



Minnesota Pollution Control Agency

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October 7, 2016

TO: Interested Parties

RE: Protection of Historic Properties Section 106 Review
Response to Comments from Consulting Parties
City of Afton Infrastructure Improvement Projects

To Whom It May Concern:

The Minnesota Pollution Control Agency (MPCA) is conducting a Section 106 review for the proposed City of Afton (City) infrastructure improvement projects, pursuant to 36 CFR Part 800. On August 2, 2016, pursuant to 36 CFR 800.5(c), the MPCA issued its determination that the City of Afton infrastructure improvements projects will result in no adverse effects to historic properties. These findings can be reviewed online at <https://www.pca.state.mn.us/water/findings>.

The MPCA is presenting the following information in response to the comments received from all consulting parties and common concerns received from non-consulting parties during the comment review period which ended on September 1, 2016. The vast majority of comments are related to the Rattlesnake Mound (site 21WA10). This document highlights the efforts that have been made to date and those that will be taken during construction to protect the Rattlesnake Mound.

Question 1: Why are the proposed infrastructure improvements important to the Afton area?

The following are the main elements of the project:

PROJECT ELEMENT	CURRENT ISSUE	PROPOSED IMPROVEMENT
Fix the failing septic systems	Many of the septic systems in the downtown area of Afton are failing. When the systems were evaluated, approximately 45 percent were determined to need improvements. These failing systems threaten public health and the environment by backing up into homes, having sewage on the ground surface, having inadequate separation to groundwater, or not meeting setback requirements to water supply lines. Failing septic systems can lead to contaminated drinking water wells. In Afton, failing septic systems also impact the St. Croix River area. Excessive nutrients and bacteria are found in the sewage and those impact the environment.	The proposed project will construct a new large subsurface sewage treatment system to adequately treat the wastewater produced in the downtown area of Afton and eliminate the use of all septic systems in the downtown area. The new system will be required to meet permit limits as set by the MPCA and will provide additional technology to provide enhanced treatment compared to an individual home's septic system. The new treatment system will be located approximately one mile north of the Rattlesnake Mound.

Flood levee improvements	The levee needs improvements to meet current requirements of the U.S. Army Corps of Engineers (USACE). As of now the levee cannot fully protect the City during times when the St. Croix River is flooding. Some existing septic systems are built into the levee and need to be removed to improve the structural integrity of the levee and meet USACE and FEMA levee standards. During flooding, the sewage from the septic systems flows directly to the St. Croix River.	The levee will provide improved flood protection and will seek accreditation from FEMA and enrollment into the USACE Levee Program. The levee will be moved slightly to the east and will be raised by a couple of feet in some locations. The existing septic systems will be removed from the levee to allow for a more-sound structure and to eliminate the pollution from the septic systems that currently occurs during flooding.
Stormwater management improvements	Improved stormwater management is needed in the downtown area of Afton both for flood protection and to protect water quality in the area. The stormwater pond which is proposed near the Rattlesnake Mound is located at the low point of the downtown area. This area currently ponds water as it is the lower point in the Old Village. The City installs flood pumping operations in this area during floods to remove rainwater and levee seepage from the Village side of the levee.	The area where the water collects will be reshaped to provide proper treatment in a natural environment. This pond will not contain wastewater, only stormwater. It will prevent erosion at and around the Rattlesnake Mound. The pond will include native plants to create a natural setting.
Remove current sewage discharge into the Rattlesnake Mound	Septic systems from four (4) properties are currently impacting the Rattlesnake Mound. Three of the properties have sewer pipes running through the footprint of the Rattlesnake Mound. One of the properties has its drainfield currently discharging sewage into the head of the Rattlesnake Mound. These septic systems were installed by open cut excavation in the Rattlesnake Mound area. See Figure 1	The proposed project will connect these properties, and others nearby, to new collection piping and transport the sewage through the city sewer system and pump it to the site of the treatment facility approximately one (1) mile away from the Rattlesnake Mound. This project will eliminate the discharge of sewage into the Rattlesnake Mound. The existing septic systems will be abandoned in place to avoid further disturbance of the Rattlesnake Mound. Construction techniques have been chosen to minimize any potential disturbance to the area around the Rattlesnake Mound.

Question 2: What were the MPCA's findings regarding the assessment of effects to historic properties?

The proposed MPCA finding was of "no adverse effects" to historic properties. The criteria of adverse effect were applied for each of the 11 properties identified as eligible for the National Register of Historic Places (NRHP) within the Area of Potential Effects (APE). This project will not impact the characteristics that qualify any of the historic properties for inclusion in the NRHP in a manner that would diminish the integrity of the sites' location, design, setting, materials, workmanship, feeling, or association. For more information please see the MPCA's Section 106 Findings Report which is available online at <https://www.pca.state.mn.us/water/findings>.

Question 3: Does the APE include the Rattlesnake Mound (21WA10)?

Yes, the Rattlesnake Mound is located within the APE. Potential effects to the Rattlesnake Mound were assessed as required by 36 CFR 800.

Question 4: Is the Rattlesnake Mound eligible for the NRHP?

Yes, the Rattlesnake Mound was found to be eligible for listing in the NRHP. Since the Rattlesnake Mound was found to be eligible for listing in the NRHP, potential effects to the Mound were considered as required by 36 CFR 800.

Question 5: Why would you build a wastewater treatment facility on or put piping through the Rattlesnake Mound, especially since it's eligible for the NRHP? This will destroy the site and desecrate graves.

A wastewater treatment facility is not being built on the site of the Rattlesnake Mound. The wastewater treatment facility will be located over one mile from the site of the Rattlesnake Mound. A piping collection system will be installed throughout the city, mainly in road right of ways, to collect and transport sewage to the treatment site. The location of the proposed wastewater treatment facility in relation to the Rattlesnake Mound can be found in Figure 2.

A sewage pipe will not be placed or drilled "through" the mound. There are currently four homes that are located in close proximity to the Rattlesnake Mound that are currently served by private septic systems which require replacement and will be connected to the new wastewater treatment facility. One of these home septic systems is currently discharging sewage into the Rattlesnake Mound. Part of the Afton improvement project will cease the current sewage discharge into the mound by connecting the home to the new wastewater treatment facility. The current proposal is to directionally drill a small diameter pipe under (about eight (8) feet below ground surface) the Rattlesnake Mound in areas of previously disturbed soil.

The City of Afton is taking appropriate action to protect and even provide enhancements to the Rattlesnake Mound. As an example, a Phase II site investigation was completed in an attempt to best find out if there were burial sites or other areas with potential archaeological significance in the proposed construction zone, as recommended by tribes, the Minnesota Historic Preservation Office (MnHPO), and the Minnesota Indian Affairs Council (MIAC) at the February 19, 2016, MPCA consultation meeting. The Phase II investigation results were utilized in the project design to avoid or minimize any potential impacts to the Rattlesnake Mound. The results of the Phase II investigation were discussed with tribal representatives, MnHPO, and MIAC at the May 20, 2016, MPCA consultation meeting. At this meeting, the MPCA heard tribal representatives discuss the need to eliminate the existing sewage discharge into the Rattlesnake Mound. More information on the Phase II study is contained below.

Question 6: What has been done to protect the Rattlesnake Mound, and other unknown burial or significant sites, prior to construction?

Many steps have already been taken to evaluate the proposed construction area. As a result of the numerous background investigations and testing, several aspects of the project design were modified to avoid impacts to historic properties.

Previous investigations included an archaeological reconnaissance survey which included shovel testing. In addition, a visual inspection by Merjent determined that "evidence of intact mound remnants in the vicinity of 21WA10 was not found." The Mississippi Valley Archaeology Center (MVAC) also visited the site. These investigations and consultation with the Office of the State Archaeologist (OSA) and MnHPO resulted in the plan to require archaeological monitoring during construction. The recommendation at the time from MnHPO was that no additional archaeological survey work was warranted except as directed by the OSA. The OSA notified the City that the OSA recommendation had been fulfilled and the project should have no adverse effects on the mound site known as 21WA10. Blondo Consulting also completed a Cultural Resource Assessment in November 2015 for the proposed project. This report includes the

information from Merjent and MVAC. For more detailed information about this report please refer to the report located at <http://tinyurl.com/November2015Report>.

The Phase II investigation included Lidar analysis and a geophysical survey using electrical resistance and ground penetrating radar (GPR) performed by Archaeo-Physics LLC. In addition, Blondo Consulting performed archaeological testing using shovel tests and test pits. These investigations were completed in consultation with, and as recommended by, the MIAC, OSA, MnHPO, and the Shakopee Mdewakanton Sioux Community. Representatives of these entities were consulted during the planning and/or were on site during portions of the actual testing. Phase II investigation results were previously provided to interested parties and these results were discussed during the May 20, 2016, MPCA consultation meeting. For more detailed information about the Phase II study please refer to the report located at <http://tinyurl.com/Phase2Report>.

Question 7: What is being done to protect the Rattlesnake Mound and other unknown burial or significant sites during construction?

The MPCA is requiring an archaeologist to be on site during construction near the Rattlesnake Mound.

During the consultation process, the City of Afton has invited the tribal community to have their own representative (Tribal Monitor, etc.) present during construction in sensitive areas. The tribal community should contact Ron Moore from the City of Afton to provide the contact information for their proposed on site representative. Mr. Moore can be reached at rmoore@ci.afton.mn.us or at 651-436-8957. This contact information should be provided as soon as possible so the proper individuals can be contacted to coordinate the construction schedule.

In the event historical artifacts are discovered during construction, the City has developed an Unanticipated Discovery Plan that outlines steps required to comply with all federal and state regulations. The construction contractor will be required to immediately stop work and inform the City's archaeological consultant in the event of discovery of any significant items. Proper procedures include contacting local law enforcement, OSA, and MIAC as applicable. Work can only resume if associated issues are mitigated. An Unanticipated Discovery Plan was developed during consultation with the tribes, MnHPO, and MIAC. This plan is included with the construction contract documents and the contractor will be required to follow this plan.

Question 8: We heard that human remains have been found in the Rattlesnake Mound.

There is no physical evidence of human remains being found in the Rattlesnake Mound. The Office of the State Archaeologist has no definitive records in its files that document human bones being recovered within the limits of the Rattlesnake Mound. In a letter from the State Archaeologist to the MPCA on January 19, 2016, they were not aware of any human remains being documented from the site for the purposes of the Native American Graves Protection and Repatriation Act (NAGPRA). A local 1956 newspaper account stated that workmen had bones in the body of a "fish" (assumed to be the Rattlesnake) mound. Because the skulls are no longer available for inspection in any known public or private collection, the account is being treated as hearsay, especially since there are other significant errors in the newspaper account. If anyone has any verifiable information related to human remains being found in the area of the Rattlesnake Mound, that information should be shared with the MPCA immediately.

Bone fragments were discovered as part of the Phase II investigation conducted in spring 2016. These bone fragments were examined by Susan M. T. Myser, PhD, D-ABFA from Hamline University. Of the 71 bone fragments which were examined, 70 were classified as nonhuman. No bone fragments were classified as human. A single bone fragment from Test Unit 1, found within the 21WA116 site, was classified as "undetermined" because of its small size and lack of physical features. This bone fragment was not found in the Rattlesnake Mound.

Even though there is no known evidence to support that human remains have been found at the Rattlesnake Mound, the Unanticipated Discovery Plan will be followed by the construction contractor during the project.

Question 9: What other options were evaluated to avoid potential impacts to the Rattlesnake Mound?

Other options were evaluated during the planning and design phases of this project, include the options described below:

1. Some consulting parties questioned if the City could just route the connections lines around the homes and under the streets instead of drilling the connection lines under the mound. The City considered this option but unfortunately it would require additional open cut excavation in and around the Rattlesnake Mound. The homes immediately adjacent to the Rattlesnake Mound were constructed with the sewer connection exiting the homes' foundation through the back. This is where the home must be connected to the new sewer system. Excavation of a trench along the rear of the homes for a connection to a sewer line at the front of the homes would involve excavation within the 20-foot buffer around the Mound, and for one property would involve excavation in the Mound. Excavation in and around the Rattlesnake Mound would disturb the area significantly.
2. Another option to avoid the need to directionally drill under the Rattlesnake Mound would be to leave the existing septic system and piping in place, under the Rattlesnake Mound, for the four (4) houses to continue to use. This option is undesirable as it would continue the use of the septic system that is currently discharging sewage into the Rattlesnake Mound. As part of this option, three (3) of the four (4) homes would abandon their drainfields in the levee and connect directly to the new sewer collection system for their sewage to be taken to the new wastewater treatment facility. These three (3) homes would need to continue to use their existing sanitary sewer service piping connections which should be replaced due to their age rather than waiting for them to fail.

The proposed plan to directionally drill the piping under the Rattlesnake Mound was selected because it does not allow for open excavation in the Rattlesnake Mound and allows the existing septic systems to be abandoned in place to stop the sewage flow into the Rattlesnake Mound.

Question 10: How does the project help the Rattlesnake Mound and mitigate previous impacts?

It is not possible to change what has been done in the past but the current project is proposing to make improvement to the existing conditions by:

1. Eliminating the current sewage discharge into the Rattlesnake Mound and safely transport the sewage to the wastewater treatment site over one (1) mile away.
2. Better management of flood and high rainfall events, with levee and stormwater improvements, will help reduce potential soil erosion on and near Rattlesnake Mound.
3. City has proposed a plan to create awareness of the Rattlesnake Mound. The City previously expressed interest in working with the tribes to create a public display to describe the history and significance of the Rattlesnake Mound. If the tribes are interested, the MPCA encourages them to contact the City of Afton to work together on this kiosk or other display.

Question 11: Was the field site (21WA116) evaluated during this process?

During the investigation work for the Rattlesnake Mound, another historic site was discovered nearby. The site which was known as N5.5 E12 is now identified as 21WA116. This site was determined to be eligible for listing in the NRHP. The construction which was proposed in that area was relocated to avoid any impacts to the 21WA116 site. Site 21WA116 is not impacted by the current project.

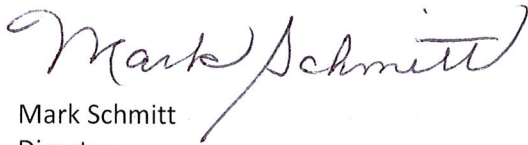
Question 12: Why are you not responding to all comments submitted during this most recent comment period?

The 30-day comment period from August 2 to September 1, 2016, was not a public comment period. This period was required by 36 CFR 800.5(c) and is intended only for the consulting parties to the Section 106 review process to express their opinion about with the MPCA's findings of no adverse effects. The MPCA received many comments from people and organizations that are not members of the consulting parties. Although the comment period was only intended for consulting parties, the MPCA attempted to address all concerns regarding historical review. Many of the additional questions and concerns submitted to the MPCA during the August 2-September 1, 2016 comment period involved Environmental Review and Permitting. These same issues were brought up and resolved during the 2015 Environmental Review and Permitting phase of this project. On June 23, 2015, the MPCA Citizens' Board evaluated the Environmental Assessment Worksheet and comments and determined that the project would not have any significant environmental effects and determined that an Environmental Impact Statement was not necessary.

This document is being provided as the next step toward further consultation with the consulting parties. The MPCA intends to continue the consultation process by hosting another meeting for the consulting parties in November 2016. Details regarding this meeting will be provided to the consulting parties as soon as possible.

If you have any questions or concerns regarding this information or the upcoming meeting for consulting parties, please contact Corey Mathisen of my staff at corey.mathisen@state.mn.us or at 651-757-2554.







Sincerely,

A handwritten signature in dark ink, reading "Mark Schmitt". The signature is fluid and cursive, with the first name "Mark" and last name "Schmitt" clearly legible.

Mark Schmitt
Director
Municipal Division

MS/CM:wgp

**Figure 1:
Existing Sanitary
Septic Systems
& Septic Drain
Fields**

-  Effigy Mound
-  Previously Excavated Areas in Effigy Mound
-  Existing Buildings
-  Existing Septic Tanks
-  Existing Sanitary Lines
-  Existing Drain Field Locations

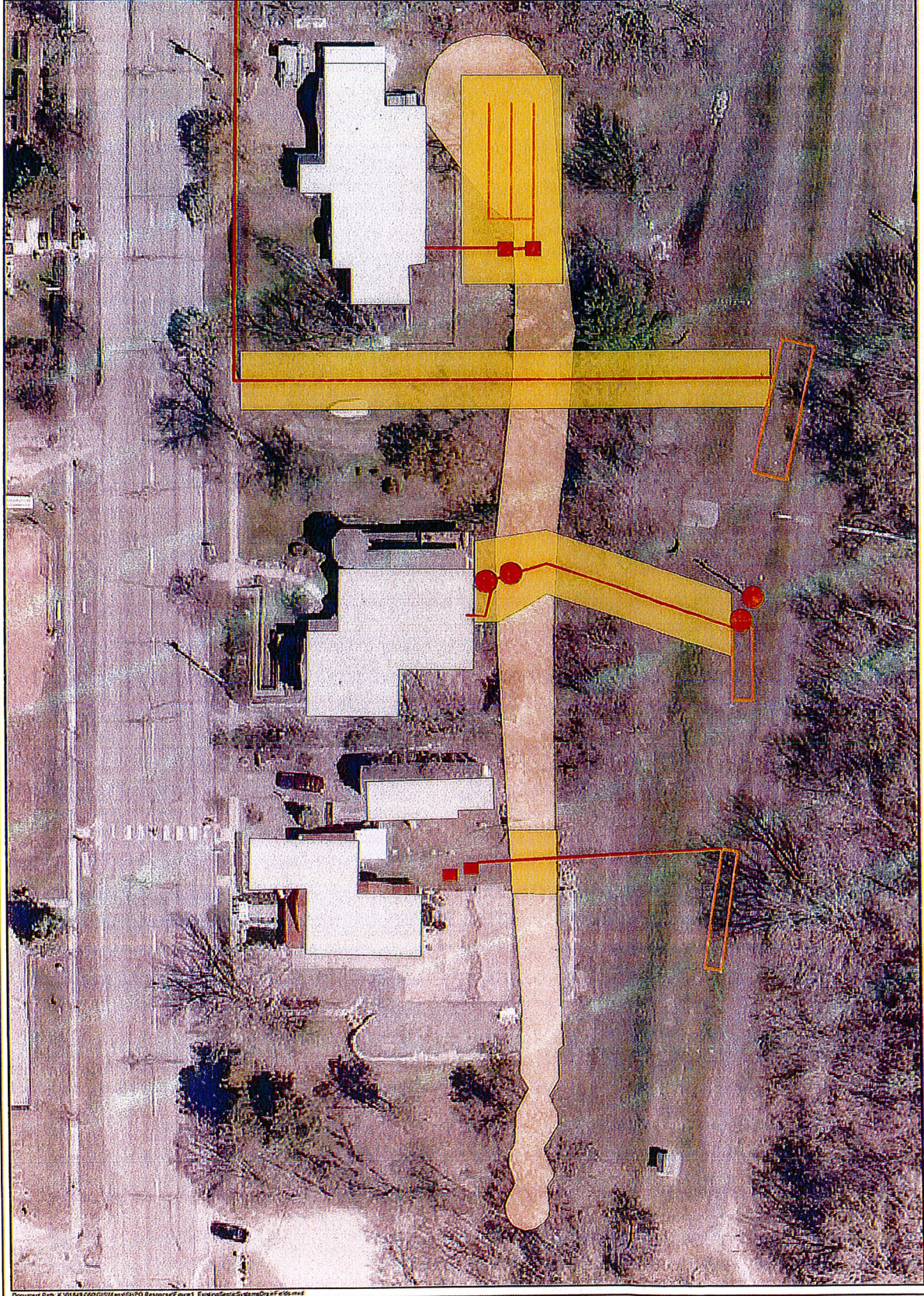




Figure 2.

Afton Downtown Improvements Project
City of Afton



0 1,200 Feet
1 inch = 1,211 feet

