National Park Service U.S. Department of the Interior

Grand Teton National Park Wyoming



Silver Star Telephone Company, Inc. Wyoming Loop Completion Projects

FINDING OF NO SIGNIFICANT IMPACT

Silver Star Telephone Company, Inc. (SST), based in Freedom, Wyoming was selected by the U.S. Department of Commerce, National Telecommunications and Information Administration (NTIA) to install approximately 102 miles of buried high-speed broadband fiber optic cable under the provisions of two new programs – the Broadband Technology Opportunities Program (BTOP) and the Agricultural Department's Rural Utility Service's Broadband Initiatives Program. The purpose of these projects is to improve overall broadband communications throughout Wyoming by filling several gaps in the current communications infrastructure. The award to SST by NTIA through the BTOP is tied to the American Recovery and Reinvestment Act (ARRA, 2009).

SST's installation will complete two fiber optic loops that provide service to a majority of the State of Wyoming and a portion of eastern Idaho, making a robust broadband network available to critical community facilities, community anchor institutions, public safety entities, internet service providers, voice and data providers, and for the transport of that information both within and outside the state. By filling the gaps of existing broadband service in Wyoming, vital services will be ensured even if lines are cut, damaged, or temporarily taken out of service for repair.

Because these proposed loops traverse multiple jurisdictions including federal land on three national forests (Bridger-Teton, Caribou-Targhee, and Shoshone National Forests) and Grand Teton National Park (GTNP), as well as lands controlled or administered by Wyoming Department of Transportation, Town of Jackson, and Teton County, an environmental assessment (EA) has been prepared to disclose potential environmental impacts of the project.

The two primary components of the project, the Teton Pass Segment and the Togwotee Pass Segment, are described in detail in this EA for the Wyoming Loop Completion Projects (WLCP). The Togwotee Pass Segment of this project is the only portion of the WLCP that falls within the Grand Teton National Park.

This document records 1) a Finding of No Significant Impact (FONSI) as required by the National Environmental Policy Act of 1969; and 2) a determination of no impairment as required by the National Park Service (NPS) Organic Act of 1916.

PREFERRED ALTERNATIVE

The preferred alternative will permit the installation of 32.33 miles of fiber optic cable within Grand Teton National Park. The Togwotee Pass Segment of the WLCP fulfills the need to complete a statewide fiber optic ring that would provide major fiber optic connections among Wyoming's larger towns and cities – Jackson, Evanston, Green River, Rock Springs, Rawlins, Laramie, Cheyenne, Casper, Riverton, and Dubois – as well as to many smaller towns along the route and/or located on spurs or smaller fiber rings. Ancillary facilities would include underground cable splice vaults, called "handholes" at various locations along the cable, a 41" W x 27" D x 60" H vault constructed near the Moran School, and a 12' x 24' building in the Moose Area Complex. See *Attachment A* for route details and installation methodology.

MITIGATION MEASURES

Mitigation measures are designed to prevent or minimize adverse impacts or to contain impacts within acceptable limits during and after project implementation. Under the preferred alternative, the permit will be conditioned by mitigation measures to reduce the effects of the proposed project on natural, cultural, and social resources. See *Attachment B* of this document for required mitigation measures.

ALTERNATIVES CONSIDERED

The National Environmental Policy Act (NEPA) process requires that a no action alternative be evaluated along with a preferred alternative and other alternatives that have the potential to fulfill the purpose and need for the project. SST consulted with the US Forest Service (USFS), National Park Service (NPS), US Army Corps of Engineers (USACE), Teton County, the Town of Jackson, and others to solicit ideas on routing and methods of installation. Several route alternatives and/or segments were considered but dismissed after further consultation with the cooperating agencies, as they did not meet the purpose and need of the project or caused unnecessary impacts. The alternatives ultimately considered were the No Action Alternative and the Preferred Alternative (proposed action).

The preferred alternative for the WLCP involves two projects described and depicted in the EA as the Teton Pass Segment and the Togwotee Pass Segment. Only the Togwotee Pass segment will pass through GTNP. A special use permit and a utility right-of-way by the NPS will be required prior to conduit installation on NPS lands.

The Environmentally Preferred Alternative

The environmentally preferred alternative is the alternative that will promote national environmental policy as expressed by §101 of the National Environmental Policy Act. This includes alternatives that:

- (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- (2) assure for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- (3) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- (4) preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice
- (5) achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
- (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

As the completed project would be a utility right of way only and the park has no current plans to connect to the potential services provided by the WLCP, the "No Action" alternative would provide maximum protection of park resources and values, human health and safety, and visitor use and enjoyment of GTNP, thus fulfilling the requirements of all six NEPA goals. However, the preferred alternative was selected for implementation over the environmentally preferred alternative. After consideration of public comments throughout the scoping and planning process, careful review of potential resource and visitor impacts, and development of appropriate mitigation to protect resources, the preferred alternative best strikes a long-term balance between the widest range of use and enjoyment of GTNP without degrading the environment or increasing risks to health or safety. The final installation will provide numerous benefits to the region in communications for emergency and health services, resource management,

education, and security. After installation and rehabilitation is complete, there will be no new impacts to the resources through its operation.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse

Minor impacts of the preferred alternative include the exclusion of visitors from some areas during cable installation and occasional traffic slow-downs as traffic on main highways passes the installation activity. Visitors will continue to have opportunities to view much of the Grand Teton National Park's traditional scenery and wildlife but views may be temporarily interrupted as visitors may be distracted by the installation in progress. Traffic slow-downs, if unexpected, as well as any driver distraction may increase safety concerns. Some wildlife will also likely leave the immediate vicinity of the installation activity until that activity ceases or passes by. However, installation can proceed at a rapid pace at times, at times covering 2-3 miles in a day. Consequently, any impacts such as wildlife avoiding areas or the incursion of installation activities into visitor view-space will only be temporary. Soils and vegetation along the installation line will experience minor impacts during and post construction, but revegetation, and weed control mitigation will decrease these impacts and prevent long-term effects. The final installation will provide numerous beneficial long term impacts in improved communications, especially for emergency and health services, resource management, education and security.

Degree of effect on public health or safety

Advanced broadband capabilities and closing the gap in connectivity will improve the reliability and redundancy of communication and services in the region. WCLP installation ensures continued service, which is an integral part of national security, safety, and law enforcement, along with support for schools and libraries positively affecting public health and safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

There are no prime farmlands or ecologically critical areas affected.

A number of wetlands would be crossed under the terms of a Nationwide #12 Permit issued by the US Army Corps of Engineers (USACE) for this project. Under the terms of the permit, no permanent loss of wetlands would result from the proposed installation. The permit also provides additional conditions which will mitigate the effects of boring operations.

Wild and Scenic Rivers will be crossed at 3 separate locations: one suspended from an existing bridge across the Snake River at the Moose Park Headquarters; another bored under the Buffalo Fork River near Moran; and a conduit hung on an existing bridge across the Buffalo Fork River on US 26 east of Moran. A §7 of the Wild and Scenic Rivers Act assessment determined there will be no adverse impact on the Wild and Scenic River Outstandingly Remarkable Values.

See *Attachment C* for a complete list of wetland and Wild and Scenic River crossings located within GTNP.

Degree to which effects on the quality of the human environment are likely to be highly controversial. There is no local controversy over the proposed installation. Some GTNP visitors may be temporarily inconvenienced during the process, but these inconveniences will be short lived and will not detract from their overall park experience. In addition, the Bridger Teton National Forest, a cooperator on the project,

conducted a 30-day public review and did not receive any comments. The conclusion drawn from the EA process is there are no highly controversial effects.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks

The effects of installing fiber optic cable is fairly standard and with few uncertainties. The environmental process has not identified any effects that may involve highly unique or have unknown risks.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

Future projects of this type will undergo their own NEPA review and approval process to examine environmental and other impacts, as well as obtain special use permitting. Therefore, each project will be considered on a case-by-case basis and this project will not set any NPS precedent.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts

Cumulative impacts were analyzed in the EA and no significant cumulative impacts were identified.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resource

A number of cultural resources were identified during the archeological survey of the proposed route. None of these sites will be impacted by the installation and provisions have been included in the preferred alternative to protect any new sites that may be encountered during the installation. Compliance with §106 of the National Historic Preservation Act was completed with a concurrence by the Wyoming SHPO, dated December 20, 2010, with the NPS determination of "no historic properties affected."

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat

The U.S. Fish and Wildlife Service reviewed the preferred alternative and accompanying data and concurred with the determination of "no effect" on threatened or endangered species in their letter dated November 5, 2010.

Whether the action threatens a violation of Federal, state, or local environmental protection law This action violates no federal, state, or local environmental protection laws.

APPROPRIATE USE

Section 1.5 of *Management Policies 2006*, Appropriate Use of the Parks, directs the National Park Service to ensure that park uses that are allowed would not cause impairment of, or unacceptable impacts on, park resources and values. A new form of park use may be allowed within a park only after a determination has been made that, in the professional judgment of the park manager, it will not result in unacceptable impacts.

Section 8.1.2 of *Management Policies 2006*, Process for Determining Appropriate Uses, provides evaluation factors for determining appropriate uses. All proposals for park uses are evaluated for:

- Consistency with applicable laws, executive orders, regulations, and policies;
- Consistency with existing plans for public use and resource management;
- Actual and potential effects on park resources and values:
- Total costs to the Service; and
- Whether the public interest will be served.

Park managers must continually monitor all park uses to prevent unanticipated and unacceptable impacts. If unanticipated and unacceptable impacts emerge, the park manager must engage in a thoughtful, deliberate process to further manage or constrain the use, or to discontinue it.

From §8.2 of *Management Policies 2006*, Visitor Use, the National Park Service will encourage visitor activities that:

- Are appropriate to the purpose for which the park was established; and
- Are inspirational, educational, or healthful, and otherwise appropriate to the park environment; and
- Will foster an understanding of and appreciation for park resources and values, or will promote enjoyment through a direct association with, interaction with, or relation to park resources; and
- Can be sustained without causing unacceptable impacts to park resources and values.

The proposed use was screened to determine consistency with applicable laws, executive orders, regulations, and policies; consistency with existing plans for public use and resource management; actual and potential effects to park resources; total costs to the Park Service; and whether the public interest would be served. Because the application of mitigating measures is expected to be successful in ensuring that no major adverse impacts would occur and that satisfactory reclamation of the disturbed area is expected to be achievable, implementation of the preferred alternative would not result in any unacceptable impacts. This action violates no federal, state, or local environmental protection laws and serves in the public's best interest; therefore, the Park Service finds that the preferred alternative is an appropriate use.

IMPAIRMENT

The guidance in *Management Policies 2006* requires analysis of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values. Section 1.4.3 of *Management Policies 2006* states that:

The fundamental purpose of all parks also includes providing for the enjoyment of park resources and values by the people of the United States ... Congress, recognizing that the enjoyment by future generations of the national parks can be enjoyed only if the superb quality of park resources and values is left unimpaired, has provided that when there is a conflict between conserving resources and values and providing for enjoyment of them, conservation is to be predominant. This is how courts have consistently interpreted the Organic Act.

However, the laws give the NPS the management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of the park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within the park, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment, but an impact would be more likely to constitute an impairment when there is a major or severe adverse effect on a resource or value whose conservation is:

 Necessary to fulfill specific park purposes identified in the establishing legislation or proclamation of the park; or

- Key to the natural or cultural integrity of the park; or
- Identified as a goal in the park's general management plan or other relevant NPS planning documents.

Management Policies 2006 recognizes that the impact threshold at which impairment occurs is not always readily apparent. Therefore, the NPS will apply a standard that offers greater assurance that impairment will not occur. The NPS will do this by avoiding impacts that it determines to be unacceptable. These are impacts that fall short of impairment, but are still not acceptable within a particular park's environment. Park managers must not allow uses that would cause unacceptable impacts; they must evaluate existing or proposed uses and determine whether the associated impacts on park resources and values are acceptable."

The park resources and values that are subject to the no-impairment standard include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS's threshold for considering whether there could be an impairment is based on whether an action would have major (or significant) effects.

Impairment findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relate back to park resources and values, and these impact areas are not generally considered park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. Fundamental resources and values for GTNP are identified in the draft *Foundation for Planning and Management: Grand Teton National Park and John D. Rockefeller, Jr. Memorial Parkway.* Of those resources and values listed as fundamental resources and values and after dismissing the above exempt topics, topics remaining to be evaluated for impairment include archeological resources, historic structures, and natural resources, including wetlands.

Although the preferred alternative has some negative impacts, in all cases these impacts range from negligible to minor in the short-term with no long-term impacts. Also, its implementation does not result in the impairment of those benefits, resources, and values.

• Archeological Resources –Archeological resources are a fundamental resource at the park, the preferred alternative would result in no adverse impacts to archeological resources. An

archeological survey of the entire line was completed and the proposed alignment does not have to be modified to avoid any such resources.

- Historic Structures Because the preferred alternative would result in no adverse effects to historic properties, there would be no impairment to historic structures. The historic irrigation ditches crossed by the installation will be bored under to protect their historic integrity outside existing road crossings.
- Natural Resources Because the preferred alternative would result in no long-term, adverse effects to the natural resources and values in the project area, and only negligible to minor effects on some resources in the short term, there would be no impairment to natural resources.
- Wetlands Protection The preferred alternative has received a Section 401 Certification from the Wyoming Office of Environmental Quality in conjunction with Certification of Nationwide Permit #12 conformance. Consequently, the preferred alternative will not result in any loss to wetlands, even though the line will pass through or under wetlands. Some wetland vegetation and soil will be disturbed, but there will be no filling or draining of wetlands and the vegetation will recover quickly; therefore, there would be no impairment to wetland areas. See *Attachment C* for a complete list of wetland and Wild and Scenic River crossings located within GTNP.

Mitigation measures for these resources would further lessen the degree of potential impact and help promote protection if new resources are discovered within the route alignment. If any historic or archeological materials are discovered during construction, all construction activities would be halted until the materials can be analyzed and recovered by an assigned archeologist and GTNP staff.

In conclusion, as guided by this analysis, good science and scholarship, advice from subject matter experts and others who have relevant knowledge and experience, and the results of public involvement activities, it is the Superintendent's professional judgment that there would be no impairment of park resources and values from implementation of the preferred alternative. This conclusion is further based on the Superintendent's professional judgment, as guided and informed by NPS policy and guidance, and the Grand Teton National Park Master Plan (1976) and other related park plans. Although the plan/project has some adverse impacts, in all cases these impacts are the result of actions taken to preserve and restore other park resources and values. Overall, the plan results in net benefits to park resources and values, and opportunities for their enjoyment, and it does not result in impairment.

PUBLIC INVOLVEMENT

The availability of scoping information describing the proposal was made available for public review and comment by the Forest Service during a 30-day comment period ending December 27, 2010. Notices of availability of the project description were published in the Casper and Idaho Falls News Papers along with articles in the Jackson Hole newspapers. The information was also made available on the Bridger Teton National Forest web site. There were no comments or inquiries from the public regarding the proposal during the comment period.

CONCLUSION

As described above, the preferred alternative does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement. The preferred alternative will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with adverse impacts that are generally localized, short-term, or negligible. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of GTNP. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal,

state, or local environmental protection law.	Based on the foregoing, it has been determined that an EIS is
not required for this project and thus will not	t be prepared.

Approved:

John Wessels

Regional Director, Intermountain Region

Date

Attachment A

Description of Fiber Optic Installation Route

The segment enters the south entrance of the park on US 89/26. The route remains on the west side of US 89/26 within the Wyoming Department of Transportation (WYDOT) right-of-way (ROW) to the Grand Teton National Park (GTNP) boundary near Elk View Terrace Road. After entering GTNP, it remains within the existing ROW for US 89/26. Prior to Gros Ventre Junction the line would cross the Gros Ventre River (attached to the bridge) and bored under several other water features. At Gros Ventre Junction the route turns west along the south side of Lower Gros Ventre Road, then north on the east side of Spring Gulch Road to the southern perimeter fence line of the Jackson Hole Airport. The line would be located inside of the GTNP boundary fence, boring under Enterprise Ditch, and follow the existing utility easement on the east side of the access road to airport facilities. Leaving the airport the line turns east on the north side of Airport Road, then north at its junction with US 89/26. The line would proceed north on the east side of US 89/26 from the Airport Road to Moose Junction where it would provide a stub along Teton Park Road to provide service access to the GTNP headquarters at Moose. The crossing of the Snake River in Moose would be installed as an attachment to the underside of the existing bridge. A prefabricated hut would be built within the headquarters area in order to facilitate potential use of the fiber optic services in the area.

Continuing north from Moose Junction, the line would be bored across Ditch Creek to the Antelope Flats Road near an existing buried Qwest line in a ROW along the Antelope Flats Road. In order to avoid a heavily forested and environmentally sensitive area farther north along US 89/26, the SST line would follow Antelope Flats Road east to Shadow Mountain Road then north where it would parallel the existing overhead power line. The cable would follow the existing power line ROW until it intersects with FS Road 30333 near Lost Creek Ranch. Following this unimproved road it would continue north. These roads are mostly on NPS land with some bordering or making short crossings within National Forest System land. The route would reenter the US 89/26 ROW on the south side of US 89/26 in order to avoid the parking lot near the Cunningham Cabin Historic Site. It would continue north for a short distance then cross to the north/west side of the US 89/26 ROW before continuing north. The crossing of Spread Creek would be by boring or using the existing bridge, as directed by the NPS.

Just north of Spread Creek the line would turn east onto Wolff Ranch Road, then following the road, the line would turn north until it eventually is under an existing overhead power line route. It would follow this existing power line ROW deviating slightly to the west as the power line approaches the bank of the Buffalo Fork River. It would cross under the Buffalo Fork River by being bored well under the channel starting at a distance of over 200 feet from the south bank and ending up about 75 feet away from the north bank of the river along US 26.

This route would provide a stem that goes west to Moran to provide service access to the Moran Elementary School, Fire Station, and Post Office, and the GTNP entrance gate and other NPS facilities. The main route would continue towards the east along US 26 for about 1.6 miles, where it would cross onto the BTNF until it reached a second crossing of the Buffalo Fork River, where it moves back onto GTNP. After crossing the Buffalo Fork River hung from the existing bridge, the route would continue east for approximately one mile where it moves back onto the BTNF and continues on the US 26 ROW to the Buffalo Ranger District office and beyond to Togwotee Pass.

Construction Footprint/Methodology

The primary method for laying fiber optic conduit and lines will be using a vibratory plow. The conduit would be buried approximately 36 inches deep, disturbing approximately 12 inches wide. The plow would be fitted with backfill plow blades to immediately backfill the trench after laying the fiber optics line. The conduits would be fed either from the tractor plow or a separate truck-mounted reel. No material

will be excavated, although soil may be displaced or stirred. A compaction machine would follow directly behind and return the soil to a recognized standard measure of compaction.

The trench method would be used when the working environment or other conditions preclude the plow method. The trench method would use a backhoe or a "wheel" or "chain" trenching machine. The conduit would be placed in the bottom of the open trench by a separate operation, and the excavation would be backfilled and compacted to restore the ground to original condition and density.

Plowing and trenching would not be done through water features, such as rivers, streams, creeks, and wetlands. The fiber optics line would be bored below channel beds of rivers, streams, and creeks with surface water using a horizontal directional drilling rig. In several areas, the conduit will be suspended on existing bridges.

When the material to be trenched is solid rock, a rock saw would be used to cut down approximately three feet. The rock removed from the trench would be replaced in the trench after conduit installation. The conduit would be laid in the bottom of the trench and at least 36 inches of cover would be applied.

Ingress and egress routes to and from the construction sites will be required approximately every ½ mile. To minimize disturbance, all construction equipment will be rubber-tracked. The impacted area to accommodate equipment would be no more than 10 feet wide, with actual soil disturbance less than 4 acres.

Staging Areas

Materials and equipment will be stored in previously disturbed areas such as pull-outs and designated parking areas.

Ancillary Facilities

Ancillary facilities would include underground cable splice vaults, or "handholes," located at 10,000- to 15,000-foot intervals or as needed to join cable sections and provide opportunities for services. None of the buried boxes would be in traffic (vehicle, pedestrian, or bicycle) areas or environmentally sensitive sites. The exact number of hand holes will be determined in the field pending site-specific conditions.

A 41" W x 27" D x 60" H vault will be constructed near the Moran School and a 12' x 24' building will be constructed in the Moose Area Complex adjacent to other communication infrastructure.

Attachment B

Mitigation Measures

Mitigation measures are designed to prevent or minimize adverse impacts or to contain impacts within acceptable limits during and after project implementation. Under the preferred alternative, the permit will be conditioned by the following mitigation measures to reduce the effects of the proposed project on natural, cultural, and social resources.

NATURAL RESOURCES

- The contractor will provide NPS staff with an updated installation schedule at the beginning of each week. This schedule will identify the locations of daily installation activity and the duration of activity at each location. Park staff will be notified immediately of any changes to the schedule.
- Under the Migratory Bird Treaty Act, no migratory bird, nest, or eggs can be disturbed, removed or destroyed without formal consultation. To minimize the potential for "taking" a nest of any protected bird species, park resource managers will survey the site daily ahead of ground disturbance activities to mitigate any potential issues in advance of site construction. Additional guidance was provided to the project manager.
 - o Grand Teton National Park biologists will monitor the Buffalo Fork osprey nest and determine its occupancy and nesting status. To prevent disturbing nesting birds, only park staff should approach and monitor this nest. SST or their agent will consult with park biologists prior to working in the area. Construction activities and human presence may be limited if the nest is active.
 - o There will be no disturbance closer than 1,000 feet to the heron colony during 1 March through 1 August. Construction activities may be stopped if activities appear to be impacting nesting herons. Park biologists will monitor the heronry throughout the summer to determine its occupancy. SST or their agent will consult with park biologists prior to working in the area.
- All contractors and employees will be trained and required to comply with the park's bear
 management plan during construction. All personnel will carry bear pepper spray when working
 in the project area. Food or other attractants will be stored and handled to minimize potential
 conflicts (i.e. no food, garbage, drink, trash, or food and drink containers are to be placed outside
 vehicles, trailers, or bear-resistant containers except during times when they are being used). No
 pets will be allowed at the site.
- All trash and recycling facilities will be of bear resistant design and stored in closed hard-sided trailers or vehicles.
- To minimize disturbance to elk and park visitors during the elk rut (September 15 October 15), noise-producing activities will stop at 5 p.m.
- Activity will be confined to the minimum area required for construction and stockpiling of support materials and equipment. No activity, including vehicle or material storage, will be allowed outside the predetermined staging areas.
- No tents or other overnight activities by construction contractors will be permitted at the construction sites.
- Construction activities will be scheduled to occur during daytime hours to the greatest extent possible to limit non-natural sound impacts on nocturnal wildlife in the area. Any work beyond daytime hours must be approved by the NPS.

- Construction work with heavy equipment will occur approximately between May 1 and September 30 to minimize impacts on wildlife during seasonal migration periods and to preserve quiet around major visitor destinations during the construction period.
- The storage, handling, and disposal of all hazardous material and waste will comply with applicable federal and state regulations. Provisions will be made for storage, containment, and disposal of hazardous materials used on site. Construction equipment will be checked frequently to identify and repair any leaks and will be staged in designed areas suitable to contain leaking materials. Trained personnel will clean-up and dispose of any leakage or spill from construction equipment such as hydraulic fluid, oil, or fuel. Fueling and fuel storage areas will be permitted only at approved locations and comply with park re-fueling guidelines.
- In an effort to avoid introduction of exotic plant species, no hay bales will be used. Hay often contains seed of undesirable or harmful alien plant species. Therefore, on a case-by-case basis the following materials may be used for any erosion control dams that may be necessary: rice straw, straws determined by NPS to be weed-free (e.g., Coors barley straw or Arizona winter wheat straw), cereal grain straw that has been fumigated to kill weed seed, and wood excelsior bales. Standard erosion control measures such as silt fences and/or sand bags will also be used to minimize any potential soil erosion.
- Silt fencing fabric will be inspected weekly or after every major storm. Accumulated sediments
 will be removed when the fabric is estimated to be approximately 75 percent full. Silt removal
 will be accomplished in such a way as to avoid introduction into any wetlands or flowing water
 bodies.
- Construction activities will be limited to designated areas when soils are excessively wet such that
 rutting will be caused by wheeled vehicles. Construction will take advantage of previously
 disturbed areas wherever possible.
- All water required from boring activities will be obtained off-site. If a NPS water source is required, contractor must work with NPS personnel.
- All mud or other waste from boring activities will be transported off-site to an approved dumping facility.
- All disturbed slopes will be revegetated with native species. Revegetation efforts will be to
 reconstruct the natural spacing, abundance, and diversity of native plant species. All disturbed
 areas will be restored as nearly as possible to pre-construction conditions shortly after installation
 activities are completed.
- When construction is ended prior to a winter season, all disturbed areas will be protected from snowmelt impacts by using erosion control best management practices and covering dirt piles with impermeable materials.
- Noxious weed control measures will be implemented and a management plan for continual
 maintenance will be drafted to monitor and mitigate impacts during the first three years following
 installation.
- The contractors will control dust during construction by minimizing soil exposure and watering or use of other dust prevention methods.
- Best management practices will be used during construction to mitigate impacts to resources.

CULTURAL RESOURCES

All actions that will take place, including mitigation, will only be implemented after sufficient
consultation with and clearance by the Wyoming State Historic Preservation Office (SHPO)
under §106 of the National Historic Preservation Act. This process ensures that the SHPO is
consulted and concurs with any action proposed, before action is taken.

- Should construction unearth previously undiscovered archaeological resources, work will be stopped in the area of any discovery, and the park will consult with the park archaeologist, state historic preservation officer/tribal historic preservation officer and the Advisory Council on Historic Preservation, as necessary, according to §36 CFR Part 800.13, Post Review Discoveries. In the unlikely event that human remains are discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (1990) will be followed.
- NPS will ensure that all contractors and subcontractors are informed of the penalties for illegally
 collecting artifacts or intentionally damaging archaeological sites or historic properties.
 Contractors and subcontractors will also be instructed on procedures to follow in case previously
 unknown archaeological resources are uncovered during construction. Equipment traffic will be
 minimized in the area of the site. Equipment and materials staging areas will also avoid known
 archaeological resources.
- NPS will ensure that the historic irrigation ditches are not harmed as a result of heavy equipment or material storage on-site.

SOCIAL RESOURCES

- All installation sites will remain clean of construction debris.
- Contractors will coordinate with NPS staff to reduce the potential for disruption of normal park
 activities. Traffic will not be stopped and equipment will not be stored along the roadway
 overnight without prior approval of park staff. Construction workers and supervisors will be
 informed about the special sensitivity of park values, regulations, and appropriate housekeeping.

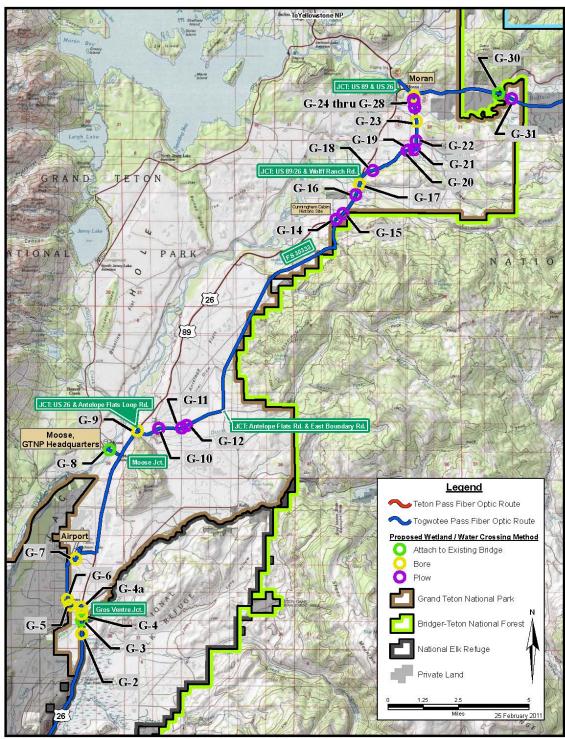
NOISE BMPs

- Noise that has the potential to disturb wildlife, livestock and private surface owners or neighbors should be controlled to reduce sound levels. Do not exceed noise levels of 55 decibels at a distance of one-quarter mile from installation activity. As directed by the local federal agencies involved, apply timing restrictions to reduce the impacts of construction, operations, noise, and human presence on raptor nest sites. When background noise exceeds 55dBA, noise levels will be no greater than 5dBA above background.
- Where technically and economically feasible, mitigate noise impacts by using muffling/suppression. All vehicles and construction equipment will be properly maintained to minimize exhaust emissions and will be properly muffled to minimize noise. Obtain muffling equipment on all engines that will reduce sound levels to reasonable minimums.
- Minimize construction traffic and design road use and travel pattern to keep construction traffic on site to a minimum and reduce noise impacts.
- Impose and enforce speed limits and provide driving guidelines for vehicle operators.
- Do not use horns, bells, or other noise-making devices on vehicles except where required for safety.
- Where noise impacts to existing sensitive receptors are an issue, noise levels will be required to
 be no greater than 55 decibels measured at a distance of one-quarter mile from the installation.
 When background noise exceeds 55dBA, noise levels will be no greater than 5dBA above
 background.

Attachment C

	WLCP fiber optic line within Grand Teton Nat	201101 1 01 11		
ID No.*	General Location and Description of Crossing	Proposed Crossing Method	Type of Water Feature	Length in Feet
	Attaching to an Existi	ng Bridge		
G-3	Crossing of Gros Ventre River on US 89/26	Attach to existing bridge	RIVER	311
G-8	Crossing of the Snake River on Teton Park Road / GTNP HQ- Crossing Snake River	Attach to existing bridge	RIVER	490
G-30	Crossing of the Buffalo Fork River along the US 26 ROW near Buffalo Valley Rd	Attach to existing bridge	RIVER WITHIN NWSRS	380
Total Feet of Steams Crossed by Attaching to Existing Bridges				
	Crossing Wetlands by Bori	ng Under T	hem	
G-2	Ditch crossing in the US 89/26 ROW just south of the Gros Ventre River near MP160	Bore	IRRIGATION DITCH	228
G-4	Ditch crossing in the US 89/26 ROW just north of the Gros Ventre River near MP161	Bore	IRRIGATIN DITCH	121
G-4a	Ditch crossing in the US 89/26 ROW just south of Gros Ventre Junction	Bore	IRRIGATION DITCH	76
G-5	Ditch crossing along Lower Gros Ventre Rd. near Spring Gulch Rd intersection	Bore	IRRIGATION DITCH	53
G-6	Ditch crossing along Spring Gulch Rd. north of Sagebrush Drive intersection	Bore	IRRIGATION DITCH	119
G-7	Ditch & associated wetland crossing along southeast side of airport near General Aviation parking	Bore	IRRIGATION DITCH	110
G-9	Crossing of Ditch Creek adjacent to existing Qwest crossing	Bore	CREEK	145
G-17	Crossing of Spread Creek in the US 89/26 ROW, south of MP 181	Bore	CREEK	401
G-23	Wetland crossing adjacent to Wolff Ranch Road	Bore	PALUSTRINE WETLAND	537
G-28	Crossing of the Buffalo Fork River near the LVE power line easement	Bore	RIVER WITHIN NWSRS	871
Total Feet of Water Features Crossed by Boring Under Them				

Table 1. C	ontinued.			
G-10	Creek bed and wetland crossing at Carpenter Draw along Antelope Flats Rd	Plow	DRY CREEK BED AND NARROW WETLAND	23
G-11	Ditch crossing along Antelope Flats Rd near Mormon Row	Plow	IRRIGATION DITCH	41
G-12	Ditch crossing along Antelope Flats Rd near Mormon Row	Plow	IRRIGATION DITCH	36
G-14	Wetland crossing in the US 89/26 ROW near the Historic Cunningham Cabin parking lot	Plow	ISOLATED ROADSIDE WETLAND	664
G-15	Wetland crossing in the US 89/26 ROW just north of the Historic Cunningham Cabin parking lot	Plow	ISOLATED ROADSIDE WETLAND	742
G-16	Ditch crossing in the US 89/26 ROW, north of MP 180	Plow	IRRIGATION DITCH	49
G-18	Wetland crossing adjacent to Wolff Ranch Road	Plow	WETLAND IN INTERMITENT DRAINAGE	51
G-19	Ditch crossing adjacent to Wolff Ranch Road	Plow	IRRIGATION DITCH	25
G-20	Ditch crossing adjacent to Wolff Ranch Road	Plow	IRRIGATION DITCH	18
G-21	Ditch crossing adjacent to Wolff Ranch Road	Plow	IRRIGATION DITCH	62
G-22	Ditch crossing adjacent to Wolff Ranch Road	Plow	IRRIGATION DITCH	48
G-24	Wetland crossing along LVE power line easement adjacent to Buffalo Fork River	Plow	ISOLATED PALUSTRINEM EADOW	165
G-25	Wetland crossing along LVE power line easement adjacent to Buffalo Fork River	Plow	ISOLATED PALUSTRINEM EADOW	41
G-26	Wetland crossing along LVE power line easement adjacent to Buffalo Fork River	Plow	SEASONALLY WET MEADOW	90
G-27	Wetland crossing along LVE power line easement adjacent to Buffalo Fork River	Plow	SEASONALLY WET MEADOW	162
G-31	Roadside area in US 26 ROW with wetland characteristics, east of the Buffalo Fork River Bridge	Plow	SEASONALLY WET MEADOW	4,917
Total Feet of Wetlands Crossed Using a Toothed-Plow				7,134
*See Asso	ciated Figures for detailed locations			



Wetland / Water Crossings within Grand Teton National Park for the WLCP.

ERRATA SHEET SILVER STAR TELEPHONE COMPANY, INC. ENVIRONMENTAL ASSESSMENT OF THE WYOMING LOOP COMPLETION PROJECTS

The combination of the EA and the errata sheets form the complete and final record on which the FONSI is based.

CHANGES IN THE ENVIRONMENTAL ASSESSMENT TEXT

On pp. 3-15change line from: "There is a great blue heron colony of about 10+ herons located about 3 miles west of the southern terminus of that same proposed bore. The WYGFD classifies the great blue heron as a Species of Special Concern with a Native Species Status of 4 because its habitat is restricted and vulnerable" to "There is a great blue heronry with 10 or more herons located about less than one mile west of the southern terminus of that same proposed bore. The WYGFD classifies the great blue heron as a Species of Special Concern with a Native Species Status of 4 because its habitat is restricted and vulnerable."

On pp. 4-12change line from: "Similarly, herons are very sensitive to disturbance by humans and by foraging eagles. There will be no disturbance closer than about 3 miles to the heron colony located to the west of the proposed construction activities so no adverse impact to this species is anticipated," to "Similarly, herons are very sensitive to disturbance by humans and by foraging eagles. There will be no disturbance closer than one mile to the heron colony located to the west of the proposed construction activities so no adverse impact to this species is anticipated."