AECOM
303 E. Wacker Drive, Suite 900
Chicago, Illinois 60601

312-938-0300 tel
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October 30, 2013

Mr. Ron Reagan
National Restoration Systems
1500 Hicks Road, Suite 200
Rolling Meadows, IL 60008

RE: Radiological Survey of Right-of-Way Utility Excavation
Permit Address: 445 E Ohio Street
AECOM Project No. 60308332

Dear Mr. Reagan:

Pursuant to conditions specified in the Streeterville Thorium Investigation Area permits issued by the City of Chicago, radiation monitoring was required to be performed at the above referenced site. AECOM Technical Services, Inc. (AECOM) provided the required radiation monitoring on October 14, 2013 for the removal and replacement of a section of the concrete sidewalk at the above address.

Gamma surveying was conducted of the subgrade immediately beneath the concrete from the curb to the building (refer to attached sketch). The subgrade consisted of gravel to gravely sand (i.e., no urban fill soil was observed). The gamma readings revealed no indication of soil above the specified cleanup value established by the U.S. Environmental Protection Agency (USEPA) for the Streeterville area of Chicago.

The USEPA cleanup value for Chicago's Streeterville area is 7.1 picocuries per gram (pCi/g) total radium (Ra-226 + Ra-228). Gamma radiation count measurements for the project were made using a Ludlum Model 2221 survey meter and an unshielded 2 x 2 inch sodium iodide (Nal) probe Model 44-10. For the field instrument used, the gamma count equivalent to the USEPA 7.1 pCi/g cleanup value was 17,920 counts per minute (cpm) unshielded. Thus, gamma readings above 17,920 cpm would be considered a potential indication of the presence of radiologically contaminated fill soil.

The field gamma background for the area was measured at approximately 8,400 cpm unshielded. This value was calculated from data collected at sidewalk-grade planters in vicinity of the work area. In general, field gamma measurements greater than twice background represent potential anomalous results that require more cautious and frequent field screening, but are not necessarily indications of the presence of thorium contaminated fill soil. In this case, no gamma readings greater than twice background were observed.

The field gamma measurements of the subgrade within the sidewalk replacement area ranged from a minimum of 6,300 cpm to a maximum of 9,500 cpm unshielded. The readings appeared to represent typical background values for uncontaminated soil. Thus, there was no indication of the presence of radiologically-contaminated fill soil and/or an exceedance of the USEPA cleanup value of 7.1 pCi/g total radium.

As part of the permit conditions this letter has been forwarded to:

Chicago Department of Public Health
Attn: Ms. Rahmat Begum
333 South State Street, Rm. 200
Chicago, Illinois 60604

Please contact us with any questions you have regarding this letter or the reported results.

Regards,

Brian R. Schmidt
Project Scientist II

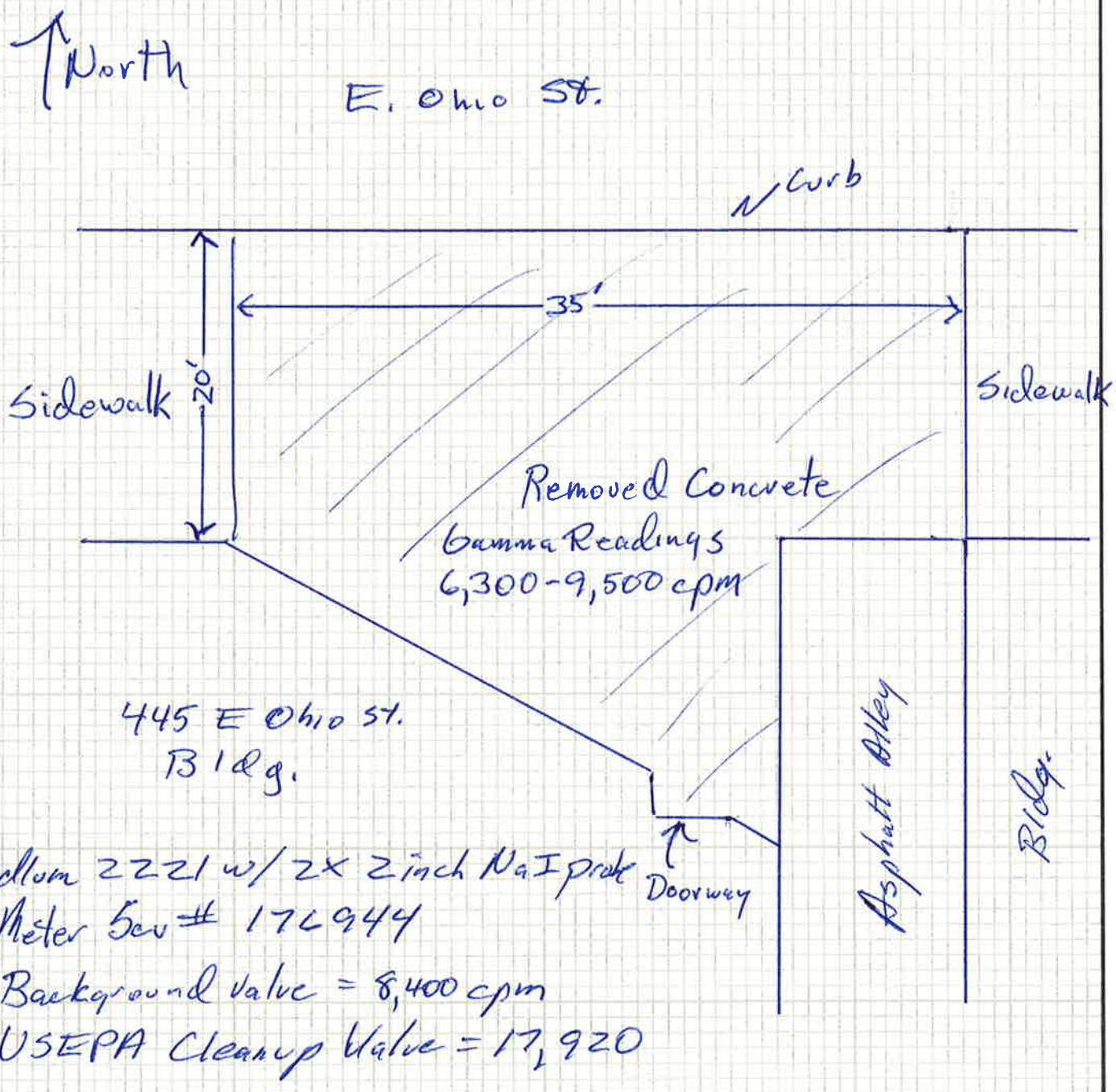
Steven C. Kornder, Ph.D.
Senior Project Geoscientist

cc: Rahmat Begum, Chicago Department of Public Health
Verneta Simon, USEPA

Attachments: Sketch

AECOM

PROJECT	JOB NO.
445 E Ohio St	60308332
SUBJECT: Radiological Survey for Sidewalk Replacement	CALC. NO.
DATE: 10/14/13 | BY: SCL | CHECKED BY: SCK	REV. NO. 0



Ludlum 2221 w/ 2x 2 inch NaI probe
Meter Ser # 171944
Background value = 8,400 cpm
USEPA Cleanup Value = 17,920

not to scale