

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



**OFFICE OF THE  
GENERAL COUNSEL**

May 4, 2017

Dr. Jeff Pappas, Director and State Historic Preservation Officer  
New Mexico Department of Cultural Affairs, Historic Preservation Division  
407 Galisteo Street, Suite 236  
Santa Fe, New Mexico 87501

RE: Section 106 Consultation for the Proposed Changes to Sacramento Peak Observatory Operations, Sunspot, Otero County, New Mexico—Request for Concurrence on the Revised Area of Potential Effects and Determinations of Eligibility

HPD Log #: 103800; HPD Log #: 104236; HPD Log #: 105254

Dear Dr. Pappas:

The National Science Foundation (NSF) initiated Section 106 consultation with the New Mexico Historic Preservation Division (HPD) on August 24, 2016, regarding the Proposed Changes to Sacramento Peak Observatory Operations in Sunspot, Otero County, New Mexico. Consultation has been ongoing. With this letter, NSF is transmitting a copy of the revised area of potential effects (APE) and notifying the HPD that revised Historic Cultural Preservation Inventory (HCPI) Base Forms have been submitted via the New Mexico Cultural Resources Information System (NMCRIS). Under Section 106 of the National Historic Preservation Act, NSF is seeking comments from your office on the revised APE and concurrence on the determination that the Sacramento Peak Observatory is eligible for listing in the National Register of Historic Places (NRHP) as a historic district with 63 contributing resources, including two telescopes that are individually eligible for the NRHP.

**Area of Potential Effects**

NSF received concurrence from the HPD on the original APE via email on September 15, 2016. After visiting the grounds of the Observatory in November 2016 and further discussions with the United States Forest Service (USFS), the HPD requested that NSF provide documentation showing what areas of the Sacramento Peak Observatory had been previously surveyed for archaeological resources, to ensure that the entirety of the land that would be undergoing change in management was included within the APE. This information was provided to the HPD and to the USFS via email on February 8, 2017 (Enclosure 1). In a summary of the February 15, 2017 conference call provided by HPD on March 1, 2017, HPD stated that no further archaeological survey would be required.

Several possible boundaries were discussed for the APE during a conference call between the NSF, HPD, and USFS on February 15, 2017, including two areas identified in the Land Use Agreement between USFS and NSF—

the compound area and a larger area identified as the immediate vicinity. HPD provided a conference call summary on March 1, 2017, recommending that the APE be the same as the compound area. After further discussions between NSF and USFS, NSF has expanded the APE to include the roads southeast of the Observatory that connect the Sewage Treatment Plant and associated water wells along Sunspot Highway to the main Observatory property. The revised APE is smaller than the compound area, but includes all built-environment resources that are owned by NSF and may directly or indirectly experience effects as a result of the proposed undertaking. The airstrip, located northwest of the Observatory, is not included in the APE because it will not be affected by the proposed operation changes. A copy of the revised APE is attached as Enclosure 2 for your review and comment.

### **Determinations of Eligibility**

At the request of the HPD, NSF submitted 65 HCPI Base Forms via NMCRIS on December 19, 2016 and sent hard copies of the completed forms to the HPD on December 20, 2016. NSF submitted the completed forms to USFS on January 18, 2017. NSF determined that the Sacramento Peak Observatory is eligible for listing in the NRHP as a historic district for representing an important time in science and military history and for its significant contribution to the advancement of solar astronomy (Criterion A). NSF has identified 63 buildings and structures that contribute to the district. NSF also determined that there are two contributing telescopes on the property that are also individually eligible for listing in the NRHP: the John W. Evans Solar Facility and the Dunn Solar Telescope. Both are eligible under Criterion A for important association with events that have made a significant contribution to the field of astronomy. The Dunn Solar Telescope is also eligible under Criterion C for design and engineering. NSF requested concurrence from the HPD on the determinations of eligibility in a letter dated December 20, 2016.

HPD responded on January 18, 2017, and agreed that the significance of the property is as an historic district, but also noted that determining individual significance of any features or structures is not the recommended approach to the determination of eligibility of this nationally significant property. In addition, the HPD noted that certain additional landscape features such as roads, open spaces, playground, wells, retaining walls, and historic archaeological foundations should be considered as elements of the historic district. HPD recommended that NSF document these landscape features on Laboratory of Anthropology Forms and that an expanded historical context be prepared for the Observatory. During the February 15, 2017 conference call, these features and additional documentation for the Observatory were discussed. In the conference call summary provided by HPD on March 1, 2017, HPD requested that NSF (and their consulting firm CH2M HILL, Inc. [CH2M]) consult with the USFS regarding revisions to the HCPI forms and documentation for the additional landscape features.

After the conference call in February, several conversations occurred between NSF, USFS, and CH2M to finalize the approach for documenting the historic district for the determination of eligibility under Section 106. As a result of these conversations, NSF and USFS have agreed that the HCPI Base Forms be updated to include the names of those architects known to be responsible for the design of certain buildings. USFS agreed that no additional changes needed to be made to the HCPI Base Forms, and that the general approach for the NSF's determination of eligibility would remain the same: the Observatory is determined eligible as a historic district with 63 contributing resources. However, since some of the resources within this nationally significant property are considered more significant than others, two of the telescopes that contribute to the historic district are also determined individually eligible for the NRHP. As such, the HCPI forms were updated with the architect names in NMCRIS and submitted electronically on April 27, 2017. Barbara Zook at the HPD confirmed on April 24, 2017 that hard-copies of the revised forms are not required.

NSF and USFS have also agreed that no further survey work and no Laboratory of Anthropology Forms would be completed at this phase of the consultation process. CH2M is currently working on an expanded historical

context for the Sacramento Peak Observatory, to include discussion of the additional landscape features identified by USFS and the HPD. This approach for documenting the additional features was confirmed with Barbara Zook and Andrew Zink at the HPD on April 24, 2017. This will be submitted to the HPD with a finding of effect for the proposed project alternatives, after the determination of eligibility for the historic district has been resolved.

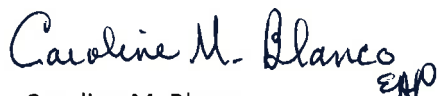
### **Request for Concurrence**

NSF requests your comments on the revised APE and concurrence on the determination that the Sacramento Peak Observatory is eligible for the NRHP as an historic district, containing 63 contributing resources, including the two individually eligible telescopes. Please respond 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](mailto:epenteco@nsf.gov)

If you have any questions, please do not hesitate to contact me by phone at 703-292-4592 or by email at [cblanco@nsf.gov](mailto:cblanco@nsf.gov). We look forward to your response.

Sincerely,

Handwritten signature of Caroline M. Blanco in cursive, with the initials "EAP" written below the name.

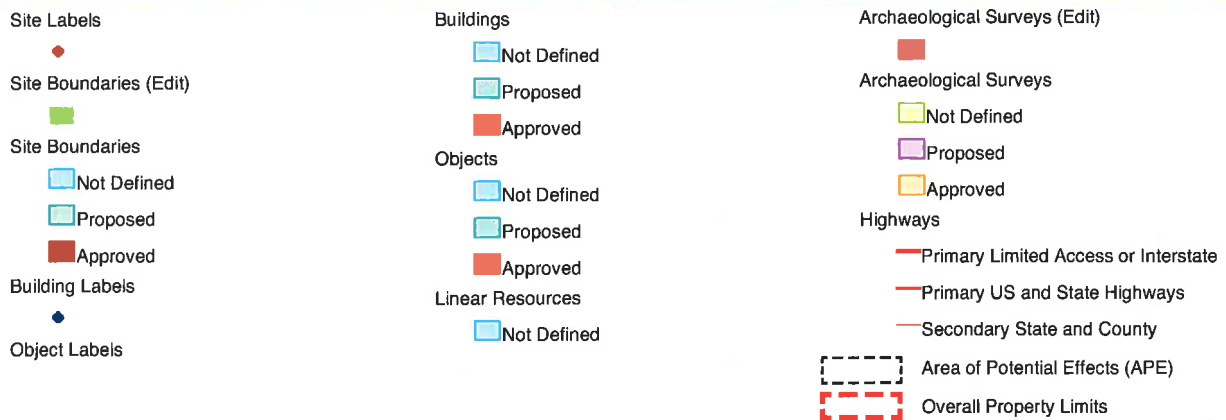
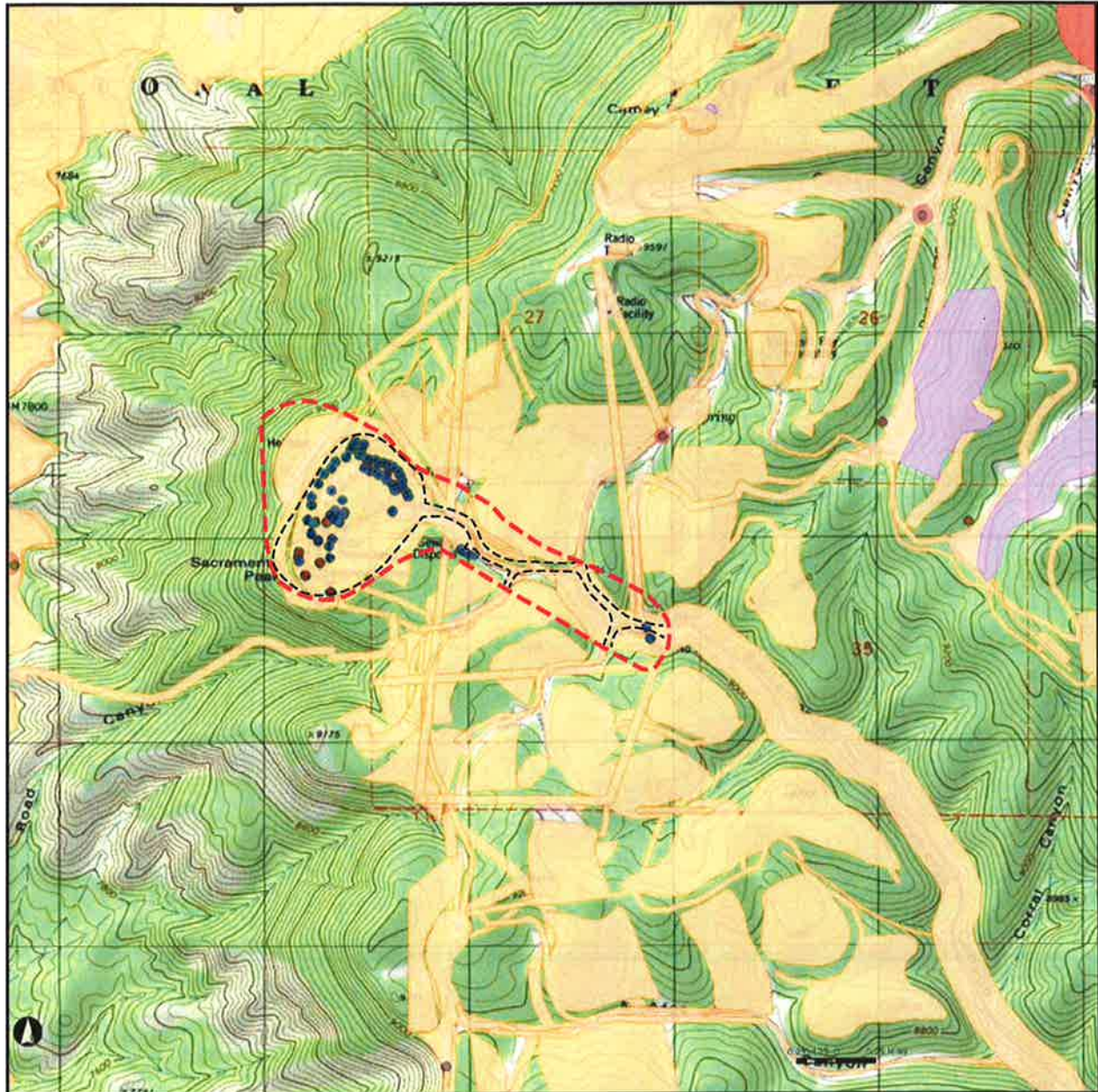
Caroline M. Blanco  
Federal Preservation Officer  
Assistant General Counsel  
Office of the General Counsel

**Cc:** E. Pentecost, NSF  
K. Hamilton, NSF  
B. Sapp, USFS  
M. Gutzman, USFS  
A. Naccarato, CH2M  
L. Price, CH2M

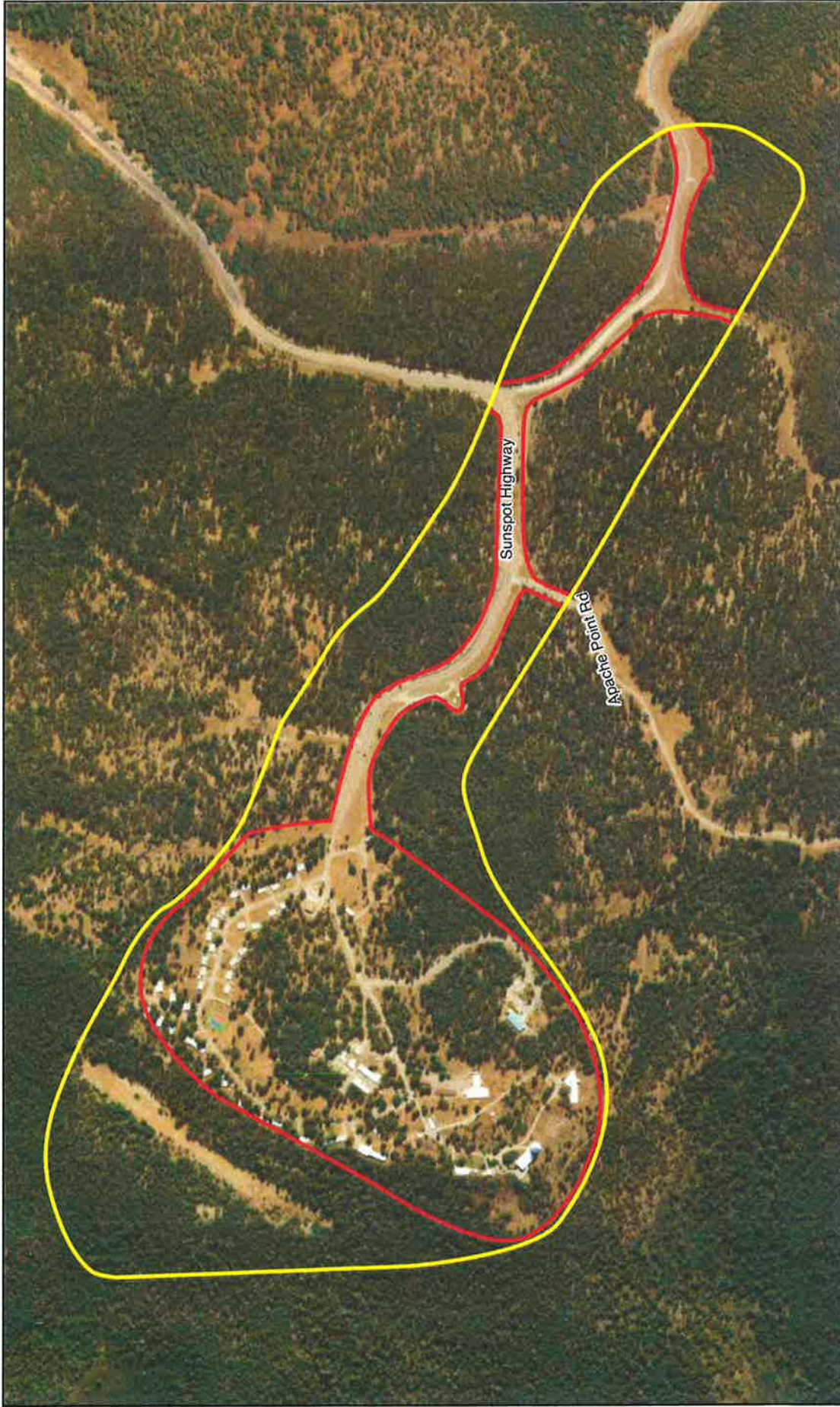
### **Enclosures:**

1. Map Illustrating Areas of Previously Conducted Archaeological Surveys
2. Area of Potential Effects

# Map



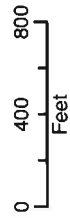




Aerial Source: National Agriculture Imagery Program (NAIP), 2016

**Legend**

- Area of Potential Effects (APE)
- Overall Property Limits



Sacramento Peak Observatory  
*Sunspot, New Mexico*