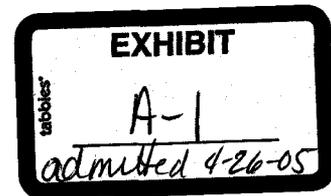




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Arizona Corporation Commission

DOCKETED

MAY 11 2005

2005 MAY 11 P 12: 21

ARIZONA CORPORATION COMMISSION
DOCUMENT CONTROL

DOCKETED BY *RN*

BEFORE THE ARIZONA CORPORATION COMMISSION

Richard L. Sallquist, Esq. (002677)
SALLQUIST & DRUMMOND, P.C.
2525 E. Arizona Biltmore Circle, Suite 117
Phoenix, Arizona 85016
Telephone: (602) 224-9222 Fax: (602) 224-9366
Attorneys for Virgin Mountain Utilities Company

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IN THE MATTER OF THE APPLICATION OF)
VIRGIN MOUNTAIN UTILITIES COMPANY)
FOR AN EXTENSION OF ITS CERTIFICATE OF)
CONVENIENCE AND NECESSITY TO)
PROVIDE WATER SERVICE IN MOHAVE)
COUNTY, ARIZONA AND APPROVAL OF A)
HOOK-UP FEE TARIFF.)

DOCKET NO. W-03551A-04-0325

APPLICATION

Virgin Moutain Utilities Company (the "Company" or "Applicant") submits this Application to extend its water Certificate of Convenience and Necessity. In support of this Application, the Company states as follows:

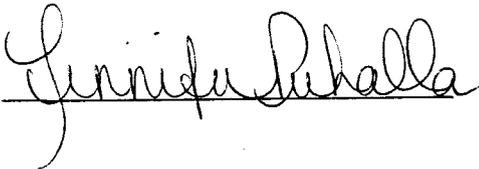
1. Applicant holds a Certificate of Convenience and Necessity ("CC&N") issued by the Commission to provide water service in portions of Mohave County, Arizona.
2. A copy of the completed CC&N Extension Application as required by the Commission is attached hereto as Attachment A.
3. Three copies of the Requests for Service from the owners of the subject property, supporting the Application have been filed under separate cover with the Commission's Staff.
4. Based on the Service Agreements with the Developers within the Subject Area, and the Hook-Up Fee proposed below, the Company will have sufficient water capacity to serve the Subject Area.
5. The Company will provide service to the Subject Area under their existing service rates, charges, terms and conditions, as those rates may be amended by appropriate regulatory action.

1 Copies of the foregoing were mailed
this 28th day of April, 2004 to:

2
3 Hearing Division
4 Arizona Corporation Commission
5 1200 W. Washington St.
6 Phoenix, AZ 85007

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8 Legal Division
9 Arizona Corporation Commission
10 1200 W. Washington St.
11 Phoenix, AZ 85007

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13 Utilities Division
14 Arizona Corporation Commission
15 1200 W. Washington St.
16 Phoenix, AZ 85007

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1 **ARIZONA CORPORATION COMMISSION**

2 **APPLICATION FOR AN EXTENSION OF CERTIFICATE OF CONVENIENCE AND**
3 **NECESSITY**

4 **WATER**

5 A. The name, address and telephone number of the Applicant is:

6 **Virgin Mountain Utilities Company**
7 **P.O. Box 668**
8 **Beaver Dam, Arizona 864326**
9 **(928) 347-5515**

10 B. The name, address and telephone number of management contact is:

11 **Tom Stoddard**
12 **P.O. Box 668**
13 **Beaver Dam, Arizona 86432**
14 **(928) 347-5515**

15 C. List the name, address and telephone number of the operator certified by the Arizona
16 Department of Environmental Quality:

17 **Tom Stoddard**
18 **P.O. Box 668**
19 **Beaver Dam, Arizona 86432**
20 **(928) 347-5515**

21 D. List the name, address and telephone number of the attorney for the Applicant:

22 **Richard L. Sallquist, Esq.**
23 **Sallquist & Drummond, P.C.**
2525 E. Arizona Biltmore Cr., Suite A117
Phoenix, Arizona 85016
(602) 224-9222

E. Attach the following documents that apply to you:

1. Certificate of Good Standing (if corporation) **Please see Exhibit A.**

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ATTACHMENT A

1 2. Corporate Resolution Authorizing this application (if required by the corporation's
2 Articles of Incorporation) **Please see Exhibit B.**

3 F. Attach a legal description of the area requested by either **CADASTRAL** (quarter section
4 description) or **Metes and Bounds** survey. References to parcels and docket will not be
5 accepted. **Please see Exhibit C.**

6 G. Attach a detailed map using the form provided as attachment B. Shade and outline the area
7 requested. Also indicate the present certificated area by using different colors. **Please see**
8 **Exhibit D.**

9 H. Attach a current balance sheet and profit and loss statement. **Please see Exhibit E.**

10 I. Provide the following information:

11 1. Indicate the estimated number of customers, by class, to be served in the new area in each
12 of the next five years:

13 **Residential:**

14 First Year 10 Second Year 25 Third Year 45 Fourth Year 70
15 Fifth Year 100

16 **Commercial:**

17 First Year _____ Second Year _____ Third Year _____ Fourth Year _____
18 Fifth Year _____

19 **Industrial:**

20 First Year _____ Second Year _____ Third Year _____ Fourth Year _____
21 Fifth Year _____

22 **Irrigation:**

23 First Year _____ Second Year _____ Third Year _____ Fourth Year _____
Fifth Year _____

Other: (specify)

1 First Year _____ Second Year _____ Third Year _____ Fourth Year _____
2 Fifth Year _____

- 3 2. (WATER ONLY) Indicate the projected annual water consumption, in gallons, for each
4 of the customer classes in the new area for each of the next five years:

5 **Residential:**

6 First Year 720,000 Second Year 1,800,000 Third Year 3,240,000
7 Fourth Year 5,040,000 Fifth Year 7,200,000

8 **Commercial:**

9 First Year _____ Second Year _____ Third Year _____
10 Fourth Year _____ Fifth Year _____

11 **Industrial:**

12 First Year _____ Second Year _____ Third Year _____
13 Fourth Year _____ Fifth Year _____

14 **Irrigation:**

15 First Year _____ Second Year _____ Third Year _____
16 Fourth Year _____ Fifth Year _____

- 17 3. Indicate the total estimated annual operating revenue from the new area for each of the
18 next five years:

19 First Year \$4,560 Second Year \$11,400 Third Year \$20,520
20 Fourth Year \$31,920 Fifth Year \$45,600

- 21 • Complete Attachment "D" (Water Use Data Sheet) for the past 13 months
22 **The Company has no metered customers at this time.**

1 4. Indicate the total estimated annual operating expenses attributable to the new area for
2 each of the next five years:

3 First Year \$4,104 Second Year \$10,260 Third Year \$18,468

4 Fourth Year \$28,728 Fifth Year \$41,040

5 J. Total estimated cost to construct utility facilities to serve customers in the requested area:

6 **The Off-Site Facilities will be funded through an Off-Site Facilities Agreement**
7 **including the Tariffed Hook-Up Fees. (See Attachment B to the Application)**

8 **For On-Site Facilities, the cost estimates will be included in Line Extension**
9 **Agreements in accordance with Commission Rules and Regulations.**

10 K. Explain method of financing utility facilities (see paragraph 8 of instructions)

11 **Please see Paragraph J. above.**

12 L. Estimated starting and completion date of construction of utility facilities:

13 Starting date **Within 30 days of CC&N issuance**

14 Completion date **60 days after commencement**

15 M. Attach the following permits:

16 1. Franchise from either the City or County for the area requested. **To be late filed as**
17 **Exhibit F.**

18 2. Arizona Department of Environmental Quality or designee's approval to construct
19 facilities. **To be late filed as Exhibit G.**

20 3. Arizona State Land Department approval. (If you are including any State land in your
21 requested area this approval is needed.) **N/A**

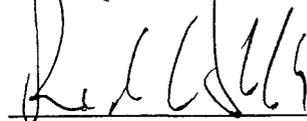
22 4. U.S. Forest Service approval. (If you are including any U.S. Forest Service land in your
23 requested area this approval is needed.) **N/A**

1 5. (WATER ONLY) If the area requested is within an Active Management Area, attach a
2 copy of either the utility's Designation of an Assured Water Supply or the developer's
3 Certificate of 100 Year Assured Water Supply issued by the Arizona Department of Water
4 Resources.

- 5 • If the area requested is outside an Active Management Area, attach the developer's
6 Adequacy Statement issued by the Arizona Department of Water Resources if applied
7 for by the developer.
- 8 • If the area requested is outside an Active Management Area and the developer does not
9 obtain an Adequacy Statement, provide sufficient detailed information to prove that
10 adequate water exists to provide water to the area requested. **Please see the attached**
11 **Exhibit H attached Letter of Physical Availability.**

12 **N. Attached hereto as Exhibit I is the Notice to Customers and Property Owners for the**
13 **subject area. The Affidavit of Mailing/Publication will be late filed as an Exhibit.**

14 SALLQUIST & DRUMMOND, P.C.

15 

16 Richard L. Sallquist
17 2525 E. Arizona Biltmore Circle
18 Suite A117
19 Phoenix, Arizona 85016
20 Attorneys for Virgin Mountain Utilities Company

EXHIBITS

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- A. Certificate of Good Standing
- B. Corporate Resolution
- C. Legal Description
- D. Map
- E. December 31, 2002 Annual Report
- F. Mohave County Franchise (Late Filed)
- G. ADEQ approvals (Late Filed)
- H. Letter of Physical Availability
- I. Notice to Customers and Property Owners

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CERTIFICATE OF GOOD STANDING

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(Attached)

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EXHIBIT A

22

23

STATE OF ARIZONA



Office of the
CORPORATION COMMISSION

CERTIFICATE OF GOOD STANDING

To all to whom these presents shall come, greeting:

I, Brian C. McNeil, Executive Secretary of the Arizona Corporation Commission, do hereby certify that

*****VIRGIN MOUNTAIN UTILITIES COMPANY*****

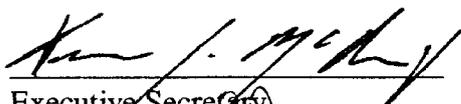
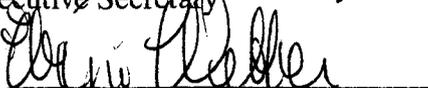
a domestic corporation organized under the laws of the State of Arizona, did incorporate on March 19, 1998.

I further certify that according to the records of the Arizona Corporation Commission, as of the date set forth hereunder, the said corporation is not administratively dissolved for failure to comply with the provisions of the Arizona Business Corporation Act; that its most recent Annual Report, subject to the provisions of A.R.S. sections 10-122, 10-123, 10-125 & 10-1622, has been delivered to the Arizona Corporation Commission for filing; and that the said corporation has not filed Articles of Dissolution as of the date of this certificate.

This certificate relates only to the legal existence of the above named entity as of the date issued. This certificate is not to be construed as an endorsement, recommendation, or notice of approval of the entity's condition or business activities and practices.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Arizona Corporation Commission. Done at Phoenix, the Capital, this 27th Day of April, 2004, A. D.




Executive Secretary
By 

CERTIFICATE OF SECRETARY

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I, the undersigned, being the Secretary of Virgin Mountain Utilities Company do hereby certify the foregoing to be duly adopted resolutions of the Corporation's Board of Directors as adopted at a Meeting of the Directors held on _____.

Secretary

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EXHIBIT B

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VIRGIN MOUNTAIN UTILITIES COMPANY

RESOLUTION OF THE BOARD OF DIRECTORS

The President reported on the need to enter certain contracts and file certain applications with regulatory agencies which will authorize the Corporation to provide water service to new development(s) in the vicinity of the Corporation's existing service area. Discussion of those matters ensued.

Thereafter, upon motion duly made, seconded and unanimously carried, it was:

RESOLVED, that the Board hereby authorizes the proper offices of the Corporation to enter into appropriate contract(s) with certain developer(s) pursuant to which the developer(s) will pay their proportionate share of the administration and capital costs for water facilities necessary to serve the new customers in the expanded Certificate of Convenience and Necessity ("CC&N"), as herein below contemplated, and as those contracts or Tariff provisions are approved by the Arizona Corporation Commission (the "Commission")

FURTHER RESOLVED, that the Board hereby authorizes the proper officers of the Corporation to file an application with the Commission for extension of the boundaries of the Corporation's CC&N upon the terms and conditions herein mentioned and further authorizes the filing of any and all amendments and supplements to said application.

FURTHER RESOLVED, that the Board hereby authorizes the proper officers of the Corporation to file an application with the Mohave County Board of Supervisors for an extension of its Public Utility Franchise, all in the manner and in the terms and conditions provided in the above-mentioned resolutions.

FURTHER RESOLVED, that the proper officers of the Corporation, and employees designated by the proper officers of the Corporation, be and each of them hereby is, authorized, in the name and on behalf of the Corporation, to conduct any and all negotiations, to make any and all arrangements, testify on behalf of the Corporation, do and perform any and all acts and things and to execute and deliver any and all officer's certificates and other documents and instruments as they deem necessary or appropriate in order to consummate and otherwise effectuate the purposes of each and all of the foregoing resolutions.

LEGAL DESCRIPTION

Section 15, Township 39 North, Range 16 West
G&SRB&M, Mohave County, Arizona

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EXHIBIT C

COU N T Y : Mohave

RANGE 16 West

TOWNSHIP 39 North

-  W-3067 (4)
Heaver Dam Water Company, Inc.
-  W-3551 (1)
Virgin Mountain Utilities Company
-  Sunrise Well Association, Inc.
Docket No. W-4154-02-848
Application for Adjudication
-  Virgin Mountain Utilities Company
Extension Application

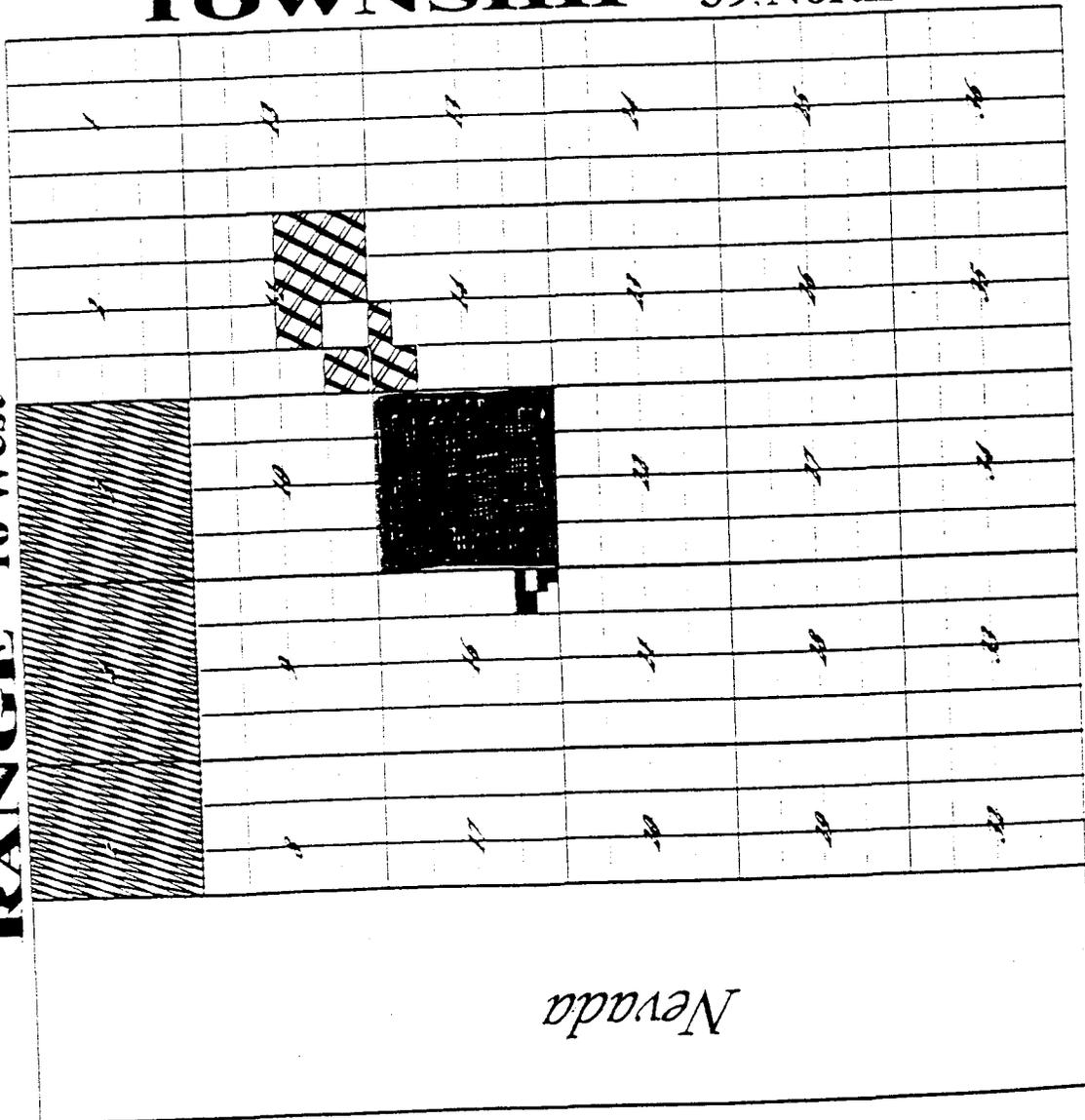


EXHIBIT D

VIRGIN MOUNTAIN UTILITIES COMPANY
PROFORMA INCOME STATEMENT

	Year One	Year Two	Year Three	Year Four	Year Five
REVENUES					
Minimum Charges/Month	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00
Gallons Included	0	0	0	0	0
Excess Gallonage Charge/1000 for Residential/Commercial	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50
Excess Gallonage Charge/1000 for Standpipe	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00
Number of Residential Customers	10	40	60	80	100
Sales Revenues (1)	\$5,520	\$22,080	\$33,120	\$44,160	\$55,200
Number of Master Meter Customers	0	0	0	0	0
Sales Revenues (2)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Number of Commercial Customers	0	0	0	5	6
Sales Revenues (3)	\$0.00	\$0.00	\$0.00	\$1,740.00	\$2,540.00
Standpipe Revenues (4)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Revenues	\$5,520	\$22,080	\$33,120	\$45,900	\$57,740
EXPENSES					
Pumping costs	\$360.00	\$1,440.00	\$2,160.00	\$3,240.00	\$4,320.00
Cost/1000	\$0.50				
Operations and Maintenance					
Cost/Unit/Month	\$8.33				
Management					
Cost/Unit/Month	\$12.50				
SDWA Compliance	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00
Insurance:					
Liability/Month	\$75.00	\$900.00	\$900.00	\$900.00	\$900.00
Property/Month	\$75.00	\$900.00	\$900.00	\$900.00	\$900.00
Automotive/Year	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00
Vehicle/Month	\$200.00	\$2,400.00	\$2,400.00	\$2,400.00	\$2,400.00
Depreciation					
Plant	\$146,334.38	\$146,334.38	\$146,334.38	\$146,334.38	\$146,334.38
Composite Rate	2.50%				
Total Depreciation	\$3,670.37	\$3,670.37	\$3,670.37	\$3,670.37	\$3,670.37
Property Taxes (Schedule F)	\$1,032.23	\$1,379.73	\$1,360.21	\$2,170.01	\$2,425.47
Income Taxes (Schedule G)	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00
Total Operating Expenses	\$14,613.11	\$22,690.62	\$22,691.08	\$26,330.38	\$43,916.34
Operating Income (Loss)	(\$9,093.11)	(\$1,610.62)	\$3,428.92	\$9,069.12	\$13,923.66
Interest Expense					
Outstanding Debt	\$59,933.95	\$59,933.95	\$59,933.95	\$59,933.95	\$59,933.95
Interest Rate	3.00%				
Long Term Interest Expense Total	\$4,794.72	\$4,794.72	\$4,794.72	\$4,794.72	\$4,794.72
Working Capital Interest at	10.00%				
Working Capital Interest at	\$750.00	\$1,700.00	\$1,700.00	\$1,200.00	\$0.00
Total Interest Expense	\$5,544.72	\$6,494.72	\$6,494.72	\$5,994.72	\$4,794.72
Net income (Loss)	(\$14,637.82)	(\$8,105.34)	(\$2,065.30)	\$3,074.41	\$9,128.94
Original Cost Rate Base	\$146,164.01	\$142,493.14	\$138,322.25	\$135,151.39	\$131,480.52
Return on OCLD of:	-6.22%	-1.13%	2.47%	6.71%	10.59%
in Gallons, except Unit =					
(1) Average Residential Sales/Month	3,000	3,000	3,000	3,000	3,000
Res Sales/Year	720,000	2,380,000	4,320,000	5,760,000	7,200,000
(2) Average Master Meter Sales/Month	0	0	0	0	0
Computed as # Units Served	0	0	0	0	0
Times Avg. Res. Sales/Mo	0	0	0	0	0
Master Meter Sales/Year	0	0	0	0	0
(3) Average Commercial Sales/Month	0	0	0	20,000	20,000
Comm. Sales/Year	0	0	0	720,000	1,440,000
(4) Standpipe Sales/Year	0	0	0	0	0
Total Sales/Year	720,000	2,380,000	4,320,000	6,480,000	8,640,000
Avg. Res. Bill	\$46.00	\$46.00	\$46.00	\$46.00	\$46.00
Avg. Comm. Bill	N/A	N/A	N/A	\$95.00	\$95.00

Water Income

4/20/98

VIRGIN MOUNTAIN UTILITIES COMPANY

BALANCE SHEET PROFORMA

	Beginning Year One	End Year One	Year Two	Year Three	Year Four	Year Five	
ASSETS							
Cash	\$0.00	\$3,283.05	\$3,283.05	\$848.59	\$1,453.66	\$3,198.94	\$3,998.75
Land (Water)	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00	\$3,000.00
Production & Storage Plant in Service	\$146,834.88	\$146,834.88	\$146,834.88	\$146,834.88	\$146,834.88	\$146,834.88	\$146,834.88
Less: Accumulated Depreciation	\$0.00	\$3,670.37	\$3,670.37	\$7,341.74	\$11,012.62	\$14,683.49	\$18,354.36
Net Plant in service	\$149,834.88	\$146,164.01	\$142,493.14	\$138,822.26	\$135,151.39	\$131,480.52	
TOTAL ASSETS	\$149,834.88	\$149,447.06	\$143,341.72	\$140,275.92	\$138,350.33	\$135,479.27	
LIABILITIES							
Current Liabilities:							
Current Liabilities	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Deferred Credits:							
Advances	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Contributions	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Total Deferred Credits	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Capital:							
Common Stock Issued	\$89,900.93	\$89,900.93	\$89,900.93	\$89,900.93	\$89,900.93	\$89,900.93	
Long Term Debt	\$59,933.95	\$59,933.95	\$59,933.95	\$59,933.95	\$59,933.95	\$59,933.95	
Retained Earnings	0	(\$15,287.32)	(\$23,493.16)	(\$26,358.96)	(\$23,484.55)	(\$14,355.61)	
Working Capital Loan	\$0.00	\$15,000.00	\$17,000.00	\$17,000.00	\$12,000.00	\$0.00	
Total Capital	\$149,834.88	\$149,447.06	\$143,341.72	\$140,275.92	\$138,350.33	\$135,479.27	
TOTAL LIABILITIES & CAPITAL	\$149,834.88	\$149,447.06	\$143,341.72	\$140,275.92	\$138,350.33	\$135,479.27	

Tuesday, April 02, 2002 11:21 AM

To: Tom Stoddard

From: Joel A. Myers, 435-586-7400

Page: 2 of 3

ARIZONA DEPARTMENT OF WATER RESOURCES

Hydrology Division

500 North Third Street, Phoenix, Arizona 85004

Telephone 602 417-2448

Fax 602 417-2425

JANE DEE HULL
GovernorJOSEPH C. SMITH
Director

March 26, 2002

Mr. Tom Stoddard
Virgin Mountain Utilities
#39 Virgin Mountain Drive
Beaver Dam, Arizona 86432

RE: "Scenic Arizona," T39N, R16W, Mohave County, Arizona
Application for Physical Availability Demonstration #20-400682

Dear Mr. Stoddard:

The Department has completed review of the report entitled *Hydrologic Study, Assured and Adequate Water Supply, Virgin Mountain Utilities Company, Mohave County*, by GEO Consultants, Inc., July 24, 2001, and the analysis of available hydrologic information. The study area consists of about 23,040 acres in Sections 1 through 36, T39N, R16W, G&S R B&M in Mohave County within the Virgin River basin of northwestern Arizona.

In accordance with A.A.C. R12-15-717(C), it was determined that sufficient groundwater is physically available to meet the projected demand of approximately 968 acre-feet per year for 100 years under A.A.C. R12-15-717(B) for adequate water supply purposes in the subject area. This water is also of adequate quality for purposes of A.A.C. R12-15-718. It is the Department's conclusion that the estimated one hundred year depth-to-water should not encounter hydrologic bedrock, nor exceed 1200 feet below land surface, the maximum depth allowed by A.A.C. R12-15-717(B).

The results of the Department's hydrologic review fulfill the requirements of R12-15-716(C) and can be cited in applications for Statements of Water Adequacy, Analysis of Adequate Water Supply, or Designation of Adequate Water Supply. These applications have certain additional requirements based on the assured and adequate water supply criteria referenced in A.R.S. 45-108 and Rule R12-15-701 et. seq. For further information on these requirements, please contact the Office of Assured and Adequate Water Supply at (602) 417-2465. **If the Department finds that the groundwater supply is not available because the assumptions and information used in determining the physical availability under the current criteria prove incorrect, the Department will modify the availability of groundwater accordingly.**

The Department's determination is an appealable agency action. In order to appeal this decision, you must request an appeal within thirty (30) days from receipt of this letter. I have enclosed a summary of the appeals process and an appeal form should you wish to pursue this option.

EXHIBIT H

Page 2
March 26, 2002
Mr. Tom Stoddard
"Scenic Arizona," T19N, R16W, Mohave County, Arizona
Application for Physical Availability Demonstration #20-400682

If you have any questions regarding the physical availability review, please contact me at (602) 417-2448.

Sincerely,



Greg Wallace
Chief Hydrologist

QW/KM/rd
202237

cc: Joel Meyers
Christa McJunkin, ADWR

DOCKET W-03551

Applies to all WATER service areas

PART ONE
STATEMENT OF CHARGES
WATER SERVICE

M. Off-Site Facilities Hook-Up Fee

1. Purpose and Applicability

The purpose of the hook-up fees payable to Virgin Mountain Utilities Company (the "Company") pursuant to this tariff is to equitably apportion the costs of constructing additional facilities to provide water production, storage, pressure and fire flow among all new service connections.

These charges are applicable to all new service connections established after the effective date of this tariff. The charges are one-time charges and are payable as a condition to the Company's establishment of service, as more particularly provided below.

2. Definitions

Unless the context otherwise requires, the definitions set forth in R-14-2-401 of the Arizona Corporation Commission's rules and regulations governing water utilities shall apply in interpreting, this tariff schedule.

"Applicant" means any party entering into an agreement with Company for the installation of water facilities to serve new service connections.

"Company" means Virgin Mountain Utilities Company, an Arizona corporation.

Issued _____

Effective _____

ISSUED BY:

Thomas G. Stoddard, Secretary
Virgin Mountain Utilities Company
P.O. Box 668
Littlefield, Arizona 86432

DOCKET W-03551

Applies to all WATER service areas

PART ONE

STATEMENT OF CHARGES
WATER SERVICE

"Main Extension Agreement" means any agreement whereby an Applicant agrees to advance the costs of the installation of water facilities to the Company to serve new service connections, or install water facilities to serve new service connections and transfer ownership of such water facilities to the Company, which agreement shall require the approval of the Arizona Corporation Commission (same as line extension agreement).

"Off-Site Facilities" means wells, storage tanks and related appurtenances necessary for proper operation, including, engineering and design costs. Off-Site facilities may also include booster pumps, pressure tanks, transmission mains and related appurtenances necessary for proper operation, if these facilities are not for the exclusive use of the applicant and these facilities will benefit the entire water system.

"Service Connection" means and includes all service connections for residential, commercial, industrial, or other uses, regardless of meter size.

Issued February 19, 1999

Effective March 1, 1999

ISSUED BY:

Thomas G. Stoddard, Secretary
Virgin Mountain Utilities Company
P.O. Box 668
Littlefield, Arizona 86432

DOCKET W-03551

Applies to all WATER service areas

PART ONE
STATEMENT OF CHARGES
WATER SERVICE

3. Off-Site Hook-Up Charges

Each new service connection shall pay the total off-site capacity charge, derived from the following table:

OFF-SITE CAPACITY RESERVATION CHARGE TABLE		
<i>Meter Size</i>	NARUC Meter Factor	Fee
5/8" X 3/4"	1	\$ 2,500
3/4"	1.2	\$ 3,000
1"	2	\$ 5,000
1 - 1/2"	4	\$ 10,000
2"	6.4	\$ 16,000
3"	12	\$ 30,000
4"	20	\$ 50,000
6" or larger	40	\$100,000

4. Terms and Conditions

- (a.) Assessment of One Time Hook-Up Charge: The hook-up fee may be assessed only once per service connection, or lot within a platted subdivision (similar to meter and service line installation charges). However, this provision does not exempt from the hook-up fee, any newly created parcel(s) which are the result of further subdivision of a lot or land parcel and which do not have a service connection.

Issued February 19, 1999

Effective March 1, 1999

ISSUED BY:

Thomas G. Stoddard, Secretary
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 P.O. Box 668
 Littlefield, Arizona 86432

DOCKET W-03551

Applies to all WATER service areas

PART ONE

STATEMENT OF CHARGES
WATER SERVICE

- (b.) Use of Off-Site Hook-Up Fee: Hook-Up fees may only be used to pay for the capital items of off-site facilities, or for repayment of loans obtained for installation of off-site facilities. Off site hook-up fees shall not be used for repairs, maintenance, plant replacements, or operational purposes.
- (c.) Time of Payment:
- (1) In the event that the Applicant is required to enter into a main extension agreement, whereby the Applicant agrees to advance the costs of installing mains, valves, fittings, hydrants and other on-site improvements in order to extend service in accordance with R-14-2-406 (B), payment of the charges required hereunder shall be made by the Applicant within 15 calendar days after receipt of notification from the Company that the Utilities Division of the Arizona Corporation Commission has approved the main extension agreement in accordance with R14-2-406(M).
 - (2) In the event that the Applicant is not required to enter into a main extension agreement, the charges hereunder shall be due and payable at the time the meter and service line installation fee is due and payable.
- (d.) Failure to Pay Charges. Delinquent Payments: - Under no circumstances will the Company set a meter or otherwise allow service to be established if the Applicant has not paid in full all charges as provided by this off-site hook-up fee tariff.

Issued February 19, 1999

Effective March 1, 1999

ISSUED BY:

Thomas G. Stoddard, Secretary
Virgin Mountain Utilities Company
P.O. Box 668
Littlefield, Arizona 86432

DOCKET W-03551

Applies to all WATER service areas

PART ONE

STATEMENT OF CHARGES
WATER SERVICE

- (e.) Off-Site Hook-Up Fee Non-refundable: - The amounts collected by the Company pursuant to the off-site hook-up fee shall be non-refundable contributions in aid of construction.
- (f.) Use of Charges Received: All funds collected by the Company as off-site hook-up fees, shall be deposited into a separate interest bearing trust account and used solely for the purposes of paying for the costs of off-site facilities, including repayment of loans obtained for the installation of off-site facilities that will benefit the entire water system.
- (g.) Off-Site Hook-Up Fees In Addition to Other Charges: The off-site hook-up fees shall be in addition to any costs associated with a main extension agreement for on-site facilities, and are in addition to the amounts to be advanced pursuant to charges authorized under other sections of this tariff.
- (h.) Disposition of Excess Funds: After all necessary and desirable off-site facilities are constructed utilizing funds collected pursuant to the off-site hook-up fee or the off-site hook-up fee has been terminated by order of the Arizona Corporation Commission (Commission), any funds remaining in the trust shall be refunded. The manner of the refund shall be determined by the Commission at the time a refund becomes necessary

Issued February 19, 1999

Effective March 1, 1999

ISSUED BY:

Thomas G. Stoddard, Secretary
Virgin Mountain Utilities Company
P.O. Box 668
Littlefield, Arizona 86432

Virgin Mountain Utilities Company
Hook Up Fee Computation
Certificate of Convenience and Necessity Expansion
Docket No.

Item	Quantity	Unit Price	Cost	Allocation	
				Section 15	System
6" PVC Transmission Main	52,800	\$ 14.00	\$ 739,200	\$ 739,200	\$ -
10" PVC Transmission Mains	15,840	\$ 21.00	\$ 332,640	\$ 332,640	\$ -
Well and Pumping Plant	1	\$ 350,000	\$ 350,000	\$ 233,100	\$ 116,550
Fire Hydrants	137	\$ 2,250	\$ 308,250	\$ 308,250	\$ -
			<u>\$ 1,730,090</u>	<u>\$ 1,613,190</u>	<u>\$ 116,550</u>
Total Units				500	
Backbone Cost per Unit				\$ 3,226	
Proposed Hook-Up Fee					
Percent of Cost			80%	\$ 2,581	
Say				<u>\$ 2,500</u>	

Map No. 55

COU^NT^Y Mohave

RANGE 16 West

TOWNSHIP 39 North

-  W-3067 (4)
Heaver Dam Water Company, Inc.
-  W-3551 (1)
Virgin Mountain Utilities Company
-  Sunrise Well Association, Inc.
Docket No. W-4154-02-848
Application for Adjudication
-  Virgin Mountain Utilities Company
Extension Application

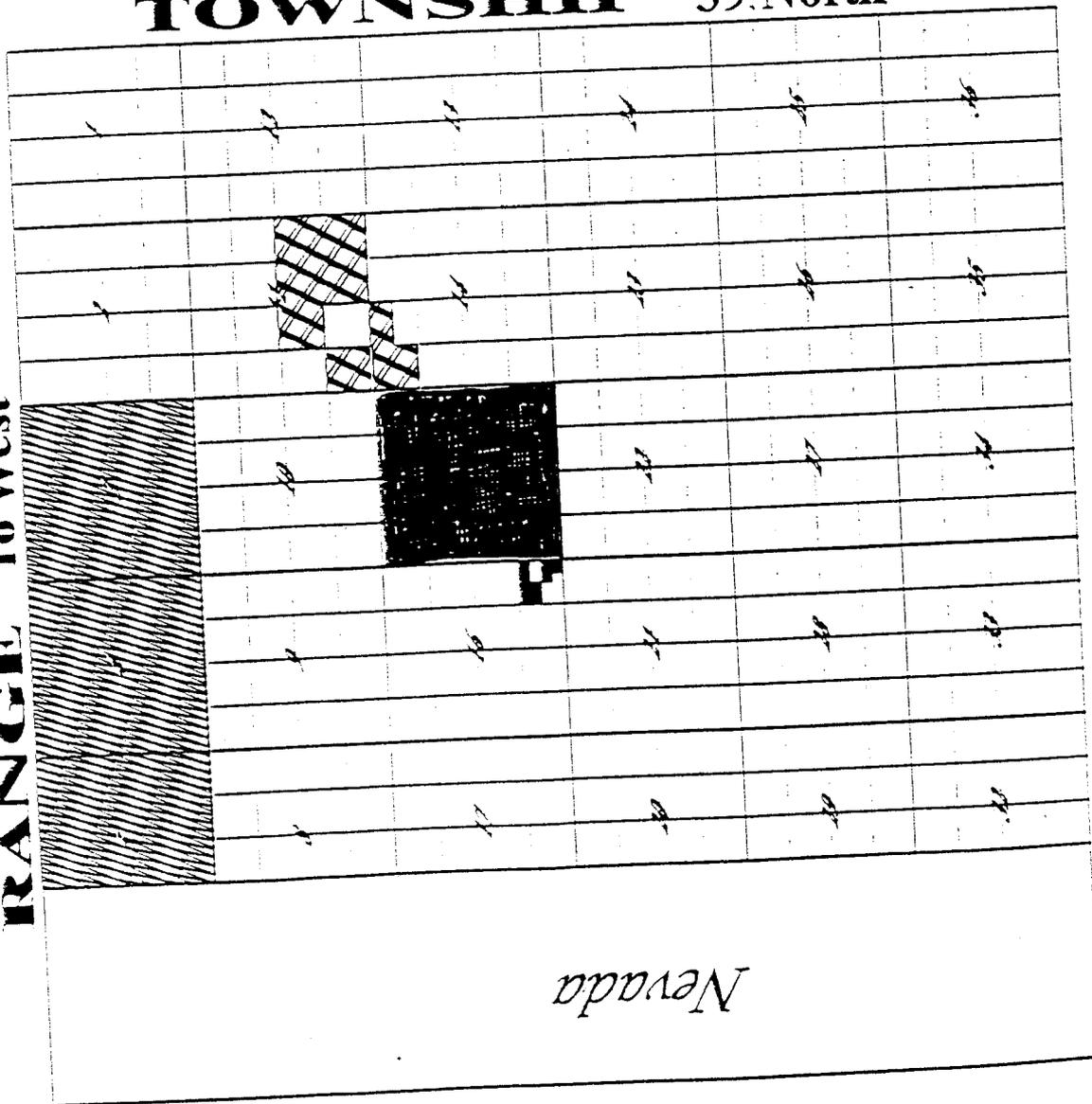


EXHIBIT D

EXHIBIT
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 A-2
 admitted 4-26-05

TR9916W 25 MAR 2002

EXHIBIT
tabbler
A-3
admitted 4-26-05

SALLQUIST & DRUMMOND, P.C.
ATTORNEYS AT LAW
TEMPE OFFICE
4500 S. LAKESHORE DRIVE
SUITE 339
TEMPE, ARIZONA 85282

RICHARD L. SALLQUIST

PHONE (602) 224-9222
FACSIMILE (480) 345-0412
E-MAIL dick@sd-law.com

February 23, 2005

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

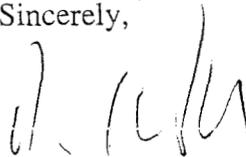
Re: Virgin Mountain Utilities Company; Docket No. W-03551A- 04- 0325

Dear Ms. Ryan:

The Procedural Order dated January 21, 2005 in this Docket requires publication of the Notice of the proceeding and filing an Affidavit to that effect.

Enclosed please find the original and 15 copies of that Affidavit. In the event you should have any question regarding this matter, please do not hesitate to contact the undersigned.

Sincerely,



Richard L. Sallquist

Enclosures

Cc: Tom Stoddard

STATE OF ARIZONA } ss.
County of Mohave }

Linda Delano, being first duly sworn, says that during the publication of the notice, as herein mentioned, he/she was and now is the Legal Clerk of the MOHAVE VALLEY DAILY NEWS, six times weekly newspaper published on Sunday, Monday, Tuesday, Wednesday, Thursday and Friday of each and every week at the city of Bullhead City, in said county.

That said newspaper was printed and published as aforesaid on the following dates, to-wit:

February 2 2005
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That the Public Notice
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of which the annexed copy is a printed and true copy, was printed and inserted in each and every copy of said newspaper printed and published on the dates aforesaid, and in the body of said newspaper and not in a supplement thereto.

Linda Delano
Subscribed and sworn to before me this 9th
day of February, 2005

Susan K. Anderson
Notary Public

(My commission expires July 14, 2007)

**PUBLIC NOTICE OF THE HEARING
FOR VIRGIN MOUNTAIN UTILITIES
COMPANY FOR AN EXTENSION
OF ITS CERTIFICATE OF
CONVENIENCE AND NECESSITY
AND APPROVAL OF A HOOK-UP
FEE TARIFF
Docket No. W-03551A-04-0325**

On April 29, 2004, Arizona Water Company ("Applicant") filed an application requesting approval for an extension of its CC&N to various parts of Mohave County, Arizona, and for approval of a Hook-Up Fee Tariff.

The application is available for inspection during regular business hours at the offices of the Commission in Phoenix, at 1200 West Washington Street, Phoenix, Arizona and at the Applicant's office, #39 Virgin Mountain Dr, Littlefield, Arizona 86432

The Commission will hold a hearing on this matter commencing on April 26, 2005, at 9:30 a.m., at the Commission's offices, 1200 West Washington Street, Phoenix, Arizona. Public comments will be taken on the first day of the hearing.

The law provides for an open public hearing at which, under appropriate circumstances, interested parties may intervene. Intervention shall be permitted to any person entitled by law to intervene and having a direct and substantial interest in the matter. Persons desiring to intervene must file a written motion to intervene with the Commission, which motion should be sent to Applicant or its counsel and to all parties of record, and which, at the minimum, shall contain the following:

1. The name, address, and telephone number of the proposed intervenor and of any party upon whom service of documents is to be made if different than the intervenor.
2. A short statement of the proposed intervenor's interest in the proceeding (e.g., a customer of Applicant, a shareholder of Applicant, a competitor, etc.).
3. A statement certifying that a copy of the motion to intervene has been mailed to the Applicant or its counsel and to all parties of record in the case.

The granting of motions to intervene shall be governed by A.A.C. R14-3-105, except that all motions to intervene must be filed on or before March 20, 2005.
Publish: February 2, 2005
16546445

SEC. 15 TN. 39 N R. 16 W

TOWNSHIP 39N RANGE 16W

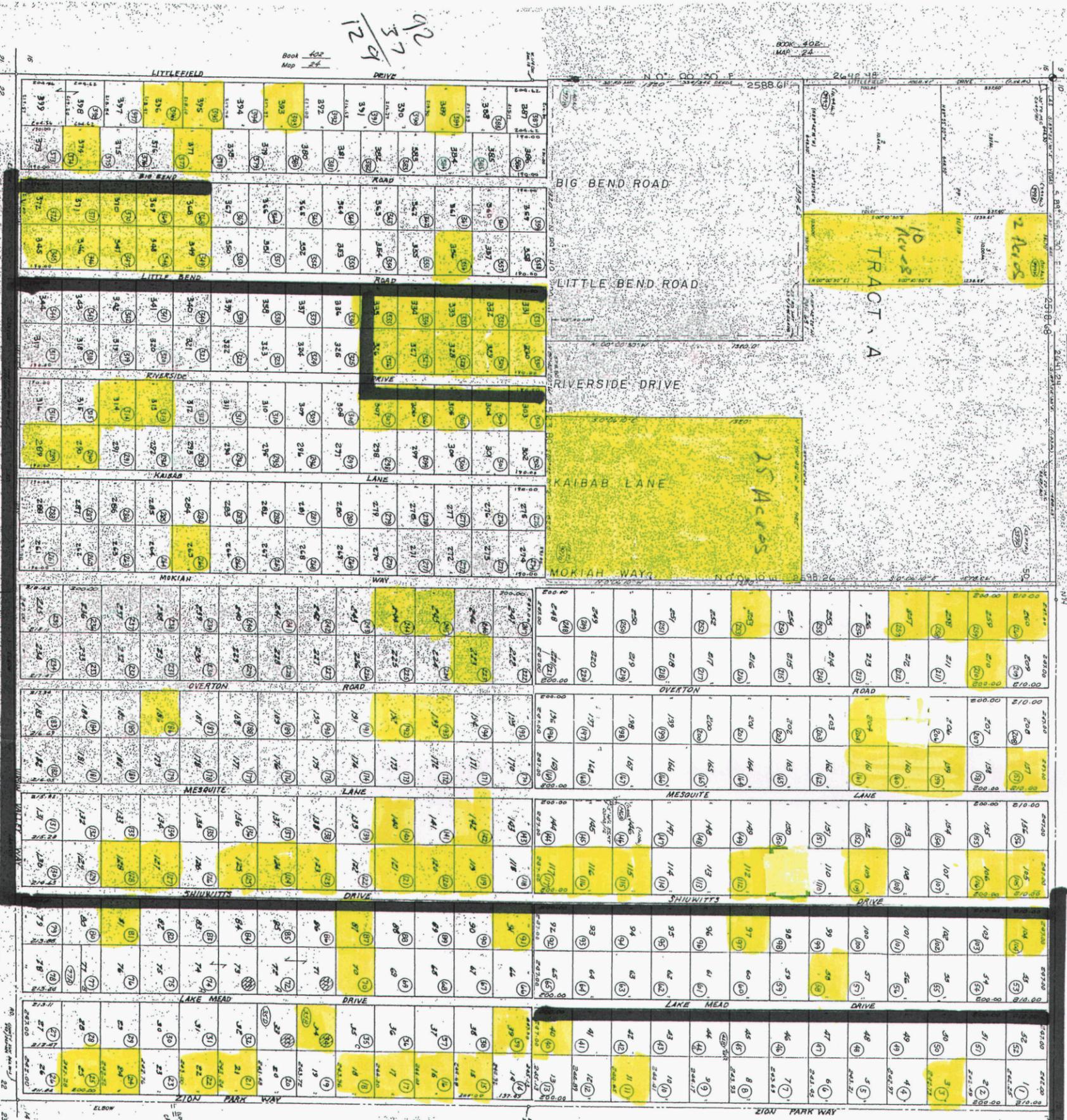
BOOK 402

VIRGIN RIVER RANCHES
VALLEY VIEW ADDITION

VIRGIN RIVER RANCHES
VALLEY VIEW ADDN.

MAP 23

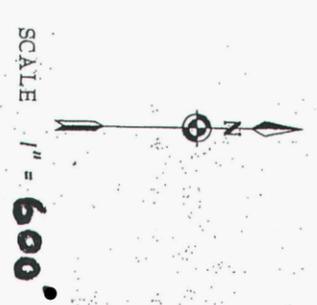
EXHIBIT
A-4



PROPOSED
SERVICE
AREA

Phase 1

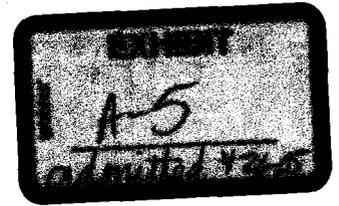
MOHAVE COUNTY ASSASSOR



Handwritten notes: 12/12, 37, 42

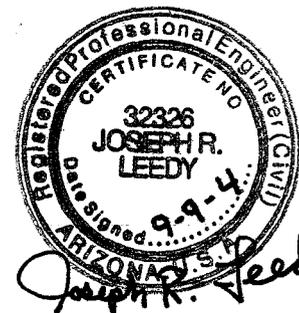
Book 402
Map 23

39N-16W-15



**VIRGIN MOUNTAIN UTILITIES COMPANY
PROPOSED SERVICE AREA EXPANSION**

Engineer's Design Report



Mohave Engineering Associates Inc.
405 East Beale Street
Kingman, AZ 86401
(928) 753-2627

Job # 04-531

**VIRGIN MOUNTAIN UTILITIES COMPANY
PROPOSED SERVICE AREA EXPANSION**

Engineer's Design Report

INTRODUCTION

The existing water service area for Virgin Mountain Utilities Company is located in portions of Section 14 and 11, T39N, R16W, G. & S.R.M., Mohave County Arizona. **Exhibit 1** shows the existing service area. The proposed expansion of the water service area includes all of Section 15, T39N, R16W. The expansion area is located adjacent and east of the existing service area and it includes 399 existing \pm 1-acres lots in Virgin River Ranches Valley View Addition and 160-acres of un-subdivided land. **Exhibit 2** shows the limits of the proposed service area expansion.

The Current CCN no lots are being served in the existing service area due to delays in subdividing the property. The proposed service area expansion will serve existing lots within the Virgin River Ranches Valley View Addition, located in Section 15, T39N, R15W.

This report will demonstrate that there is sufficient capacity, with the proposed improvements to serve the expanded service area.

EXISTING FACILITIES

EXISTING WELL

There is an existing well, submersible pump, 56,870 gallons of water storage, consisting of two 28,435-gallon water storage tank and miscellaneous yard piping located on in a portion of the NW1/4 of the NW1/4 of section 14, T39N, R16W.

The well and tank site is located in FEMA Flood Zone "C", an area of minimal flooding. The facility is graded to direct runoff around and away from the facility. The water system will be operated by Virgin Mountain Utilities Company.

The well (ADWR # 55-553309) was drilled in 1996. Virgin Mountain Utilities has obtained a letter of physical availability for 600 gpm from ADWR. Presently there is a 7.5-hp submersible pump with a capacity of 72 gpm.

The water quality data for the existing well will be submitted along with this report.

EXISTING TANK CAPACITY

The two existing tanks have a combined volume of 56,870 gallons. The required water storage capacity for the system is one days water consumption for all users within the system. The full day of water storage will allow repairs on the well without interrupting service. ADEQ requires that each person have 100 gallons per day and it is estimated there will be approximately 3.5 people per house, which equates to 350 gallons per lot per day.

PROPOSED FACILITIES

HYDRO-PNEUMATIC PRESSURE SYSTEM DESIGN

The booster pump system will consist of a series of 7.5-hp booster pumps and 110-gallon hydro-pneumatic tanks that can be connected in series and expanded as the system demand increases. The water storage tanks will then feed a series of 7.5-hp booster pumps with a capacity of 100 gpm @ 76 psi each. The 7.5-hp pumps will serve to meet the peak domestic demand and pressurize the hydro-pneumatic tanks and one additional pump will serve as backup. Additional pumps will be added as the demand increases. (See table below for phasing improvement requirements.)

The Hydro-Pneumatic Pressure System was designed using the U.S. Department of Health, Education and Welfare, Public Health Service Division of Indian Health Office of Environmental Health manual titled "HYDRO-PNEUMATIC PRESSURE SYSTEMS." The system was also designed in accordance with ADEQ regulations.

Table 3 of ADEQ Engineering Bulletin 10 shows that the peak instantaneous flow for the estimated 824 lots at full build-out is 685 gpm. The tanks will be set to operate between 85 psi and 55 psi. The efficiency of the tank can be determined using the following chart and knowing:

P_1 = high pressure setting = 85 psi,

P_2 = low pressure setting = 55 psi

$P_1/P_2 = (85 + 14.7)/(55 + 14.7) = 1.430$

Assuming V_1 at the High water line (HWL) = 40%

Efficiency (E) = $[(P_1/P_2)-1][100-V_1]$

E = 27%

$V_2 = V_1 - E = 13\% \quad V_2 > 5\% \text{ Ok}$

Required Tank Volume = $V_T = 15(Q_p)/(CE)$

V_T = Minimum Hydro-Pneumatic Tank Size

Q_p = Maximum Pump Capacity (peak instantaneous flow) = 685 gpm

E = Efficiency

C = Maximum Number of Cycles per Hour

$V_T = 15(685)/(6)(.27) = 6343 \text{ Gallons}$

Fifty-eight 110-gallon hydro-pneumatic tanks with a capacity of 6380 gallons or an approved equal will be used.

The hydro-pneumatic system will be built in phases and the capacity will be increased as demand increases. Alternate systems such as variable frequency drives (VFD) can be used as an alternative to the hydro-pneumatic system.

The chart shown below shows the required pumping and hydro-pneumatic capacity for the proposed phasing.

WATER STORAGE TANK CAPACITY

The ADEQ requirement for average annual daily domestic flow for the proposed system is (100 gallons per person x 3.5 persons per lot = 350 gallons per lot per lot. Storage tank capacity will be increased to meet the requirements of each phase of construction. The table shown below shows the water storage requirements for each phase.

WELL PUMP

At full build-out the estimated 824 lots within the service area will require a well pump or pumps that can produce 350 gallons per lot with in a 24 hour period or 288,400 gallons. A well pump that can produce 300 gpm will need to pump approximately 16 hours per day to produce the required volume.

The chart shown below shows the required well pumping capacity for the proposed phasing.

A second well site located on lot 372 in Virgin River Ranches Valley View Addition, might be used as a backup or even an additional storage tank and booster pump location. If the well site is used water quality data will be provided later.

The table below shows the required well capacity for each phase of the water system.

FIRE FLOW

The existing and proposed service areas are not located within a fire district. No fire flow is proposed in the first three phase of the project. Phase 4 construction will include a fire booster pump, fire hydrant assemblies and additional water storage capacity to provide 2 hours of fire flow capacity at 500 gpm. A fill station at the water storage tank will be available for fire fighting purposes.

WATER DISTRIBUTION SYSTEM

Water distribution lines will be extended from the well site through each phase of the development. 10 inch water mains will be used along the north and south section lines and in other major roads where necessary to provide fire flow in phase 4 of the construction. 6 inch water mains will be used in all other streets. **Exhibits 3 – 6** show the proposed water line sizes and locations.

A hydraulic analysis was performed for the proposed water system improvements using a computer program called WaterCAD by Heastad Methods. **Exhibit 3** shows the WaterCAD calculations for

Phase - One. The calculations indicate that the proposed improvements for Phase - One meet ADEQ requirements for pressure and flow. Phase - One includes 125 lots in the expanded service area.

Exhibit 4 shows the WaterCAD calculations for Phase - Two. The calculations indicate that the proposed improvements for Phase - Two meet ADEQ requirements for pressure and flow. Phase - two includes a total of 160 lots (125 from phase - one and 35 in the existing service area).

Exhibit 5 shows the WaterCAD calculations for Phase - Three. The calculations indicate that the proposed improvements for Phase - Three meet ADEQ requirements for pressure and flow. Phase - three includes a total of 494 lots (399 lots in the expanded service area and 95 lots in the existing service area).

Exhibit 6 shows the WaterCAD calculations for Phase - Four. The calculations indicate that the proposed improvements for Phase - Four meet ADEQ requirements for pressure and flow. Phase - four includes 824 lots (529 lots in the expanded service area and 295 lots in the existing service area.) 500 gpm fire flow was also included in the analysis for Phase - Four.

REQUIRED FACILITY CAPACITY CHART

	TOTAL # OF LOTS	PROPOSED WELL CAPACITY	PROPOSED WATER STORAGE CAPACITY (gallons)	REQUIRED WATER STORAGE CAPACITY FOR A ONE DAY BACK-UP SUPPLY (# OF LOTS X 350 G/LOT)	BOOSTER PUMP CAPACITY WITH INSTANTANEOUS FLOW (GPM)
EXISTING WATER SYSTEM	0	72 GPM 103,680 GPD	56,870	0	0
PHASE - 1	125	72 GPM 103,670 GPD	56,870	43,750	188
PHASE - 2	160	72 GPM 103,670 GPD	56,870	56,000	219
PHASE - 3	494	350 GPM 504,000 GPD	200,000	172,900	454
PHASE - 4	824	350 GPM 504,000 GPD	350,000	348,400 288,400 plus 60,000 For Fire (500 gpm for 2-hours)	685 Plus 500 gpm for fire flow

PROJECT TIMING:

Estimated project timing for each phase of construction is shown below.

Phase – One construction will begin immediately and should be completed by January 2005.

Phase – Two construction will begin in March 2005 and will be completed by August 2005.

Phase – Three construction will begin in May of 2005 and will be completed by August 2009, **Five years from the date of this report, (494 lots will be served.)**

Phase – Four construction will begin in August 2009 and will be completed by August 2012. **At total build out 824 lots will be served.**

CONCLUSIONS:

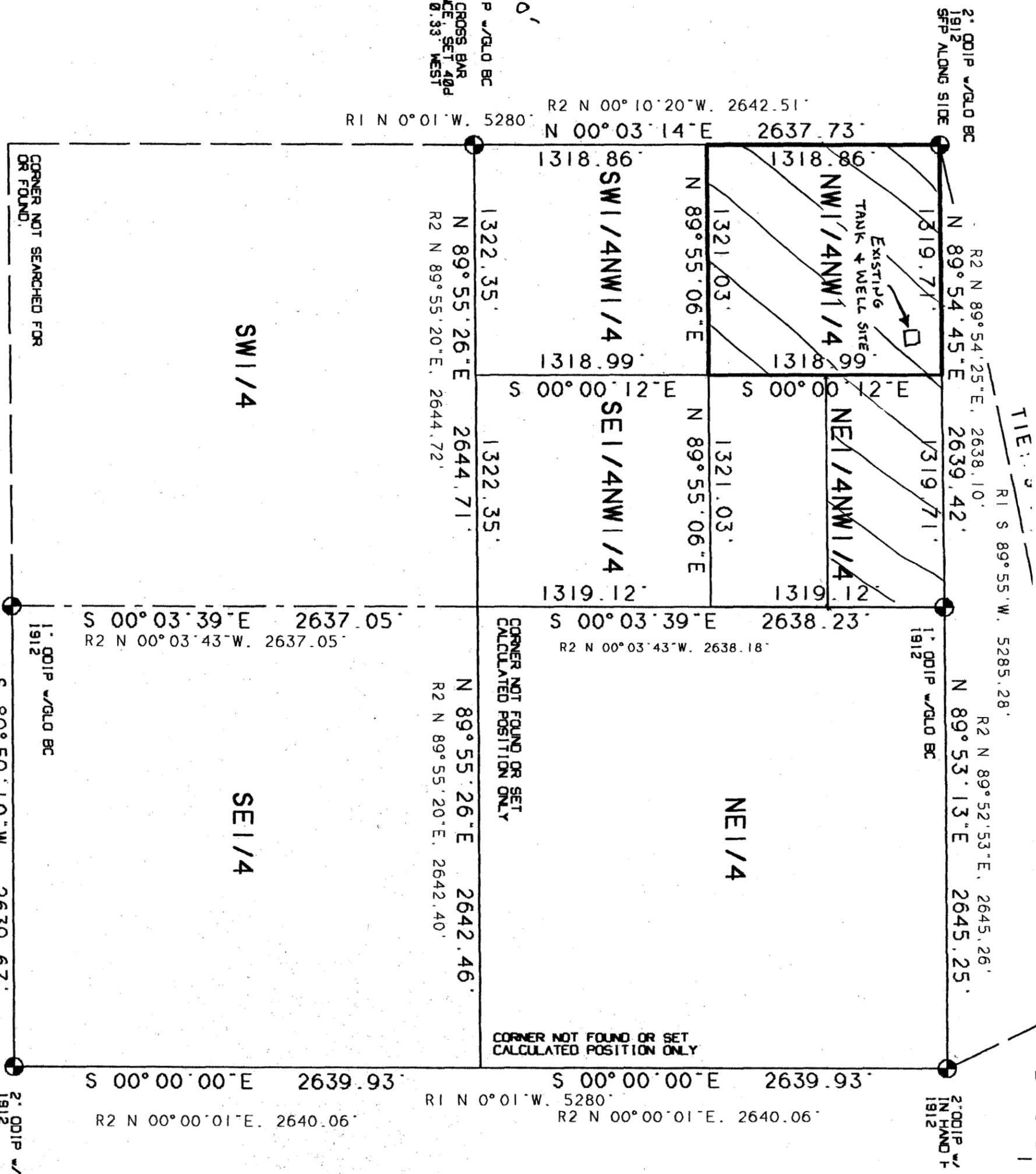
It is the conclusion of this writer that the proposed water system is suitable and has the capacity to serve the proposed service area expansion.

EXHIBIT 1

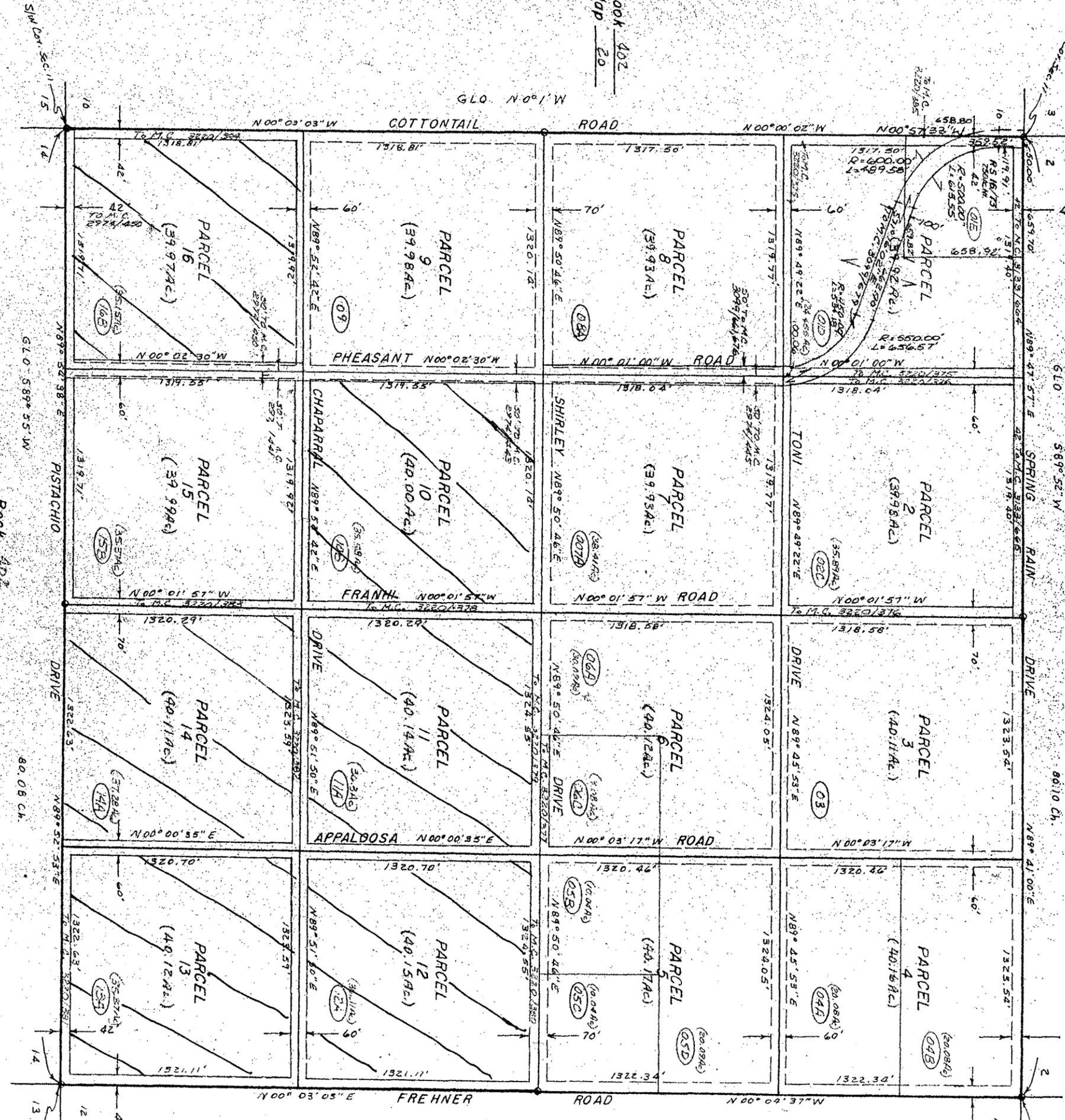
EXISTING SERVICE AREA

EXISTING SERVICE AREA

1" = 600'
 1" ODIP w/GLO BC
 UNDER CROSS BAR
 OF FENCE SET 400'
 NAIL 0.33 WEST



SECTION 14, T 39 N, R 16 W



Book 402
Map 20

Book 402
Map 12

SECTION 11
T 39N
R 16W



SCALE 1"=600'



 - EXISTING SERVICE AREA

39N, 16W, 11

MOHAVE COUNTY

EXHIBIT 2

PROPOSED SERVICE AREA

SEC. 15 TN. 39 N RG. 16 W

TOWNSHIP 39N RANGE 16W

VIRGIN RIVER RANCHES
VALLEY VIEW ADDITION

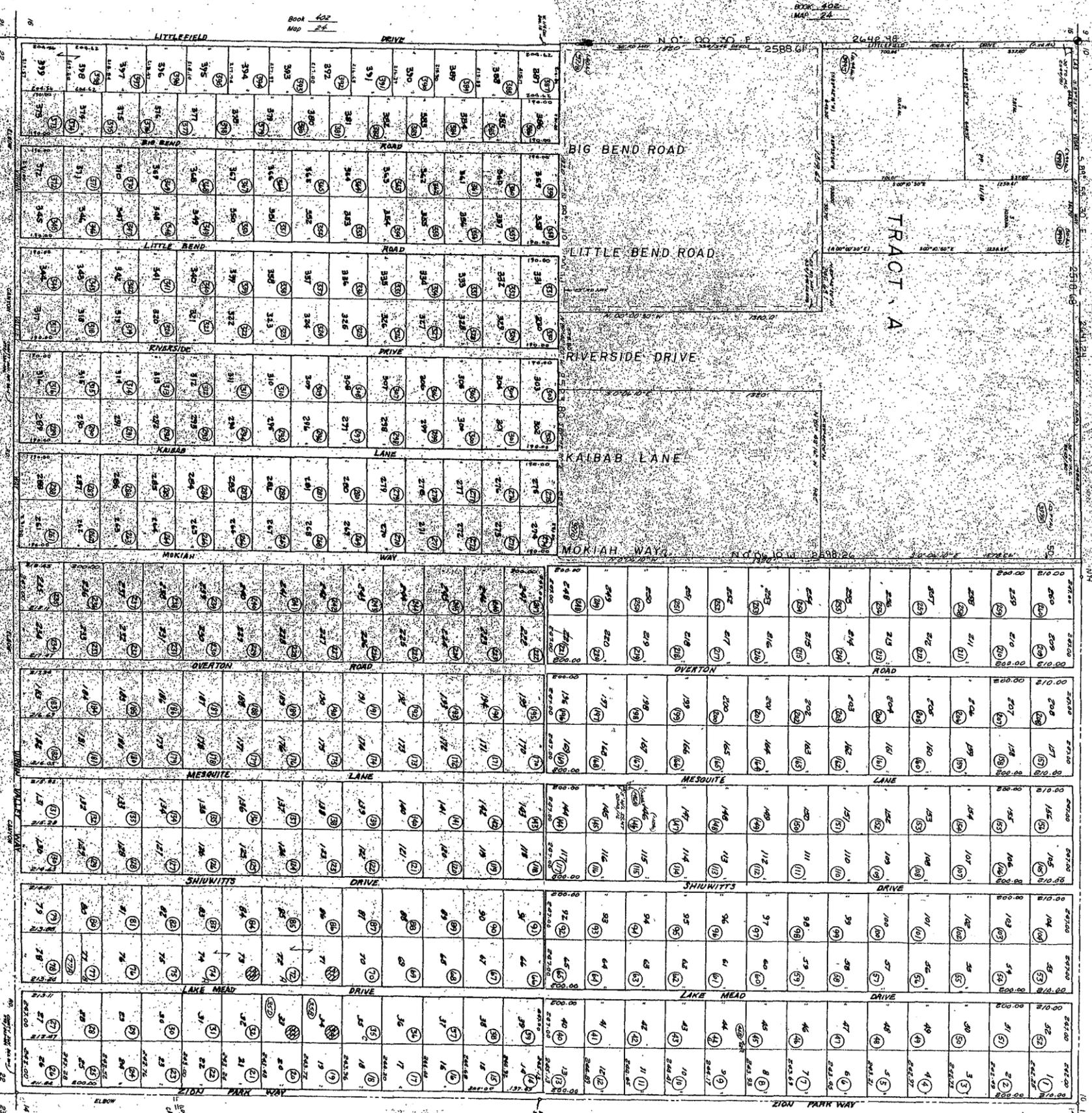
VIRGIN RIVER RANCHES
VALLEY VIEW ADDN.

BOOK 402

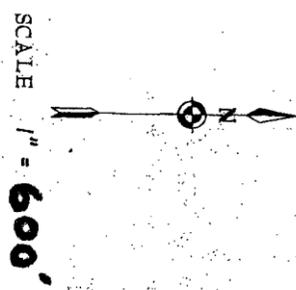
MAP 23

PROPOSED
SERVILE
AREA

MOHAVE COUNTY ASSESSOR



39N - 16W - 15



Book 402
Map 23

Book 402
Map 23

Book 402
Map 23

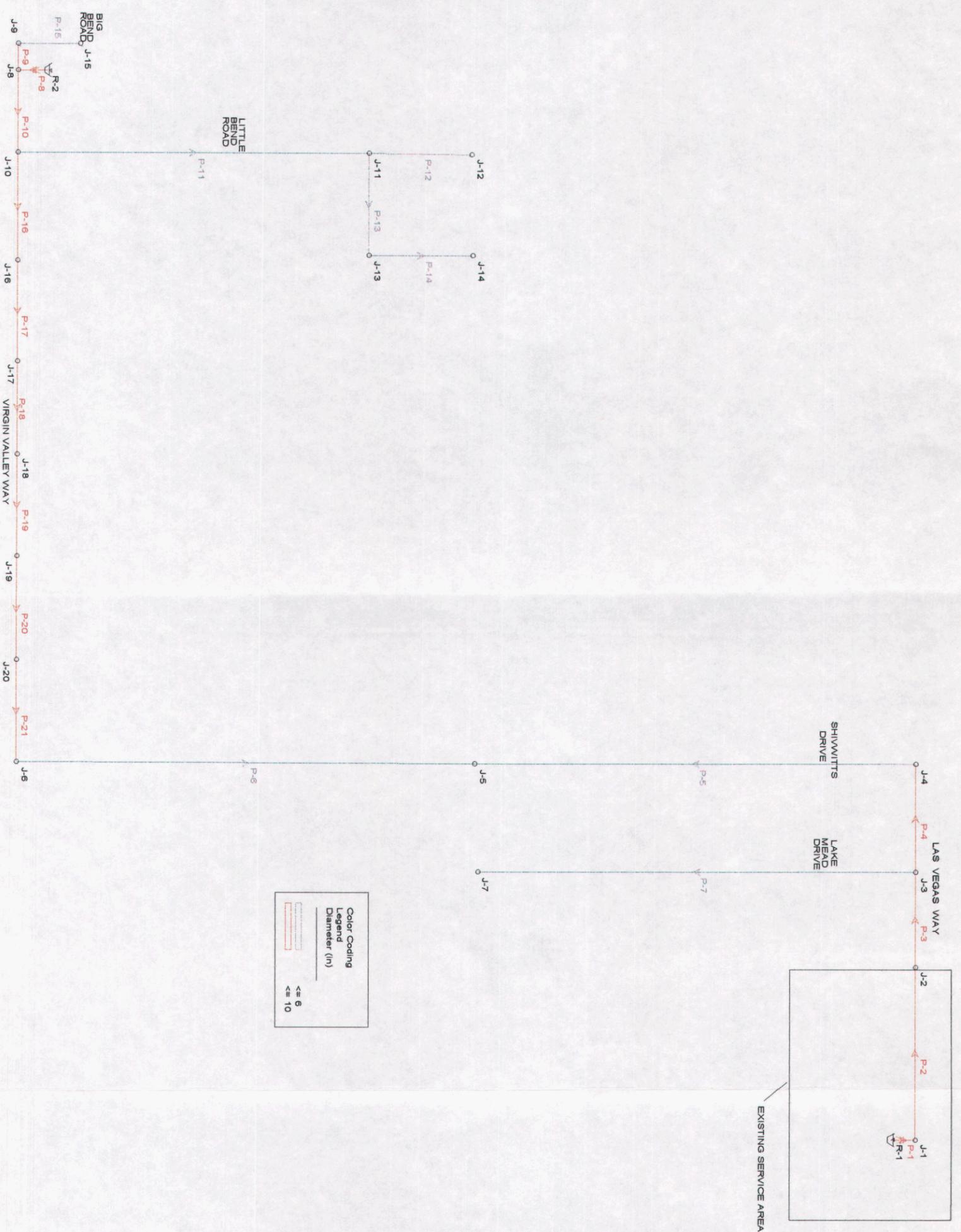
Book 402
Map 23

EXHIBIT 3

**PHASE - 1 HYDRAULIC
ANALYSIS**

Steady State Analysis

PHASE ONE



Color Coding Legend	Diameter (in)
Blue line	6
Red line	10

HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 5, Accuracy = 0.000273
Flow Supplied 107.00 gpm
Flow Demanded 107.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Emptying
P-1 Check Valve: Open
P-8 Check Valve: Open

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.33	82.74
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,091.32	81.00
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,091.32	82.30
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,091.30	65.86
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,091.31	39.92
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,091.28	64.56
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.34	54.20
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.34	54.64
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,091.33	52.90
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,091.26	68.87
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.26	76.65
J-13	1,937.00	Demand	2.00	Fixed	2.00	2,091.26	66.71
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,091.26	74.06
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.34	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.33	51.60
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.32	49.87
J-18	1,979.00	Demand	8.50	Fixed	8.50	2,091.32	48.57
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.32	46.84
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.31	45.54

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	45.18	2,091.35	2,091.35	0.17e-2	0.02
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	45.18	2,091.35	2,091.33	0.02	0.02
P-3	528.00	10	PVC	150.0	1.00	Open	Open	45.18	2,091.33	2,091.32	0.01	0.02
P-4	528.00	10	PVC	150.0	1.00	Open	Open	23.18	2,091.32	2,091.32	0.24e-2	0.46e-2
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	8.18	2,091.32	2,091.30	0.02	0.01
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	-6.82	2,091.30	2,091.31	0.02	0.01
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	11.00	2,091.32	2,091.28	0.04	0.01
P-8	150.00	10	PVC	150.0	1.00	Open	Open	61.82	2,091.35	2,091.34	0.01	0.03
P-9	128.00	10	PVC	150.0	1.00	Open	Open	0.00	2,091.34	2,091.34	0.00	0.00
P-10	400.00	10	PVC	150.0	1.00	Open	Open	61.82	2,091.34	2,091.33	0.01	0.03
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	17.50	2,091.33	2,091.26	0.07	0.03
P-12	570.00	6	PVC	150.0	1.00	Open	Open	0.00	2,091.26	2,091.26	0.00	0.00
P-13	528.00	6	PVC	150.0	1.00	Open	Open	6.50	2,091.26	2,091.26	0.27e-2	0.01
P-14	570.00	6	PVC	150.0	1.00	Open	Open	4.50	2,091.26	2,091.26	0.15e-2	0.26e-2
P-15	400.00	6	PVC	150.0	1.00	Open	Open	0.00	2,091.34	2,091.34	0.00	0.00
P-16	528.00	10	PVC	150.0	1.00	Open	Open	31.32	2,091.33	2,091.33	0.44e-2	0.01
P-17	528.00	10	PVC	150.0	1.00	Open	Open	31.32	2,091.33	2,091.32	0.44e-2	0.01
P-18	528.00	10	PVC	150.0	1.00	Open	Open	31.32	2,091.32	2,091.32	0.44e-2	0.01
P-19	528.00	10	PVC	150.0	1.00	Open	Open	22.82	2,091.32	2,091.32	0.24e-2	0.46e-2
P-20	528.00	10	PVC	150.0	1.00	Open	Open	22.82	2,091.32	2,091.31	0.24e-2	0.46e-2
P-21	528.00	10	PVC	150.0	1.00	Open	Open	22.82	2,091.31	2,091.31	0.24e-2	0.46e-2

Steady State Analysis Reservoir Report

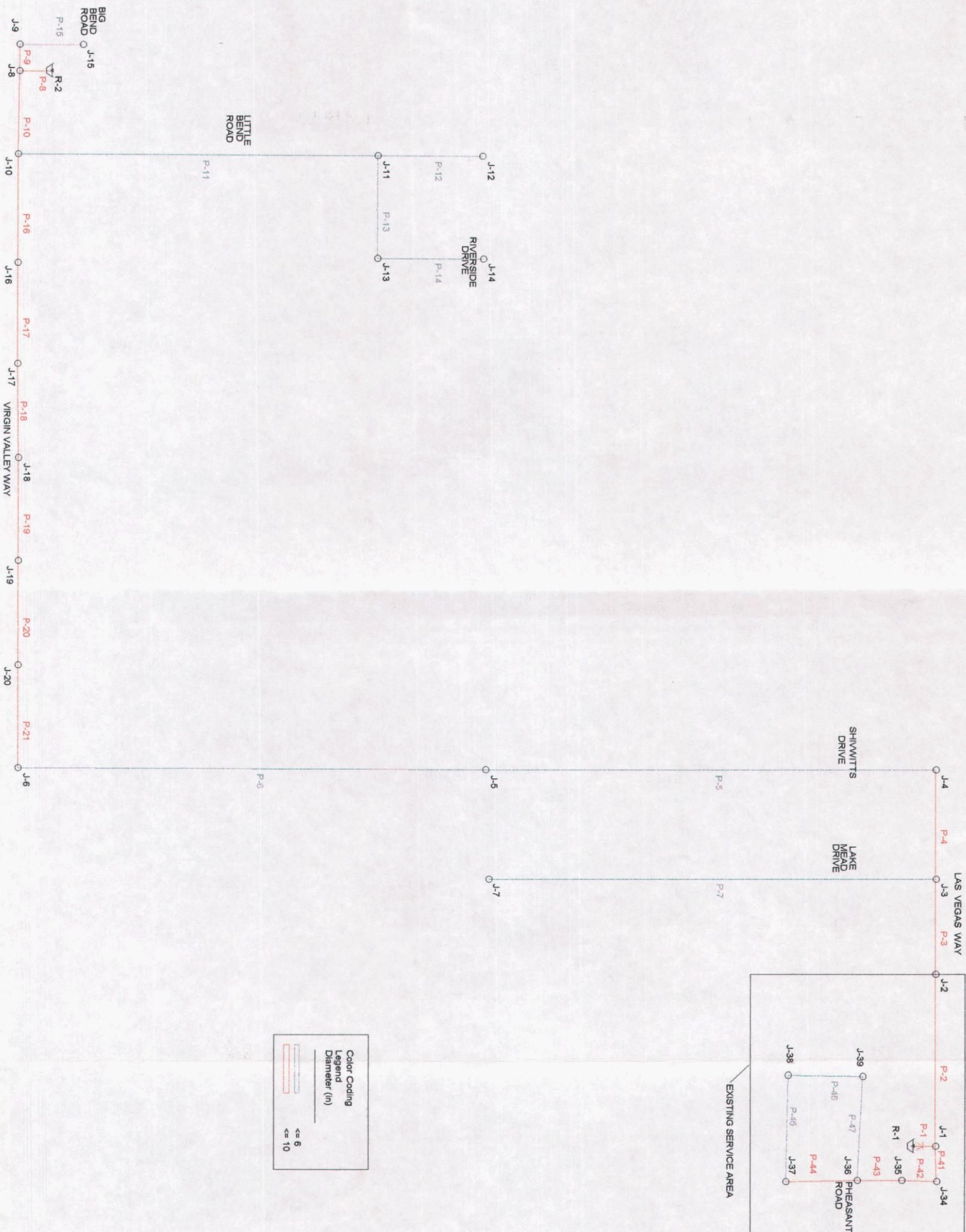
Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-45.18	2,091.35
R-2	2,091.35	-61.82	2,091.35

EXHIBIT 4

PHASE - 2 HYDRAULIC ANALYSIS

Steady State Analysis

PHASE TWO



Color Coding Legend	
— (Red line)	Diameter (in) <= 6
— (Blue line)	Diameter (in) <= 10

HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 5, Accuracy = 0.000498
Flow Supplied 137.00 gpm
Flow Demanded 137.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Closed Or Stagnant
P-1 Check Valve: Open
P-8 Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.34	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.24	82.70
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,091.20	80.95
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,091.17	82.24
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,090.04	65.31
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,089.31	39.05
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,091.16	64.50
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,089.28	53.31
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,089.28	53.74
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,089.28	52.01
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,089.21	67.98
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,089.21	75.77
J-13	1,937.00	Demand	2.00	Fixed	2.00	2,089.21	65.82
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,089.21	73.17
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,089.28	58.07
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,089.29	50.72
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,089.29	48.99
J-18	1,979.00	Demand	8.50	Fixed	8.50	2,089.29	47.69
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,089.30	45.97
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,089.31	44.67
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.33	70.20
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.33	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.33	74.09
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.33	65.87
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,091.31	69.32
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,091.31	71.92

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.35	82.75
J-3	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-4	1,901.00	Demand	0.00	Fixed	0.00	2,091.35	82.31
J-5	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-6	1,999.00	Demand	0.00	Fixed	0.00	2,091.35	39.94
J-7	1,942.00	Demand	0.00	Fixed	0.00	2,091.35	64.58
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.35	54.21
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-10	1,969.00	Demand	0.00	Fixed	0.00	2,091.35	52.91
J-11	1,932.00	Demand	0.00	Fixed	0.00	2,091.35	68.91
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.35	76.69
J-13	1,937.00	Demand	0.00	Fixed	0.00	2,091.35	66.75
J-14	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.35	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.35	51.61
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.35	49.88
J-18	1,979.00	Demand	0.00	Fixed	0.00	2,091.35	48.58
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.35	46.85
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.35	45.56
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.35	70.21
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-38	1,931.00	Demand	0.00	Fixed	0.00	2,091.35	69.34
J-39	1,925.00	Demand	0.00	Fixed	0.00	2,091.35	71.94

STATIC
PRESSURE

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	137.00	2,091.35	2,091.34	0.01	0.18
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	107.00	2,091.34	2,091.24	0.09	0.08
P-3	528.00	10	PVC	150.0	1.00	Open	Open	107.00	2,091.24	2,091.20	0.04	0.08
P-4	528.00	10	PVC	150.0	1.00	Open	Open	85.00	2,091.20	2,091.17	0.03	0.05
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	70.00	2,091.17	2,090.04	1.13	0.43
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	55.00	2,090.04	2,089.31	0.72	0.27
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	11.00	2,091.20	2,091.16	0.04	0.01
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,089.28	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	0.00	2,089.28	2,089.28	0.00	0.00
P-10	400.00	10	PVC	150.0	1.00	Open	Open	-0.11e-2	2,089.28	2,089.28	0.00	0.00
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	17.50	2,089.28	2,089.21	0.07	0.03
P-12	570.00	6	PVC	150.0	1.00	Open	Open	0.00	2,089.21	2,089.21	0.00	0.00
P-13	528.00	6	PVC	150.0	1.00	Open	Open	6.50	2,089.21	2,089.21	0.29e-2	0.01
P-14	570.00	6	PVC	150.0	1.00	Open	Open	4.50	2,089.21	2,089.21	0.15e-2	0.26e-2
P-15	400.00	6	PVC	150.0	1.00	Open	Open	0.00	2,089.28	2,089.28	0.00	0.00
P-16	528.00	10	PVC	150.0	1.00	Open	Open	-30.50	2,089.28	2,089.29	0.42e-2	0.01
P-17	528.00	10	PVC	150.0	1.00	Open	Open	-30.50	2,089.29	2,089.29	0.42e-2	0.01
P-18	528.00	10	PVC	150.0	1.00	Open	Open	-30.50	2,089.29	2,089.29	0.42e-2	0.01
P-19	528.00	10	PVC	150.0	1.00	Open	Open	-39.00	2,089.29	2,089.30	0.01	0.01
P-20	528.00	10	PVC	150.0	1.00	Open	Open	-39.00	2,089.30	2,089.31	0.01	0.01
P-21	528.00	10	PVC	150.0	1.00	Open	Open	-39.00	2,089.31	2,089.31	0.01	0.01
P-41	150.00	10	PVC	150.0	1.00	Open	Open	30.00	2,091.34	2,091.33	0.15e-2	0.01
P-42	350.00	10	PVC	150.0	1.00	Open	Open	30.00	2,091.33	2,091.33	0.27e-2	0.01
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,091.33	2,091.33	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,091.33	2,091.33	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,091.33	2,091.31	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,091.31	2,091.31	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,091.31	2,091.33	0.02	0.03

Steady State Analysis Reservoir Report

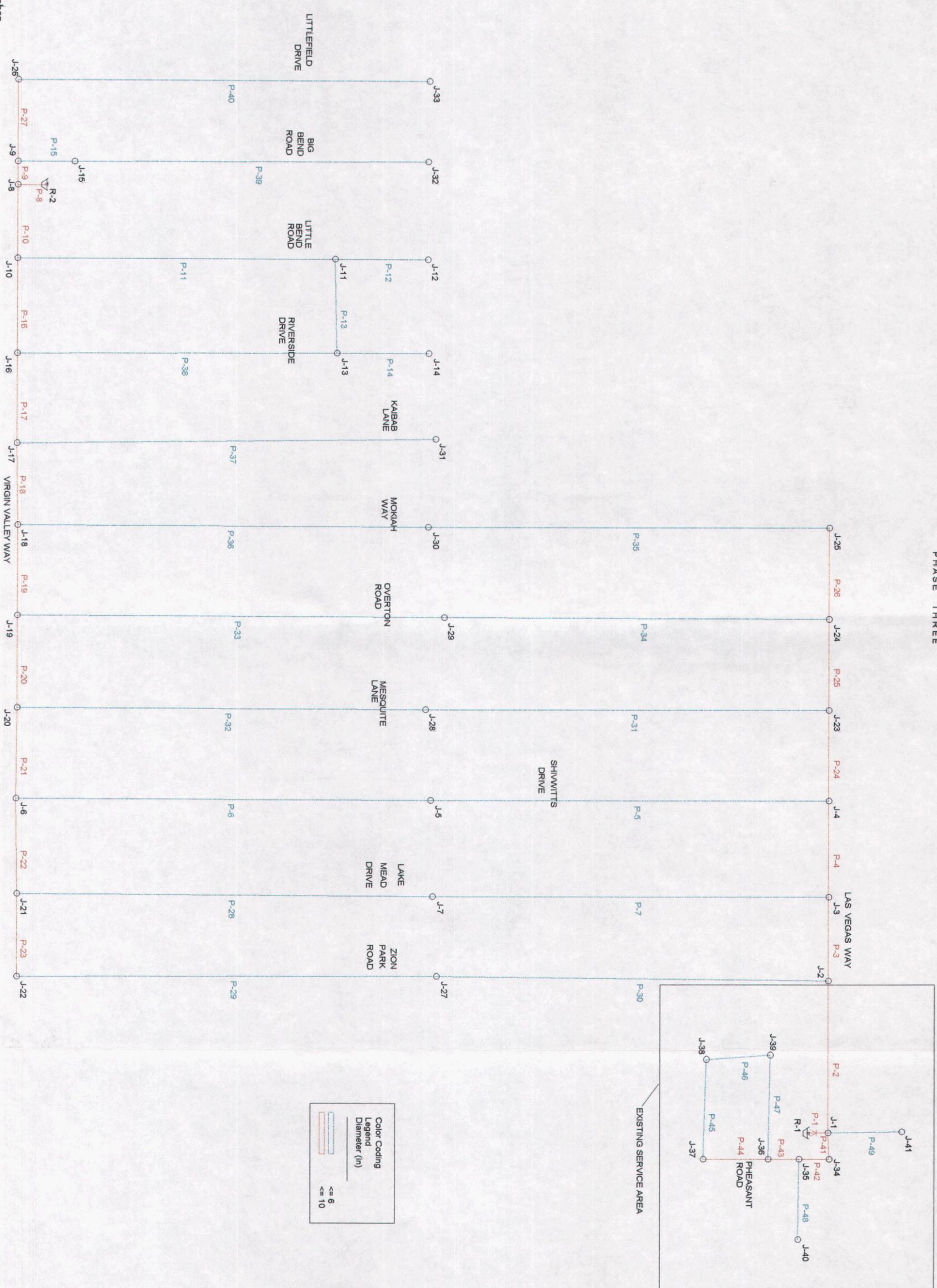
Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-137.00	2,091.35
R-2	2,091.35	0.00	2,091.35

EXHIBIT 5

PHASE - 3 HYDRAULIC ANALYSIS

Steady State Analysis

PHASE THREE



Color Coding Legend	
—	Legend Diameter (in)
—	≤ 6
—	≤ 10

HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced	Trials = 5, Accuracy = 0.000151
Flow Supplied	421.00 gpm
Flow Demanded	421.00 gpm
Flow Stored	0.00 gpm
R-1	Reservoir: Emptying
R-2	Reservoir: Closed Or Stagnant
P-1	Check Valve: Open
P-8	Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.23	69.72
J-2	1,900.00	Demand	11.00	Fixed	11.00	2,090.44	82.35
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,090.19	80.51
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,090.03	81.74
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,089.53	65.10
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,089.30	39.05
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,089.64	63.85
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,089.07	53.22
J-9	1,965.00	Demand	11.00	Fixed	11.00	2,089.06	53.65
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,089.08	51.93
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,089.04	67.91
J-12	1,914.00	Demand	5.00	Fixed	5.00	2,089.04	75.69
J-13	1,937.00	Demand	7.50	Fixed	7.50	2,089.04	65.75
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,089.04	73.10
J-15	1,955.00	Demand	11.00	Fixed	11.00	2,089.04	57.96
J-16	1,972.00	Demand	11.00	Fixed	11.00	2,089.10	50.64
J-17	1,976.00	Demand	11.00	Fixed	11.00	2,089.14	48.93
J-18	1,979.00	Demand	11.00	Fixed	11.00	2,089.21	47.66
J-19	1,983.00	Demand	11.00	Fixed	11.00	2,089.25	45.95
J-20	1,986.00	Demand	11.00	Fixed	11.00	2,089.28	44.66
J-21	1,993.00	Demand	11.00	Fixed	11.00	2,089.32	41.65
J-22	1,996.00	Demand	11.00	Fixed	11.00	2,089.32	40.35
J-23	1,898.00	Demand	11.00	Fixed	11.00	2,089.94	83.00
J-24	1,895.00	Demand	11.00	Fixed	11.00	2,089.90	84.28
J-25	1,892.00	Demand	11.00	Fixed	11.00	2,089.89	85.57
J-26	1,962.00	Demand	11.00	Fixed	11.00	2,089.06	54.95
J-27	1,946.00	Demand	11.00	Fixed	11.00	2,089.76	62.17
J-28	1,933.00	Demand	11.00	Fixed	11.00	2,089.52	67.68
J-29	1,926.00	Demand	11.00	Fixed	11.00	2,089.48	70.70
J-30	1,920.00	Demand	11.00	Fixed	11.00	2,089.45	73.28
J-31	1,915.00	Demand	11.00	Fixed	11.00	2,089.11	75.29
J-32	1,909.00	Demand	11.00	Fixed	11.00	2,089.01	77.84
J-33	1,904.00	Demand	11.00	Fixed	11.00	2,089.02	80.01
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,090.69	69.92
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,090.69	69.49
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,090.69	73.81
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,090.69	65.59
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,090.66	69.04
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,090.66	71.64
J-40	1,935.00	Demand	17.00	Fixed	17.00	2,090.66	67.31
J-41	1,920.00	Demand	34.00	Fixed	34.00	2,091.12	74.00

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.35	82.75
J-3	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-4	1,901.00	Demand	0.00	Fixed	0.00	2,091.35	82.31
J-5	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-6	1,999.00	Demand	0.00	Fixed	0.00	2,091.35	39.94
J-7	1,942.00	Demand	0.00	Fixed	0.00	2,091.35	64.58
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.35	54.21
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-10	1,969.00	Demand	0.00	Fixed	0.00	2,091.35	52.91
J-11	1,932.00	Demand	0.00	Fixed	0.00	2,091.35	68.91
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.35	76.69
J-13	1,937.00	Demand	0.00	Fixed	0.00	2,091.35	66.75
J-14	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.35	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.35	51.61
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.35	49.88
J-18	1,979.00	Demand	0.00	Fixed	0.00	2,091.35	48.58
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.35	46.85
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.35	45.56
J-21	1,993.00	Demand	0.00	Fixed	0.00	2,091.35	42.53
J-22	1,996.00	Demand	0.00	Fixed	0.00	2,091.35	41.23
J-23	1,898.00	Demand	0.00	Fixed	0.00	2,091.35	83.61
J-24	1,895.00	Demand	0.00	Fixed	0.00	2,091.35	84.91
J-25	1,892.00	Demand	0.00	Fixed	0.00	2,091.35	86.21
J-26	1,962.00	Demand	0.00	Fixed	0.00	2,091.35	55.94
J-27	1,946.00	Demand	0.00	Fixed	0.00	2,091.35	62.85
J-28	1,933.00	Demand	0.00	Fixed	0.00	2,091.35	68.48
J-29	1,926.00	Demand	0.00	Fixed	0.00	2,091.35	71.50
J-30	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-31	1,915.00	Demand	0.00	Fixed	0.00	2,091.35	76.26
J-32	1,909.00	Demand	0.00	Fixed	0.00	2,091.35	78.85
J-33	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.35	70.21
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-38	1,931.00	Demand	0.00	Fixed	0.00	2,091.35	69.34
J-39	1,925.00	Demand	0.00	Fixed	0.00	2,091.35	71.94
J-40	1,935.00	Demand	0.00	Fixed	0.00	2,091.35	67.61
J-41	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10

STATIC
PRESSURE

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	421.00	2,091.35	2,091.23	0.12	1.54
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	340.00	2,091.23	2,090.44	0.79	0.67
P-3	528.00	10	PVC	150.0	1.00	Open	Open	275.45	2,090.44	2,090.19	0.25	0.48
P-4	528.00	10	PVC	150.0	1.00	Open	Open	217.23	2,090.19	2,090.03	0.16	0.31
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	44.76	2,090.03	2,089.53	0.49	0.19
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	29.76	2,089.53	2,089.30	0.23	0.09
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	47.21	2,090.19	2,089.64	0.55	0.21
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,089.07	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	55.00	2,089.07	2,089.06	0.37e-2	0.03
P-10	400.00	10	PVC	150.0	1.00	Open	Open	-55.00	2,089.07	2,089.08	0.01	0.02
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	11.84	2,089.08	2,089.04	0.03	0.02
P-12	570.00	6	PVC	150.0	1.00	Open	Open	5.00	2,089.04	2,089.04	0.2e-2	0.34e-2
P-13	528.00	6	PVC	150.0	1.00	Open	Open	-4.16	2,089.04	2,089.04	0.12e-2	0.23e-2
P-14	570.00	6	PVC	150.0	1.00	Open	Open	4.50	2,089.04	2,089.04	0.15e-2	0.26e-2
P-15	400.00	6	PVC	150.0	1.00	Open	Open	22.00	2,089.06	2,089.04	0.02	0.05
P-16	528.00	10	PVC	150.0	1.00	Open	Open	-79.84	2,089.08	2,089.10	0.02	0.05
P-17	528.00	10	PVC	150.0	1.00	Open	Open	-107.00	2,089.10	2,089.14	0.04	0.08
P-18	528.00	10	PVC	150.0	1.00	Open	Open	-129.00	2,089.14	2,089.21	0.06	0.12
P-19	528.00	10	PVC	150.0	1.00	Open	Open	-108.96	2,089.21	2,089.25	0.04	0.08
P-20	528.00	10	PVC	150.0	1.00	Open	Open	-89.90	2,089.25	2,089.28	0.03	0.06
P-21	528.00	10	PVC	150.0	1.00	Open	Open	-70.53	2,089.28	2,089.30	0.02	0.04
P-22	528.00	10	PVC	150.0	1.00	Open	Open	-56.77	2,089.30	2,089.32	0.01	0.03
P-23	528.00	10	PVC	150.0	1.00	Open	Open	-31.55	2,089.32	2,089.32	0.44e-2	0.01
P-24	528.00	10	PVC	150.0	1.00	Open	Open	157.47	2,090.03	2,089.94	0.09	0.17
P-25	528.00	10	PVC	150.0	1.00	Open	Open	105.10	2,089.94	2,089.90	0.04	0.08
P-26	528.00	10	PVC	150.0	1.00	Open	Open	53.04	2,089.90	2,089.89	0.01	0.02
P-27	528.00	10	PVC	150.0	1.00	Open	Open	22.00	2,089.06	2,089.06	0.22e-2	0.42e-2
P-28	2,640.00	6	PVC	150.0	1.00	Open	Open	36.21	2,089.64	2,089.32	0.33	0.12
P-29	2,640.00	6	PVC	150.0	1.00	Open	Open	-42.55	2,089.32	2,089.76	0.44	0.17
P-30	2,640.00	6	PVC	150.0	1.00	Open	Open	-53.55	2,089.76	2,090.44	0.68	0.26
P-31	2,640.00	6	PVC	150.0	1.00	Open	Open	41.37	2,089.94	2,089.52	0.42	0.16
P-32	2,640.00	6	PVC	150.0	1.00	Open	Open	30.37	2,089.52	2,089.28	0.24	0.09
P-33	2,640.00	6	PVC	150.0	1.00	Open	Open	-30.06	2,089.25	2,089.48	0.23	0.09
P-34	2,640.00	6	PVC	150.0	1.00	Open	Open	-41.06	2,089.48	2,089.90	0.41	0.16
P-35	2,640.00	6	PVC	150.0	1.00	Open	Open	42.04	2,089.89	2,089.45	0.43	0.16
P-36	2,640.00	6	PVC	150.0	1.00	Open	Open	31.04	2,089.45	2,089.21	0.25	0.09
P-37	2,640.00	6	PVC	150.0	1.00	Open	Open	11.00	2,089.14	2,089.11	0.04	0.01
P-38	2,070.00	6	PVC	150.0	1.00	Open	Open	16.16	2,089.10	2,089.04	0.06	0.03
P-39	2,240.00	6	PVC	150.0	1.00	Open	Open	11.00	2,089.04	2,089.01	0.03	0.01
P-40	2,640.00	6	PVC	150.0	1.00	Open	Open	11.00	2,089.06	2,089.02	0.04	0.01
P-41	2,640.00	6	PVC	150.0	1.00	Open	Open	47.00	2,091.23	2,090.69	0.53	0.20
P-42	350.00	10	PVC	150.0	1.00	Open	Open	47.00	2,090.69	2,090.69	0.01	0.02
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,090.69	2,090.69	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,090.69	2,090.69	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,090.69	2,090.66	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,090.66	2,090.66	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,090.66	2,090.69	0.02	0.03
P-48	1,000.00	6	PVC	150.0	1.00	Open	Open	17.00	2,090.69	2,090.66	0.03	0.03
P-49	1,000.00	6	PVC	150.0	1.00	Open	Open	34.00	2,091.23	2,091.12	0.11	0.11

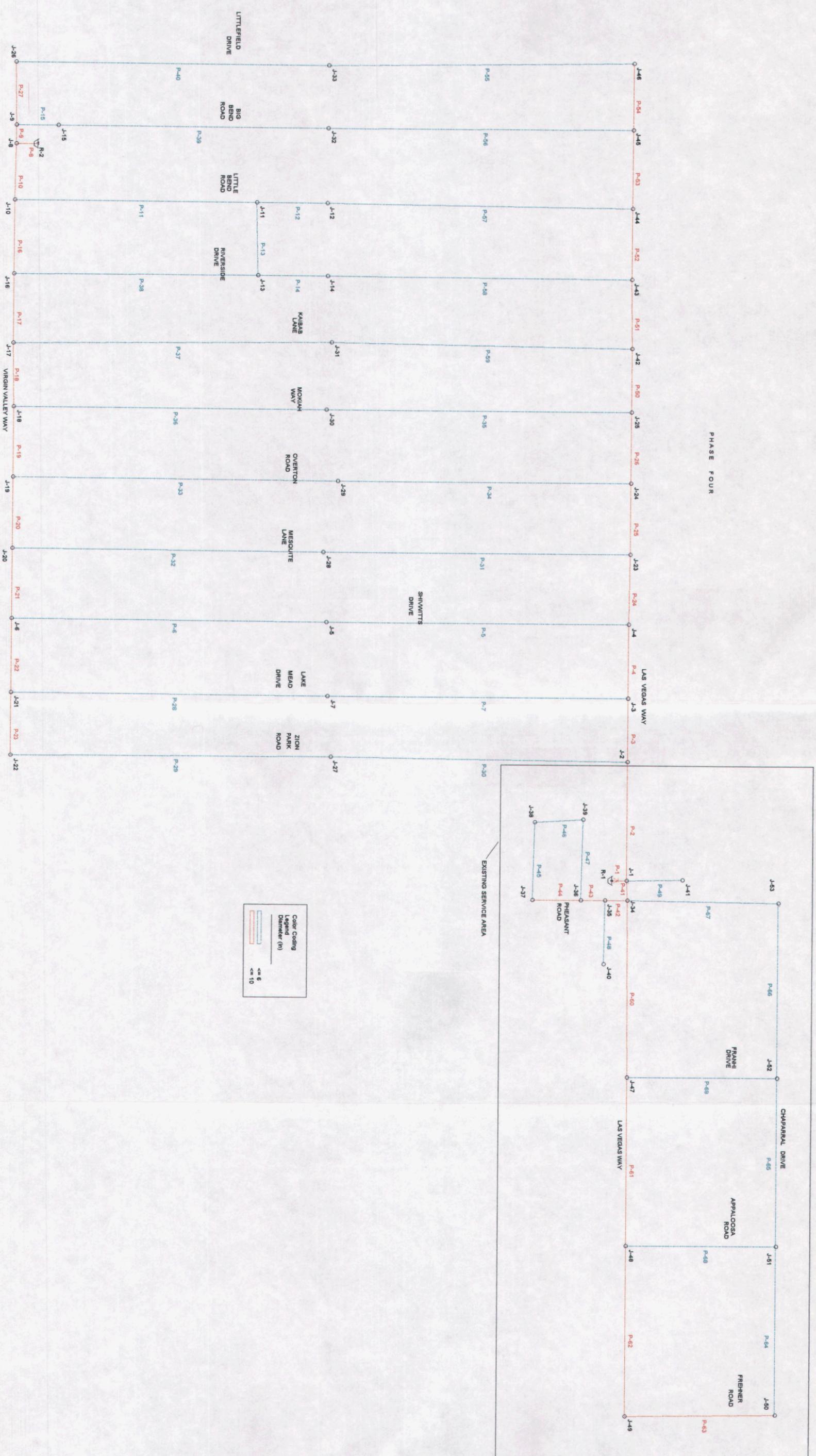
Steady State Analysis Reservoir Report

Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-421.00	2,091.35
R-2	2,091.35	0.00	2,091.35

EXHIBIT 6

PHASE - 4 HYDRAULIC ANALYSIS

Steady State Analysis



HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 6, Accuracy = 0.000057
Flow Supplied 701.00 gpm
Flow Demanded 701.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Closed Or Stagnant
P-1 Check Valve: Open
P-8 Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.03	69.63
J-2	1,900.00	Demand	11.00	Fixed	11.00	2,089.70	82.03
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,089.24	80.10
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,088.90	81.25
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,088.49	64.65
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,088.32	38.62
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,088.68	63.43
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,088.18	52.83
J-9	1,965.00	Demand	11.00	Fixed	11.00	2,088.17	53.26
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,088.18	51.54
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,088.18	67.54
J-12	1,914.00	Demand	5.00	Fixed	5.00	2,088.18	75.32
J-13	1,937.00	Demand	7.50	Fixed	7.50	2,088.18	65.38
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,088.19	72.73
J-15	1,955.00	Demand	11.00	Fixed	11.00	2,088.17	57.59
J-16	1,972.00	Demand	11.00	Fixed	11.00	2,088.20	50.25
J-17	1,976.00	Demand	11.00	Fixed	11.00	2,088.22	48.53
J-18	1,979.00	Demand	11.00	Fixed	11.00	2,088.24	47.24
J-19	1,983.00	Demand	11.00	Fixed	11.00	2,088.27	45.52
J-20	1,986.00	Demand	11.00	Fixed	11.00	2,088.30	44.24
J-21	1,993.00	Demand	11.00	Fixed	11.00	2,088.33	41.23
J-22	1,996.00	Demand	11.00	Fixed	11.00	2,088.34	39.93
J-23	1,898.00	Demand	11.00	Fixed	11.00	2,088.66	82.45
J-24	1,895.00	Demand	11.00	Fixed	11.00	2,088.49	83.67
J-25	1,892.00	Demand	11.00	Fixed	11.00	2,088.37	84.92
J-26	1,962.00	Demand	11.00	Fixed	11.00	2,088.17	54.56
J-27	1,946.00	Demand	11.00	Fixed	11.00	2,088.89	61.79
J-28	1,933.00	Demand	11.00	Fixed	11.00	2,088.41	67.21
J-29	1,926.00	Demand	11.00	Fixed	11.00	2,088.33	70.20
J-30	1,920.00	Demand	11.00	Fixed	11.00	2,088.27	72.76
J-31	1,915.00	Demand	11.00	Fixed	11.00	2,088.22	74.91
J-32	1,909.00	Demand	11.00	Fixed	11.00	2,088.16	77.48
J-33	1,904.00	Demand	11.00	Fixed	11.00	2,088.17	79.64
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,090.97	70.04
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,090.97	69.61
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,090.96	73.93
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,090.96	65.71
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,090.94	69.16
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,090.94	71.76
J-40	1,935.00	Demand	17.00	Fixed	17.00	2,090.93	67.43
J-41	1,920.00	Demand	34.00	Fixed	34.00	2,090.91	73.91
J-42	1,883.00	Demand	22.00	Fixed	22.00	2,088.28	88.77
J-43	1,874.00	Demand	22.00	Fixed	22.00	2,088.23	92.64
J-44	1,864.00	Demand	22.00	Fixed	22.00	2,088.20	96.95
J-45	1,855.00	Demand	22.00	Fixed	22.00	2,088.18	100.84
J-46	1,855.00	Demand	23.00	Fixed	23.00	2,088.18	100.83
J-47	1,930.00	Demand	24.00	Fixed	24.00	2,090.82	69.54
J-48	1,965.00	Demand	24.00	Fixed	24.00	2,090.76	54.38
J-49	2,000.00	Demand	24.00	Fixed	24.00	2,090.73	39.24
J-50	1,980.00	Demand	25.00	Fixed	25.00	2,090.73	47.88
J-51	1,960.00	Demand	24.00	Fixed	24.00	2,090.73	56.53
J-52	1,930.00	Demand	24.00	Fixed	24.00	2,090.75	69.52
J-53	1,890.00	Demand	24.00	Fixed	24.00	2,090.78	86.83

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-2	1,900.00	Demand	0.00	Fixed	0.00	2,091.35	82.75
J-3	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-4	1,901.00	Demand	0.00	Fixed	0.00	2,091.35	82.31
J-5	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-6	1,999.00	Demand	0.00	Fixed	0.00	2,091.35	39.94
J-7	1,942.00	Demand	0.00	Fixed	0.00	2,091.35	64.58
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,091.35	54.21
J-9	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-10	1,969.00	Demand	0.00	Fixed	0.00	2,091.35	52.91
J-11	1,932.00	Demand	0.00	Fixed	0.00	2,091.35	68.91
J-12	1,914.00	Demand	0.00	Fixed	0.00	2,091.35	76.69
J-13	1,937.00	Demand	0.00	Fixed	0.00	2,091.35	66.75
J-14	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-15	1,955.00	Demand	0.00	Fixed	0.00	2,091.35	58.96
J-16	1,972.00	Demand	0.00	Fixed	0.00	2,091.35	51.61
J-17	1,976.00	Demand	0.00	Fixed	0.00	2,091.35	49.88
J-18	1,979.00	Demand	0.00	Fixed	0.00	2,091.35	48.58
J-19	1,983.00	Demand	0.00	Fixed	0.00	2,091.35	46.85
J-20	1,986.00	Demand	0.00	Fixed	0.00	2,091.35	45.56
J-21	1,993.00	Demand	0.00	Fixed	0.00	2,091.35	42.53
J-22	1,996.00	Demand	0.00	Fixed	0.00	2,091.35	41.23
J-23	1,898.00	Demand	0.00	Fixed	0.00	2,091.35	83.61
J-24	1,895.00	Demand	0.00	Fixed	0.00	2,091.35	84.91
J-25	1,892.00	Demand	0.00	Fixed	0.00	2,091.35	86.21
J-26	1,962.00	Demand	0.00	Fixed	0.00	2,091.35	55.94
J-27	1,946.00	Demand	0.00	Fixed	0.00	2,091.35	62.85
J-28	1,933.00	Demand	0.00	Fixed	0.00	2,091.35	68.48
J-29	1,926.00	Demand	0.00	Fixed	0.00	2,091.35	71.50
J-30	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-31	1,915.00	Demand	0.00	Fixed	0.00	2,091.35	76.26
J-32	1,909.00	Demand	0.00	Fixed	0.00	2,091.35	78.85
J-33	1,904.00	Demand	0.00	Fixed	0.00	2,091.35	81.02
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,091.35	70.21
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,091.35	65.88
J-38	1,931.00	Demand	0.00	Fixed	0.00	2,091.35	69.34
J-39	1,925.00	Demand	0.00	Fixed	0.00	2,091.35	71.94
J-40	1,935.00	Demand	0.00	Fixed	0.00	2,091.35	67.61
J-41	1,920.00	Demand	0.00	Fixed	0.00	2,091.35	74.10
J-42	1,883.00	Demand	0.00	Fixed	0.00	2,091.35	90.10
J-43	1,874.00	Demand	0.00	Fixed	0.00	2,091.35	93.99
J-44	1,864.00	Demand	0.00	Fixed	0.00	2,091.35	98.31
J-45	1,855.00	Demand	0.00	Fixed	0.00	2,091.35	102.21
J-46	1,855.00	Demand	0.00	Fixed	0.00	2,091.35	102.21
J-47	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-48	1,965.00	Demand	0.00	Fixed	0.00	2,091.35	54.64
J-49	2,000.00	Demand	0.00	Fixed	0.00	2,091.35	39.50
J-50	1,980.00	Demand	0.00	Fixed	0.00	2,091.35	48.15
J-51	1,960.00	Demand	0.00	Fixed	0.00	2,091.35	56.80
J-52	1,930.00	Demand	0.00	Fixed	0.00	2,091.35	69.77
J-53	1,890.00	Demand	0.00	Fixed	0.00	2,091.35	87.07

STATIC
PRESSURE

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	701.00	2,091.35	2,091.03	0.32	4.06
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	451.00	2,091.03	2,089.70	1.33	1.14
P-3	528.00	10	PVC	150.0	1.00	Open	Open	381.18	2,089.70	2,089.24	0.46	0.87
P-4	528.00	10	PVC	150.0	1.00	Open	Open	322.24	2,089.24	2,088.90	0.34	0.64
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	40.43	2,088.90	2,088.49	0.41	0.16
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	25.43	2,088.49	2,088.32	0.17	0.07
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	47.95	2,089.24	2,088.68	0.56	0.21
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,088.18	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	40.95	2,088.18	2,088.17	0.2e-2	0.02
P-10	400.00	10	PVC	150.0	1.00	Open	Open	-40.95	2,088.18	2,088.18	0.01	0.01
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	2.52	2,088.18	2,088.18	0.2e-2	0.91e-3
P-12	570.00	6	PVC	150.0	1.00	Open	Open	-1.97	2,088.18	2,088.18	0.24e-3	0.43e-3
P-13	528.00	6	PVC	150.0	1.00	Open	Open	-6.51	2,088.18	2,088.18	0.29e-2	0.01
P-14	570.00	6	PVC	150.0	1.00	Open	Open	-7.02	2,088.18	2,088.19	0.34e-2	0.01
P-15	400.00	6	PVC	150.0	1.00	Open	Open	14.15	2,088.17	2,088.17	0.01	0.02
P-16	528.00	10	PVC	150.0	1.00	Open	Open	-56.46	2,088.18	2,088.20	0.01	0.02
P-17	528.00	10	PVC	150.0	1.00	Open	Open	-74.45	2,088.20	2,088.22	0.02	0.04
P-18	528.00	10	PVC	150.0	1.00	Open	Open	-82.10	2,088.22	2,088.24	0.03	0.05
P-19	528.00	10	PVC	150.0	1.00	Open	Open	-84.64	2,088.24	2,088.27	0.03	0.05
P-20	528.00	10	PVC	150.0	1.00	Open	Open	-81.64	2,088.27	2,088.30	0.03	0.05
P-21	528.00	10	PVC	150.0	1.00	Open	Open	-72.19	2,088.30	2,088.32	0.02	0.04
P-22	528.00	10	PVC	150.0	1.00	Open	Open	-62.76	2,088.32	2,088.33	0.02	0.03
P-23	528.00	10	PVC	150.0	1.00	Open	Open	-36.82	2,088.33	2,088.34	0.01	0.01
P-24	528.00	10	PVC	150.0	1.00	Open	Open	266.81	2,088.90	2,088.66	0.24	0.45
P-25	528.00	10	PVC	150.0	1.00	Open	Open	224.36	2,088.66	2,088.49	0.17	0.32
P-26	528.00	10	PVC	150.0	1.00	Open	Open	188.36	2,088.49	2,088.37	0.12	0.23
P-27	528.00	10	PVC	150.0	1.00	Open	Open	15.80	2,088.17	2,088.17	0.12e-2	0.23e-2
P-28	2,640.00	6	PVC	150.0	1.00	Open	Open	36.95	2,088.68	2,088.33	0.34	0.13
P-29	2,640.00	6	PVC	150.0	1.00	Open	Open	-47.82	2,088.34	2,088.89	0.55	0.21
P-30	2,640.00	6	PVC	150.0	1.00	Open	Open	-58.82	2,088.89	2,089.70	0.81	0.31
P-31	2,640.00	6	PVC	150.0	1.00	Open	Open	31.45	2,088.66	2,088.41	0.25	0.10
P-32	2,640.00	6	PVC	150.0	1.00	Open	Open	20.45	2,088.41	2,088.30	0.11	0.04
P-33	2,640.00	6	PVC	150.0	1.00	Open	Open	-14.00	2,088.27	2,088.33	0.06	0.02
P-34	2,640.00	6	PVC	150.0	1.00	Open	Open	-25.00	2,088.33	2,088.49	0.17	0.06
P-35	2,640.00	6	PVC	150.0	1.00	Open	Open	19.46	2,088.37	2,088.27	0.10	0.04
P-36	2,640.00	6	PVC	150.0	1.00	Open	Open	8.46	2,088.27	2,088.24	0.02	0.01
P-37	2,640.00	6	PVC	150.0	1.00	Open	Open	-3.35	2,088.22	2,088.22	0.39e-2	0.15e-2
P-38	2,070.00	6	PVC	150.0	1.00	Open	Open	6.99	2,088.20	2,088.18	0.01	0.01
P-39	2,240.00	6	PVC	150.0	1.00	Open	Open	3.15	2,088.17	2,088.16	0.29e-2	0.13e-2
P-40	2,640.00	6	PVC	150.0	1.00	Open	Open	4.80	2,088.17	2,088.17	0.01	0.3e-2
P-41	150.00	10	PVC	150.0	1.00	Open	Open	216.00	2,091.03	2,090.97	0.05	0.36
P-42	350.00	10	PVC	150.0	1.00	Open	Open	47.00	2,090.97	2,090.97	0.01	0.02
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,090.97	2,090.96	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,090.96	2,090.96	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,090.96	2,090.94	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,090.94	2,090.94	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,090.94	2,090.96	0.02	0.03
P-48	1,000.00	6	PVC	150.0	1.00	Open	Open	17.00	2,090.97	2,090.93	0.03	0.03
P-49	1,000.00	6	PVC	150.0	1.00	Open	Open	34.00	2,091.03	2,090.91	0.11	0.11
P-50	528.00	10	PVC	150.0	1.00	Open	Open	157.90	2,088.37	2,088.28	0.09	0.17
P-51	528.00	10	PVC	150.0	1.00	Open	Open	121.55	2,088.28	2,088.23	0.05	0.10
P-52	528.00	10	PVC	150.0	1.00	Open	Open	88.02	2,088.23	2,088.20	0.03	0.06
P-53	528.00	10	PVC	150.0	1.00	Open	Open	59.05	2,088.20	2,088.18	0.01	0.03

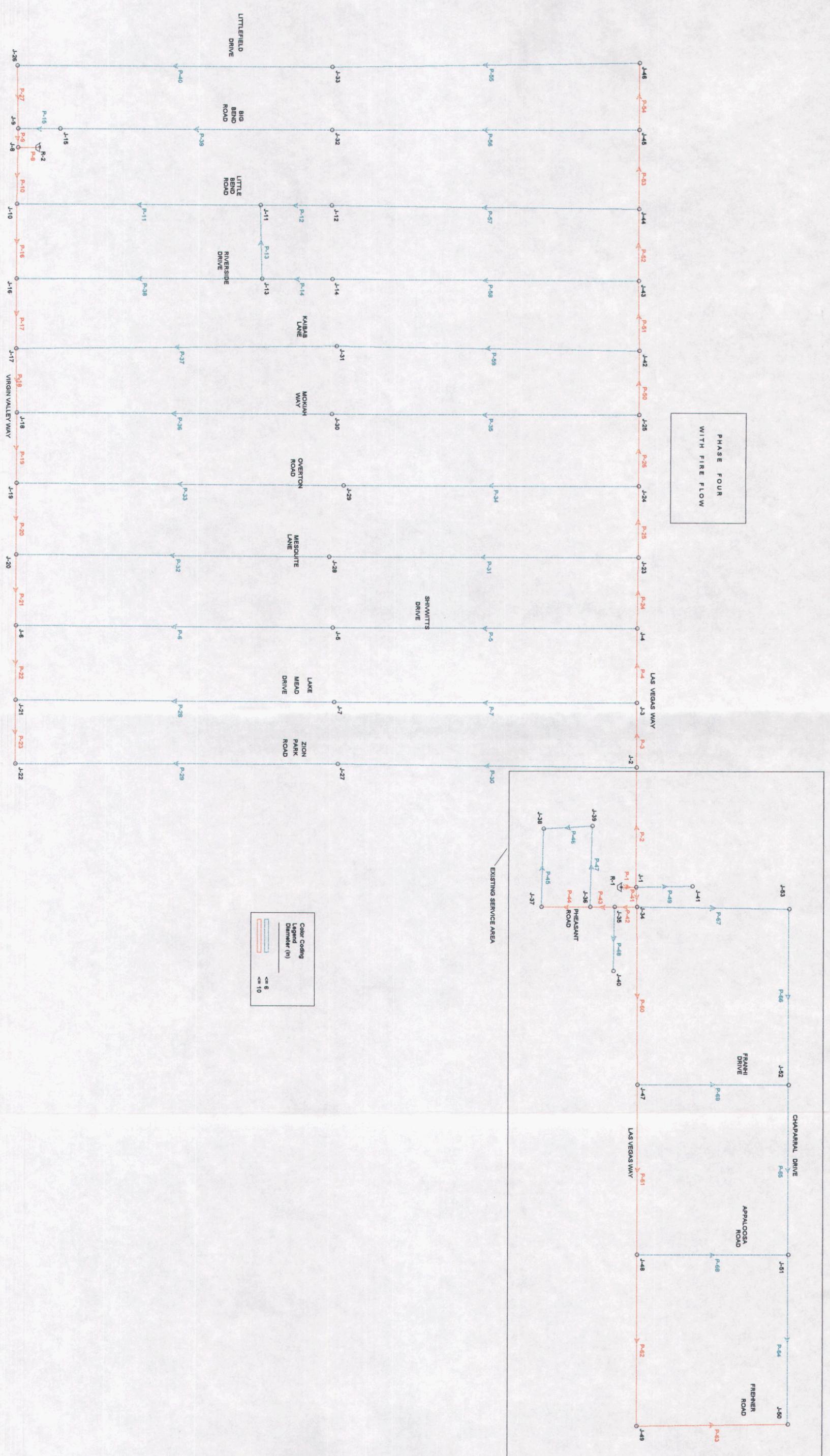
Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-54	528.00	10	PVC	150.0	1.00	Open	Open	29.20	2,088.18	2,088.18	0.39e-2	0.01
P-55	2,640.00	6	PVC	150.0	2.00	Open	Open	6.20	2,088.18	2,088.17	0.01	0.47e-2
P-56	2,640.00	6	PVC	150.0	2.00	Open	Open	7.85	2,088.18	2,088.16	0.02	0.01
P-57	2,640.00	6	PVC	150.0	2.00	Open	Open	6.97	2,088.20	2,088.18	0.02	0.01
P-58	2,640.00	6	PVC	150.0	2.00	Open	Open	11.52	2,088.23	2,088.19	0.04	0.02
P-59	2,640.00	6	PVC	150.0	2.00	Open	Open	14.35	2,088.28	2,088.22	0.06	0.02
P-60	1,320.00	10	PVC	150.0	1.00	Open	Open	130.40	2,090.97	2,090.82	0.15	0.11
P-61	1,320.00	10	PVC	150.0	1.00	Open	Open	84.01	2,090.82	2,090.76	0.07	0.05
P-62	1,320.00	10	PVC	150.0	1.00	Open	Open	46.50	2,090.76	2,090.73	0.02	0.02
P-63	1,320.00	10	PVC	150.0	1.00	Open	Open	22.50	2,090.73	2,090.73	0.01	0.43e-2
P-64	1,320.00	6	PVC	150.0	1.00	Open	Open	-2.50	2,090.73	2,090.73	0.12e-2	0.92e-3
P-65	1,320.00	6	PVC	150.0	1.00	Open	Open	-12.99	2,090.73	2,090.75	0.02	0.02
P-66	1,320.00	6	PVC	150.0	1.00	Open	Open	-14.60	2,090.75	2,090.78	0.03	0.02
P-67	1,320.00	6	PVC	150.0	1.00	Open	Open	-38.60	2,090.78	2,090.97	0.19	0.14
P-68	1,320.00	6	PVC	150.0	1.00	Open	Open	13.51	2,090.76	2,090.73	0.03	0.02
P-69	1,320.00	6	PVC	150.0	1.00	Open	Open	22.38	2,090.82	2,090.75	0.07	0.05

Steady State Analysis Reservoir Report

Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-701.00	2,091.35
R-2	2,091.35	0.00	2,091.35

Steady State Analysis



HYDRAULIC STATUS:

Hydraulic status for steady-state conditons

Balanced Trials = 5, Accuracy = 0.000582
Flow Supplied 1,201.00 gpm
Flow Demanded 1,201.00 gpm
Flow Stored 0.00 gpm
R-1 Reservoir: Emptying
R-2 Reservoir: Closed Or Stagnant
P-1 Check Valve: Open
P-8 Pipe: Closed

Steady State Analysis Junction Report

Node Label	Elevation (ft)	Demand Type	Demand (gpm)	Demand Pattern	Calculated Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
J-1	1,930.00	Demand	0.00	Fixed	0.00	2,090.44	69.38
J-2	1,900.00	Demand	11.00	Fixed	11.00	2,085.14	80.06
J-3	1,904.00	Demand	11.00	Fixed	11.00	2,083.31	77.54
J-4	1,901.00	Demand	15.00	Fixed	15.00	2,081.99	78.27
J-5	1,939.00	Demand	15.00	Fixed	15.00	2,079.87	60.92
J-6	1,999.00	Demand	16.00	Fixed	16.00	2,078.31	34.29
J-7	1,942.00	Demand	11.00	Fixed	11.00	2,080.41	59.85
J-8	1,966.00	Demand	0.00	Fixed	0.00	2,078.66	48.72
J-9	1,965.00	Demand	11.00	Fixed	11.00	2,078.66	49.15
J-10	1,969.00	Demand	13.00	Fixed	13.00	2,078.65	47.42
J-11	1,932.00	Demand	11.00	Fixed	11.00	2,078.81	63.49
J-12	1,914.00	Demand	5.00	Fixed	5.00	2,078.88	71.30
J-13	1,937.00	Demand	7.50	Fixed	7.50	2,078.81	61.32
J-14	1,920.00	Demand	4.50	Fixed	4.50	2,078.90	68.71
J-15	1,955.00	Demand	11.00	Fixed	11.00	2,078.67	53.48
J-16	1,972.00	Demand	11.00	Fixed	11.00	2,078.65	46.12
J-17	1,976.00	Demand	11.00	Fixed	11.00	2,078.64	44.38
J-18	1,979.00	Demand	11.00	Fixed	11.00	2,078.61	43.08
J-19	1,983.00	Demand	11.00	Fixed	11.00	2,078.56	41.32
J-20	1,986.00	Demand	11.00	Fixed	11.00	2,078.47	39.99
J-21	1,993.00	Demand	11.00	Fixed	11.00	2,078.04	36.77
J-22	1,996.00	Demand	511.00	Fixed	511.00	2,077.58	35.28
J-23	1,898.00	Demand	11.00	Fixed	11.00	2,081.05	79.16
J-24	1,895.00	Demand	11.00	Fixed	11.00	2,080.38	80.17
J-25	1,892.00	Demand	11.00	Fixed	11.00	2,079.91	81.26
J-26	1,962.00	Demand	11.00	Fixed	11.00	2,078.66	50.45
J-27	1,946.00	Demand	11.00	Fixed	11.00	2,081.07	58.41
J-28	1,933.00	Demand	11.00	Fixed	11.00	2,079.59	63.39
J-29	1,926.00	Demand	11.00	Fixed	11.00	2,079.33	66.30
J-30	1,920.00	Demand	11.00	Fixed	11.00	2,079.14	68.82
J-31	1,915.00	Demand	11.00	Fixed	11.00	2,079.00	70.92
J-32	1,909.00	Demand	11.00	Fixed	11.00	2,078.83	73.44
J-33	1,904.00	Demand	11.00	Fixed	11.00	2,078.84	75.61
J-34	1,929.00	Demand	0.00	Fixed	0.00	2,090.39	69.79
J-35	1,930.00	Demand	0.00	Fixed	0.00	2,090.38	69.35
J-36	1,920.00	Demand	0.00	Fixed	0.00	2,090.38	73.68
J-37	1,939.00	Demand	0.00	Fixed	0.00	2,090.38	65.46
J-38	1,931.00	Demand	15.00	Fixed	15.00	2,090.36	68.91
J-39	1,925.00	Demand	15.00	Fixed	15.00	2,090.36	71.51
J-40	1,935.00	Demand	17.00	Fixed	17.00	2,090.35	67.18
J-41	1,920.00	Demand	34.00	Fixed	34.00	2,090.33	73.66
J-42	1,883.00	Demand	22.00	Fixed	22.00	2,079.58	85.01
J-43	1,874.00	Demand	22.00	Fixed	22.00	2,079.37	88.81
J-44	1,864.00	Demand	22.00	Fixed	22.00	2,079.26	93.08
J-45	1,855.00	Demand	22.00	Fixed	22.00	2,079.20	96.95
J-46	1,855.00	Demand	23.00	Fixed	23.00	2,079.19	96.95
J-47	1,930.00	Demand	24.00	Fixed	24.00	2,090.24	69.29
J-48	1,965.00	Demand	24.00	Fixed	24.00	2,090.17	54.13
J-49	2,000.00	Demand	24.00	Fixed	24.00	2,090.15	38.98
J-50	1,980.00	Demand	25.00	Fixed	25.00	2,090.15	47.63
J-51	1,960.00	Demand	24.00	Fixed	24.00	2,090.15	56.28
J-52	1,930.00	Demand	24.00	Fixed	24.00	2,090.17	69.26
J-53	1,890.00	Demand	24.00	Fixed	24.00	2,090.20	86.57

Steady State Analysis Pipe Report

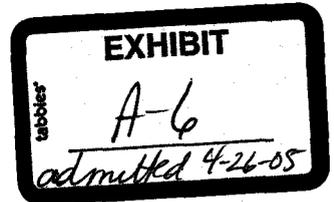
Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-1	80.00	10	PVC	150.0	1.00	Open	Open	1,201.00	2,091.35	2,090.44	0.91	11.35
P-2	1,170.00	10	PVC	150.0	1.00	Open	Open	951.00	2,090.44	2,085.14	5.31	4.54
P-3	528.00	10	PVC	150.0	1.00	Open	Open	799.16	2,085.14	2,083.31	1.82	3.46
P-4	528.00	10	PVC	150.0	1.00	Open	Open	671.88	2,083.31	2,081.99	1.32	2.50
P-5	2,640.00	6	PVC	150.0	3.00	Open	Open	98.19	2,081.99	2,079.87	2.12	0.80
P-6	2,640.00	6	PVC	150.0	3.00	Open	Open	83.19	2,079.87	2,078.31	1.56	0.59
P-7	2,640.00	6	PVC	150.0	3.00	Open	Open	116.28	2,083.31	2,080.41	2.90	1.10
P-8	150.00	10	PVC	150.0	1.00	Closed	Closed	0.00	2,091.35	2,078.66	0.00	0.00
P-9	128.00	10	PVC	150.0	1.00	Open	Open	-20.71	2,078.66	2,078.66	0.49e-3	0.38e-2
P-10	400.00	10	PVC	150.0	1.00	Open	Open	20.71	2,078.66	2,078.65	0.17e-2	0.43e-2
P-11	2,150.00	6	PVC	150.0	2.00	Open	Open	-26.94	2,078.65	2,078.81	0.16	0.07
P-12	570.00	6	PVC	150.0	1.00	Open	Open	-34.12	2,078.81	2,078.88	0.07	0.11
P-13	528.00	6	PVC	150.0	1.00	Open	Open	-3.82	2,078.81	2,078.81	0.98e-3	0.18e-2
P-14	570.00	6	PVC	150.0	1.00	Open	Open	-39.56	2,078.81	2,078.90	0.09	0.15
P-15	400.00	6	PVC	150.0	1.00	Open	Open	-16.40	2,078.66	2,078.67	0.01	0.03
P-16	528.00	10	PVC	150.0	1.00	Open	Open	34.65	2,078.65	2,078.65	0.01	0.01
P-17	528.00	10	PVC	150.0	1.00	Open	Open	51.88	2,078.65	2,078.64	0.01	0.02
P-18	528.00	10	PVC	150.0	1.00	Open	Open	78.97	2,078.64	2,078.61	0.02	0.05
P-19	528.00	10	PVC	150.0	1.00	Open	Open	114.49	2,078.61	2,078.56	0.05	0.09
P-20	528.00	10	PVC	150.0	1.00	Open	Open	160.55	2,078.56	2,078.47	0.09	0.17
P-21	528.00	10	PVC	150.0	1.00	Open	Open	219.69	2,078.47	2,078.31	0.16	0.31
P-22	528.00	10	PVC	150.0	1.00	Open	Open	286.88	2,078.31	2,078.04	0.27	0.51
P-23	528.00	10	PVC	150.0	1.00	Open	Open	381.16	2,078.04	2,077.58	0.46	0.87
P-24	528.00	10	PVC	150.0	1.00	Open	Open	558.69	2,081.99	2,081.05	0.94	1.77
P-25	528.00	10	PVC	150.0	1.00	Open	Open	466.55	2,081.05	2,080.38	0.67	1.27
P-26	528.00	10	PVC	150.0	1.00	Open	Open	387.49	2,080.38	2,079.91	0.47	0.90
P-27	528.00	10	PVC	150.0	1.00	Open	Open	-15.31	2,078.66	2,078.66	0.12e-2	0.23e-2
P-28	2,640.00	6	PVC	150.0	1.00	Open	Open	105.28	2,080.41	2,078.04	2.37	0.90
P-29	2,640.00	6	PVC	150.0	1.00	Open	Open	-129.84	2,077.58	2,081.07	3.50	1.32
P-30	2,640.00	6	PVC	150.0	1.00	Open	Open	-140.84	2,081.07	2,085.14	4.06	1.54
P-31	2,640.00	6	PVC	150.0	1.00	Open	Open	81.14	2,081.05	2,079.59	1.46	0.55
P-32	2,640.00	6	PVC	150.0	1.00	Open	Open	70.14	2,079.59	2,078.47	1.12	0.42
P-33	2,640.00	6	PVC	150.0	1.00	Open	Open	-57.06	2,078.56	2,079.33	0.76	0.29
P-34	2,640.00	6	PVC	150.0	1.00	Open	Open	-68.06	2,079.33	2,080.38	1.06	0.40
P-35	2,640.00	6	PVC	150.0	1.00	Open	Open	57.53	2,079.91	2,079.14	0.77	0.29
P-36	2,640.00	6	PVC	150.0	1.00	Open	Open	46.53	2,079.14	2,078.61	0.52	0.20
P-37	2,640.00	6	PVC	150.0	1.00	Open	Open	-38.08	2,078.64	2,079.00	0.36	0.14
P-38	2,070.00	6	PVC	150.0	1.00	Open	Open	-28.23	2,078.65	2,078.81	0.16	0.08
P-39	2,240.00	6	PVC	150.0	1.00	Open	Open	-27.40	2,078.67	2,078.83	0.17	0.07
P-40	2,640.00	6	PVC	150.0	1.00	Open	Open	-26.31	2,078.66	2,078.84	0.18	0.07
P-41	150.00	10	PVC	150.0	1.00	Open	Open	216.00	2,090.44	2,090.39	0.05	0.36
P-42	350.00	10	PVC	150.0	1.00	Open	Open	47.00	2,090.39	2,090.38	0.01	0.02
P-43	200.00	10	PVC	150.0	1.00	Open	Open	30.00	2,090.38	2,090.38	0.17e-2	0.01
P-44	500.00	10	PVC	150.0	1.00	Open	Open	14.81	2,090.38	2,090.38	0.98e-3	0.2e-2
P-45	900.00	6	PVC	150.0	1.00	Open	Open	14.81	2,090.38	2,090.36	0.02	0.02
P-46	500.00	6	PVC	150.0	1.00	Open	Open	-0.19	2,090.36	2,090.36	0.00	0.00
P-47	900.00	6	PVC	150.0	1.00	Open	Open	-15.19	2,090.36	2,090.38	0.02	0.03
P-48	1,000.00	6	PVC	150.0	1.00	Open	Open	17.00	2,090.38	2,090.35	0.03	0.03
P-49	1,000.00	6	PVC	150.0	1.00	Open	Open	34.00	2,090.44	2,090.33	0.11	0.11
P-50	528.00	10	PVC	150.0	1.00	Open	Open	318.97	2,079.91	2,079.58	0.33	0.62
P-51	528.00	10	PVC	150.0	1.00	Open	Open	247.88	2,079.58	2,079.37	0.21	0.39
P-52	528.00	10	PVC	150.0	1.00	Open	Open	181.83	2,079.37	2,079.26	0.12	0.22
P-53	528.00	10	PVC	150.0	1.00	Open	Open	120.71	2,079.26	2,079.20	0.05	0.10

Steady State Analysis Pipe Report

Link Label	Length (ft)	Diameter (in)	Material	Roughness	Minor Loss	Initial Status	Current Status	Discharge (gpm)	Start Hydraulic Grade (ft)	End Hydraulic Grade (ft)	Headloss (ft)	Friction Slope (ft/1000ft)
P-54	528.00	10	PVC	150.0	1.00	Open	Open	60.31	2,079.20	2,079.19	0.01	0.03
P-55	2,640.00	6	PVC	150.0	2.00	Open	Open	37.31	2,079.19	2,078.84	0.35	0.13
P-56	2,640.00	6	PVC	150.0	2.00	Open	Open	38.40	2,079.20	2,078.83	0.37	0.14
P-57	2,640.00	6	PVC	150.0	2.00	Open	Open	39.12	2,079.26	2,078.88	0.38	0.14
P-58	2,640.00	6	PVC	150.0	2.00	Open	Open	44.06	2,079.37	2,078.90	0.48	0.18
P-59	2,640.00	6	PVC	150.0	2.00	Open	Open	49.08	2,079.58	2,079.00	0.58	0.22
P-60	1,320.00	10	PVC	150.0	1.00	Open	Open	130.39	2,090.39	2,090.24	0.15	0.11
P-61	1,320.00	10	PVC	150.0	1.00	Open	Open	84.01	2,090.24	2,090.17	0.07	0.05
P-62	1,320.00	10	PVC	150.0	1.00	Open	Open	46.48	2,090.17	2,090.15	0.02	0.02
P-63	1,320.00	10	PVC	150.0	1.00	Open	Open	22.48	2,090.15	2,090.15	0.01	0.43e-2
P-64	1,320.00	6	PVC	150.0	1.00	Open	Open	-2.52	2,090.15	2,090.15	0.98e-3	0.74e-3
P-65	1,320.00	6	PVC	150.0	1.00	Open	Open	-12.99	2,090.15	2,090.17	0.02	0.02
P-66	1,320.00	6	PVC	150.0	1.00	Open	Open	-14.61	2,090.17	2,090.20	0.03	0.02
P-67	1,320.00	6	PVC	150.0	1.00	Open	Open	-38.61	2,090.20	2,090.39	0.19	0.14
P-68	1,320.00	6	PVC	150.0	1.00	Open	Open	13.53	2,090.17	2,090.15	0.03	0.02
P-69	1,320.00	6	PVC	150.0	1.00	Open	Open	22.39	2,090.24	2,090.17	0.07	0.05

Steady State Analysis Reservoir Report

Node Label	Reservoir Surface Elevation (ft)	Reservoir Inflow (gpm)	Hydraulic Grade (ft)
R-1	2,091.35	-1,201.00	2,091.35
R-2	2,091.35	0.00	2,091.35



FRANCHISE AGREEMENT
and
FRANCHISE
for
PUBLIC SERVICE CORPORATIONS

Date of Franchise: 01 06 1997
 Franchise No: _____
 Term of Franchise: 25 years
 Renewal Date Option: 01 06 2022

This is a Franchise Agreement between the County of Mohave, State of Arizona, and Virgin Mountain Utilities, authorizing the location, construction, maintenance and operation of water / wastewater within the unincorporated areas of Mohave County. This Franchise specifically grants to Virgin Mt. Utilities the privilege of using the Public Rights-of-Way and Easements of Mohave County in accordance with established policies, practices, and procedures of Mohave County and its several departments.

RECITALS

WHEREAS, the Mohave County Board of Supervisors has the duty and responsibility to protect the health, safety and welfare of the residents of Mohave County; and

WHEREAS, the Mohave County Board of Supervisors has the duty and responsibility to assure that Public Rights-of-Way and Easements of Mohave County are used in a responsible manner consistent with the best interests of the residents of Mohave County; and

WHEREAS, the Mohave County Board of Supervisors strives to authorize the use of the Public Rights-of-Way and Easements of Mohave County in a uniform manner among all users; and

WHEREAS, the Mohave County Board of Supervisors deems this form of Franchise Agreement and Franchise to be fair, reasonable and appropriate for Public Service Corporations;

NOW, THEREFORE, the Mohave County Board of Supervisors and Virgin Mt. Utilities do hereby state, promise and agree as follows:

SECTION 1. DEFINITIONS.

As used in this Franchise Agreement and Franchise, the following terms have been agreed to have the meanings indicated:

- A. "Agreement" means this Franchise Agreement and Franchise.
- B. "Area of Jurisdiction" means that part of Mohave County for which this Franchise is granted.
- C. "Board" means the Mohave County Board of Supervisors.
- D. "County" means Mohave County, Arizona.
- E. "Emergency" means any occurrence that may arise without prior notice to Franchisee.
- F. "Franchise" means this Franchise Agreement and Franchise.
- G. "Franchisee" means _____.
- H. "Franchising Authority" means the Mohave County Board of Supervisors.
- I. "Franchise Property" means all materials, equipment, and facilities of Franchisee located, constructed, maintained, and/or operated in the Public Rights-of-Way and Easements of Mohave County pursuant to the terms and conditions of this Franchise Agreement and Franchise.
- J. "Gross Annual Receipts" means any compensation derived from any Subscriber or User in payment for delivery of a product or services from Franchisee. This meaning shall not include any taxes collected by Franchisee and transmitted to a governmental agency, and it shall not include any amounts collected by Franchisee by virtue of the Franchise Fee provisions of this Franchise.
- K. "Intergovernmental Agreement" means the joint exercise of powers authorized by Title 11, Chapter 7, Article 3 of Arizona Revised Statutes.
- L. "Public Rights-of-Way and Easements" means that real property

located within unincorporated areas of Mohave County within which the Mohave County Board of Supervisors has the power and authority to grant a Franchise.

M. "Rights-of-Way and Easements" shall mean the surface of, the space above, and the space below the Public Rights-of-Way and Easements reasonably necessary to construct, operate, and maintain the Franchise Property.

N. "Service Area" means the unincorporated areas of Mohave County in which the Franchisee delivers the service for which this Franchise is granted.

O. "Subscriber or User" means any person or entity receiving, for any purpose, the services of the Franchisee.

Section 2. GRANTING OF FRANCHISE.

A non-exclusive Franchise is hereby granted to Franchisee for the purpose of locating, constructing, and maintaining Franchise Property in the unincorporated area of Mohave County. This Franchise shall include the authority, privilege, and power to construct, operate, and maintain all necessary Franchise Property in, over, under, across, and upon the Public Rights-of-Way and Easements consistent with the terms and conditions of this Franchise.

Section 3. TERM OF FRANCHISE.

This Franchise shall be for an initial term of twenty five (25) years beginning on the date of Board approval. This term may be extended only by reapplication and grant of an extension. Application for an extension shall be submitted to the Board no sooner than three hundred sixty-five (365) days, nor later than one hundred twenty (120) days, prior to the expiration date of this Franchise.

Section 4. TERMS AND CONDITIONS.

This Franchise shall be subject to the following conditions:

A. This Franchise shall not be deemed to limit the authority of the Board to include other conditions or restrictions which may be necessary for the protection of the health, safety and welfare of the residents of the County and/or for the efficient administration of the Rights-of-Way and Easements in general.

B. This Franchise is non-exclusive.

C. The Board has granted this Franchise in reliance upon the Franchisee's business skill, reputation, financial capacity, and character. Accordingly, this Franchise, and/or any interest hereunder, shall not be assigned, transferred, conveyed, or otherwise encumbered without the express written consent of the Board. Failure of performance by the Franchisee of any of the terms and conditions of this Franchise may be cause for termination of this Franchise pursuant to Section 16 of this Agreement.

D. No privilege or exemption shall be granted or inferred unless specifically set forth in this Franchise.

E. Any privilege claimed under this Franchise by the Franchisee in any Right-of-Way or Easement shall be subordinated to any prior lawful occupancy of the Right-of-Way or Easement.

F. Prior to commencing any activity authorized by this Franchise, the Franchisee shall submit plans and specifications for such activity to the County Public Works Director for approval; provided, however, whenever Franchisee is required to undertake emergency activities required to protect the health, safety and welfare of the public and/or the safety and reliability of the Franchise Property, Franchisee shall notify the County Public Works Director not later than twenty four (24) hours after notice of the emergency; and provided further, however, should such emergency present an immediate threat or danger to the health, safety and welfare of the public, Franchisee shall notify the County Manager or the County Public Works Director or the County Emergency Services Coordinator or the Chairman of the Board within one (1) hour of notice of the emergency.

G. Any failure of the Board, or its agents, to promptly enforce compliance of the terms and/or conditions of this Franchise shall not be deemed a waiver of such terms and/or conditions.

H. The Franchisee shall have no recourse against the Board or its agents for any loss, cost, expense, or damage arising out of any term, condition or enforcement of this Franchise.

I. The Franchisee shall be subject to all County rules, regulations and/or specifications pertaining to the use of Public Rights-of-Way and Easements which may be adopted from time to time by the Board.

J. Prior to the grant of this Franchise by the Board, and annually thereafter, Franchisee shall submit to the Board a complete financial statement that reflects the current financial status of the Franchisee and a list of names and addresses of proprietors, owners, or beneficial shareholders who hold more than a ten percent (10%) interest in the corporation, organization, or regulated entity.

SECTION 5. RECORDS TO BE KEPT AND MAINTAINED; REPORTS; INSPECTION OF RECORDS.

A. Franchisee shall prepare and furnish to the Board, or its agents, such reports and records of its operations, affairs, transactions and/or property as the Board deems necessary or appropriate for the enforcement of performance by the Franchisee according to the terms and conditions of this Franchise.

B. Franchisee shall keep and maintain within the County, and make available for County inspection upon reasonable request, full and complete plans and records showing the exact location of all Franchise Property installed and/or in use in the Public Rights-of-Way and Easements.

C. Franchisee shall file with the County Public Works Director, on or before the 31st day of December of each year, a map and/or a set of plans showing all Franchise Property installed and/or in use in the Public Rights-of-Way and Easements current as of the immediately preceding November 30th.

D. Franchisee shall keep its Franchise Property in good operating condition, and Franchisee shall cause all customer complaints to be duly investigated and, where the circumstances warrant, corrected within a reasonable period of time. Records

reflecting such complaints, and the time and manner in which they are resolved, shall be maintained by the Franchisee for at least one (1) year and shall be made available for inspection by the Board or its agents upon reasonable request.

SECTION 6. INSTALLATION STANDARDS.

A. Franchisee shall be responsible for meeting all County, State, Federal, and local installation standards.

B. Any other provision of this Franchise notwithstanding, all installations of Franchise Property shall be made in a safe and workmanlike manner and maintained in good condition at all times. Except for the conduct of normal construction and repair activities, all such installations of Franchise Property shall be approximately placed so as not to interfere in any manner with the rights of the public or individual property owners and shall not interfere with the use of public property by the public and shall not obstruct or impede traffic. The Board reserves the right of regulation of the erection and construction of any Franchise Property, by Franchisee and its agents or employees, and to designate where such Franchise Property shall be placed. Franchisee agrees to make changes in its plans, specifications and/or Franchise Property to conform with all requirements of the Board.

C. Franchisee shall be responsible for obtaining all necessary licenses, certificates, permits and approvals from all government authorities having jurisdiction over the activities to be conducted under this Franchise.

SECTION 7. UNDERGROUND LINES.

Franchisee shall, at its own expense, place its lines underground in areas which it serves where telephone and electric power lines are, or are required to be, underground.

SECTION 8. LOCATION OF FRANCHISE PROPERTY.

Franchise Property shall be constructed or installed in Public Rights-of-Way and Easements of the County only at such locations and in such manner as shall be approved by the Board or its agents. Construction or installation of Franchise Property shall be in accordance with all Federal, State, and County laws and regulations.

SECTION 9. REPAIR OF ROADS, STREETS, RIGHTS-OF-WAY AND EASEMENTS.

Franchisee shall, at its own expense, promptly repair and restore any and all roads, streets, sidewalks or other public and/or private property altered, damaged, or destroyed by Franchisee in exercising the privileges granted herein to Franchisee.

SECTION 10. FAILURE TO PERFORM AS REQUIRED IN SECTION 9 ABOVE.

A. Upon failure of Franchisee, and its agent or employees, to complete any work required by this Franchise, the Board or its agents may notify Franchisee of non-compliance by registered mail. Franchisee shall have fourteen (14) days from the receipt of the notice to complete the repairs or to enter into an agreement with the Board and/or its agents for the completion of the repairs.

B. If, in the opinion of the County Director of Public Works and/or the County Manager, the failure to repair or complete construction presents a serious and immediate danger to the public health, safety and welfare, they, separately or together, may take immediate action to mitigate the damage. All costs associated with such actions will be the sole responsibility of Franchisee, and Franchisee shall reimburse the County for such costs within thirty (30) days after receipt of an itemized bill.

SECTION 11. REMOVAL AND ABANDONMENT OF FRANCHISE PROPERTY.

A. In the event the use of any Franchise Property is discontinued for a continuous period of twelve (12) months and Franchisee is unable to reasonably demonstrate the usefulness of

such Franchise Property for future use, Franchisee shall either remove such Franchise Property or abandon such Franchise Property in place.

B. In the event Franchise Property is installed in violation of any requirements of this Franchise, and Franchisee fails to take reasonable measures to cure such violation within thirty (30) days after written notice of such violation, Franchisee shall either remove such Franchise Property or abandon such Franchise Property in place.

C. Franchise Property to be abandoned in place shall be abandoned in accordance with applicable law. Upon abandonment of Franchise Property in place, Franchisee shall submit to the Board an instrument satisfactory to the Board transferring the ownership of such Franchise Property to the County.

SECTION 12. CHANGES REQUIRED BY PUBLIC IMPROVEMENTS.

Franchisee shall, at its own expense, protect, support, temporarily disconnect, relocate in the same street, alley or public place, any Franchise Property when required by the Board or its agents by reason of County public improvements; provided, however, Franchisee shall have the right to abandon Franchise Property as provided in Section 11 above.

SECTION 13. INDEMNIFICATION OF COUNTY.

Franchisee shall defend the County against all claims for injury to any person or property caused by the negligence of Franchisee, its agents and/or employees, in the construction or operation of Franchise Property, and, in the event of a determination of liability, shall indemnify the County, the Board, its agents and/or employees. More particularly, Franchisee, its successors and assigns, does hereby agree to indemnify and hold harmless the County, the Board and/or its agents and employees, from any and all liability, claim, demand or judgment arising out of any injury to any person or property as a result of a violation or failure on the part of Franchisee, its successors and assigns, to observe their proper duty or because of negligence in whole or in part arising out of the construction, repair, extension,

maintenance, or operation of Franchise Property of any kind or character used in connection with this Franchise.

SECTION 14. LIABILITY INSURANCE REQUIRED.

Franchisee agrees that, at all times during the existence of this Franchise, Franchisee will carry a minimum of \$1,000,000 in excess liability insurance on a combined single limit basis above any permitted self-insured retention. Self-insured retention shall be permitted so long as Franchisee continues to report to the Securities and Exchange Commission of the United States a Total Assets amount in excess of \$100,000,000. The insurance coverage required by this Section shall be provided by one or more insurers permitted under Title 20 or Arizona Revised Statutes to transact insurance business. Further, Franchisee shall provide, to the Clerk of the Board of Mohave County, a Certificate of Insurance naming the County, the Board and/or its agents and employees as additional insured. The Certificate will provide for notification to the Clerk of the Board of Mohave County prior to any change in said policy, or cancellation of said policy, for any reason including nonpayment of premiums.

SECTION 15. FRANCHISE FEE.

A. Franchisee shall pay to the County an annual Franchise Fee in an amount equal to two percent (2%) of Franchisee's Gross Annual Receipts derived from the operation of Franchise Property so long as the Board shall have the authority to levy a Franchise Fee. Further, Franchisee shall not be required to pay to the County any other Franchise fee or Permit fee in connection with this Franchise. There shall be no offsets for any other taxes or assessments, i.e., sales tax, fuel tax, personal property tax, general ad valorem property tax, special assessments for local improvements or any other tax or assessment not directly related to the use of the Public Rights-of-Way and Easements that may be required of Franchisee by any governmental agency.

B. The annual Franchise Fee shall be paid no later than the first (1st) day of May following each calendar year during the term of this Franchise. All such payments shall be made to the Mohave County Finance Department, P.O. Box 7000, Kingman, Arizona 86402-

7000. So long as the Board shall have the authority to levy a Franchise Fee, failure to pay such Franchise Fee by the first (1st) day of May following the calendar year is a material breach of this Franchise Agreement and is subject to the termination provisions of Section 16 hereinafter.

C. The Board shall have the right to inspect and audit all Franchisee's books and records which may be necessary in determining Franchisee's Gross Annual Receipts derived from the use of the Public Rights-of-Way and Easements and the right of audit and recomputation of any amount paid under this Section; provided, however, that the right of recomputation shall be limited to the two (2) calendar years immediately preceding the initiation of any such audit. Financial statements required by this Franchise Agreement for each calendar year shall be submitted annually on or before April 15 of each year. No acceptance of any payment shall be construed as a release or accord and satisfaction of any claim the County may have for further or additional sums payable under this Section or for the performance of any obligation under this Franchise Agreement.

D. The percentage of Gross Annual Receipts set forth in this Section and the insurance requirements set forth in Section 14 above shall be subject to reevaluation by the Board every fifth year of this Franchise; provided, however, that no reevaluation shall occur so long as Franchisee continues to report to the Securities and Exchange Commission of the United States a Total Assets amount in excess of \$100,000,000. If reevaluation of the amounts due under this Section or the insurance requirements set forth in Section 14 above should result in a dispute between the parties, the dispute shall be presented to a neutral Arbitration Board for decision and settlement. The Arbitration Board shall consist of either one person mutually acceptable to the parties to this Franchise Agreement or to the American Arbitration Association. In the event of arbitration, the parties shall each pay their individual costs for such arbitration. The standard procedures and policies of arbitration shall apply in all cases.

SECTION 16. TERMINATION.

A. This Franchise Agreement and Franchise may be terminated by the mutual consent of the Board and the Franchisee evidenced by a writing.

B. This Franchise Agreement and Franchise, and all rights granted hereunder, may be terminated by the Board upon any breach of the terms and conditions hereof by Franchisee and Franchisee's failure to undertake reasonable measures to cure such breach within thirty (30) days subsequent to Franchisee's receipt of written notice of such breach. Written notice shall be by registered mail.

SECTION 17. OTHER PROVISIONS.

Franchise shall keep a copy of its current Tariffs applicable to Subscribers or Users in Mohave County on file with the Clerk of the Board of Mohave County.

SECTION 18. RESERVATION OF POWERS.

A. There is hereby reserved to the Board every right and power which is required to be reserved and Franchisee, by its acceptance of this Franchise, agrees to be bound thereby and to comply with any action or requirements of the Board in its exercise of any such right of power enacted or established.

B. Neither the granting of this Franchise nor any of the provisions contained herein shall be construed to prevent the Board from granting any identical, or similar, Franchise to any person or corporation other than Franchisee.

SECTION 19. SEVERABILITY.

In the event any provision of this Agreement is rendered inoperative by virtue of the entry of a final judgment of a Court of competent jurisdiction, such event shall not affect any other provision of this Agreement that can be given effect without such inoperative provision and, for this purpose, the provisions of this

Agreement are hereby declared to be severable.

SECTION 20. OFFICIAL NOTICES.

Notices concerning this Franchise Agreement and Franchise shall be sent to:

FOR THE COUNTY
Clerk of the Board
Mohave County
P.O. Box 7000
Kingman, AZ 86402-7000
602-753-0729

FOR FRANCHISEE
Virginia Mt. Utilities
P.O. Box 130
Littlefield AZ 86432
(520) 347-5515
Tom Stoddard

SECTION 21. EFFECTIVE DATE.

This Franchise shall take effect upon the date of approval by the Board.

Approved by the Mohave County Board of Supervisors this 12th
day of January, 1997.

For the Board:

Carol S. Anderson
Chairman of the Board

Accepted for Franchisee:

Tom Stoddard

Approved as to form:

[Signature]
County Attorney

ATTEST:



**ATTACHMENT A
LEGAL DESCRIPTION
VIRGIN MT. UTILITIES**

T41N, R15W, Sections 30, 29, 28, 32, 33, 34, 35, 36

T40N, R15W, Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, 29, 30, 31, 32

T40N, R16W, Sections 12, 13, 14, 23, 24, 25, 26, 27, 28, 29, 32, 33, 34, 35, 36

T39N, R16W, Sections 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22



Arizona Department of Environmental Quality

Certificate of Approval to Construct for a New Source Well, Storage Tanks, and Pressure System

EXHIBIT
tabbies
A-7
admitted 4-26-05

Applicant Information		ADEQ File No.		20050273, LTF#35906, PID#16040		
Name	Thomas G. Stoddard	Project	Virgin Mountain Utilities Company			
Mail Address 1	Virgin Mountain Utilities Company	Name	System Improvement and Expansion			
Mail Address 2	PO Box #668	Project Location	SE corner of Las Vegas Way & Zion Blvd.			
City/State/Zip	Beaver Dam, AZ 86432		Virgin River Ranches,			
Project Types		Project Description				
x	Pressure Main	x	Storage Tank	Install well #55-553309, two (2) 28,435 gallon water storage tanks for combined total capacity of 56,870 gallons, twelve (12) 110 gallon capacities for a combined total capacity of 1,320 gallons of hydro-pneumatic tanks to be installed in phases as demand increases and a community stand pipe.		
x	Hydro Tank	x	New Source Well			
Facility Name	Virgin Mountain Utilities Company	Facility Capacity	72 Gallons per minute			
Street Address 1	formerly known as Beaver Dam Water Company III		Up to 350 GPM			
Street Address 2	PO Box #668					
City/State/Zip	Beaver Dam, AZ 86432					
PWSID	08-093	System Capacity Affirmed By	Date			
County	Mohave	Joe Leedy, PE, Engin.'s Design Report	10/11/1999			
Design Documents Approved		Date	Site Information			
Application		1/28/05	Location of Distribution System			
Site Plan		11/22/1999	Township	39	Range	16
Design Plan		10/11/1999	Section	14	Quarter Section	NW
Operations & Maintenance Plan		AOC	Latitude	36° 47' 12.1"		North
Response Letter			Longitude	113° 59' 44.0"		West
Other						

Approval to Construct (ATC) the above-described facilities as represented in the approved plans documents on file with the Arizona Department of Environmental Quality is hereby given subject to the following provisions.
The General Provision and Special Provision for the Water Distribution System appear on Pages 2 through 2.

CERTIFICATE DISTRIBUTION

Original Certificate:

Owner

Steven Owens, Director
Arizona Department of Environmental Quality

By: *[Signature]* 3-29-05

Kurt J. Harris, P.E., Manager Date Approved
Water Quality Design Review Unit
Northern Regional Office

Certificate Copy Only
ADEQ/NRO Reading File
ADEQ/NRO Construction File
Mohave County Environmental Services, Rachael Patterson
Project Engineer: Joe Leedy, PE
2202 Stockton Hill Rd., Kingman, AZ 86401 - 4663

General Provisions

1. Notice shall be given to the Northern Regional Office (NRO) in Flagstaff (1 (877) 602-3675) and to the appropriate county department when construction of the project begins to allow for inspection during construction per A.R.S. § 49-104(B) (10). Contact Michelle Schroeder, Extension #2714, at least seven days prior to the start of construction.
2. The project owner shall contact a professional engineer as soon as possible to provide detailed construction inspection of this project (A.A.C. R18-4-507). Upon completion of construction, the retained professional engineer shall send to NRO the following:
 - A. Engineers Certificate of Completion (attached).
 - B. Sealed and signed As-Built plans with construction specifications.
 - C. All construction test data certified by the engineer.
 - D. All construction test data certified number of an operator, who is certified by the Department at a grade appropriate for the facility, is employed to operate the potable water distribution system.After receipt of the items outlined above, NRO will review the file and, if in order, will issue an Approval of Construction (AOC).
3. Operation of a newly constructed facility shall not begin until an AOC is issued by the Department per A.A.C. R18-4-507(A).
4. A minimum pressure of 20 psi shall be provided at all points in the distribution lines at all times.
5. All materials and products that come into contact with drinking water or drinking water treatment chemicals must comply with NSF Standard 61. Any "or equal" substitution shall also meet NSF Standard 61 may be considered if they otherwise comply with A.R.S. § 49-353.01.
6. Backflow prevention shall be provided in accordance with A.A.C. R18-4-115 and/or local ordinances.
7. The open end of each air relief pipe from automatic valves shall extend at least one foot above grade and shall incorporate pipe elbows to cause the opening, permanently covered with #16 mesh screen, to face downward.
8. The certificate voids and supersedes all previous "Approvals to Construct" Construction File 19990527 issued on 12-9-1999 previously for this project.
9. Water line sewer line separation shall meet A.A.C. 18-4-502. The separation requirements of A.A.C. R18-4-502 shall extend to all water line services and sewer line services within the right-of-way. Separation of water and sewer line on individual private property shall meet the requirements of the Uniform Plumbing Code (UPC).
10. This Approval to Construct become void if an extension of time is not granted by the Department within 90 days after passage of one of the following (A.A.C. R18-4-505(E)):
 - A. Construction does not begin within one year after the date the Approval to construct is issued, or
 - B. There is a halt in construction of more than one year, or
 - C. Construction is not completed within three years after the date construction begins.
11. Construction material used in a public water system, including residential and non-residential facilities connected to the public water system, shall be lead free as defined by A.A.C. R18-4-101(46).

[Handwritten signature] 3-29-05

Special Provisions

- A. As per R18-4-(B) (1) (d), provide Water Quality Data - Priority Pollutants for organic and inorganic for new source approval. Laboratory Analysis must be on ADEQ, Safe Drinking Water Quality Source Approval Form showing a complete water quality laboratory analysis. All water samples Chain-of-Custody to report forms shall use ADWR #55-553309 Well Number.
- B. Provide copies of Notice to Intent to Drill as soon as they are received. Please include ADWR Well completion report and ADWR Well Identification #55-553309. Please include a copy of this ATC with any subsequent submittals to assist NRO in document tracking and filing these document forms. As per R12-15 (D), please include ADWQ Well completion report ADWR Well Identification #55-553309. Installed well pump curve plotted with know total dynamic head to GPM.
- C. As per A.A.C. R18-4-116, submit an Emergency Operations Plan meeting this requirement.
- D. As per A.A.C. R18-5-505, no additional distribution system is to be installed without an ATC.
- E. As per ADWR, A.A.C. R12-5-502 (C)(5), Sewer mains (gravity, pressure and force) shall be kept at a minimum of 50 feet from wells unless the following conditions are met: a. Water main piper, pressure tested in place to 50 psi without excessive leakage, is used for gravity sewers at distances greater than 20 feet from water wells.
- F. As per ADWR, A.A.C. R12-15-811, Install a functional water tight access port or some other means to collect water level measurements without having to remove pump and associated equipment.
- G. As per ADWR, A.A.C. R18-15-, a sign having ADWR 55-553309 well registration number is required. NRO recommends that it should be installed at an easily visible location closest to the proposed well as possible (20' Rolling Gate).
- H. As per Bulletin 10, 2-E.6. The well site should be graded to provide drainage away from the well slab.
- I. As per Bulletin 10, 2-A-3. Install an Emergency disinfection tap and electrical connection on discharge line was shown. ADEQ recommends this tap be added prior to the storage tank to maximize chlorine contact time and disinfection effectiveness.
- J. As per Bulletin 10, 3-C.7. Pressure gage and flow meter (totalizing as per ADWR R12-15-902) on discharge line.
- K. As per Bulletin 8, 2-E.20. Well driller is required to disinfect well when submersible pump is deployed or show testing data of the results.
- L. As per Bulletin 10, 6-E.7, Storage Tanks are to include Level indicator, level controls - operating levels, and overflow and low-level warnings or alarms.
- M. ADEQ-NRO highly recommends that the PUMP HOUSE install a floor drain to facilitate maintenance and drain any accumulated water from inherit leaks or worn seals.

End of Provisions

1/11 3-29-05

Arizona Department of Environmental Quality
Operator Certification Program
1110 West Washington Street
Phoenix, Arizona 85007

The Arizona Department of Environmental Quality
hereby issues this Certificate of Registration as a

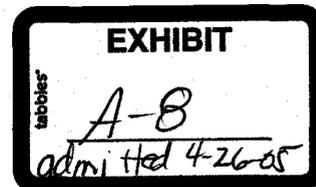
Grade 1 Water Treatment Plant Operator
to **TOM G STODDARD**

This certificate has been issued pursuant to Arizona Revised
Statutes Title 49, Chapter 2, Articles 9 and 10, and Arizona
Administrative Code Title 18, Chapter 5, Article 1.

Operator ID No. Expiration Date
11388 3/31/2008

TOM G STODDARD
P O BOX 668
BEAVER DAM, AZ

86432-



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Pursuant to Arizona Revised Statutes, Title 49, Chapter 2, Articles 9 and 10, and Arizona Administrative
Code, Title 18, Chapter 5, Article 1, the Arizona Department of Environmental Quality finds that

TOM G STODDARD

has complied with the requirements for operator certification in the State of Arizona, and issues
this Certificate of Registration as a

GRADE 1 WATER TREATMENT PLANT OPERATOR

Operator ID No. Expiration Date
11388 3/31/2008


Drinking Water Section
Operator Certification Program

Please notify the Operator Certification Program at (602) 771-4644:

- 1) *Within 10 days of an address change, or*
- 2) *To renew your certificate. You will not be notified regarding your certificate expiration.*

Arizona Department of Environmental Quality
Operator Certification Program
1110 West Washington Street
Phoenix, Arizona 85007

The Arizona Department of Environmental Quality
hereby issues this Certificate of Registration as a

Grade 1 Water Distribution System Operator
to **TOM G STODDARD**

This certificate has been issued pursuant to Arizona Revised
Statutes Title 49, Chapter 2, Articles 9 and 10, and Arizona
Administrative Code Title 18, Chapter 5, Article 1.

Operator ID No.	Expiration Date
11388	3/31/2008

TOM G STODDARD
P O BOX 668
BEAVER DAM, AZ

86432-

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Pursuant to Arizona Revised Statutes, Title 49, Chapter 2, Articles 9 and 10, and Arizona Administrative
Code, Title 18, Chapter 5, Article 1, the Arizona Department of Environmental Quality finds that

TOM G STODDARD

has complied with the requirements for operator certification in the State of Arizona, and issues
this Certificate of Registration as a

GRADE 1 WATER DISTRIBUTION SYSTEM OPERATOR

Operator ID No.	Expiration Date
11388	3/31/2008

Tony Bode
Drinking Water Section
Operator Certification Program

Please notify the Operator Certification Program at (602) 771-4644:

- 1) *Within 10 days of an address change, or*
- 2) *To renew your certificate. You will not be notified regarding your certificate expiration.*

ARIZONA DEPARTMENT OF WATER RESOURCES

Hydrology Division

500 North Third Street, Phoenix, Arizona 85004

Telephone 602 417-2448

Fax 602 417-2425

March 26, 2002

Mr. Tom Stoddard
 Virgin Mountain Utilities
 #39 Virgin Mountain Drive
 Beaver Dam, Arizona 86432

RE: "Scenic Arizona," T39N, R16W, Mohave County, Arizona
 Application for Physical Availability Demonstration #20-400682

Dear Mr. Stoddard:

The Department has completed review of the report entitled *Hydrologic Study, Assured and Adequate Water Supply, Virgin Mountain Utilities Company, Mohave County*, by GEO Consultants, Inc., July 24, 2001, and the analysis of available hydrologic information. The study area consists of about 23,040 acres in Sections 1 through 36, T39N, R16W, G&S R B&M in Mohave County within the Virgin River basin of northwestern Arizona.

In accordance with A.A.C. R12-15-717(C), it was determined that sufficient groundwater is physically available to meet the projected demand of approximately 968 acre-feet per year for 100 years under A.A.C. R12-15-717(B) for adequate water supply purposes in the subject area. This water is also of adequate quality for purposes of A.A.C. R12-15-718. It is the Department's conclusion that the estimated one hundred year depth-to-water should not encounter hydrologic bedrock, nor exceed 1200 feet below land surface, the maximum depth allowed by A.A.C. R12-15-717(B).

The results of the Department's hydrologic review fulfill the requirements of R12-15-716(C) and can be cited in applications for Statements of Water Adequacy, Analysis of Adequate Water Supply, or Designation of Adequate Water Supply. These applications have certain additional requirements based on the assured and adequate water supply criteria referenced in A.R.S. 45-108 and Rule R12-15-701 et. seq. For further information on these requirements, please contact the Office of Assured and Adequate Water Supply at (602) 417-2465. **If the Department finds that the groundwater supply is not available because the assumptions and information used in determining the physical availability under the current criteria prove incorrect, the Department will modify the availability of groundwater accordingly.**

The Department's determination is an appealable agency action. In order to appeal this decision, you must request an appeal within thirty (30) days from receipt of this letter. I have enclosed a summary of the appeals process and an appeal form should you wish to pursue this option.

EXHIBIT

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A-9

admitted 4-26-05



JANE DEE HULL
 Governor

JOSEPH C. SMITH
 Director

Page 2

March 26, 2002

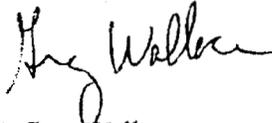
Mr. Tom Stoddard

"Scenic Arizona," T39N, R16W, Mohave County, Arizona

Application for Physical Availability Demonstration #20-400682

If you have any questions regarding the physical availability review, please contact me at (602) 417-2448.

Sincerely,



Greg Wallace
Chief Hydrologist

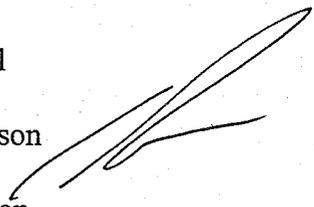
GW/KM/rd
202237

cc: Joel Meyers
Christa McJunkin, ADWR

LEGAL

MEMORANDUM

TO: Docket Control
FROM: Ernest G. Johnson
for Director
Utilities Division



DATE: March 15, 2005

RE: VIRGIN MOUNTAIN UTILITIES COMPANY - APPLICATION AN EXTENSION OF ITS CERTIFICATE OF CONVENIENCE AND NECESSITY ("CC&N") TO PROVIDE WATER SERVICE IN MOHAVE COUNTY, ARIZONA (DOCKET NO. W-03551A-04-0325)

Attached is the Staff Report for the above referenced application. Staff is recommending approval of the application.

EGJ:JEF:red

Originator: Jim Fisher

Attachment: Original and Thirteen Copies

RECEIVED

MAR 16 2005

LEGAL DIV.
ARIZ CORPORATION COMMISSION

EXHIBIT
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AZ CORP COMMISSION
DOCUMENT CONTROL

2005 MAR 15 P 4: 36

RECEIVED

Service List for: Virgin Mountain Utilities Company
Docket No. W-03551A-04-0325

Mr. Richard L. Sallquist
Sallquist & Drummond P.C.
2525 East Arizona Biltmore Circle
Phoenix, Arizona 85016

Mr. Christopher C. Kempley
Chief, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Mr. Ernest G. Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Ms. Lyn Farmer
Chief, Hearing Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

VIRGIN MOUNTAIN UTILITIES COMPANY

DOCKET NO. W-03551A-04-0325

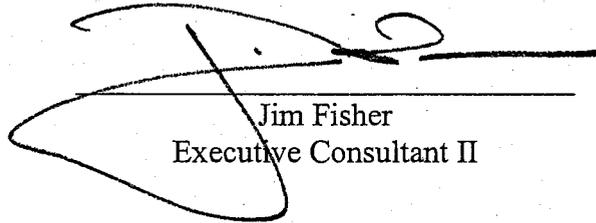
APPLICATION FOR AN EXTENSION OF ITS CC&N
TO PROVIDE WATER SERVICE IN MOHAVE COUNTY, ARIZONA

MARCH 2005

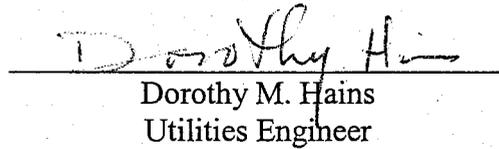
STAFF ACKNOWLEDGEMENT

The Staff Report for Virgin Mountain Utilities Company, Inc. (Docket No. W-03551A-04-0325) was the responsibility of the Staff members listed below. Jim Fisher was responsible for the review and analyses of the Company's application. Dorothy M. Hains was responsible for the engineering and technical analysis.

Contributing Staff:



Jim Fisher
Executive Consultant II



Dorothy M. Hains
Utilities Engineer

EXECUTIVE SUMMARY
VIRGIN MOUNTAIN UTILITIES COMPANY
DOCKET NO. W-03551A-04-0325

On April 29, Virgin Mountain Utilities ("VMU" or "Company"), a certificated Arizona public service corporation, filed an application with the Arizona Corporation Commission ("ACC" or "Commission") requesting approval for an extension of its existing Certificate of Convenience and Necessity, ("CC&N") to include additional property in Mohave County, Arizona.

On January 18, 2005, Staff informed the Company that the application was sufficient for administrative purposes.

VMU is an Arizona corporation, authorized by the ACC to provide water service to a portion of Mohave County. The Commission initially authorized VMU a CC&N in Decision No. 61525, (February 19, 1999). The Company currently has no customers, or ability to serve.

The Commission conditioned authorization of the initial CC&N on VMU demonstrating ownership in a well and compliance with the Arizona Department of Environmental Quality ("ADEQ") and the Arizona Department of Water Resources ("ADWR"). VMU failed to comply with filing requirements and necessitated numerous extensions of time from the Commission in order to demonstrate compliance with the initial CC&N.

VMU is still not in operation, it has no distribution plant or current customers. VMU has one well with a total production capacity of 70 gallons-per-minute ("GPM"), two 25,000 gallon storage tanks and 10 (ten) 110 gallon pressure tanks. ADEQ has not approved the system to operate, and the system has not been issued a Public Water System number.

The Commission has stated a goal to ensure Arizona consumer's benefit from financially stable and technically fit water systems. The requested area is adjacent to Beaver Dam Water Company, Inc., a utility that operates in compliance with the rules and regulations of ADWR, ADEQ and the Commission.

In spite of expending considerable Commission resources to assist VMU obtain compliance, the utility has yet to offer service to the public. Authorizing VMU additional territory that results in 100 connections is inconsistent with the goals of the Commission.

Staff recommends that the Commission deny the Virgin Mountain Utilities Company application for an extension of its Certificate of Convenience and Necessity in a portion of Mohave County to provide water service.

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Introduction

On April 29, Virgin Mountain Utilities Company ("VMU" or "Company"), a certificated Arizona public service corporation, filed an application with the Arizona Corporation Commission ("ACC" or "Commission") requesting approval for an extension of its existing Certificate of Convenience and Necessity, ("CC&N") to include additional property in Mohave County, Arizona. VMU is also requesting authority to charge a Hook-Up Fee. On May 21, 2004, Utilities Division Staff ("Staff") informed the Company that the application was insufficient for administrative purposes.

On January 18, 2005, Staff informed the Company that the application was sufficient for administrative purposes.

Background

VMU is an Arizona corporation, authorized by the ACC to provide water service to a portion of Mohave County. The Commission initially authorized VMU a CC&N in Decision No. 61525, (February 19, 1999). The Company has no customers, or current ability to serve.

In VMU initial application, the Commission was informed that two area developers would capitalize the utility and provide service to area property owners. The Commission was further informed that the utility had no facilities, however an eight inch well had been drilled by one of the developers. VMU informed the Commission that initial service would be provided by construction of backbone facilities, with further development financed through main extension agreements.

The developer informed the Commission he had not obtained related approvals from the Arizona Department of Water Resources ("ADWR") or the Arizona Department of Environmental Quality ("ADEQ"). The Commission conditioned authorization of the CC&N on VMU complying with certain conditions. The Commission required VMU to "secure transfer of its well site and related property from the Bowler Family Trust not later than 30 days after the effective date of the Decision and file confirmation with the Director of the Commission's Utilities Division."

The Commission further informed VMU that if the Company "does not timely file copies of the Certificate of Approval to Construct, Water Adequacy Statement, confirmation of the transfer of the well site, and the performance bond or its equivalent as required by the preceding paragraphs, then the Certificate of Convenience and Necessity for the area described in Exhibit A shall be deemed to be denied, without further Order by the Arizona Corporation Commission."

According to Decision No. 61525, VMU was required to provide the Commission well ownership evidence by March 19, 1999, and provide ADEQ and ADWR documentation by February 19, 2000.

On March 8, 2000, VMU filed its first application with the Commission requesting a retroactive extension to file the ADEQ and ADWR documentation by August 18, 2000. By Procedural Order dated March 14, 2000, the Commission provided VMU a retroactive extension of time to file the required ADEQ and ADWR documents by August 18, 2000.

On August 9, 2000, VMU filed a second application for an extension of time to file the ADWR documentation. By Procedural Order dated August 10, 2000, the Commission provided VMU an extension of time to file the required ADWR documents by February 19, 2001.

On February 21, 2001, Utilities Division Compliance and Enforcement Section notified VMU that it had not met certain conditions of Decision No. 61525, and as a result of the non-compliance, the CC&N was void.

On February 23, 2001, VMU filed with the Commission a recorded deed of the transfer of the well site. By Procedural Order dated May 4, 2001, the Commission accepted VMU's late file transfer deed and provided VMU a third extension of time to file the required ADWR documents by August 19, 2001.

On August 2, 2001, VMU filed an application for a fourth extension of time to file the ADWR documentation. By Procedural Order dated September 7, 2001, the Commission provided a fourth extension of time to file the required ADWR documents by February 15, 2002.

On February 14, 2002, VMU filed an application for a fifth extension of time to file the ADWR documentation. By Procedural Order dated March 21, 2002, the Commission provided a fifth extension of time to file the required ADWR documents by August 14, 2002.

On April 9, 2002, VMU filed the ADWR documentation. VMU had previously filed the ADEQ documentation dated December 9, 1999, by its terms, the ADEQ certificate is void if the construction had not been completed. The proposed water system has yet to be constructed.

By this application, VMU is seeking to extend its current 320 acre CC&N to include an additional one square mile parcel adjacent to the existing CC&N.

The Extension Request

VMU is requesting the Commission allow the Company to extend its service territory to include all of Section 15, of Township 39 North, South, Range 16 West of the Gila and Salt River Base and Meridian.

Finance of Facilities

According to the application VMU intends to finance the required transmission and distribution facilities primarily with Advances in Aid of Construction and Hook-Up Fees. Advances in aid of construction are often in the form of Main Extension Agreements. Main

Extension Agreements generally require the developer to design, construct and install, (or cause to be), all facilities to provide adequate service to the development. The developer is required to pay all costs of constructing the required facilities necessary to serve the development. Upon acceptance of the facilities by the utility the developer will convey the water facilities by way of a warranty deed. The utility will often refund ten (10) percent of the annual water revenue associated with development for a period of ten (10) years.

Hook-Up Fees are a Commission authorized rate applied to each new customer connection for the purpose of financing additional common plant. Hook-Up Fees can allow for the equitable distribution of costs to those requiring the additional facilities. A utility will obtain a Hook-Up Fee Tariff to assist in financing additional plant to ensure existing customers are not adversely impacted by new connections. Utilities will also use such a tariff to ensure developers are assessed costs for common facilities on an equal basis. Hook-Up Fees are contributions to rate base.

VMU is not in operation, it has no distribution plant or current customers. VMU has previously assured the Commission the shareholders would fund the plant needed. Until such time as VMU is operational, with plant in service, and a demonstrated need for additional common facilities Staff believes the no Hook-Up Fee should be authorized for this new utility.

Water Production Capacity

VMU has one well with a total production capacity of 70 gallons-per-minute ("GPM") two 25,000 gallon storage tanks and 10 (ten) 110 gallon pressure tanks.

The Company has not completed construction of the system. ADEQ has not approved the system to operate, therefore the system has not been issued a Public Water System number.

The existing system has adequate production and storage capacity to serve the proposed CC&N area within a conventional five year planning period and can be reasonably expected to develop additional production and storage capacity in the future.

Arizona Department of Water Resources (ADWR) Compliance

VMU is not with any ADWR Active Management Area, and is in compliance with ADWR's rules.

Curtailment Plan Tariff

A "Curtailment Plan Tariff" is an effective tool to allow a water company to manage its resources during periods of water shortages due to pump breakdowns, droughts, or other unforeseeable events. Since VMU does not yet have a curtailment tariff, this application provides an opportune time to prepare and file such a tariff.

Therefore, Staff recommends that the Company file a curtailment tariff within 60 days after the effective date of any decision and order pursuant to this application. The tariff should be filed within the current docket of record for this water CC&N application. Staff also recommends that the tariff shall generally conform to the sample tariffs found posted on the Commission's web site (www.cc.state.az.us/utility/water/forms.htm) or available upon request from Commission Staff.

ACC Compliance

A check with the Utilities Division, Compliance Section showed no outstanding compliance issues for the Company.

Proposed Rates

VMU has proposed to extend service to the property at its tariffed rates.

County Franchise

The requested area is not within the VMU Mohave County franchise.

Staff Analysis

The Commission has stated a goal to ensure Arizona consumer's benefit from financially stable and technically fit water systems.

VMU obtained a CC&N in 1999 and required 3 years to demonstrate compliance. VMU required numerous extensions of time, additional Staff time and actions on behalf of the Commission to retain the initial CC&N. However, in spite of expending considerable Commission resources to assist VMU obtain compliance, the utility has yet to offer service to the public.

VMU has not constructed a water system. VMU does not have a Public Water System number from ADEQ. VMU does not have any customers in its current CC&N.

VMU is requesting additional territory that could be served by Beaver Dam Water Company, Inc. Beaver Dam Water Company, Inc., an adjacent utility to the requested area, operates in compliance with the rules and regulations of ADWR, ADEQ and the Commission. Beaver Dam Water Company, Inc., has numerous water sources and offers customers the benefits of a focused management with an economy of scale to ensure long term viability. The Commission has seen fit to authorize Beaver Dam Water Company, Inc. additional territory, including the service territory of a small non-complaint utility.

Authorizing VMU additional territory that results in 100 connections will only ensure the system is marginally viable at best. Taking steps to ensure that the consuming public in the

requested territory is served by a viable utility is consistent with the goals of Commission. Therefore Staff recommends the Commission deny VMU's request for additional territory.

Recommendations

Staff recommends that the Commission deny the Virgin Mountain Utilities Company application for an extension of its Certificate of Convenience and Necessity in a portion of Mohave County to provide water service.

MEMORANDUM

TO: Jim Fisher
Executive Consultant II
Utilities Division

FROM: Barb Wells 
Information Technology Specialist
Utilities Division

THRU: Del Smith 
Engineering Supervisor
Utilities Division

DATE: May 28, 2004

RE: **VIRGIN MOUNTAIN UTILITIES COMPANY (DOCKET NO. W-03551A-04-0325)**

The area requested by Virgin Mountain for an extension to its CC#N has been plotted with no complications using the legal description provided with the application (a copy of which is attached).

Also attached is a copy of the map for your files.

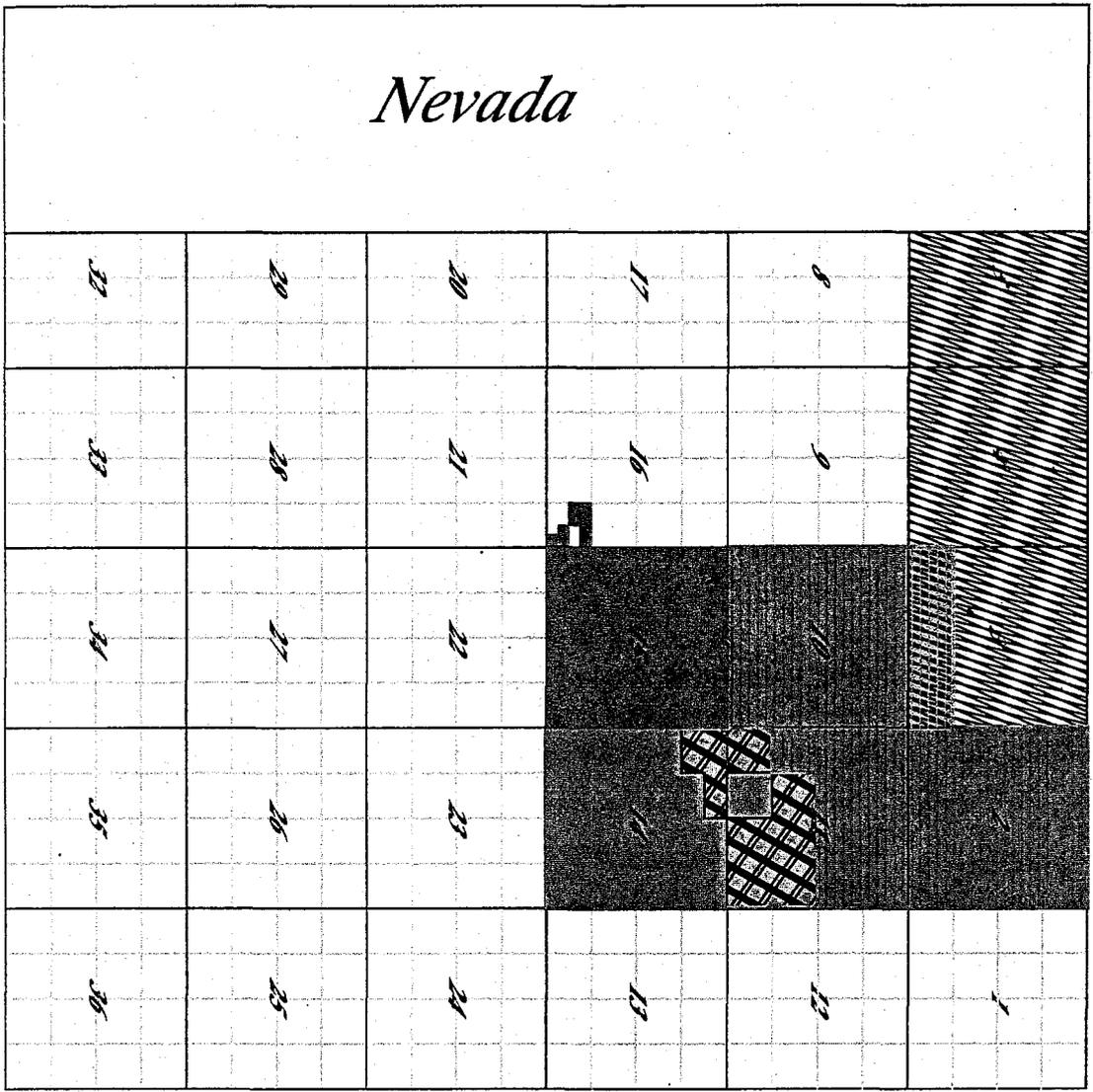
:bsw

Attachments

cc: Docket Control
Mr. Richard Sallquist
Ms. Deb Person (Hand Carried)
File

COUNTY: Mohave

RANGE 16 West



TOWNSHIP 39 North

-  W-3067 (4)
Beaver Dam Water Company, Inc.
-  W-3551 (1)
Virgin Mountain Utilities Company
-  Sunrise Well Association, Inc.
Docket No. W-4154-02-848
Application for Adjudication
-  Sunrise Utilities, LLC
Docket No. WS-4247-04-217
Application for CC&N for Water
-  Sunrise Utilities, LLC
Docket No. WS-4247-04-217
Application for CC&N for Sewer
-  Virgin Mountain Utilities Company
Docket No. W-3551-04-325
Application for Extension

LEGAL DESCRIPTION

Section 15, Township 39 North, Range 16 West
G&SRB&M, Mohave County, Arizona

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EXHIBIT C

MEMORANDUM

DATE March 15, 2005

TO: James E. Fisher

FROM: Dorothy Hains

RE: **Water CC&N Extension Application for Virgin Mountain Utilities Company**
Docket No. W-03551A-04-0325

I. Introduction

Virgin Mountain Utilities Company ("Virgin Mountain" or "Company") has submitted a Certificate of Convenience and Necessity (CC&N) extension application to provide water service near the town of Littlefield in northwest Mohave County. The requested water service area is one square mile.

II. System Analysis

The Company's water system consists of one well (70 gallons per minute), two 25,000 gallon storage tanks, and ten 110 gallon pressure tanks. Because the Company has not completed construction of the system, ADEQ has not approved this system to operate. There are no existing customers served by the system and the Company does not anticipate that there will be any demand for service in its existing CC&N area in the immediate future. The company has projected that there will be 100 customers in the extension within five years.

Staff concludes that the existing system has adequate production and storage capacity to serve the proposed CC&N area within a conventional five year planning period and can reasonably be expected to develop additional storage and production as required in the future.

III. Cost Analysis

To serve the requested area, the Company plans to install transmission mains, a pump station and fire protection. The Company's cost estimate for full build out of the extension area, which would consist of 825 lots, is \$1,455,790. The table below shows itemized costs and Staff's adjustments to reflect the cost to serve the initial 100 lots. Staff's cost estimate to serve the extension area during the initial five year period is \$215,589:

NARUC Account	Description	Company's cost estimate (\$)	Staff adjusted cost estimate (\$)
304	Structure & Improvements (a) Pump house & piping (b) fencing	\$7,000 (four @1,750 \$/unit) \$5,000	\$1,750 (one @1,750 \$/unit) \$0 ¹
307	Well/ well pump	\$25,000	\$0 ¹
311	Pumping Equipment: 7½-HP booster pumps	\$10,000 (Five pumps @ \$2,000/unit)	\$4,000 (Two pumps @ \$2,000/ unit)
330	Reservoir Standpipe	\$1,500 (one)	\$0 ¹
330.1	Storage tank	\$20,000 (one 28,000 gal storage tank)	\$0 ¹
330.2	Pressure tank	\$7,200 (ten 110 gal tanks)	\$0 ¹
331	Mains & Transmission: 6" mains 10" main	\$739,200 (52,800' @ 14 \$/ft) \$332,640 (15,840' (@ 21 \$/ft)	\$112,126 (8,009' @14 \$/ft) \$50,463 (2,403' @ 21 \$/ft)
335	Fire hydrants	\$308,250 (137 FH @ 2,250 \$/unit)	\$47,250 (21 FH @ 2,250 \$/unit)
	Total	1,455,790	215,589

Note: 1. These are existing plant items.

The Company's estimated water system costs, after Staff's adjustments, appear reasonable and appropriate. However, approval of this CC&N application does not imply any particular future treatment for rate base. No "used and useful" determination of the proposed plant in service was made, and no conclusions should be inferred for rate making purposes.

IV. Arizona Department of Environmental Quality (ADEQ) Capacity Development

Because the system construction is not completed and there is no customer on the system, Staff considers this system to be a new system. ADEQ Capacity

Development rules, effective September 23, 1999, require new public drinking water systems to meet (1) financial capacity, (2) managerial capacity, and (3) technical capacity requirements. ADEQ will accept a financial determination made by this Commission as meeting the financial capacity requirements for new water systems under the jurisdiction of the Commission. The technical and managerial capability is determined by ADEQ. All three components are combined in the final approval of the water company's "elementary business plan", pursuant to ADEQ rule R-18-4-606. The three components are reviewed and approved sequentially, with the technical capacity approval and "Approval to Construct" being the last performed. The Approval to Construct acts as a control point in the process, and once an Approval to Construct has been issued; it can be assumed that the water company has complied with the capacity development rules. Therefore, it is recommended that Virgin Mountain Utilities Company file a copy of the ADEQ "Approval of Construction" for water source/treatment plant and a copy of "Approval to Construct" for the water distribution system with Docket Control as a compliance filing in this same docket number within one year of the effective date of the final decision and order issued pursuant to this application.

V. Arizona Department of Water Resources (ADWR)

The Company is not located within any Active Management Area, as designated by ADWR. Staff recommends that the Company file with the Commission a copy of the developers' Letter of Adequate Water Supply, stating that there is adequate water to serve the proposed customers, where applicable or when required by statute, within a year of the effective date of the final decision and order issued pursuant to this application.

VI. Arizona Corporation Commission (ACC)

A check with the Utilities Division Compliance Unit showed no outstanding compliance issues

VI. Depreciation Rates

Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table 1, and it is recommended that the Company use the depreciation rates by individual National Association of Regulatory Utility Commissioners ("NARUC") category, as delineated in the following table.

**Table 1
Water Depreciation Rates**

Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

VII. Other Issues

A. Arsenic

The U.S. Environmental Protection Agency ("EPA") has reduced the arsenic maximum contaminant level ("MCL") in drinking water from 50 micrograms per

liter ("µg/l") or parts per billion ("ppb") to 10 µg/l. The date for compliance with the new MCL is January 23, 2006. The most recent lab analysis provided by the Company indicates that the arsenic level in the well is 5 µg/l which is below the new arsenic MCL.

B. Curtailment Tariff

A curtailment tariff is an effective tool to allow a water company to manage its resources during periods of shortages due to pump breakdowns, droughts, or other unforeseeable events. Since the Company does not have a curtailment tariff, this application provides an opportune time to prepare and file such a tariff. Staff recommends that the Company file a curtailment tariff as soon as possible, but no later than forty-five (45) days after the effective date of the final Decision and Order in this matter. The tariff shall be filed with Docket Control as a compliance item under this same docket number for Staff's review and certification.

Staff further recommends that the tariff shall generally conform to the sample tariff found on the Commission's web site at www.cc.state.az.us. Staff recognizes that the Company may need to make minor modifications according to their specific management, operational, and design requirements as necessary and appropriate.

C. Off-site Hookup Fee Charges

The Company has proposed to implement an off-site hookup fee tariff for its water services. Since the Company has no existing customer on its system, Staff considers this to be like a new CC&N. It is Staff's practice that when new water CC&Ns are being established not to recommend approval of off-site hookup fees. Staff recommends that the Company's request be denied.

Summary

I. Conclusions

1. Staff concludes that the proposed water system will have adequate production and storage capacity to serve the proposed CC&N area within a conventional five year planning period.
2. The Company's estimated water system cost after Staff adjustments appear reasonable and appropriate. However, approval of this CC&N application does not imply any particular future treatment for rate base. No "used and useful" determination of the proposed plant in service was made, and no conclusions should be inferred for rate making or rate base purposes.

II. Recommendations

1. It is recommended that Virgin Mountain Utilities Company file a copy of the ADEQ "Approval of Construction" for water source/treatment plant and a copy of "Approval To Construct" for the water distribution system to the Docket Control within one year of the effective date of the final decision and order issued pursuant to this application.
2. Staff recommends that the Company file with the Commission a copy of the developers' Letter of Adequate Water Supply, stating that there is adequate water supply, where applicable or when required by statute, within a year of the effective date of the final decision and order issued pursuant to this application.
3. Staff recommends that the Company use the depreciation rates delineated in Table 1 for its water system.
4. Staff recommends that the Company's request to implement off-site hookup fees for its water service be denied.
5. Staff recommends that the Company file a curtailment tariff as soon as possible, but no later than forty-five (45) days after the effective date of the final Decision and Order in this matter. The tariff shall be filed with Docket Control as a compliance item under this same docket number for Staff's review and certification. Staff further recommends that the tariff shall generally conform to the sample tariff found on the Commission's web site at www.cc.state.az.us.