



April 2, 2020

REVISION 1 GAH 4/2/20

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

955548

RE: Thorium Monitoring 355-416 E. Ohio St. (E. Ohio St. & N. McClurg Ct.)  
CDOT Permit #1200368

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 and power conduit at 355-416 E. Ohio Street in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on March 16, 2020 through March 20, 2020.

#### Instrumentation

Surface gamma scans were performed using a Ludlum Model 2221 Scaler / Ratemeter (serial no. 132844) with attached Ludlum Model 44-10 2"x2" NaI Detector (w/ 6" collimated lead shield). The instrument was last calibrated on August 6, 2019. The US Environmental Protection Agency (USEPA) action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 7,299 counts per minute (cpm).

The background count rate for this location was measured as 1,741 cpm (average).

#### 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 trench and recording the highest count rate for the floor and walls to a maximum excavation depth of 4 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 1,600 cpm to 4,600 cpm. No count rates were found at any time that exceeded the threshold limit of 7,299 cpm.

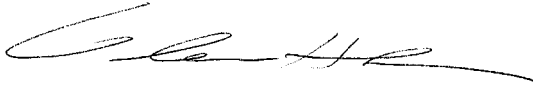
#### Additional Monitoring

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: ECL-McCraw & Ohio St. - Fiber Optic Install - Row RADIOLOGICAL SOIL SURVEY

Date: 3/16-20/2020

Technician: Brian Schmitt

Inst Model: Lucum-2221

Serial No.: 132844

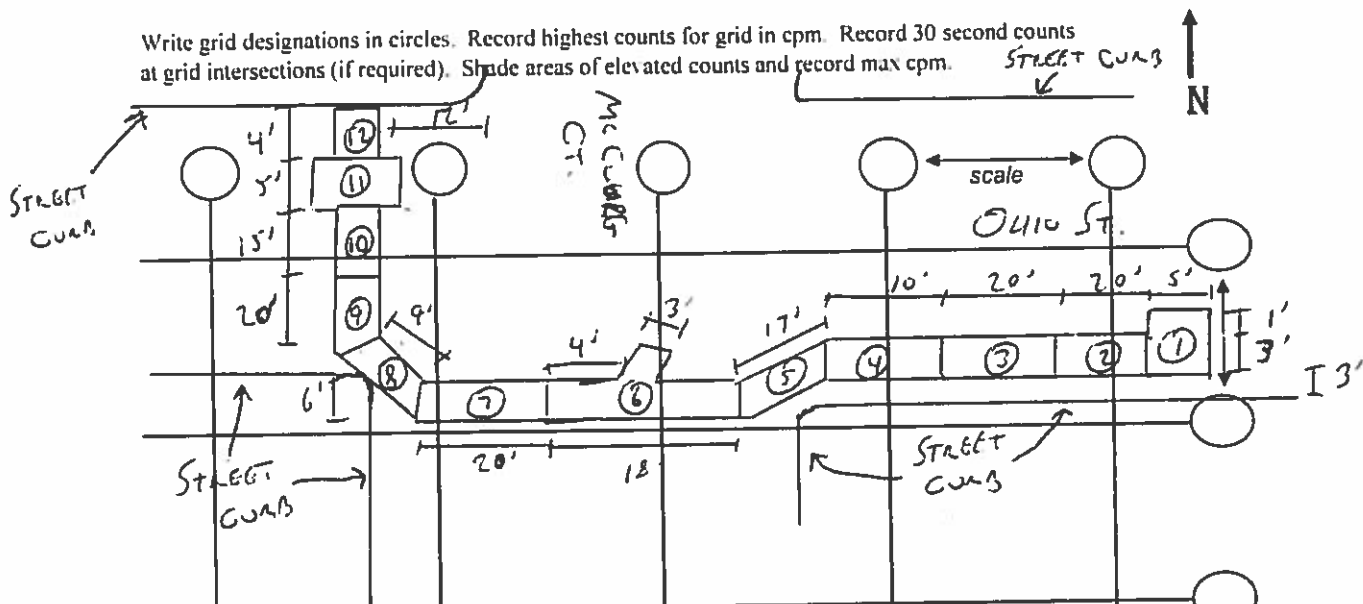
Probe Type: 1"x1" NaI / 2"x2" NaI  
Shielded / Not Shielded

Lift Elevation: 0-48"

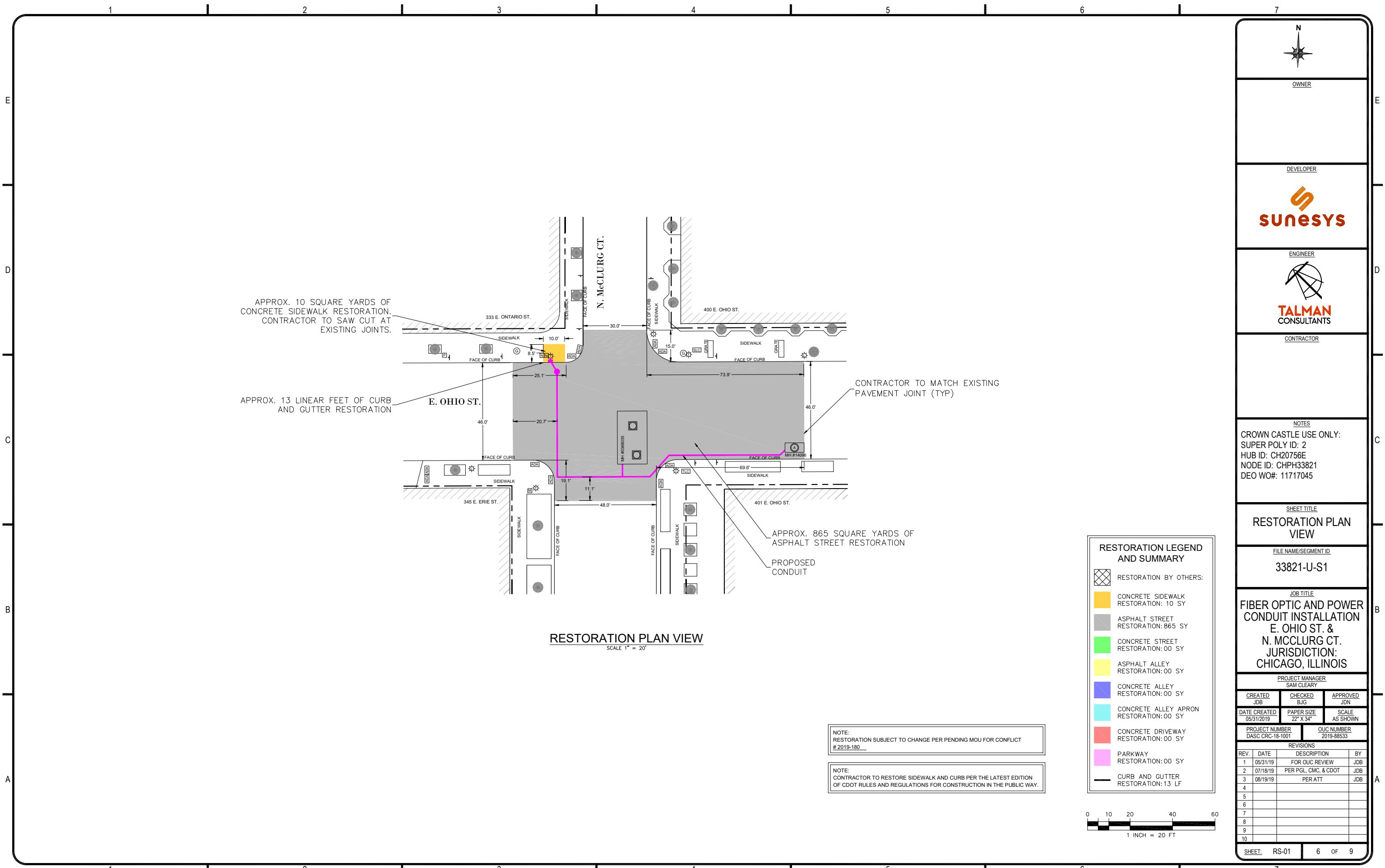
Background 1741 cpm

Action Level: 7299 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.



ID	DEPTH	CPM	ID	DEPTH	CPM	ID	DEPTH	CPM	ID	DEPTH	CPM
①	0-12"	1600	④	0-12"	1800	⑦	0-12"	2000	⑩	0-12"	1800
	12-30"	1800		12-30"	2100		12-30"	2300		12-30"	2200
	30-48"	3100		30-48"	3100		30-48"	2900		30-48"	2200
	48-66"	3500		36-54"	3300		36-54"	3200		36-54"	2500
②	0-12"	2200	⑤	0-12"	1600	⑧	0-12"	1700	⑪	0-12"	2400
	12-30"	2600		12-30"	2300		12-30"	1800		12-30"	2800
	30-48"	2800		30-48"	2900		30-48"	2300		30-48"	4000
	36-54"	3000		36-54"	3400		36-54"	2400		48-66"	4600
③	0-12"	2000	⑥	0-12"	1800	⑨	0-12"	2100	⑫	0-12"	1600
	12-30"	2500		12-30"	2400		12-30"	3200		12-30"	2100
	30-48"	2700		30-48"	3300		30-48"	4100		30-48"	2700
	36-54"	3200		36-54"	3500		36-54"	4300		36-54"	3800



N

OWNER

DEVELOPER

**SUNESYS**

ENGINEER

**TALMAN CONSULTANTS**

CONTRACTOR

NOTES

CROWN CASTLE USE ONLY:  
SUPER POLY ID: 2  
HUB ID: CH20756E  
NODE ID: CHPH33821  
DEO WO#: 11717045

SHEET TITLE

**RESTORATION PLAN VIEW**

FILE NAME/SEGMENT ID

**33821-U-S1**

JOB TITLE

**FIBER OPTIC AND POWER CONDUIT INSTALLATION  
E. OHIO ST. &  
N. MCCLURG CT.  
JURISDICTION:  
CHICAGO, ILLINOIS**

PROJECT MANAGER

SAM CLEARY

CREATED JDB	CHECKED BJG	APPROVED JDN
DATE CREATED 05/31/2019	PAPER SIZE 22" X 34"	SCALE AS SHOWN
PROJECT NUMBER DASC CRC-18-1001	OUC NUMBER 2019-88533	

REVISIONS

REV.	DATE	DESCRIPTION	BY
1	05/31/19	FOR OUC REVIEW	JDB
2	07/18/19	PER PGL, CMC, & CDOT	JDB
3	08/19/19	PER ATT	JDB
4			
5			
6			
7			
8			
9			
10			

SHEET: RS-01 6 OF 9