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DEPARTMENT OF UTILITY SERVICES



“NOT IN MY BACK YARD!”

**An innovative community outreach program for a new
water reclamation facility**

Kathleen Richards, City of Henderson, Nevada



The Context - City of Henderson

- Active bedroom community experiencing double-digit annual growth, approaching 270,000 residents
- Historically a leader in water reclamation
- Currently reuse 34% of our wastewater
 - Up to 100% in peak demand summer months
- Water reclamation essential component to Southern Nevada's water resource portfolio

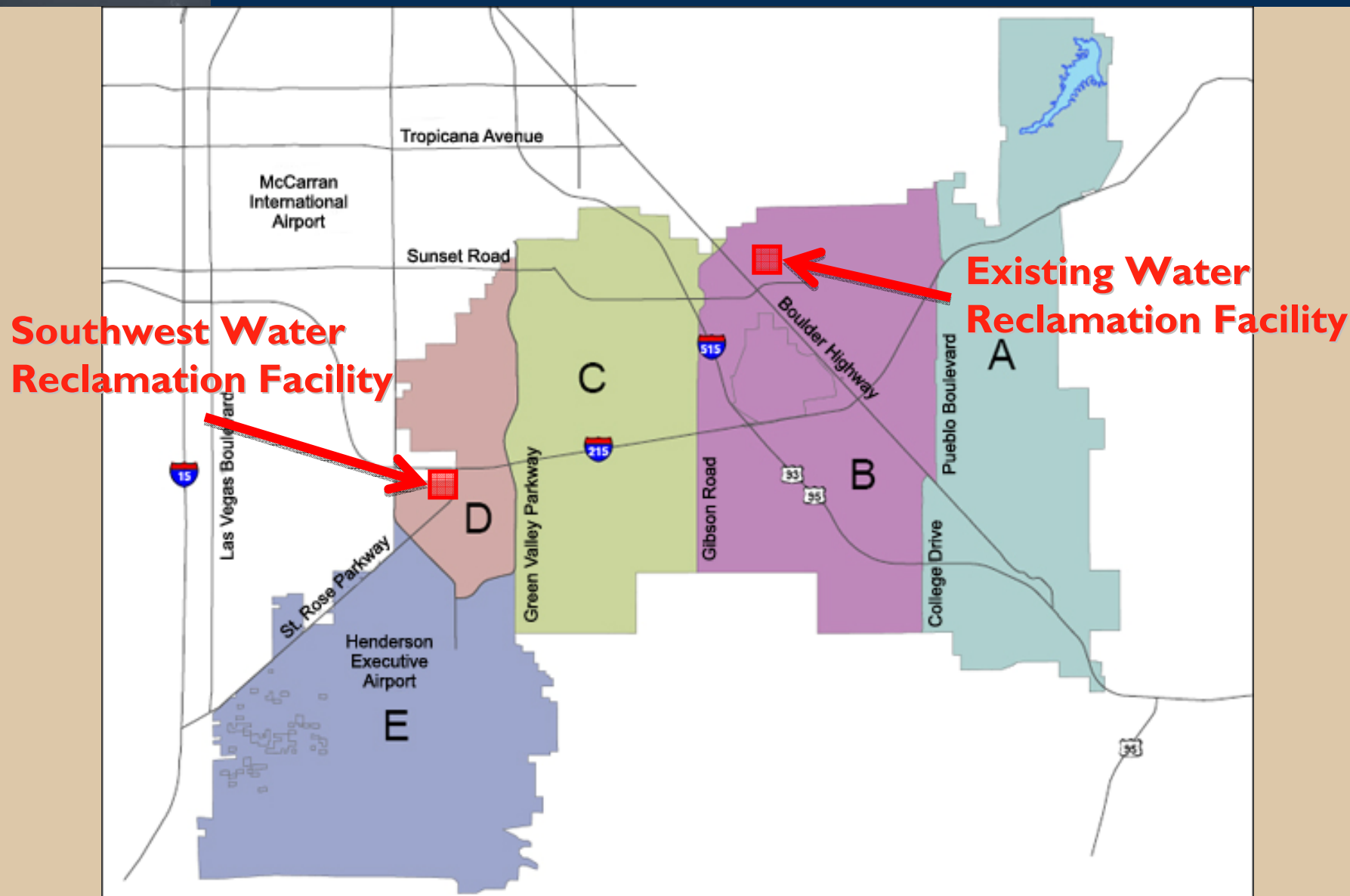


Project History

- 2000 – Determined a need for a satellite water reclamation facility
 - 8 MGD expandable to 16 MGD; membrane bioreactor technology
- 2002 – Site selected from 48 alternatives based on weighted criteria
 - Best site located adjacent to rural preservation district, a politically active neighborhood
- 2003 – Formed the Neighborhood Advisory Committee



City of Henderson Environs





Project Site





Community Outreach Program

- Twelve Neighborhood Advisory Committee meetings between July 2003 and August 2007
 - Develop meaningful and production partnership with the community
 - Inform community about the water reclamation process
 - Maintain open and honest communication
 - Document and address neighbor concerns
 - Gain neighbor input on project characteristics
 - Gain project acceptance



Tours of Similar Facilities





Printed Materials

Facts about the...

July 2002

Facts about...

March 2007

The Southwest Water Reclamation Facility

Dear Neighbor:

We are pleased to send you this update on the progress of the City of Henderson's Southwest Water Reclamation Facility, which will break ground in your area in the coming months. Thank you to all who have participated in the planning and design of this important community facility. We are pleased with how this project has developed, and look forward to continued interaction with our neighbors.

SWRF History

The Henderson Southwest Water Reclamation Facility has been in the planning, design and engineering phases since 2003. Concurrent with that effort, a Neighborhood Advisory Committee has worked to develop the landscape and amenities that will occupy a large portion of the site. Their input has been important in creating a facility that will be a good neighbor and provide attractive benefits to the surrounding community.

The Coming Months

Work will begin at the site in late May. Site grading will proceed first, including the construction of a landscape berm to screen the neighborhood from the treatment facility. This is also the first step in the placement of landscape materials. The entire outside landscape of the site will be completed prior to the construction of the facility itself, helping to minimize the impact of that construction on those who live near the site.

During this first phase, there will be considerable activity on the site that will be visible to neighbors. To help minimize the impact on those who live and work close to the site, the City intends to do the following:

- Site work during this phase will be limited to the hours between 6:00 a.m. and 6:00 p.m. This includes all construction and equipment maintenance activities.
- Dust control permits will be strictly followed, with water tanks and trucks on site to keep dust levels down.
- During the entire construction period, a web site will be maintained to track progress and give detailed information about the project.
- Community meetings will be held as needed during construction to address questions and gather input from our neighbors.
- A direct contact will be available throughout the project construction for your questions or concerns.

Following the first phase of landscape and site work, construction on the facility will begin in late December 2007, with the reclaimed pipeline construction scheduled to begin in the 2nd quarter of 2008.



An aerial view of the property where the Southwest Water Reclamation Facility will be built.



Community members and City staff in an open house to discuss the project in the Serene Country Estates.



ELECTRICAL POWER CONDUIT INSTALLATION SOUTHWEST WATER RECLAMATION FACILITY

What's happening in your neighborhood

The Department of Utility Services' mission is to provide vital water and wastewater services to our citizens while protecting the environment, health and prosperity of our community.

Construction through this area will begin by the end of January and will be completed in approximately four weeks.

Work will be conducted Monday through Friday between the hours of 6:00 a.m. and 6:00 p.m.

For more information, please contact Kathleen Richards at 267-2500 or kathleen.richards@cityofhenderson.com.

The City of Henderson's Department of Utility Services provides your water and sewer services. To increase our sewer system's capacity and improve our ability to recycle our community's wastewater resources, we are constructing the Southwest Water Reclamation Facility (SWRF) on St. Rose Parkway just west of Coronado Center Drive. As part of that project, the City's contractor will be installing conduit (basically pipe) on behalf of the power company, who will use that conduit to install their power cables.

Why is this project necessary?

We must provide two separate and reliable electrical power sources to serve the SWRF. This project is the installation of our connection to one of those power sources.

What will be happening?

The contractor is going to dig a narrow trench along the edge of Carnegie Street, turn north along Cozy Hill Circle, turn west along the Armagosa Corridor between Cozy Hill Circle and Coronado Center Drive, then north along Coronado Center and across St. Rose Parkway (see map below). The contractor will fill the trench as the conduit is installed, and cover any open holes each night with metal plating. Construction through this area should be completed in approximately four weeks.

How will this construction affect you?

The road shoulder and adjacent sidewalk will be closed for short intervals. The roadway will remain open to vehicles in both directions.





Project Website

Utility Services - New Page - Windows Internet Explorer
http://www.cityofhenderson.com/utility_services/swrf.php

File Edit View Favorites Tools Help

Utility Services - New Page

City of Henderson Nevada

GOVERNMENT RESIDENTS VISITORS BUSINESS Text Size: A A A

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Utility Services

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- Frequently Asked Questions
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Adobe® Reader® is required to view PDF files.

Utility Services

Southwest Water Reclamation Facility (SWRF)

Project History

In 1999, the City recognized the need for a satellite water reclamation facility to support the community's increasing wastewater treatment demands, and provide better service to our reuse water customers. From that time to the present, the City has worked with neighbors, property owners, businesses, developers and consultants to develop a water reclamation facility that meets the needs of the Henderson community while providing a positive addition to the surrounding area.

Project Overview

Odors are always the first concern when residents learn that a water reclamation facility is planned for the area near their homes or businesses. Neighbors immediately think of massive, open wastewater treatment facilities where thousands of tons of sewage and solids are treated on a daily basis. The truth is, even large wastewater facilities have changed significantly over the years, and operate with few odors being detected in surrounding neighborhoods. This facility will be even better.

All treatment process facilities with the potential to emanate odors will be covered (indoors or underground) and treated for odors. The choice of odor control technology is granular activated carbon units. These units absorb the odors into carbon canisters which are replaced over time. This technology does not use any type of chemical.

The Southwest Water Reclamation Facility will employ membrane bioreactor (MBR) treatment technology to clean and highly treat wastewater primarily for reuse on Henderson golf courses. This process was selected because it will result in the highest quality end product, and provide the smallest building footprint to minimize the facility area. MBR also reduces both the number and required quantity of chemicals that must be utilized and stored on site.

Project Status

Construction on the facility will occur in four phases over a number of years.

- Phase I - construction of landscaped berm, site landscaping and entrance road
- Phase II - facility construction





Meetings and Workshops





Neighborhood Concerns

- Odors
- Noise
- Aesthetics
- Traffic
- Chemicals





Design Strategies

Stealth Strategy



Disguise Strategy



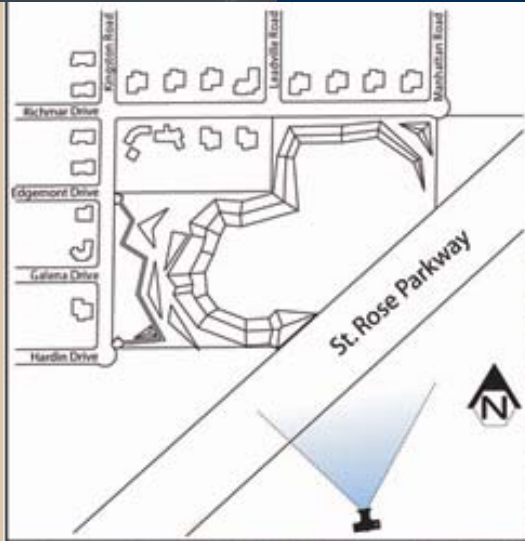


Process Boundaries

- NAC had considerable control over what the outside of the facility would look like
 - Selected design strategy of landscaped berms to shield the facility from neighborhood
- City and consulting engineers responsible for everything inside the berms

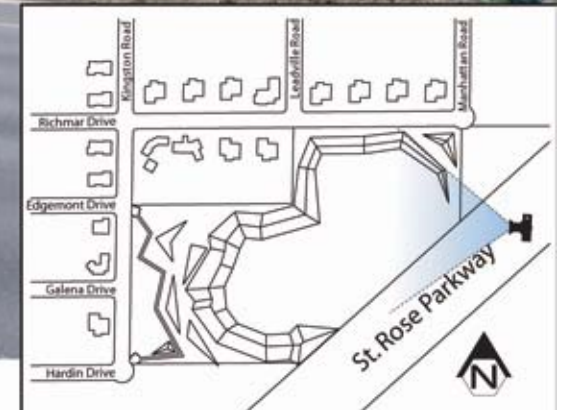


Project Design - Aerial View





Project Design - Front View





Project Design - Amenities





Project Design - Neighborhood





Project Under Construction





Continued Outreach Activities

- Groundbreaking ceremony
April 30, 2008
- Continue to meet as needed
to discuss construction
activities
- Begin operations in 2010






Lessons Learned

- Neighbors appreciated the opportunity to participate and “be heard”
- Consensus was reached, but it did not always mean cooperation
- Clear goals and well-defined boundaries are critical to the community outreach program’s success


CITY OF HENDERSON SOUTHWEST WATER RECLAMATION FACILITY



Begins Operation in 2009

Mayor and Council

James B. Gibson
Andy A. Hahn
Steven D. Kirk
Jack K. Clark
Gerrit Schroder



For more information visit www.cityofhenderson.com/swrf

IMPROVING HENDERSON'S WATER QUALITY

DEPARTMENT OF UTILITY SERVICES



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