



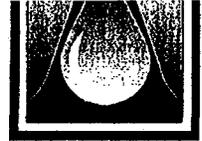
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AZ CORP COMMISSION
DOCKET CONTROL



Northern Sunrise Water Co.
Southern Sunrise Water Co.
ALGONQUIN
WATER SERVICES, L.L.C.

Northern Sunrise Water Company
Southern Sunrise Water Company
Algonquin Water Service L.L.C.
12725 W. Indian School Rd. Suite D101
Avondale, AZ 85323

Decision No. 68826

Docket Nos. W-20453A-06-0247
W-20454A-06-0248
W-20453A-06-0251
W-20454A-06-0251
W-01646A-06-0251
W-01868A-06-0251

Docket Nos. W-02235A-06-0251
W-02316A-06-0251
W-02230A-06-0251
W-01629A-06-0251
W-02240A-06-0251

November 20, 2008

Docket Control Center
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Arizona Corporation Commission
DOCKETED

NOV 21 2008

DOCKETED BY

RE: Proposed Modification to the Capital Improvements per Exhibit B to Decision No. 68826 for the Northern Sunrise Water Company – Coronado Estates and Sierra Sunset Systems

Decision No. 68826 Opinion and Order states in part, *"It is further ordered that Northern Sunrise Water Company, Inc. and Southern Sunrise Water Company, Inc. shall file any proposed amendment or modification to Exhibit B with Docket Control as soon as practical. If Staff has an objection to any proposed modification to Exhibit B, Staff shall file its objections in the docket within 10 business days. Staff's failure to file a comment or objection will be deemed an acceptance of the proposed modification to Exhibit B."*

Northern Sunrise Water Company ("Northern Sunrise") is preparing to upgrade the Coronado Estates well and storage site. Since Decision No. 68826 was approved, many improvements have been made, much data has been collected, and economic conditions have changed which has led to the change in modifications proposed in Exhibit B for Coronado Estates ("Coronado") and Sierra Sunset ("Sierra").

Docket Control Center
N & S Sunrise
November 20, 2008
Page 2

Since Decision No. 68826, the Coronado and Sierra systems have been physically inter-connected. This allows for the construction of storage tanks at the Coronado well site to serve both the Coronado and Sierra systems. In addition, the inter-connection means that there are two wells available to serve the combined system and allows for a reduction in the storage requirement.

All services have been replaced and meters installed in the Sierra system. This, along with well meters installed on both wells has allowed for more accurate recording of water demand.

The well pump at Coronado has been replaced and the well now yields 100 gpm instead for the previous yield of 75gpm. Three new 5,000 gallon storage tanks have been installed at Coronado. Chlorination has been added to both wells.

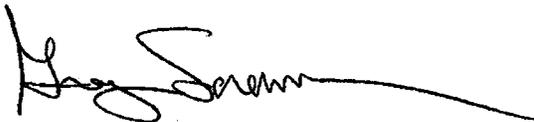
Based on the modifications already made and on new water usage data, the following changes from Exhibit B will be made:

1. Install five - 5,000 gallon storage tanks at Coronado instead of one 100,000 gallon storage tank at Coronado and one 30,000 gallon storage tank at Sierra.
2. Install one - 2,000 gallon hydro pneumatic tank at Coronado instead of one- 5,000 gallon hydro pneumatic tank.

Attached is Exhibit 1 which is the engineering design report prepared by Westland Resources that describes the proposed upgrades to the Coronado well site which will bring both Coronado and Sierra into compliance. Included in Exhibit 1 is a water use data sheet for the past 12 months.

Every effort is being made to complete the improvements as soon as possible. In addition, every resource that is available is being used to insure safe reliable service with a minimum of outages during the upgrade period.

Sincerely,



Greg Sorensen
Director of Operations
Western Division
Algonquin Water Services L.L.C.

Docket Control Center
N & S Sunrise
November 20, 2008
Page 3

Service List for Northern Sunrise Water Company, Inc et al.

Docket Nos. W-20453A-06-0247 et al

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Exhibit 1

MEMORANDUM

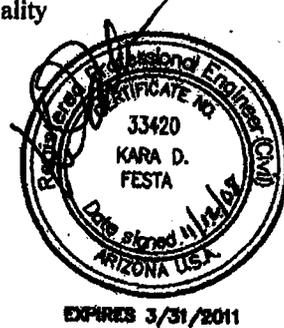
TO: Mr. Marty McCarthy, Arizona Department of Environmental Quality
Southern Regional Office

FROM: Kara D. Festa, P.E., WestLand Resources, Inc.

DATE: November 11, 2008

CC: Bradley Jordan, Northern Sunrise Water Company
Martin Garland, Northern Sunrise Water Company
Xiumin Ju, WestLand Resources, Inc.

RE: **CORONADO ESTATES WATER PLANT UPGRADES**
WESTLAND PROJECT NO. 1428.17 A 8000



INTRODUCTION

WestLand Resources, Inc. (WestLand) has prepared this design memorandum to describe the criteria used in the design of the Coronado Estates water plant upgrades. The proposed facility upgrades include the addition of two new 5,000 gallon potable water storage tanks and a new 2,000 gallon hydropneumatic tank to replace the existing hydropneumatic tank. The water plant is located within Section 18, Township 20 South, Range 20 East, in Cochise County, Arizona.

The existing Coronado Estates water plant, together with the Sierra Sunset well, provides potable water supply to the Northern Sunrise Water Company (NSWC) Coronado-Sierra Sunset water system. This project is designed to increase the level of service and reliability to the existing customers on a temporary basis for up to five years while alternatives for full scale source, booster, and storage facilities are evaluated, designed and constructed.

DESIGN STANDARDS

The new water facilities will be constructed in accordance with the American Water Works Association (AWWA), National Sanitary Foundation (NSF), and the Arizona Department of Environmental Quality (ADEQ) requirements for potable water. All new facilities will be disinfected in accordance with ADEQ Engineering Bulletin No. 8 guidance, and bacteriological water quality samples will be collected to verify the absence of coliform organisms.

EXISTING SYSTEM

The Coronado – Sierra Sunset water system currently has 213 active metered connections. The service area is residential and covers Section 18 and a portion of the north half of Section 19. The existing Coronado Estates water plant site consists of a 100 gallon per minute (gpm) well, three 5,000 gallon polyethylene storage tanks

with a total storage capacity of 15,000 gallons, a 240 gpm booster station, and an approximately 2,500 gallon hydropneumatic tank. The existing Sierra Sunset well has a capacity of 35 gpm and pumps directly to the water system. Thus the water system has a total well capacity of 135 gpm.

Well production data from October 2007 to September 2008 provided by the water company was used to obtain the peak day demand (PDD) and average day peak month demand (ADPM). The water use data sheet is attached. The well pumping records for the Coronado-Sierra Sunset water system indicate the following:

PDD = 109,900 gallons per day (gpd) or 76 gpm

ADPM (June 2008) = 2,151,000 gallons / 30 days = 71,700 gpd

STORAGE REQUIREMENT

Storage capacity required by the Arizona Administrative Code (AAC) R18-5-503 is ADPM, which is 71,700 gallons per the water use data sheet. For a multiple well system, the storage required can be reduced by the amount of the total daily production capacity minus the production from the largest producing well. The Coronado-Sierra Sunset water system has a total well capacity of 135 gpm, and the capacity of the largest well is 100 gpm. Therefore, the storage requirement can be reduced by the equivalent of 35 gpm or 50,400 gallons.

The AAC required minimum storage for Coronado-Sierra Sunset water system is 21,300 gallons (71,700 - 50,400). The three storage tanks at Coronado are currently 15,000 gallons total. The water system is currently requires 6,300 gallons (21,300 - 15,000) of storage capacity. Two new 5,000 gallon storage tanks are proposed.

WELL REQUIREMENT

Well capacity needs to be able to meet the peak daily demand or there would not be enough source water for summer peaks. The Coronado-Sierra Sunset water system contains two wells, the Coronado well at 100 gpm and the Sierra Sunset well at 35 gpm. The total water system well capacity of 135 gpm exceeds the PDD of 76 gpm.

BOOSTER STATION REQUIREMENT

The actual delivery of water into the water system must be able to meet Peak Hour Demand (PHD) of the water system which is typically assumed to be 3.5 times average daily demand (ADD) or 1.75 times PDD.

Total PHD = 76 gpm x 1.75 = 133 gpm

The available source water for PHD would be the total capacity of the well that goes directly into the system (Sierra Sunset well) at 35 gpm, and the booster station at Coronado Estates water plant site at approximately 240 gpm, which total to 275 gpm and are sufficient to meet PHD.

HYDROPNEUMATIC TANK SIZING

The Coronado Estates water plant contains an existing hydropneumatic tank with an approximate capacity of 2,500 gallons. The existing tank is believed to be approximately 40 years old, with several repair patches, and is not recommended for continued use. A new hydropneumatic tank will replace the existing tank.

The booster station at the water plant site consists of two booster pumps, a large pump with a pumping capacity of 140 gpm, and a smaller backup pump with a pumping capacity of 100 gpm. The backup pump does not typically run at the same time as the primary pump.

Based on the system pressure of approximately 40 to 60 pound per square inch (psi) at the water plant site and assuming the working volume of the hydropneumatic tank is approximately 20% of the total volume, the new hydropneumatic tank will provide pumping cycles of less than approximately six cycles per hour.

WATER PLANT UPGRADES

The proposed water plant upgrades will include addition of two new 5,000 gallon polyethylene water storage tanks and a new 2,000 gallon hydropneumatic tank. The site piping will be modified to accommodate the addition of the two new storage tanks and provide for operational flexibility. The two new storage tanks and the three existing tanks will be interconnected to provide a total storage capacity of 25,000 gallons, exceeding the system minimum storage requirement by 3,700 gallons. The hydropneumatic tank will be connected to the booster station discharge line to prevent short cycling of the booster pumps and provide surge control to the water system.

KDF:emr

Attachment: Well Production Data from October 2007 to September 2008

WATER USE DATA SHEET

NAME OF COMPANY _____ →	Coronado Estates- Sierra Sunset
ADEQ Public Water System No. _____ →	02-013 & 02-055 (Interconnected)

MONTH/YEAR (Last 13 Months)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
November 2007	213	1,239	1,483	
December	213	1,095	1,445	
January 2008	213	1,258	1,240	
February	213	1,071	1,116	
March	213	932	1,483	
April	213	1,193	1,724	
May	213	1,419	1,820	
June	212	1,654	2,151	
July	212	1,714	1,615	
August	212	1,362	1,692	
September	216	1,362	1,392	
October	213	1,323	1,325	

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
5,000	3	Sierra Sunset - 55-807772	35
		Coronado - 55-807773	100
5,000 (Proposed)	2		

Other Water Sources in Gallons per Minute _____ →	GPM
Fire Hydrants on System _____ →	Yes No X
Total Water Pumped Last 13 Months (Gallons in Thousands) _____ →	