

AECOM 303 E. Wacker Drive, Suite 1400 Chicago, Illinois 60601 312-939-1000 tel 312-939-4198 fax

October 25, 2024

Mr. Kyle Carlson Peoples Gas Light & Coke Co. Environmental Services Department 200 E. Randolph Street, 24th Floor Chicago, IL 60601

RE: Streeterville Thorium Monitoring Results for E North Water St. Peoples Gas System Expansion

Permit No.: CDOT1987116

Permit Addresses: 403-457 E North Water Street

Dear Mr. Carlson:

Pursuant to conditions specified in the Right of Way (ROW) 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 during September 2024 for excavations at the referenced addresses related to the expansion of the Peoples Gas System (refer to map included with CDPH forms). The excavations varied in depth, ranging from 18 inches to 6 feet below ground surface (bgs). Additional details about individual sections of the overall excavation are provided below. All excavations were completed using an excavator.

The monitoring did not indicate that the 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 Ludlum Model 2221 survey meters with shielded 2 x 2 inch Nal probes (Model 44-10). Two Ludlum instruments were utilized for screening. The gamma count thresholds indicative of the 7.1 pCi/g total radium removal action level in counts per minute (cpm) with a shielded probe and short cord were 6,323 cpm for S/N 176944. The gamma count threshold indicative of the 7.1 pCi/g removal action level with a shielded probe was 7,245 cpm with a short cord and 6,641 cpm with a long cord for Ludlum S/N 326720.

All excavations, 1 through 36, were conducted along East North Water Street as shown in the figures attached to the ROW form (Attachment 1).

Week of September 2

On September 3, Excavation 1 was excavated to a depth of about 3 feet. Thorium surveying results for the excavated 18-inch lifts ranged from 1,400 to 3,100 cpm. Excavation 2a was excavated to a depth of about 54 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,410 to 1,450 cpm. The gamma counts for both activities were below the instrument cutoff of 6,641 cpm.

On September 4, Excavation 3 was excavated to a depth of about 54 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,349 to 1,543 cpm. Excavation 2b was excavated to a depth of about 38 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,417 to 1,573 cpm. Excavation 4 was excavated to a depth of about 31 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,113 to 2,074 cpm. Excavation 5 was excavated to a depth of about 31 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,014 to 2,037 cpm. Excavation 6 was excavated to a depth of about 31 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,187 to 2,237 cpm. The gamma counts for all activities were below the instrument cutoff of 6,641 cpm.

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On September 5, Excavation 7 was excavated to a depth of about 49 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,113 to 2,074 cpm. Excavation 8 was excavated to a depth of about 45 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,115 to 2,376 cpm. The gamma counts for both activities were below the instrument cutoff of 6,641 cpm.

On September 6, Excavation 9 was excavated to a depth of about 54 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,921 to 2,396 cpm. Excavation 10 was excavated to a depth of about 18 inches, with a gamma count of 1,410 cpm. Excavation 11 was excavated to a depth of about 18 inches, with a gamma count of 1,367 cpm. Excavation 12 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,638 to 1,901 cpm. The gamma counts for all activities were below the instrument cutoff of 7,245 cpm.

Week of September 9

On September 9, Excavation 13 was excavated to a depth of about 45 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,743 to 1,967 cpm. Excavation 14 was excavated to a depth of about 45 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,432 to 2,165 cpm. Excavation 15 was excavated to a depth of about 45 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,389 to 1,995 cpm. Excavation 16 was excavated to a depth of about 45 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,838 to 2,107 cpm. The gamma counts for all activities were below the instrument cutoff of 7,245 cpm.

On September 10, Excavation 17 was excavated to a depth of about 54 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,772 to 2,751 cpm. Excavation 18 was excavated to a depth of about 54 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,663 to 2,897 cpm. Excavation 19 was excavated to a depth of about 6 feet. Thorium surveying results for the excavated 18-inch lifts ranged from 1,778 to 2,346 cpm. Excavation 20 was excavated to a depth of about 6 feet. Thorium surveying results for the excavated 18-inch lifts ranged from 1,543 to 2,313 cpm. The gamma counts for all activities were below the instrument cutoff of 7,245 cpm.

On September 11, Excavation 21 was excavated to a depth of about 62 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,569 to 2,032 cpm. Excavation 22 was excavated to a depth of about 62 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 2,165 to 2,541 cpm. The gamma counts for both activities were below the instrument cutoff of 6,323 cpm.

Week of September 16

On September 16, Excavation 23 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,911 to 2,323 cpm. Excavation 24 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,964 to 2,364 cpm. Excavation 25 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 2,156 to 2,174 cpm. Excavation 26 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,824 to 2,586 cpm. Excavation 27 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 2,019 to 2,618 cpm. The gamma counts for all activities were below the instrument cutoff of 6,641 cpm.

On September 19, Excavation 28 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,807 to 1,910 cpm. Excavation 29 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,510 to 2,011 cpm. Excavation 30 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,797 to 1,944 cpm. Excavation 31 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,724 to 1,816 cpm. Excavation 32 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,904 to 1,910 cpm. The gamma counts for all activities were below the instrument cutoff of 6,641 cpm.

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On September 20, Excavation 33 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,814 to 2,017 cpm. Excavation 34 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 2,011 to 2,180 cpm. Excavation 35 was excavated to a depth of about 36 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 2,114 to 2,580 cpm. Thorium surveying results for the excavated 18-inch lifts ranged from 2,019 to 2,618 cpm. The gamma counts for all activities were below the instrument cutoff of 6,641 cpm.

Week of September 23

On September 23, Excavation 36 was excavated to a depth of about 63 inches. Thorium surveying results for the excavated 18-inch lifts ranged from 1,807 to 4,295 cpm. Excavation 1 was screened to a depth of 36 inches on September 3, but was further excavated to 54 inches on September 23. Thorium surveying results at a depth of 54 inches was 2,160 cpm. The gamma counts for all activities were below the instrument cutoff of 6,323 cpm.

A PDF copy of this letter report will be forwarded via email to the CDPH, and Verneta Simon (USEPA) to fulfill the reporting requirements. Copies of the CDPH forms, annotated drawing, tabulated gamma results, and photographs, are included as attachments to this report. Please contact us with any questions you have regarding this letter or the reported results.

Regards,

Elif Ulger

Environmental Engineer

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

cc: Ahmad Nur, CDPH

Verneta Simon, USEPA

Attachments: CDPH Permit Form and Figures

Annotated Drawings, Tabulated Gamma Results and Photographs

ATTACHMENT 1

CDPH PERMIT FORM AND FIGURES



DEPARTMENT OF PUBLIC HEALTH CITY OF CHICAGO

FORM NO. CDPH.ROW.04 (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.

Review all environmental and other information regarding the worksite provided by CDPH. Additional information regarding the aforementioned environmental contamination is available for review at https://www.epa.gov/lindsay-light. This environmental information must be reviewed and the remainder of this form completed before the permit can be issued if the ground will be 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 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 CDPH at (312) 745-8332 and the United States Environmental Protection Agency at (800) 424-8802.

immediately contact CDPH at (312) 745-8332 and the United States Environr	nental Protection A	gency at (800) 424-8802.
Applicant Name (print): Cecilio Martinez	Signature:	Cecilio Martinez
Site Address and Work Location (Describe exact site location and attach ma		
403-457 E NORTH WA	TER ST	
Nature of Work: Installation of new gas main in E North Water right of	way	-
Company Name, Address, Phone No.: Peoples Gas, 200 E Randolph St.	Chicago, IL 60601	, 312-240-4000
General / Prime Contractor Name, Address, Phone No.: Cecilio Martinez, 4. Include subcontractor information if applicable) Safety Officer / Phone No. Kyle Carlson / 414-221-4076	207 W 35th PI Chi	cago, IL 60637, 312-909-9837
Radiation Contractor / Phone No. (if applicable) AECOM / Steve Kornder: 2	<u>262-515-7700</u>	
Check if City Department Work Department Name:		
CDOT Permit No.: DOT1987116		
Today's Date: 8/15/2024 Expected Start Date: 8/26/2024	_ CDPH Approva	al/Date ahmad nur 08/19/2024
Please upload this form with detailed drawings as an attachment to the CDOT Public Vinspection, License, Registration, and 811 Chicago Portal (https://ipi.cityofchicago.com/	Way Opening Permit	Application on the City of Chicago's Permit,

ISSUED FOR CONSTRUCTION 06-03-2024

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PGL-CDWM DIRECTIONAL BORE PILOT PROGRAM:

PART 192 OF TITLE 49 OF THE CODE OF FEDERAL REGULATIONS.

REV. 0 EFFECTIVE DATE: 01/23/2017

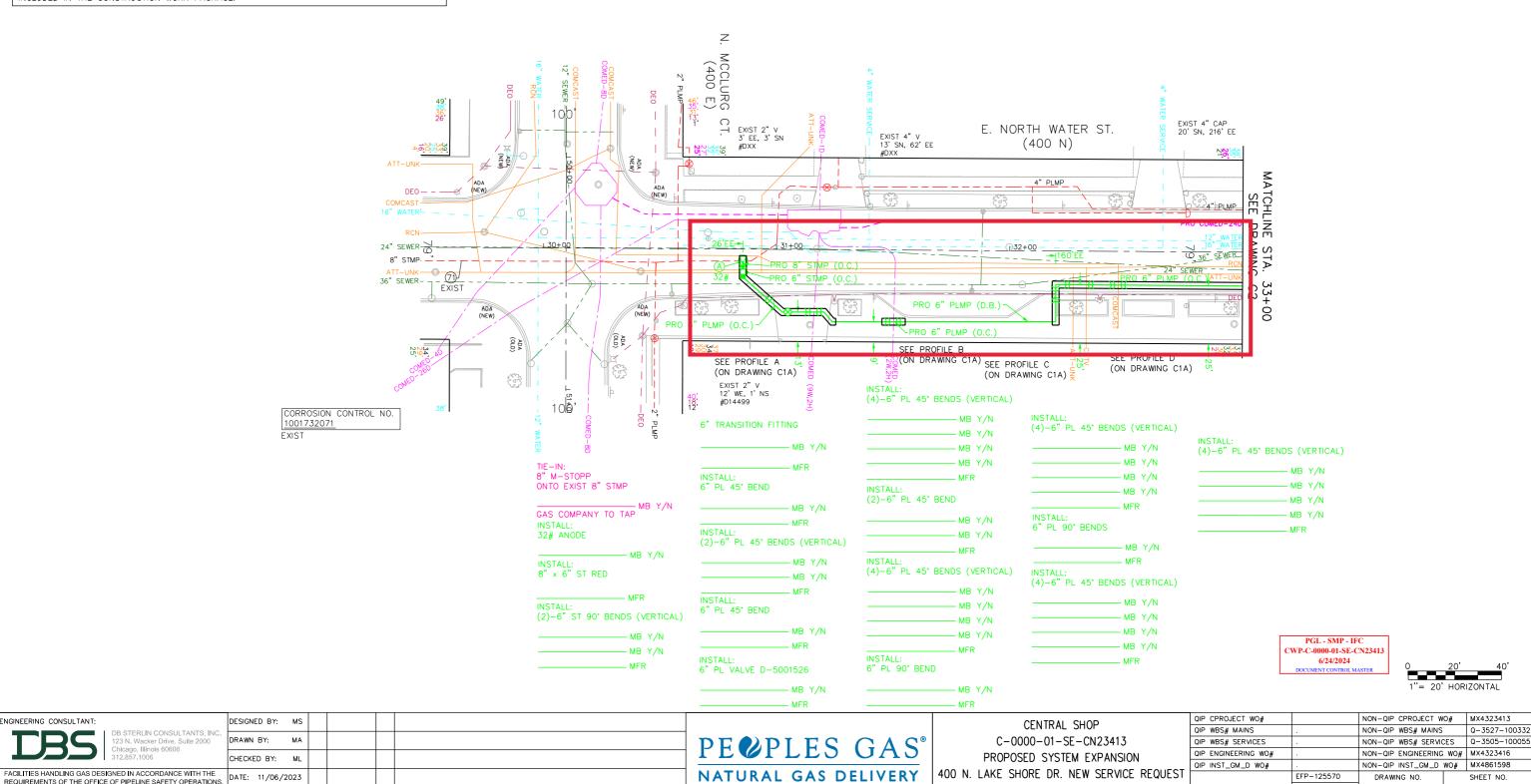
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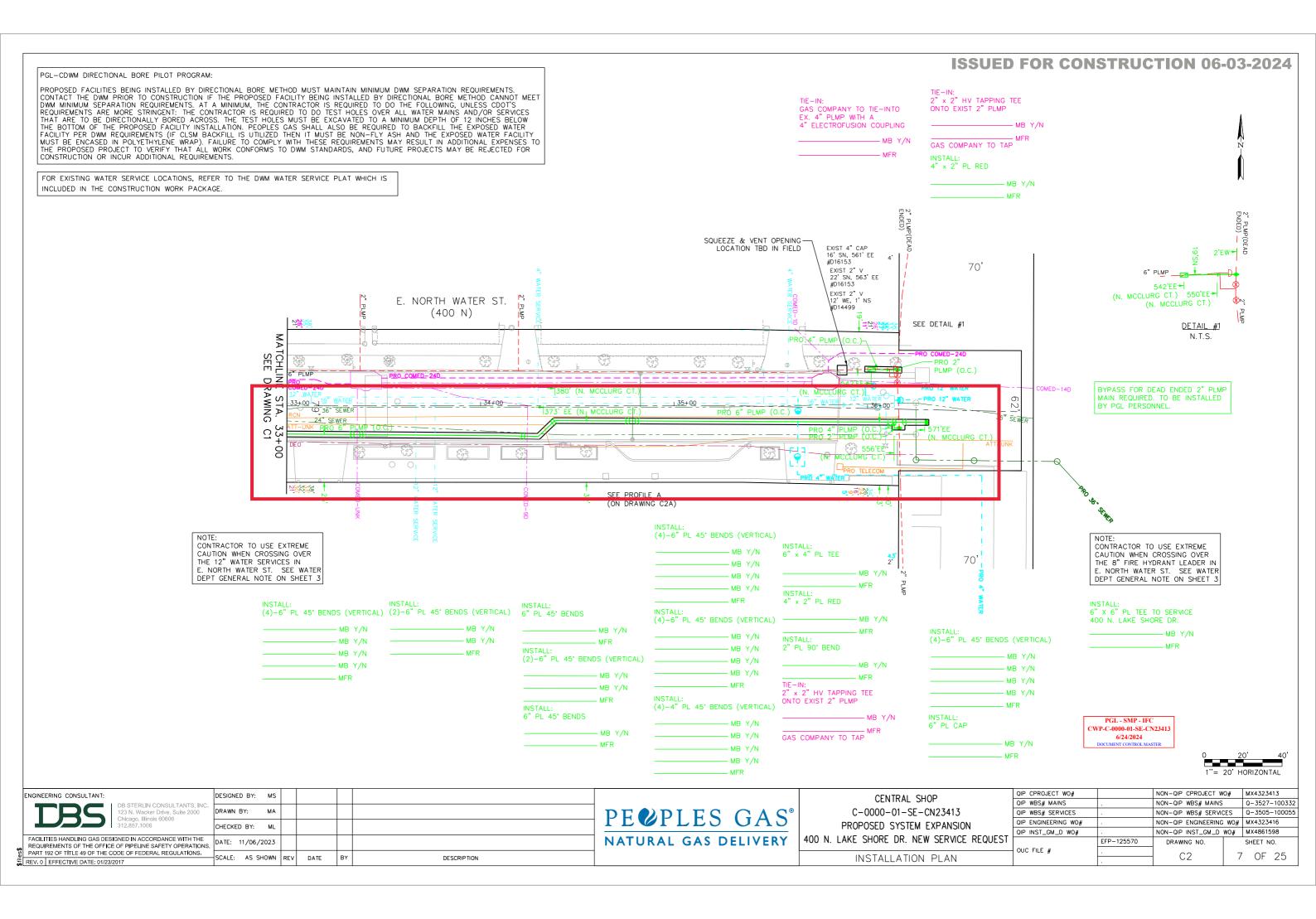
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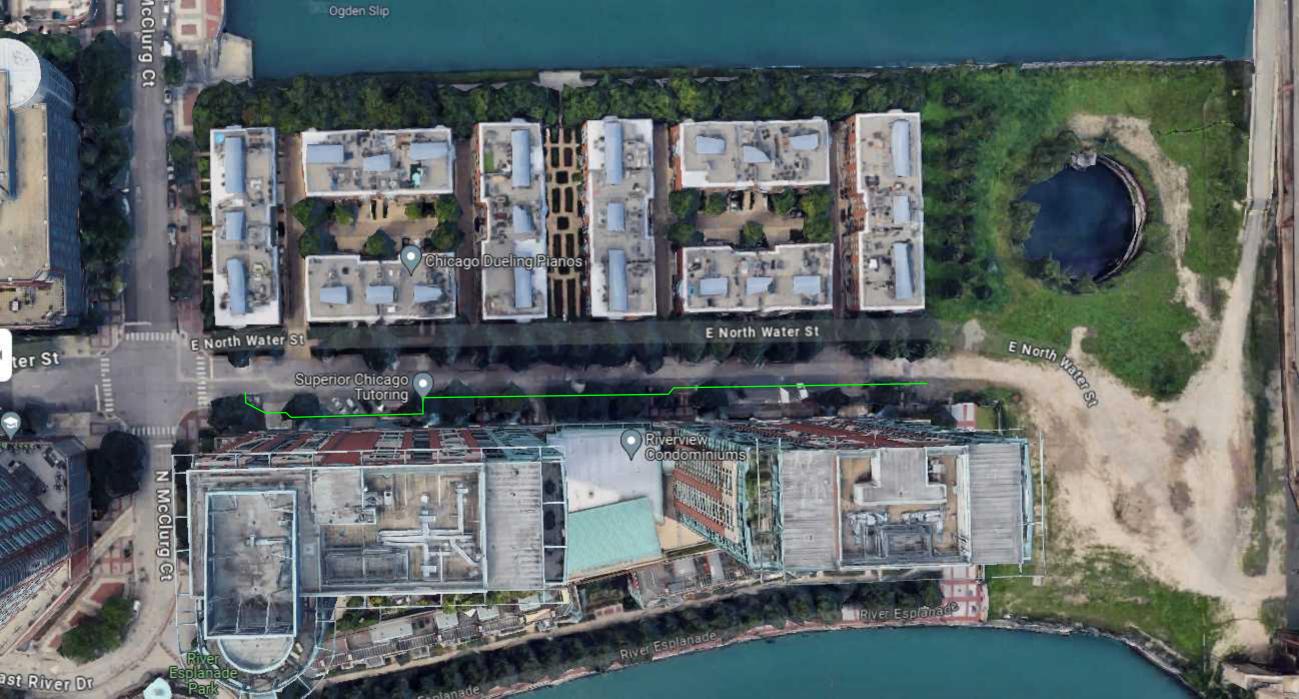
PROPOSED FACILITIES BEING INSTALLED BY DIRECTIONAL BORE METHOD MUST MAINTAIN MINIMUM DWM SEPARATION REQUIREMENTS. CONTACT THE DWM PRIOR TO CONSTRUCTION IF THE PROPOSED FACILITY BEING INSTALLED BY DIRECTIONAL BORE METHOD CANNOT MEET DWM MINIMUM SEPARATION REQUIREMENTS. AT A MINIMUM, THE CONTRACTOR IS REQUIRED TO DO THE FOLLOWING, UNLESS CDOT'S REQUIREMENTS ARE MORE STRINGENT: THE CONTRACTOR IS REQUIRED TO DO TEST HOLES OVER ALL WATER MAINS AND/OR SERVICES THAT ARE TO BE DIRECTIONALLY BORED ACROSS. THE TEST HOLES MUST BE EXCAVATED TO A MINIMUM DEPTH OF 12 INCHES BELOW THE BOTTOM OF THE PROPOSED FACILITY INSTALLATION, PEOPLES GAS SHALL ALSO BE REQUIRED TO BACKFILL THE EXPOSED WATER FACILITY PER DWM REQUIREMENTS (IF CLSM BACKFILL IS UTILIZED THEN IT MUST BE NON-FLY ASH AND THE EXPOSED WATER FACILITY MUST BE ENCASED IN POLYETHYLENE WRAP). FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY RESULT IN ADDITIONAL EXPENSES TO THE PROPOSED PROJECT TO VERIFY THAT ALL WORK CONFORMS TO DWM STANDARDS, AND FUTURE PROJECTS MAY BE REJECTED FOR CONSTRUCTION OR INCUR ADDITIONAL REQUIREMENTS.

FOR EXISTING WATER SERVICE LOCATIONS, REFER TO THE DWM WATER SERVICE PLAT WHICH IS INCLUDED IN THE CONSTRUCTION WORK PACKAGE.



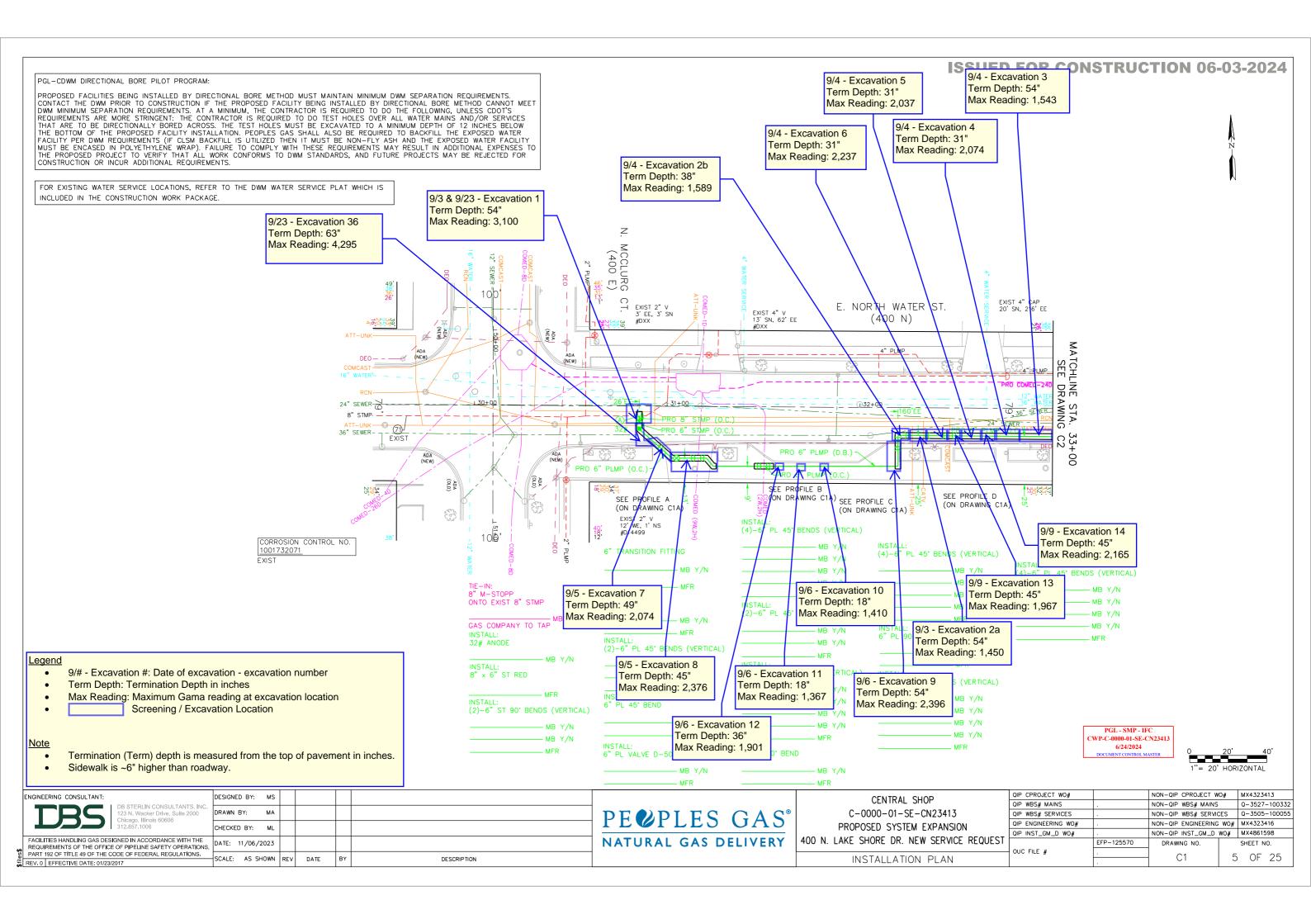
INSTALLATION PLAN

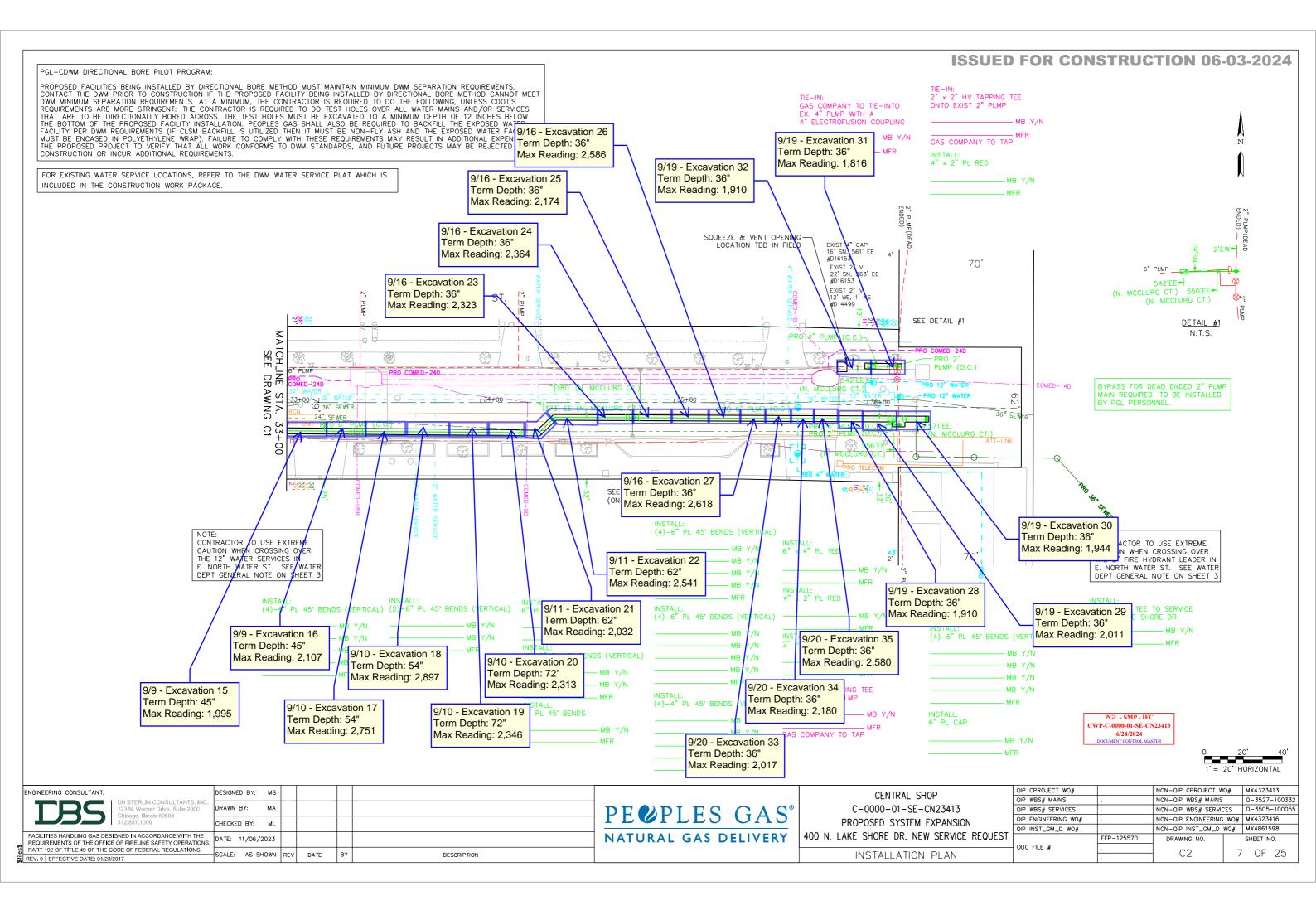




ATTACHMENT 2

ANNOTATED DRAWING, TABULATED GAMMA RESULTS AND PHOTOGRAPHS





Survey Equipment

CDOT No:	CDOT1987116
Ludlum 2221 S/N:	Various, See below
Ludlum Probe S/N	Various, See below
Cutoff (cpm)	Various, See below
Date of Screening:	9/03/2024 through 9/23/2024

Survey Results

Day	Equipment	Ludlum Cutoff (cpm)	Location	Depth (inches)	Maximum Readings (cpm)
		, ,	1	0-4"	Asphalt
				4-9"	Concrete
				9-18"	3,100
				18-36"	1,400
9/3/2024	Ludlum SN: 326720 (Probe SN: 360158)	6641		0-4"	3,100 1,400 Asphalt Concrete 1,410 1,440 1,450 Asphalt Concrete 1,349 1,349 1,543 Asphalt Concrete 1,417 1,589 1,573 Asphalt Concrete 1,113
	300130)			4-9"	Concrete
			2a	9-18"	1,410
				18-36"	1,440
				36-54"	1,450
				0-4"	Asphalt
				4-9"	Concrete
			3	9-18"	1,349
				18-36"	1,349
				36-54"	1,543
			2b	0-4"	Asphalt
				4-9"	Concrete
				9-18"	1,417
				18-36"	1,589
				38"	1,573
9/4/2024	Ludlum SN: 326720 (Probe SN:	6641		0-4" Asphalt 4-9" Concrete 9-18" 1,417 18-36" 1,589 38" 1,573 0-4" Asphalt 4-9" Concrete	Asphalt
9/4/2024	360158)	0041	4	4-9"	
			4	13"	1,113
				31"	2,074
			5	0-4"	Asphalt
				4-9"	Concrete
				13"	1,014
				31"	2,037
				0-4"	Asphalt
			6	4-9"	Concrete
			О	9-13"	1,187
				13-31"	2,237

	I		l	0-4"	Asphalt			
9/5/2024				4-9"	Concrete			
			7	9-13"	1,113			
				13-31"	Asphalt Concrete 1,113 2,074 2,005 Concrete (Driveway) 2,348 2,376 Sidewalk Paver Concrete 2,396 1,921 1,991 Sidewalk Paver Concrete 1,410 Sidewalk Paver Concrete 1,410 Sidewalk Paver Concrete 1,4638 1,901 Asphalt Concrete 1,743 1,800 1,967			
	Ludlum SN: 326720 (Probe SN: 360158)	6641		31-49"				
	300138)							
				0-9"	(Driveway)			
			8	9-27"	2,348			
				27-45"	2,376			
				0-2"	Sidewalk Paver			
				2-6"	Concrete			
			9	6-18"	2,396			
				18-36"	1,921			
				36-54"	1,991			
				0-2"	Sidewalk Paver			
			10	2-6"	Concrete			
9/6/2024	Ludlum SN: 326720 (Probe SN: 360158)	7245		6-18"	1,410			
	300138)			0-2"	Sidewalk Paver			
			11	2-6"	Concrete			
				6-18"	1,367			
				0-2"	Sidewalk Paver			
			40	2-6"	Concrete			
			12	6-18"	1,638			
				18-36"				
				0-3"				
			1				3-9"	1,638 1,901 Asphalt Concrete 1,743
			13	9-18"	Asphalt Concrete			
				18-36"	1,800			
				45"	1,967			
				0-3"	Asphalt			
			14	3-9"	Concrete			
				9-18"	1,432			
				18-36"	1,808			
				45"	2,165			
0/0/2024	Ludlum SN: 326720 (Probe SN:	7045		0-3"	Asphalt			
9/9/2024	360158)	7245		3-9"	Concrete			
				9-12"	1,736			
			15	12-18"	2,005 Concrete (Driveway) 2,348 2,376 Sidewalk Paver Concrete 2,396 1,921 1,991 Sidewalk Paver Concrete 1,410 Sidewalk Paver Concrete 1,410 Sidewalk Paver Concrete 1,367 Sidewalk Paver Concrete 1,367 Sidewalk Paver Concrete 1,638 1,901 Asphalt Concrete 1,743 1,800 1,967 Asphalt Concrete 1,432 1,808 2,165 Asphalt Concrete			
				18-36"				
				36-45"				
				0-4"	Asphalt			
				4-9"				
			16	9-12"	2,001			
		16	16	12-18"	2,107			
				18-36"				
				36-45"	1,838			

				0-4"	Asphalt			
				4-9"	Concrete			
			47	9-13"	2,751			
			17	13-18"	1,894			
				18-36"	1,772			
				36-54"	2,354			
				0-4"	Asphalt			
				4-9"	Concrete			
				9-13"	2,897			
			18	13-18"	1,663			
				18-36"	1,733			
				36-54"	2,277			
0/40/0004	Ludlum SN: 326720 (Probe SN:	7045		0-4"	Asphalt			
9/10/2024	360158) `	7245		4-9"	Concrete			
				9-13"	1,863			
			19	13-18"	1,973			
				18-36"	Asphalt Concrete 1 1,863 18" 1,973 16" 2,264 164" 2,346 172" 1,778 1" Asphalt Concrete 3" 2,252 18" 1,927 1,543 1,730			
				36-54"				
				54-72"	1,778			
				0-4"	Asphalt			
				4-9"	Concrete			
				9-13"				
						20	13-18"	2,252
				18-36"	1,543			
				36-54"	1,730			
				54-72"	2,313			
				0-3"	Asphalt			
				3-9"	Concrete			
			21	9-12"	1,992			
9/11/2024			21	12-30"	1,634			
				30-48"	2,032			
	Ludlum SN: 176944 (Probe SN:	6222		48-62"	1,569			
	RN21187)	6323		0-3"	1,733 2,277 Asphalt Concrete 1,863 1,973 2,264 2,346 1,778 Asphalt Concrete 2,252 1,927 1,543 1,730 2,313 Asphalt Concrete 1,992 1,634 2,032			
				3-9"				
			22	9-12"				
		22 12-30" 30-48" 48-62"						
				30-48"	2,452			

	T T		I	0-3"	Asphalt
				3-9"	Concrete
			23	9-18"	2,323
				18-36"	1,911
				0-3"	
				3-9"	Asphalt Concrete
			24	9-18"	2,364
				18-36"	1,964
				0-3"	
	Ludlum CN: 226720 (Broke CN:		25	3-9"	Asphalt Concrete
9/16/2024	Ludlum SN: 326720 (Probe SN: 360158)	6641		9-18"	2,156
				18-36"	2,174
				0-3"	
				3-9"	Asphalt Concrete
			26	9-18"	
				18-36"	1,824
				0-3"	2,586
					Asphalt
			27	27 3-9" Concre 9-18" 2,019	
			28	2,618	
					Asphalt
		6641			
				9-18" 1,807 18-36" 1,910 0-3" Asphalt 3-9" Concrete 9-18" 1,510	
					2,011
			30		Asphalt
9/19/2024	Ludlum SN: 326720 (Probe SN: 360158)			3-9"	Concrete
	300130)			9-18"	1,797
				18-36"	1,944
				0-3"	Asphalt
			31	3-9"	Concrete
				9-18"	1,724
				18-36"	1,816
				0-3"	Asphalt
	32	32	3-9"	Concrete	
				9-18"	1,910
		<u> </u>	ļ	18-36"	1,904
			33	0-18"	1,814
9/20/2024				18-36"	2,017
	Ludlum SN: 326720 (Probe SN:	6641	34	0-18"	2,011
	360158)			18-36"	2,180
			35	0-18"	2,114
				18-36"	2,580

9/23/2024 Ludlum SN: 176944 (Probe S RN21187)				0-4"	Asphalt
			4-9"	Concrete	
			36	9-13"	
	Leadhara ONE 470044 (Deals a ONE			13-18"	2,193
		6323		18-36"	4,295
	TAINZ 1 TOT)			36-45"	2,511
				45-54"	
				63	1,880
			1	54"	2,160

PICTURE 1: VIEW OF EXCAVATION FACING EAST, WESTERN END OF EXCAVATION.



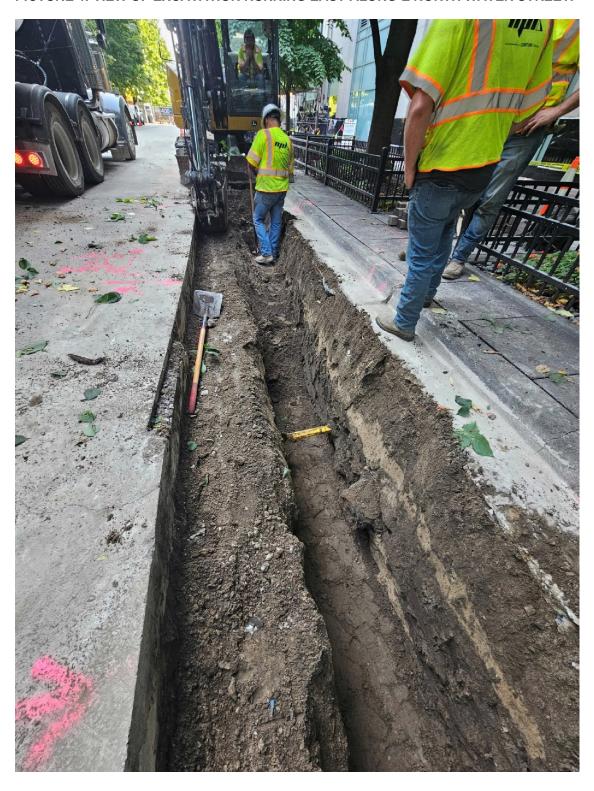
PICTURE 2: VIEW OF EXCAVATION FACING EAST, INSIDE OF THE 400 LSD PROPERTY GATE.



PICTURE 3: VIEW OF EXCAVATION RUNNING EAST TOWARDS 400 LSD



PICTURE 4: VIEW OF EXCAVATION RUNNING EAST ALONG E NORTH WATER STREET.



PICTURE 5: VIEW OF EXCAVATION ON SIDEWALK INFRONT OF 415 E NORTH WATER STREET CONDOS, FACING NORTHEAST.



PICTURE 6: VIEW OF EXCAVATION, FACING EAST, COMPLETED ALONG DRIVEWAY LEADING INTO THE RIVERVIEW RECEIVING GARAGE.

