



United States Department of the Interior

NATIONAL PARK SERVICE
YELLOWSTONE NATIONAL PARK

P.O. Box 168
Mammoth, Wyoming 82190-0168



L3015(YELL)

CERTIFIED

FEB 03 2017

Ms. Mary Hopkins
State Historic Preservation Officer
2301 Central Avenue
Barrett Building, Third Floor
Cheyenne, Wyoming 82002

Dear Ms. Hopkins:

Yellowstone National Park proposes to permit the construction of a wireless communications tower on Mt. Washburn and improve wireless facilities at other developed areas to increase data transport capacity to Canyon Village, Old Faithful, Lake Area, and Grant Village. We are initiating consultation with you in accordance with 36 CFR §800, the regulations implementing Section 106 of the National Historic Preservation Act (NHPA). In addition to initiating consultation, the purpose of this letter is to 1) establish the Area of Potential Effects (APE) for this project, and 2) to identify historic properties and other properties eligible for listing on the National Register of Historic Places within the proposed APE.

Proposed Undertaking

Verizon Wireless has applied for a permit to improve and upgrade telecommunications infrastructure on Mt. Washburn, the telecommunications hub for the park, and at other developed areas in the park. The purpose of this project is to improve safety for personnel maintaining the telecommunications and two-way radio equipment on Mt. Washburn; mitigate concerns over too much infrastructure affixed to the exterior of a historic structure; and address a severe shortage of telecommunications bandwidth in the park that is currently limiting park operations, visitor safety, and visitor experience. New antennas would also be installed to improve poor cellular telecommunication services in the Old Faithful, Grant, Fishing Bridge, and Canyon areas. The proposed project would consist of the following:

- Construct a new steel lattice structure at the Mt. Washburn fire lookout and relocate existing NPS radio, USGA Yagi antennas, cellco panels and associated hardware from the historic building to the new structure.
- Construct two new vaults on either side of the Mt. Washburn fire lookout, designed to conceal and protect four new four- and six-foot diameter microwave dish antennas.
- Replace the existing generator shed and diesel generator on the northern flank of Mt. Washburn with a propane generator that would improve reliability and provide a more environmentally friendly and safer backup power solution for the facility.
- Replace the existing buried electrical service from the existing generator shed to the summit fire lookout with new service. The new service will be buried beneath the existing Chittenden access road, covering a distance of about 4,000 linear feet.
- Construct a camouflaged tower for microwave and cellular phone antennas at an existing telecommunications site near the Canyon Maintenance area.
- Construct a steel lattice tower for a microwave antenna at an existing telecommunications site north of Fishing Bridge.
- Install a new microwave antenna on an existing communications tower at Grant.

The new structure on Mt. Washburn would be constructed from steel lattice supports that would surround the east, north, and west sides of the existing fire lookout. It is designed to accept relocation of multiple antennas currently attached to the historic fire lookout building. As part of this project, new microwave antennas would also be installed and concealed in two separate vaults placed adjacent to existing concealed telecommunications microwave antennas. Many existing antennas would be removed from the historic building and some new antennas would be placed on the free standing steel lattice structure. Lattice structures have a greater degree of visual transparency than monopoles and allow views of the background landscape (Map 1).

Existing telecommunication towers at the Fishing Bridge and Canyon developed areas (one tower at each) are structurally inadequate to support new equipment. At each location, one new tower would be constructed directly adjacent to the existing telecommunication towers. The proposed tower at Fishing Bridge would be a lattice structure painted a non-reflective color that would blend into the surrounding landscape. The proposed tower at Canyon would be a 95-foot tall monopole camouflaged with artificial pine boughs to allow it to blend into the surrounding forest. As determined by visual simulation testing, both proposed tower locations are obscured from public view by distance and existing vegetation (see enclosed visual simulations).

The proposed additional tower at Canyon would be approximately 25 feet taller than the existing telecommunications tower so that the antennas can reach above the forest canopy and provide sufficient cellular coverage to the developed area. This design meets the park's goal to provide

better cellular service to the Canyon developed area while limiting spillover into the backcountry in accordance with the objectives of Yellowstone's Wireless Communications Services Plan. The new tower at Canyon would be camouflaged to ensure that it is not visible from the nearest Yellowstone road, which is one-half mile away. Cellular antennas on this structure would occupy only one of three possible sectors to limit spillover to the backcountry (Map 2).

The existing tower at Fishing Bridge is structurally inadequate to support the proposed microwave antenna. Therefore, a new steel lattice tower would be constructed at the same height adjacent to the existing tower. The new structure location is obscured from the Grand Loop Road by mature trees and understory (Map 3).

At Grant, a microwave antenna would be affixed to the existing telecommunications tower. At the Old Faithful developed area, existing leased telephone company data circuits will supply the towers with increased bandwidth for voice and data. These proposed telecommunications upgrades at Grant and Old Faithful would necessitate no ground disturbance (Map 4). Project specifications for these towers and structures and visual simulations are enclosed for your review.

Area of Potential Effects

The Area of Potential Effects (APE) consists of both direct and indirect effects. Direct effects are defined by the footprint and staging areas necessary for construction of the proposed new telecommunication structures. Indirect effects consist of the viewshed impacts, defined as the distance from which an observer can reasonably see constructed elements (towers, structures) of the proposed undertaking. These are depicted in the enclosed visual simulations submitted for your review.

Identification of Historic Properties

Yellowstone National Park has identified eight historic properties and/or properties determined eligible for nomination for listing on the National Register of Historic Places (NRHP) within or near the APE for the proposed telecommunications infrastructure project, including one National Historic Landmark. These consist of the Grand Loop Road Historic District (48YE520), Mt. Washburn Fire Lookout (48YE946), Chittenden Road Historic District (48YE826), Canyon Service Area Historic District (48YE999), Fishing Bridge Museum National Historic Landmark (48YE686), Fishing Bridge Historic District (48YE675), the South Entrance Road Historic District (48YE823), and 48YE304, a prehistoric lithic scatter with a buried cultural level (Hoffman 1971).

In addition, archaeological surveys of the direct APE were completed by the park between 1995 and 1998 (Cannon 1995, Sanders 1999, Sanders and Wedel 1997) that encompassed the direct APE for this project at the Canyon and Fishing Bridge developed areas. Based upon this work, we have identified one archaeological site in the immediate vicinity of the direct APE,

specifically 48YE304, which is just north of the proposed footprint of the new tower at Fishing Bridge. Based on test excavations, 48YE304 was determined eligible for nomination to the NRHP under Criterion D. Although 48YE304 is not within the direct APE, the park plans to have a professional archaeologist meeting the Secretary of Interior's Standards monitoring all ground disturbing actions conducted for installation of this tower. No other archaeological sites were identified during survey efforts within the APE.

A brief summary description of each identified historic property is enclosed, as well as maps of the spatial relationship between the historic properties and the APE. We are seeking your concurrence on identification of the area of potential effect and historic properties within that APE. We would also like to schedule a call with you and your staff to discuss this project and our forthcoming determination of effect.

We will be engaging the ACHP, our associated Native American tribes, and the proposal will be open for public comment for 30 days. Please contact Tobin Roop, Chief, Branch of Cultural Resources at (307) 344-2224 at your convenience to consult further on a determination of effect on this project or with any questions you may have.

Sincerely,

Daniel N. Wenk
Superintendent

Enclosures: (All enclosures are available at: <https://parkplanning.nps.gov/mtwashburn>)

- Summary Statement; Historic Properties within and adjacent to the APE
- Map 1 - Mt. Washburn Historic Properties Map
- Map 2 - Canyon Cell Tower Historic Properties Map
- Map 3 - Fishing Bridge Historic Properties Map
- Map 4 - Grant Collocation Historic Properties Map
- Mt. Washburn Visual Simulations; Mt Washburn, Canyon, Fishing Bridge, Grant
- Mt. Washburn Project Specifications; Mt Washburn, Canyon, Fishing Bridge, Grant

References Cited

Cannon, Kenneth P.

- 1995 Archeological Inventory and Testing of Selected Areas for Fishing Bridge Campground Relocation, HUDAT, and Lake YPSS Service Station Development Projects, Yellowstone National Park.

Cannon, Kenneth P., Pierce, Kenneth L., Stormberg, Paul, and Michael Vincent MacMillian

- 1997 Results of Archaeological and Paeleoenvironmental Investigations Along the North Shore of Yellowstone Lake, Yellowstone National Park, Wyoming: 1990-1994. National Park Service, Midwest Archeological Center. Lincoln, Nebraska.

Hoffman, John Jacob

- 1971 Archaeological Investigations along Lake Bypass, Yellowstone National Park. National Park Service, Midwest Archeological Center, Lincoln, Nebraska.

Sanders, Paul H.

- 1999 The 1998 Archaeological Inventory of the West Side of the Canyon to Lake Junction Highway and National Register Testing of Site 48YE446, Yellowstone National Park, Wyoming, Project.

Sanders, Paul H. and Dale L. Wedel

- 1997 The 1996 Class III Cultural Resource Inventory of the Bridge Bay to Lake Junction Road, Yellowstone National Park, Project 785D (254H).

bcc (with enclosures)

Zehra Osman

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bcc (w/o enclosures)

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