



March 7, 2022

973860

Paul Muszynski
Electric Conduit Construction
3333 S. Iron St.
Chicago, IL 60608

RE: Thorium Monitoring at 161 E. Erie St.
CDOT Permit # 1644476

Dear Mr. Muszynski:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation for repair of failing trench at 161 E. Erie St. in Chicago, Illinois. The monitoring was performed by Mark Dewald, SAHCI Health Physics Technician, on March 4, 2022.

Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 127242) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was last calibrated on May 5, 2021. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 6,995 counts per minute (cpm).

The background count rate for this location was measured at 1,972 cpm.

Soil Gamma Scans

Gamma surface scans were performed in the excavation using the Ludlum Model 2221 Scaler / Ratemeter detailed above. Survey data was collected by measuring the surface of the trench concrete prior to removal and again after removal to a maximum depth of 12 inches. All concrete was loaded directly into a truck for disposal.

The maximum gamma count rate on the surface and after the single lift was recorded on the attached Radiation Survey Form. The count rates in the excavation ranged from 1,200 cpm to 2,900 cpm. No count rates were found at any time that exceeded the threshold limit of 6,995 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 (CDPH) and USEPA, 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 stylized flourish at the end.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: 161 E. Erie Street Trench Repair - ECC

Date: 3/4/2022

Technician: Mark Dewald

Inst Model: Ludlum 2221

Serial No. : 127242

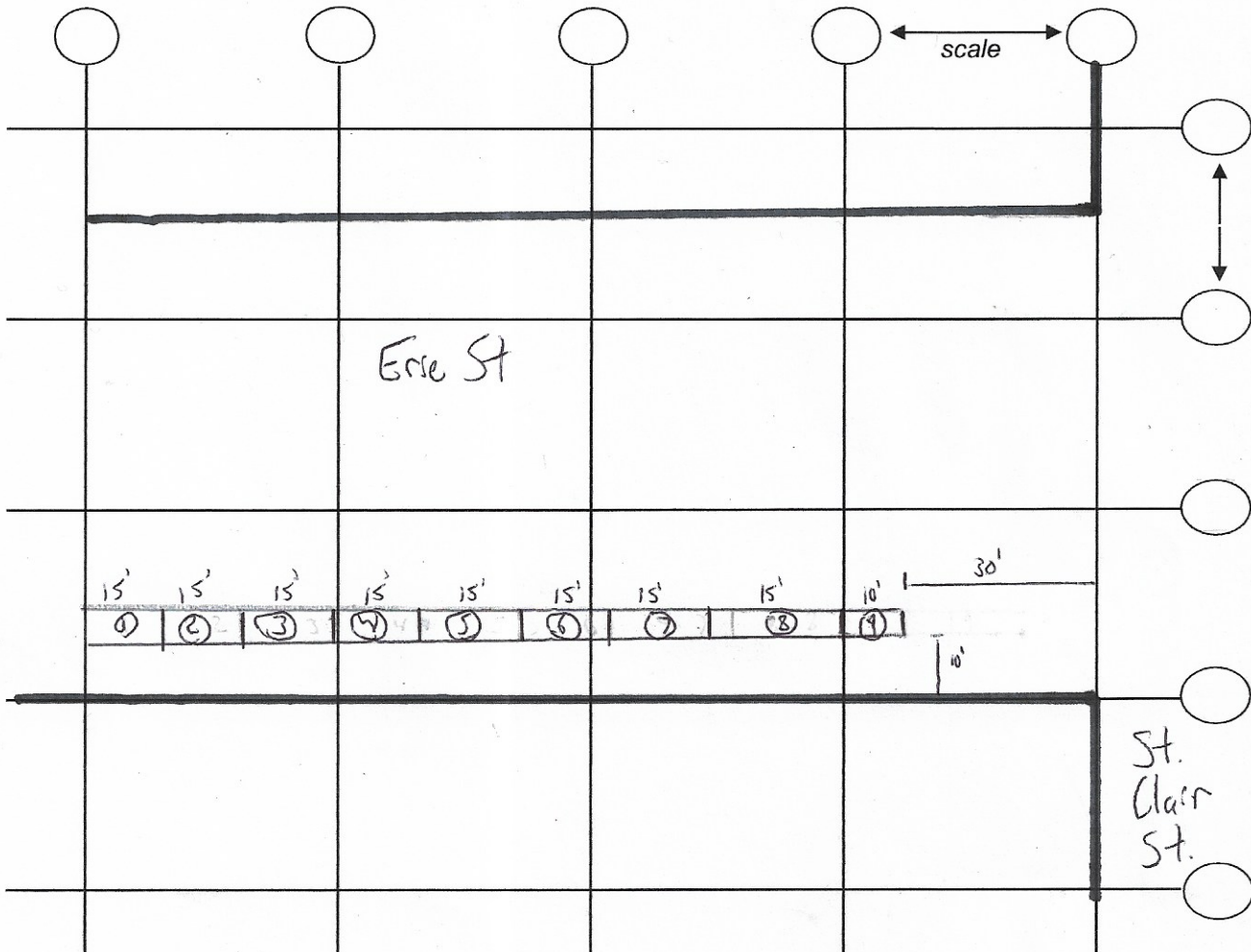
Probe Type: 1"x1" NaI / 2"x2" NaI
 Shielded Not Shielded

Lift Elevation: Surface to -12" BGS

Background 1,972 cpm

Action Level: 6,995 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.



	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6	Area 7	Area 8	Area 9
0-12"	1200	1500	1500	1600	1700	1400	1300	1300	1200
12-30"	2700	2800	2700	2200	2400	2500	2700	2900	2600