



March 26, 2018

Steven Griffin
Electric Conduit Construction
816 Hicks Drive
Elburn, IL 60119

RE: 616 N. Rush St. Thorium Monitoring 3/20/18 - 3/23/18
CDOT Permit #874872

Dear Mr. Griffin:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during excavation for a fiber optic utility installation at 616 N. Rush St. in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on March 20 – March 23, 2018.

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 October 11, 2017. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,366 counts per minute (cpm).

The background count rate for this location was found to average 1,811 cpm.

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. Survey data was collected by entering the excavation after each 18-inch lift and recording the highest count rate for the floors and walls to a maximum excavation depth of 53 inches below ground surface. No soil was stockpiled onsite.

The maximum gamma count rate for each lift was recorded on the attached Radiation Survey Form. The count rates in the excavations ranged from 1,200 cpm to 3,400 cpm. No count rates were found at any time that exceeded the threshold limit of 7,366 cpm.

Additional Monitoring

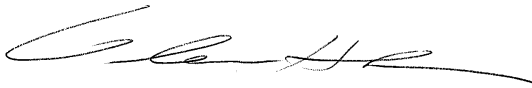
Since no count rates were identified above the 7.1 pCi/gram threshold limit, no additional soil sampling, air monitoring, or personnel monitoring were performed.

Regulatory Notification of Survey Completion

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: ELECTRICAL CONDUIT - ONTARIO ST & RUSH ST. - FIBER OPTIC INSTALLATION - ROW
RADIOLOGICAL SURVEY

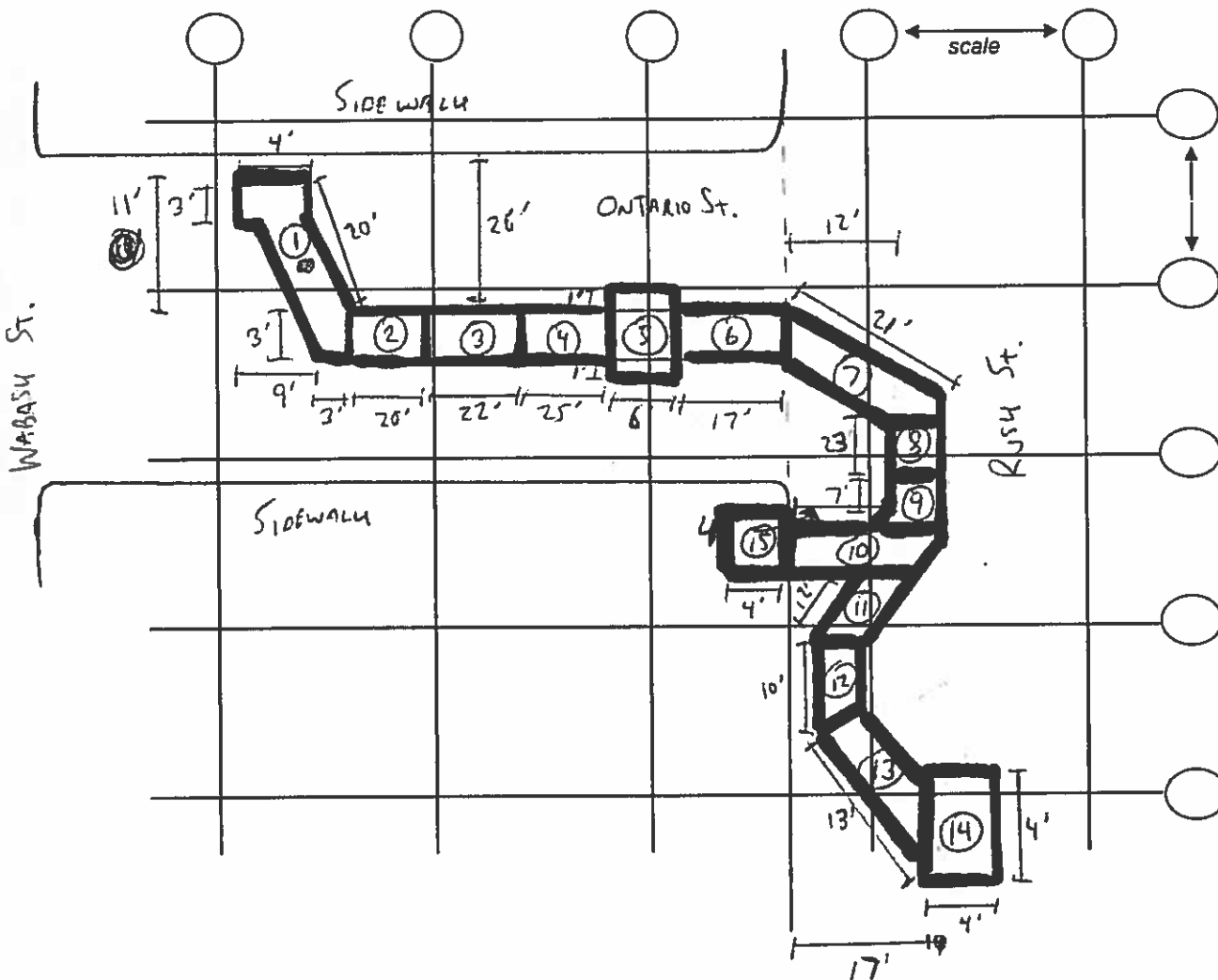
Date: 3/20-23/2018 Technician: BRIAN SCHMIDT

Inst Model: LUDLUM - 2221 Serial No.: 126496

Probe Type: 1"x1" NaI / 2"x2" NaI
Shielded / Not Shielded Lift Elevation: 0-53"

Background 1811 cpm Action Level: 7366 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: ELECTRIC CONDUIT - ONTARIO ST. & RUSH ST. - FIBER OPTIC INSTALLATION -

Date: 3/20-23/2018

Technician: BRIAN SCHMIOT

LOW RADIOLOGICAL
SOIL SURVEY

Inst Model: LOUWM-2221

Serial No.: 126496

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

Lift Elevation: 0-53"

Background 1811 cpm

Action Level: 7366 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.

