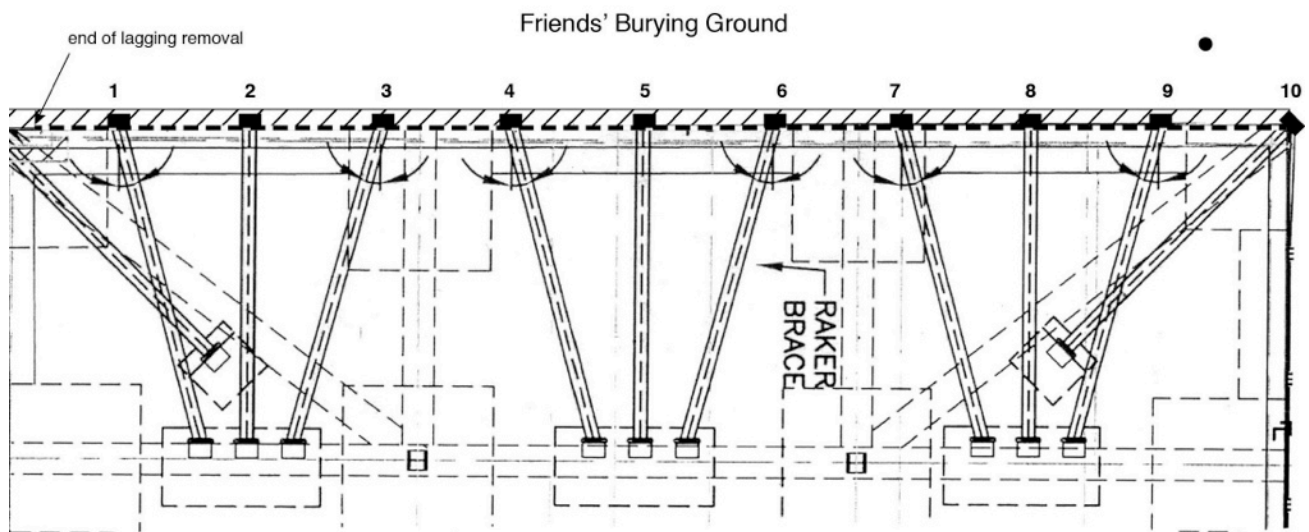

Removal of Intrusions from the Burial Ground of the Flushing Meeting House of the Religious Society of Friends, 137-16 Northern Boulevard (Block 4977, Lot 26), Flushing, Queens

DRAFT



Prepared for
The Flushing Meeting of the
Religious Society of Friends

Prepared by
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May 28, 2013

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To: Brian Doherty, as the Representative of the Flushing Meeting House of the Religious Society of Friends
From: Joan H. Geismar, Ph.D., LLC
Date: May 28, 2013
Re: Removal of Intrusions from the Burial Ground of the Flushing Meeting House of the Religious Society of Friends: End of Field Memo Report

This end of field memo documents the successful removal of intrusions from the burial ground of the historic Flushing Meeting House of the Religious Society of Friends [hereafter, Friends], 137-16 Northern Boulevard (Block 4977, Lot 26), Flushing, County of Queens (Figure 1). As outlined in the project's approved scope of work (Geismar 2013; Sutphin 2013; Mackey 2013), as agreed by both affected parties (the Friends and Pinnacle Engineers), and as described in the Miscellaneous Amendments issued by the New York City Landmarks Preservation Commission (2013), the removals were carried out from May 15 to May 17, 2013. They were undertaken by Pinnacle Engineers (Pinnacle) with archaeological oversight provided by Joan H. Geismar, Ph.D., assisted by Shelly Spritzer, MA. At issue were ten iron Soldier-Beams (I-Beams), the wooden lagging between these beams located on or adjacent to the south property line of the Friends' burying ground, and the remnants of a wooden utility pole of unknown depth located further north, that is, within the burial ground (see Figure 2 for locations). At the Friends' request, what remained of the utility pole and the upper 2 feet (0.61 m) of the ten soldier beams and the wooden lagging were to be removed with minimal site disturbance. As agreed, the utility pole was to be extracted without new excavation and the excavation required to remove the Soldier Beams and lagging was not to extend more than 2 feet (0.61 m) below the existing ground surface nor more than 2 feet (0.61 m) into the cemetery.

The undertaking, which was efficiently carried out, proved to require less excavation than anticipated (the east-west trench excavated to facilitate removal of the Soldier-Beams and lagging was 2-feet [0.61 m] deep as anticipated, but only in one instance (the removal of SB10) did it extend as far as 2 feet (0.61) into the burial ground. Moreover, all trenching proved to be in disturbed soil that mainly, if not entirely, comprised fill.

All excavation, which was by hand, was carried out by Pinnacle personnel. The excavated soil was troweled by Dr. Geismar or Ms. Spritzer to observe or collect cultural material. However, intrusions of small ceramic and glass fragments of indeterminate age and some oyster shell in association with modern material such as a whole 1994 alcoholic beverage bottle, bricks and brick fragments, wood fragments, concrete and plastic sheeting fragments, and, in one instance, a scrap of newspaper that referred to [Bett?] Midler, negated the need for screening. Several small bone fragments, apparently none of them human (one was charred), were noted but, following

the established protocol, all were returned to the soil. Of interest was the tooth (molar?) of a large animal (see Photo 3), the enamel almost totally worn down by use and indicative of age. This isolated specimen (there were no other associated bones) was collected for identification purposes and its preliminary identification of a horse tooth was confirmed (Brown 2013:personal communication). Following the established protocol (any bone material was to be returned to the soil), the tooth will be reburied at the Friends' direction.

The entire undertaking was documented in photographs (for example, see Photos 1 to 22). A schematic profile of the north trench wall in the eastern part of the trench, representative of the trench in general, is provided in Figure 3. Table 1 documents the dimensions of the lagging sections and of the removed lagging components; the dimensions of each removed Soldier Beam segment and the utility pole will be found in Table 2.

While measurements were often variable, all met or exceeded the requirements of the scope (lagging pieces ranged from 1.9/2.0 feet [0.58/0.61m] to 2.8 feet [0.85 m] and the Soldier-Beam segments from 2.2 feet [0.67 m] to 3.0 feet [0.9 m]; see Tables 1 and 2). The ten soldier beams at issue were identified sequentially as Number 10 at the eastern end and Number 1 on the western end (see Figure 2). Four linear feet (1.2 m) of lagging were removed west of Soldier Beam (SB) No. 1 (an eleventh soldier-beam in the progression, located west of the Friend's property, remains intact). The utility pole, which was encountered between .6 and 1 foot (0.20 to 0.31 m) below the current (uneven) ground surface, proved to be wrapped in blue plastic sheeting tied with cord. The plastic sheeting, which covered the upper 2 feet (0.61 m) of the pole remnant, was apparently introduced by HPI after it had been exposed during an earlier testing program (Mascia 2012). However, there were no above ground markings to identify its exact location. Using information from the site's non-intrusive, Ground Penetrating Radar (GPR) survey (Horsley 2012), Ms. Yan A. Huang of Pinnacle successfully located the pole.

To remove the pole, Pinnacle erected surface-supported scaffolding to accommodate a hand operated winch and chain to hoist the pole from the ground. A plate was screwed into the top of the pole and a chain attached. The hand operated winch was then activated and the pole slowly emerged. Once the pole was above ground, a strap was wrapped around it, the winching continued, and it was lifted out. To prevent the hole from collapsing, sand was introduced during and after the pole's extraction (eleven 10-pound bags in all). The pole proved to be 8.0 feet (2.4 m) long (see Photos 16 to 20 that document the procedure and the pole). The entire undertaking was accomplished in just under an hour. The excavation trench had been backfilled and the debris cleared after the Soldier Beams were removed the previous day. Once the pole was extracted, the scaffolding was dismantled and a final clean-up was done (see Photos 21 and 22).

As noted above, all trenching was in disturbed soil and mainly fill, and the minimal hand excavation required to locate the pole was in soil that obviously had been previously excavated. In sum, all removals were as planned and the undertaking was carried out efficiently, cooperatively, and without incident.

Table 1. FLUSHING FRIENDS MEETING HOUSE

LAGGING REMOVALS BETWEEN SOLDIER-BEAMS (SB) IN 10THS OF FEET (METERS)

Lagging Section	Trench E-W/ N-S/ Depth	Lagging Removed (Height)	Remarks
SB 10-9	8.0 ft (2.4 m) x 1.2 ft (0.37 m) x c. 3 ft (0.9 m)	2.8 ft (0.85 m)	
SB 9-8	8.4 ft (2.6 m) x 1.4 ft (0.43 m) x 2.5 ft (0.76 m)	2.0 ft (0.61 m)	
SB 8-7	8.2 ft (2.5 m) x 1.4 ft (0.43 m) x 2.3 ft (0.70 m)	2.0 ft (0.61 m)	
SB 7-6	8.0 ft (2.4 m) x 1.4 ft (0.43 m) x 2.2 ft (0.64 m)	1.9/2.0 ft (0.58/0.61 m)	
SB 6-5	8.4 ft x 1.3 ft (0.4 m) x 2.0 ft (0.61 m)	2.0 ft (0.61 m)	
SB 5-4	8.1 ft (2.5 m) x 1.4 ft (0.43 m) x 2.1 ft (0.61 m)	1.9/2.1 ft (0.58/0.64 m)	
SB 4-3	8.7 ft (2.65 m) x 1.7 ft (0.5 m) x 2.3 ft (0.7 m)	2.0 ft (0.61 m)	
SB 3-2	8.0 ft (2.4 m) x 1.6 ft (0.49 m) x 2.0 ft (0.61 m)	2.0 ft (0.61 m)	
SB 2-1	8.2 ft (2.5 m) x 1.4 (0.43 m x 2.0 ft (0.61 m)	2.0 ft (0.61 m)	Large mammal tooth (enamel very worn) c. 1.2 ft (0.37 m) BGS
SB 1-0	2.7 ft (0.83 m) x 1.0 ft (0.3 m) x 2.2 ft (0.67 m)	2.2 ft (0.67 m)	

Table 2. FLUSHING FRIENDS MEETING HOUSE

SOLDIER-BEAM (SB) & UTILITY POLE (UP) REMOVALS IN 10THS OF FEET (METERS)

SB No. /UP	Length of SB/UP Removed	Remarks
SB 10	3.0 ft (0.9 m)	1.0 ft (0.31 m) between SB & trench N wall; Styrofoam on building wall
SB 9	2.25 ft (0.69 m)	Styrofoam on building wall
SB 8	2.23 ft (0.68 m)	
SB 7	2.2 ft (0.67 m)	
SB 6	2.4 ft (0.73 m)	SB close to tree
SB 5	2.3 ft (0.70 m)	
SB 4	2.3 ft (0.70 m)	1.2 ft (0.37 m) between SB & N trench wall
SB3	2.3 ft (0.70 m)	0.9 ft (0.28 m) between SB and N trench wall
SB 2	2.2 ft (0.67 m)	Styrofoam on building wall
SB1	2.4 ft (0.73 m)	S of partition wall
UP	8.0 ft (2.6 m)	Ground surface and top of pole both uneven, therefore depth BGS to top of pole variable (ca. 0.6 to 1.0 ft [0.20 to 0.31 m]); 11 10-lb bags of clean sand introduced during & after removal

All excavations by hand; excavated soils troweled; BGS = Below Ground Surface

References Cited

Brown, Matthew A.

2013. Personal communication. Brooklyn College Department of Anthropology/ Brooklyn College Zooarchaeology Laboratory and Hunter College Bioarchaeology Laboratory, CUNY. May 23, 2013.

Geismar, Joan H.

2013 (Draft) Proposal to Remove a Wooden Utility Pole and Portions of Soldier-Beams and Lagging on the Friends' Meeting House Property, at 137-16 Northern Boulevard, Flushing, the Borough of Queens, New York (Block 4977, Lot 25 [*sic*]) January 30, 2013.

Horsley, T. J.

2012 Religious Society of Friend's Burial Ground, Flushing, Queens County, New York. Report of Geophysical Surveys, July 2012, for Historical Perspectives, Inc. August 2012.

Landmarks Preservation Commission

2013 MISCELLANEOUS/AMENDMENTS. LPC - 142683, MISC 14-265, 137-16 Northern Boulevard, Flushing Meeting House, INDIVIDUAL LANDMARK, Borough of Queens, Block/Lot 4977/94[*sic*]. New York City Landmarks Preservation Commission, New York. April 8, 2013.

Mackey, Douglas

2013 Approval of Scope (e-mail). Historic Preservation Program Analyst, Archaeology. New York State Office of Parks, Recreation and Historic Preservation, Peebles Island, Waterford, NY 12188. January 31, 2013.

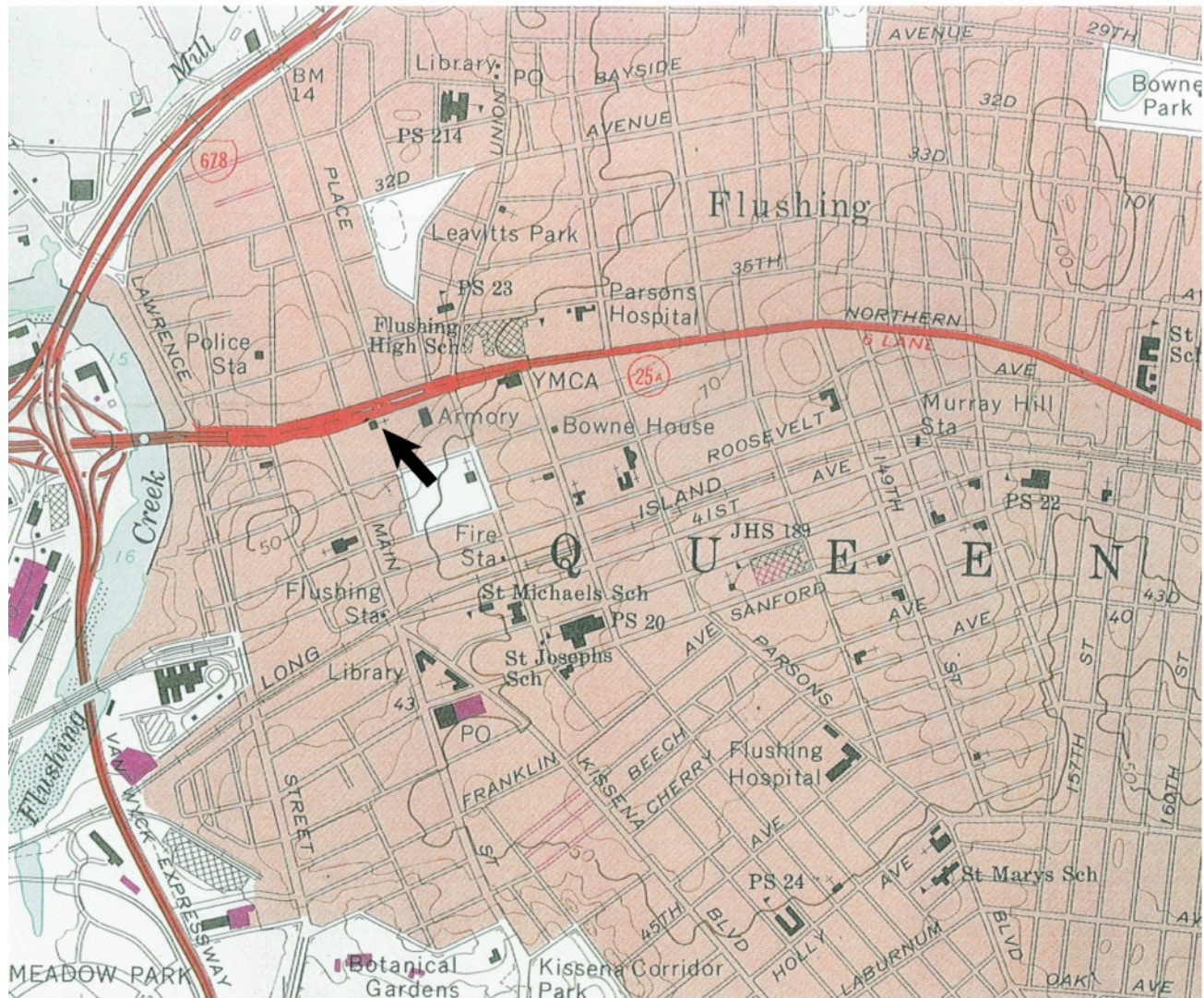
Mascia, Sarah

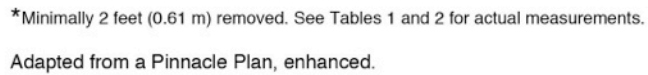
2012 Archaeological Testing of Property Boundary, 136-33 37th Avenue Project, Block 4977 Lot 94, 136-33 and 136-35 37th Avenue, Flushing, Queens and Block 4977, Lot 26, 137-16 Northern Boulevard, Flushing Queens. HPI, Inc. May 2012.

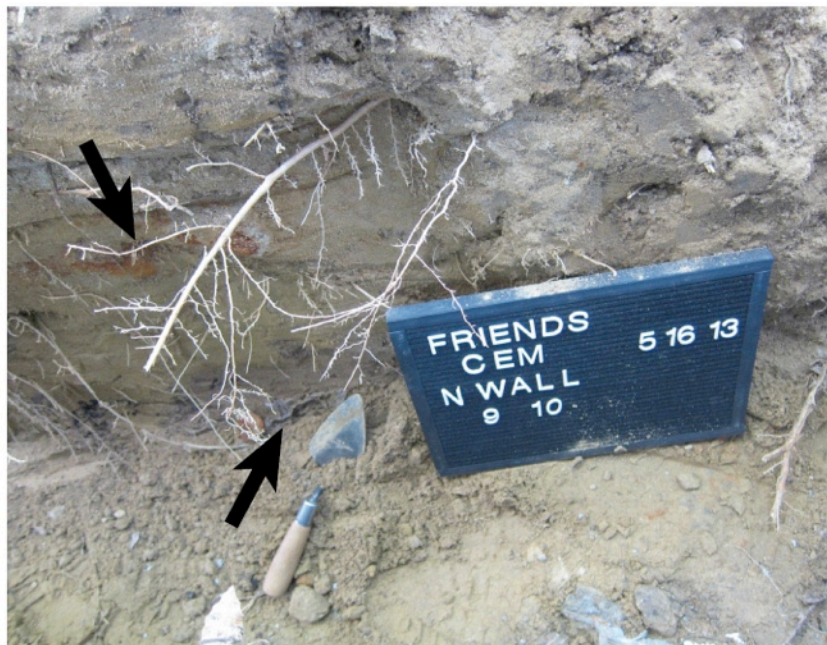
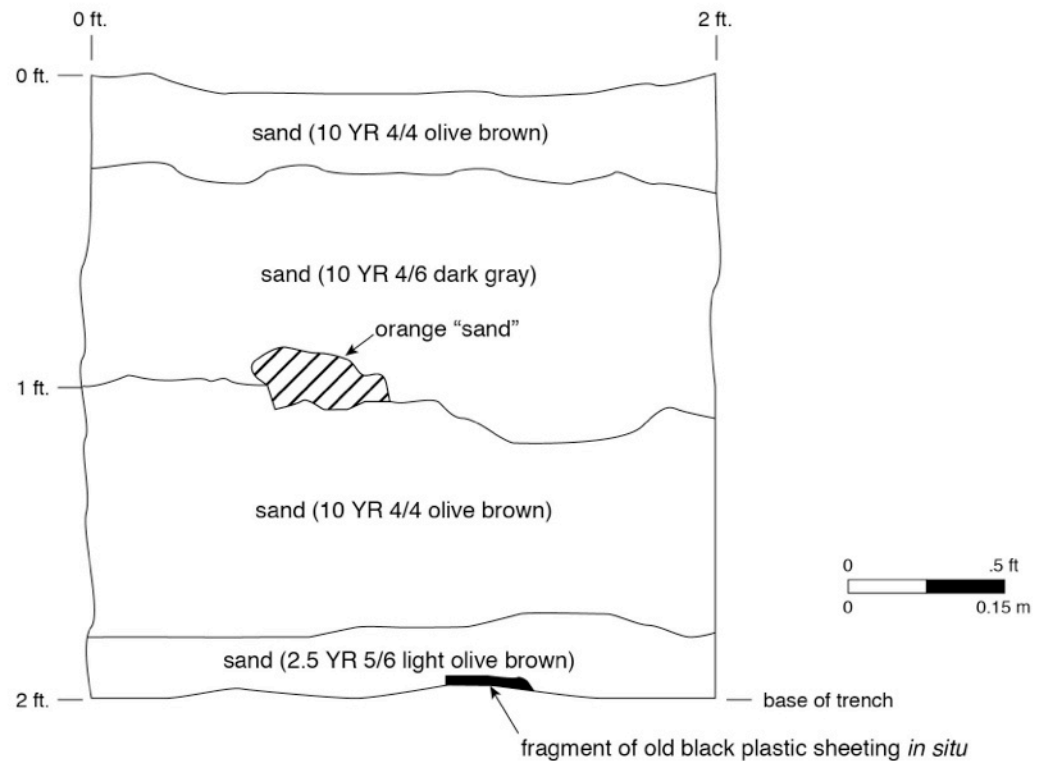
Sutphin, Amanda

2013 Approval of Scope (e-mail). Director of Archaeology, New York City Landmarks Preservation Commission, 1 Centre Street, 9th Floor, New York, NY 10007. January 31, 2013.

FIGURES







Approximate location of 2- x 2-foot (0.61 x 0.61 m) section of the north "wall" profiled near the eastern end of the trench. Note the patch of orange (corrosion?) sand (upper arrow) and a fragment of old black plastic sheeting (bottom arrow) in the trench wall. Both indicate fill. (Geismar 5/16/13)

PHOTOS May 15 to May 17, 2013

(photos by Joan H. Geismar)

LAGGING REMOVAL May 15, 2013



Photo 1. Pinnacle personnel during removal of the second of three lagging planks removed between SB10 and SB9. A blowtorch is being used to eliminate a support. Note the narrow trench in front of the lagging. The trench width never exceeded 2 feet (0.61 m) and was considerably narrower for much of its length.



Photo 2. Lagging removal between SB9 and SB8, a typical lagging removal. While two planks were the norm, in some sections, such as SB10 - SB9 noted in Photo 1, three planks were removed to meet the 2-foot (0.61 m) requirement.



Photo 3. The only collected "artifact," this large tooth, its enamel extremely worn, was recovered from soil excavated between SB2 and SB1. Its field identification as the tooth of an aged horse has been confirmed (see text).

LAGGING REMOVAL May 15, 2013 (continued)



Photo 4. Lagging removal west of SB1, adjacent to a wood partition and extending to the line of an east - west running chain-link fence that protrudes through the wood partition (see Photo 5).



Photo 5. View of the void beyond the line of the chain-link fence that intrudes between SB1 and an 11th Soldier-Beam. The wood partition, the fence post, and its concrete support (arrow) are to the right.



Photo 6. View east from SB4 - SB3 along the narrow trench excavated to provide access to the lagging and Soldier-Beams. The lagging has been removed and the Soldier-Beams exposed.

SOLDIER-BEAM REMOVAL May 16, 2013



Photo 7. SB1 being torched for removal. The cramped location and styrofoam on the wall made removal difficult. The east end of a neighboring parking lot can be seen to the far right, behind the chain-link fence.



Photo 8. The upper 2.4 feet (0.73 m) of SB1 after removal.



Photo 9. The removal of the upper part of SB3 shown here was typical of the torch-and-hammer removal procedure.



Photo 10. The upper 2.3 feet (0.7 m) of SB3 after removal.

SOLDIER-BEAM REMOVAL May 16, 2013 (continued)



Photo 11. View east from the location of SB2 after all but SB10 at the western end of the trench had been removed.



Photo 12. Clearing to remove SB10 at the southeast corner of the new building. Removal of this corner element required greater effort and excavation than was typically necessary.



Photo 13. Torching SB10 to remove the upper portion. The height of the ground surface in this area made removal of this last remaining SB within the project area more difficult than elsewhere.



Photo 14. SB10. This was the largest of the ten SB segments (3.0 feet [0.9 m]) that were removed.

UTILITY POLE REMOVAL May 17, 2013



Photo 15. The exposed top of the truncated utility pole located about 1 foot (0.31 m) below the current ground surface. The blue plastic sheeting tied with cord that covered the upper 2 feet (0.61 m) was evidence of the previously reported excavation around the pole (Maschia 2012:10).



Photo 16. Surface-supported scaffolding being introduced to allow the use of a winch and chain to extract the truncated utility pole without involving excavation other than what was needed to uncover it. On a previous site visit, in anticipation of the pole's removal, Ms. Yan Huang of Pinnacle (standing in the foreground) had determined and marked the pole's location based on a ground penetrating radar survey.

UTILITY POLE REMOVAL May 17, 2013 (continued)



Photo 17. Hoisting the pole, its length as yet unknown.



Photo 18. The pole's extraction in progress.



Photo 19. What proved to be an 8-foot (2.6 m), pole remnant being lifted from the hole. Note that sand has been introduced during the extraction to prevent hole's collapse.

UTILITY POLE REMOVAL May 17, 2013 (continued)



Photo 20. The 8-foot (2.6-m) utility pole remnant. The successful effort by Pinnacle personnel took less than one hour. Filling the hole required eleven 10-lb bags of sand.



Photo 21. Looking east from SB1 about one hour after the pole's removal. The trench has been backfilled and the site cleared.



Photo 22. Looking west, the patch of sand in the right foreground marks the former location of the utility pole.