

6 February 2024

FUNCTIONAL PROGRAM HRW
NUCLEAR MED CAMERA OSHPD
Project #SXXXXXX-XX-XX

PROJECT SCOPE:

The scope of this project is limited to the following work:

Installation of a Nuclear Medicine camera for PET Imaging, including electrical connections and minor modifications of existing casework and finishes. The equipment is being installed in a room constructed specifically for use as a Nuclear Medicine room within the "Hospital Replacement Wing" ("HRW"), OSHPD project M-XXXX-XX-XX. The installation of a Nuc Med camera in the room has been deferred from the HRW's 2019 project completion until now.

SUPPORT SPACES:

The Nuclear Medicine room will utilize the existing support spaces originally intended to serve it, including the designated Hot Lab, which are located within the Radiology Service area of the HRW.

UTILITIES:

A new branch circuit will be required to serve the Nuc Med camera at its required voltage; there is sufficient capacity in the existing electrical system to support this load. The existing HVAC system has sufficient capacity to maintain the required air changes and negative pressurization, as well as the temperature and humidity levels preferred by the facility.

LIST OF PROCEDURES:

following pages

EQUIPMENT FLOOR PLAN

See last page for the Equipment Floor Plan

Subject: FW: Follow-up: [Facility]

Renal scan, Adrenal scans, Renal Captopril scan, Renal Tubular Function scan
Brain scan, brain death scan
Bone scan, BONE DENSITY, BONE MARROW SCAN, METS SCAN, 3PHASE BONE SCAN
Gallium scan
Gastrointestinal bleed scan
Gastric emptying,
Cardiac: MUGU, MYOCARDIAL INFARCT SCAN, GATED FIRST PASS PERFUSION VIABILITY SCAN.
Lung scan
Liver/spleen scan
Meckels scan
Thyroid uptake, thyroid ablation 131 iodine scan
shunt scan
Testicular scan
Hepatobiliary scan
Breast scans
HIDA scan
Parathyroid scan
Salivary gland scan

2010 versus 2022 Code Analysis: [Facility]

Requirement	2010 CBC Section	2022 CBC Section	Difference Between Code Editions	Code Compliance documented
Radiation protection	1224.34.1.1	1224.34.1.1.	2022 requires Physicist to address dosing areas and circulation paths	Physicist's Report & Update letter; see sheet A2.4 for existing 4# shielding noted
Room Size & Handwash Fixture	1224.34.1.2		Handwash fixture required only in Nuc Med Room	
SPECT Room Size		1224.34.1.2.3.1	4' Clearance at sides and foot; additional space req'd for CT	Sheet A2.4, note 7
SPECT Control Room		1224.34.1.2.3.2	Control Room Required	Sheet A2.3, Room 212.1
Imaging Equipment Room		1224.34.1.2.3.3	Equipment Room Required	N/A The proposed camera has all equipment self-contained in the room; see sheet A2.4
Handwashing fixtures		1224.34.1.2.3.3	Handwash fixtures required in patient rooms and are here radiopharmaceuticals are handled, prepared and disposed	Sheet A2.3; handwash fixture not currently provided in the Dosing Room
Radiopharmacy	1224.34.1.3	1224.34.1.3	No Difference	See Sheet A2.1, A2.2 Room G214, 214.1.
Nuc Med Department	1224.34.2	122	Minor text changes to clarify requirements when Nuc Med is within the Imaging Dept.	See Sheet A2.1, A2.2 for Nuc Med spaces within Imaging Department
Entrance	1224.34.2.1	1224.34.2	No Difference	See Sheet A2.1, A2.2
Cleanup	1224.34.2.2	1224.34.2.2	Minor text change: "convenient access" changed to "readily accessible."	See Sheet A2.1, A2.2 Room G252
Consultation	1224.34.2.3	1224.34.2.3	No Difference	N/A
Waiting	1224.34.2.4	1224.34.2.4	No Difference	See Sheet A2.1, A2.2 Room G116
Dose Administration Area	1224.34.2.5	1224.34.2.5	Minor text change: "locate near" changed to "immediately accessible."	See Sheet A2.1, A2.2 Room G253, G254
Hold Area	1224.34.2.6	1224.34.2.6	Title of area clarified; no difference in requirements	See Sheet A2.1, A2.2 Room G253, G254
Patient Dressing Area	1224.34.2.7	1224.34.2.7	Minor text change: "locate near" changed to "immediately accessible."	See Sheet A2.1, A2.2 Room G210, G211
Patient Toilet Room	1224.34.2.8	1224.34.2.8	Minor text change: "located convenient" changed to "immediately accessible."	See Sheet A2.1, A2.2 Room G255
Staff Toilet Room	1224.34.2.9	1224.34.2.9	Minor text change: "located convenient" changed to "readily accessible."	See Sheet A2.1, A2.2 Room G259
Handwashing Stations	1224.34.2.10	1224.34.2.10	Minor text change: "fixtures" changed to "stations."	See Sheet A2.3

Control Desk & Reception	1224.34.2.11	1224.34.2.11	No Difference	See Sheet A2.1, A2.2 Room G115
Storage Area for Clean Linen	1224.34.2.12	1224.34.2.12	No Difference	See Sheet A2.1, A2.2 Room G251
Soiled & Contaminated Material	1224.34.2.13	1224.34.2.13	Minor text change: "fixtures" changed to "stations."	See Sheet A2.1, A2.2 Room G252
Hot Lab		1224.34.2.14	Securable area required with shielding and dose & storage areas	See Sheet A2.1, A2.2 Room G214, 214.1.
Ventilation	2010 CMC Table 4-A	2022 CMC Table 4-A	No Difference in Negative Pressure or Changes; 70-75 Temperature critical area now required	Functional Program
Plumbing Fixtures	2010 CPC Table 4-2	2022 CPC Table 4-2	No Difference	See Sheet A

SAMPLE



Therapy Physics, Inc.

Diagnostic Radiology Physics Services
Radiation Protection Shielding Design
Radiation Oncology Physics Services
www.therapyphysics.com

Radiation Shielding Design Review

Date: February 2nd, 2024

Site:

Project: Nuclear Medicine Room G213 New SPECT Camera – Siemens Symbia EVO

Dear [REDACTED]

The proposed shielding plans for Nuclear Medicine Rooms G212 and G213, dated August 2013, were reviewed and the lead specifications outlined in the plans will provide sufficient radiation protection for the currently proposed project: Siemens Symbia EVO SPECT system to be installed in Room G213.

Please note that both rooms, G212 and G213, have already been constructed with the lead shielding installed within the walls, doors, windows, etc.

Also note that at the time of the SPECT equipment installation a radiation safety survey will be performed to ensure that the lead shielding within the walls has been installed properly and will provide sufficient radiation protection to adjacent occupied areas.

If you have any further questions regarding this matter, please contact me at [REDACTED]

Enclosed:

- 1) Radiation Protection Shielding Design - [REDACTED]
Replacement Wing – Room G212 and G213.