



June 27, 2020

958916

Nicole Espinoza  
Electric Conduit Construction  
3333 S. Iron St.  
Chicago, IL 60608

RE: Thorium Monitoring 248-258 E. Ohio St. (E. Ohio St. & N. Fairbanks Ct.)  
CDOT Permit #1242994

Dear Ms. Espinoza:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for the replacement of a utility pole at 248-258 E. Ohio Street in Chicago, Illinois. The monitoring was performed by Mark Dewald, SAHCI Health Physicist, on June 5, 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 last calibrated on October 18, 2019. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,102 counts per minute (cpm).

The background count rate for this location was measured as 1,902 cpm.

#### Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by scanning material as it was removed from the excavation. The majority of the excavation work was performed with a vacuum truck, but material was periodically brought to the surface with a shovel so it could be scanned prior to vacuuming. The maximum excavation depth for the pole was 9 feet below ground surface. Soil was loaded directly into a truck for offsite 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 2,300 cpm to 4,000 cpm. No count rates were found at any time that exceeded the threshold limit of 7,102 cpm.

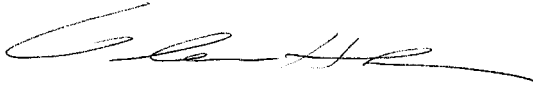
#### Additional Monitoring

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

Location/ Project ID: Ohio St / Fairbaker St Intersection

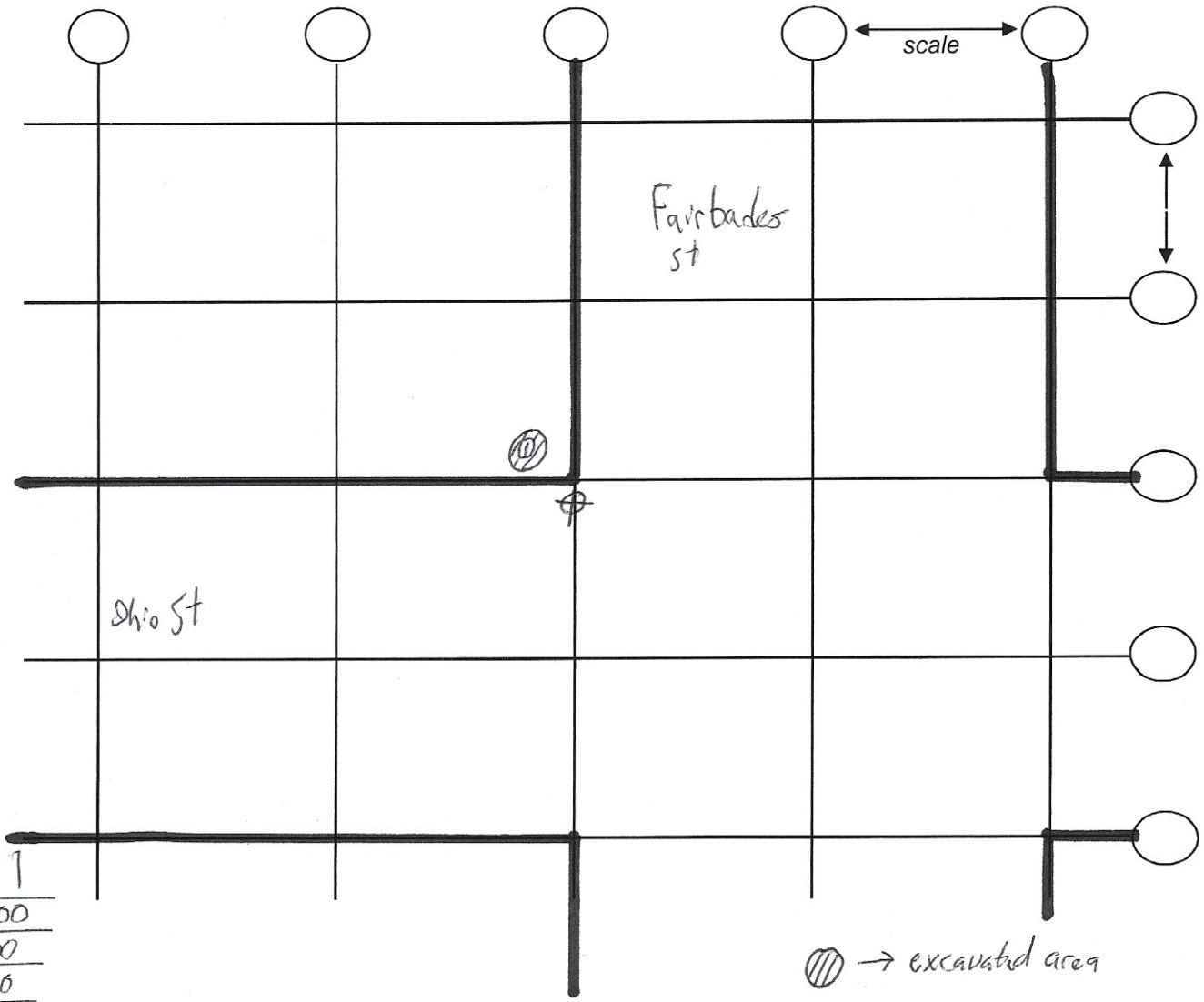
Date: 6/5/2020 Technician: Mark Dewald

Inst Model: Iudlum 2221 Serial No.: 126496

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

Background 1902 cpm Action Level: 7102 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

5	2500
1.5'	4000
3'	3400
4.5'	2300
6'	2500
7.5'	2900
9'	2800

⊗ → excavated area

⊕ → background location