



United States
Department of
Agriculture

Forest
Service

Coronado National Forest
Supervisor's Office

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File Code: 2320/2720

Date: December 22, 2011

George Barnes
City Manager
City of Tombstone
613 E. Allen Street
P.O. Box 339
Tombstone, AZ 85635

**CERTIFIED MAIL – RETURN
RECEIPT REQUESTED
NUMBER: 7008183000002515879**

Dear George Barnes:

This letter authorizes the City of Tombstone to use mechanized and motorized equipment within the Miller Peak Wilderness per the conditions that are outlined below and within the attached Required Specifications document. I want to emphasize that this addresses only the immediate work necessary on the Gardner Spring system, as well as the stabilization and rehabilitation work required as a result of all of the work within the Miller Creek drainage. Any additional work needed will require additional analysis and specific authorization as appropriate.

Repairs to the Gardner Spring portion of the Tombstone water system will consist of reconstructing a catchment basin by hand at Gardner Spring, approximately 6 feet by 10 feet in size, and installing a 4 inch pipe, starting at the catchment basin and continuing approximately 3000 feet to the existing Miller Spring catchment. A mini-excavator will be used to bury the pipe along the west side of the Miller Creek Trail. Approximately 3000 feet of pipe will be installed. Total acreage impact of the project is approximately 3 acres.

Approved mechanized and mechanical work within Miller Peak Wilderness as follows:

Four inch pipe will be buried along the Miller Creek Trail, from the point where the pipeline from the Gardner Spring catchment basin intersects the Miller Creek Trail to the existing Miller Spring catchment where it would tie to the 7 inch main aqueduct portion of the system. A mini excavator will be used to dig the trench for the pipeline along the trail, bury the pipe, and rehabilitate the trail. Remaining repairs, including reconstruction of the catchment basin, and installation of the pipeline from the catchment basin to where it intersects the existing trail, will be completed by hand.

The City of Tombstone will be required to follow all applicable mitigation measures for wildlife, rare plants and heritage resources outlined in the Minimum Requirements Decision Guide (MRDG) and/or included as part of the required specifications provided with the authorization, including the road and trail drainage and stabilization specifications, which will be attached to and be made part of the authorization.



2. Equipment Authorized

- * One mini-excavator, up to a JD60 or equivalent.
- * Gas cutoff saw.
- * Chain saw.
- * 4x4 pickups and flatbed trucks, as far as the 1st crossing, as authorized in previous action.
- * 48" ATV or UTV.
- * 1 Generator.
- * Assorted hand tools.

(If other equipment is needed, please contact Sierra Vista District Ranger for approval.)

Refer to the attached Required Specifications for additional details on the specific actions and standards required per this authorization.

Workers shall carry a signed copy of this authorization at all times while working in the Miller Creek project area.

As to the next steps needed to continue to address maintenance and repair needs for the spring areas under special use permit, we will await further communication from you regarding your next proposal. As previously discussed, we will need substantially more lead time than we have had for the Miller and Gardner Spring work. It would also help our planning as well as that of the City of Tombstone, to consider the remaining work in one proposal, rather than one spring at a time. While we understand that sometimes it is impossible to anticipate everything that will be encountered in a project such as this, to the extent possible, please give careful consideration to all the work that you anticipate needing to do in each area when developing a proposal, so that we can avoid future delays and frustrations.

The existing authorization will need to be updated and reissued, accounting for the changes that have occurred since the issuance of the 1962 special use permit. We will be in communication with you regarding the process for reissuance of an updated special use permit.

If there are any questions, please contact Kathleen Nelson or Duane Bennett at Sierra Vista Ranger District 520-378-0519

Sincerely,

/s/ Rick Gerhart
JIM UPCHURCH
Forest Supervisor

cc: Francisco Valenzuela, Diane Taliaferro, Duane A Bennett, Glenn P Frederick

Required specifications for City of Tombstone water system repairs at Gardner Spring

The City of Tombstone is authorized to conduct repairs to that portion of their water system connected with Gardner Spring in the Miller Creek Wilderness. The following outlines the details of the work authorized, including specifications for the repairs and post-repair stabilization and rehabilitation, as well as mitigating measures required for protection of Wilderness, wildlife, and other values.

In summary, Tombstone would install a new 4 inch plastic (HDPE) water pipe, starting at the collection structure and continuing approximately 3000 feet to the existing Miller Spring catchment where it would tie to the 7 inch main aqueduct portion of the system.

This process would involve using a mini-excavator (John Deere 60 or smaller) to access and excavate a shallow trench approximately 2 feet in depth along the west side of the mostly intact access trail located on the west bank of the flow path.

A head wall up to 4 feet in height would be built approximately 10 feet below the spring head. The head wall would be constructed with sand bags or may be made of loose rocks gathered from the stream bed. A pond approximately six feet wide and ten feet long would be hand dug approximately one to two feet deep to remove any debris. The side walls would be made of earth, rocks and sand bags. The entire pond would be lined with native rocks. The catchment basin may be covered with a temporary lid made of expanded steel or 60 mil plastic. If it is covered such that wildlife would no longer have access to the water, a replacement open water source for wildlife would be constructed off the pipeline prior to covering the Gardner Spring catchment. The Forest Service would design the facility in consultation with the City of Tombstone, U.S. Fish and Wildlife Service, and Arizona Game and Fish Department. It would be constructed and maintained by the City of Tombstone. In addition, the area around the spring catchment maybe fenced if necessary for protection of the municipal water supply. Fence design would be developed in consultation with Forest Service staff.

The 4 inch pipe issuing from the catchment basin would travel at a slight downhill grade, exposed along the west bank for approximately 200 feet until it intercepts the existing system trail. This section would be installed with hand labor. Upon intercepting the trail, the pipe would be buried along the inside edge of the trail.

Where the pipe would cross Miller Creek, a 12 inch steel culvert would be installed to sleeve and protect the HDPE pipe for a distance of up to 200 feet. The pipe would continue along the system trail, buried to the Miller Spring collection site, where it would terminate into the 7 inch main aqueduct.

Other tools and equipment that may be used include a generator, a gas powered cut off saw, a chain saw, a UTV or ATV and a variety of shovels, rakes, picks and digging bars. Pickup trucks and flatbed trucks may be used as far up as the first crossing of Miller Creek. Disturbance, including vegetation removal, would be limited to the minimum amount necessary to complete the repair work.

The existing nonfunctional pipe would be removed where it is accessible, i.e. not buried under debris.

Road and trail surfaces disturbed by Tombstone while making repairs to their water system would be stabilized and partially rehabilitated, as per the following specifications. The road from the western private land boundary to the historic reservoir at Miller Spring would be reduced to a 12-foot width by shifting the roadway toward the cutslope-side of the existing roadway and scarifying the unused previously disturbed area at the fillslope-side of the road. All existing corrugated metal drainage pipes would be crushed and/or abandoned in place, with at least one foot of cover over them. The road would have broad-based grade dips installed at no greater than 115-foot intervals, center to center, and as otherwise described in the following publication (Low Volume Roads Engineering Best Management Practices, by Keller and Sherar, July 2003 – available online). All road surfaces would be outsloped at approximately 6 percent throughout the length of the road. No earthen or rock berm would remain along the outside (fill side) edge of the road.

The access route that Tombstone built from the existing road into the historic reservoir, and the south side of the creek where material was moved, adjacent to the reservoir, would be scarified parallel to contour (most easily done with a mini excavator). If the disturbed area extends farther than 20-feet down-grade, it would be waterbarred across the face of the disturbed area at intervals not exceeding 20 feet. Weed-free straw wattles may be used in lieu of waterbars if properly staked and installed and left to decompose.

The road area where the trail and pipeline crosses Miller Creek (just above Miller Spring) will have an allowable disturbance limit of 25 feet in width to allow for burying the pipe in this section. All spoil material shall be recontoured at the conclusion of work so that the waterline crossing resembles an eight foot wide trail. The elevation of the finished trail in this creek crossing shall be at-grade with the creekbed as much as possible. No drainage treatment is required or desired at this trail crossing of the creekbed, other than ensuring that no berm exists along either side of the trail which would channelize water along the finished trail surface.

Just above the crossing, the trail area located in the stream channel, up against the southern bank of Miller Creek shall have a maximum disturbance width of 20 feet during construction, limited to the already disturbed creekbed area, i.e. no side-hill excavation. The final disposition of this portion of the trail area shall be a trail tread of eight feet in width, up against the southern bank of the creek. In all other respects the trail in this area shall be treated as the remainder of the trail.

Following installation of the pipeline, the Miller Canyon Trail above the Miller Creek crossing would be restored to a width closely matching its pre-disturbance dimensions. During access and installation of the waterline along the Miller Canyon Trail above the Miller Creek crossing, material excavated shall remain on the trail, and shall not be side-cast. After installation of the waterline a waterbar shall be installed every 60 feet along the trail centerline, constructed as per the Keller and Sherar publication reference above. All surface expression of the excavation and backfill associated with the waterline installation shall be 'dressed' such that a casual observer would not suspect a utility lies below, including shaping the cut-slope for a natural appearance. Broad-based grade dips would be installed at locations where significant side drainages enter the trail in order to prohibit water from running down the trail. Any boulders requiring removal from the trail for passage of equipment or installation of the waterline shall be 'keyed in' to the fill slope of the trail, such that the boulder will durably shore up the trail edge. The finished trail tread shall contain no loose rock greater than three inches in average diameter.

Care shall be exercised during all phases of the project to not damage live trees over 4 inches in diameter at chest height, and to minimize the amount of vegetation and ground disturbance to the extent possible.

Only those signs required by Arizona Department of Environmental Quality pertaining to protection of water sources may be posted.

Implementation plan

Start ASAP running consecutive after Miller Springs infiltration basins are complete. All mechanized work to be completed as quickly as possible, but no later than March 1st, to protect spotted owl nesting activity.

A closure will be implemented from 100 feet west of the Hunter trail to ¼ mile west of Gardner Spring, to provide for the safety of the public as well as work crews.