automatic transfer switches. The Life Safety Branch is fed from a 150A automatic transfer switch, the Critical Branch is fed from a 225A automatic transfer switch, the Equipment Branch is fed from a 400A automatic transfer switch. There is a 400A automatic transfer switch for imaging and is considered an optional branch to the EES.

There is required to be vertical separation of the branches on the EES. The existing distribution panel “E” does not currently provide the required vertical separation.

A proposed code compliant solution would be to replace the 1200A distribution panel ‘E’ with (5) fused disconnects or enclosed circuit breakers to refeed the existing (4) automatic transfer switches and load bank outlet.

The location of the automatic transfer switches in the original electrical main distribution room is not acceptable. Per NFPA 110 26, the automatic transfer switches shall not be installed the same room with “normal service equipment”. The solution to this problem would be to relocate the automatic transfer switches outside the original electrical main distribution room.

SYSTEMS:

The existing nurse call system is a recently installed Rauland Nurse Call system. This system is capable of supporting new devices as deemed necessary. It appeared that most spaces had the appropriate device types required per FGI. Any spaces that do not will be noted in the respective section.

TELECOMMUNICATIONS:

The existing main telecommunication and data room serves the hospital’s current needs. However, they do not meet 2018 FGI requirements for a TDR or TSER.

Consideration by the Owner should be made to provide the appropriate space for a code compliant TDR/TSER. It is recommended that a secondary TSER be designated with provisions for a secondary internet service if Electronic Health Records are stored off site.

It was not determined if the assessed spaces had adequate low voltage drops for the clinical staff and their equipment.

FIRE ALARM:

An existing Simplex 4100ES fire alarm system appeared to be maintained and should be capable of system expansion. It appeared that most spaces met the required coverage for smoke detection and audio/visual notification.

POWER DEVICES:

It was observed that a uniform color was not utilized throughout the facility to indicate electrical receptacles that are served from the EES as required by NFPA 99. **It is recommended that the Owner choose a standard color (typically red) and replace any devices that are served from the EES and that are not the standard color.**

It was observed that no faceplates were marked with the branch panel and circuit designation. Per NFPA 70, the faceplate shall be labeled with panel and circuit numbers.

It is recommended that the owner should consider having circuitry serving all areas verified and panel directories updated.

EMERGENCY DEPARTMENT:

Exam Rooms:

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met.

Based on the relatively newer system and system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated.

Plumbing:

Plumbing appears to meet required codes and be in good working condition. **No changes required.**

Med Gas:

Most of the exam rooms have more outlets than required by FGI; however, Exam room 7 and 8 only have(1) O2 outlet.

Provide minimum med gas outlets to Exam rooms 7 and 8 fed from existing ZVB serving the rest of the emergency department.

Power:

It was observed that most of the exam rooms exceed the required (8) single electrical outlets. (8) single receptacles are located at the head wall and (6) single receptacles located on the walls. It was also observed that there were electrical outlets within 6ft of the sink that did not appear to be GFCI protected. There appeared to be exam rooms with prefabricated towers that do not have receptacles installed but have (8) single receptacles on the walls, with (4) convenient to the head of the bed. None of these receptacles appeared to be on critical branch power.

It is required to replace all receptacles required to be GFCI with GFCI devices.

Lighting:

It was observed that most rooms had functional lighting. There were also rooms with damaged lighting fixtures or switches that did not appear to control any lights.

It is recommended to demolish any switches that are not in use and/or damaged.

Treatment Rooms:

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met. The treatment rooms are also used as air borne isolation rooms and have exhaust fans. **Based on the relatively newer system and system type it is assumed there will be minimal modifications other than rebalancing needed once pre-design TAB is received and evaluated. The exhaust fans will need to be replaced with utility set fans that discharge 10' above the roof, and pressure monitors will need to be added to the rooms.**

Plumbing:

Plumbing appears to meet required codes and be in good working condition. **No changes required.**

Med Gas:

The treatment rooms have more outlets than required by FGI. **No changes required.**

Power:

A prefabricated power column headwall was observed with (12) duplex receptacles or (24) single electrical receptacles all served from critical branch circuits. There were (3) duplex receptacles served from a normal branch circuit on the walls of the room. This exceeds the FGI required (12) single receptacles for a treatment room. **No changes required.**

Lighting:

It was observed that each room had fluorescent lighting fixtures and a ceiling mounted exam light. There were also rooms with damaged lighting fixtures or switches that did not appear to control any lights.

It is recommended to demolish any switches that are not in use and/or damaged.

Triage Room

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met. The triage rooms also exhaust fans. **Based on the relatively newer system and system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated. The exhaust fans will need to be replaced with utility set fans that discharge 10' above the roof, and pressure monitors will need to be added to the rooms.**

Plumbing:

Plumbing appears to meet required codes and be in good working condition. **No changes required.**

Med Gas:

The treatment rooms have more outlets than required by FGI. **No changes required.**

Power:

It was observed that there is a sufficient number of electrical receptacles. However, at least 50% of them were not served by critical branch power.

Per FGI requirements, a triage room in the emergency department is required to have a minimum of (6) single electrical outlets, with at least 50% fed from critical branch power.

Support Spaces:

Mechanical:

A new emergency department waiting room will be relocated (refer to architectural drawings). **Supply air will need to be rebalanced to serve this room. A new utility set exhaust fan will be needed that discharges 10' above the roof that serves the new waiting room.**

Power:

It appeared that the existing support spaces had a sufficient number of electrical receptacles. Receptacle counts and locations should be considered if the existing rooms change use.

Lighting:

It was observed that the existing lighting fixtures are fluorescent. Consideration should be given to utilizing a more energy efficient lighting solution.

Medication Zones, Nurse stations, charting stations, etc. are required to have lighting levels as noted in USP 1066. These levels can be achieved with fixed task lighting (such as undercabinet lights) or a strategic lighting layout.

IMAGING:

Mechanical:

The existing AHU serving the imaging rooms utilizes return air plenum and has cooling coils down stream of the final filters, neither which meet code requirements. **Provide a new AHU that will be sized to accommodate the load of the existing imaging equipment room with built-in capacity for future imaging equipment replacements. It is recommended that an alternate path to provide imaging for Phase 1 be explored so that the hospital can open quicker than it would take to make the major mechanical modifications required.**

Plumbing:

Plumbing appears to be in good working condition. **Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.**

Med Gas:

The imaging rooms are provided with (1) O₂ outlet. **Provide minimum med gas outlets for a Class 1 Inpatient Imaging room to each room. A new Vacuum ZVB (zone valve box) will be needed.**

Power:

The existing imaging equipment was observed to be served from a 480/277V 3PH 4W 400A distribution panel 'HX'. This distribution panel appears to be near maximum capacity and probably will not support a larger demand replacement or additional imaging equipment.

Lighting:

It was observed that the existing lighting fixtures are fluorescent throughout the imaging suite. Consideration should be given to utilizing a more energy efficient lighting solution.

X-Ray:

Power:

It was observed that the X-Ray imaging room had (6) single receptacles within the room. These receptacles are fed from normal branch power.

Per FGI 2018 2.1-3.2.1 requirements, a Class I Imaging area is required to have a minimum of (8) single electrical outlets, with (4) on each side of the imaging gantry with consideration to some of the receptacles to be on critical branch power. (1) additional duplex receptacle fed from critical branch power should be installed on accessible wall space in the room.

MRI/CT/Ultrasound Room:

Power:

The number of electrical receptacles could not be determined.

It should be verified that the MRI room complies with FGI Requirements. Per FGI requirements, a Class I Imaging area is required to have a minimum of (8) single electrical outlets, with (4) on each side of the imaging gantry. Consideration should be given to the source of power to the receptacles.

Support Spaces:

Power:

It appeared that the existing support spaces had a sufficient number of electrical receptacles. Receptacle counts and locations should be considered if the existing rooms change use.

Lighting:

It was observed that the existing lighting fixtures are fluorescent. **Consideration should be given to utilizing a more energy efficient lighting solution.**

FOOD SERVICE:

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met.

Based on the system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated.

Plumbing:

Plumbing appears to meet required codes and be in good working condition. The dishwasher and hot water system are served by the existing hot water system. **A new electric hot water heater will need to be provided for redundancy dedicated to the kitchen. Existing hot water and domestic water will be modified as needed to integrate the redundant hot water heater.**

Power:

Some of the existing receptacles throughout the kitchen did not appear to be protected against ground fault as required by NFPA 70. There were (5) circuits of electrical receptacles that were GFCI protected. **It is**

required that all receptacles in a kitchen be GFCI protected at the device or at the breaker serving the device per NFPA 70.

Lighting:

It was observed that there was mostly functional surface mounted fluorescent lighting in the kitchen area. It could not be determined that the existing lighting provided the required lighting levels. **It is recommended to update the lighting in the kitchen to a more energy efficient and higher light output solution.**

LAB:

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met. Per user, the lab does not stay cool when it is running. **A new above ceiling FCU's (fan coil units) will be provided to supplement the cooling of the lab. An additional exhaust fan will be added to ensure pressurization is maintained.**

Plumbing:

Plumbing appears to meet required codes and be in good working condition. **No changes required.**

Power:

It was observed that the existing lab, analysis areas, and support spaces had sufficient receptacles and branch circuits available to serve additional equipment. It was also observed that these receptacles were powered from both normal and critical branch power.

Lighting:

It was observed that there was functional surface mounted fluorescent lighting in the area. **It is recommended to update the lighting in the lab to a recessed and more energy efficient and higher light output solution.**

PHARMACY:

Mechanical:

The pharmacy was recently updated to meet USP 800 requirements. It is served by HEPA FFU's (Fan Filter Units) at a minimum of 30 ACHs. The required pressures are maintained with pressure monitors provided. The Hazardous room is provided with a dedicated exhaust fan that discharges 10' above the roof.

No changes required.

Plumbing:

Plumbing appears to meet required codes and be in good working condition. The Ante room was provided with a large hands free sink. **No changes required.**

Power:

It was observed that the pharmacy had sufficient electrical receptacles and branch circuits to meet their current needs.

Lighting:

It was observed that the new ante and buffer rooms had new flanged LED lighting fixtures that appeared to meet current USP 1066 requirements. The support areas in the pharmacy had fluorescent lighting. **It is recommended to update the lighting in the pharmacy support areas to a more energy efficient and higher light output solution.**

MEDICAL/SURGICAL (EXISTING OBSTETRICS):

It was observed and discussed with the Owner that the existing Obstetrics area was the most capable of serving as the Med/Surge wing in this phase of the hospital re-licensing.

Patient Rooms:

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met. The existing airborne isolation room does not have a pressure monitor, and the exhaust fan does not discharge 10' above the roof. **Based on the relatively newer system and system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated.** The exhaust fan serving the airborne isolation room shall be replaced with a utility set type fan that discharges 10' above the roof and a digital pressure monitor will be provided to the room.

Plumbing:

Plumbing appears to be in good working condition. **Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.**

Med Gas:

Most of the rooms have more the minimum or more O2 and Vac outlets required by FGI. However, Medical Air (MA) gas outlets are not provided. The existing ZVB serving the wing does have medical air available as it feeds the nursery. There are some medical gas stub ups in the patient rooms, but it is unclear if these are medical air or for oxygen or vacuum. **Provide medical air outlets to all patient rooms. Modify piping as required to add these outlets to be served by existing ZVB serving the area.**

Power:

It was observed that there were (16) total single receptacles in the room, (6) of which are on critical branch power. Per FGI requirements, a med/surge wing patient room is required to have (12) single receptacles.

No changes required.

Lighting:

Fluorescent lighting was observed in each of the patient rooms. **It is recommended that the lighting be updated to more energy efficient light fixtures. Reading fixtures should have the capability to be controlled by the patient without the patient leaving the bed. An exam fixture with high lumen output should be installed over the bed to meet the required medication administration work area lighting levels per USP requirements.**

Nursery:

The existing nursery was observed under the direction to utilize this space as an additional med/surge patient room.

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met.

Based on the relatively newer system and system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated. |

Plumbing:

There is a sink in the existing nursery, but there is not a bathroom. **The plumbing will need to be updated to meet match architectural changes to be able use this room as an inpatient room. Since there is not a restroom, it is recommended that the nursery stay as is and not be converted to inpatient rooms as it is not required in the inpatient room count order to open Phase 1. This would reduce the time to open hospital initially under Phase 1.**

Med Gas:

The nursery has more med gas outlets than required by code. **Modify outlets and piping as required to convert to inpatient rooms.**

Power:

It was observed that the existing nursery had (26) single receptacles, (16) of which are on critical branch power.

Per FGI requirements, a med/surge wing patient room is required to have (12) single receptacles. No changes required.

Lighting:

Fluorescent lighting was observed in each of the patient rooms. **It is recommended that the lighting be updated to more energy efficient light fixtures. Reading fixtures should have the capability to be controlled by the patient without the patient leaving the bed. An exam fixture with high lumen output should be installed over the bed to meet the required medication administration work area lighting levels per USP requirements.**

Systems:

It was observed that the only nurse call device in the room is a combination code pink and emergency call station. **Per FGI requirements, a med/surge patient room is required to have a patient station, staff assistance station and emergency call station. It is recommended to add an additional device with the noted functions in the room.**

Nurse Station/Meds Alcove:

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met. **Based on the relatively newer system and system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated.**

Plumbing:

Plumbing appears to be in good working condition. **Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.**

Power:

It appeared that the existing Nurse station had a sufficient number of electrical receptacles that supports the clinical staff's equipment.

Lighting:

Fluorescent lighting was observed in the nurse station. **This area is designated to have required lighting levels per USP 1066. Lighting fixtures should be replaced with more**

energy efficient fixtures with higher light outputs or add fixed task lighting to achieve the required lighting levels.

Support Spaces:

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met.

Based on the relatively newer system and system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated.

Plumbing:

Plumbing appears to be in good working condition. **Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.**

Power:

It appeared that the existing support spaces had a sufficient number of electrical receptacles that supports the clinical staff's equipment.

Lighting:

Fluorescent lighting was observed in the support spaces. **It is recommended that the lighting be updated to more energy efficient light fixtures.**

PHYSICAL THERAPY:

It is anticipated by the owner to open the physical therapy area as an outpatient type space during Phase 1.

Mechanical:

A pre-design TAB report is needed to confirm that the air changes and pressure requirements are met.

Based on the relatively newer system dedicated system that serves the physical therapy area it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated. An exhaust fan will be added to maintain the negative pressure requirement.

Plumbing:

Plumbing appears to be in good working condition. **Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.**

Power:

It was observed that there were sufficient electrical receptacles in the treatment bays and accessible floor receptacles in the gymnasium. It was not determined if the exam room had the required (8) single electrical receptacles per FGI requirements. **It is recommended to verify the number of single electrical receptacles and provide additional receptacles as required.**

Lighting:

Fluorescent lighting was observed throughout the physical therapy area. **It is recommended that the lighting be updated to more energy efficient light fixtures.**

Systems:

It was observed that there was a staff assist nurse call station and several bath stations and the respective visible signals in this area. A master nurse call station that these report to could not be located. **It is recommended that the designated master nurse call station be added to this area or located in a normally manned area.**

ONCOLOGY/INFUSION:

The oncology/infusion area is anticipated to be licensed as outpatient in Phase 1.

It was observed that the existing oncology area did not have a dedicated nurse station. It is required that the patient care areas nurse call devices report to a dedicated master nurse station located at a normally manned station within the oncology area. **It is recommended that Owner consider the best location where a new master nurse call station be monitored.**

Infusion Exam Rooms:

Mechanical:

The infusion/oncology area is served by the same AHU that serves the imaging suite. That unit needs to be replaced unless a different option for imaging can be taken during Phase 1 to be able to open the hospital sooner. **If the AHU is replaced, it will be sized to accommodate infusion/oncology and new supply and return ductwork serving infusion/oncology will be ran. If there is an option to create temporary imaging, a pre-design TAB report is needed to confirm that the air changes and pressure requirements are met. Based on the system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated.**

Plumbing:

Plumbing appears to be in good working condition. **Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.**

Power:

It appeared that these rooms had the required (8) single receptacles with (4) convenient to the patient recliner.

Lighting:

It was observed that the existing lighting fixtures are fluorescent. Consideration should be given to utilizing a more energy efficient lighting solution with dimming capabilities for patient comfort.

Support Spaces:

Mechanical:

The infusion/oncology area is served by the same AHU that serves the imaging suite. That unit needs to be replaced unless a different option for imaging can be taken during Phase 1 to be able to open the hospital sooner. **If the AHU is replaced, it will be sized to accommodate infusion/oncology and new supply and return ductwork serving infusion/oncology will be ran. If there is an option to create temporary imaging, a pre-design TAB report is needed to confirm that the air changes and pressure requirements are met. Based on the system type it is assumed there will be minimal modifications other than re-balancing needed once pre-design TAB is received and evaluated.**

Plumbing:

Plumbing appears to be in good working condition. **Each plumbing sink will need to be confirmed to meet current FGI bowl dimension requirements with gooseneck faucets and wrist blades. They will be replaced on a case-by-case basis as needed.**

Med Gas:

The infusion rooms (1) O2 outlet. **Provide minimum med gas outlets to infusion rooms fed from a new ZVB.**

Power:

It appeared that the existing support spaces had a sufficient number of electrical receptacles. Receptacle counts and locations should be considered if the existing rooms change use.

Lighting:

It was observed that the existing lighting fixtures are fluorescent. Consideration should be given to utilizing a more energy efficient lighting solution.

Medication Zones, Nurse stations, charting stations, etc. are required to have lighting levels as noted in USP 1066. These levels can be achieved with fixed task lighting or a strategic lighting layout.

The recommendations provided in this report are qualitative only and should be considered schematic and not for construction purposes. The design and implementation based on these recommendations should be done under the direction of a licensed design professional. PEC will not be responsible for the implementation of the remedial actions taken that are solely based on the qualitative recommendations provided in this report. Unless otherwise specified, nothing in the report shall be deemed to imply or suggest anything beyond what is specifically stated therein. This report is solely written for the use of the client. No party, other than the client, shall have the right to rely on the information provided in this report. This report is not transferable or assignable to any third party without written permission of PEC and is the copyrighted work of PEC. Reproductions of this report, not bearing the original engineer's signature and seal, shall not be considered valid.

These comments were copied from the "draft" report presented to the Governing Board. The Cost Estimate was presented to the Governing Board for the Phase One estimated Engineers opinion of \$6,200,480.00.