



Section 4: Guide Plates

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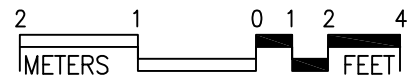
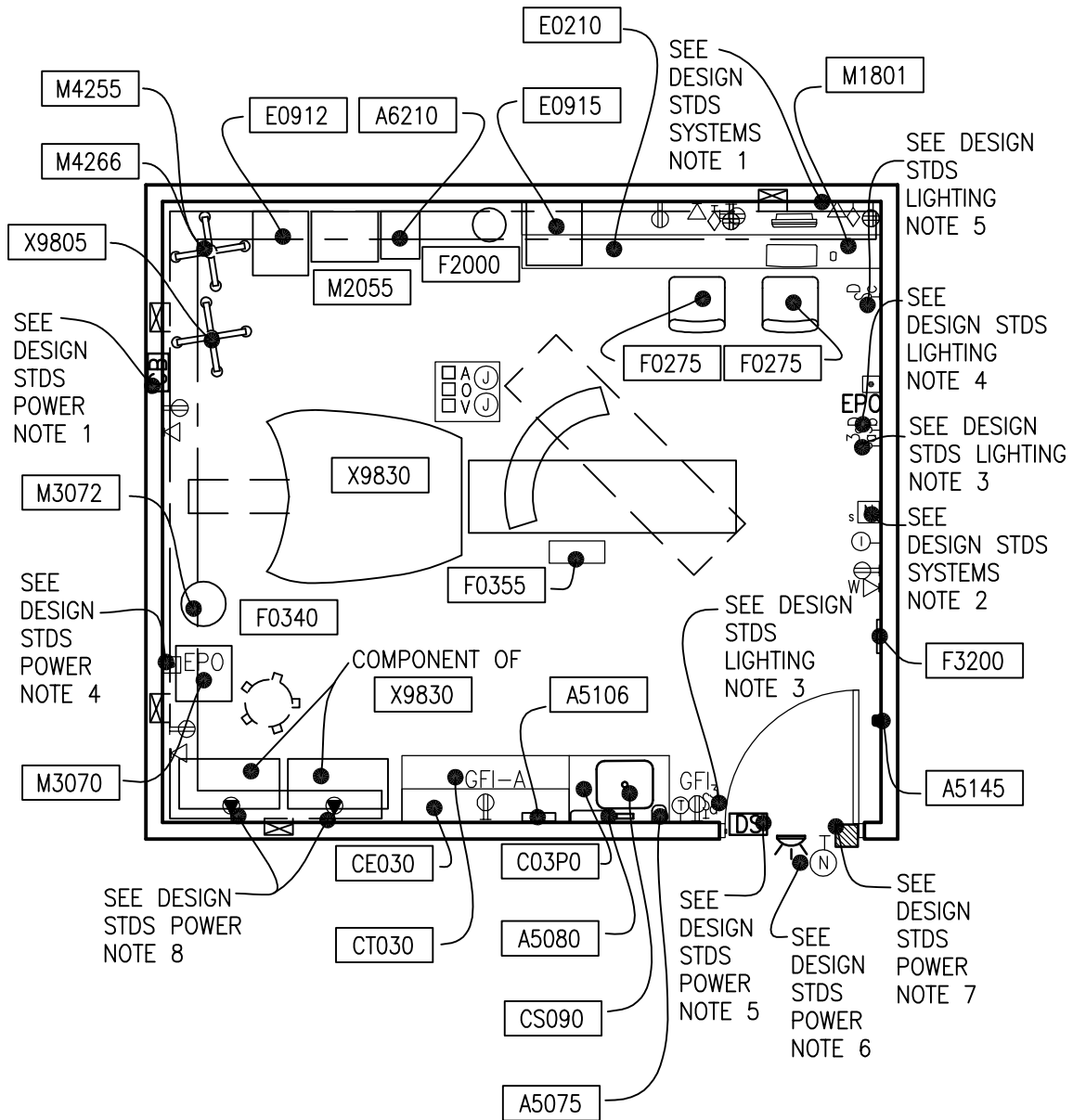
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Nuclear Medicine Scanning Room (NMGS1)

400 NSF

Floor Plan

37.2 NSM



$3/16" = 1'-0"$

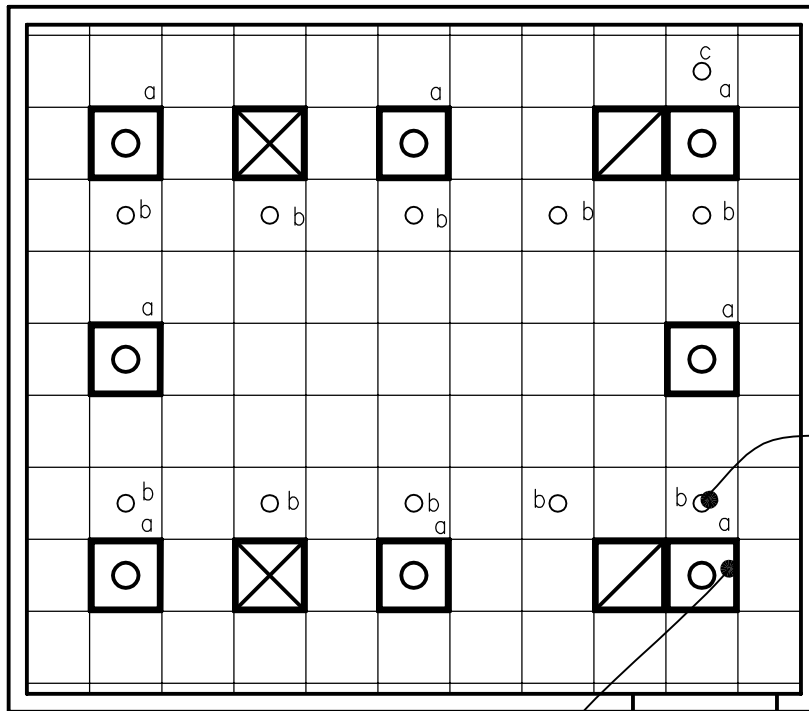
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Nuclear Medicine Scanning Room (NMGS1)

400 NSF

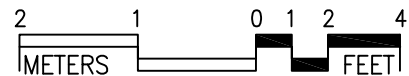
Reflected Ceiling Plan

37.2 NSM



SEE DESIGN
STDS
LIGHTING
NOTE 2

SEE DESIGN
STDS
LIGHTING
NOTE 1



3/16" = 1'-0"

The locations and quantities of the air outlets and inlets are tentative and may not represent the optimum design solution(s) envisioned by the designer, who shall study the layout, calculate air volumes, and may alter the arrangement shown in the reflected ceiling plan, as required, to produce a project-specific air distribution system design.

Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

NM SCANNING ROOM (NMGS1): Design Standards

ARCHITECTURAL

Ceiling:	Acoustical Tile Ceiling
Ceiling Height:	Coordinate with Equip. Manufacturer
Wall Finish:	Paint
Wainscot:	--
Base:	Integral Cove Base
Floor Finish:	Welded Seam Sheet
Sound Protection:	Yes

Notes:

1. Walls should be shielded if necessary.

LIGHTING

General: Fluorescent lights will provide illumination level up to 50 FC during patient transfer on and from the table, equipment setting, room cleaning, and equipment maintenance.

Special: Incandescent luminaires controlled by dimmer will provide lower illumination levels down to 5 FC during scanning. Luminaires shall be located to avoid direct glare for patient comfort.

Notes:

1. 2'x2' fluorescent recessed luminaire, acrylic prismatic lens, with (2) FB031T8-U lamps, 4100 K , CRI=85 (minimum).
2. 8-inch dia., recessed incandescent downlight, with recessed Fresnel lens, and 150W/A21 inc. horizontally mounted lamp.
3. 3-way switch for NM Room fluorescent lighting control; located at entrance door and at control area
4. Dimmer for NM Room incandescent downlights control; located at control area.
5. Dimmer for Control area incandescent downlights control.

POWER

General: The electrical power as shown is to be used as a guide only. Equipment locations, dimensions and wiring requirements should be per the x-ray system suppliers' equipment drawings. Electrical

trades should provide necessary conduits, openings, bushings, nipples, flexible conduits, surface, recessed, wall mounted and floor raceways, etc., as required at the various junction boxes, duct and conduit terminations to allow proper connections of the scanner equipment and related accessories.

Emergency: Emergency power for scanner equipment, controls, and selected receptacles as determined by the Hospital.

Notes:

1. 480V, 3P-100A circuit breaker, with adjustable trip, shunt trip, flush mounted. Run empty 50 mm (2"C) from circuit breaker to x-ray duct above finished ceiling.
2. 10" W x 3-1/2" D flush vertical wall duct with 300 mm (12") wide screw-on cover. Connect to x-ray duct above finished ceiling and terminate at finished floor.
3. 10" W x 3-1/2" D x-ray duct above finished ceiling with 250 mm (10") wide screw-on cover. Connect to vertical wall duct.
4. Emergency Power Off pushbutton station. Refer to specific radiology equipment requirements for EPO. Connect to shunt trip at main disconnect.
5. Door switch with NO/NC contacts. Connect to x-ray machine control circuit. X-ray machine should not start until the entrance door is closed.
6. Warning light with wording "X-RAY ON DO NOT ENTER". Provide power, interface with x-ray machine via interface relay.
7. X-ray warning light interface relay with low voltage power supply to match x-ray equipment requirements.
8. Notes 5, 6, & 7 are not relevant to nuclear medicine unless PET/CT or SPECT/CT is a function of a particular room and then warning light should read "X-Ray in use, Do Not Enter."



- 9. Special outlet for UPS unit; outlet requirements, configuration as coordinated with the equipment.

Medical Vacuum:
Oxygen:

Yes
Yes

COMMUNICATION/SPECIAL SYSTEMS

ADP:	Yes
Data:	Yes
Telephone:	Yes
Intercom:	Yes
Nurse Call:	Yes
Public Address:	--
Radio/Entertainment:	--
MATV:	--
CCTV:	--
MID:	--
Security/Duress:	--
VTEL:	--
VA Satellite TV:	--

Notes:

- 1. 4-port telecommunication outlet for PACS.
- 2. Staff nurse call station to annunciate at nurse's station

HEATING, VENTILATING AND AIR CONDITIONING

Inside Design Conditions:	70°F to 75°F (21°C to 24C°)
	30 to 60% Relative Humidity
Minimum Air Changes per Hour:	6
	-Supply Air
100% Exhaust:	Yes
100% Outside Air:	No
Room Air Balance:	Negative
Dedicated Exhaust System:	No
Occupancy:	3
AC Load – Equipment:	9,300 Btuh (2,750 W)
AC Load Lighting:	1.4 W/SF (15 W/M²)

Notes:

- 1. Verify cooling loads and other specific requirements with the equipment manufacturer on a specific project.

PLUMBING AND MEDICAL GASES

Cold Water:	Yes
Hot Water:	Yes
Laboratory Air:	--
Laboratory Vacuum:	--
Sanitary Drain:	Yes
Reagent grade Water:	--
Medical Air:	Yes

NM SCANNING ROOM (NMGS1): Equipment Guide List

JSN	NAME	QTY	ACQ / INS	DESCRIPTION	SPEC
A1010	Telecommunication Outlet	1	CC	Telecommunication outlet location.	27 31 00
A1012	Telephone, Wall Mounted, 1 Line	1	CC	Telephone, wall mounted, 1 line.	27 31 00
A5075	Dispenser, Soap, Disposable	1	VV	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.	
A5080	Dispenser, Paper Towel, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.	10 28 00
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	1	VV	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.	
A5145	Hook, Garment, Double, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.	10 28 00
A6210	Uninterruptible Power Supply, Single Phase	2	VV	Stand alone uninterruptible power supply (UPS) available in 120, 208 or 240 VAC configuration. Power output can range from 200 VA to 3000 VA depending on the application. Used in areas where power protection is required for computer systems, communication equipment, etc. The UPS is used to keep the equipment on line or safely turn the equipment off in the event of a power loss.	

C03F0	Cabinet, U/C/B, 1 Shelf, 2 Half DR, 2 DO, 36x30x22	2	CC	Standing height under counter base cabinet with an adjustable shelf and two half width drawers above solid hinged doors. Also referred to as a combination cabinet or a drawer and cupboard cabinet. For general purpose use throughout the facility.	12 32 00
C03P0	Cabinet, Sink, U/C/B, 2 Door, 30" W	1	CC	Standing height under counter base sink cabinet. 36" H x 30" W x 22" D with two solid hinged doors. Also referred to as a double-door sink cabinet. For general purpose use throughout the facility where a sink is to be used. Coordinate actual clear cabinet dimension with the actual outside dimension of sink that is specified to ensure that they are compatible.	12 32 00
CE030	Cabinet, W/H, 2 SH, 2 GDO, Sloping Top, 38x30x13	1	CC	Wall hung cabinet with two adjustable shelves, framed-glass hinged doors, and sloping top. Also referred to as a framed-glass hinged double door wall case. For general purpose use throughout the facility.	12 32 00
CS090	Sink, SS, Single Compartment, 7.5x19x16 ID	1	CC	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.	22 40 00



CT030	Countertop, High Pressure Laminate	AR	CC	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.	12 36 00
E0210	Worksurface, w/Overhead Cab, Wall Mtd, 48" W	1	VV	<p>THIS TYPICAL INCLUDES:</p> <ul style="list-style-type: none"> 2 Vertical Hanging Strips 1 Lockable Flipper Unit 1 Shelf, Storage/Display 1 Light 1 Cantilevered Work Surface 	
E0912	Locker, Supply, Med Surg, Wall Mtd	1	VV	<p>Medical/Surgical Supply locker, Wall Mounted, Approx 23"W x20"D. THIS TYPICAL INCLUDES:</p> <ul style="list-style-type: none"> 1 Wall Mounted Rail 1 Locked Storage Container 4 Tray/Shelves 5 Drawers, 3"H (76mm) 2 Drawers, 6"H (152mm) 2 Tray/Shelf Dividers Drawer Organizer Bins <p>Consider the need for an E0921 to transport the locker from place to place.</p>	

E0915	Locker, Supply, Medication, Wall Mtd, 23"W x 20"D	1	VV	<p>THIS TYPICAL INCLUDES:</p> <ul style="list-style-type: none"> 1 Wall Mounted Rail 1 Locked Storage Container 2 Tray/Shelves 1 Locker Drawer w/Locked Lid, 6"H (152mm) 5 Drawers, 3"H (76mm) 3 Drawers, 6"H (152mm) 2 Tray/Shelves Divider Drawer Organizer Bins <p>Consider the need for an E0921 to transport the locker from place to place.</p>
E1500	Rail, MOD, W/MNTD, HX144XD	1	VV	Wall mounted rail used for hanging (mounting) lockers, shelves drawers on a wall.
F0275	Chair, Swivel, High Back	2	VV	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	1	VV	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0355	Footstool, Straight	1	VV	Step stool. Used to assist patients getting on and off exam or surgical tables. Fitted with electrically conductive rubber tips.
F2000	Basket, Wastepaper, Round, Metal	1	VV	Round wastepaper basket, approximately 18" high X 16" diameter. This metal unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations.
F3200	Clock, Battery, 12" Diameter	1	VV	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).



M0750	Flowmeter, Air, Connect w/50 PSI Supply	1	VV	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.	
M0755	Flowmeter, Oxygen, Low Flow	1	VV	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.	
M0765	Regulator, Vacuum	1	VV	An air/oxygen mixer is designed to accurately control a pressurized gas mixing with an oxygen concentration. Unit contains audible alarms to warn of supply failure, an auxiliary outlet and a oxygen concentration control adjustment range from 21% to 100%. The unit can also be used to supply an accurate pre-mixed gas source to respiration or ventilator units. A specific application may require an additional air inlet filter/water trap.	
M1801	Computer, Microprocessing, w/Flat Panel Monitor	1	VV	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; a 3.5" floppy drive; 1.44MB network interface card; video 32 MB NVIDIA; a 15 inch flat panel color monitor. The computer is used throughout the facility to input, manipulate and retrieve information.	
M2055	Shelving, Storage, Wire, CRS, w/Adjustable Shelves	1	VV	Stationary, wire, shelving unit. Unit has fully adjustable shelves constructed of stainless steel. For use in general purpose storage areas. Shelving is provided in various sizes and configurations. Price provided is for a unit approximately 74"H x 18"D x 48"W with four shelves.	



M3070	Hamper, Linen, Mobile, w/Lid	1	VV	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	1	VV	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M4250	Pump, Syringe, Infusion	1	VV	The infusion syringe pump ensures highly accurate volume delivery and consistent flow for small volumes (<50 ml) of pharmacologic agents or thick feeding solutions. It shall be small, lightweight construction, making it transportable. Shall have menu-driven programming capable of flow rates (e.g. 0.1 or 1.0 mL/hr) that are intended for long-term bedside use and/or critical care patient transport, plunger positioning sensor, LCD display for easy viewing, volume limit programming to serve as a convenient cue of volume or dose delivery completion and multiple delivery modes for all applications requiring precisely controlled infusion rates. The infusion pump shall have automatic syringe size sensing which will give the flexibility to accept a wide range of syringe sizes (up to 60 mL) from different manufacturers. Shall be battery powered/AC adapter.
M4255	Stand, IV, Adjustable	1	VV	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.



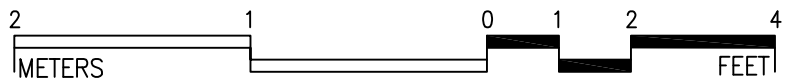
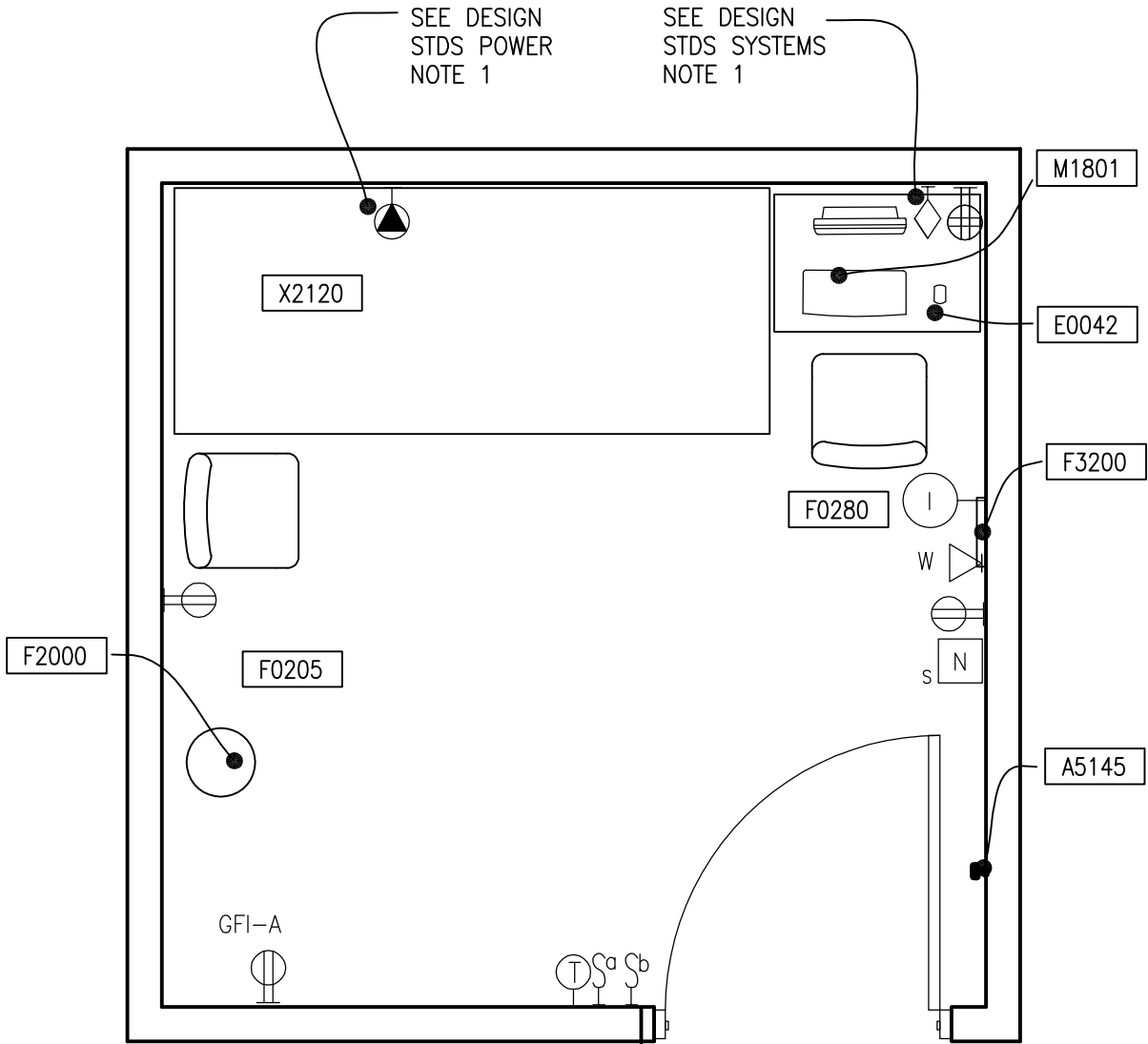
M4266	Pump, Volumetric, Infusion, Multiple Line	1	VV	Volumetric infusion pump. Pump is self-regulating with automatic sensor and adjustable rate. Equipped with visual and audible alarms and up to 10 hour capacity battery. For the administration of a wide variety of therapeutic agents where precise control is required. Unit provides individual control to IV lines simultaneously.
X9805	Stand, Injection, Nuclear Medicine	1	VV	An injection stand designed for arm positioning for radionuclide injections. The arm rest holds the patient's arm firmly in place. A utility tray sits adjacent to the armrest to hold supplies and includes a lead-lined multi syringe holder. The stand height is adjustable approximately from 29" to 44." Casters allow the stand to be rolled into position or out of the way for storage. It is structurally balanced so that it won't tip over.
X9830	Scanner, Nuclear, SPECT, Dual Head	1	VV	The system shall be a single plane or variable angle dual detector emission system, designed for fast data acquisition and high patient throughput for Single Photon Emission Computed Tomography (SPECT), whole body and general purpose nuclear medicine procedures. It shall be designed to image at any energy range for any procedures. The unit detects and counts photons emanating from radiopharmaceuticals. Collimators available to suit full range applications. The system shall be DICOM 3.0 or latest version, compatible, for easy linkage to filmless image management systems and review stations.

Bone Densitometry Room (XDBD1)

160 NSF

Floor Plan

14.9 NSM



3/8" = 1'-0"

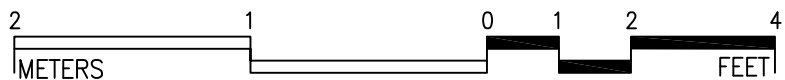
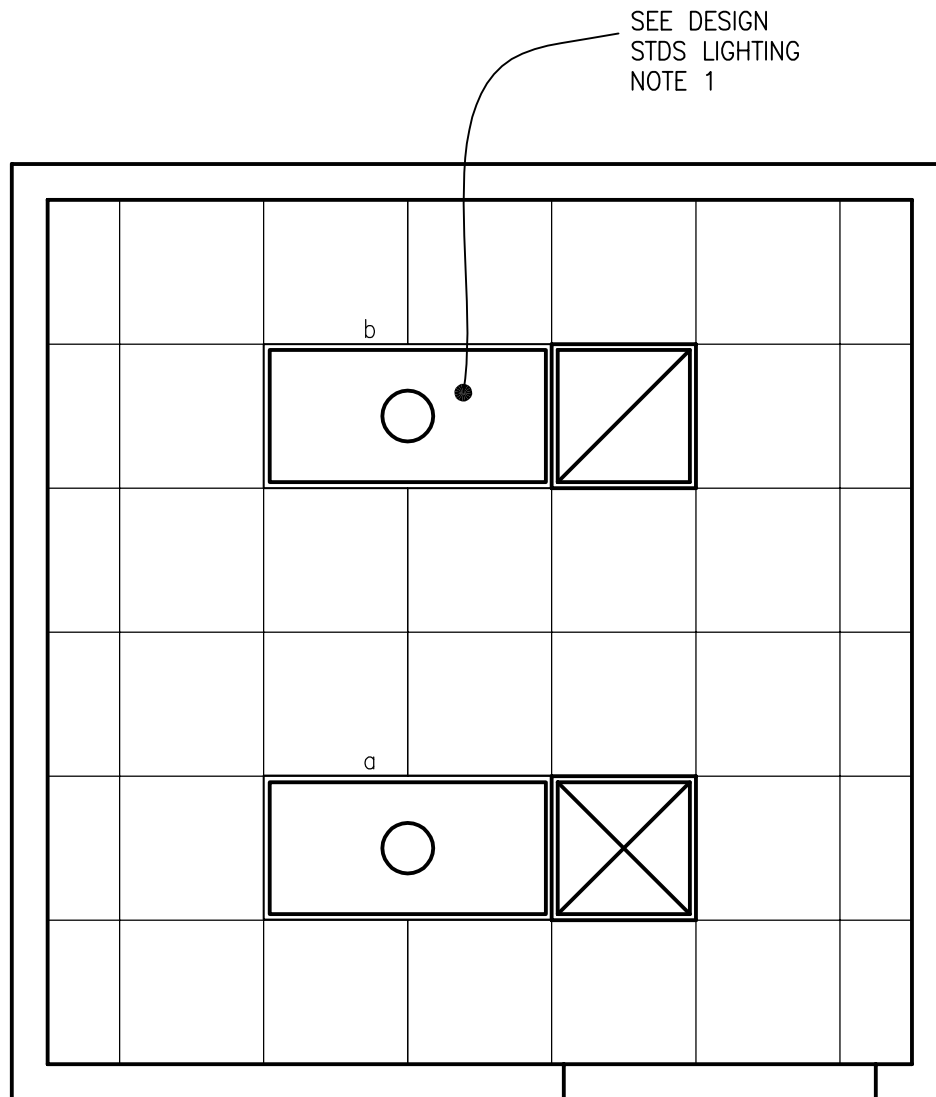
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Bone Densitometry Room (XDBD1)

160 NSF

Reflected Ceiling Plan

14.9 NSM



$3/8" = 1'-0"$

The locations and quantities of the air outlets and inlets are tentative and may not represent the optimum design solution(s) envisioned by the designer, who shall study the layout, calculate air volumes, and may alter the arrangement shown in the reflected ceiling plan, as required, to produce a project-specific air distribution system design.

Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

BONE DENSITOMETRY ROOM (XDBD1): Design Standards

ARCHITECTURAL

Ceiling:	Acoustical Tile Ceiling
Ceiling Height:	8'-0"
Wall Finish:	Paint
Wainscot:	--
Base:	Vinyl Base
Floor Finish:	Vinyl Composition Tile
Sound Protection:	Yes

Notes:

LIGHTING

General: Fluorescent lights provide illumination level up to 30 FC.

Special: Luminaires are dual switched for multi-level illumination.

Notes:

1. 2'x4' fluorescent recessed luminaire, acrylic prismatic lens, with (3) F32T8 lamps, 4100 K, CRI=85 (minimum), two ballasts.

POWER

General: The electrical power as shown is to be used as a guide only. Equipment locations, dimensions and wiring requirements should be per the x-ray system suppliers' equipment drawings. Electrical trades should provide all necessary conduits and wiring, to allow proper connections of the bone densitometry equipment and related accessories.

Emergency: Emergency power for the equipment, controls, and selected receptacles as determined by the Hospital.

Notes:

1. Special outlet for bone densitometry unit connection, coordinated with equipment requirements.

COMMUNICATION/SPECIAL SYSTEMS

ADP:	Yes
Data:	Yes
Telephone:	Yes
Intercom:	Yes
Nurse Call:	Yes
Public Address:	--

Radio/Entertainment:	--
MATV:	--
CCTV:	--
MID:	--
Security/Duress:	--
VTEL:	--
VA Satellite TV:	--

Notes:

1. 4-port telecommunication outlet for PACS station

HEATING, VENTILATING AND AIR CONDITIONING

Inside Design Conditions:
70°F to 75°F (21°C to 24°C)
30% to 60% Relative Humidity
Minimum Air Changes per hour: 6
-Supply Air

100% Exhaust:	No
100% Outside Air:	No
Room Air Balance:	Positive
Dedicated Exhaust System:	No
Occupancy:	3
AC Load – Equipment:	5,500 Btuh (1,600 W)
AC Load Lighting:	1.3 W/SF (14 W/M ²)

Notes:

1. Verify cooling loads and other specific requirements with the equipment manufacturer on a specific project.

PLUMBING AND MEDICAL GASES

Cold Water:	Yes
Hot Water:	Yes
Laboratory Air:	--
Laboratory Vacuum:	Yes
Sanitary Drain:	--
Reagent grade Water:	--
Medical Air:	--
Medical Vacuum:	--
Oxygen:	--

BONE DENSITOMETRY ROOM (XDBD1): Equipment Guide List

JSN	NAME	QTY	ACQ / INS	DESCRIPTION	SPEC
A1010	Telecommunication Outlet	1	CC	Telecommunication outlet location.	27 31 00
A1012	Telephone, Wall Mounted, 1 Line	1	CC	Telephone, wall mounted, 1 line.	27 31 00
A5145	Hook, Garment, Double, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.	10 28 00
F2000	Basket, Wastepaper, Round, Metal	1	VV	Round wastepaper basket, approximately 18" high X 16" diameter. This metal unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations.	
F3200	Clock, Battery, 12" Diameter	1	VV	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).	
E0042	Workcenter, Computer, Free Standing, 48" W	1	VV	THIS TYPICAL INCLUDES: 1 TOOL RAIL 2 PAPER TRAY 1 DIAGONAL TRAY 1 FREESTANDING WORK SURFACE 1 MOBILE PEDESTAL, BOX/FILE 1 ADJUSTABLE KEYBOARD TRAY	
F0205	Chair, Side, Without Arms	1	VV	Upholstered side chair, 32" high X 21" wide X 23" deep with arms, padded seats and padded backs. Seat height is a minimum of 17". Available with or without sled base.	
F0280	Chair, Swivel, Low Back	1	VV	Low back contemporary swivel chair, 37" high X 25" wide X 31" deep with a five (5) caster swivel base, arms and foam padded seat and back upholstered with either woven textile fabric or vinyl.	

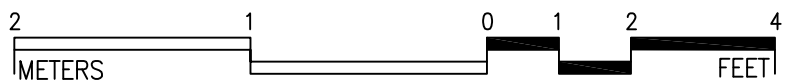
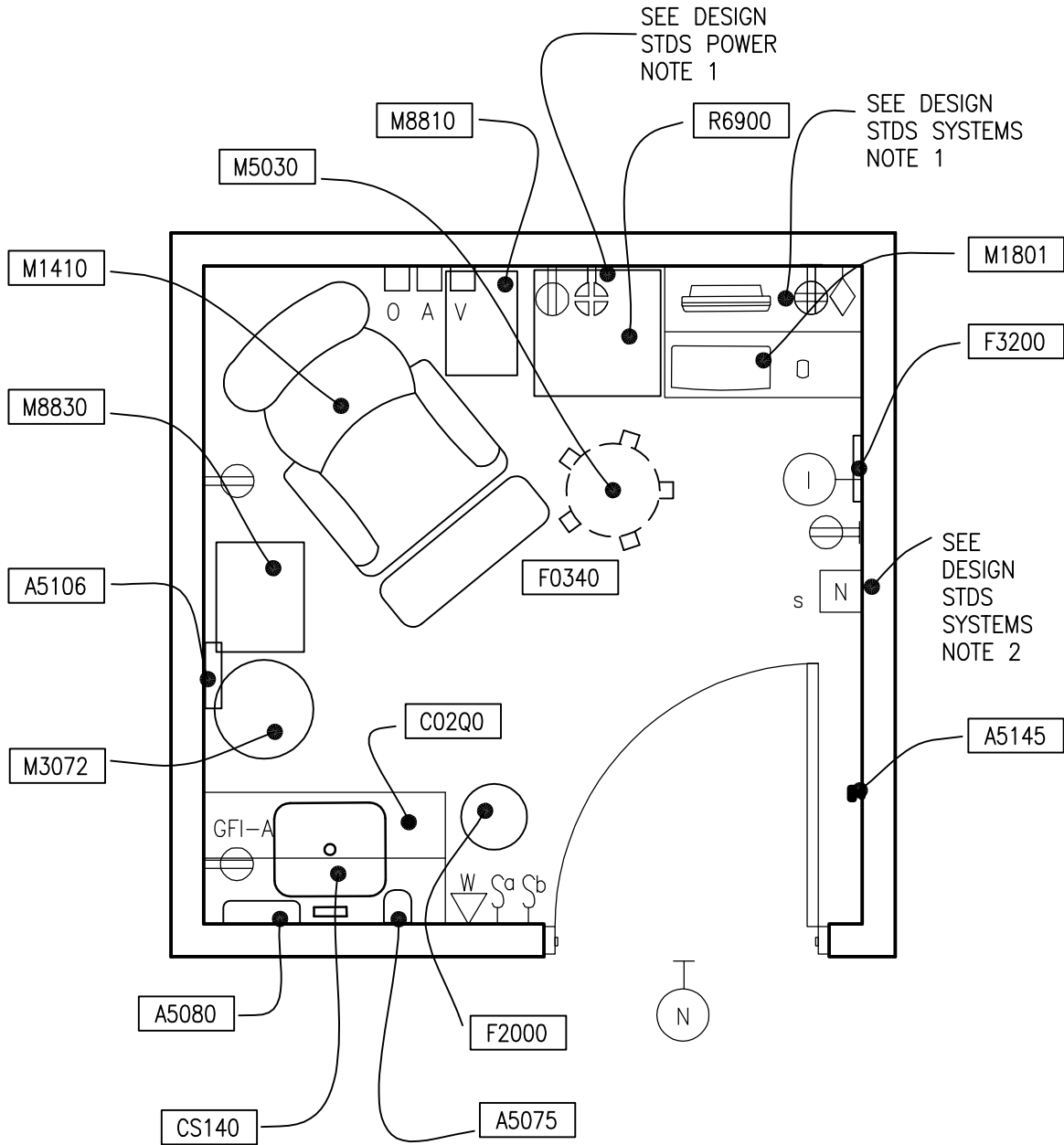
M1801	Computer, Microprocessing, w/Flat Panel Monitor	1	VV	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; a 3.5" floppy drive; 1.44MB network interface card; video 32 MB NVIDIA; a 15 inch flat panel color monitor. The computer is used throughout the facility to input, manipulate and retrieve information.	
X2120	Scanner, Bone Density, Full Body	1	VV	Full body scanner used to determine bone mineral density measurements and vertebral assessment associated with osteoporotic fracture risk.	

Patient Dose Administration (NMIR1)

100 NSF

Floor Plan

9.3 NSM



3/8" = 1'-0"

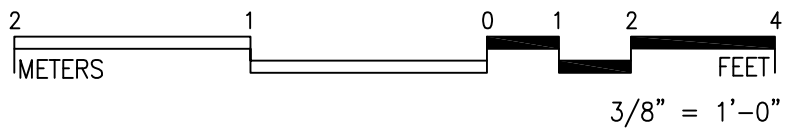
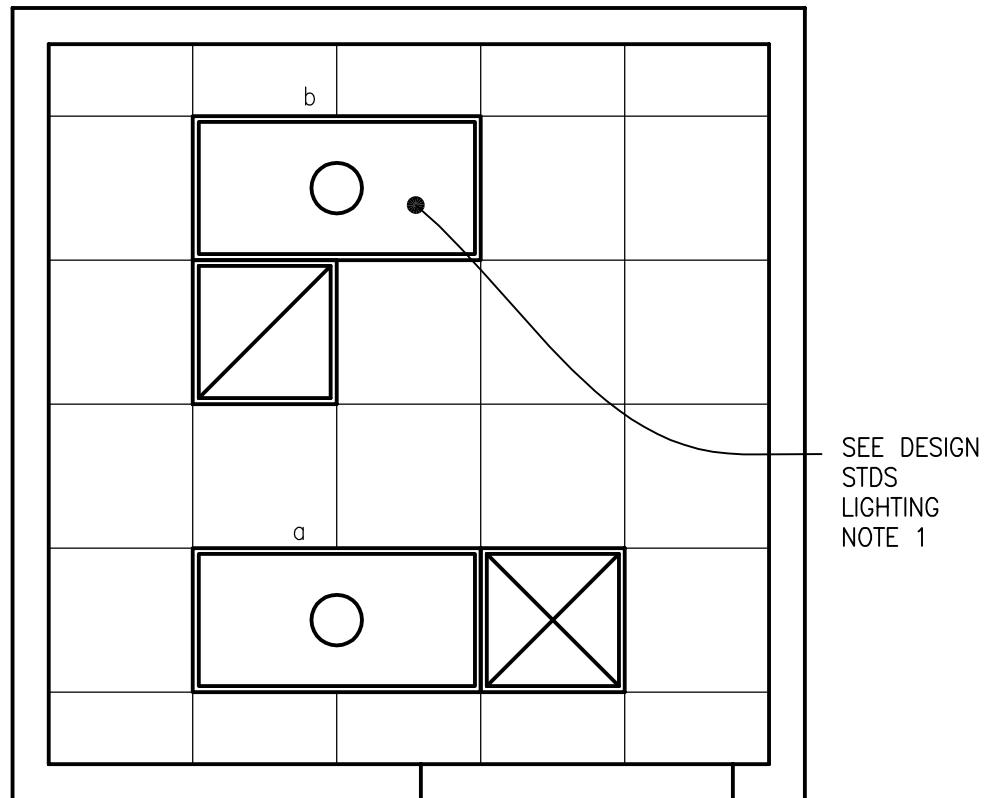
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Patient Dose Administration (NMIR1)

100 NSF

Reflected Ceiling Plan

9.3 NSM



The locations and quantities of the air outlets and inlets are tentative and may not represent the optimum design solution(s) envisioned by the designer, who shall study the layout, calculate air volumes, and may alter the arrangement shown in the reflected ceiling plan, as required, to produce a project-specific air distribution system design.

Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

PATIENT DOSE ADMINISTRATION (NMIR1): Design Standards

ARCHITECTURAL

Ceiling:	Acoustical Tile Ceiling
Ceiling Height:	8'-0"
Wall Finish:	Paint
Wainscot:	--
Base:	Integral Cove Base
Floor Finish:	Welded Seam Sheet
Sound Protection:	Yes

Notes:

1. Room may need shielding depending upon intended use that might include high energy radioisotopes (PET), high dose radioisotope therapy or radiation interference with adjacent imaging rooms.

LIGHTING

General: Fluorescent lights provide illumination level up to 50 FC.

Special: Luminaires are dual switched for multi-level illumination.

Notes:

1. 2'x4' fluorescent recessed luminaire, acrylic prismatic lens, with (3) F32T8 lamps, 4,100 K, CRI=85 (minimum), two ballasts.

POWER

Notes:

1. Refrigerator outlet on emergency power

COMMUNICATION/SPECIAL SYSTEMS

ADP:	Yes
Data:	Yes
Telephone:	Yes
Intercom:	Yes
Nurse Call:	Yes
Public Address:	--
Radio/Entertainment:	--
MATV:	--
CCTV:	--
MID:	--
Security/Duress:	--
VTEL:	--

VA Satellite TV: --

Notes:

1. 4-port telecommunication outlet for PACS.
2. Staff nurse call station to annunciate at nurse's station.

HEATING, VENTILATING AND AIR CONDITIONING

Inside Design Conditions:
70°F to 75°F (21°C to 24°C)
30% to 60% Relative Humidity
Minimum Air Changes per Hour: 6
-Supply Air

100% Exhaust Air:	No
100% Outside Air:	No
Room Air Balance:	Positive
Dedicated Exhaust System:	No
Occupancy:	3
AC Load – Equipment:	850 Btuh (250 W)
AC Load Lighting:	1.9 W/SF (20 W/M ²)

Notes:

1. Verify cooling loads and other specific requirements with the equipment manufacturer on a specific project.

PLUMBING AND MEDICAL GASES

Cold Water:	Yes
Hot Water:	Yes
Laboratory Air:	--
Laboratory Vacuum:	Yes
Sanitary Drain:	--
Reagent grade Water:	--
Medical Air:	--
Medical Vacuum:	--
Oxygen:	--



PATIENT DOSE ADMINISTRATION (NMIR1): Equipment Guide List

JSN	NAME	QTY	ACQ / INS	DESCRIPTION	SPEC
A1010	Telecommunication Outlet	1	CC	Telecommunication outlet location.	27 31 00
A1012	Telephone, Wall Mounted, 1 Line	1	CC	Telephone, wall mounted, 1 line.	27 31 00
A5075	Dispenser, Soap, Disposable	1	VV	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.	
A5080	Dispenser, Paper Towel, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.	10 28 00
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	1	VV	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.	
A5145	Hook, Garment, Double, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.	10 28 00
C02Q0	Cabinet, Sink, U/C/B, 1 Door, 36x24x22	1	CC	Standing height under counter base sink cabinet with a solid right or left-hinged door (appropriate door configuration to be indicated on equipment elevation drawings). Also referred to as a single-door sink cabinet. For general purpose use throughout the facility where a sink is to be used. Coordinate actual clear cabinet dimension with the actual outside dimension of sink that is specified to ensure that they are compatible.	12 32 00

C03J0	Cabinet, U/C/B, 8 Half Drawers, 36x30x22	1	CC	Standing height under counter base cabinet with eight half width drawers of equal height. Also referred to as a drawer cabinet. For general purpose use throughout the facility.	12 32 00
C03L0	Cabinet, U/C/B, 1 DR, 3 Half DR, 1 Door, 30" W	1	CC	Standing height under counter base cabinet, 34" H x 30" W x 22" D with a full width drawer above three half width drawers alongside a solid right or left door/cupboard (appropriate door/cupboard configuration to be indicated on equipment elevation drawings). Also referred to as a combination cabinet or a drawer and cupboard cabinet. For general purpose use throughout the facility.	12 32 00
CE030	Cabinet, W/H, 2 SH, 2 GDO, Sloping Top, 38x30x13	2	CC	Standing height under counter base cabinet with an adjustable shelf and a full width drawer above solid hinged doors. Also referred to as a combination cabinet or a drawer and cupboard cabinet. For general purpose use throughout the facility.	12 32 00
CS140	Sink, SS, Single Compartment, 10x14x16 ID	1	CC	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.	22 40 00



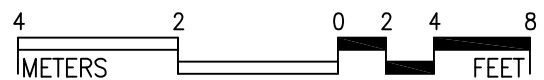
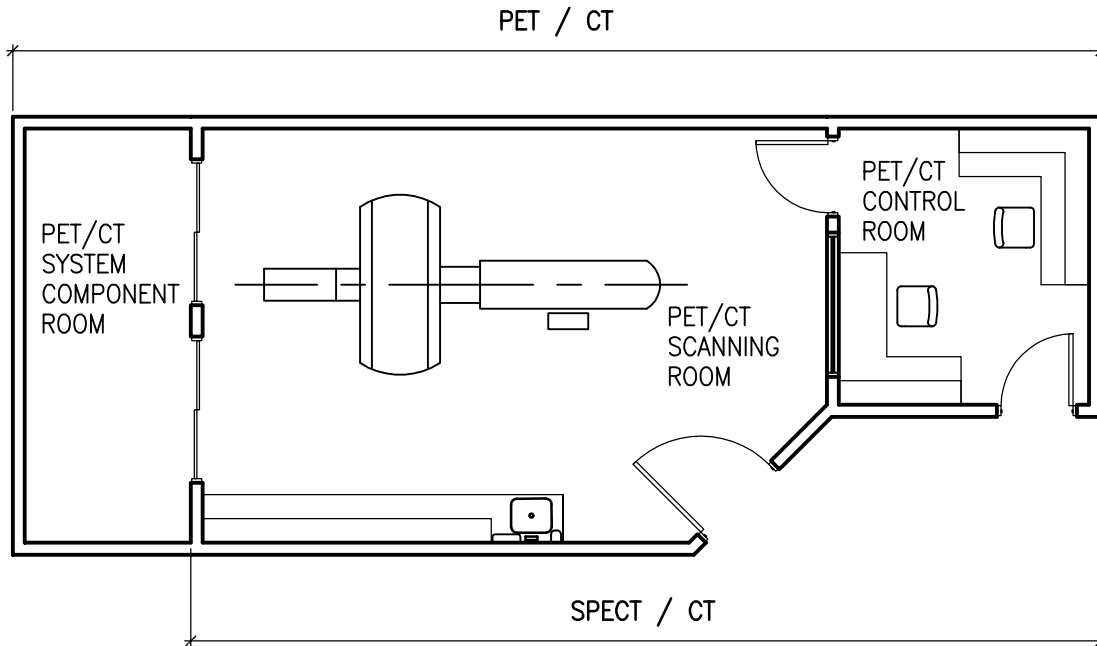
CT050	Countertop, Stainless Steel	AR	CC	Stainless steel countertop (composition of heavy-gauge Type No. 304 stainless steel) having a smooth satin finish and integral 4" backsplash/curb. Also referred to as a corrosion-resistant steel work surface or work top. Available in various depths. Used in areas where excellent ease of cleaning, abrasion resistance, bacteria resistance, impact resistance, load capacity and moisture resistance, are of concern. Pricing based upon a 24" depth.	12 36 00
F0340	Stool, Self Adjusting	1	VV	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.	
F2000	Basket, Wastepaper, Round, Metal	1	VV	Round wastepaper basket, approximately 18" high X 16" diameter. This metal unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations.	
F3200	Clock, Battery, 12" Diameter	1	VV	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).	
M1410	Chair, Laboratory, Blood Drawing, w/Storage	1	VV	Laboratory blood drawing chair with storage. Chair has built-in storage cabinet(s) and locking arm assembly that may be positioned on either side of the fiberglass chair.	
M1801	Computer, Microprocessing, w/Flat Panel Monitor	1	VV	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROM/DVD combo; a 3.5" floppy drive; 1.44MB network interface card; video 32 MB NVIDIA; a 15 inch flat panel color monitor. The computer is used throughout the facility to input, manipulate and retrieve information.	

M3072	Frame, Infectious Waste Bag w/Lid	1	VV	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M5030	Stool, Surgeon, Revolving	1	VV	Revolving stool. Consists of a padded upholstered seat with height adjustment. Unit rotates and is mounted on ball bearing swivel casters. Designed for use in examinations, treatment, and surgical procedures.
M8810	Stand, Mayo	1	VV	Adjustable instrument table. Table is corrosion resistant stainless steel construction and is mounted on two casters with two skid rails. It has telescopic upright adjusts from 39 inches to 60 inches with automatic locking device, and removable 13"x19" instrument tray. Designed for use in operating and procedure rooms.
M8830	Table, Instrument/Dressing, Mobile	1	VV	Mobile instrument/dressing table, approximately 34" H x 20" W x 16" D Corrosion resistant stainless steel mobile table with sound-deadening shelf and drawer. Unit is mounted on 2" casters. Designed for all purpose use in the hospital or clinic.
R6900	Refrigerator, Bio, Radio/Pharm, Approx. 5 CuFt	1	VV	Radiopharmaceutical and biological refrigerator with key-lock door. This unit is lead-lined on all sides for radiopharmaceuticals, biologicals and other radioactive materials. Freezer compartment and refrigerator eliminates thermal lag placement of cooling units inside the shielding. This unit is used as a storage unit in hospitals and laboratories that handle radioactive materials.



PET/CT & SPECT/CT

Key Plan

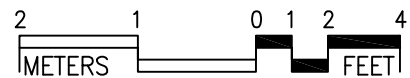
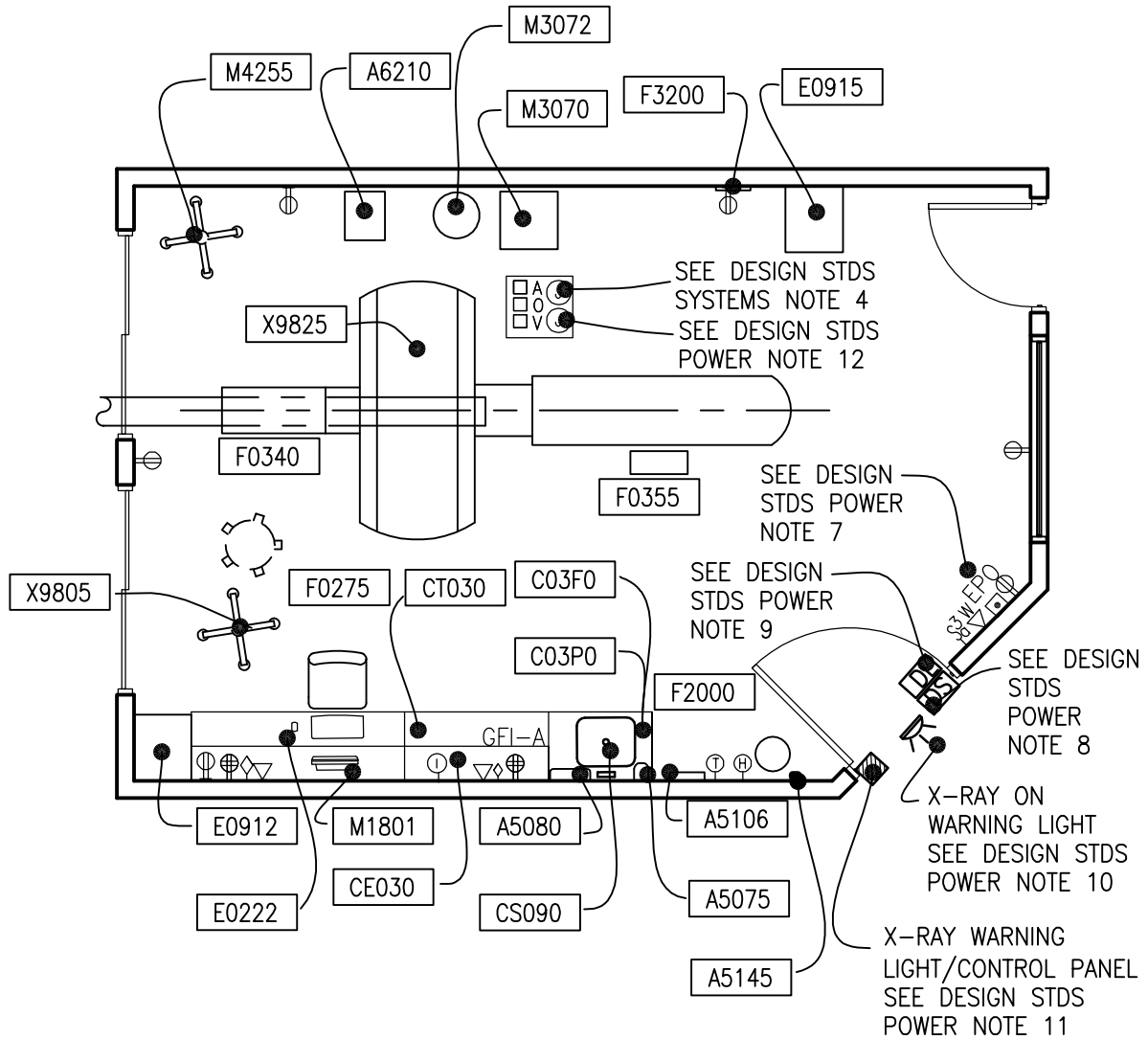


1/8" = 1'-0"

Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

PET/CT Scanning Room (NMSS1)
 Floor Plan

450 NSF
 41.8 NSM



3/16" = 1'-0"

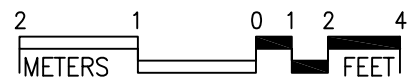
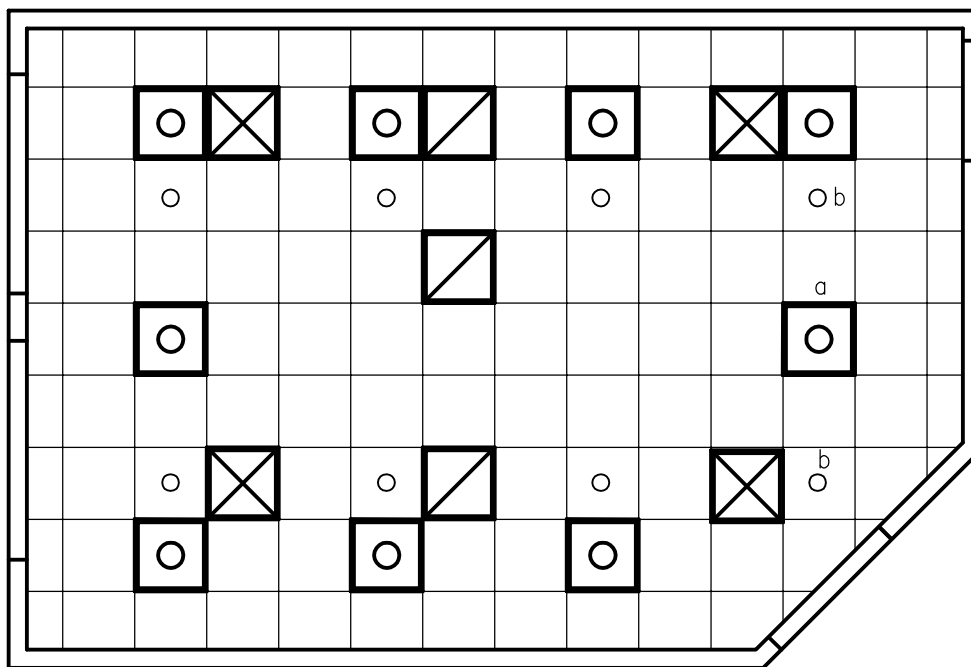
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PET/CT Scanning Room (NMSS1)

450 NSF

Reflected Ceiling Plan

41.8 NSM



$3/16" = 1'-0"$

The locations and quantities of the air outlets and inlets are tentative and may not represent the optimum design solution(s) envisioned by the designer, who shall study the layout, calculate air volumes, and may alter the arrangement shown in the reflected ceiling plan, as required, to produce a project-specific air distribution system design.

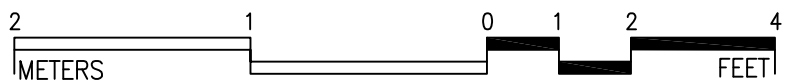
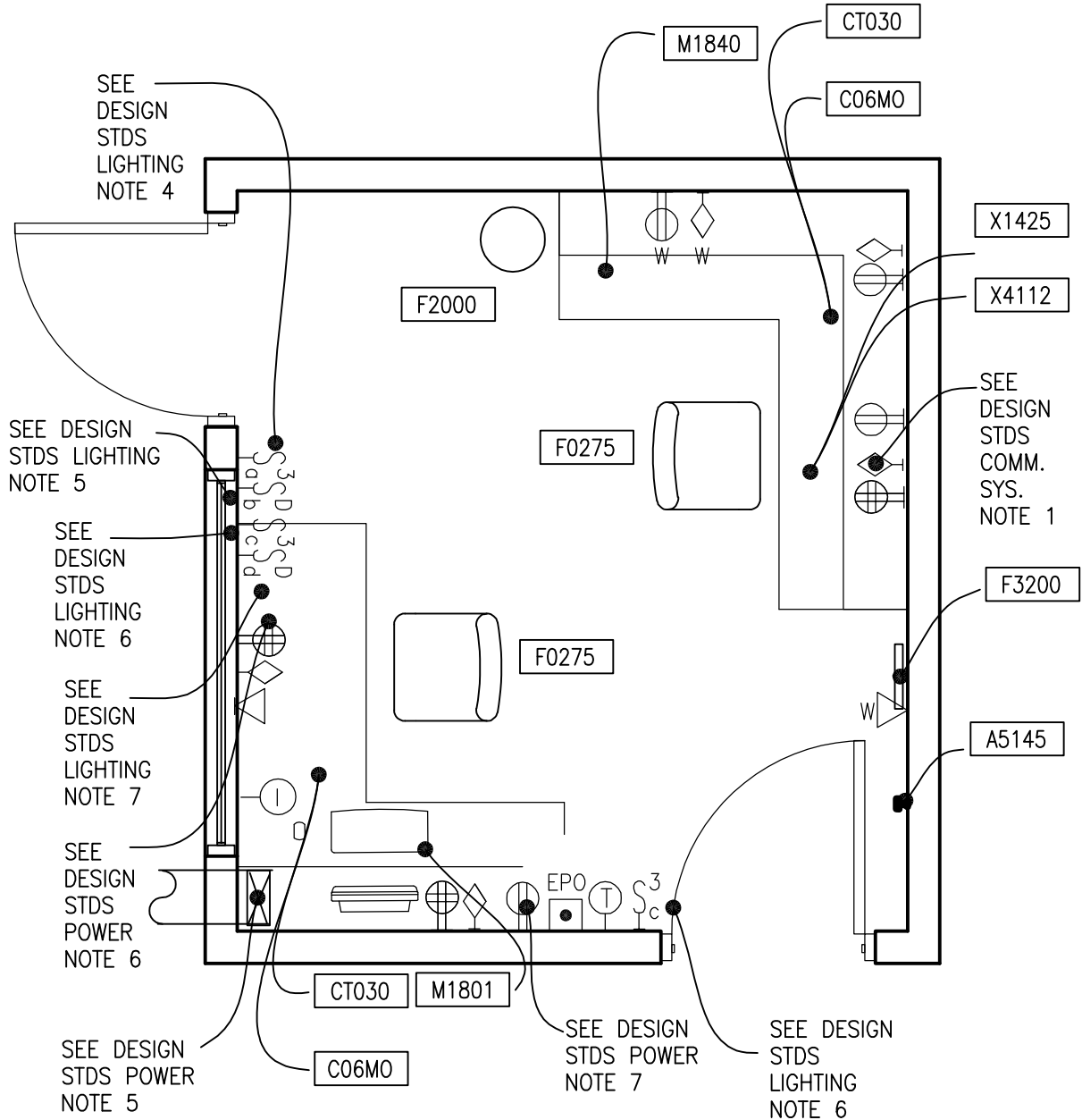
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PET/CT Control Room (NMRCR1)

120 NSF

Floor Plan

11.2 NSM



3/8" = 1'-0"

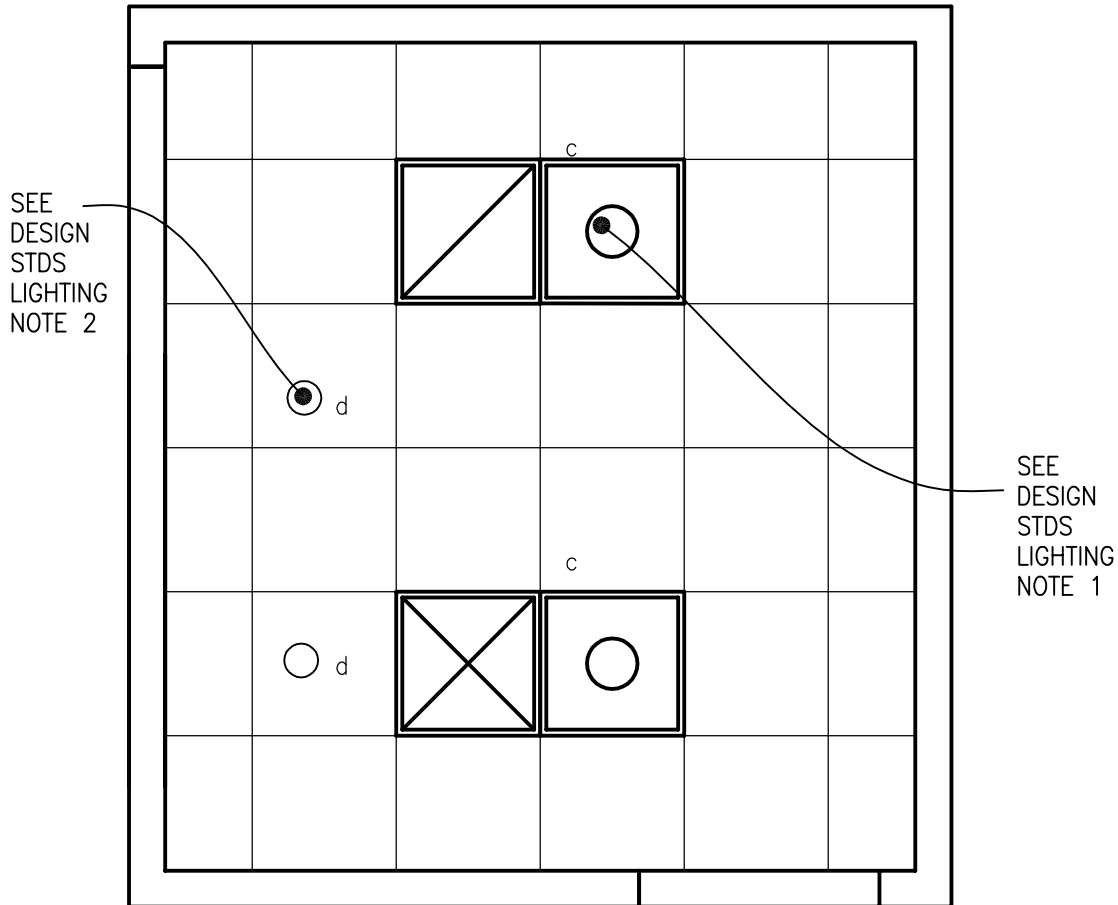
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PET/CT Control Room (NMRCR1)

120 NSF

Reflected Ceiling Plan

11.2 NSM



The locations and quantities of the air outlets and inlets are tentative and may not represent the optimum design solution(s) envisioned by the designer, who shall study the layout, calculate air volumes, and may alter the arrangement shown in the reflected ceiling plan, as required, to produce a project-specific air distribution system design.

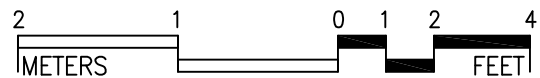
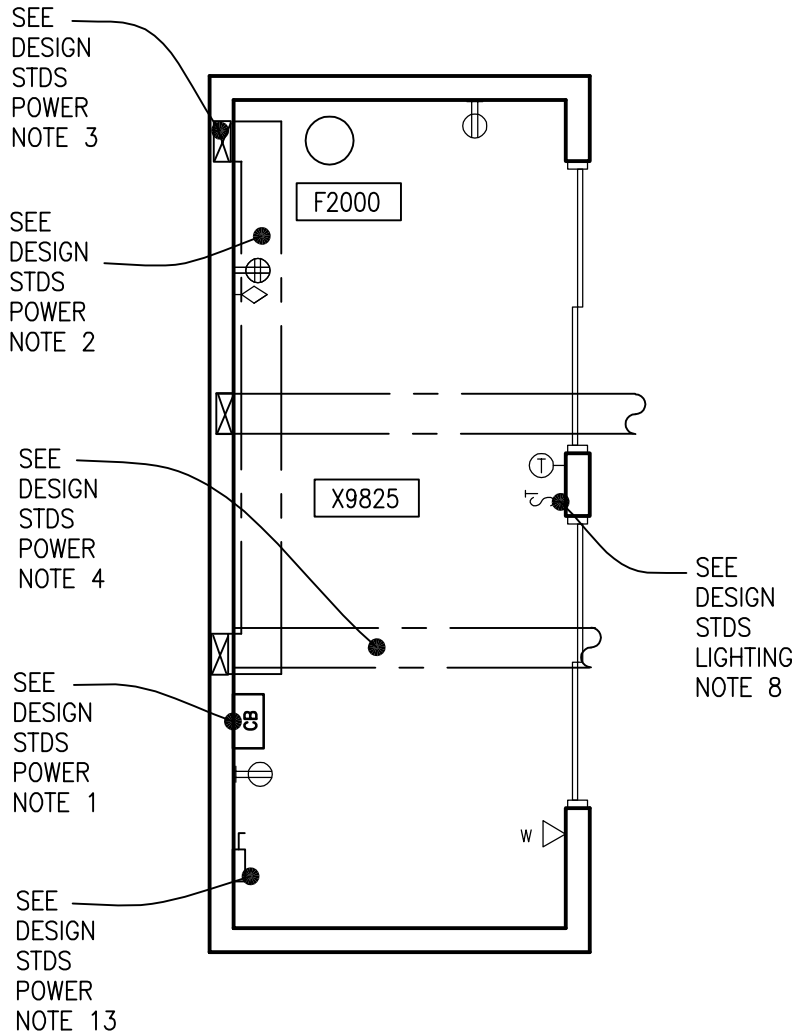
Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

PET/CT System Component Room (XMRC2)

120 NSF

Floor Plan

11.2 NSM



1/4" = 1'-0"

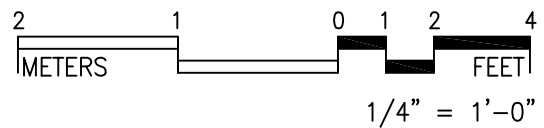
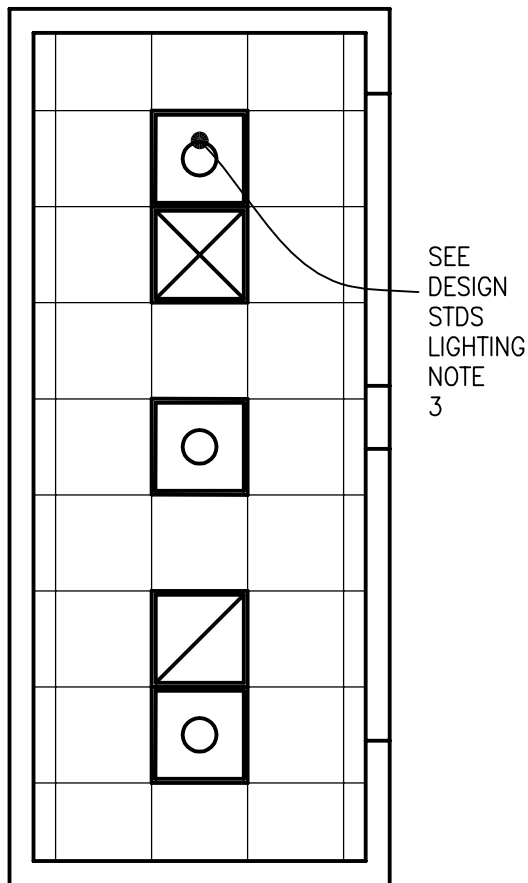
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PET/CT System Component Room (XMRC2)

120 NSF

Reflected Ceiling Plan

11.2 NSM



The locations and quantities of the air outlets and inlets are tentative and may not represent the optimum design solution(s) envisioned by the designer, who shall study the layout, calculate air volumes, and may alter the arrangement shown in the reflected ceiling plan, as required, to produce a project-specific air distribution system design.

Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

PET / CT (XMRC2, NMSS1, & NMRCR1): Design Standards

ARCHITECTURAL

Ceiling:	Acoustical Tile Ceiling
Ceiling Height:	Coordinate with Equip. Manufacturer
Wall Finish:	Paint
Wainscot:	--
Base:	Integral Cove Base
Floor Finish:	Welded Seam Sheet
Sound Protection:	Yes

Notes:

1. Provide a 4'-0" wide shielded door into the PET / CT Scanning Room.
2. Provide a shielded viewing window from PET / CT Control Room to the PET / CT Scanning Room.

LIGHTING

PET-CT Room

General: Fluorescent lights will provide higher illumination level up to 50 FC during patient transfer on and from the table, equipment setting, room cleaning, and equipment maintenance.

Special: Incandescent luminaires controlled by dimmer will provide lower illumination levels down to 5 FC during scanning. Luminaires shall be located to avoid direct glare for patient comfort.

Control Room

General: Fluorescent lights will provide higher illumination level up to 30 FC for room cleaning, and equipment maintenance.

Special: Incandescent luminaires controlled by dimmer will provide lower illumination levels down to 5 FC during scanning for monitor viewing.

Equipment Room

General: Fluorescent lights will provide illumination level up to 50 FC for equipment maintenance.

Notes:

1. 2'x2' fluorescent recessed luminaire, acrylic prismatic lens, with (2) FB031T8-U lamps, 4,100 K, CRI=85 (minimum).
2. 8-inch dia., recessed incandescent downlight, with recessed Fresnel lens, and 150W/A21 inc. horizontally mounted lamp.
3. 2'x2' fluorescent recessed luminaire, acrylic prismatic lens, with (3) FB031T8-U lamps, 4,100 K, CRI=85 (minimum).
4. 3-way switch for PET CT Room fluorescent lighting control; located at entrance door and in control area
5. Dimmer for PET CT Room incandescent downlights control; located in control area.
6. Switch for Control Room fluorescent lighting control
7. Dimmer for Control Room incandescent downlights control.
8. Timer Switch for Equipment Room fluorescent lighting control

POWER

General: The electrical power as shown is to be used as a guide only. Equipment locations, dimensions and wiring requirements should be per the CT system suppliers' equipment drawings. Electrical trades should provide necessary conduits, openings, bushings, nipples, flexible conduits, surface, recessed, wall mounted and floor raceways, etc., as required at the various junction boxes, duct and conduit terminations to allow proper connections of the x-ray equipment and related accessories.

Emergency: Emergency power for CT equipment, controls, and selected receptacles as determined by the Hospital

Notes:

1. 480V, 3P-150A circuit breaker, with adjustable trip, shunt trip, flush mounted. Run empty 50 mm (2" C) from circuit breaker to the floor duct.

2. 12" W x 3-1/2" D multi-compartment flush floor duct with screw-on cover. Connect to vertical wall duct.
3. 10" W x 3-1/2" D multi-compartment flush vertical wall duct with screw-on cover. Connect to CT floor duct and horizontal wall duct.
4. 10" W x 3-1/2" D multi-compartment duct above ceiling with screw-on cover. Connect to vertical duct.
5. 4-3/4" W x 3-1/2" D multi-compartment flush vertical wall duct with screw-on cover. Connect to ceiling duct and horizontal wall duct.
6. 4-3/4" W x 3-1/2" D multi-compartment surface wall duct with screw-on cover. Connect to vertical wall duct.
7. Emergency Power Off pushbutton station. Refer to specific radiology equipment requirements for EPO. Connect to shunt trip at main disconnect.
8. Door switch with NO/NC contacts. Connect to CT system control circuit. CT should shut-off upon opening of the entrance door.
9. Magnetic door interlock with CT controller to prevent interruption of scanning procedure (optional).
10. Warning light with wording "X-RAY IN USE, DO NOT ENTER". Provide interface with CT controller via interface relay.
11. CT warning light interface relay with low voltage power supply to match CT equipment requirements.
12. Power connection above ceiling to modular ceiling service column.
13. 480V, 3P-30A fused disconnect switch for equipment room air conditioning unit.

COMMUNICATION/SPECIAL SYSTEMS

ADP:	Yes
Data:	Yes
Telephone:	Yes
Intercom:	Yes
Nurse Call:	Yes
Public Address:	--
Radio/Entertainment:	--
MATV:	--
CCTV:	--
MID:	--
Security/Duress:	--
VTEL:	--
VA Satellite TV:	--

Notes:

1. 4-port telecommunication outlet per PACS station
2. Junction box above ceiling for data connection to modular ceiling service column.

HEATING, VENTILATING AND AIR CONDITIONING

Inside Design Conditions:
 70°F to 75°F (21°C to 24°C)
 35% to 60% Relative Humidity
 Minimum Air Changes per Hour:
 - Supply Air
 6 for PET/CT Scanning Room
 6 for PET/CT Control Room
 2 for PET/CT System Component Room
 100% Exhaust: PET/CT Scanning Room
 100% Outside Air: No
 Room Air Balance:
 Negative for PET/CT Scanning Room
 Positive for Control Room and System Component Room
 Dedicated Exhaust System: No
 Occupancy:
 3 for PET/CT Scanning Room
 2 for other rooms
 AC Load-Equipment:
 26,000 Btuh (7,750 W) for PET/CT Scanning Room
 4,500 Btuh (1,350 W) for PET/CT Control Room
 13,500 Btuh (4,000 W) for PET/CT System Component Room
 AC Load-Lighting:
 1.3 W/SF (14 W/M²) in PET/CT Scanning Room
 1.6 W/SF (17 W/M²) in PET/CT

Control Room
1.6 W/SF (17 W/M²) in PET/CT
System Component Room

Notes:

1. Verify cooling loads and other specific requirements with the equipment manufacturer on a specific project.
2. Provide dedicated AC unit to serve the PET/CT System Component Room.

PLUMBING AND MEDICAL GASES

Cold Water:	Yes
Hot Water:	Yes
Laboratory Air:	--
Laboratory Vacuum:	--
Sanitary Drain:	Yes
Reagent grade Water:	--
Medical Air:	Yes
Medical Vacuum:	Yes
Oxygen:	Yes
Notes:	

PET / CT (XMRC2, NMSS1, & NMRCR1): Equipment Guide List

1. PET / CT SCANNING ROOM (NMSS1)					
JSN	NAME	QTY	ACQ / INS	DESCRIPTION	SPEC
A1010	Telecommunication Outlet	1	CC	Telecommunication outlet location.	27 31 00
A1012	Telephone, Wall Mounted, 1 Line	1	CC	Telephone, wall mounted, 1 line.	27 31 00
A5075	Dispenser, Soap, Disposable	1	VV	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.	
A5080	Dispenser, Paper Towel, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.	10 28 00
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	1	VV	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.	
A5145	Hook, Garment, Double, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.	10 28 00
A6210	Uninterruptible Power Supply, Single Phase	2	VV	Stand alone uninterruptible power supply (UPS) available in 120, 208 or 240 VAC configuration. Power output can range from 200 VA to 3000 VA depending on the application. Used in areas where power protection is required for computer systems, communication equipment, etc. The UPS is used to keep the equipment on line or safely turn the equipment off in the event of a power loss.	

C03F0	Cabinet, U/C/B, 1 Shelf, 2 Half DR, 2 DO, 36x30x22	2	CC	Standing height under counter base cabinet with an adjustable shelf and two half width drawers above solid hinged doors. Also referred to as a combination cabinet or a drawer and cupboard cabinet. For general purpose use throughout the facility.	12 32 00
C03P0	Cabinet, Sink, U/C/B, 2 Door, 30" W	1	CC	Standing height under counter base sink cabinet. 36" H x 30" W x 22" D with two solid hinged doors. Also referred to as a double-door sink cabinet. For general purpose use throughout the facility where a sink is to be used. Coordinate actual clear cabinet dimension with the actual outside dimension of sink that is specified to ensure that they are compatible.	12 32 00
CE030	Cabinet, W/H, 2 SH, 2 GDO, Sloping Top, 38x30x13	1	CC	Wall hung cabinet with two adjustable shelves, framed-glass hinged doors, and sloping top. Also referred to as a framed-glass hinged double door wall case. For general purpose use throughout the facility.	12 32 00
CS090	Sink, SS, Single Compartment, 7.5x19x16 ID	1	CC	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.	22 40 00



CT030	Countertop, High Pressure Laminate	AR	CC	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.	12 36 00
E0222	Worksurface, Computer, O/H Cab, Wall Mtd, 48" W	1	VV	<p>THIS TYPICAL INCLUDES:</p> <ul style="list-style-type: none"> 3 Vertical Hanging Strips 2 Lockable Flipper Units 2 Shelves, Storage/Display 2 Lights 1 Cantilevered Work Surface 4 Storage Frames 4 Drawers, 3"H (76mm) 6 Drawers, 6"H (152mm) 	
E0912	Locker, Supply, Med Surg, Wall Mtd	1	VV	<p>Medical/Surgical Supply locker, Wall Mounted, Approx 23"W x20"D. THIS TYPICAL INCLUDES:</p> <ul style="list-style-type: none"> 1 Wall Mounted Rail 1 Locked Storage Container 4 Tray/Shelves 5 Drawers, 3"H (76mm) 2 Drawers, 6"H (152mm) 2 Tray/Shelf Dividers Drawer Organizer Bins <p>Consider the need for an E0921 to transport the locker from place to place.</p>	

E0915	Locker, Supply, Medication, Wall Mtd, 23"W x 20"D	1	VV	<p>THIS TYPICAL INCLUDES:</p> <ul style="list-style-type: none"> 1 Wall Mounted Rail 1 Locked Storage Container 2 Tray/Shelves 1 Locker Drawer w/Locked Lid, 6"H (152mm) 5 Drawers, 3"H (76mm) 3 Drawers, 6"H (152mm) 2 Tray/Shelves Divider Drawer Organizer Bins <p>Consider the need for an E0921 to transport the locker from place to place.</p>
E1500	Rail, MOD, W/MNTD, HX144XD	1	VV	Wall mounted rail used for hanging (mounting) lockers, shelves drawers on a wall.
F0275	Chair, Swivel, High Back	2	VV	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.
F0340	Stool, Self Adjusting	1	VV	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.
F0355	Footstool, Straight	1	VV	Step stool. Used to assist patients getting on and off exam or surgical tables. Fitted with electrically conductive rubber tips.
F2000	Basket, Wastepaper, Round, Metal	1	VV	Round wastepaper basket, approximately 18" high X 16" diameter. This metal unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations.

F3200	Clock, Battery, 12" Diameter	1	VV	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).	
M0750	Flowmeter, Air, Connect w/50 PSI Supply	1	VV	Air flowmeter. Unit has a stainless steel needle valve with clear flowtube for connection to 50 PSI air outlet from central pipeline system. Requires the appropriate adapter for connection to the wall outlet and fitting to connect to tubing. Database prices reflect fittings with an attached DISS power outlet. Other outlet and adapter configurations are available.	
M0755	Flowmeter, Oxygen, Low Flow	1	VV	Oxygen flowmeter. Consists of a clear crystal flowtube calibrated to 3.5 or 8 LPM depending on manufacturer. For oxygen regulation in hospital settings. Database pricing includes DISS fitting and DISS power outlet and wall adapter. Other fitting and adapter configurations are available.	
M0765	Regulator, Vacuum	1	VV	An air/oxygen mixer is designed to accurately control a pressurized gas mixing with an oxygen concentration. Unit contains audible alarms to warn of supply failure, an auxiliary outlet and a oxygen concentration control adjustment range from 21% to 100%. The unit can also be used to supply an accurate pre-mixed gas source to respiration or ventilator units. A specific application may require an additional air inlet filter/water trap.	
M1801	Computer, Microprocessing, w/Flat Panel Monitor	1	VV	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROM/DVD combo; a 3.5" floppy drive; 1.44MB network interface card; video 32 MB NVIDIA; a 15 inch flat panel color monitor. The computer is used throughout the facility to input, manipulate and retrieve information.	

M2055	Shelving, Storage, Wire, CRS, w/Adjustable Shelves	1	VV	Stationary, wire, shelving unit. Unit has fully adjustable shelves constructed of stainless steel. For use in general purpose storage areas. Shelving is provided in various sizes and configurations. Price provided is for a unit approximately 74"H x 18"D x 48"W with four shelves.
M3070	Hamper, Linen, Mobile, w/Lid	1	VV	Mobile linen hamper with hand or foot operated lid. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Holds 25" hamper bags. Mounted on ball bearing casters. For linen transport in hospitals and clinics.
M3072	Frame, Infectious Waste Bag w/Lid	1	VV	Frame for an infectious waste collection bag. Made of heavy tubular stainless steel with heavy gauge welded steel platform. Adjust to hold 18" or 25" trash bags. Mounted on ball bearing casters and includes permanently mounted hinged lid. Provides means of bagging infectious waste at point of waste generation.
M4116	Monitor, Vital Signs	1	VV	Electronic sphygmomanometer. LCD displays non-invasive blood pressure, pulse rate and temperature. Used in hospitals and clinics. Includes an optional mobile stand.

M4250	Pump, Syringe, Infusion	1	VV	The infusion syringe pump ensures highly accurate volume delivery and consistent flow for small volumes (<50 ml) of pharmacologic agents or thick feeding solutions. It shall be small, lightweight construction, making it transportable. Shall have menu-driven programming capable of flow rates (e.g. 0.1 or 1.0 mL/hr) that are intended for long-term bedside use and/or critical care patient transport, plunger positioning sensor, LCD display for easy viewing, volume limit programming to serve as a convenient cue of volume or dose delivery completion and multiple delivery modes for all applications requiring precisely controlled infusion rates. The infusion pump shall have automatic syringe size sensing which will give the flexibility to accept a wide range of syringe sizes (up to 60 mL) from different manufacturers. Shall be battery powered/AC adapter.
M4255	Stand, IV, Adjustable	1	VV	Adjustable IV stand with 4-hook arrangement. Stand has stainless steel construction with heavy weight base. It adjusts from 66 inches to 100 inches and is mounted on conductive rubber, ball bearing, swivel casters. Stand is used for administering intravenous solutions.
M4266	Pump, Volumetric, Infusion, Multiple Line	1	VV	Volumetric infusion pump. Pump is self-regulating with automatic sensor and adjustable rate. Equipped with visual and audible alarms and up to 10 hour capacity battery. For the administration of a wide variety of therapeutic agents where precise control is required. Unit provides individual control to IV lines simultaneously.

X9805	Stand, Injection, Nuclear Medicine	1	VV	An injection stand designed for arm positioning for radionuclide injections. The arm rest holds the patient's arm firmly in place. A utility tray sits adjacent to the armrest to hold supplies and includes a lead-lined multi syringe holder. The stand height is adjustable approximately from 29" to 44." Casters allow the stand to be rolled into position or out of the way for storage. It is structurally balanced so that it won't tip over.	
X9825	Nuclear Imaging System (PET/CT)	1	CF	A system that combines the functionality of PET and SPECT with the anatomical landmarks of CT to perform Functional Anatomic Mapping.	

2. CONTROL ROOM (NMRCR1)

JSN	NAME	QTY	ACQ / INS	DESCRIPTION	SPEC
A1010	Telecommunication Outlet	1	CC	Telecommunication outlet location.	27 31 00
A1012	Telephone, Wall Mounted, 1 Line	1	CC	Telephone, wall mounted, 1 line.	27 31 00
A5145	Hook, Garment, Double, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.	10 28 00
C0044	Frame, Apron, 1 Drawer, 4x30x22	1	CC	Apron frame with one standard drawer. Also referred to as a drawer frame or table frame. Used for a knee space as a combination frame and drawer to support a top between base cabinets or a base cabinet and a wall.	12 32 00
C0045	Frame, Apron, 1 Drawer, 4x36x22	2	CC	Apron frame with one standard drawer. Also referred to as a drawer frame or table frame. Used for a knee space as a combination frame and drawer to support a top between base cabinets or a base cabinet and a wall.	12 32 00
C06M0	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	3	CC	Cabinet, U/C/B, 1 PBD, 2 DR, 1 File DR, 30x18x22	12 32 00

CT030	Countertop, High Pressure Laminate	AR	CC	High pressure laminate countertop (composition of wood particle core with plastic laminate surface) having a hard smooth surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a wide choice of colors, patterns, and depths. Used in general purpose areas requiring a basic work surface arrangement with limited heat resistance and poor chemical resistance. Pricing based upon a 24" depth.	12 36 00
F0275	Chair, Swivel, High Back	2	VV	Highback contemporary swivel chair, 41" high X 23" wide X 23" deep with five (5) caster swivel base and arms. Chair may be used at desks or in conference rooms. Back and seat are foam padded and upholstered with either woven textile fabric or vinyl.	
F2000	Basket, Wastepaper, Round, Metal	1	VV	Round wastepaper basket, approximately 18" high X 16" diameter. This metal unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations.	
F3050	Whiteboard, Dry Erase	1	CC	Whiteboard unit, approximately 36" H x 48" W consisting of a white porcelain enamel writing surface with an attached chalk tray. Magnetic surface available. Image can be easily removed with a standard chalkboard eraser. For use with water color pens. Unit is ready to hang.	10 11 13
F3200	Clock, Battery, 12" Diameter	1	VV	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).	



M1801	Computer, Microprocessing, w/Flat Panel Monitor	1	VV	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROMDVD combo; a 3.5" floppy drive; 1.44MB network interface card; video 32 MB NVIDIA; a 15 inch flat panel color monitor. The computer is used throughout the facility to input, manipulate and retrieve information.
M1840	Printer/Copier/Fax Combination	1	VV	Multifunctional printer, fax, scanner and copier (PFC) all-in-one machine.
X1425	Imager, Laser (1024 X 1024) (Din/PACS)	1	CF	Laser imager. An infrared laser beam is scanned across the film by a precision rotating polygon, while correcting optic focus and controlling the beam's intensity. The characteristics and components include an automatic film handling system and uses 10" X 14" IR film. It can be interfaced to additional imaging modalities with optional interface kit. For use with digital output imaging modalities.
X4112	Console, PACS, Remote View, 1k X 1k, 2 Monitors	1	CF	Two monitor remote viewing station for picture archiving and retrieval (PACS) system. This station is for use by providers inside or outside of radiology to review images. Station includes local image storage, image manipulation, and simultaneous display of multiple images on two 1024 x 1024 image display CRT's. Images are stored on a resident hard disk and roll off the disk as more recent images are sent to the station. Provider may request images from the PACS. Unit must be connected to the PACS by LAN for image and result receipt. This station is for use in areas like radiologist's offices and the E.R.. where a more comprehensive system is required. Console must be DICOM compliant. Input may be by keyboard, mouse, trackball or voice activated commands.

X9825	Components of Parent Item: : Nuclear Imaging System for PET/CT: Workstation with LCD Monitors, Injector Control and electronic station, and operator console and computer	1	CF	A system that combines the functionality of PET and SPECT with the anatomical landmarks of CT to perform Functional Anatomic Mapping.	
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3. SYSTEM COMPONENT ROOM (XMRC2)

JSN	NAME	QTY	ACQ / INS	DESCRIPTION	SPEC
A1010	Telecommunication Outlet	AR	CC	Telecommunication outlet location.	27 31 00
A1012	Telephone, Wall Mounted, 1 Line	1	CC	Telephone, wall mounted, 1 line.	27 31 00
F2000	Basket, Wastepaper, Round, Metal	1	VV	Round wastepaper basket, approximately 18" high X 16" diameter. This metal unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations.	
X9825	Components of Equipment for Nuclear Imaging System for PET/CT	1	CF	May include (depending on type of equipment):	
				Electronics	
				Step down transformer	
				Water Chiller	
				Generator	
				System component cabinets	
				Electronics cabinet	
				Computer room air conditioning	
				Floor duct, wall mounted horizontal raceway, Vertical raceway,	
				Electrical Power panel	

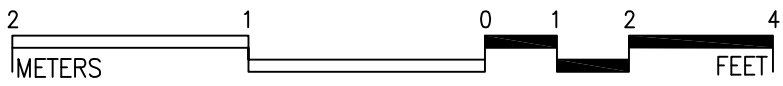
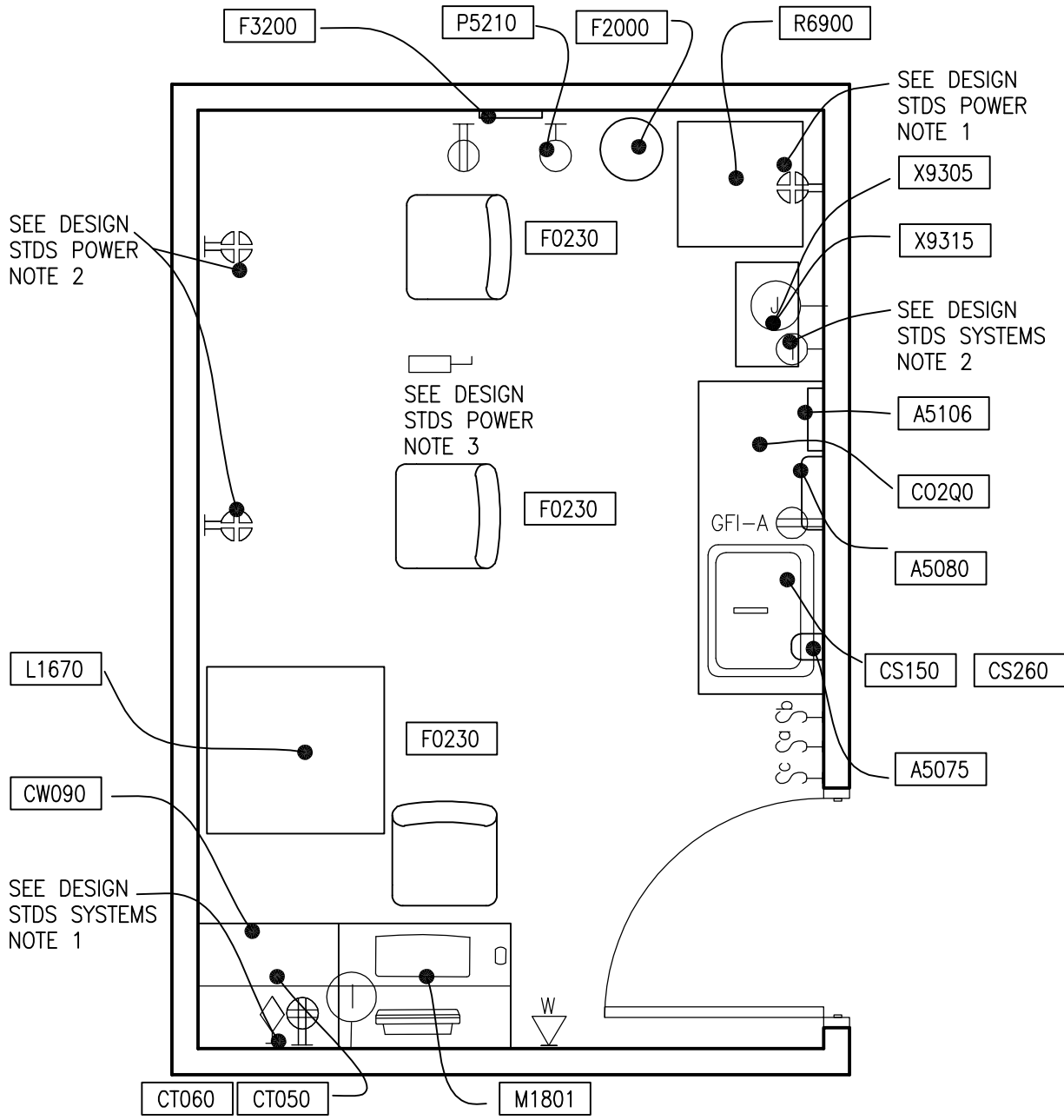


Radiopharmacy (NMRP1)

150 NSF

Floor Plan

14.0 NSM



3/8" = 1'-0"

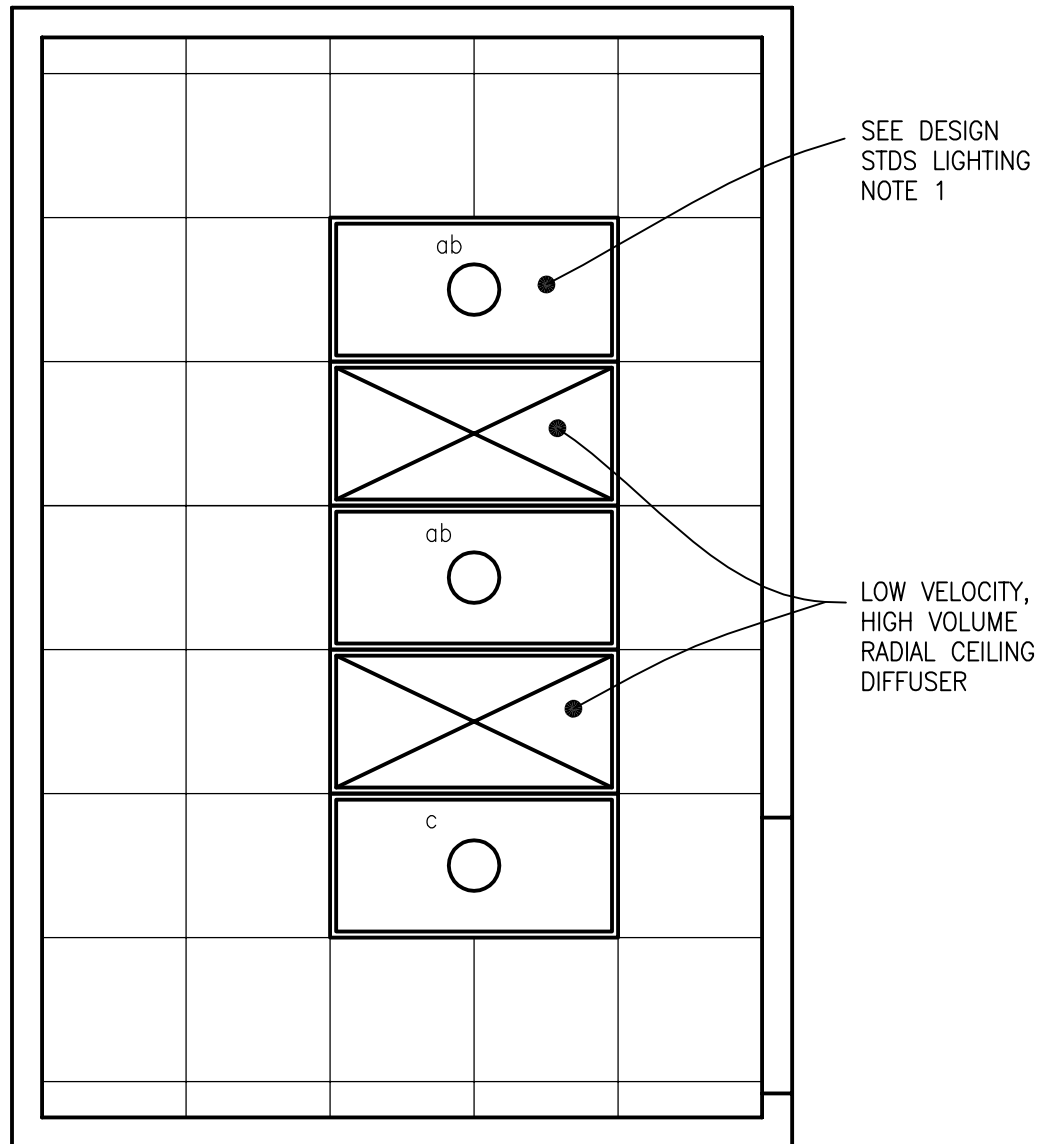
Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

Radiopharmacy (NMRP1)

150 NSF

Reflected Ceiling Plan

14.0 NSM



The locations and quantities of the air outlets and inlets are tentative and may not represent the optimum design solution(s) envisioned by the designer, who shall study the layout, calculate air volumes, and may alter the arrangement shown in the reflected ceiling plan, as required, to produce a project-specific air distribution system design.

Guide plates are graphical representations of selected room types, illustrating the integration of space, components, systems, and equipment. They provide typical configurations and general technical guidance, and are not intended to be project specific. Specific infrastructure design requirements are contained in VA Design Manuals and Space Planning Criteria located in the VA Technical Information Library.

RADIOPHARMACY (NMRP1): Design Standards

ARCHITECTURAL

Ceiling:	Acoustical Tile Ceiling
Ceiling Height:	8'-0"
Wall Finish:	Paint
Wainscot:	--
Base:	Integral Cove Base
Floor Finish:	Welded Seam Sheet
Sound Protection:	Yes

Notes:

1. Room shielding may be required depending upon the complexity of program.

LIGHTING

General: Fluorescent lights will provide illumination level up to 70 FC.

Special: Dual switching for multi-level illumination.

Notes:

1. 2'x4' fluorescent recessed luminaire, acrylic prismatic lens, with (4) F32T8 lamps, 3500-deg K, two ballasts.

POWER

General: The electrical power as shown is to be used as a guide only. Equipment locations, dimensions and wiring should be per the radiopharmacy equipment requirements.

Emergency: Emergency power for the equipment, controls, and selected receptacles as determined by the Hospital.

Notes:

1. Refrigerator outlet on emergency power
2. Bio-safety cabinet outlet on emergency power
3. Connection to exhaust fan on roof on emergency power

COMMUNICATION/SPECIAL SYSTEMS

ADP:	Yes
Data:	Yes
Telephone:	Yes

Intercom:	Yes
Nurse Call:	--
Public Address:	--
Radio/Entertainment:	--
MATV:	--
CCTV:	--
MID:	--
Security/Duress:	Yes
VTEL:	--
VA Satellite TV:	--

Notes:

1. 4-port telecommunication outlet for PACS station
2. Junction box for safe security monitoring device connection.

HEATING, VENTILATING AND AIR CONDITIONING

Inside Design Conditions:
70°F to 75°F (21°C to 24°C)
30% to 60% Relative Humidity

Minimum Air Changes per Hour:
-Supply Air
As required to meet hood exhaust

100% Exhaust:	Yes
100% Outside Air:	No
Room Air Balance:	Negative
Dedicated Exhaust System:	Yes
Occupancy:	3
AC Load – Equipment:	3,000 Btuh – 6,500 Btuh (900 W – 1,800 W)
AC Load Lighting:	1.2 W/SF (12 W/M ²)

Notes:

1. Verify cooling loads and other specific requirements with the equipment manufacturer on a specific project.
2. Provide dedicated fume hood exhaust system (Type H3 or H7 hood, refer to VA HVAC Design Manual)

PLUMBING AND MEDICAL GASES

Cold Water:	Yes
Hot Water:	Yes
Laboratory Air:	Yes
Laboratory Vacuum:	Yes



Sanitary Drain: Yes
Reagent grade Water: Verify with the Medical Center
Medical Air: --
Medical Vacuum: --
Oxygen: --

Notes:

1. Provide natural gas if fume hood will be used.
2. Sanitary waste and vent piping from radiopharmacy shall be chemical resistant type, as appropriate.
3. Eyewash equipment shall comply with ANSI Z358.1. Provide tepid water to the unit.

RADIOPHARMACY (NMRP1): Equipment Guide List

JSN	NAME	QTY	ACQ / INS	DESCRIPTION	SPEC
A1010	Telecommunication Outlet	1	CC	Telecommunication outlet location.	27 31 00
A1012	Telephone, Wall Mounted, 1 Line	1	CC	Telephone, wall mounted, 1 line.	27 31 00
A5075	Dispenser, Soap, Disposable	1	VV	Disposable soap dispenser. One-handed dispensing operation. Designed to accommodate disposable soap cartridge and valve.	
A5080	Dispenser, Paper Towel, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, single-fold, paper towel dispenser. Dispenser features: tumbler lock; front hinged at bottom; and refill indicator slot. Minimum capacity 400 single-fold paper towels. For general purpose use throughout the facility.	10 28 00
A5106	Waste Disposal Unit, Sharps w/Glove Dispenser	1	VV	The unit is designed for the disposal of sharps and complies with OSHA guidelines for the handling of sharps. It shall house a 5 quart container and be capable of being mounted on a wall. It shall have a glove dispenser attached. The unit shall be secured by a locked enclosure.	
A5145	Hook, Garment, Double, SS, Surface Mounted	1	CC	A surface mounted, satin finish stainless steel, double garment hook. Equipped with a concealed mounting bracket that is secured to a concealed wall plate. For general purpose use throughout the facility to hang various items of apparel.	10 28 00
C0036	Rail, Apron, 4x30x1	4	CC	Apron rail. Also referred to as an apron front, apron panel, or knee space rail. Used to close in front knee space area and/or provide work surface support between two base cabinets or a base cabinet and wall. Apron rails should be ordered in pairs to provide both front and rear work surface support.	12 32 00
C0039	Rail, Apron, 4x48x1	2	CC	Apron rail. Also referred to as an apron front, apron panel, or knee space rail. Used to close in front knee space area and/or provide work surface support between two base cabinets or a base cabinet and wall. Apron rails should be ordered in pairs to provide both front and rear work surface support.	12 32 00

C0041	Rail, Apron, 4x60x1	4	CC	Apron rail. Also referred to as an apron front, apron panel, or knee space rail. Used to close in front knee space area and/or provide work surface support between two base cabinets or a base cabinet and wall. Apron rails should be ordered in pairs to provide both front and rear work surface support.	12 32 00
C02Q0	Cabinet, Sink, U/C/B, 1 Door, 36x24x22	1	CC	Standing height under counter base sink cabinet with a solid right or left-hinged door (appropriate door configuration to be indicated on equipment elevation drawings). Also referred to as a single-door sink cabinet. For general purpose use throughout the facility where a sink is to be used. Coordinate actual clear cabinet dimension with the actual outside dimension of sink that is specified to ensure that they are compatible.	12 32 00
CS260	Sink, Epoxy Resin, 10x25x15 ID (Note: may use corrosion resistant stainless steel if user desires)	1	CC	One-piece cast epoxy resin sink (composition of molded epoxy resins and inert materials) connected with a drain and provided with a mixing faucet. For use in suspended or U/C/B sink cabinets and mounted under the epoxy resin countertops/work surfaces found in lab areas requiring optimum physical chemical resisting properties. For general purpose use in a lab area.	22 40 00
	OR				
CS150	Sink, SS, Single Compartment, 10x19x16 ID	1	CC	Single compartment stainless steel sink, drop-in, self-rimming, ledge-type, connected with a drain and provided with a mixing faucet. It shall also be provided with pre-punched fixture holes on 4" center, integral back ledge to accommodate deck-mounted fixtures, brushed/polished interior and top surfaces, and sound deadened. Recommended for use in suspended or U/C/B sink cabinets having a high plastic laminate or Chemsurf laminate countertop/work surface. Coordinate actual outside sink dimensions with the actual clear dimension of cabinet specified to ensure that they are compatible. For general purpose use throughout the facility.	22 40 00



CT060	Countertop, Modified Epoxy Resin (Note: may use corrosion resistant stainless steel if user desires)	1	CC	Modified epoxy resin countertop (composition of molded epoxy resins and inert materials) having a low sheen surface finish, standard thickness of 1", and a 4" butt backsplash/curb. Also referred to as a work surface or work top. Available in a choice of colors and depths. Used in lab areas requiring optimum physical and chemical resisting properties.	12 36 00
	OR				
CT050	Countertop, Stainless Steel	1	CC	Stainless steel countertop (composition of heavy-gauge Type No. 304 stainless steel) having a smooth satin finish and integral 4" backsplash/curb. Also referred to as a corrosion-resistant steel work surface or work top. Available in various depths. Used in areas where excellent ease of cleaning, abrasion resistance, bacteria resistance, impact resistance, load capacity and moisture resistance, are of concern. Pricing based upon a 24" depth.	12 36 00
CW090	Cabinet, Floor Standing, 5 SH, 2 GDO, ST, 95"x36"	2	CC	Floor standing storage cabinet approximately 95" H x 36" W x 16" D with five adjustable shelves, framed glass hinged doors, and sloping top. Also referred to as a framed glass hinged double door case. For general purpose use throughout the facility.	12 32 00
F0230	Chair, Drafting, Rotary	3	VV	Drafting chair approximately 47" high X 20" wide X 20" deep with rotary stool and a 5 (five) star base with casters. Padded seat and back. Foot ring adjusts with chair.	
F0340	Stool, Self Adjusting	1	VV	Self adjusting stool. Consists of a foam padded upholstered seat with attached foot rest for added comfort. Mounted on swivel casters. Designed for doctor's use during examinations.	
F2000	Basket, Wastepaper, Round, Metal	1	VV	Round wastepaper basket, approximately 18" high X 16" diameter. This metal unit is used to collect and temporarily store small quantities of paper refuse in patient rooms, administrative areas and nursing stations.	
F3200	Clock, Battery, 12" Diameter	1	VV	Clock, 12" diameter. Round surface, easy to read numbers with sweep second hand. Wall mounted unit for use when impractical to install a fully synchronized clock system. Battery operated, (batteries not included).	



L1670	Centrifuge, Refrigerated, Floor Model	1	VV	Refrigerated centrifuge. This is a floor standing unit with a solid state speed control system that has speeds ranging from 150 to 6000 RPM. Other characteristics include a temperature range of -9 to +39 degrees C., dual range digital timer, rotor imbalance detection, a programmable memory and a dynamic brake with three deceleration rates. The unit also has a refrigeration system that consists of a low maintenance compressor and a coil wrapped insulated guard bowl. Used in laboratories for processing heat sensitive samples.	
M1801	Computer, Microprocessing, w/Flat Panel Monitor	1	VV	Desk top microprocessing computer. The unit shall consist of a central processing mini tower, flat panel monitor, keyboard, mouse and speakers. The system shall have the following minimum characteristics: a 2.8 GHz Pentium processor; 512 MB memory; 80GB hard drive; 32/48x CD-ROM/DVD combo; a 3.5" floppy drive; 1.44MB network interface card; video 32 MB NVIDIA; a 15 inch flat panel color monitor. The computer is used throughout the facility to input, manipulate and retrieve information.	
P2450	Valve, Mixing, Thermostatic	1	CC	Thermostatic mixing valve with washout hose. Used with portable whirlpool equipment. Thermostatic valve is used to maintain temperature between 70 and 110 degree Fahrenheit, with a flow rate of 20 gallons a minute. The washout hose assembly used to wash out tanks after treatment. Used in physical therapy department to provide comfortable water temperature for patient treatments.	22 40 00
P5210	Shower, Safety, Freestanding, With Eye/Face Wash	1	CC	Deluge safety shower. This is a complete, maximum protection safety station consisting of a free-standing emergency shower and an eye/face wash fixture. Used anywhere exposure to hazardous substances may occur.	22 40 00



R6900	Refrigerator, Bio, Radio/Pharm, Approx. 5 CuFt	1	VV	Radiopharmaceutical and biological refrigerator with key-lock door. This unit is lead-lined with 1/8 inch lead on all sides for radiopharmaceuticals, biologicals and other radioactive materials. Freezer compartment and refrigerator eliminates thermal lag placement of cooling units inside the shielding. This unit is used as a storage unit in hospitals and laboratories that handle radioactive materials.
X9305	Cabinet, Storage, Lead Lined	1	VV	Lead lined storage cabinet. This unit is constructed of rigid steel walls with a 1/16" lead liner between each wall. The lead liner is formed into the cover so that when closed, positive x-ray protection is assured. Designed to hold cassettes up to the 14" X 17" size. This unit is used in nuclear medicine and radioisotope lab.
	or use the following at the users preference			
X9315	Safe, Storage, Radium	1	VV	Radium storage safe. The unit assures optimum shielding against exposure to radioisotopes . It is made of steel (CRS) with lead lining, has a door key-lock and is fire-proof.