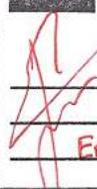


**MASTER WATER REPORT  
FOR  
DEVELOPMENT UNITS 8 & 9  
AT  
EASTMARK**

January 14, 2014  
WP# 123835.04

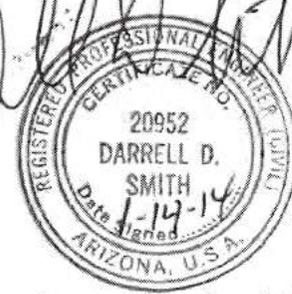
REVIEWED BY  
CITY STAFF BY *Larry Smith*  
*2/16/14* DATE

DMB <sup>®</sup>	Master Developer Approval	EASTMARK.
	Date <u>01/21/14</u>	
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*EXPIRES 6-30-16*

**TABLE OF CONTENTS**

**1.0 INTRODUCTION.....1**

    1.1 General Background and Project Location.....1

    1.2 Scope of Master Water Report .....1

    1.3 Master Water Report for Eastmark.....2

    1.4 Full Build-Out Condition .....2

    1.5 Phase 1.....2

    1.6 Basis of Design Reports for Specific Individual Developments .....3

**2.0 EXISTING CONDITIONS.....4**

    2.1 Topographic Conditions .....4

    2.2 Existing Pressure Zones and Hydraulic Grade Lines .....4

    2.3 Existing Offsite Water Infrastructure .....4

    2.4 Existing Onsite Water Infrastructure.....5

**3.0 DESIGN CRITERIA AND PROJECTED WATER DEMANDS.....6**

    3.1 Design Criteria .....6

    3.2 Water Demand Design Flows.....6

**4.0 HYDRAULIC MODEL .....7**

    4.1 Modeled Scenarios .....7

    4.2 Hydraulic Modeling Assumptions.....7

    4.3 Hydraulic Modeling Results.....8

**5.0 GENERAL PLAN FOR ONSITE WATER DISTRIBUTION .....9**

    5.1 Piping Layout .....9

    5.2 Water Sources.....9

        5.2.1 Surface Water.....9

        5.2.2 Groundwater Wells.....10

    5.3 Water Pressure to Multi-Story Buildings .....10

**6.0 CONCLUSIONS.....11**



*Revised 6-30-16*

## TABLES

Table 1	Water System Design Criteria
Table 2	Eastmark Modeled Land Use
Table 3	DU 8 & 9 Land Use, Full Build-Out Condition
Table 4	Water Demand Design Flows, Full Build-Out Condition
Table 5	Water Demand Design Flows by Junction Node, Full Build-Out Condition
Table 6	DU 8 & 9 Land Use, Phase 1
Table 7	Water Demand Design Flows, Phase 1
Table 8	Water Demand Design Flows by Junction Node, Phase 1

## APPENDICES

Appendix A Hydraulic Modeling Results – Served by South CAP Water Treatment Plant – Full Build-Out Condition

- Average Day Demand
- Max Day Demand
- Peak Hour Demand
- Max Day Demand Plus Fire Flow

Appendix B Hydraulic Modeling Results – Served by South CAP Water Treatment Plant – Phase 1

- Average Day Demand
- Max Day Demand
- Peak Hour Demand
- Max Day Demand Plus Fire Flow

## PLATES

Plate 1	Vicinity Map
Plate 2	DU 8 & 9 Master Water Exhibit – Full Build-Out Condition
Plate 3	DU 8 & 9 Master Water Exhibit - Phase 1



EXPIRES 6-30-16

## 1.0 INTRODUCTION

### 1.1 General Background and Project Location

The proposed Development Units 8 & 9 (Site) is anticipated to be an approximate 527-acre Development Unit (DU) within the 3,151-acre Eastmark master planned community (formerly known as Mesa Proving Grounds), in Mesa, Arizona. It is a Planned Community District (PCD) which is a mixed-use development that will include single-family residential, multi-family residential, commercial uses, various community uses, and open space.

This Master Water Report has been prepared in accordance with Wood, Patel & Associates, Inc.'s (Wood/Patel's) understanding of the City's technical requirements for water distribution systems as applicable for the Eastmark.

The Site is located within Section 26 of Township 1 South, Range 7 East of the Gila and Salt River Meridian. The Site is bounded by Ray Road and the Powerline Floodway to the north, Williams Field Road and Pacific Proving Grounds on the south, Signal Butte Road to the east, and Inspirian Parkway and Pacific Proving Grounds on the west (refer to the attached Plate 1 – *Vicinity Map*).

### 1.2 Scope of Master Water Report

This Master Water Report for Development Units 8 & 9 at Eastmark has been prepared to reflect the proposed water system layout for Development Units 8 and 9 and includes:

- Water system pipe sizes
- Water system layout based on planned lotting
- Water system phasing

This report reflects the City of Mesa Water Master Plan modeled waterline sizes in this area of the Desert Wells system. Report results reflect pressures and flows that are adequate to serve the planned development.

This report presents water demands and water main sizes and locations, as required to provide water service to the Site for full build-out conditions. The purpose of this report is to provide a water analysis reflecting the developed condition of DU 8 & 9, based on

the land uses provided by TerraWest Communities. The goal of this DU 8 & 9 Master Water Report is to identify the water infrastructure required to serve the Site, while meeting the requirements of the City's Engineering and Design Standards.

Updates to the DU 8 & 9 Master Water Report may be required if significant changes are made to the land uses and assumptions utilized to prepare this report. Additionally, design criteria may change based on actual water demands to calculate draws on the system in the future.

### **1.3 Master Water Report for Eastmark**

The *Master Water Report Update for Eastmark*, by Wood, Patel & Associates, Inc. dated February 4, 2013 was approved by the City of Mesa. The approved report set the design criteria required within Eastmark. The *Master Water Report Update for Eastmark*, by Wood, Patel and Associates, Inc. is currently being updated to reflect the water system within this report, in addition to new information for other development units within Eastmark and will be submitted to the City of Mesa for review and re-approval.

### **1.4 Full Build-Out Condition**

The design criteria utilized to calculate water flows and to determine required pipe sizes for the Site are based on projected full build-out conditions for DU 8 & 9. For a detailed breakdown of DU 8 & 9 modeled land use, please refer to the following:

- Table 3 – *DU 8 & 9 Land Use, Full Build-Out Condition*
- Table 4 – *Water Demand Design Flows, Full Build-Out Condition*
- Table 5 – *Water Demand Design Flows by Junction Node, Full Build-Out Condition*
- Plate 2 – *DU 8 & 9 Master Water Exhibit – Full Build-Out Condition*

### **1.5 Phase 1**

Phase 1 was modeled to ensure adequate pressures to meet peak-hour demands and max-day demands plus fire flow within the water distribution system prior to the full build-out condition. For a detailed breakdown of DU 8 & 9 Phase 1 modeled land use, refer to the following:

- *Table 6 – DU 8 & 9 Land Use, Phase 1*
- *Table 7 – Water Demand Design Flows, Phase 1*
- *Table 8 – Water Demand Design Flows by Junction Node, Phase 1*
- *Plate 3 – DU 8 & 9 Master Water Exhibit – Phase 1*

#### **1.6 Basis of Design Reports for Specific Individual Developments**

As development progresses within the Site, Basis of Design (BOD) reports are required for specific individual developments to ensure compliance with the Master Report and this Development Unit Master Report, and to identify significant variations in land use, water demands, and the water infrastructure needed to serve the parcel. The Site will be developed in phases, and the infrastructure needed to support a phased development will be determined at the time of platting.

## 2.0 EXISTING CONDITIONS

### 2.1 Topographic Conditions

The Site consists of multiple automotive test tracks and undisturbed desert which will surround the Site to the northern, southern, and western boundaries. The Site is bordered on the east by residential developments which are in various stages of design and construction. The land generally slopes in a southwesterly direction, at approximately 0.5 to 1 percent. The peak elevation within the Site is approximately 1,440 feet above mean sea level (MSL), located near the intersection of Signal Butte Road and Ray Road. The lowest elevation within the Site is approximately 1,410 feet MSL, located at the intersection of Williams Field Road and Crismon Road. Refer to Plate 1 – *Vicinity Map* for roadway alignments.

### 2.2 Existing Pressure Zones and Hydraulic Grade Lines

The Site is located within the Desert Wells water pressure zone, defined by the City of Mesa as follows:

Desert Wells Pressure Zone:

- Ground elevation range = 1,370 to 1,520 feet
- Static hydraulic grade line (HGL) = 1,634 feet.

### 2.3 Existing Offsite Water Infrastructure

Relevant existing water infrastructure adjacent to the Site includes the following within the Desert Wells Pressure Zone:

- 16-inch waterline extending south along Ellsworth Road, from Elliot Road to Pecos Road.
- 16-inch waterline extending east along Elliot Road, from Ellsworth Road to Signal Butte Road.
- 16-inch waterline extending south along Signal Butte Road, from Elliot Road to Ray Road.
- 30-inch waterline extending south along Signal Butte Road, from Elliot Road to north of Warner Road.
- 16-inch waterline extending east along Ray Road, from Ellsworth Road to Signal Butte Road.

#### **2.4 Existing Onsite Water Infrastructure**

It is Wood/Patel's understanding there are existing onsite water service lines for the General Motors Proving Grounds offices and facilities. These waterlines will be removed by the developer, where applicable, with construction of DU 8 & 9.

### 3.0 DESIGN CRITERIA AND PROJECTED WATER DEMANDS

#### 3.1 Design Criteria

Water demand and pipe-sizing criteria utilized in this DU 8 & 9 Master Water Report are based on Wood/Patel's understanding of the following:

- The Master Water Report for Eastmark,
- Design Criteria listed in the 2012 City of Mesa Engineering Design Standards,
- Regionally accepted design standards.

Table 1 – *Water System Design Criteria* represents Unit Daily Water Demand design criteria for each land use category. The Development Unit Daily Water Demand was used to estimate demands at each node in the hydraulic model to determine flow rates, velocities, and pipe sizing.

#### 3.2 Water Demand Design Flows

Water demand flows under full build-out conditions are calculated using the design criteria listed in Section 3.1. For detailed calculations, see Table 4 – *Water Demand Design Flows, Full Build-Out Condition* and Table 7 – *Water Demand Design Flows, Phase 1*. Design flows are summarized below and include the development unit adjustments.

##### Full Build-Out

	<b>Average-Day Demand MGD (gpm)</b>	<b>Max-Day Demand MGD (gpm)</b>	<b>Peak-Hour Demand MGD (gpm)</b>
DU-8	0.197 (137.4)	0.396 (274.8)	0.593 (412.2)
DU-9	0.287 (198.9)	0.573 (398.1)	0.860 (596.7)
<b>Total</b>	<b>0.484 (336.3)</b>	<b>0.969 (672.9)</b>	<b>1.453 (1,008.9)</b>

##### Phase 1

	<b>Average-Day Demand MGD (gpm)</b>	<b>Max-Day Demand MGD (gpm)</b>	<b>Peak-Hour Demand MGD (gpm)</b>
DU-8	0.110 (76.4)	0.220 (152.9)	0.330 (229.2)
DU-9	0.105 (72.9)	0.210 (145.9)	0.315 (218.7)
<b>Total</b>	<b>0.215 (149.3)</b>	<b>0.430 (298.8)</b>	<b>0.645 (447.9)</b>

## 4.0 HYDRAULIC MODEL

Bentley WaterCAD Version 8i, a potable water transmission and distribution system numerical modeling program, was utilized to analyze the proposed potable water system. A hydraulic grade line (HGL) of 1,634 feet was used to simulate the water supply pressure for the Desert Wells pressure zone. Water demands and peaking factors utilized are based on information listed in Section 3.0. Pipes are sized to accommodate modeled conditions of flow.

### 4.1 Modeled Scenarios

The following primary modeling scenarios were selected to demonstrate compliance with City of Mesa requirements, and analyze the proposed water system for both full build-out and Phase 1:

- Average Day Demand
- Max Day Demand
- Peak Hour Demand
- Max Day Demand Plus Fire Flow
- Fire Flow Analyses

The hydraulic model utilizes the Hazen-Williams equation to calculate head losses throughout the system during the modeled scenarios. Refer to Table 1 for additional information regarding hydraulic modeling parameters.

### 4.2 Hydraulic Modeling Assumptions

Several assumptions were made regarding offsite water infrastructure for the purpose of modeling DU 8 & 9 to full build-out design conditions. The Ray Road 16-inch waterline has been constructed. The proposed infrastructure anticipates several tie-ins to offsite waterlines. The first location is in Inspirian Parkway, one-third mile south of Ray Road. The second location is at the intersection of Inspirian Parkway and Ray Road. The third connection is located at the intersection of Eastmark Parkway and Ray Road. The fourth location is at the intersection of Ray Road and Everton. The fifth location is at the intersection of Ray Road and Signal Butte Road. Refer to Plate 2 for detailed information regarding future offsite water infrastructure. With multiple tie-ins, the water system has redundancy allowing for construction phasing, and allows the water system to function in compliance with City of Mesa standards and specifications.

### 4.3 Hydraulic Modeling Results

The hydraulic modeling results indicate the onsite system in DU 8 & 9 is capable of delivering average day and peak hour demands for the full build-out condition as well as Phase 1 within the following onsite pressure ranges:

#### DU 8 & 9 Full Build-Out Pressure (psi)

Hydraulic Model Scenario	Low	Node(s)	High	Node(s)
Average Day Demand	88	J-DU8-110, J-DU8-120	95	J-DU9-070
Peak Hour Demand	85	J-DU8-120	92	J-DU9-020 J-DU9-030 J-DU9-040 J-DU9-070

#### DU 8 & 9 Phase 1 Pressure (psi)

Hydraulic Model Scenario	Low	Node(s)	High	Node(s)
Average Day Demand	88	J-DU8-110	95	J-DU9-020
Peak Hour Demand	87	J-DU8-110	93	J-DU9-020 J-DU9-030

As shown in the above tables, the proposed water distribution infrastructure will serve DU 8 & 9. Fire flow results from the model indicate available mainline fire flows exceed 3,900 gpm at individual modeling nodes during max day demand, while maintaining residual pressures greater than 20 psi throughout the Site at full build-out condition and during Phase 1. Detailed hydraulic modeling results, calculations, and exhibits are provided in the attached appendices and plates. Modeled outflow from each water source is shown below:

#### Flow from South C.A.P. Desert Wells Pump Station:

	Full Build-Out	Phase 1
Average Day Demand:	975 gpm	810 gpm
Max Day Demand:	1,951 gpm	1,620 gpm
Peak Hour Demand:	2,926 gpm	2,430 gpm

#### Flow from City of Mesa Water System, North of Elliot Road:

	Full Build-Out	Phase 1
Average Day Demand:	129 gpm	107 gpm
Max Day Demand:	258 gpm	214 gpm
Peak Hour Demand:	386 gpm	321 gpm

## 5.0 GENERAL PLAN FOR ONSITE WATER DISTRIBUTION

### 5.1 Piping Layout

The planned water distribution system for the Site consists of looped public waterlines ranging in diameter from 8 inches through 16 inches, using pipe materials per City of Mesa standards. Main waterlines have been located within designated public rights-of-way. In accordance with City of Mesa standards, 12-inch and 16-inch waterlines are generally located near ½-mile and 1-mile street alignments, or are upsized as needed to meet design constraints (refer to Plate 2 – *DU 8 & 9 Master Water Exhibit – Full Build-Out Condition*). As noted on the exhibit, some onsite waterlines require upsizing to meet regional City of Mesa water demands.

### 5.2 Water Sources

According to the *2010 City of Mesa Water Master Plan Update*, two primary sources of water will supply Eastmark. These sources are surface water supplied from the CAP canal, and groundwater from proposed well sites.

#### 5.2.1 Surface Water

The first phase of the South CAP Water Treatment Plant, consisting of the first reservoir and the first section of the booster pump station, has been constructed to provide storage and assist in meeting peak demands in the Desert Wells Zone. A portion of the facility will serve Eastmark in the interim until such time as the City deems it necessary to construct the CAP raw water conveyance system from the CAP canal and the water treatment portion of the plant.

According to the *2010 City of Mesa Water Master Plan Update*, the CAP water supply system typically provides a constant supply of surface water, although outages are possible as a result of failures and for periodic maintenance. CAP has indicated that short dry-ups (ranging from one week to one month in duration) may be required every two to three years, on average, for maintenance purposes. According to the *2010 City of Mesa Water Master Plan Update*, the South CAP water facilities will be supplied by groundwater production wells during CAP dry-ups to provide adequate storage and pumping to the Desert Wells Pressure Zone and other pressure zones.

### **5.2.2 Groundwater Wells**

Conceptual locations of the future groundwater wells are shown on Plate 2. Well locations are conceptual in nature and will be coordinated with the City of Mesa during the construction plan design and preparation. Well collection lines will be required extending from each well site to supply the South CAP water facilities. It is Wood/Patel's understanding the well sites and well collector mains will be phased with development and will be owned, operated, and maintained by the City of Mesa.

### **5.3 Water Pressure to Multi-Story Buildings**

Based on full build-out hydraulic modeling results, peak-hour residual pressures within the Site are at or above 70 pounds per square inch (psi). Private individual booster pumps may be required to serve multi-story buildings, and should be evaluated on an individual basis.

## 6.0 CONCLUSIONS

The *Master Water Report for Development Units 8 & 9 at Eastmark* meets accepted standards and requirements, and will serve, in conjunction with the *Master Water Report for Eastmark*, as a guide for construction documents associated with the planned potable water systems of DU 8 & 9. No critical issues were identified that would preclude the anticipated development as presented in this Master Water Report. The following are critical conclusions:

1. The Site is located within the existing Desert Wells water pressure zone currently served by the City of Mesa.
2. For the purpose of this Master Water Report, the full build-out conditions for DU 8 & 9 have been evaluated for the design of the water distribution system.
3. The approximate average daily water demand for DU 8 & 9 is 0.48 million gallons per day (MGD) in the full build-out condition, and 0.22 MGD in Phase 1, per Section 3.2 of this report.
4. A hydraulic model was utilized to analyze the proposed potable water system and size pipes for the water distribution system. Modeling results indicate minimum residual pressures are met, and head loss and velocities within the planned waterlines meet the design criteria presented herein.
5. The planned onsite water distribution system for DU 8 & 9 consists of looped public waterlines ranging in diameter from 8 inches through 16 inches.
6. Modeling results indicated the proposed waterline layout would adequately serve DU 8 & 9.
7. The proposed water distribution system and resulting hydraulic modeling output anticipates City of Mesa water production facilities and booster pump station facilities will be brought into service as necessary.
8. This *Master Water Report for Development Units 8 & 9 at Eastmark* demonstrates the sufficiency of the proposed water distribution system to serve the Site in accordance with City of Mesa Water Standards and the *Master Water Report for Eastmark*.

**TABLE 1**

**Water System Design Criteria**

Project: DU 8 & 9 at Eastmark  
 Location: Mesa, Arizona  
 Reference: 2012 City of Mesa Engineering Design Standards

CIVIL ENGINEERS \* HYDROLOGISTS \* LAND SURVEYORS \* CONSTRUCTION MANAGERS  
 Proj. Number: 123835.04  
 Proj. Engineer: Darrell Smith, P.E.

UNIT DAILY RESIDENTIAL WATER DEMANDS								
LAND USE CATEGORY	LAND USE	DWELLING UNIT DENSITY		UNIT DAILY WATER DEMAND		UNIT DAILY WATER DEMAND		NOTES
		RANGE / VALUE	UNITS	VALUE	UNITS	VALUE	UNITS	
LDR-1	Low Density Residential (LDR 0-1)	0.5	DU/AC	490	GPD/DU	126	GPD/AC	Source: Dwelling unit density divisions are based on City of Mesa 2025 General Plan. Unit water demands are based on the City of Mesa 2012 Engineering and Design Standards. LDR 1.0 Average and MDR 4.0 Average are used at locations where the dwelling unit densities are at or near 1 DU/AC and 4 DU/AC, respectively.
LDR-2	LDR 0-1 & LDR 1-2 AVG.	1	DU/AC	490	GPD/DU	204	GPD/AC	
LDR-3	Low Density Residential (LDR-1-2)	1.2	DU/AC	490	GPD/DU	281	GPD/AC	
MDR-1	Medium Density Residential (MDR 2-4)	3.0	DU/AC	300	GPD/DU	834	GPD/AC	
MDR-2	MDR 2-4 & MDR 4-6 AVG.	4	DU/AC	250	GPD/DU	1,218	GPD/AC	
MDR-3	Medium Density Residential (MDR 4-6)	5.0	DU/AC	250	GPD/DU	1,602	GPD/AC	
MDR-4	Medium Density Residential (MDR 6-10)	6.5	DU/AC	250	GPD/DU	1,523	GPD/AC	
HDR-1	High Density Residential (HDR 10-15)	11.0	DU/AC	230	GPD/DU	1,936	GPD/AC	
HDR-2	High Density Residential (HDR 15+)	17.0	DU/AC	230	GPD/DU	2,355	GPD/AC	
MUR-1	Mixed Use/Residential (MUR) - Residential	15.0	DU/AC	185	GPD/DU	2,307	GPD/AC	

UNIT DAILY NON-RESIDENTIAL WATER DEMANDS			
LAND USE	UNIT DAILY WATER DEMAND		NOTES
	VALUE	UNITS	
Resort Hotel	350	GPD/UNIT	Source: City of Mesa 2012 Engineering and Design Standards.
Commercial / Retail	0.8	GPD/SF	
Office	0.6	GPD/SF	
Education/Civil/Church	1,500	GPD/AC	
Potable Irrigated Turf	4,400	GPD/AC	

HYDRAULIC MODELING CRITERIA

DESCRIPTION	VALUE	UNITS	NOTES
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PEAKING FACTORS			
Max Day	2.0	x Ave Day Demand	2
Peak Hour	3.0	x Ave Day Demand	2
MODELED FIRE HYDRANT FLOW (MINIMUMS)			
Residential	1,500	gpm	
Commercial (represents flow in backbone waterlines)	4,000	gpm	
HYDRAULICS (ON SITE)			
Minimum Residual Pressure, Peak Hour	40	psi	
Minimum Residual Pressure, Max Day + Fire Flow	20	psi	2
Maximum Pipe Headloss, Max Day Demand	10 ft/1000 ft	-	3
Maximum Velocity, Peak Hour Demand	5 (+/-)	ft/s	3
Maximum Velocity, Max Day + Fire Flow	10	ft/s	3
Minimum Pipe Diameter, Looped System	8	in	2
Hazen-Williams C-value	120	-	3

- Notes:  
 1. City of Scottsdale Design Standards and Policy Manual  
 2. Per 2012 City of Mesa Engineering Design Standards  
 3. Per City of Phoenix Design Standards Manual for Water and Wastewater Systems.

**TABLE 2**

**Eastmark Modeled Land Use**

**WOOD/PATEL**

**TABLE 2 - EASTMARK MODELED LAND USE**

Project: DU 8 & 9 at Eastmark  
 Location: Mesa, Arizona  
 Proj. Number: 123835.04  
 Proj. Engineer: Darrell Smith, P.E.

EASTMARK - PRELIMINARY RESIDENTIAL LAND USE AND DWELLING UNIT BREAKDOWN										
Land Use	LDR-2	LDR-3	MDR-1	MDR-2	MDR-3	MDR-4	HDR-1	HDR-2	Residential Total	Total Residential Units
Acreage	--	20.0	726.7	22.4	148.4	--	37.3	--	954.8	--
Dwelling Units	--	39	2,364	90	669	--	410	--	3,572	3,572

EASTMARK - WATER DEMAND CALCULATIONS												
Development Unit	Total Area (AC)	Residential (AC)	Total Dwelling Units	Keys <sup>(1)</sup>	Gross Non-Residential <sup>(2)</sup> (AC)	Total Floor Area (sq. ft.)	Education (AC)	Church (AC)	Civic (AC)	Other (AC)	Golf <sup>(3)</sup> (AC)	Avg. Day Water Demand (GPD)
1	--	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	--	--	--	--	--
3N	--	--	--	--	--	--	--	--	--	--	--	--
3S	--	--	--	--	--	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--	--	--	--	--	--
6	280	--	--	--	280	5,360,000	--	--	--	--	--	1,385,140
7	581.5	504.7	2,129	--	5.5	15,000	20.0	13.5	2.5	35.3	--	642,560
8	198.8	192.0	535	--	--	--	--	--	--	6.8	--	197,830
9	270.5	258.1	908	--	--	--	--	--	12.4	--	--	286,500
<b>Subtotal:</b>	<b>1,310.8</b>	<b>954.8</b>	<b>3,572</b>	<b>--</b>	<b>265.5</b>	<b>5,375,000</b>	<b>20.0</b>	<b>13.5</b>	<b>14.9</b>	<b>42.1</b>	<b>0.0</b>	<b>2,515,020</b>

<sup>(1)</sup> Anticipated number of "Keys" represents hotel and resort uses.

<sup>(2)</sup> Non-residential water demands are calculated based on net non-residential acreage.

<sup>(3)</sup> Unit, daily water demand calculations do not include golf course acreage.

Abbreviations:

AC = Acres

GPD = Gallons Per Day

GPD/AC = Gallons Per Day Per Acre

**TABLE 3**

**DU 8 & 9 Land Use,  
Full Build-Out Condition**

Project: DU 8 & 9 at Eastmark  
 Location: Mesa, Arizona

Proj. Number: 123835.04  
 Proj. Engineer: Darrell Smith, P.E.

## PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL

Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Commercial/Retail S.F.	Land Use	Unit Daily Water Demand (GPD/DU, AC, or S.F.)	Avg Day
8-1	74	22.9	3.23	--	--	MDR-1	300	22,200
8-2	87	30.0	2.90	--	--	MDR-1	300	26,100
8-3	64	24.7	2.59	--	--	MDR-1	300	19,200
8-4	42	20.9	2.01	--	--	MDR-1	300	12,600
8-5	--	--	--	6.8	--	PARK	4400	29,920
8-6	91	23.6	3.86	--	--	MDR-1	300	27,300
8-7	74	28.2	2.62	--	--	MDR-1	300	22,200
8-8	39	20.0	1.95	--	--	LDR-3	490	19,110
8-9	64	21.7	2.95	--	--	MDR-1	300	19,200
9-1	189	54.0	3.50	--	--	MDR-1	300	56,700
9-2	99	31.8	3.11	--	--	MDR-1	300	29,700
9-3	--	--	--	12.4	--	Civic	1500	18,600
9-4	159	49.4	3.22	--	--	MDR-1	300	47,700
9-5	145	39.8	3.64	--	--	MDR-1	300	43,500
9-6	90	22.4	4.02	--	--	MDR-2	250	22,500
9-7	226	60.7	3.72	--	--	MDR-1	300	67,800
<b>DU 8 &amp; 9 Totals</b>	<b>1443</b>	<b>450.1</b>		<b>19.2</b>	<b>0</b>			<b>484,330</b>

## PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION

Junction	Parcel(s)	No. of DUs	Acres	Density (DU/AC)	Land Use	GPD/AC	Avg Day (GPD)	Avg Day (GPM)
J-DU8-010	--	--	--	--	--	--	--	--
J-DU8-020	--	--	--	--	--	--	--	--
J-DU8-030	--	--	--	--	--	--	--	--
J-DU8-040	1/2 8-9	32	10.9	2.9	MDR-1	881	9,600	6.7
J-DU8-050	--	--	--	--	--	--	--	--
J-DU8-060	1/2 8-2	43.5	15.0	2.9	MDR-1	870	13,050	9.1
J-DU8-070	8-1	74	22.9	3.2	MDR-1	969	22,200	15.4
J-DU8-080	1/2 8-4	21	10.5	2.0	MDR-1	600	6,300	4.4
J-DU8-090	1/2 8-4, 1/2 8-8	40.5	20.5	2.0	MDR-1 & LDR-3	773	15,855	11.0
J-DU8-100	1/2 8-2	43.5	15.0	2.9	MDR-1	870	13,050	9.1
J-DU8-110	8-3 & 8-5, 1/2 8-6	110	43.3	2.5	MDR-1 & Park	1,450	62,770	43.6
J-DU8-120	1/2 8-6, 1/2 8-7	82.5	25.9	3.2	MDR-1	956	24,750	17.2
J-DU8-130	1/2 8-7, 1/2 8-8, 1/2 8-9	88.5	35.0	2.5	MDR-1 & LDR-3	864	30,255	21.0
J-DU9-010	1/2 9-1	94.5	27.0	3.5	MDR-1	1,050	28,350	19.7
J-DU9-020	1/2 9-1, 1/2 9-2 & 9-3	144	49.1	2.9	MDR-1 & Civic	1,069	52,500	36.5
J-DU9-030	1/2 9-2 & 9-3, 1/2 9-4	129	46.8	2.8	MDR-1 & Civic	1,026	48,000	33.3
J-DU9-040	1/2 9-6	45	11.2	4.0	MDR-2	1,004	11,250	7.8
J-DU9-050	--	--	--	--	--	--	--	--
J-DU9-060	1/2 9-6, 1/2 9-7	158	41.6	3.8	MDR-2 & MDR-1	1,085	45,150	31.4
J-DU9-070	1/2 9-4, 1/2 9-5	152	44.6	3.4	MDR-1	1,022	45,600	31.7
J-DU9-080	1/2 9-5, 1/2 9-7	185.5	50.3	3.7	MDR-1	1,106	55,650	38.6
		<b>1,444</b>	<b>469.6</b>				<b>484,330</b>	<b>336.5</b>

**TABLE 4**

**Water Demand Design Flows,  
Full Build-Out Condition**

Project: DU 8 & 9 at Eastmark  
 Location: Mesa, Arizona  
 References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 123835.04  
 Proj. Engineer: Darrell Smith, P.E.

Eastmark

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	AVE. DAY DEMAND		MAX DAY DEMAND		PEAK HOUR DEMAND
							(GPD)	(GPM)	(GPD)	(GPM)	(GPM)
DU-6	DU-6A	130.0	-	INDUSTRIAL	5,339	J-DU6-010, J-DU6-020, J-DU6-030, J-DU6-040, J-DU6-050, J-DU6-060	694,070	482.0	1,388,140	964.0	1,446.0
	DU-6B	130.0	-	INDUSTRIAL	5,339	J-DU6-040, J-DU6-050, J-DU6-060, J-DU6-070, J-DU6-080, J-DU6-090	694,070	482.0	1,388,140	964.0	1,446.0
<b>Total</b>		<b>260.0</b>	<b>0.0</b>				<b>1,388,140</b>	<b>964.0</b>	<b>2,776,280</b>	<b>1,928.0</b>	<b>2,892.0</b>

DU-7	7-1	23.9	84	MDR-1	1,152	J-DU7-100	24,200	16.9	48,400	33.8	50.7
	7-2	31.8	88	MDR-1	1,304	J-DU7-100	31,500	18.5	63,000	34.9	54.7
	7-3	33.1	83	MDR-1	1,600	J-DU7-100	32,700	22.7	65,400	42.4	64.1
	7-4	34.8	84	MDR-1	724	J-DU7-100	23,200	17.5	46,400	32.8	52.8
	7-5	29.9	85	MDR-1	750	J-DU7-100	21,900	14.2	43,800	28.4	42.9
	7-6	35.4	77	MDR-1	873	J-DU7-100	25,800	16.7	51,600	32.8	48.9
	7-7	31.4	108	MDR-1	394	J-DU7-100	31,300	21.7	62,600	41.3	62.1
	7-8	25.3	116	MDR-1	1,146	J-DU7-100	20,900	18.3	36,800	32.3	46.3
	7-9	7.5	-	RESIDENTIAL	4,300	J-DU7-100	11,200	7.8	22,400	12.6	22.4
	7-10	25.4	108	MDR-1	1,263	J-DU7-100	27,200	18.3	54,400	31.7	46.4
	7-11	10.1	100	MDR-1	1,309	J-DU7-100	25,000	19.4	50,000	34.7	52.9
	7-12	40.6	33	MDR-1	1,198	J-DU7-100	33,200	18.1	66,400	32.3	48.3
	7-13	20.1	82	MDR-1	1,632	J-DU7-100	43,200	14.2	86,400	28.5	42.9
	7-14	17.3	150	MDR-1	2,300	J-DU7-100	43,900	30.3	87,800	36.7	56.9
	7-15	18.1	84	MDR-1	1,160	J-DU7-100	31,000	14.8	62,000	29.7	43.8
	7-16	25.4	100	MDR-1	1,101	J-DU7-100	30,000	20.3	60,000	31.7	46.6
	7-17	25.4	70	MDR-1	1,007	J-DU7-100	23,400	16.3	46,800	32.5	48.9
	7-18	28.2	87	MDR-1	852	J-DU7-100	25,500	17.7	51,000	33.9	50.9
	7-19	28.1	88	MDR-1	1,111	J-DU7-100	24,600	18.4	48,200	31.3	46.2
	7-20	28.1	80	MDR-1	1,194	J-DU7-100	34,000	18.3	68,000	33.3	50.1
7-21	22.1	85	MDR-1	1,158	J-DU7-100	25,800	17.5	51,600	32.4	48.1	
7-22	23.0	-	EDUCATION	1,438	J-DU7-100	30,200	20.8	60,400	41.7	62.4	
7-23	21.7	220	MDR-1	2,250	J-DU7-100	20,800	35.1	41,600	71.3	106.3	
7-24	6.0	-	CHURCH	1,300	J-DU7-100	8,000	8.3	16,000	12.4	18.9	
7-25	2.9	-	CIVIC	1,400	J-DU7-100	3,500	3.6	7,000	9.2	13.8	
7-26	6.5	-	COMMERCIAL RESTAURANT	2,582	J-DU7-100	12,900	8.3	25,800	18.3	24.9	
7-27	93.0	-	PARKS AND RECREATION	-	J-DU7-100	-	-	-	-	-	
<b>Total</b>		<b>581.5</b>	<b>2,129</b>				<b>642,550</b>	<b>446.2</b>	<b>1,285,100</b>	<b>892.5</b>	<b>1,338.6</b>

DU-8	8-1	22.9	74	MDR-1	969	J-DU8-070	22,200	15.4	44,400	30.8	46.2
	8-2	30.0	87	MDR-1	870	J-DU8-080, J-DU8-100	26,100	18.1	52,200	36.3	54.3
	8-3	24.7	64	MDR-1	777	J-DU8-110	19,200	13.3	38,400	26.7	39.9
	8-4	20.9	42	MDR-1	603	J-DU8-080, J-DU8-090	12,600	8.8	25,200	17.5	26.4
	8-5	6.8	-	PARK	4,400	J-DU8-080, J-DU8-090	29,920	20.8	59,840	41.6	62.4
	8-6	23.6	91	MDR-1	1,157	J-DU8-110, J-DU8-120	27,300	19.0	54,600	37.9	57.0
	8-7	28.2	74	MDR-1	787	J-DU8-120, J-DU8-130	22,200	15.4	44,400	30.8	46.2
	8-8	20.0	39	LDR-3	966	J-DU8-090, J-DU8-130	19,110	13.3	38,220	26.5	39.9
	8-9	21.7	64	MDR-1	885	J-DU8-040, J-DU8-130	19,200	13.3	38,400	26.7	39.9
<b>Total</b>		<b>198.8</b>	<b>535</b>				<b>197,830</b>	<b>137.4</b>	<b>395,660</b>	<b>274.8</b>	<b>412.2</b>

DU-9	9-1	54.0	189	MDR-1	1,050	J-DU9-010, J-DU9-020	56,700	39.4	113,400	78.8	118.2
	9-2	31.8	99	MDR-1	934	J-DU9-020, J-DU9-030	29,700	20.6	59,400	41.3	61.8
	9-3	12.4	-	CIVIC	1,500	J-DU9-020, J-DU9-030	18,600	12.9	37,200	25.6	38.7
	9-4	49.4	159	MDR-1	966	J-DU9-030, J-DU9-070	47,700	33.1	95,400	66.3	99.3
	9-5	39.8	145	MDR-1	1,093	J-DU9-070, J-DU9-080	43,500	30.2	87,000	60.4	90.6
	9-6	22.4	90	MDR-2	1,004	J-DU9-040, J-DU9-080	22,500	15.6	45,000	31.3	46.8
	9-7	60.7	226	MDR-1	1,117	J-DU9-060, J-DU9-080	67,800	47.1	135,600	94.2	141.3
<b>Total</b>		<b>270.5</b>	<b>908</b>				<b>286,500</b>	<b>198.9</b>	<b>573,000</b>	<b>398.1</b>	<b>596.7</b>

<b>DU 8 &amp; 9 TOTAL</b>	<b>469.3</b>	<b>1,443</b>					<b>484,330</b>	<b>336.3</b>	<b>968,560</b>	<b>672.9</b>	<b>1,008.9</b>
<b>EASTMARK TOTAL</b>	<b>1,310.8</b>	<b>3,572</b>					<b>2,515,020</b>	<b>1,746.5</b>	<b>5,030,040</b>	<b>3,493.4</b>	<b>5,239.5</b>

**TABLE 5**

**Water Demand Design Flows by Junction Node,  
Full Build-Out Condition**

**TABLE 5 - WATER DEMAND DESIGN FLOWS BY JUNCTION NODE, FULL BUILD-OUT CONDITION**

CIVIL ENGINEERS \* HYDROLOGISTS \* LAND SURVEYORS \* CONSTRUCTION MANAGERS

**Project:** DU 8 & 9 at Eastmark  
**Location:** Mesa, Arizona  
**References:** 2012 City of Mesa Engineering Design Standards

**Proj. Number:** 123835.04  
**Proj. Engineer:** Darrell Smith, P.E.

**EASTMARK**

HYDRAULIC MODEL NODE	WATER DEMAND (GPM)		
	AVE. DAY	PEAK DAY	PEAK HOUR
J-DU6-010	80.3	160.6	240.9
J-DU6-020	80.3	160.6	240.9
J-DU6-050	80.4	160.8	241.2
J-DU6-060	80.4	160.8	241.2
J-DU7-010	8.5	16.8	24.9
J-DU7-020	--	--	--
J-DU7-030	--	--	--
J-DU7-040	--	--	--
J-DU7-050	35.1	70.2	105.3
J-DU7-060	14.2	28.4	42.6
J-DU7-070	--	--	--
J-DU7-080	36.1	72.2	108.3
J-DU7-090	--	--	--
J-DU7-100	31.8	63.6	95.4
J-DU7-110	40.4	80.8	121.2
J-DU7-120	--	--	--
J-DU7-130	2.6	5.2	7.8
J-DU7-140	62.1	124.2	186.3
J-DU7-150	36.6	73.2	109.8
J-DU7-160	30.7	61.4	92.1
J-DU7-170	16.3	32.6	48.9
J-DU7-180	17.5	35.0	52.5
J-DU7-190	35.8	71.6	107.4
J-DU7-200	50.6	101.2	151.8
J-250EX	28.0	56.0	84.0
J-DU8-010	--	--	--
J-DU8-020	--	--	--
J-DU8-030	--	--	--
J-DU8-040	6.7	13.4	20.1
J-DU8-050	--	--	--
J-DU8-060	9.1	18.2	27.3
J-DU8-070	15.4	30.8	46.2
J-DU8-080	4.4	8.8	13.2
J-DU8-090	11.0	22.0	33.0
J-DU8-100	9.1	18.2	27.3
J-DU8-110	43.6	87.2	130.8
J-DU8-120	17.2	34.4	51.6
J-DU8-130	21.0	42.0	63.0
J-DU9-010	19.7	39.4	59.1
J-DU9-020	36.5	73.0	109.5
J-DU9-030	33.3	66.6	99.9
J-DU9-040	7.8	15.6	23.4
J-DU9-050	--	--	--
J-DU9-060	31.4	62.8	94.2
J-DU9-070	31.7	63.4	95.1
J-DU9-080	38.6	77.2	115.8

**DU 8 & 9 TOTAL**                      **336.5**                      **673.0**                      **1,009.5**

**EASTMARK TOTAL**                      **1,104.0**                      **2,208.0**                      **3,312.0**

**TABLE 6**

**DU 8 & 9 Land Use,  
Phase 1**

**Project:** DU 8 & 9 at Eastmark  
**Location:** Mesa, Arizona

**Proj. Number:** 123835.04  
**Proj. Engineer:** Darrell Smith, P.E.

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY PARCEL								
Parcel	No. of DUs	Residential Acres	Density (DU/AC)	Non-Residential Acres	Commercial/Industrial/Retail S.F.	Land Use	Unit Daily Water Demand (GPD/DU, AC, or S.F.)	Avg Day
8-1	74	22.9	3.23	--	--	MDR-1	300	22,200
8-2	87	30.0	2.90	--	--	MDR-1	300	26,100
8-3	64	24.7	2.59	--	--	MDR-1	300	19,200
8-4	42	20.9	2.01	--	--	MDR-1	300	12,600
8-5	--	--	--	6.8	--	PARK	4400	29,920
9-1	189	54.0	3.50	--	--	MDR-1	300	56,700
9-2	99	31.8	3.11	--	--	MDR-1	300	29,700
9-3	--	--	--	12.4	--	Civic	1500	18,600
<b>DU 8 &amp; 9 Phase 1 Totals</b>	<b>555</b>	<b>184.3</b>		<b>19.2</b>	<b>0</b>			<b>215,020</b>

PRELIMINARY LAND USE AND DWELLING UNIT BREAKDOWN BY JUNCTION								
Junction	Parcel(s)	No. of DUs	Acres	Density (DU/AC)	Land Use	GPD/AC	Avg Day (GPD)	Avg Day (GPM)
J-DU8-010	--	--	--	--	--	--	--	--
J-DU8-020	--	--	--	--	--	--	--	--
J-DU8-030	--	--	--	--	--	--	--	--
J-DU8-060	1/2 8-2	43.5	15.0	2.9	MDR-1	870	13,050	9.1
J-DU8-070	8-1	74	22.9	3.2	MDR-1	969	22,200	15.4
J-DU8-080	1/2 8-4	21	10.5	2.0	MDR-1	600	6,300	4.4
J-DU8-090	1/2 8-4	21	10.5	2.0	MDR-1 & LDR-3	600	6,300	4.4
J-DU8-100	1/2 8-2	43.5	15.0	2.9	MDR-1	870	13,050	9.1
J-DU8-110	8-3 & 8-5	64	31.5	2.0	MDR-1 & Park	1,559	49,120	34.1
J-DU9-010	1/2 9-1	94.5	27.0	3.5	MDR-1	1,050	28,350	19.7
J-DU9-020	1/2 9-1, 1/2 9-2 & 9-3	144	49.1	2.9	MDR-1 & Civic	1,069	52,500	36.5
J-DU9-030	1/2 9-2 & 9-3	49.5	22.1	2.2	MDR-1 & Civic	1,093	24,150	16.8
		<b>555</b>	<b>203.6</b>				<b>215,020</b>	<b>149.5</b>

**TABLE 7**

**Water Demand Design Flows,  
Phase 1**

Project: DU 8 & 9 at Eastmark  
Location: Mesa, Arizona  
References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 123835.04  
Proj. Engineer: Darrell Smith, P.E.

Eastmark

DEVELOPMENT UNIT	PARCEL/ DEVELOPMENT UNIT SUB-AREA	DEVELOPMENT UNIT DEMAND AREA (ACRES)	DWELLING UNITS	LAND USE	UNIT FLOW (GPD/AC)	HYD. MODEL NODE	AVE. DAY DEMAND		MAX DAY DEMAND		PEAK HOUR DEMAND
							(GPD)	(GPM)	(GPD)	(GPM)	(GPM)
DU-6	1/2 DU-6A	65.0	0	INDUSTRIAL	6.339	J-DU6-010, J-DU6-020, J-DU6-050, J-DU6-060	347,035	241.0	694,070	482.0	723.0
<b>Total</b>		<b>65.0</b>	<b>0.0</b>				<b>347,035</b>	<b>241.0</b>	<b>694,070</b>	<b>482.0</b>	<b>723.0</b>

DU-7	7-1	21.2	31	MDR-1	1.152	J-DU7-001	24,391	16.6	48,783	31.8	50.7
	7-2	30.5	35	MDR-1	1.134	J-DU7-002	34,593	14.9	69,187	23.8	44.7
	7-3	33.4	100	MDR-1	988	J-DU7-003	32,930	22.7	65,861	43.4	55.1
	7-4	36.5	84	MDR-1	724	J-DU7-004	25,281	14.5	50,563	32.5	33.3
	7-5	26.2	83	MDR-1	706	J-DU7-005	21,480	14.2	42,961	28.3	42.8
	7-6	26.8	79	MDR-1	675	J-DU7-006	23,400	16.3	46,801	30.5	43.0
	7-7	31.4	124	MDR-1	665	J-DU7-007	21,250	24.7	42,501	47.2	55.1
	7-8	25.3	116	MDR-1	1.166	J-DU7-008	26,000	20.1	52,001	40.3	59.3
	7-9	7.8	0	CARPOOL	1.200	J-DU7-009	11,280	1.8	22,561	15.6	23.4
	7-10	25.4	128	MDR-1	1.085	J-DU7-010	27,600	18.9	55,201	37.8	56.4
	7-11	15.1	125	MDR-1	1.500	J-DU7-011	22,500	27.8	45,001	34.7	52.2
	7-12	16.5	85	MDR-1	1.166	J-DU7-012	23,250	18.1	46,501	35.3	50.5
	7-13	25.1	85	MDR-1	1.055	J-DU7-013	26,350	14.2	52,701	28.7	43.4
	7-14	17.3	135	MDR-1	1.124	J-DU7-014	19,350	30.1	38,701	40.1	58.0
	7-15	14.1	14	MDR-1	1.100	J-DU7-015	15,500	14.9	31,001	29.7	43.8
	7-16	25.9	125	MDR-1	1.183	J-DU7-016	30,500	25.8	61,001	41.7	62.4
	7-17	25.3	75	MDR-1	1.000	J-DU7-017	25,200	18.9	50,401	30.5	46.8
	7-18	28.9	85	MDR-1	1.122	J-DU7-018	25,500	19.7	51,001	35.4	53.3
	7-19	25.1	26	MDR-1	1.171	J-DU7-019	29,400	10.4	58,801	40.8	61.7
	7-20	25.1	80	MDR-1	1.194	J-DU7-020	24,000	19.7	48,001	35.3	50.1
7-21	22.9	85	MDR-1	1.154	J-DU7-021	26,350	14.2	52,701	28.7	43.4	
7-22	33.8	0	SEPARATION	1.800	J-DU7-022	60,300	30.8	120,601	41.7	62.4	
7-23	31.2	283	MDR-1	2.530	J-DU7-023	30,600	15.1	61,201	30.3	45.3	
7-24	6.8	0	CHANGING	1.200	J-DU7-024	8,100	1.3	16,201	10.5	16.2	
7-25	7.8	0	CHANGING	1.200	J-DU7-025	9,300	1.5	18,601	12.2	18.3	
7-26	7.8	0	COMMERCIAL RESTAURANT	2.142	J-DU7-026	16,600	8.1	33,201	11.7	17.9	
7-27	95.5	0	PARKLAND	0	J-DU7-027	0	0	0	0	0	
<b>Total</b>		<b>581.5</b>	<b>2,129</b>				<b>642,550</b>	<b>446.2</b>	<b>1,285,100</b>	<b>892.5</b>	<b>1,338.6</b>

DU-8	8-1	22.9	74	MDR-1	969	J-DU8-070	22,200	15.4	44,400	30.8	46.2
	8-2	30.0	87	MDR-1	870	J-DU8-060, J-DU8-100	26,100	18.1	52,200	36.3	54.3
	8-3	24.7	64	MDR-1	777	J-DU8-110	19,200	13.3	38,400	26.7	39.9
	8-4	20.9	42	MDR-1	603	J-DU8-080, J-DU8-090	12,600	8.5	25,200	17.5	26.4
	8-5	6.8	0	PARK	4,400	J-DU8-080, J-DU8-090	29,920	20.8	59,840	41.6	62.4
<b>Total</b>		<b>105.3</b>	<b>267</b>			<b>116,020</b>	<b>76.4</b>	<b>226,040</b>	<b>152.9</b>	<b>229.2</b>	

DU-9	9-1	54.0	189	MDR-1	1,050	J-DU9-010, J-DU9-020	56,700	39.4	113,400	78.8	118.2
	9-2	31.8	99	MDR-1	934	J-DU9-020, J-DU9-030	29,700	20.5	59,400	41.3	61.8
	9-3	12.4	0	Civic	1,500	J-DU9-020, J-DU9-030	18,800	12.9	37,600	25.8	38.7
<b>Total</b>		<b>98.2</b>	<b>288</b>			<b>105,000</b>	<b>72.9</b>	<b>210,000</b>	<b>145.9</b>	<b>218.7</b>	

DU 8 & 9 PHASE 1 TOTAL

EASTMARK TOTAL

203.5	555					215,020	149.3	430,040	298.8	447.9
850.0	2,684					1,204,605	836.5	2,409,210	1,673.3	2,509.5

**TABLE 8**

**Water Demand Design Flows by Junction Node,  
Phase 1**

Project: DU 8 & 9 at Eastmark  
 Location: Mesa, Arizona  
 References: 2012 City of Mesa Engineering Design Standards

Proj. Number: 123835.04

Proj. Engineer: Darrell Smith, P.E.

## EASTMARK

HYDRAULIC MODEL NODE	WATER DEMAND (GPM)		
	AVE. DAY	PEAK DAY	PEAK HOUR
J-DU6-010	80.3	160.6	240.9
J-DU6-020	80.3	160.6	240.9
J-DU6-050	80.4	160.8	241.2
J-DU6-060	80.4	160.8	241.2
J-DU7-010	8.3	16.6	24.9
J-DU7-020	--	--	--
J-DU7-030	--	--	--
J-DU7-040	--	--	--
J-DU7-050	35.1	70.2	105.3
J-DU7-060	14.2	28.4	42.6
J-DU7-070	--	--	--
J-DU7-080	36.1	72.2	108.3
J-DU7-090	--	--	--
J-DU7-100	31.6	63.6	95.4
J-DU7-110	40.4	80.8	121.2
J-DU7-120	--	--	--
J-DU7-130	2.6	5.2	7.8
J-DU7-140	62.1	124.2	186.3
J-DU7-150	36.6	73.2	109.8
J-DU7-160	30.7	61.4	92.1
J-DU7-170	16.3	32.6	48.9
J-DU7-180	17.5	35.0	52.5
J-DU7-190	35.8	71.6	107.4
J-DU7-200	50.6	101.2	151.8
J-250EX	28.0	56.0	84.0
J-DU8-010	--	--	--
J-DU8-020	--	--	--
J-DU8-030	--	--	--
J-DU8-060	9.1	18.2	27.3
J-DU8-070	15.4	30.8	46.2
J-DU8-080	4.4	8.8	13.2
J-DU8-090	4.4	8.8	13.2
J-DU8-100	9.1	18.2	27.3
J-DU8-110	34.1	68.2	102.3
J-DU9-010	19.7	39.4	59.1
J-DU9-020	36.5	73.0	109.5
J-DU9-030	16.8	33.6	50.4

DU 8 &amp; 9 PHASE 1 TOTAL

149.5

299.0

448.5

EASTMARK TOTAL

917.0

1,834.0

2,751.0

**APPENDIX A**

**Hydraulic Modeling Results –  
Served by South CAP Water Treatment Plant –  
Full Build-Out Condition**

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Reservoir Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Flow (Out net) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	128.8	Desert Wells	1,634.0
SCAP DWPS	1,634.0	975.2	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	0.0	Desert Wells	1,634.0

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	98	1,633.6
J-110EX	1,440.0	Desert Wells	0.0	84	1,633.6
J-120EX	1,462.0	Desert Wells	0.0	74	1,634.0
J-135EX	1,460.0	Desert Wells	0.0	75	1,633.8
J-150EX	1,472.0	Desert Wells	0.0	70	1,633.4
J-160EX	1,435.0	Desert Wells	0.0	86	1,633.3
J-170EX	1,430.0	Desert Wells	0.0	88	1,633.3
J-180EX	1,405.0	Desert Wells	0.0	99	1,633.3
J-190EX	1,395.0	Desert Wells	0.0	103	1,633.3
J-200EX	1,385.0	Desert Wells	0.0	107	1,633.3
J-210EX	1,393.0	Desert Wells	0.0	104	1,633.5
J-220EX	1,480.0	Desert Wells	0.0	67	1,633.8
J-230EX	1,475.0	Desert Wells	0.0	69	1,633.6
J-250EX	1,452.0	Desert Wells	28.0	78	1,633.4
J-260EX	1,453.0	Desert Wells	0.0	78	1,633.4
J-270	1,429.0	Desert Wells	0.0	88	1,633.3
J-280EX	1,460.0	Desert Wells	0.0	75	1,633.3
J-300EX	1,392.0	Desert Wells	0.0	104	1,633.4
J-320	1,422.0	Desert Wells	0.0	91	1,633.3
J-330EX	1,455.0	Desert Wells	0.0	77	1,633.3
J-340	1,440.0	Desert Wells	0.0	84	1,633.3
J-360EX	1,405.0	Desert Wells	0.0	99	1,633.5
J-450	1,393.0	Desert Wells	0.0	104	1,633.4
J-550	1,425.0	Desert Wells	0.0	90	1,633.3
J-560	1,402.0	Desert Wells	0.0	100	1,633.3
J-590EX	1,410.0	Desert Wells	0.0	97	1,633.6
J-840	1,390.0	Desert Wells	0.0	105	1,633.4
J-920	1,434.0	Desert Wells	0.0	86	1,633.3
J-930	1,410.0	Desert Wells	0.0	97	1,633.3
J-950	1,414.0	Desert Wells	0.0	95	1,633.3
J-960EX	1,401.0	Desert Wells	0.0	101	1,633.5
J-970EX	1,397.0	Desert Wells	0.0	102	1,633.5
J-980	1,393.0	Desert Wells	0.0	104	1,633.4
J-1000EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1010EX	1,485.0	Desert Wells	0.0	64	1,634.0
J-1020EX	1,425.0	Desert Wells	0.0	90	1,634.0
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,438.0	Desert Wells	0.0	85	1,633.7
J-1050EX	1,445.0	Desert Wells	0.0	81	1,633.3
J-1120EX	1,453.0	Desert Wells	0.0	78	1,633.5
J-1130EX	1,445.0	Desert Wells	0.0	82	1,633.7
J-1160EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1170EX	1,470.0	Desert Wells	0.0	71	1,634.0
J-1180EX	1,440.0	Desert Wells	0.0	84	1,634.0
J-1190EX	1,420.0	Desert Wells	0.0	93	1,634.0

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1200EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1210EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1220EX	1,475.0	Desert Wells	0.0	69	1,634.0
J-1230EX	1,460.0	Desert Wells	0.0	75	1,633.3
J-1235EX	1,440.0	Desert Wells	0.0	84	1,633.3
J-1240EX	1,455.0	Desert Wells	0.0	77	1,633.4
J-1280	1,410.0	Desert Wells	0.0	97	1,633.3
J-1290EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1300EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1310EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1330EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1340EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1350EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1360EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1370EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1380EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1390EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1400EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1410	1,450.0	Desert Wells	0.0	80	1,634.0
J-1410EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1420EX	1,461.0	Desert Wells	0.0	75	1,633.7
J-1430	1,397.0	Desert Wells	0.0	102	1,633.4
J-1430EX	1,455.0	Desert Wells	0.0	77	1,633.7
J-1440EX	1,478.0	Desert Wells	0.0	67	1,633.7
J-1680EX	1,400.0	Desert Wells	0.0	101	1,633.5
J-1990EX	1,447.0	Desert Wells	0.0	81	1,633.4
J-2000EX	1,442.0	Desert Wells	0.0	83	1,633.3
J-2010	1,419.0	Desert Wells	0.0	93	1,633.3
J-2040	1,427.0	Desert Wells	0.0	89	1,633.3
J-2120EX	1,453.0	Desert Wells	0.0	78	1,633.8
J-2140EX	1,446.0	Desert Wells	0.0	81	1,633.7
J-2200	1,414.0	Desert Wells	0.0	95	1,633.3
J-2295	1,415.0	Desert Wells	0.0	94	1,633.3
J-DU6-010	1,459.0	Desert Wells	80.3	76	1,633.7
J-DU6-020	1,453.0	Desert Wells	80.3	78	1,633.7
J-DU6-050	1,448.0	Desert Wells	80.4	80	1,633.7
J-DU6-060	1,458.0	Desert Wells	80.4	76	1,633.7
J-DU7-010	1,415.0	Desert Wells	8.3	94	1,633.3
J-DU7-020	1,420.0	Desert Wells	0.0	92	1,633.3
J-DU7-030	1,415.0	Desert Wells	0.0	94	1,633.3
J-DU7-040	1,415.0	Desert Wells	0.0	94	1,633.3
J-DU7-050	1,420.0	Desert Wells	35.1	92	1,633.3
J-DU7-060	1,435.0	Desert Wells	14.2	86	1,633.3
J-DU7-070	1,440.0	Desert Wells	0.0	84	1,633.3
J-DU7-080	1,450.0	Desert Wells	36.1	79	1,633.3

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

Current Time: 0.000 hours

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-090	1,437.0	Desert Wells	0.0	85	1,633.3
J-DU7-100	1,435.0	Desert Wells	31.8	86	1,633.3
J-DU7-110	1,435.0	Desert Wells	40.4	86	1,633.3
J-DU7-120	1,420.0	Desert Wells	0.0	92	1,633.3
J-DU7-130	1,420.0	Desert Wells	2.6	92	1,633.3
J-DU7-140	1,430.0	Desert Wells	62.1	88	1,633.3
J-DU7-150	1,418.0	Desert Wells	36.6	93	1,633.3
J-DU7-160	1,435.0	Desert Wells	30.7	86	1,633.3
J-DU7-170	1,432.0	Desert Wells	16.3	87	1,633.3
J-DU7-180	1,433.0	Desert Wells	17.5	87	1,633.3
J-DU7-190	1,437.0	Desert Wells	35.8	85	1,633.3
J-DU7-200	1,432.0	Desert Wells	50.6	87	1,633.3
J-DU8-010	1,420.0	Desert Wells	0.0	92	1,633.3
J-DU8-020	1,419.5	Desert Wells	0.0	92	1,633.3
J-DU8-030	1,421.0	Desert Wells	0.0	92	1,633.3
J-DU8-040	1,418.0	Desert Wells	6.7	93	1,633.3
J-DU8-050	1,422.0	Desert Wells	0.0	91	1,633.3
J-DU8-060	1,420.0	Desert Wells	9.1	92	1,633.3
J-DU8-070	1,420.0	Desert Wells	15.4	92	1,633.3
J-DU8-080	1,422.0	Desert Wells	4.4	91	1,633.3
J-DU8-090	1,424.0	Desert Wells	11.0	91	1,633.3
J-DU8-100	1,425.0	Desert Wells	9.1	90	1,633.3
J-DU8-110	1,430.0	Desert Wells	43.6	88	1,633.3
J-DU8-120	1,431.0	Desert Wells	17.2	88	1,633.3
J-DU8-130	1,427.0	Desert Wells	21.0	89	1,633.3
J-DU9-010	1,419.0	Desert Wells	19.7	93	1,633.3
J-DU9-020	1,415.0	Desert Wells	36.5	94	1,633.3
J-DU9-030	1,416.0	Desert Wells	33.3	94	1,633.2
J-DU9-040	1,416.0	Desert Wells	7.8	94	1,633.2
J-DU9-050	1,419.0	Desert Wells	0.0	93	1,633.2
J-DU9-060	1,422.0	Desert Wells	31.4	91	1,633.2
J-DU9-070	1,414.0	Desert Wells	31.7	95	1,633.2
J-DU9-080	1,419.0	Desert Wells	38.6	93	1,633.2

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	27.8	0.04	0.0009
P-170EX	16.0	5,366.00	120.0	27.8	0.04	0.0009
P-180EX	16.0	5,396.00	120.0	-47.8	0.08	0.0026
P-190EX	16.0	5,728.00	120.0	-47.8	0.08	0.0026
P-200EX	16.0	231.00	120.0	-147.0	0.23	0.0206
P-210EX	16.0	1,388.00	120.0	-147.0	0.23	0.0208
P-220EX	16.0	2,909.00	120.0	281.2	0.45	0.0691
P-240EX	16.0	1,387.00	120.0	-425.1	0.68	0.1485
P-250EX	16.0	2,611.00	120.0	294.6	0.47	0.0753
P-340EX	16.0	5,775.00	120.0	27.8	0.04	0.0010
P-410EX	16.0	5,368.00	120.0	-47.8	0.08	0.0026
P-970	24.0	1,001.00	120.0	89.5	0.06	0.0012
P-980	24.0	1,935.00	120.0	-38.5	0.03	0.0003
P-1060EX	16.0	1,328.00	120.0	-147.0	0.23	0.0208
P-1070EX	16.0	1,243.00	120.0	-147.0	0.23	0.0208
P-1630EX	16.0	560.00	120.0	-147.0	0.23	0.0209
P-1640EX	16.0	2,569.00	120.0	-147.0	0.23	0.0208
P-1780	24.0	1,528.00	120.0	89.5	0.06	0.0012
P-1790	24.0	1,115.00	120.0	89.5	0.06	0.0011
P-1850	16.0	1,560.00	120.0	99.3	0.16	0.0100
P-1860	16.0	1,385.00	120.0	99.3	0.16	0.0100
P-1940EX	16.0	1,976.00	120.0	-147.0	0.23	0.0208
P-1950EX	16.0	680.00	120.0	-147.0	0.23	0.0208
P-1970EX	16.0	927.00	120.0	-147.0	0.23	0.0208
P-1980EX	16.0	1,106.00	120.0	-147.0	0.23	0.0207
P-2000EX	16.0	2,710.00	120.0	-147.0	0.23	0.0208
P-2040EX	16.0	10,635.00	120.0	-30.0	0.05	0.0011
P-2055EX	16.0	10,453.00	120.0	13.5	0.02	0.0002
P-2070EX	24.0	5,329.00	120.0	-85.3	0.06	0.0011
P-2340EX	16.0	2,281.00	120.0	-147.0	0.23	0.0208
P-2500EX	24.0	2,750.00	120.0	89.3	0.06	0.0012
P-2510EX	24.0	2,726.00	120.0	85.6	0.06	0.0010
P-2540EX	12.0	2,624.00	120.0	-10.5	0.03	0.0007
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.0000
P-2655EX	16.0	2,870.00	120.0	27.8	0.04	0.0010
P-2660EX	24.0	2,797.00	120.0	128.8	0.09	0.0023
P-2665EX	16.0	2,716.00	120.0	27.8	0.04	0.0009
P-2690EX	16.0	2,914.00	120.0	-141.2	0.23	0.0193
P-2700EX	16.0	3,115.00	120.0	153.4	0.24	0.0225
P-2710EX	16.0	1,823.00	120.0	110.8	0.18	0.0123
P-2720EX	12.0	3,042.00	120.0	-42.6	0.12	0.0085
P-2800	24.0	5,786.00	120.0	75.5	0.05	0.0008
P-2830	16.0	2,890.00	120.0	83.1	0.13	0.0072
P-2860EX	24.0	761.00	120.0	128.8	0.09	0.0022

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.0000
P-2890EX	8.0	3,148.00	120.0	-6.7	0.04	0.0019
P-2900	24.0	1,423.00	120.0	115.6	0.08	0.0019
P-2910EX	24.0	497.00	120.0	122.1	0.09	0.0020
P-2950	12.0	1,089.00	120.0	3.8	0.01	0.0001
P-2970EX	12.0	1,119.00	120.0	6.2	0.02	0.0002
P-2990EX	8.0	2,811.00	120.0	-4.8	0.03	0.0011
P-3010EX	12.0	471.00	120.0	6.7	0.02	0.0003
P-3020EX	12.0	1,167.00	120.0	1.4	0.00	0.0000
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.0000
P-3040EX	8.0	3,081.00	120.0	-4.6	0.03	0.0010
P-3060	12.0	595.00	120.0	0.0	0.00	0.0000
P-3070EX	8.0	2,922.00	120.0	-3.2	0.02	0.0005
P-3080EX	12.0	1,397.00	120.0	-10.3	0.03	0.0006
P-3090EX	12.0	1,109.00	120.0	-8.2	0.02	0.0004
P-3100EX	12.0	695.00	120.0	2.3	0.01	0.0000
P-3110EX	12.0	664.00	120.0	0.2	0.00	0.0000
P-3120EX	8.0	1,851.00	120.0	-2.1	0.01	0.0003
P-3130	12.0	1,155.00	120.0	3.2	0.01	0.0001
P-3140EX	16.0	1,783.00	120.0	3.0	0.00	0.0001
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.0000
P-3160EX	8.0	3,801.00	120.0	-3.0	0.02	0.0004
P-3170EX	8.0	2,838.00	120.0	-6.5	0.04	0.0019
P-3180EX	8.0	736.00	120.0	2.0	0.01	0.0002
P-3190EX	30.0	4,441.00	120.0	0.0	0.00	0.0000
P-3240EX	16.0	1,954.00	120.0	341.0	0.54	0.0987
P-3250EX	12.0	844.00	120.0	13.4	0.04	0.0010
P-3260EX	16.0	1,108.00	120.0	281.2	0.45	0.0690
P-3270EX	16.0	1,509.00	120.0	232.4	0.37	0.0485
P-3280EX	12.0	2,890.00	120.0	-48.7	0.14	0.0109
P-3290EX	12.0	2,432.00	120.0	-62.2	0.18	0.0171
P-3340	16.0	1,114.00	130.0	-99.3	0.16	0.0087
P-3450	16.0	1,525.00	130.0	99.3	0.16	0.0086
P-3930EX	16.0	751.00	120.0	-147.0	0.23	0.0206
P-3940EX	16.0	509.00	120.0	-147.0	0.23	0.0209
P-3970EX	16.0	1,445.00	120.0	147.0	0.23	0.0208
P-4720EX	16.0	1,216.00	120.0	126.0	0.20	0.0156
P-4730EX	16.0	456.00	120.0	126.0	0.20	0.0158
P-4750EX	16.0	715.00	120.0	126.0	0.20	0.0155
P-4760EX	16.0	774.00	120.0	54.2	0.09	0.0033
P-4780	24.0	1,020.00	120.0	-38.5	0.03	0.0002
P-4790EX	16.0	1,816.00	120.0	96.8	0.15	0.0095
P-4860	24.0	986.00	120.0	38.5	0.03	0.0002
P-4870	24.0	620.00	120.0	38.5	0.03	0.0002

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-5700EX	16.0	1,176.00	120.0	397.8	0.63	0.1313
P-5710EX	16.0	1,171.00	120.0	397.8	0.63	0.1312
P-5740	24.0	2,671.00	120.0	38.5	0.03	0.0003
P-5770	16.0	353.00	120.0	341.0	0.54	0.0989
P-5780	16.0	684.00	120.0	341.0	0.54	0.0987
P-6064	16.0	846.00	120.0	-37.0	0.06	0.0016
P-6065	16.0	3,443.00	120.0	-37.0	0.06	0.0016
P-6070	16.0	247.00	120.0	42.5	0.07	0.0020
P-7000	16.0	742.00	120.0	42.5	0.07	0.0021
P-COMWWTREX	36.0	10.00	120.0	128.8	0.04	0.0000
P-DU6-010	12.0	1,163.00	120.0	-111.5	0.32	0.0506
P-DU6-020	12.0	124.00	120.0	278.0	0.79	0.2747
P-DU6-050	12.0	2,203.00	120.0	86.2	0.24	0.0314
P-DU6-060	12.0	2,209.00	120.0	-31.2	0.09	0.0048
P-DU6-070	12.0	142.00	120.0	43.4	0.12	0.0086
P-DU6-080	12.0	1,130.00	120.0	-5.8	0.02	0.0002
P-DU7-010	12.0	1,169.00	120.0	-21.3	0.06	0.0024
P-DU7-020	12.0	1,092.00	120.0	21.3	0.06	0.0023
P-DU7-030	12.0	1,044.00	120.0	21.3	0.06	0.0023
P-DU7-040	24.0	1,410.00	120.0	-21.3	0.02	0.0001
P-DU7-050	24.0	1,075.00	120.0	-209.4	0.15	0.0056
P-DU7-060	24.0	1,254.00	120.0	-223.6	0.16	0.0062
P-DU7-070	24.0	992.00	120.0	-292.0	0.21	0.0103
P-DU7-080	24.0	2,552.00	120.0	-328.1	0.23	0.0127
P-DU7-090	16.0	941.00	120.0	-90.4	0.14	0.0084
P-DU7-100	16.0	1,562.00	120.0	-58.6	0.09	0.0038
P-DU7-110	16.0	1,742.00	120.0	34.6	0.06	0.0015
P-DU7-120	16.0	778.00	120.0	-69.8	0.11	0.0052
P-DU7-130	20.0	317.00	120.0	24.0	0.02	0.0000
P-DU7-140	20.0	1,207.00	120.0	26.6	0.03	0.0003
P-DU7-150	20.0	1,514.00	120.0	116.4	0.12	0.0046
P-DU7-160	20.0	619.00	120.0	153.0	0.16	0.0075
P-DU7-170	12.0	1,073.00	130.0	-68.5	0.19	0.0176
P-DU7-180	12.0	828.00	120.0	37.8	0.11	0.0068
P-DU7-190	12.0	399.00	120.0	-1.5	0.00	0.0000
P-DU7-200	12.0	2,378.00	120.0	17.0	0.05	0.0016
P-DU7-210	12.0	1,049.00	120.0	-71.8	0.20	0.0223
P-DU7-220	12.0	1,054.00	120.0	-36.0	0.10	0.0063
P-DU7-230	12.0	1,714.00	120.0	-23.0	0.07	0.0028
P-DU7-240	12.0	1,014.00	120.0	27.6	0.08	0.0039
P-DU8-010	16.0	1,107.00	120.0	59.2	0.09	0.0039
P-DU8-020	16.0	714.00	120.0	90.1	0.14	0.0084
P-DU8-030	16.0	1,312.00	120.0	31.0	0.05	0.0012
P-DU8-040	16.0	1,371.00	120.0	-21.3	0.03	0.0006

**Active Scenario: Ave Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU8-050	16.0	520.00	120.0	-55.1	0.09	0.0033
P-DU8-060	16.0	1,021.00	120.0	-128.0	0.20	0.0160
P-DU8-070	8.0	542.00	120.0	18.6	0.12	0.0133
P-DU8-080	8.0	253.00	120.0	7.8	0.05	0.0024
P-DU8-090	8.0	1,138.00	120.0	-7.6	0.05	0.0025
P-DU8-100	12.0	599.00	120.0	69.8	0.20	0.0212
P-DU8-110	12.0	709.00	120.0	25.2	0.07	0.0033
P-DU8-120	8.0	678.00	120.0	1.6	0.01	0.0002
P-DU8-130	8.0	1,315.00	120.0	28.0	0.18	0.0281
P-DU8-140	8.0	966.00	120.0	22.4	0.14	0.0187
P-DU8-150	6.0	737.00	130.0	15.3	0.17	0.0323
P-DU8-160	8.0	1,265.00	120.0	18.6	0.12	0.0131
P-DU8-170	8.0	2,613.00	120.0	2.9	0.02	0.0004
P-DU8-180	8.0	1,778.00	120.0	-14.3	0.09	0.0080
P-DU8-190	8.0	1,185.00	120.0	-8.2	0.05	0.0029
P-DU8-200	8.0	1,054.00	120.0	27.1	0.17	0.0266
P-DU9-010	16.0	904.00	120.0	79.5	0.13	0.0066
P-DU9-020	16.0	227.00	120.0	30.9	0.05	0.0011
P-DU9-030	8.0	1,616.00	120.0	28.8	0.18	0.0298
P-DU9-040	8.0	746.00	120.0	-40.6	0.26	0.0561
P-DU9-050	8.0	869.00	120.0	32.9	0.21	0.0379
P-DU9-060	8.0	1,550.00	120.0	-37.0	0.24	0.0473
P-DU9-070	8.0	1,001.00	120.0	19.6	0.12	0.0145
P-DU9-080	8.0	644.00	120.0	11.8	0.08	0.0057
P-DU9-090	8.0	3,092.00	120.0	17.0	0.11	0.0112
P-DU9-100	8.0	1,619.00	120.0	-16.1	0.10	0.0101
P-DU9-110	8.0	3,057.00	120.0	1.4	0.01	0.0001
P-DU9-120	8.0	901.00	120.0	22.3	0.14	0.0184
P-DU9-130	8.0	879.00	120.0	-26.6	0.17	0.0257
P-DU9-140	8.0	430.00	120.0	-72.9	0.47	0.1661
P-DU9-150	8.0	4,471.00	120.0	-14.9	0.10	0.0088
P-DWGWF	36.0	1,757.00	120.0	0.0	0.00	0.0000
P-SCAP	36.0	1,752.00	120.0	-975.2	0.31	0.0133

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Reservoir Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Flow (Out net) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	257.5	Desert Wells	1,634.0
SCAP DWPS	1,634.0	1,950.5	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	0.0	Desert Wells	1,634.0

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	98	1,632.5
J-110EX	1,440.0	Desert Wells	0.0	83	1,632.7
J-120EX	1,462.0	Desert Wells	0.0	74	1,633.9
J-135EX	1,460.0	Desert Wells	0.0	75	1,633.4
J-150EX	1,472.0	Desert Wells	0.0	69	1,631.9
J-160EX	1,435.0	Desert Wells	0.0	85	1,631.6
J-170EX	1,430.0	Desert Wells	0.0	87	1,631.6
J-180EX	1,405.0	Desert Wells	0.0	98	1,631.5
J-190EX	1,395.0	Desert Wells	0.0	102	1,631.6
J-200EX	1,385.0	Desert Wells	0.0	107	1,631.6
J-210EX	1,393.0	Desert Wells	0.0	103	1,632.1
J-220EX	1,480.0	Desert Wells	0.0	66	1,633.2
J-230EX	1,475.0	Desert Wells	0.0	68	1,632.7
J-250EX	1,452.0	Desert Wells	56.0	78	1,631.7
J-260EX	1,453.0	Desert Wells	0.0	77	1,632.0
J-270	1,429.0	Desert Wells	0.0	88	1,631.5
J-280EX	1,460.0	Desert Wells	0.0	74	1,631.6
J-300EX	1,392.0	Desert Wells	0.0	104	1,631.7
J-320	1,422.0	Desert Wells	0.0	91	1,631.5
J-330EX	1,455.0	Desert Wells	0.0	76	1,631.6
J-340	1,440.0	Desert Wells	0.0	83	1,631.5
J-360EX	1,405.0	Desert Wells	0.0	98	1,632.3
J-450	1,393.0	Desert Wells	0.0	103	1,631.9
J-550	1,425.0	Desert Wells	0.0	89	1,631.5
J-560	1,402.0	Desert Wells	0.0	99	1,631.6
J-590EX	1,410.0	Desert Wells	0.0	96	1,632.6
J-840	1,390.0	Desert Wells	0.0	105	1,631.7
J-920	1,434.0	Desert Wells	0.0	85	1,631.5
J-930	1,410.0	Desert Wells	0.0	96	1,631.6
J-950	1,414.0	Desert Wells	0.0	94	1,631.5
J-960EX	1,401.0	Desert Wells	0.0	100	1,632.4
J-970EX	1,397.0	Desert Wells	0.0	102	1,632.2
J-980	1,393.0	Desert Wells	0.0	103	1,632.0
J-1000EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1010EX	1,485.0	Desert Wells	0.0	64	1,634.0
J-1020EX	1,425.0	Desert Wells	0.0	90	1,634.0
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,438.0	Desert Wells	0.0	84	1,632.9
J-1050EX	1,445.0	Desert Wells	0.0	81	1,631.6
J-1120EX	1,453.0	Desert Wells	0.0	77	1,632.1
J-1130EX	1,445.0	Desert Wells	0.0	81	1,633.1
J-1160EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1170EX	1,470.0	Desert Wells	0.0	71	1,634.0
J-1180EX	1,440.0	Desert Wells	0.0	84	1,634.0
J-1190EX	1,420.0	Desert Wells	0.0	93	1,634.0

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1200EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1210EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1220EX	1,475.0	Desert Wells	0.0	69	1,633.9
J-1230EX	1,460.0	Desert Wells	0.0	74	1,631.6
J-1235EX	1,440.0	Desert Wells	0.0	83	1,631.6
J-1240EX	1,455.0	Desert Wells	0.0	76	1,631.7
J-1280	1,410.0	Desert Wells	0.0	96	1,631.5
J-1290EX	1,480.0	Desert Wells	0.0	67	1,633.9
J-1300EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1310EX	1,480.0	Desert Wells	0.0	67	1,633.9
J-1330EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1340EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1350EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1360EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1370EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1380EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1390EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1400EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1410	1,450.0	Desert Wells	0.0	80	1,633.9
J-1410EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1420EX	1,461.0	Desert Wells	0.0	74	1,632.8
J-1430	1,397.0	Desert Wells	0.0	102	1,631.7
J-1430EX	1,455.0	Desert Wells	0.0	77	1,632.8
J-1440EX	1,478.0	Desert Wells	0.0	67	1,632.9
J-1680EX	1,400.0	Desert Wells	0.0	101	1,632.3
J-1990EX	1,447.0	Desert Wells	0.0	80	1,631.7
J-2000EX	1,442.0	Desert Wells	0.0	82	1,631.6
J-2010	1,419.0	Desert Wells	0.0	92	1,631.5
J-2040	1,427.0	Desert Wells	0.0	88	1,631.5
J-2120EX	1,453.0	Desert Wells	0.0	78	1,633.2
J-2140EX	1,446.0	Desert Wells	0.0	81	1,633.1
J-2200	1,414.0	Desert Wells	0.0	94	1,631.5
J-2295	1,415.0	Desert Wells	0.0	94	1,631.5
J-DU6-010	1,459.0	Desert Wells	160.6	75	1,632.8
J-DU6-020	1,453.0	Desert Wells	160.6	78	1,633.0
J-DU6-050	1,448.0	Desert Wells	160.8	80	1,632.8
J-DU6-060	1,458.0	Desert Wells	160.8	76	1,632.8
J-DU7-010	1,415.0	Desert Wells	16.6	94	1,631.5
J-DU7-020	1,420.0	Desert Wells	0.0	92	1,631.5
J-DU7-030	1,415.0	Desert Wells	0.0	94	1,631.5
J-DU7-040	1,415.0	Desert Wells	0.0	94	1,631.5
J-DU7-050	1,420.0	Desert Wells	70.2	92	1,631.5
J-DU7-060	1,435.0	Desert Wells	28.4	85	1,631.6
J-DU7-070	1,440.0	Desert Wells	0.0	83	1,631.6
J-DU7-080	1,450.0	Desert Wells	72.2	79	1,631.6

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-090	1,437.0	Desert Wells	0.0	84	1,631.5
J-DU7-100	1,435.0	Desert Wells	63.6	85	1,631.5
J-DU7-110	1,435.0	Desert Wells	80.8	85	1,631.5
J-DU7-120	1,420.0	Desert Wells	0.0	92	1,631.5
J-DU7-130	1,420.0	Desert Wells	5.2	92	1,631.5
J-DU7-140	1,430.0	Desert Wells	124.2	87	1,631.5
J-DU7-150	1,418.0	Desert Wells	73.2	92	1,631.5
J-DU7-160	1,435.0	Desert Wells	61.4	85	1,631.5
J-DU7-170	1,432.0	Desert Wells	32.6	86	1,631.5
J-DU7-180	1,433.0	Desert Wells	35.0	86	1,631.5
J-DU7-190	1,437.0	Desert Wells	71.6	84	1,631.5
J-DU7-200	1,432.0	Desert Wells	101.2	86	1,631.5
J-DU8-010	1,420.0	Desert Wells	0.0	91	1,631.5
J-DU8-020	1,419.5	Desert Wells	0.0	92	1,631.5
J-DU8-030	1,421.0	Desert Wells	0.0	91	1,631.4
J-DU8-040	1,418.0	Desert Wells	13.4	92	1,631.5
J-DU8-050	1,422.0	Desert Wells	0.0	91	1,631.5
J-DU8-060	1,420.0	Desert Wells	18.2	91	1,631.4
J-DU8-070	1,420.0	Desert Wells	30.8	91	1,631.4
J-DU8-080	1,422.0	Desert Wells	8.8	91	1,631.4
J-DU8-090	1,424.0	Desert Wells	22.0	90	1,631.4
J-DU8-100	1,425.0	Desert Wells	18.2	89	1,631.4
J-DU8-110	1,430.0	Desert Wells	87.2	87	1,631.3
J-DU8-120	1,431.0	Desert Wells	34.4	87	1,631.3
J-DU8-130	1,427.0	Desert Wells	42.0	88	1,631.3
J-DU9-010	1,419.0	Desert Wells	39.4	92	1,631.5
J-DU9-020	1,415.0	Desert Wells	73.0	94	1,631.3
J-DU9-030	1,416.0	Desert Wells	66.6	93	1,631.2
J-DU9-040	1,416.0	Desert Wells	15.6	93	1,631.1
J-DU9-050	1,419.0	Desert Wells	0.0	92	1,631.1
J-DU9-060	1,422.0	Desert Wells	62.8	91	1,631.2
J-DU9-070	1,414.0	Desert Wells	63.4	94	1,631.1
J-DU9-080	1,419.0	Desert Wells	77.2	92	1,631.1

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	55.5	0.09	0.0034
P-170EX	16.0	5,366.00	120.0	55.5	0.09	0.0034
P-180EX	16.0	5,396.00	120.0	-95.5	0.15	0.0093
P-190EX	16.0	5,728.00	120.0	-95.5	0.15	0.0094
P-200EX	16.0	231.00	120.0	-294.1	0.47	0.0750
P-210EX	16.0	1,388.00	120.0	-294.1	0.47	0.0750
P-220EX	16.0	2,909.00	120.0	562.3	0.90	0.2493
P-240EX	16.0	1,387.00	120.0	-850.1	1.36	0.5360
P-250EX	16.0	2,611.00	120.0	589.2	0.94	0.2718
P-340EX	16.0	5,775.00	120.0	55.5	0.09	0.0034
P-410EX	16.0	5,368.00	120.0	-95.5	0.15	0.0093
P-970	24.0	1,001.00	120.0	178.9	0.13	0.0041
P-980	24.0	1,935.00	120.0	-77.1	0.05	0.0009
P-1060EX	16.0	1,328.00	120.0	-294.1	0.47	0.0750
P-1070EX	16.0	1,243.00	120.0	-294.1	0.47	0.0750
P-1630EX	16.0	560.00	120.0	-294.1	0.47	0.0752
P-1640EX	16.0	2,569.00	120.0	-294.1	0.47	0.0750
P-1780	24.0	1,528.00	120.0	178.9	0.13	0.0042
P-1790	24.0	1,115.00	120.0	178.9	0.13	0.0042
P-1850	16.0	1,560.00	120.0	198.5	0.32	0.0363
P-1860	16.0	1,385.00	120.0	198.5	0.32	0.0362
P-1940EX	16.0	1,976.00	120.0	-294.1	0.47	0.0751
P-1950EX	16.0	680.00	120.0	-294.1	0.47	0.0750
P-1970EX	16.0	927.00	120.0	-294.1	0.47	0.0749
P-1980EX	16.0	1,106.00	120.0	-294.1	0.47	0.0751
P-2000EX	16.0	2,710.00	120.0	-294.1	0.47	0.0750
P-2040EX	16.0	10,635.00	120.0	-60.0	0.10	0.0039
P-2055EX	16.0	10,453.00	120.0	27.0	0.04	0.0009
P-2070EX	24.0	5,329.00	120.0	-170.5	0.12	0.0038
P-2340EX	16.0	2,281.00	120.0	-294.1	0.47	0.0750
P-2500EX	24.0	2,750.00	120.0	178.7	0.13	0.0041
P-2510EX	24.0	2,726.00	120.0	171.2	0.12	0.0038
P-2540EX	12.0	2,624.00	120.0	-21.1	0.06	0.0023
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.0000
P-2655EX	16.0	2,870.00	120.0	55.5	0.09	0.0034
P-2660EX	24.0	2,797.00	120.0	257.5	0.18	0.0081
P-2665EX	16.0	2,716.00	120.0	55.5	0.09	0.0034
P-2690EX	16.0	2,914.00	120.0	-282.3	0.45	0.0696
P-2700EX	16.0	3,115.00	120.0	306.9	0.49	0.0812
P-2710EX	16.0	1,823.00	120.0	221.6	0.35	0.0444
P-2720EX	12.0	3,042.00	120.0	-85.2	0.24	0.0307
P-2800	24.0	5,786.00	120.0	151.0	0.11	0.0030
P-2830	16.0	2,890.00	120.0	166.1	0.27	0.0261
P-2860EX	24.0	761.00	120.0	257.5	0.18	0.0082

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.0000
P-2890EX	8.0	3,148.00	120.0	-13.2	0.08	0.0071
P-2900	24.0	1,423.00	120.0	231.2	0.16	0.0067
P-2910EX	24.0	497.00	120.0	244.3	0.17	0.0074
P-2950	12.0	1,089.00	120.0	7.5	0.02	0.0003
P-2970EX	12.0	1,119.00	120.0	12.5	0.04	0.0009
P-2990EX	8.0	2,811.00	120.0	-9.6	0.06	0.0038
P-3010EX	12.0	471.00	120.0	13.3	0.04	0.0010
P-3020EX	12.0	1,167.00	120.0	2.9	0.01	0.0000
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.0000
P-3040EX	8.0	3,081.00	120.0	-9.3	0.06	0.0036
P-3060	12.0	595.00	120.0	0.0	0.00	0.0000
P-3070EX	8.0	2,922.00	120.0	-6.4	0.04	0.0018
P-3080EX	12.0	1,397.00	120.0	-20.6	0.06	0.0023
P-3090EX	12.0	1,109.00	120.0	-16.5	0.05	0.0014
P-3100EX	12.0	695.00	120.0	4.6	0.01	0.0002
P-3110EX	12.0	664.00	120.0	0.5	0.00	0.0000
P-3120EX	8.0	1,851.00	120.0	-4.2	0.03	0.0008
P-3130	12.0	1,155.00	120.0	6.4	0.02	0.0002
P-3140EX	16.0	1,783.00	120.0	5.9	0.01	0.0001
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.0000
P-3160EX	8.0	3,801.00	120.0	-5.9	0.04	0.0016
P-3170EX	8.0	2,838.00	120.0	-13.1	0.08	0.0069
P-3180EX	8.0	736.00	120.0	4.0	0.03	0.0007
P-3190EX	30.0	4,441.00	120.0	0.0	0.00	0.0000
P-3240EX	16.0	1,954.00	120.0	682.0	1.09	0.3563
P-3250EX	12.0	844.00	120.0	26.8	0.08	0.0036
P-3260EX	16.0	1,108.00	120.0	562.3	0.90	0.2493
P-3270EX	16.0	1,509.00	120.0	464.8	0.74	0.1752
P-3280EX	12.0	2,890.00	120.0	-97.5	0.28	0.0395
P-3290EX	12.0	2,432.00	120.0	-124.3	0.35	0.0618
P-3340	16.0	1,114.00	130.0	-198.5	0.32	0.0312
P-3450	16.0	1,525.00	130.0	198.5	0.32	0.0312
P-3930EX	16.0	751.00	120.0	-294.1	0.47	0.0749
P-3940EX	16.0	509.00	120.0	-294.1	0.47	0.0751
P-3970EX	16.0	1,445.00	120.0	294.1	0.47	0.0750
P-4720EX	16.0	1,216.00	120.0	252.0	0.40	0.0563
P-4730EX	16.0	456.00	120.0	252.0	0.40	0.0565
P-4750EX	16.0	715.00	120.0	252.0	0.40	0.0563
P-4760EX	16.0	774.00	120.0	108.3	0.17	0.0118
P-4780	24.0	1,020.00	120.0	-77.1	0.05	0.0008
P-4790EX	16.0	1,816.00	120.0	193.6	0.31	0.0346
P-4860	24.0	986.00	120.0	77.1	0.05	0.0009
P-4870	24.0	620.00	120.0	77.1	0.05	0.0008

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-5700EX	16.0	1,176.00	120.0	795.5	1.27	0.4740
P-5710EX	16.0	1,171.00	120.0	795.5	1.27	0.4740
P-5740	24.0	2,671.00	120.0	77.1	0.05	0.0009
P-5770	16.0	353.00	120.0	682.0	1.09	0.3562
P-5780	16.0	684.00	120.0	682.0	1.09	0.3564
P-6064	16.0	846.00	120.0	-73.9	0.12	0.0058
P-6065	16.0	3,443.00	120.0	-73.9	0.12	0.0059
P-6070	16.0	247.00	120.0	85.0	0.14	0.0074
P-7000	16.0	742.00	120.0	85.0	0.14	0.0076
P-COMWTREX	36.0	10.00	120.0	257.5	0.08	0.0000
P-DU6-010	12.0	1,163.00	120.0	-223.1	0.63	0.1826
P-DU6-020	12.0	124.00	120.0	556.1	1.58	0.9913
P-DU6-050	12.0	2,203.00	120.0	172.4	0.49	0.1134
P-DU6-060	12.0	2,209.00	120.0	-62.5	0.18	0.0173
P-DU6-070	12.0	142.00	120.0	86.7	0.25	0.0318
P-DU6-080	12.0	1,130.00	120.0	-11.6	0.03	0.0008
P-DU7-010	12.0	1,169.00	120.0	-42.6	0.12	0.0086
P-DU7-020	12.0	1,092.00	120.0	42.6	0.12	0.0085
P-DU7-030	12.0	1,044.00	120.0	42.6	0.12	0.0085
P-DU7-040	24.0	1,410.00	120.0	-42.6	0.03	0.0003
P-DU7-050	24.0	1,075.00	120.0	-418.8	0.30	0.0201
P-DU7-060	24.0	1,254.00	120.0	-447.2	0.32	0.0226
P-DU7-070	24.0	992.00	120.0	-584.1	0.41	0.0372
P-DU7-080	24.0	2,552.00	120.0	-656.3	0.47	0.0460
P-DU7-090	16.0	941.00	120.0	-180.8	0.29	0.0305
P-DU7-100	16.0	1,562.00	120.0	-117.2	0.19	0.0137
P-DU7-110	16.0	1,742.00	120.0	69.3	0.11	0.0052
P-DU7-120	16.0	778.00	120.0	-139.6	0.22	0.0188
P-DU7-130	20.0	317.00	120.0	48.1	0.05	0.0008
P-DU7-140	20.0	1,207.00	120.0	53.3	0.05	0.0011
P-DU7-150	20.0	1,514.00	120.0	232.7	0.24	0.0164
P-DU7-160	20.0	619.00	120.0	305.9	0.31	0.0272
P-DU7-170	12.0	1,073.00	130.0	-136.9	0.39	0.0638
P-DU7-180	12.0	828.00	120.0	75.5	0.21	0.0245
P-DU7-190	12.0	399.00	120.0	-3.0	0.01	0.0000
P-DU7-200	12.0	2,378.00	120.0	34.1	0.10	0.0056
P-DU7-210	12.0	1,049.00	120.0	-143.7	0.41	0.0809
P-DU7-220	12.0	1,054.00	120.0	-72.1	0.20	0.0225
P-DU7-230	12.0	1,714.00	120.0	-45.9	0.13	0.0098
P-DU7-240	12.0	1,014.00	120.0	55.3	0.16	0.0138
P-DU8-010	16.0	1,107.00	120.0	118.4	0.19	0.0139
P-DU8-020	16.0	714.00	120.0	180.3	0.29	0.0304
P-DU8-030	16.0	1,312.00	120.0	62.1	0.10	0.0042
P-DU8-040	16.0	1,371.00	120.0	-42.5	0.07	0.0020

**Active Scenario: Max Day DU 8&9 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU8-050	16.0	520.00	120.0	-110.1	0.18	0.0122
P-DU8-060	16.0	1,021.00	120.0	-256.0	0.41	0.0581
P-DU8-070	8.0	542.00	120.0	37.1	0.24	0.0475
P-DU8-080	8.0	253.00	120.0	15.6	0.10	0.0096
P-DU8-090	8.0	1,138.00	120.0	-15.2	0.10	0.0091
P-DU8-100	12.0	599.00	120.0	139.7	0.40	0.0766
P-DU8-110	12.0	709.00	120.0	50.4	0.14	0.0117
P-DU8-120	8.0	678.00	120.0	3.3	0.02	0.0005
P-DU8-130	8.0	1,315.00	120.0	55.9	0.36	0.1016
P-DU8-140	8.0	966.00	120.0	44.9	0.29	0.0675
P-DU8-150	6.0	737.00	130.0	30.6	0.35	0.1164
P-DU8-160	8.0	1,265.00	120.0	37.1	0.24	0.0476
P-DU8-170	8.0	2,613.00	120.0	5.9	0.04	0.0015
P-DU8-180	8.0	1,778.00	120.0	-28.5	0.18	0.0292
P-DU8-190	8.0	1,185.00	120.0	-16.3	0.10	0.0104
P-DU8-200	8.0	1,054.00	120.0	54.2	0.35	0.0958
P-DU9-010	16.0	904.00	120.0	158.9	0.25	0.0240
P-DU9-020	16.0	227.00	120.0	61.9	0.10	0.0038
P-DU9-030	8.0	1,616.00	120.0	57.6	0.37	0.1073
P-DU9-040	8.0	746.00	120.0	-81.1	0.52	0.2021
P-DU9-050	8.0	869.00	120.0	65.7	0.42	0.1370
P-DU9-060	8.0	1,550.00	120.0	-74.0	0.47	0.1705
P-DU9-070	8.0	1,001.00	120.0	39.2	0.25	0.0524
P-DU9-080	8.0	644.00	120.0	23.6	0.15	0.0205
P-DU9-090	8.0	3,092.00	120.0	34.0	0.22	0.0403
P-DU9-100	8.0	1,619.00	120.0	-32.2	0.21	0.0365
P-DU9-110	8.0	3,057.00	120.0	2.8	0.02	0.0004
P-DU9-120	8.0	901.00	120.0	44.6	0.28	0.0669
P-DU9-130	8.0	879.00	120.0	-53.2	0.34	0.0926
P-DU9-140	8.0	430.00	120.0	-145.9	0.93	0.5993
P-DU9-150	8.0	4,471.00	120.0	-29.8	0.19	0.0317
P-DWGWF	36.0	1,757.00	120.0	0.0	0.00	0.0000
P-SCAP	36.0	1,752.00	120.0	1,950.5	0.61	0.0480

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Reservoir Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Flow (Out net) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	386.3	Desert Wells	1,634.0
SCAP DWPS	1,634.0	2,925.7	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	0.0	Desert Wells	1,634.0

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	97	1,630.8
J-110EX	1,440.0	Desert Wells	0.0	83	1,631.2
J-120EX	1,462.0	Desert Wells	0.0	74	1,633.8
J-135EX	1,460.0	Desert Wells	0.0	75	1,632.6
J-150EX	1,472.0	Desert Wells	0.0	68	1,629.6
J-160EX	1,435.0	Desert Wells	0.0	84	1,628.8
J-170EX	1,430.0	Desert Wells	0.0	86	1,628.8
J-180EX	1,405.0	Desert Wells	0.0	97	1,628.8
J-190EX	1,395.0	Desert Wells	0.0	101	1,628.9
J-200EX	1,385.0	Desert Wells	0.0	106	1,629.0
J-210EX	1,393.0	Desert Wells	0.0	103	1,629.9
J-220EX	1,480.0	Desert Wells	0.0	66	1,632.3
J-230EX	1,475.0	Desert Wells	0.0	68	1,631.1
J-250EX	1,452.0	Desert Wells	84.0	77	1,629.2
J-260EX	1,453.0	Desert Wells	0.0	76	1,629.7
J-270	1,429.0	Desert Wells	0.0	86	1,628.7
J-280EX	1,460.0	Desert Wells	0.0	73	1,628.9
J-300EX	1,392.0	Desert Wells	0.0	103	1,629.1
J-320	1,422.0	Desert Wells	0.0	89	1,628.7
J-330EX	1,455.0	Desert Wells	0.0	75	1,628.9
J-340	1,440.0	Desert Wells	0.0	82	1,628.7
J-360EX	1,405.0	Desert Wells	0.0	98	1,630.4
J-450	1,393.0	Desert Wells	0.0	102	1,629.6
J-550	1,425.0	Desert Wells	0.0	88	1,628.7
J-560	1,402.0	Desert Wells	0.0	98	1,628.9
J-590EX	1,410.0	Desert Wells	0.0	96	1,631.0
J-840	1,390.0	Desert Wells	0.0	103	1,629.2
J-920	1,434.0	Desert Wells	0.0	84	1,628.8
J-930	1,410.0	Desert Wells	0.0	95	1,628.8
J-950	1,414.0	Desert Wells	0.0	93	1,628.7
J-960EX	1,401.0	Desert Wells	0.0	99	1,630.6
J-970EX	1,397.0	Desert Wells	0.0	101	1,630.2
J-980	1,393.0	Desert Wells	0.0	102	1,629.8
J-1000EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1010EX	1,485.0	Desert Wells	0.0	64	1,633.9
J-1020EX	1,425.0	Desert Wells	0.0	90	1,634.0
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,438.0	Desert Wells	0.0	84	1,631.6
J-1050EX	1,445.0	Desert Wells	0.0	80	1,629.0
J-1120EX	1,453.0	Desert Wells	0.0	77	1,630.0
J-1130EX	1,445.0	Desert Wells	0.0	81	1,632.0
J-1160EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1170EX	1,470.0	Desert Wells	0.0	71	1,633.9
J-1180EX	1,440.0	Desert Wells	0.0	84	1,634.0
J-1190EX	1,420.0	Desert Wells	0.0	93	1,634.0

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1200EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1210EX	1,455.0	Desert Wells	0.0	77	1,633.9
J-1220EX	1,475.0	Desert Wells	0.0	69	1,633.9
J-1230EX	1,460.0	Desert Wells	0.0	73	1,628.9
J-1235EX	1,440.0	Desert Wells	0.0	82	1,628.9
J-1240EX	1,455.0	Desert Wells	0.0	75	1,629.1
J-1280	1,410.0	Desert Wells	0.0	95	1,628.8
J-1290EX	1,480.0	Desert Wells	0.0	67	1,633.9
J-1300EX	1,465.0	Desert Wells	0.0	73	1,633.9
J-1310EX	1,480.0	Desert Wells	0.0	67	1,633.9
J-1330EX	1,465.0	Desert Wells	0.0	73	1,633.9
J-1340EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1350EX	1,465.0	Desert Wells	0.0	73	1,633.9
J-1360EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1370EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1380EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1390EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1400EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1410	1,450.0	Desert Wells	0.0	80	1,633.8
J-1410EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1420EX	1,461.0	Desert Wells	0.0	74	1,631.5
J-1430	1,397.0	Desert Wells	0.0	100	1,629.0
J-1430EX	1,455.0	Desert Wells	0.0	76	1,631.5
J-1440EX	1,478.0	Desert Wells	0.0	66	1,631.7
J-1680EX	1,400.0	Desert Wells	0.0	100	1,630.5
J-1990EX	1,447.0	Desert Wells	0.0	79	1,629.1
J-2000EX	1,442.0	Desert Wells	0.0	81	1,628.9
J-2010	1,419.0	Desert Wells	0.0	91	1,628.7
J-2040	1,427.0	Desert Wells	0.0	87	1,628.7
J-2120EX	1,453.0	Desert Wells	0.0	78	1,632.2
J-2140EX	1,446.0	Desert Wells	0.0	80	1,632.0
J-2200	1,414.0	Desert Wells	0.0	93	1,628.7
J-2295	1,415.0	Desert Wells	0.0	92	1,628.7
J-DU6-010	1,459.0	Desert Wells	240.9	75	1,631.5
J-DU6-020	1,453.0	Desert Wells	240.9	77	1,632.0
J-DU6-050	1,448.0	Desert Wells	241.2	79	1,631.5
J-DU6-060	1,458.0	Desert Wells	241.2	75	1,631.5
J-DU7-010	1,415.0	Desert Wells	24.9	92	1,628.7
J-DU7-020	1,420.0	Desert Wells	0.0	90	1,628.7
J-DU7-030	1,415.0	Desert Wells	0.0	92	1,628.8
J-DU7-040	1,415.0	Desert Wells	0.0	92	1,628.8
J-DU7-050	1,420.0	Desert Wells	105.3	90	1,628.8
J-DU7-060	1,435.0	Desert Wells	42.6	84	1,628.8
J-DU7-070	1,440.0	Desert Wells	0.0	82	1,628.9
J-DU7-080	1,450.0	Desert Wells	108.3	77	1,629.0

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-090	1,437.0	Desert Wells	0.0	83	1,628.8
J-DU7-100	1,435.0	Desert Wells	95.4	84	1,628.7
J-DU7-110	1,435.0	Desert Wells	121.2	84	1,628.7
J-DU7-120	1,420.0	Desert Wells	0.0	90	1,628.7
J-DU7-130	1,420.0	Desert Wells	7.8	90	1,628.7
J-DU7-140	1,430.0	Desert Wells	186.3	86	1,628.7
J-DU7-150	1,418.0	Desert Wells	109.8	91	1,628.7
J-DU7-160	1,435.0	Desert Wells	92.1	84	1,628.7
J-DU7-170	1,432.0	Desert Wells	48.9	85	1,628.7
J-DU7-180	1,433.0	Desert Wells	52.5	85	1,628.7
J-DU7-190	1,437.0	Desert Wells	107.4	83	1,628.7
J-DU7-200	1,432.0	Desert Wells	151.8	85	1,628.7
J-DU8-010	1,420.0	Desert Wells	0.0	90	1,628.6
J-DU8-020	1,419.5	Desert Wells	0.0	90	1,628.6
J-DU8-030	1,421.0	Desert Wells	0.0	90	1,628.6
J-DU8-040	1,418.0	Desert Wells	20.1	91	1,628.6
J-DU8-050	1,422.0	Desert Wells	0.0	89	1,628.6
J-DU8-060	1,420.0	Desert Wells	27.3	90	1,628.5
J-DU8-070	1,420.0	Desert Wells	46.2	90	1,628.5
J-DU8-080	1,422.0	Desert Wells	13.2	89	1,628.5
J-DU8-090	1,424.0	Desert Wells	33.0	88	1,628.4
J-DU8-100	1,425.0	Desert Wells	27.3	88	1,628.6
J-DU8-110	1,430.0	Desert Wells	130.8	86	1,628.3
J-DU8-120	1,431.0	Desert Wells	51.6	85	1,628.3
J-DU8-130	1,427.0	Desert Wells	63.0	87	1,628.4
J-DU9-010	1,419.0	Desert Wells	59.1	91	1,628.7
J-DU9-020	1,415.0	Desert Wells	109.5	92	1,628.3
J-DU9-030	1,416.0	Desert Wells	99.9	92	1,628.0
J-DU9-040	1,416.0	Desert Wells	23.4	92	1,627.9
J-DU9-050	1,419.0	Desert Wells	0.0	90	1,627.9
J-DU9-060	1,422.0	Desert Wells	94.2	89	1,628.1
J-DU9-070	1,414.0	Desert Wells	95.1	92	1,627.8
J-DU9-080	1,419.0	Desert Wells	115.8	90	1,627.8

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	83.3	0.13	0.0073
P-170EX	16.0	5,366.00	120.0	83.3	0.13	0.0073
P-180EX	16.0	5,396.00	120.0	-143.3	0.23	0.0198
P-190EX	16.0	5,728.00	120.0	-143.3	0.23	0.0198
P-200EX	16.0	231.00	120.0	-441.1	0.70	0.1591
P-210EX	16.0	1,388.00	120.0	-441.1	0.70	0.1590
P-220EX	16.0	2,909.00	120.0	843.5	1.35	0.5282
P-240EX	16.0	1,387.00	120.0	1,275.2	2.03	1.1356
P-250EX	16.0	2,611.00	120.0	883.8	1.41	0.5759
P-340EX	16.0	5,775.00	120.0	83.3	0.13	0.0073
P-410EX	16.0	5,368.00	120.0	-143.3	0.23	0.0198
P-970	24.0	1,001.00	120.0	268.4	0.19	0.0088
P-980	24.0	1,935.00	120.0	-115.6	0.08	0.0019
P-1060EX	16.0	1,328.00	120.0	-441.1	0.70	0.1589
P-1070EX	16.0	1,243.00	120.0	-441.1	0.70	0.1590
P-1630EX	16.0	560.00	120.0	-441.1	0.70	0.1589
P-1640EX	16.0	2,569.00	120.0	-441.1	0.70	0.1590
P-1780	24.0	1,528.00	120.0	268.4	0.19	0.0088
P-1790	24.0	1,115.00	120.0	268.4	0.19	0.0089
P-1850	16.0	1,560.00	120.0	297.8	0.48	0.0768
P-1860	16.0	1,385.00	120.0	297.8	0.48	0.0768
P-1940EX	16.0	1,976.00	120.0	-441.1	0.70	0.1590
P-1950EX	16.0	680.00	120.0	-441.1	0.70	0.1591
P-1970EX	16.0	927.00	120.0	-441.1	0.70	0.1589
P-1980EX	16.0	1,106.00	120.0	-441.1	0.70	0.1590
P-2000EX	16.0	2,710.00	120.0	-441.1	0.70	0.1590
P-2040EX	16.0	10,635.00	120.0	-90.0	0.14	0.0084
P-2055EX	16.0	10,453.00	120.0	40.5	0.06	0.0019
P-2070EX	24.0	5,329.00	120.0	-255.8	0.18	0.0080
P-2340EX	16.0	2,281.00	120.0	-441.1	0.70	0.1589
P-2500EX	24.0	2,750.00	120.0	268.0	0.19	0.0088
P-2510EX	24.0	2,726.00	120.0	256.7	0.18	0.0081
P-2540EX	12.0	2,624.00	120.0	-31.6	0.09	0.0049
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.0000
P-2655EX	16.0	2,870.00	120.0	83.3	0.13	0.0073
P-2660EX	24.0	2,797.00	120.0	386.3	0.27	0.0172
P-2665EX	16.0	2,716.00	120.0	83.3	0.13	0.0072
P-2690EX	16.0	2,914.00	120.0	-423.5	0.68	0.1474
P-2700EX	16.0	3,115.00	120.0	460.3	0.73	0.1720
P-2710EX	16.0	1,823.00	120.0	332.4	0.53	0.0941
P-2720EX	12.0	3,042.00	120.0	-127.8	0.36	0.0651
P-2800	24.0	5,786.00	120.0	226.5	0.16	0.0064
P-2830	16.0	2,890.00	120.0	249.2	0.40	0.0552

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2860EX	24.0	761.00	120.0	386.3	0.27	0.0173
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.0000
P-2890EX	8.0	3,148.00	120.0	-19.9	0.13	0.0149
P-2900	24.0	1,423.00	120.0	346.7	0.25	0.0141
P-2910EX	24.0	497.00	120.0	366.4	0.26	0.0157
P-2950	12.0	1,089.00	120.0	11.3	0.03	0.0007
P-2970EX	12.0	1,119.00	120.0	18.6	0.05	0.0019
P-2990EX	8.0	2,811.00	120.0	-14.3	0.09	0.0081
P-3010EX	12.0	471.00	120.0	19.9	0.06	0.0021
P-3020EX	12.0	1,167.00	120.0	4.3	0.01	0.0001
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.0000
P-3040EX	8.0	3,081.00	120.0	-13.9	0.09	0.0078
P-3060	12.0	595.00	120.0	0.0	0.00	0.0000
P-3070EX	8.0	2,922.00	120.0	-9.6	0.06	0.0039
P-3080EX	12.0	1,397.00	120.0	-30.9	0.09	0.0047
P-3090EX	12.0	1,109.00	120.0	-24.7	0.07	0.0031
P-3100EX	12.0	695.00	120.0	6.9	0.02	0.0004
P-3110EX	12.0	664.00	120.0	0.7	0.00	0.0000
P-3120EX	8.0	1,851.00	120.0	-6.2	0.04	0.0017
P-3130	12.0	1,155.00	120.0	9.6	0.03	0.0005
P-3140EX	16.0	1,783.00	120.0	8.9	0.01	0.0001
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.0000
P-3160EX	8.0	3,801.00	120.0	-8.9	0.06	0.0034
P-3170EX	8.0	2,838.00	120.0	-19.7	0.13	0.0146
P-3180EX	8.0	736.00	120.0	5.9	0.04	0.0017
P-3190EX	30.0	4,441.00	120.0	0.0	0.00	0.0000
P-3240EX	16.0	1,954.00	120.0	1,023.0	1.63	0.7551
P-3250EX	12.0	844.00	120.0	40.2	0.11	0.0077
P-3260EX	16.0	1,108.00	120.0	843.5	1.35	0.5283
P-3270EX	16.0	1,509.00	120.0	697.3	1.11	0.3712
P-3280EX	12.0	2,890.00	120.0	-146.2	0.41	0.0835
P-3290EX	12.0	2,432.00	120.0	-186.5	0.53	0.1311
P-3340	16.0	1,114.00	130.0	-297.8	0.48	0.0663
P-3450	16.0	1,525.00	130.0	297.8	0.48	0.0662
P-3930EX	16.0	751.00	120.0	-441.1	0.70	0.1590
P-3940EX	16.0	509.00	120.0	-441.1	0.70	0.1590
P-3970EX	16.0	1,445.00	120.0	441.1	0.70	0.1590
P-4720EX	16.0	1,216.00	120.0	378.0	0.60	0.1195
P-4730EX	16.0	456.00	120.0	378.0	0.60	0.1194
P-4750EX	16.0	715.00	120.0	378.0	0.60	0.1195
P-4760EX	16.0	774.00	120.0	162.5	0.26	0.0249
P-4780	24.0	1,020.00	120.0	-115.6	0.08	0.0018
P-4790EX	16.0	1,816.00	120.0	290.3	0.46	0.0733
P-4860	24.0	986.00	120.0	115.6	0.08	0.0019

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (In)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-4870	24.0	620.00	120.0	115.6	0.08	0.0018
P-5700EX	16.0	1,176.00	120.0	1,193.3	1.90	1.0043
P-5710EX	16.0	1,171.00	120.0	1,193.3	1.90	1.0042
P-5740	24.0	2,671.00	120.0	115.6	0.08	0.0019
P-5770	16.0	353.00	120.0	1,023.0	1.63	0.7549
P-5780	16.0	684.00	120.0	1,023.0	1.63	0.7551
P-6064	16.0	846.00	120.0	-110.9	0.18	0.0123
P-6065	16.0	3,443.00	120.0	-110.9	0.18	0.0123
P-6070	16.0	247.00	120.0	127.5	0.20	0.0158
P-7000	16.0	742.00	120.0	127.5	0.20	0.0160
P-COMWTREX	36.0	10.00	120.0	386.3	0.12	0.0000
P-DU6-010	12.0	1,163.00	120.0	-334.6	0.95	0.3870
P-DU6-020	12.0	124.00	120.0	834.1	2.37	2.1008
P-DU6-050	12.0	2,203.00	120.0	258.6	0.73	0.2402
P-DU6-060	12.0	2,209.00	120.0	-93.7	0.27	0.0366
P-DU6-070	12.0	142.00	120.0	130.1	0.37	0.0679
P-DU6-080	12.0	1,130.00	120.0	-17.4	0.05	0.0016
P-DU7-010	12.0	1,169.00	120.0	-63.9	0.18	0.0181
P-DU7-020	12.0	1,092.00	120.0	63.9	0.18	0.0180
P-DU7-030	12.0	1,044.00	120.0	63.9	0.18	0.0181
P-DU7-040	24.0	1,410.00	120.0	-63.9	0.05	0.0006
P-DU7-050	24.0	1,075.00	120.0	-628.1	0.45	0.0425
P-DU7-060	24.0	1,254.00	120.0	-670.7	0.48	0.0479
P-DU7-070	24.0	992.00	120.0	-876.1	0.62	0.0786
P-DU7-080	24.0	2,552.00	120.0	-984.4	0.70	0.0976
P-DU7-090	16.0	941.00	120.0	-271.1	0.43	0.0646
P-DU7-100	16.0	1,562.00	120.0	-175.7	0.28	0.0289
P-DU7-110	16.0	1,742.00	120.0	103.9	0.17	0.0109
P-DU7-120	16.0	778.00	120.0	-209.4	0.33	0.0400
P-DU7-130	20.0	317.00	120.0	72.1	0.07	0.0019
P-DU7-140	20.0	1,207.00	120.0	79.9	0.08	0.0022
P-DU7-150	20.0	1,514.00	120.0	349.1	0.36	0.0348
P-DU7-160	20.0	619.00	120.0	458.9	0.47	0.0578
P-DU7-170	12.0	1,073.00	130.0	-205.4	0.58	0.1352
P-DU7-180	12.0	828.00	120.0	113.3	0.32	0.0520
P-DU7-190	12.0	399.00	120.0	-4.5	0.01	0.0000
P-DU7-200	12.0	2,378.00	120.0	51.1	0.14	0.0119
P-DU7-210	12.0	1,049.00	120.0	-215.5	0.61	0.1713
P-DU7-220	12.0	1,054.00	120.0	-108.1	0.31	0.0477
P-DU7-230	12.0	1,714.00	120.0	-68.9	0.20	0.0208
P-DU7-240	12.0	1,014.00	120.0	82.9	0.24	0.0293
P-DU8-010	16.0	1,107.00	120.0	177.6	0.28	0.0296
P-DU8-020	16.0	714.00	120.0	270.4	0.43	0.0641
P-DU8-030	16.0	1,312.00	120.0	93.1	0.15	0.0089

**Active Scenario: Peak Hour DU 8&9, Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU8-040	16.0	1,371.00	120.0	-63.8	0.10	0.0044
P-DU8-050	16.0	520.00	120.0	-165.2	0.26	0.0258
P-DU8-060	16.0	1,021.00	120.0	-384.0	0.61	0.1230
P-DU8-070	8.0	542.00	120.0	55.7	0.36	0.1009
P-DU8-080	8.0	253.00	120.0	23.5	0.15	0.0203
P-DU8-090	8.0	1,138.00	120.0	-22.7	0.15	0.0192
P-DU8-100	12.0	599.00	120.0	209.5	0.59	0.1626
P-DU8-110	12.0	709.00	120.0	75.6	0.21	0.0246
P-DU8-120	8.0	678.00	120.0	4.9	0.03	0.0011
P-DU8-130	8.0	1,315.00	120.0	83.9	0.54	0.2153
P-DU8-140	8.0	966.00	120.0	67.3	0.43	0.1429
P-DU8-150	6.0	737.00	130.0	45.9	0.52	0.2466
P-DU8-160	8.0	1,265.00	120.0	55.7	0.36	0.1008
P-DU8-170	8.0	2,613.00	120.0	8.8	0.06	0.0033
P-DU8-180	8.0	1,778.00	120.0	-42.8	0.27	0.0619
P-DU8-190	8.0	1,185.00	120.0	-24.5	0.16	0.0220
P-DU8-200	8.0	1,054.00	120.0	81.3	0.52	0.2029
P-DU9-010	16.0	904.00	120.0	238.4	0.38	0.0509
P-DU9-020	16.0	227.00	120.0	92.8	0.15	0.0091
P-DU9-030	8.0	1,616.00	120.0	86.4	0.55	0.2274
P-DU9-040	8.0	746.00	120.0	-121.7	0.78	0.4284
P-DU9-050	8.0	869.00	120.0	98.6	0.63	0.2902
P-DU9-060	8.0	1,550.00	120.0	-111.0	0.71	0.3613
P-DU9-070	8.0	1,001.00	120.0	58.7	0.37	0.1112
P-DU9-080	8.0	644.00	120.0	35.3	0.23	0.0434
P-DU9-090	8.0	3,092.00	120.0	51.0	0.33	0.0855
P-DU9-100	8.0	1,619.00	120.0	-48.3	0.31	0.0773
P-DU9-110	8.0	3,057.00	120.0	4.1	0.03	0.0008
P-DU9-120	8.0	901.00	120.0	66.9	0.43	0.1416
P-DU9-130	8.0	879.00	120.0	-79.9	0.51	0.1965
P-DU9-140	8.0	430.00	120.0	-218.8	1.40	1.2698
P-DU9-150	8.0	4,471.00	120.0	-44.7	0.29	0.0672
P-DWGWFF	36.0	1,757.00	120.0	0.0	0.00	0.0000
P-SCAP	36.0	1,752.00	120.0	2,925.7	0.92	0.1018

**Active Scenario: Max Day DU 8&9 + Fire Flow - Served by SCAP**  
**Fire Flow Node FlexTable: Fire Flow Report (123835\_04 DU 8&9 at EM**  
**Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsd) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)	Satisfies FF?
J-100EX	1,406.0	Desert Wells	3,000.0	5,000.0	74	63	J-150EX	True
J-110EX	1,440.0	Desert Wells	3,000.0	5,000.0	62	64	J-150EX	True
J-120EX	1,462.0	Desert Wells	3,000.0	5,000.0	74	64	J-1010EX	True
J-135EX	1,460.0	Desert Wells	3,000.0	5,000.0	71	64	J-1010EX	True
J-150EX	1,472.0	Desert Wells	3,000.0	5,000.0	58	62	J-230EX	True
J-160EX	1,435.0	Desert Wells	3,000.0	5,000.0	55	53	J-280EX	True
J-170EX	1,430.0	Desert Wells	3,000.0	5,000.0	60	56	J-280EX	True
J-180EX	1,405.0	Desert Wells	3,000.0	5,000.0	82	60	J-150EX	True
J-190EX	1,395.0	Desert Wells	3,000.0	5,000.0	76	60	J-150EX	True
J-200EX	1,385.0	Desert Wells	3,000.0	5,000.0	80	60	J-150EX	True
J-210EX	1,393.0	Desert Wells	3,000.0	5,000.0	79	62	J-150EX	True
J-220EX	1,480.0	Desert Wells	3,000.0	5,000.0	59	61	J-1440EX	True
J-230EX	1,475.0	Desert Wells	3,000.0	5,000.0	59	61	J-1440EX	True
J-250EX	1,452.0	Desert Wells	3,056.0	5,000.0	67	60	J-150EX	True
J-260EX	1,453.0	Desert Wells	3,000.0	5,000.0	67	61	J-150EX	True
J-270	1,429.0	Desert Wells	3,000.0	5,000.0	74	60	J-150EX	True
J-280EX	1,460.0	Desert Wells	3,000.0	5,000.0	47	53	J-1230EX	True
J-300EX	1,392.0	Desert Wells	3,000.0	5,000.0	86	61	J-150EX	True
J-320	1,422.0	Desert Wells	3,000.0	5,000.0	76	60	J-150EX	True
J-330EX	1,455.0	Desert Wells	3,000.0	5,000.0	61	59	J-150EX	True
J-340	1,440.0	Desert Wells	3,000.0	5,000.0	69	60	J-150EX	True
J-360EX	1,405.0	Desert Wells	3,000.0	5,000.0	74	63	J-150EX	True
J-450	1,393.0	Desert Wells	3,000.0	5,000.0	81	62	J-150EX	True
J-550	1,425.0	Desert Wells	3,000.0	5,000.0	76	60	J-150EX	True
J-560	1,402.0	Desert Wells	3,000.0	5,000.0	81	60	J-150EX	True
J-590EX	1,410.0	Desert Wells	3,000.0	5,000.0	74	64	J-110EX	True
J-840	1,390.0	Desert Wells	3,000.0	5,000.0	85	61	J-150EX	True
J-920	1,434.0	Desert Wells	3,000.0	5,000.0	72	60	J-150EX	True
J-930	1,410.0	Desert Wells	3,000.0	5,000.0	79	60	J-150EX	True
J-950	1,414.0	Desert Wells	3,000.0	5,000.0	80	60	J-150EX	True
J-960EX	1,401.0	Desert Wells	3,000.0	5,000.0	76	63	J-150EX	True
J-970EX	1,397.0	Desert Wells	3,000.0	5,000.0	77	63	J-150EX	True
J-980	1,393.0	Desert Wells	3,000.0	5,000.0	80	62	J-150EX	True
J-1000EX	1,455.0	Desert Wells	3,000.0	5,000.0	76	64	J-1010EX	True
J-1010EX	1,485.0	Desert Wells	3,000.0	5,000.0	63	66	J-1310EX	True
J-1020EX	1,425.0	Desert Wells	3,000.0	5,000.0	71	64	J-1010EX	True
J-1030EX	1,480.0	Desert Wells	3,000.0	5,000.0	67	64	J-1010EX	True
J-1040EX	1,438.0	Desert Wells	3,000.0	5,000.0	67	64	J-220EX	True
J-1050EX	1,445.0	Desert Wells	3,000.0	5,000.0	67	60	J-150EX	True
J-1120EX	1,453.0	Desert Wells	3,000.0	5,000.0	67	61	J-150EX	True
J-1130EX	1,445.0	Desert Wells	3,000.0	5,000.0	70	64	J-1010EX	True
J-1160EX	1,445.0	Desert Wells	3,000.0	5,000.0	48	58	J-1360EX	True
J-1170EX	1,470.0	Desert Wells	3,000.0	5,000.0	69	63	J-1010EX	True

**Active Scenario: Max Day DU 8&9 + Fire Flow - Served by SCAP**  
**Fire Flow Node FlexTable: Fire Flow Report (123835\_04 DU 8&9 at EM**  
**Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdl) (psi)	Pres. (Calc. Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)	Satisfies FF?
J-1180EX	1,440.0	Desert Wells	3,000.0	5,000.0	67	64	J-1010EX	True
J-1190EX	1,420.0	Desert Wells	3,000.0	5,000.0	60	64	J-1010EX	True
J-1200EX	1,445.0	Desert Wells	3,000.0	5,000.0	26	48	J-1370EX	True
J-1210EX	1,455.0	Desert Wells	3,000.0	4,953.1	20	25	J-1300EX	True
J-1220EX	1,475.0	Desert Wells	3,000.0	5,000.0	68	64	J-1010EX	True
J-1230EX	1,460.0	Desert Wells	3,000.0	5,000.0	51	53	J-280EX	True
J-1235EX	1,440.0	Desert Wells	3,000.0	5,000.0	69	60	J-150EX	True
J-1240EX	1,455.0	Desert Wells	3,000.0	5,000.0	62	59	J-150EX	True
J-1280	1,410.0	Desert Wells	3,000.0	5,000.0	81	60	J-150EX	True
J-1290EX	1,480.0	Desert Wells	3,000.0	5,000.0	65	64	J-1010EX	True
J-1300EX	1,465.0	Desert Wells	3,000.0	5,000.0	24	29	J-1210EX	True
J-1310EX	1,480.0	Desert Wells	3,000.0	5,000.0	65	63	J-1010EX	True
J-1330EX	1,465.0	Desert Wells	3,000.0	5,000.0	62	64	J-1010EX	True
J-1340EX	1,450.0	Desert Wells	3,000.0	5,000.0	66	64	J-1010EX	True
J-1350EX	1,465.0	Desert Wells	3,000.0	5,000.0	29	30	J-1300EX	True
J-1360EX	1,445.0	Desert Wells	3,000.0	5,000.0	58	58	J-1160EX	True
J-1370EX	1,430.0	Desert Wells	3,000.0	5,000.0	48	41	J-1200EX	True
J-1380EX	1,450.0	Desert Wells	3,000.0	5,000.0	65	64	J-1010EX	True
J-1390EX	1,430.0	Desert Wells	3,000.0	5,000.0	68	63	J-1200EX	True
J-1400EX	1,430.0	Desert Wells	3,000.0	5,000.0	62	57	J-1200EX	True
J-1410	1,450.0	Desert Wells	3,000.0	5,000.0	78	64	J-1010EX	True
J-1410EX	1,420.0	Desert Wells	3,000.0	5,000.0	66	64	J-1010EX	True
J-1420EX	1,461.0	Desert Wells	3,000.0	5,000.0	69	63	J-1440EX	True
J-1430	1,397.0	Desert Wells	3,000.0	5,000.0	83	61	J-150EX	True
J-1430EX	1,455.0	Desert Wells	3,000.0	5,000.0	67	62	J-1440EX	True
J-1440EX	1,478.0	Desert Wells	3,000.0	5,000.0	59	61	J-220EX	True
J-1680EX	1,400.0	Desert Wells	3,000.0	5,000.0	76	63	J-150EX	True
J-1990EX	1,447.0	Desert Wells	3,000.0	5,000.0	66	60	J-150EX	True
J-2000EX	1,442.0	Desert Wells	3,000.0	5,000.0	68	60	J-150EX	True
J-2010	1,419.0	Desert Wells	3,000.0	5,000.0	78	60	J-150EX	True
J-2040	1,427.0	Desert Wells	3,000.0	5,000.0	74	60	J-150EX	True
J-2120EX	1,453.0	Desert Wells	3,000.0	5,000.0	73	64	J-1010EX	True
J-2140EX	1,446.0	Desert Wells	3,000.0	5,000.0	71	64	J-1010EX	True
J-2200	1,414.0	Desert Wells	3,000.0	5,000.0	78	60	J-150EX	True
J-2295	1,415.0	Desert Wells	3,000.0	5,000.0	80	60	J-150EX	True
J-DU6-010	1,459.0	Desert Wells	3,160.6	5,000.0	59	64	J-1010EX	True
J-DU6-020	1,453.0	Desert Wells	3,160.6	5,000.0	72	64	J-1010EX	True
J-DU6-050	1,448.0	Desert Wells	3,160.8	5,000.0	64	64	J-220EX	True
J-DU6-060	1,458.0	Desert Wells	3,160.8	5,000.0	69	64	J-1440EX	True
J-DU7-010	1,415.0	Desert Wells	3,016.6	5,000.0	80	60	J-150EX	True
J-DU7-020	1,420.0	Desert Wells	3,000.0	5,000.0	68	60	J-150EX	True
J-DU7-030	1,415.0	Desert Wells	3,000.0	5,000.0	71	60	J-150EX	True
J-DU7-040	1,415.0	Desert Wells	3,000.0	5,000.0	80	60	J-150EX	True

**Active Scenario: Max Day DU 8&9 + Fire Flow - Served by SCAP**  
**Fire Flow Node FlexTable: Fire Flow Report (123835\_04 DU 8&9 at EM**  
**Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsd) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)	Satisfies FF?
J-DU7-050	1,420.0	Desert Wells	3,070.2	5,000.0	79	60	J-150EX	True
J-DU7-060	1,435.0	Desert Wells	3,028.4	5,000.0	72	60	J-150EX	True
J-DU7-070	1,440.0	Desert Wells	3,000.0	5,000.0	71	60	J-150EX	True
J-DU7-080	1,450.0	Desert Wells	3,072.2	5,000.0	67	60	J-150EX	True
J-DU7-090	1,437.0	Desert Wells	3,000.0	5,000.0	71	60	J-150EX	True
J-DU7-100	1,435.0	Desert Wells	3,063.6	5,000.0	70	60	J-150EX	True
J-DU7-110	1,435.0	Desert Wells	3,080.8	5,000.0	71	60	J-150EX	True
J-DU7-120	1,420.0	Desert Wells	3,000.0	5,000.0	79	60	J-150EX	True
J-DU7-130	1,420.0	Desert Wells	3,005.2	5,000.0	78	60	J-150EX	True
J-DU7-140	1,430.0	Desert Wells	3,124.2	5,000.0	74	60	J-150EX	True
J-DU7-150	1,418.0	Desert Wells	3,073.2	5,000.0	79	60	J-150EX	True
J-DU7-160	1,435.0	Desert Wells	3,061.4	5,000.0	66	60	J-150EX	True
J-DU7-170	1,432.0	Desert Wells	3,032.6	5,000.0	69	60	J-150EX	True
J-DU7-180	1,433.0	Desert Wells	3,035.0	5,000.0	68	60	J-150EX	True
J-DU7-190	1,437.0	Desert Wells	3,071.6	5,000.0	63	60	J-150EX	True
J-DU7-200	1,432.0	Desert Wells	3,101.2	5,000.0	64	60	J-150EX	True
J-DU8-010	1,420.0	Desert Wells	3,000.0	5,000.0	78	60	J-150EX	True
J-DU8-020	1,419.5	Desert Wells	3,000.0	5,000.0	77	60	J-150EX	True
J-DU8-030	1,421.0	Desert Wells	3,000.0	5,000.0	75	60	J-150EX	True
J-DU8-040	1,418.0	Desert Wells	3,013.4	5,000.0	76	60	J-150EX	True
J-DU8-050	1,422.0	Desert Wells	3,000.0	5,000.0	75	60	J-150EX	True
J-DU8-060	1,420.0	Desert Wells	3,018.2	5,000.0	57	60	J-150EX	True
J-DU8-070	1,420.0	Desert Wells	3,030.8	5,000.0	42	60	J-150EX	True
J-DU8-080	1,422.0	Desert Wells	3,008.8	5,000.0	64	60	J-150EX	True
J-DU8-090	1,424.0	Desert Wells	3,022.0	5,000.0	48	58	J-DU8-120	True
J-DU8-100	1,425.0	Desert Wells	3,018.2	5,000.0	69	60	J-150EX	True
J-DU8-110	1,430.0	Desert Wells	3,087.2	4,997.0	20	43	J-DU8-120	True
J-DU8-120	1,431.0	Desert Wells	3,034.4	3,200.1	20	64	J-150EX	True
J-DU8-130	1,427.0	Desert Wells	3,042.0	5,000.0	28	40	J-DU8-120	True
J-DU9-010	1,419.0	Desert Wells	3,039.4	5,000.0	78	60	J-150EX	True
J-DU9-020	1,415.0	Desert Wells	3,073.0	5,000.0	52	60	J-150EX	True
J-DU9-030	1,416.0	Desert Wells	3,066.6	5,000.0	44	52	J-DU9-040	True
J-DU9-040	1,416.0	Desert Wells	3,015.6	4,542.5	20	48	J-DU9-050	True
J-DU9-050	1,419.0	Desert Wells	3,000.0	5,000.0	25	31	J-DU9-080	True
J-DU9-060	1,422.0	Desert Wells	3,062.8	5,000.0	38	49	J-DU9-080	True
J-DU9-070	1,414.0	Desert Wells	3,063.4	3,993.7	20	51	J-DU9-080	True
J-DU9-080	1,419.0	Desert Wells	3,077.2	4,031.0	20	51	J-DU9-050	True

**APPENDIX B**

**Hydraulic Modeling Results –  
Served by South CAP Water Treatment Plant –  
Phase 1**

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Reservoir Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Flow (Out net) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	106.9	Desert Wells	1,634.0
SCAP DWPS	1,634.0	810.1	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	0.0	Desert Wells	1,634.0

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	99	1,633.7
J-110EX	1,440.0	Desert Wells	0.0	84	1,633.8
J-120EX	1,462.0	Desert Wells	0.0	74	1,634.0
J-135EX	1,460.0	Desert Wells	0.0	75	1,633.9
J-150EX	1,472.0	Desert Wells	0.0	70	1,633.6
J-160EX	1,435.0	Desert Wells	0.0	86	1,633.6
J-170EX	1,430.0	Desert Wells	0.0	88	1,633.6
J-180EX	1,405.0	Desert Wells	0.0	99	1,633.6
J-190EX	1,395.0	Desert Wells	0.0	103	1,633.6
J-200EX	1,385.0	Desert Wells	0.0	108	1,633.6
J-210EX	1,393.0	Desert Wells	0.0	104	1,633.7
J-220EX	1,480.0	Desert Wells	0.0	67	1,633.8
J-230EX	1,475.0	Desert Wells	0.0	69	1,633.7
J-250EX	1,452.0	Desert Wells	28.0	79	1,633.6
J-260EX	1,453.0	Desert Wells	0.0	78	1,633.6
J-280EX	1,460.0	Desert Wells	0.0	75	1,633.6
J-300EX	1,392.0	Desert Wells	0.0	105	1,633.6
J-330EX	1,455.0	Desert Wells	0.0	77	1,633.6
J-360EX	1,405.0	Desert Wells	0.0	99	1,633.7
J-450	1,393.0	Desert Wells	0.0	104	1,633.6
J-560	1,402.0	Desert Wells	0.0	100	1,633.6
J-590EX	1,410.0	Desert Wells	0.0	97	1,633.7
J-840	1,390.0	Desert Wells	0.0	105	1,633.6
J-930	1,410.0	Desert Wells	0.0	97	1,633.6
J-950	1,414.0	Desert Wells	0.0	95	1,633.5
J-960EX	1,401.0	Desert Wells	0.0	101	1,633.7
J-970EX	1,397.0	Desert Wells	0.0	102	1,633.7
J-980	1,393.0	Desert Wells	0.0	104	1,633.6
J-1000EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1010EX	1,485.0	Desert Wells	0.0	64	1,634.0
J-1020EX	1,425.0	Desert Wells	0.0	90	1,634.0
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,438.0	Desert Wells	0.0	85	1,633.8
J-1050EX	1,445.0	Desert Wells	0.0	82	1,633.6
J-1120EX	1,453.0	Desert Wells	0.0	78	1,633.6
J-1130EX	1,445.0	Desert Wells	0.0	82	1,633.8
J-1160EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1170EX	1,470.0	Desert Wells	0.0	71	1,634.0
J-1180EX	1,440.0	Desert Wells	0.0	84	1,634.0
J-1190EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1200EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1210EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1220EX	1,475.0	Desert Wells	0.0	69	1,634.0
J-1230EX	1,460.0	Desert Wells	0.0	75	1,633.6
J-1235EX	1,440.0	Desert Wells	0.0	84	1,633.6

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1240EX	1,455.0	Desert Wells	0.0	77	1,633.6
J-1290EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1300EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1310EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1330EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1340EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1350EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1360EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1370EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1380EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1390EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1400EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1410	1,450.0	Desert Wells	0.0	80	1,634.0
J-1410EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1420EX	1,461.0	Desert Wells	0.0	75	1,633.8
J-1430	1,397.0	Desert Wells	0.0	102	1,633.6
J-1430EX	1,455.0	Desert Wells	0.0	77	1,633.8
J-1440EX	1,478.0	Desert Wells	0.0	67	1,633.8
J-1680EX	1,400.0	Desert Wells	0.0	101	1,633.7
J-1990EX	1,447.0	Desert Wells	0.0	81	1,633.6
J-2000EX	1,442.0	Desert Wells	0.0	83	1,633.6
J-2120EX	1,453.0	Desert Wells	0.0	78	1,633.8
J-2140EX	1,446.0	Desert Wells	0.0	81	1,633.8
J-2295	1,415.0	Desert Wells	0.0	95	1,633.5
J-DU6-010	1,459.0	Desert Wells	80.3	76	1,633.8
J-DU6-020	1,453.0	Desert Wells	80.3	78	1,633.8
J-DU6-050	1,448.0	Desert Wells	80.4	80	1,633.8
J-DU6-060	1,458.0	Desert Wells	80.4	76	1,633.8
J-DU7-010	1,415.0	Desert Wells	8.3	95	1,633.5
J-DU7-020	1,420.0	Desert Wells	0.0	92	1,633.5
J-DU7-030	1,415.0	Desert Wells	0.0	95	1,633.5
J-DU7-040	1,415.0	Desert Wells	0.0	95	1,633.5
J-DU7-050	1,420.0	Desert Wells	35.1	92	1,633.5
J-DU7-060	1,435.0	Desert Wells	14.2	86	1,633.5
J-DU7-070	1,440.0	Desert Wells	0.0	84	1,633.6
J-DU7-080	1,450.0	Desert Wells	36.1	79	1,633.6
J-DU7-090	1,437.0	Desert Wells	0.0	85	1,633.6
J-DU7-100	1,435.0	Desert Wells	31.8	86	1,633.6
J-DU7-110	1,435.0	Desert Wells	40.4	86	1,633.5
J-DU7-120	1,420.0	Desert Wells	0.0	92	1,633.5
J-DU7-130	1,420.0	Desert Wells	2.6	92	1,633.5
J-DU7-140	1,430.0	Desert Wells	62.1	88	1,633.5
J-DU7-150	1,418.0	Desert Wells	36.6	93	1,633.5
J-DU7-160	1,435.0	Desert Wells	30.7	86	1,633.5
J-DU7-170	1,432.0	Desert Wells	16.3	87	1,633.5

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-180	1,433.0	Desert Wells	17.5	87	1,633.5
J-DU7-190	1,437.0	Desert Wells	35.8	85	1,633.5
J-DU7-200	1,432.0	Desert Wells	50.6	87	1,633.5
J-DU8-010	1,420.0	Desert Wells	0.0	92	1,633.5
J-DU8-020	1,419.5	Desert Wells	0.0	93	1,633.5
J-DU8-030	1,421.0	Desert Wells	0.0	92	1,633.5
J-DU8-060	1,420.0	Desert Wells	9.1	92	1,633.5
J-DU8-070	1,420.0	Desert Wells	15.4	92	1,633.5
J-DU8-080	1,422.0	Desert Wells	4.4	92	1,633.5
J-DU8-090	1,424.0	Desert Wells	4.4	91	1,633.5
J-DU8-100	1,425.0	Desert Wells	9.1	90	1,633.5
J-DU8-110	1,430.0	Desert Wells	34.1	88	1,633.5
J-DU9-010	1,419.0	Desert Wells	19.7	93	1,633.5
J-DU9-020	1,415.0	Desert Wells	36.5	95	1,633.5
J-DU9-030	1,416.0	Desert Wells	16.8	94	1,633.5

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	-12.9	0.02	0.0002
P-170EX	16.0	5,366.00	120.0	-12.9	0.02	0.0002
P-180EX	16.0	5,396.00	120.0	-12.9	0.02	0.0002
P-190EX	16.0	5,728.00	120.0	-12.9	0.02	0.0002
P-200EX	16.0	231.00	120.0	-110.7	0.18	0.0122
P-210EX	16.0	1,388.00	120.0	-110.7	0.18	0.0123
P-220EX	16.0	2,909.00	120.0	229.6	0.37	0.0475
P-240EX	16.0	1,387.00	120.0	-356.6	0.57	0.1073
P-250EX	16.0	2,611.00	120.0	224.4	0.36	0.0454
P-340EX	16.0	5,775.00	120.0	-12.9	0.02	0.0002
P-410EX	16.0	5,368.00	120.0	-12.9	0.02	0.0002
P-1060EX	16.0	1,328.00	120.0	-110.7	0.18	0.0123
P-1070EX	16.0	1,243.00	120.0	-110.7	0.18	0.0123
P-1630EX	16.0	560.00	120.0	-110.7	0.18	0.0124
P-1640EX	16.0	2,569.00	120.0	-110.7	0.18	0.0123
P-1850	16.0	1,560.00	120.0	97.9	0.16	0.0098
P-1860	16.0	1,385.00	120.0	97.9	0.16	0.0098
P-1940EX	16.0	1,976.00	120.0	-110.7	0.18	0.0123
P-1950EX	16.0	680.00	120.0	-110.7	0.18	0.0124
P-1970EX	16.0	927.00	120.0	-110.7	0.18	0.0124
P-1980EX	16.0	1,106.00	120.0	-110.7	0.18	0.0123
P-2000EX	16.0	2,710.00	120.0	-110.7	0.18	0.0123
P-2040EX	16.0	10,635.00	120.0	-24.9	0.04	0.0008
P-2055EX	16.0	10,453.00	120.0	11.2	0.02	0.0002
P-2070EX	24.0	5,329.00	120.0	-70.8	0.05	0.0008
P-2340EX	16.0	2,281.00	120.0	-110.7	0.18	0.0123
P-2500EX	24.0	2,750.00	120.0	74.2	0.05	0.0008
P-2510EX	24.0	2,726.00	120.0	71.1	0.05	0.0008
P-2540EX	12.0	2,624.00	120.0	-8.8	0.02	0.0005
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.0000
P-2655EX	16.0	2,870.00	120.0	-12.9	0.02	0.0002
P-2660EX	24.0	2,797.00	120.0	106.9	0.08	0.0016
P-2665EX	16.0	2,716.00	120.0	-12.9	0.02	0.0002
P-2690EX	16.0	2,914.00	120.0	-120.1	0.19	0.0143
P-2700EX	16.0	3,115.00	120.0	104.3	0.17	0.0110
P-2710EX	16.0	1,823.00	120.0	64.8	0.10	0.0046
P-2720EX	12.0	3,042.00	120.0	-39.5	0.11	0.0074
P-2830	16.0	2,890.00	120.0	77.6	0.12	0.0064
P-2860EX	24.0	761.00	120.0	106.9	0.08	0.0016
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.0000
P-2890EX	8.0	3,148.00	120.0	-5.5	0.04	0.0014
P-2900	24.0	1,423.00	120.0	96.0	0.07	0.0013
P-2910EX	24.0	497.00	120.0	101.4	0.07	0.0015
P-2950	12.0	1,089.00	120.0	3.1	0.01	0.0000

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2970EX	12.0	1,119.00	120.0	5.2	0.01	0.0001
P-2990EX	8.0	2,811.00	120.0	-4.0	0.03	0.0007
P-3010EX	12.0	471.00	120.0	5.5	0.02	0.0003
P-3020EX	12.0	1,167.00	120.0	1.2	0.00	0.0000
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.0000
P-3040EX	8.0	3,081.00	120.0	-3.9	0.02	0.0007
P-3060	12.0	595.00	120.0	0.0	0.00	0.0000
P-3070EX	8.0	2,922.00	120.0	-2.7	0.02	0.0003
P-3080EX	12.0	1,397.00	120.0	-8.6	0.02	0.0004
P-3090EX	12.0	1,109.00	120.0	-6.8	0.02	0.0003
P-3100EX	12.0	695.00	120.0	1.9	0.01	0.0000
P-3110EX	12.0	664.00	120.0	0.2	0.00	0.0000
P-3120EX	8.0	1,851.00	120.0	-1.7	0.01	0.0002
P-3130	12.0	1,155.00	120.0	2.7	0.01	0.0001
P-3140EX	16.0	1,783.00	120.0	2.5	0.00	0.0000
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.0000
P-3160EX	8.0	3,801.00	120.0	-2.5	0.02	0.0003
P-3170EX	8.0	2,838.00	120.0	-5.4	0.03	0.0014
P-3180EX	8.0	736.00	120.0	1.6	0.01	0.0002
P-3190EX	30.0	4,441.00	120.0	0.0	0.00	0.0000
P-3240EX	16.0	1,954.00	120.0	260.5	0.42	0.0599
P-3250EX	12.0	844.00	120.0	-5.2	0.01	0.0001
P-3260EX	16.0	1,108.00	120.0	229.6	0.37	0.0475
P-3270EX	16.0	1,509.00	120.0	183.6	0.29	0.0314
P-3280EX	12.0	2,890.00	120.0	-45.9	0.13	0.0098
P-3290EX	12.0	2,432.00	120.0	-40.7	0.12	0.0078
P-3340	16.0	1,114.00	130.0	-97.9	0.16	0.0084
P-3450	16.0	1,525.00	130.0	97.9	0.16	0.0084
P-3930EX	16.0	751.00	120.0	-110.7	0.18	0.0122
P-3940EX	16.0	509.00	120.0	-110.7	0.18	0.0125
P-3970EX	16.0	1,445.00	120.0	110.7	0.18	0.0122
P-4720EX	16.0	1,216.00	120.0	77.5	0.12	0.0064
P-4730EX	16.0	456.00	120.0	77.5	0.12	0.0062
P-4750EX	16.0	715.00	120.0	77.5	0.12	0.0065
P-4760EX	16.0	774.00	120.0	5.0	0.01	0.0000
P-4790EX	16.0	1,816.00	120.0	44.6	0.07	0.0023
P-5700EX	16.0	1,176.00	120.0	330.8	0.53	0.0933
P-5710EX	16.0	1,171.00	120.0	330.8	0.53	0.0934
P-5770	16.0	353.00	120.0	260.5	0.42	0.0598
P-5780	16.0	684.00	120.0	260.5	0.42	0.0600
P-6070	16.0	247.00	120.0	49.4	0.08	0.0030
P-7000	16.0	742.00	120.0	49.4	0.08	0.0028
P-COMWTREX	36.0	10.00	120.0	106.9	0.03	0.0000
P-DU6-010	12.0	1,163.00	120.0	-95.3	0.27	0.0378

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU6-020	12.0	124.00	120.0	245.8	0.70	0.2185
P-DU6-050	12.0	2,203.00	120.0	70.3	0.20	0.0215
P-DU6-060	12.0	2,209.00	120.0	-15.0	0.04	0.0012
P-DU6-070	12.0	142.00	120.0	75.6	0.21	0.0241
P-DU6-080	12.0	1,130.00	120.0	10.1	0.03	0.0006
P-DU7-010	12.0	1,169.00	120.0	-14.6	0.04	0.0011
P-DU7-020	12.0	1,092.00	120.0	14.6	0.04	0.0011
P-DU7-030	12.0	1,044.00	120.0	14.6	0.04	0.0012
P-DU7-040	24.0	1,410.00	120.0	-14.6	0.01	0.0001
P-DU7-050	24.0	1,075.00	120.0	-168.7	0.12	0.0036
P-DU7-060	24.0	1,254.00	120.0	-182.9	0.13	0.0044
P-DU7-070	24.0	992.00	120.0	-238.9	0.17	0.0070
P-DU7-080	24.0	2,552.00	120.0	-275.0	0.20	0.0092
P-DU7-090	16.0	941.00	120.0	-122.2	0.19	0.0147
P-DU7-100	16.0	1,562.00	120.0	-90.4	0.14	0.0085
P-DU7-110	16.0	1,742.00	120.0	-2.0	0.00	0.0000
P-DU7-120	16.0	778.00	120.0	-54.8	0.09	0.0035
P-DU7-130	20.0	317.00	120.0	-10.7	0.01	0.0000
P-DU7-140	20.0	1,207.00	120.0	-8.1	0.01	0.0000
P-DU7-150	20.0	1,514.00	120.0	82.4	0.08	0.0024
P-DU7-160	20.0	619.00	120.0	119.0	0.12	0.0047
P-DU7-170	12.0	1,073.00	130.0	-56.0	0.16	0.0122
P-DU7-180	12.0	828.00	120.0	25.3	0.07	0.0032
P-DU7-190	12.0	399.00	120.0	-13.1	0.04	0.0009
P-DU7-200	12.0	2,378.00	120.0	6.1	0.02	0.0003
P-DU7-210	12.0	1,049.00	120.0	-72.5	0.21	0.0227
P-DU7-220	12.0	1,054.00	120.0	-36.7	0.10	0.0065
P-DU7-230	12.0	1,714.00	120.0	-22.1	0.06	0.0026
P-DU7-240	12.0	1,014.00	120.0	28.5	0.08	0.0041
P-DU8-010	16.0	1,107.00	120.0	46.0	0.07	0.0024
P-DU8-020	16.0	714.00	120.0	59.4	0.09	0.0038
P-DU8-030	16.0	1,312.00	120.0	23.1	0.04	0.0007
P-DU8-070	8.0	542.00	120.0	14.0	0.09	0.0079
P-DU8-080	8.0	253.00	120.0	8.3	0.05	0.0029
P-DU8-090	8.0	1,138.00	120.0	-7.1	0.05	0.0023
P-DU8-100	12.0	599.00	120.0	54.1	0.15	0.0130
P-DU8-110	12.0	709.00	120.0	19.0	0.05	0.0021
P-DU8-120	8.0	678.00	120.0	-3.5	0.02	0.0005
P-DU8-130	8.0	1,315.00	120.0	18.9	0.12	0.0136
P-DU8-140	8.0	966.00	120.0	11.2	0.07	0.0051
P-DU8-150	6.0	737.00	130.0	8.4	0.10	0.0106
P-DU8-160	8.0	1,265.00	120.0	15.2	0.10	0.0092
P-DU9-010	16.0	904.00	120.0	49.4	0.08	0.0027
P-DU9-020	16.0	227.00	120.0	13.4	0.02	0.0005

**Active Scenario: Ave Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU9-030	8.0	1,616.00	120.0	16.3	0.10	0.0103
P-DU9-040	8.0	746.00	120.0	-22.4	0.14	0.0187
P-DU9-050	8.0	869.00	120.0	2.1	0.01	0.0003
P-DU9-060	8.0	1,550.00	120.0	-14.7	0.09	0.0085
P-DWGWF	36.0	1,757.00	120.0	0.0	0.00	0.0000
P-SCAP	36.0	1,752.00	120.0	-810.1	0.26	0.0094

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Reservoir Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Flow (Out net) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	213.9	Desert Wells	1,634.0
SCAP DWPS	1,634.0	1,620.1	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	0.0	Desert Wells	1,634.0

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	98	1,633.0
J-110EX	1,440.0	Desert Wells	0.0	84	1,633.1
J-120EX	1,462.0	Desert Wells	0.0	74	1,633.9
J-135EX	1,460.0	Desert Wells	0.0	75	1,633.5
J-150EX	1,472.0	Desert Wells	0.0	70	1,632.7
J-160EX	1,435.0	Desert Wells	0.0	85	1,632.5
J-170EX	1,430.0	Desert Wells	0.0	88	1,632.5
J-180EX	1,405.0	Desert Wells	0.0	98	1,632.5
J-190EX	1,395.0	Desert Wells	0.0	103	1,632.5
J-200EX	1,385.0	Desert Wells	0.0	107	1,632.5
J-210EX	1,393.0	Desert Wells	0.0	104	1,632.8
J-220EX	1,480.0	Desert Wells	0.0	66	1,633.4
J-230EX	1,475.0	Desert Wells	0.0	68	1,633.1
J-250EX	1,452.0	Desert Wells	56.0	78	1,632.5
J-260EX	1,453.0	Desert Wells	0.0	78	1,632.7
J-280EX	1,460.0	Desert Wells	0.0	75	1,632.5
J-300EX	1,392.0	Desert Wells	0.0	104	1,632.5
J-330EX	1,455.0	Desert Wells	0.0	77	1,632.5
J-360EX	1,405.0	Desert Wells	0.0	99	1,632.9
J-450	1,393.0	Desert Wells	0.0	104	1,632.7
J-560	1,402.0	Desert Wells	0.0	100	1,632.4
J-590EX	1,410.0	Desert Wells	0.0	97	1,633.1
J-840	1,390.0	Desert Wells	0.0	105	1,632.6
J-930	1,410.0	Desert Wells	0.0	96	1,632.4
J-950	1,414.0	Desert Wells	0.0	94	1,632.3
J-960EX	1,401.0	Desert Wells	0.0	100	1,632.9
J-970EX	1,397.0	Desert Wells	0.0	102	1,632.8
J-980	1,393.0	Desert Wells	0.0	104	1,632.7
J-1000EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1010EX	1,485.0	Desert Wells	0.0	64	1,634.0
J-1020EX	1,425.0	Desert Wells	0.0	90	1,634.0
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,438.0	Desert Wells	0.0	84	1,633.2
J-1050EX	1,445.0	Desert Wells	0.0	81	1,632.5
J-1120EX	1,453.0	Desert Wells	0.0	78	1,632.7
J-1130EX	1,445.0	Desert Wells	0.0	81	1,633.3
J-1160EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1170EX	1,470.0	Desert Wells	0.0	71	1,634.0
J-1180EX	1,440.0	Desert Wells	0.0	84	1,634.0
J-1190EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1200EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1210EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1220EX	1,475.0	Desert Wells	0.0	69	1,634.0
J-1230EX	1,460.0	Desert Wells	0.0	75	1,632.5
J-1235EX	1,440.0	Desert Wells	0.0	83	1,632.4

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1240EX	1,455.0	Desert Wells	0.0	77	1,632.5
J-1290EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1300EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1310EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1330EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1340EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1350EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1360EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1370EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1380EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1390EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1400EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1410	1,450.0	Desert Wells	0.0	80	1,633.9
J-1410EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1420EX	1,461.0	Desert Wells	0.0	74	1,633.1
J-1430	1,397.0	Desert Wells	0.0	102	1,632.5
J-1430EX	1,455.0	Desert Wells	0.0	77	1,633.2
J-1440EX	1,478.0	Desert Wells	0.0	67	1,633.3
J-1680EX	1,400.0	Desert Wells	0.0	101	1,632.9
J-1990EX	1,447.0	Desert Wells	0.0	80	1,632.5
J-2000EX	1,442.0	Desert Wells	0.0	82	1,632.4
J-2120EX	1,453.0	Desert Wells	0.0	78	1,633.4
J-2140EX	1,446.0	Desert Wells	0.0	81	1,633.3
J-2295	1,415.0	Desert Wells	0.0	94	1,632.3
J-DU6-010	1,459.0	Desert Wells	160.6	75	1,633.1
J-DU6-020	1,453.0	Desert Wells	160.6	78	1,633.3
J-DU6-050	1,448.0	Desert Wells	160.8	80	1,633.1
J-DU6-060	1,458.0	Desert Wells	160.8	76	1,633.1
J-DU7-010	1,415.0	Desert Wells	16.6	94	1,632.3
J-DU7-020	1,420.0	Desert Wells	0.0	92	1,632.3
J-DU7-030	1,415.0	Desert Wells	0.0	94	1,632.4
J-DU7-040	1,415.0	Desert Wells	0.0	94	1,632.4
J-DU7-050	1,420.0	Desert Wells	70.2	92	1,632.4
J-DU7-060	1,435.0	Desert Wells	28.4	85	1,632.4
J-DU7-070	1,440.0	Desert Wells	0.0	83	1,632.4
J-DU7-080	1,450.0	Desert Wells	72.2	79	1,632.4
J-DU7-090	1,437.0	Desert Wells	0.0	85	1,632.4
J-DU7-100	1,435.0	Desert Wells	63.6	85	1,632.4
J-DU7-110	1,435.0	Desert Wells	80.8	85	1,632.3
J-DU7-120	1,420.0	Desert Wells	0.0	92	1,632.3
J-DU7-130	1,420.0	Desert Wells	5.2	92	1,632.3
J-DU7-140	1,430.0	Desert Wells	124.2	88	1,632.3
J-DU7-150	1,418.0	Desert Wells	73.2	93	1,632.3
J-DU7-160	1,435.0	Desert Wells	61.4	85	1,632.3
J-DU7-170	1,432.0	Desert Wells	32.6	87	1,632.3

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psl)	Hydraulic Grade (ft)
J-DU7-180	1,433.0	Desert Wells	35.0	86	1,632.3
J-DU7-190	1,437.0	Desert Wells	71.6	85	1,632.4
J-DU7-200	1,432.0	Desert Wells	101.2	87	1,632.3
J-DU8-010	1,420.0	Desert Wells	0.0	92	1,632.3
J-DU8-020	1,419.5	Desert Wells	0.0	92	1,632.3
J-DU8-030	1,421.0	Desert Wells	0.0	91	1,632.3
J-DU8-060	1,420.0	Desert Wells	18.2	92	1,632.3
J-DU8-070	1,420.0	Desert Wells	30.8	92	1,632.3
J-DU8-080	1,422.0	Desert Wells	8.8	91	1,632.3
J-DU8-090	1,424.0	Desert Wells	8.8	90	1,632.3
J-DU8-100	1,425.0	Desert Wells	18.2	90	1,632.3
J-DU8-110	1,430.0	Desert Wells	68.2	88	1,632.2
J-DU9-010	1,419.0	Desert Wells	39.4	92	1,632.3
J-DU9-020	1,415.0	Desert Wells	73.0	94	1,632.3
J-DU9-030	1,416.0	Desert Wells	33.6	94	1,632.3

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	-25.7	0.04	0.0008
P-170EX	16.0	5,366.00	120.0	-25.7	0.04	0.0008
P-180EX	16.0	5,396.00	120.0	-25.7	0.04	0.0008
P-190EX	16.0	5,728.00	120.0	-25.7	0.04	0.0008
P-200EX	16.0	231.00	120.0	-221.5	0.35	0.0444
P-210EX	16.0	1,388.00	120.0	-221.5	0.35	0.0444
P-220EX	16.0	2,909.00	120.0	459.2	0.73	0.1713
P-240EX	16.0	1,387.00	120.0	-713.2	1.14	0.3871
P-250EX	16.0	2,611.00	120.0	448.8	0.72	0.1642
P-340EX	16.0	5,775.00	120.0	-25.7	0.04	0.0008
P-410EX	16.0	5,368.00	120.0	-25.7	0.04	0.0008
P-1060EX	16.0	1,328.00	120.0	-221.5	0.35	0.0444
P-1070EX	16.0	1,243.00	120.0	-221.5	0.35	0.0444
P-1630EX	16.0	560.00	120.0	-221.5	0.35	0.0443
P-1640EX	16.0	2,569.00	120.0	-221.5	0.35	0.0444
P-1850	16.0	1,560.00	120.0	195.8	0.31	0.0353
P-1860	16.0	1,385.00	120.0	195.8	0.31	0.0353
P-1940EX	16.0	1,976.00	120.0	-221.5	0.35	0.0444
P-1950EX	16.0	680.00	120.0	-221.5	0.35	0.0443
P-1970EX	16.0	927.00	120.0	-221.5	0.35	0.0444
P-1980EX	16.0	1,106.00	120.0	-221.5	0.35	0.0444
P-2000EX	16.0	2,710.00	120.0	-221.5	0.35	0.0444
P-2040EX	16.0	10,635.00	120.0	-49.8	0.08	0.0028
P-2055EX	16.0	10,453.00	120.0	22.4	0.04	0.0006
P-2070EX	24.0	5,329.00	120.0	-141.6	0.10	0.0027
P-2340EX	16.0	2,281.00	120.0	-221.5	0.35	0.0444
P-2500EX	24.0	2,750.00	120.0	148.4	0.11	0.0029
P-2510EX	24.0	2,726.00	120.0	142.2	0.10	0.0027
P-2540EX	12.0	2,624.00	120.0	-17.5	0.05	0.0016
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.0000
P-2655EX	16.0	2,870.00	120.0	-25.7	0.04	0.0009
P-2660EX	24.0	2,797.00	120.0	213.9	0.15	0.0058
P-2665EX	16.0	2,716.00	120.0	-25.7	0.04	0.0008
P-2690EX	16.0	2,914.00	120.0	-240.2	0.38	0.0516
P-2700EX	16.0	3,115.00	120.0	208.6	0.33	0.0397
P-2710EX	16.0	1,823.00	120.0	129.5	0.21	0.0165
P-2720EX	12.0	3,042.00	120.0	-79.1	0.22	0.0268
P-2830	16.0	2,890.00	120.0	155.2	0.25	0.0230
P-2860EX	24.0	761.00	120.0	213.9	0.15	0.0058
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.0000
P-2890EX	8.0	3,148.00	120.0	-11.0	0.07	0.0050
P-2900	24.0	1,423.00	120.0	192.0	0.14	0.0047
P-2910EX	24.0	497.00	120.0	202.9	0.14	0.0054
P-2950	12.0	1,089.00	120.0	6.2	0.02	0.0002

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2970EX	12.0	1,119.00	120.0	10.3	0.03	0.0005
P-2990EX	8.0	2,811.00	120.0	-7.9	0.05	0.0027
P-3010EX	12.0	471.00	120.0	11.0	0.03	0.0008
P-3020EX	12.0	1,167.00	120.0	2.4	0.01	0.0001
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.0000
P-3040EX	8.0	3,081.00	120.0	-7.7	0.05	0.0026
P-3060	12.0	595.00	120.0	0.0	0.00	0.0000
P-3070EX	8.0	2,922.00	120.0	-5.3	0.03	0.0013
P-3080EX	12.0	1,397.00	120.0	-17.1	0.05	0.0016
P-3090EX	12.0	1,109.00	120.0	-13.7	0.04	0.0011
P-3100EX	12.0	695.00	120.0	3.8	0.01	0.0002
P-3110EX	12.0	664.00	120.0	0.4	0.00	0.0000
P-3120EX	8.0	1,851.00	120.0	-3.5	0.02	0.0006
P-3130	12.0	1,155.00	120.0	5.3	0.02	0.0001
P-3140EX	16.0	1,783.00	120.0	4.9	0.01	0.0000
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.0000
P-3160EX	8.0	3,801.00	120.0	-4.9	0.03	0.0012
P-3170EX	8.0	2,838.00	120.0	-10.9	0.07	0.0049
P-3180EX	8.0	736.00	120.0	3.3	0.02	0.0005
P-3190EX	30.0	4,441.00	120.0	0.0	0.00	0.0000
P-3240EX	16.0	1,954.00	120.0	520.9	0.83	0.2164
P-3250EX	12.0	844.00	120.0	-10.4	0.03	0.0006
P-3260EX	16.0	1,108.00	120.0	459.2	0.73	0.1712
P-3270EX	16.0	1,509.00	120.0	367.3	0.59	0.1133
P-3280EX	12.0	2,890.00	120.0	-91.9	0.26	0.0354
P-3290EX	12.0	2,432.00	120.0	-81.5	0.23	0.0283
P-3340	16.0	1,114.00	130.0	-195.8	0.31	0.0305
P-3450	16.0	1,525.00	130.0	195.8	0.31	0.0305
P-3930EX	16.0	751.00	120.0	-221.5	0.35	0.0444
P-3940EX	16.0	509.00	120.0	-221.5	0.35	0.0444
P-3970EX	16.0	1,445.00	120.0	221.5	0.35	0.0444
P-4720EX	16.0	1,216.00	120.0	155.1	0.25	0.0229
P-4730EX	16.0	456.00	120.0	155.1	0.25	0.0230
P-4750EX	16.0	715.00	120.0	155.1	0.25	0.0229
P-4760EX	16.0	774.00	120.0	10.1	0.02	0.0002
P-4790EX	16.0	1,816.00	120.0	89.2	0.14	0.0083
P-5700EX	16.0	1,176.00	120.0	661.6	1.06	0.3368
P-5710EX	16.0	1,171.00	120.0	661.6	1.06	0.3369
P-5770	16.0	353.00	120.0	520.9	0.83	0.2161
P-5780	16.0	684.00	120.0	520.9	0.83	0.2165
P-6070	16.0	247.00	120.0	98.8	0.16	0.0099
P-7000	16.0	742.00	120.0	98.8	0.16	0.0100
P-COMWTREX	36.0	10.00	120.0	213.9	0.07	0.0000
P-DU6-010	12.0	1,163.00	120.0	-190.6	0.54	0.1365

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU6-020	12.0	124.00	120.0	491.7	1.39	0.7895
P-DU6-050	12.0	2,203.00	120.0	140.5	0.40	0.0776
P-DU6-060	12.0	2,209.00	120.0	-30.0	0.09	0.0045
P-DU6-070	12.0	142.00	120.0	151.1	0.43	0.0894
P-DU6-080	12.0	1,130.00	120.0	20.3	0.06	0.0022
P-DU7-010	12.0	1,169.00	120.0	-29.1	0.08	0.0042
P-DU7-020	12.0	1,092.00	120.0	29.1	0.08	0.0042
P-DU7-030	12.0	1,044.00	120.0	29.1	0.08	0.0042
P-DU7-040	24.0	1,410.00	120.0	-29.1	0.02	0.0002
P-DU7-050	24.0	1,075.00	120.0	-337.4	0.24	0.0134
P-DU7-060	24.0	1,254.00	120.0	-365.8	0.26	0.0156
P-DU7-070	24.0	992.00	120.0	-477.8	0.34	0.0256
P-DU7-080	24.0	2,552.00	120.0	-550.0	0.39	0.0332
P-DU7-090	16.0	941.00	120.0	-244.4	0.39	0.0532
P-DU7-100	16.0	1,562.00	120.0	-180.8	0.29	0.0305
P-DU7-110	16.0	1,742.00	120.0	-4.0	0.01	0.0001
P-DU7-120	16.0	778.00	120.0	-109.5	0.17	0.0121
P-DU7-130	20.0	317.00	120.0	-21.5	0.02	0.0000
P-DU7-140	20.0	1,207.00	120.0	-16.3	0.02	0.0002
P-DU7-150	20.0	1,514.00	120.0	164.9	0.17	0.0087
P-DU7-160	20.0	619.00	120.0	238.1	0.24	0.0172
P-DU7-170	12.0	1,073.00	130.0	-112.0	0.32	0.0439
P-DU7-180	12.0	828.00	120.0	50.6	0.14	0.0118
P-DU7-190	12.0	399.00	120.0	-26.2	0.07	0.0037
P-DU7-200	12.0	2,378.00	120.0	12.2	0.03	0.0008
P-DU7-210	12.0	1,049.00	120.0	-145.0	0.41	0.0823
P-DU7-220	12.0	1,054.00	120.0	-73.4	0.21	0.0233
P-DU7-230	12.0	1,714.00	120.0	-44.2	0.13	0.0091
P-DU7-240	12.0	1,014.00	120.0	57.0	0.16	0.0146
P-DU8-010	16.0	1,107.00	120.0	92.1	0.15	0.0087
P-DU8-020	16.0	714.00	120.0	118.9	0.19	0.0140
P-DU8-030	16.0	1,312.00	120.0	46.2	0.07	0.0024
P-DU8-070	8.0	542.00	120.0	27.9	0.18	0.0282
P-DU8-080	8.0	253.00	120.0	16.7	0.11	0.0106
P-DU8-090	8.0	1,138.00	120.0	-14.1	0.09	0.0079
P-DU8-100	12.0	599.00	120.0	108.2	0.31	0.0479
P-DU8-110	12.0	709.00	120.0	38.1	0.11	0.0069
P-DU8-120	8.0	678.00	120.0	-6.9	0.04	0.0022
P-DU8-130	8.0	1,315.00	120.0	37.8	0.24	0.0490
P-DU8-140	8.0	966.00	120.0	22.4	0.14	0.0186
P-DU8-150	6.0	737.00	130.0	16.9	0.19	0.0388
P-DU8-160	8.0	1,265.00	120.0	30.4	0.19	0.0329
P-DU9-010	16.0	904.00	120.0	98.8	0.16	0.0099
P-DU9-020	16.0	227.00	120.0	26.8	0.04	0.0011

**Active Scenario: Max Day DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU9-030	8.0	1,616.00	120.0	32.6	0.21	0.0373
P-DU9-040	8.0	746.00	120.0	-44.7	0.29	0.0671
P-DU9-050	8.0	869.00	120.0	4.3	0.03	0.0008
P-DU9-060	8.0	1,550.00	120.0	-29.3	0.19	0.0307
P-DWGWF	36.0	1,757.00	120.0	0.0	0.00	0.0000
P-SCAP	36.0	1,752.00	120.0	1,620.1	0.51	0.0341

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Reservoir Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Flow (Out net) (gpm)	Zone	Hydraulic Grade (ft)
C.O.M. DW SUPPLY FROM NORTH	1,634.0	320.8	Desert Wells	1,634.0
SCAP DWPS	1,634.0	2,430.2	Desert Wells	1,634.0
DWGWF - DWPS	1,634.0	0.0	Desert Wells	1,634.0

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-100EX	1,406.0	Desert Wells	0.0	98	1,631.9
J-110EX	1,440.0	Desert Wells	0.0	83	1,632.1
J-120EX	1,462.0	Desert Wells	0.0	74	1,633.9
J-135EX	1,460.0	Desert Wells	0.0	75	1,633.0
J-150EX	1,472.0	Desert Wells	0.0	69	1,631.1
J-160EX	1,435.0	Desert Wells	0.0	85	1,630.8
J-170EX	1,430.0	Desert Wells	0.0	87	1,630.8
J-180EX	1,405.0	Desert Wells	0.0	98	1,630.9
J-190EX	1,395.0	Desert Wells	0.0	102	1,630.9
J-200EX	1,385.0	Desert Wells	0.0	106	1,630.9
J-210EX	1,393.0	Desert Wells	0.0	103	1,631.4
J-220EX	1,480.0	Desert Wells	0.0	66	1,632.8
J-230EX	1,475.0	Desert Wells	0.0	68	1,632.1
J-250EX	1,452.0	Desert Wells	84.0	77	1,630.8
J-260EX	1,453.0	Desert Wells	0.0	77	1,631.1
J-280EX	1,460.0	Desert Wells	0.0	74	1,630.8
J-300EX	1,392.0	Desert Wells	0.0	103	1,630.9
J-330EX	1,455.0	Desert Wells	0.0	76	1,630.8
J-360EX	1,405.0	Desert Wells	0.0	98	1,631.6
J-450	1,393.0	Desert Wells	0.0	103	1,631.2
J-560	1,402.0	Desert Wells	0.0	99	1,630.7
J-590EX	1,410.0	Desert Wells	0.0	96	1,632.0
J-840	1,390.0	Desert Wells	0.0	104	1,630.9
J-930	1,410.0	Desert Wells	0.0	95	1,630.6
J-950	1,414.0	Desert Wells	0.0	94	1,630.5
J-960EX	1,401.0	Desert Wells	0.0	100	1,631.7
J-970EX	1,397.0	Desert Wells	0.0	101	1,631.6
J-980	1,393.0	Desert Wells	0.0	103	1,631.3
J-1000EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1010EX	1,485.0	Desert Wells	0.0	64	1,633.9
J-1020EX	1,425.0	Desert Wells	0.0	90	1,634.0
J-1030EX	1,480.0	Desert Wells	0.0	67	1,634.0
J-1040EX	1,438.0	Desert Wells	0.0	84	1,632.4
J-1050EX	1,445.0	Desert Wells	0.0	80	1,630.7
J-1120EX	1,453.0	Desert Wells	0.0	77	1,631.3
J-1130EX	1,445.0	Desert Wells	0.0	81	1,632.6
J-1160EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1170EX	1,470.0	Desert Wells	0.0	71	1,634.0
J-1180EX	1,440.0	Desert Wells	0.0	84	1,634.0
J-1190EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1200EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1210EX	1,455.0	Desert Wells	0.0	77	1,634.0
J-1220EX	1,475.0	Desert Wells	0.0	69	1,633.9
J-1230EX	1,460.0	Desert Wells	0.0	74	1,630.8
J-1235EX	1,440.0	Desert Wells	0.0	83	1,630.7

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-1240EX	1,455.0	Desert Wells	0.0	76	1,630.9
J-1290EX	1,480.0	Desert Wells	0.0	67	1,633.9
J-1300EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1310EX	1,480.0	Desert Wells	0.0	67	1,633.9
J-1330EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1340EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1350EX	1,465.0	Desert Wells	0.0	73	1,634.0
J-1360EX	1,445.0	Desert Wells	0.0	82	1,634.0
J-1370EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1380EX	1,450.0	Desert Wells	0.0	80	1,634.0
J-1390EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1400EX	1,430.0	Desert Wells	0.0	88	1,634.0
J-1410	1,450.0	Desert Wells	0.0	80	1,633.9
J-1410EX	1,420.0	Desert Wells	0.0	93	1,634.0
J-1420EX	1,461.0	Desert Wells	0.0	74	1,632.2
J-1430	1,397.0	Desert Wells	0.0	101	1,630.8
J-1430EX	1,455.0	Desert Wells	0.0	77	1,632.2
J-1440EX	1,478.0	Desert Wells	0.0	67	1,632.4
J-1680EX	1,400.0	Desert Wells	0.0	100	1,631.7
J-1990EX	1,447.0	Desert Wells	0.0	80	1,630.8
J-2000EX	1,442.0	Desert Wells	0.0	82	1,630.7
J-2120EX	1,453.0	Desert Wells	0.0	78	1,632.7
J-2140EX	1,446.0	Desert Wells	0.0	81	1,632.6
J-2295	1,415.0	Desert Wells	0.0	93	1,630.5
J-DU6-010	1,459.0	Desert Wells	240.9	75	1,632.2
J-DU6-020	1,453.0	Desert Wells	240.9	78	1,632.5
J-DU6-050	1,448.0	Desert Wells	241.2	80	1,632.2
J-DU6-060	1,458.0	Desert Wells	241.2	75	1,632.2
J-DU7-010	1,415.0	Desert Wells	24.9	93	1,630.5
J-DU7-020	1,420.0	Desert Wells	0.0	91	1,630.5
J-DU7-030	1,415.0	Desert Wells	0.0	93	1,630.5
J-DU7-040	1,415.0	Desert Wells	0.0	93	1,630.5
J-DU7-050	1,420.0	Desert Wells	105.3	91	1,630.5
J-DU7-060	1,435.0	Desert Wells	42.6	85	1,630.6
J-DU7-070	1,440.0	Desert Wells	0.0	82	1,630.6
J-DU7-080	1,450.0	Desert Wells	108.3	78	1,630.6
J-DU7-090	1,437.0	Desert Wells	0.0	84	1,630.7
J-DU7-100	1,435.0	Desert Wells	95.4	85	1,630.6
J-DU7-110	1,435.0	Desert Wells	121.2	85	1,630.5
J-DU7-120	1,420.0	Desert Wells	0.0	91	1,630.5
J-DU7-130	1,420.0	Desert Wells	7.8	91	1,630.5
J-DU7-140	1,430.0	Desert Wells	186.3	87	1,630.5
J-DU7-150	1,418.0	Desert Wells	109.8	92	1,630.5
J-DU7-160	1,435.0	Desert Wells	92.1	85	1,630.5
J-DU7-170	1,432.0	Desert Wells	48.9	86	1,630.5

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Junction Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Demand (gpm)	Pressure (psi)	Hydraulic Grade (ft)
J-DU7-180	1,433.0	Desert Wells	52.5	85	1,630.5
J-DU7-190	1,437.0	Desert Wells	107.4	84	1,630.5
J-DU7-200	1,432.0	Desert Wells	151.8	86	1,630.4
J-DU8-010	1,420.0	Desert Wells	0.0	91	1,630.5
J-DU8-020	1,419.5	Desert Wells	0.0	91	1,630.4
J-DU8-030	1,421.0	Desert Wells	0.0	91	1,630.4
J-DU8-060	1,420.0	Desert Wells	27.3	91	1,630.4
J-DU8-070	1,420.0	Desert Wells	46.2	91	1,630.4
J-DU8-080	1,422.0	Desert Wells	13.2	90	1,630.4
J-DU8-090	1,424.0	Desert Wells	13.2	89	1,630.4
J-DU8-100	1,425.0	Desert Wells	27.3	89	1,630.4
J-DU8-110	1,430.0	Desert Wells	102.3	87	1,630.3
J-DU9-010	1,419.0	Desert Wells	59.1	91	1,630.5
J-DU9-020	1,415.0	Desert Wells	109.5	93	1,630.3
J-DU9-030	1,416.0	Desert Wells	50.4	93	1,630.3

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

Current Time: 0.000 hours

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-160EX	16.0	2,722.00	120.0	-38.6	0.06	0.0017
P-170EX	16.0	5,366.00	120.0	-38.6	0.06	0.0018
P-180EX	16.0	5,396.00	120.0	-38.6	0.06	0.0017
P-190EX	16.0	5,728.00	120.0	-38.6	0.06	0.0017
P-200EX	16.0	231.00	120.0	-332.2	0.53	0.0941
P-210EX	16.0	1,388.00	120.0	-332.2	0.53	0.0941
P-220EX	16.0	2,909.00	120.0	688.8	1.10	0.3629
P-240EX	16.0	1,387.00	120.0	1,069.8	1.71	0.8203
P-250EX	16.0	2,611.00	120.0	673.2	1.07	0.3478
P-340EX	16.0	5,775.00	120.0	-38.6	0.06	0.0017
P-410EX	16.0	5,368.00	120.0	-38.6	0.06	0.0017
P-1060EX	16.0	1,328.00	120.0	-332.2	0.53	0.0940
P-1070EX	16.0	1,243.00	120.0	-332.2	0.53	0.0941
P-1630EX	16.0	560.00	120.0	-332.2	0.53	0.0942
P-1640EX	16.0	2,569.00	120.0	-332.2	0.53	0.0941
P-1850	16.0	1,560.00	120.0	293.7	0.47	0.0748
P-1860	16.0	1,385.00	120.0	293.7	0.47	0.0749
P-1940EX	16.0	1,976.00	120.0	-332.2	0.53	0.0941
P-1950EX	16.0	680.00	120.0	-332.2	0.53	0.0941
P-1970EX	16.0	927.00	120.0	-332.2	0.53	0.0940
P-1980EX	16.0	1,106.00	120.0	-332.2	0.53	0.0940
P-2000EX	16.0	2,710.00	120.0	-332.2	0.53	0.0941
P-2040EX	16.0	10,635.00	120.0	-74.7	0.12	0.0059
P-2055EX	16.0	10,453.00	120.0	33.7	0.05	0.0014
P-2070EX	24.0	5,329.00	120.0	-212.4	0.15	0.0057
P-2340EX	16.0	2,281.00	120.0	-332.2	0.53	0.0941
P-2500EX	24.0	2,750.00	120.0	222.6	0.16	0.0062
P-2510EX	24.0	2,726.00	120.0	213.3	0.15	0.0057
P-2540EX	12.0	2,624.00	120.0	-26.3	0.07	0.0035
P-2570EX	16.0	2,640.00	120.0	0.0	0.00	0.0000
P-2655EX	16.0	2,870.00	120.0	-38.6	0.06	0.0017
P-2660EX	24.0	2,797.00	120.0	320.8	0.23	0.0122
P-2665EX	16.0	2,716.00	120.0	-38.6	0.06	0.0018
P-2690EX	16.0	2,914.00	120.0	-360.3	0.57	0.1093
P-2700EX	16.0	3,115.00	120.0	312.9	0.50	0.0842
P-2710EX	16.0	1,823.00	120.0	194.3	0.31	0.0348
P-2720EX	12.0	3,042.00	120.0	-118.6	0.34	0.0567
P-2830	16.0	2,890.00	120.0	232.8	0.37	0.0487
P-2860EX	24.0	761.00	120.0	320.8	0.23	0.0124
P-2880EX	12.0	383.00	120.0	0.0	0.00	0.0000
P-2890EX	8.0	3,148.00	120.0	-16.5	0.11	0.0106
P-2900	24.0	1,423.00	120.0	288.0	0.20	0.0100
P-2910EX	24.0	497.00	120.0	304.3	0.22	0.0111

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-2950	12.0	1,089.00	120.0	9.3	0.03	0.0006
P-2970EX	12.0	1,119.00	120.0	15.5	0.04	0.0013
P-2990EX	8.0	2,811.00	120.0	-11.9	0.08	0.0058
P-3010EX	12.0	471.00	120.0	16.5	0.05	0.0016
P-3020EX	12.0	1,167.00	120.0	3.6	0.01	0.0001
P-3030EX	12.0	378.00	120.0	0.0	0.00	0.0000
P-3040EX	8.0	3,081.00	120.0	-11.6	0.07	0.0055
P-3060	12.0	595.00	120.0	0.0	0.00	0.0000
P-3070EX	8.0	2,922.00	120.0	-8.0	0.05	0.0028
P-3080EX	12.0	1,397.00	120.0	-25.7	0.07	0.0033
P-3090EX	12.0	1,109.00	120.0	-20.5	0.06	0.0022
P-3100EX	12.0	695.00	120.0	5.8	0.02	0.0002
P-3110EX	12.0	664.00	120.0	0.6	0.00	0.0000
P-3120EX	8.0	1,851.00	120.0	-5.2	0.03	0.0013
P-3130	12.0	1,155.00	120.0	8.0	0.02	0.0004
P-3140EX	16.0	1,783.00	120.0	7.4	0.01	0.0001
P-3150EX	16.0	958.00	120.0	0.0	0.00	0.0000
P-3160EX	8.0	3,801.00	120.0	-7.4	0.05	0.0024
P-3170EX	8.0	2,838.00	120.0	-16.3	0.10	0.0103
P-3180EX	8.0	736.00	120.0	4.9	0.03	0.0010
P-3190EX	30.0	4,441.00	120.0	0.0	0.00	0.0000
P-3240EX	16.0	1,954.00	120.0	781.4	1.25	0.4585
P-3250EX	12.0	844.00	120.0	-15.6	0.04	0.0013
P-3260EX	16.0	1,108.00	120.0	688.8	1.10	0.3629
P-3270EX	16.0	1,509.00	120.0	550.9	0.88	0.2400
P-3280EX	12.0	2,890.00	120.0	-137.8	0.39	0.0749
P-3290EX	12.0	2,432.00	120.0	-122.2	0.35	0.0599
P-3340	16.0	1,114.00	130.0	-293.7	0.47	0.0644
P-3450	16.0	1,525.00	130.0	293.7	0.47	0.0646
P-3930EX	16.0	751.00	120.0	-332.2	0.53	0.0941
P-3940EX	16.0	509.00	120.0	-332.2	0.53	0.0940
P-3970EX	16.0	1,445.00	120.0	332.2	0.53	0.0941
P-4720EX	16.0	1,216.00	120.0	232.6	0.37	0.0486
P-4730EX	16.0	456.00	120.0	232.6	0.37	0.0487
P-4750EX	16.0	715.00	120.0	232.6	0.37	0.0485
P-4760EX	16.0	774.00	120.0	15.1	0.02	0.0003
P-4790EX	16.0	1,816.00	120.0	133.8	0.21	0.0175
P-5700EX	16.0	1,176.00	120.0	992.5	1.58	0.7138
P-5710EX	16.0	1,171.00	120.0	992.5	1.58	0.7139
P-5770	16.0	353.00	120.0	781.4	1.25	0.4585
P-5780	16.0	684.00	120.0	781.4	1.25	0.4585
P-6070	16.0	247.00	120.0	148.2	0.24	0.0208
P-7000	16.0	742.00	120.0	148.2	0.24	0.0211
P-COMWTREX	36.0	10.00	120.0	320.8	0.10	0.0000

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU6-010	12.0	1,163.00	120.0	-285.9	0.81	0.2892
P-DU6-020	12.0	124.00	120.0	737.5	2.09	1.6726
P-DU6-050	12.0	2,203.00	120.0	210.8	0.60	0.1644
P-DU6-060	12.0	2,209.00	120.0	-45.0	0.13	0.0094
P-DU6-070	12.0	142.00	120.0	226.7	0.64	0.1883
P-DU6-080	12.0	1,130.00	120.0	30.4	0.09	0.0045
P-DU7-010	12.0	1,169.00	120.0	-43.7	0.12	0.0090
P-DU7-020	12.0	1,092.00	120.0	43.7	0.12	0.0089
P-DU7-030	12.0	1,044.00	120.0	43.7	0.12	0.0089
P-DU7-040	24.0	1,410.00	120.0	-43.7	0.03	0.0003
P-DU7-050	24.0	1,075.00	120.0	-506.1	0.36	0.0284
P-DU7-060	24.0	1,254.00	120.0	-548.7	0.39	0.0331
P-DU7-070	24.0	992.00	120.0	-716.7	0.51	0.0543
P-DU7-080	24.0	2,552.00	120.0	-825.0	0.59	0.0703
P-DU7-090	16.0	941.00	120.0	-366.6	0.58	0.1129
P-DU7-100	16.0	1,562.00	120.0	-271.2	0.43	0.0646
P-DU7-110	16.0	1,742.00	120.0	-6.0	0.01	0.0001
P-DU7-120	16.0	778.00	120.0	-164.3	0.26	0.0254
P-DU7-130	20.0	317.00	120.0	-32.2	0.03	0.0004
P-DU7-140	20.0	1,207.00	120.0	-24.4	0.02	0.0003
P-DU7-150	20.0	1,514.00	120.0	247.3	0.25	0.0184
P-DU7-160	20.0	619.00	120.0	357.1	0.36	0.0363
P-DU7-170	12.0	1,073.00	130.0	-168.0	0.48	0.0932
P-DU7-180	12.0	828.00	120.0	75.9	0.22	0.0248
P-DU7-190	12.0	399.00	120.0	-39.3	0.11	0.0073
P-DU7-200	12.0	2,378.00	120.0	18.2	0.05	0.0017
P-DU7-210	12.0	1,049.00	120.0	-217.5	0.62	0.1743
P-DU7-220	12.0	1,054.00	120.0	-110.1	0.31	0.0493
P-DU7-230	12.0	1,714.00	120.0	-66.3	0.19	0.0194
P-DU7-240	12.0	1,014.00	120.0	85.5	0.24	0.0309
P-DU8-010	16.0	1,107.00	120.0	138.1	0.22	0.0185
P-DU8-020	16.0	714.00	120.0	178.3	0.28	0.0297
P-DU8-030	16.0	1,312.00	120.0	69.3	0.11	0.0051
P-DU8-070	8.0	542.00	120.0	41.9	0.27	0.0595
P-DU8-080	8.0	253.00	120.0	25.0	0.16	0.0232
P-DU8-090	8.0	1,138.00	120.0	-21.2	0.14	0.0169
P-DU8-100	12.0	599.00	120.0	162.2	0.46	0.1013
P-DU8-110	12.0	709.00	120.0	57.1	0.16	0.0146
P-DU8-120	8.0	678.00	120.0	-10.4	0.07	0.0045
P-DU8-130	8.0	1,315.00	120.0	56.6	0.36	0.1040
P-DU8-140	8.0	966.00	120.0	33.5	0.21	0.0394
P-DU8-150	6.0	737.00	130.0	25.3	0.29	0.0822
P-DU8-160	8.0	1,265.00	120.0	45.7	0.29	0.0698
P-DU9-010	16.0	904.00	120.0	148.2	0.24	0.0212

**Active Scenario: Peak Hour DU8&9 - PHS1 - Served by SCAP**  
**FlexTable: Pipe Table (123835\_04 DU 8&9 at EM Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Diameter (in)	Length (ft)	Hazen- Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-DU9-020	16.0	227.00	120.0	40.2	0.06	0.0016
P-DU9-030	8.0	1,616.00	120.0	48.8	0.31	0.0790
P-DU9-040	8.0	746.00	120.0	-67.1	0.43	0.1422
P-DU9-050	8.0	869.00	120.0	6.4	0.04	0.0018
P-DU9-060	8.0	1,550.00	120.0	-44.0	0.28	0.0651
P-DWGWF	36.0	1,757.00	120.0	0.0	0.00	0.0000
P-SCAP	36.0	1,752.00	120.0	2,430.2	0.77	0.0722

**Active Scenario: Max Day DU8&9 + FF - Served by SCAP**  
**Fire Flow Node FlexTable: Fire Flow Report (123835\_04 DU 8&9 at EM**  
**Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdfl) (psi)	Pres. (Calc. Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)	Satisfies FF?
J-100EX	1,406.0	Desert Wells	3,000.0	5,000.0	75	64	J-220EX	True
J-110EX	1,440.0	Desert Wells	3,000.0	5,000.0	62	64	J-1010EX	True
J-120EX	1,462.0	Desert Wells	3,000.0	5,000.0	74	64	J-1010EX	True
J-135EX	1,460.0	Desert Wells	3,000.0	5,000.0	71	64	J-1010EX	True
J-150EX	1,472.0	Desert Wells	3,000.0	5,000.0	59	62	J-230EX	True
J-160EX	1,435.0	Desert Wells	3,000.0	5,000.0	46	49	J-280EX	True
J-170EX	1,430.0	Desert Wells	3,000.0	5,000.0	46	50	J-160EX	True
J-180EX	1,405.0	Desert Wells	3,000.0	5,000.0	56	54	J-170EX	True
J-190EX	1,395.0	Desert Wells	3,000.0	5,000.0	63	57	J-280EX	True
J-200EX	1,385.0	Desert Wells	3,000.0	5,000.0	75	60	J-280EX	True
J-210EX	1,393.0	Desert Wells	3,000.0	5,000.0	80	63	J-150EX	True
J-220EX	1,480.0	Desert Wells	3,000.0	5,000.0	59	61	J-1440EX	True
J-230EX	1,475.0	Desert Wells	3,000.0	5,000.0	60	61	J-1440EX	True
J-250EX	1,452.0	Desert Wells	3,056.0	5,000.0	68	61	J-150EX	True
J-260EX	1,453.0	Desert Wells	3,000.0	5,000.0	68	62	J-150EX	True
J-280EX	1,460.0	Desert Wells	3,000.0	5,000.0	44	52	J-1230EX	True
J-300EX	1,392.0	Desert Wells	3,000.0	5,000.0	85	62	J-150EX	True
J-330EX	1,455.0	Desert Wells	3,000.0	5,000.0	62	60	J-1230EX	True
J-360EX	1,405.0	Desert Wells	3,000.0	5,000.0	74	64	J-150EX	True
J-450	1,393.0	Desert Wells	3,000.0	5,000.0	81	63	J-150EX	True
J-560	1,402.0	Desert Wells	3,000.0	5,000.0	82	62	J-150EX	True
J-590EX	1,410.0	Desert Wells	3,000.0	5,000.0	74	64	J-110EX	True
J-840	1,390.0	Desert Wells	3,000.0	5,000.0	85	62	J-150EX	True
J-930	1,410.0	Desert Wells	3,000.0	5,000.0	80	61	J-150EX	True
J-950	1,414.0	Desert Wells	3,000.0	5,000.0	80	61	J-150EX	True
J-960EX	1,401.0	Desert Wells	3,000.0	5,000.0	76	64	J-150EX	True
J-970EX	1,397.0	Desert Wells	3,000.0	5,000.0	77	64	J-150EX	True
J-980	1,393.0	Desert Wells	3,000.0	5,000.0	80	63	J-150EX	True
J-1000EX	1,455.0	Desert Wells	3,000.0	5,000.0	76	64	J-1010EX	True
J-1010EX	1,485.0	Desert Wells	3,000.0	5,000.0	63	66	J-1310EX	True
J-1020EX	1,425.0	Desert Wells	3,000.0	5,000.0	71	64	J-1010EX	True
J-1030EX	1,480.0	Desert Wells	3,000.0	5,000.0	67	64	J-1010EX	True
J-1040EX	1,438.0	Desert Wells	3,000.0	5,000.0	68	64	J-1010EX	True
J-1050EX	1,445.0	Desert Wells	3,000.0	5,000.0	68	61	J-150EX	True
J-1120EX	1,453.0	Desert Wells	3,000.0	5,000.0	68	62	J-150EX	True
J-1130EX	1,445.0	Desert Wells	3,000.0	5,000.0	71	64	J-1010EX	True
J-1160EX	1,445.0	Desert Wells	3,000.0	5,000.0	48	58	J-1360EX	True
J-1170EX	1,470.0	Desert Wells	3,000.0	5,000.0	69	64	J-1010EX	True
J-1180EX	1,440.0	Desert Wells	3,000.0	5,000.0	67	64	J-1010EX	True
J-1190EX	1,420.0	Desert Wells	3,000.0	5,000.0	60	64	J-1010EX	True
J-1200EX	1,445.0	Desert Wells	3,000.0	5,000.0	26	48	J-1370EX	True
J-1210EX	1,455.0	Desert Wells	3,000.0	4,953.7	20	25	J-1300EX	True
J-1220EX	1,475.0	Desert Wells	3,000.0	5,000.0	68	64	J-1010EX	True

**Active Scenario: Max Day DU8&9 + FF - Served by SCAP**  
**Fire Flow Node FlexTable: Fire Flow Report (123835\_04 DU 8&9 at EM**  
**Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsd) (psl)	Pres. (Calc. Zn Lwr Lmt) (psl)	Junction w/ Minimum Pressure (Zone)	Satisfies FF?
J-1230EX	1,460.0	Desert Wells	3,000.0	5,000.0	50	51	J-280EX	True
J-1235EX	1,440.0	Desert Wells	3,000.0	5,000.0	70	61	J-150EX	True
J-1240EX	1,455.0	Desert Wells	3,000.0	5,000.0	63	60	J-150EX	True
J-1290EX	1,480.0	Desert Wells	3,000.0	5,000.0	65	64	J-1010EX	True
J-1300EX	1,465.0	Desert Wells	3,000.0	5,000.0	24	29	J-1210EX	True
J-1310EX	1,480.0	Desert Wells	3,000.0	5,000.0	65	63	J-1010EX	True
J-1330EX	1,465.0	Desert Wells	3,000.0	5,000.0	62	64	J-1010EX	True
J-1340EX	1,450.0	Desert Wells	3,000.0	5,000.0	66	64	J-1010EX	True
J-1350EX	1,465.0	Desert Wells	3,000.0	5,000.0	29	30	J-1300EX	True
J-1360EX	1,445.0	Desert Wells	3,000.0	5,000.0	58	58	J-1160EX	True
J-1370EX	1,430.0	Desert Wells	3,000.0	5,000.0	48	41	J-1200EX	True
J-1380EX	1,450.0	Desert Wells	3,000.0	5,000.0	65	64	J-1010EX	True
J-1390EX	1,430.0	Desert Wells	3,000.0	5,000.0	68	63	J-1200EX	True
J-1400EX	1,430.0	Desert Wells	3,000.0	5,000.0	62	57	J-1200EX	True
J-1410	1,450.0	Desert Wells	3,000.0	5,000.0	78	64	J-1010EX	True
J-1410EX	1,420.0	Desert Wells	3,000.0	5,000.0	66	64	J-1010EX	True
J-1420EX	1,461.0	Desert Wells	3,000.0	5,000.0	70	64	J-1440EX	True
J-1430	1,397.0	Desert Wells	3,000.0	5,000.0	83	62	J-150EX	True
J-1430EX	1,455.0	Desert Wells	3,000.0	5,000.0	67	62	J-1440EX	True
J-1440EX	1,478.0	Desert Wells	3,000.0	5,000.0	60	61	J-220EX	True
J-1680EX	1,400.0	Desert Wells	3,000.0	5,000.0	76	64	J-150EX	True
J-1990EX	1,447.0	Desert Wells	3,000.0	5,000.0	67	61	J-150EX	True
J-2000EX	1,442.0	Desert Wells	3,000.0	5,000.0	69	61	J-150EX	True
J-2120EX	1,453.0	Desert Wells	3,000.0	5,000.0	73	64	J-1010EX	True
J-2140EX	1,446.0	Desert Wells	3,000.0	5,000.0	71	64	J-1010EX	True
J-2295	1,415.0	Desert Wells	3,000.0	5,000.0	79	61	J-150EX	True
J-DU6-010	1,459.0	Desert Wells	3,160.6	5,000.0	59	64	J-1010EX	True
J-DU6-020	1,453.0	Desert Wells	3,160.6	5,000.0	72	64	J-1010EX	True
J-DU6-050	1,448.0	Desert Wells	3,160.8	5,000.0	64	64	J-1010EX	True
J-DU6-060	1,458.0	Desert Wells	3,160.8	5,000.0	69	64	J-220EX	True
J-DU7-010	1,415.0	Desert Wells	3,016.6	5,000.0	81	61	J-150EX	True
J-DU7-020	1,420.0	Desert Wells	3,000.0	5,000.0	69	61	J-150EX	True
J-DU7-030	1,415.0	Desert Wells	3,000.0	5,000.0	72	61	J-150EX	True
J-DU7-040	1,415.0	Desert Wells	3,000.0	5,000.0	81	61	J-150EX	True
J-DU7-050	1,420.0	Desert Wells	3,070.2	5,000.0	80	61	J-150EX	True
J-DU7-060	1,435.0	Desert Wells	3,028.4	5,000.0	73	61	J-150EX	True
J-DU7-070	1,440.0	Desert Wells	3,000.0	5,000.0	72	61	J-150EX	True
J-DU7-080	1,450.0	Desert Wells	3,072.2	5,000.0	68	61	J-150EX	True
J-DU7-090	1,437.0	Desert Wells	3,000.0	5,000.0	71	61	J-150EX	True
J-DU7-100	1,435.0	Desert Wells	3,063.6	5,000.0	71	61	J-150EX	True
J-DU7-110	1,435.0	Desert Wells	3,080.8	5,000.0	72	61	J-150EX	True
J-DU7-120	1,420.0	Desert Wells	3,000.0	5,000.0	79	61	J-150EX	True
J-DU7-130	1,420.0	Desert Wells	3,005.2	5,000.0	79	61	J-150EX	True

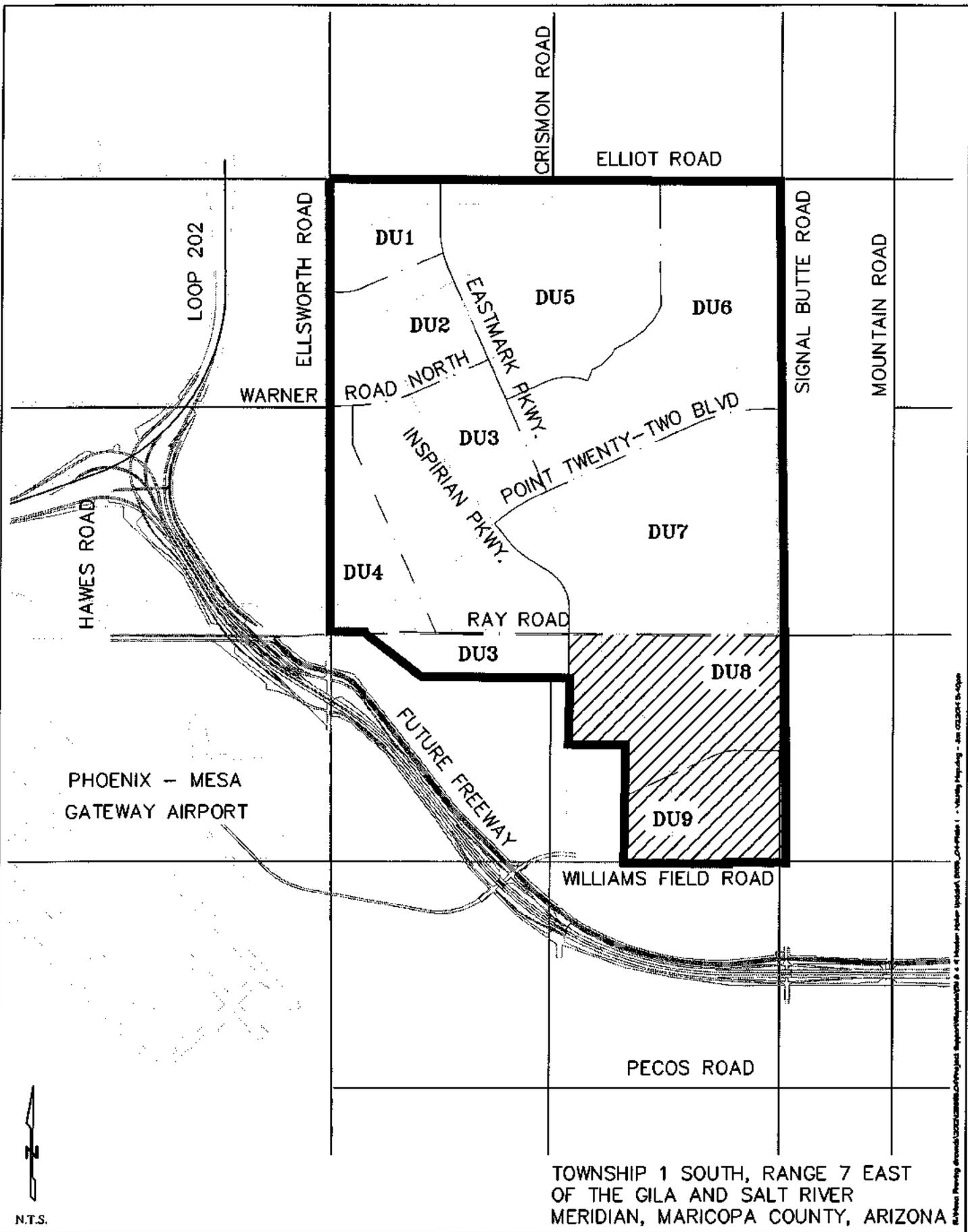
**Active Scenario: Max Day DU8&9 + FF - Served by SCAP**  
**Fire Flow Node FlexTable: Fire Flow Report (123835\_04 DU 8&9 at EM**  
**Water Model-01-06-14.wtg)**

**Current Time: 0.000 hours**

Label	Elevation (ft)	Zone	Flow (Total Needed) (gpm)	Fire Flow (Avalb.) (gpm)	Press. (Calc. Rsdh) (psi)	Pres. (Calc Zn Lwr Lmt) (psi)	Junction w/ Minimum Pressure (Zone)	Satisfies FF?
J-DU7-140	1,430.0	Desert Wells	3,124.2	5,000.0	75	61	J-150EX	True
J-DU7-150	1,418.0	Desert Wells	3,073.2	5,000.0	80	61	J-150EX	True
J-DU7-160	1,435.0	Desert Wells	3,061.4	5,000.0	67	61	J-150EX	True
J-DU7-170	1,432.0	Desert Wells	3,032.6	5,000.0	70	61	J-150EX	True
J-DU7-180	1,433.0	Desert Wells	3,035.0	5,000.0	70	61	J-150EX	True
J-DU7-190	1,437.0	Desert Wells	3,071.6	5,000.0	64	61	J-150EX	True
J-DU7-200	1,432.0	Desert Wells	3,101.2	5,000.0	65	61	J-150EX	True
J-DU8-010	1,420.0	Desert Wells	3,000.0	5,000.0	77	61	J-150EX	True
J-DU8-020	1,419.5	Desert Wells	3,000.0	5,000.0	75	61	J-150EX	True
J-DU8-030	1,421.0	Desert Wells	3,000.0	5,000.0	70	61	J-150EX	True
J-DU8-060	1,420.0	Desert Wells	3,018.2	5,000.0	57	60	J-DU8-070	True
J-DU8-070	1,420.0	Desert Wells	3,030.8	5,000.0	42	61	J-150EX	True
J-DU8-080	1,422.0	Desert Wells	3,008.8	5,000.0	64	61	J-150EX	True
J-DU8-090	1,424.0	Desert Wells	3,008.8	5,000.0	30	47	J-DU8-110	True
J-DU8-100	1,425.0	Desert Wells	3,018.2	5,000.0	69	61	J-150EX	True
J-DU8-110	1,430.0	Desert Wells	3,068.2	4,142.6	20	63	J-150EX	True
J-DU9-010	1,419.0	Desert Wells	3,039.4	5,000.0	78	61	J-150EX	True
J-DU9-020	1,415.0	Desert Wells	3,073.0	5,000.0	46	57	J-DU9-030	True
J-DU9-030	1,416.0	Desert Wells	3,033.6	4,637.1	20	62	J-150EX	True

**PLATE 1**

**Vicinity Map**



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TOWNSHIP 1 SOUTH, RANGE 7 EAST  
 OF THE GILA AND SALT RIVER  
 MERIDIAN, MARICOPA COUNTY, ARIZONA

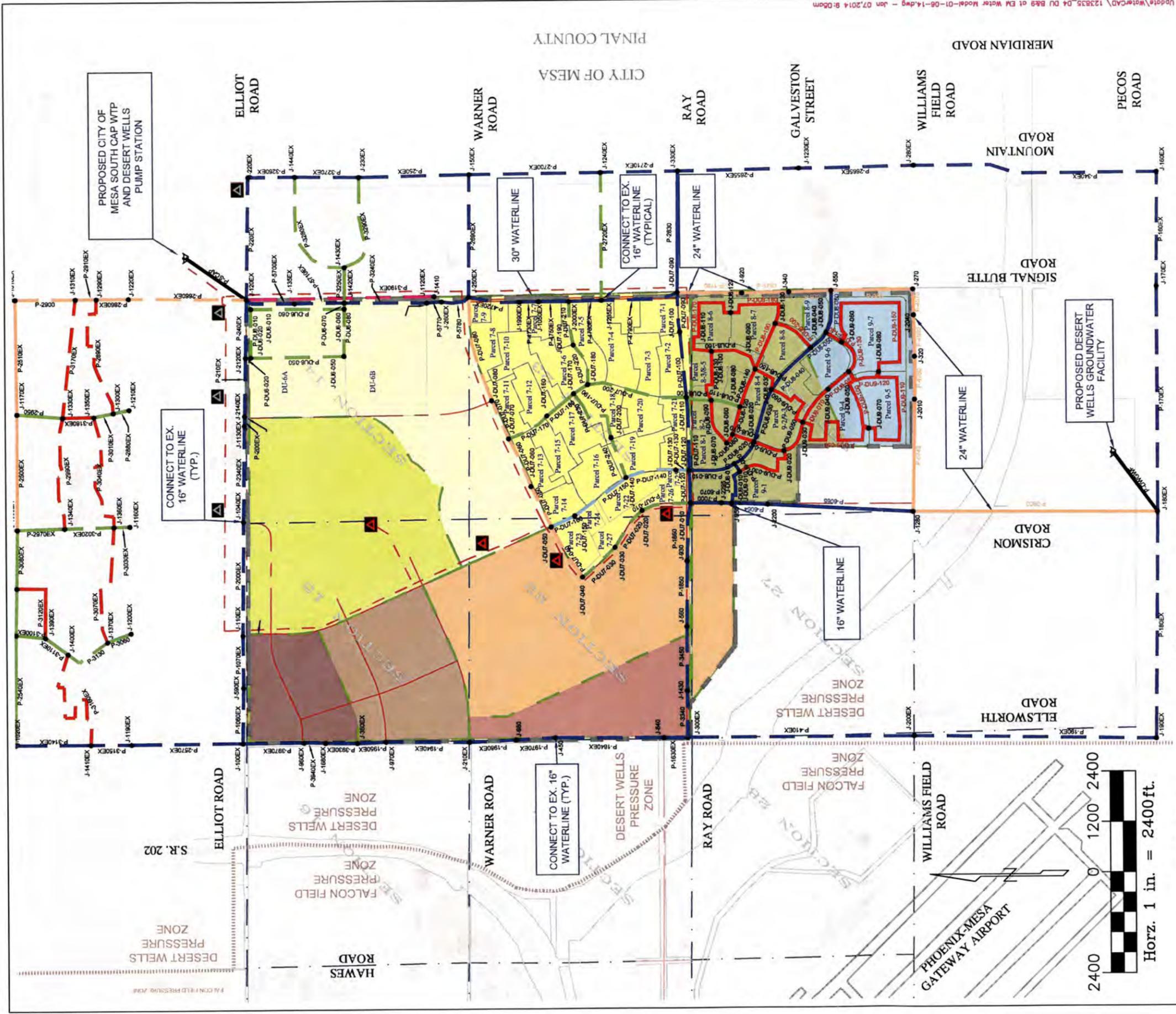
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**PLATE 1: VICINITY MAP**  
 EASTMARK  
 MESA, ARIZONA

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**PLATE 2**

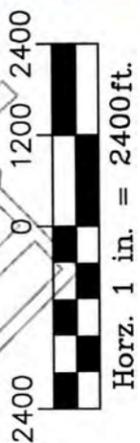
**DU 8 & 9 Master Water Exhibit –  
Full Build-Out Condition**



NOTES:  
1. INFRASTRUCTURE SIZES AND LOCATIONS ARE CONCEPTUAL AND SUBJECT TO CHANGE.

### LEGEND

PIPE DIAMETER	EXISTING	PLANNED	JUNCTION NODE	ON-SITE DEVELOPMENT UNITS
8-INCHES			●	DU-1
12-INCHES			▽	DU-2
16-INCHES			P-XXX	DU-3
20-INCHES			P-XXXEX	DU-4
24-INCHES			J-XXX	DU-5
30-INCHES			J-XXXEX	DU-6
WELL SITE			JUNCTION NODE (PROPOSED)	DU-7
WELL COLLECTION LINE			JUNCTION NODE (EXIST.)	DU-8
PRESSURE ZONE BOUNDARY			MODELED PRESSURE ZONE	DU-9
			DESERT WELLS	DU-4A
			DESERT WELLS PRESSURE ZONE	SITE BOUNDARY
				FIRST SOLAR SITE



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EASTMARK  
MESA, ARIZONA

## PLATE 2 - MASTER WATER EXHIBIT - FULL BUILD OUT

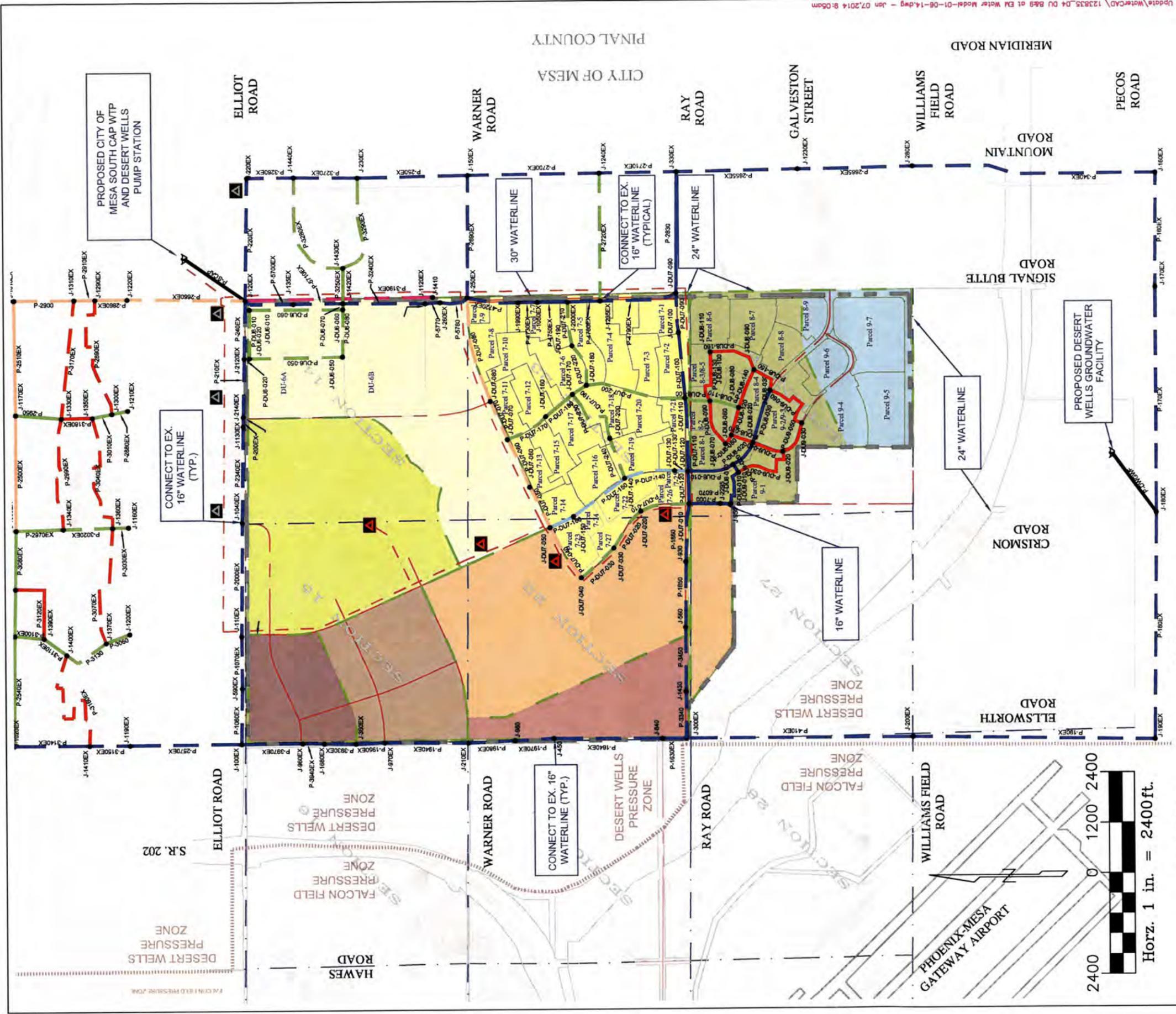
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PHOTO: MIKEY TUCKER

R:\Mass Proving Grounds\2012\12305\_04\Project Support\Report\DU 8 & 9 Master Water Update\WaterCAD\12305\_04 DU 8&9 of EM Water Model-01-06-14.dwg - Jan 07,2014 8:05am

**PLATE 3**

**DU 8 & 9 Master Water Exhibit –**

**Phase 1**



NOTES:  
1. INFRASTRUCTURE SIZES AND LOCATIONS ARE CONCEPTUAL AND SUBJECT TO CHANGE.

### LEGEND

PIPE DIAMETER	EXISTING	PLANNED
8-INCHES		
12-INCHES		
16-INCHES		
20-INCHES		
24-INCHES		
30-INCHES		
WELL SITE		
WELL COLLECTION LINE		
PRESSURE ZONE BOUNDARY		

JUNCTION NODE	WATER SOURCE
•	
P-XXX	PROPOSED PIPE
P-XXXEX	EXISTING PIPE
J-XXX	JUNCTION NODE (PROPOSED)
J-XXXEX	JUNCTION NODE (EXIST.)
MODELED PRESSURE ZONE:	DESERT WELLS

ON-SITE DEVELOPMENT UNITS	
DU-1	
DU-2	
DU-3	
DU-4	
DU-5	
DU-6	
DU-7	
DU-8	
DU-9	
DU-4A	DEVELOPMENT UNIT SUB-AREA
	SITE BOUNDARY
	FIRST SOLAR SITE

## PLATE 3 - MASTER WATER EXHIBIT - PHASE 1

EASTMARK  
MESA, ARIZONA

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