

# LETTER OF TRANSMITTAL

**Posillico Environmental**  
 1610 NEW HIGHWAY  
 FARMINGDALE, NEW YORK 11735  
 Phone: (631) 249-1872  
 Fax: (631) 249-8124

To:	Scott A Morris, PE	Transmittal No.:	05569-046
Company:	ARCADIS, BBL5	Date:	2/6/08
Address:	2001 Marcus Ave., Suite S170	Project:	KeySpan – Rockaway Park, Former MGP Site
	New Hyde Park, NY 11042-1011	Subject:	02260- Details on Method of Excavation Support
	516.328.0464	Sent Via:	Email

- ☐ Attached
 ☐ Catalog Cuts
 ☐ Certifications
 ☐ Invoices  
☐ Copy of letter
 ☐ Shop drawings
 ☐ Specifications
 ☐ Schedule

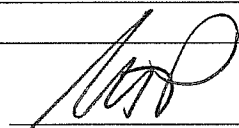
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1	2/6/08		Section 02260 Excavation Support and Protection, Ref. 1.3.1 – Details on Method of Excavation Support

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Remarks: \_\_\_\_\_

Copy to: C. Hurst – w/attachments  
 Job File # 5569 w/ attachments

Signed:   
 Michael Perciballi  
 Area Manager

**KEYSPAN**

Rockaway Park Former Manufactured Gas Site  
Rockaway Park, Queens County, New York

**Technical Specification Section: 02260 Excavation Support and Protection**  
**Reference: 1.3.1****Details on method of excavation support:**

Posillico will incorporate three methods of excavation support for the pre-trenching for the migration barriers, utility cut and cap and remedial excavation areas. The supports will resist soil and hydrostatic pressures as well as superimposed/construction loads and to insure work does not undermine the foundations of adjacent streets or property. The three methods of support are temporary steel sheeting, steel trench boxes and soil benching.

**Temporary Steel Sheeting:**

Posillico shall install temporary steel sheeting to support an 8-foot excavation depth in accordance with the contract documents. The steel sheeting will support soil and equipment surcharges and resist hydrostatic pressure. The sheeting will consist of 25-foot AZ13 sheet piles. Refer to Technical Specification Section 02300. Reference 3.5.1 for design details by a licensed professional engineer.

**Steel Trench Boxes:**

Posillico proposes to use steel trench boxes to support an 8 foot excavation depth where overhead electrical lines create a low overhead work clearance or where adjacent streets or properties are in close proximity to the work zone. All Posillico owned trench boxes have previously been submitted under Technical Specification Section 01010, Reference 1.3.1, Bullet 17 along with an engineer's certification. If a rental trench box is needed, a certification will be obtained before acceptance on-site is allowed.

**Soil Benching:**

Posillico will utilize soil benching in areas that are not adjacent to pavements or structures. All benched sidewalls will be maintained in accordance with the requirements of the OSHA, 29CFR, 1926.650, Subpart P. No design by a licensed professional engineer required.

Posillico will have multiple Competent People on site at one time. **(as defined by OSHA regulations.)** The Competent Person/People will monitor the integrity of the excavation. The Competent person for the excavation work on site will be Steve Klaus, General Foreman and/or Christopher Hurst, Project Manager. The Competent Person(s) will also oversee the installation of dirt berms, dikes, grading away from excavation or other means to prevent surface water from entering the excavations.

Attached is a plan depicting the locations of the various types of excavation supports.



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# LETTER OF TRANSMITTAL

To:	Scott A Morris, PE	Transmittal No.:	05569-047
Company:	ARCADIS, BBLs	Date:	2/6/08
Address:	2001 Marcus Ave., Suite S170	Project:	KeySpan - Rockaway Park, Former MGP Site
	New Hyde Park, NY 11042-1011	Subject:	02260 - Excavation Support Design
	516.328.0464	Sent Via:	Email

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COPIES	DATE	NO.	DESCRIPTION
1	2/6/08		Section 02260 Excavation Support and Protection, Ref. 1.4.2 -Excavation Support Design in Proximity to Overhead Utilities

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Signed:   
 Michael Perciballi  
 Area Manager

**KEYSPAN**

Rockaway Park Former Manufactured Gas Site  
Rockaway Park, Queens County, New York

**Technical Specification Section: 02260 Excavation Support and Protection  
Reference: 1.4.2****Excavation support design and installation procedures for remedial excavation areas in proximity to existing overhead utilities:**

The excavation support in proximity to existing overhead utilities will be performed using shoring (trench) boxes. All equipment and personnel will be required to maintain setbacks of 15 feet for the 33kV overhead line, 10 feet for the 13kV overhead line, and 5.5 feet for the insulated 33kV line. In addition to the setbacks, all personnel will be briefed in the dangers involved as part of our safety-training program.

Trench boxes will be selected based on their design capacity to support soil and equipment surcharges and to resist hydrostatic pressure. An engineer's certification for all Posillico owned trench boxes was previously submitted under Technical Specification Section 01010, reference 1.3.1, Bullet 17. If a rental trench box is needed, a certification will be obtained before acceptance on-site is allowed.

Posillico will follow the same procedures for installation of trench boxes regardless of the size and/or location. The equipment to be utilized will be a Komatsu PC308 zero-swing excavator. This will be the same machine used to perform the excavation. The trench box will only be used once the excavation reaches a depth of 4 feet. Once the excavation reaches this depth, the excavator using an appropriately rated 4-way cable will pick the trench box. (The cable will be inspected by the foreman before each use to ensure it is free of any defects.) The trench box will be placed in the excavation, at which point the 4-way shall be disconnected from both the machine and box. At this time, the excavation will continue to the required depth.

At the completion of the excavation, backfilling will proceed in the trench box. Fill will be placed in the required lifts and compacted accordingly. As the backfilling continues, the trench box will be lifted in intervals not to exceed the previously placed lift. This will continue until the excavation is at the safe depth of 4 feet. At this time the trench box will be lifted by the excavator and moved to the next location where the process will be repeated as necessary.

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# LETTER OF TRANSMITTAL

To:	Scott A Morris, PE	Transmittal No.:	<b>05569-048</b>
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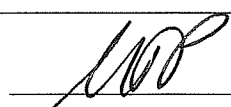
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1	2/6/08		Section 02260 Excavation Support and Protection, Ref. 1.4.3 -Excavation Support Design for the Pre-Trenching for the Migration Barriers

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 Michael Perciballi  
 Area Manager

**KEYSPAN**

Rockaway Park Former Manufactured Gas Site  
Rockaway Park, Queens County, New York

**Technical Specification Section: 02260 Excavation Support and Protection  
Reference: 1.4.3****Excavation support design and installation procedures for the pre-trenching along the alignment of the migration barriers:**

The excavation support for the pre-trenching along the alignment of the migration barriers will be performed using shoring (trench) boxes. Trench boxes will be selected based on their design capacity to support soil and equipment surcharges and to resist hydrostatic pressure. An engineer's certification for all Posillico owned trench boxes was previously submitted under Technical Specification Section 01010, reference 1.3.1, Bullet 17. If a rental trench box is needed, a certification will be obtained before acceptance on-site is allowed.

Posillico will follow the same procedures for the installation of trench boxes regardless of the size and/or location. The equipment to be utilized will be a Komatsu PC308 zero-swing excavator. This will be the same machine used to perform the excavation. The trench box will only be used once the excavation reaches a depth of 4 feet. Once the excavation reaches this depth, the excavator using an appropriately rated 4-way cable will pick the trench box. (The cable will be inspected by the foreman before each use to ensure it is free of any defects.) The trench box will be placed in the excavation, at which point the 4-way shall be disconnected from both the machine and box. At this time, the excavation will continue to the required depth.

At the completion of the excavation, backfilling will proceed in the trench box. Fill will be placed in the required lifts and compacted accordingly. As the backfilling continues, the trench box will be lifted in intervals not to exceed the previously placed lift. This will continue until the excavation is at the safe depth of 4 feet. At this time the trench box will be lifted by the excavator and moved to the next location where the process will be repeated as necessary.