

**OPEN SPACE ADVISORY COMMITTEE
STAFF REPORT**

MEETING DATE: December 19, 2016

AGENDA ITEM NUMBER: 3A

STAFF: Ann Bollinger, Open Space Administrator
John Ranlett, Regional Biologist, Ducks Unlimited

REQUEST: Presentation and discussion only on the wetlands enhancement project at the old Buzzy's Ranch property by Mr. John Ranlett with Ducks Unlimited

GENERAL DISCUSSION: Ducks Unlimited was awarded a grant from the North American Wetlands Conservation Act for several projects throughout the Carson River watershed. One project included wetlands enhancements at the old Buzzy's Ranch property.

The planning began in late 2014 which included a meeting with the ranch operator (Mick Andersen) and the Natural Resources Conservation Service (NRCS). In October 2015, Ducks Unlimited visited the property to conduct surveys and collect topography data.

The project construction started on November 2, 2016, and depending upon weather conditions, it is anticipated that the project will be completed by mid-December 2016. Attached, please find the project site plans as provided and submitted to Open Space staff on November 1, 2016.

Mr. John Ranlett with Ducks Unlimited will be presenting the project updates at this meeting.

RECOMMENDED ACTION: This agenda item is for informational purposes only. No formal action can be taken at this time.

Buzzy's Ranch Wetland Enhancement Project

Regional Context

- Great Basin wetlands such as those in Carson and Lahontan valleys provide continentally important spring migration stopover areas for waterfowl, shorebirds, and other waterbirds to feed and rest before continuing their migration journeys to their breeding grounds in the Prairie Pothole Region of the Dakotas and prairie Canada, the western Boreal Forest Region of western Canada and Alaska, and the high Arctic.
- Floodplain wetlands such as those at Buzzy's Ranch fall into this category, and besides providing important cattle pasture and open space, support a wide variety of wetland-associated wildlife.
- DU regularly works with ranchers to help improve their flood irrigation infrastructure so that ranchers can keep irrigating to benefit their ranching operation while simultaneously providing important wildlife habitat across the nation.
- Funding for the Buzzy's Ranch project comes from a North American Wetlands Conservation Act (NAWCA) grant recently awarded to DU, and made possible in part through leveraging Carson City Department of Parks, Recreation, and Open Space (CCDPROS) funds recently expended on the purchase of Carson River Canyon Open Space properties.
- DU is currently involved in similar wetland enhancement projects in the Carson and Lahontan valleys of northern Nevada as well as in northeast California, southern Oregon, eastern Washington, and Idaho.

Project Background:

- CCDPROS purchased the Buzzy's Ranch property to protect agricultural open space and keep the land from being subdivided and developed into residential and other uses.
- Current land uses of the property include livestock grazing on irrigated pasture, wetland/wildlife habitat, and open space.
- The property is being grazed under a lease agreement between CCDPROS and Mickey Andersen, former owner of a portion of the overall property.
- Irrigation water originates in the Carson River at the Mexican Dam, with water diverted into the Mexican Ditch; irrigation water flows onto the Buzzy's Ranch property through turnouts in the Mexican Ditch which feed ditches on the property; sub-irrigation water and tail-water also flow onto the property.
- The flood-irrigated pastures on Buzzy's Ranch support livestock grazing and provide habitat for wetland-dependent birds.
- The irrigation system suffers from dilapidated water delivery and drainage infrastructure including eroded berms, non-functional water control structures, and silted ditches which cause inefficient water management practices that reduce the production of the wet meadow pasture and habitat.
- Mr. Andersen and his family have ranched on the property for many years, and Mr. Andersen is able to manage irrigated pastures adequate to the needs of his cattle. However, rehabilitation of infrastructure now will benefit Mr. Andersen, CCDPROS, and future lessees of the property.

- With the foregoing in mind Ducks Unlimited worked with CCDPROS to secure grant funding to reconstruct the irrigation system so that CCDPROS, Mr. Andersen, and future grazing lessees would have an improved irrigation system with which to manage the flood-irrigated habitats on the site for the benefit of both cattle and wetland-associated wildlife.

Nature of Activity:

The project will enhance the site's flood-irrigated pasture and wetland habitat by improving water delivery to and drainage capabilities of the wet meadow pastures on the property.

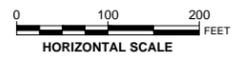
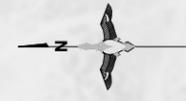
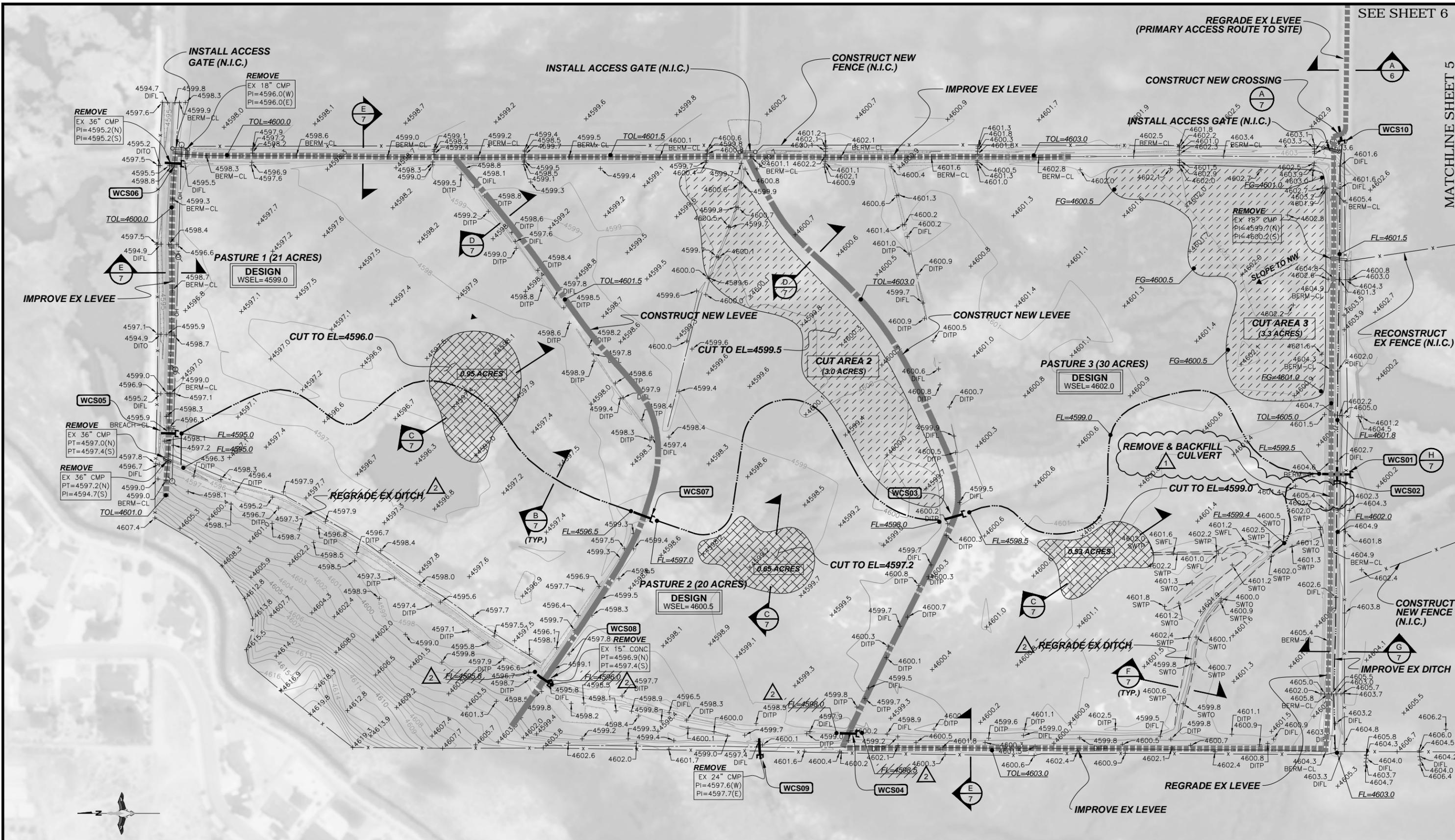
Specific project activities include:

- constructing two low levees/berms to divide the pasture into three more manageable and easier to irrigate sub-units;
- regrading and improving three existing perimeter low levees/berms for improved water management and site access;
- excavating three new potholes and swales to provide dirt for berm construction and also to improve habitat;
- replacing five rusted culverts with new water control structures (WCSs) and installing four additional WCSs to improve water management capabilities;
- re-grading the flowline of several ditches to improve water conveyance;
- placing riprap to reduce erosive force of irrigation water as it flows onto the site from the Mexican Ditch;
- and constructing perimeter pasture fence to improve pasture management and livestock utilization of the site.

Project Outcomes:

- Project construction will result in improved ability to deliver irrigation water and spread it across the entirety of the wet meadow pastures.
- New berms and WCSs will allow improved irrigation of each pasture, and movement of irrigation water from pasture to pasture, and drainage of water from the site which will improve the ability of ranchers to grow pasture grasses.
- New perimeter fencing will allow improved cattle management and pasture management.
- Constructed swales and potholes, which provided the soil needed to construct project improvements, were designed to improve wetland habitat that will support species such as mallard, gadwall, cinnamon teal, white-faced ibis, sora and Virginia's rail, sandhill cranes, Wilson's snipe, marsh wren, yellow-headed blackbirds and other wetland associated species that regularly utilize the wet meadow pastures on the site.

In the end, CCDPROS will have a site with reconstructed flood-irrigation infrastructure with which it, current, and future lessees of the property can manage the property's flood-irrigated pastures and wetlands.



GRADING NOTES:

- ALL CUT/BORROW AREAS SHALL BE GRADED WITH A 5:1 DAYLIGHT SLOPE TO EXISTING GROUND, AROUND THE ENTIRE PERIMETER OF THE CUT/BORROW AREA.
- CUT AREA 2 SHALL BE CUT TO A FLAT GRADE AS SHOWN ON THE PLANS.
- CUT AREAS 1 AND 3 WILL HAVE A MINOR VARYING SLOPE TO THE NW. GRADE TO ELEVATIONS SHOWN ON THE PLANS.

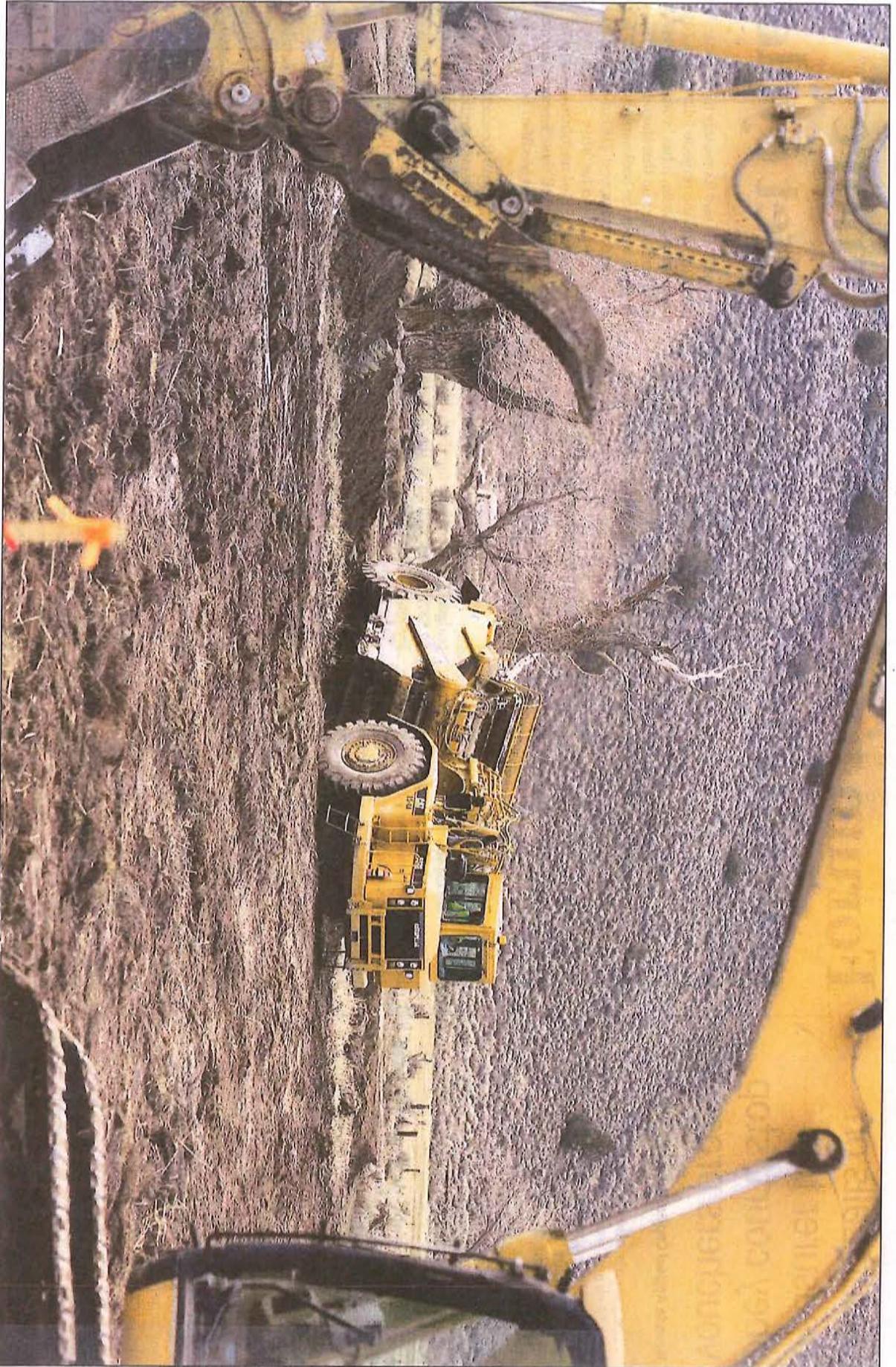
| REV. NO. | DESCRIPTION | DATE | APPROVED |
|----------|------------------------------------|------------|----------|
| 1 | REDUCE DITCH REGRADE; REMOVE WCS11 | 10/18/2016 | VT |
| 2 | REMOVE CULVERT | 10/12/2016 | VT |



CONSTRUCTION SET

| | | |
|--|-------------------------|-------------------------|
| PROJECT NO. US-NV-33-7 | DATE: 10/18/2016 | DESIGNED BY: JR |
| BUZZY'S RANCH PROJECT | | |
| WETLAND RESTORATION / ENHANCEMENT | | |
| DRAWN BY: JM | CHECKED BY: VT | SHEET NO. 4 of 7 |

Unauthorized Changes & Uses
 The engineer preparing these plans will not be responsible for, or liable for, unauthorized changes to or uses of these plans. All changes must be in writing and must be approved by the preparer of these plans.



A wetlands restoration project is underway at Buzzy's Ranch.

Mighty Ducks (Unlimited) project underway

By Anne Knowles
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Those backhoes visible from Buzzy's Ranch and Carson River roads, working on Carson City open space land, are building berms not houses. Ducks Unlimited, the 80-year-old waterfowl conservation organization, is conducting a wetlands

enhancement project on about 125 acres there.

The work started Nov. 1 and should be completed in two weeks, said John Ranlett, regional biologist, intermountain west, Ducks Unlimited. The property is being excavated to rebuild two washed-out berms and a swale that meanders across three pastures.

In addition, five new and five replaced water control structure flashboard risers are being installed as is a perimeter fence to better manage grazing of the site. When that's done, the berms and land will be revegetated. All that will enable the three pastures to be irrigated separately, provide better drainage, and improve the

wildlife habitat. The area is home to Canada geese, yellow-headed black birds, ducks, marsh wren, white-faced ibis, sandhill cranes and Virginia rails. "They're a secretive marsh bird. They like to hide in the weeds, but you can hear them," said Ranlett. Mule deer, coyote and the occasional mountain

lion roam there, too, said Ann Bollinger, open space administrator, Carson City Parks, Recreation and Open Space department. The \$250,000 project is one of 11 projects Ducks Unlimited is doing throughout the Carson and Walker river water basins.

It's funded by a \$1 million North American Wetlands Conservation Act grant made possible by a match from some funding the city got to acquire what's now the Morgan Mill Preserve Open Space off Deer Run Road.

PROJECT, A5

PROJECT

From page A4

Design work started in late 2014 and took more than a year in part because Michael Andersen, who runs cattle there, was concerned he might lose grazing land.

"Once we worked through it with him he was in favor of the project," said Ranlett.

The project went out to bid in July and was awarded to Coons Construction after 14 contractors visited the site and three to four bid on it, said Ranlett. Before starting construction, cows were let on the site to help eat

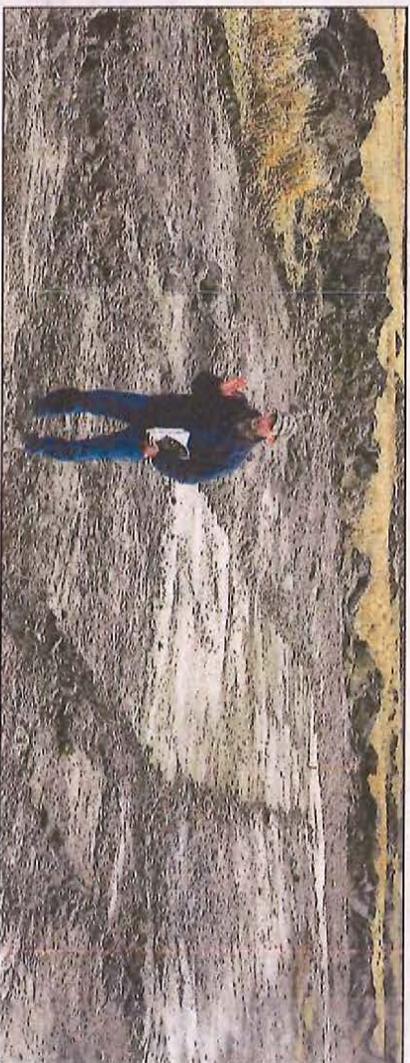
up the vegetation that was going to be removed anyway.

"You want to put dirt on bare dirt," to build the berms, said Ranlett.

The total 45-acre property known as Buzzy's Ranch was acquired by the city for open space in two separate purchases.

In 2007, 86 acres was bought from the Andersen Trust and in 2010 another 369 acres was purchased from James Jarrard.

As part of the purchase, the sellers retained the water rights and full access for ranching so the property is Carson City open space, but not open to the public.



Ducks Unlimited regional biologist John Ranlett describes a wetlands restoration project on Monday at Buzzy's Ranch.

JIM GRANT/NEVADA APPEAL