



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

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

October 9, 2016

Jerome Murphy  
Powers Construction  
8750 W. Bryn Mawr Ave., Suite 500  
Chicago, Illinois 60631

RE: Radiological Survey of a Sewer Installation  
Permit No.: 1604905  
Permit Address: 465 N. Park Ave., Chicago, Illinois  
AECOM Project No. 60508241

Dear Mr. Murphy:

Pursuant to conditions specified in a 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 on September 27, 2016 for installation of a sewer line.

Surveying was performed within the excavation and on the spoil removed at 465 N. Park Ave. (refer to sketch). The excavation involved removal of concrete and an additional trench excavation. Powers Construction sub-contractor removed a section of concrete sidewalk approximately 20-feet long by 17-foot wide. The additional trench excavation was within the removed concrete area and was approximately the same dimensions with 6-foot "benched" on the east and west sides of the excavation, to a depth of 8.5-feet below 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 17,253 (S/N: 172039) counts per minute (cpm) unshielded.

The field gamma measurements within the excavations and of the spoil during the excavation process did not exceed the instrument threshold previously stated and ranged from a minimum of 3,900 cpm to a maximum of 8,200 cpm unshielded. Based on field observations there was no indication of the presence of radiologically-contaminated fill and/or an exceedance of the USEPA removal action level of 7.1 pCi/g total radium. A copy of the permit and a field sketch documenting the area where work was performed are included as attachments.

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

Chicago Department of Public Health  
Attention: Mr. Terry Sheahan  
333 South State Street, Room 200  
Chicago, Illinois 60604

Permit No.: 1604905  
Permit Address: 465 N. Park Ave.  
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Please contact us with any questions you have regarding this letter or the reported results.

Regards,



Andrew Kozak  
Geologist



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

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

Attachments: Permit  
Sketch

**PERMIT**

CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT



SEWER PERMIT



**SEWER PERMIT # 1604905**

**JAMES O'SULLIVAN  
O'SULLIVAN PLBG (SL)  
9726 W 194TH STREET  
MOKENA, IL 60448**

Sewer License #: 78  
Effective Date: Aug 30, 2016  
Special Deposit#: 1600779

**Permit Fee: \$ 125.00**

Phone: 708-326-1400

Estimated Cost: \$ 80,000.00

Building Use:

Project Number:

Number of Units:

Covenant Number:

Type of Work: 07-08 Connection  
Location of Work: 465 N PARK DR WARD 42 POLICE 18 FIRE 1  
Restrictions: 1- 12" SAN. CONN. TO MAIN SEWER IN ILLINOIS.  
INSTALL 2.51" PLATE RESTRICTOR IN VAULT.  
STORAGE PROVIDED- 5,752 CU. FT.  
STORAGE REQUIRED- 5,236 CU. FT.  
PERMIT IS FOR INSIDE / OUTSIDE WORK. 1 -8" STORM CONN. TO MAIN SEWER IN ILLINOIS.  
Number of connections: 1  
Pipe diameter (inches): 8  
Pipe material: Ductile Iron Pipe

Issued By: P. MALONEY

Approved By: P. MALONEY

Comment: 47 STORY, 444 DWELLING UNIT RESIDENTIAL TOWER

3 sets of plans approved by DOS w/ req. plumbing drawings: YES

Number of units: 444

Zoning approval: Yes

Public way permit or ordinance: Yes

The site plan with sewer/sewer structure installed quantity: Yes

Elevations referenced to the City of Chicago city datum: Yes

DOB permit: Yes

Building use: APARTMENTS

**CITY OF CHICAGO - DEPARTMENT OF WATER MANAGEMENT  
SEWER PERMIT**

Plans Sent to Inspectors:	Chief Inspector Name:
Plans Received by Inspectors:	Approval Date:
Actual Inspector:	As Built Sent to Main Office:
Job Completion Date:	As Built Received by Main Office:
As Built Plans Complete:	Plans Sent to be Microfilmed:
Other:	

**Conditions of Sewer Permits**

1. Work performed under authority of this Permit shall be in accordance with the ordinances of the City of Chicago and the rules of the Department of Water Management.
2. Sewer permits are not licenses to make openings in the Public Street or parkway. Before making any opening in the street, parkways or sidewalk, a permit for such an opening must be obtained from the Bureau of Inspections of the Department of Transportation. The permit to make house drain repairs, to connect a sewer or drain to the City sewer, or to abandon a sewer line in the public way is not valid until the street opening permit has been obtained and is in the possession of the Sewer and Drain, or Wrecking Contractor's Foreman in charge of the work at the location in question.
3. Connections to the public sewers shall be made to junctions or as referenced in the latest edition of the Regulations for Sewer Construction and Stormwater Management - Permit and Fees handbook.
4. Work performed under this permit shall conform to the plans approved by the Department of Water Management. Field changes in the plans must be authorized by said Department.
5. The work authorized by this permit shall not be performed without prior notice to the Department of Water Management. Said notice is to be made 48 hours before said work. All sewer activity including but not limited to retrofits / driveways / televising / lining / seals / stubs / wrecking / abandonment require inspections. No building, structure - sewer line shall be installed, wrecked, demolished or abandoned without notification in writing to said Department.
6. Where sewers or drains are extended from stubs, the Sewer and Drain Contractor to whom this permit is issued must examine the existing sewer stubs in the presence of a sewer inspector. No connections shall be made to stubs unless they are in good, clean, clear, undamaged condition and approved for use by the Sewer Inspector.
7. Sizes and Grades of House Drains shall be in accordance with the City Municipal Code or as directed by the Department of Water Management. (Note: for foot prints of more than 15,000 square feet and open spaces of more than 7,500 square feet, the sizes shall be determined by the Department of Water Management's stormwater reviewers.)
8. In the event of an emergency, sewer repair work must be registered prior to commencement of work. A permit MUST be obtained no later than 24 hours from date of registration.
9. Permittee is responsible for following OSHA safety regulations and assumes all liability for work-related damages.

"Not valid unless receipted by the Department of Revenue City of Chicago. Permits and Deposits for Sewer work shall be void one (1) year from date of generation."

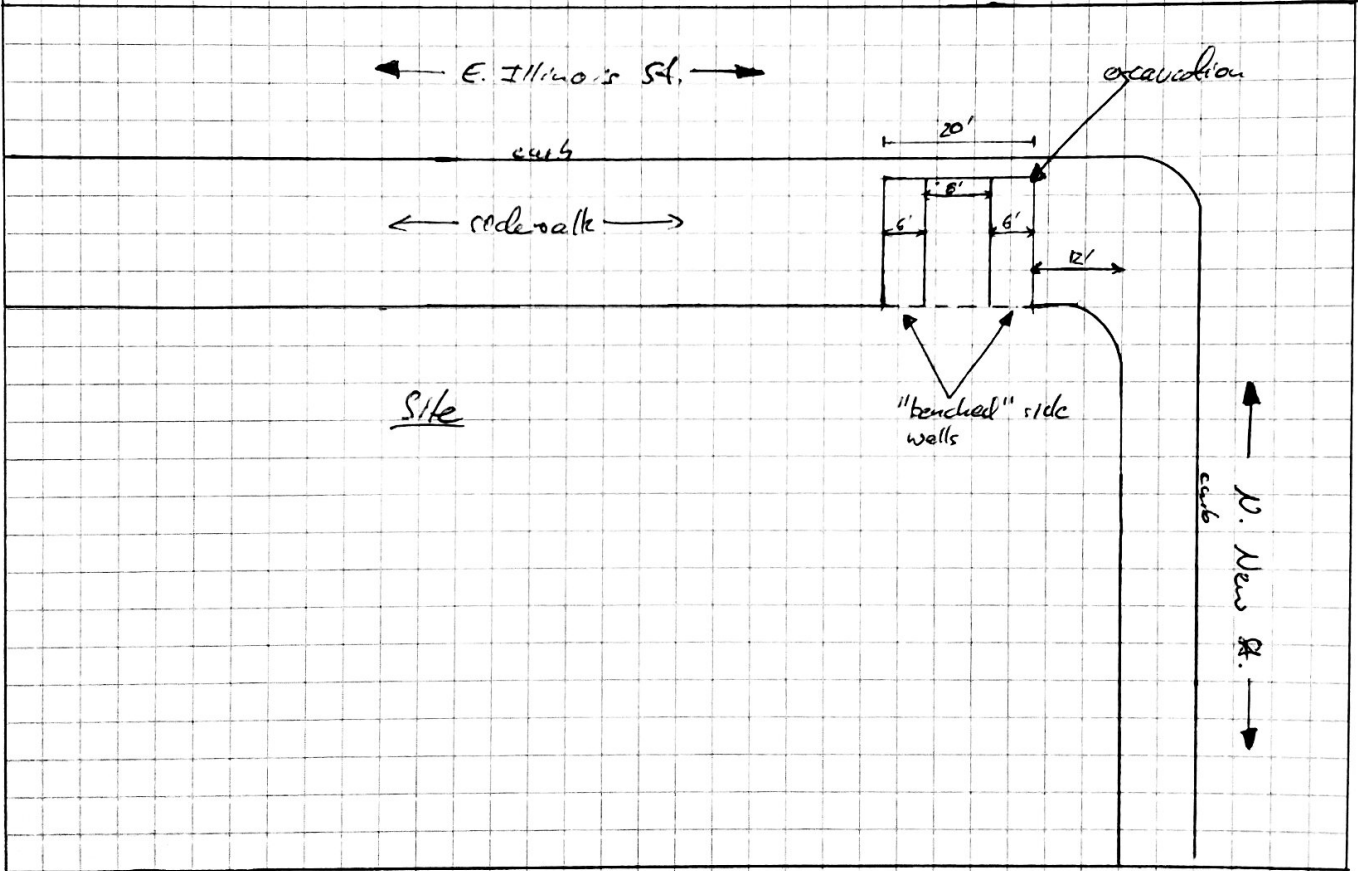
**PERMIT OFFICE PHONES WILL BE OPEN DAILY: MONDAY-FRIDAY, (312) 744-3020/ (312) 744-3155. FOR REGISTRATION OF EMERGENCY WORK ON EVENINGS, WEEKENDS, AND HOLIDAYS, CALL: (312) 744-3155. FOR INSPECTIONS CALL: (312)744-5503(House Drain) / (312)744-5502(Mason)**

**SKETCH**

JOB TITLE 465 N. Park Ave - Sewer  
 JOB NO. 60508241 CALCULATION NO. +  
 ORIGINATOR A. Kozak DATE 10/9/16  
 REVIEWER S. Koruder DATE 9/27/16  
 SCALE 1 square = 5 feet SHEET NO. 1 OF 1

Survey Equipment

Ludlum 2221 S/U: 172039  
 Probe 2x2 NaI S/U: 174496  
 unshielded: 17,253 cpm  
 shielded: 7,013 cpm  
 background:  
 personnel: A. Kozak



Readings

<u>Depth</u>	<u>CPM</u>
6" (beneath concrete)	3,900 - 5,000 cpm
6" - 102" (soil)	6,300 - 8,200 cpm