



February 28, 2020

954700

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

RE: Thorium Monitoring 400-415 N. Dearborn St.
CDOT Permit #1201885

Dear Mr. Muszynski:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during the excavation and repair of a blocked utility conduit at 400-415 N. Dearborn St. in Chicago, Illinois. The monitoring was performed by Brian Schmidt, SAHCI Health Physics Technician, on February 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 1,902 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. All excavated material 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 1,800 cpm to 3,800 cpm. No count rates were found at any time that exceeded the threshold limit of 7,299 cpm.

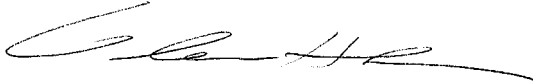
Additional Monitoring

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: ECC - KINZIE ST & DEARBORN ST. - OBSTRUCTION EXCAVATION - ROW CALCULATED RADIOLOGICAL SOIL SURVEY

Date: 2/20/2020

Technician: BRIAN SCHMIDT

Inst Model: LUOVUM - 2221

Serial No.: 132844

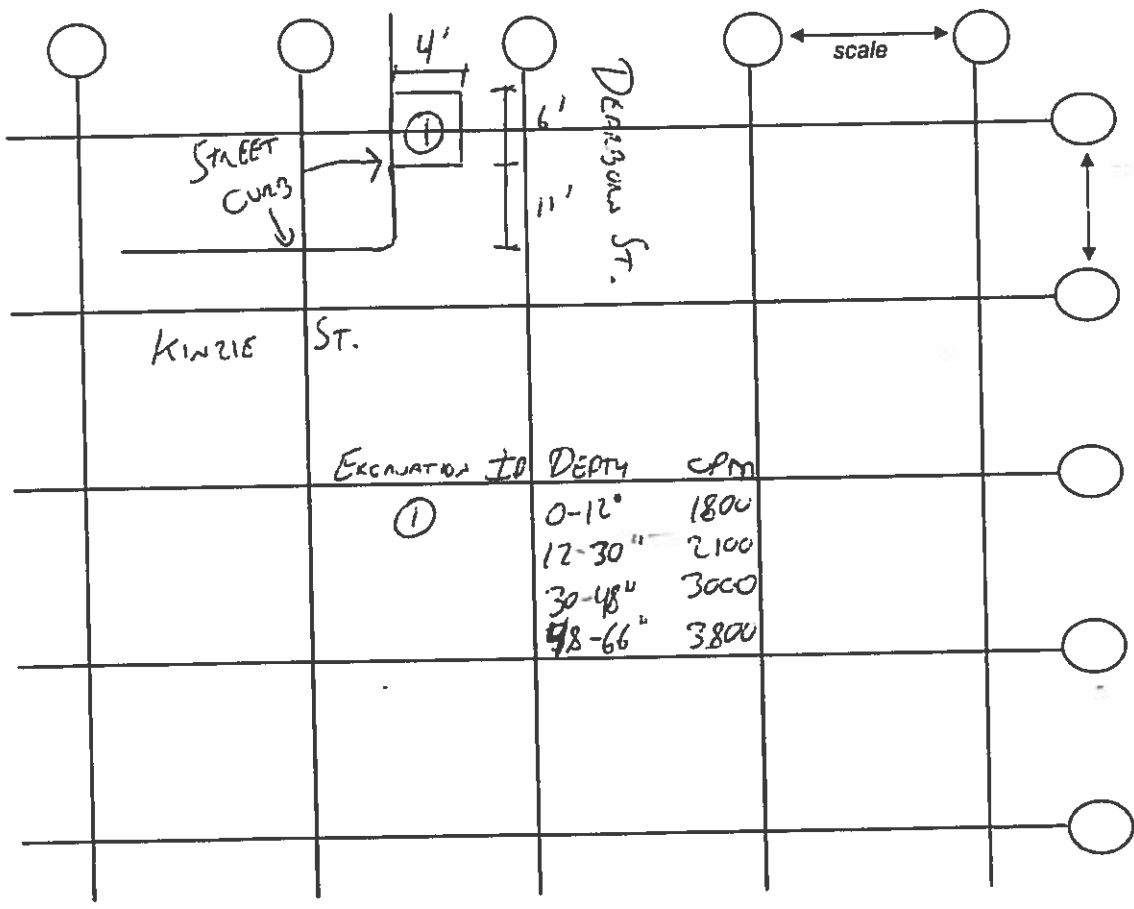
Probe Type: 1"x1" NaI / 2"x2" NaI
Shielded / Not Shielded

Lift Elevation: 0"-48"

Background 1902 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.





SEGMENT:
CC-ST-49

ENGINEER:
hbk
ENGINEERING
921 WEST VAN BUREN STREET, SUITE 100
CHICAGO, ILLINOIS 60607
STATE OF ILLINOIS DEPARTMENT
OF PROFESSIONAL REGULATION.
LICENSE NO. 184-002308

OWNER/DEVELOPER:
CROWN
CASTLE

CONTRACTOR:
Hydro-Exc, Inc.
Hydrovac Excavation

TITLE:
**FIBER OPTIC CONDUIT
INSTALLATION-CONNECTION
DEARBORN & KINZIE
CHICAGO, ILLINOIS**

REVISIONS

REV	DATE	DESCRIPTION	BY
01	09-05-13	FOR OUC REVIEW	SLL
02	10-21-13	PER OUC COMMENTS	SJS
03	10-22-13	FOR CONSTRUCTION	SJS
04			
05			
06			
07			
08			

DRAWN BY:	CHECKED BY:	APPROVED BY:
SJS	JPK	JDN

PROJECT NUMBER:	13-347
FILE NAME:	13347
DATE DRAWN:	08-30-13
SCALE:	1" = 20'

SHEET: **3 OF 8**

END CONSTRUCTION BY CONNECTING
1-2" PVC CONDUIT TO NEXTG
EXISTING CONDUIT WITH 2" "Y"
CONNECTION (SEE SHEET 5 FOR
DETAILS).

PROPOSED 68' OF 1-2" PVC CONDUIT
VIA OPEN CUT TRENCH. (SEE SHEET 5
FOR DETAILS).

NOTE:
CONTRACTOR IS TO RESTORE SIDEWALK/CURB
AS PER THE LATEST EDITION OF "CHICAGO
DEPARTMENT OF TRANSPORTATION REGULATIONS
FOR OPENINGS, CONSTRUCTION AND REPAIR
IN THE PUBLIC WAY".

CAUTION: USE EXTREME CAUTION
WHEN DIGGING NEAR EXISTING
UTILITIES.

NOTE:
CONSTRUCTION MAY INCLUDE
WRECKING OUT OF ABANDONED
CTA RAIL TRACKS.

EXISTING GAS MAIN AND CASING.
CONTRACTOR TO INSTALL NON-CONDUCTIVE
MATERIAL AT PROPOSED LOCATION ALONG
ENTIRE LENGTH OF GAS CASING.
CONTRACTOR TO ALLOW 7" MIN.
HORIZONTAL CLEARANCE FROM 20" GAS
MAIN

NOTES:

THE UNDERGROUND UTILITY LOCATIONS SHOWN ON THIS
PLAN WERE DERIVED FROM DRAWINGS PROVIDED BY THE
CHICAGO DEPARTMENT OF TRANSPORTATION - OFFICE OF
UNDERGROUND'S UTILITY SEARCH PROCEDURE. EXISTING
FACILITY LOCATIONS ARE APPROXIMATE AND MUST BE
FIELD VERIFIED PRIOR TO CONSTRUCTION. "DIGGER" IS TO
BE NOTIFIED 48 HOURS PRIOR TO THE START OF ANY
WORK ON THIS PROJECT. (312-744-7000)

CITY OF CHICAGO - DEPARTMENT OF SEWERS IS TO
BE NOTIFIED 48 HOURS PRIOR TO THE START OF
CONSTRUCTION AT (312) 747-7047.

AN EIGHTEEN (18) INCH MINIMUM VERTICAL
SEPARATION AND A THREE (3) FOOT MINIMUM
HORIZONTAL SEPARATION MUST BE MAINTAINED
BETWEEN ALL PROPOSED CONDUIT INSTALLATIONS
AND ALL EXISTING WATER MAINS.

RESTORATION TO BE IN COMPLIANCE WITH
DEPARTMENT OF TRANSPORTATION STANDARDS.

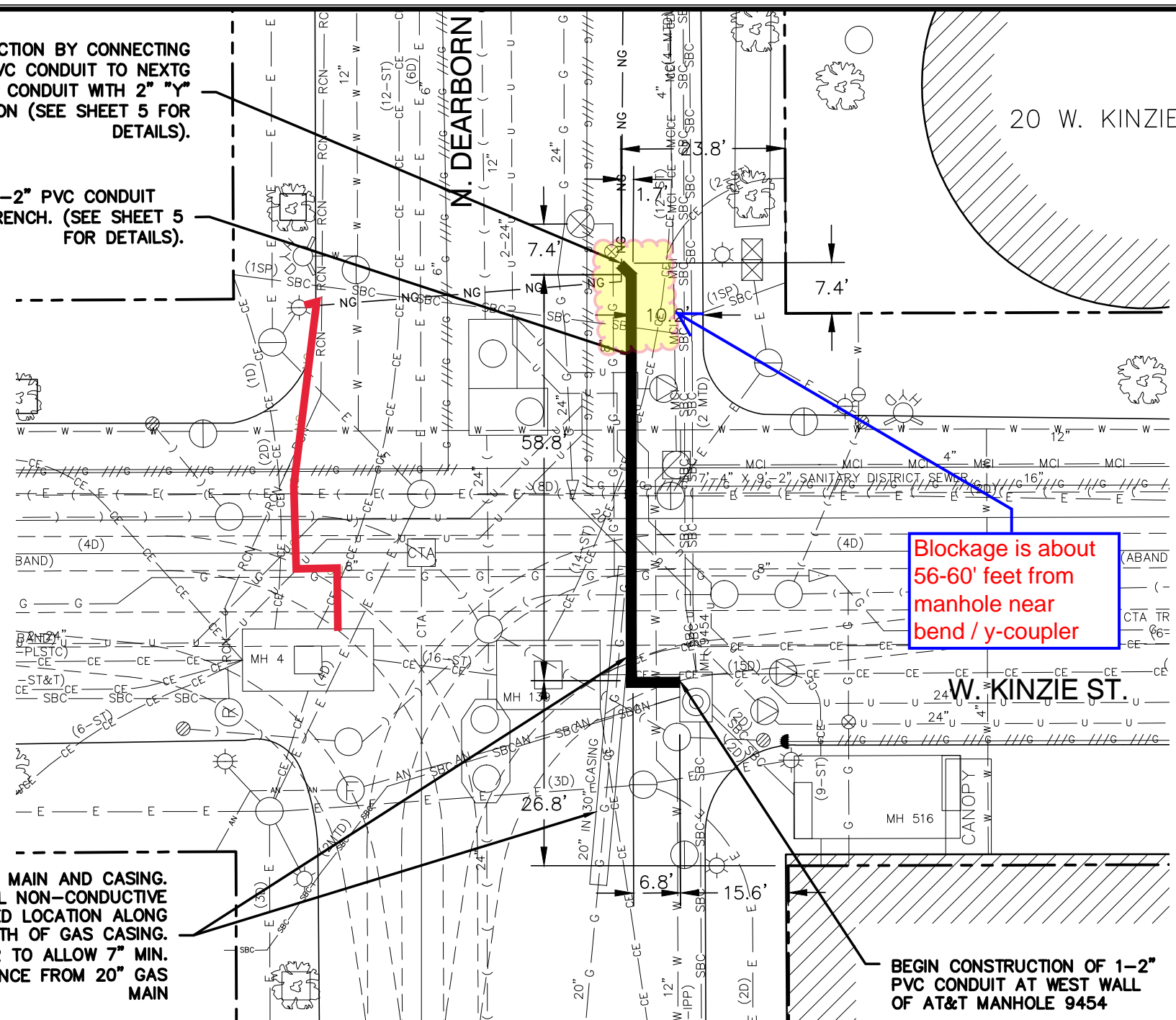
CONTRACTOR IS CAUTIONED TO PROTECT SEWER
MANHOLES, CATCH BASINS, LATERALS AND INLETS. A FOUR
(4) FOOT MINIMUM HORIZONTAL SEPARATION AND A TWO
(2) FOOT MINIMUM VERTICAL SEPARATION MUST BE
MAINTAINED BETWEEN ALL PROPOSED CONDUIT
INSTALLATIONS AND EXISTING SEWER MANHOLES, CATCH
BASINS, LATERALS AND INLETS.

CONTRACTOR WILL PROVIDE BARRICADING TO INSURE
CORRECT TRAFFIC CONTROL PER THE CHICAGO
DEPARTMENT OF TRANSPORTATION, REGULATIONS FOR
OPENINGS, CONSTRUCTION AND REPAIR IN THE PUBLIC
WAY WHILE MAINTAINING VEHICULAR TRAFFIC AT ALL TIMES.

THE EXISTING ABOVE GROUND UTILITY
STRUCTURES AND IMPROVEMENTS SHOWN ON
THESE DRAWINGS WERE FIELD LOCATED BY
HBK ENGINEERING, LLC UTILIZING
CONVENTIONAL (TOTAL STATION) DATA
COLLECTION METHODS.



1 inch = 20 ft.



Blockage is about
56-60' feet from
manhole near
bend / y-coupler

BEGIN CONSTRUCTION OF 1-2"
PVC CONDUIT AT WEST WALL
OF AT&T MANHOLE 9454