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BEFORE THE ARIZONA CORPORATION COMMISSION

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**COMMISSIONERS**

MIKE GLEASON, Chairman  
WILLIAM A. MUNDELL  
JEFF HATCH-MILLER  
KRISTIN K. MAYES  
GARY PIERCE

2007 NOV -7 P 3:58

AZ STATE DOCUMENTS  
DOCKET CONTROL

IN THE MATTER OF THE APPLICATION  
OF WATER UTILITY OF GREATER  
TONOPAH, INC. FOR APPROVAL OF AN  
EXTENSION OF ITS CERTIFICATE OF  
CONVENIENCE AND NECESSITY TO  
PROVIDE WATER UTILITY SERVICE IN  
MARICOPA COUNTY, ARIZONA

Docket No. W-02450A-06-0626

IN THE MATTER OF THE APPLICATION  
OF HASSYAMPA UTILITY COMPANY,  
INC., FOR APPROVAL OF AN EXTENSION  
OF ITS CERTIFICATE OF CONVENIENCE  
AND NECESSITY TO PROVIDE  
WASTEWATER UTILITY SERVICE IN  
MARICOPA COUNTY, ARIZONA

Docket No. SW-20422A-06-0566

**NOTICE OF FILING**

**(Revised Engineering Memorandum)**

Water Utility of Greater Tonopah, Inc. ("WUGT" or "Tonopah") and Hassayampa Utility Company ("HUC" or "Hassayampa")(collectively, the "Global Utilities") respectfully submit a revised Engineering Memorandum for HUC based on HUC's regional master plan. The master plan is described in greater detail in the "Final Hassayampa Utility Company Wastewater Master Plan" ("HUC Master Plan") prepared by the engineering firm of Damon S. Williams Associates, LLC. A copy of the HUC Master Plan is being provided to Staff. The HUC Master Plan cannot be filed with docket control because it contains oversized maps.

Arizona Corporation Commission

**DOCKETED**

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DOCKETED BY	nr
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1 RESPECTFULLY SUBMITTED this 7<sup>th</sup> day of November 2007.

2 ROSHKA DEWULF & PATTEN, PLC

3  
4 By 

5 Michael W. Patten  
6 Timothy J. Sabo  
7 One Arizona Center  
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10 Original + 15 copies of the foregoing  
11 filed this 7<sup>th</sup> day of November 2007, with:

12 Docket Control  
13 ARIZONA CORPORATION COMMISSION  
14 1200 West Washington  
15 Phoenix, Arizona 85007

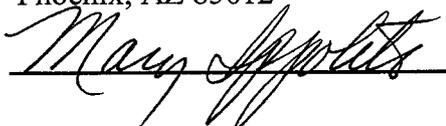
16 Copies of the foregoing hand-delivered/mailed  
17 This 7<sup>th</sup> day of November 2007, to:

18 Lyn A. Farmer, Esq.  
19 Chief Administrative Law Judge  
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## MEMORANDUM

**Date:** September 5, 2006 *Revised November 5, 2007*

**Re:** Hassayampa Utility Company Service Area Extension  
Wastewater Services

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This memorandum defines the service requirements of the extension of the Hassayampa Utility Company (HUC) Service Area CC&N for wastewater treatment. The initial Hassayampa Utility Company wastewater service area CC&N (SW-20422A-05-0659) for approximately 2,050 acres was approved on August 29, 2006 in Decision No. 68922. The extension service area includes approximately 24,340 acres with an estimated 103,015 additional dwelling units. As seen in the attached exhibits, the extension areas include the Belmont, Copperleaf, Silver Water Ranch, Silver Springs Ranch, and 339<sup>th</sup> Avenue developments, currently in advanced stages of planning with Maricopa County. All of these developments have requested service from HUC or its parent company, Global Water. Proposed wastewater infrastructure is shown along with the location and relationship to the existing CC&N service area system. Water Utility of Greater Tonopah, also owned by Global Water, currently has a CC&N for some of this extension area, and will file an extension to serve the remainder of the developments included in HUC's extension. Further detail is provided in the "Final Hassayampa Utility Company Wastewater Master Plan" ("HUC Master Plan") which is being provided to Staff. The HUC Master Plan was prepared by the engineering firm of Damon S. Williams Associates, LLC, and describes the HUC regional plan.

### Absorption Rates

For years 1 and 2, 200 dwelling units per month are anticipated, or 2,400 per year. For years 3-5, 300 dwelling units per month are anticipated, or 3,600 per year. Note that the buildout dwelling units are based on the master planning completed for the Belmont, Copperleaf, Silver Water Ranch, Silver Springs Ranch, and 339<sup>th</sup> Avenue developments

### Wastewater

At 2,400 dwelling units per year and 187 GPD/DU<sup>1</sup>, it is expected that the Year 1 flow will be 0.45 MGD, 2.92 (approximately 3) MGD after 5 years, and 19.26 MGD at buildout.

As dictated by the Section 208 Regional Water Quality Management Plan requirements, HUC has undertaken a regional plan for the development and deployment of water reclamation facilities in the area. MCESD and HUC worked to provide a plan whose boundaries were dictated by natural "sewer-sheds" as opposed to development boundaries.

Five new WRF campuses are identified in this extension on the attached exhibits, excerpted from the two MAG 208 Plan Amendments being processed by MAG and ADEQ for certification (labeled Exhibit 5, Sewer Collection System). These WRFs are proposed as regional plants ranging in size up to

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<sup>1</sup> ADEQ has recognized a design flow for treatment systems in the Maricopa area of 187.2 GPD/DU. Historic data, however, shows that the flow is actually in the order of 142135 GPD/DU.



approximately 32<sup>2</sup> MGD to serve an estimated 109 sections. This CC&N extension is limited to approximately 41.3 sections for which requests for service have been received by HUC/Global; applications for future extensions will be made as additional requests for service are received and will rely on these 6 WRF sites (Campus 1 WRF from the approved CC&N plus the 5 additional WRFs identified in this extension).

Further information about the six proposed WRF sites is contained in the HUC Master Plan. Note that for the first 5 years in this extension service area, one 3 MGD WRF is expected to be built, with the year 1 capacity of 0.5 MGD. The "Initial Phase" WRF capacity is expected to be 0.5 MGD, and the Phase 1 WRF, representing the first 5 years, is expected to be 3 MGD capacity. Depending on the rate and location of development, the lift stations for any of the 6 WRFs may be constructed for initial collection and/or pumpover until the sewer-shed builds up sufficiently to justify the construction of those WRFs.

The location of the first WRF will be based on the most economical and reasonable servicing option. This will be driven primarily by the pace of development and the location of the first platted units in the region. HUC will select one of the 6 WRF sites to serve as the Initial Phase WRF. This selection will be based on which WRF site appears most practical and economical based on information known at the time. HUC will use the same process to select the Phase I WRF site. The Initial Phase and Phase I will be developed in accordance with the regional plan described in the HUC Master Plan. In addition, HUC's parent company, Global Water, Inc., recently signed an agreement to acquire a neighboring wastewater utility, Balterra Sewer Corp ("Balterra") which allows for a greater deployment of the regional philosophy. It may be more efficient and economical for HUC to purchase capacity from Balterra, or to construct a shared facility with Balterra. Or it may be better for HUC to construct one of the other WRFs first. Regardless of the location and number of facilities built, the same Maricopa County Environmental Services Department and Arizona Department of Environmental Quality approvals are required for the initial treatment site(s) as well as all additional sites.

The anticipated servicing schedule is as follows:

Year 1: Based on the absorptions as currently understood and estimated, the Initial Phase WRF will be operational at 0.5 MGD. Any necessary tie-ins between Initial Phase WRF and other active developments will be constructed. Note that the constructed capacity may vary depending on development pace.

Year 2: An additional 0.5 MGD of capacity will be built at the Initial Phase WRF or at another of the WRF sites depending on the pace and location of development. The tie-ins between Initial Phase WRF and other active development(s) will be constructed. Note that the constructed capacity may vary depending on development pace.

Year 3: An additional 1 MGD of capacity will be built at the Initial Phase WRF or at another of the WRF sites depending on the pace and location of development. The tie-ins between Initial Phase and/or Phase 1 WRFs (if not the same WRF) and other active development(s) will be constructed. Note that the constructed capacity may vary depending on development pace.

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<sup>2</sup> The sizing of the WRFs shown on the 208 exhibits, ranging from 9-32 MGD, is based on a design flow of 320 GPD/DU in accordance with MCESD policy for 208 planning purposes. In reality, these plants will likely be less than half these sizes, or flows will be consolidated to fewer plants, since actual flow rates are as stated in footnote 1.



Year 4: An additional 1 MGD of capacity will be built at the Initial Phase WRF or at another of the WRF sites depending on the pace and location of development. The tie-ins between Initial Phase and/or Phase 1 WRFs (if not the same WRF) and other active development(s) will be constructed. Note that the constructed capacity may vary depending on development pace.

Year 5: The tie-ins between Initial Phase and/or Phase 1 WRFs (if not the same WRF) and other active development(s) will be constructed. Note that the constructed capacity may vary depending on development pace.

**Summary Table of WRF Capacity Expected to be Constructed to Serve Extension Area**

Year Built	Capacity Added (MGD)	Total Capacity (MGD)
1	0.5	0.5
2	0.5	1.0
3	1.0	2.0
4	1.0	3.0
5	0.0	3.0
Build-out	16.26	19.26

A table of infrastructure to be added to serve the extension areas is included. The total, build-out estimated cost of this infrastructure is \$226 million. Please see the attached spreadsheets with the breakdown of costs for each of years one through five, as follows:

- Year 1: \$9.77 M
- Year 2: \$8.93 M
- Year 3: \$10.90 M
- Year 4: \$12.11 M
- Year 5: \$8.38 M

Buildout - Backbone Wastewater Infrastructure Needs in HUC Extension

NUMBER OF DU'S 103,015	LF/QUANTITY	UNIT COST	TOTAL
56" SEWER MAIN	7,926	\$208	\$1,743,720
48" SEWER MAIN	6,600	\$179	\$1,260,600
36" SEWER MAIN	29,040	\$134	\$4,239,840
30" SEWER MAIN	7,920	\$105	\$910,800
24" SEWER MAIN	29,040	\$95	\$3,049,200
18" SEWER MAIN	17,160	\$85	\$1,630,200
15" SEWER MAIN	52,800	\$75	\$4,488,000
12" SEWER MAIN	197,399	\$65	\$14,804,925
24" RECLAIMED WATER	51,486	\$110	\$5,663,460
18" RECLAIMED WATER	29,040	\$94	\$2,729,760
12" RECLAIMED WATER	69,960	\$53	\$3,707,880
8" RECLAIMED WATER	197,399	\$35	\$6,908,965
LIFT STATION	0	\$0	0
BORING			
2 - 36" Diameter Borings	450	\$1,157	\$520,850
2 - 72" Diameter Borings	450	\$2,125	\$956,200
WRF	MGD		
187 gpd/du =	19.26	\$10,000,000	\$192,638,050
<b>Total Cost at Buildout</b>			<b>\$245,252,450</b>

Year 1 - Backbone Wastewater Infrastructure Needs in HUC Extension

NUMBER OF DU'S 2400	LF/QUANTITY	UNIT COST	TOTAL
56" SEWER MAIN	0	\$208	\$0
48" SEWER MAIN	0	\$179	\$0
36" SEWER MAIN	6,600	\$134	\$963,600
30" SEWER MAIN	5,280	\$105	\$607,200
24" SEWER MAIN	10,560	\$95	\$1,108,800
18" SEWER MAIN	1,320	\$85	\$125,400
15" SEWER MAIN	0	\$75	\$0
12" SEWER MAIN	33,000	\$65	\$2,475,000
24" RECLAIMED WATER	11,880	\$110	\$1,306,800
18" RECLAIMED WATER	10,560	\$94	\$992,640
12" RECLAIMED WATER	1,320	\$53	\$69,960
8" RECLAIMED WATER	33,000	\$35	\$1,155,000
<b>LIFT STATION</b>	0	\$0	\$0
<b>BORING</b>	0	\$0	\$0
<b>WRF</b>	<b>MGD</b>		
187 gpd/du =	0.4488	\$10,000,000	\$4,488,000
<b>Total Cost Year 1</b>			<b>\$13,292,400</b>

Year 2 - Backbone Wastewater Infrastructure Needs in HUC Extension

NUMBER OF DU'S 2400	LF/QUANTITY	UNIT COST	TOTAL
54" SEWER MAIN	2,646	\$208	\$582,120
48" SEWER MAIN	0	\$179	\$0
36" SEWER MAIN	7,920	\$134	\$1,156,320
30" SEWER MAIN	0	\$105	\$0
24" SEWER MAIN	0	\$95	\$0
18" SEWER MAIN	5,280	\$85	\$501,600
15" SEWER MAIN	0	\$75	\$0
12" SEWER MAIN	22,440	\$65	\$1,683,000
24" RECLAIMED WATER	10,566	\$110	\$1,162,260
18" RECLAIMED WATER	0	\$94	\$0
12" RECLAIMED WATER	5,280	\$53	\$279,840
8" RECLAIMED WATER	22,440	\$35	\$785,400
<b>LIFT STATION</b>	0	\$0	\$0
<b>BORING</b>			
2 - 36" Diameter Borings	450	\$1,157	\$520,850
<b>WRF</b>	<b>MGD</b>		
187 gpd/du =	0.4488	\$10,000,000	\$4,488,000
<b>Total Cost Year 2</b>			<b>\$11,159,390</b>

Year 3 - Backbone Wastewater Infrastructure Needs in HUC Extension

NUMBER OF DU'S 3600	LF/QUANTITY	UNIT COST	TOTAL
56" SEWER MAIN	5,280	\$208	\$1,161,600
48" SEWER MAIN		\$179	\$0
36" SEWER MAIN		\$134	\$0
30" SEWER MAIN	2,640	\$105	\$303,600
24" SEWER MAIN	5,280	\$95	\$554,400
18" SEWER MAIN		\$85	\$0
15" SEWER MAIN		\$75	\$0
12" SEWER MAIN	15,840	\$65	\$1,188,000
24" RECLAIMED WATER	7,920	\$110	\$871,200
18" RECLAIMED WATER	5,280	\$94	\$496,320
12" RECLAIMED WATER	0	\$53	\$0
8" RECLAIMED WATER	15,840	\$35	\$554,400
<b>LIFT STATION</b>	0	\$0	\$0
<b>BORING</b>			
2 - 72" Diameter Borings	450	\$2,125	\$956,200
<b>WRF</b>	<b>MGD</b>		
187 gpd/du =	0.6732	\$10,000,000	\$6,732,000
<b>Total Cost Year 3</b>			<b>\$12,817,720</b>

Year 4 - Backbone Wastewater Infrastructure Needs in HUC Extension

NUMBER OF DU'S 3600	LF/QUANTITY	UNIT COST	TOTAL
56" SEWER MAIN	0	\$208	\$0
48" SEWER MAIN	3,960	\$179	\$756,360
36" SEWER MAIN	10,560	\$134	\$1,541,760
30" SEWER MAIN		\$105	\$0
24" SEWER MAIN	13,200	\$95	\$1,386,000
18" SEWER MAIN	5,280	\$85	\$501,600
15" SEWER MAIN		\$75	\$0
12" SEWER MAIN	15,840	\$65	\$1,188,000
24" RECLAIMED WATER	14,520	\$110	\$1,597,200
18" RECLAIMED WATER	13,200	\$94	\$1,240,800
12" RECLAIMED WATER	5,280	\$53	\$279,840
8" RECLAIMED WATER	15,840	\$35	\$554,400
LIFT STATION	0	\$0	\$0
BORING	0	\$0	\$0
WRF 187 gpd/du =	MGD 0.6732	\$10,000,000	\$6,732,000
<b>Total Cost Year 4</b>			<b>\$15,777,960</b>

Year 5 - Backbone Wastewater Infrastructure Needs in HUC Extension

NUMBER OF DU'S 3600	LF/QUANTITY	UNIT COST	TOTAL
56" SEWER MAIN	0	\$208	\$0
48" SEWER MAIN	0	\$179	\$0
36" SEWER MAIN	0	\$134	\$0
30" SEWER MAIN	0	\$105	\$0
24" SEWER MAIN	0	\$95	\$0
18" SEWER MAIN	0	\$85	\$0
15" SEWER MAIN	6,600	\$75	\$561,000
12" SEWER MAIN	14,529	\$65	\$1,089,675
24" RECLAIMED WATER	0	\$110	\$0
18" RECLAIMED WATER	0	\$94	\$0
12" RECLAIMED WATER	6,600	\$53	\$349,800
8" RECLAIMED WATER	14,529	\$35	\$508,515
<b>LIFT STATION</b>	0	\$0	0
<b>BORING</b>	0	\$0	\$0
<b>WRF</b>	<b>MGD</b>		
187 gpd/du =	0.6732	\$10,000,000	\$6,732,000
<b>Total Cost Year 5</b>			<b>\$9,240,990</b>



NO.	DATE	BY	DESCRIPTION

Designed By  
 Drawn By  
 Checked By  
 CHC

**DSVA**  
 DANIEL S. VILLAS ASSOCIATES, LLC

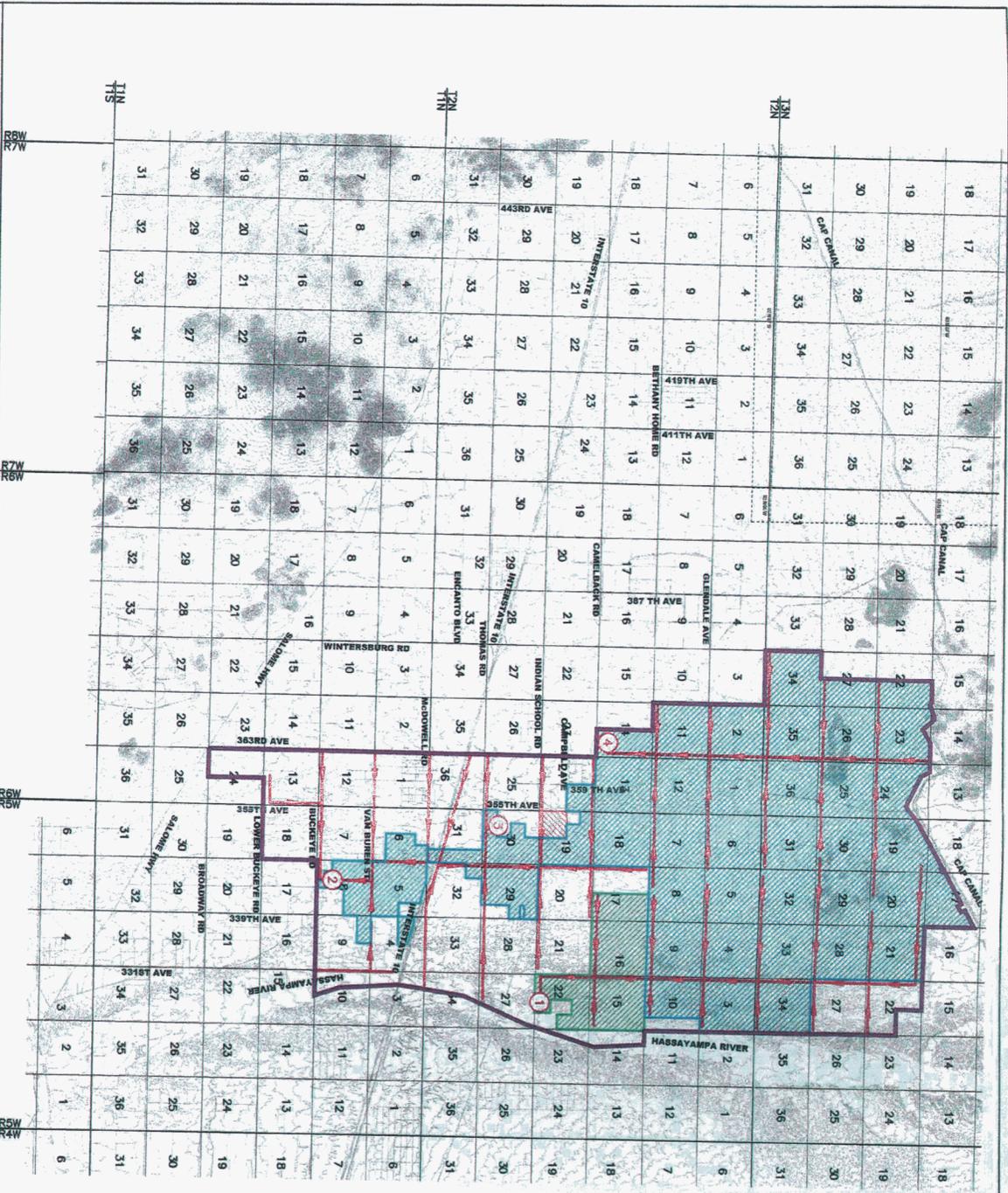
PRELIMINARY  
 CONSTRUCTION  
 OR RECORDING



HUC NE  
 PROPOSED 208

SEWER COLLECTION SYSTEM

DSVA Project No. 080010  
 Date: MAY 2007  
 Dwg No. EXHIBIT 5  
 Sht No. of



**LEGEND**

- HUC NE PROPOSED 208 SERVICE AREA BOUNDARY
- BEUKONT DEVELOPMENT
- HASSAYAMPA RANCH DEVELOPMENT
- 339H AVENUE PROJECT DEVELOPMENT
- OTHER DEVELOPMENTS
- PROPOSED SEWER LINE
- PROPOSED WATER REDEMPTION FACILITY

**WRF FACILITIES**

WRF CAMPUS	CAPACITY (MGD)
(1)	9.0
(2)	10.0
(3)	12.0
(4)	14.0

63.6