

ORIGINAL



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AZ CORP COMMISSION  
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March 19, 2007

Arizona Corporation Commission  
**DOCKETED**

MAR 19 2007

DOCKETED BY *nr*

Ms. Linda A. Jaress  
Executive Consultant III  
Utilities Division  
Arizona Corporation Commission  
1200 West Washington Avenue  
Phoenix, Arizona 85007

Re: Palo Verde Utilities Company and Santa Cruz Water Company's Application  
for Extensions of Certificates of Convenience and Necessity  
Docket Nos. SW-03575A-06-0545 and W-03576A-06-0545

Dear Ms. Jaress:

Santa Cruz Water Company and Palo Verde Utilities Company respond to your Second Insufficiency Letter dated January 17, 2007 in this docket. We hope that the responses and the documents that are part of this response do address your concerns and questions. Please let us know if Staff has any further questions.

Very truly yours,

Timothy J. Sabo

TJS:da

cc: Ms. Dorothy Hains  
Christopher C. Kempley, Esq.  
Mr. Graham Symmonds  
ACC Docket Control (Original + 13 copies).

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
To Staff's Second Insufficiency Letter  
Dated January 17, 2007

March 19, 2007

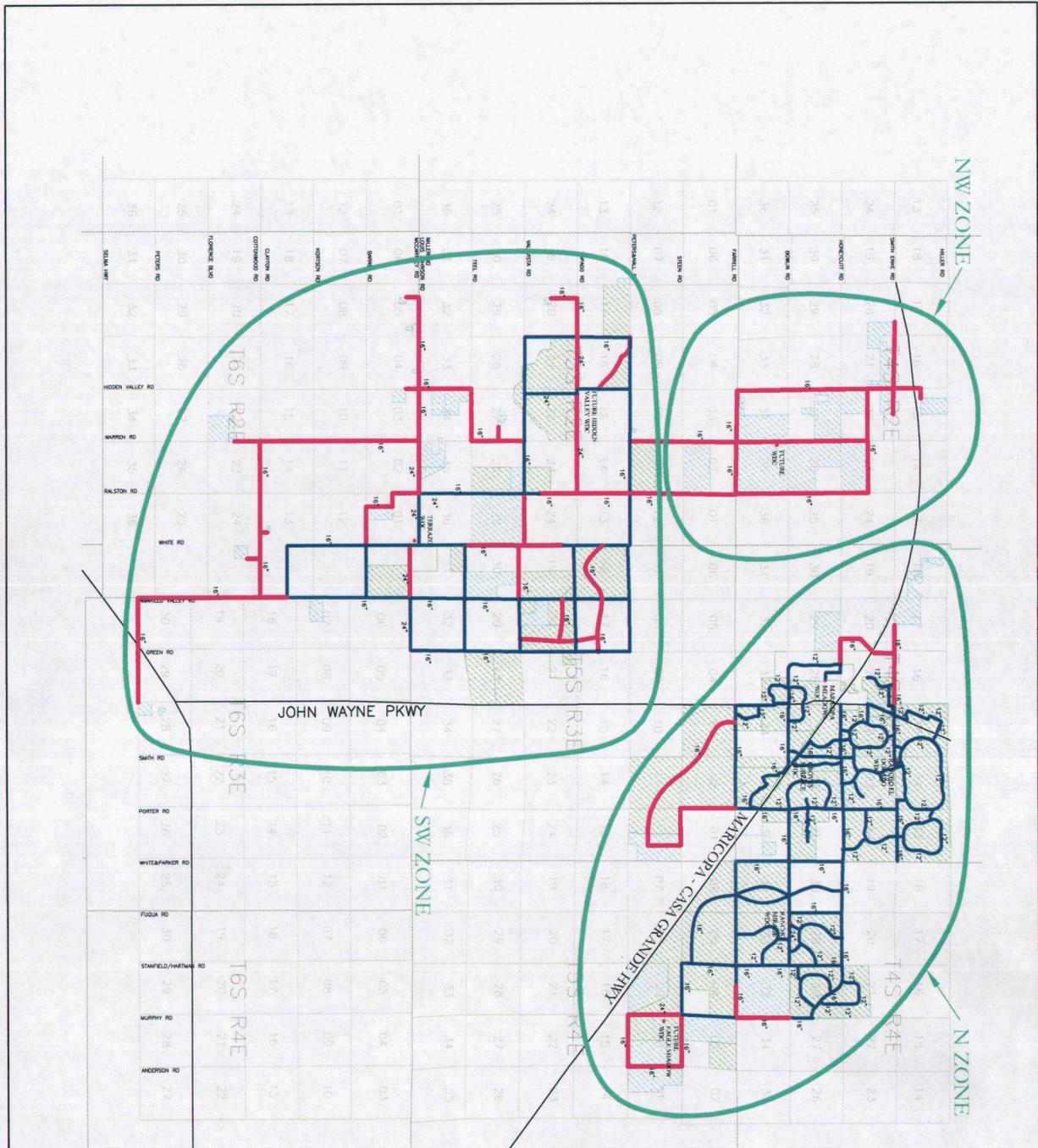
For water:

SCWC plans to serve part of the requested area by the Company's Southwest water system and part of the requested area will be served by SCWC (original) water system per 11/9 letter. It also appears that both the SCWC and the Southwest systems are not interconnected yet.

1. Please identify which sections of the requested area will be served by the Southwest system and which sections of the requested area will be served by the SCWC system.

RESPONSE: Please see the attached exhibit which shows the proximate 3 areas ("zones"), which represent the subsystems of Santa Cruz that serve the existing and proposed extension areas. It is not anticipated that these subsystems will necessarily be interconnected. The three zones are the North Zone (where the majority of the existing system lies), the Southwest Zone, and the Northwest Zone. The need to interconnect to provide storage and other redundancies will be assessed as the system grows to keep pace with the development.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.



LEGEND	
	EXISTING WATER
	PROPOSED WATER
	EXISTING SEW/CLEAN
	PROPOSED SEW/CLEAN EXTENSION
	ZONES



DKT: W 03576A-06-0545  
 WATER

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**Global Water - Santa Cruz Water Co.**  
**Water System**  
**Expansion Exhibit with Zones**

Drawn By:	BB	Date:	3/07	Sheet:	1 OF 1
App'vd By:		Date:		Drawing Number:	
Scale:	NTS				

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
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Dated January 17, 2007

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2. Please identify how many customers are projected in the requested area to be served by Southwest system and by the area to be served by the SCWC water system.

RESPONSE: Assuming 3.0 dwelling units/customers per acre:

- North Zone extension additional customers: 10,800.
- Southwest Zone extension additional customers: 6,000.
- Northwest Zone extension additional customers: 9,000.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
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3. The water usage data per system should be provided.

RESPONSE: The only Santa Cruz sub-system currently serving customers is the North zone. The water use data sheets are attached, as they were submitted in Palo Verde and Santa Cruz November 9, 2006 Responses to the September 29, 2006 Insufficiency Letter, question No. 1.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.

**NAME OF COMPANY** → Palo Verde Utilities Company

<b>Month/Year (Most Recent 13 Months)</b>	<b>Number of Services<sup>1</sup></b>	<b>Total Monthly Sewage Flow</b>
Aug-05	7,141	18,831,064
Sep-05	8,059	18,654,369
Oct-05	8,872	20,175,184
Nov-05	9,308	22,456,429
Dec-05	9,528	26,178,280
Jan-06	9,833	27,405,908
Feb-06	9,992	25,124,236
Mar-06	10,474	29,791,733
Apr-06	10,609	29,754,483
May-06	10,818	33,954,794
Jun-06	10,879	31,743,701
Jul-06	11,037	34,824,753
Aug-06	11,099	46,143,811
Sep-06	11,971	46,410,083

<sup>1</sup> - Represents Total Connection (includes residential + builder connections)

<b>NAME OF COMPANY</b> →	Santa Cruz Water Company
<b>ADEQ Public Water System No.</b>	11-131

<b>Month/Year (Most Recent 13 Months)</b>	<b>Number of Customers</b>	<b>Gallons Sold (Thousands)<sup>2</sup></b>	<b>Gallons Pumped (Thousands)</b>
Aug-05	7,256	127,768	114,352
Sep-05	8,176	168,282	113,455
Oct-05	8,991	117,403	112,904
Nov-05	9,434	120,486	102,802
Dec-05	9,658	69,773	84,188
Jan-06	9,970	77,589	89,363
Feb-06	10,130	65,770	111,582
Mar-06	10,474	75,921	83,665
Apr-06	10,609	82,920	113,865
May-06	10,818	115,374	150,380
Jun-06	10,879	144,422	193,897
Jul-06	11,037	183,318	207,100
Aug-06	11,099	214,508	159,160
Sep-06	11,971	149,439	143,449

<sup>2</sup> - Includes GC water but excludes any reclaimed water, raw water for irrigation impoundment filling or construction e

<sup>3</sup> - Includes 28.5 Mgal used to test/flush wells

Storage Tank Capacity	Number of Each	ADWR Well ID number	Well Production (Gallons per Minute)
1.5 Mgal	2	55-612737 - Smith	1070
0.5 Mgal	2	55-617336 - Vance	1965
		55-621410 - Porter @	1000
		55-621408 - Neely East	2000
		55-621407 - Neely West	1980
		55-621406 - Neely North	2000
		55-801069 - Cobblestone @	1280
		55-624037 - Glennwilde #1 **	1380
		55-509941 - Rancho Mirage #1 **	2800
		55-622132 - Maricopa Meadows @	1400
		55-612741 - Maricopa Groves #	1200

Other Water Sources in Gallons per Minute \_\_\_\_\_

Fire Hydrants on System \_\_\_\_\_

Total Water Pumped Last 13 Months (Gallons in Thousands) \_\_\_\_\_

\*\* - Undergoing Rehabilitation

@ - Non-potable use only

# - not operational

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
To Staff's Second Insufficiency Letter  
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4. If the Southwest system is not in service yet, please provide the planned number of wells, each well's production rate, the planned number of storage tanks and the storage capacity of each planned storage tank. If the Southwest system is in service, the plant information should be provided with the water usage data.

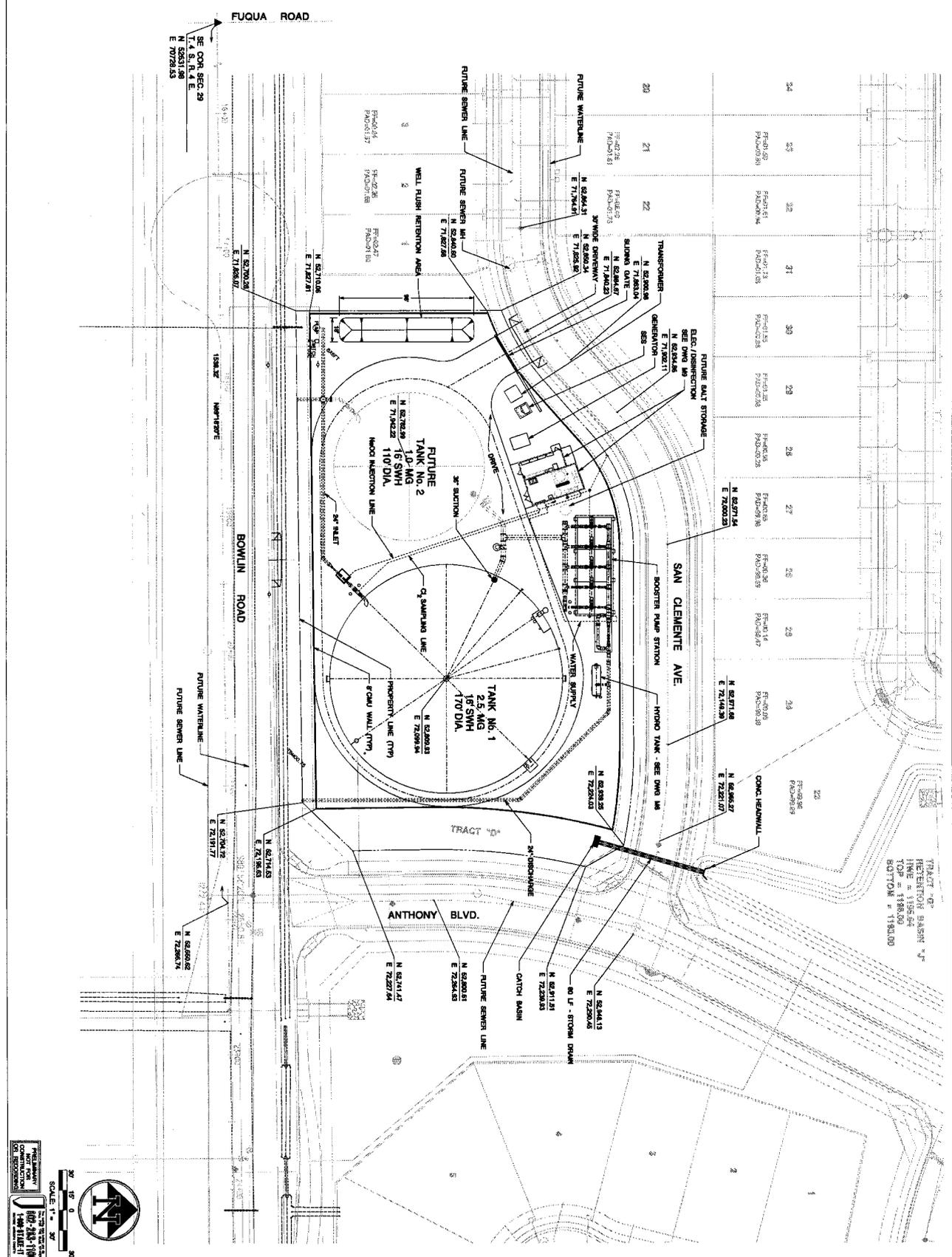
RESPONSE: In the Southwest Zone, the Terrazo Water Distribution Center ("WDC") is under construction. It consists of 2 wells, one 1,800 gpm and the other 1,500 gpm for a total of 3,300 gpm well capacity with ADEQ New Source approval, 6,500 gpm booster capacity, and 2.5 MG storage. The site plan showing the infrastructure is attached. The WDC was to be completed next month, but the development has slowed due to the overall new homes demand in the Phoenix Metro area, so we have put completion on hold until later this year. The first rooftops to require water service in the Southwest Zone are now expected in March 2008. Buildout of the Terrazo site will add 10,500 booster capacity and 2.5 MG storage. Another WDC is also planned to serve the Southwest Zone in the future.

The Northwest Zone has one WDC currently planned.

The North Zone has 3 WDCs in operation – Rancho El Dorado, Maricopa Meadows, and Maricopa Groves, one under construction – Rancho Mirage, and additional planned for the future. Phase 1 of the additional Rancho Mirage WDC under construction provides 8,000 gpm booster capacity and 2.5 MG storage, and will serve water from the existing Neely North and West wells, each 2,000 gpm approximately. An additional new well to serve the Rancho Mirage WDC is in planning. A copy of the Rancho Mirage WDC site plan is attached. Finally, a surface water treatment plant is under design, co-located at the Maricopa Groves WDC site. Its first phase is 1 MGD, but its construction has been put on hold due to the slow down in the new home building and thus the need for redundant supply.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.





TRACT 7-C  
RETENTION BASIN "J"  
LINE = 1185.44  
TOP = 1188.00  
BOTTOM = 1181.88

SCALE 1" = 30'

NO. 11

PRELIMINARY  
DRAWING  
NOT FOR  
CONSTRUCTION

SANTA CRUZ WATER COMPANY, LLC  
RANCHO MIRAGE - WATER TREATMENT PLANT  
SITE PLAN

NO.	REVISION	DATE

Coe & Van Loo Consultants, Inc.

**CVL**  
4650 North 12th Street  
Phoenix, Arizona 85014  
Telephone 602-264-6831  
http://www.cvl.com

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
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5. In its 11/9 response, the Company provided exhibits showing existing and proposed sewer/reclaimed water lines and estimated costs of sewer mains. However, there are no such drawings for water system. Does this mean all water transmission lines/mains to serve the requested area are in place? If not, please provide the drawings that identify where proposed water lines will be located and provide the estimated water line construction costs.

RESPONSE: The initial filing docketed on September 29, 2006 included the cost estimates and an exhibit showing the water lines in the extension. The water lines are shown in the revised exhibit prepared in response to question No.1 above. The cost estimates are also provided in an attachment.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.

Backbone Water Infrastructure Needs in SCWC N/SW Extension

NUMBER OF DU'S 28,000	LF	Unit Cost	Total
24" WATER MAIN	26,400	\$76	\$2,006,400
16" WATER MAIN	345,069	\$48	\$16,563,312
<b>BOOSTER STATIONS</b>	<b>MGD</b>		
0.584 gpm/du=	23.547	\$125,000	\$2,943,360
<b>PRODUCTION</b>	<b>MGD</b>		
0.17 gpm/du=	7		
<b>Wells</b>	5	\$250,000	\$1,250,000
<b>Surface Water Trmt</b>	2	\$4,800,000	\$9,600,000
<b>STORAGE</b>	<b>MGD</b>		
355 gpd peak mo demand =	10	less	
Firm Capacity =	7	=	
Storage Requirement	3	plus	
Add .5 MG fire flow	0.5	=	
	4	\$2,300,000	\$8,246,880
<b>Total Cost</b>			<b>\$40,609,952</b>
Year 1			\$5,684,144
Year 2			\$5,810,288
Year 3			\$8,326,384
Year 4			\$5,506,288
Year 5			\$5,384,688

YEAR 1 - Backbone Water Infrastructure Needs in SCWC N/SW Extension

NUMBER OF DU'S 1,200	LF	Unit Cost	Total
<b>24" WATER MAIN</b>	8,000	\$76	\$608,000
<b>16" WATER MAIN</b>	50,000	\$48	\$2,400,000
<b>BOOSTER STATIONS</b>	<b>MGD</b>		
0.584 gpm/du=	1.0	\$125,000	\$125,000
<b>PRODUCTION</b>	<b>MGD</b>		
0.17 gpm/du=	0.29		
<b>Wells</b>	0.29	\$250,000	\$250,000
<b>Surface Water Trmt</b>	0	\$4,800,000	\$0
<b>STORAGE</b>	<b>MGD</b>		
355 gpd peak mo demand =	0.43	less	
Firm Capacity =	0.29	=	
Storage Requirement	0.13	plus	
Add .5 MG fire flow	0.5	=	
	1	\$2,300,000	\$2,300,000
<b>Total Cost</b>			<b>\$5,683,000</b>

Note: min well cost \$250,000

YEAR 2 - Backbone Water Infrastructure Needs in SCWC N/SW Extension

NUMBER OF DU'S 2400	LF	Unit Cost	Total
24" WATER MAIN	8,000	\$76	\$608,000
16" WATER MAIN	50,000	\$48	\$2,400,000
<b>BOOSTER STATIONS</b>	<b>MGD</b>		
0.584 gpm/du=	2.0	\$125,000	\$250,000
<b>PRODUCTION</b>	<b>MGD</b>		
0.17 gpm/du=	0.59		
<b>Wells</b>	0.59	\$250,000	\$250,000
<b>Surface Water Trmt</b>	0	\$4,800,000	\$0
<b>STORAGE</b>	<b>MGD</b>		
355 gpd peak mo demand =	0.85	less	
Firm Capacity =	0.59	=	
Storage Requirement	0.26	plus	
Add .5 MG fire flow	0.5	=	
	1	\$2,300,000	\$2,300,000
<b>Total Cost</b>			<b>\$5,808,000</b>

Note: min well cost \$250,000

YEAR 3 - Backbone Water Infrastructure Needs in SCWC N/SW Extension

NUMBER OF DU'S 2400	LF	Unit Cost	Total
<b>24" WATER MAIN</b>	4,000	\$76	\$304,000
<b>16" WATER MAIN</b>	50,000	\$48	\$2,400,000
<b>BOOSTER STATIONS</b>			
	<b>MGD</b>		
0.584 gpm/du=	2.0	\$125,000	\$250,000
<b>PRODUCTION</b>			
	<b>MGD</b>		
0.17 gpm/du=	0.59		
<b>Wells</b>	0.00	\$250,000	\$250,000
<b>Surface Water Trmt</b>	0.59	\$4,800,000	\$2,820,096
<b>STORAGE</b>			
	<b>MGD</b>		
355 gpd peak mo demand =	0.85	less	
Firm Capacity =	0.59	=	
Storage Requirement	0.26	plus	
Add .5 MG fire flow	0.5	=	
	1	\$2,300,000	\$2,300,000
<b>Total Cost</b>			<b>\$8,324,096</b>

Note: min well cost \$250,000

Note: 1st phase surface water plant = 2.5 MGD

YEAR 4 - Backbone Water Infrastructure Needs in SCWC N/SW Extension

NUMBER OF DU'S 2400	LF	Unit Cost	Total
24" WATER MAIN	4,000	\$76	\$304,000
16" WATER MAIN	50,000	\$48	\$2,400,000
<b>BOOSTER STATIONS</b>	<b>MGD</b>		
0.584 gpm/du=	2.0	\$125,000	\$250,000
<b>PRODUCTION</b>	<b>MGD</b>		
0.17 gpm/du=	0.59		
<b>Wells</b>	0.59	\$250,000	\$250,000
<b>Surface Water Trmt</b>	0	\$4,800,000	\$0
<b>STORAGE</b>	<b>MGD</b>		
355 gpd peak mo demand =	0.85	less	
Firm Capacity =	0.59	=	
Storage Requirement	0.26	plus	
Add .5 MG fire flow	0.5	=	
	1	\$2,300,000	\$2,300,000
<b>Total Cost</b>			<b>\$5,504,000</b>

Note: min well cost \$250,000

YEAR 5 - Backbone Water Infrastructure Needs in SCWC N/SW Extension

NUMBER OF DU'S 2400	LF	Unit Cost	Total
24" WATER MAIN	2,400	\$76	\$182,400
16" WATER MAIN	50,000	\$48	\$2,400,000
<b>BOOSTER STATIONS</b>	<b>MGD</b>		
0.584 gpm/du=	2.0	\$125,000	\$250,000
<b>PRODUCTION</b>	<b>MGD</b>		
0.17 gpm/du=	0.59		
<b>Wells</b>	0.59	\$250,000	\$250,000
<b>Surface Water Trmt</b>	0	\$4,800,000	\$0
<b>STORAGE</b>	<b>MGD</b>		
355 gpd peak mo demand =	0.85	less	
Firm Capacity =	0.59	=	
Storage Requirement	0.26	plus	
Add .5 MG fire flow	0.5	=	
	1	\$2,300,000	\$2,300,000
<b>Total Cost</b>			<b>\$5,382,400</b>

Note: min well cost \$250,000

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
To Staff's Second Insufficiency Letter  
Dated January 17, 2007

March 19, 2007

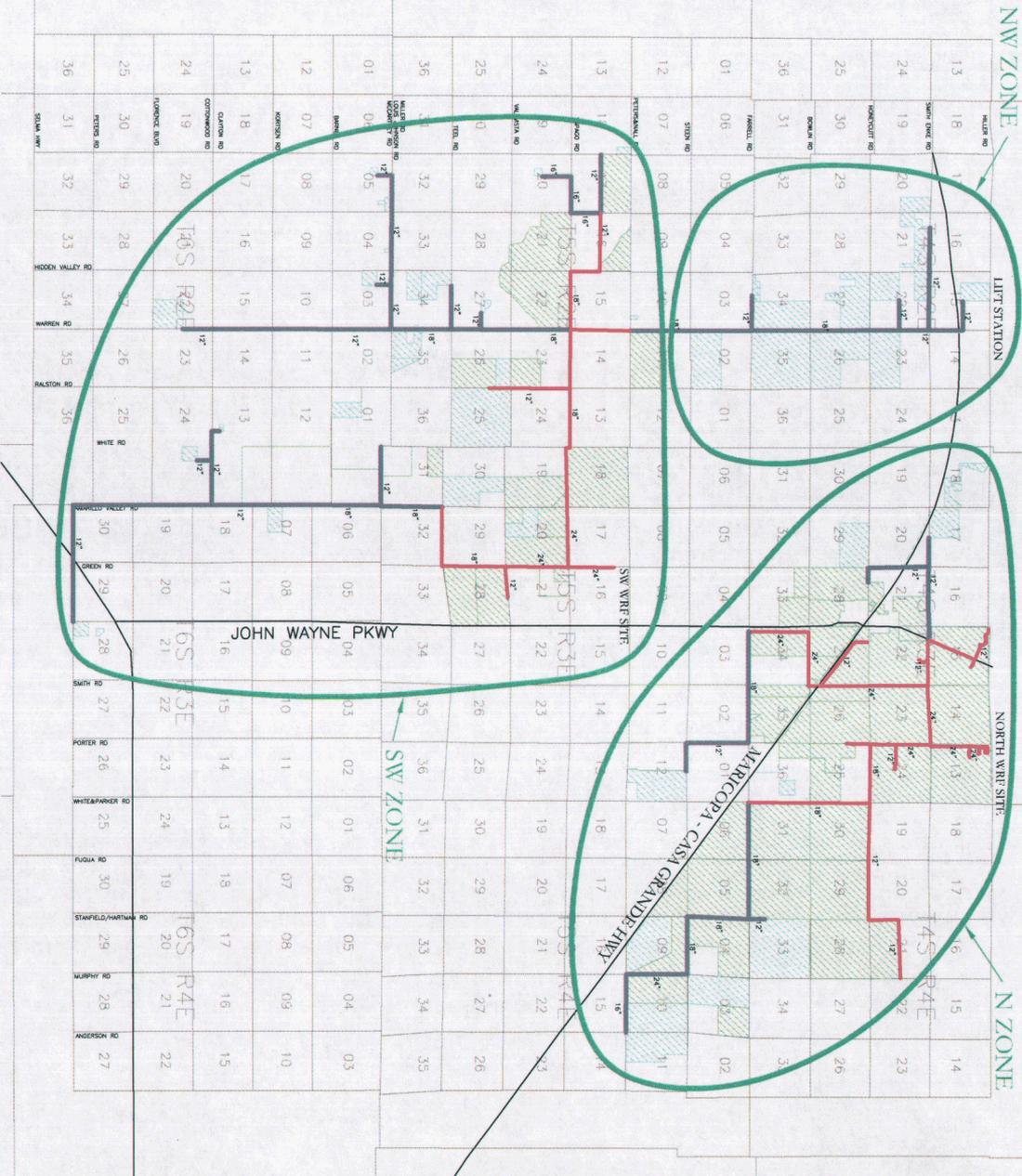
For sewer:

1. Per the Company's letter of November 9, 2006, Palo Verde plans to serve part of the requested area with the Company's Campus 2 WRF and part of the requested area with Campus 4 and Campus 1 WRF. It appears that there are no interconnections between Campus 1 WRF, Campus 2 WRF and Campus 4 WRF, although Global plans to tie the wastewater systems into one 208 water quality management plan.

Please identify which sections of the requested area will be served by Campus 1 WRF, which sections of the requested area will be served by Campus 2 WRF and which sections of the requested area will be served by Campus 4 WRF.

RESPONSE: Please see the attached exhibit which shows the proximate 3 areas ("sewersheds") which will be served by the existing and proposed WRFs. The Palo Verde Consolidated 208 was certified by ADEQ on January 19, 2007 (copy attached) and it does indeed include these three WRFs. As discussed in the engineering memorandum – revised on November 8, 2006 – flows in the North sewershed will be treated at Campus 1 WRF; flows from the Northwest sewershed will be pumped over and treated at Campus 1 until the sewershed builds up sufficiently to justify the construction of Campus 4 WRF, which is not expected within the first five years. The Southwest sewershed will be treated at the Campus 2 WRF, whose construction is underway and will be completed in 2007 or early 2008. There are no plans for permanent interconnection between the North and Northwest sewersheds, and no plans to interconnect the sewer systems of these 3 WRFs. However, the need to interconnect to provide treatment capacity and/or redundancies will be assessed as the system grows to keep pace with the development.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.



**QUANTITIES - Reclaim Line**

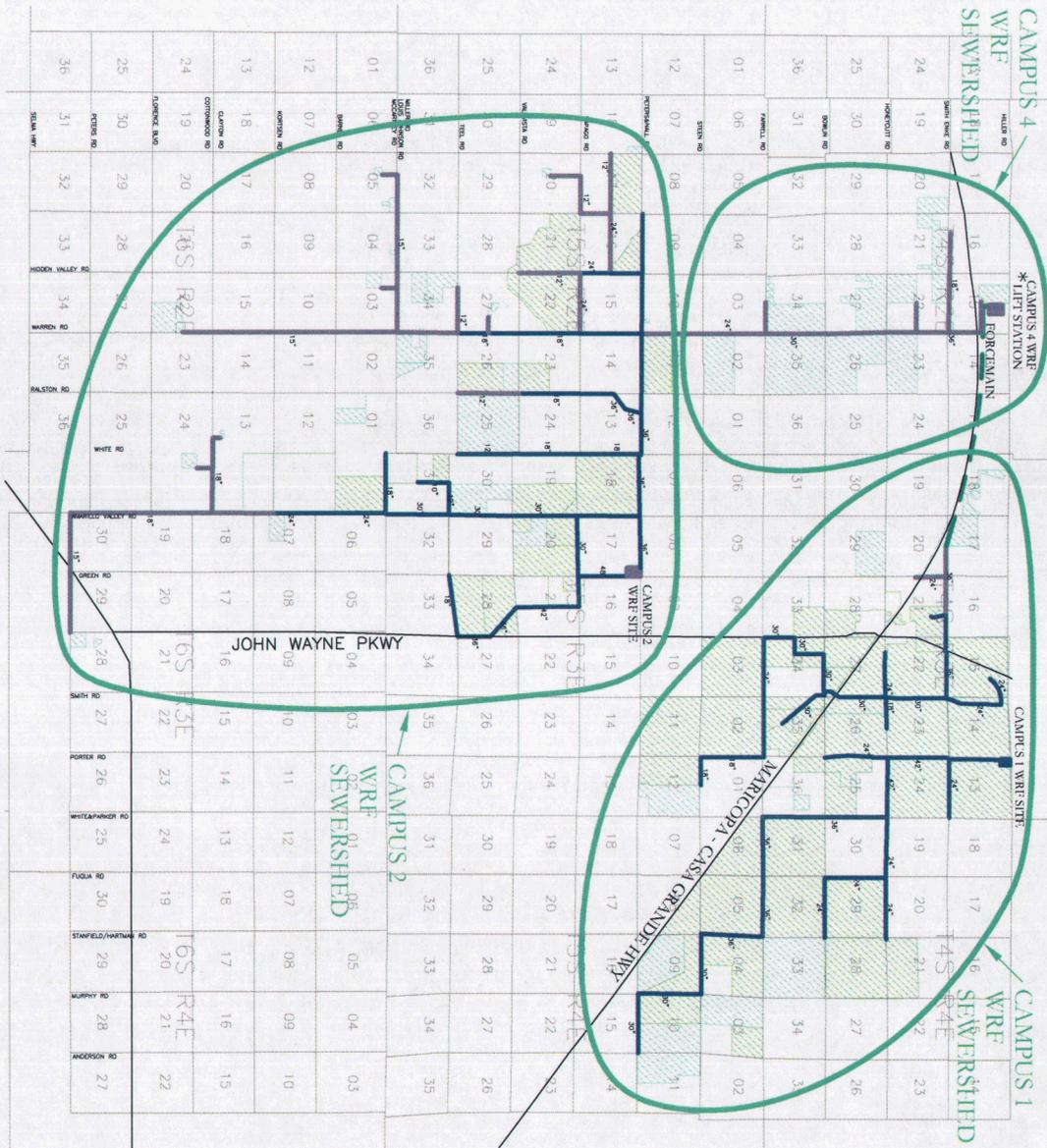
Existing	
12"	= 14.0 mi.
18"	= 9.1 mi.
24"	= 11.5 mi.
Proposed	
12"	= 22.9 mi.
16"	= 2.6 mi.
18"	= 16.2 mi.
24"	= 1.0 mi.

**LEGEND**

	EXISTING RECLAIMED WATER LINE
	PROPOSED RECLAIMED WATER LINE
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING PUV C&N
	PROPOSED PUV C&N
	EXISTING PVC C&N
	PROPOSED PVC C&N
	EXISTING ZONES
	PROPOSED ZONES



DKT: SW 03575A-06-0545  
RECLAIMED WATER



\* 1 MGD INFLUENT IS FOR FUTURE CAMPUS 4 WRF

LEGEND	
	PROPOSED SEWER
	PROPOSED FORCEMAIN
	EXISTING SEWER
	EXISTING PVUC CLEAN
	PROPOSED PVUC CLEAN EXTENSION
	SEWERSHEDS



DKT: SW 03575A-06-0545  
SEWER

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**Global Water - Palo Verde Utilities Co.**  
Sewer System  
Expansion Exhibit with Sewersheds

Drawn By: BB	Date: 3/07	Sheet: 1 OF 1
App'd By:	Date:	Drawing Number:
Scale: NTS		

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
To Staff's Second Insufficiency Letter  
Dated January 17, 2007

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2. Provide the projected number of customers in the requested area to be served by Campus 1 WRF, the projected number of customers in the requested area to be served by Campus 2 WRF and the projected number of customers in the requested area to be served by Campus 4 WRF.

RESPONSE: Assuming 3.0 dwelling units/customers per acre:

- North Zone extension additional customers: 10,800.
- Southwest Zone extension additional customers: 6,000.
- Northwest Zone extension additional customers: 9,000.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
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3. Please provide the waste water flow data per WRF if there are existing customers being served by those Campus WRFs.

RESPONSE: The only Palo Verde WRF currently serving customers is Campus 1 in the North sewershed. The wastewater use data sheet is attached, as they were submitted in the November 9, 2006 Responses to September 29, 2006 Insufficiency Letter, question No.1 .

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.

Palo Verde Utilities Company and  
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4. The Company provided the estimated costs of wastewater mains/force main/reclaimed water mains (from year 1 through year 5) in its letter of November 9, 2006. To serve the requested area, is it correct that the Company only needs to install one undersized lift station in Campus 4 WRF? If this is correct, please provide information regarding this proposed lift station.

RESPONSE: The proposed lift station is the influent pump station for the future Campus 4 WRF. Its building will be sized to house pumps for the 6 MGD WRF, but when built will be fitted with 1 MGD capacity pumping. So as to ensure adequate pumping capacity, in year 3 it will be necessary to add another 1 MGD pumping capacity, and again in year 5. The costs of the additional pumps have been added to the revised infrastructure cost tables attached.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.

Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 28,000	LF	Unit Cost	Total
36" SEWER MAIN	13,920	\$146	\$2,032,320
30" SEWER MAIN	13,200	\$115	\$1,518,000
24" SEWER MAIN	23,760	\$105	\$2,494,800
18" SEWER MAIN	43,010	\$95	\$4,085,950
15" SEWER MAIN	42,900	\$85	\$3,646,500
12" SEWER MAIN	34,680	\$75	\$2,601,000
FORCE MAIN	22,300	\$48	\$1,070,400
24" RECLAIMED WATER	5,280	\$110	\$580,800
18" RECLAIMED WATER	85,536	\$94	\$8,040,384
16" RECLAIMED WATER	13,728	\$82	\$1,125,696
12" RECLAIMED WATER	120,912	\$53	\$6,408,336
<b>LIFT STATION</b>	1	\$2,000,000	\$2,000,000
<b>WRF Expansion</b>	<b>MGD</b>		
187 gpd/du =	5.236	\$10,000,000	\$52,360,000
<b>Total Cost</b>			<b>\$87,964,186</b>
Year 1			\$10,466,720
Year 2			\$8,736,800
Year 3			\$8,736,800
Year 4			\$8,671,856
Year 5			\$12,508,890

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 1 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 1,200	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	22,300	\$48	\$1,070,400
24" RECLAIMED WATER	5,280	\$110	\$580,800
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	6,600	\$82	\$541,200
12" RECLAIMED WATER	10,560	\$53	\$559,680
<b>LIFT STATION</b>	1	\$2,000,000	\$2,000,000
1 MGD Installed pumping capacity			
<b>WRF Expansion</b>	<b>MGD</b>		
187 gpd/du =	0.224	\$10,000,000	\$2,244,000
			\$10,466,720

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 2 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 2,400	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	0	\$48	\$0
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	2,640	\$82	\$216,480
12" RECLAIMED WATER	10,560	\$53	\$559,680
<b>LIFT STATION</b>	0	\$2,000,000	\$0
<b>WRF Expansion</b>	<b>MGD</b>		
187 gpd/du =	0.449	\$10,000,000	\$4,490,000
			\$8,736,800

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 3 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 2,400	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	0	\$48	\$0
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	2,640	\$82	\$216,480
12" RECLAIMED WATER	10,560	\$53	\$559,680
<b>LIFT STATION</b>	0	\$2,000,000	\$0
capacity	1	\$300,000	\$300,000
<b>WRF Expansion</b>	<b>MGD</b>		
187 gpd/du =	0.449	\$10,000,000	\$4,490,000
			\$9,036,800

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 4 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 2,400	LF	Unit Cost	Total
36" SEWER MAIN	3,000	\$146	\$438,000
30" SEWER MAIN	3,000	\$115	\$345,000
24" SEWER MAIN	4,000	\$105	\$420,000
18" SEWER MAIN	5,000	\$95	\$475,000
15" SEWER MAIN	5,000	\$85	\$425,000
12" SEWER MAIN	5,000	\$75	\$375,000
FORCE MAIN	0	\$48	\$0
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	1,848	\$82	\$151,536
12" RECLAIMED WATER	10,560	\$53	\$559,680
LIFT STATION	0	\$2,000,000	\$0
WRF Expansion	MGD		
187 gpd/du =	0.449	\$10,000,000	\$4,490,000
			\$8,671,856

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

YEAR 5 - Backbone Wastewater and Reclaimed Water Infrastructure Needs in PVUC N/SW Extension

NUMBER OF DU'S 2,400	LF	Unit Cost	Total
36" SEWER MAIN	1,920	\$146	\$280,320
30" SEWER MAIN	1,200	\$115	\$138,000
24" SEWER MAIN	7,760	\$105	\$814,800
18" SEWER MAIN	23,010	\$95	\$2,185,950
15" SEWER MAIN	22,900	\$85	\$1,946,500
12" SEWER MAIN	14,680	\$75	\$1,101,000
FORCE MAIN	0	\$48	\$0
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	10,560	\$94	\$992,640
16" RECLAIMED WATER	0	\$82	\$0
12" RECLAIMED WATER	10,560	\$53	\$559,680
<b>LIFT STATION</b>	0	\$2,000,000	\$0
Install additional 1.0 MGD pumping capacity	1	\$300,000	\$300,000
<b>WRF Expansion</b>	<b>MGD</b>		
187 gpd/du =	0.449	\$10,000,000	\$4,490,000
			\$12,808,890

Influent Lift Station for Campus 4 WRF will be built sized but not fitted for 6 MGD

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
To Staff's Second Insufficiency Letter  
Dated January 17, 2007

March 19, 2007

For both:

1. Because the requested area is large, please identify on a map the construction location for the first three years, by year.

RESPONSE: As we are not the developers, we respond to the pace and status of their development planning activity with Pinal County and Maricopa and build in-time what is needed. We anticipate the majority of the growth in year 1 to be in the North water and sewer areas. In year 2, we can expect to see more activity in the Southwest and Northwest water and sewer areas. We have not provided a map as we do not have definitive information on this subject. We have in the answers to the above questions discussed ongoing and near-term construction activities.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.

Palo Verde Utilities Company and  
Santa Cruz Water Company's Responses  
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March 19, 2007

2. Provide a map of the extension area illustrating residential, commercial, industrial, green areas, lakes areas, etc. This requested map has not been provided.

RESPONSE: This specific information is not currently known and is dependent on the landowners developing their land-use plans. However, in order to acquire service from Global, land-use plans must conform to Global's Code of Practice GWR-CP-01-007 Land Use Plan by Section. Under this requirement, the following limitations are imposed:

Developers submitting plans for approval to the Utility must provide the following:

- Integrated Irrigation Impoundments (Reclaimed Water Storage) capable of handling 6 days with no irrigation use.
- For all open spaces, the following limitations are applied:
  - Turf = 22%
  - Xeriscape = 75%
  - Lakes = 3%

Global works closely with the developers through their entitlement process with the County or Cities, and reviews water, wastewater and reclaimed plans to ensure compatibility with the backbone plant and compliance with Global's Land Use Plan Code of Practice.

We currently are not able to provide a map illustrating this land use mix.

RESPONDENT: Robin Bain, P.E., DEE for Graham Symmonds.