



August 17, 2020

959668

Kendal Heldt
Western Utility Contractors
2565 Palmer Ave.
University Park, IL 60484

RE: 320-345 N. MacChesney Ct. Thorium Monitoring 8/14/20
CDOT Permit: 1277306

Dear Ms. Heldt:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation for repair of a conduit at 320-345 N. MacChesney Ct. in Chicago, Illinois. The monitoring was performed by Glenn Huber, SAHCI Health Physicist, on August 14, 2020.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 126496) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was calibrated on July 28, 2020. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,959 counts per minute (cpm).

The average background count rate for these locations was measured at 1,962 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeters described above. Survey data was collected by entering the excavation and recording the highest count rate for the floor and walls to a maximum excavation depth of 3 feet below ground surface. All asphalt, concrete, and soil were loaded directly into a truck for disposal.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 1,900 cpm to 2,200 cpm. No count rates were found at any time that exceeded the instrument specific count rate threshold limit of 6,959 cpm.

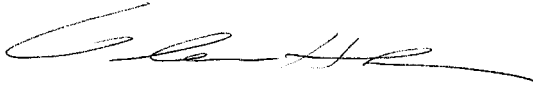
Additional Monitoring

Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

I will be providing a copy of this report to both the City of Chicago Department of Public Health and US Environmental Protection Agency, as required.

Thank you for your assistance with this project. If you have any questions or need additional information, please call me at (815) 485-6161.

Sincerely,
Stan A. Huber Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Glenn Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP
President

Radiation Survey Form

CDOT Permit #1273306

Location/ Project ID: Western Utility 320-345 N. MacChesney Ct.

Date: 8/14/20

Technician: Glenn Huber

Inst Model: Ludlum 2221

Serial No. : 99147

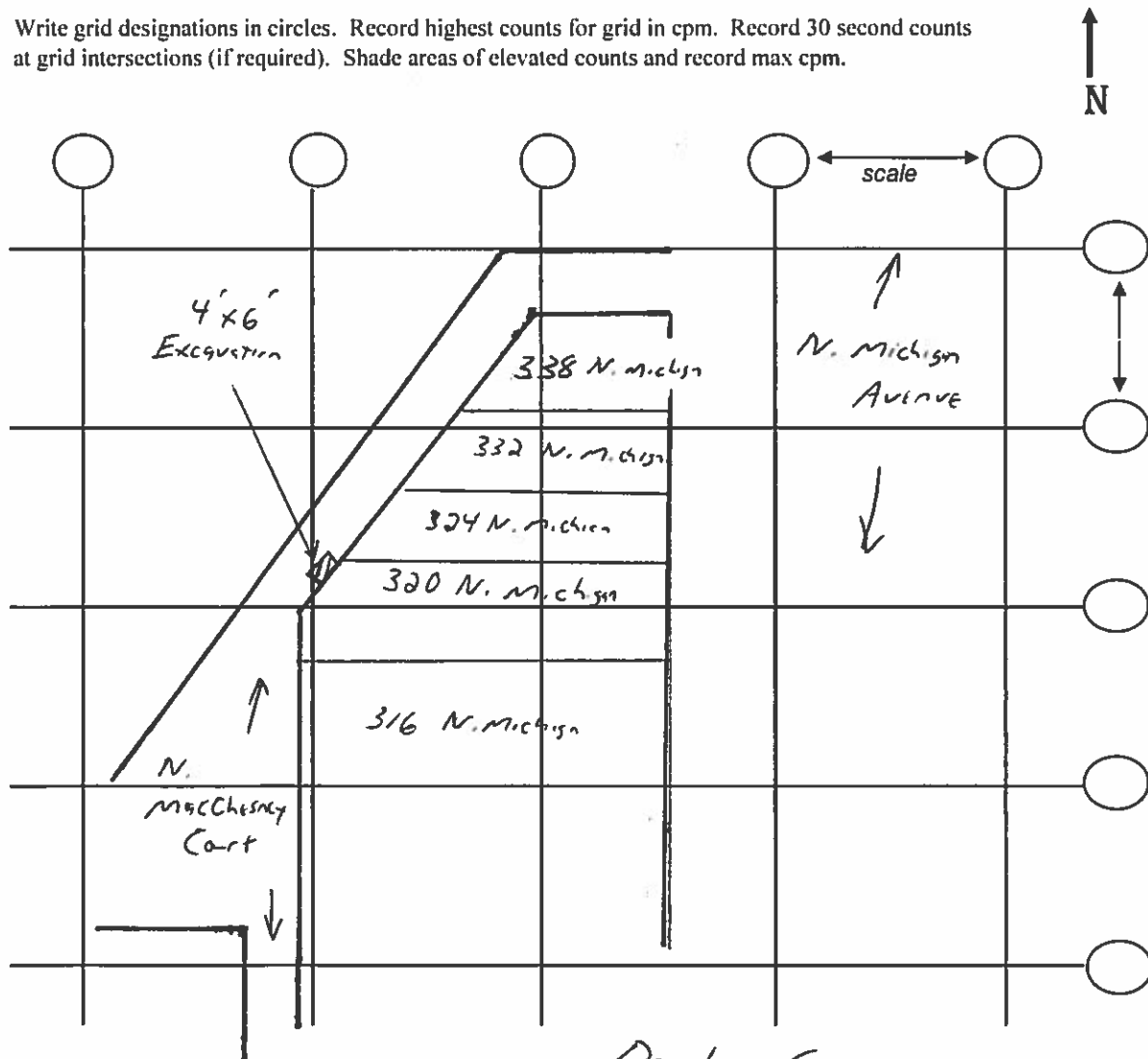
Probe Type: 1"x1" NaI / 2"x2" NaI
Shielded / Not Shielded

Lift Elevation: Surface to -3' BGS

Background 1,962 cpm

Action Level: 6,959 cpm

Write grid designations in circles. Record highest counts for grid in cpm. Record 30 second counts at grid intersections (if required). Shade areas of elevated counts and record max cpm.



<u>Depth</u>	<u>Cpm</u>
Surface	2200
-1.5'	1900
-3'	1900