**MINNESOTA ARCHAEOLOGICAL SITE FORM**

**OFFICE OF THE STATE ARCHAEOLOGIST**
Fort Snelling History Center, St. Paul, MN  55111   (612) 725-2729

**SITE #:** 21-WA0116

**Site Name:**

**Agency/Field #:**

- **X** New Site  _ Site Update
- **OSA License #:** 16-056
- **SHPO RC #:** 2015-1403

**Type of Fieldwork:**

- _ X_ Reconnaissance/Phase I
- _ _ Evaluation/Phase II
- _ _ Excavation/Phase III

**Date(s) of This Fieldwork:** April 4-22, and May 16-17, 2016

**NRHP Status:**

- _ Listed
- _ X Determined Eligible
- _ CEF(106)
- _ CNEF(106)
- _ Undetermined

**LOCATIONAL INFORMATION**

- **County:** Washington
- **City/Twp. Name:** Afton
- **SHPO Sub-Region:** 4e

**USGS 7.5’ Quadrangle Map (name and year):** Hudson, Wis.-Minn. 1993

**Township:** 28N  
**Range:** 20W  
**Section:** 22  
**¼ Sections (at least 2):** SE NE

**UTM Coordinates:** (less than 10 acres use center; over 10 acres define polygon around site; draw points on USGS)

<table>
<thead>
<tr>
<th>Zone</th>
<th>Datum</th>
<th>Method</th>
<th>Easting</th>
<th>Northing</th>
</tr>
</thead>
<tbody>
<tr>
<td>15T</td>
<td>___ 1927 ___ 1983</td>
<td>___ USGS Map ___ GPS ___ Other Google Earth</td>
<td>517133.00 m E</td>
<td>4971732.00 m N</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point 1: Easting</td>
<td>517133.00 m E</td>
<td>Northing</td>
<td>4971732.00 m N</td>
<td></td>
</tr>
<tr>
<td>Point 2: Easting</td>
<td>Northing</td>
<td>Northing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point 3: Easting</td>
<td>Northing</td>
<td>Northing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point 4: Easting</td>
<td>Northing</td>
<td>Northing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Point 5: Easting</td>
<td>Northing</td>
<td>Northing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SITE CHARACTERISTICS**

- **Acreage:** ~.07
- **Site Dimensions:** N-S ~23m  E-W ~51m  
- **Maximum Cultural Depth (if known):** unknown

**Site Description (V all that apply, but only one check per line):**

- _ single artifact
- _ lithic scatter
- X artifact scatter
- _ burial mound (number of mounds ______)
- _ non-mound lone grave
- _ non-mound cemetery
- _ petroglyph
- _ pictograph
- _ petroform
- surface features (list below)
- _ other: ________________

**Surface Features (V all that apply):**

- _ earthwork
- _ pit/depression
- _ foundation/ruin
- _ other: ________________

**Inferred Site Function (V all that apply):**

- X habitation
- _ mortuary
- _ farm
- X industrial
- _ transportation
- _ unknown

**Current Land Use (list approximate % for all that apply):**

- _ cultivated
- _ fallow
- _ commercial
- 50% recreational
- _ industrial
- 40% residential
- _ woodland
- _ grassland
- _ water-covered
- 10% other: grassy, wooded lot used as a green space/picnic area

**Surface Visibility (list approximate % for all that apply):**

- _ excellent
- _ good
- _ fair
- 100% poor/none

**Degree of Disturbance (list approximate % for all that apply or V unassessed):**

- 50% minimal
- 50% moderate
- _ heavy
- _ completely destroyed
- _ unassessed

**Current Threats to Site: (V all that apply or V none known):**

- _ erosion
- _ X development
- _ agricultural
- _ other: ________________
- _ none known
### MINNESOTA ARCHAEOLOGICAL SITE FORM

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**Agency/Field #:**

#### CULTURAL/TEMPORAL AFFILIATION

*(list all that apply by level of certainty; 1 = confirmed; 2 = probable or √ "not determined"):

<table>
<thead>
<tr>
<th>Period</th>
<th>Contact (1650-1837)</th>
<th>Post-Contact (1837-1945)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Precontact Context:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Paleoindian Tradition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td>Folsom</td>
<td>other:</td>
</tr>
<tr>
<td>Clovis</td>
<td>Eastern Fluted</td>
<td></td>
</tr>
<tr>
<td><strong>Archaic Tradition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td>Prairie</td>
<td>Riverine</td>
</tr>
<tr>
<td>Shield</td>
<td>Lake-Forest</td>
<td></td>
</tr>
<tr>
<td><strong>Woodland Tradition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td>Fox Lake</td>
<td>Laurel</td>
</tr>
<tr>
<td>SE Mn Early</td>
<td>C Mn Transitional</td>
<td>Lake Benton</td>
</tr>
<tr>
<td>Brainerd</td>
<td>Blackduck-Kathio</td>
<td>Psinomani/Sandy Lake</td>
</tr>
<tr>
<td>Havana-Related</td>
<td>SE Mn Late</td>
<td>Rainy River Late</td>
</tr>
<tr>
<td>other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Plains Village Tradition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td>Cambria</td>
<td>Great Oasis</td>
</tr>
<tr>
<td>other:</td>
<td></td>
<td>Big Stone</td>
</tr>
<tr>
<td><strong>Mississippian Tradition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td>Silvernale</td>
<td>other:</td>
</tr>
<tr>
<td><strong>Oneota Tradition</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>not determined</td>
<td>Blue Earth</td>
<td>Orr</td>
</tr>
<tr>
<td>other:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Contact Context:**

*(list all that apply by level of certainty; if unable to discern specific context, √ here)

| American Indian        | Dakota               | Ojibwe                   | other:                   |
|                       |                      |                          |
| Euro-American          | British              | other:                   |
|                       | French               | Initial US               |

**Post-Contact Context:**

*(list all that apply by level of certainty; if unable to discern specific context, √ here)

| Indian Communities & Reservations (1837-1934) | St. Croix Triangle Lumbering (1830s-1900s) |
|                                               |                                         |
| Early Agriculture & River Settlement (1840-1870) | Railroads & Agricultural Development (1870-1940) |
| Northern MN Lumbering (1870-1930s)            | Iron Ore Industry (1880s-1945)           |
| Tourism & Recreation (1870-1945)             | Urban Centers (1870-1940)               |

Approximate Post-Contact Occupation/Site Formation Date(s): 1837-1900

#### Context Assignment/Dating Methods

*√ all that apply:*

- artifact type/style  
- feature type  
- radiometric  
- relative stratigraphy  
- geomorphology  
- historic accounts (list)  
- historic maps (list)  
- other(s) (specify):

*(For radiometric dates, attach photocopies of laboratory sheets if available.)*

#### MATERIALS PRESENT

*√ all that apply:*

<table>
<thead>
<tr>
<th>Basic Artifact Categories</th>
<th>Ceramics</th>
<th>Lithics</th>
<th>Biological Remains</th>
<th>Historic Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboriginal</td>
<td>projectile points</td>
<td>animal</td>
<td>X glass</td>
<td>X other: ashy material, buttons</td>
</tr>
<tr>
<td>X Euro-American</td>
<td>other chipped stone tools</td>
<td>human</td>
<td>X metal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>debitage</td>
<td>unidentified bone</td>
<td>X brick</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ground/pecked stone</td>
<td>seeds/nuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FCR</td>
<td>X charcoal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>aboriginal copper</td>
<td>wood</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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**Major Exotic Materials (\\(√\) all that apply):**  
- catlinite  
- Knife River Flint  
- native copper  
- obsidian  
- Hixton orthoquartzite  
- other:  

**Diagnostic Artifacts:**  
- Ceramics: Prehistoric Types/Wares/Temper  
  Historic Earthenware, whiteware, porcelain, flow blue ceramics  
- Prehistoric Lithics:  
- Glass: window glass, bottle glass  
- Metal: square nails  
- Other:  

**ENVIRONMENTAL DATA**  
**Current Topographic Setting (\\(√\) all that apply):**  
- Away from Water  
- Riverine  
- Lacustrine  
  - general upland  
  - terrace edge  
  - hilltop  
  - glacial beach ridge  
  - rock outcrop  
  - other:  
  - fan  
  - terrace/bluff top  
  - stream-stream junction  
  - bluff-base  
  - cave/rockshelter  
  - floodplain  
  - other:  

Topographic Feature Name from USGS Map: St. Croix River  

**OWNERSHIP INFORMATION**  
**Source and Date of Ownership Information (e.g., plat map, county recorder's office, personal communication, etc.):**  
Ownership Type (list approximate % for all that apply; if unknown \(√\) here \(\_\)):  
- Federal  
- State  
- Local (public)  
- Tribal  
- Private  

Land Owner (name and address if known): City of Afton  

**CURRENT INVESTIGATION INFORMATION**  
**Methods/Techniques Employed (\\(√\) all that apply):**  
- informant report  
- small diameter soil coring (\\(≈\) 1" diameter)  
- surface survey  
- shovel testing  
- formal test units  
- mechanical testing  
- max. test depth  
- geomorphological survey (specify):  
- geophysical survey (specify): electrical resistance and ground penetrating radar (GPR)  
- other:  

Informant Name and Address (if known): N/A  

Known Collectors/Collections: none known  

Artifact Repository (name and accession numbers or repository agreement number): Minnesota Historical Society Repository Agreement #745  


Major Previous Bibliographic Reference(s) to Site: Afton Remembered, Edwin G. Robb, 1996  

Principal Investigator (name and affiliation): Steven J. Blondo, MA, Blondo Consulting, LLC  

**Form Completed By (name and date):** Kelly Wolf, June 20, 2016  

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MAPS: Attach/include original scale copy of 7.5’ USGS map with site location clearly outlined or designated. Attach a sketch map if surface features present, if sub-surface testing done, or if complicated boundaries/setting. Sketch map must have re-locatable datum, scale, north arrow, and legend if symbols are used.

Figure 1: Topographic map of the historic site.
Figure 2: Sketch map including archaeological testing and the tail of the Rattlesnake Mound (21WA10).
This site was first identified during a Phase I evaluation of a portion of the proposed Downtown Village Improvements Project in the City of Afton. This portion of the proposed project included a wastewater pond, lift station, and directionally drilled utility lines within the vicinity of site 21WA10- the Rattlesnake Mound Group. Project funding and permitting triggered a Section 106 review of the project and tribal consultation meetings agreed on further investigations of the proposed APE within the vicinity of 21WA10. A geophysical survey completed by Archaeo-Physics, LLC of the area showed strong and deep subsurface patterning in the southwestern portion of the lot where the tail of the Rattlesnake Mound is located and where the lift station was originally proposed (see Figure 3 for GPR results). This geophysical feature of interest was archaeologically tested through shovel tests and a one-meter by one-meter test unit. The feature of interest was located at Shovel Test 20 (see Figure 2). This shovel test resulted in a high amount of historic materials, and an ashy layer containing the highest concentration of historic materials identified in the shovel test. A one-meter by one-meter test unit was excavated just adjacent to this to further explore this feature. The test unit uncovered the remains of what was likely the cellar of a building that had been burned down sometime before 1900. According to Edwin G. Robb in his book Afton Remembered the Tilton and Newman sawmill once stood in approximately this location between 1857 and 1860, but Robb had no comments as to what happened to the structure (Robb 1996).

The test unit was located approximately one meter west of Shovel Test 20, and was excavated in 10-centimeter levels. The first four levels (0-40 centimeters below the surface) contained a profile of 10YR2/2 sandy loam, consistent with the other shovel tests within the original proposed lift station area. The feature of interest in this area became clear in the following levels and consisted of a heavily defined concentration of historic artifacts, heavily mottled soils, and burned, ashy and sandy material. Historic (19th century Euro-American) artifacts were recovered throughout the unit with the greatest consistency recovered from the historic feature. Artifacts recovered included square nails, metal sheeting, concrete, window glass, historic ceramics, glass, brick, charcoal, food remains such as animal and fish bone, and personal items such as buttons. As soon as this feature was recognized as a large, intact historic feature the test unit was terminated at approximately 60 centimeters below the ground surface to maintain the feature for a more extensive investigation in the future. A tarp was used to cover the bottom of the unit prior to it being filled in.

Additional shovel testing to the east of this test unit showed the remains of a post hole that could be associated with this feature. Historic mapping depicts a fence running along a portion of this lot, so this may be related. This feature was identified in Shovel Test 17.

This site is recommended as eligible for inclusion in the National Register of Historic Places under Criterion D for the potential to yield further information about early Afton and early Minnesota history. At this time, the proposed lift station has been relocated to avoid any impact to this eligible Historic Property therefore continued archaeological investigation of the feature was not required for this project. Further evaluation of this site is recommended in the future to help narrow the association with historic contexts and to further define the feature.
Figure 3: GPR results from the Geophysical Survey of the 21WA10 Mound Group, Afton, MN by Geoffrey Jones, Archaeo-Physics, LLC, 2016. The historic feature is located at number 1 in the second image.

GPR time slice (20-40cm depth) of Area 1.

1. an area of relatively discrete reflection, ambiguous but consistent with an archaeological feature
2. A strong and relatively distinct reflection. It is near (slightly to the west) the recorded location of the rattlesnake effigy, but largely outside the boundaries of the archaeological investigation.

GPR time slice (80-100cm depth) of Area 1.

1. a strong and coherent reflection that appears in multiple depth slices between 60 and 160 cm depth. This is very likely to be a cultural feature of either historic or prehistoric origin.
2. disturbance associated with a drainage ditch.
Figure 4: Of the lot where the historic site is located, facing southwest. The historic site is in the south and southwest portion of this lot.

Figure 5: Of the lot where the historic site is located, facing west. The historic site is in the left side of this image.