

DOCUMENT 202.11 10 10R – STANDARD PATIENT ROOM, RENOVATION STANDARD

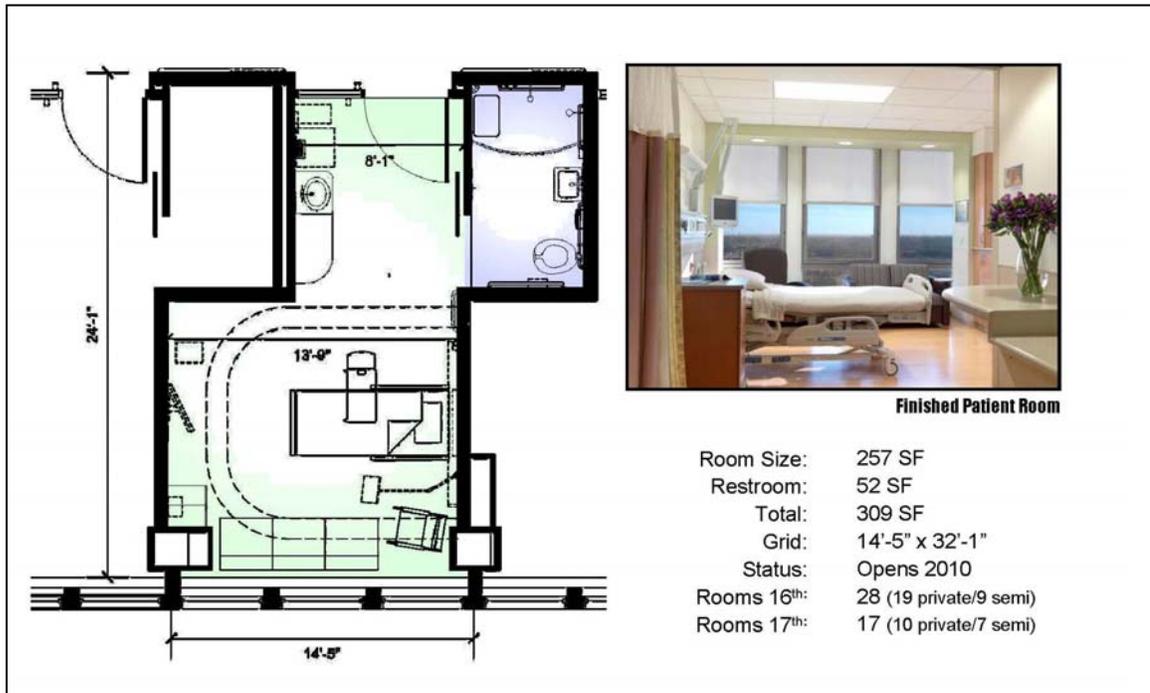
Academic hospital, Patient division, Med/Surg Unit, Patient Area, Standard room, Renovation type

1.1 INTRODUCTION

- A. History. The room standard originated for the BJH East and West Pavilion renovations on the 16th and 17th floors. A Super-User Group was created to help design the standard room. This group included physicians, nurses facilities, ergonomics, IS, pharmacy, etc.
- B. Concepts. The basic concepts of this room were built off the concepts developed for the new construction academic patient rooms. While some adjustments were needed to accommodate a renovation condition, the primary idea of defining zones for people and activities remains an important organizational and defining component for this room.
 - 1. Internal - Caregiver zone
 - 2. Central - Patient zone
 - 3. External - Family zone

1.2 ROOM STANDARD

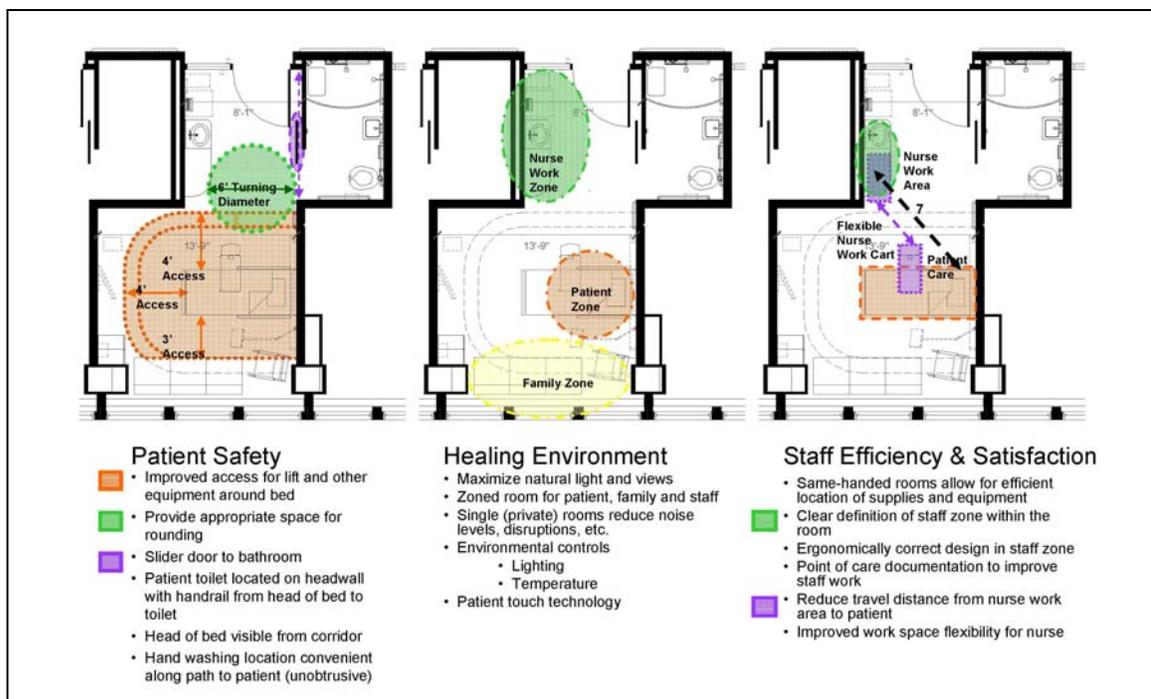
- A. Primary elements. Several characteristics are identified in this room standard.
 - 1. Same-handed rooms. In general, teaching environments mimic the actual room layout as much as possible for common room orientation. BJC teaches patient



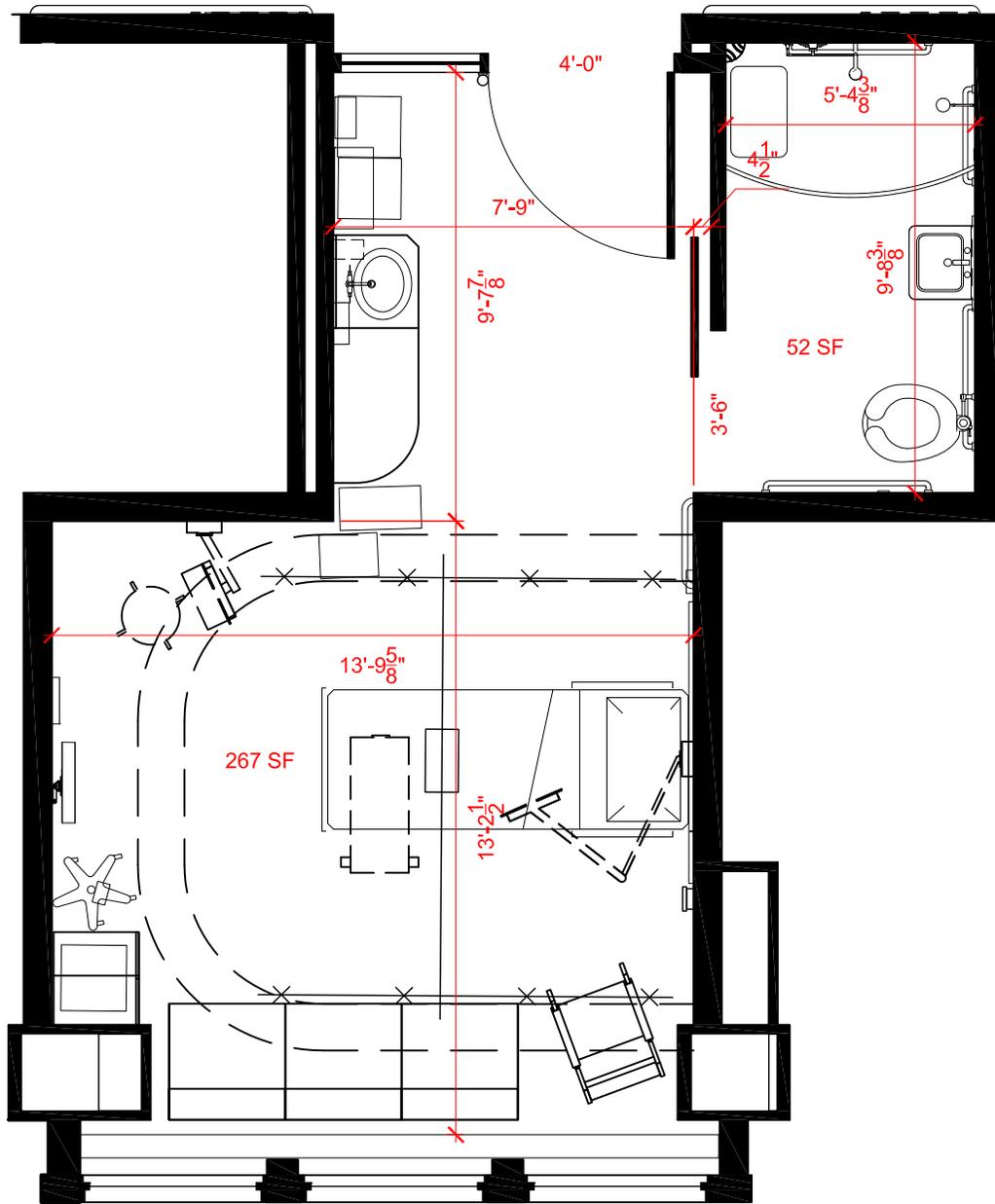
approach from the patient's right side. Therefore, the design of this standard accommodates this teaching approach.

2. Toilets on headwall. Toilets are located on the headwall to reduce travel distance from bed.
3. Handrail. A wall-mounted handrail is standard in this room to assist patients between the bed and toilet. This
4. In-board (corridor side) toilet rooms open room to exterior walls to maximize amount of natural light.
5. Implementation of a rolling cart for care givers use at bedside. Cart docks below counter at nurse work area.
6. Bathroom sliding door.

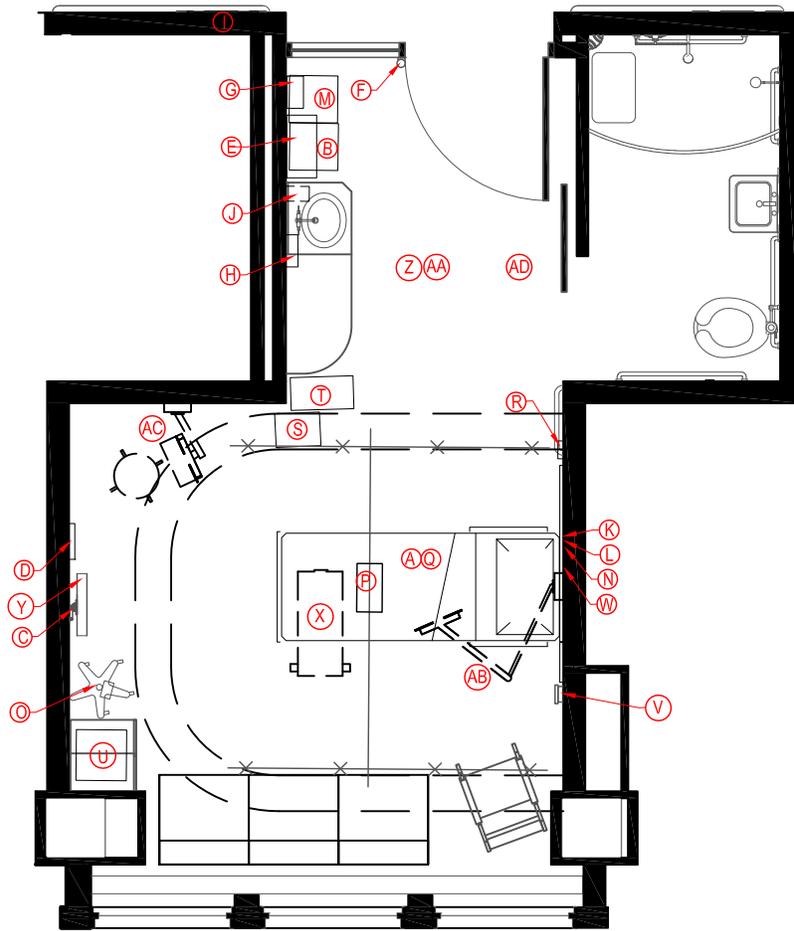
B. Core Values. The values that guided the development of the decisions for all clinical standards.



C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.



1 FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 EQUIPMENT PLAN
SCALE: 3/16" = 1'-0"

Equipment List

- | | | | |
|---|------------------------------|----|----------------------------|
| A | BED, ELECTRIC | P | LIFT, PATIENT, CEILING MTD |
| B | BIOHAZARD, CONTAINER, 8 gal. | Q | MATTRESS, BED |
| C | BRACKET, WALL (TV) | R | NURSE CALL, STAFF |
| D | CLOCK, ANALOG, WALL MTD | S | RECEPTACLE, WASTE 40QT |
| E | CONTAINER, SHARPS | T | RECEPTACLE, WASTE 96QT |
| F | DISPENSER, ALCOHOL FOAM | U | SAFE, MINI |
| G | DISPENSER, GLOVE | V | SPHYGMOMANOMETER, WALL MTD |
| H | DISPENSER, PAPER TOWEL | W | SUCTION REGULATOR |
| I | DISPENSER, PPE | X | TABLE, OVERBED |
| J | DISPENSER, SOAP | Y | TV, 32" |
| K | FLOWMETER, INTEGRATED OXYGEN | Z | CUBICAL CURTAIN |
| L | FLOWMETER, OXYGEN | AA | TRACK, CUBICAL CURTAIN |
| M | HAMPER, LINEN | AB | PATIENT TOUCH |
| N | HEADWALL UNIT | AC | PC, WALL MTD |
| O | IV STAND | AD | TELEPHONE |

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)



FACILITY TYPE

Academic

DESIGN STANDARD

Patient Room
Renovation

ISSUE DATE

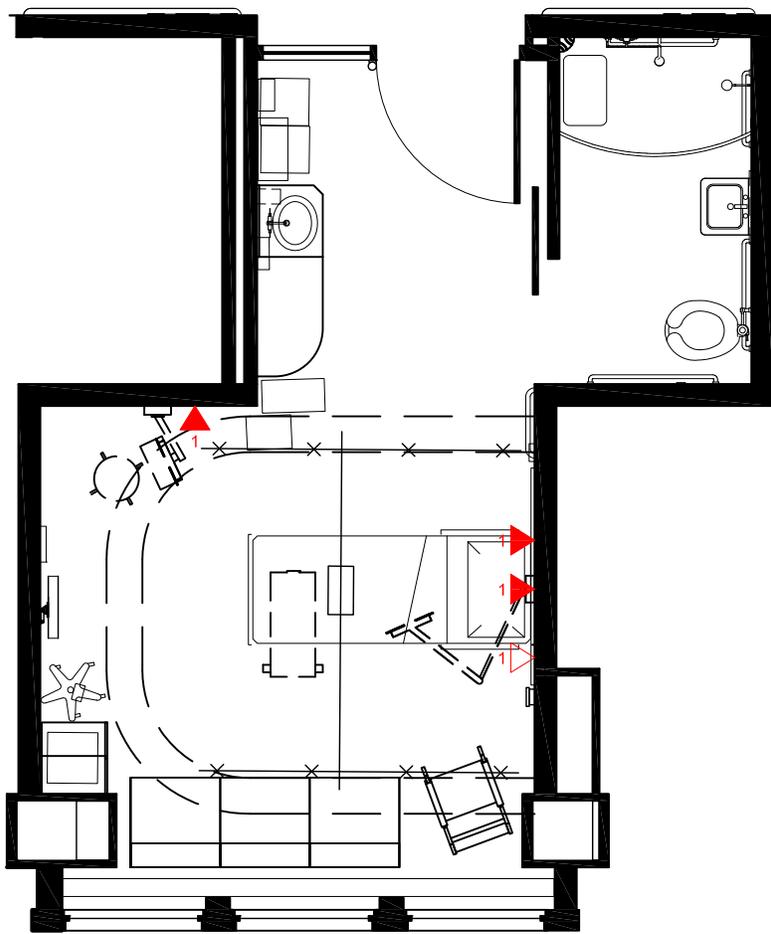
See Manual of Practice

REF #

202.11 10 10R

DWG #

02



NOTES

Patient Touch data drop located inside mounting plate

Extra data drop located within headwall for future growth

1 VOICE AND DATA DROPS
SCALE: 3/16" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)

DOCUMENT 202.11 20 10 – PATIENT CARE STATION STANDARD

Academic hospital, Patient division, Med/Surg. Unit, Clinical Support, Patient Care Station

1.1 INTRODUCTION

- A. **History.** The patient care station standards originated in 2008 as a request by the BJH nursing director. BJC PD&C was asked to help the nurses develop the patient care stations as the standard work flow and process was progressing. At the time, BJH had 2 projects in planning and design stages, 3200 and 10500, which became case studies to evaluate the standard design criteria and proposed solutions. Evaluations of the two designs were made midway through the Design Development phase and presented to the nursing leaders. The result of this and subsequent meetings was a significant amount of work flow practices which affected the nurses' physical environment and how this environment could positively affect their processes. The goal then became an exercise in developing a standard layout for all departments so staff can work within other departments with little need to re-orient to a new environment.
- B. **Terminology.** As requested by the CNE's, the term "nurse station" is no longer preferred. The reason being that the nurses are most often bedside, attending to patients, and there are other patient care providers that work collectively in this area, therefore BJC uses the term "Patient Care Station". This shall be the label used on design and construction documents.
- C. **Application.** The patient care station standard is unique to other room standards in that it is a "kit of parts" that needs to be assembled on a project-to-project basis. It is not intended to be an off-the-shelf, one size fits all standard. Rather, this standard defines worker "profiles" which relates to specific job functions and activities. It is a standard that applies to all BJC hospital types (academic, community, pediatric) and applies to patient care stations in both patient divisions and diagnostic and treatment areas. In all cases, the implementation of these standards must be developed in conjunction with PD&C project manager/planner and with key project stakeholders. Dimensioned drawings (tear sheets) are provided at the end of this document and include more detailed information.
- D. **Three Core Values.** Guided the development of the decisions for the patient care station standards. Examples of how these standards reinforce the core values are identified below.



Patient Safety

- Standardized layout promotes standard work, which reduces chance for errors when working as an interdisciplinary team
- Stations with appropriate technology support reduces chance for errors

Healing Environment

- Patients and families have a central point of contact
- Appearance of organization creates calm environment for both staff, patients and their families

Staff Efficiency & Satisfaction

- Opportunity for standard work
- Aids in the efficiency of standard work
- Standardized layout and equipment creates less confusion when working in new units
- Dedicated stations for specific functions reduce competition for space

E. Roles and work activities. The standard development of the patient care station required a past present and future look at roles and responsibilities of those individuals that work in this area. The roles were evolving at the time these standards were being developed however as the process unfolded, it became evident that no matter what department or unit was considered, there were 5 major worker profiles that emerged.

5

Station Profiles







Profile Attributes

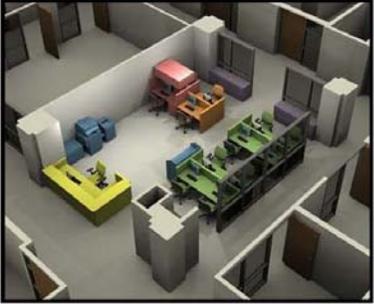
Unit Secretary
Characteristics: An employee tethered to their phone, computer and files and has visitor activity. May do heads down, concentrative, individualized work that is often confidential and privileged in nature. Additionally, phone or in person conversations will often occur. Only unit secretaries are provided this workspace type.
 - Unit Secretary

Dedicated
Characteristics: A generally desk-bound employee providing assistance to a team. May do more heads down, concentrative, individualized work. Although desk bound, they are connected via phone and email. May have moderate levels of analysis, creating and managing in their daily activities.
 - Case Manager, Social Worker

Shared Single
Characteristics: A mobile individual that typically works in collaborative work areas. They may be likely to work by themselves and produce output on an on-demand basis. Collaboration is most likely over email or other forms of virtual communication. Some, within this group, may have a need for multiple monitors. - Nurse Tech

Shared Multiple
Characteristics: A highly mobile individual. They are most likely communicating information in collaboration with others or synthesizing or downloading information via a computer. Workspace vacancy may be very high. Intensive collaboration both physically and virtually.
 - Physician

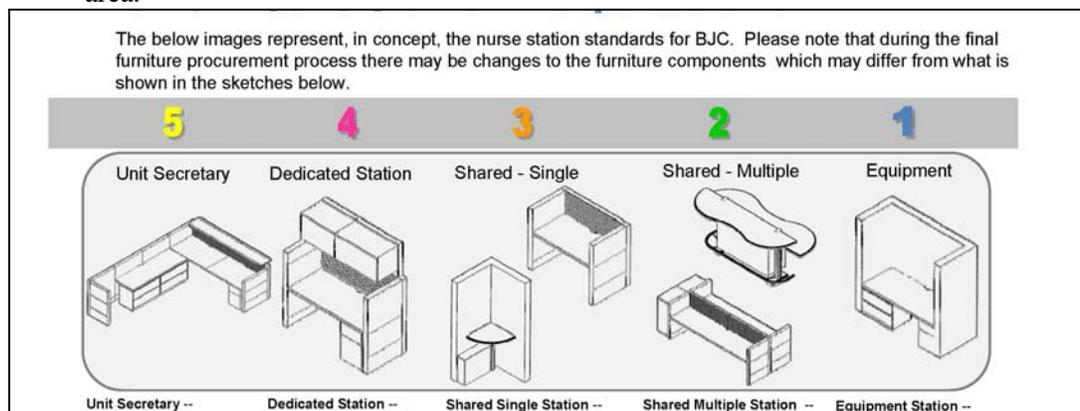
Equipment
Characteristics: A central hub of technology to support the unit. CAM, Procurement, Emergency Central Area (Red Phone, fax, telephone)



1.2 ROOM STANDARD

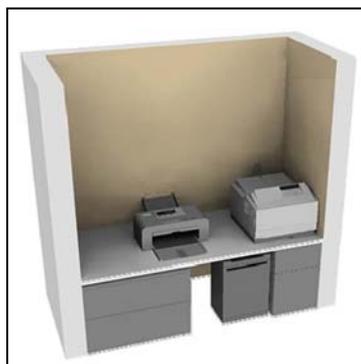
A. Primary elements.

1. **Flexibility.** Patient care stations utilize systems furniture as opposed to built-in cabinets and counters. This approach allows for easier modifications, reuse of existing components and a reduction of costs as spaces and departments change in the future. All of the components are designed to be interchangeable pieces and all work together from a dimensional standpoint.
2. **Collaboration.** Another important element that the standard supports is the goal for greater collaboration and communication among all staff. The design of the standards foster a team environment and it is important to keep this in mind when laying out each project's patient care station.
3. The patient care stations require an emergency support area built in as a hub with red phone, e-power, computer and printer all in one place within the patient care station area.



B. Stations.

1. **Equipment.** This is intended to be a central hub of technology supporting the unit. Close coordination with utilities is required. There are 3 different types of equipment stations based primarily on equipment needs, size and functional work requirements. PD&C project manager/planner shall work with key project stakeholders and user groups to identify which station type(s) will be required for every specific project. This work will be done prior to the design team.



Equipment Station Type 1



Equipment Station Type 2



Equipment Station Type 3

2. **Shared – Multiple.** This station is intended for a person that is very mobile and needs space to communicate and download information electronically. Area shall be visible and afford opportunity for concentrated work. The station is often identified as a space for the physicians. There are 2 different options for the shared multiple station.



Shared Multiple Station Type 1



Shared Multiple Station Type 2

3. **Shared – Single.** Much like the Shared Multiple station, this station is also intended for a mobile, collaborative individual and will be responsible for retrieving and sharing information. The obvious difference is that it is a single seat station. The space shall be visible yet still afford opportunity for concentrated work. This space is often associated with the role of the Nurse Technicians. There are 2 different options for the shared single station.



Shared Single Station Type 1



Shared Single Station Type 2

4. **Dedicated.** The dedicated station is mostly for an individual that requires concentrative, and very focused work. The tasks require the individual to primarily be at the desk. Acoustical buffer is important due to telephone use, however it is important for the worker to be able to collaborate with the staff in this area. An example of this role would be the Case Manager. With the development of these patient care standards, the location of the Case Manager specifically was moved from an enclosed office to the open patient care station to better engaged them in the work flow. This intentional change forces greater communication and collaboration and has been shown to reduce patient stays. The role requires more storage and there is a need for some privacy for job activities.



5. **Unit secretary.** This station is the central and the primary focus of the patient care station and the person serves as the primary point of contact for the station. The role requires the individual to be always connected to the telephone, computer and hard copy files. This person has the most visibility and shall be at the leading edge of the patient care station, closest to the main corridor. The person will have some focused, concentrative work that may at times be confidential in nature. The functions require a lot of space to perform their job so the station is the largest of the five and this offers the greatest unobstructed counter space. There is only one unit secretary standard but the layout and connection with the equipment station allows for flexibility of this station. An equipment station (type 3) may be added on to the short length of the “L” with some alterations to achieve a more directly connected file/copy condition. There is one unit secretary type but the location of the equipment station can change the operability of the and functional relationships of the station



PATIENT CARE STATION STANDARDS

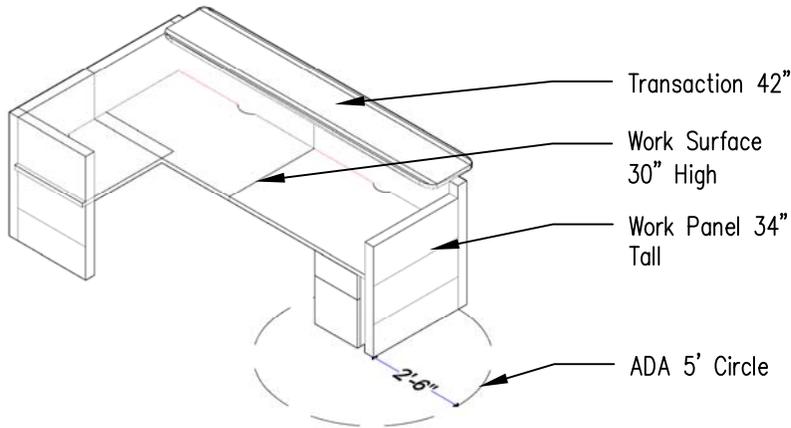
INDEX

PCUS-01	Unit Secretary (Use As Base Design)
PCES-01	Equipment Station - Type I
PCES-02	Equipment Station - Type II
PCES-03	Equipment Station - Type III
PCD-01	Dedicated Work Station
PCSHM-01	Shared Multiple Station - Type I
PCSHM-02	Shared Multiple Station - Type II
PCST-01	Shared Single Station - Type I
PCST-02	Shared Single Station - Type II
PCSTOR	Storage

Program:

Function = Unit Clerk

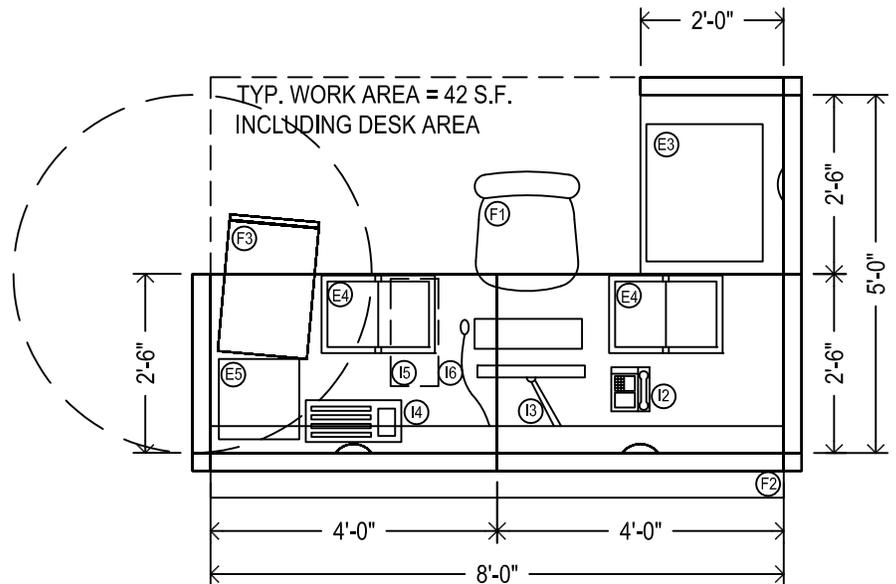
Unit Secretary



1 WORK STATION PERSPECTIVE
SCALE: 1/4" = 1'-0"

Patient Room Equipment List

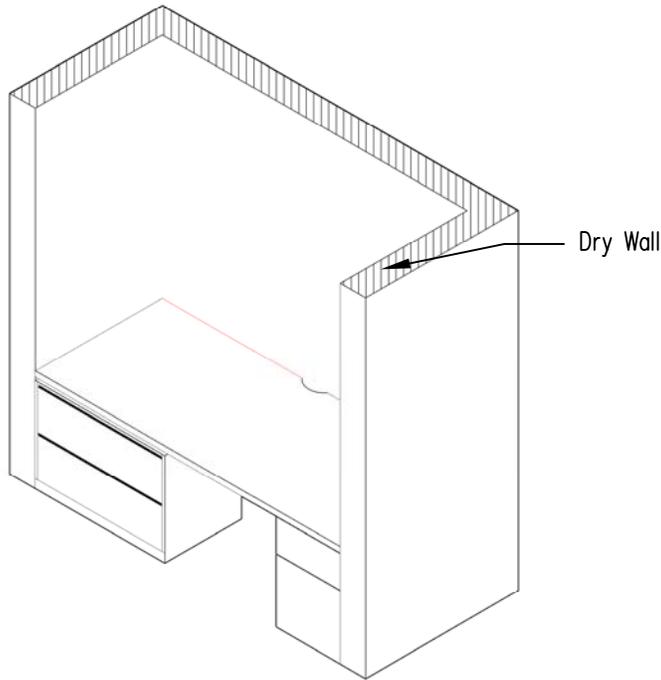
- E.3 PHARMACY SCANNER - O.F.O.I.
- E.4 CHARTING WORK AREA
- E.5 ALPHA MATE - O.F.O.I. VERIFY W/TEAM
- F.1 DESK CHAIR
- F.2 TRANSACTION TOP 42" +/- A.F.F.
- F.3 UNDERCOUNTER MOBILE PEDESTAL STORAGE BOX, BOX, FILE
- I.2 TELEPHONE - O.F.O.I.
- I.3 MONITOR ON TABLE MOUNTED ADJUSTABLE MOUNTING ARM - O.F.O.I. VERIFY W/TEAM
- I.4 NURSE CALL - O.F.O.I.
- I.5 CPU HOLDER MOUNTED BELOW WORK SURFACE - O.F.O.I. VERIFY W/TEAM
- I.6 MOUSE - O.F.O.I.



2 UNIT SECRETARY WORK STATION
SCALE: 3/8" = 1'-0"

Program:

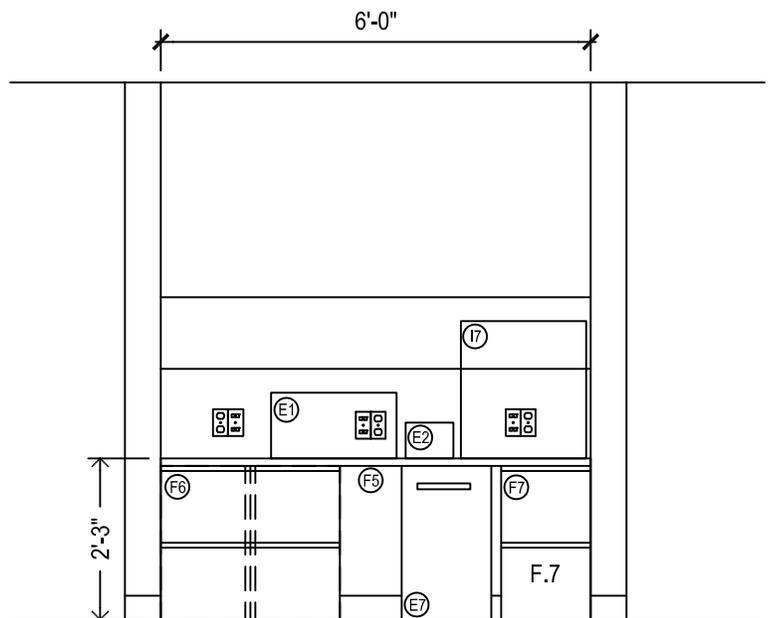
Function = Central Nurse Station support
resources with counter top printer



1 EQUIPMENT STATION PERSPECTIVE
SCALE: 3/8" = 1'-0"

Patient Room Equipment List

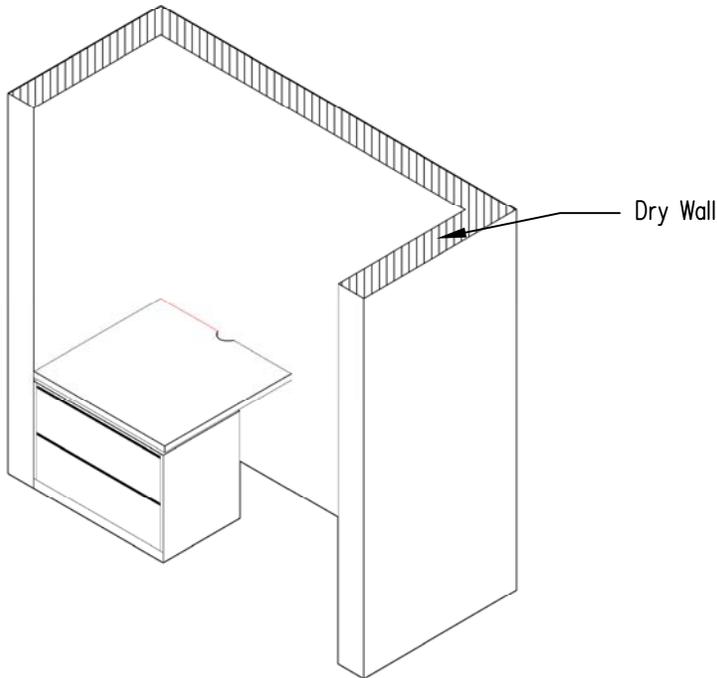
- E.1 FAX MACHINE - O.F.O.I.
- E.2 LABEL PRINTER - O.F.O.I.
- E.7 UNDER COUNTER SIZE SHRED PRO BIN - O.F.O.I. VERIFY W/TEAM
- F.5 WORK COUNTER MOUNTED TO PEDESTALS
- F.6 30" UNDERCOUNTER LATERAL FILE OR STORAGE CABINET VERIFY TYPE WITH STORAGE REQUIRED - VERIFY W/TEAM
- F.7 UNDERCOUNTER PEDESTAL STORAGE FILE / FILE - OVERFLOW FORM & BINDER STORAGE - VERIFY W/TEAM
- I.7 NETWORK PRINTER - TABLE MOUNTED - O.F.O.I.



2 TYPICAL EQUIPMENT STATION
SCALE: 3/8" = 1'-0"

Program:

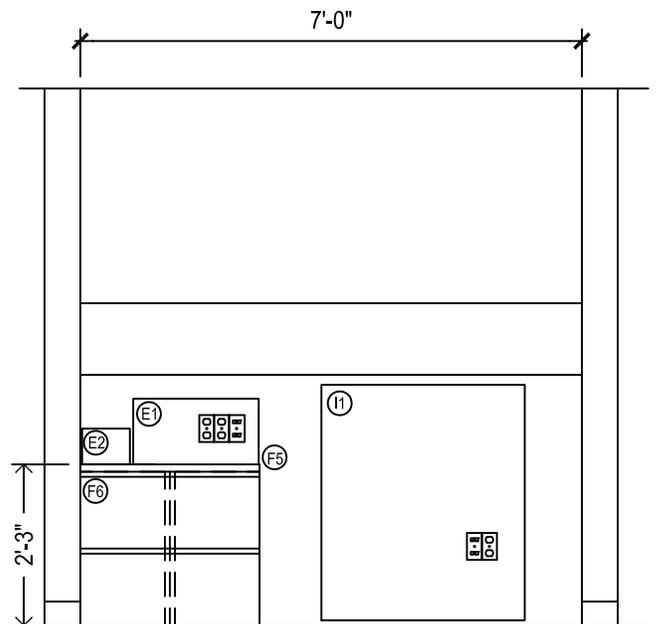
Function = Central Nurse Station support
resources with floor model printer



1 EQUIPMENT STATION PERSPECTIVE
SCALE: 3/8" = 1'-0"

Patient Room Equipment List

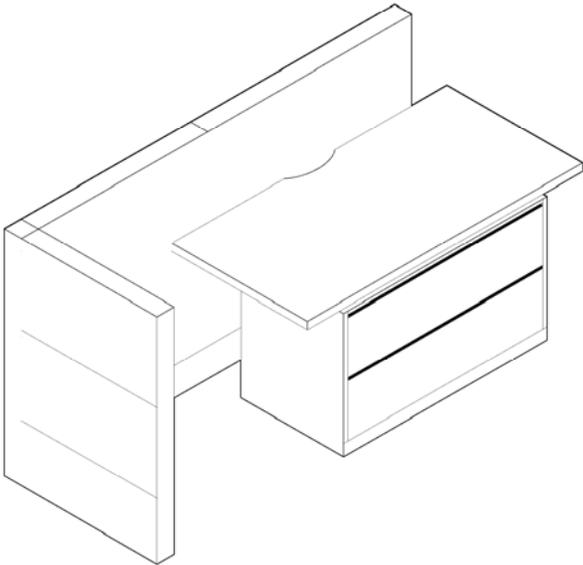
- E.1 FAX MACHINE - O.F.O.I.
- E.2 LABEL PRINTER - O.F.O.I.
- F.5 WORK COUNTER MOUNTED TO PEDESTALS
- F.6 30" UNDERCOUNTER LATERAL FILE OR STORAGE CABINET VERIFY TYPE WITH STORAGE REQUIRED - VERIFY W/TEAM
- F.7 UNDERCOUNTER PEDESTAL STORAGE FILE / FILE - OVERFLOW FORM & BINDER STORAGE - VERIFY W/TEAM
- I.1 NETWORK PRINTER - FLOOR MOUNT - O.F.O.I.



2 TYPICAL EQUIPMENT STATION
SCALE: 3/8" = 1'-0"

Program:

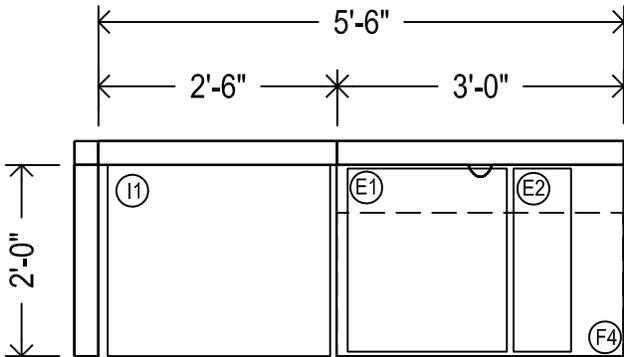
Function = Unit Clerk
Unit Secretary



1 WORK STATION PERSPECTIVE
SCALE: 1/2" = 1'-0"

Patient Room Equipment List

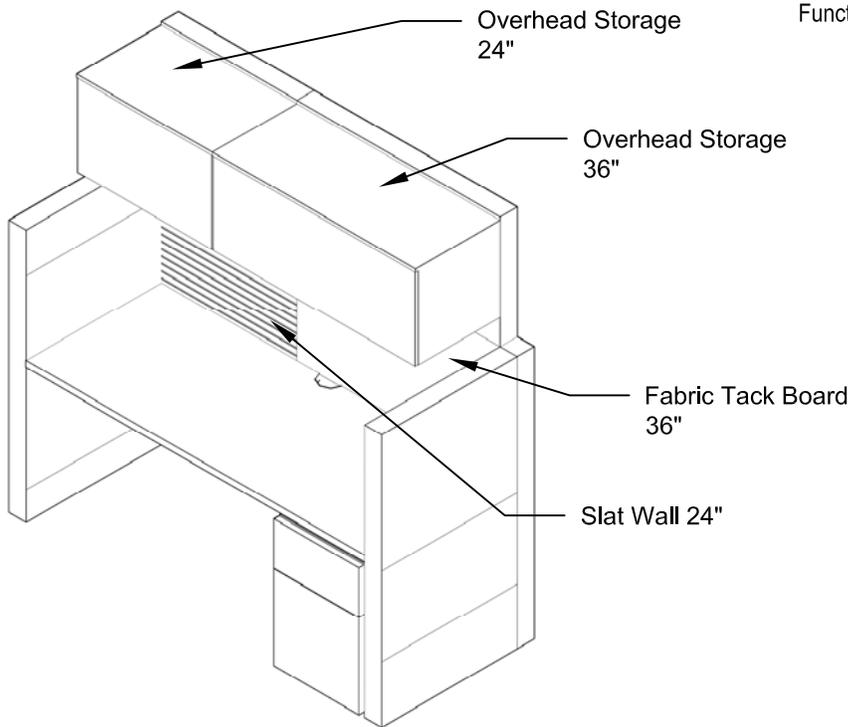
- E.1 FAX MACHINE - O.F.O.I.
- E.2 LABEL PRINTER - O.F.O.I.
- F.4 36" UNDER COUNTER LATERAL FILE FOR FORM STORAGE - O.F.O.I.
- I.1 NETWORK PRINTER - FLOOR MOUNT - O.F.O.I.



2 UNIT SECRETARY WORK STATION
SCALE: 1/2" = 1'-0"

Program:

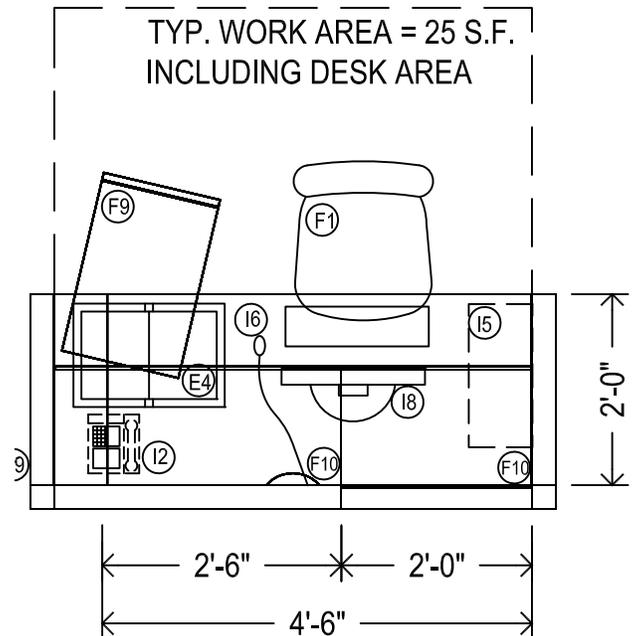
Function = Typical layout for dedicated sitting work area



1 DEDICATED WORK AREA PERSPECTIVE
SCALE: 1/2" = 1'-0"

Patient Room Equipment List

- E.4 CHARTING WORK AREA
- F.1 DESK CHAIR
- F.8 PANEL DIVIDER REQUIRED WHEN ADJACENT TO MULTIPLE WORKSTATIONS
- F.9 MOBILE STORAGE FOR PERSONAL ITEMS AND SUPPLIES THAT CAN DOUBLE AS ADDITIONAL WORK SURFACE
- F.10 OVERHEAD BEN W/KEY
- I.2 TELEPHONE - O.F.O.I.
- I.5 CPU HOLDER MOUNTED BELOW WORK SURFACE OR NOT REQUIRED - O.F.O.I. VERIFY W/TEAM
- I.6 MOUSE - O.F.O.I.
- I.8 DESKTOP MONITOR - O.F.O.I.

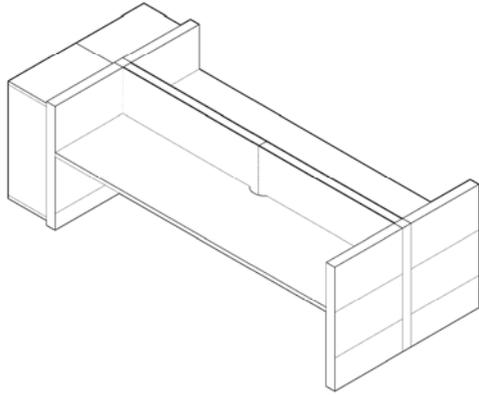


2 TYPICAL DEDICATED WORK AREA
SCALE: 1/2" = 1'-0"

THIS IS THE TYPICAL LAYOUT FOR A SHARED WORK STATION. ALL NUMBERED ITEMS BELOW SHOULD BE CONSIDERED "STANDARD" AND ARE REQUIRED AT EACH WORKSTATION.

NOTES:

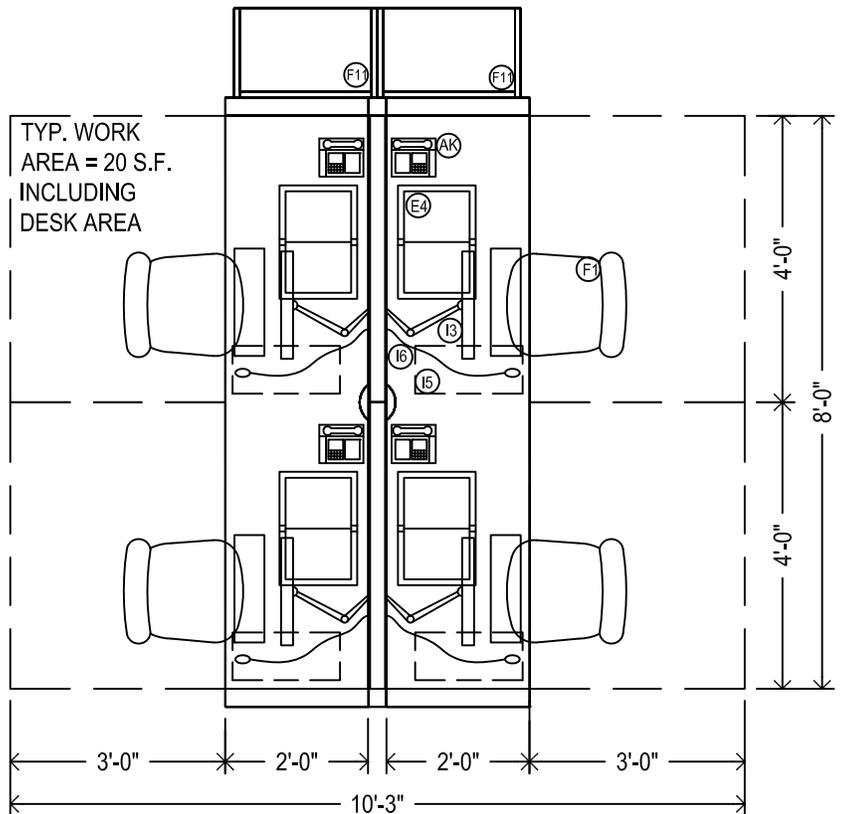
- ALL PANEL HEIGHTS ARE TO BE 49"
- OVERHEAD STORAGE IS TO BE USED FOR STORAGE OF NURSE STATION MATERIAL ONLY (*BINDERS, MANUALS, JOINT COMMISSION REQUIRED MATERIALS ETC...*). DESIGN TEAM TO VERIFY UNIT NEEDS AND PROVIDE ONLY THE STORAGE REQUIRED TO MEET THIS NEED.
- ACTUAL QUANTITY OF SEATS IS DEPENDENT ON UNIT BED COUNT AND STAFFING NEEDS.



1 SHARED STATION PERSPECTIVE
SCALE: 1/4" = 1'-0"

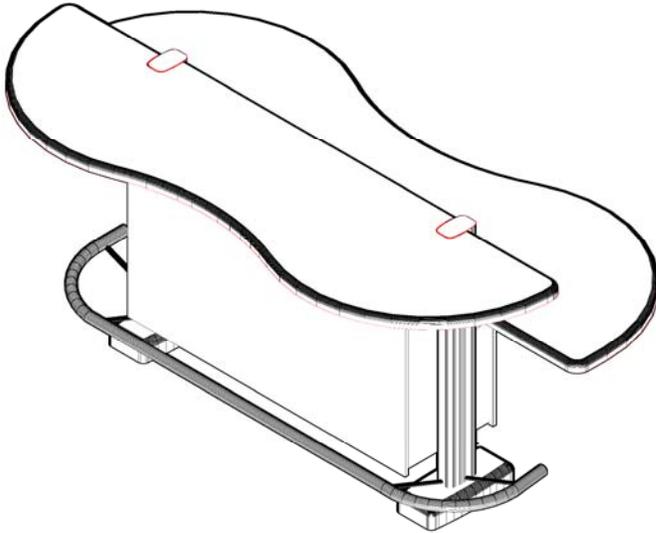
Patient Room Equipment List

- E.4 CHARTING WORK AREA
- F.1 DESK CHAIR
- F.11 BOOKCASE
- I.2 TELEPHONE - O.F.O.I.
- I.3 MONITOR ON TABLE MOUNTED ADJUSTABLE MOUNTING ARM - O.F.O.I. VERIFY W/TEAM
- I.5 CPU HOLDER MOUNTED BELOW WORK SURFACE - O.F.O.I. VERIFY W/TEAM
- I.6 MOUSE - O.F.O.I.



2 TYPICAL SHARED STATION
SCALE: 3/8" = 1'-0"

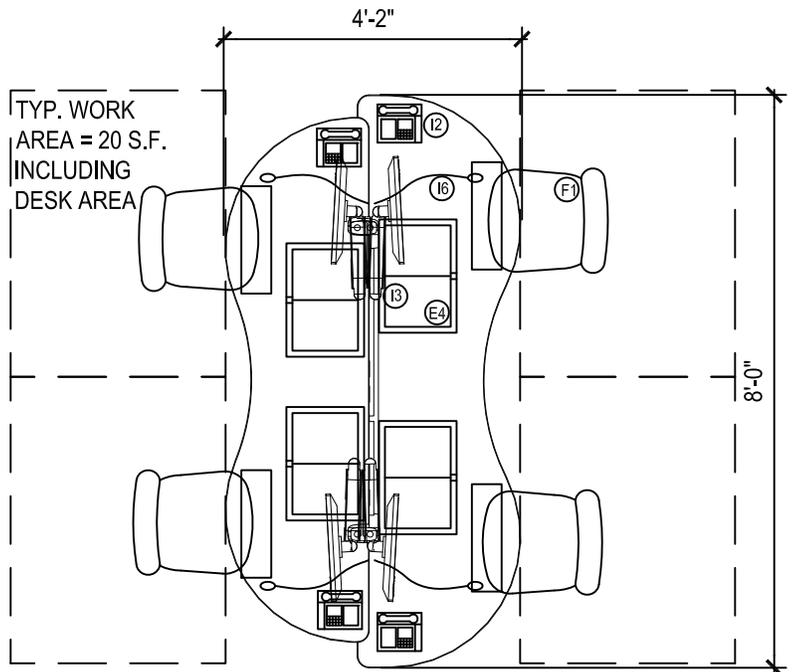
NOTE:
THIS IS THE TYPICAL LAYOUT FOR A STANDING OR SEATED HEIGHT HOTELING STATION. ACTUAL QUANTITY OF STATIONS IS DEPENDENT ON UNIT BED COUNT.



1 SHARED STATION PERSPECTIVE
SCALE: 1/2" = 1'-0"

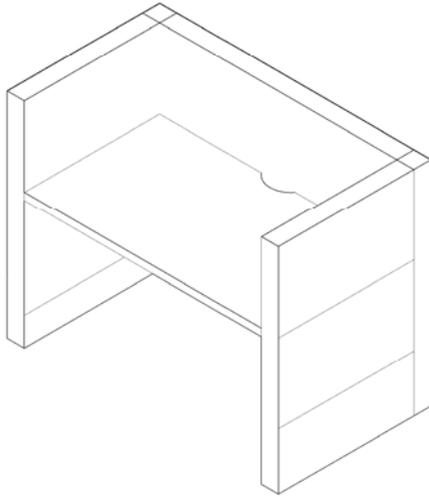
Patient Room Equipment List

- E.4 CHARTING WORK AREA
- F.1 DESK CHAIR
- I.2 TELEPHONE - O.F.O.I.
- I.3 MONITOR ON TABLE MOUNTED ADJUSTABLE MOUNTING ARM - O.F.O.I.
- I.6 MOUSE - O.F.O.I.



2 TYPICAL SHARED STATION
SCALE: 3/8" = 1'-0"

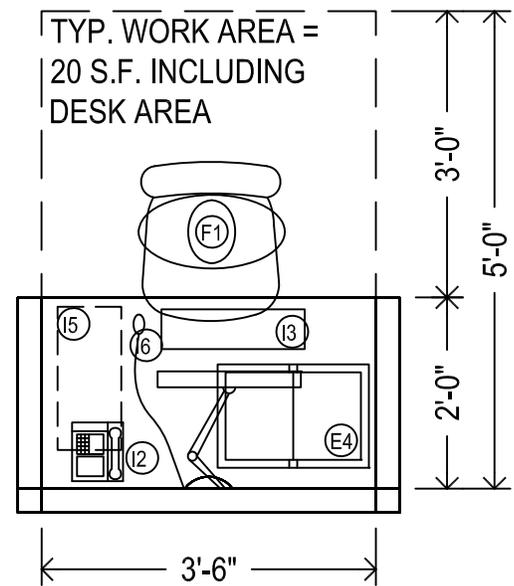
NOTE:
THIS IS THE TYPICAL LAYOUT FOR A STANDING OR SEATED HEIGHT HOTELING STATION. ACTUAL QUANTITY OF STATIONS IS DEPENDENT ON UNIT BED COUNT.



1 SHARED STATION PERSPECTIVE
SCALE: 1/2" = 1'-0"

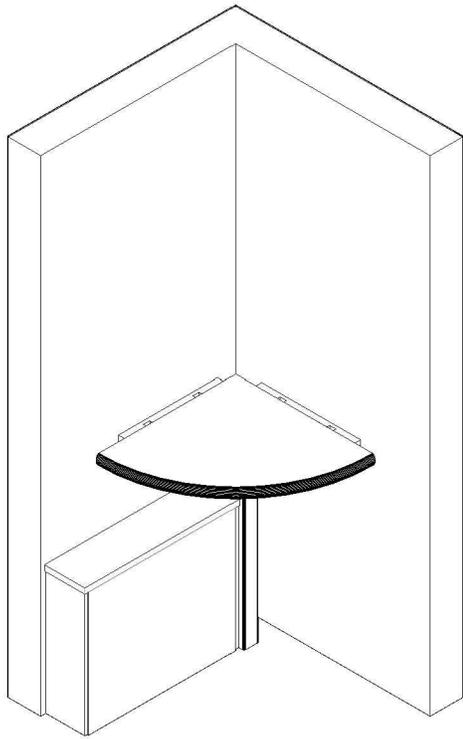
Patient Room Equipment List

- | | | | |
|-----|---|-----|--|
| E.4 | CHARTING WORK AREA | I.3 | MONITOR ON TABLE MOUNTED ADJUSTABLE MOUNTING ARM - O.F.O.I. VERIFY W/TEAM |
| F.1 | DESK CHAIR | I.5 | CPU HOLDER MOUNTED BELOW WORK SURFACE OR NOT REQUIRED - O.F.O.I. VERIFY W/TEAM |
| F.8 | PANEL DIVIDER REQUIRED WHEN ADJACENT TO MULTIPLE WORKSTATIONS | I.6 | MOUSE - O.F.O.I. |
| I.2 | TELEPHONE - O.F.O.I. | | |



2 TYPICAL SHARED STATION
SCALE: 1/2" = 1'-0"

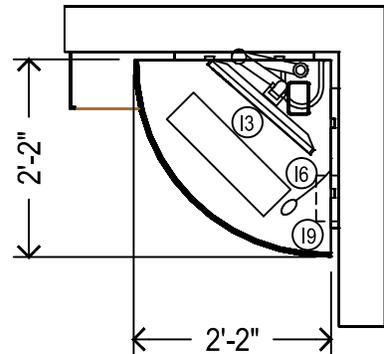
NOTE:
THIS IS THE TYPICAL LAYOUT FOR A STANDING OR SEATED HEIGHT HOTELING STATION. ACTUAL QUANTITY OF STATIONS IS DEPENDENT ON UNIT BED COUNT.



1 SHARED STATION PERSPECTIVE
SCALE: 3/8" = 1'-0"

Patient Room Equipment List

- I.3 MONITOR ON TABLE
MOUNTED ADJUSTABLE
MOUNTING ARM - O.F.O.I.
VERIFY W/TEAM
- I.6 MOUSE - O.F.O.I.
- I.9 WALL MOUNTED
TELEPHONE - O.F.O.I.



2 TYPICAL SHARED STATION
SCALE: 3/8" = 1'-0"

BJC HealthCare

FACILITY TYPE

ALL

DESIGN STANDARD

Typical Shared
Station-Single-Type II

ISSUE DATE

See Manual of Practice

REF #

202.11 20 10

DWG #

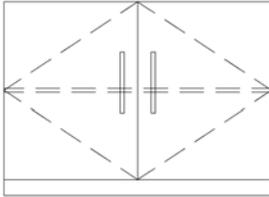
PCST

02



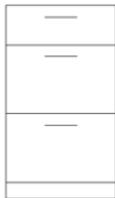
2 Drawer
Lateral

_____ 30" _____ 36" _____ 42"



2 Door
Cabinet
1 Shelf

_____ 30" _____ 36" _____ 42"



Box File

DOCUMENT 202.11 20 31 – MEDICATION ROOM, PYXIS COMPLETE STANDARD

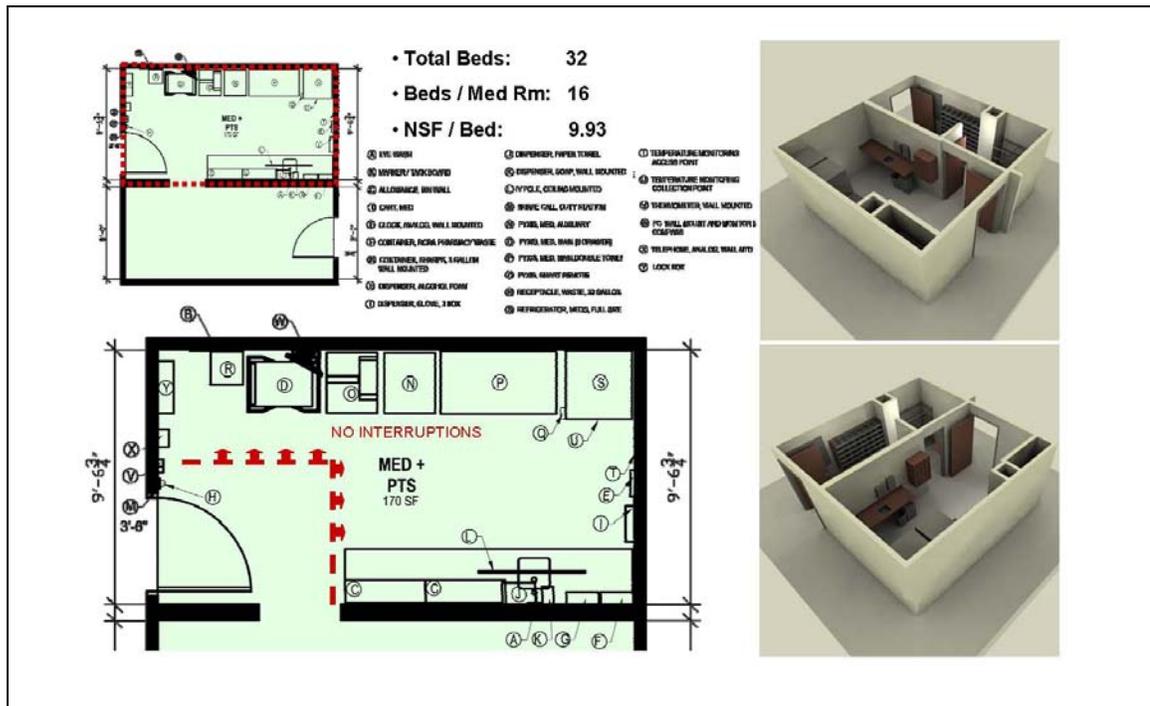
Academic hospital, Patient division, Med/Surg. Unit, Clinical Support, Med Room, Pyxis Complete

1.1 INTRODUCTION

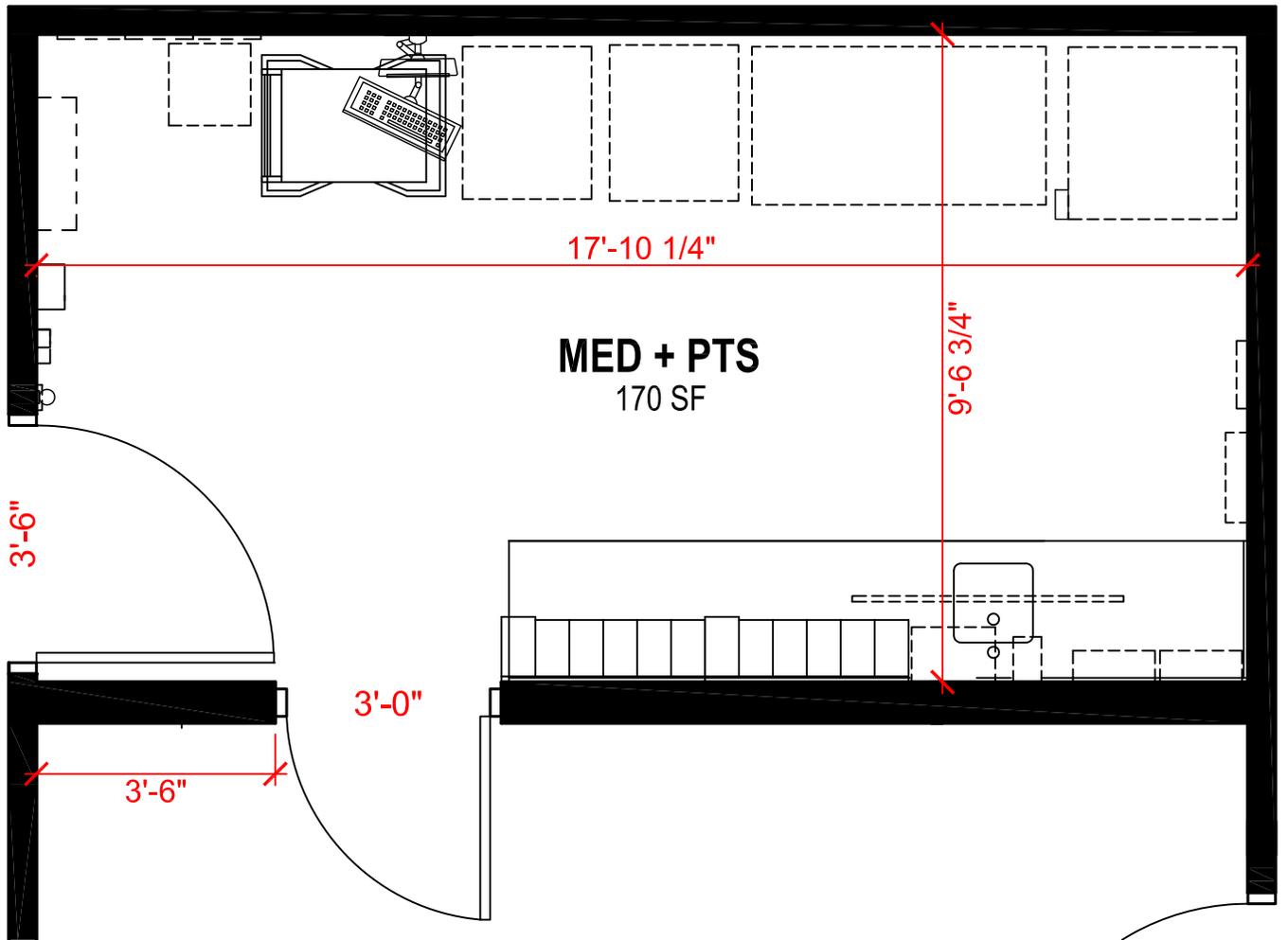
- A. **History.** The room standard originated from the planning and design activities for the MBMC West Pavilion and they were developed prior to completion of several BJC system initiatives. A common user group was created to help design the standard room.
- B. **Inpatient Core Area.** There are four basic rooms that define the inpatient core area. These four rooms are often used by nurses and care givers on a regular basis. For reasons which support the 3 core values, the location of rooms relative to the centroid of the unit is an important factor and supports the 3 core values - patient safety, healing environment and staff efficiency and satisfaction. The four rooms that make up this core area are as follows.
 - 1. Med Room
 - 2. Clean Supply (JIT) Room
 - 3. Soiled Holding
 - 4. Equipment Storage
- C. **Medication Distribution Study.** In 2010 the Medication Distribution High Impact Team was formed to determine the best way for BJC entities to distribute medications. This team was formed by the Clinical Workflow Initiative (CWI) and was assembled to help all entities make a decision on distribution processes and workflows. The research focused on medication distribution studies at PWHC, AMH, CHNE, BJSP, and MBMC. This team identified the two primary means for distribution of medications at BJC entities as follows.
 - 1. Pyxis complete. The majority of BJC hospitals distribute medications to patients via Pyxis units. In this approach, all medications are located in the central Med Room. Most of the medications are located in a Pyxis machine while those medications that need to be kept cool are stored in the refrigerator. All bulk medications are placed in patient specific bins.
 - 2. Cart-Exchange system (hybrid). There are two community hospitals that distribute medications in a Pyxis hybrid manner. In this approach to medication storage and distribution, the pharmacy bags individual patient meds for a 24 hour period, while the Pyxis machines are mainly used for PRN and 1st dose orders. PWHC stores medications in a locked cart directly in patient rooms, while AMH places the med bags in mailboxes located in a central med room.
- D. **Design testing.**
 - 1. Simulation models were built to understand work flow, process, durations, for med rooms based on actual collected data.
 - 2. A mock-up was constructed and reviewed by staff to gather feedback before the actual space is built.

1.2 ROOM STANDARD

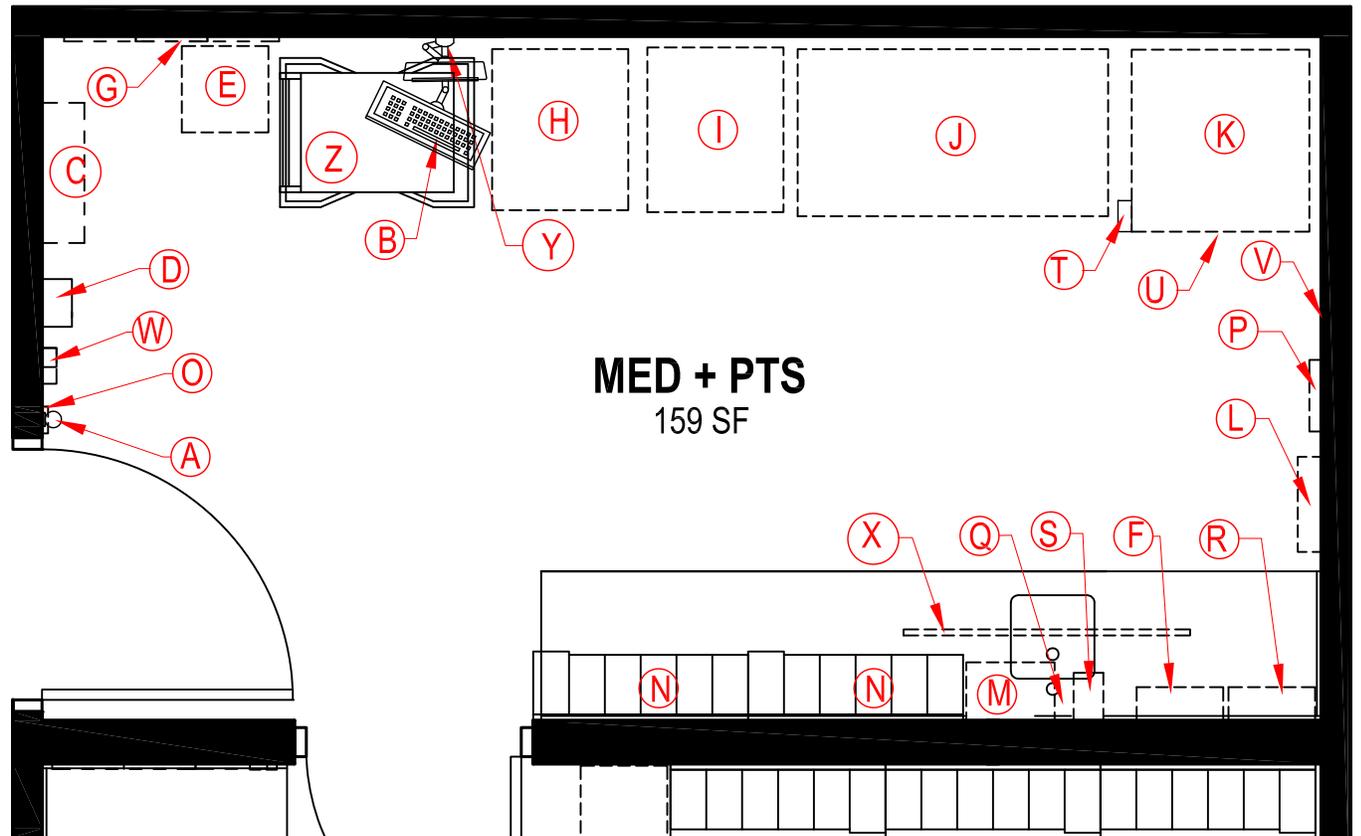
- A. General. The Med Room standard is adjoining and without doors to the Clean Supply Room. A door can be installed between the two rooms in the future if regulations require separation.



- B. Primary elements. The goal was to create a standard that was flexible enough to accommodate a Pyxis complete scenario or a Cart-exchange system (hybrid) as identified above. These standards reflect the most current response to the functional requirements however it should be noted that evaluation of policies and procedures is ongoing and may affect these standards. Plans for both systems are represented in these standards.
1. No interruption zone. These standards extend the no interruption zone to the entire Med Room.
 2. Work flow is from left to right and the refrigerator is directly across from sink area.
 3. Primary distinction between community and academic standard for Pyxis complete is that academic has an additional Pyxis tower unit.
- C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.



1 FLOOR PLAN
SCALE: 3/8" = 1'-0"



1 EQUIPMENT PLAN
SCALE: 3/8" = 1'-0"

Equipment List

- | | | | |
|---|---------------------------------|---|---|
| A | ALCOHOL FOAM DISPENSER | O | NURSE CALL, DUTY |
| B | COMPUTER WORKSTATION, COMPASS | P | CLOCK, WALL MTD |
| C | LOCK BOX | Q | EYE WASH |
| D | TELEPHONE, ANALOG, WALL MTD. | R | CONTAINER, RCRA |
| E | RECEPTACLE, WASTE 23G | S | DISPENSER, SOAP |
| F | CONTAINER, SHARPS | T | PYXIS, SMART REMOTE |
| G | MARKER/TACK BOARD | U | TEMPERATURE MONITORING,
COLLECTION POINT |
| H | PYXIS, MED, MAIN | V | TEMPERATURE MONITORING,
ACCESS POINT |
| I | PYXIS, MED, AUXILIARY, 7 DRAWER | W | THERMOMETER, WALL MTD |
| J | PYXIS, MED, MAIN, DOUBLE TOWER | X | IV POLE, CEILING MTD |
| K | REFRIGERATOR, MEDS, FULL SIZE | Y | PC MOUNT AND MONITOR MOUNT |
| L | DISPENSER, GLOVE | Z | CART MED |
| M | DISPENSER, PAPER TOWEL | | |
| N | BIN WALL SYSTEM | | |

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)

BJC HealthCare

FACILITY TYPE

Academic

DESIGN STANDARD

Med Room
Pyxis Complete

ISSUE DATE

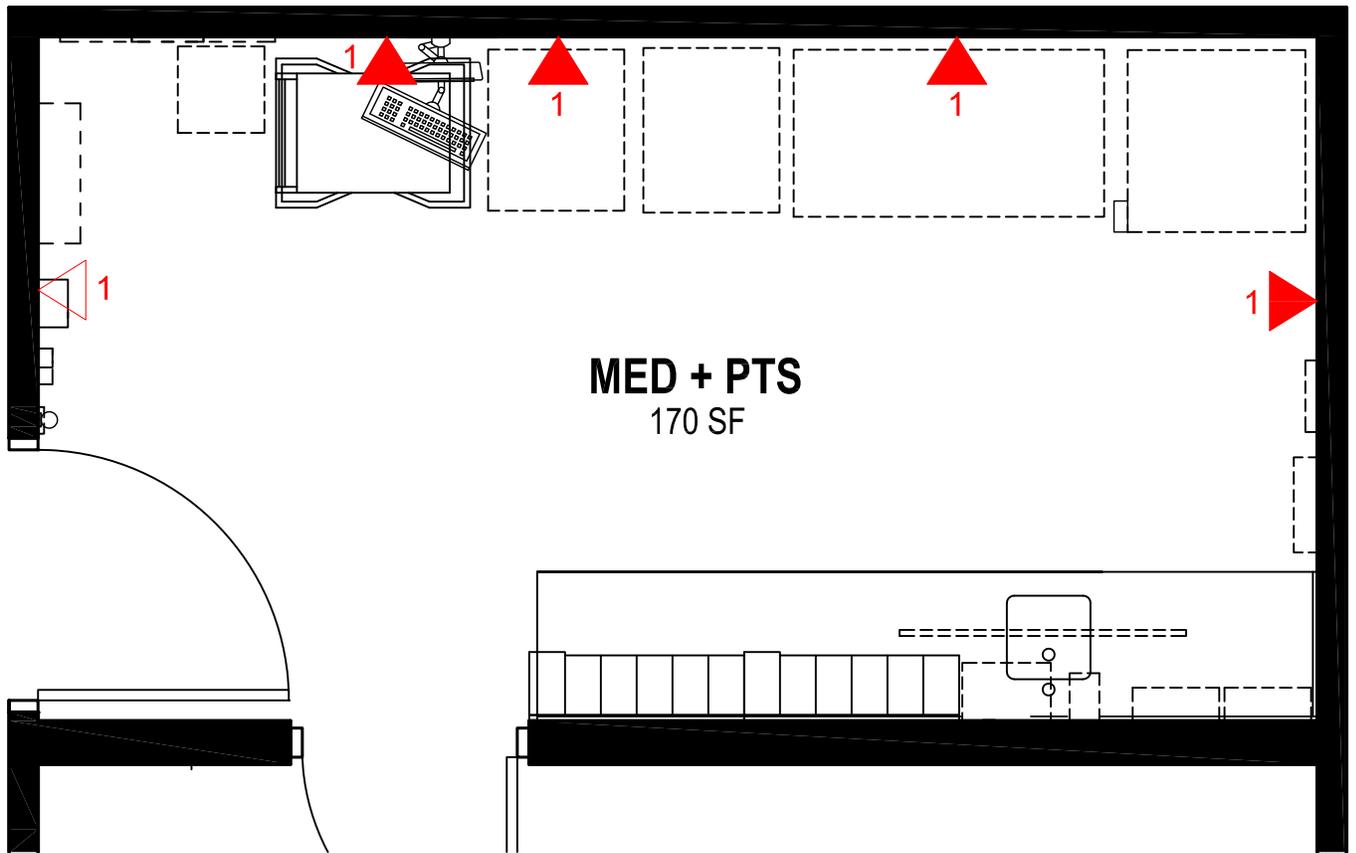
See Manual of Practice

REF #

202.11 20 31

DWG #

02



MED + PTS
170 SF

1 VOICE AND DATA DROPS
SCALE: 3/8" = 1'-0"

NOTES

Glucos Monitor?
EKG Machine?

LEGEND

-  Voice Drop
-  Data Drop
-  Voice and Data

* All drops and drop locations should be verified with Information Services (IS)



FACILITY TYPE

Academic

DESIGN STANDARD

Med Room
Pyxis Complete

ISSUE DATE

See Manual of Practice

REF #

202.11 20 31

DWG #

03

DOCUMENT 202.12 10 10R – ICU PATIENT ROOM RENNOVATION STANDARD

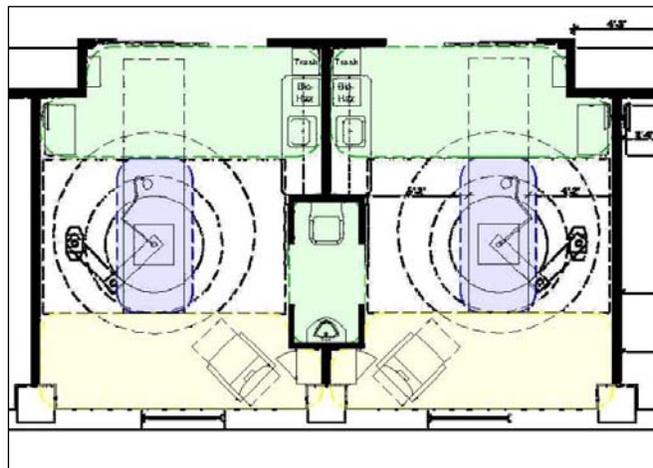
Academic hospital, Patient division, Intensive Care Unit, Patient Area, Standard room, Renovation type

1.1 INTRODUCTION

A. History. The room standard originated from the in-design activities of the BJH 4300/4400 ICU Renovation project. The construction of these standard rooms for the project began in 201. A cross-section of project stakeholders was created to help design the standard room. This group included physicians, nursing executives, leadership, facilities, ergonomics, CAM IS, Infection Prevention, etc. A 2P event was implemented to initiate the standard discussion.

B. Concepts. The basic concepts of this room were built off the concepts developed for the new construction academic patient rooms. While some adjustments were needed to accommodate a renovation condition, the primary idea of defining zones for people and activities remains an important organizational and defining component for this room.

1. Internal - Caregiver zone
2. Central - Patient zone
3. External - Family zone



1.2 ROOM STANDARD

A. Primary elements. Several characteristics are identified in this room standard.

1. Shared hopper room configuration is preferred over the swingettes. This drives the layout of the rooms to be handed rooms.
2. The patient bed is located in the middle of room. This permits full 360 degree patient access and reduces some of the challenges of the mirrored room layout.
3. The ICU Room is designed for the patient room to be a positive pressure environment. This created challenges for the design of a shared hopper room configuration challenging. It is acknowledged that some ICU rooms will need to be designed with a dedicated hopper room in order to maintain proper pressurization. In general, the rooms are positive pressure, hopper rooms are negative pressure and corridors are pressure neutral.

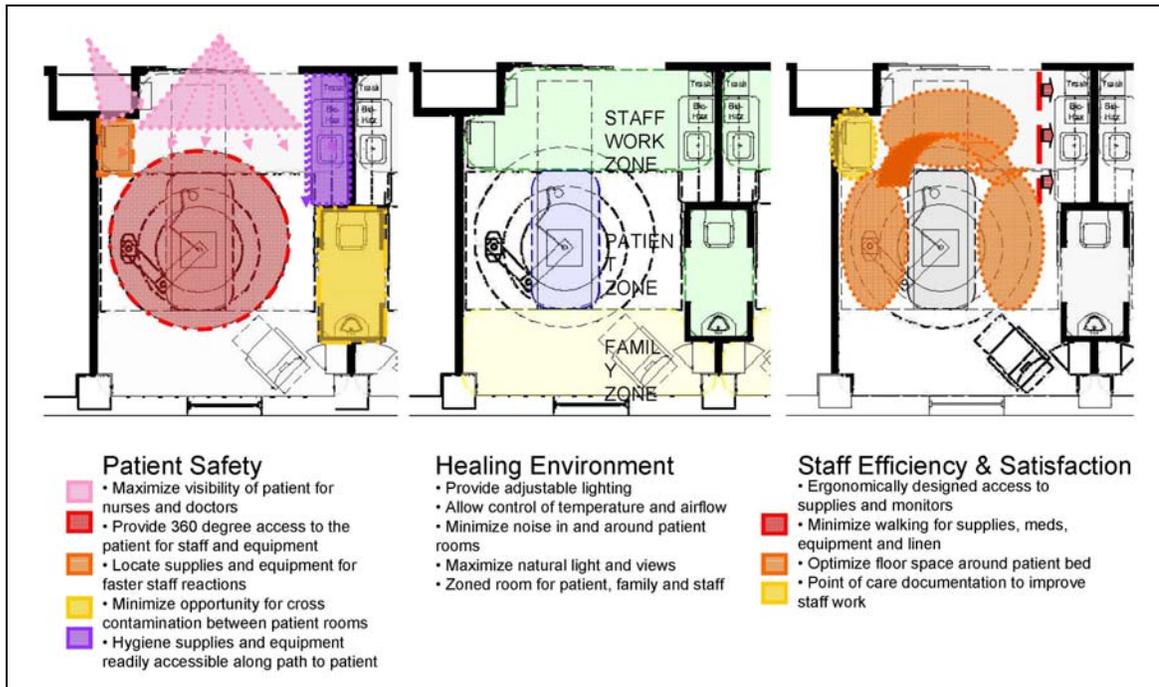




- B. **Mock-up.** A mock-up of the ICU patient room was built at BJH in order for project stakeholders to review and test the developed standard. As a result of the mock-up preview, a few minor adjustments were made to the final plan including moving the observation station to the central core zone.

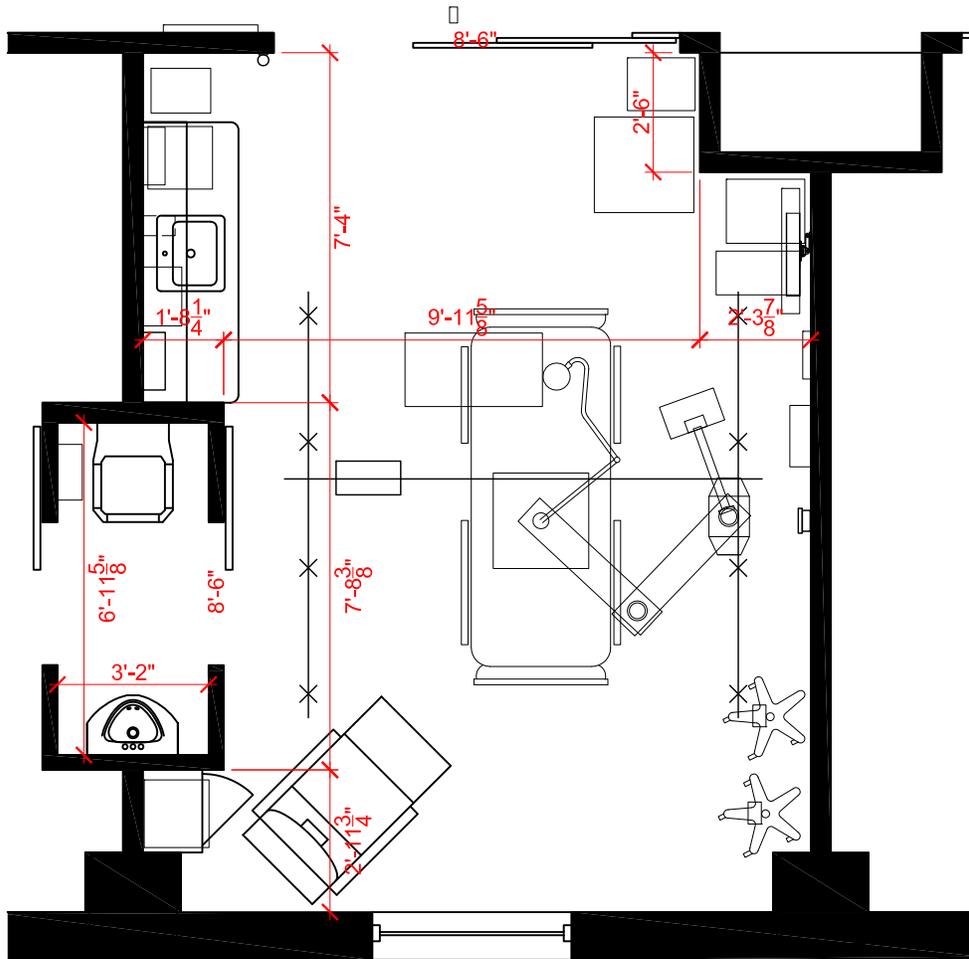


- C. **Core Values.** The values that guided the development of the decisions for all clinical standards.
1. **Patient Safety**
 - a. Maximize visibility of patient for nurses and doctors
 - b. Provide 360 degree access to the patient for staff and equipment
 - c. Locate supplies and equipment for faster staff reactions
 - d. Minimize opportunity for cross contamination between patient rooms
 - e. Hygiene supplies and equipment readily accessible along path to patient
 2. **Healing Environment**
 - a. Provide adjustable lighting
 - b. Allow control of temperature and airflow
 - c. Minimize noise in and around patient rooms
 - d. Zoned room for patient, family and staff
 - e. Maximize natural light and views
 3. **Staff Efficiency and Satisfaction**
 - a. Ergonomically designed access to supplies and monitors
 - b. Minimize walking for supplies, meds, equipment and linen
 - c. Optimize floor space around patient bed
 - d. Point of care documentation to improve staff work



D. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

END OF DOCUMENT 202.12 10 10R



1

FLOOR PLAN

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



FACILITY TYPE

Academic

DESIGN STANDARD
 ICU Patient Room
 Renovation

ISSUE DATE

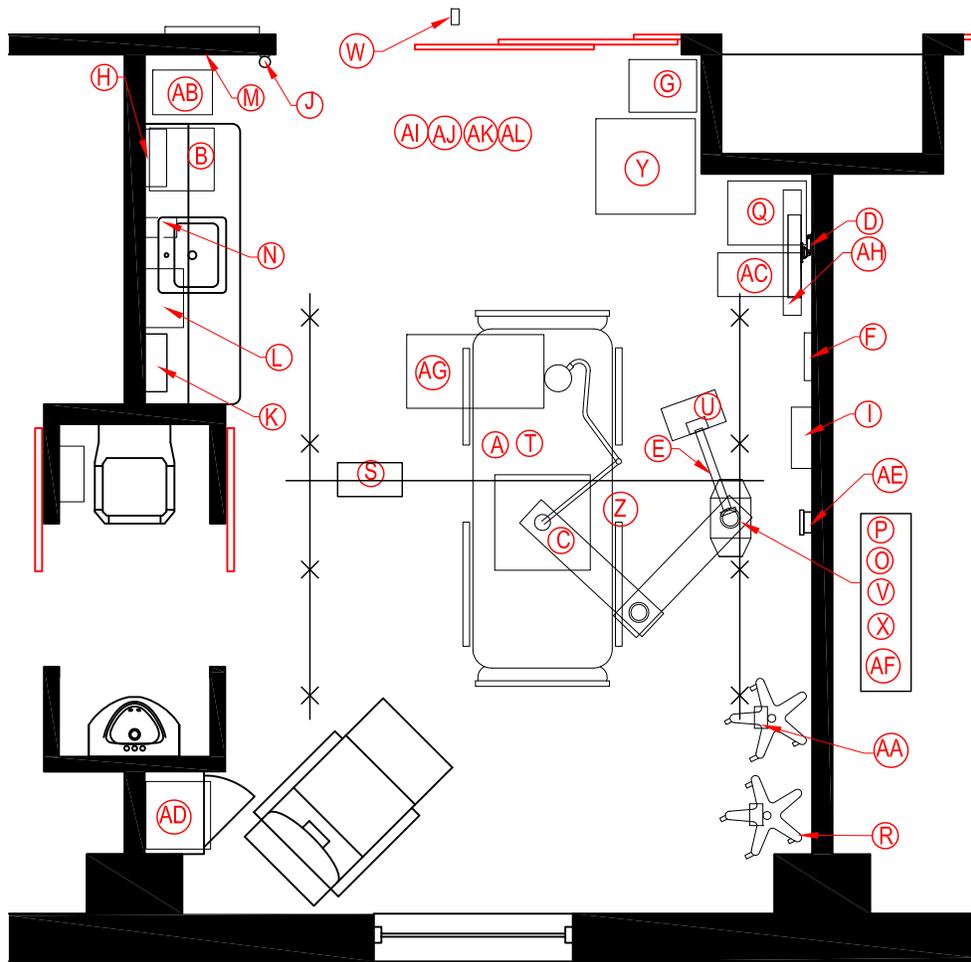
See Manual of Practice

REF #

202.12 10 10R

DWG #

01



1 EQUIPMENT PLAN
SCALE: 1/4" = 1'-0"

Equipment List

- | | | | |
|---|------------------------------|----|----------------------------|
| A | BED, ELECTRIC | T | MATTRESS, BED |
| B | BIOHAZARD CONTAINER, 8 gal. | U | MONITOR, PHYSIOLOGICAL |
| C | BOOM, MED GASES | V | NURSE CALL, CODE BLUE |
| D | BRACKET, TV | W | NURSE CALL, DOME LIGHT |
| E | BRACKET, MONITOR | X | NURSE CALL, SINGLE BED |
| F | CLOCK, ANALOG | Y | NURSE, SERVER-FIVE DRAWER |
| G | CONTAINER, SHARPS MOBILE | Z | PILLOW SPEAKER |
| H | CONTAINER, SHARPS WALL MTD | AA | PUMP, INFUSION |
| I | CONTAINER, WASTE, PHARM. | AB | RECEPTACLE, WASTE 40QT |
| J | DISPENSER, ALCOHOL FOAM | AC | RECEPTACLE, WASTE 96QT |
| K | DISPENSER, GLOVE | AD | SAFE, MINI |
| L | DISPENSER, PAPER TOWEL | AE | SPHYGMOMANOMETER, WALL MTD |
| M | DISPENSER, PPE | AF | SUCTION REGULATOR |
| N | DISPENSER, SOAP | AG | TABLE, OVERBED |
| O | FLOWMETER, INTEGRATED OXYGEN | AH | TV, 32" |
| P | FLOWMETER, OXYGEN | AI | CUBICAL, CURTAIN |
| Q | HAMPER, LINEN | AJ | TRACK, CUBICAL CURTAIN |
| R | IV STAND | AK | TELEPHONE |
| S | LIFT, PATIENT-CEILING MTD | AL | WORKSTATION |

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)



FACILITY TYPE

Academic

DESIGN STANDARD

ICU Patient Room
Renovation

ISSUE DATE

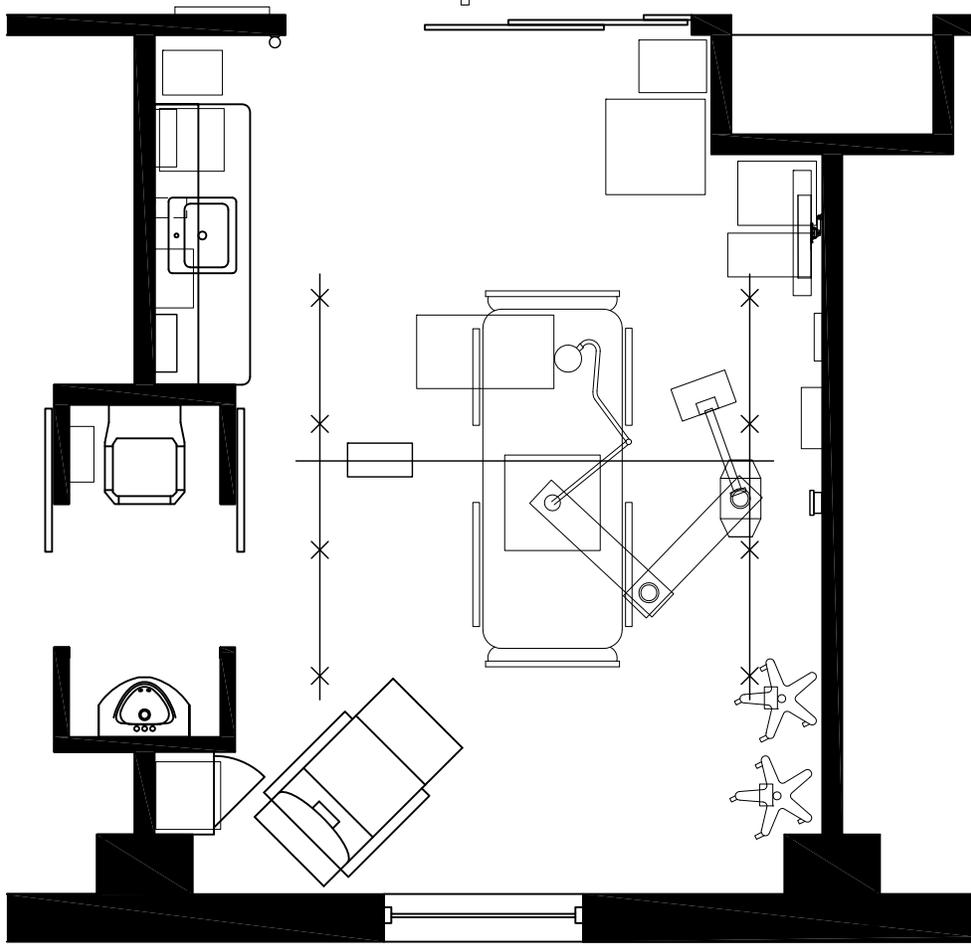
See Manual of Practice

REF #

202.12 10 10R

DWG #

02



1 VOICE AND DATA DROPS
SCALE: 1/4" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

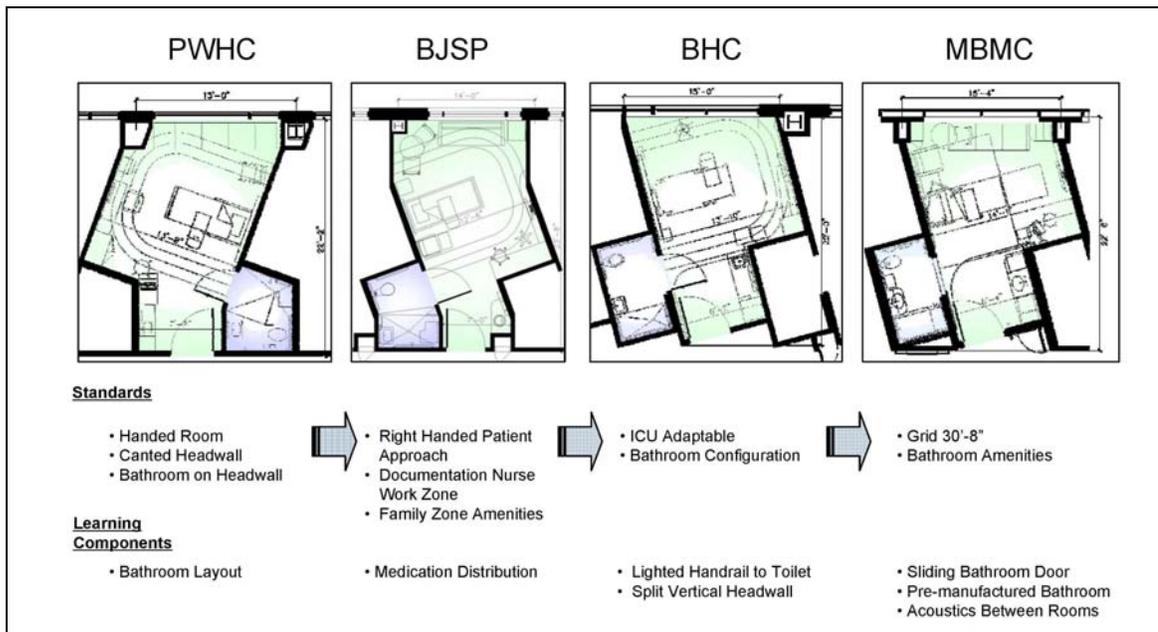
* All drops and drop locations should be verified with Information Services (IS)

DOCUMENT 203.11 10 10 –PATIENT ROOM STANDARD

Community hospital, Patient division, Med/Surgical Unit, Patient Area, Standard Patient Room

1.1 INTRODUCTION

A. History. A BJC initiative to formally develop standard room designs for new construction and renovation projects was realized in 2010 which focuses on the patient-centered experience. The idea of creating standard rooms was originally conceived in 2004 by BJC leadership while the plans for Progress West HealthCare Center were being developed. At the time, the design team was tasked with developing a standard patient room for new construction which could be used on other BJC projects. This room standard was a precursor to the current room standards. Since the standard patient room was first conceived, the room has undergone several slight modifications. This is also a clear example of the evolutionary nature of the room standards.



1.2 ROOM STANDARD

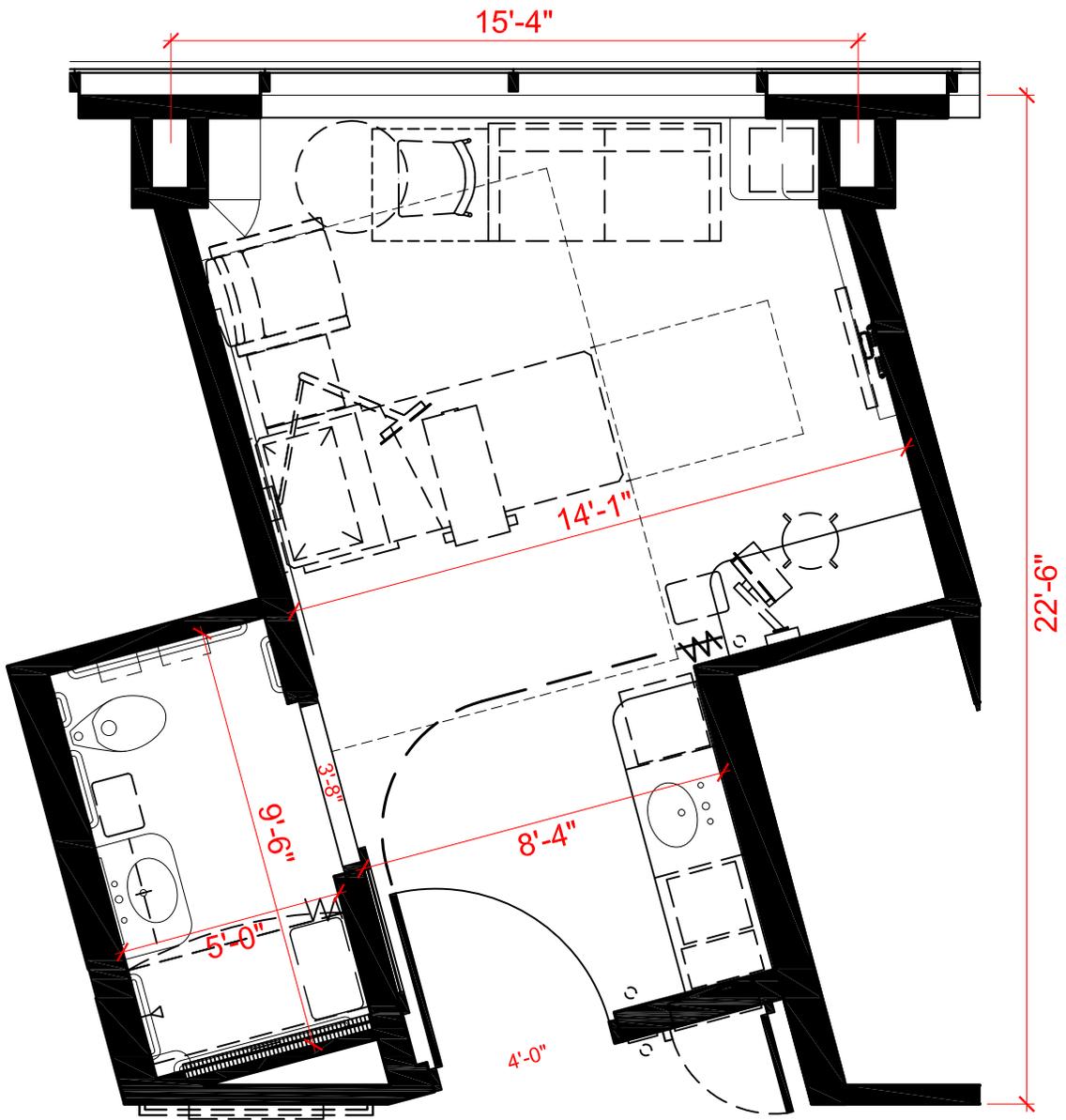
A. Primary elements.

1. Right-handed rooms. Caregivers approach on patient’s right side, all rooms are handed type.
2. Headwall canted for greater patient visibility
3. Bathroom located on the head wall to reduce the distance from bed to bathroom

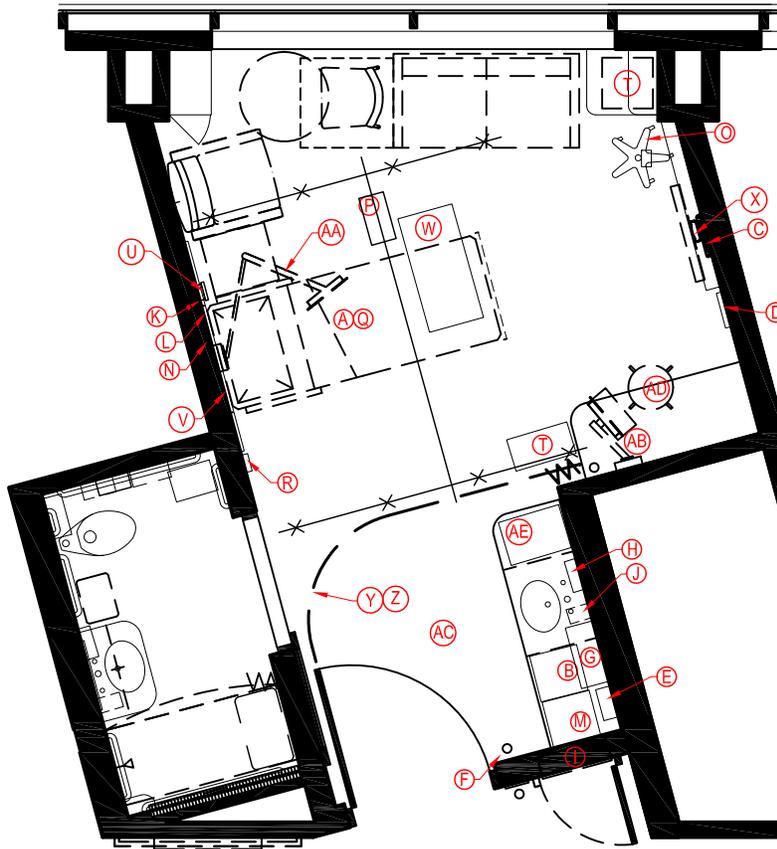
B. Core Values. The primary core values for all room standards originated with the development of the standard patient room. These values guided the development of the decisions for all clinical standards.

- C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

END OF DOCUMENT 203.11 10 20



1 FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 EQUIPMENT PLAN
SCALE: 3/16" = 1'-0"

Equipment List

- | | | | |
|---|------------------------------|----|----------------------------|
| A | BED, ELECTRIC | Q | MATTRESS, BED |
| B | BIOHAZARD, CONTAINER, 8 gal. | R | NURSE CALL, STAFF |
| C | BRACKET, WALL (TV) | S | RECEPTACLE, WASTE 40QT |
| D | CLOCK, ANALOG, WALL MTD | T | SAFE, MINI |
| E | CONTAINER, SHARPS | U | SPHYGMOMANOMETER, WALL MTD |
| F | DISPENSER, ALCOHOL FOAM | V | SUCTION REGULATOR |
| G | DISPENSER, GLOVE | W | TABLE, OVERBED |
| H | DISPENSER, PAPER TOWEL | X | TV, 32" |
| I | DISPENSER, PPE | Y | CUBICAL CURTAIN |
| J | DISPENSER, SOAP | Z | TRACK, CUBICAL CURTAIN |
| K | FLOWMETER, INTEGRATED OXYGEN | AA | PATIENT TOUCH |
| L | FLOWMETER, OXYGEN | AB | PC, WALL MTD |
| M | HAMPER, LINEN | AC | TELEPHONE |
| N | HEADWALL UNIT | AD | STOOL |
| O | IV STAND | AE | NURSE CALL |
| P | LIFT, PATIENT, CEILING MTD | | |

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)



FACILITY TYPE

Community

DESIGN STANDARD

Patient Room
New Construction

ISSUE DATE

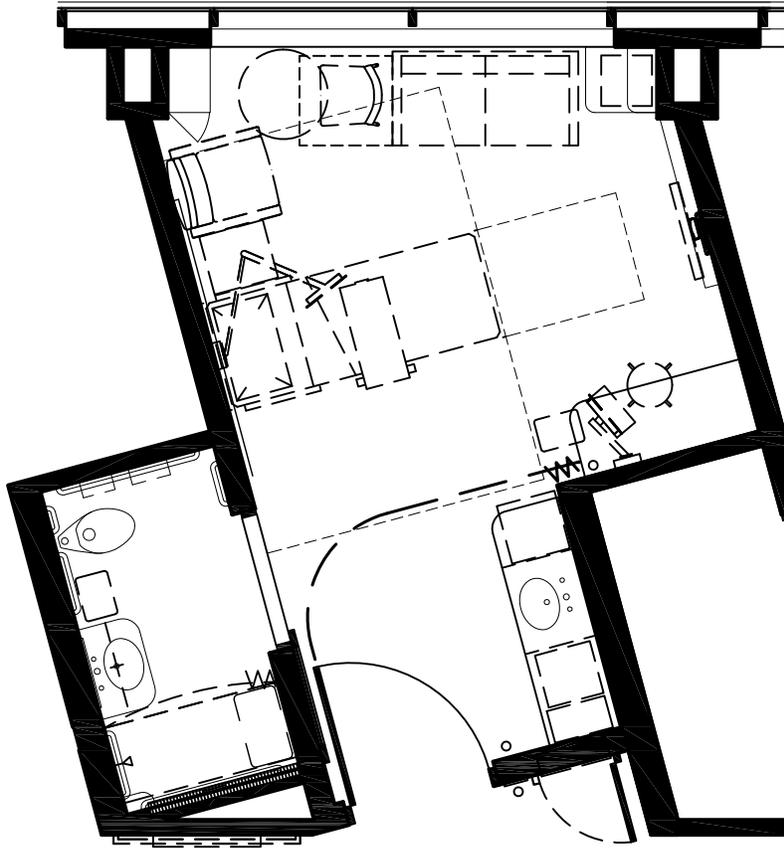
See Manual of Practice

REF #

203.11 10 10

DWG #

02



NOTES

1 **VOICE AND DATA DROPS**
SCALE: 3/16" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)

DOCUMENT 203.11 10 20 – BARIATRIC PATIENT ROOM STANDARD

Community hospital, Patient division, Med/Surgical Unit, Patient Area, Bariatric Room

1.1 INTRODUCTION

- A. History. The room standard originated from the planning and design activities for the MBMC West Pavilion and as a result of the development of the standard patient room. This standard first became effective on March 1, 2011.
- B. Research. Prior to the development of this room standard, PD&C Director of Planning participated in roundtable discussions with other healthcare organizations across the country on the topic of designing environments to accommodate bariatric patients. The conclusion from those meetings was there was no one single and definitive approach on how to accommodate bariatric patients. Therefore it was determined that the best way for BJC PD&C to develop a standard bariatric room was to engage qualified participants in a Kepner-Tregoe Analysis. Subject experts from within BJC participated in the process. This included planners, designers from PD&C, CAM, Ergonomics, and Clinical staff from MBMC and BJH. Through the KT process, the group evaluated the current information and analyzed case studies from BJH 17300, AMH, BJSP, and Boone. Additional resources included the 2009 AIA Guidelines for Healthcare Facilities and Hill-Rom Bariatric Room Design Advisory Board Guidelines.

1.2 ROOM STANDARD

- A. Concepts. As the bariatric design conditions were discovered, it became clear to the group that the spatial response would result in a room significantly larger than that of a standard patient room. In addition, the shape of the room would not allow for it to be easily aligned and located among standard patient rooms. The image below shows the standard patient room alongside the bariatric patient room. The dashed blue line on the standard room plan is the outline of the bariatric room and graphically depicts the area increase for bariatric rooms. Not only are the bariatric rooms significantly more expensive to construct than a standard patient room but the space requirements alone could prohibit the incorporation of this standard into a project. As a result the K-T process determined that in the absence of enforceable, codified bariatric standards, a list of best practices should be developed for implementation throughout all BJC entities. The following list of best practice for bariatric patient room design establishes the **minimum recommendations** that should be followed on every project. It is important to note that this does not serve as a complete room standard but rather as a list of recommendations to which will permit greater spatial flexibility when implementing the standard.



B. Primary elements. The primary elements are represented in the best practice recommendations below. Again, these are recommendations and are not considered a standard. Certain conditions have square footage impact and are identified within the blue shaded areas. These recommendations should be reviewed and determined for every project to meet the specific challenges and limitations of bariatric room design.

DESCRIPTION		RECOMMENDATION
1	Patient room occupancy	Single occupant room
2	Patient room area (not including bathroom)	260 net sf., minimum
3	Clearance around patient bed	5'-0" at sides and foot of bed
4	Door opening width	5'-6" opening (4'-0" leaf and 1'-6" leaf) minimum
5	Room shape	Canted type
6	Toilet room location	On headwall
7	Grab bar, shelving and other horizontal surface load capacities	Condition 1. For all wall mounted items less than 6'-0" above finished floor, load capacity shall resist 800 lb static and 1,000 lb impact load. Condition 2. For items located more than 6'-0" above finished floor, load capacity shall be 500 lb static and 750 lb impact load.
8	Wall Protection	High impact

9	Patient room flooring	See floor selection guideline. Note: consideration should be given to the selection of floor supported items such as furniture, beds and equipment with respect to the size and type of casters, wheels, or feet. The ability of the floor to support concentrated static and rolling loads needs to be carefully reviewed with these specific elements.
10	Patient room lighting	Additional lighting at floor, rail, and shower area
11	Patient lift	Built-in patient lift in every room
12	Patient lift capacity	2 booms at 625 lbs. (1,250 lb total capacity) minimum
13	Patient lift manufacturer/type	Waverly Glen, double motor
14	Patient bed load capacity	1,000 lbs. minimum
15	Patient bed dimensions	48" wide x 7'-6" long
16	Trapeze	Trapeze in every room
17	Trapeze type	Bed mounted
18	Furniture	Bariatric type. See line item 20 below
19	Furniture load capacity	600 lbs minimum
20	Furniture options	Recliner, couch/sofa sleeper, guest chair, dining table Note: The above options represent all the types of furniture that may be included in a patient room. While the current room layout accounts for every furniture piece indicated above, there is no requirement to include every item. The selection shall be determined by the entity, design team, and PD&C project manager. It is also important to note that in some instances, bariatric furniture will be rented on an as-needed basis. In all instances, design team shall coordinate with PD&C project manager for the planning and layout of furniture in bariatric rooms, early in the development of the design.
21	Toilet room area	72 net sf.
22	Toilet room entrance width	4'-0" clear, minimum

23	Toilet accessories	Recessed type
24	Toilet room flooring	See floor selection guideline
25	Toilet room accessibility	<p>Toilet room designed to accommodate wheelchair access.</p> <p>Note: Room design may not meet the current ADA requirements, especially depending on the position of the toilet to the side wall.</p>
26	Toilet room clear floor space	5'-0" clear turning diameter, indicate on plans
27	Toilet load capacity	<p>1,000 lbs static, 2,000 lbs impact.</p> <p>Note – the dimensions of the bariatric toilet (depth from front edge of bowl to wall and width of bowl are greater than a standard toilet. Selection of a toilet may influence the requirements of these standards and should be done early in the design process to ensure proper clearances are maintained.</p>
28	Toilet mounting type	Floor mounted
29	Toilet discharge type	Floor discharge
30	Toilet clearances	<p>Option 1, preferred. 24" clear around toilet for full nurse assistance. This allows room for 2 care givers, one on either side of the toilet to assist patient as necessary. This 24" clear dimension will also require a rear wall mounted and floor supported, fold down grab bar adjacent to the side wall, 18" off the center of the toilet in the event only 1 caregiver assists.</p> <p>Option 2. 18" clear dimension around toilet for partial nurse assistance. This allows for patient to use a fixed, sidewall mounted grab bar as in traditional toilet room designs but reduces the available area for a caregiver to assist the patient.</p> <p>Note: This is a clear dimension and must be coordinated with the specific toilet manufacturer dimensions.</p>
31	Toilet seat height	17.5" minimum, 18.5" maximum above finished floor
32	Toilet type	Vitreous china
33	Toilet room grab bars	See clear dimensions, line item 30 above

34	Toilet room lighting	Additional floor and ceiling lights connected to motion sensors
35	Sink type	Vitreous china. Sink should include flat horizontal surface(s) for patient toiletries.
36	Sink mounting type	Wall mounted
37	Sink load capacity	800 lbs static, 1,000 lbs impact minimum
38	Sink height above finished floor	Standard height, non-ADA. 2'-10" maximum or per governing codes.
39	Shower area	24 net sf, minimum
40	Shower base type	Curb-less, roll-in type shower
41	Shower head type	Handheld with adjustable height docking, Hooks on wet wall, multiple height.
42	Shower head location	Located on bathroom "wet wall" with toilet and sink
43	Shower bench load capacity	800 lbs.
44	Shower bench type	Wall mounted or removable furniture
45	Shower grab bars	Wall mounted
46	Shower grab bar load capacity	800 lbs minimum

C. Core Values. The values that guided the development of the decisions for all clinical standards.



- D. Image. The snapshots below represent the general interpretations of the bariatric patient room. While the finishes will vary from project to project, the intent of these images is to generally convey that the bariatric rooms should not look much different than a typical patient room.



END OF DOCUMENT 203.11 10 20

DOCUMENT 203.11 20 31 – MEDICATION ROOM, PYXIS COMPLETE STANDARD

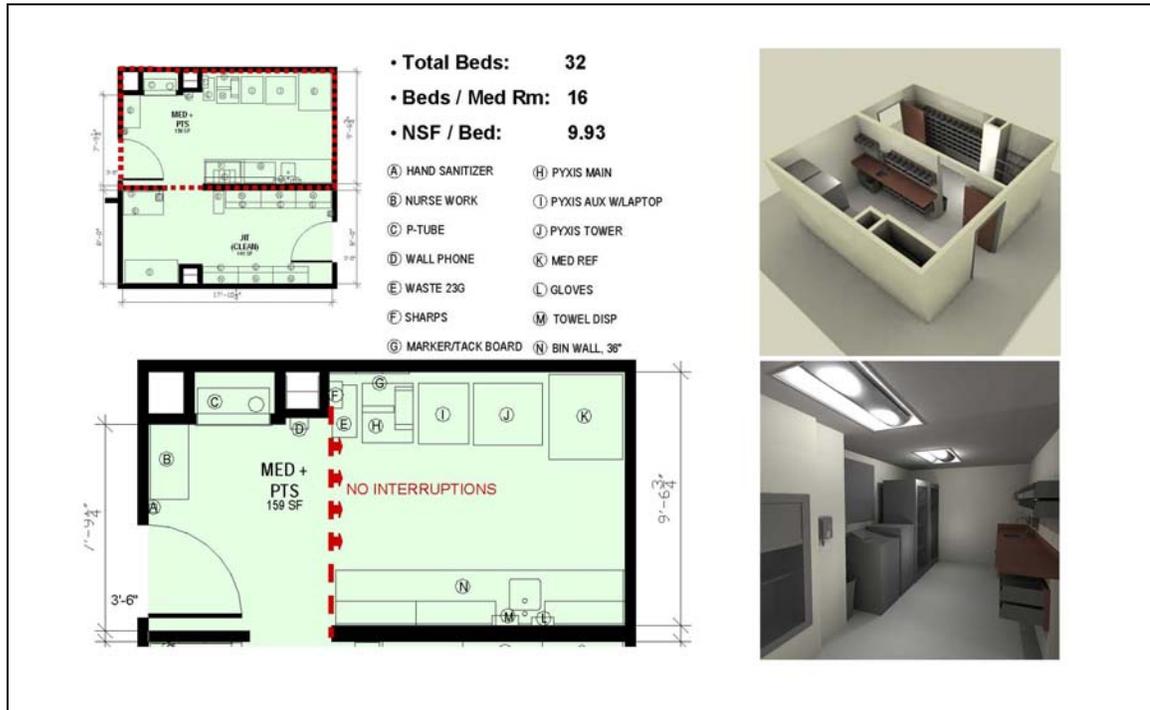
Community hospital, Patient division, Med/Surg. Unit, Clinical Support, Med Room, Pyxis Complete

1.1 INTRODUCTION

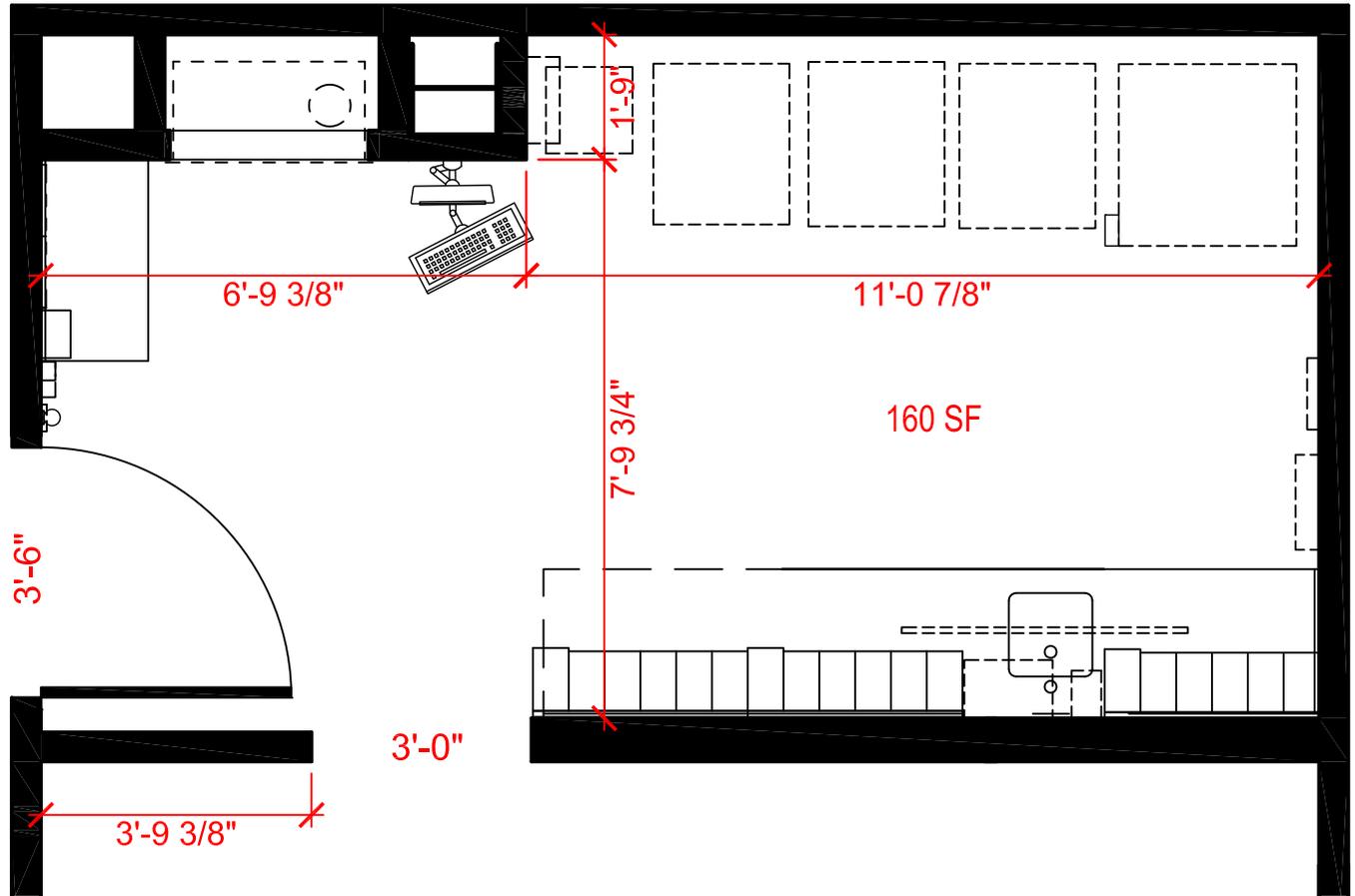
- A. History. The room standard originated from the planning and design activities for the MBMC West Pavilion and they were developed prior to completion of several BJC system initiatives. A common user group was created to help design the standard room.
- B. Inpatient Core Area. There are four basic rooms that define the inpatient core area. These four rooms are often used by nurses and care givers on a regular basis. For reasons which support the 3 core values, the location of rooms relative to the centroid of the unit is an important factor and supports the 3 core values - patient safety, healing environment and staff efficiency and satisfaction. The four rooms that make up this core area are as follows.
 - 1. Med Room
 - 2. Clean Supply (JIT) Room
 - 3. Soiled Holding
 - 4. Equipment Storage
- C. Medication Distribution Study. In 2010 the Medication Distribution High Impact Team was formed to determine the best way for BJC entities to distribute medications. This team was formed by the Clinical Workflow Initiative (CWI) and was assembled to help all entities make a decision on distribution processes and workflows. The research focused on medication distribution studies at PWHC, AMH, CHNE, BJSP, and MBMC. This team identified the two primary means for distribution of medications at BJC entities as follows.
 - 1. Pyxis complete. The majority of BJC hospitals distribute medications to patients via Pyxis units. In this approach, all medications are located in the central Med Room. Most of the medications are located in a Pyxis machine while those medications that need to be kept cool are stored in the refrigerator. All bulk medications are placed in patient specific bins.
 - 2. Cart-Exchange system (hybrid). There are two community hospitals that distribute medications in a Pyxis hybrid manner. In this approach to medication storage and distribution, the pharmacy bags individual patient meds for a 24 hour period, while the Pyxis machines are mainly used for PRN and 1st dose orders. PWHC stores medications in a locked cart directly in patient rooms, while AMH places the med bags in mailboxes located in a central med room.
- D. Design testing.
 - 1. Simulation models were built to understand work flow, process, durations, for med rooms based on actual collected data.
 - 2. A mock-up was constructed and reviewed by staff to gather feedback before the actual space is built.

1.2 ROOM STANDARD

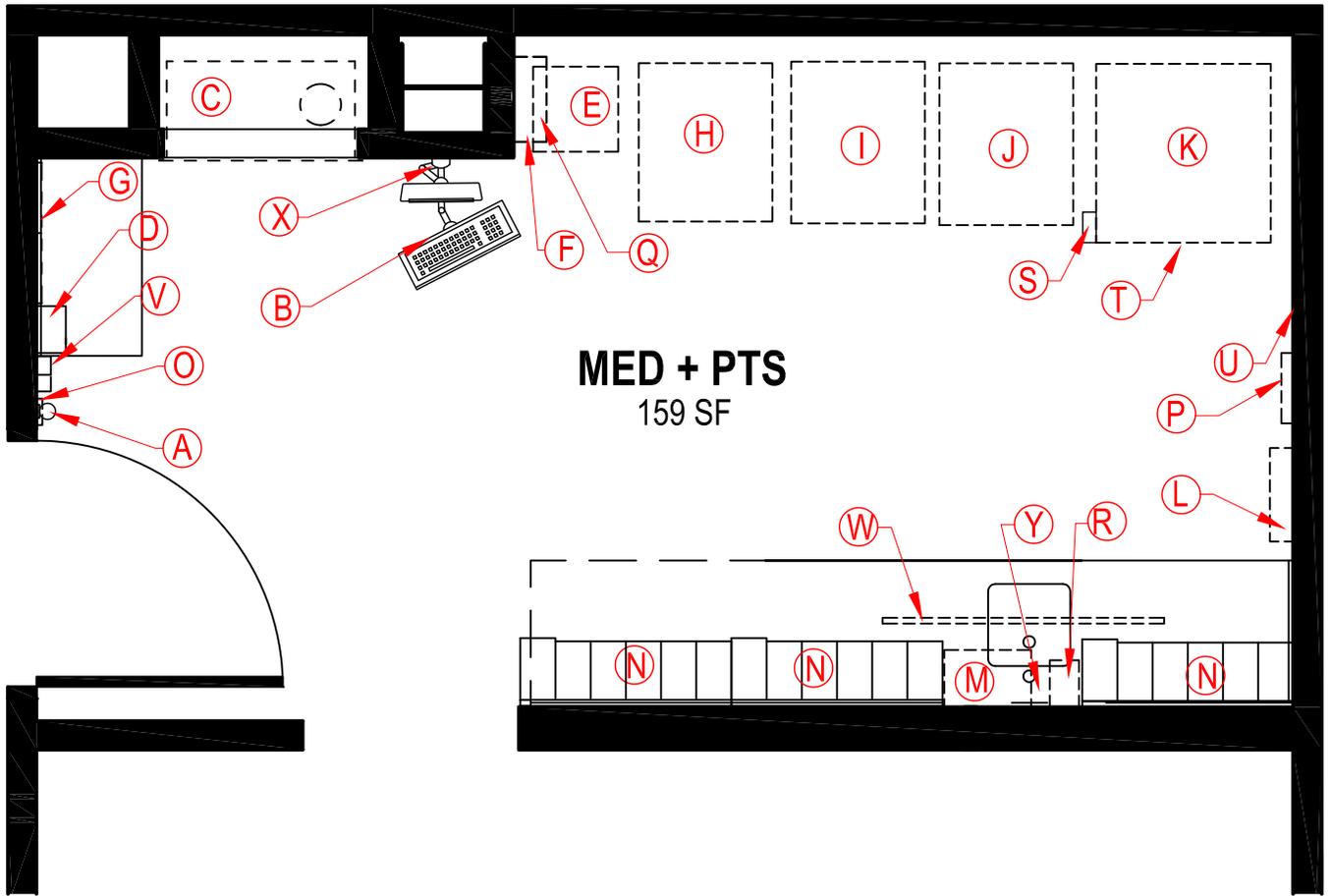
- A. General. The Med Room standard is adjoining and without doors to the Clean Supply Room. A door can be installed between the two rooms in the future if regulations require separation.



- B. Primary elements. The goal was to create a standard that was flexible enough to accommodate a Pyxis complete scenario or a Cart-exchange system (hybrid) as identified above. These standards reflect the most current response to the functional requirements however it should be noted that evaluation of policies and procedures is ongoing and may affect these standards. Plans for both systems are represented in these standards.
1. No interruption zone. These standards extend the no interruption zone to the entire Med Room.
 2. Work flow is from left to right and the refrigerator is directly across form sink area.
 3. Primary distinction between community and academic standard for Pyxis complete is that academic has an additional Pyxis tower unit.
- C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.



1 FLOOR PLAN
SCALE: 3/8" = 1'-0"



MED + PTS
159 SF

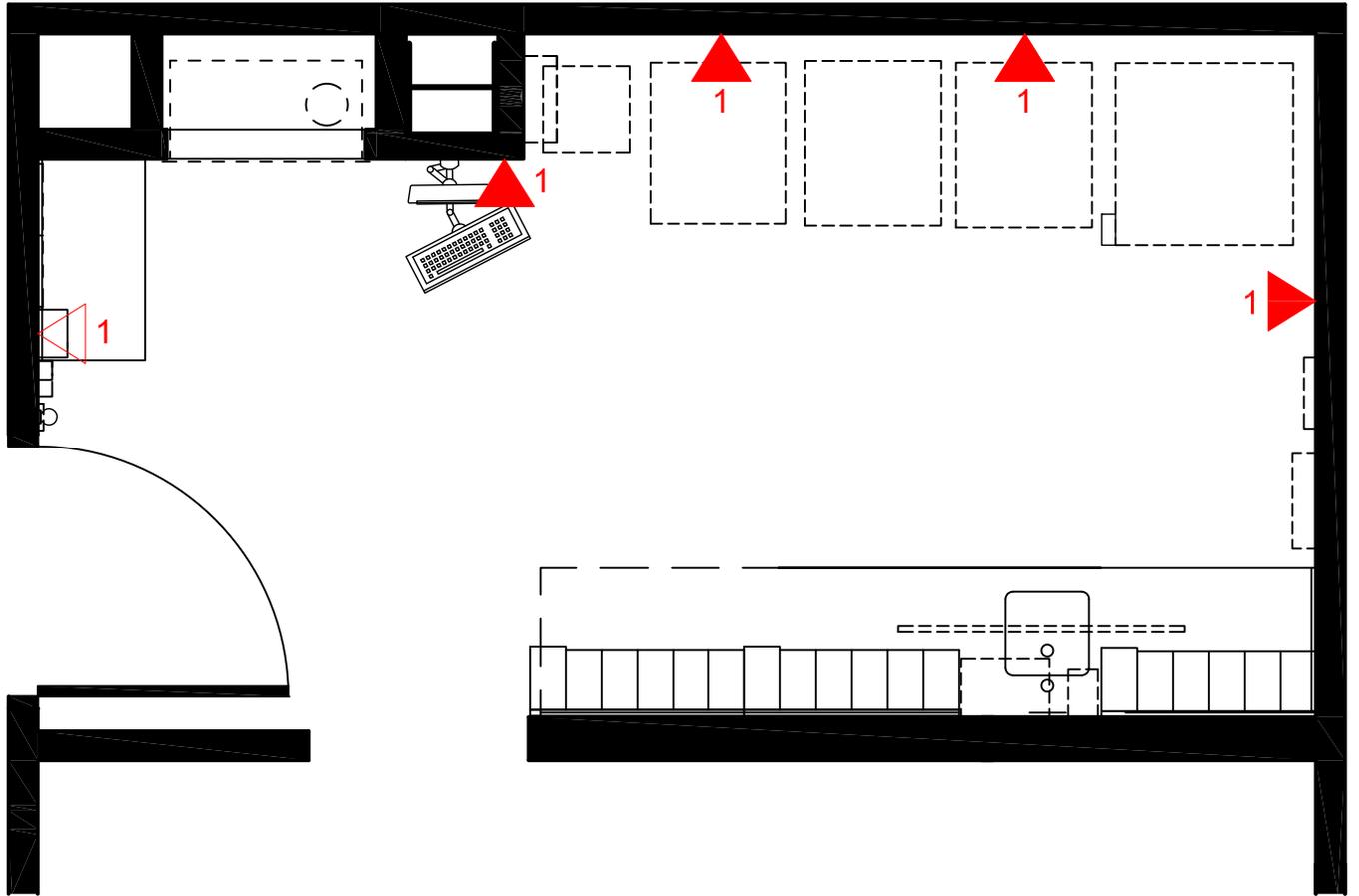
1 **EQUIPMENT PLAN**
SCALE: 3/8" = 1'-0"

Equipment List

- | | |
|-----------------------------------|--|
| A ALCOHOL FOAM DISPENSER | O NURSE CALL, DUTY |
| B COMPUTER WORKSTATION, COMPASS | P CLOCK, WALL MTD |
| C P-TUBE | Q CONTAINER, RCRA |
| D TELEPHONE, ANALOG, WALL MTD. | R DISPENSER, SOAP |
| E RECEPTACLE, WASTE 23 G | S PYXIS, SMART REMOTE |
| F CONTAINER, SHARPS | T TEMPERATURE MONITORING, COLLECTION POINT |
| G MARKER/TACK BOARD | U TEMPERATURE MONITORING, ACCESS POINT |
| H PYXIS, MED, MAIN | V THERMOMETER, WALL MTD |
| I PYXIS, MED, AUXILIARY, 7 DRAWER | W IV POLE, CEILING MTD |
| J PYXIS, MED, MAIN | X PC MOUNT & MONITOR MOUNT |
| K REFRIGERATOR, MEDS, FULL SIZE | Y EYE WASH |
| L DISPENSER, GLOVE | |
| M DISPENSER, PAPER TOWEL | |
| N BIN WALL SYSTEM | |

* This document acts as a guide for room layout
 * All equipment is to be verified with Clinical Asset Management (CAM)

<p>FACILITY TYPE Community</p>	<p>DESIGN STANDARD</p> <p>Med Room Pyxis Complete</p>	<p>ISSUE DATE See Manual of Practice</p>	<p>DWG # 02</p>
		<p>REF # 203.11 20 31</p>	



1 VOICE AND DATA DROPS
SCALE: 3/8" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)



FACILITY TYPE

Community

DESIGN STANDARD

Med Room
Pyxis Complete

ISSUE DATE

See Manual of Practice

REF #

203.11 20 31

DWG #

03

DOCUMENT 203.11 20 32 – MED ROOM, CART-EXCHANGE (HYBRID) STANDARD

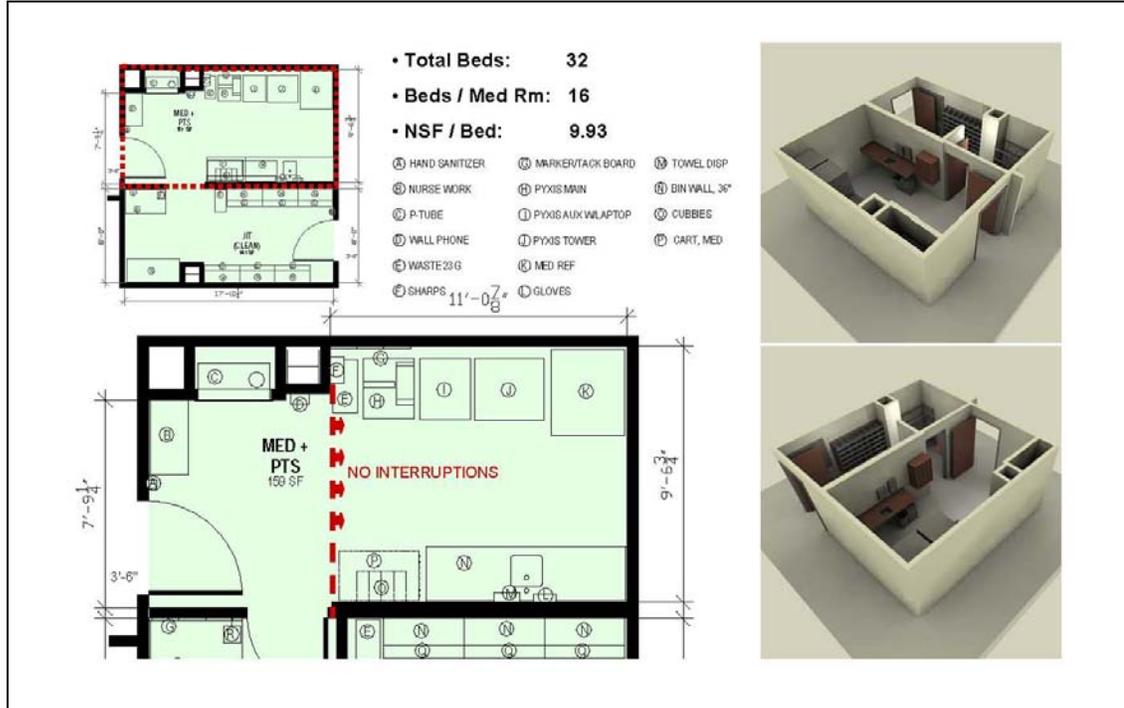
Community hospital, Patient division, Med/Surg. Unit, Clinical Support, Med Room, Pyxis Cart-Exchange (Hybrid)

1.1 INTRODUCTION

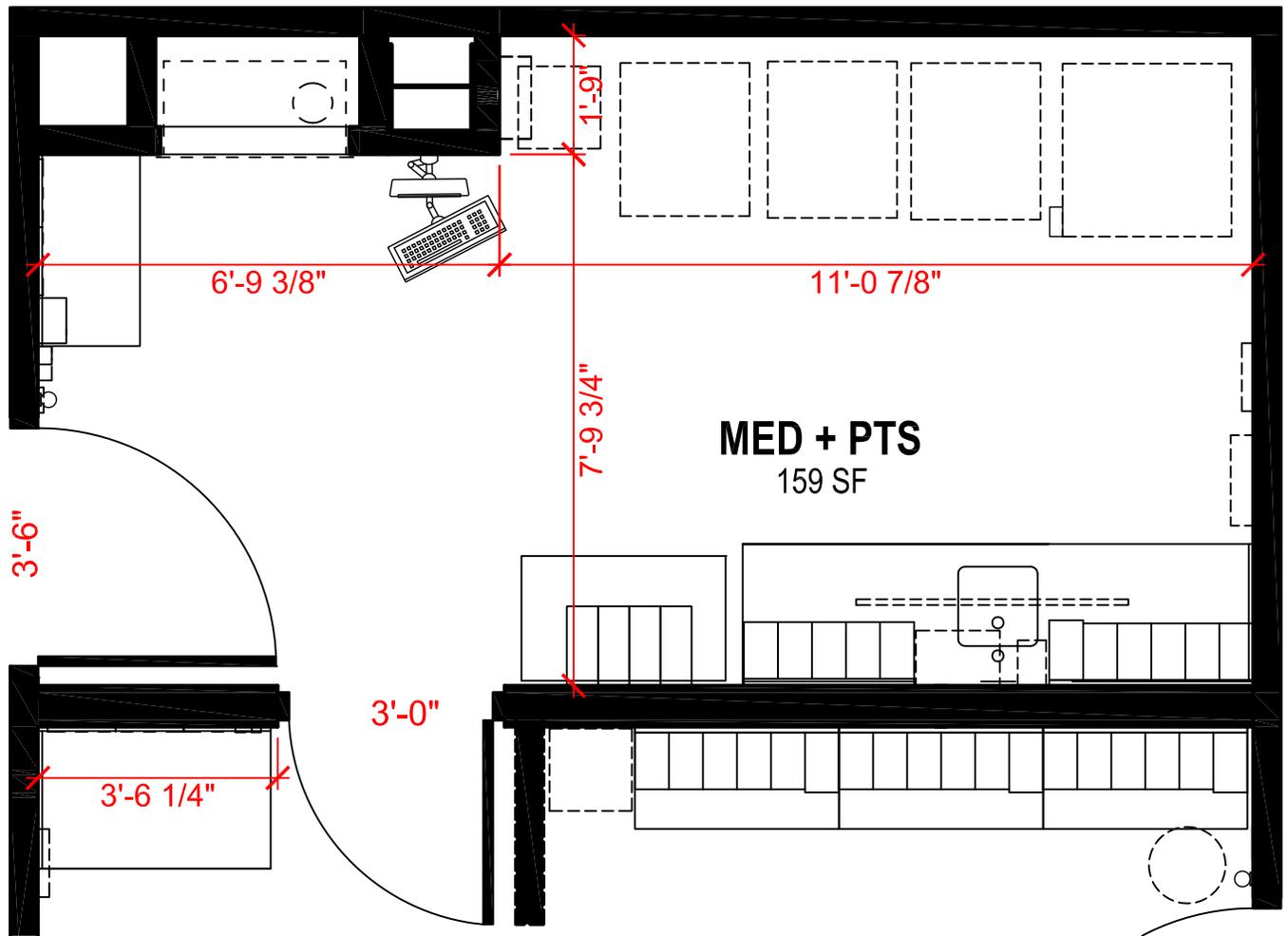
- A. History. The room standard originated from the planning and design activities for the MBMC West Pavilion and they were developed prior to completion of several BJC system initiatives. A common user group was created to help design the standard room.
- B. Inpatient Core Area. There are four basic rooms that define the inpatient core area. These four rooms are often used by nurses and care givers on a regular basis. For reasons which support the 3 core values, the location of rooms relative to the centroid of the unit is an important factor and supports the 3 core values - patient safety, healing environment and staff efficiency and satisfaction. The four rooms that make up this core area are as follows.
 - 1. Med Room
 - 2. Clean Supply (JIT) Room
 - 3. Soiled Holding
 - 4. Equipment Storage
- C. Medication Distribution Study. In 2010 the Medication Distribution High Impact Team was formed to determine the best way for BJC entities to distribute medications. This team was formed by the Clinical Workflow Initiative (CWI) and was assembled to help all entities make a decision on distribution processes and workflows. The research focused on medication distribution studies at PWHC, AMH, CHNE, BJSP, and MBMC. This team identified the two primary means for distribution of medications at BJC entities as follows.
 - 1. Pyxis complete. The majority of BJC hospitals distribute medications to patients via Pyxis units. In this approach, all medications are located in the central Med Room. Most of the medications are located in a Pyxis machine while those medications that need to be kept cool are stored in the refrigerator. All bulk medications are placed in patient specific bins.
 - 2. Cart-Exchange system (hybrid). There are two community hospitals that distribute medications in a Pyxis hybrid manner. In this approach to medication storage and distribution, the pharmacy bags individual patient meds for a 24 hour period, while the Pyxis machines are mainly used for PRN and 1st dose orders. PWHC stores medications in a locked cart directly in patient rooms, while AMH places the med bags in mailboxes located in a central med room.
- D. Design testing.
 - 1. Simulation models were built to understand work flow, process, durations, for med rooms based on actual collected data.

1.2 ROOM STANDARD

- A. General. The Med Room standard is adjoining and without doors to the Clean Supply Room. A door can be installed between the two rooms in the future if regulations require separation.



- B. Primary elements. The goal was to create a standard that was flexible enough to accommodate a Pyxis complete scenario or a Cart-exchange system (hybrid) as identified above. These standards reflect the most current response to the functional requirements however it should be noted that evaluation of policies and procedures is ongoing and may affect these standards. Plans for both systems are represented in these standards.
1. No interruption zone. These standards extend the no interruption zone to the entire Med Room.
 2. Work flow is from left to right and the refrigerator is directly across form sink area.
 3. Primary distinction between community and academic standard for Pyxis complete is that academic has an additional Pyxis tower unit.
 4. Hybrid approach allows for cart or cubby system in the Med Room based on entity’s operational preference.
- C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.



MED + PTS
159 SF

1 FLOOR PLAN
SCALE: 3/8" = 1'-0"



FACILITY TYPE

Community

DESIGN STANDARD

Med Room
Cart Exchange

ISSUE DATE

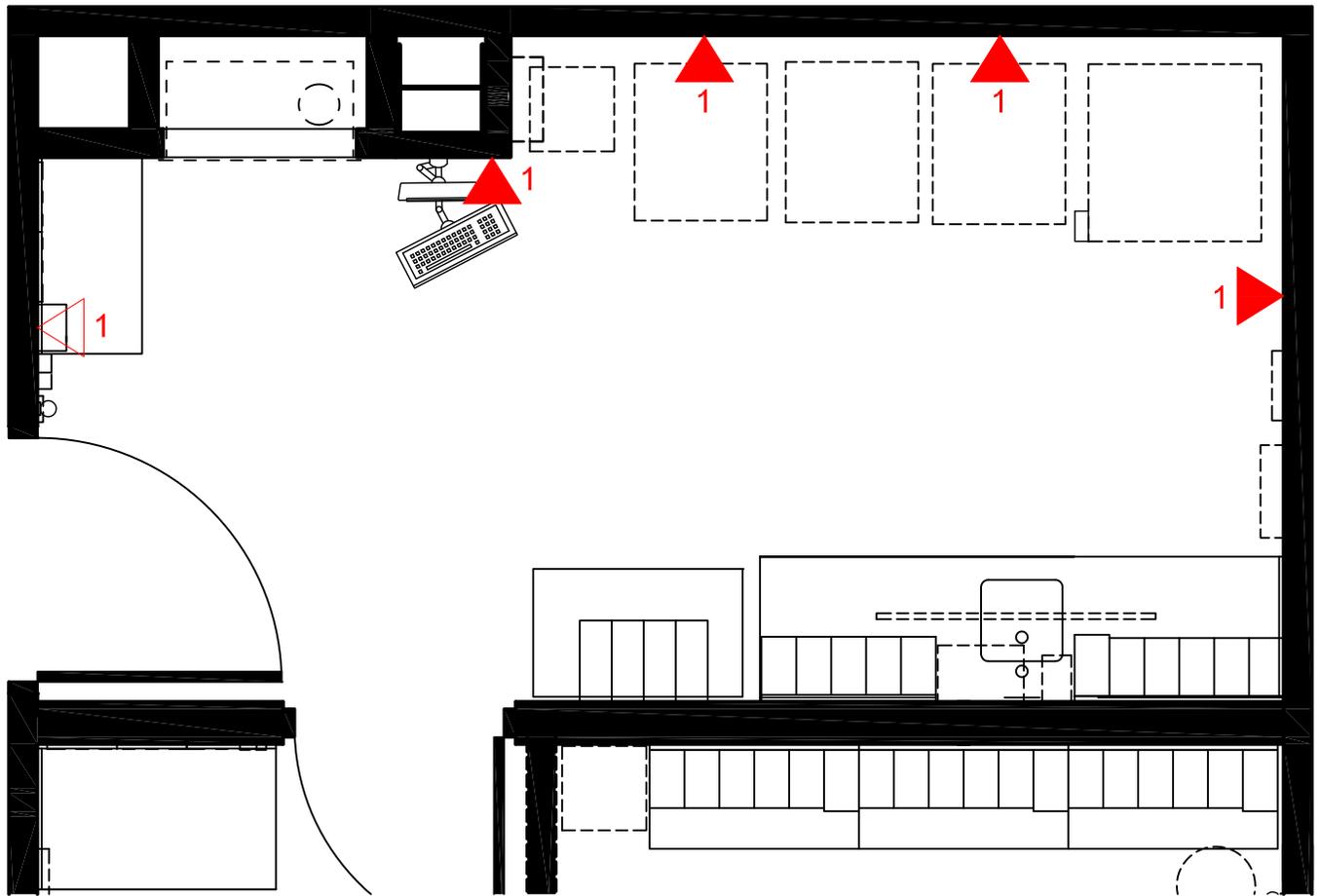
See Manual of Practice

REF #

203.11 20 32

DWG #

01

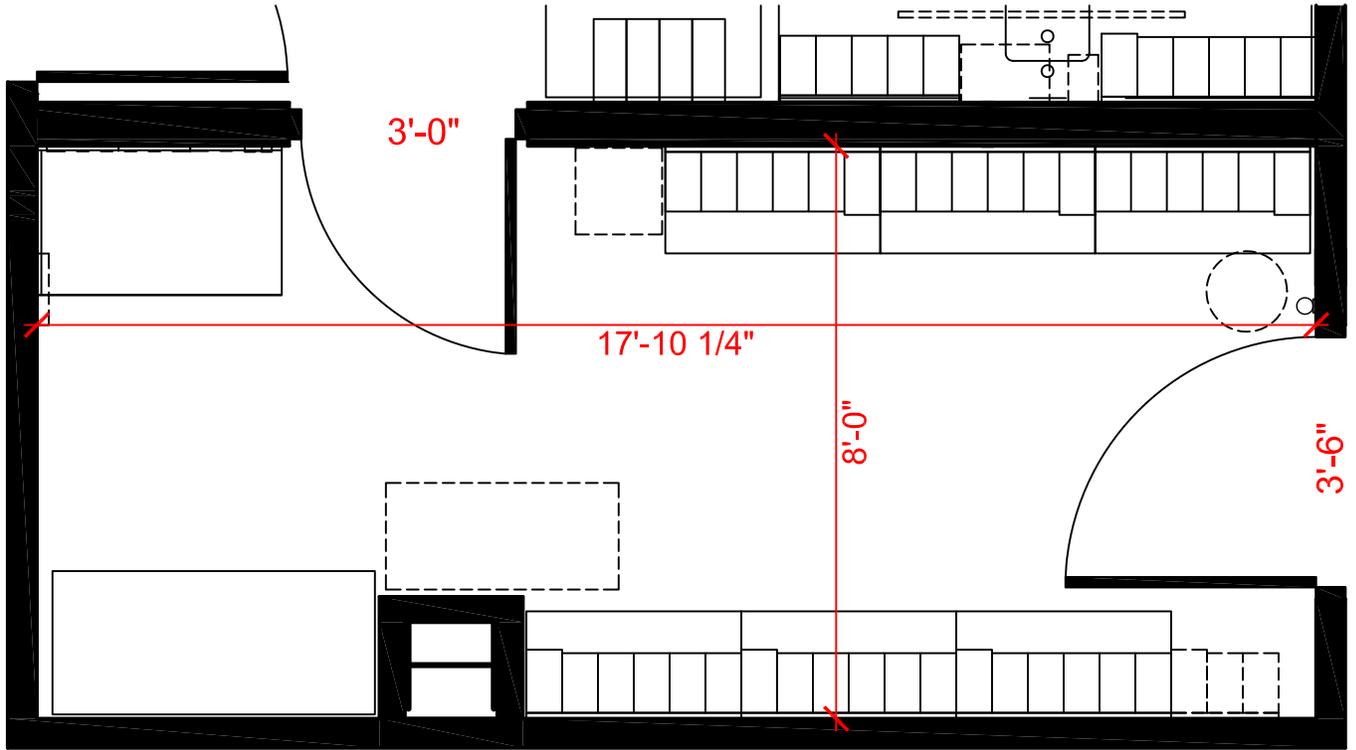


1 VOICE AND DATA DROPS
SCALE: 3/8" = 1'-0"

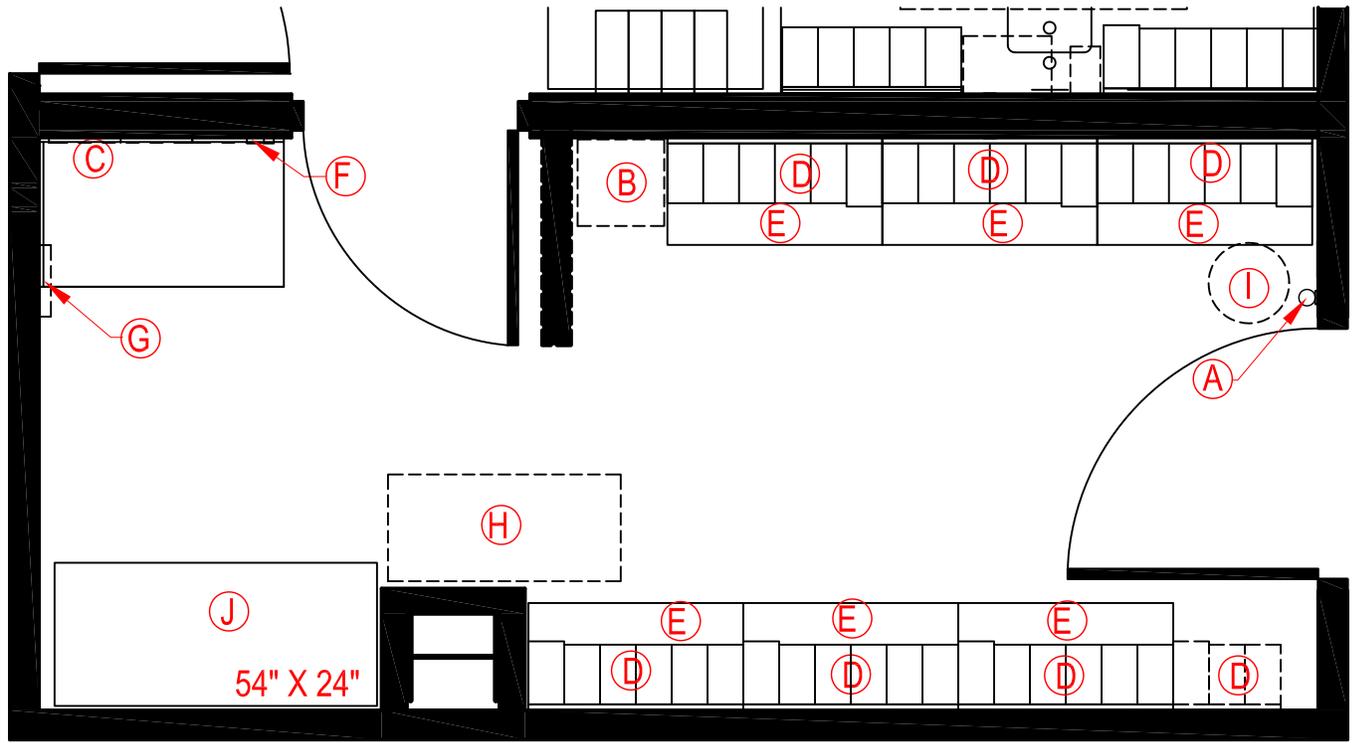
LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)



1 FLOOR PLAN
SCALE: 3/8" = 1'-0"



1 EQUIPMENT PLAN
SCALE: 3/8" = 1'-0"

Equipment List

- A ALCOHOL FOAM DISPENSER
- B RECEPTACLE, WASTE 23G
- C MARKER/TACK BOARD
- D BIN WALL SYSTEM
- E DUNNAGE RACK
- F NURSE CALL, DUTY
- G CLOCK WALL MTD
- H CART, UTILITY
- I STOOL, FOOT
- J WIRE RACK

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)



FACILITY TYPE

Community

DESIGN STANDARD

Clean Supply
(JIT) Room

ISSUE DATE

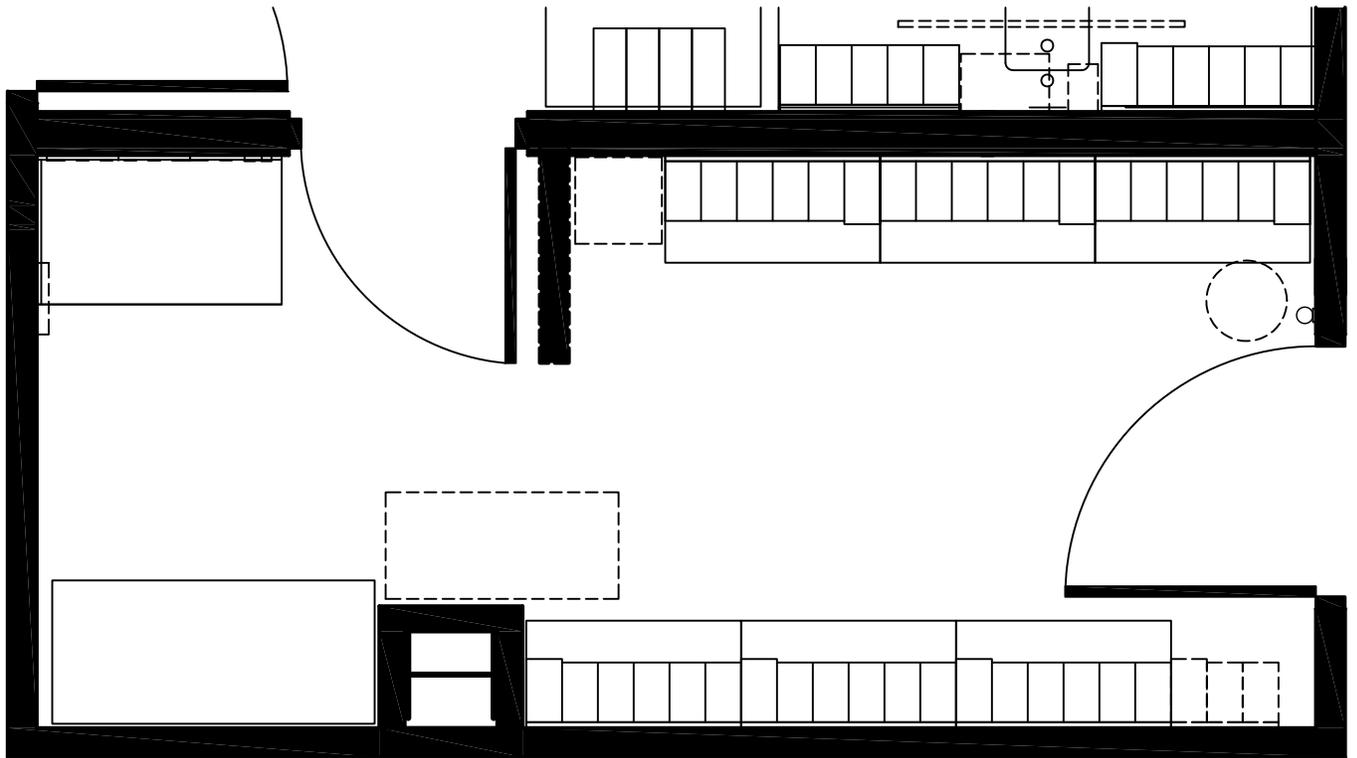
See Manual of Practice

REF #

203.11 20 40

DWG #

02



1 VOICE AND DATA DROPS
SCALE: 3/8" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)



FACILITY TYPE

Community

DESIGN STANDARD

Clean Supply
(JIT) Room

ISSUE DATE

See Manual of Practice

REF #

203.11 20 40

DWG #

03

DOCUMENT 203.11 20 40 – CLEAN SUPPLY (JIT) ROOM STANDARD

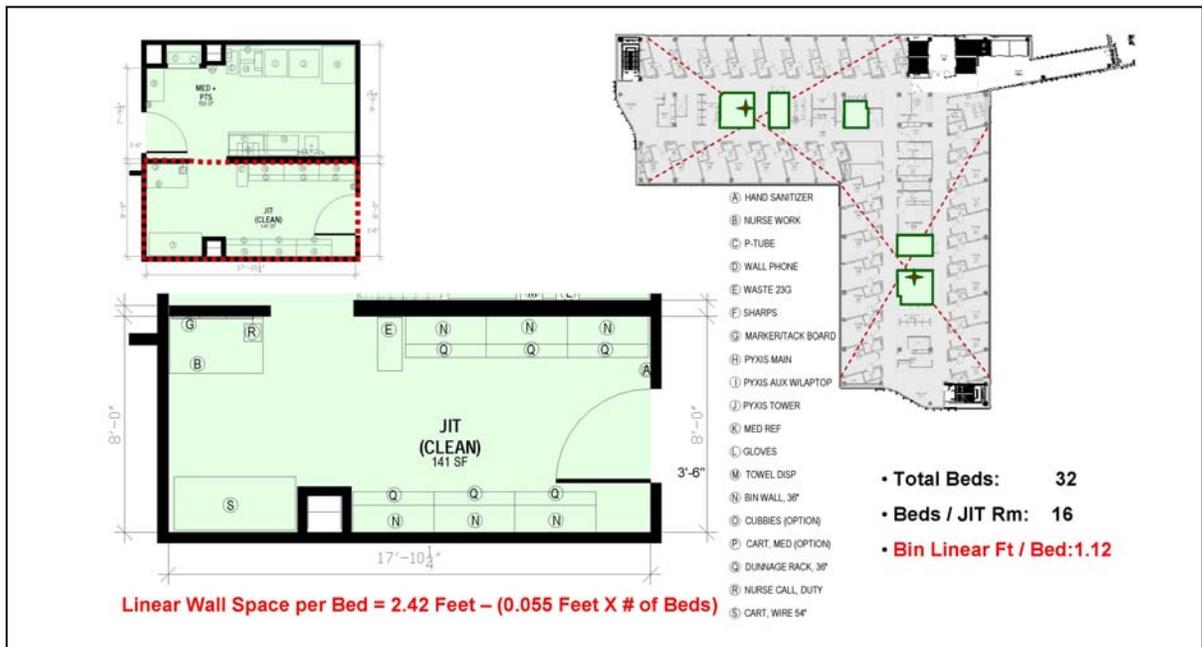
Community hospital, Patient division, Med/Surg. Unit, Clinical Support, Clean Supply (JIT)

1.1 INTRODUCTION

- A. History. The room standard originated from the planning and design activities for the MBMC West Pavilion. Analysis also included a review of the core design for the BJH 16400/16500 renovation project. A common user group was created to help design the standard room.
- B. Inpatient Core Area. There are four basic rooms that define the inpatient core area. These four rooms are often used by nurses and care givers on a regular basis. For reasons which support the 3 core values, the location of rooms relative to the centroid of the unit is an important factor and supports the 3 core values - patient safety, healing environment and staff efficiency and satisfaction. The four rooms that make up this core area are as follows.
 - 1. Med Room
 - 2. Clean Supply (JIT) Room
 - 3. Soiled Holding
 - 4. Equipment Storage

1.2 ROOM STANDARD

- A. Concepts. The Clean Supply (JIT) Room adjoins the Med Room in order to increase staff



efficiency. An opening between the rooms directly connects the two. The reason being that when a nurse retrieves medications, they will need supplies as well. Therefore it became important for these rooms to directly connect. If at some point in the future

regulations change and require the rooms to be distinct and separate, a door between these rooms can be added with little modification to either space.

- B. Bin system. The design centers around the use of color-coded open bin system for storage. Supply chain originally developed a formula to determine the length of wall space for bin system required per bed. The equation was based on review of several facilities and different departmental conditions. The initial formula is below however it is currently being tested for applicability.

Original Supply Room Study Results	Formula
Based on sample of 19 supply rooms at MBMC and BJH. There were typical medical and surgical units with average of 295 items per supply room	Linear Bin Wall = # of ICU Beds x [2.2ft - (0.05 ft x # of beds)]
Bin Wall Space Required for ICU's	Linear Bin Wall = # of ICU Beds x [2.86ft - (0.065 ft x # of beds)]
Comparing number of supply items needed for two small ICU's at Christian, we found an ICU requires 60-70% more items (SKU's) kept for ICU. ICU supply rooms typically replenished more frequently. Estimate an ICU requires 30% more bin space.	
Additional Bin Wall Space Required for Kanban	Linear Bin Wall = # of ICU Beds x [3.65ft - (0.083 ft x # of beds)]
BJH leads Lean Operational Principles at BJC. Setting up nursing supply rooms involves dedicating single storage bin to each item while community hospitals still subdivide bins. When items are stored one per bin, 25-30% more bin wall space is required.	
Additional Bin Wall Space Required for Item Growth	Linear Bin Wall = # of ICU Beds x [4.0ft - (0.09 ft x # of beds)]
Medical supply items required for "Best Practice" care has been growing steadily. Yearly average growth over last ten years is just over 3%. To accommodate new items we should provide at least 10% more space than required.	

- C. Horizontal surfaces. CNE's indicated there was a real need to increase the amount of horizontal surfaces available to the nurses to set items down. This standard addressed that request and increased the usable counter area.
- D. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

DOCUMENT 203.11 20 51 – SOILED HOLDING WITHOUT CHUTES STANDARD

Community hospital, Patient division, Med/Surg. Unit, Clinical Support, Soiled Holding, Without chutes

1.1 INTRODUCTION

- A. History. The room standard originated from the planning and design activities for the MBMC West Pavilion. Analysis also included a review of the core design for the BJH 16400/16500 renovation project. A common user group was created to help design the standard room.
- B. Inpatient Core Area. There are four basic rooms that define the inpatient core area. These four rooms are often used by nurses and care givers on a regular basis. For reasons which support the 3 core values, the location of rooms relative to the centroid of the unit is an important factor and supports the 3 core values - patient safety, healing environment and staff efficiency and satisfaction. The four rooms that make up this core area are as follows.
 1. Med Room
 2. Clean Supply (JIT) Room
 3. Soiled Holding
 4. Equipment Storage

1.2 ROOM STANDARD

- A. Concepts. As a result of this effort, two types of rooms have been for the Soiled Holding

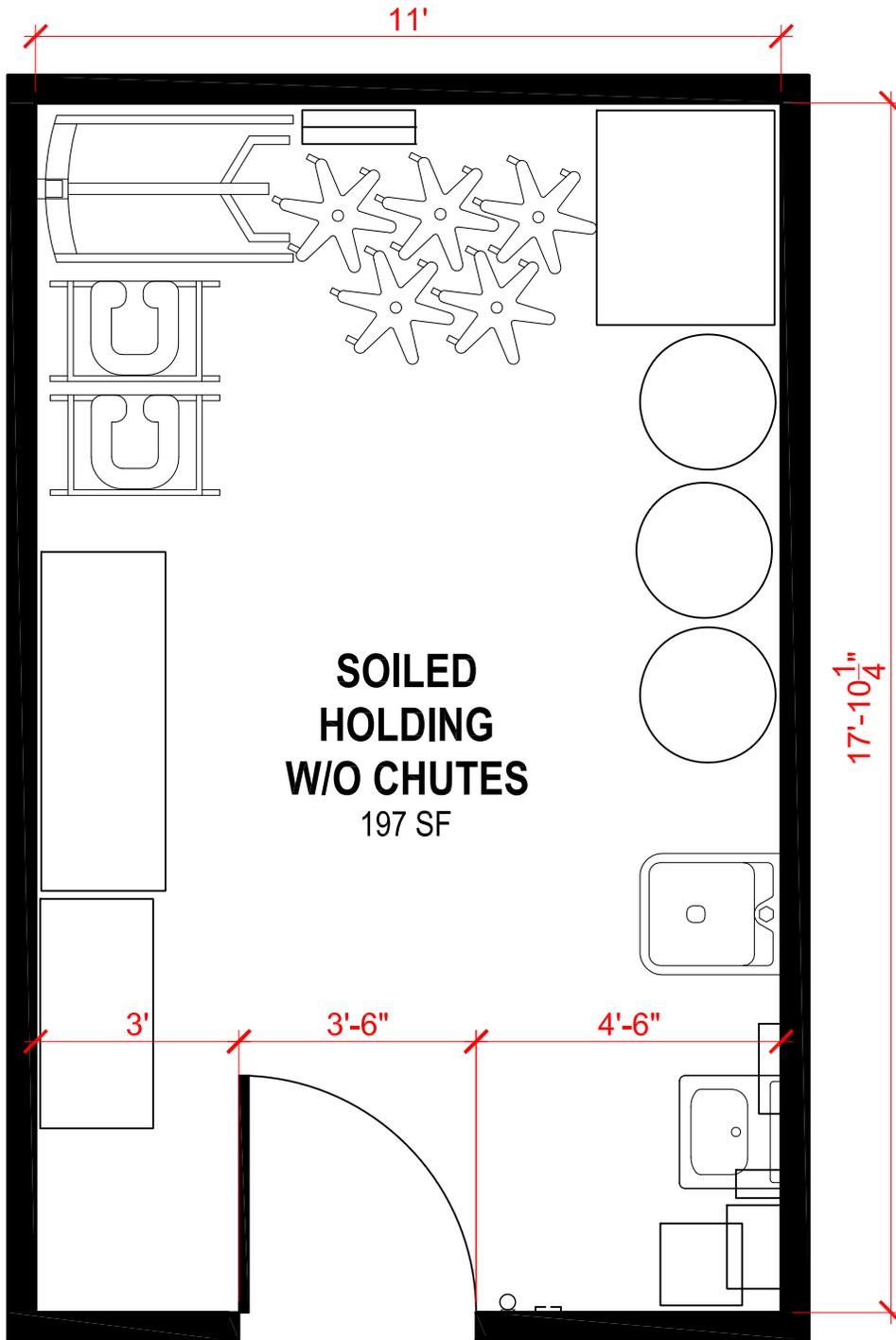


standard, those rooms that use trash and linen chutes and those without chutes. In general, BJH, CHNE, and MBMC use chutes for soiled linens and trash. In general, the rest of

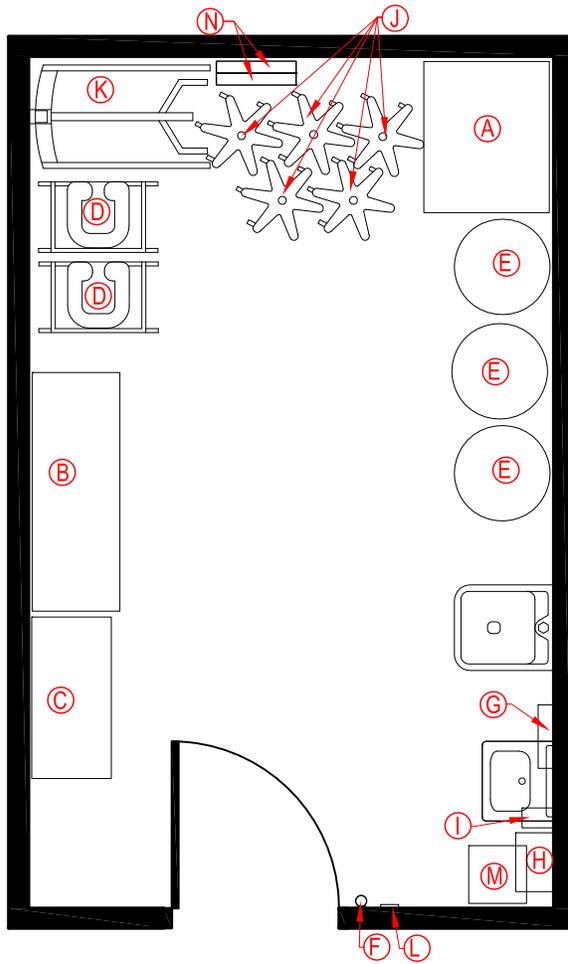
BJC's facilities use a rolling cart system. The chutes in general allow the Soiled Holding to be smaller than the Soiled Holding without chutes because the rolling carts take up greater floor area. The room was designed to accommodate all of the equipment and ancillary items that will be located there.

- B. Equipment. Of importance to note here is that there is no longer a separate bed pan washer (equipment). The item is a large piece of equipment and takes up valuable floor area. This was determined to be unnecessary and wasted clear floor space and so the bed pan washer is incorporated in the hopper.
- C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

END OF DOCUMENT 203.11 20 51



1 FLOOR PLAN
SCALE: 3/8" = 1'-0"



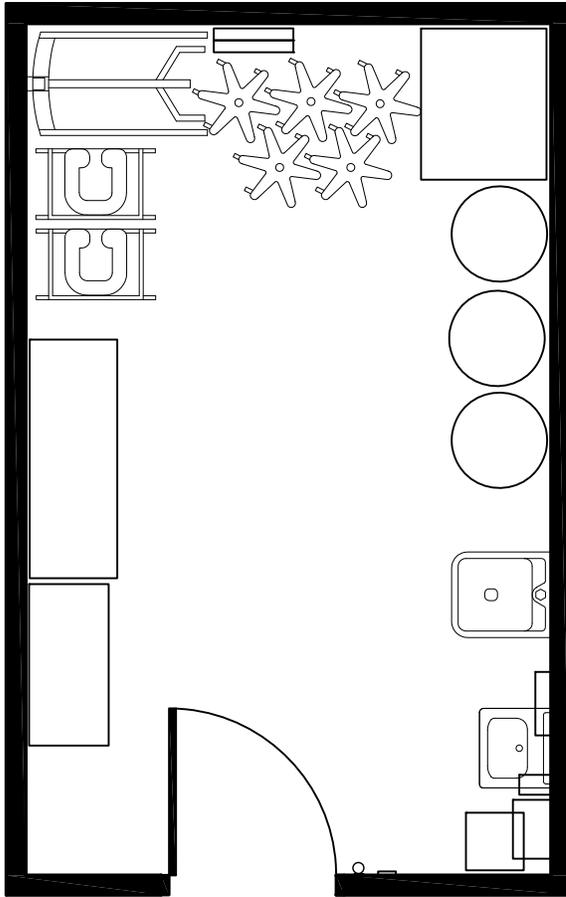
1 EQUIPMENT PLAN
SCALE: 1/4" = 1'-0"

Equipment List

- | | | | |
|---|--------------------------|---|-----------------------|
| A | CART, BIOHAZARD | I | DISPENSER, SOAP |
| B | CART, LINEN | J | IV STAND (5) |
| C | CART, UTILITY | K | LIFT, PATIENT |
| D | CHAIR, COMMODE (2) | L | NURSE CALL, DUTY |
| E | CONTAINER, TRASH 44g (3) | M | RECEPTACLE, WASTE 23g |
| F | DISPENSER, ALCOHOL FOAM | N | WALKER (2) |
| G | DISPENSER, GLOVE | | |
| H | DISPENSER, PAPER TOWEL | | |

* This document acts as a guide for room layout
 * All equipment is to be verified with Clinical Asset Management (CAM)

 FACILITY TYPE Community	DESIGN STANDARD <hr/> Soiled Holding Without Chutes	ISSUE DATE See Manual of Practice <hr/> REF # 203.11 20 51	DWG # 02
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1 VOICE AND DATA DROPS
SCALE: 1/4" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)

DOCUMENT 203.11 20 52 – SOILED HOLDING WITH CHUTES STANDARD

Community hospital, Patient division, Med/Surg. Unit, Clinical Support, Soiled Holding, With chutes

1.1 INTRODUCTION

- A. History. The room standard originated from the planning and design activities for the MBMC West Pavilion. Analysis also included a review of the core design for the BJH 16400/16500 renovation project. A common user group was created to help design the standard room.
- B. Inpatient Core Area. There are four basic rooms that define the inpatient core area. These four rooms are often used by nurses and care givers on a regular basis. For reasons which support the 3 core values, the location of rooms relative to the centroid of the unit is an important factor and supports the 3 core values - patient safety, healing environment and staff efficiency and satisfaction. The four rooms that make up this core area are as follows.
 - 1. Med Room
 - 2. Clean Supply (JIT) Room
 - 3. Soiled Holding
 - 4. Equipment Storage

1.2 ROOM STANDARD

- A. Concepts. As a result of this effort, two types of rooms have been for the Soiled Holding

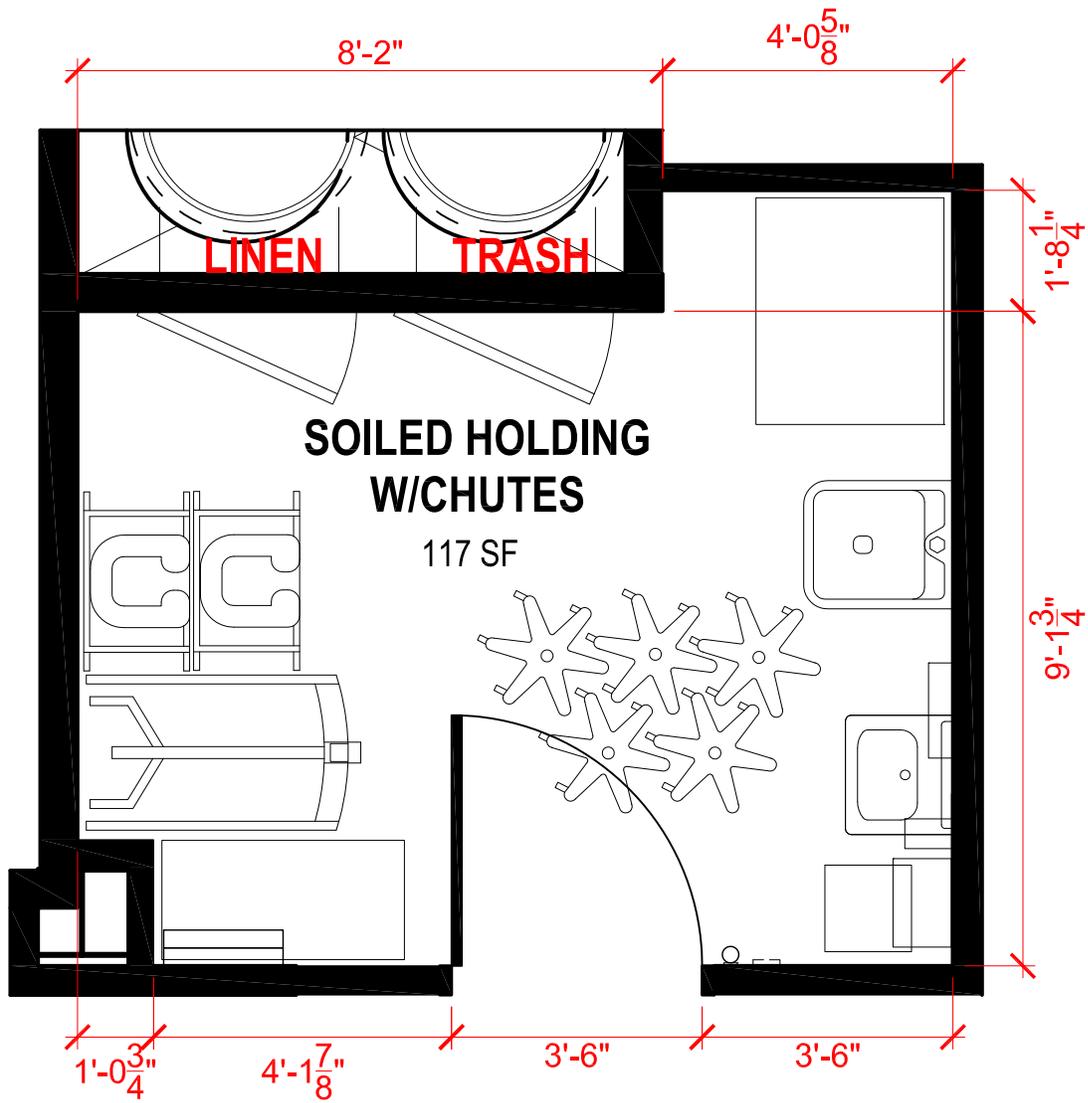


standard, those rooms that use trash and linen chutes and those without chutes. In general, BJH, CHNE, and MBMC use chutes for soiled linens and trash. In general, the rest of BJC’s facilities use a rolling cart system. The chutes in general allow the Soiled Holding to be smaller than the Soiled Holding without chutes because the rolling carts take up greater

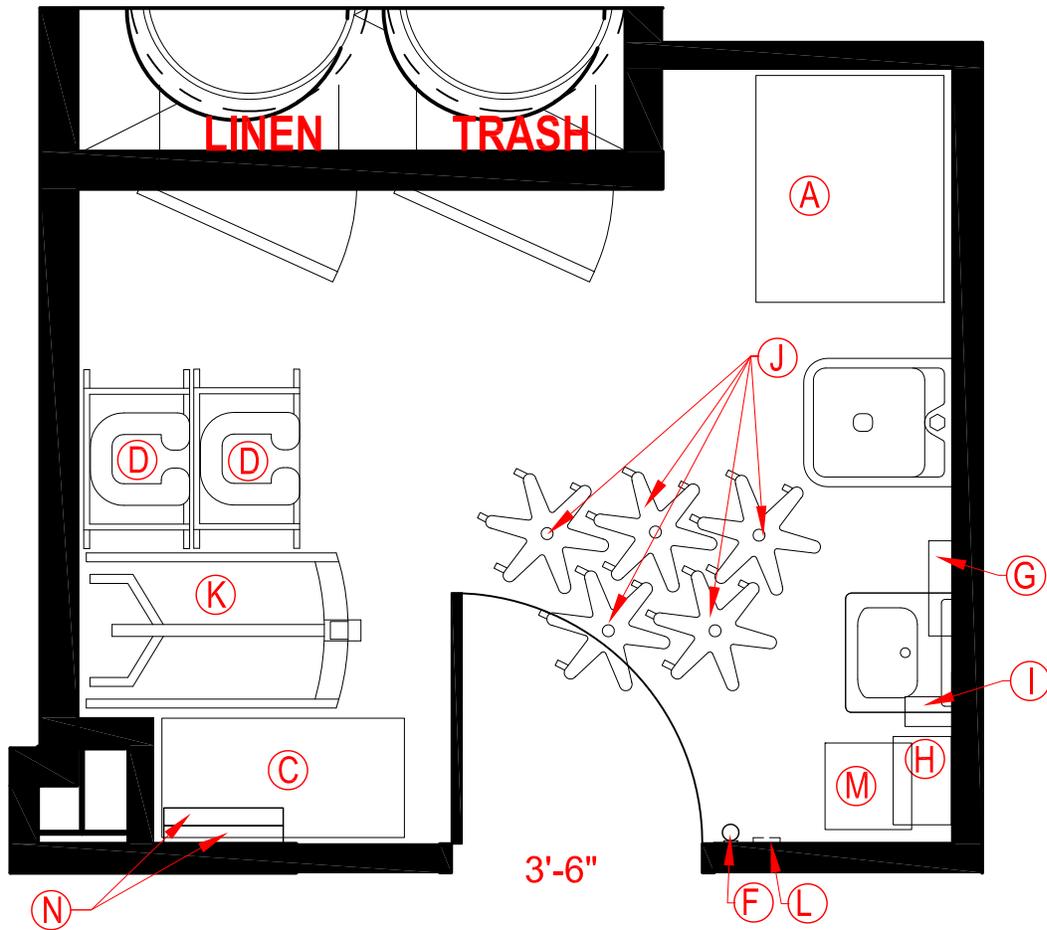
floor area. The room was designed to accommodate all of the equipment and ancillary items that will be located there.

- B. Equipment. Of importance to note here is that there is no longer a separate bed pan washer (equipment). The item is a large piece of equipment and takes up valuable floor area. This was determined to be unnecessary and wasted clear floor space and so the bed pan washer is incorporated in the hopper.
- C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

END OF DOCUMENT 203.11 20 52



1 FLOOR PLAN
SCALE: 3/8" = 1'-0"



1 EQUIPMENT PLAN
SCALE: 3/8" = 1'-0"

Equipment List

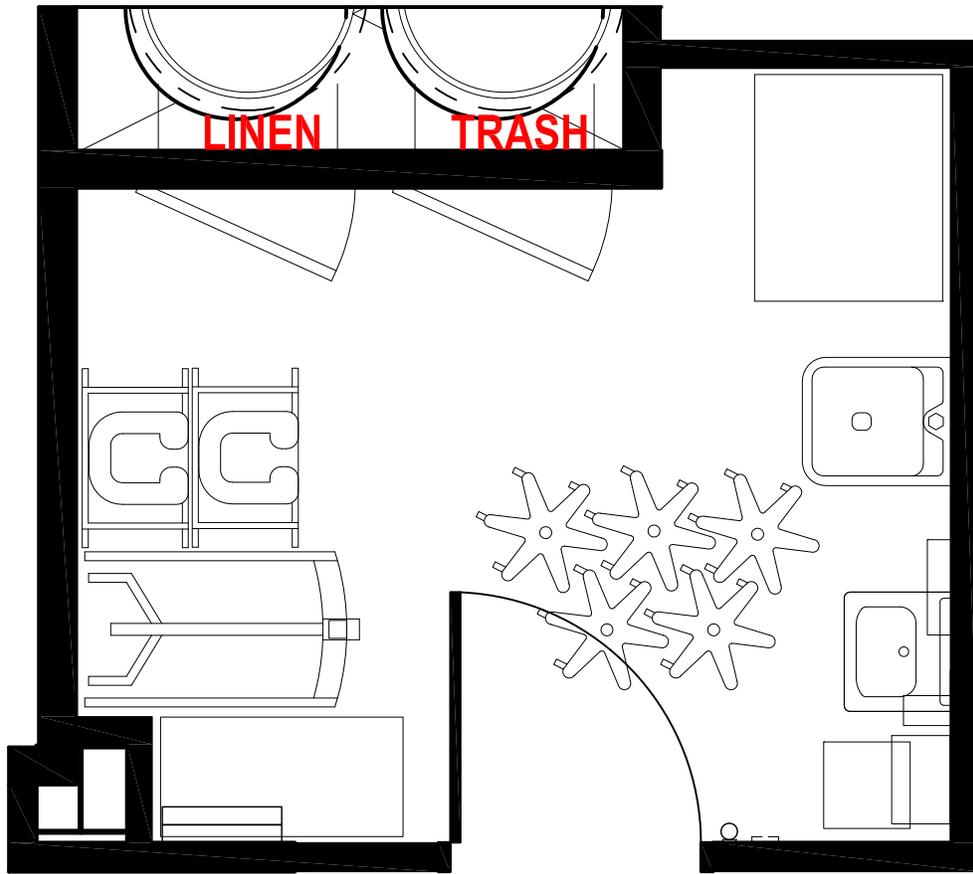
- A CART, BIOHAZARD
- C CART, UTILITY
- D CHAIR, COMMODE (2)
- F DISPENSER, ALCOHOL FOAM
- G DISPENSER, GLOVE
- H DISPENSER, PAPER TOWEL
- I DISPENSER, SOAP
- J IV STAND (5)
- K LIFT, PATIENT
- L NURSE CALL, DUTY
- M RECEPTACLE, WASTE 23g
- N WALKER (2)

Not listed due to chutes

- B CART, LINEN
- E CONTAINER, TRASH 44g (3)

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)

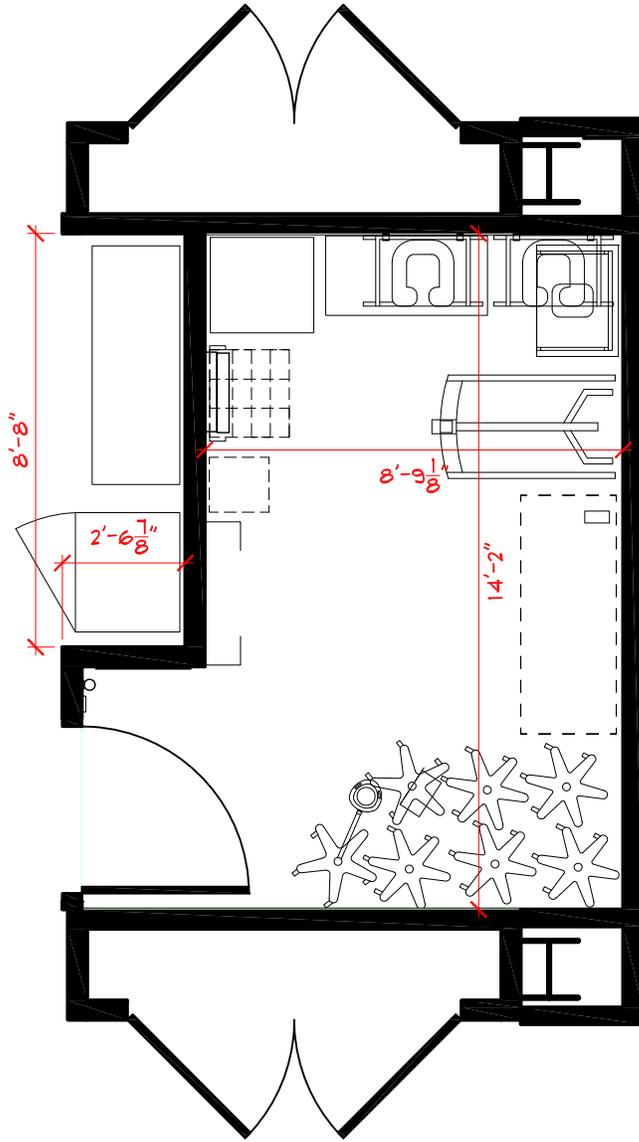


1 EQUIPMENT PLAN
SCALE: 3/8" = 1'-0"

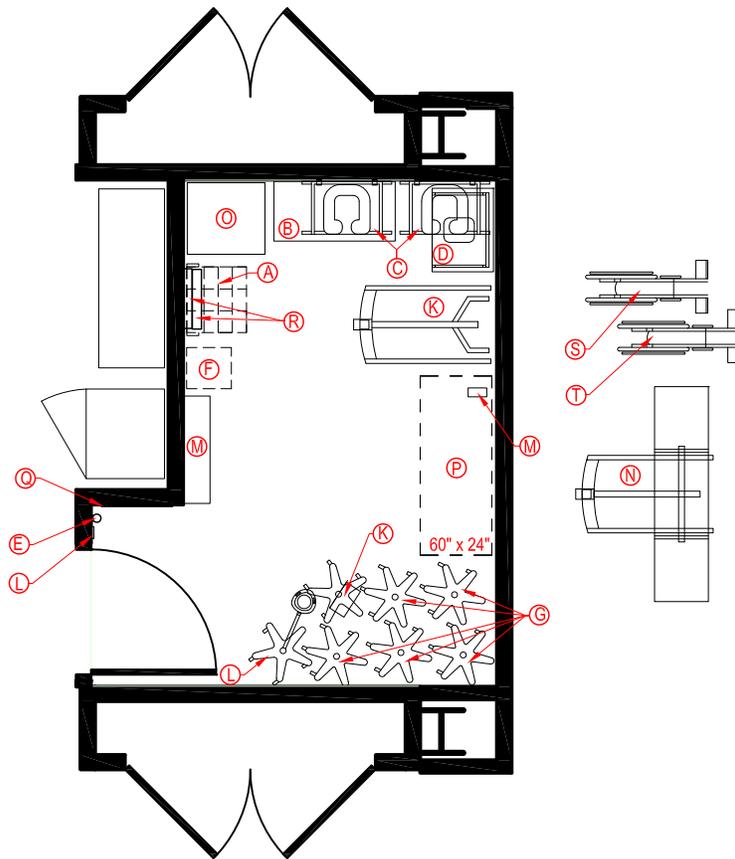
LEGEND

-  Voice Drop
-  Data Drop
-  Voice and Data

* All drops and drop locations should be verified with Information Services (IS)



1 FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 EQUIPMENT PLAN
SCALE: 1/4" = 1'-0"

Equipment List

- | | | | |
|---|--|---|---------------------------|
| A | CART, OXYGEN CYLINDER, STORAGE, 12CYLINDER | K | MONITOR, VITAL SIGNS |
| B | CART, UTILITY, 3 SHELVES | L | NURSE CALL, DUTY STATION |
| C | CHAIR, COMMODE (2), WALL MND | M | PULSE OXIMETER |
| D | CHAIR, COMMODE, BARIATRIC | N | SCALE, SLING |
| E | DISPENSER, ALCOHOL, FOAM | O | SCALE, WHEEL CHAIR |
| F | ELECTROCARIOGRAPH, 12 CHANNEL, WITH CART | P | SHELVING, WIRE STATIONARY |
| G | IV STAND, 6 CASTER BASE (5) | Q | SMOOTH MOVER |
| H | LIFT, PATIENT, MOBILE | R | WALKER, WALL MOUNTED (2) |
| I | LIGHT, EXAMINATION, MOBILE | S | WHEELCHAIR |
| J | MED SLED, 10 SLED STORAGE, WALL MTD | T | WHEELCHAIR, BARIATRIC |

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)



FACILITY TYPE

Community

DESIGN STANDARD

Clean Equipment
Room

ISSUE DATE

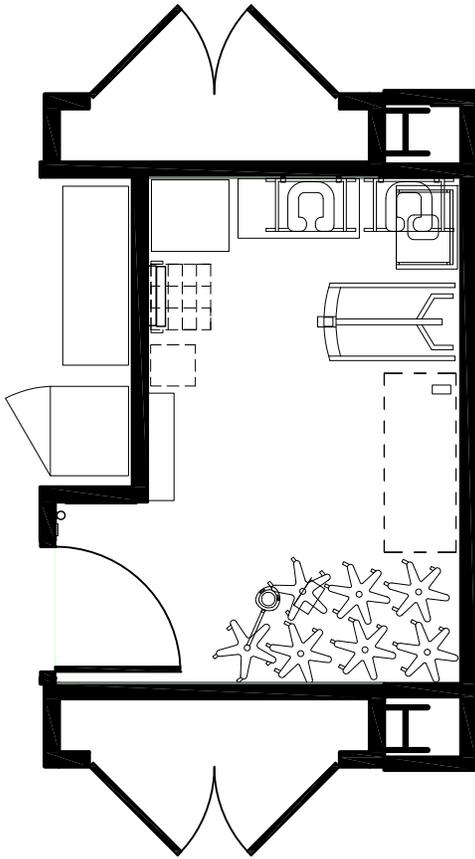
See Manual of Practice

REF #

203.11 20 60

DWG #

02



1 VOICE AND DATA DROPS
SCALE: 1/4" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)



FACILITY TYPE

Community

DESIGN STANDARD

Clean Equipment Room

ISSUE DATE

See Manual of Practice

REF #

203.11 20 60

DWG #

03

DOCUMENT 203.11 20 60 – EQUIPMENT STORAGE ROOM STANDARD

Community hospital, Patient division, All Nursing Units, Clinical Support, Equipment Storage

1.1 INTRODUCTION

- A. History. The room standard originated from the planning and design activities for the MBMC West Pavilion. Analysis also included a review of the core design for the BJH 16400/16500 renovation project. A common user group was created to help design the standard room.
- B. Inpatient Core Area. There are four basic rooms that define the inpatient core area. These four rooms are often used by nurses and care givers on a regular basis. For reasons which support the 3 core values, the location of rooms relative to the centroid of the unit is an important factor and supports the 3 core values - patient safety, healing environment and staff efficiency and satisfaction. The four rooms that make up this core area are as follows.
 - 1. Med Room
 - 2. Clean Supply (JIT) Room
 - 3. Soiled Holding
 - 4. Equipment Storage

1.2 ROOM STANDARD



- A. Concepts. The standards team worked with Supply chain to understand their work flows for getting supplies to these core areas. In addition PD&C worked with the nurses to understand their work flows and how they interacted with the space for supplies. The linen cart is frequently used by staff and the decision was made to pull this out of the clean

equipment room and locate it in a cross corridor niche, just outside of the equipment storage room. While developing this idea, the relationship between the linen cart and blanket warmer become an important consideration since the nurses will grab linens and put them immediately in the warmer. Therefore, the decision was made to put these two items right next to each other in the niche.

- B. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

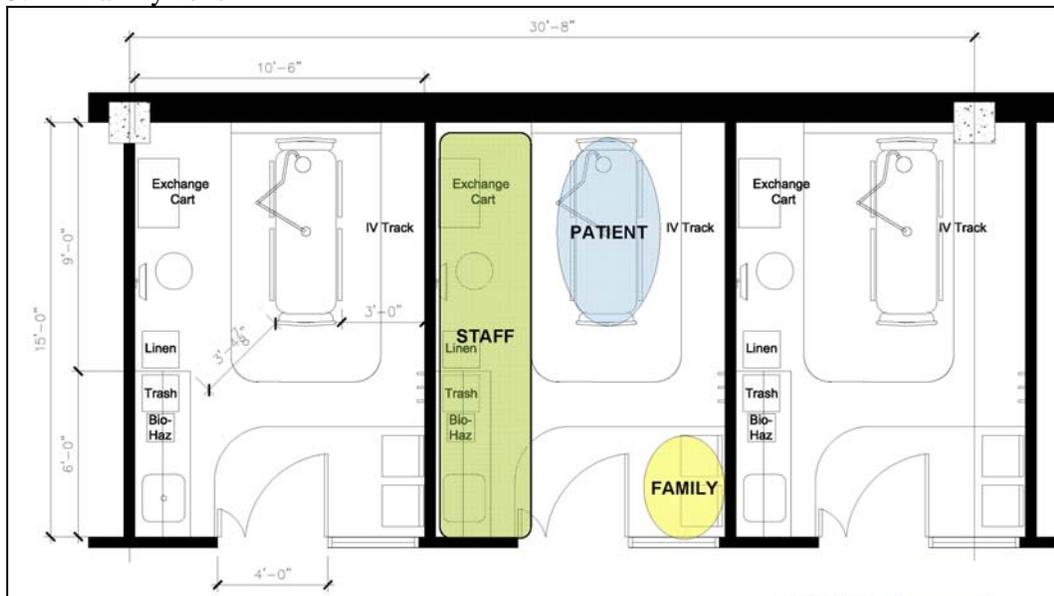
END OF DOCUMENT 203.11 20 60

DOCUMENT 203.21 10 10 – ED EXAM ROOM STANDARD

Community hospital, Diagnostic and Treatment, Emergency Department, Patient Area, Exam Room

1.1 INTRODUCTION

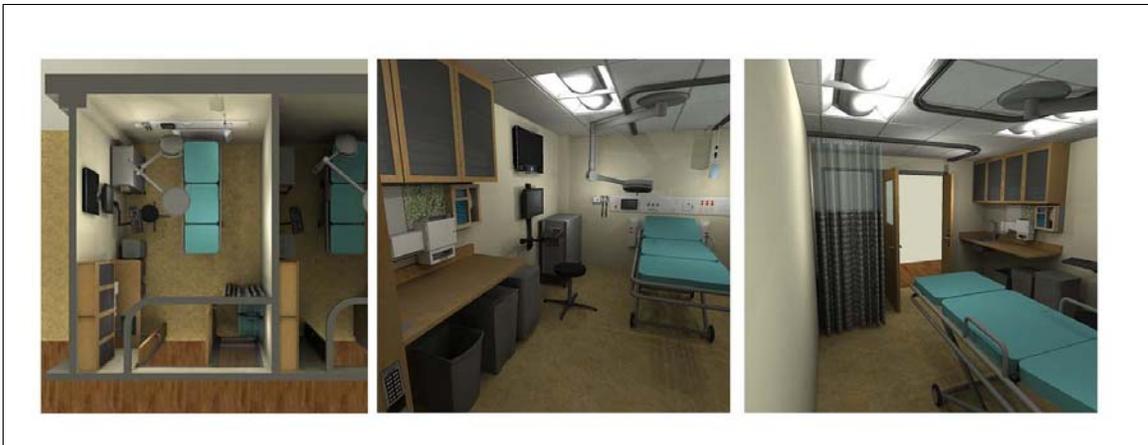
- A. History. The Emergency Department renovation project at CHNE was originally planned to be used as the basis for developing this standard. When the project did not proceed in time to use the design as the basis for the standard, PD&C developed a different approach. The Emergency Department Operations Group (EDOG) was asked to begin participate and assist in the standard room development. EDOG has representatives from across all BJC facilities and this group includes nurses, doctors, managers, IS, etc. It was determined that since BJC’s only trauma center facility is BJH, the focus should be on developing ED exam and resuscitation room standards rather than a trauma room standard. PD&C benchmarked the 5 most recent ED design and construction projects and developed a list of common elements which became the recommendations. It was these internal recommendations that served as the basis for EDOG approval.
- B. Concepts. The basic concepts of this room were built off the concepts developed for the new construction academic patient rooms. The primary idea of defining zones for people and activities remains an important organizational and defining component for this room.
 - 1. Staff/Caregiver zone
 - 2. Patient zone
 - 3. Family zone



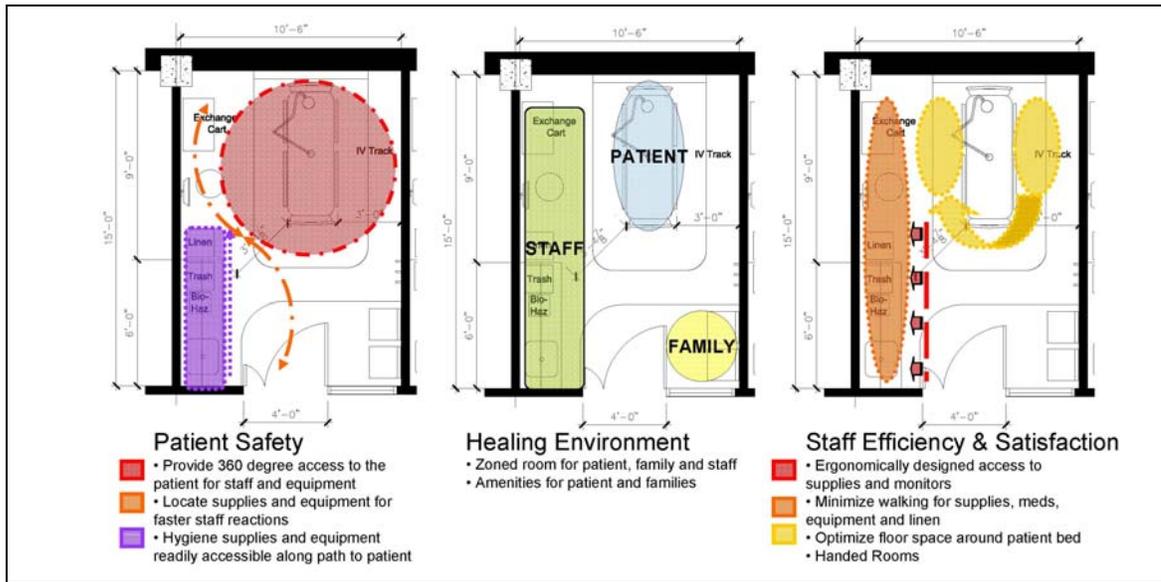
1.2 ROOM STANDARD

- A. Primary elements. The EDOG approved elements are identified as follows:
 - 1. Room attributes.
 - a. All rooms shall be same-handed.

- b. Rooms shall be 157.5 NSF.
 - c. Room dimensions shall be 10'-6" x 15'-0"
 - d. Doors shall be a double leaf (3'-0" and 1'-0") in-swing door. Provide half-height glass in 3'-0" door leaf. Provide full height sidelight adjacent to 3'-0" leaf.
2. Staff zone.
- a. Staff zone shall be located on patient's right side.
 - b. Handwash sink shall be located inside room, within the counter and closest to the entry door.
 - c. Computer and documentation station shall be located near the staff work zone counter and mounted on an articulating arm.
 - d. Storage shall be minimized so that the exchange cart will contain approximately 80% of the supplies needed. Casework shall have glass faces to easily view availability of miscellaneous items such as urinals, linens, etc.
 - e. A nurse server option is not allowed.
 - f. Bedside carts for procedures are permitted.
3. Patient zone.
- a. Bed shall be centered on back wall
 - b. A headwall shall be utilized.
 - c. A ceiling mounted exam light shall be installed
 - d. Otoscope and monitor shall be located on patient's right side
 - e. Wall mounted hooks for patient belongings shall be provided.
4. Family zone.
- a. Family zone to be located in two places.
 - 1) on left side of patient
 - 2) immediately within entry but outside of privacy curtain
 - b. Two chairs shall be provided in each room.
 - c. TV shall be wall mounted and located above documentation station.



- B. Core Values. The values that guided the development of the decisions for all clinical standards.



C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

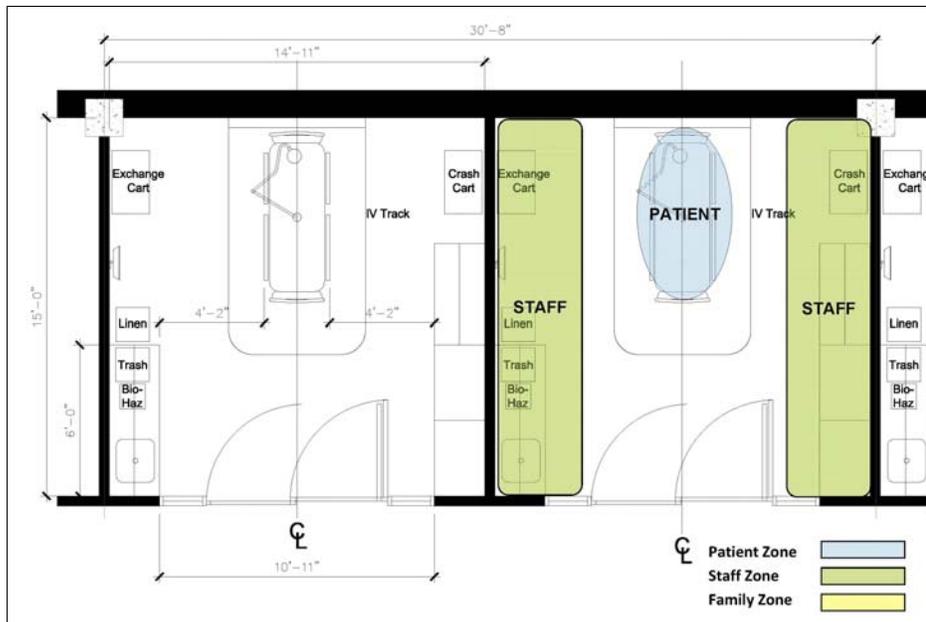
END OF DOCUMENT 203.21 10 10

DOCUMENT 203.21 10 20 – ED RESUSCITATION ROOM STANDARD

Community hospital, Diagnostic and Treatment, Emergency Department, Patient Area, Resuscitation Room

1.1 INTRODUCTION

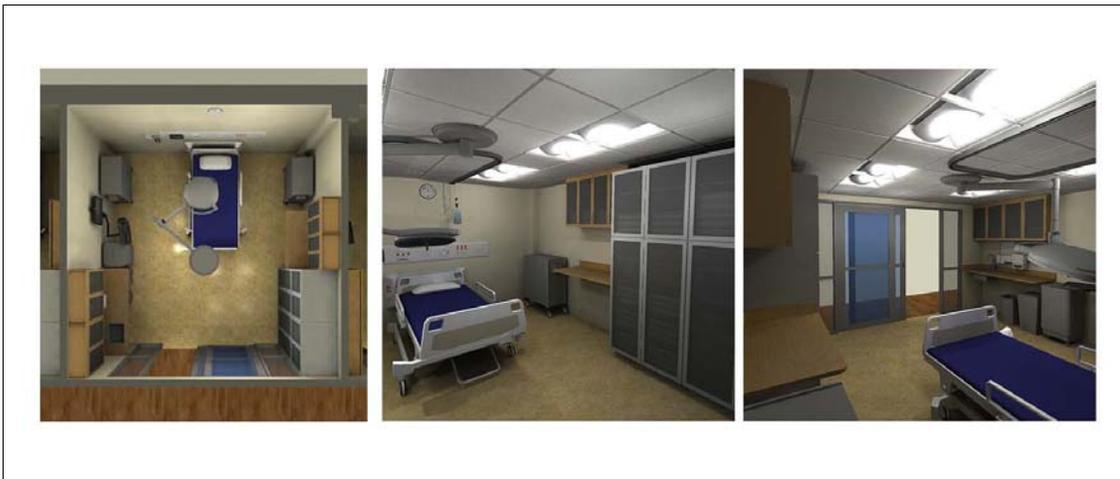
- A. History. The Emergency Department renovation project at CHNE was originally planned to be used as the basis for developing this standard. When the project did not proceed in time to use the design as the basis for the standard, PD&C developed a different approach. The Emergency Department Operations Group (EDOG) was asked to participate and assist in the standard room development. EDOG includes representatives from across all BJC facilities and it includes nurses, doctors, managers, IS, etc. It was determined that since BJC’s only trauma center facility is BJH, the focus should be on developing ED exam and resuscitation room standards rather than a trauma room standard. PD&C benchmarked the 5 most recent ED design and construction projects and developed a list of common elements which became the recommendations. It was these internal recommendations that served as the basis for EDOG approval.
- B. Concepts. The primary idea of defining zones for people and activities remains an important organizational and defining component for this room.
 - 1. Staff/Caregiver zone
 - 2. Patient zone
 - 3. Family zone



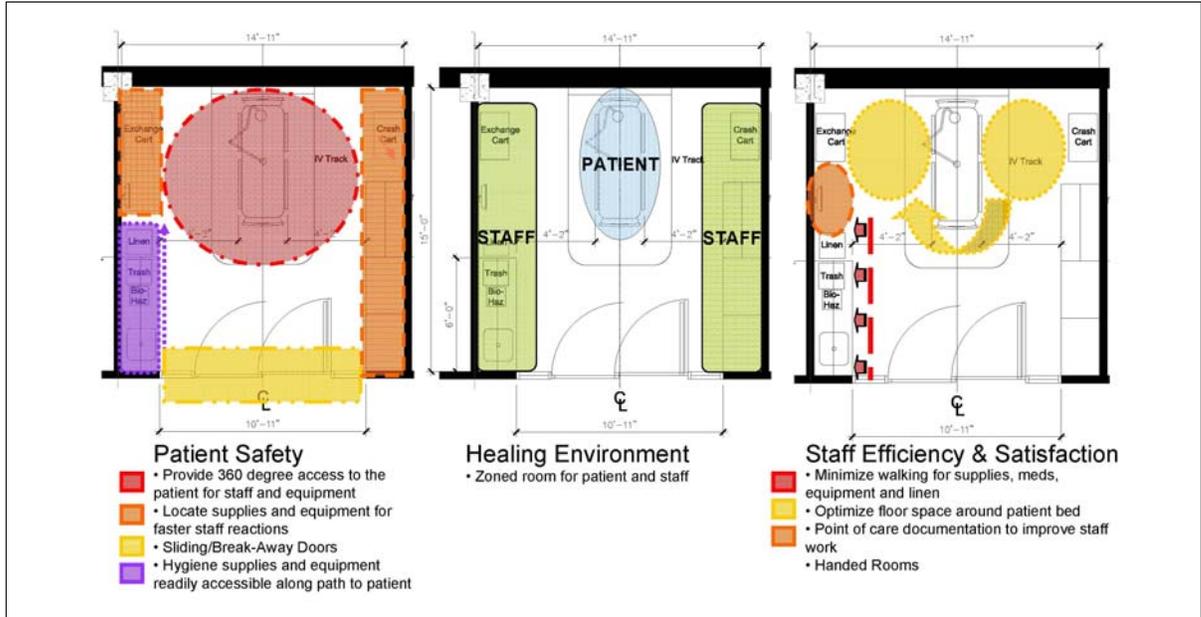
1.2 ROOM STANDARD

- A. Primary elements. The EDOG approved elements are identified as follows:
 - 1. Room attributes.

- a. All rooms shall be same-handed.
 - b. Rooms shall be 224 NSF.
 - c. Room dimensions shall be 14'-11" x 15'-0"
 - d. Doors shall be sliding glass type with break-away units
 - e. Swing door connecting two rooms is not required but is an approved option.
2. Staff zone.
- a. Staff zone shall be located on patient's right side.
 - b. Handwash sink shall be located inside room, within the counter and closest to the entry door.
 - c. Computer and documentation station shall be located near the staff work zone counter and mounted on an articulating arm.
 - d. Storage shall be available on both sides of room within casework. Exchange cart will contain approximately 80% of the supplies needed. Casework shall have glass faces to easily view availability of miscellaneous items such as urinals, linens, etc.
 - e. A nurse server option is not allowed.
3. Patient zone.
- a. Bed shall be centered on back wall
 - b. A headwall shall be utilized.
 - c. A ceiling mounted exam light shall be installed
 - d. Option allowed for 2 patients
 - e. Otoscope and monitor shall be located on patient's right side
4. Family zone.
- a. Chairs not permitted. Space is slightly larger to accommodate families if necessary.

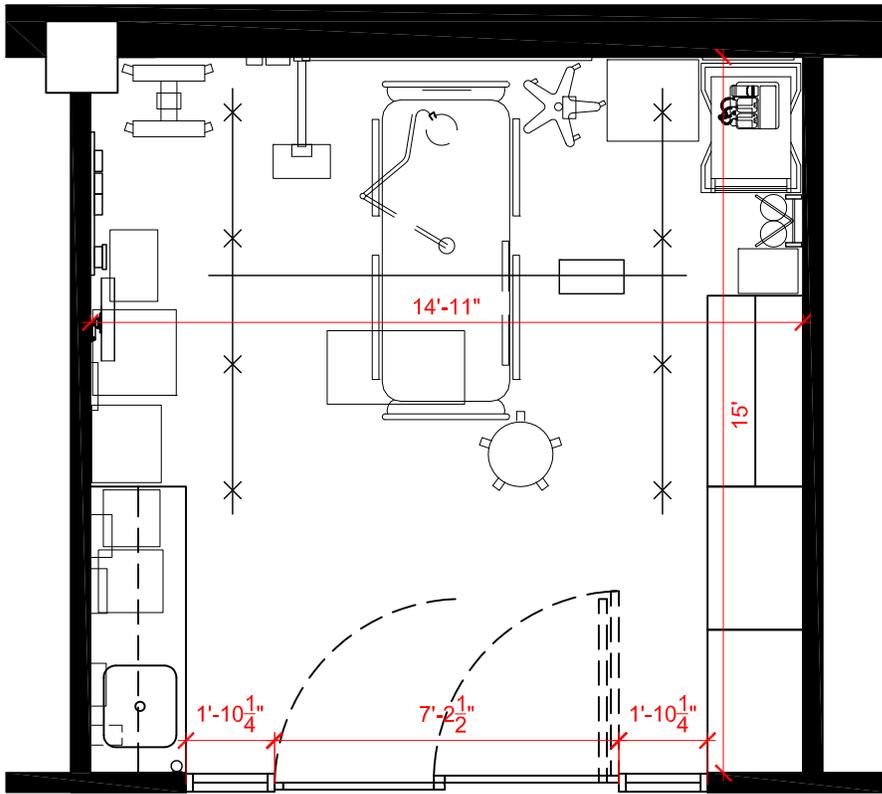


- B. Core Values. The values that guided the development of the decisions for all clinical standards.

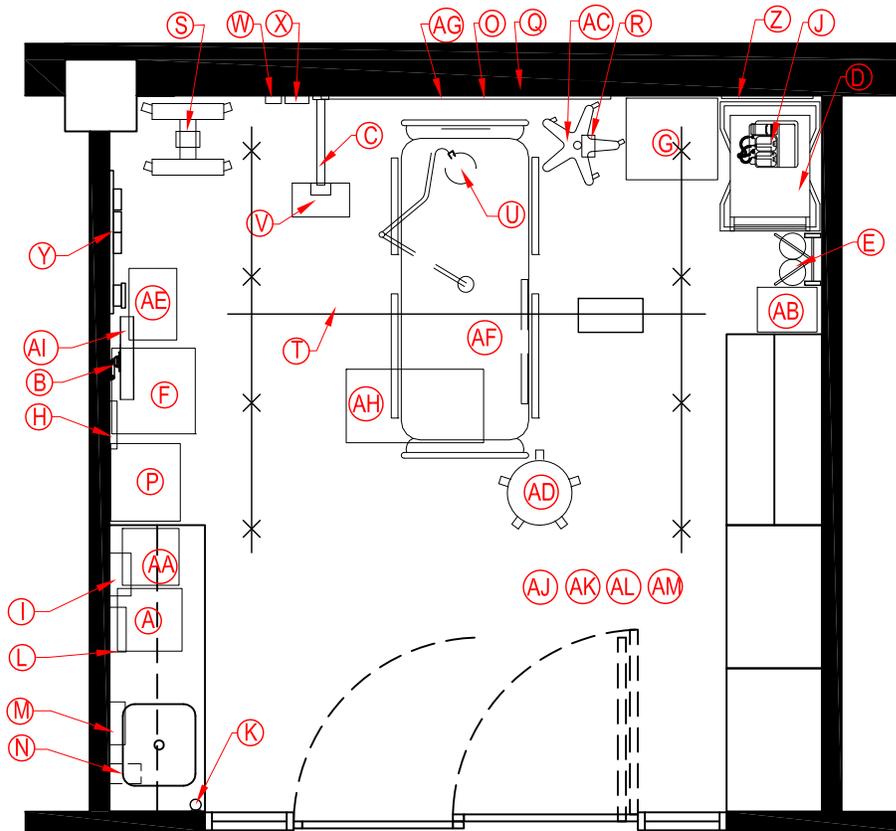


C. Supplemental Information. Refer to the following dimensioned drawings (tear sheets) following this section.

END OF DOCUMENT 203.21 10 20



1 FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 EQUIPMENT PLAN
SCALE: 1/4" = 1'-0"

Equipment List

A	BIOHAZARD, CONTAINER, 12g	U	LIGHT, EXAM, CEILING MOUNTED
B	BRACKET, TV	V	MONITOR, PHYSIOLOGICAL
C	BRACKET, WALL (FOR PHYS. MONITOR)	W	NURSE CALL, CODE BLUE
D	CART, CRASH, EMERG.	X	NURSE CALL, DUTY STATION
E	CART, OXYGEN TANK	Y	OTOSCOPE/OPHTHALMOSCOPE, W/SPHYG, THERMOMETER AND SPECULA DISPENSER
F	CART, PROCEDURE	Z	PATIENT MOVER, W/WALL MOUNT
G	CART, RESPIRATORY	AA	RECEPTACLE, WASTE, 23g
H	CLOCK, ANALOG, WALL MOUNT	AB	RECEPTACLE, WASTE, 40q
I	CONTAINER, SHARPS	AC	STAND, IV
J	DEFIBRILLATOR	AD	STOOL, EXAM
K	DISPENSER, ALCOHOL FOAM	AE	STOOL, FOOT
L	DISPENSER, GLOVE/MASK	AF	STRETCHER
M	DISPENSER, PAPER TOWEL	AG	SUCTION, REGULATOR
N	DISPENSER, SOAP	AH	TABLE, OVERBED
O	FLOWMETER, OXYGEN	AI	TELEVISION, 22", FLAT PANEL
P	HAMPER, LINEN	AJ	CUBICAL CURTAIN
Q	HEADWALL UNIT	AK	TRACK, CUBICAL CURTAIN
R	INFUSION PUMP	AL	TELEPHONE
S	IV FLUID WARMER	AM	WORKSTATION
T	LIFT, PATIENT, CEILING MOUNTED		

* This document acts as a guide for room layout

* All equipment is to be verified with Clinical Asset Management (CAM)

BJC HealthCare

FACILITY TYPE

Community

DESIGN STANDARD

Emergency Dept.
Resuscitation Room

ISSUE DATE

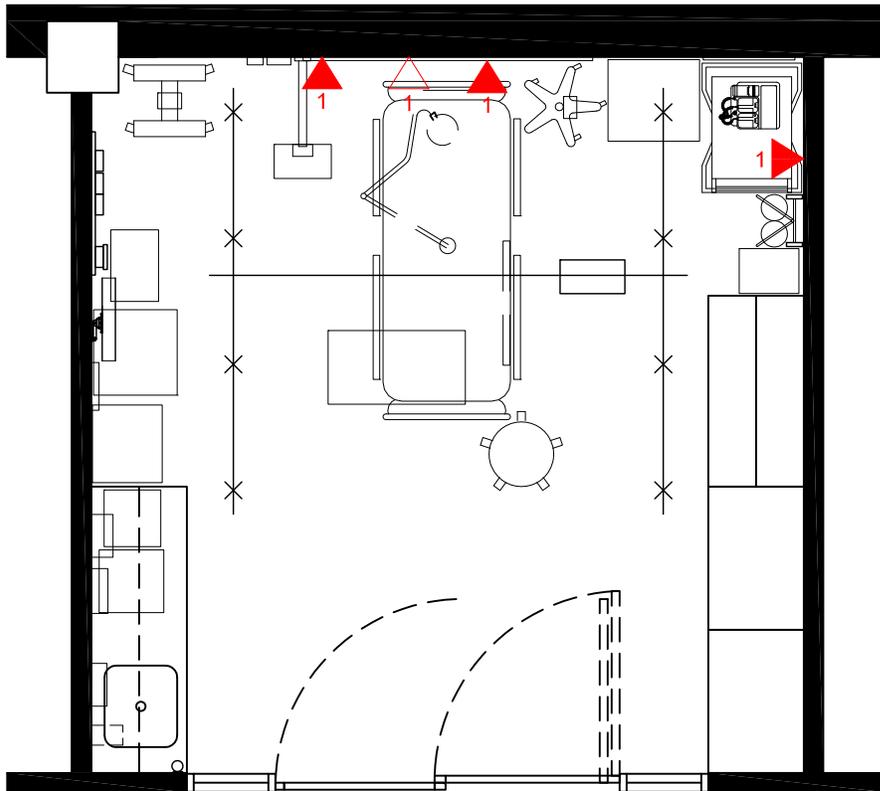
See Manual of Practice

REF #

203.21 10 20

DWG #

02



1 VOICE AND DATA DROPS
SCALE: 1/4" = 1'-0"

LEGEND

	Voice Drop
	Data Drop
	Voice and Data

* All drops and drop locations should be verified with Information Services (IS)



FACILITY TYPE

Community

DESIGN STANDARD

Emergency Dept.
Resuscitation Room

ISSUE DATE

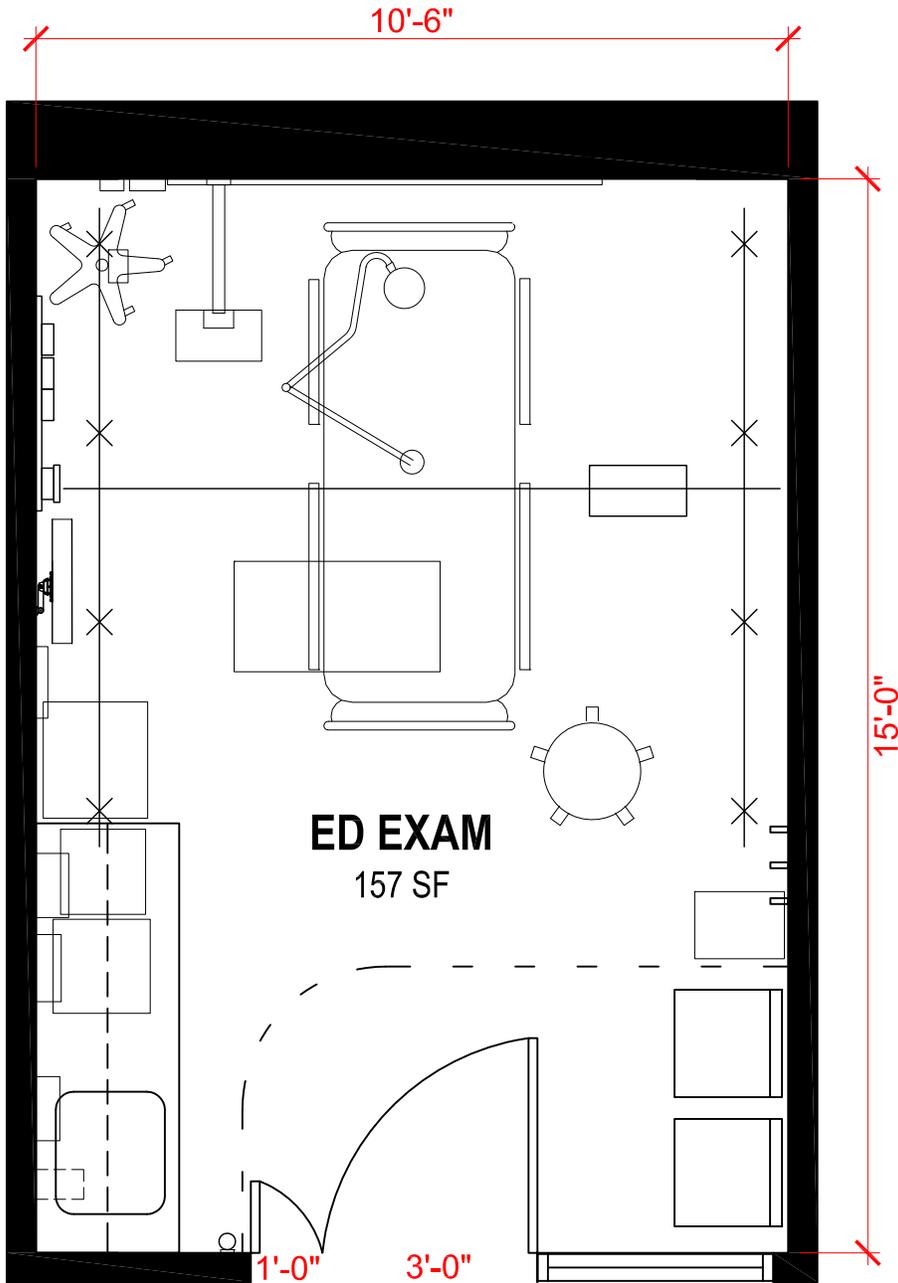
See Manual of Practice

REF #

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DWG #

03

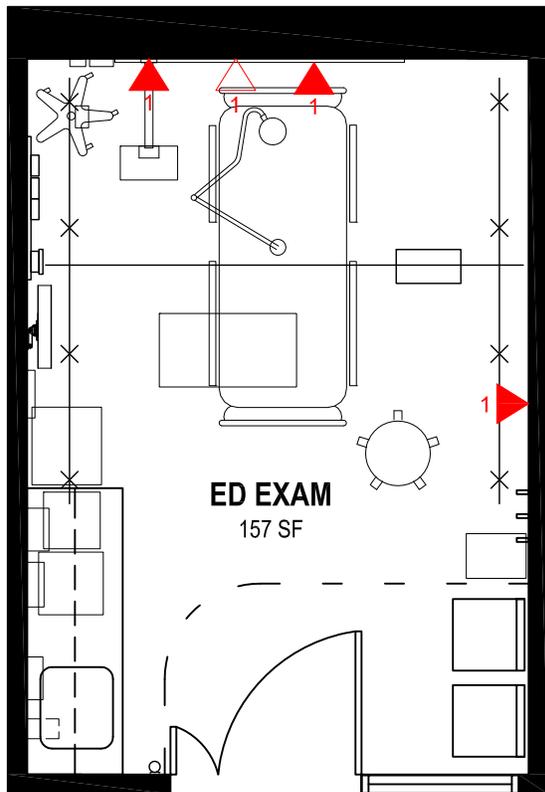


1 FLOOR PLAN
SCALE: 3/8" = 1'-0"

NOTES

Data drop on patient family wall could be wireless cart.

Extra data drop located within headwall for future growth



1 VOICE AND DATA DROPS
SCALE: 1/4" = 1'-0"

LEGEND

-  Voice Drop
-  Data Drop
-  Voice and Data

* All drops and drop locations should be verified with Information Services (IS)