New Britain General
An affiliate of Central Connecticut Health Alliance, Inc.

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Laurence A. Tanner
President

March 20, 2002

Ms. Michelle Beardsley
USNRC Region I
475 Allendale Road
King of Prussia, PA 19406

Dear Ms. Beardsley:

In response to your letter of March 6, 2002 (Mail Control No. 130960), we can provide additional information as follows:

1. Diagrams of areas of use are attached. We regret if these were inadvertently not included in our application.

2. Please allow us to possess up to15 GBq of materials listed in Part 35.300.

3. Procedures for use of blood irradiator have been revised since September 30, 1993. A summary of the revisions is attached.

4. We will establish and implement the model procedure for keeping an inventory of implant sources that was published in Appendix M.4 to Regulatory Guide 10.8, Revision 2.

5. Regarding the use of xenon-133 gas for lung imaging, we will collect spent xenon-133 in a shielded container and will establish and implement the model procedure for checking trap effluent that was published in Appendix O.3 to Regulatory Guide 10.8, Revision 2. We will calculate spilled gas clearance times according to the procedure that was published in Appendix O.4 to Regulatory Guide 10.8, Revision 2.

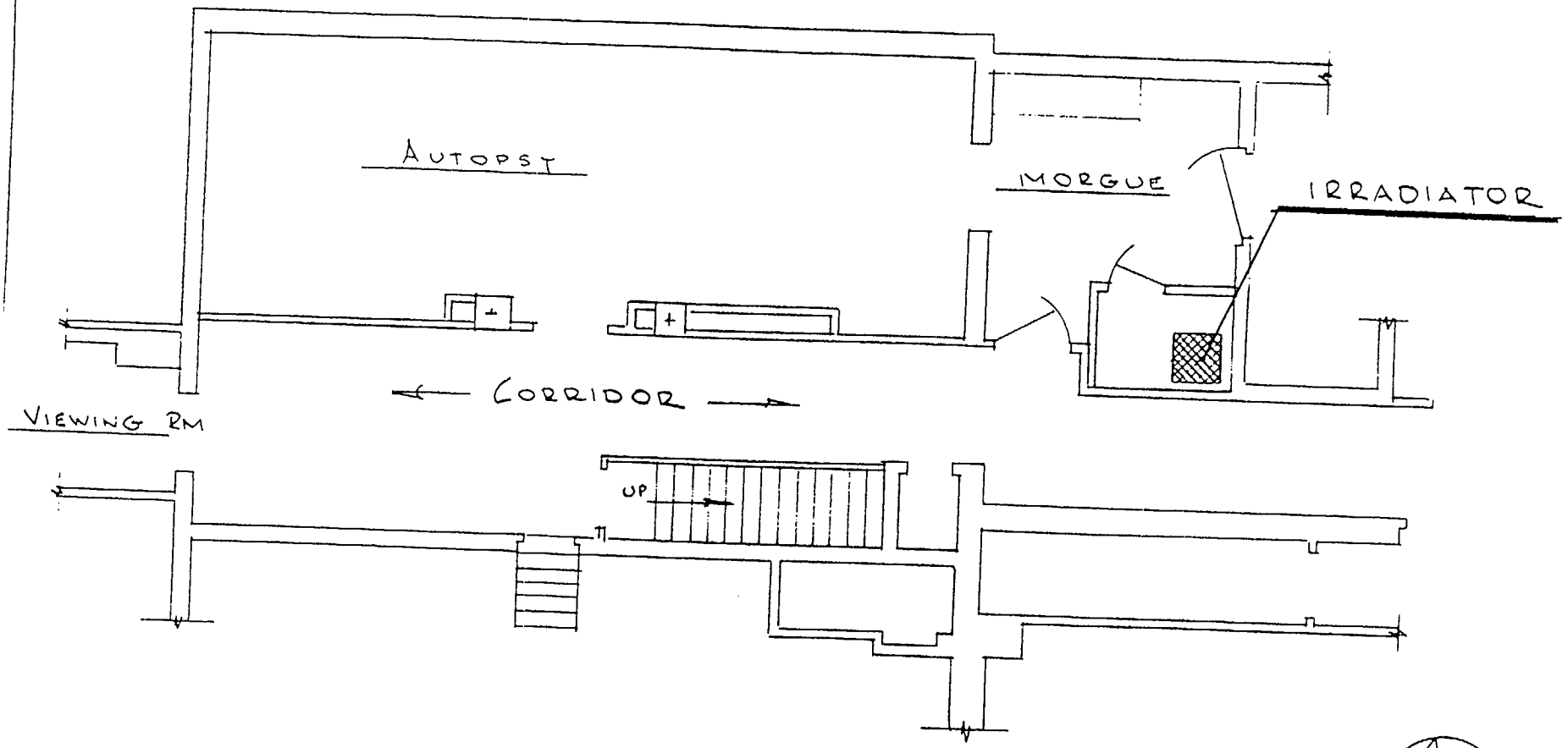
Please contact us if you require additional information.

Sincerely,

Clarence Silvia
Senior Vice President, Operations

/js

Attachments

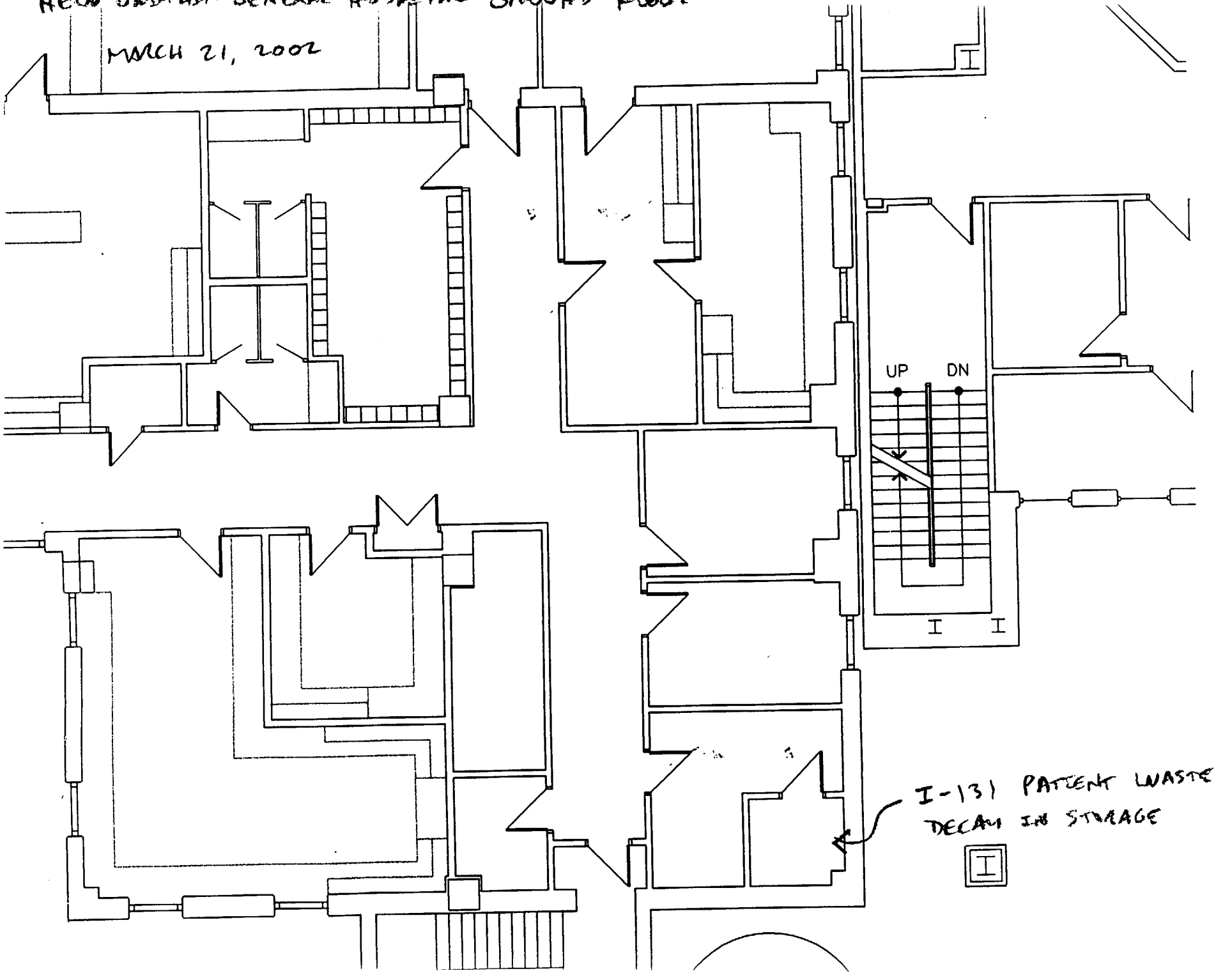


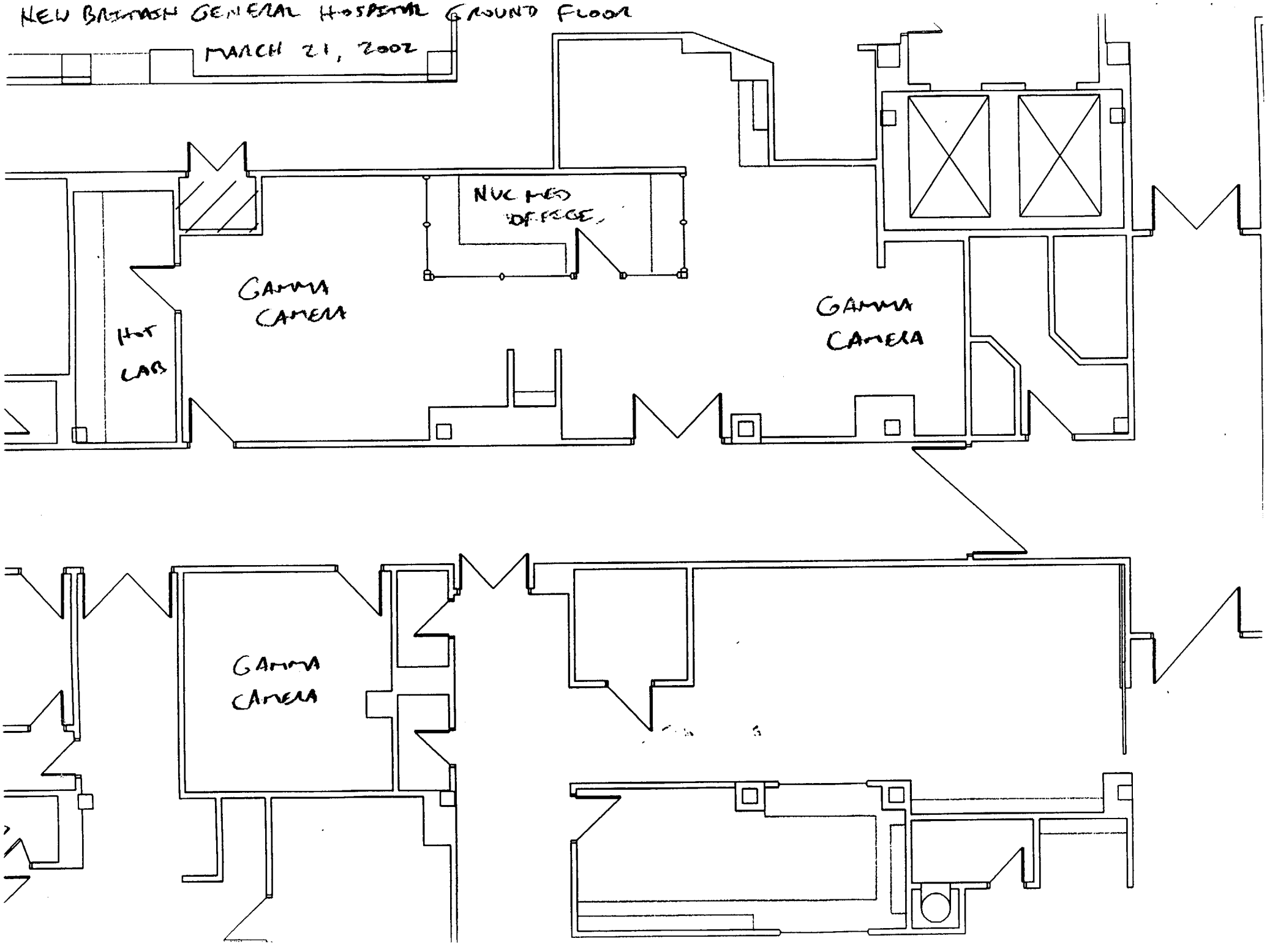
IRRADIATOR RM

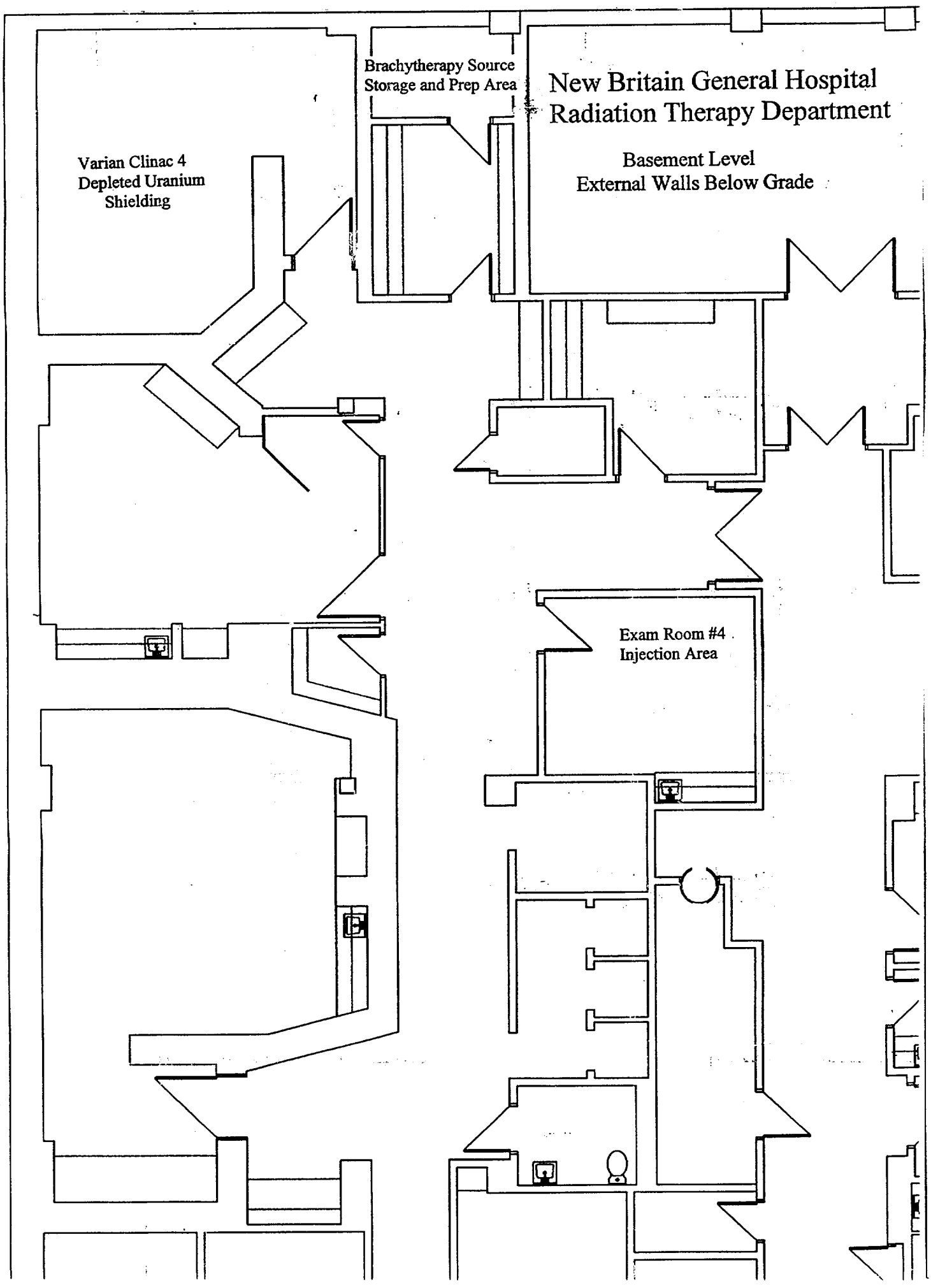
NORTH BLDG - BASEMENT

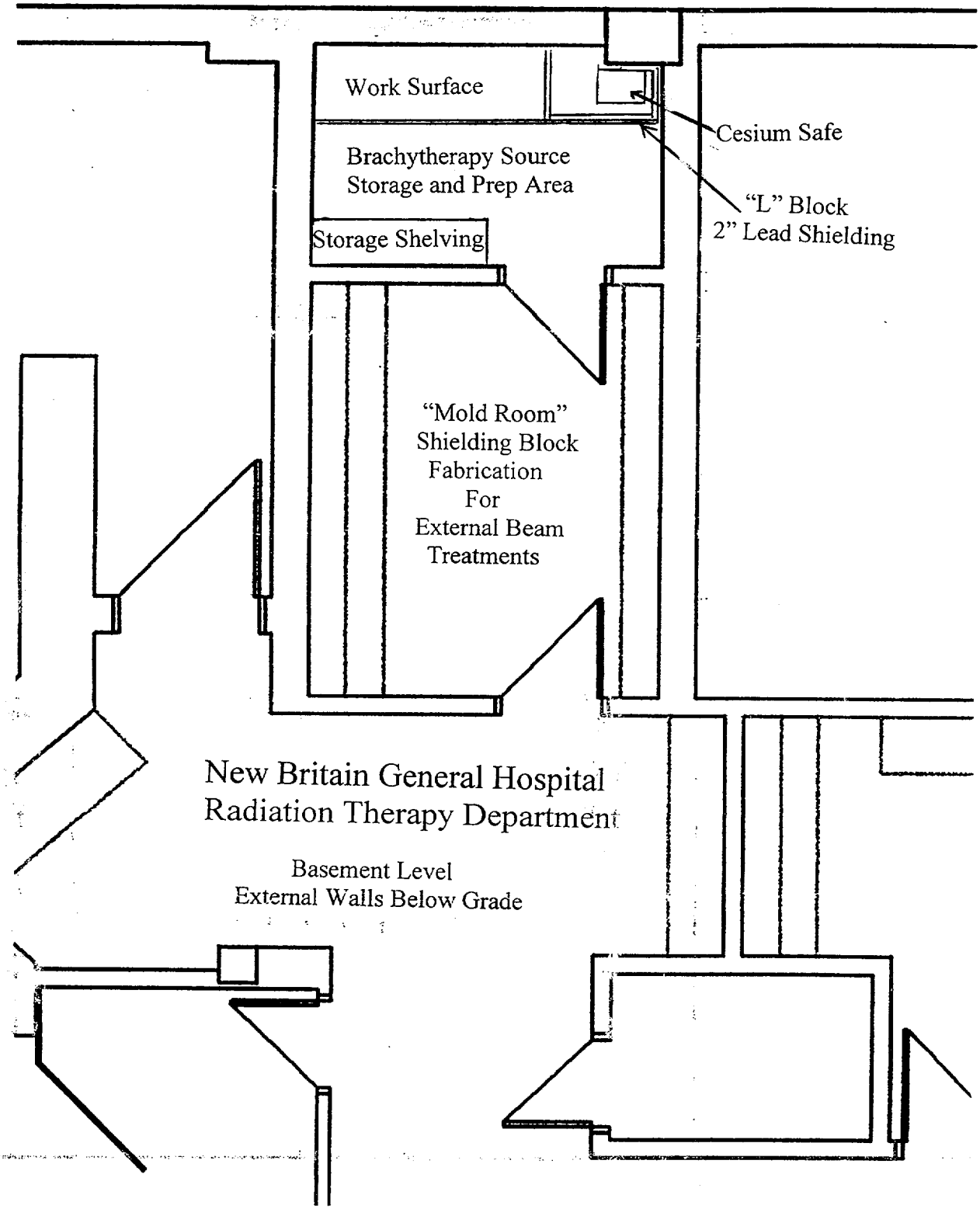
SCALE: 1/8" = 1'-0"

DATE: 10-21-93


NEW BRITAIN GENERAL HOSPITAL GROUND FLOOR
MARCH 21, 2002
UP
DN
I
I
I
I-131 PATIENT WASTE
DECAY IN STORAGE
I


NEW BRUNSWICK GENERAL HOSPITAL GROUND FLOOR
MARCH 21, 2002
NUC MED OFFICE
GAMMA CAMERA
HOT LAB
GAMMA CAMERA
GAMMA CAMERA


Brachytherapy Source
Storage and Prep Area
New Britain General Hospital
Radiation Therapy Department
Basement Level
External Walls Below Grade
Varian Clinac 4
Depleted Uranium
Shielding
Exam Room #4
Injection Area


Work Surface
Cesium Safe
Brachytherapy Source
Storage and Prep Area
"L" Block
2" Lead Shielding
Storage Shelving
"Mold Room"
Shielding Block
Fabrication
For
External Beam
Treatments
New Britain General Hospital
Radiation Therapy Department
Basement Level
External Walls Below Grade

BLOOD IRRADIATOR (revised 3/02)

Nordion Gammacell 1000 Elite Model A
Source: Cs-137 initial activity 720 Ci, Model C-1001
Used for sterilization of blood and blood products.

Radiation Safety Officer:
Stuart R. Korchin, P.E., DABR

Annual training:
Users are trained before beginning duties, and receive annual training in radiation safety by video or lecture.

Security:
Per drawing submitted, in the basement of the hospital. Keys are held by blood bank supervisor and security. The irradiator room is equipped with fire detection and suppression (water sprinkler).

Safety:
The irradiator has a single stationary sealed source. The source is lead shielded at all times and human access to the source or the irradiation chamber is not physically possible in the design configuration. The area around the irradiator is an unrestricted area since radiation at 5 cm from the surface does not exceed 0.5 mR/hr, and is less than 0.1 mR/hr at 1 meter. Survey meters used are calibrated annually by an accredited calibration facility. Leak testing is done at six month intervals under the supervision of the radiation safety officer. Written procedures are provided for all users, including step-by-step operating procedures, blood product set-up, table of monthly calculated irradiation times, and emergency actions.

Decommissioning:
Should the Cs-137 source become unusable, the source will be transferred back to Nordion.