

RADIATION THERAPY ASSOCIATES, P.C.
25250 East River Road
Grosse Ile, MI 48138
rlutsic@comcast.net
734-748-1876

November 29, 2017

Daniel Strohmeier, CHP
Health Physicist – Reviewer
Materials Licensing Branch
U.S. NRC, Region III
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352

Re: License No. 21-26536-01
Control No. 601548

Dear Mr. Strohmeier:

This letter concerns your email of Nov. 28, 2017.

1. Two drawings are included which delineate the areas in which surveys were conducted in support of our license termination request and NRC Form 314 documentation. These are in the brachytherapy and simulator rooms and include all locations of use and storage of radioactive materials. Lower case letters (a- l) are used to denote locations of exposure rate measurements. Numbers (1-28) are used to denote locations of wipe tests.
2. The survey data is included.
3. The proof of receipt of the Ir-192 seed shipment by Best Medical International, Inc. is included.
4. Regarding the exposure rate measurements of the Ir-192 shipping container, we do not know why they are in excess of background level even though the Ir-192 has fully decayed. We note the following:
 - a. No other radioactive materials have been added to the storage area since this shipping container was placed there. Contamination by other radioactive materials is not possible.

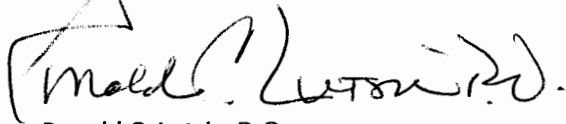
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b. We have spoken to the Best Medical health physicist and were informed that the stainless steel encapsulation of the Ir-192 seeds contains sub-microcurie amounts of Co-60 which is produced during the Ir-192 seed production process involving neutron irradiation. This level of activity was estimated to result in exposure rates of up to 0.02 mR/hr at the container surface and 0.0003 mR/hr at 1 meter. Apparently, this has been discussed with the NRC previously.

c. The brachytherapy room (labelled as "HDR 017" on the included floor plan) shares a primary barrier wall in common with the linear accelerator. We calculate that the instantaneous exposure rate at the center of the brachytherapy room could be as high as 2.9 mR/hr under some linac operating conditions. Depending on the relative timing of treatments and the container measurements, the results may have been affected.

Please let me know if additional information is required.

Sincerely,

A handwritten signature in black ink, appearing to read "Ronald C. Lutsic".

Ronald C. Lutsic, D.O.
Radiation Oncologist
President

ROSS BORTING, M.S.
MEDICAL PHYSICIST
248-705-8366

SURVEY DATA

Radiation Therapy Associates, P.C.

NRC Form 314 Documentation for License No. 21-26536-012

Nov. 29, 2017

Instrument used: Ludlum 14C, Serial No. 113073, calibrated 04/05/17.
Check source 1.2 mR/hr. – as expected from calibration
Background: 0.01 mR/hr. and 10 CPM

Points with lower case letters (a – l) denote points of exposure rate measurements with results given in mR/hr. The location of each point is general in that the entire associated area was surveyed and the maximum measured exposure rate was recorded.

Points with numeric values (1-28) denote wipe test locations with results in CPM. For objects with smaller areas, the entire surface was wiped with a large alcohol swab. For larger areas, the wipes were made selectively and include approximately one square foot surface areas each. These were taken in areas most frequently used for radioactive material handling and administration.

It should be noted that for many years the only radioactive material received and administered at this facility has been iodine-131 in capsular form. There have been no contamination events with these administrations as has been demonstrated with surveys performed after each administration procedure. Hence, negative survey results are expected.

Brachytherapy Room

Location	Exposure rate (mR/hr)	Wipe test (CPM)
Storage cabinet (below counter)	(a) 0.01	(1) 10
		(2) 10
		(3) 10
Sink	(b) 0.01	(4) 10
Fixtures	(c) 0.01	(5) 10
Dose calibrator	(d) 0.01	(6) 10
Counter top	(e) 0.01	(7) 10
		(8) 10
		(9) 10
Floor	(f) 0.01	(10) 10
		(11) 10
		(12) 10
		(13) 10
		(14) 10

Simulator Room

Sink	(g) 0.01	(15) 10
Fixtures	(h) 0.01	(16) 10
Patient's chair	(i) 0.01	(17) 10

Counter top	(j)	0.01	(18)	10
			(19)	10
			(20)	10
Simulator table	(k)	0.01	(21)	10
			(22)	10
			(23)	10
Floor	(l)	0.01	(24)	10
			(25)	10
			(26)	10
			(27)	10
			(28)	10

In conclusion, the background exposure rate results demonstrate that no radioactive materials are present in the facility. The background wipe test results demonstrate that there is no removable radioactive contamination in this facility.



Best Medical International, Inc.

To: Hospital Name: Radiation Therapy Associates, P.C.
Address: 6255 N. Inkster Road
Suite 7
Garden City, MI 48135

ACKNOWLEDGEMENT

This acknowledges the receipt of Ir-192 radioactive shipment
from you on: September 25, 2017

The shipment was made by you on: September 18, 2017
with Airbill #: 8017 0234 1226

Your documentation indicated the shipment contained:

RADIOACTIVE MATERIAL: IRIIDIUM 192 SEEDS IN NYLON RIBBONS

Total Activity: 5.16×10^{-21} mCi as of 9/18/17
Total # of Seeds: 32

These quantities will be reported in our consolidated radioactive waste
disposal documentation.

* You may be required to keep this acknowledgement for possible
review by your regulatory agency.


Dr. Ramesh Yalamanchili

643 Fullerton Road
Springfield, VA 22153



703-451-2378
800-336-4970

FAX: 703-451-5228
FAX: 703-451-4977

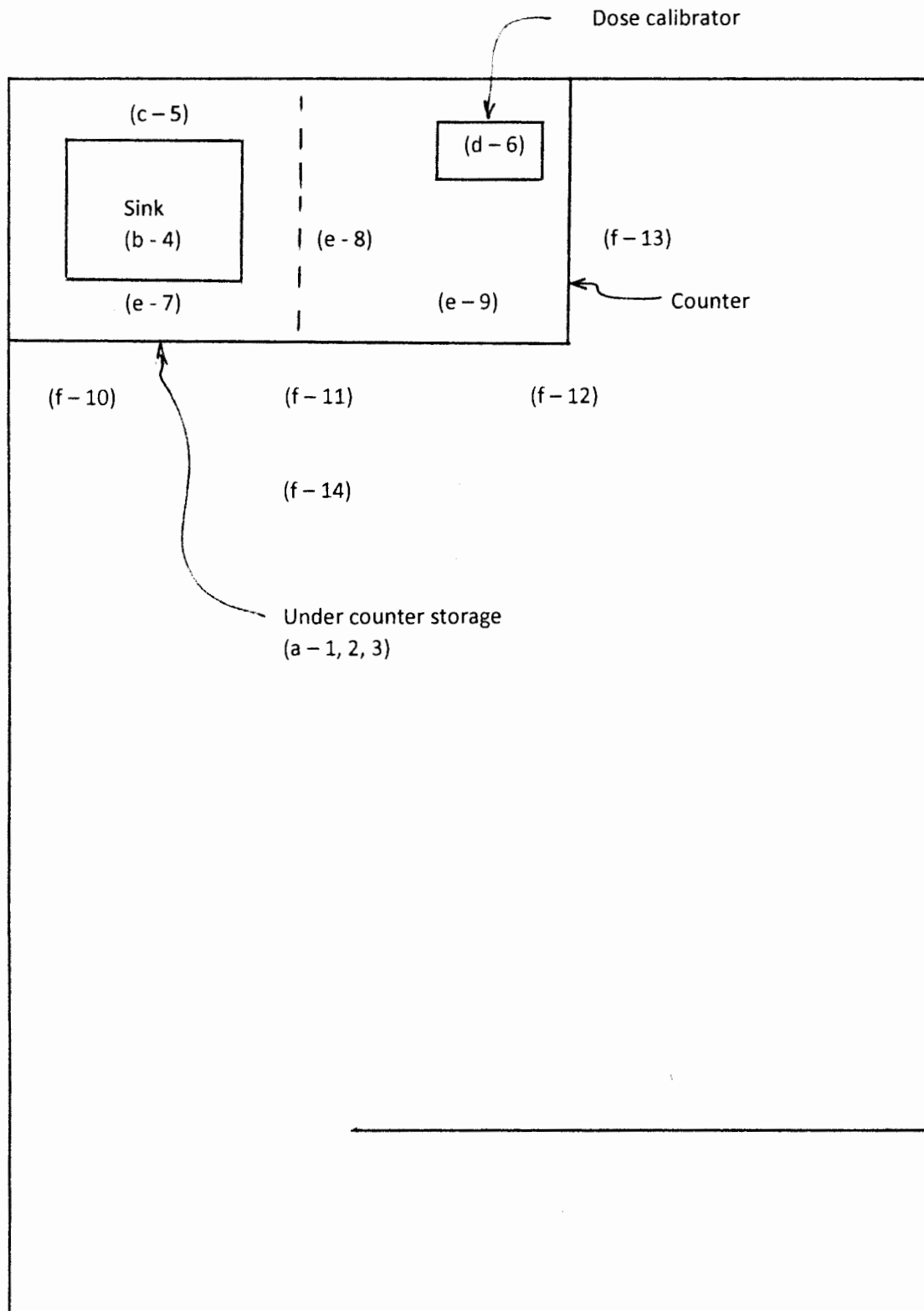
www.bestmedical.com

Effective Date: 5/6/04

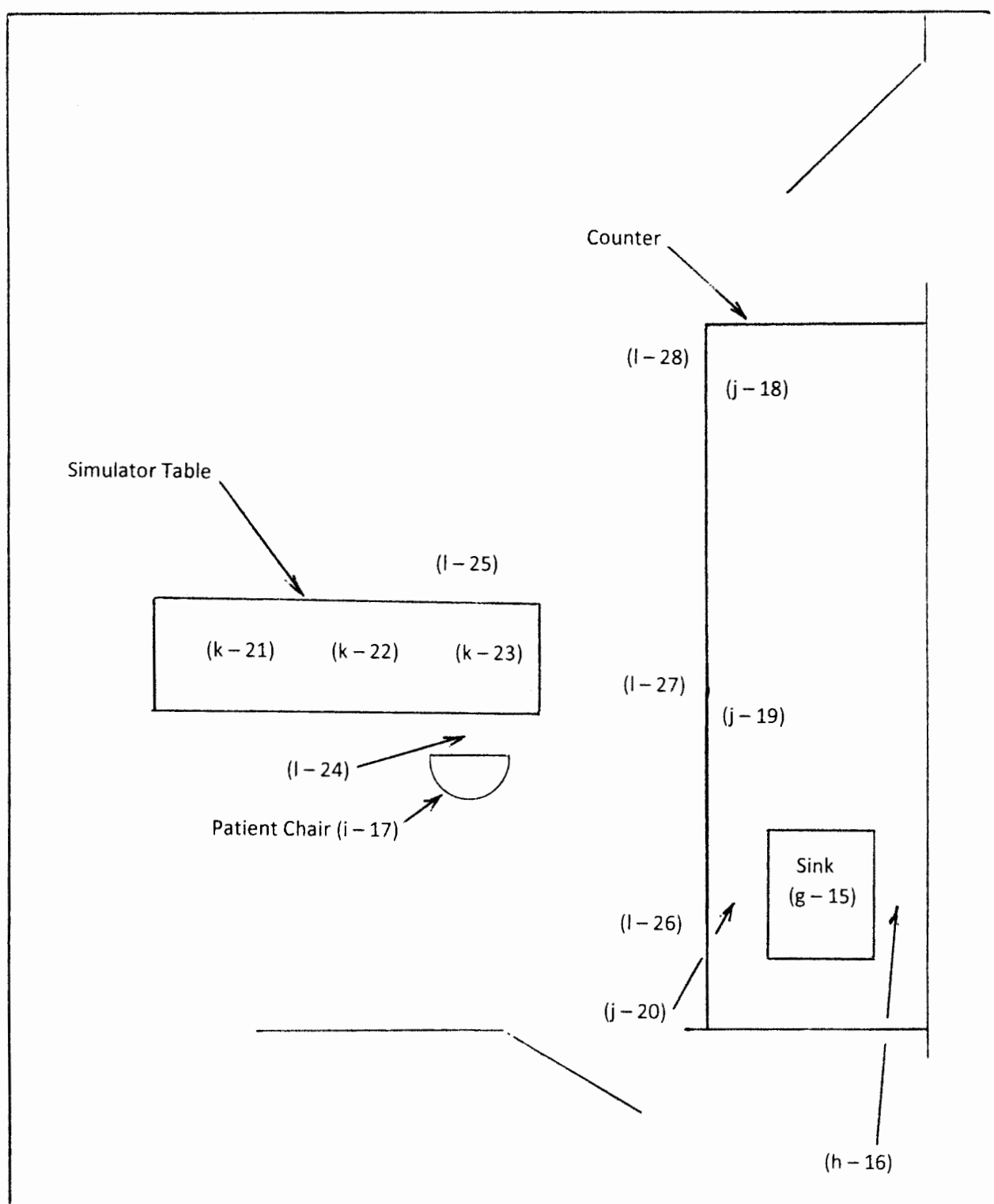
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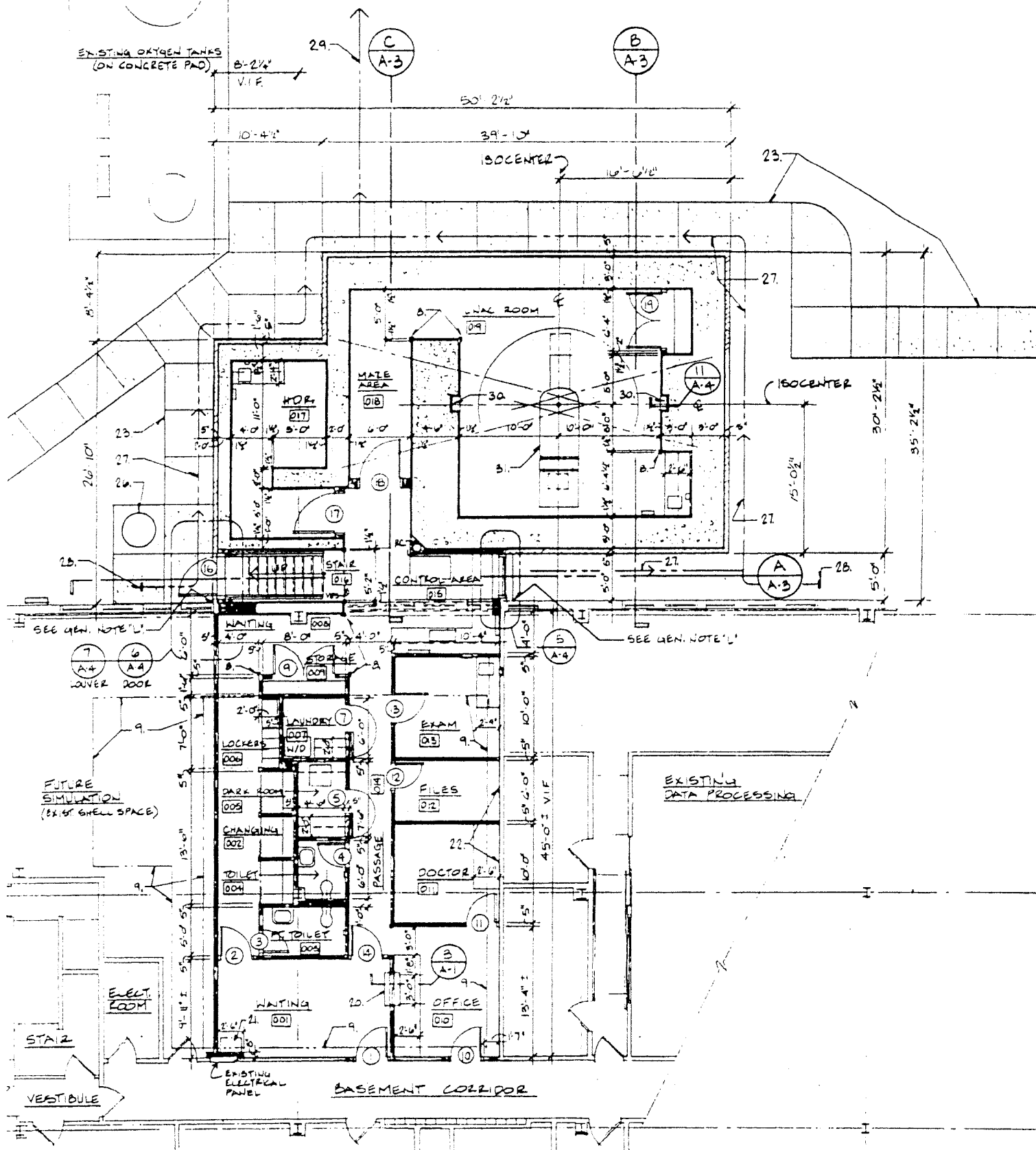
Brachytherapy Room

(not to scale)



Simulator Room
(not to scale)





NORTH



PARTIAL BASEMENT FLOOR PLAN

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

R.C. LUTSIL DO.
25250 EAST RIVER
GROSSE ILE, MI.
48138

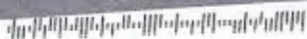


7017 0530 0000 4973 2639

CPU



U.S. POSTAGE
\$7.50
FCMF 0000
Orig: 48183
Dest: 80532
12/04/17
11082042 06 28



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