AECOM
303 E. Wacker Drive, Suite 1400
Chicago, Illinois 60606

312-939-1000 tel
312-939-4198 fax

October 8, 2020

Mr. Chris Hanlon
Meade Electric Company
9550 W. 55th St., Suite A
Countryside, IL 60525

RE: Streeterville Thorium Monitoring Results
Permit No.: DOT1283488
Permit Address: 353-426 E. Grand Ave., Chicago, IL
AECOM Project No. 60586768.500

Dear Mr. Hanlon:

Pursuant to conditions specified in the Right of Way (ROW) form (attached) issued by the City of Chicago Department of Public Health (CDPH), radiation monitoring was required to be performed at the above referenced site. AECOM Technical Services, Inc. (AECOM) provided the required radiation surveillance on September 29 and 30, 2020 for a trench excavation required to install communications conduit on public ROW near the intersection of E. Grand Ave. and N. McClurg Ct. in Chicago, Illinois (refer to map included with CDPH form).

Surveying was performed in a 32-inch wide, 30-inch deep and 60-foot long trench excavated near 353-426 E. Grand Ave. The excavation was in the Grand Ave. ROW directly adjacent to the south curbing of E. Grand Ave. The excavation began in the sidewalk directly west of a utility pole at the southwest corner of E Grand Ave. and N. McClurg Ct. From there, the excavation continued north into the ROW, turned east directly adjacent of the south curb of E. Grand Ave. and continued east into the intersection of N. McClurg Ct. and E. Grand Ave. Refer to the attached photograph and annotated drawing for the approximate location of the excavation.

The monitoring did not indicate that the exported fill soils were above the removal action level established by the U.S. Environmental Protection Agency (USEPA) for the Streeterville area of Chicago. The USEPA removal action level 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 recorded using a Ludlum Model 2221 survey meter and a shielded 2 x 2 inch NaI probe (Model 44-10). For the instrument used the gamma count threshold indicative of the 7.1 pCi/g removal action level is 7,020 (S/N: 326720) counts per minute (cpm) shielded utilizing a short cord. The field instrument background gamma count for nearby planter fill soil was measured at 2,600 cpm shielded.

Elevated gamma counts were observed in June 2019 within the street just northeast of this corner. The latest discovery occurred during the installation of the utility pole in July 2020. These elevated gamma counts were observed near the curb during the utility pole excavation within the sidewalk. In both cases, the elevated gamma readings were observed approximately at 30-inches below the surface. The maximum depth required for this project was 30-inches, so it was anticipated that screening for this project may require excavation in thin lifts. It was also anticipated that shine from contaminated spoil buried beneath the floor of the excavation would require the screening of spoil within the excavator bucket.

A majority of the fill soil was able to be screened within the trench. The exception was the area north of the curb shown on the attached annotated drawing. In this area the gamma readings at the base of the trench gradually increased with depth as excavation proceeded. As a result, the spoil was removed in thin lifts 3-6 inches thick and screened within the excavator bucket. Spoil excavated and screened within the excavator bucket remained below the USEPA cleanup level established for the instrument. The majority of the gamma counts within the bucket were below 4,000 cpm with a maximum reading of 6,500 cpm shielded.

When the elevated gamma readings were encountered the USEPA was notified. Gene Jablonowski (USEPA) visited the site approximately 2PM on September 29, 2020 to observe the work and discuss the observed readings. Installation of the conduit package and backfilling of the trench proceeded without delay during and following the visit. No elevated gamma readings were observed during the remaining excavation work which was completed on September 30, 2020.

The elevated gamma readings were confined to the base of the 30-inch deep trench from just east of the utility pole to the western curb of N. McClurg Ct. The sidewalls above the base of the trench were also less than the instrument threshold, which also substantiates the conclusion that the contaminated fill soil above the USEPA removal action level is buried beneath the base of the trench. The section of trench with the elevated gamma counts is shown on the attached annotated drawing and on photograph.

Copies of the CDPH form, annotated drawing, photograph and the tabulated gamma results are included as attachments. As part of the permit conditions, a PDF copy of this letter is being forwarded to Terry Sheahan (CDPH) and Verneta Simon (USEPA) to fulfill the requirements of the CDPH.

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

Regards,

Eric Sulita, P.E.
Environmental Engineer III

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

cc: Terry Sheahan, Chicago Department of Public Health
Verneta Simon, USEPA

Attachments: CDPH Permit Form and Map
Annotated Drawing
Photographs and Gamma Results

CDPH PERMIT FORM

DEPARTMENT OF PUBLIC HEALTH

CITY OF CHICAGO

(STREETERVILLE Right-of-Way)

Notice is hereby given that the site you have requested a permit for is recorded with the City of Chicago Department of Public Health (CDPH) as potentially having environmental contamination on the site and adjacent right-of way. This environmental contamination could present a threat to human health and safety in connection with work performed at the site, or in the adjacent right-of-way, if proper safeguards are not employed.

A file containing detailed information regarding the aforementioned environmental contamination is available for review at CDPH at 333 S. State St., Room 200, Chicago, Illinois 60604 during normal business hours (8:30AM-4:30PM, Monday through Friday). Contact (312) 745-3152 for an appointment. This file must be reviewed and the remainder of this form completed before the permit can be issued if the ground is exposed or excavated. **Please note that for some locations, additional health and safety procedures may be required by law.**

Please complete the following:

I have reviewed and understand the documents, maintained by CDPH, regarding environmental contamination of the site and adjacent right-of-way. Further, I will ensure that all work at the subject site and adjacent right-of-way, and any monitoring required including but not limited to radiation monitoring, will be performed in a manner that is protective of human health and the environment and in compliance with all applicable local, state, and federal laws, rules, and regulations, especially those pertaining to worker safety and waste management. I will ensure that the results of any radiation monitoring and/or surveying conducted shall be provided to the CDPH and the United States Environmental Protection Agency **within two (2) weeks of their completion**. If any elevated levels of radioactive material are detected, I will immediately contact the United States Environmental Protection Agency at (800) 424-8802.

Applicant Name (print): Kelli Woodhouse Signature: Kelli Woodhouse

Site Address and Work Location (Describe exact site location and **attach map**): N McClurg Ct, E Grand Ave

504-541 N McClurg Ct, 353-426 E Grand Ave

Nature of Work: Installation of conduit 1 light pole/foundation, 1 quazite box via open cut trench.

Company Name, Address, Phone No.: Meade Electric CO. 9550 W 55th St Ste A, Countryside IL, 60525-3641 (708) 588-2500

General / Prime Contractor Name, Address, Phone No.: Chris Hanlon (773) 447-6627
Include subcontractor information if applicable)
Safety Officer / Phone No.

Radiation Contractor / Phone No. and email address (if applicable) Steve Kornder (262)515-7700 steve.kornder@aecom.com

Check if City Department Work ☐ Department Name:

CDOT Permit No.: DOT1283488

Today's Date: 8/27/20 Expected Start Date: 9/14/20 CDPH Approval / Date

Please return this completed form to the Chicago Department of Transportation, Division of Infrastructure Management, Public Way Permit Office, City Hall – Room 905, 121 N. LaSalle St., Chicago, Illinois 60602 during normal business hours (8:30 AM - 4:30 PM, Monday through Friday)

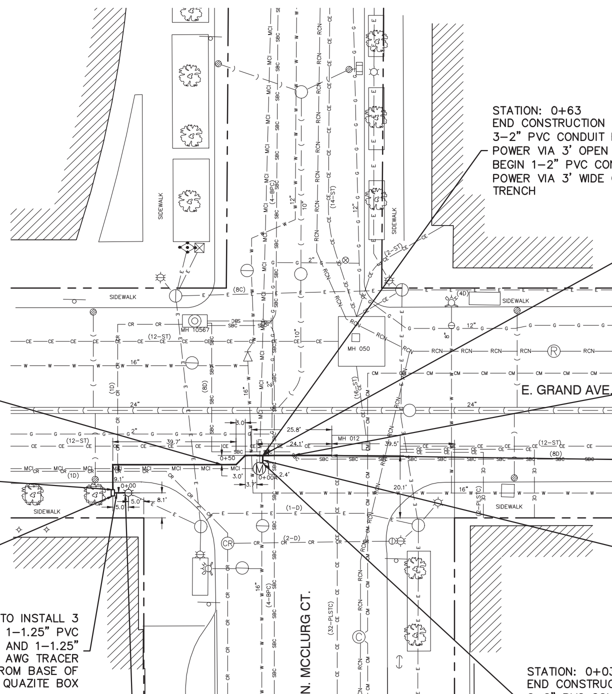
For CDPH Use Only

CITY OF CHICAGO, ILLINOIS
COOK COUNTY

ISSUED FOR CONSTRUCTION

NORTH

verizon business



STATION: 0+63
END CONSTRUCTION OF PROPOSED 3-2" PVC CONDUIT FOR FIBER AND POWER VIA 3' OPEN CUT TRENCH
BEGIN 1-2" PVC CONDUIT FOR POWER VIA 3' WIDE OPEN CUT TRENCH

STATION: 0+00A
BEGIN CONSTRUCTION OF PROPOSED 1-2" PVC CONDUIT FOR FIBER BY VIA 3' WIDE OPEN CUT TRENCH

PROPOSED 58 LINEAR FEET OF 3-2" PVC CONDUIT FOR 2-2" PVC CONDUIT FOR FIBER AND 1-2" PVC CONDUIT FOR POWER VIA 3' WIDE OPEN CUT TRENCH (SEE DETAILS SHEET)

PROPOSED 22 LINEAR FEET OF 1-2" PVC CONDUIT FOR POWER VIA 3' WIDE OPEN CUT TRENCH (SEE DETAILS SHEET)

STATION: 0+05
BEGIN CONSTRUCTION OF PROPOSED 2-2" PVC CONDUIT FOR FIBER AND POWER AT PROPOSED QUAZITE BOX

STATION: 0+85
END CONSTRUCTION OF PROPOSED 1-2" PVC CONDUIT FOR POWER BY CORING INTO THE WEST WALL OF COMED MH 0368012

PROPOSED 3 LINEAR FEET OF 2-2" PVC CONDUIT FOR FIBER VIA 3' WIDE OPEN CUT TRENCH (SEE DETAILS SHEET)

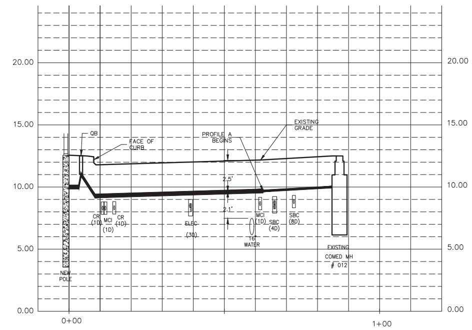
STATION: 0+05
BEGIN CONSTRUCTION OF PROPOSED 1-2" PVC CONDUIT FOR FIBER BY STUBBING 1-2" CONDUIT SOUTH OF PROPOSED QUAZITE BOX

CONTRACTOR TO INSTALL 3 LINEAR FEET OF 1-1.25" PVC CONDUIT FOR POWER AND 1-1.25" PVC CONDUIT & 12 AWG TRACER WIRE FOR FIBER FROM BASE OF POLE TO QUAZITE BOX

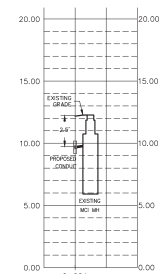
STATION: 0+03A
END CONSTRUCTION OF PROPOSED 2-2" PVC CONDUIT FOR FIBER BY CORING INTO THE NORTH WALL OF MFS MH

PROJECT PLAN VIEW
Scale: 1" = 20'

STATION 0+00
CONTRACTOR TO REMOVE EXISTING LIGHT POLE AND FOUNDATION. REPLACE WITH NEW FOUNDATION (DEO SPECIFICATION #818 - 9'-0" DEEP) AND NEW POLE (CDOT DEO SPECIFICATION #808). (SEE SHEET 9 FOR DETAILS)



PROFILE VIEW
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 5'



PROFILE VIEW A
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 5'

NOTE: USE EXTREME CAUTION WHEN DIGGING NEAR EXISTING UTILITIES.

CONTRACTOR TO COORDINATE WITH CDOT-DEO PRIOR TO CONSTRUCTION, REGARDING THE PROPOSED REPLACEMENT OF EXISTING LIGHT POLE AND FOUNDATION.

PRIOR TO INSTALLATION OF NEW POLE, CONTRACTOR TO CONFIRM THAT FOUNDATION WILL NOT INTERFERE WITH EXISTING UTILITIES.

GAS FACILITIES SHOWN ON THIS DRAWING MAY INDICATE THE PRESENCE OF A GAS SERVICE OR OTHER GAS INFRASTRUCTURE. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING AROUND THESE FACILTIES.

0 2.5 5 10 — 1 inch = 5 ft.
0 10 20 40 — 1 inch = 20 ft.

NODE ID: 501367
397 E. GRAND AVE.
CHICAGO, ILLINOIS
OUC NO: 102707

CLARIFICATION NO.	QUANTITY

OWNER: MCI
MCImetro ACCESS TRANSMISSION SERVICES LLC
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC CABLE ROUTE

ENGINEER: hbk ENGINEERING
HBK ENGINEERING, LLC

DATE: 03-25-2020
ENGINEER: GSS
DRAWN BY: JNW, CGT

REVISIONS

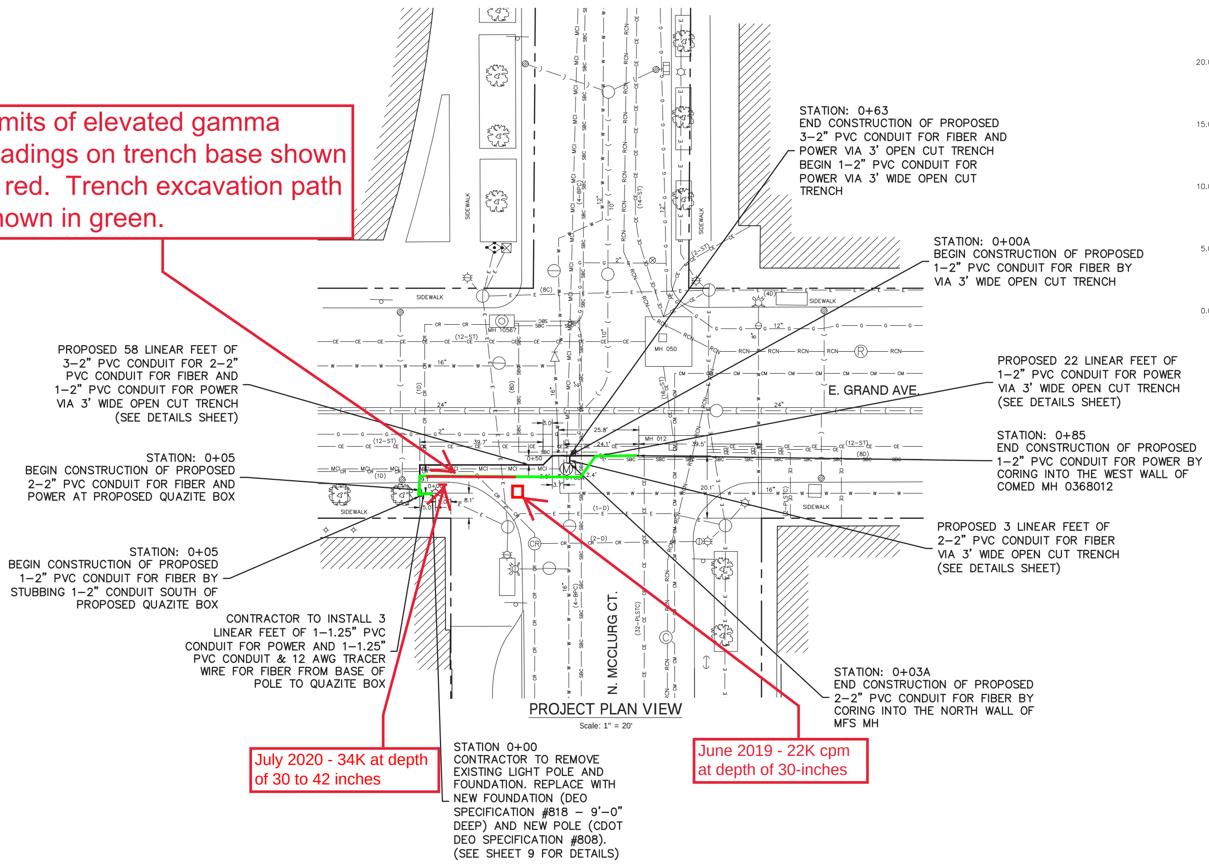
DATE	DESCRIPTION	INITIAL
03-25-20	FOR OUC REVIEW	NPP
08-13-20	IFC	CGT

SCALE
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'
MP ____ TO MP ____
SHEET 4 OF 10
FILE: 18-0864, VZ-ST-1748

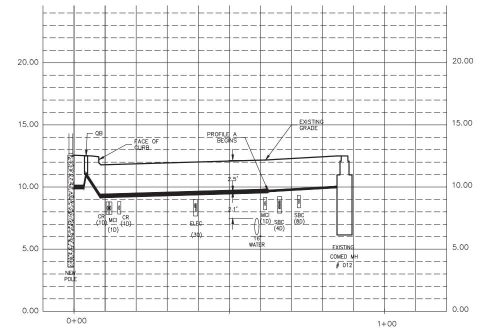
ANNOTATED DRAWING AND GAMMA RESULTS

CITY OF CHICAGO, ILLINOIS
COOK COUNTY

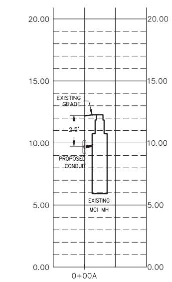
ISSUED FOR CONSTRUCTION



PROJECT PLAN VIEW
Scale: 1" = 20'



PROFILE VIEW
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 5'



PROFILE VIEW A
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 5'

NOTE: USE EXTREME CAUTION WHEN DIGGING NEAR EXISTING UTILITIES.

CONTRACTOR TO COORDINATE WITH CDOT-DEO PRIOR TO CONSTRUCTION, REGARDING THE PROPOSED REPLACEMENT OF EXISTING LIGHT POLE AND FOUNDATION.

PRIOR TO INSTALLATION OF NEW POLE, CONTRACTOR TO CONFIRM THAT FOUNDATION WILL NOT INTERFERE WITH EXISTING UTILITIES.

GAS FACILITIES SHOWN ON THIS DRAWING MAY INDICATE THE PRESENCE OF A GAS SERVICE OR OTHER GAS INFRASTRUCTURE. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING AROUND THESE FACILTIES.

1 inch = 5 ft.   1 inch = 20 ft.

NORTH

verizonbusiness

NODE ID: 501367
397 E. GRAND AVE.
CHICAGO, ILLINOIS
OUC NO: 102707

CLARIFICATION NO.	QUANTITY

OWNER: MCI MCImetro ACCESS TRANSMISSION SERVICES LLC
OUTSIDE PLANT CONSTRUCTION
TITLE: FIBER OPTIC CABLE ROUTE

ENGINEER: hbk ENGINEERING
HBK ENGINEERING, LLC

DATE: 03-25-2020
ENGINEER: GSS
DRAWN BY: JNW, CGT

REVISIONS

DATE	DESCRIPTION	INITIAL
03-25-20	FOR OUC REVIEW	NPP
08-13-20	IFC	CGT

SCALE
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'
MP ____ TO MP ____
SHEET 4 OF 10
FILE: 18-0864, VZ-ST-1748

Gamma Survey Results
Meade

Survey Equipment

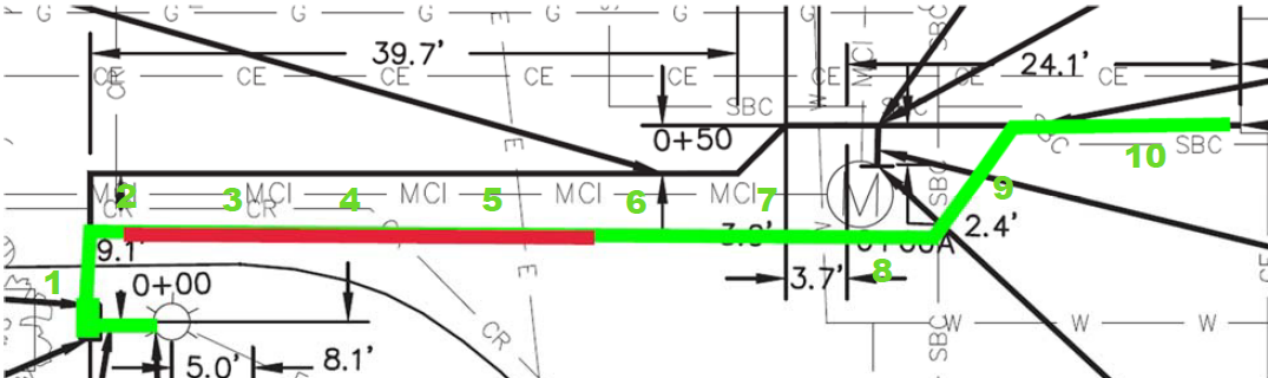
Location:	353-426 E. Grand Ave.
CDPH:	1283488
Ludlum 2221 S/N:	326720
Cutoff (short cord):	7,020 cpm
Background:	2,600 cpm
Personnel:	E. Sulita
Date of Screening:	9/29/2020, 9/30/2020

Survey Results

Location (353-426 E. Grand Ave.) See Map	Depth (inches)	Maximum Readings (cpm)
1 (sidewalk), 25' W. of McClurg	0-6	concrete
	6	1,600
	18	2,000
	30	2,700
2 (roadway), 25'-20' W. of McClurg	0-12	concrete
	12	1,900
	18	2,100
	30	6,000
3, 20'-15' W. of McClurg	0-12	concrete
	12	2,850
	12-24*	2,900
	24-30*	4,000
	30	20,835
4, 15'-10' W. of McClurg	0-12	concrete
	12	6,760
	12-24*	5,500
	24-30*	6,500
	30	11,000 - 21,000
5, 10'-5' W of McClurg	0-12	concrete
	12	5,950
	12-24*	6,000
	24-30*	6,500
	30	7,000 - 10,000

Location (353-426 E. Grand Ave.) See Map	Depth (inches)	Maximum Readings (cpm)
6, 5' W. to W. edge of McClurg	0-12	concrete
	12	2,100
	12-24*	2,650
	24-30*	2,150
	30	32,150
7, W. edge of McClurg to 10' E.	0-12	concrete
	12	1,670
	30	2,000
8, 10'-15' E. of McClurg	0-12	concrete
	12	1,800
	18	2,200
	30	2,160
9, 15'-20' N.E. of McClurg	0-12	concrete
	12	5,010
	18	2,200
	30	3,160
10, 20'-30' E. of McClurg	0-12	concrete
	12	2,100
	18	2,200
	30	4,050

* Gamma readings for these depths were taken from the excavator bucket. Lifts were approximately 3-6" with maximum readings noted.



PHOTOGRAPH

PICTURE 1: VIEW OF THE EXCAVATION AT 353-426 E. GRAND AVE, LOOKING WEST TOWARDS FAIRBANKS AVE.