

Memorandum

To: Rebecca Neri Zagal
From: David Chapman, Stratus Consulting Inc.
Date: 1/24/2007
Subject: Anderson Ranch Habitat Preservation

Project Overview

Anderson Ranch, located near Sunshine Valley, is an important groundwater-fed wetland site owned by Molycorp. The site is used heavily by wildlife, especially waterfowl. The land is currently grazed informally (i.e., without written Molycorp permission) and is at risk of future development. This project would involve acquiring a conservation easement to protect approximately 225 acres of open water, marsh, and upland habitat. Preservation of this property would protect this habitat in perpetuity for wildlife.

Site Description

The Anderson Ranch property was purchased by Molycorp is approximately 1970; groundwater rights were then transferred to the Molycorp mill. Before its purchase by Molycorp, the area was irrigated and used for hay production. Currently, the marsh habitat area comprises approximately 122 acres located in the north central portion of the ranch. There are several areas of open water, approximately two feet deep and surrounded by a dike, that total approximately 1.3 acres. The entire ranch parcel is 1,260 acres.

Anderson Ranch includes an assemblage of important bird and wildlife habitats, including locally rare shallow-water wetlands. The site has stayed wet even during drought conditions. Emergent cattails are present throughout the wetland area. The drier sections of the property contain sagebrush. Many varieties of birds, often present in large numbers, have been observed on the property. The area may have rare birds nesting, including the possibility of a snipe nest. Anderson Ranch is also part of a migration corridor for elk.

Project Implementation

Project actions would include establishing a conservation easement and preservation plan to actively manage the property. Cattle grazing would be eliminated from open-water and marshy areas of the site and would be carefully managed in the upland habitat. Public access would also be managed carefully, possibly allowing for specific designated uses such as bird-watching. The specific details of land ownership and/or management need to be determined.

Administrative Process

Implementation of the project would be a joint process between Molycorp and the Trustees. The property is owned by Molycorp but preservation actions may involve a transfer of ownership or creation of an easement to a conservation organization. Permits and administrative processes that may be required include:

- ▶ Compliance with the Clean Water Act Section 404
- ▶ Local permits.

Operations, Maintenance, and Monitoring

This project is not expected to require significant ongoing maintenance activities. However, the project would need to be managed actively to control public access for designated uses and ensure that cattle are not grazing sensitive areas. The degree of required management will depend on the specific terms of public access and grazing.

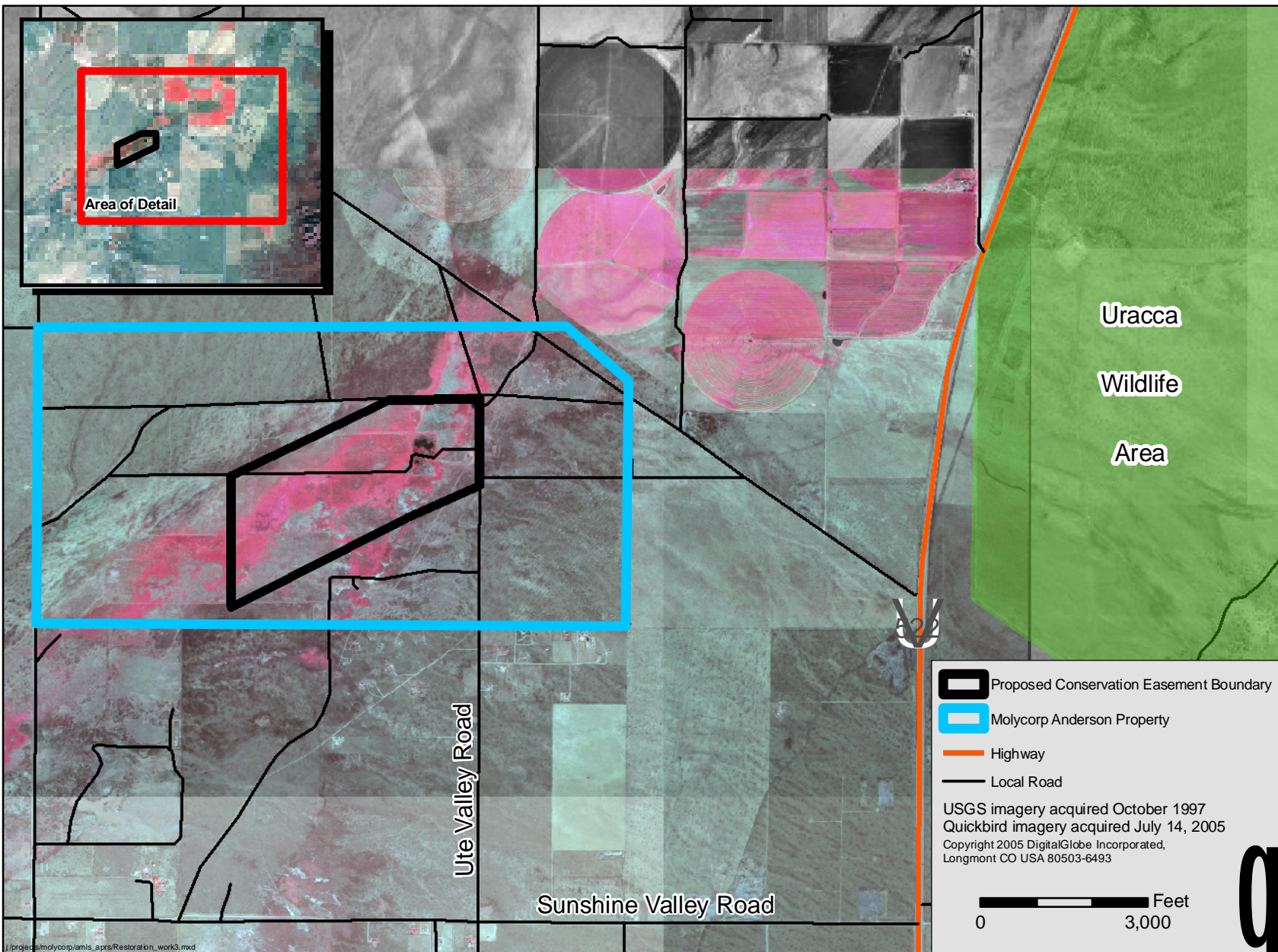
A long-term monitoring and management plan would be developed to ensure that the project is meeting restoration goals. Monitoring would likely include metrics such as estimates of vegetation cover and diversity in the different habitats, monitoring of water quality, bird and wildlife surveys, as well as long-term photographic monitoring. Baseline data would be collected before project initiation.





Benefits

Wetland habitats provide many benefits and are designated as a primary focus of the US Fish and Wildlife Partners for Fish and Wildlife Program activities in New Mexico. In addition to providing habitat for many species, wetlands also improve water quality, are important in nutrient cycling, control sediment, and provide water storage. According to the USGS, New Mexico has lost about one-third of its wetlands, mainly from agricultural conversion, diversion of water to irrigation, overgrazing, and urbanization (USGS, 2005). This type of ecosystem is very unique in New Mexico and provides much needed habitat for a variety of wetland vegetation, amphibians, and birds. It is especially important as resting habitat for migrating birds. The protection of diverse habitats (open-water, marshy, and upland) would provide a variety of benefits to multiple species and increase the value of the project as a whole.


Reference

USGS. 2005. National Water Summary on Wetland Resources. United States Geological Survey Water Supply Paper 2425. Available http://water.usgs.gov/nwsum/WSP2425/state_highlights_summary.html. Accessed September 9, 2005.

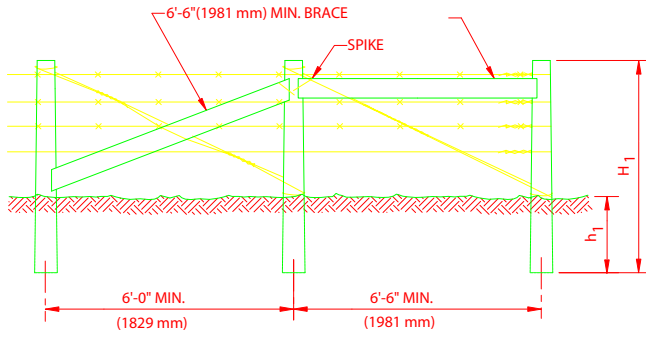


 Proposed Conservation Easement Boundary
 MolyCorp Anderson Property
 Highway
 Local Road

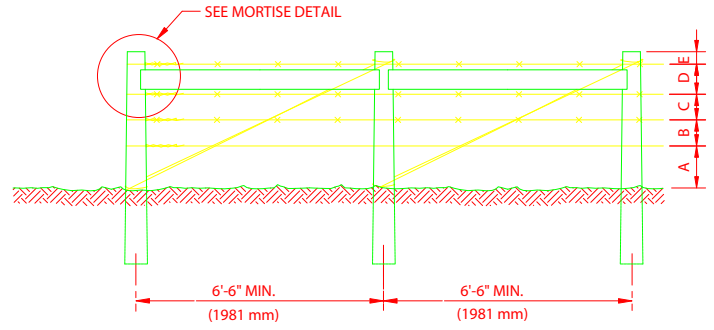
USGS imagery acquired October 1997
 Quickbird imagery acquired July 14, 2005
 Copyright 2005 DigitalGlobe Incorporated,
 Longmont CO USA 80503-6493

 Feet
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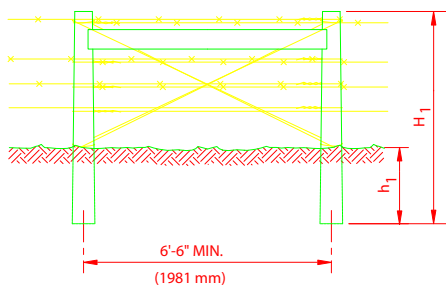
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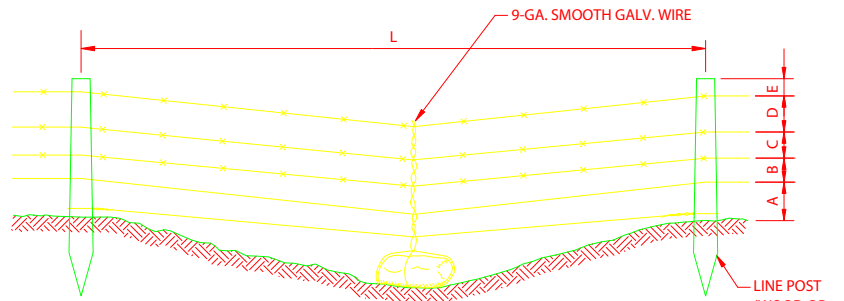
END PANEL-TYPE I



END PANEL-TYPE II

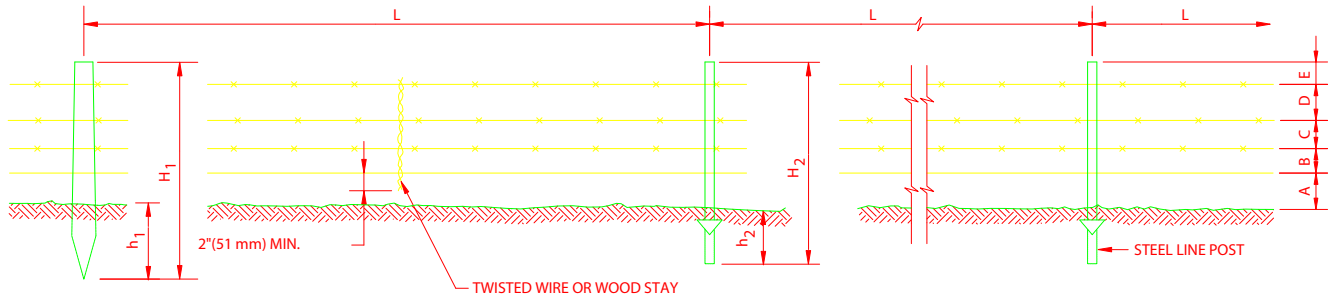


STRESS PANEL

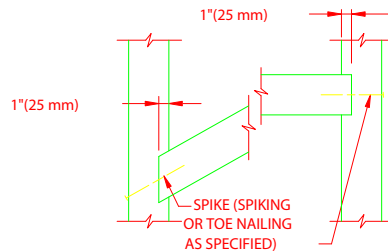


ADD ADDITIONAL WIRE OF THE SAME MATERIAL AS BOTTOM WIRE OF FENCE & A ROCK DEADMAN (MIN. WEIGHT 50 LBS (22.5 kg)) WHEN SPACE BETWEEN BOTTOM WIRE & GROUND EXCEED 20" (508 mm)

PANEL AT MINOR DEPRESSION



LINE PANELS



MORTISE DETAIL

NOTES:

1. SEE SPECIFICATIONS FOR THE FOLLOWING:
 - A. RATIO OF STEEL TO WOOD LINE POSTS.
 - B. POST SPACING, LENGTH & DEPTH IN GROUND.
 - C. TYPE OF END PANEL TO BE USED.
 - D. TYPE OF WIRE TO BE USED.
 - E. SPACING BETWEEN WIRES.
 - F. NUMBER OF STAYS PER SPAN (L).

2. THE METRIC CONVERSIONS ARE PROVIDED IN PARENTHESIS FOLLOWING THE ENGLISH UNITS.