



AECOM
100 S. Wacker Drive, Suite 500
Chicago, Illinois 60606

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

February 15, 2016

Ms. Michelle Weiland
Western Utility Contractors Inc.
2565 Palmer Ave
Park Forest, IL 60466

RE: Radiological Survey of Fiber Optic Conduit Installation
Permit No.: DOT579409
Permit Address: 300-45 East Erie Street, Chicago, Illinois
AECOM Project No. 60305263

Dear Ms. Weiland:

Pursuant to conditions specified in the permit (see attached) 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 surveillance between January 25 and 29, 2016 for a trench excavation to install a Comcast fiber optic conduit.

Surveying was performed on the soil removed at the above site (see sketch) during installation of a new fiber optic conduit. The excavation was composed of several connected trenches to address connection to the new development. The trench sections varied in length from 8 to 30 feet and depth from 3 to 7 feet below the ground surface (bgs).

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 Models 2221 survey meter and an unshielded 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 18,278 (S/N: 176944) counts per minute (cpm) unshielded.

The field gamma measurements within the excavation during the excavation process did not exceed the instrument threshold previously stated and ranged from a minimum of 4,900 cpm to a maximum of 10,200 cpm unshielded. The background field instrument readings for fill soil in the vicinity of the excavation area ranged from 7,000 to 7,400 cpm. The general subsurface stratigraphy was composed of urban fill and fine backfill sand within the proximity of gas line installations, which were encountered during the excavation activities. Based on field observations there was no indication of the presence of radiologically-contaminated material and/or an exceedance of the USEPA cleanup value of 7.1 pCi/g total radium. A copy of the permit and a field sketch documenting the area where work was performed have been included as attachments.

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

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

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

Regards,



Andrew Kozak
Environmental Engineer



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

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

Attachments: Permit
Sketch

PERMIT

Permit # DOT579409

**DOT Public Way Opening
Opening in the Public Way**



City of Chicago
Department of Transportation
(312) 744-4652

335 E Erie WU

ISSUED

Received Date: January 10, 2016 7:08 am

COMCAST OF CHICAGO INC
1255 WEST NORTH AVENUE
CHICAGO, IL 60622

MIKE DICKEY (630)514-8186

1531-10-105

PERMIT DATES
January 08, 2016 through January 29, 2016

PERMIT DETAILS
Public Way Opening for the purpose: repair conduit
Excavation may commence on January 08, 2016 - NO SOONER
300 - 345 E ERIE ST - Number of Openings: 1
Curb Lane, Parkway, and Sidewalk
15 Ft (L) x 3 Ft (W) x 3 Ft (D)

Subcontractors:

WESTERN UTILITY CONTRACTORS INC
2565 PALMER AVENUE
PARK FOREST, IL 60466
(708)235-1408

COBRA CONCRETE CUTTING SERVICE
2416 E. OAKTON
ARLINGTON HEIGHTS, IL 60005
(773)775-1111

Restrictions:

1. If Arterial Street Outside CBD, Then Start no earlier then 9:00 A.M. and end no later then 4:00 P.M.
2. Contractor must notify DIGGER at 312-744-7000 no less then 48 hours (exclusive of Saturdays, Sundays and Holidays) but no more then 14 calendar days in advance of the start of the excavation or demolition, unless the excavation date was provided with the application and remains unchanged. Prior to 26 calendar days the Contractor must notify DIGGER to renewal the dig date! It is the Excavator's responsibility to request refreshing of marks when needed, but no longer than 28 calendar days after the last requested date. When applicable, all excavation areas are to be clearly marked in safety white paint prior to calling DIGGER. White paint is not required for joint meets or emergency work. Excavators requesting dig tickets are responsible for the protection of utility markings at the job site. Any markings of underground utilities utilizing utility colors must be done by facility owners or authorized agents only.
3. A copy of the permit must remain on-site for inspector's review.
4. If Non-Arterial Street Outside CBD, Then Start no earlier then 7:00 A.M. and end no later then 3:00 P.M.
5. Permittee must provide a sign which identifies the telephone number and company or person performing the work. Signage may be affixed to barricades.
6. Contractor must secure plating over all openings in the roadway and secure all sidewalk/parkway openings during non-working hours until such time when the road surface is restored.
7. No work in or use of the public right of way is to be done when a special event is taking place. It is up to the applicant to determine if an event is scheduled. To obtain a listing of programs or events within the City of Chicago please dial 311 when you are within the City boundaries.

Fees:

01/11/2016 DOT_PWO - Street Opening Fee

CAPS:	AH04
Amount: \$	954.00

Total Fees: \$954.00

EFFECTIVE DATES OF PERMIT

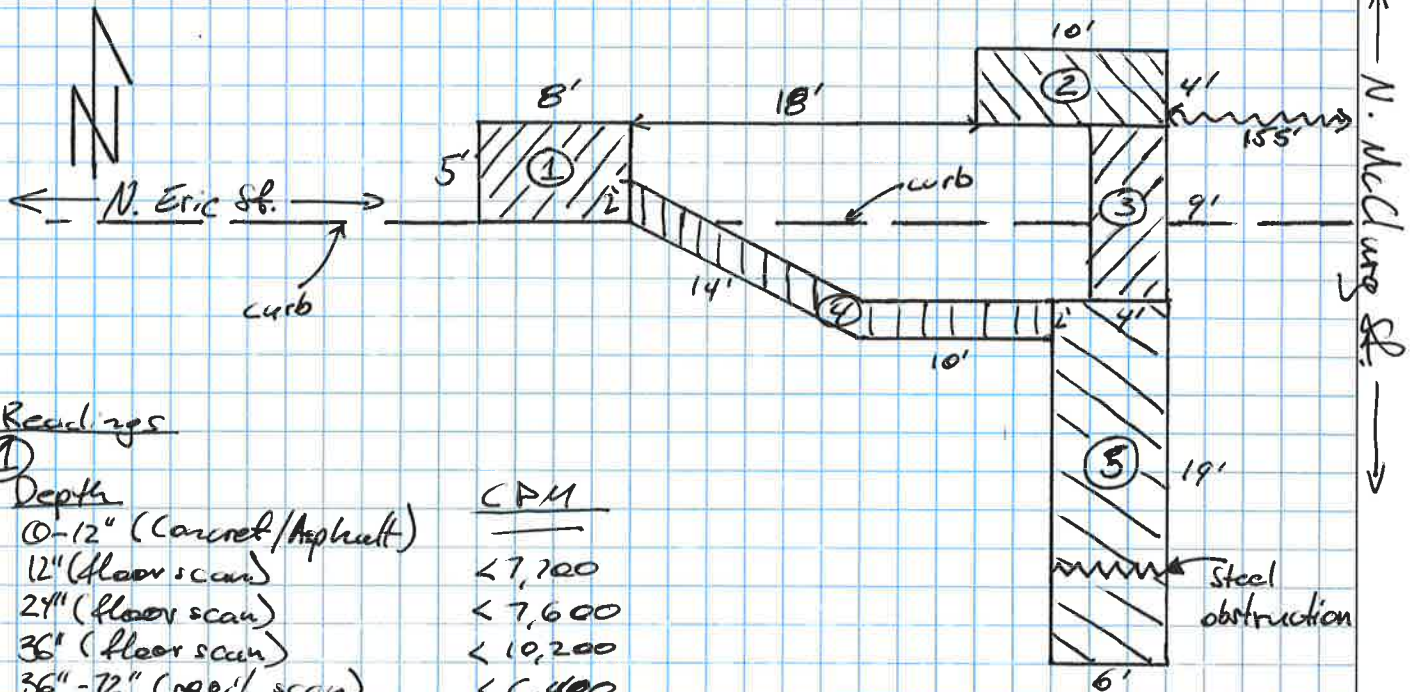
Current: January 08, 2016 through January 29, 2016 (Input date: January 10, 2016 7:08 am)

END OF PERMIT

SKETCH

Survey Equipment

Lucasini-2221 s/N: 176944
 Probe 2x2 NaI s/N: RN21187
 unshielded: 18,278 cpm
 shielded: 6,123 cpm
 background: 7,000 - 7,400 cpm (free well on north side of Erie)



Readings

①

Depth	CPM
0-12" (concrete/asphalt)	—
12" (floor scan)	< 7,700
24" (floor scan)	< 7,600
36" (floor scan)	< 10,200
36"-72" (spoil scan)	< 6,400

②

Depth	CPM
0-12" (concrete/asphalt)	—
12" (floor scan)	< 5,600
12"-36" (1" stone)	< 4,000
36" (floor scan)	< 7,600

⑤

Depth	CPM
0-6" (concrete)	—
12" (floor scan)	5,400 - 6,200
12"-32" (floor scan)	4,500 - 5,400
32"-72" (floor scan)	4,900 - 5,500

③

Depth	CPM
0-6" (concrete)	—
6" (floor scan)	< 5,200
6"-54" (clean sand/stoned fill)	< 4,900

④

Depth	CPM
0-12" (concrete)	—
12-42" (spoil scan)	6,200 - 7,200