

MEMORANDUM OF AGREEMENT
FOR MITIGATION MEASURES TO PROTECT HISTORIC
MATERIALS ASSOCIATED WITH A NEW YORK CITY DEPARTMENT OF
ENVIRONMENTAL PROTECTION RECONSTRUCTION PROJECT

between

THE NEW YORK STATE OFFICE OF PARKS, RECREATION AND HISTORIC
PRESERVATION - STATE HISTORIC PRESERVATION OFFICE
and
THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

For
Proposed Gilboa Dam Reconstruction Project
Town of Gilboa, Schoharie County, NY

07PR02067

WHEREAS, the Gilboa Dam is a key component of the New York City Water Supply System, and

WHEREAS, engineering analyses in November 2005 indicated that the structural stability of the Dam's concrete gravity spillway did not meet New York State Department of Environmental Conservation (NYSDEC) Dam Safety guidelines for existing concrete dams and posed a potential hazard during an extreme flood event to downstream communities, and

WHEREAS, the New York City Department of Environmental Protection (NYCDEP) declared a state of emergency for its Gilboa Dam and Schoharie Reservoir facility on November 10, 2005 and thereafter installed post-tensioned anchors through the Dam's structure to the underlying bedrock, along with several remedial emergency measures, and

WHEREAS, the NYCDEP proposes to further rehabilitate the Dam and its associated structures to address the deterioration of the stone façade, improve the Dam's long-term hydraulic performance, provide improved reservoir drainage capabilities through the installation of a new low level outlet and enhance downstream flood attenuation capabilities through the installation of crest gates, and

WHEREAS, once completed these improvements will ensure the safety and security of the Dam and downstream communities and bring the Dam into compliance with current NYSDEC Dam Safety guidelines for existing concrete dams and ensure its continued long-term reliability in the New York City Water Supply System, and

WHEREAS, all proposed work will be performed pursuant to the New York City Environmental Quality Review (CEQR) process as set forth in Executive Order 91 of 1977 and its amendments creating the Rules of Procedure for CEQR, Article 8 of the Environmental Conservation Law (Section 8-0113) establishing the New York State Environmental Quality Review Act (SEQRA) and its regulations as set forth in 6NYCRR Part 617, and the State Environmental Review Process (SERP) as required by the State Revolving Loan Fund Program, and

WHEREAS, these regulations mandate consideration and investigation of onsite historic and archeological resources, and

WHEREAS, Phase 1 and Phase 1B Archaeological Surveys were conducted for sites identified as potential disposal areas for accumulated sediment from the Shandaken Intake Channel including the Gate 16 area (March 2005), and the Gilboa Grassy Area (July 2005), and

WHEREAS, review of these sites in accordance with Section 106 of the Natural Historic Preservation Act of 1966 and relevant implementing regulations prompted the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) to recommend a Phase II Site Examination to more clearly define site boundaries and significance in the Gate 16 area, and

WHEREAS, the Gate 16 Area Phase II Site Examination in July 2005 led to the identification of three areas of artifact concentrations, of which two, the J. Reed (SUBi-2532) and Gilboa #1 (SUBi-2532) sites, were identified as eligible for the National Register of Historic Places (National Register) for which either avoidance of impacts or a Phase III Data Recovery was recommended by NYSOPRHP, and

WHEREAS, in August 2005 additional areas on the east side of the Dam were identified as potential areas of impact and a subsequent Phase II Site Examination recommended Phase III Data Recovery or avoidance of impacts for two additional sites, Gilboa #4 (SUBi-2598) and Gilboa #5 (North Locus) (SUBi-2599), and

WHEREAS, in February 2007, it was determined that reconstruction of the Dam could impact all four sites, J. Reed, Gilboa #1, Gilboa #4 and Gilboa #5 (North Locus) and NYSOPRHP recommended Phase III Data Recovery, and

WHEREAS, the field investigations for the Phase III Data Recovery Plan completed in March 2007 positioned all data recovery units using the same grid and coordinate system, noted and bagged all artifacts by level, recorded vital information in standardized form and photographed each unit, categorized soil layers, and carefully drew and identified features, and

WHEREAS, an End of Field Memo for the Phase III Data Recovery was transmitted on August, 15 2007 indicating Data Recovery had mitigated any potential impact posed by

Dam reconstruction (see Attachment 1) and was approved by NYSOPRHP as stated in its October 9, 2007 correspondence (see Attachment 2), and

WHEREAS, in April 2007 additional work areas were identified as part of the proposed Dam reconstruction project and Phase 1B archaeological testing of these areas identified three additional historic sites and a quarry, namely: the J. Cronk 1 Site, J. Cronk 2 Site, the Vroman Site and the Riverside Quarry Site, and

WHEREAS, a subsequent Phase II Site Examination was completed for the J. Cronk 1, J. Cronk 2 and Vroman sites as described in an End of Field Memo transmitted September 26, 2007 (see Attachment 1), and

WHEREAS, on October 9, 2007 the NYSOPRHP determined construction of the proposed project may proceed with the mitigation measures outlined below providing the three new sites, J. Cronk 1 Site(SUBi-2666), J. Cronk 2 Site (SUBi-2667), and the Vroman Site (SUBi-2668) are avoided, and

WHEREAS, on June 17, 2008 (see Attachment 2) the NYSOPRHP has concurred with the Phase II report that all three sites are eligible for listing on the National Register of Historic Places (National Register) for which either avoidance of impacts or a Phase III Data Recovery was recommended by NYSOPRHP, and

WHEREAS, protection of the historic resources located onsite is a priority of the NYCDEP, and

WHEREAS, no human remains, associated or unassociated funerary objects or sacred objects, or objects of cultural patrimony as defined in the Native American Graves Protection and Repatriation Act (25 U.S.C 3001), are presently expected to be encountered during any work contemplated by this Agreement.

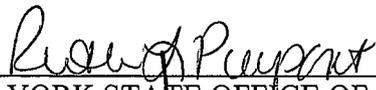
NOW THEREFORE, the NYSOPRHP and the NYCDEP agree that the proposed project shall be implemented in accordance with the following stipulations in order to protect the identified historic resources located on the proposed project site.

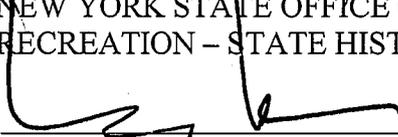
STIPULATIONS

1. NYCDEP shall conduct onsite historic and archaeological monitoring for historic resources during the clearing and grubbing phases of the site preparation contract to monitor the site for the presence of any additional historical or archaeological artifacts and to ensure their proper recovery.
2. During reconstruction, the NYCDEP shall recover and retain excavated bluestone facing from the Dam's spillway for potential use in the proposed onsite berm and shall investigate the feasibility of using recovered bluestone facing within the public scenic overlook to the Schoharie Reservoir.

3. Due to the potential presence of fossils at the Riverside Quarry Site, NYCDEP shall provide site access to local and state certified paleontologists subsequent to the initial clearing of the Riverside Quarry Site and other associated sites in proximity to Schoharie Creek. NYCDEP shall provide adequate notification to these individuals regarding site access.

4. There are no anticipated project-related impacts to the historical and archeological resources that would occur once construction activities are completed and standard reservoir operations are in place. As noted above, disruption to any sensitive area that did not have the necessary data recovery will be avoided and adequately protected during the construction phases.

By:  Date: 3/3/09
NEW YORK STATE OFFICE OF PARKS AND
RECREATION - STATE HISTORIC PRESERVATION OFFICE

By:  Date: 10/09/08
THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

ATTACHMENT 1

End of Field Memos

October 2008

PUBLIC ARCHAEOLOGY FACILITY

MEMORANDUM

TO: Sandeep Mehrota, Hazen and Sawyer**FROM:** Richard A. Kastl, Research Associate **RE:** Gilboa Dam Historic Sites, Site Examination**DATE:** June 16, 2005

Fieldwork has been completed for the site examinations of the J. Reed, Gilboa Historic Site #1, Gilboa Historic Site #2, and the Gilboa Historic Site #3. Fieldwork consisted of the excavation of 125 STPs and 30 1 x 1 m units. STPs were excavated at 5 m (16 ft) intervals around two foundations encountered during Phase 1 excavations. During the site exam three additional stone foundations were encountered. Two of these foundations have associated sheet middens. The attached map shows the location of all units, STPs, and cultural features, and approximate sheet midden boundaries.

Sheet midden deposits were encountered in the vicinity of each foundation. Around foundations 2 and 5 (adjacent foundations) deposits consisted largely of nails and architectural debris and is designated the Gilboa Historic Site #2. This was also the case on the north, west, and south sides of foundation #1. There is a dense sheet midden deposit associated with foundation #3. This sheet midden and foundation were designated the Gilboa Historic Site #1 on the map. It is not possible to determine, at this stage, whether this distribution constitutes one deposit, or if there are two separate deposits, associated with the respective foundations. The location of historic property lines may elucidate this designation more clearly. There is another dense sheet midden scatter adjacent to Gilboa Historic Site #1 and extending to the east toward foundation #4. This sheet midden has been designated the J. Reed Site on the map. Both of these sheet middens have similar characteristics. They have yielded a variety of redwares, pearlwares, whitewares, stonewares, and creamwares. The preliminary MCD (mean ceramic date) for Gilboa Historic Site #1 is 1825 and for J. Reed Site is 1844. Both of these site areas appear to be potentially eligible for the National Register.

Site boundaries were drawn to include positive STPs with diagnostic artifacts for the Gilboa Historic Site #1 and the J. Reed Site. These boundaries are ill-defined. It is not possible, at this stage of analysis, to determine if a clear demarcation can be made on the basis of the artifacts, or by historical information. The site area boundaries between the ceramic concentrations and the areas with mainly architectural concentrations is more clear. At the border between site area 2 and the foundation 2 midden is a small ditch, which seems to form a boundary between the two assemblages.

Historic maps which show the project area are available for 1856 and 1866. The 1856 map shows 2 structures in or near the project area, and the 1866 map shows only one structure in the project area. The J. Reed home is shown on the 1856 map, and appears to correspond to foundation #4. The other structure is identified as a Carpenter's shop. This structure is not shown on the 1866 map. The 1866 map shows the C Potter home in the project area. The placement of the home on the map makes it likely that it is the same structure as the J. Reed home shown in 1856, but there is a possibility that another structure is represented, and the J. Reed home had been demolished by this time.

Gannett Fleming provided a map with an overlay of identified cultural features c. 1917. Foundations 1, 2, 3, and 4 are represented on this map. One more foundation is shown northeast of foundation 1. Extensive testing in this area did not reveal any traces of this foundation. A structure corresponding to foundation #5 does not appear on this map.

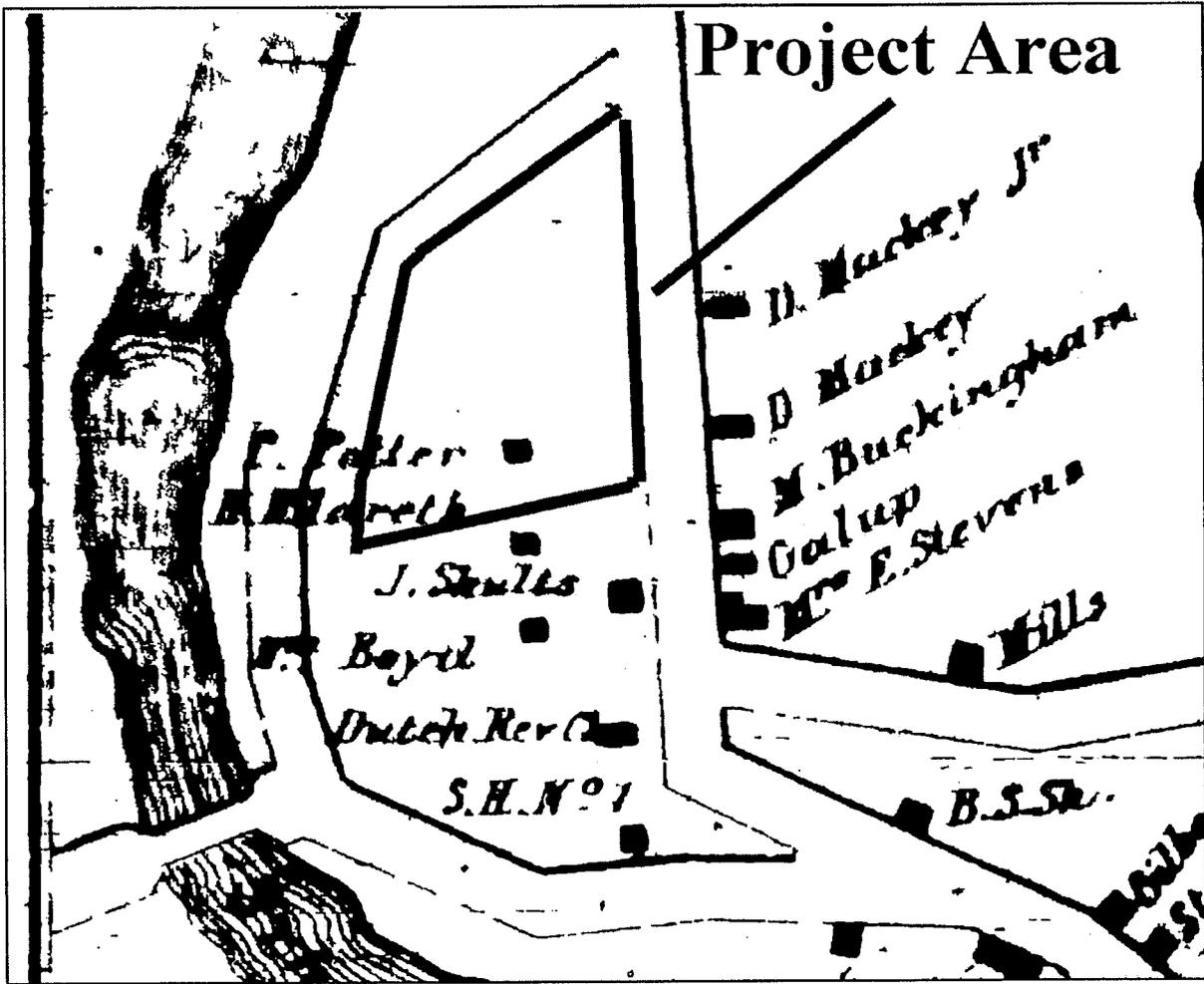
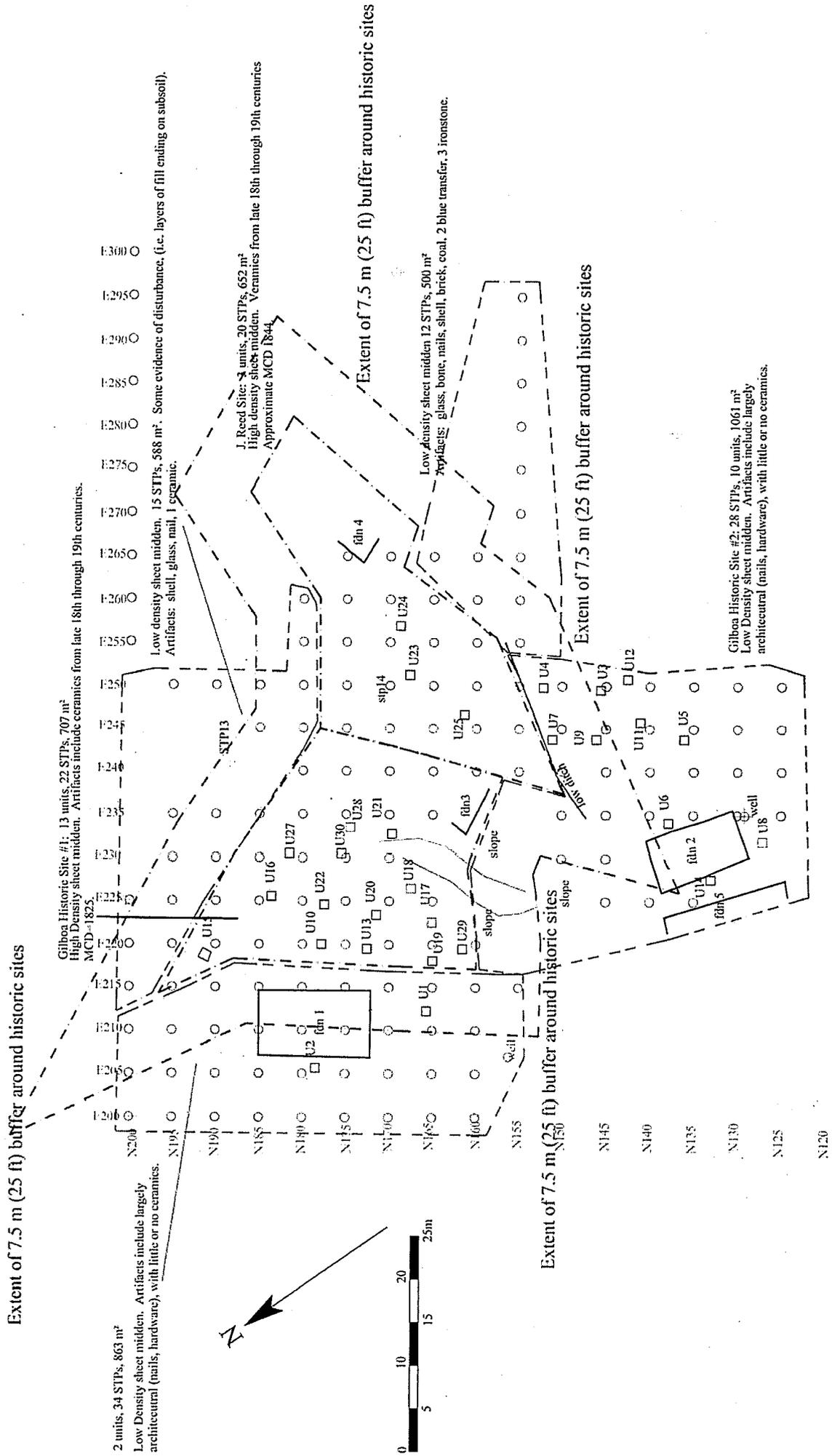


Figure 2. 1866 map showing the project area.

Map showing location of Gilboa Historic Sites, and extent of testing



Map showing location of Gilboa Historic Sites, and extent of testing

Extent of 7.5 m (25 ft) buffer around historic sites

2 units, 34 STPs, 863 m²

Low Density sheet midden. Artifacts include largely architectural (nails, hardware), with little or no ceramics.

Gilboa Historic Site #1: 13 units, 22 STPs, 707 m²
High Density sheet midden. Artifacts include ceramics from late 18th through 19th centuries.
MCD = 1827

Low density sheet midden. 15 STPs, 568 m².
Artifacts: shell, glass, nail, ceramic.

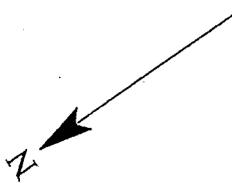
High Density Site: 20 units, 30 STPs, 652 m²
High Density sheet midden. Ceramics from late 18th through 19th centuries
Approximate MCD 1844

Extent of 7.5 m (25 ft) buffer around historic sites

0 10 20 25m

5 15

20 25m

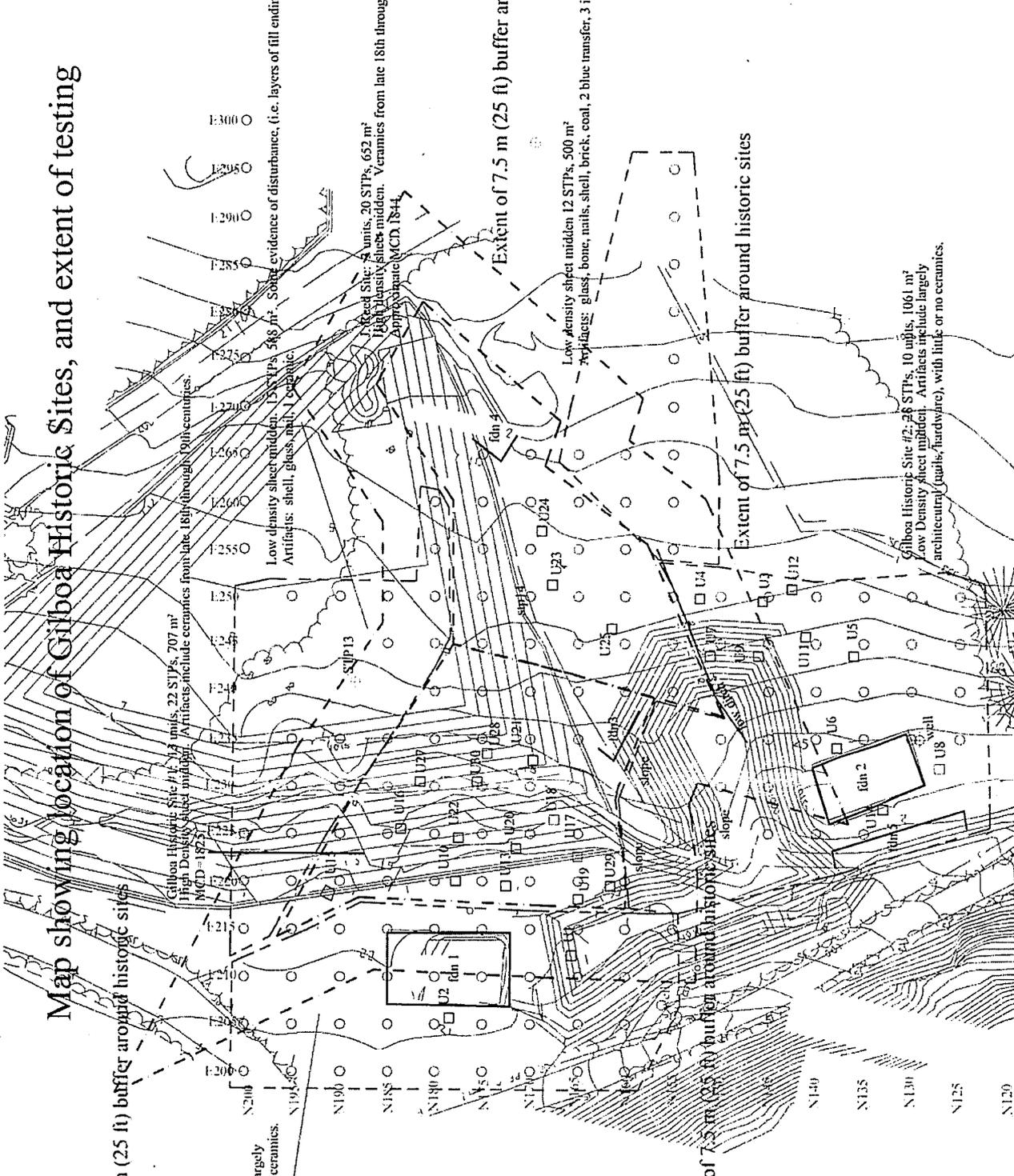


Extent of 7.5 m (25 ft) buffer around historic sites

Low density sheet midden 12 STPs, 500 m²
Artifacts: glass, bone, nails, shell, brick, coal, 2 blue transfer, 3 ironstone.

Extent of 7.5 m (25 ft) buffer around historic sites

Gilboa Historic Site #2: 28 STPs, 10 units, 1061 m²
Low Density sheet midden. Artifacts include largely architectural (nails, hardware), with little or no ceramics.



END OF FIELD LETTER

DATE: May 4, 2007

TO: Sandeep Mehrotra, Hazen and Sawyer

FROM: Richard A. Kastl, Research Associate *RAK*

SUBJECT: End of Field Letter, Additional Archaeological Survey, Schoharie Reservoir Project, Town of Gilboa, Schoharie County, NY.

Fieldwork has been completed for the Addendum Archaeological Survey for the Schoharie Project. This survey included five additional work areas (See Figure 6):

- 1) Low Level Outlet (2.8 ha, 6.88 ac)
- 2) Spoils Area (2.6 ha, 6.42 ac)
- 3) Temporary Access Road (1.8 ha, 4.59 ac)
- 4) Landslide Area (6.9 ha, 17.2 ac)
- 5) Permanent Access Road (3.7 ha, 9.18 ac)

A walkover of the project area was conducted first in order to determine which areas were accessible for archaeological testing. Cultural features such as foundations were also noted at this time. In general, the additional project areas consist of areas of extreme slope interspersed with small, flatter, areas accessible for testing. Three foundations were noted in the Spoils, Temporary Access Road, and the Landslide project areas. The Riverside Quarry in the Spoils area was also noted. Previous work in Gilboa was located on the east side of Schoharie Creek (cf. Kastl et al. 2007). The current project area is located on the west side of the creek. This area is outside of the original village of Gilboa, but is within the dam construction area of 1919-1926. The site contexts identified for the east side of the creek also apply to the west side. That is, the contexts include the settlement of Gilboa village to 1919, worker housing (1919-1926), and dam construction activities (1919-1926).

Archaeologists excavated 161 STPs in the five work areas. STPs were excavated at 15 m (49 ft) intervals in all testable areas. Around the three foundations STPs were excavated at 5 m (16 ft) intervals. Transects were spaced so that the STPs began 1 m (3.3 ft) from each foundation. All soil was screened through 6 mm (¼ in) hardware cloth in order to standardize recovery rates.

Preliminary Results of STPs

Low Level Outlet Area:

Archaeologists excavated 25 STPs in this area. This project area is located on the east side of NY 990V, east of the dam. The project area consists of a small flat area adjacent to the road, which slopes steeply to the east. No artifacts were recovered in this project area. We recommend no further archaeological work in this area.

Spoils Area

This project area is located on the west side of Schoharie Creek, and begins just inside Gate 18 and extends south. The largest part of this area consists of the Riverside Quarry. This quarry was used during dam construction (1920-1926) as a source of stone for the dam. Also in this area is a stone foundation. Archaeologists excavated 43 STPs in this area. STPs were located along the northerly edge of the area, and along the southerly edge of the area. The quarry area consists of large piles of rubble from quarrying activities, and was inaccessible for testing. STPs were excavated at 15 m intervals, except around the foundation, which was excavated at 5 m intervals. No prehistoric artifacts were found. There was a concentration of artifacts around the foundation. This area has been designated the J. Cronk 1 Site (see below), and a Phase 2 Site Examination is recommended if impacts to the site cannot be avoided.

As noted, the former Riverside Quarry occupies the bulk of this project area and quarried stone was used in dam construction. The quarry was also the source of the famous fossil stumps of *Gilboa*. These stumps had long presented a problem in palaeobotany, in that only the stumps had been found, and the rest of the structure of the tree was unknown. Since these stumps represent the earliest known trees (397-385 MYBP) the question is an important one in the evolution of trees, and also of other flora. Recent research has located information that has allowed scientists to reconstruct this species (Stein, et al. 2007). The most recent specimen was found on South Mountain, 15 km east of the Riverside Quarry. The type specimen for these fossils, however, was found in Riverside Quarry during construction of Gilboa Dam.

The quarry was an integral part of construction activities of the dam. As such the quarry can be considered potentially eligible for the National Register based upon this association. The integrity of the quarry will need to be assessed to determine eligibility. Based on the quarry's historic role in the identification of the oldest known tree species, and that it is the source of many of the known specimens of this fossil, as well as the type fossil, the quarry may be potentially eligible for the National Register based on that connection (Stein, personal communication, Hernick, personal communication). If impacts to the quarry cannot be avoided, we propose that the integrity and research potential of the quarry be evaluated by qualified paleobotanists and geologists.

Temporary Access Road Area

This project area is located south of the Spoils Area, and adjacent to Schoharie Creek. Archaeologists excavated 20 STPs in this area. Two foundations were located in this area, at the boundary with the adjacent Landslide Area. The only STPs excavated in this area were adjacent to the foundations. There was a concentration of historic material, and the J. Cronk 2 and Vroman Sites have been identified. Each of these sites is discussed below. A former road was also noted, and this passes to the west of the two sites.

Landslide Area

Archaeologists excavated 38 STPs in this area. most of them were located near the Vroman and J. Cronk 2 Sites. The other STPs were located on the east side of the dam access road. There were three small shelves which were accessible to testing. The historic sites are discussed below. The test areas along the access road did not yield any concentration of artifacts. There were some surface finds noted. However, the indications were that the surface finds consisted of trash dumped post dam construction, some as late as the 1960s and 1970s. No further work is recommended outside of the sites located in this area.

Permanent Access Road Area

This area extends from the west side of the dam toward NY 30 and proceeds through the current Gate 19. A road was formerly located in this area, but some of it has eroded away. Much of this area was too steep to test. Testable portions were located along NY 30, and along the former access road. Archaeologists excavated 37 STPs in the project area. No artifacts were recovered. We recommend no further work in this area.

Historic Maps

Historic maps from 1856, 1866 and 1917 were consulted. It appears that the Cronk 2 and Vroman sites appear on the 1866 map as H. Lemmon and J. Mallory, respectively. The Cronk 1 site may be the dwelling listed as the J. Mattice residence. On the 1856 map there are two residences listed owned by J. G. Richtmyer, but they are located on the other side of the road. It may be that the road shifted, or they may be entirely different structures. It is difficult to correlate the mapped structures on these maps, since there is no trace of the original roads, and the channel of the creek has been changed. A thorough deed search will need to be conducted in order to determine which structures are depicted on these maps. The 1917 plat map clearly shows the foundations found in the field.

Site Descriptions

J. Cronk 1 Site

The J. Cronk 1 Site is located on the edge of the Riverside Quarry. The site consists of a foundation, possible privy, and sheet midden deposits from the mid nineteenth century. The northwestern corner of the foundation is exposed in the quarry wall. The site encompasses 737 m². The 1917 plat map identifies the dwelling as owned by Jason Cronk. The site consists of the area around a dry laid, irregular coursed, ashlar foundation. The northwest corner of the foundation contains a possible privy. Archaeologists excavated 18 STPs at 5 m intervals around the foundation. Archaeologists recovered 227 artifacts in 13 STPs. Artifact s are listed by functional categories in table 1 below. Ceramic type distributions are listed in table 2.

Table 1. Artifacts by Functional Category

Group	0	1	2	3	6	8	10	15	Total
Total	69	51	4	87	1	3	5	7	227
%	30.40%	22.47%	1.76%	38.33%	0.44%	1.32%	2.20%	3.08%	100.00%

KEY: 0=unaffiliated; 1=food related, 2=food remains, 3=architectural; 4= hygienic/medicinal, 5=furnishing , 6=clothing, 7=personal/amusement/cosmetic, 8=lighting, 9=tools/arms, 10=smoking, 15=faunal

Table 2: Ceramic Distribution, J. Cronk 1 Site

DESCRIPTION	Total
Creamware Undecorated Tableware Plate	1.
Creamware	1
Ironstone Tableware Bowl	1.
Ironstone Tableware/teaware	1.
Ironstone Undiff. Ceramic	13.
Ironstone Annular Banded Blue Undiff. Ceramic	1.
Ironstone Annular Banded Brown Undiff. Ceramic	1.
Ironstone Hand Painted Red Undiff. Ceramic	1.
Ironstone Molded Tableware/teaware	1.
Ironstone Shell Edge Blue Tableware/teaware	1.
Ironstone	20
Pearlware Tableware/teaware	9.
Pearlware Blue Transfer Undiff. Ceramic	1.
Pearlware Hand Painted Blue Tableware/teaware	2.
Pearlware Hand Painted Blue Teaware Lid	1.
Pearlware Transfer Blue Tableware/teaware	1.
Pearlware Transfer Blue Undiff. Ceramic	1.
Pearlware/whiteware Shell Edge Blue Undiff. Ceramic	1.
Pearlware	16
Redware Undiff. Ceramic	3.
Redware Lead Glazed Food Prep/storage	4.
Redware Manganese Glaze Undiff. Ceramic	3.
Redware	10
Stoneware Undiff. Ceramic	1.
Stoneware Glazed Black Food Prep/storage	1.
Stoneware Glazed Brown Food Prep/storage	1.
Stoneware Salt Glaze Undiff. Ceramic	1.
Stoneware Salt Glaze/alb. Slip Undiff. Ceramic	1.
Stoneware	5
Whiteware Shell Edge Blue Tableware/plate	1.
Whiteware Tableware/teaware	3.
Whiteware Undiff. Ceramic	10.

DESCRIPTION	Total
Whiteware Banded Brown Tableware/teaware Plate or Saucer	1.
Whiteware Glazed Cobalt Tableware/teaware	2.
Whiteware Hand Painted Blue Undiff. Ceramic	1.
Whiteware Sponge Blue Undiff. Ceramic	1.
Whiteware Transfer Black Tableware/teaware	3.
Whiteware Transfer Blue Undiff. Ceramic	2.
Whiteware Transfer Purple Undiff. Ceramic	1.
Whiteware	25
Yellowware Undiff. Ceramic	4.
Yellow ware	4

The density and diversity of artifacts at the site indicate that it is potentially eligible for the National Register. If impacts to the site cannot be avoided, we recommend a Phase 2 Site Examination to determine if it is eligible for the National Register. Site examination will consist of 15-20 1 x 1 m units at 5 m intervals, and judgmentally placed.

J. Cronk 2 Site

The J. Cronk 2 Site is located about 110 m (350 ft) south of the J. Cronk 1 Site. A well, foundation, and sheet midden is associated with the dwelling shown on the 1917 plat map, and part of the same property owned by Jason Cronk. The site consists of the area around a dry laid, irregular coursed, ashlar foundation, a well, and sheet midden. About 3 m north of the foundation is the remains of a stone lined well. Archaeologists recovered 72 artifacts from 7 STPs. Artifact distribution is shown by functional category in the table below. The ceramic assemblage consists of ironstone (n=14), porcelain (n=1), undecorated whiteware (n=3), and yellowware (n=2).

Table 3. Artifacts by Functional Category, J. Cronk 2 Site

STP	0	1	2	3	6	7	8	10	15	
Total	14	1	1	49	0	0	2	1	4	72
%	19.44%	1.39%	1.39%	68.06%	0.00%	0.00%	2.78%	1.39%	5.56%	100.00%

KEY: 0=unaffiliated; 1=food related, 2=food remains, 3=architectural; 4=hygienic/medicinal, 5=furnishing, 6=clothing, 7=personal/amusement/cosmetic, 8=lighting, 9=tools/arms, 10=smoking, 15=faunal

Table 4. Ceramic Type Distribution, J. Cronk 2 Site

DESCRIPTION	Total
Ironstone Tableware/teaware	3.
Ironstone Undiff. Ceramic	8.
Ironstone Decorated Blue Undiff. Ceramic	1.
Ironstone Decorated Red Undiff. Ceramic	1.

DESCRIPTION	Total
Ironstone Shell Edge Blue Undiff. Ceramic	1.
Ironstone	14
Porcelain Decal Tableware/teaware	1.
Porcelain	1
Whiteware Undiff. Ceramic	1.
Whiteware Green/black Undiff. Ceramic	1.
Whiteware Shell Edge Blue Tableware/teaware	1.
Whiteware	3
Yellowware Food Prep/storage	1.
Yellowware Undiff. Ceramic	1.
Yellow Ware	2

The density and diversity of artifacts at the site indicate that it is potentially eligible for the National Register. If impacts to the site cannot be avoided, we recommend a Phase 2 Site Examination to determine if it is eligible for the National Register. Site examination will consist of 8-10 1 x 1 m units at 5 m intervals and judgmentally at the well.

Vroman Site

The Vroman Site is adjacent to the J. Cronk 2 Site and consists of the area around a dry laid, irregular coursed, ashlar foundation, well, and sheet midden. There is a stone-lined well located 26 m south of the foundation. Archaeologists excavated 31 STPs at 5 m intervals. STPs were placed so that the one transect (P) was placed 1 m (3.3 ft) from the foundation, and other transect (M, N, O) started 1 m (3.3 ft) from the foundation. Archaeologists recovered 225 artifacts from 26 STPs. Artifacts are shown by functional category in table 5 below. Ceramic type distribution is shown in table 6, below

Table 5. Artifacts by Functional Category.

STP	0	1	2	3	6	7	8	10	15	
Total	46	43	17	94	1	2	4	1	17	225
%	20.44%	19.11%	7.56%	41.78%	0.44%	0.89%	1.78%	0.44%	7.56%	100.00%

KEY: 0=unaffiliated; 1=food related, 2=food remains, 3=architectural; 4=hygienic/medicinal, 5=furnishing, 6=clothing, 7=personal/amusement/cosmetic, 8=lighting, 9=tools/arms, 10=smoking, 15=faunal

Table 6. Ceramic Types, Vroman Site.

DESCRIPTION	Total
Ironstone Tableware/teaware	1
Ironstone Undiff. Ceramic	10
Ironstone Decal Undiff. Ceramic	3

DESCRIPTION	Total
Ironstone Glazed Pink Undiff. Ceramic	1
Ironstone	15
Porcelain Undiff. Ceramic	3
Porcelain Hand Painted Figurine	1
Porcelain	4
Redware Food Prep/storage	1
Redware Undiff. Ceramic	1
Redware Lead Glazed Food Prep/storage	1
Redware	3
Stoneware Albany Slip Food Prep/storage	1
Stoneware Glazed Brown Undiff. Ceramic	1
Stoneware	2
Whiteware Tableware/teaware	8
Whiteware Undiff. Ceramic	7
Whiteware Annular Banded Lt. Blue Undiff. Ceramic Unidentifiable	1
Whiteware Hand Painted Blue Tableware/teaware	2
Whiteware Hand Painted Polychrome Tableware/teaware	1
Whiteware Hand Painted Purple Tableware/teaware	1
Whiteware Shell Edge Blue Tableware/teaware	1
Whiteware Transfer Black Tableware/teaware	3
Whiteware Transfer Blue Tableware/teaware Unidentifiable	2
Whiteware Transfer Blue Teaware Tea Cup	2
Whiteware Transfer Brown Teaware Tea Cup	2
Whiteware Transfer Red Tableware/teaware	1
Whiteware Transfer Red Undiff. Ceramic	1
Whiteware	32
Yellowware Undiff. Ceramic	2
Yellow Ware	2

The density and diversity of artifacts at the site indicate that it is potentially eligible for the National Register. If impacts to the site cannot be avoided, we recommend a Phase 2 Site Examination to determine if it is eligible for the National Register. Site examination will consist of 12-18 1 x 1 m units at 5 m intervals and judgmentally at the well.

Recommendations

We recommend that if the sites (J. Cronk 1 & 2, Vroman Sites) cannot be avoided, that a Phase 2 Site Examination be conducted in order to determine if they are eligible for the National Register. If the Riverside Quarry cannot be avoided, we recommend that qualified paleobotanists and geologists conduct an examination of the quarry to determine the integrity and research potential of the quarry—and to make recommendations to mitigate any impacts to the quarry.

BIBLIOGRAPHY:

Beers, S.

1866 *New Topographical Atlas of Schoharie County, NY*. Philadelphia: Stone and Stewart, Publishers.

Kastl, Richard, Michael Jacobson, and Kevin Sheridan

2007 Cultural Resource Management Report, Phase 2 Site Examination, Mackey 1 Site, SUBi-2595; Mackey 2 Site (SUBi-2596); Buckingham Site, SUBi-2594; Gilboa 3 Site (SUBi-2597); Gilboa 4 Site (SUBi-2598); Gilboa 5 Site (SUBi-2599), Schoharie Reservoir, Town of Gilboa, Schoharie County, New York, MCD 09508. Binghamton, NY: The Public Archaeology Facility.

Stein, William E, Frank Mannolini, Linda VanAller Hernick, Ed Landing and Christopher M. Berry

2007 Giant cladoxylopsid trees resolve the enigma of the Earth's earliest forest stumps at Gilboa. *Nature*, Vol. 446, April 19, 2007:904-907.

Wenig, E. and W. Lorey

1856 *Map of Schoharie County, New York*. Philadelphia.

Reviewed by Nina Versaggi

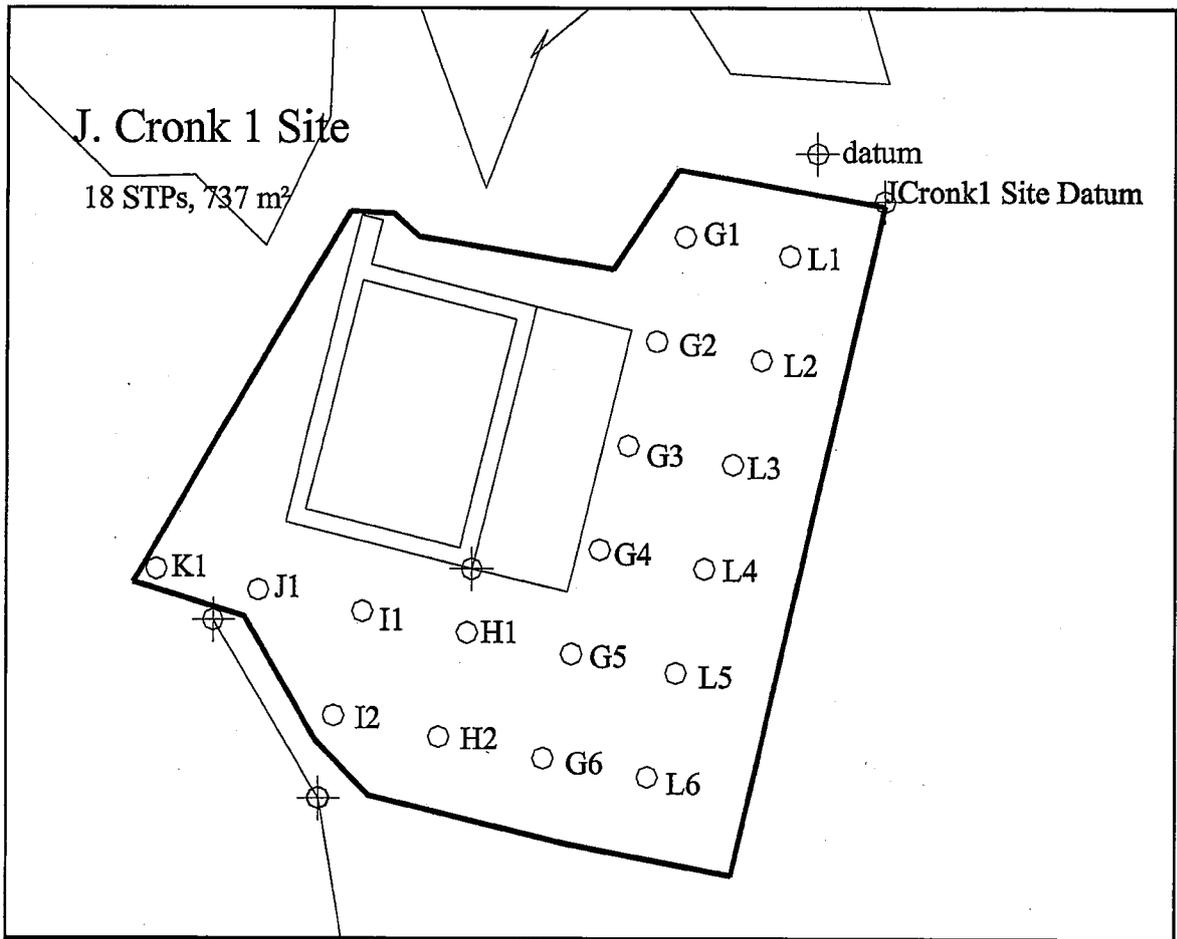


Figure 1. J. Cronk 1 Site, showing STPs.

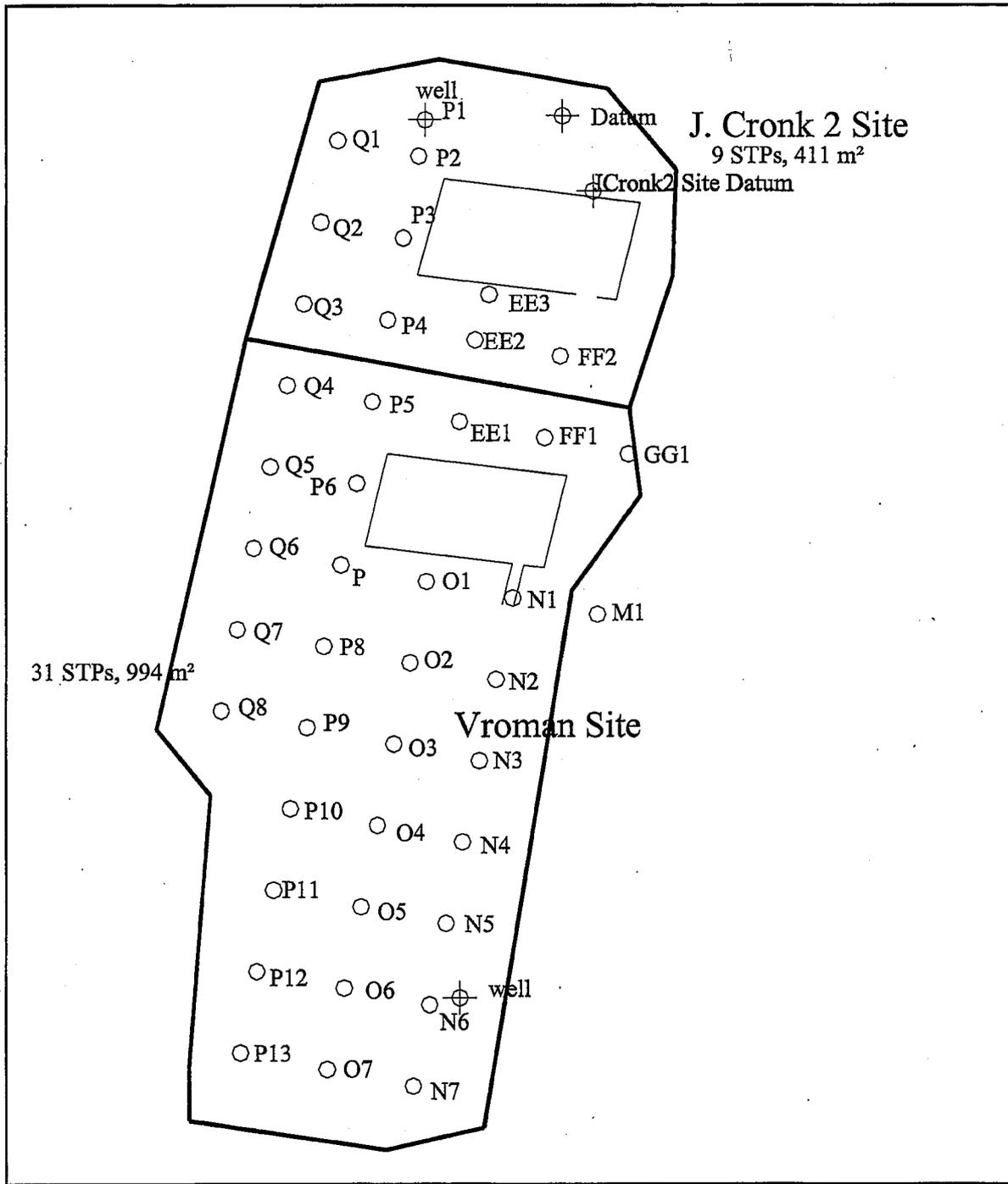


Figure 2. J. Cronk 2 and Vroman Site, showing STPs and boundary.



Figure 3. 1856 Wenig and Lorey map.

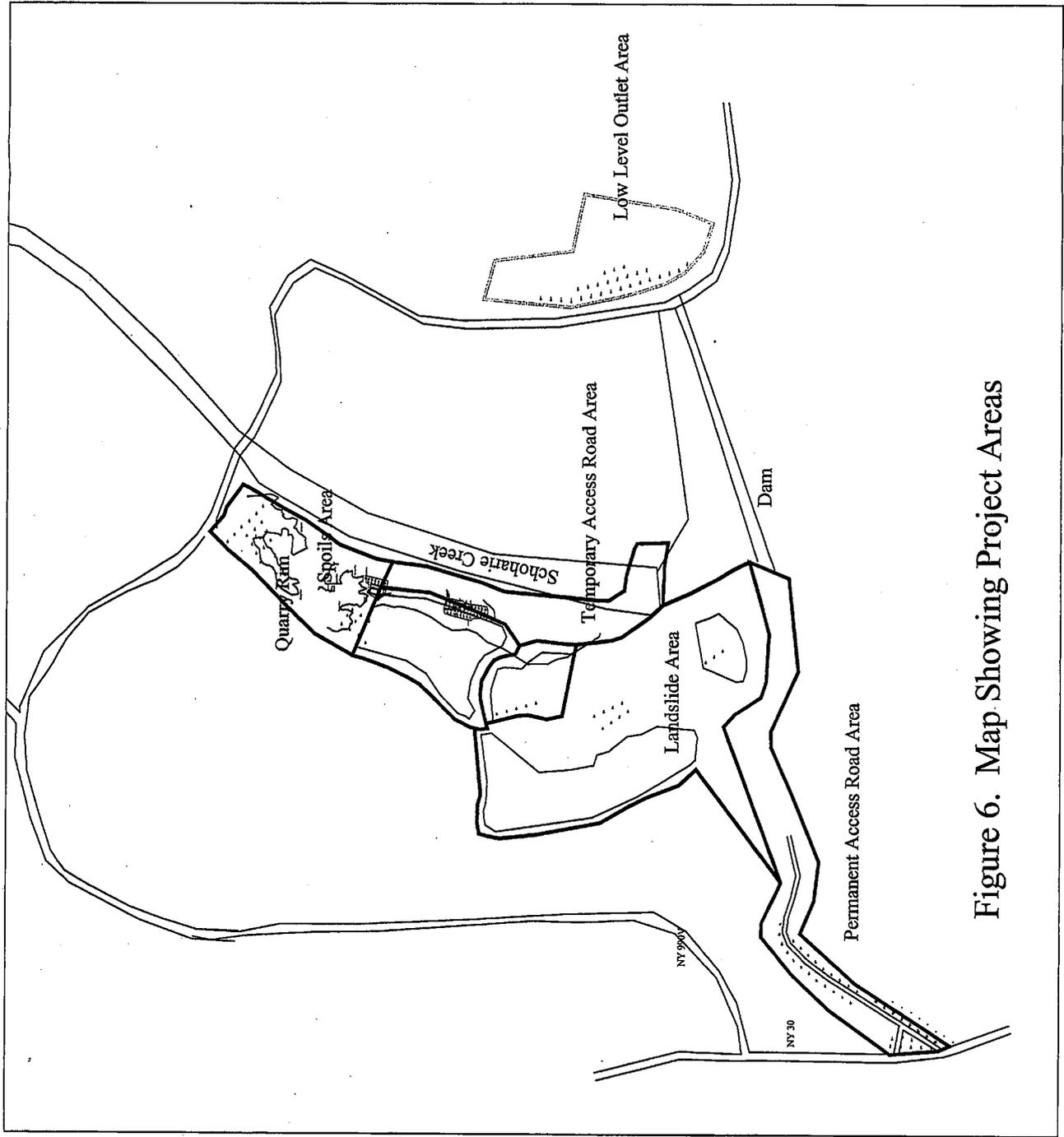


Figure 6. Map Showing Project Areas

PUBLIC ARCHAEOLOGY FACILITY

END OF FIELD LETTER

Date: August 15, 2007

To: Sandeep Mehrotra, Hazen and Sawyer

From: Richard A. Kastl, Research Associate 

Re: End of Field Letter, Data Recovery of the J. Reed (SUBi-2531), Gilboa 1 (SUBi-2432), Gilboa 4 (SUBi-2598), and Gilboa 5, North locus (SUBi-2599) Sites.

On August 2, 2007, crews from the Public Archaeology Facility (PAF) completed data recovery excavations at the sites of J. Reed (SUBi-2531), Gilboa 1 (SUBi-2532), Gilboa 4 (SUBi-2598) and Gilboa 5 (SUBi-2599) within the boundaries of the proposed project to repair and rehabilitate the Gilboa Dam in the Town of Gilboa, Schoharie County, New York. All four sites were historic sites initially defined during Phase I shovel testing conducted by PAF in 2005 (Kastl 2005) and 2006 (Kastl et al. 2007). Subsequent site examination testing occurred in 2005 and 2006 to further determine National Register eligibility, research potential, and the spatial limits of the sites (Kastl 2005 and Kastl et al. 2007). PAF recommended further data recovery excavations as these four sites were determined to be eligible for the National Register and impacts from the rehabilitation of the Gilboa Dam could not be avoided. A data recovery plan was submitted by PAF to Hazen Sawyer on behalf of the City of New York DEP in March of 2007 (Versaggi et al. 2007). The data recovery plan was accepted in May 2007. Field excavations at the J. Reed, Gilboa 1, Gilboa 4 and Gilboa 5 sites were conducted from June to August 2007. The excavations at the Gilboa 1 (SUBi-2532), J. Reed (SUBi-2532), and Gilboa 4 (SUBi-2598) sites identified multi-component historic sites with periods representing the nineteenth-century occupation of the village of Gilboa and the use of the land during the construction of the dam during the 1920s. The north locus of the Gilboa 5 Site (SUBi-2599) recovered information primarily related to the work camps of the workers constructing the dam in the 1920s.

1.1 Project Location and Description

The J. Reed, Gilboa 1, Gilboa 4, and Gilboa 5 sites are among nine sites identified by PAF during site Phase 1 testing in 2005 and 2006. The four sites are located on a terrace above Schoharie Creek, and below the Gilboa Dam. The dam was built in the 1920s and resulted in the creation of the Schoharie Reservoir. The four sites are at elevations ranging from 299 to 323 m (980-1060 ft) asl in an area known historically, as the "upper village" and "Church Hill."

The J. Reed Site (SUBi-2531) consists of a residential sheet midden, associated with the 19th century occupation of the village of Gilboa, as well as midden associated with the construction of the dam from 1920-1926. The Phase 1 and 2 examinations recovered 3290 artifacts dating from the early to late 19th century. The site includes a fieldstone foundation. The site covers approximately 252 m², all of which is within the project boundaries. The site is bounded by the Gilboa 1 Site to the west, the Buckingham and Mackey 1 sites situated to the east, on the other side of the old village road.

The Gilboa 1 Site (SUBi-2532) consists of a multi-component site including a residential sheet midden associated with the nineteenth century occupation of the village of Gilboa, as well as a midden associated with the construction of the dam in the 1920s. A small assemblage of prehistoric material was also recovered, and consisted of several flakes and expedient tools. The Phase I and Phase II examinations recovered 4863 artifacts and 2468 faunal remains. The residential component and the prehistoric assemblage were located primarily in the southern section of the site. The material associated with the dam construction was confined to the northern section of the site. This included the only existing feature, a stone foundation that possibly served as a steam power plant. The

site measures approximately 30 x 26 m (98 x 85 ft), and has an area of 707 m² (7610 ft²), or .7 ha (.17 ac). The site is bounded by the J. Reed Site to the east and the Gilboa 2 Site to the south.

Based on the Phase I and Phase II investigations, the Gilboa 4 Site is defined by a residential sheet midden containing 1,955 artifacts dating from mid to late nineteenth century and associated with three foundations (residence and two wells). The site was historically associated with Solomon Mackay, who most likely used the site as a rural farm residence. There is also some evidence, through fill deposits and material culture of the use of the site during construction of the dam. The site is located in the eastern portion of the project area. It measures approximately 712 m² (7664 ft²) within the project boundaries.

The Gilboa 5 Site (SUBi- 2599) consists of two separate loci identified during the Phase I investigations of the project area. Phase II testing determined that only the northern locus held further research potential and National Register eligibility. The Gilboa 5 loci are located in the western section of the project area. The northern locus consisted of a trash dump likely created during the construction of the dam in the 1920s. The dump is probably reflective of the consumption patterns of those working on the dam. It was most likely related to an unidentified workers' camp in the area and used as a central trash area by workers. The northern locus of the site covers approximately 811 m² (8729.5 ft²) within the project boundaries. The vertical site boundaries place much of the site within a trash midden located beneath a 50 cm (20 in) fill layer (Versaggi et al. 2007).

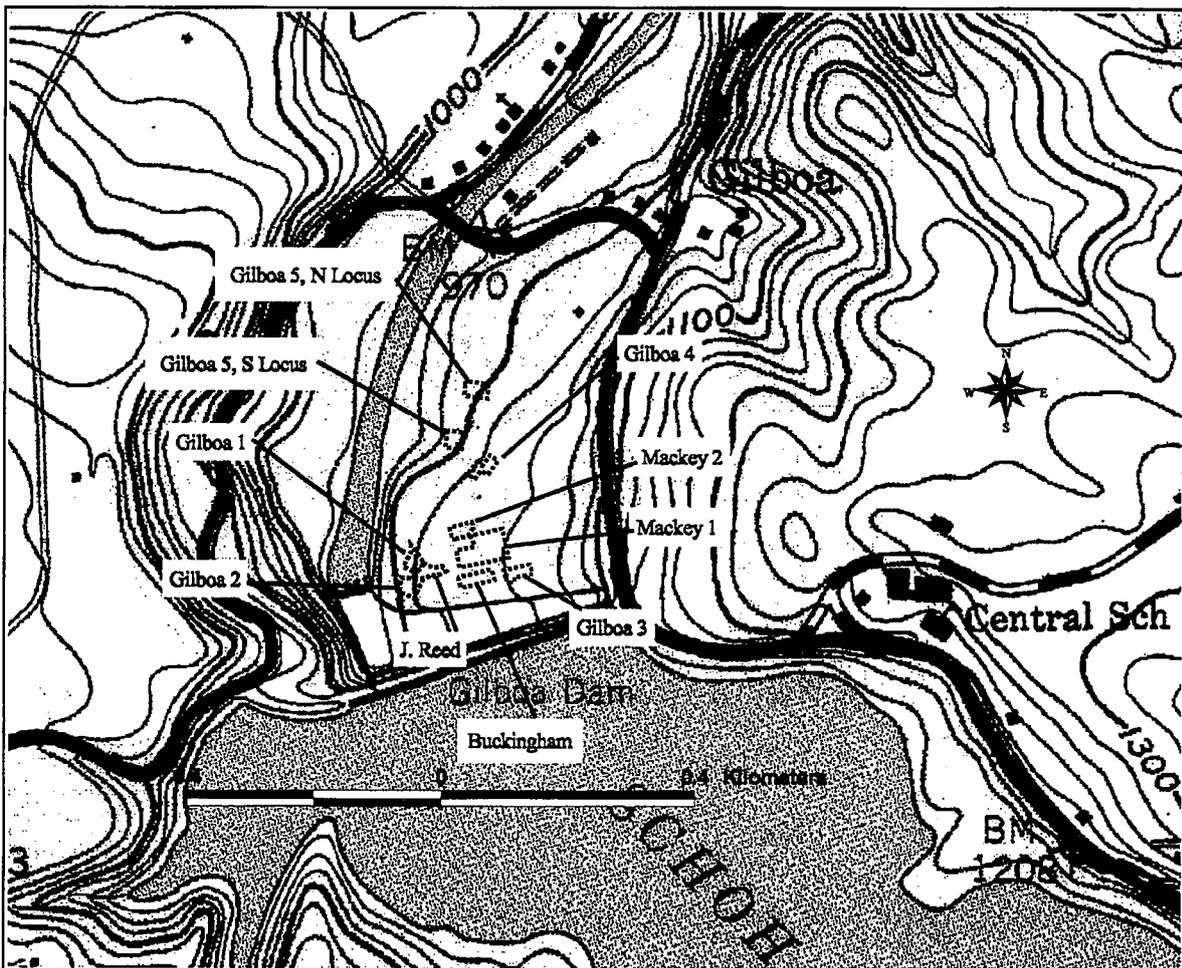


Figure 1. Location of the Gilboa sites on the 1945/1980 USGS Gilboa quadrangle.

II. ARCHAEOLOGICAL INVESTIGATIONS

2.1 Field Methodology

All data recovery units were positioned using the same grid and coordinate system established for the site examinations. Excavations proceeded by hand using shovels. All soil removed in this manner was screened through ¼ inch wire mesh to standardize recovery of artifacts unless thick, sterile horizons were identified during the systematic sampling. Units were excavated using arbitrary levels within natural layers of soil. Crews then excavated in arbitrary 5 cm (2 in) levels within natural layers of soil. All artifacts were noted and bagged by level. The vital information for each unit was recorded level by level on standardized forms. Excavation of each unit continued until one or two sterile levels within the B-horizon are encountered. Each unit was photographed after it is fully excavated. Additional photos were taken if significant artifacts or features are discovered in a specific level. A profile was drawn at the end of each unit's excavation. The excavators of each unit characterized the soil layers from standardized categories using a Munsell color chart. The interpretations regarding the intactness of deposits on site were made by historical archaeologists trained in the analysis of cultural deposits.

Features were systematically excavated using the normal PAF process, when features were located during the unit excavation. First, their boundaries were defined by troweling, then plan views were drawn and the feature was photographed. Soil discolorations, post-holes, etc., were cross-sectioned to obtain a vertical profile. The remaining half was bisected to obtain a perpendicular profile. Standard-sized (approximately 10 liter, where possible) soil samples for flotation were collected. Structural features, such as wells, privies, and cisterns, were treated as a single excavation unit. Excavation within these shaft features followed similar excavation strategies as long as safety measures can be maintained. If depths within these features exceeds the allowable OSHA limits, then alternative methods were employed. Alternative methods could consist of removal of one "wall" of such structural features and excavating inside deposits from larger units on the outside. The trash dump at Gilboa 5 (SUBi-2599) was too large in size to treat as a single excavation unit. Instead, it was tested using four 2 x 1 m (6.5 x 3 ft) test units. This size of test unit allowed for increased safety as the units reached a depth of approximately 150 cm (59 in). It also allowed for greater access to the cultural deposits in the trash dump. At the Gilboa 4 Site (SUBi- 2598) a stone walkway was uncovered at a depth of about 6 cm (2 in) below the ground surface. Excavators removed the topsoil covering the stone walkway to determine the boundaries of the feature. A unit placed alongside the feature identified the walkway as having one to two courses of stone. Due to the shallow nature of the feature, the walkway was plan viewed, but not bisected further than the adjacent unit. The goal for all feature excavation was to obtain information of feature structure and content.

III. PRELIMINARY RESULTS

3.1 Strategy

Data Recovery consisted of additional 1 x 1 m units placed in productive site areas, as determined by the site examination results. The number of proposed units was: J. Reed, 20-30 units, Gilboa 1, 20-30 units; Gilboa 4, 15-25 units; and Gilboa 5, 10-15 units. This strategy was constructed to be adaptable to new features or artifact concentrations encountered during data recovery excavations.

3.2 Archaeological Results

3.2.1 J. Reed (SUBi-2531)

The excavations at the J. Reed Site expanded on the unit test excavation conducted during site examination. The survey and site examination consisted of 25 STPs at 5 m intervals and 3 1 x 1 m units, sampling approximately 1% of the site. The 25 STPs and three units produced over 2100 artifacts and 1100 faunal remains distributed among 9 functional groups. The high percentage of ceramics (55%) suggested a high research potential for addressing issues of class, social stratification, consumer patterns, and ideology. The functional diversity suggested a high potential to yield information to date the site and address economic class issues.

Field crews excavated 29 1 x 1 m test units and 1 feature during data recovery. Data recovery efforts accounted for an additional 31 m² of the site being excavated. Features identified includes two stone foundations and a dark stain in one unit.

Deposition at the site consisted of a thin (5-10 cm) layer of industrial fill. Under the fill was an A horizon typified by a 10YR3/3 (dark brown) to 7.5YR3/2 (dark brown) silt loam, with rocks. The industrial fill layer, based on a review of artifacts in the field, consisted of large quantities of nails (both cut and wire) and pieces of unidentified metal. The A horizon, based on a preliminary review of artifacts identified in the field, appears to be associated with the rural household occupation of the site during the 19th century. The preliminary assessment confirms the results of the site examination, with significant quantities of creamware, pearlware, and redware in the assemblage. Additionally, there was also a significant number of kaolin pipe fragments found throughout the site, but a particular concentration was noted in feature 2, a suspected root cellar. Overall, some 10,000 additional artifacts were recovered.

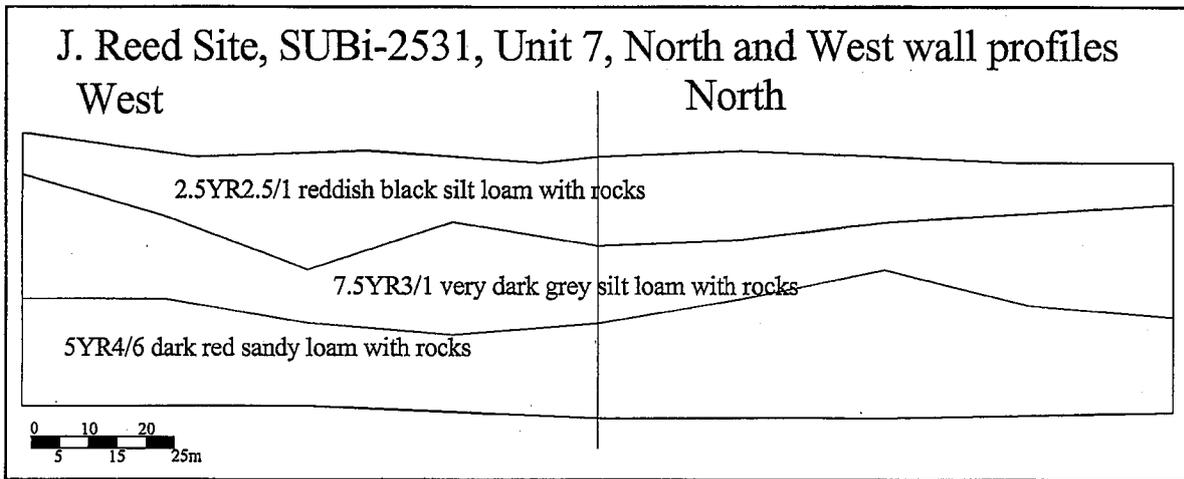


Figure 2. J. Reed Site, Unit 7, north and west wall profiles.

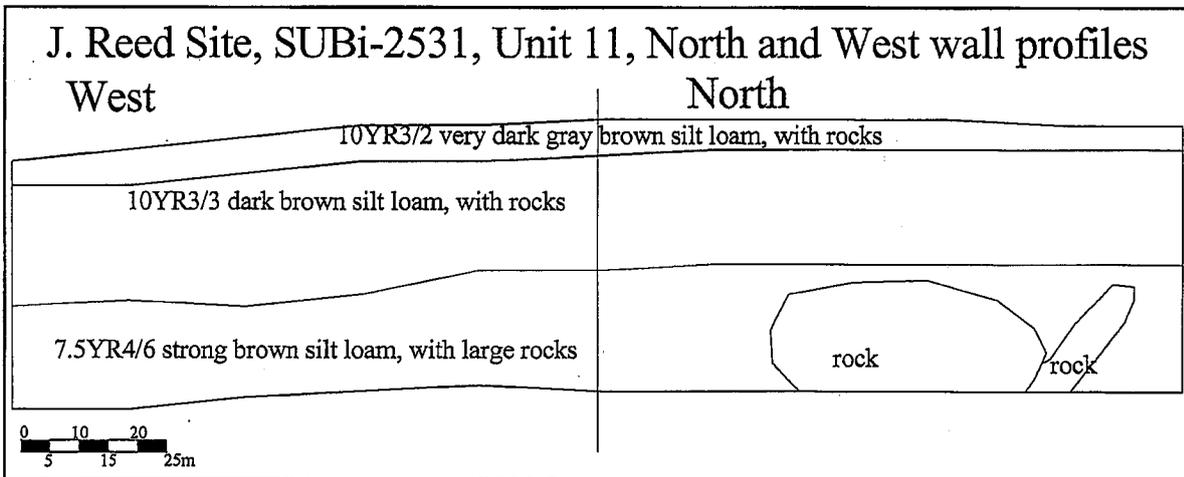


Figure 3. J. Reed Site, Unit 11, north and west wall profiles.

3.2.1 Gilboa 1 Site (SUBi-2532)

The excavations at the Gilboa 1 Site expanded on the unit test excavations conducted during the site examination. The initial survey and the site examination consisted of 17 1 x 1 m (3.3 x 3.3 ft) units and 29 STPs at 5 m (16 ft) intervals, sampling approximately 3% of the total site. The large variety of artifacts found at the Gilboa 1 Site, (13 functional groups represented) and the high percentage of ceramics (41% of the assemblage) suggested a high research potential for studying the lives of a rural household before the construction of the dam (Versaggi et al. 2007).

Field crews excavated thirty-one 1 x 1 m (3.3 x 3.3 ft) test units and 8 STP's at 5 m (16 ft) intervals surrounding Feature 1. The top of an ashlar foundation was uncovered via shovel scraping. Subsurface testing accounted for approximately 31 m² (333.7 ft²) of the site being tested. One feature was uncovered during excavation, which consisted of a 10.5 x 5.57 m (34.4 x , 18.3 ft) ashlar foundation (Feature 1). Overall, some 10,000 additional artifacts were recovered.

The deposition on the site was defined by two main types of deposition. The main stratigraphic profile (Figure 5) found primarily in the southern portion of the site, included an A horizon typified by a 10YR3/3 dark brown, 10YR2/2 very dark brown or 7.5YR dark brown silt loam with some gravel. This A horizon, based on a preliminary review of artifacts identified in the field, appears to be associated with the rural household occupation of the site during the nineteenth century, with some intrusion from the construction of the dam. The A horizon contained particularly dense concentrations of ceramic sherds. In addition, this stratum also produced small amounts of prehistoric material, including chert flakes and expedient tools. Underlying this A horizon was a B horizon identified as a 7.5YR4/6 strong brown, 7.5YR 3/4 dark brown or a 7.5YR4/4 brown sandy loam with large rocks and occasional gravel laying on top of bedrock. The northern section of the site (Figures 6 and 7) contained variable A horizon soils, including 10YR3/2 very dark grayish brown silt loam, 10YR2/2 very dark brown silt loam and 7.5 YR 2.5/1 black silt loam. A horizon levels terminated with a charcoal lense in some units. B horizon soils typically consisted of 5 YR 4/6 yellowish red or 5YR 3/2 dark reddish brown silt loam. The disturbance of the A horizon soils is likely a result of the construction of the structure represented by Feature 1. Artifacts from this section of the site are consistent with material associated with the construction of the dam during the 1920s, including a 1924 dime, rubber, and plumbing fittings associated with Feature 1.

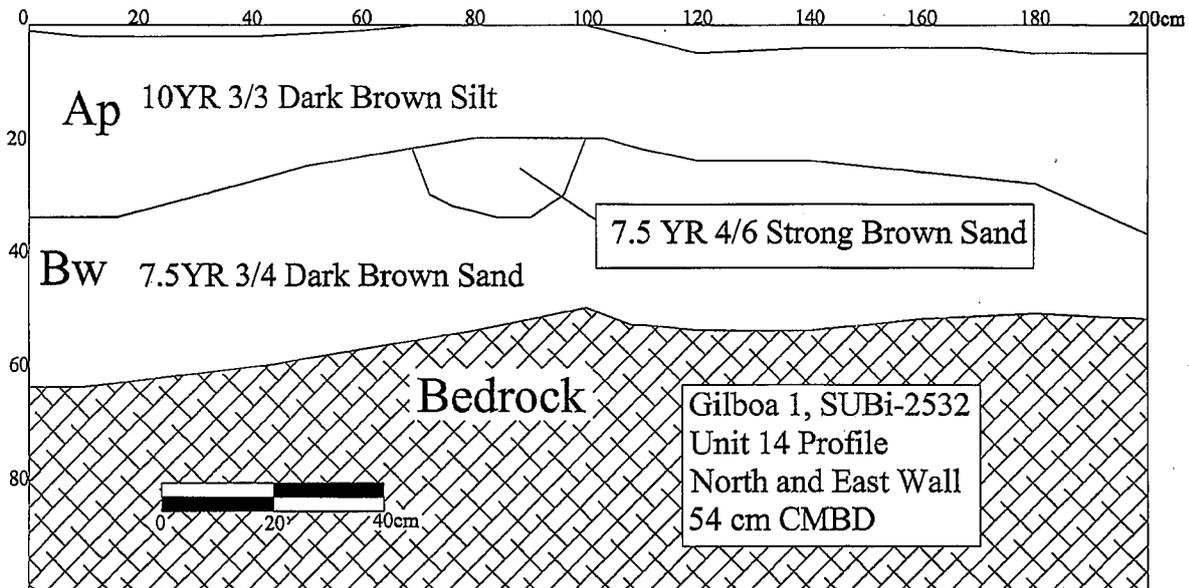


Figure 4. Gilboa 1 (SUBi-2660) Unit 14 Profile, North and East Walls

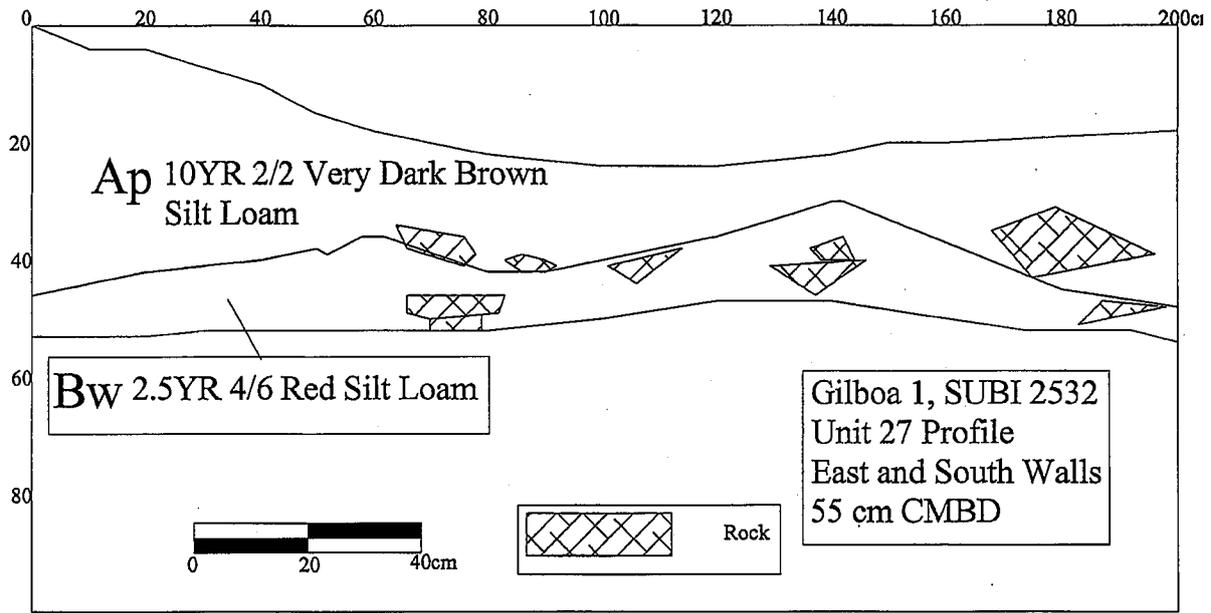


Figure 5. Gilboa 1 (SUBi-2660) Unit 19 Profile, North and East Walls

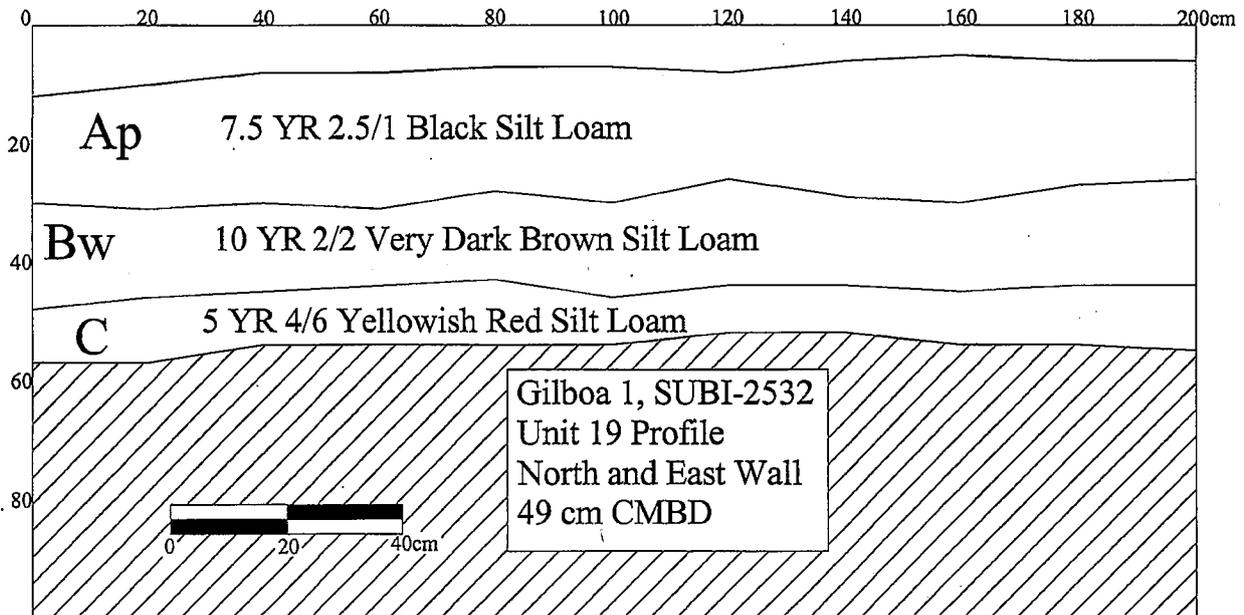


Figure 6. Gilboa 1 (SUBi-2660) Unit 27 Profile, East and South Walls

3.2.3 Gilboa 4 Site (SUBi-2598)

The excavations at the Gilboa 4 Site expanded on the unit test excavations conducted during the site examination. The initial survey and the site examination consisted of eight 1 x 1 m (3.3 x 3.3 ft) units and 33 STPs, sampling approximately 1.5% of the total site. The site examination units and STPs found a higher amount of intact cultural deposits at the north end of the site adjacent to two wells. Although a stone foundation was present, the southern portion of the site was defined by shallow soil deposition over bedrock, with low to moderate amounts of cultural material. The large variety of artifacts found at the Gilboa 4 Site, (11 functional groups represented) and the high percentage of ceramics (16% of the assemblage) suggested a high research potential for studying the lives of a rural household before the construction of the dam (Versaggi et al. 2007). The lack of soil and cultural deposition at the south end of the site meant most of the testing during the data recovery was conducted at the north end of the site.

Field crews excavated twenty-three 1 x 1 m (3.3 x 3.3 ft) test units and uncovered portions of a stone walkway. Excavations accounted for approximately 25 m² (269 ft²) of the site being tested, primarily in the north half of the site near the two wells. Two features were uncovered during excavation. One was later discounted as a rodent disturbance and the other was a stone walkway adjacent to the southern well (Feature 1). Overall, some 5,000 additional artifacts were recovered.

The deposition on the site was defined by two main types of deposition (Figures 2 and 3). The main stratigraphic profile found on the site included an A horizon typified by a 10YR3/2 very dark grayish brown or 10YR2/2 very dark brown silt loam with some gravel. This A horizon, based on a preliminary review of artifacts identified in the field, appears to be associated with the rural household occupation of the site during the nineteenth century, with some intrusion from the construction of the dam. Underlying this A horizon was a B horizon identified as a 10YR3/4 dark yellowish brown silt loam with large rocks and occasional gravel. Other areas of the site, specifically at the south end of the site and at some portions of the northern section of the site, consisted of a shallow A horizon of 10YR2/2 very dark brown silt loam overlaying bedrock. Three units at the northeast section of the site contained a layer of culturally sterile rock fill over a compact soil stratigraphy similar to the rest of the site. It appears that this section had a layer of rock fill deposited over the nineteenth century occupational layers, probably during the construction of the dam. Two units at the extreme northern end of the site had fill composed of large rocks. These rocks became large enough that they hindered excavation. The general stratigraphy for the site appears to be intact with occasional intrusions related to the initial construction of the dam during the 1920s.

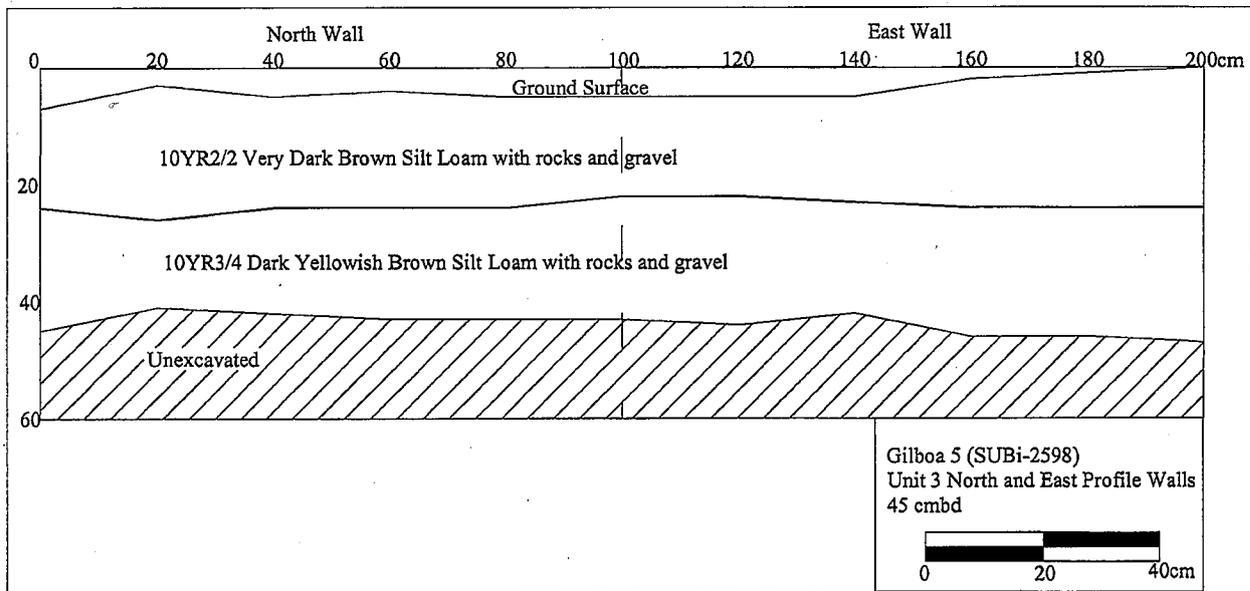


Figure 7. Gilboa 4, Unit 3, North and East Wall Profiles.

3.2.4 Gilboa 5 Site, North locus (SUBi-2599)

Excavations at the northern locus of the Gilboa 5 Site were aimed at better defining the nature of deposition of the trash dump identified during the site examination and to recover enough material culture to determine the nature of daily life in the work camps related to the construction of the dam. The northern locus of the site yielded over 3,500 historic artifacts and 181 faunal remains from 18 STPs and four 1 x 1 m (3.3 x 3.3 ft) units during the initial survey and the site examination. The majority of these artifacts came from a cluster in the center of the locus identified during the site examination as a historic trash dump. The majority of the units excavated during the data recovery were positioned in this cluster to gain the most data as possible. Three 1 x 1 m (3.3 x 3.3 ft) were placed along the assumed perimeter of the trash dump to identify the boundary of the trash dump. The other units consisted of four 2 x 1 m (6.5 x 3 ft) test units excavated at the center of the cluster of artifacts, potentially the center of the trash dump. The seven units account for 11 m² (118 ft²) excavated. Overall, some 5,000 additional artifacts were recovered.

The three perimeter units had a shallow deposition of cultural material. The stratigraphy in these units was for the most part ephemeral with only slight transitions between an organic 10YR3/2 very dark grayish brown silt loam to a 7.5YR3/4 dark brown sandy loam or 7.5YR4/6 strong brown sandy loam A horizon to a B horizon defined as a 5YR4/4 reddish brown sandy silt. There were few artifacts in two of the three perimeter units having mostly nails, glass, and ceramics. The third perimeter unit (Unit 5, Figure 4) had a charcoal lens possible associated with the trash dump. Most of the artifacts from this unit came from the charcoal lens and included bottle glass, metal objects, personal items (belt buckle, pencil lead, and shoe pieces), bottle caps, and other material culture. Many of these types of items were also found in the nearby trash dump suggesting an association, although Unit 5 had a shallower deposition than the rest of the trash dump.

The excavations of the artifact cluster identified a high concentration of artifacts consisting mostly of metal, glass, leather items, and burned wood and paper. The stratigraphic profile of the deposits related to the trash dump were simple. A fill layer identified as 7.5YR4/6 Strong Brown sandy loam overlay the actual dump with a depth of approximately 100 cm (39 in). The fill had few artifacts and was probably placed over the trash dump in an attempt to make the area more sanitary. The layer that contained the actual trash dump has a very high density of artifacts, including whiteware ceramics, ferrous metal objects (tin cans), bottle and window glass, charcoal, and other assorted items. The bottom of the dump was associated with a lens of burned newspaper. This layer was approximately 50 cm (20 in) in depth for most of the units and had little soil deposition amongst the dense layer of artifacts. The soil present was identified as a 7.5YR4/3 brown sandy loam. Beneath the trash dump was a sterile subsoil defined by thin bands of 7.5YR4/6 strong brown sandy loam, 5YR4/6 yellowish red sandy loam, and 10YR3/4 dark brown sand. STPs were excavated into the unit floors after the completion of unit excavation to determine if the trash dump continued. These STPs reached a sterile gravel layer related to glacial outwash without encountering any other cultural occupations.

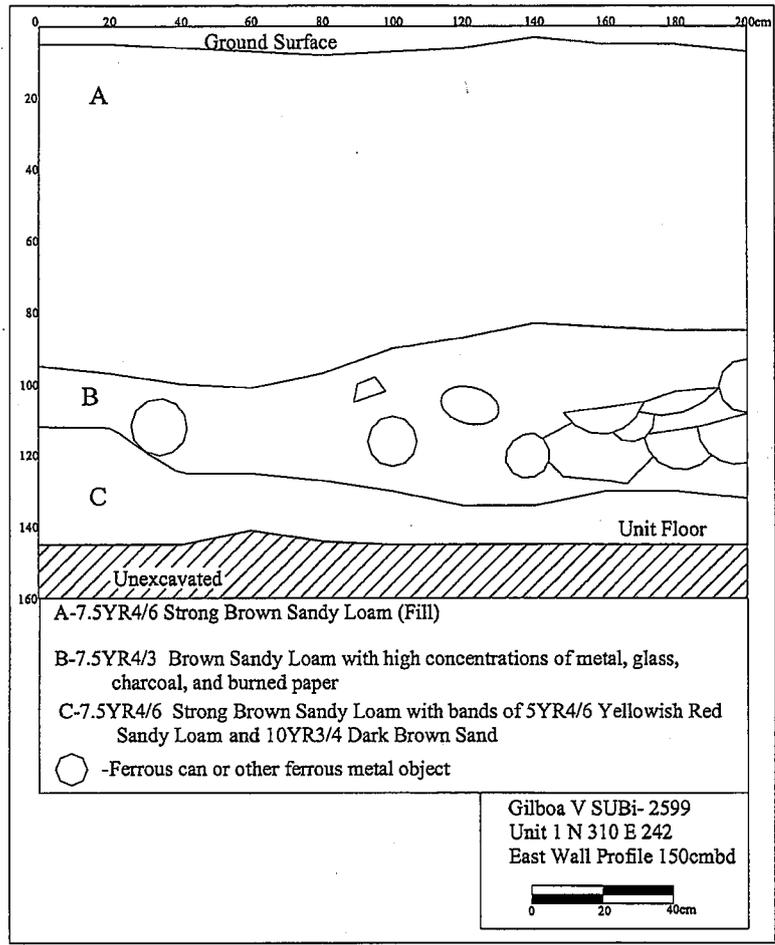


Figure 8. Gilboa 5, Unit 1, East wall profile.

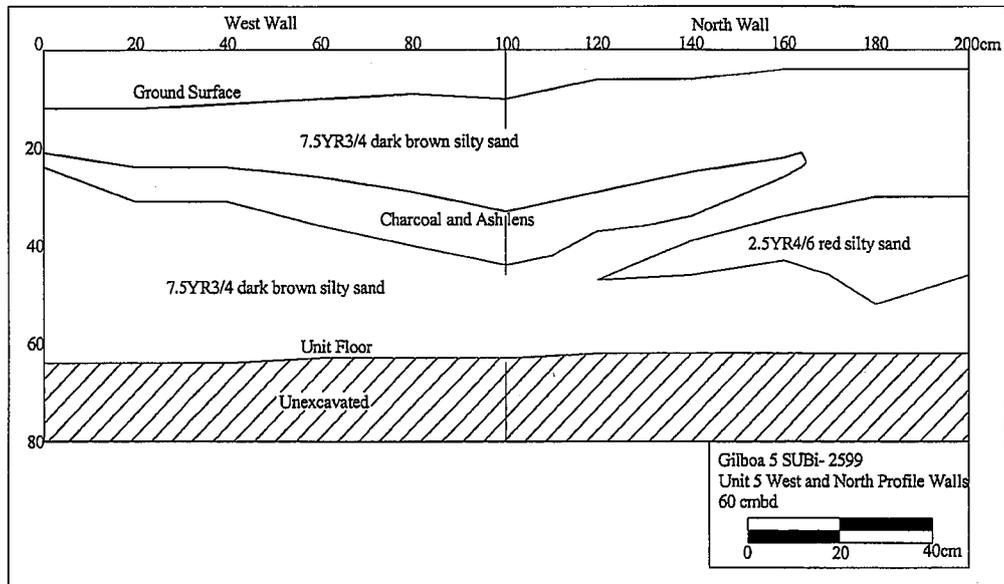


Figure 9. Gilboa 5, Unit 5, west and north wall profiles.

3.3 Data Potential and Research Objectives

The data recovery plan for the four sites outlined six major research questions concerning historic context, ceramic and glass assemblage, faunal assemblage, functional diversity, features and integrity. We have recovered sufficient information from each of the sites to address each of these questions.

Historic Context. Historic contexts, defined in the data recovery plan, include the 19th century village of Gilboa and 20th century worker camp/dam construction contexts. Evidence of the 19th century village context was abundant in the J. Reed, Gilboa 1, and Gilboa 4 sites. Each of these sites, to some degree, also exhibit evidence of the construction of Gilboa Dam. The Gilboa 5 Site, north locus exhibited evidence of the 20th century worker camp context, but little evidence of the 19th century occupation of the village of Gilboa.

Ceramic and glass assemblage. Extensive ceramic and glass assemblages were taken from each of the sites, which all produced an extensive sample of diagnostic artifacts. These artifacts can be used to establish a chronology for each site and have sufficient functional and decorative variation to examine class, consumption, display, and gendered patterns.

Faunal assemblage. Faunal assemblage preservation was excellent across all four sites. The J. Reed and Gilboa 1 sites both yielded extensive faunal collections. These assemblages will provide excellent information on meat cuts and diet. While the faunal assemblages are less extensive from Gilboa 4 and Gilboa 5 (north locus) sites, they should be able to provide some insight into worker camp diet (Gilboa 5) and 19th century patterns (Gilboa 4).

Functional diversity. Both the J. Reed and the Gilboa 1 sites had a high potential for functional diversity. The extensive assemblages recovered retained this diversity. We will be able to address questions of production, gendered activities, and differences in domestic activities with this sample.

Features. Features not identified during site examination were located on the J. Reed, Gilboa 1, and Gilboa 4 sites. At the Gilboa 1 Site, a building foundation, likely associated with dam construction, was uncovered. At the J. Reed Site, a foundation wall was encountered, as well as a possible root cellar and a stain feature. At the Gilboa 4 Site, a stone platform, or a possible walkway was uncovered.

Integrity. Site examination indicated that each of the sites retained excellent integrity. This was confirmed during data recovery. This was also confirmed on the J. Reed and Gilboa 1 sites, where there is an overlay of related dam construction fill; however, the fill did not penetrate into the historic sheet midden in the A horizon.

IV. SUMMARY AND RECOMMENDATIONS

The data recovery at the J. Reed, Gilboa 1, Gilboa 4, and Gilboa 5, north locus sites supports earlier predictions of integrity and research potential. Area proposed for excavation was either met or exceeded during the data recovery (Table 1, below) These unit excavations recovered a sufficient sample of material culture from intact areas of each site for site interpretation. This coverage has produced a large and diverse sample of artifacts and features to address the major research questions proposed in the data recovery plan. The results of the data recovery excavations will be combined with information from the site examination units into a final report. We recommend that data recovery has mitigated the adverse impact that will result from Gilboa Dam rehabilitation work.

Table 1. Proposed # of units, and Units excavated.

Site Name	Proposed Excavation	Area Excavated
Gilboa 1	20-30 units	31 units
J. Reed	20-30 units	29 units, plus 1 feature
Gilboa 4	15-25 units	23 units
Gilboa 5, North locus	10-15 units	7 units (11 m ²)

SOURCES CITED

Kastl, Richard

2005 *Cultural Resource Management Report, Phase 2 Site Examination, J. Reed Site, Gilboa #1 Site, Gilboa #2 Site, Gilboa Dam Historic Sites (Foundations 1 and 2): Shandaken Tunnel Intake Dredging Project, Schoharie Reservoir, Town of Gilboa, Schoharie County, New York.* Public Archaeology Facility, Binghamton University, Binghamton, New York

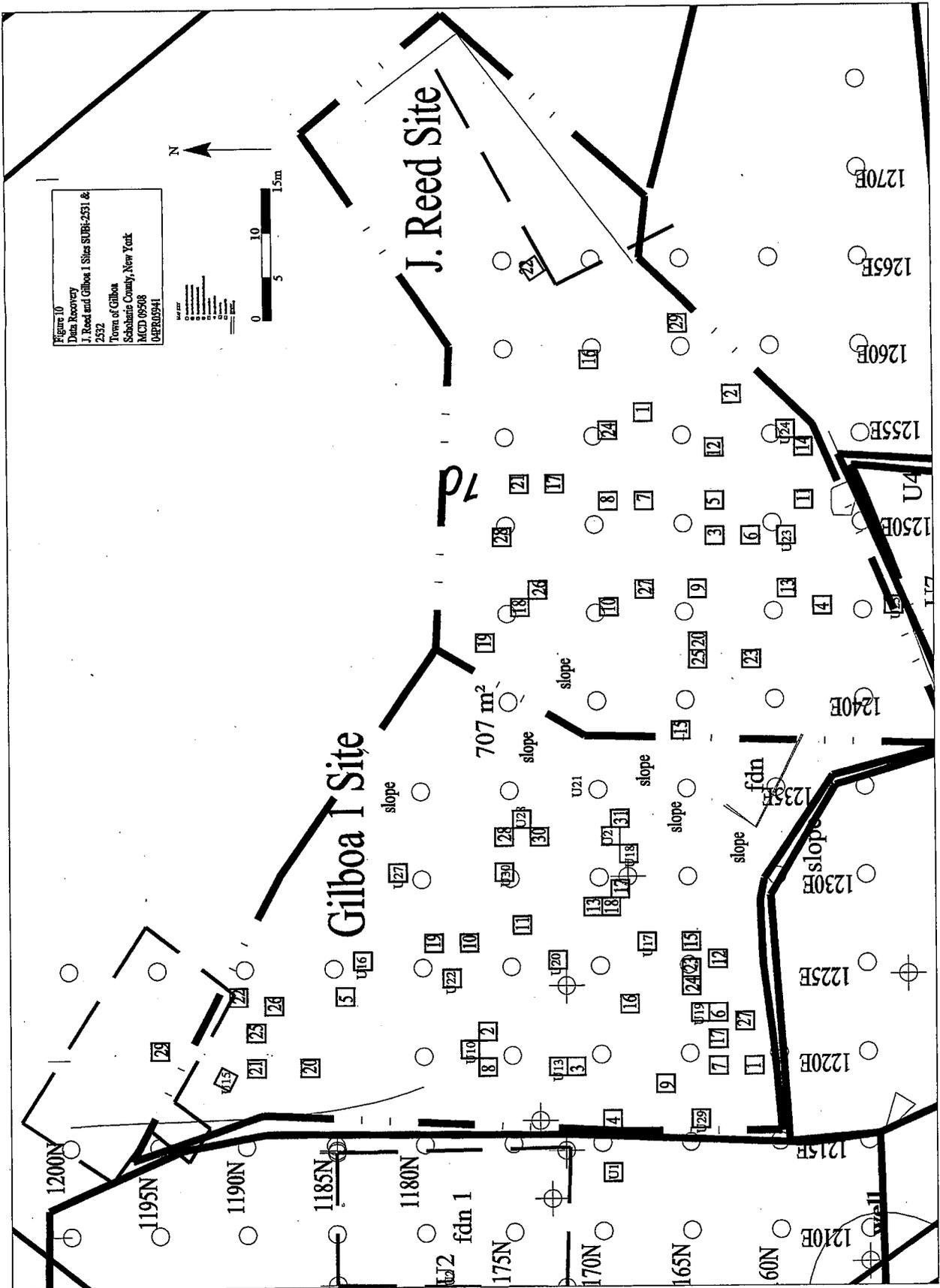
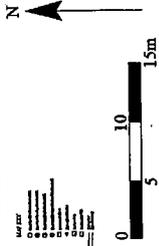
Kastl, Richard, Michael Jacobson and Kevin Sheridan

2006 *Cultural Resource Management Report, Phase 1 Reconnaissance Survey and Phase 2 Site Examinations, Shandaken Tunnel Intake Dredging Report, Schoharie Reservoir, Town of Gilboa, Schoharie County, New York.* Public Archaeology Facility, Binghamton University, Binghamton, New York.

Versaggi, Nina M., Christopher Hohman, and Richard A. Kastl

2007 Data Recovery Plan For: J. Reed Site (Subi-2531), Gilboa I Site (Subi-2532), Gilboa Iv Site (Subi-2598), Gilboa V Site (Subi-2599), for the Gilboa Dam Project, Town of Gilboa, Schoharie County, New York, MCD 09508, 04PR05941. Public Archaeology Facility, Binghamton University, Binghamton, New York.

Figure 10
 Data Recovery
 J. Reed and Gilboa I Sites SUB-251 &
 2532
 Town of Gilboa
 Schoharie County, New York
 MCD 08508
 04PR0941



Gilboa 5 Site, North Locus

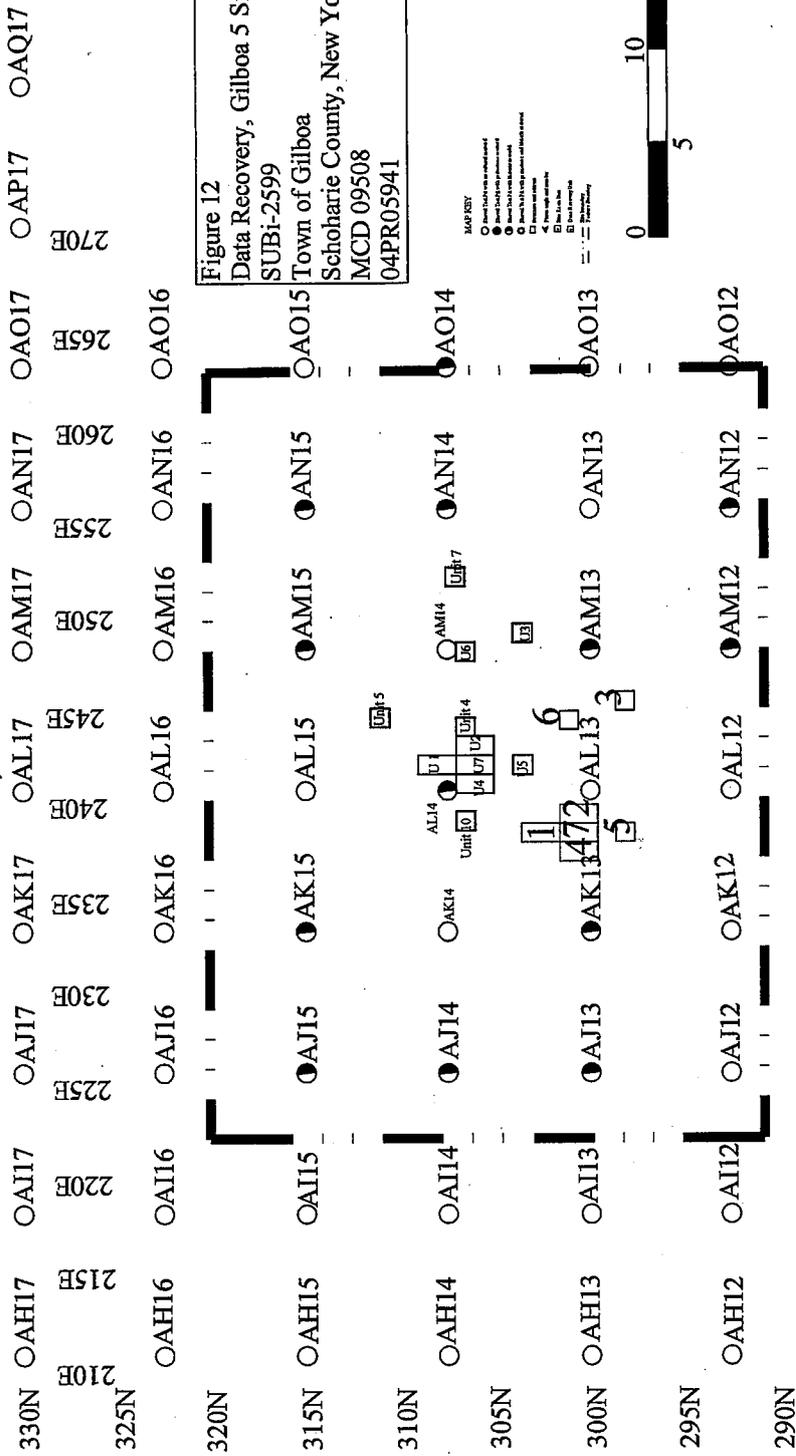


Figure 12
 Data Recovery, Gilboa 5 Site,
 SUBI-2599
 Town of Gilboa
 Schoharie County, New York
 MCD 09508
 04PR05941

- MAP KEY
- Other locations not used
 - Sample locations
 - Black 100
 - Black 100 (Black 100 and Black 100 are not used)
 - 4 Sample numbers
 - 1-10 Sample numbers
 - 11-20 Sample numbers
 - 21-30 Sample numbers
 - 31-40 Sample numbers
 - 41-50 Sample numbers
 - 51-60 Sample numbers
 - 61-70 Sample numbers
 - 71-80 Sample numbers
 - 81-90 Sample numbers
 - 91-100 Sample numbers



PUBLIC ARCHAEOLOGY FACILITY

END OF FIELD LETTER

Date: **September 26, 2007**

To: **Sandeep Mehrotra, Hazen and Sawyer**

From: **Michael E. Jacobson, Research Associate** *Michael Jacobson*

Re: **End of Field Letter, Data Recovery of the J. Cronk I (SUBi-2666), J. Cronk II (SUBi-2667), and Vroman (SUBi-2668) Sites.**

On September 18, 2007, crews from the Public Archaeology Facility (PAF) completed site examination excavations at the sites of J. Cronk I (SUBi-2666), J. Cronk II (SUBi-2667), and Vroman (SUBi-2668) within the boundaries of the proposed project to repair and rehabilitate the Gilboa Dam in the Town of Gilboa, Schoharie County, New York. All three were historic sites initially defined during Phase I shovel testing completed by PAF in 2007 (Kastl 2007). Field excavations at the J. Cronk I, J. Cronk II, and Vroman sites were conducted from August to September 2007. The excavations at J. Cronk I (SUBi-2666), J. Cronk II (SUBi-2667), and Vroman (SUBi-2668) sites identified single component historic sites representing the nineteenth century occupation of the Village of Gilboa. No concentrated occupation related to the construction of the dam was identified on any of the three sites with the majority of material related to the dam located to the north near the stone quarries (Kastl 2007).

1.1 Project Location and Description

The J. Cronk I, J. Cronk II, and Vroman sites are among four sites identified by PAF during Phase 1 testing in 2007 (Kastl 2007). The three sites are located on terraces above Schoharie Creek and below the Gilboa Dam. The three sites are at elevations ranging from 293 to 299 m (960-980 ft) asl in an area known historically as the "upper village."

The J. Cronk I site (SUBi-2666) consists of two possible residential sheet middens, associated with the nineteenth century occupation of the Village of Gilboa. The Phase 1 reconnaissance recovered 227 artifacts dating from the early to late nineteenth century and includes a dry laid, irregularly coursed, ashlar foundation. The site covers approximately 738 m² (7944 ft²), all of which is within the project boundaries. It is located on the west side of Schoharie Creek, 200 m (656 ft) south of NY 990V and 570 m north of Gilboa Dam.

The J. Cronk II site (SUBi-2667) includes a residential sheet midden associated with the nineteenth century occupation of the village of Gilboa. The Phase 1 reconnaissance recovered 72 artifacts that dated to the middle nineteenth century. Archaeologists also discovered a dry laid, irregularly coursed, ashlar foundation and a well. The site measures approximately 23 x 15 m (411 m²; 4424 ft²). It is located on the west side of Schoharie Creek, 330 m (1082 ft) south of NY 990V and 475 m (1558 ft) north of Gilboa Dam. The site is bounded by the Vroman Site to the south.

The Vroman site (SUBi-2668) contains a dry laid, irregularly coursed, ashlar foundation surrounded by a residential sheet midden. A well is also located at the south end of the site. The Phase 1 investigation produced 225 artifacts, including 17 faunal remains. The artifacts date to the middle to late nineteenth century. The site is located on the west side of Schoharie Creek, 330 m (1082 ft) south of NY 990V and 475 m (1558 ft) north of Gilboa Dam. It measures approximately 45 x 25 m (994 m²; 10699 ft²). It is bounded on the north by the J. Cronk II site.

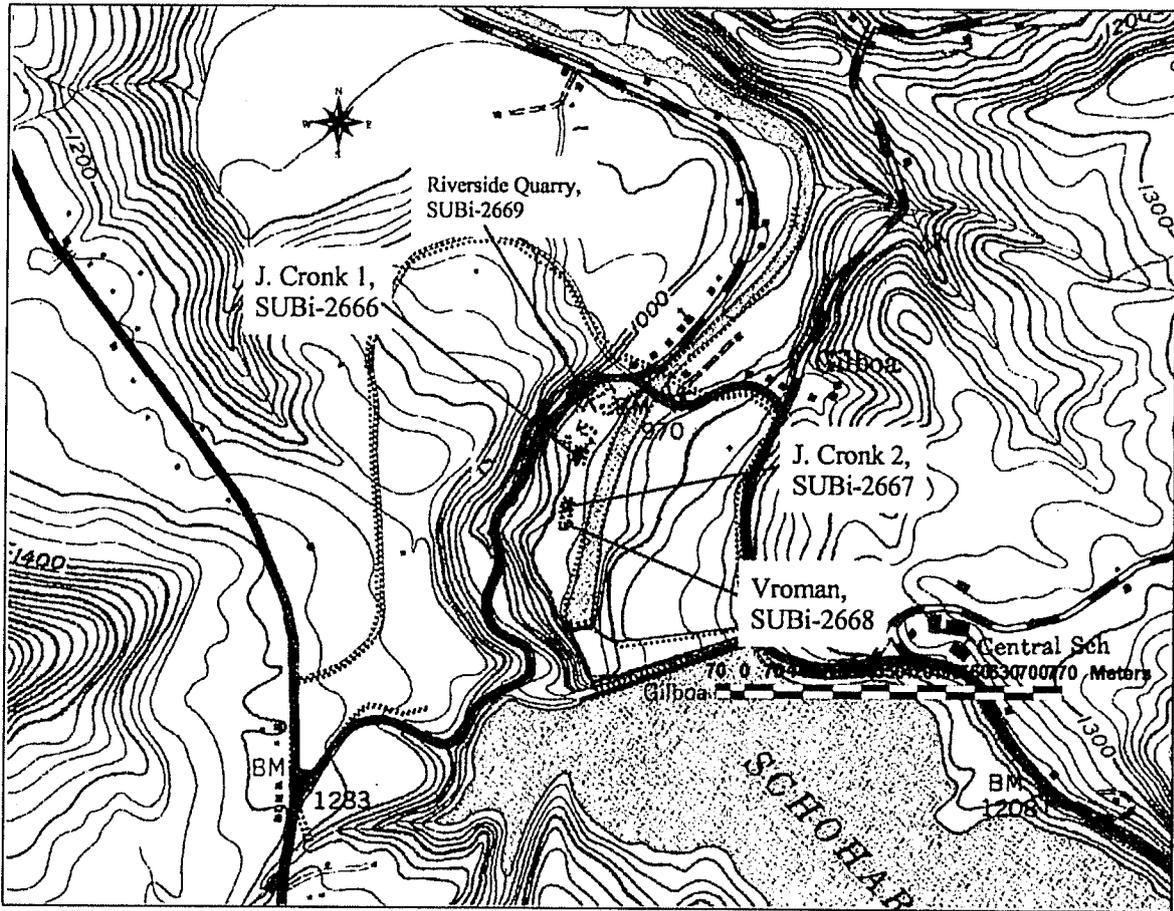


Figure 1. Location of the Gilboa sites on the 1945/1980 USGS Gilboa quadrangle.

II. ARCHAEOLOGICAL INVESTIGATIONS

2.1 Field Methodology

Phase 2 excavation units were positioned using two grid and coordinate systems, one for the J. Cronk I site and another for both the J. Cronk II and Vroman sites. Excavations proceeded by hand using shovels, and all soil was screened through 7 mm (¼ in) wire mesh to standardize recovery rates of artifacts. Most units were excavated using arbitrary 5 cm (2 in) levels within natural layers of soil. Some exceptions occurred at the J. Cronk I site where arbitrary 10 cm (4 in) levels were used when units were filled with large rocks or were adjacent to units with thick layers containing little cultural material.

All artifacts were noted and bagged by level. The vital information for each unit was recorded level by level on standardized forms. Excavation of each unit continued until two sterile levels within the B-horizon were encountered, unless stopped by rock that filled in the entire unit. Each unit was photographed after it was fully excavated. Additional photos were taken if significant artifacts or features were discovered in a specific level. A profile was drawn at the end of each unit's excavation. The excavators of each unit characterized the soil layers from standardized categories using a Munsell color chart. Interpretations regarding intact deposits on site were made by historical archaeologists trained in the analysis of cultural deposits.

Features were systematically excavated using the normal PAF process. First, their horizontal boundaries were defined by troweling, then plan views were drawn, and the feature was photographed. Standard-sized soil samples for flotation were collected. Structural features, such as wells, privies, and cisterns, were treated as a single excavation unit. Excavation within these shaft features followed similar excavation strategies as long as safety measures could be maintained. Alternative methods could consist of removal of one "wall" of such structural features and excavating inside deposits from larger units on the outside. Features identified in units during these Phase 2 investigations consisted primarily of stone walls. Rather than following the stone wall beyond the test unit, field crews drew plan views of the stone wall, took photographs, and excavated down the sides of the stone wall within the boundaries of the unit. The characteristics of the wall courses were recorded as excavation continued and before stones were removed.

III. PRELIMINARY RESULTS

3.1 Strategy

Site examination consisted of placing 1 x 1 m units at varying intervals around the foundations located at the sites as well as judgmentally placed units in productive site areas, as determined by the shovel testing results. This strategy allowed for testing across the sites to determine the nature of the soil deposits and the concentration of artifacts. The number of proposed units for each site was: J. Cronk I, 15-20 units; J. Cronk II, 8-10 units; and Vroman, 12-18 units. This strategy was constructed to be adaptable to new features or artifact concentrations encountered during test excavations.

3.2 Archaeological Results

3.2.1 J. Cronk I Site (SUBi-2666)

The excavations at the J. Cronk I site expanded on Phase 1 shovel testing. The initial survey consisted of 18 STPs at 7.5 m intervals. The 18 STPs produced 227 artifacts distributed among 8 functional groups.

Field crews excavated sixteen 1 x 1 m test units during the site examination (Figure 7). This accounted for 16 m² (2%) of the site being excavated beyond that covered by the STPs. Features identified include two possible stone walls. These walls were in addition to the stone foundation previously recorded during the Phase 1 testing. The two stone walls appear to be either retention walls or stone garden walls. Overall, at least 10,000 artifacts were recovered.

Deposits at the site were regular and defined by alluvial and flood soils. The alluvial deposits are consistent with those recorded by the USDA soil survey (USDA 1969:145-150). The main stratigraphic difference between

units was based on the depth of depositional layers. There was a slight difference in thickness in overall deposition based on location within the site. Units at the north end of the site had a maximum depth of 150 cm (59 in), while the south had a maximum depth of 137 cm (54 in) allowing for a slight difference in thickness of deposits. The top layer ranged from 0 to 30 or 60 cm below the surface across the site and consisted of a 10YR3/2 (very dark grayish brown) to 10YR3/3 (dark brown) silt loam with a high concentration of rocks. This rock layer is most likely the result of the razing of the historic structure. Given the site's close proximity to the stone quarries, the rock layer could possibly be waste rock from the construction of the dam in the 1920s. There is a low density of artifacts in this rock layer. Below the rock layer are one to two buried A horizons related to the nineteenth century occupation of the village.

Cultural deposits were lightly scattered throughout the vertical dimension in most units. However, in some units, two separate A horizons could be identified by differences in the density of artifacts. The initial A horizon was typified by a 10YR3/2 (dark brown), 10YR4/4 dark yellowish brown, or 7.5YR4/3 (brown) silt loam to sandy loam and most units predominately contained food-related and architectural items (Figure 2). If a secondary A horizon was present in the unit, it was usually separated from the higher A horizon by a layer of lightly clustered artifacts in a soil of a 7.5YR4/6 (strong brown) to 5YR4/4 (reddish brown) sandy loam to silt. The secondary, deeper A horizon had the same soil type as the upper A horizon, but was differentiated by its deeper position and lack of architectural materials. Those units south of and adjacent to the foundation were less likely to have separate A horizons. This may be due to a deposition of flood sediments along the eastern side of the site. Flood deposits created a separation within sheet midden deposits and also related to the deterioration and razing of the house accounting for the higher amounts of architectural materials in the shallower deposits.

Based on an initial review of recovered artifacts, there is sufficient evidence connected with the site to suggest a high research potential. The ceramic assemblage consists of redwares, whitewares, and ironstones. There are some sherds of pearlware, and yellowware. Ceramic decorations include transfer prints, annular wares, shell-edged, Rockingham, and sponge wares, which may suggest a late nineteenth century occupation. This continues the pattern suggested by the initial survey. Ceramics include sufficient information on decoration and vessel shape to determine a basic chronology as well as inform on class, ideology, and household activities. The number of faunal remains is not large, but most are in good condition. The identification of species and any butchering marks should help in the determination of foodways. Glass, personal, and clothing items provide at least moderate diversity in artifact types to address other research avenues.

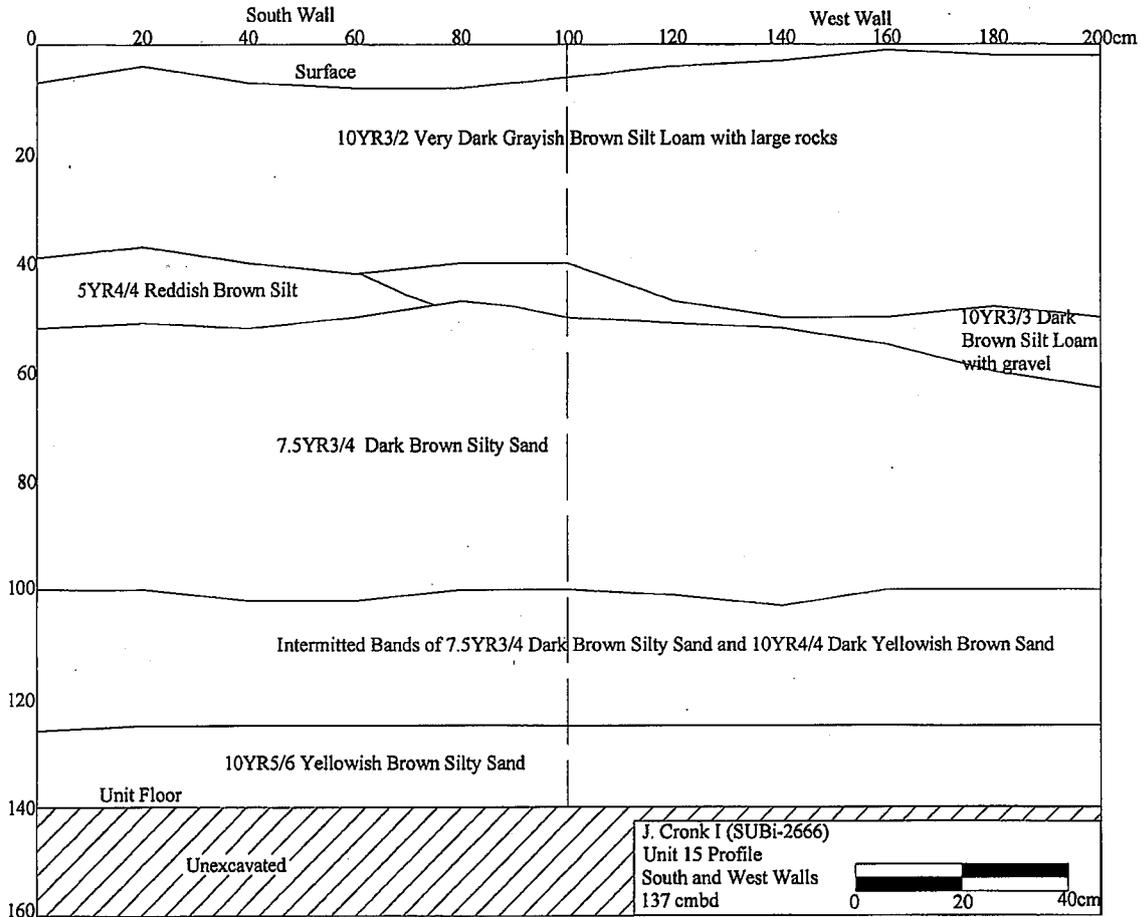


Figure 2. J. Cronk I Site, Unit 15, south and west wall profiles.

3.2.1 J. Cronk II Site (SUBI-2667)

Testing at the J. Cronk II Site expanded on the Phase 1 shovel testing to determine the internal variation of the site and its research potential. The initial survey consisted of 9 STPs at 7.5 m (16 ft) intervals. The presence of features, including a well and foundation, along with diagnostic artifacts suggest research potential related to the nineteenth century occupation of the village of Gilboa.

Field crews excavated ten 1 x 1 m (3.3 x 3.3 ft) test units accounting for 10 m² (107.6 ft²) (2.4%) of the site being tested (Figure 8). One feature was excavated. The feature was a stone wall foundation for a possible privy or refuse pit. Approximately 2,000 artifacts were recovered. Initial review of artifacts in the field indicate that the majority are architectural materials with a small assemblage of ceramics. The ceramics are fairly limited in terms of number and diversity. The assemblage consists almost entirely of whitewares, with some possible evidence for curated pearlwares. There are some faunal remains, and a high diversity of other functional groups: personal items, smoking pipe pieces, gun cartridges, clothing items (buttons, jewelry pieces), an eye glass lens, and a doll's head. The diversity of artifacts indicates research potential especially in regards to the assemblage of personal items, which is unusual for this small village setting. Ceramic decorations include transfer printed, shell-edged, and

annular wares. Ceramic and vessel analysis will provide a basic chronology which with an analysis of other items can lead to issues related to class, consumption, foodways, ideology, and possibly ethnic identity.

The deposition on the site was defined by one main type of stratigraphic profile, which included an A horizon typified by a 10YR3/3 (dark brown) to 10YR3/2 very dark grayish brown silt loam with rocks (Figure 3). This A horizon, based on a preliminary review of artifacts identified in the field, appears to be associated with the rural household occupation of the site during the nineteenth century. Below the A horizon was a B horizon identified as a 7.5YR4/3 (brown) silt loam with large rocks. Artifacts extended into the B horizon due to root disturbance and other types of bioturbation. The large rocks in the B horizon limited deeper excavation in most of the units. The maximum depth for units ranged from 45 cm (17.7 in) to 103 cm (40.6 in). Those units that could go deeper had a B horizon with increased gravel. Based on the USDA soil survey (USDA 1969), the soils for the J. Cronk II site are part of the Lordstown, Oquaga, Nassau complex, which is related to glacial till and glaciated bedrock. This would account for the large rocks and gravel deposits in the B horizon.

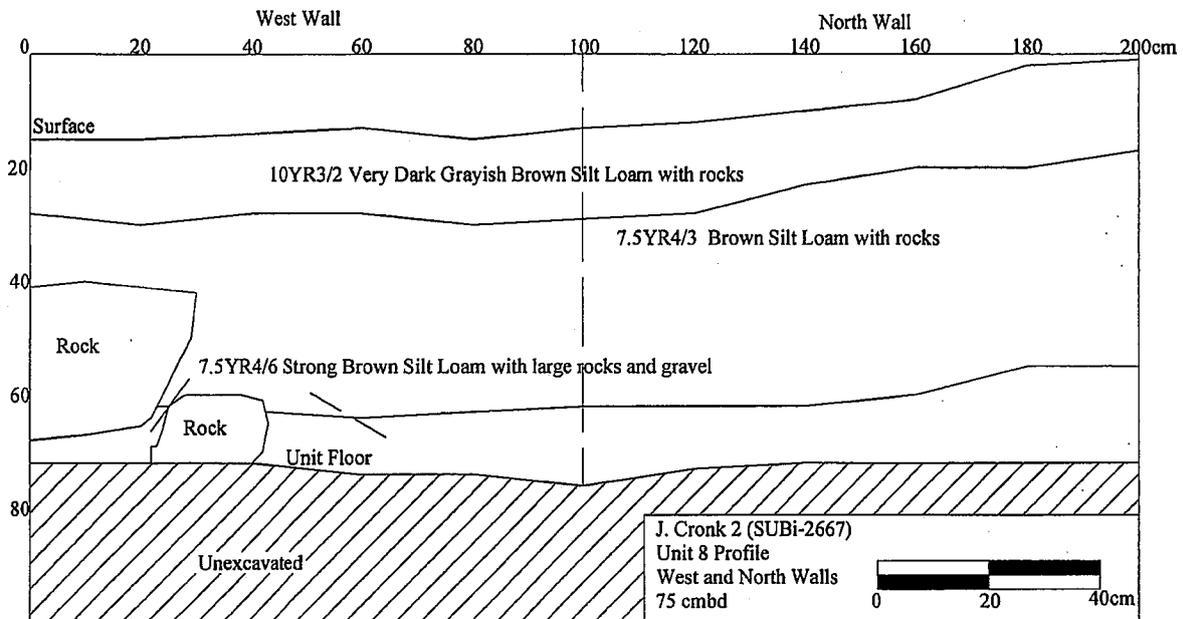


Figure 3. J. Cronk II site, Unit 8 Profile, North and West Walls.

3.2.3 Vroman Site (SUBi-2668)

The excavations at the Vroman Site consisted of eighteen 1 x 1 m (3.3 x 3.3 ft) units in addition to the 31 STPs excavated during the initial survey (Figure 8). This allowed for testing of 18 m² (193.75 ft²) (1.8%) of the site. The site had a higher density of artifacts at the north end near the house foundation. The south end of the site was associated with a map documented outbuilding and a well, but had relatively little cultural material. The presence of features, such as the house foundation and the well, along with a distribution of artifacts across nine functional groups and the presence of diagnostic artifacts, suggested research potential for the site during the Phase I investigations.

Overall, some 5,000 artifacts were recovered. No features were identified during excavation. The majority of artifacts appear to be related to architecture, specifically window glass and nails. The ceramics represented are mostly whitewares and ironstones. There were some pearlwares recovered, which indicates that these items may have been curated. Bottle glass and faunal remains are present allowing for research into the foodways of those who occupied the site. The presence of fruit jars and canning jar lids indicates potential for investigating local food preservation and storage. The types of food preparations and goods consumed can inform on issues of class and

ideology. In addition, there is research potential for this site from the presence of a large assemblage of personal and clothing items. The buttons, beads, clothing snaps, smoking pipe fragments, coins, gun cartridges, and comb recovered from the site can provide information related to the socio-economic identities of those who occupied the site. These items can reflect ethnic and class identities to those within and outside of social communities (Mrozowski 2000).

As with J. Cronk II, the deposits at the Vroman site are the result of glacial deposits. The site is high enough in elevation to not have been flooded in recent history. There is a wetland that runs along the west perimeter of the site that may have been created by road construction during dam related construction activities. Wetland soils were identified in some of the units on the west side of the site. The majority of the site has a common depositional pattern. Within this broader stratigraphic pattern, there were three variations in depositional patterns identified during excavation. Figure 4 represents the main stratigraphic pattern. It is defined by an A horizon typified by a 7.5YR3/2 (dark brown) to 7.5YR4/3 (brown) silt loam to sandy silt. The majority of artifacts are located in this A horizon, with some artifacts present in the B horizon. The B horizon differs from the A horizon more in a texture than in color. It is a glacial deposit of 7.5YR4/3 (brown) to 7.5YR3/3 (dark brown) silt loam with large rocks. The units near the wetlands on the west end of the site have clay inclusions of 2.5Y6/6 (olive yellow brown) clay among the B horizon. Two units in the southeast corner of the site have deposits related to possible rock fill. Figure 5 represents a second depositional pattern that has a similar A horizon to the rest of the site, with a high concentration of artifacts, but the possible B horizon is a 5YR4/3 (reddish brown) silt with a higher amount of gravel and rocks than the rest of the site. This area is next to a steep elevation drop on the east side of the site and may have been filled in with rock to level the landscape. The third stratigraphic type (Figure 6) was identified in units placed in the south central portion of the site. These units have little to no rock or gravel. The A horizon is the same as the rest of the site, but the B horizon is defined by a 7.5YR5/4 (brown) compact silt and a 7.5YR4/6 strong brown clay loam. This B horizon is probably not related to any cultural use of the landscape. The units had a maximum depth of 40 cm (15.7 in) to 85 cm (33.5 in).

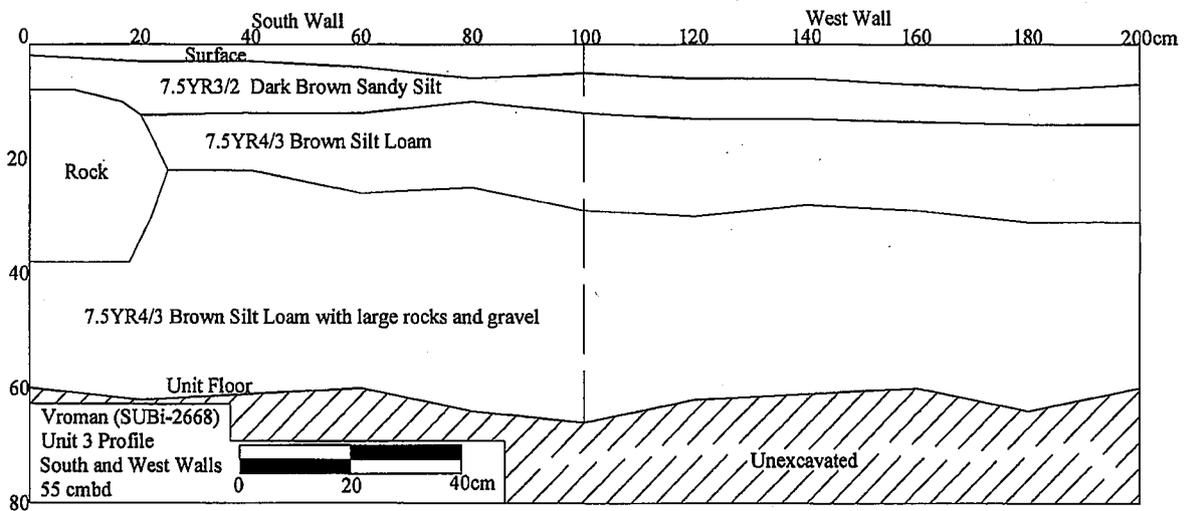


Figure 4. Vroman, Unit 3, south and west wall profiles.

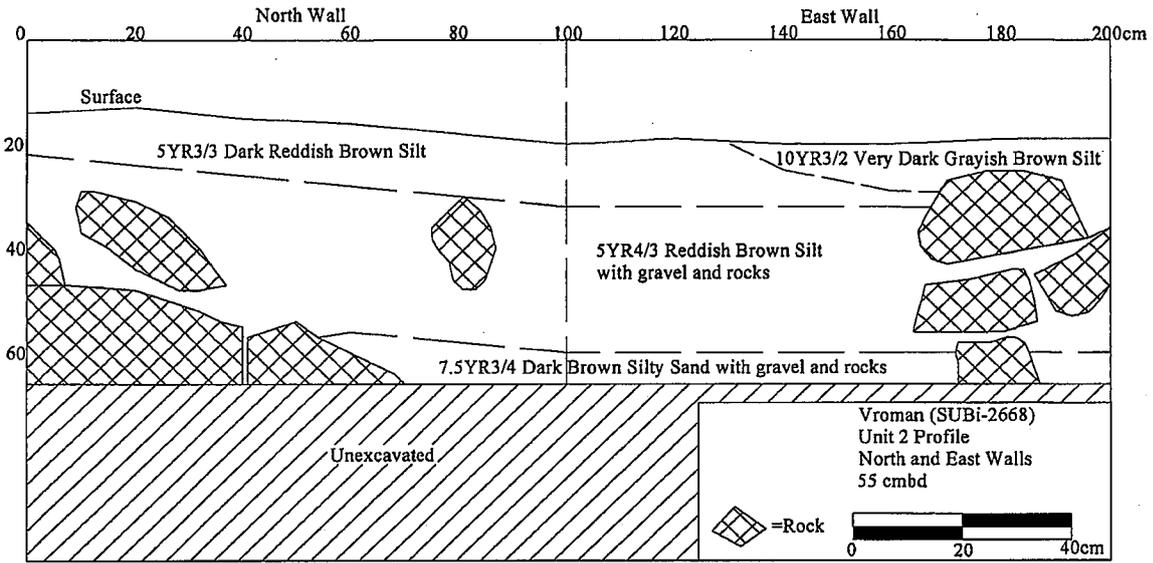


Figure 5. Vroman, Unit 2, north and east walls profiles.

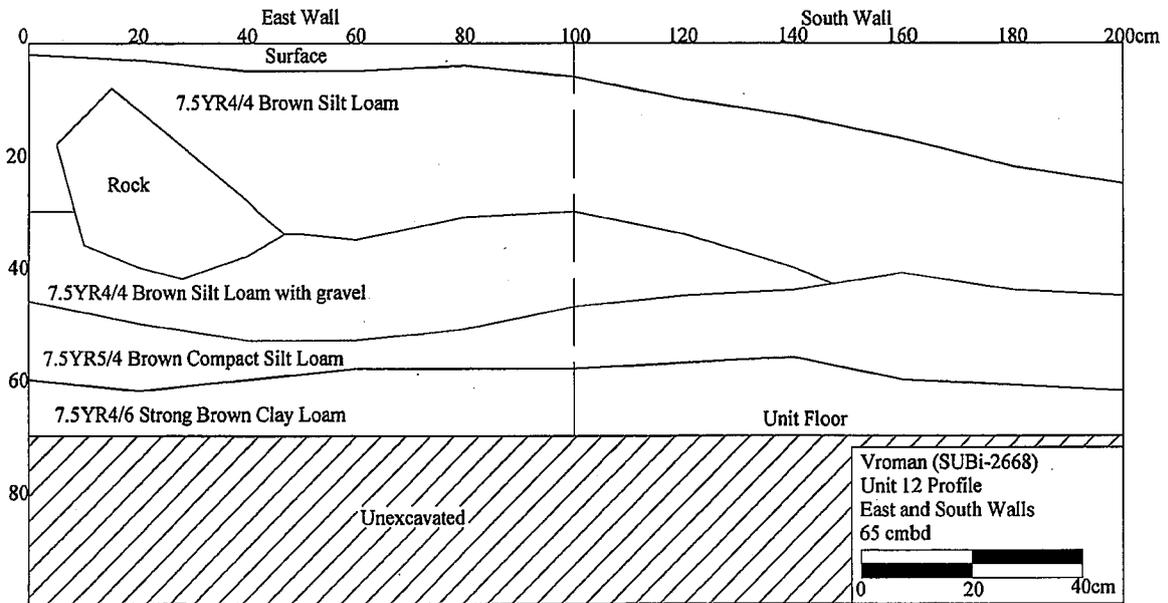


Figure 6. Vroman, Unit 12, south and east profiles.

3.3 Data Potential and Research Objectives

The excavations associated with the Gilboa dam rehabilitation have addressed six major research questions concerning historic context, ceramic and glass assemblage, faunal assemblage, functional diversity, features and integrity. The research potential for each of the three sites is evaluated here based on the ability of each site to inform on the six themes.

Historic Context. Historic contexts for the Gilboa dam area include either the nineteenth century village or the twentieth century dam construction. The dam construction is further separated as to whether the deposits are related to either the industrial aspects of dam construction or the workers' camps. All three sites discussed here- J. Cronk I, J. Cronk II, and Vroman- have evidence linking them to the nineteenth century village context. All three have one stone house foundation related to the occupation of the village and an associated sheet midden. J. Cronk I has a top layer of waste rock possibly related to the construction of the dam, but with little material evidence, there is little information to relate the site to dam construction. J. Cronk II and Vroman have limited evidence related to the twentieth century construction of the dam beyond the razing of village structures. Although a well present on the J. Cronk II site was not fully examined and could be related to the construction of the dam.

Ceramic and glass assemblage. Based on an early review of artifacts, J. Cronk I has a sufficient quantity and diversity of ceramics and vessel glass to aid in the construction of a chronology for the site. This assemblage should contribute to research related to foodways, and have sufficient functional and decorative variation to examine class, consumption, display, and gendered patterns. J. Cronk II most likely does not have enough ceramic or vessel glass to go beyond a basic chronology for the site. The small number of ceramics and bottle glass will probably limit socio-economic research at the site. Vroman probably has an adequate assemblage for developing a chronology for site occupation as well as informing on class, ideology and other socio-economic conditions.

Faunal assemblage. Faunal assemblage preservation was excellent across all three sites. Although excavations recovered a small number of faunal remains from each site, these remains were well-preserved and should aid in species identification and in the identification of saw or cut marks. This information can help in the determination of foodways and possible ethnic and class practices.

Functional diversity. All three sites had a wide diversity of artifact types, including smoking, lighting, clothing, and personal items. Vroman had the best representation of clothing and personal items. J. Cronk I had moderate diversity that along with the information provided by vessel analysis should have a high research potential. J. Cronk II had a smaller amount of material, but did have moderate diversity. For the three sites, we will be able to address questions of production, gendered activities, and differences in domestic activities. Historical archaeologists often rely on ceramics to research issues of class and identity within rural households. However, sites that date to the late nineteenth century into the early twentieth century often have limited variation in terms of ceramics as most ceramics at this time were mass produced whitewares and ironstones. Such mass produced wares provide little information related to class and identity beyond an overall study of the capitalist economy (Leone 1999). The mass production of goods during the late nineteenth and early twentieth centuries helps to provide research avenues in other areas of material culture. Purser (1999) notes that when integrated with studies linking markets, consumers, and production centers along with merging local with global scales, such issues become clearer. Wobst (1977), Mroszowski (2000), and Mullins (1999) have looked at personal items, clothing items, and knick knacks to discuss issues related to identity, class, and consumer practice, respectively. White (2005:7) uses items of personal adornment to understand a variety of issues. She notes: "Assemblages from multiple sites record what people wore through a town or region, reflecting both individual and group appearance at a community scale." There is the potential to study these issues at each of the sites and to compare them to each other and the Gilboa sites on the east side of Schoharie Creek. For the J. Cronk II and Vroman sites there may not be a large assemblage of ceramics, but the collection of personal items and faunal remains used in conjunction with the ceramics and bottle glass recovered will provide entry points into research related to identity, class, ideology, consumer practice, and local economic networks during the late nineteenth century and early twentieth century. In addition, the Vroman Site produced artifacts related to

metal working (i.e. soapstone pencils) that may relate to either late nineteenth or early twentieth century blacksmithing or activities possibly related to dam construction.

Features. Two stone walls were identified at the J. Cronk I site. These stone walls may have served as retention walls or garden walls. At the J. Cronk II site, a narrow depression between two possible stone walls was excavated. Artifacts and materials recovered from the feature suggest it may have been a privy or refuse pit. Wells were noted at both the Vroman and J. Cronk II sites. Both wells may have limited data potential. The well on the Vroman site appears to be empty of fill or cultural material. The well on the J. Cronk II site needs further testing to determine its data potential. It is possible that one or both wells were used during dam construction by either humans or livestock.

Integrity. Site examination indicated that each of the sites retained excellent integrity. There is no evidence of disturbance to any of the historic deposits. The J. Cronk I site does have evidence of flooding deposits, which worked to separate historic occupations on the site. J. Cronk I also has a top layer of rock that may be related to dam construction, but this does not appear to have intruded or disturbed the historic sheet midden. The Vroman site has an area of gravel fill in the southeast portion of the site. It appears to have been a part of the nineteenth century historic landscape and not a disturbance.

IV. SUMMARY AND RECOMMENDATIONS

The three sites, J. Cronk I (SUBi- 2666), J. Cronk II (SUBi-2667), and Vroman (SUBi-2668), are in areas that will be impacted by the rehabilitation of the Gilboa dam. Site examinations were conducted during August and September 2007 to determine the research potential of these sites. The results presented here are based on the initial review of artifacts and evidence recovered during the site examination. All three sites had little to no disturbance and had excellent integrity. All three sites produced diverse artifact assemblages that indicated high research potential. We recommend that all three sites are eligible for the National Register of Historic Places. J. Cronk I had the most ceramic data, with numerous vessels and artifact diversity. We recommend that if impacts cannot be avoided, a data recovery be conducted at the J. Cronk I Site. The J. Cronk II and Vroman sites had more limited ceramic remains. However, in combination with other materials, such as numerous and diverse personal items, the total assemblage has a high research potential. Given this early stage of analysis it is possible that there are additional artifact classes present with added research potential. We recommend that if impacts to these two sites cannot be avoided, a data recovery be conducted. At J. Cronk II, limited field investigations are needed, including examination of the historic well feature, and units placed near previously excavated units that were productive in terms of personal items. The artifacts on the Vroman site were concentrated at the north end of the site past Unit 18. It is recommended that if impacts cannot be avoided, a data recovery be conducted. The data recovery would be concentrated at the north end of the site.

If avoidance is not possible, a data recovery plan will need to be developed that outlines the proposed research, field investigations, and analysis. Table 1 summarizes the site examination and recommendations for data recovery.

Table 1. Site Examination Summary and Data Recovery Recommendations.

Site Name	Proposed Site Examination Units	Units Excavated	NR Eligible?	Recommendation
J. Cronk I	15-20 units	16 units	Yes	Data Recovery
J. Cronk II	8-10 units	10 units	Yes	Data Recovery
Vroman	12-18 units	18 units	Yes	Data Recovery

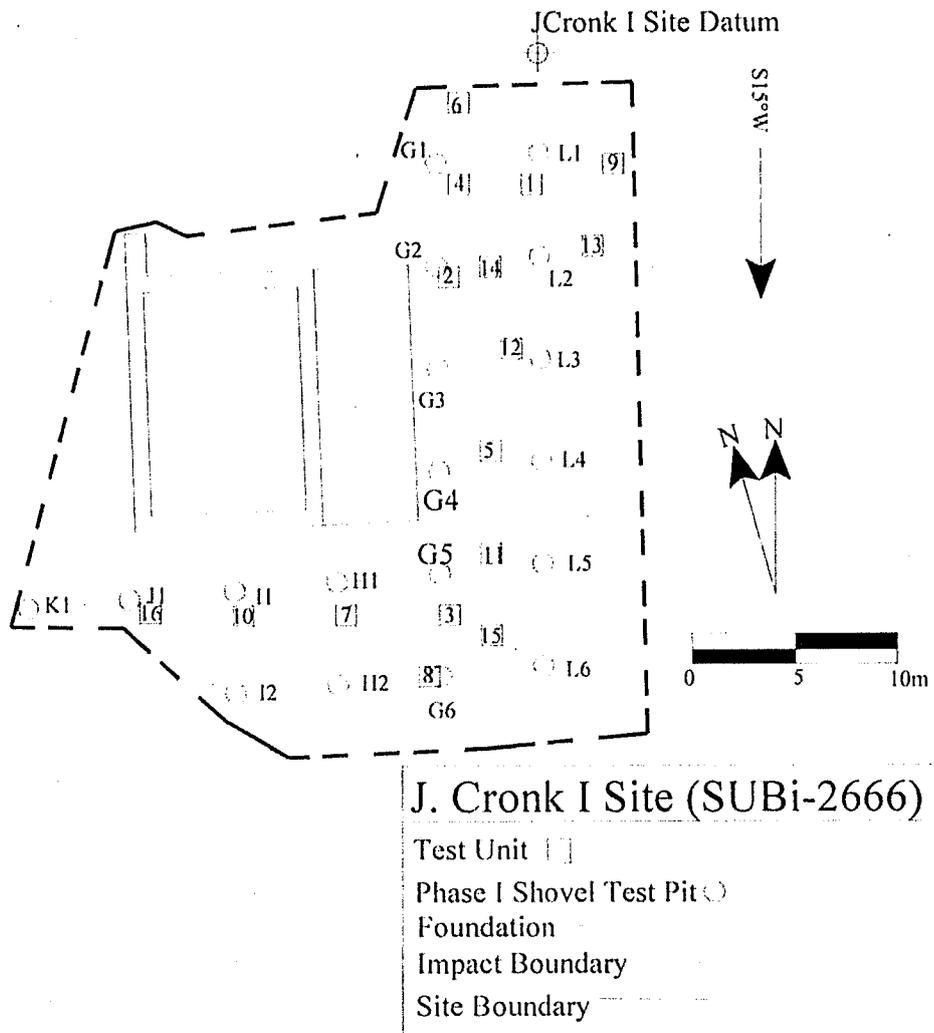


Figure 7. Plan of Site Examination Units, J. Cronk I Site.

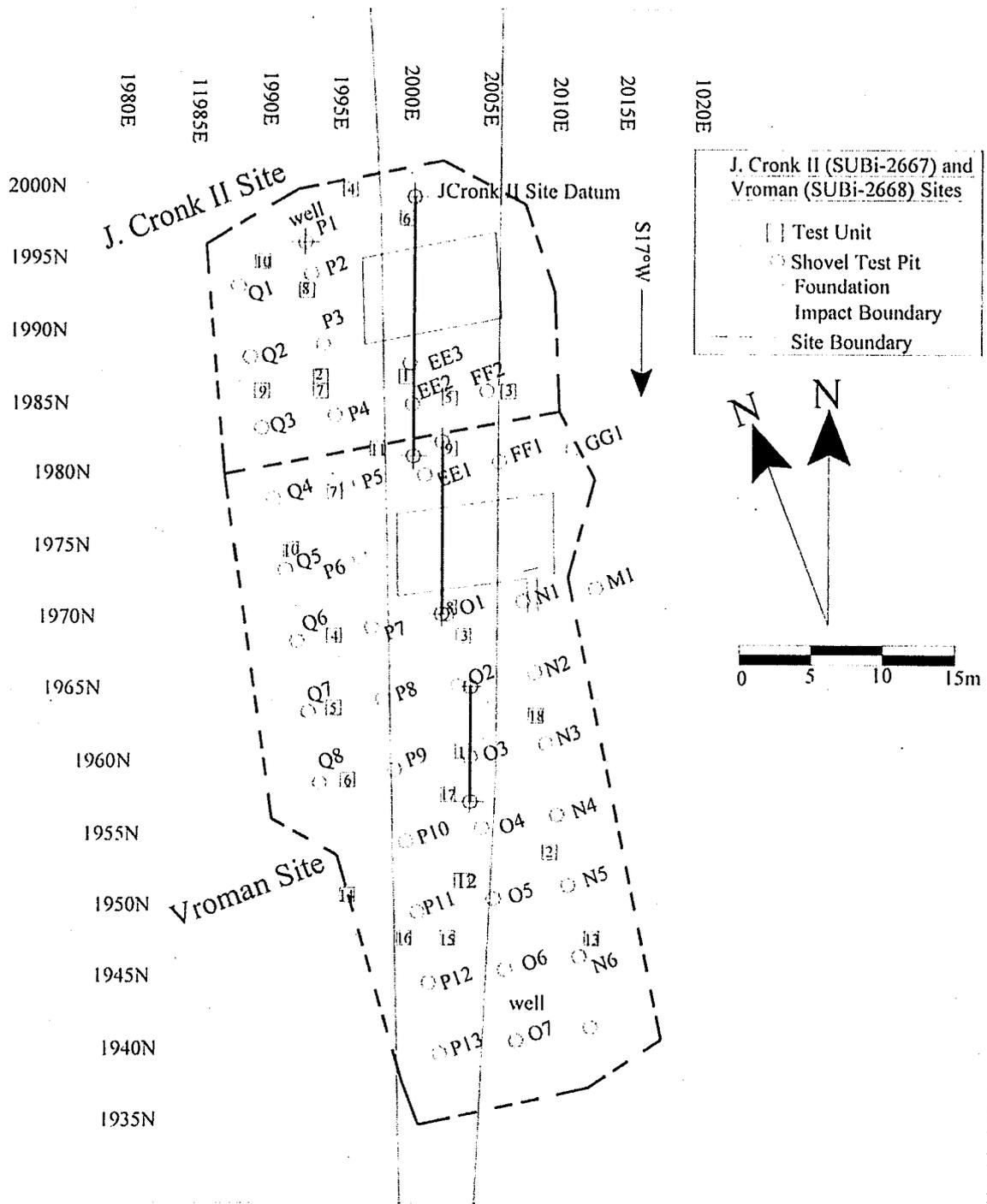


Figure 8. Plan of Site Examination Units, J. Cronk II and Vroman Sites.

SOURCES CITED

Kastl, Richard

2007 *Cultural Resource Management Report, Addendum Report, Schoharie Reservoir, Town of Gilboa, Schoharie County, New York, MCD 09508*. Prepared for Hazen and Sawyer. Binghamton, NY: The Public Archaeology Facility.

Leone, Mark

1999 Ceramics from Annapolis, Maryland: A Measure of Time Routines and Work Discipline. In *Historical Archaeologies of Capitalism*, edited by Mark P. Leone and Parker B. Potter, Jr., pp. 195-216. Kluwer Academic/Plenum Publishers, New York.

Mrozowski, Stephen A.

2000 The Growth of Managerial Capitalism and the Subtleties of Class Analysis in Historical Archaeology. In *Lines that Divide: Historic Archaeologies of Race, Class, and Gender*. Edited by James A. Delle, Stephen A. Mrozowski, and Robert Paytner. University of Tennessee Press, Knoxville. pp. 276-305.

Mullins, Paul

1999 "A Bold and Gorgeous Front:" The Contradictions of African American and Consumer Culture. In *Historical Archaeologies of Capitalism*, edited by Mark P. Leone and Parker B. Potter, Jr., pp. 169-194. Kluwer Academic/Plenum Publishers, New York.

Purser, Margaret

1999 Ex Occidente Lux? An Archaeology of Later Capitalism in the Nineteenth-Century West. In *Historical Archaeologies of Capitalism*, edited by Mark P. Leone and Parker B. Potter, Jr., pp. 115-142. Kluwer Academic/Plenum Publishers, New York.

(USDA) United States Department of Agriculture

1969 *Soil Survey of Schoharie County, New York*. United States Department of Agriculture.

White, Carolyn L.

2005 *Artifacts of Personal Adornment, 1680-1820: A Guide to Identification and Interpretation*. AltaMira Press, A Division of Rowman & Littlefield Publishers, Inc., Lanham, MD.

Wobst, H. Martin

1977 Stylistic Behavior and Information Exchange. In *For the Director: Research Essays in Honor of James B. Griffin*, edited by Charles E. Cleland, pp.317-342. Anthropological Papers No. 61. University of Michigan Museum of Anthropology, Ann Arbor.

ATTACHMENT 2

NYSOPRHP Correspondence

October 2008



**New York State Office of Parks,
Recreation and Historic Preservation**

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

David A. Paterson
Governor

Carol Ash
Commissioner

26 March 2009

Ms. Diane M. McCarthy
New York City Department of Environmental Protection
59-17 Junction Boulevard
Flushing, NY 11373

CORPS PERMITS
Reconstruction of Gilboa Dam, Schoharie Reservoir
Town of Gilboa, Schoharie County
07PR02067

Dear Ms. McCarthy:

The State Historic Preservation Office (SHPO) has reviewed the information submitted for this project (*Data Recovery Plan, J. Cronk 1 Site (SUBi-2666, A09508.000071), J. Cronk 2 Site (SUBi-2667, A09508.000072), Vroman Site (SUBi-2668, A09508.000073), Gilboa Dam Reconstruction Project, Town of Gilboa, Schoharie County, New York*; March 2009; prepared by Public Archaeology Facility). Our review has been in accordance with Section 106 of the National Historic Preservation Act and relevant implementing regulations.

SHPO concurs with the above-referenced data recovery plan (DRP). SHPO recommends that full execution of this DRP, under the Memorandum of Agreement for this project, will mitigate the project's anticipated adverse effects on these three archaeological sites.

Please continue consultation with this office as the project proceeds.

If you have any questions please don't hesitate to contact me.

Sincerely,

Philip A. Perazio, OPRHP
Phone: 518-237-8643 x3276; FAX: 518-233-9049
Email: Philip.Perazio@oprhp.state.ny.us

Cc: Jennifer A. Dion, Hazen and Sawyer
Nina Versaggi, PAF (via email)

MP



David A. Paterson

Governor

Carol Ash

Commissioner

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

17 June 2008

Ms. Diane M. McCarthy
New York City Department of Environmental Protection
59-17 Junction Boulevard
Flushing, NY 11373

CORPS PERMITS
Reconstruction of Gilboa Dam, Schoharie Reservoir
Town of Gilboa, Schoharie County
07PR02067

2008 JUN 23 PM 12:34

Dear Ms McCarthy:

The State Historic Preservation Office (SHPO) has reviewed the information submitted for this project (*Cultural Resource Management Report, Phase 2 Site Examination, J. Cronk 1 Site (SUBi-2666), J. Cronk 2 Site (SUBi-2667), Vroman Site (SUBi-2668), Schoharie Reservoir, Town of Gilboa, Schoharie County, New York, May 2008*, prepared by Public Archaeology Facility). Our review has been in accordance with Section 106 of the National Historic Preservation Act and relevant implementing regulations.

The three sites examined by the above-referenced investigation have been given the following Unique Site Numbers (USN):

SITE NAME	USN
J. Cronk 1 Historic Site (SUBi-2666)	A09508.000071
J. Cronk 2 Historic Site (SUBi-2667)	A09508.000072
Vroman Historic Site (SUBi-2668)	A09508.000073

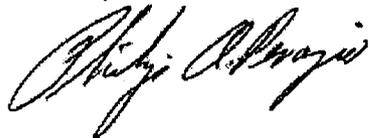
SHPO concurs with the report's recommendation that all three of these sites are eligible for listing on the National Register of Historic Places. Based on the information provided, SHPO recommends that the planned project will have an Adverse Effect on these historic properties.

Since it appears that disturbance of these sites by the planned project cannot be avoided, SHPO recommends that data recovery investigations should be conducted at each site prior to project construction in order to mitigate the anticipated adverse effects. SHPO requests that data recovery plans be prepared for each site and submitted to this office for review and concurrence.

Perazio, 17 June 2008, page 2

If you have any questions please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip A. Perazio". The signature is written in a cursive style with a large initial "P".

Philip A. Perazio, OPRHP

Phone: 518-237-8643 x3276; FAX: 518-233-9049

Email: Philip.Perazio@oprhp.state.ny.us

Cc: Nina Versaggi, PAF



New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

Elliot Spitzer
Governor

Carol Ash
Commissioner

9 October 2007

Ms. Diane M. McCarthy
New York City Department of Environmental Protection
59-17 Junction Boulevard
Flushing, NY 11373

CORPS PERMITS

Reconstruction of Gilboa Dam, Schoharie Reservoir
Town of Gilboa, Schoharie County
07PR02067

Dear Ms McCarthy:

The State Historic Preservation Office (SHPO) has reviewed the information submitted for this project (*End of Field Letter, Additional Archaeological Survey, Schoharie Reservoir Project, Town of Gilboa, Schoharie County, NY, 4 May 2007, and End of Field Letter, Data Recovery of the J. Reed (SUBi-2531), Gilboa 1 (SUBi-2532), Gilboa 4 (SUBi-2598), and Gilboa 5, North locus (SUBi-2599), Sites, 15 August 2007, both prepared by the Public Archaeology Facility*). Our review has been in accordance with Section 106 of the National Historic Preservation Act and relevant implementing regulations.

SHPO concurs with the recommendation that the three newly discovered sites, J. Cronk 1, J. Cronk 2, and Vroman, may be eligible for listing on the National Register of Historic Places. Either these sites should be protected from adverse effects or they should be subjected to Phase II-level investigations in order to evaluate their National Register eligibilities. If site protection is the selected alternative, detailed protection plans should be submitted for SHPO concurrence. SHPO requests that site inventory forms be submitted for each of these sites.

SHPO concurs that the data recovery fieldwork at the J. Reed (SUBi-2531, A09508.000062), Gilboa 1 (SUBi-2532, A09508.000064), Gilboa 4 (SUBi-2598, A09508.000069), and Gilboa 5, North locus (SUBi-2599, A09508.000070) sites conforms to the approved data recovery plan and that no additional fieldwork is necessary at these sites. SHPO looks forward to reviewing the full data recovery report on these sites.

Please reference SHPO USN site numbers in all reports.

Perazio, 9 October 2007, page 2

If you have any questions please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Philip A. Perazio". The signature is written in a cursive style with a large initial "P".

Philip A. Perazio, OPRHP

Phone: 518-237-8643 x3276; FAX: 518-233-9049

Email: Philip.Perazio@oprhp.state.ny.us

Cc: Nina Versaggi, PAF



New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

Elliot Spitzer
Governor

Carol Ash
Commissioner

July 13, 2007

Diane M. McCarthy
NYC DEP
59-17 Junction Boulevard
Flushing, New York 11373

Re: CORPS PERMITS
Gilboa Dam Reconstruction
Schoharie Reservoir
GILBOA, Schoharie County
07PR02067

Dear Ms. McCarthy:

Thank you for continuing to consult with the State Historic Preservation Office (SHPO). SHPO has reviewed the materials you submitted in accordance with Section 106 of the National Historic Preservation Act of 1966 and relevant implementing regulations.

When we spoke on site, I recall saying that the extensive work to the dam is technically an Adverse Effect under the law cited above. However, the work can proceed after a Memorandum of Agreement is signed listing mitigation measures.

It was suggested by someone that the bluestone facing could be reused to pave the road leading to the dam. I suggested some of the stone could be offered to the town to be used in local parks or public areas. I also suggested NYC use it in their park projects since the dam is owned by the city. You have completed photo documentation of the dam. Please submit an original to the Gilboa local library or historical society. We will submit one of our copies to the NYS Archives.

Since I am unsure of what you are offering as mitigation beyond photo documentation, it might be more expeditious for you to write the first draft of the Memorandum of Agreement. I have enclosed a sample for your convenience.

Please continue to consult with Philip Perazio regarding the archeological resources on the site.

SHPO appreciates the opportunity to comment on this project. Should you have any questions about this review, please contact me at 518-237-8643 ext 3284 or at marie.sarchiapone@oprhp.state.ny.us .Thank you.

Sincerely,

A handwritten signature in cursive script, appearing to read 'M Sarchiapone', written in black ink.

Marie Sarchiapone
Historic Sites Restoration Coordinator

CC: MAS chron



New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

www.nysparks.com

Elliot Spitzer
Governor

Carol Ash
Commissioner

10 May 2007

Ms. Diane M. McCarthy
New York City Department of Environmental Protection
59-17 Junction Boulevard
Flushing, NY 11373

CORPS PERMITS

Reconstruction of Gilboa Dam, Schoharie Reservoir
Town of Gilboa, Schoharie County
07PR02067

Dear Ms McCarthy:

The State Historic Preservation Office (SHPO) has reviewed the information submitted for this project (*Cultural Resource Management Report, Phase 2 Site Examination, Mackey 1 Site, SUBi-2595; Mackey 2 Site, SUBi-2596; Buckingham Site, SUBi-2594; Gilboa 3 Site, SUBi-2597; Gilboa 4 Site, SUBi-2598; Gilboa 5 Site, SUBi-2599, Schoharie Reservoir, Town of Gilboa, Schoharie County, New York, March 2007 and Final Data Recovery Plan, J. Reed Site (SUBi-2531), Gilboa I Site (SUBi-2532), Gilboa IV Site (SUBi-2598), Gilboa V Site (SUBi-2599), Gilboa Dam Project, Town of Gilboa, Schoharie County, New York, March 2007*, both prepared by the Public Archaeology Facility). Our review has been in accordance with Section 106 of the National Historic Preservation Act and relevant implementing regulations.

The Phase 2 investigation evaluated six archaeological sites regarding their National Register eligibility (NRE). Each has been assigned a Unique Site Number (USN)

USN	NRE	SITE NAME
09508.000067	No	Buckingham Historic Site (SUBi-2594)
09508.000068	No	Gilboa 3 Historic Site (SUBi-2597)
09508.000069	Yes	Gilboa 4 Historic Site (SUBi-2598)
09508.000070	Yes	Gilboa 5 Historic Site (SUBi-2599)
09508.000065	No	Mackey 1 Historic Site (SUBi-2595)
09508.000066	No	Mackey 2 Historic Site (SUBi-2596)

SHPO concurs with the results and recommendations of the above-referenced Phase 2 investigation. The applicant indicates that avoidance of the two National Register eligible sites, Gilboa 4 and Gilboa 5, is not feasible (Versaggi, personal communication, 3 May 2007). Therefore, mitigation of effects via data recovery is recommended.

Perazio, 10 May 2007, p. 2

The submitted data recovery plan also encompasses proposed investigations of two other, previously evaluated sites – the J. Reed Historic Site (09508.000062) and the Gilboa 1 Historic Site (09508.000064), which also have been recommended as National Register eligible and which cannot be avoided by the planned project.

SHPO concurs with the above-referenced data recovery plan for the four National Register eligible sites located within the APE of the planned Gilboa Dam reconstruction project.

A determination of effect will be provided only after ALL documentation requirements have been met. In addition to archaeological concerns, technical review of above-ground resources is also pending. Any questions concerning our comments and/or requests for additional information should be directed to the appropriate staff person: Archaeology – Philip Perazio (518-237-8643 x3276) and Technical Assistance: Marie Sarchiapone (518-237-8643 x3284).

If you have any questions please don't hesitate to contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Philip A. Perazio".

Philip A. Perazio, OPRHP
Phone: 518-237-8643 x3276; FAX: 518-233-9049
Email: Philip.Perazio@oprhp.state.ny.us