## NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard Arlington, Virginia 22230



May 18, 2017

Mr. Randall Reid-Smith, State Historic Preservation Officer West Virginia Division of Culture and History Historic Preservation Office 1900 Kanawha Boulevard East Charleston, West Virginia 25305

RE:

Transmittal of 48 Historic Property Inventory Forms for Section 106 Compliance for the Proposed Changes to Green Bank Observatory Operations, Green Bank, Pocahontas County, West Virginia

FR#: 17-49-PH-1

Dear Mr. Reid-Smith:

The National Science Foundation (NSF) initiated Section 106 consultation with the West Virginia Division of Culture and History, Historic Preservation Office (SHPO) on December 2, 2016, regarding the undertaking of Proposed Changes to Green Bank Observatory (GBO) Operations in Pocahontas County, West Virginia. Along with the Section 106 consultation letter, NSF transmitted a report to SHPO entitled *Cultural Resources Evaluation, Green Bank Observatory, Green Bank, West Virginia,* which included a historical context for the Observatory and determinations of eligibility. NSF requested input on the proposed area of potential effects (APE) and concurrence on the determination that there are four telescopes at GBO that are individually eligible for listing in the National Register of Historic Places (NRHP) and that the GBO is eligible for listing in the NRHP as a historic district.

On December 22, 2016, NSF received a response letter from the West Virginia SHPO that provided concurrence on the APE, which was defined as the property boundary for GBO. SHPO agreed that the Reber Radio Telescope (NR# 72001291), which was listed in the NRHP in 1972 and was named a National Historic Landmark (NHL) in 1986, remains historically significant. In addition, SHPO concurred that there are four additional GBO telescopes that are individually eligible for the NRHP, including:

- 1. Interferometer Range: Howard E. Tatel Telescope (85'-1) and 85'-1 control building; 85'-2 Telescope; 85'-3 Telescope; and the Interferometer Control building (eligible under Criterion A);
- 2. 40-foot Telescope and control building (eligible under Criterion A);

- 3. 43-meter (140-foot) Telescope (eligible under Criteria A and C); and
- 4. Robert C. Byrd Green Bank Telescope (GBT) (eligible under Criteria A and C and Criterion Consideration G).

NSF determined that GBO is eligible as a historic district for representing an important time in science history and for its significant contribution to the advancement of radio astronomy. The boundaries of the proposed GBO Historic District coincide with the site's property boundaries (and the APE). The December 22, 2016 response letter from SHPO noted that while it appears likely that the GBO is eligible for the NRHP as a historic district, additional documentation would be required for SHPO to concur with this assessment. SHPO requested that Historic Property Inventory (HPI) forms be completed for each resource at least 45 years old located at the GBO, as well as any resource less than 45 years old that may contribute to the potential historic district.

HPI forms were completed for a total of 48 resources, 44 of which NSF determined contribute to the GBO Historic District. Contributing elements include 8 administrative/operational buildings, 1 airstrip, 1 water tower, 1 recreational area, 24 residential (or formerly residential) buildings, 2 horns, 1 antenna, and 6 telescopes (the Interferometer includes 3 large telescopes). One contributing residence within the APE, the Riley House (PH-0331), was previously recorded in 2011; an updated HPI form was completed for this property. As a group, the 44 contributing resources are a distinct and well-preserved representation of the early years of the National Radio Astronomy Observatory (NRAO), complete with scientific instruments, administration/operational facilities, recreation area, and residential buildings. Additionally, the scientific instruments present on site illustrate a linear, historical narrative of the history of radio astronomy from the Jansky Replica Antenna and Reber Radio Telescope to the monumental GBT. With this letter, NSF is transmitting the 48 HPI forms for review and requesting concurrence on the determination that the GBO is an NRHP-eligible historic district containing 44 contributing resources.

We respectfully request a response within 30 days from receipt of this letter to:

Ms. Elizabeth Pentecost National Science Foundation Division of Astronomical Sciences 4201 Wilson Blvd, Suite 1045 Arlington, Virginia 22230 epenteco@nsf.gov

The December 22, 2016, SHPO response letter also requested that NSF forward any comments received as a result of the Section 106 consultation process to the SHPO. The West Virginia SHPO provided NSF with a list of Native American tribes with historical ties to West Virginia. The Oneida Nation of Wisconsin notified NSF by email on November 9, 2016, that it is not interested in participating as a Consulting Party in the Section 106 process. NSF initiated

Section 106 consultation with the other identified Native American tribes by sending letters on December 12, 2016, to the following tribes:

- United Keetoowah Band of Cherokee Indians;
- Tuscarora Nation;
- Shawnee Tribe;
- · Seneca-Cayuga Tribe of Oklahoma;
- Seneca Nation of Indians;
- Tonawanda Band of Seneca;
- St. Regis Mohawk Tribe;
- United Keetoowah Band of Cherokee Indians;
- · Eastern Shawnee Tribe of Oklahoma;
- Delaware Tribe of Indians;
- Onondaga Nation;
- Eastern Band of Cherokee Indians;
- Cherokee Nation;
- Cayuga Nation; and
- · Absentee Shawnee Tribe of Oklahoma.

No responses were received from the Native American tribes.

During the NEPA public scoping meetings held at the GBO on November 9, 2016, Section 106 public outreach was also addressed, and participants were invited to identify whether they would like to participate in Section 106 as a Consulting Party. The following individuals confirmed that they would like to participate as Consulting Parties:

- · Daryl and Deana White
- Grayg Ralphsnyder

In response to the scoping meeting, 14 public comments were received that included references to cultural resources. These generally cited the historic significance of the GBO and its contributions to astronomy and the sciences in general.

Additional local organizations were contacted to verify whether they wished to participate as Consulting Parties in the Section 106 process. Letters were sent to the following organizations:

- Pocahontas County Historical Landmarks Commission
- Pocahontas County Historical Society
- · Preservation Alliance of West Virginia

On December 30, 2016, Robert A. Sheets responded via email as the individual designated by the Pocahontas County Historical Landmarks Commission to serve as the Consulting Party representative. At SHPO's request, NSF provided the Pocahontas County Historical Society and

the Preservation Alliance of West Virginia with copies of the Section 106 initiation letter and attachments that were sent to SHPO on December 2, 2016. The Preservation Alliance of West Virginia sent a letter to NSF on February 3, 2017, indicating that it would like to continue as a Consulting Party during the Section 106 process. No other responses have been received to date.

A list of all evaluated resources, including each resource's HPI site number (provided by the staff historian at SHPO) and respective NRHP status, is included in Enclosure 1. An aerial map showing the GBO Historic District boundaries and locations of evaluated resources is included in Enclosure 2. Hard-copies of the 48 completed HPI forms are included in Enclosure 3. In addition, two CDs are included with this package: the first CD includes electronic copies of all the HPI forms and the second CD includes GIS data. A spreadsheet with the public scoping meeting comments relating to cultural resources, as well as Section 106 responses and comments received to date, are included in Enclosure 4. If you have any questions, please do not hesitate to contact me by phone at 703-292-4592 or by email at <a href="mailto:cblanco@nsf.gov">cblanco@nsf.gov</a>. We look forward to your comments and further consultation on this proposed undertaking.

Regards,

Caroline M. Blanco

Federal Preservation Officer

Assistant General Counsel

Office of the General Counsel

Cc:

E. Pentecost

K. Hamilton

M. Rau, CH2M

## **Enclosures:**

List of All Evaluated Properties at GBO

Carolino M. Blanco

- 2. GBO Historic District Boundary
- 3. 48 HPI Forms (and 2 CDs)
- 4. Section 106 Correspondence