



November 8, 2021

Paul Muszynski
Electric Conduit Construction
816 Hicks Drive
Elburn, IL 60119

RE: Thorium Monitoring 534-550 N. Michigan Ave. (Ohio and Michigan)
CDOT Permit #1601368

Dear Mr. Muszynski:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and installation of a fiber optic conduit installation at 534-550 N. Michigan Ave. in Chicago, Illinois. The monitoring was performed by Glenn Huber and Brian Schmidt on October 25 – October 29, 2021.

Instrumentation

Surface gamma scans were performed using Ludlum Model 2221 Scaler / Ratemeters (serial no. 134542 and 126497) with attached Ludlum Model 44-10 2"x2" NaI Detectors (w/ 6" collimated lead shields). These instruments were 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 instrument 134542 is 7,396 counts per minute (cpm) and 6,383 cpm for instrument 126497.

The background count rate for this location ranged from 1,714 cpm to 1,946 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 4 feet below ground surface. Soil, concrete and asphalt 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 1,400 cpm to 3,400 cpm. No count rates were found at any time that exceeded the threshold limits of 7,396 cpm and 6,383 cpm, respectively.

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.

Glenn Huber, CHP
President

Radiation Survey Form

Location/ Project ID: 534-550 N. Michigan ECC CDOT#1601368

Date: 10/25/21-10/26/21

Technician: Glenn Huber

Inst Model: Ludlum 2221

Serial No. : 134542

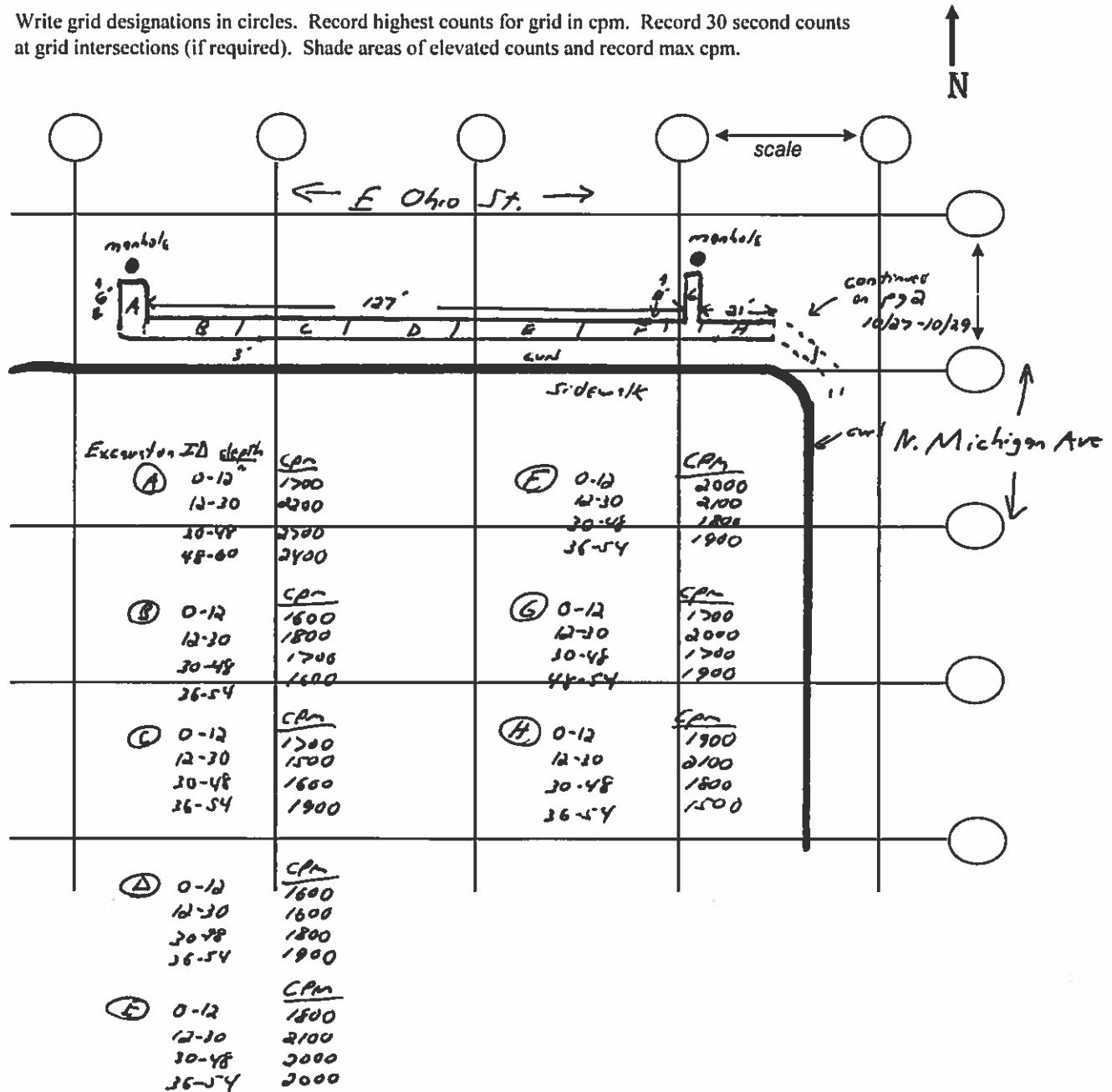
Probe Type: 1"x1" NaI / (2"x2" NaI)
Shielded / Not Shielded

Lift Elevation: Surface to -4'

Background 1,946 cpm

Action Level: 7,396 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.



Radiation Survey Form

Location/ Project ID: ECC - MICHIGAN AVE & OHIO ST. - FIBER INSTALL - ROW RADIOLOGICAL SOIL SURVEY

Date: 10/27-29/2021 Technician: BRIAN SCHMIDT

Inst Model: LU9221 Serial No.: 126497

Probe Type: 1"x1" NaI / 2"x2" NaI / Shielded / Not Shielded Lift Elevation: 0-36"

Background 1714 cpm Action Level: 6983 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.

