

RECYCLED WATER ANALYSIS ARANTINE HILLS

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NOVEMBER 15, 2010

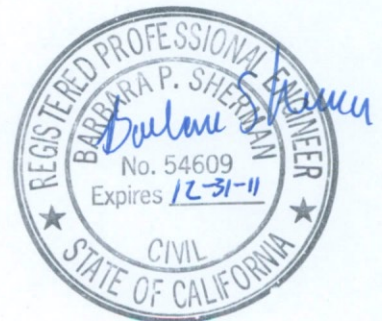


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ARANTINE HILLS
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CORONA, CA**

I. INTRODUCTION

The following document has been prepared to analyze the proposed Arantine Hills Project and the affects on the City's existing recycled water system. The City's recycled water system consists of four (4) service zones. Zone 1 is located in the northwest portion of the City. The service elevation 1008.5 feet is established by the high water level of the Border Reservoir. The tertiary treated effluent from Water Reclamation Facility (WRF) 1 supplies Zone 1 and 2. Zone 1 service elevations vary from 557 feet to 957 feet. Zone 2 is located in the northern portion of the City. Zone 2 service elevations vary from 582 feet to 838 feet. Zone 3 is located in the southern portion of the City. The service elevation of 1380 feet is established by the high water level of the Gilbert Reservoir. The source of supply to Zone 3 is from Zone 1 through the Border Pump Station. The service elevations vary from 716 feet to 1244 feet. Zone 4 is located in the southeast portion of the City. The tertiary treated effluent from WRF3 is supplemented with non potable well water to serve Zone 4. The recycled water is pumped to Terminal Lake located at the end of Eagle Glen Parkway and Eagle Glen HOA maintained landscaped area. The Project is located in Zone 4. The City is in the process of completing an interconnection between WRF3 and WRF1 systems. The interconnection consists of the addition of 16" recycled water lines in Foothill Parkway easterly to Bedford Canyon Road then southerly to approximately Georgetown Drive to tie Zone 3 and Zone 4 together. Per the 2006 Recycled Water Model, it was anticipated that a Pressure Reducing Valve would be included as part of the interconnection project. However, upon further analysis, the City determined the PRV was not needed and therefore was not installed. The City of Corona Department of Water and Power provided a recycled water hydraulic analysis that was prepared in April of 2010. This analysis included additional demands that were not included in the 2006 study. This analysis was used as the existing system model prior to any additional demands for the Arantine Hills Recycled Water Analysis. See Figure 1-Recycled Water Zone Service Areas provided on Sheet 2.

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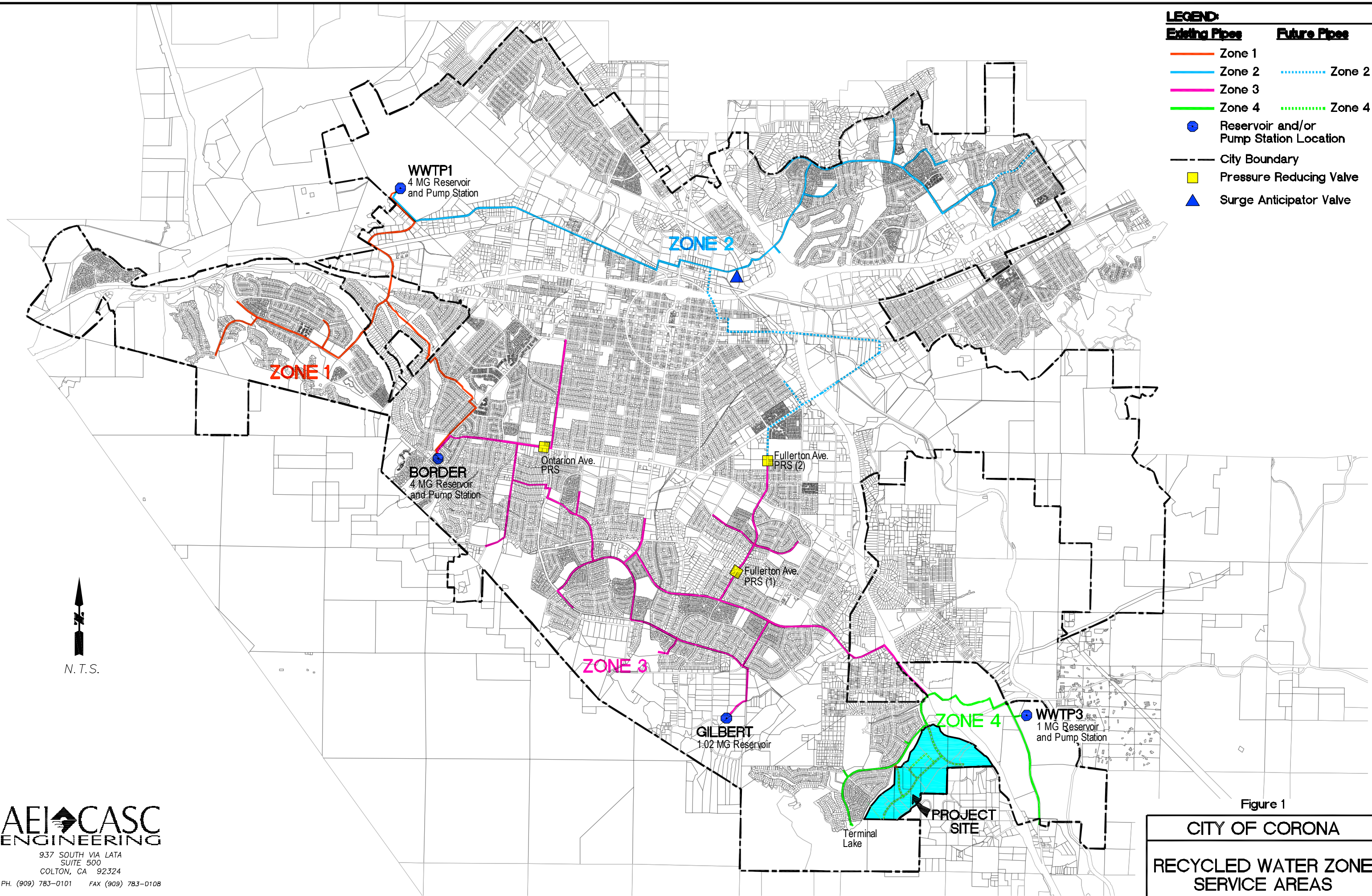


Figure 1

CITY OF CORONA

RECYCLED WATER ZONE
SERVICE AREAS

II. STUDY AREA

The proposed Project area known as Arantine Hills is located in the southeast area of the City of Corona (see Exhibit 1, Vicinity Map). The site consists of nineteen (19) Planning Areas comprised of Residential, Commercial, Mixed-Use, Park, and Open Space Areas (see Exhibit 2, Land Use Plan). The study also includes APN 282-040-003 which is the offsite parcel at the south end of proposed Street “B”. The intent is that the recycled waterline will be extended to future development from the south end of the proposed recycled waterline in Street “B”. The Project is located in the City’s Recycled Water Service Zone 4. The recycled water supply is tertiary treated wastewater from WRF3 and is stored in a 1 MG reservoir located at WRF3. There are currently three (3) – 100 horsepower pumps with a design flow of 500 gpm that supply recycled water to Zone 4. The current system uses two (2) of the three (3) pumps. The main backbone system consist of existing 14” pipelines in Temescal Canyon Road and adjacent to Cajalco Road and existing 12” pipelines in Bedford Canyon Road and Eagle Glen Parkway.

Currently the recycled water serves the Eagle Glen Golf Club, city parks, an elementary school, and Eagle Glen HOA maintained landscape areas. The WRF3 System has the capacity to serve 1MGD of recycled water.

The City is currently in the process of completing an Interconnection Project between the WRF3 and WRF1 Recycled Water System. The City anticipates the Project to be completed by the end of 2010. This interconnection will increase the City’s supply availability to Zone 4 thereby providing capacity for additional customers.

III. DESIGN CRITERIA

The City has utilized past consumption records to provide estimated recycled water usage based on acreage. The total demand for the Parks per Table 5 of the 2006 Model is 1132.80 AFY. The total area of Parks is 267.9 acres. To obtain an average usage for the Parks, the demand per acre was calculated as 4.23 AFY/AC (see Exhibit 10). For this Project, the recycled water average day unit demand utilized is 5AFY/AC. This is based on the Draft Recycled Water System Design Policy for the City of Corona Department of Water and Power. The areas being irrigated with recycled water include Parks, Entry Monuments, Street Parkways, Fuel Modification Areas, and HOA or LMD maintained landscaped areas (see Exhibit 3 – Water Generation Calculations). Three (3) scenarios where run for the project; the first scenario was run based on average day demands for the project. The second scenario was run utilizing a peaking factor of 4 for maximum day demands. The third scenario was provided using a peaking factor of 6 for peak hour demands.

The hydraulic analyses were run under steady state conditions. The Reservoir at WRF3, Gilbert Reservoir and Border reservoir were modeled with an elevation of 1’ below the High Water Level. The systems demands were set at nodes based on demands for each of the project planning areas. Table 1 summarizes the City’s Recycled Water Guidelines.

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Table 1 - City of Corona Recycled Water Guidelines

1	Recycled water average day demand for irrigation is 5 acre feet per year per acre.
2	Max day demand is calculated using a peaking factor of 4 for 240 days @ 9 hours a day.
3	Peak day demand is calculated using a peaking factor of 6 for 240 days @ 6 hours a day.
4	Distribution mains shall be sized to meet peak hour demands.
5	Maximum velocity during peak hour demands shall not exceed 6 feet per second. The preferred velocity is 2-3 feet per second.
6	Hazen Williams C=130 for pipes larger than 12" and C=120 for pipes 12" and smaller.
7	Minimum main size is 8" in diameter except where mains cannot be extended (cul de sacs and dead ends) the minimum is 6" in diameter.
8	Mains shall be constructed from PVC purple pipe per AWWA STD C900 or DIP per AWWA STD C151 with purple polyethylene encasement.
9	All Fittings shall be DIP per AWWA C110 and shall be restrained, flanged or mechanical joint with mega-lug type restraint.
10	Restrained Joint lengths shall be provided as per City Standard Drawings. Thrust blocks and anchors shall be allowed only at tie-ins to existing facilities. Support blocks shall be provided under all valves.
11	Minimum design pressure shall be 80 psi for average day demands and 60 psi during peak hours.
12	Pressure class of the recycled water pipelines shall be rated for the greater of the following conditions: a) recycled water booster shut off head b) average day recycled water demand working pressure plus surge allowance c) peak hour recycled water demand working pressure plus surge allowance.
13	Existing pressures to be determined from the Department of Water and Power 2010 Recycled Water System Model.

IV. HYDRAULIC MODEL

Hydraulic Analyses from April of 2010 for the Recycled Water System for Corona were provided by the City. The Existing System Analyses for Average Day, Max Day and Peak Hour were utilized as the base files for the Arantine Hills Recycled Water Analysis. Per the direction of the City of Corona Department of Water and Power, additional demands were

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added to the base system to account for additional areas being served with recycled water. The base files have been adjusted as follows:

- 535 gpm has been added to node 3-730 for the El Cerrito Park Demands
- Node 4-122 has been adjusted to provide an average day demand of 3.0 gpm for the Temescal Safety Facility
- The average day demands for the Arantine Hills project

(See Exhibit 4-Recycled Water Map). After updating the base to include the additional demands, the hydraulic analyses were re-run. The Average Day (Exhibit 5), Max Day (Exhibit 6) and Peak Hour (Exhibit 7) scenarios are provided. The Max Day Analysis utilizes a peaking factor of 4. The peak hour analysis utilizes a peaking factor of 6 (the analysis provided by the city utilized a peaking factor of 8 and we revised it to 6 for our study. The 535 gpm for the El Cerrito Park was not peaked for the Max Day and Peak Hour analyses per discussion with the Department of Water and Power).

V. RESULTS

Three Scenarios were analyzed for the Arantine Hills Recycled Water Study: Average Day Demands, Maximum (Max) Day Demands, and Peak Hour Demands. All three scenarios utilized the same base model provided by the City. Additional demands for the Project and demands requested by the City were added to provide the Average Day Demand base. The Max Day analysis was run with a peaking factor of 4 and the Peak Hour analysis utilized a peaking factor of 6.

SCENARIO 1

- The existing Average Day System recycled water supply is from Border Pump Station next to the Border Reservoir, (WRF1) and (WRF3). With the addition of the Project demands including backbone system of 8" pipelines and system demands requested by the City in recycled water Zone 3 and 4, two of the Border Pumps, seven of the WRF1 Pumps and two of the WRF3 Pumps were operating. This is the same Scenario as run for the existing system without the additional demands for the project.

SCENARIO 2

- The recycled water sources feeding the system under Existing Max Day conditions without adding additional demands include the Border, WRF1 and WRF3 reservoirs. With the addition of the Project demands including backbone system of 8" pipelines and system demands requested by the City in recycled water Zone 3 and 4, the sources supplying the system include the Border, WRF1 and WRF3 reservoirs. Three of the Border Pumps, seven of the WRF1 Pumps, and 2 of the WRF3 Pumps were operating.

SCENARIO 3

- The recycled water sources feeding the system under Existing Peak Hour conditions with the addition of the Project demands including a backbone system of 8"

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pipelines and system demands requested by the City in recycled water Zone 3 and 4 the sources supplying the system include the Border, WRF1 and WRF3 reservoirs. All four of the Border Pumps, nine of the WRF1 Pumps, and all three of the WRF3 Pumps were operating.

VI. PHASING

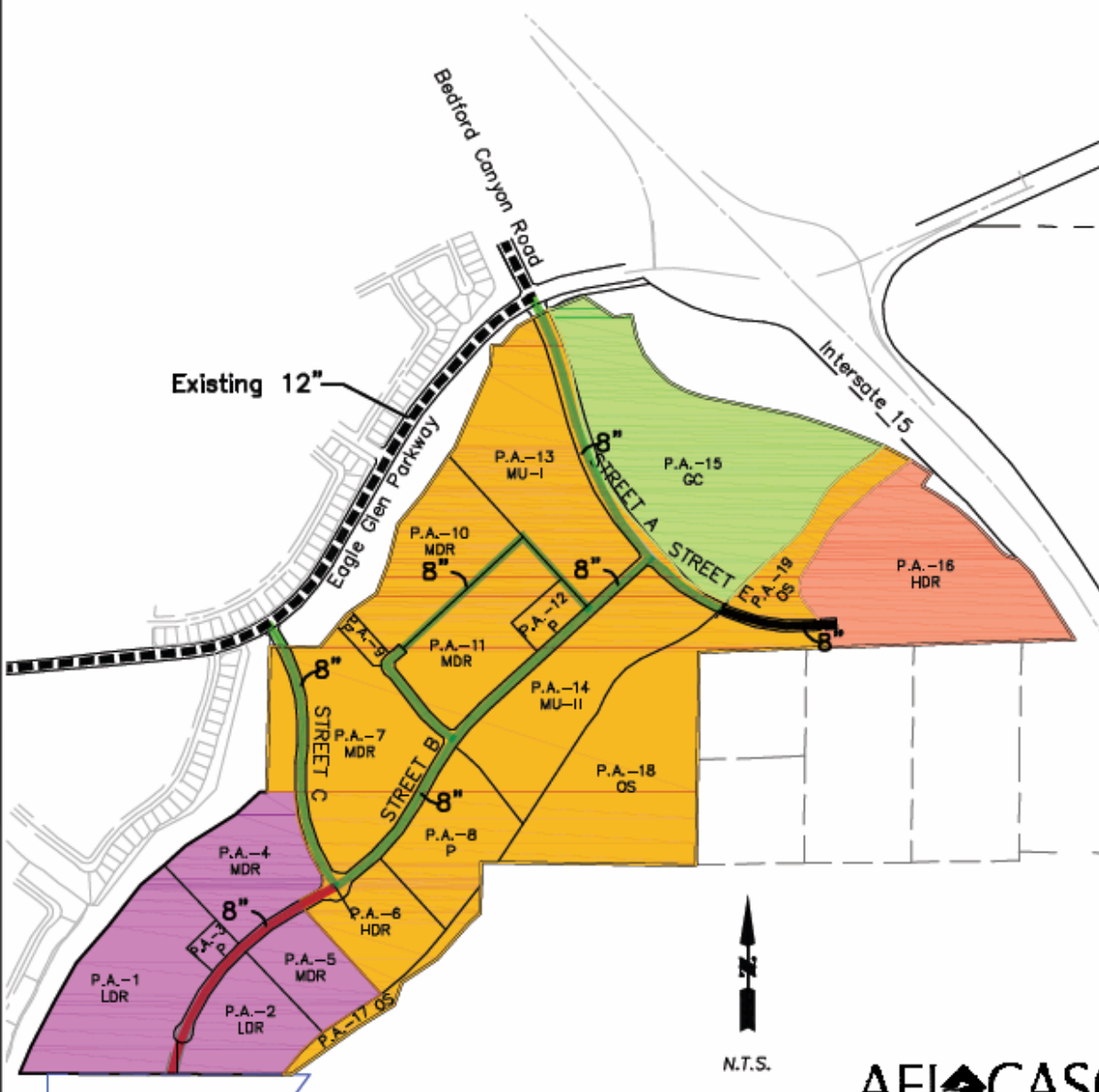
The Peak Hour analysis was used to determine which recycled waterlines would be required for the proposed phasing of the Project. The Project consists of four phases of development. See the Recycled Water Improvement Phasing Exhibit on page 7.

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Recycled Water Improvement Phasing Exhibit

LEGEND

AREA	Recycled Water Improvements
PHASE 1	
PHASE 2	NONE
PHASE 3	
PHASE 4	



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- Phase 1 development consists of P.A.'s 6-14 and 17-19. Phase 1 development will require the construction of an 8" recycled water line east of P.A. 4 and 5 in Street "A", Street "C", Street "B" from Street "A" to Street "C" and the loop around P.A. 11. A portion of the 8" recycled water line in Street "E" will need to be constructed up to the proposed Bedford Canyon Wash Crossing location. A private recycled water line can be constructed to serve Planning Areas 18 and 19 from the 8" recycled water line in Street E. During Phase 4, as Street E is constructed, the private recycled water line will be removed and replaced with permanent public lines as necessary. The pressures for the Project were above the 60 psi criteria and the velocities were less than the maximum 6 fps. See Exhibit 8-Phase 1 Peak Hour Reports.
- Phase 2 development consists of P.A. 15. The 8" recycled water line which will serve P.A. 15 will be constructed with Phase 1 in order to provide a looped connection to the existing recycled water system. Therefore, no additional recycled water line improvements are required for Phase 2.
- Phase 3 development consists of P.A.'s 1-5. Phase 3 development will require the construction of an 8" recycled water line in Street "B" west of Street "C". The pressures for the Project were above 60 psi and the velocities were less than 6 fps. See Exhibit 9-Phase 1, 2, and 3 Peak Hour Reports.
- Phase 4 development consists of PA 16. Phase 4 development will require the construction of the 8" backbone in Street "E" to Planning Area 16. This will complete the Project backbone recycled water lines. This is the same analysis as the Peak Hour Analysis. The pressures for the Project were above 60 psi and the velocities were less than 6 fps. See Exhibit 7.

VII. CONCLUSION

Per the hydraulic analyses run for the Project, Average Day, Max Day and Peak Hour, it has been determined that the project will require eight (8) inch pipelines constructed in the backbone streets of the Project. The Project meets the City's design criteria of 8" minimum diameter for main lines, minimum pressure of 80 psi for average day, and minimum pressure of 60 psi for peak hour, and velocities of less than 6 fps. The pipes shall be installed per the Phasing Exhibit provided on page 7.

VIII. REFERENCES

1. City of Corona Recycled Water System Model (July 2006)
2. Recycled Water System Hydraulic Analysis prepare by AKM and provided to the City in July of 2010

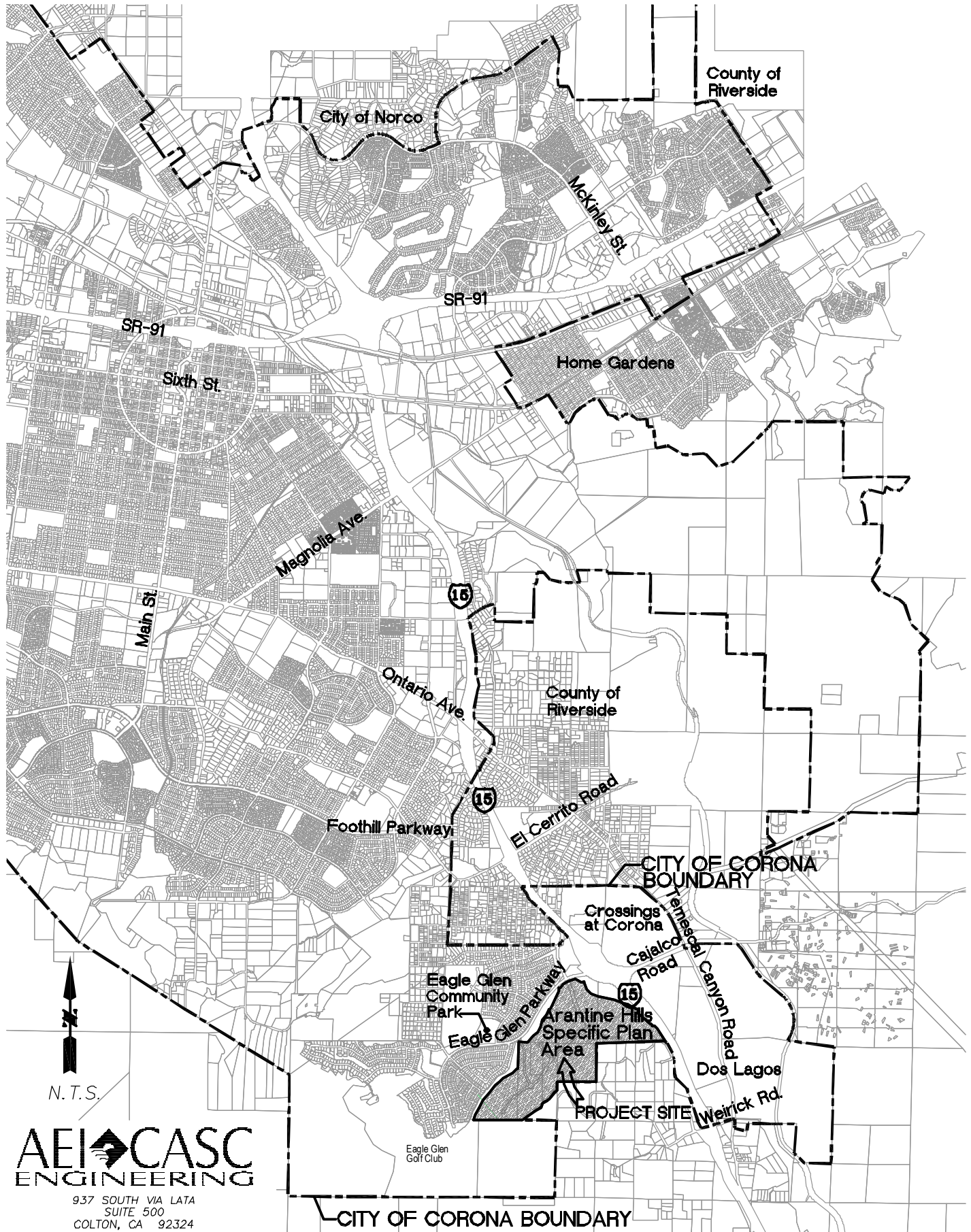
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EXHIBITS

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EXHIBIT 1: VICINITY MAP

Vicinity Map



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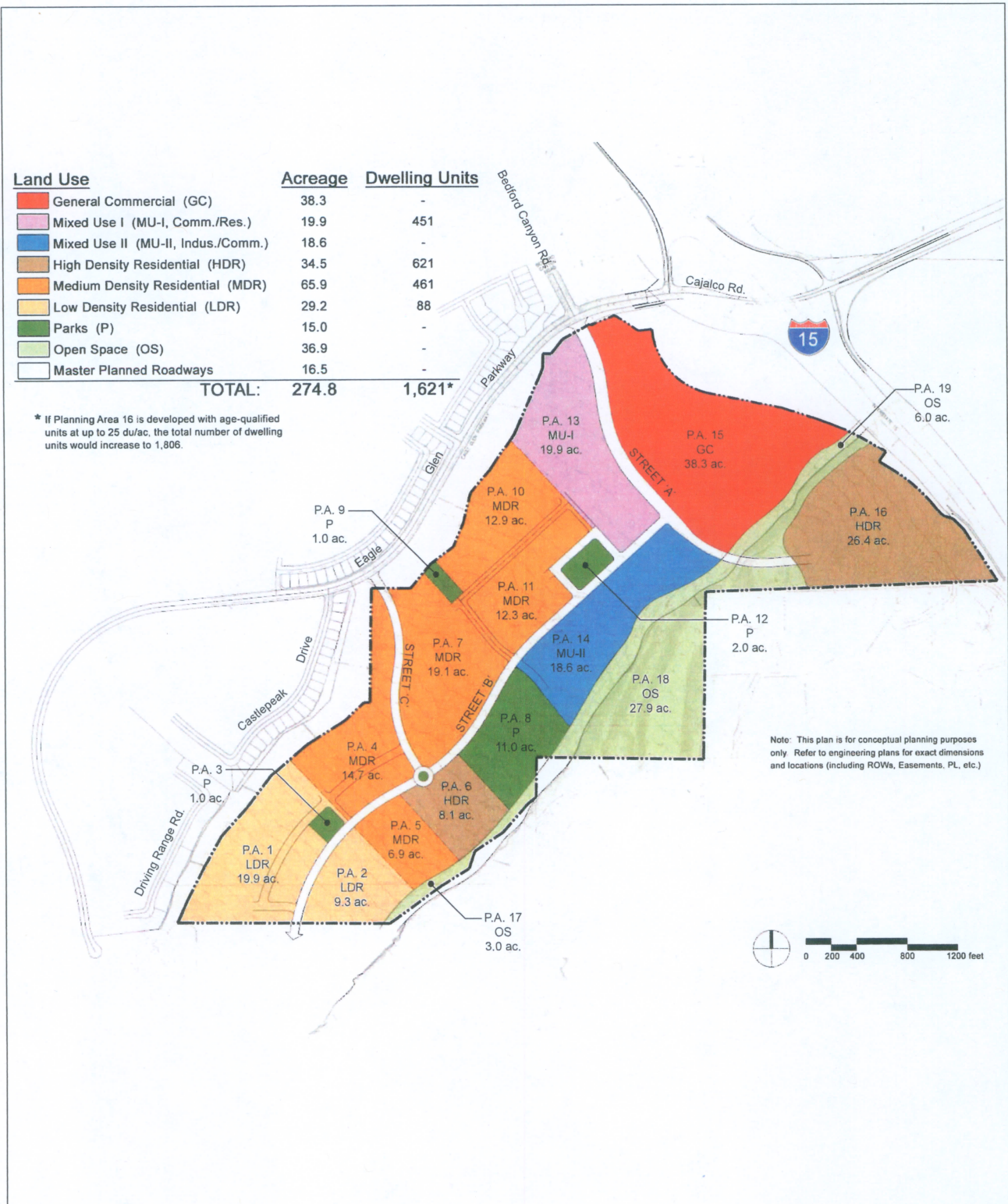
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EXHIBIT 2: LAND USE PLAN

Land Use

General Commercial (GC)	38.3	-
Mixed Use I (MU-I, Comm./Res.)	19.9	451
Mixed Use II (MU-II, Indus./Comm.)	18.6	-
High Density Residential (HDR)	34.5	621
Medium Density Residential (MDR)	65.9	461
Low Density Residential (LDR)	29.2	88
Parks (P)	15.0	-
Open Space (OS)	36.9	-
Master Planned Roadways	16.5	-
TOTAL:	274.8	1,621*

* If Planning Area 16 is developed with age-qualified units at up to 25 du/ac, the total number of dwelling units would increase to 1,806.



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EXHIBIT 3: RECYCLED WATER GENERATION CALCULATIONS

EXHIBIT 3- ARANTINE HILLS RECYCLED WATER GENERATION CALCULATIONS

Planning Area	Phase	Land Use	Acres (AC)	Net Area (AC)	Unit Demand (AFY)/AC	Average Total Demand (AFY)	Average Total Demand (gpm)	Max Day Demand (Peaking Factor of 4) (gpm)	Peak Flows (Peaking Factor of 6) (gpm)	Node
1	3	Low Density Residential	19.9	0.8	5	4.00	2.48	9.92	14.88	4-225
2	3	Low Density Residential	9.3	0.44	5	2.20	1.36	5.46	8.18	4-230
3	3	Park	1.0	1	5	5.00	3.10	12.40	18.60	4-235
4	3	Medium Density Residential	14.7	0.79	5	3.95	2.45	9.80	14.69	4-245
5	3	Medium Density Residential	6.9	0.37	5	1.85	1.15	4.59	6.88	4-240
6	1	High Density Residential	8.1	0.63	5	3.15	1.95	7.81	11.72	4-250
7	1	Medium Density Residential	19.1	0.96	5	4.80	2.98	11.90	17.86	4-260
8	1	Park	11.0	11	5	55.00	34.10	136.40	204.60	4-255
9	1	Park	1.0	1	5	5.00	3.10	12.40	18.60	4-305
10	1	Medium Density Residential	12.9	0.52	5	2.60	1.61	6.45	9.67	4-310
11	1	Medium Density Residential	12.3	0.49	5	2.45	1.52	6.08	9.11	4-275
12	1	Park	2.0	2	5	10.00	6.20	24.80	37.20	4-280
13	1	Mixed Use I	19.9	1	5	5.00	3.10	12.40	18.60	4-300
14	1	Mixed Use II	18.6	3.33	5	16.65	10.32	41.29	61.94	4-270
15	2	General Commercial	38.3	4.45	5	22.25	13.80	55.18	82.77	4-285
16	4	High Density Residential	26.4	1.78	5	8.90	5.52	22.07	33.11	4-295
17	1	Open Space	3.0	3	5	15.00	9.30	37.20	55.80	4-251
18	1	Open Space	27.9	9.4	5	47.00	29.14	116.56	174.84	4-290
19	1	Open Space	6.0	6	5	30.00	18.60	74.40	111.60	4-290
Offsite APN 282-040-003	3	Low Density Residential	160.0	6.4	5	32.00	19.84	79.36	119.04	4-220

Phase 1 Demand	141.80	39.33	-	196.65	121.92	487.69	731.54
Phase 2 Demand	38.3	4.5	-	22.3	13.8	55.2	82.8
Phase 3 Demand	211.8	9.8	-	49.0	30.4	121.5	182.3
Phase 4 Demand	26.4	1.8	-	8.9	5.5	22.1	33.1
TOTAL	418.3	55.36	-	276.8	171.616	686.464	1029.696

Assumptions

Unit demand for Irrigating with recycled water is estimated to be 5 AFY/AC

The areas being irrigated with recycled water include:

Parks, Entry monuments, Street parkways, Fuel Modification areas, and HOA and LMD Landscape areas.

To determine the Net area being irrigated, It was estimated that 20% of the planning areas would be streets. Out of this area, 20% would be irrigated landscape area. Therefore, 4% of the area will be irrigated. Fuel Mod and Entry monument areas were deducted prior to taking 4% of the area then added back in once 4% of the area was calculated. Fuel Mod areas were obtained from page 4-17 of the Arantine Hills Specific Plan and the Entry Monuments were estimate as 0.10 and 0.15 acres depending on the type of monument.

Per the fuel modification plan, a portion of the planning areas and OS areas will be irrigated with recycled water. A 200' fuel modification setback is required

Example: PA 14 Net Area= 4%(area) + 2.59(fuel mod area) + 0.1(monument area)

area=18.6 Ac-2.59(fuel mod)-0.10(monument)=15.91Ac

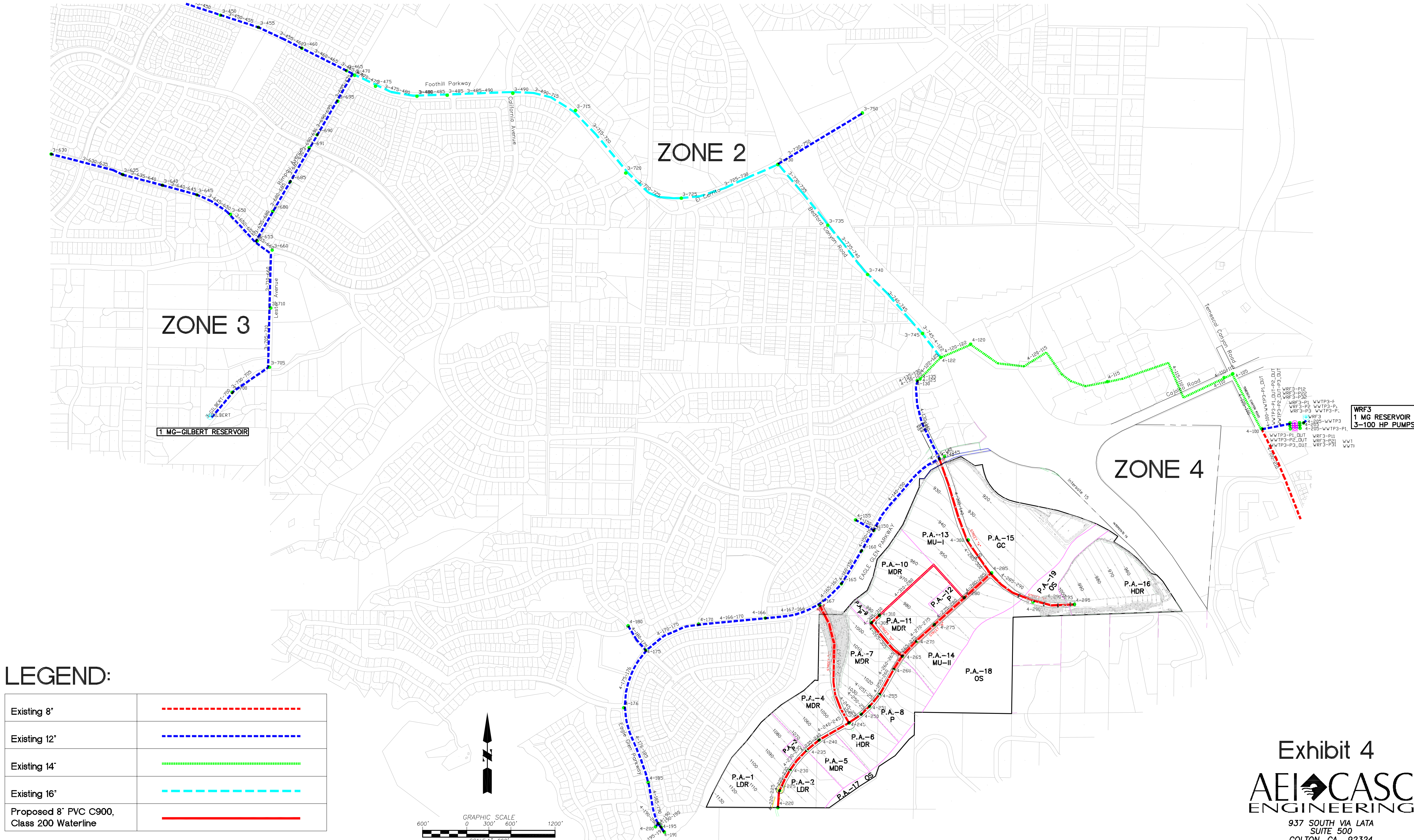
PA 14 Net area=(0.04 x 15.91) + 2.59 + 0.1= 3.33AC

Example PA 1 Average Day Demand(gpm)=4 GAF/YR x 1YR/365Days x 43560 SF/AC x 7.48 gal/CF x 1DY/1440 min=2.48 gpm

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EXHIBIT 4: RECYCLED WATER PROJECT MAP

ARANTINE HILLS RECYCLED WATER PROJECT MAP



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EXHIBIT 5: AVERAGE DAY HYDRAULIC ANALYSIS

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-100	0	544	557.62	5.9
1-105	0	555	1,118.45	244.14
1-110	0	556	1,116.11	242.7
1-115	0	574.69	1,113.45	233.44
1-120	0	568	1,111.51	235.5
1-125	7.04	564	1,109.94	236.56
1-130	0	556.6	1,108.20	239.01
1-135	0	564	1,105.22	234.51
1-140	0	581.35	1,102.35	225.75
1-145	0	596.5	1,099.77	218.07
1-150	0	605.9	1,097.12	212.85
1-155	0	614	1,094.46	208.19
1-160	0	619.5	1,093.18	205.24
1-165	0	625	1,088.25	200.73
1-170	0	650	1,081.21	186.84
1-175	0	679	1,074.59	171.41
1-180	0	709.22	1,069.10	155.94
1-185	4.04	742	1,063.39	139.26
1-190	0	740.7	1,059.19	138
1-195	0	773	1,053.32	121.46
1-200	0	779.5	1,046.79	115.82
1-205	0	781	1,043.07	113.55
1-210	0	798	1,036.97	103.54
1-215	0	825.25	1,031.75	89.47
1-220	0	852	1,024.58	74.78
1-225	0	896	1,020.15	53.8
1-230	3.25	957	1,014.28	24.82
1-235	0	616.38	1,093.18	206.6
1-240	0	652	1,093.15	191.15
1-245	3.03	667	1,093.12	184.64
1-250	0	706.88	1,093.11	167.35
1-255	4.31	728	1,093.10	158.2
1-260	20.09	782	1,093.08	134.79
1-265	0	822.7	1,093.06	117.15
1-270	0	829	1,093.04	114.41
1-275	0	817	1,093.02	119.6
1-280	0	797	1,093.01	128.26
1-285	0	733	1,092.97	155.97
1-290	0	706	1,092.93	167.66
1-295	0	683	1,092.89	177.61
1-300	0	649	1,092.86	192.32
1-305	0	627	1,092.85	201.85
1-310	10.97	586.5	1,092.85	219.4
1-315	10.31	653	1,092.85	190.59
1-320	6.3	663.24	1,092.85	186.15
1-325	0	671.79	1,092.84	182.44
1-330	0	726	1,092.82	158.94
1-335	0	771	1,092.80	139.43

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-340	0	799.35	1,092.77	127.14
1-345	13.03	783.8	1,092.75	133.87
1-350	0	786.84	1,092.75	132.55
1-355	0	827.5	1,093.05	115.06
1-360	18.03	813	1,093.04	121.34
1-365	4.32	803	1,093.04	125.67
1-370	0.5	791.12	1,093.04	130.82
1-375	0	978	1,008.95	13.41
1-400	0	638	1,093.16	197.22
2-100	0	773.87	1,014.34	104.2
2-101	0	770	1,014.34	105.87
2-102	4.39	744	1,014.34	117.14
2-103	0	717	1,014.34	128.84
2-105	0	719	1,014.38	127.99
2-110	0	718	1,014.45	128.45
2-115	9.4	715	1,014.49	129.77
2-117	3.28	712	1,014.50	131.07
2-118	9.21	719	1,014.47	128.03
2-119	19.13	753	1,014.46	113.29
2-120	0	712.3	1,014.52	130.95
2-125	0.6	711	1,014.64	131.57
2-130	0	707	1,014.71	133.33
2-135	0	641	1,014.73	161.94
2-136	0	613	1,014.74	174.07
2-137	212.3	600	1,014.57	179.63
2-140	0	598	1,014.77	180.59
2-145	0	587	1,014.84	185.38
2-150	168.4	589.91	1,014.86	184.13
2-155	0	595.7	1,014.93	181.65
2-156	0	604.52	1,014.93	177.83
2-157	0	604	1,014.93	178.06
2-158	0	611.54	1,014.93	174.79
2-160	0	593	1,015.05	182.88
2-165	0	589	1,015.09	184.62
2-170	0	586	1,015.17	185.96
2-175	0	580	1,015.27	188.6
2-176	0	586	1,015.39	186.05
2-180	0	588	1,015.32	185.16
2-185	0	584	1,015.44	186.94
2-190	0	592.6	1,015.49	183.24
2-195	0	587	1,015.59	185.71
2-200	0	581	1,015.69	188.35
2-205	0	591	1,015.78	184.06
2-210	0	592.42	1,015.83	183.46
2-215	0	596.1	1,015.94	181.91
2-220	0	601.9	1,016.04	179.45
2-225	0	598.5	1,016.13	180.96
2-230	0	594.1	1,016.24	182.91
2-235	0	584.3	1,016.33	187.2

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
2-240	0	563	1,016.42	196.47
2-245	0	567	1,016.51	194.77
2-250	0	564	1,016.60	196.11
2-255	40	582	1,016.71	188.36
2-260	0	584	1,016.83	187.55
2-265	14	575	1,016.95	191.5
2-270	182.02	580.1	1,017.09	189.35
2-275	0	555.6	1,017.30	200.06
2-280	0	554	1,017.42	200.8
2-285	0	544	557.97	6.05
2-365	0	766	1,014.26	107.57
2-370	5.62	799	1,014.22	93.26
2-375	4.19	838	1,014.18	76.34
2-380	5.29	820	1,014.13	84.12
2-381	0	798.32	1,014.12	93.51
2-385	0	761.4	1,014.08	109.48
2-390	7.99	768	1,014.06	106.62
2-395	18.35	780	1,014.05	101.41
2-400	0	777.3	1,014.05	102.58
2-405	0	738.4	1,014.06	119.44
2-410	0	742	1,014.05	117.88
2-415	0	757	1,014.05	111.38
2-420	0	800	1,014.04	92.74
2-425	0	762.98	1,014.03	108.78
2-430	18.58	778.27	1,014.02	102.15
2-435	1.66	732	1,014.04	122.21
2-440	0.99	722	1,014.02	126.53
2-445	0	710	1,014.01	131.73
2-450	0	704	1,013.99	134.32
2-455	0.18	728	1,013.97	123.91
2-460	38.37	728	1,013.96	123.91
2-465	0	776	1,013.96	103.11
2-470	2.33	808.07	1,013.96	89.21
2-475	0	800	1,013.94	92.7
2-480	0	764.1	1,013.92	108.25
2-485	5.49	771	1,013.92	105.26
2-490	2.53	784	1,013.91	99.62
2-495	0	760.59	1,013.90	109.76
2-496	0	753	1,013.89	113.05
2-500	0	753	1,013.89	113.04
2-505	0	749.7	1,013.89	114.47
2-510	19.45	760.8	1,013.88	109.66
3-090	4.9	984	1,007.45	10.16
3-095	0	1,006.63	1,482.33	206.12
3-100	7.63	991.92	1,482.13	212.41
3-105	12.88	957.95	1,480.88	226.58
3-110	0	923.51	1,480.28	241.25
3-115	3.3	918.6	1,479.68	243.12
3-120	0	886.5	1,478.34	256.44

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-125	0	879	1,476.89	259.06
3-130	0	871.75	1,476.14	261.88
3-135	9.27	872	1,475.35	261.43
3-140	0	868	1,474.39	262.75
3-141	0	865	1,473.95	263.86
3-145	0	875	1,473.95	259.52
3-150	0	875	1,036.55	70
3-155	1.29	872.5	1,036.55	71.08
3-160	0	845	1,036.55	83
3-165	0	826	1,036.55	91.23
3-170	0	813.4	1,036.55	96.69
3-175	0	814	1,036.55	96.43
3-180	0	779	1,036.55	111.6
3-185	0	758.5	1,036.55	120.48
3-190	0	743	1,036.55	127.2
3-195	0	716.72	1,036.55	138.58
3-200	19.19	1,032.27	1,470.50	189.88
3-205	0	1,042.00	1,470.50	185.67
3-210	5.16	1,042.51	1,470.50	185.45
3-215	0	1,007.00	1,470.50	200.84
3-220	0	990.05	1,470.51	208.18
3-225	3.29	965	1,470.51	219.04
3-230	0	939	1,470.51	230.3
3-235	0	928	1,470.51	235.07
3-240	0	910.58	1,471.72	243.14
3-245	0	896.1	1,472.56	249.78
3-250	0	925	1,469.16	235.78
3-255	0	925.49	1,467.54	234.87
3-260	0	926.26	1,467.24	234.41
3-265	0	935.1	1,466.86	230.41
3-270	1.37	947.35	1,466.05	224.75
3-275	0	955	1,464.97	220.97
3-280	0	966	1,464.00	215.78
3-285	3.39	982.58	1,463.15	208.23
3-290	6.56	999	1,462.05	200.64
3-295	6.4	1,045.00	1,460.54	180.05
3-300	2.04	1,053.21	1,460.23	176.36
3-305	2.34	1,085.53	1,458.61	161.66
3-310	0	962	1,463.13	217.14
3-315	22.62	941.22	1,463.12	226.14
3-320	0	1,095.60	1,458.60	157.29
3-321	1.96	1,092.00	1,458.61	158.85
3-325	9.12	1,109.00	1,458.59	151.48
3-330	4.56	1,125.00	1,458.59	144.54
3-335	8.52	1,130.45	1,458.59	142.18
3-340	0	1,137.00	1,458.59	139.34
3-345	0	1,153.00	1,458.59	132.41
3-350	0	1,191.19	1,458.59	115.86
3-355	0	1,082.00	1,455.86	161.99

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-360	0	1,088.00	1,451.22	157.38
3-365	5.24	1,088.42	1,450.71	156.98
3-370	2.64	1,220.00	1,445.45	97.69
3-371	0	1,240.83	1,445.45	88.66
3-372	0	1,220.98	1,445.45	97.26
3-373	0	1,247.86	1,445.45	85.62
3-374	0	1,209.29	1,445.91	102.53
3-375	0	1,180.00	1,447.02	115.7
3-376	0	1,262.40	1,445.45	79.32
3-377	0	1,305.68	1,445.45	60.56
3-380	1.57	1,141.00	1,448.40	133.2
3-385	0	1,107.47	1,449.62	148.25
3-390	36.28	1,095.60	1,450.20	153.65
3-395	0	1,069.54	1,447.15	163.62
3-400	0	1,093.00	1,444.44	152.28
3-402	0	1,010.28	1,447.15	189.29
3-405	2.18	1,119.80	1,440.56	138.99
3-410	0	1,127.24	1,436.38	133.95
3-420	0	1,146.00	1,432.74	124.24
3-425	0.92	1,142.00	1,430.57	125.04
3-430	3.28	1,128.00	1,428.46	130.19
3-435	0	1,124.84	1,425.80	130.41
3-440	3.61	1,129.00	1,423.90	127.78
3-445	4.2	1,129.61	1,423.50	127.34
3-450	0	1,130.39	1,420.90	125.88
3-455	41.49	1,123.00	1,418.82	128.18
3-460	2.74	1,129.95	1,416.49	124.16
3-465	2.52	1,130.00	1,414.05	123.08
3-470	0	1,130.37	1,413.96	122.88
3-475	2.03	1,128.00	1,413.85	123.86
3-480	55.67	1,116.20	1,413.66	128.89
3-485	12.6	1,102.00	1,413.55	134.99
3-490	0	1,074.92	1,413.31	146.62
3-495	0	1,089.50	1,423.48	144.71
3-500	2.6	1,086.00	1,423.47	146.23
3-505	0	1,057.00	1,423.46	158.79
3-510	3.97	1,050.37	1,423.45	161.66
3-515	0	1,046.02	1,184.49	60
3-520	0	1,013.49	1,184.47	74.09
3-525	8.76	974	1,184.45	91.19
3-530	0	947	1,184.45	102.89
3-531	3.17	942.65	1,184.45	104.77
3-535	7.43	931.7	1,184.45	109.51
3-540	0	911	1,184.45	118.48
3-545	0	892	1,184.45	126.72
3-550	0	876	1,184.45	133.65
3-555	0	851.71	1,184.45	144.17
3-560	0	830	1,184.45	153.58
3-565	0	814	1,184.45	160.51

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-570	1.63	968	1,184.45	93.79
3-575	2.17	974	1,184.45	91.19
3-580	0.54	973.8	1,184.45	91.27
3-585	1.23	966	1,184.45	94.65
3-590	6.46	973	1,184.45	91.62
3-595	0	977	1,184.39	89.86
3-600	0	975	1,184.34	90.71
3-605	46.51	937.8	1,184.27	106.79
3-610	0	1,198.00	1,444.18	106.67
3-615	3.33	1,198.00	1,443.11	106.2
3-620	2.35	1,123.00	1,442.15	138.29
3-625	2.19	1,238.79	1,440.95	87.6
3-630	3.2	1,242.00	1,436.91	84.46
3-635	18.64	1,239.00	1,428.88	82.27
3-640	0	1,245.00	1,424.49	77.77
3-645	0.66	1,250.00	1,420.69	73.96
3-650	3.18	1,244.30	1,416.55	74.64
3-655	0.2	1,240.92	1,412.58	74.38
3-660	0	1,246.51	1,409.77	70.74
3-665	0	1,243.00	1,440.95	85.77
3-670	6.63	1,268.25	1,440.95	74.83
3-675	0	1,256.12	1,440.95	80.09
3-680	0	1,224.43	1,412.82	81.63
3-685	0	1,203.00	1,413.06	91.02
3-690	0	1,169.94	1,413.45	105.51
3-691	0	1,182.00	1,413.34	100.24
3-695	5.78	1,146.00	1,413.73	116.01
3-700	8.04	1,337.63	1,384.41	20.27
3-705	0	1,311.00	1,391.54	34.9
3-710	0	1,281.00	1,400.76	51.89
3-715	0	1,052.20	1,413.06	156.36
3-720	0	1,050.00	1,412.77	157.19
3-725	0	1,013.04	1,412.53	173.1
3-730	535	948.55	1,412.16	200.88
3-735	0	950	1,412.15	200.25
3-740	0	934	1,412.14	207.18
3-745	0	903.66	1,412.13	220.32
3-750	0	904	1,412.16	220.18
4-100	0	793.7	1,419.11	270.99
4-105	0	801.95	1,418.04	266.95
4-110	0	798.01	1,417.88	268.59
4-115	0	836.04	1,415.38	251.03
4-120	0	861.06	1,412.67	239.01
4-122	3	891.44	1,412.12	225.61
4-125	0	910	1,411.52	217.31
4-130	0	908.69	1,411.40	217.82
4-135	0	920	1,411.40	212.92
4-140	0	923.22	1,407.85	209.99
4-145	7.29	918	1,407.85	212.25

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
4-150	4.81	1,018.32	1,405.40	167.72
4-155	7.38	1,024.21	1,405.40	165.17
4-160	5.57	1,038.00	1,404.82	158.94
4-165	11.88	1,063.52	1,403.90	147.49
4-166	3.75	1,112.00	1,401.59	125.48
4-167	0	1,072.94	1,403.19	143.1
4-170	11.66	1,122.00	1,399.74	120.34
4-175	0	1,135.66	1,398.10	113.72
4-176	13.69	1,148.14	1,396.44	107.59
4-180	12.64	1,138.00	1,398.10	112.7
4-185	34.43	1,206.37	1,394.42	81.48
4-190	0	1,228.00	1,393.43	71.68
4-191	750	1,214.00	1,393.19	77.64
4-195	0	1,214.00	1,393.32	77.7
4-200	0	1,214.00	1,393.43	77.75
4-205	0	792.42	803.35	4.73
4-210	0	828.94	1,419.11	255.72
4-215	0	864	1,419.11	240.53
4-220	19.84	1,108.00	1,403.50	128.04
4-225	2.48	1,101.00	1,403.50	131.07
4-230	1.36	1,089.20	1,403.51	136.19
4-235	3.1	1,073.73	1,403.51	142.9
4-240	1.15	1,064.31	1,403.52	146.98
4-245	2.45	1,047.20	1,403.53	154.4
4-250	1.95	1,040.00	1,403.61	157.55
4-251	9.3	1,030.22	1,403.67	161.81
4-255	34.1	1,023.11	1,403.76	164.93
4-260	2.98	1,010.57	1,404.03	170.49
4-265	0	1,001.89	1,404.18	174.31
4-270	10.32	990.55	1,404.26	179.26
4-275	1.52	980	1,404.36	183.88
4-280	6.2	960	1,404.55	192.62
4-285	13.8	942	1,405.01	200.62
4-290	47.74	957	1,404.94	194.09
4-295	5.52	997	1,404.94	176.76
4-300	3.1	920.83	1,405.90	210.18
4-305	3.1	996	1,404.27	176.9
4-310	1.61	990	1,404.29	179.51
BP1_IN	0	984	1,007.38	10.13
BP1_OUT	0	1,015.25	1,482.39	202.41
BP2_IN	0	984	1,007.38	10.13
BP2_OUT	0	1,015.25	1,482.40	202.41
BP3_IN	0	984	1,007.40	10.14
BP3_OUT	0	1,015.25	1,482.40	202.41
BP4_IN	0	984	1,007.42	10.15
BP4_OUT	0	1,015.25	1,482.40	202.41
WWTP1-P10_IN	0	544	557.95	6.05
WWTP1-P10_OUT	0	544	1,017.59	205.21
WWTP1-P11_IN	0	544	557.95	6.04

Average Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
WWTP1-P11_OUT	0	544	1,017.59	205.21
WWTP1-P12_IN	0	544	557.95	6.04
WWTP1-P12_OUT	0	544	1,017.59	205.21
WWTP1-P1_IN	0	544	557.39	5.8
WWTP1-P1_OUT	0	544	1,121.12	250.07
WWTP1-P2_IN	0	544	557.39	5.8
WWTP1-P2_OUT	0	544	1,121.12	250.07
WWTP1-P3_IN	0	544	557.4	5.81
WWTP1-P3_OUT	0	544	1,121.11	250.06
WWTP1-P4_IN	0	544	557.42	5.81
WWTP1-P4_OUT	0	544	1,121.10	250.06
WWTP1-P5_IN	0	544	557.42	5.81
WWTP1-P5_OUT	0	544	1,121.10	250.06
WWTP1-P6_IN	0	544	557.42	5.81
WWTP1-P6_OUT	0	544	1,121.10	250.06
WWTP1-P7_IN	0	544	557.96	6.05
WWTP1-P7_OUT	0	544	1,017.58	205.2
WWTP1-P8_IN	0	544	557.96	6.05
WWTP1-P8_OUT	0	544	1,017.58	205.2
WWTP1-P9_IN	0	544	557.96	6.05
WWTP1-P9_OUT	0	544	1,017.58	205.2
WWTP3-P1_IN	0	794	803.22	4
WWTP3-P1_OUT	0	794	1,420.08	271.28
WWTP3-P2_IN	0	792.42	803.2	4.67
WWTP3-P2_OUT	0	794	1,420.10	271.29
WWTP3-P3_IN	0	792.42	803.2	4.67
WWTP3-P3_OUT	0	794	1,420.10	271.29

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-100-WWTP1-P4_IN	1-100	WWTP1-P4_IN	61.61	24	130	7042.28	4.99	0.20
1-105-110	1-105	1-110	725.92	24	130	7042.28	4.99	2.34
1-105-WWTP1-BP4_OUT	1-105	WWTP1-P4_OUT	823.50	24	130	-7042.28	4.99	2.65
1-110-115	1-110	1-115	828.10	24	130	7042.28	4.99	2.66
1-115-120	1-115	1-120	602.76	24	130	7042.28	4.99	1.94
1-120-125	1-120	1-125	487.15	24	130	7042.28	4.99	1.57
1-125-130	1-125	1-130	540.48	24	130	7035.24	4.99	1.74
1-130-135	1-130	1-135	929.44	24	130	7035.24	4.99	2.99
1-135-140	1-135	1-140	891.61	24	130	7035.24	4.99	2.86
1-140-145	1-140	1-145	803.96	24	130	7035.24	4.99	2.58
1-145-150	1-145	1-150	825.52	24	130	7035.24	4.99	2.65
1-150-155	1-150	1-155	826.97	24	130	7035.24	4.99	2.66
1-155-160	1-155	1-160	400.46	24	130	7035.24	4.99	1.29
1-160-165	1-160	1-165	646.23	20	130	6944.35	7.09	4.92
1-160-235	1-160	1-235	818.27	24	130	90.89	0.06	0.00
1-165-170	1-165	1-170	924.08	20	130	6944.35	7.09	7.04
1-170-175	1-170	1-175	868.88	20	130	6944.35	7.09	6.62
1-175-180	1-175	1-180	720.23	20	130	6944.35	7.09	5.49
1-180-185	1-180	1-185	749.26	20	130	6944.35	7.09	5.71
1-185-190	1-185	1-190	552.20	20	130	6940.31	7.09	4.20
1-190-195	1-190	1-195	770.63	20	130	6940.31	7.09	5.87
1-195-200	1-195	1-200	858.15	20	130	6940.31	7.09	6.53
1-200-205	1-200	1-205	489.28	20	130	6940.31	7.09	3.72
1-205-210	1-205	1-210	801.28	20	130	6940.31	7.09	6.10
1-210-215	1-210	1-215	685.73	20	130	6940.31	7.09	5.22
1-215-220	1-215	1-220	940.80	20	130	6940.31	7.09	7.16
1-220-225	1-220	1-225	582.12	20	130	6940.31	7.09	4.43
1-225-230	1-225	1-230	771.09	20	130	6940.31	7.09	5.87
1-230-375	1-230	1-375	700.86	20	130	6937.06	7.08	5.33
1-235-400	1-235	1-400	519.89	12	120	90.89	0.26	0.02
1-240-245	1-240	1-245	638.53	12	120	90.89	0.26	0.02
1-240-400	1-240	1-400	382.12	12	120	-90.89	0.26	0.01
1-245-250	1-245	1-250	530.68	12	120	87.86	0.25	0.02
1-250-255	1-250	1-255	266.95	12	120	87.86	0.25	0.01

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-255-260	1-255	1-260	698.70	12	120	83.55	0.24	0.02
1-260-265	1-260	1-265	958.84	12	120	63.46	0.18	0.02
1-265-270	1-265	1-270	281.92	8	120	40.61	0.26	0.02
1-265-355	1-355	1-265	644.45	8	120	-22.85	0.15	0.01
1-270-275	1-270	1-275	466.34	8	120	40.61	0.26	0.03
1-275-280	1-275	1-280	199.09	8	120	40.61	0.26	0.01
1-280-285	1-280	1-285	740.62	8	120	40.61	0.26	0.04
1-285-290	1-285	1-290	677.64	8	120	40.61	0.26	0.04
1-290-295	1-290	1-295	651.86	8	120	40.61	0.26	0.04
1-295-300	1-295	1-300	633.58	8	120	40.61	0.26	0.04
1-300-305	1-300	1-305	503.17	8	120	10.97	0.07	0.00
1-300-315	1-300	1-315	113.29	8	120	29.64	0.19	0.00
1-305-310	1-305	1-310	799.46	8	120	10.97	0.07	0.00
1-315-320	1-315	1-320	395.94	8	120	19.33	0.12	0.01
1-320-325	1-320	1-325	220.64	6	110	13.03	0.15	0.01
1-325-330	1-325	1-330	732.23	6	110	13.03	0.15	0.02
1-330-335	1-330	1-335	611.98	6	110	13.03	0.15	0.02
1-335-340	1-335	1-340	625.35	6	110	13.03	0.15	0.02
1-340-345	1-340	1-345	628.09	6	110	13.03	0.15	0.02
1-345-350	1-345	1-350	131.80	6	110	0.00	0.00	0.00
1-355-360	1-355	1-360	449.60	8	120	22.85	0.15	0.01
1-360-365	1-360	1-365	298.77	8	120	4.82	0.03	0.00
1-365-370	1-365	1-370	274.40	8	120	0.50	0.00	0.00
1-375-BORDER	1-375	BORDER	191.03	20	130	6937.06	7.08	1.45
1-WWTP1-100	WRF1	1-100	119.55	24	130	7042.28	4.99	0.38
2-100-101	2-100	2-101	260.82	8	120	0.00	0.00	0.00
2-101-102	2-101	2-102	521.22	8	120	0.00	0.00	0.00
2-102-103	2-103	2-102	841.92	8	120	4.39	0.03	0.00
2-103-105	2-103	2-105	70.22	8	120	-135.41	0.86	0.04
2-103-365	2-103	2-365	1233.10	12	120	131.02	0.37	0.08
2-105-110	2-105	2-110	945.61	12	120	-135.41	0.38	0.07
2-110-115	2-110	2-115	539.97	12	120	-135.41	0.38	0.04
2-115-117	2-115	2-117	113.87	12	120	-144.81	0.41	0.01
2-117-118	2-117	2-118	843.56	8	120	28.34	0.18	0.02

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-117-120	2-117	2-120	240.34	12	120	-176.43	0.50	0.03
2-118-119	2-118	2-119	1110.74	8	120	19.13	0.12	0.02
2-120-125	2-120	2-125	983.52	12	120	-176.43	0.50	0.12
2-125-130	2-125	2-130	559.97	12	120	-177.03	0.50	0.07
2-130-135	2-130	2-135	853.35	16	130	-177.03	0.28	0.02
2-135-136	2-135	2-136	391.50	16	130	-177.03	0.28	0.01
2-136-137	2-136	2-137	423.36	10	120	212.30	0.87	0.17
2-136-140	2-136	2-140	295.92	16	130	-389.33	0.62	0.03
2-140-145	2-140	2-145	1092.71	18	130	-389.33	0.49	0.07
2-145-150	2-145	2-150	441.06	18	130	-389.33	0.49	0.03
2-150-155	2-150	2-155	548.10	18	130	-557.73	0.70	0.07
2-155-156	2-155	2-156	960.72	12	120	0.00	0.00	0.00
2-155-160	2-155	2-160	1036.20	18	130	-557.73	0.70	0.12
2-156-157	2-156	2-157	449.63	12	120	0.00	0.00	0.00
2-157-158	2-157	2-158	341.84	12	120	0.00	0.00	0.00
2-160-165	2-160	2-165	302.10	18	130	-557.73	0.70	0.04
2-165-170	2-165	2-170	672.48	18	130	-557.73	0.70	0.08
2-170-175	2-170	2-175	869.81	18	130	-557.73	0.70	0.10
2-175-180	2-175	2-180	407.16	18	130	-557.73	0.70	0.05
2-176-180	2-176	2-180	530.29	18	130	557.73	0.70	0.06
2-180-185	2-176	2-185	489.53	18	130	-557.73	0.70	0.06
2-185-190	2-185	2-190	386.23	18	130	-557.73	0.70	0.05
2-190-195	2-190	2-195	808.82	18	130	-557.73	0.70	0.10
2-195-200	2-195	2-200	861.85	18	130	-557.73	0.70	0.10
2-200-205	2-200	2-205	800.26	18	130	-557.73	0.70	0.10
2-205-210	2-205	2-210	391.86	18	130	-557.73	0.70	0.05
2-210-215	2-210	2-215	875.21	18	130	-557.73	0.70	0.10
2-215-220	2-215	2-220	863.18	18	130	-557.73	0.70	0.10
2-220-225	2-220	2-225	799.09	18	130	-557.73	0.70	0.10
2-225-230	2-225	2-230	857.48	18	130	-557.73	0.70	0.10
2-230-235	2-230	2-235	810.85	18	130	-557.73	0.70	0.10
2-235-240	2-235	2-240	707.78	18	130	-557.73	0.70	0.08
2-240-245	2-240	2-245	786.41	18	130	-557.73	0.70	0.09
2-245-250	2-245	2-250	702.44	18	130	-557.73	0.70	0.08

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-250-255	2-250	2-255	991.80	18	130	-557.73	0.70	0.12
2-255-260	2-255	2-260	867.24	18	130	-597.73	0.75	0.12
2-260-265	2-260	2-265	896.29	18	130	-597.73	0.75	0.12
2-265-270	2-265	2-270	947.86	18	130	-611.73	0.77	0.13
2-270-275	2-270	2-275	945.80	18	130	-793.75	1.00	0.22
2-275-280	2-275	2-280	505.23	18	130	-793.75	1.00	0.12
2-280-WWTP1-P9_OUT	2-280	WWTP1-P9_OUT	715.68	18	130	-793.75	1.00	0.16
2-285-WWTP1	2-285	WRF1	115.18	18	130	-793.75	1.00	0.03
2-285-WWTP1-BP9_IN	2-285	WWTP1-P9_IN	75.16	18	130	793.75	1.00	0.02
2-365-370	2-365	2-370	498.67	12	120	131.02	0.37	0.03
2-370-375	2-370	2-375	736.72	12	120	125.40	0.36	0.05
2-375-380	2-375	2-380	843.20	12	120	121.21	0.34	0.05
2-380-381	2-380	2-381	145.36	12	120	115.92	0.33	0.01
2-381-385	2-381	2-385	793.40	12	120	115.92	0.33	0.04
2-385-405	2-385	2-405	578.31	12	120	89.58	0.25	0.02
2-390-385	2-390	2-385	764.54	8	120	-26.34	0.17	0.02
2-395-390	2-395	2-390	709.08	8	120	-18.35	0.12	0.01
2-400-395	2-400	2-395	767.72	8	120	0.00	0.00	0.00
2-405-410	2-405	2-410	269.14	8	120	18.58	0.12	0.00
2-405-435	2-405	2-435	699.59	12	120	71.00	0.20	0.02
2-410-415	2-410	2-415	403.03	8	120	18.58	0.12	0.01
2-415-420	2-415	2-420	865.13	8	120	18.58	0.12	0.01
2-420-425	2-420	2-425	901.31	8	120	18.58	0.12	0.01
2-425-430	2-425	2-430	645.25	8	120	18.58	0.12	0.01
2-435-440	2-435	2-440	835.19	12	120	69.34	0.20	0.02
2-440-445	2-440	2-445	836.05	12	120	68.35	0.19	0.02
2-445-450	2-445	2-450	712.68	12	120	68.35	0.19	0.01
2-450-455	2-450	2-455	981.33	12	120	68.35	0.19	0.02
2-455-460	2-455	2-460	495.46	12	120	68.17	0.19	0.01
2-460-465	2-460	2-465	717.54	12	120	29.80	0.08	0.00
2-465-470	2-465	2-470	708.83	12	120	29.80	0.08	0.00
2-470-475	2-470	2-475	582.82	8	120	27.47	0.18	0.02
2-475-480	2-475	2-480	637.59	8	120	27.47	0.18	0.02
2-480-485	2-480	2-485	231.68	8	120	27.47	0.18	0.01

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-485-490	2-485	2-490	494.98	8	120	21.98	0.14	0.01
2-490-495	2-490	2-495	438.22	8	120	19.45	0.12	0.01
2-495-496	2-495	2-496	508.54	8	120	19.45	0.12	0.01
2-496-500	2-496	2-500	273.78	8	120	19.45	0.12	0.00
2-500-505	2-500	2-505	384.93	8	120	19.45	0.12	0.01
2-505-510	2-505	2-510	386.63	8	120	19.45	0.12	0.01
3-090-BORDER	3-090	BORDER	66.09	24	130	-3163.57	2.24	0.05
3-095-100	3-095	3-100	111.93	20	130	3158.67	3.23	0.20
3-095-BP1_OUT	3-095	BP1_OUT	36.38	20	130	-3158.67	3.23	0.06
3-100-105	3-100	3-105	709.75	20	130	3151.04	3.22	1.25
3-105-110	3-105	3-110	339.12	20	130	3138.16	3.20	0.59
3-110-115	3-110	3-115	343.32	20	130	3138.16	3.20	0.60
3-115-120	3-115	3-120	770.98	20	130	3134.86	3.20	1.35
3-120-125	3-120	3-125	830.51	20	130	3134.86	3.20	1.45
3-125-130	3-125	3-130	428.53	20	130	3134.86	3.20	0.75
3-130-135	3-130	3-135	448.18	20	130	3134.86	3.20	0.78
3-135-140	3-135	3-140	554.68	20	130	3125.59	3.19	0.96
3-140-141	3-140	3-141	254.42	20	130	3125.59	3.19	0.44
3-141-145	3-141	3-145	542.28	20	130	1.29	0.00	0.00
3-150-155	3-150	3-155	911.45	8	120	1.29	0.01	0.00
3-155-160	3-155	3-160	978.19	8	120	0.00	0.00	0.00
3-160-165	3-160	3-165	692.71	8	120	0.00	0.00	0.00
3-165-170	3-165	3-170	446.87	8	120	0.00	0.00	0.00
3-170-175	3-170	3-175	296.15	8	120	0.00	0.00	0.00
3-175-180	3-175	3-180	757.11	6	110	0.00	0.00	0.00
3-180-185	3-180	3-185	803.74	6	110	0.00	0.00	0.00
3-185-190	3-185	3-190	538.71	6	110	0.00	0.00	0.00
3-190-195	3-190	3-195	954.17	6	110	0.00	0.00	0.00
3-200-205	3-200	3-205	583.46	12	120	-19.19	0.05	0.00
3-205-210	3-205	3-210	473.00	12	120	-19.19	0.05	0.00
3-210-215	3-210	3-215	745.46	12	120	-24.35	0.07	0.00
3-215-220	3-215	3-220	456.48	12	120	-24.35	0.07	0.00
3-220-225	3-220	3-225	728.00	12	120	-24.35	0.07	0.00
3-225-230	3-225	3-230	666.26	12	120	-27.64	0.08	0.00

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-230-235	3-230	3-235	330.59	12	120	-27.64	0.08	0.00
3-235-240	3-235	3-240	697.41	20	130	-3124.30	3.19	1.21
3-235-250	3-235	3-250	793.74	20	130	3096.66	3.16	1.36
3-240-245	3-240	3-245	480.80	20	130	-3124.30	3.19	0.83
3-245-141	3-245	3-141	801.57	20	130	-3124.30	3.19	1.39
3-250-255	3-250	3-255	946.18	20	130	3096.66	3.16	1.62
3-255-260	3-255	3-260	173.60	20	130	3096.66	3.16	0.30
3-260-265	3-260	3-265	223.81	20	130	3096.66	3.16	0.38
3-265-270	3-265	3-270	477.60	20	130	3096.66	3.16	0.82
3-270-275	3-270	3-275	632.96	20	130	3095.29	3.16	1.08
3-275-280	3-275	3-280	565.48	20	130	3095.29	3.16	0.96
3-280-285	3-280	3-285	501.10	20	130	3095.29	3.16	0.85
3-285-290	3-285	3-290	652.10	20	130	3069.28	3.13	1.10
3-285-310	3-285	3-310	625.99	8	120	22.62	0.14	0.01
3-290-295	3-290	3-295	903.43	20	130	3062.72	3.13	1.51
3-295-300	3-295	3-300	187.71	20	130	3056.32	3.12	0.31
3-300-305	3-300	3-305	967.57	20	130	3054.28	3.12	1.61
3-305-355	3-305	3-355	568.18	16	130	3027.78	4.83	2.76
3-310-315	3-310	3-315	532.30	8	120	22.62	0.14	0.01
3-320-321	3-320	3-321	570.31	8	120	-22.20	0.14	0.01
3-320-325	3-320	3-325	608.31	8	120	22.20	0.14	0.01
3-321-305	3-321	3-305	296.47	10	120	-24.16	0.10	0.00
3-325-330	3-325	3-330	481.47	8	120	13.08	0.08	0.00
3-330-335	3-330	3-335	471.40	8	120	8.52	0.05	0.00
3-335-340	3-335	3-340	144.19	4	110	0.00	0.00	0.00
3-340-345	3-340	3-345	297.26	4	110	0.00	0.00	0.00
3-345-350	3-345	3-350	714.11	4	110	0.00	0.00	0.00
3-355-360	3-355	3-360	954.23	16	130	3027.78	4.83	4.63
3-360-365	3-360	3-365	105.82	16	130	3027.78	4.83	0.51
3-365-395	3-365	3-395	798.86	12	120	1252.02	3.55	3.56
3-370-371	3-370	3-371	325.90	8	120	0.00	0.00	0.00
3-370-374	3-370	3-374	262.57	16	130	-1732.67	2.76	0.45
3-370-610	3-370	3-610	737.06	16	130	1730.03	2.76	1.27
3-371-372	3-371	3-372	2580.46	8	120	0.00	0.00	0.00

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-371-377	3-371	3-377	1260.24	8	120	0.00	0.00	0.00
3-372-373	3-372	3-373	718.75	8	120	0.00	0.00	0.00
3-373-376	3-373	3-376	281.30	8	120	0.00	0.00	0.00
3-374-375	3-374	3-375	644.34	16	130	-1732.67	2.76	1.11
3-375-380	3-375	3-380	798.60	16	130	-1732.67	2.76	1.38
3-380-385	3-380	3-385	705.33	16	130	-1734.24	2.77	1.22
3-385-390	3-385	3-390	335.72	16	130	-1734.24	2.77	0.58
3-390-365	3-390	3-365	280.59	16	130	-1770.52	2.83	0.50
3-395-400	3-395	3-400	608.23	12	120	1252.02	3.55	2.71
3-395-402	3-395	3-402	1802.70	8	120	0.00	0.00	0.00
3-400-405	3-400	3-405	868.52	12	120	1252.02	3.55	3.87
3-405-410	3-405	3-410	942.03	12	120	1249.84	3.55	4.19
3-410-420	3-410	3-420	819.19	12	120	1249.84	3.55	3.64
3-420-425	3-420	3-425	488.34	12	120	1249.84	3.55	2.17
3-425-430	3-425	3-430	476.18	12	120	1248.92	3.54	2.11
3-430-435	3-430	3-435	601.08	12	120	1245.64	3.53	2.65
3-435-440	3-435	3-440	430.57	12	120	1245.64	3.53	1.90
3-440-445	3-440	3-445	90.91	12	120	1242.03	3.52	0.40
3-445-450	3-445	3-450	680.32	12	120	1153.36	3.27	2.60
3-445-495	3-445	3-495	673.08	12	120	84.47	0.24	0.02
3-450-455	3-450	3-455	542.64	12	120	1153.36	3.27	2.08
3-455-460	3-455	3-460	652.68	12	120	1111.87	3.15	2.33
3-460-465	3-460	3-465	684.10	12	120	1109.13	3.15	2.44
3-465-470	3-465	3-470	120.78	16	130	1106.61	1.77	0.09
3-470-475	3-470	3-475	320.57	16	130	706.34	1.13	0.11
3-475-480	3-475	3-480	582.32	16	130	704.31	1.12	0.19
3-480-485	3-480	3-485	413.51	16	130	648.64	1.04	0.12
3-485-490	3-485	3-490	889.60	16	130	636.04	1.01	0.24
3-490-715	3-490	3-715	902.91	16	130	636.04	1.01	0.24
3-495-500	3-495	3-500	366.49	12	120	84.47	0.24	0.01
3-500-505	3-500	3-505	464.87	12	120	81.87	0.23	0.01
3-505-510	3-505	3-510	220.32	12	120	81.87	0.23	0.01
3-515-520	3-515	3-520	650.14	12	120	77.90	0.22	0.02
3-520-525	3-520	3-525	865.53	12	120	77.90	0.22	0.02

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-525-530	3-525	3-530	743.28	8	120	10.60	0.07	0.00
3-525-595	3-525	3-595	896.37	8	120	46.51	0.30	0.06
3-530-531	3-530	3-531	232.04	8	120	10.60	0.07	0.00
3-531-535	3-531	3-535	602.55	8	120	7.43	0.05	0.00
3-535-540	3-535	3-540	384.78	8	120	0.00	0.00	0.00
3-540-545	3-540	3-545	487.54	8	120	0.00	0.00	0.00
3-545-550	3-545	3-550	374.80	8	120	0.00	0.00	0.00
3-550-555	3-550	3-555	740.67	8	120	0.00	0.00	0.00
3-555-560	3-555	3-560	604.50	6	110	0.00	0.00	0.00
3-560-565	3-560	3-565	548.77	6	110	0.00	0.00	0.00
3-570-575	3-570	3-575	647.35	8	120	-1.63	0.01	0.00
3-575-580	3-575	3-580	684.12	8	120	-3.80	0.02	0.00
3-580-585	3-580	3-585	303.44	8	120	-4.34	0.03	0.00
3-585-590	3-585	3-590	865.50	8	120	-5.57	0.04	0.00
3-590-525	3-590	3-525	87.63	8	120	-12.03	0.08	0.00
3-595-600	3-595	3-600	713.80	8	120	46.51	0.30	0.05
3-600-605	3-600	3-605	936.18	8	120	46.51	0.30	0.07
3-610-615	3-610	3-615	625.55	16	130	1730.03	2.76	1.08
3-615-620	3-615	3-620	556.65	16	130	1726.70	2.76	0.96
3-620-625	3-620	3-625	702.48	16	130	1724.35	2.75	1.20
3-625-630	3-625	3-630	505.40	12	120	1715.53	4.87	4.04
3-630-635	3-630	3-635	1009.61	12	120	1712.33	4.86	8.04
3-635-640	3-635	3-640	562.68	12	120	1693.69	4.80	4.39
3-640-645	3-640	3-645	486.45	12	120	1693.69	4.80	3.79
3-645-650	3-645	3-650	531.02	12	120	1693.03	4.80	4.14
3-650-655	3-650	3-655	511.77	12	120	1689.85	4.79	3.97
3-655-660	3-655	3-660	245.14	12	120	2084.13	5.91	2.81
3-655-680	3-655	3-680	456.05	12	120	-394.48	1.12	0.24
3-665-670	3-665	3-670	504.59	16	130	0.00	0.00	0.00
3-670-675	3-670	3-675	484.37	16	130	-6.63	0.01	0.00
3-675-625	3-675	3-625	435.14	16	130	-6.63	0.01	0.00
3-680-685	3-680	3-685	466.57	12	120	-394.48	1.12	0.24
3-685-690	3-685	3-691	531.25	12	120	-394.48	1.12	0.28
3-690-691	3-691	3-690	206.40	12	120	-394.48	1.12	0.11

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-690-695	3-690	3-695	539.18	12	120	-394.48	1.12	0.28
3-695-470	3-695	3-470	416.51	12	120	-400.26	1.14	0.22
3-700-705	3-700	3-705	622.95	12	120	-2084.13	5.91	7.13
3-705-710	3-705	3-710	804.82	12	120	-2084.13	5.91	9.22
3-710-660	3-710	3-660	786.65	12	120	-2084.13	5.91	9.01
3-715-720	3-715	3-720	1088.46	16	130	636.04	1.01	0.29
3-720-725	3-720	3-725	870.92	16	130	636.04	1.01	0.24
3-725-730	3-725	3-730	1405.92	16	130	636.04	1.01	0.38
3-730-735	3-730	3-735	1073.96	16	130	101.04	0.16	0.01
3-730-750	3-730	3-750	1346.76	12	120	0.00	0.00	0.00
3-735-740	3-735	3-740	861.22	16	130	101.04	0.16	0.01
3-740-745	3-740	3-745	1095.81	16	130	101.04	0.16	0.01
3-745-4-122	3-745	4-122	404.60	16	130	101.04	0.16	0.00
3-GILBERT-700	GILBERT	3-700	475.64	12	120	-2076.09	5.89	5.41
4-100-210	4-100	4-210	2007.89	8	120	0.00	0.00	0.00
4-100-WWTP3-P1_OUT	4-100	WWTP3-P1_OUT	373.87	12	120	-936.68	2.66	0.97
4-105-100	4-105	4-100	873.40	14	120	-936.68	1.95	1.07
4-110-115	4-110	4-105	128.06	14	120	-936.68	1.95	0.16
4-115-110	4-115	4-110	2037.07	14	120	-936.68	1.95	2.50
4-120-115	4-120	4-115	2198.91	14	120	-936.68	1.95	2.70
4-120-122	4-120	4-122	446.29	14	120	936.68	1.95	0.55
4-122-125	4-122	4-125	407.72	14	120	1034.72	2.16	0.60
4-130-125	4-130	4-125	39.56	12	120	-1034.72	2.94	0.12
4-130-140	4-130	4-140	1131.43	12	120	1034.72	2.94	3.54
4-135-130	4-135	4-130	43.23	12	120	0.00	0.00	0.00
4-140-150	4-140	4-150	1338.84	12	120	774.26	2.20	2.45
4-145-140	4-145	4-140	78.02	12	120	-7.29	0.02	0.00
4-150-155	4-150	4-155	285.19	12	120	7.38	0.02	0.00
4-150-160	4-150	4-160	328.04	12	120	762.07	2.16	0.58
4-160-150	4-160	4-165	525.20	12	120	756.50	2.15	0.92
4-165-167	4-165	4-167	417.99	12	120	744.62	2.11	0.71
4-166-170	4-166	4-170	907.10	12	120	822.42	2.33	1.86
4-167-166	4-167	4-166	773.65	12	120	826.17	2.34	1.60
4-170-175	4-170	4-175	819.60	12	120	810.76	2.30	1.63

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
4-175-176	4-175	4-176	860.41	12	120	798.12	2.26	1.67
4-176-185	4-176	4-185	1074.27	12	120	784.43	2.23	2.01
4-180-175	4-180	4-175	410.28	12	120	-12.64	0.04	0.00
4-185-190	4-185	4-190	577.49	12	120	750.00	2.13	1.00
4-190-195	4-190	4-195	59.16	12	120	750.00	2.13	0.10
4-190-200	4-190	4-200	64.23	12	120	0.00	0.00	0.00
4-195-191	4-195	4-191	77.71	12	120	750.00	2.13	0.13
4-205-WWTP3	4-205	WRF3	58.58	12	120	-936.68	2.66	0.15
4-205-WWTP3-P1_IN	4-205	WWTP3-P1_IN	48.50	12	120	936.68	2.66	0.13
4-210-215	4-210	4-215	3472.44	6	110	0.00	0.00	0.00
4-220-225	4-220	4-225	231.17	8	120	-19.84	0.13	0.00
4-225-230	4-225	4-230	307.43	8	120	-22.32	0.14	0.01
4-230-235	4-230	4-235	357.65	8	120	-23.68	0.15	0.01
4-235-240	4-235	4-240	218.03	8	120	-26.78	0.17	0.01
4-240-245	4-240	4-245	468.80	8	120	-27.93	0.18	0.01
4-245-167	4-245	4-167	1685.62	8	120	81.55	0.52	0.34
4-245-250	4-245	4-250	202.48	8	120	-111.93	0.71	0.07
4-250-251	4-250	4-251	155.55	8	120	-113.88	0.73	0.06
4-251-255	4-251	4-255	207.17	8	120	-123.18	0.79	0.09
4-255-260	4-255	4-260	396.51	8	120	-157.28	1.00	0.27
4-260-265	4-260	4-265	212.42	8	120	-160.26	1.02	0.15
4-265-270	4-265	4-270	283.77	8	120	-94.06	0.60	0.08
4-265-305	4-265	4-305	626.10	8	120	-66.20	0.42	0.09
4-270-275	4-270	4-275	326.49	8	120	-104.38	0.67	0.11
4-275-280	4-275	4-280	550.55	8	120	-105.90	0.68	0.18
4-280-285	4-280	4-285	505.80	8	120	-183.01	1.17	0.46
4-285-290	4-285	4-290	694.75	8	120	53.26	0.34	0.06
4-285-300	4-285	4-300	551.09	8	120	-250.07	1.60	0.90
4-290-295	4-290	4-295	567.25	8	120	5.52	0.04	0.00
4-300-140	4-300	4-140	1173.20	8	120	-253.17	1.62	1.95
4-305-310	4-305	4-310	145.77	8	120	-69.30	0.44	0.02
4-310-280	4-310	4-280	1613.37	8	120	-70.91	0.45	0.25
BP11	BP1_IN	BP1	1.00	20	150	1579.34	1.61	0.00
BP12	BP1	BP1_OUT	1.00	20	150	1579.34	1.61	0.00

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
BP1_IN-BP2_IN	BP1_IN	BP2_IN	9.54	20	130	-1579.34	1.61	0.00
BP1_OUT-BP2_OUT	BP1_OUT	BP2_OUT	8.65	20	130	-1579.33	1.61	0.00
BP21	BP2_IN	BP2_OUT	1.00	20	150	1579.34	1.61	0.00
BP22	BP2	BP2_OUT	1.00	20	150	1579.34	1.61	0.00
BP2_IN-BP3_IN	BP2_IN	BP3_IN	9.81	20	130	-3158.67	3.23	0.02
BP2_OUT-BP3_OUT	BP2_OUT	BP3_OUT	9.42	20	130	0.00	0.00	0.00
BP31	BP3_IN	BP3_OUT	1.00	20	150	0.00	0.00	0.00
BP32	BP3	BP3_OUT	1.00	20	150	0.00	0.00	0.00
BP3_IN-BP4_IN	BP3_IN	BP4_IN	9.15	20	130	-3158.67	3.23	0.02
BP3_OUT-BP4_OUT	BP3_OUT	BP4_OUT	8.62	20	130	0.00	0.00	0.00
BP41	BP4_IN	BP4_OUT	1.00	12	150	0.00	0.00	0.00
BP42	BP4	BP4_OUT	1.00	12	150	0.00	0.00	0.00
BP4_IN-3-090	BP4_IN	3-090	20.42	20	130	-3158.67	3.23	0.04
FULLERTON11	3-510	FULLERTON1	1.00	6	150	77.90	0.88	0.00
FULLERTON12	FULLERTON1	3-515	1.00	6	150	77.90	0.88	0.00
ONTARIO1	3-145	ONTARIO	1.00	6	150	1.29	0.01	0.00
ONTARIO2	ONTARIO	3-150	1.00	6	150	1.29	0.01	0.00
WRF1-P101	WWTP1-P10_IN	WRF1-P10	1.00	12	150	0.00	0.00	0.00
WRF1-P102	WRF1-P10	WWTP1-P10_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P111	WWTP1-P11_IN	WRF1-P11	1.00	12	150	396.88	1.13	0.00
WRF1-P112	WRF1-P11	WWTP1-P11_OUT	1.00	12	150	396.88	1.13	0.00
WRF1-P121	WWTP1-P12_IN	WRF1-P12	1.00	12	150	396.88	1.13	0.00
WRF1-P122	WRF1-P12	WWTP1-P12_OUT	1.00	12	150	396.88	1.13	0.00
WRF1-P1_1	WWTP1-P1_IN	WRF1-P1	1.00	12	150	1408.32	4.00	0.00
WRF1-P1_2	WRF1-P1	WWTP1-P1_OUT	1.00	12	150	1408.32	4.00	0.00
WRF1-P21	WWTP1-P2_IN	WRF1-P2	1.00	12	150	1408.35	4.00	0.00
WRF1-P22	WRF1-P2	WWTP1-P2_OUT	1.00	12	150	1408.35	4.00	0.00
WRF1-P31	WWTP1-P3_IN	WRF1-P3	1.00	12	150	1408.43	4.00	0.00
WRF1-P32	WRF1-P3	WWTP1-P3_OUT	1.00	12	150	1408.43	4.00	0.00
WRF1-P41	WWTP1-P4_IN	WRF1-P4	1.00	12	150	1408.60	4.00	0.00
WRF1-P42	WRF1-P4	WWTP1-P4_OUT	1.00	12	150	1408.60	4.00	0.00
WRF1-P51	WWTP1-P5_IN	WRF1-P5	1.00	12	150	1408.58	4.00	0.00
WRF1-P52	WRF1-P5	WWTP1-P5_OUT	1.00	12	150	1408.58	4.00	0.00
WRF1-P61	WWTP1-P6_IN	WRF1-P6	1.00	12	150	0.00	0.00	0.00

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WRF1-P62	WRF1-P6	WWTP1-P6_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P71	WWTP1-P7_IN	WRF1-P7	1.00	12	150	0.00	0.00	0.00
WRF1-P72	WRF1-P7	WWTP1-P7_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P81	WWTP1-P8_IN	WRF1-P8	1.00	12	150	0.00	0.00	0.00
WRF1-P82	WRF1-P8	WWTP1-P8_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P91	WWTP1-P9_IN	WRF1-P9	1.00	12	150	0.00	0.00	0.00
WRF1-P92	WRF1-P9	WWTP1-P9_OUT	1.00	12	150	0.00	0.00	0.00
WRF3-P11	WWTP3-P1_IN	WRF3-P1	1.00	12	150	468.38	1.33	0.00
WRF3-P12	WRF3-P1	WWTP3-P1_OUT	1.00	12	150	468.38	1.33	0.00
WRF3-P21	WWTP3-P2_IN	WRF3-P2	1.00	12	150	468.30	1.33	0.00
WRF3-P22	WRF3-P2	WWTP3-P2_OUT	1.00	12	150	468.30	1.33	0.00
WRF3-P31	WWTP3-P3_IN	WRF3-P3	1.00	12	150	0.00	0.00	0.00
WRF3-P32	WRF3-P3	WWTP3-P3_OUT	1.00	12	150	0.00	0.00	0.00
WWTP1-B4_IN-BP3_IN	WWTP1-P4_IN	WWTP1-P3_IN	13.17	24	130	4225.10	3.00	0.02
WWTP1-BP1_IN-BP5_IN	WWTP1-P4_IN	WWTP1-P5_IN	11.55	24	130	1408.58	1.00	0.00
WWTP1-BP1_OT-BP5_OT	WWTP1-P4_OUT	WWTP1-P5_OUT	11.49	24	130	-1408.58	1.00	0.00
WWTP1-BP2_IN-BP1_IN	WWTP1-P2_IN	WWTP1-P1_IN	13.51	24	130	1408.32	1.00	0.00
WWTP1-BP2_OT-BP1_OT	WWTP1-P2_OUT	WWTP1-P1_OUT	11.62	24	130	-1408.32	1.00	0.00
WWTP1-BP3_IN-BP2_IN	WWTP1-P3_IN	WWTP1-P2_IN	11.99	24	130	2816.67	2.00	0.01
WWTP1-BP3_OT-BP2_OT	WWTP1-P3_OUT	WWTP1-P2_OUT	14.76	24	130	-2816.67	2.00	0.01
WWTP1-BP4_OT-BP3_OT	WWTP1-P4_OUT	WWTP1-P3_OUT	13.11	24	130	-4225.10	3.00	0.02
WWTP1-BP5_IN-BP6_IN	WWTP1-P5_IN	WWTP1-P6_IN	9.23	24	130	0.00	0.00	0.00
WWTP1-BP5_OT-BP6_OT	WWTP1-P5_OUT	WWTP1-P6_OUT	8.13	24	130	0.00	0.00	0.00
WWTP1-P10_IN-P11_IN	WWTP1-P10_IN	WWTP1-P11_IN	11.55	18	130	793.76	1.00	0.00
WWTP1-P10_OT-P11_OT	WWTP1-P10_OUT	WWTP1-P11_OUT	10.79	18	130	-793.76	1.00	0.00
WWTP1-P11_IN-P12_IN	WWTP1-P11_IN	WWTP1-P12_IN	11.38	18	130	396.88	0.50	0.00
WWTP1-P11_OT-P12_OT	WWTP1-P11_OUT	WWTP1-P12_OUT	10.53	18	130	-396.88	0.50	0.00
WWTP1-P7_IN-P8_IN	WWTP1-P7_IN	WWTP1-P8_IN	14.82	18	130	0.00	0.00	0.00
WWTP1-P7_OUT-P8_OUT	WWTP1-P7_OUT	WWTP1-P8_OUT	15.36	18	130	0.00	0.00	0.00
WWTP1-P8_IN-P9_IN	WWTP1-P8_IN	WWTP1-P9_IN	9.42	18	130	0.00	0.00	0.00
WWTP1-P8_OUT-P9_OUT	WWTP1-P8_OUT	WWTP1-P9_OUT	10.16	18	130	-0.01	0.00	0.00
WWTP1-P9_IN-P10_IN	WWTP1-P9_IN	WWTP1-P10_IN	12.83	18	130	793.76	1.00	0.00
WWTP1-P9_OUT-P10_OUT	WWTP1-P9_OUT	WWTP1-P10_OUT	13.66	18	130	-793.76	1.00	0.00
WWTP3-P1_IN-P2_IN	WWTP3-P1_IN	WWTP3-P2_IN	29.34	12	120	468.30	1.33	0.02

Average Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WWTP3-P1_OUT-P2_OUT	WWTP3-P1_OUT	WWTP3-P2_OUT	29.42	12	120	-468.30	1.33	0.02
WWTP3-P2_IN-P3_IN	WWTP3-P2_IN	WWTP3-P3_IN	26.79	12	120	0.00	0.00	0.00
WWTP3-P2_OUT-P3_OUT	WWTP3-P2_OUT	WWTP3-P3_OUT	29.34	12	120	0.00	0.00	0.00

Average Day Tank Report

ID	Flow (gpm)	Elevation (ft)	Head (ft)	% Full (%)	Level (ft)
BORDER	3,773.49	988	1,007.50	93.55	19.5
GILBERT	2,076.09	1,357.50	1,379.00	94.29	21.5
WRF1	-7,836.03	531	558	95.65	27
WRF3	-936.68	789.5	803.5	90	14

Average Day Pump Report

ID	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Head Gain (ft)	Status	Setting
BP1	1,015.25	-3.41	202.41	1579.34	475.02	Open	1
BP2	1,015.25	-3.41	202.41	1579.34	475.02	Open	1
BP3	1,015.25	-3.40	202.41	0.00	0.00	Closed	0
BP4	1,015.25	-3.39	202.41	0.00	0.00	Closed	0
WRF1-P1	544	5.80	250.07	1408.32	563.74	Open	1
WRF1-P10	544	6.05	205.21	0.00	0.00	Closed	0
WRF1-P11	544	6.04	205.21	396.88	459.64	Open	1
WRF1-P12	544	6.04	205.21	396.88	459.64	Open	1
WRF1-P2	544	5.80	250.07	1408.35	563.73	Open	1
WRF1-P3	544	5.80	250.06	1408.43	563.72	Open	1
WRF1-P4	544	5.81	250.06	1408.60	563.69	Open	1
WRF1-P5	544	5.81	250.06	1408.58	563.69	Open	1
WRF1-P6	544	5.81	250.06	0.00	0.00	Closed	0
WRF1-P7	544	6.05	205.20	0.00	0.00	Closed	0
WRF1-P8	544	6.05	205.20	0.00	0.00	Closed	0
WRF1-P9	544	6.05	205.20	0.00	0.00	Closed	0
WRF3-P1	794	4.00	271.28	468.38	616.86	Open	1
WRF3-P2	794	3.99	271.29	468.30	616.91	Open	1
WRF3-P3	794	3.99	271.29	0.00	0.00	Closed	0

Average Day Valve Report

ID	Diameter (in)	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Velocity (ft/s)	Headloss (ft)	Status	Setting
FULLERTON1	6	1046.02	163.54	60	77.9	0.88	238.96	Active	60
ONTARIO	6	875.00	259.52	70	1.29	0.01	437.40	Active	70

**RECYCLED WATER ANALYSIS
ARANTINE HILLS
BLUESTONE COMMUNITIES
CORONA, CA**

EXHIBIT 6: MAX DAY HYDRAULIC ANALYSIS- PEAKING FACTOR OF 4

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-100	0.00	544.00	557.60	5.90
1-105	0.00	555.00	1114.51	242.44
1-110	0.00	556.00	1112.11	240.96
1-115	0.00	574.69	1109.38	231.68
1-120	0.00	568.00	1107.38	233.71
1-125	28.16	564.00	1105.77	234.75
1-130	0.00	556.60	1104.00	237.19
1-135	0.00	564.00	1100.95	232.66
1-140	0.00	581.35	1098.03	223.88
1-145	0.00	596.50	1095.39	216.17
1-150	0.00	605.90	1092.68	210.92
1-155	0.00	614.00	1089.97	206.24
1-160	0.00	619.50	1088.65	203.28
1-165	0.00	625.00	1083.98	198.88
1-170	0.00	650.00	1077.29	185.15
1-175	0.00	679.00	1071.01	169.86
1-180	0.00	709.22	1065.79	154.50
1-185	16.16	742.00	1060.37	137.95
1-190	0.00	740.70	1056.40	136.79
1-195	0.00	773.00	1050.84	120.39
1-200	0.00	779.50	1044.66	114.89
1-205	0.00	781.00	1041.14	112.72
1-210	0.00	798.00	1035.37	102.85
1-215	0.00	825.25	1030.43	88.90
1-220	0.00	852.00	1023.65	74.38
1-225	0.00	896.00	1019.46	53.49
1-230	13.00	957.00	1013.90	24.66
1-235	0.00	616.38	1088.64	204.63
1-240	0.00	652.00	1088.24	189.02
1-245	12.12	667.00	1087.95	182.40
1-250	0.00	706.88	1087.72	165.02
1-255	17.24	728.00	1087.61	155.82
1-260	80.36	782.00	1087.34	132.30
1-265	0.00	822.70	1087.12	114.57
1-270	0.00	829.00	1086.91	111.75
1-275	0.00	817.00	1086.57	116.80
1-280	0.00	797.00	1086.42	125.41
1-285	0.00	733.00	1085.88	152.90
1-290	0.00	706.00	1085.39	164.39
1-295	0.00	683.00	1084.91	174.15
1-300	0.00	649.00	1084.45	188.68
1-305	0.00	627.00	1084.41	198.20
1-310	43.88	586.50	1084.36	215.72
1-315	41.24	653.00	1084.40	186.93
1-320	25.20	663.24	1084.33	182.46
1-325	0.00	671.79	1084.23	178.71
1-330	0.00	726.00	1083.92	155.09
1-335	0.00	771.00	1083.66	135.48
1-340	0.00	799.35	1083.40	123.08

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-345	52.12	783.80	1083.13	129.70
1-350	0.00	786.84	1083.13	128.38
1-355	0.00	827.50	1086.95	112.42
1-360	72.12	813.00	1086.84	118.66
1-365	17.28	803.00	1086.84	122.99
1-370	2.00	791.12	1086.84	128.13
1-375	0.00	978.00	1008.87	13.38
1-400	0.00	638.00	1088.41	195.16
2-100	0.00	773.87	982.06	90.21
2-101	0.00	770.00	982.06	91.89
2-102	17.56	744.00	982.06	103.15
2-103	0.00	717.00	982.07	114.86
2-105	0.00	719.00	982.55	114.20
2-110	0.00	718.00	983.44	115.02
2-115	37.60	715.00	983.95	116.54
2-117	13.12	712.00	984.07	117.89
2-118	36.84	719.00	983.76	114.72
2-119	76.52	753.00	983.56	99.90
2-120	0.00	712.30	984.44	117.92
2-125	2.40	711.00	985.96	119.14
2-130	0.00	707.00	986.83	121.25
2-135	0.00	641.00	987.11	149.97
2-136	0.00	613.00	987.24	162.16
2-137	849.20	600.00	985.00	166.82
2-140	0.00	598.00	987.66	168.84
2-145	0.00	587.00	988.53	173.98
2-150	673.60	589.91	988.88	172.88
2-155	0.00	595.70	989.74	170.74
2-156	0.00	604.52	989.74	166.91
2-157	0.00	604.00	989.74	167.14
2-158	0.00	611.54	989.74	163.87
2-160	0.00	593.00	991.35	172.60
2-165	0.00	589.00	991.82	174.54
2-170	0.00	586.00	992.86	176.29
2-175	0.00	580.00	994.21	179.48
2-176	0.00	586.00	995.67	177.51
2-180	0.00	588.00	994.85	176.29
2-185	0.00	584.00	996.43	178.71
2-190	0.00	592.60	997.03	175.24
2-195	0.00	587.00	998.29	178.21
2-200	0.00	581.00	999.63	181.39
2-205	0.00	591.00	1000.87	177.60
2-210	0.00	592.42	1001.48	177.24
2-215	0.00	596.10	1002.84	176.24
2-220	0.00	601.90	1004.18	174.31
2-225	0.00	598.50	1005.43	176.32
2-230	0.00	594.10	1006.76	178.81
2-235	0.00	584.30	1008.02	183.60
2-240	0.00	563.00	1009.12	193.30

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
2-245	0.00	567.00	1010.34	192.10
2-250	0.00	564.00	1011.43	193.87
2-255	160.00	582.00	1012.98	186.74
2-260	0.00	584.00	1014.51	186.54
2-265	56.00	575.00	1016.09	191.13
2-270	728.08	580.10	1017.84	189.67
2-275	0.00	555.60	1020.67	201.51
2-280	0.00	554.00	1022.18	202.86
2-285	0.00	544.00	557.66	5.92
2-365	0.00	766.00	980.98	93.15
2-370	22.48	799.00	980.53	78.66
2-375	16.76	838.00	979.93	61.50
2-380	21.16	820.00	979.28	69.02
2-381	0.00	798.32	979.18	78.37
2-385	0.00	761.40	978.62	94.12
2-390	31.96	768.00	978.37	91.15
2-395	73.40	780.00	978.25	85.90
2-400	0.00	777.30	978.25	87.07
2-405	0.00	738.40	978.36	103.98
2-410	0.00	742.00	978.32	102.40
2-415	0.00	757.00	978.25	95.87
2-420	0.00	800.00	978.10	77.17
2-425	0.00	762.98	977.94	93.14
2-430	74.32	778.27	977.83	86.47
2-435	6.64	732.00	978.16	106.66
2-440	3.96	722.00	977.93	110.90
2-445	0.00	710.00	977.71	116.00
2-450	0.00	704.00	977.52	118.52
2-455	0.72	728.00	977.26	108.00
2-460	153.48	728.00	977.13	107.95
2-465	0.00	776.00	977.09	87.13
2-470	9.32	808.07	977.05	73.22
2-475	0.00	800.00	976.84	76.63
2-480	0.00	764.10	976.61	92.08
2-485	21.96	771.00	976.53	89.06
2-490	10.12	784.00	976.42	83.37
2-495	0.00	760.59	976.33	93.48
2-496	0.00	753.00	976.24	96.73
2-500	0.00	753.00	976.19	96.71
2-505	0.00	749.70	976.12	98.11
2-510	77.80	760.80	976.04	93.27
3-090	19.60	984.00	1007.41	10.14
3-095	0.00	1006.63	1499.01	213.35
3-100	30.52	991.92	1498.64	219.56
3-105	51.52	957.95	1496.30	233.27
3-110	0.00	923.51	1495.21	247.72
3-115	13.20	918.60	1494.10	249.37
3-120	0.00	886.50	1491.63	262.20
3-125	0.00	879.00	1488.97	264.30

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-130	0.00	871.75	1487.59	266.85
3-135	37.08	872.00	1486.16	266.11
3-140	0.00	868.00	1484.41	267.09
3-141	0.00	865.00	1483.61	268.04
3-145	0.00	875.00	1483.61	263.71
3-150	0.00	875.00	1036.55	70.00
3-155	5.16	872.50	1036.55	71.08
3-160	0.00	845.00	1036.55	83.00
3-165	0.00	826.00	1036.55	91.23
3-170	0.00	813.40	1036.55	96.69
3-175	0.00	814.00	1036.55	96.43
3-180	0.00	779.00	1036.55	111.60
3-185	0.00	758.50	1036.55	120.48
3-190	0.00	743.00	1036.55	127.20
3-195	0.00	716.72	1036.55	138.58
3-200	76.76	1032.27	1477.22	192.80
3-205	0.00	1042.00	1477.23	188.59
3-210	20.64	1042.51	1477.25	188.37
3-215	0.00	1007.00	1477.28	203.77
3-220	0.00	990.05	1477.29	211.12
3-225	13.16	965.00	1477.32	221.99
3-230	0.00	939.00	1477.36	233.27
3-235	0.00	928.00	1477.37	238.04
3-240	0.00	910.58	1479.57	246.54
3-245	0.00	896.10	1481.08	253.47
3-250	0.00	925.00	1474.99	238.31
3-255	0.00	925.49	1472.15	236.87
3-260	0.00	926.26	1471.63	236.31
3-265	0.00	935.10	1470.96	232.19
3-270	5.48	947.35	1469.53	226.26
3-275	0.00	955.00	1467.63	222.12
3-280	0.00	966.00	1465.94	216.62
3-285	13.56	982.58	1464.44	208.79
3-290	26.24	999.00	1462.58	200.87
3-295	25.60	1045.00	1460.03	179.83
3-300	8.16	1053.21	1459.50	176.05
3-305	9.36	1085.53	1456.81	160.88
3-310	0.00	962.00	1464.28	217.64
3-315	90.48	941.22	1464.15	226.59
3-320	0.00	1095.60	1456.65	156.44
3-321	7.84	1092.00	1456.78	158.06
3-325	36.48	1109.00	1456.50	150.57
3-330	18.24	1125.00	1456.46	143.62
3-335	34.08	1130.45	1456.44	141.25
3-340	0.00	1137.00	1456.44	138.41
3-345	0.00	1153.00	1456.44	131.48
3-350	0.00	1191.19	1456.44	114.93
3-355	0.00	1082.00	1452.35	160.47
3-360	0.00	1088.00	1444.87	154.63

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-365	20.96	1088.42	1444.04	154.09
3-370	10.56	1220.00	1436.44	93.78
3-371	0.00	1240.83	1436.44	84.76
3-372	0.00	1220.98	1436.44	93.36
3-373	0.00	1247.86	1436.44	81.71
3-374	0.00	1209.29	1437.09	98.70
3-375	0.00	1180.00	1438.68	112.09
3-376	0.00	1262.40	1436.44	75.41
3-377	0.00	1305.68	1436.44	56.66
3-380	6.28	1141.00	1440.66	129.84
3-385	0.00	1107.47	1442.41	145.13
3-390	145.12	1095.60	1443.25	150.64
3-395	0.00	1069.54	1438.12	159.71
3-400	0.00	1093.00	1433.62	147.59
3-402	0.00	1010.28	1438.12	185.38
3-405	8.72	1119.80	1427.19	133.19
3-410	0.00	1127.24	1420.29	126.98
3-420	0.00	1146.00	1414.28	116.25
3-425	3.68	1142.00	1410.70	116.43
3-430	13.12	1128.00	1407.23	120.99
3-435	0.00	1124.84	1402.90	120.49
3-440	14.44	1129.00	1399.81	117.34
3-445	16.80	1129.61	1399.17	116.80
3-450	0.00	1130.39	1396.13	115.15
3-455	165.96	1123.00	1393.72	117.30
3-460	10.96	1129.95	1391.48	113.32
3-465	10.08	1130.00	1389.18	112.30
3-470	0.00	1130.37	1389.10	112.11
3-475	8.12	1128.00	1388.57	112.90
3-480	222.68	1116.20	1387.61	117.60
3-485	50.40	1102.00	1387.09	123.53
3-490	0.00	1074.92	1386.04	134.81
3-495	0.00	1089.50	1398.90	134.06
3-500	10.40	1086.00	1398.76	135.52
3-505	0.00	1057.00	1398.58	148.01
3-510	15.88	1050.37	1398.50	150.85
3-515	0.00	1046.02	1184.49	60.00
3-520	0.00	1013.49	1184.27	74.00
3-525	35.04	974.00	1183.97	90.98
3-530	0.00	947.00	1183.93	102.66
3-531	12.68	942.65	1183.91	104.54
3-535	29.72	931.70	1183.89	109.28
3-540	0.00	911.00	1183.89	118.24
3-545	0.00	892.00	1183.89	126.48
3-550	0.00	876.00	1183.89	133.41
3-555	0.00	851.71	1183.89	143.94
3-560	0.00	830.00	1183.89	153.34
3-565	0.00	814.00	1183.89	160.27
3-570	6.52	968.00	1183.94	93.57

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-575	8.68	974.00	1183.94	90.97
3-580	2.16	973.80	1183.95	91.06
3-585	4.92	966.00	1183.95	94.44
3-590	25.84	973.00	1183.96	91.41
3-595	0.00	977.00	1183.13	89.32
3-600	0.00	975.00	1182.46	89.89
3-605	186.04	937.80	1181.58	105.63
3-610	0.00	1198.00	1434.63	102.53
3-615	13.32	1198.00	1433.10	101.87
3-620	9.40	1123.00	1431.75	133.78
3-625	8.76	1238.79	1430.06	82.88
3-630	12.80	1242.00	1424.52	79.09
3-635	74.56	1239.00	1413.58	75.65
3-640	0.00	1245.00	1407.90	70.58
3-645	2.64	1250.00	1402.98	66.29
3-650	12.72	1244.30	1397.63	66.44
3-655	0.80	1240.92	1392.54	65.69
3-660	0.00	1246.51	1391.40	62.78
3-665	0.00	1243.00	1430.06	81.05
3-670	26.52	1268.25	1430.06	70.11
3-675	0.00	1256.12	1430.06	75.37
3-680	0.00	1224.43	1391.93	72.58
3-685	0.00	1203.00	1391.31	81.59
3-690	0.00	1169.94	1390.33	95.49
3-691	0.00	1182.00	1390.60	90.39
3-695	23.12	1146.00	1389.61	105.56
3-700	32.16	1337.63	1381.11	18.84
3-705	0.00	1311.00	1384.00	31.63
3-710	0.00	1281.00	1387.74	46.25
3-715	0.00	1052.20	1384.97	144.19
3-720	0.00	1050.00	1383.68	144.58
3-725	0.00	1013.04	1382.65	160.15
3-730	535.00	948.55	1380.99	187.38
3-735	0.00	950.00	1380.47	186.52
3-740	0.00	934.00	1380.04	193.27
3-745	0.00	903.66	1379.51	206.18
3-750	0.00	904.00	1380.99	206.68
4-100	0.00	793.70	1387.55	257.32
4-105	0.00	801.95	1386.28	253.19
4-110	0.00	798.01	1386.10	254.82
4-115	0.00	836.04	1383.15	237.06
4-120	0.00	861.06	1379.96	224.84
4-122	12.00	891.44	1379.31	211.39
4-125	0.00	910.00	1377.47	202.56
4-130	0.00	908.69	1377.10	202.96
4-135	0.00	920.00	1377.10	198.06
4-140	0.00	923.22	1366.29	191.98
4-145	29.16	918.00	1366.29	194.25
4-150	19.24	1018.32	1359.69	147.92

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
4-155	29.52	1024.21	1359.69	145.36
4-160	22.28	1038.00	1358.18	138.74
4-165	47.52	1063.52	1355.84	126.66
4-166	15.00	1112.00	1351.60	103.82
4-167	0.00	1072.94	1354.11	121.83
4-170	46.64	1122.00	1348.74	98.24
4-175	0.00	1135.66	1346.36	91.30
4-176	54.76	1148.14	1344.09	84.91
4-180	50.56	1138.00	1346.35	90.28
4-185	137.72	1206.37	1341.56	58.58
4-190	0.00	1228.00	1340.56	48.77
4-191	750.00	1214.00	1340.33	54.74
4-195	0.00	1214.00	1340.46	54.80
4-200	0.00	1214.00	1340.56	54.84
4-205	0.00	792.42	803.32	4.72
4-210	0.00	828.94	1387.55	242.05
4-215	0.00	864.00	1387.55	226.85
4-220	79.36	1108.00	1352.60	105.98
4-225	9.92	1101.00	1352.64	109.04
4-230	5.44	1089.20	1352.72	114.18
4-235	12.40	1073.73	1352.81	120.93
4-240	4.60	1064.31	1352.89	125.04
4-245	9.80	1047.20	1353.06	132.53
4-250	7.80	1040.00	1353.05	135.65
4-251	37.20	1030.22	1353.05	139.88
4-255	136.40	1023.11	1353.05	142.96
4-260	11.92	1010.57	1353.32	148.51
4-265	0.00	1001.89	1353.48	152.34
4-270	41.28	990.55	1353.55	157.29
4-275	6.08	980.00	1353.72	161.93
4-280	24.80	960.00	1354.02	170.73
4-285	55.20	942.00	1354.89	178.90
4-290	190.96	957.00	1354.05	172.04
4-295	22.08	997.00	1354.04	154.70
4-300	12.40	920.83	1358.43	189.61
4-305	12.40	996.00	1353.58	154.94
4-310	6.44	990.00	1353.61	157.55
BP1_IN	0.00	984.00	1007.29	10.09
BP1_OUT	0.00	1015.25	1499.14	209.67
BP2_IN	0.00	984.00	1007.29	10.09
BP2_OUT	0.00	1015.25	1499.15	209.67
BP3_IN	0.00	984.00	1007.31	10.10
BP3_OUT	0.00	1015.25	1499.15	209.68
BP4_IN	0.00	984.00	1007.34	10.11
BP4_OUT	0.00	1015.25	1499.15	209.68
WWTP1-P10_IN	0.00	544.00	557.43	5.82
WWTP1-P10_OUT	0.00	544.00	1024.31	208.12
WWTP1-P11_IN	0.00	544.00	557.43	5.82
WWTP1-P11_OUT	0.00	544.00	1024.31	208.12

Max Day Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
WWTP1-P12_IN	0.00	544.00	557.43	5.82
WWTP1-P12_OUT	0.00	544.00	1024.31	208.12
WWTP1-P1_IN	0.00	544.00	557.37	5.80
WWTP1-P1_OUT	0.00	544.00	1117.26	248.39
WWTP1-P2_IN	0.00	544.00	557.38	5.80
WWTP1-P2_OUT	0.00	544.00	1117.26	248.39
WWTP1-P3_IN	0.00	544.00	557.38	5.80
WWTP1-P3_OUT	0.00	544.00	1117.25	248.39
WWTP1-P4_IN	0.00	544.00	557.40	5.81
WWTP1-P4_OUT	0.00	544.00	1117.23	248.38
WWTP1-P5_IN	0.00	544.00	557.40	5.81
WWTP1-P5_OUT	0.00	544.00	1117.23	248.38
WWTP1-P6_IN	0.00	544.00	557.40	5.81
WWTP1-P6_OUT	0.00	544.00	1117.23	248.38
WWTP1-P7_IN	0.00	544.00	557.39	5.80
WWTP1-P7_OUT	0.00	544.00	1024.36	208.14
WWTP1-P8_IN	0.00	544.00	557.40	5.81
WWTP1-P8_OUT	0.00	544.00	1024.34	208.13
WWTP1-P9_IN	0.00	544.00	557.43	5.82
WWTP1-P9_OUT	0.00	544.00	1024.31	208.12
WWTP3-P1_IN	0.00	794.00	803.17	3.97
WWTP3-P1_OUT	0.00	794.00	1388.70	257.68
WWTP3-P2_IN	0.00	792.42	803.15	4.65
WWTP3-P2_OUT	0.00	794.00	1388.72	257.69
WWTP3-P3_IN	0.00	792.42	803.15	4.65
WWTP3-P3_OUT	0.00	794.00	1388.72	257.69

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-100-WWTP1-P4_IN	1-100	WWTP1-P4_IN	61.61	24	130	7,144.36	5.07	0.20
1-105-110	1-105	1-110	725.92	24	130	7,144.36	5.07	2.40
1-105-WWTP1-BP4_OUT	1-105	WWTP1-P4_OUT	823.50	24	130	-7,144.36	5.07	2.72
1-110-115	1-110	1-115	828.10	24	130	7,144.36	5.07	2.74
1-115-120	1-115	1-120	602.76	24	130	7,144.36	5.07	1.99
1-120-125	1-120	1-125	487.15	24	130	7,144.36	5.07	1.61
1-125-130	1-125	1-130	540.48	24	130	7,116.20	5.05	1.77
1-130-135	1-130	1-135	929.44	24	130	7,116.20	5.05	3.05
1-135-140	1-135	1-140	891.61	24	130	7,116.20	5.05	2.93
1-140-145	1-140	1-145	803.96	24	130	7,116.20	5.05	2.64
1-145-150	1-145	1-150	825.52	24	130	7,116.20	5.05	2.71
1-150-155	1-150	1-155	826.97	24	130	7,116.20	5.05	2.71
1-155-160	1-155	1-160	400.46	24	130	7,116.20	5.05	1.31
1-160-165	1-160	1-165	646.23	20	130	6,752.64	6.90	4.68
1-160-235	1-160	1-235	818.27	24	130	363.56	0.26	0.01
1-165-170	1-165	1-170	924.08	20	130	6,752.64	6.90	6.69
1-170-175	1-170	1-175	868.88	20	130	6,752.64	6.90	6.29
1-175-180	1-175	1-180	720.23	20	130	6,752.64	6.90	5.21
1-180-185	1-180	1-185	749.26	20	130	6,752.64	6.90	5.42
1-185-190	1-185	1-190	552.20	20	130	6,736.48	6.88	3.98
1-190-195	1-190	1-195	770.63	20	130	6,736.48	6.88	5.55
1-195-200	1-195	1-200	858.15	20	130	6,736.48	6.88	6.18
1-200-205	1-200	1-205	489.28	20	130	6,736.48	6.88	3.52
1-205-210	1-205	1-210	801.28	20	130	6,736.48	6.88	5.77
1-210-215	1-210	1-215	685.73	20	130	6,736.48	6.88	4.94
1-215-220	1-215	1-220	940.80	20	130	6,736.48	6.88	6.78
1-220-225	1-220	1-225	582.12	20	130	6,736.48	6.88	4.19
1-225-230	1-225	1-230	771.09	20	130	6,736.48	6.88	5.55
1-230-375	1-230	1-375	700.86	20	130	6,723.48	6.87	5.03
1-235-400	1-235	1-400	519.89	12	120	363.56	1.03	0.23
1-240-245	1-240	1-245	638.53	12	120	363.56	1.03	0.29
1-240-400	1-240	1-400	382.12	12	120	-363.56	1.03	0.17
1-245-250	1-245	1-250	530.68	12	120	351.44	1.00	0.22
1-250-255	1-250	1-255	266.95	12	120	351.44	1.00	0.11

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-255-260	1-255	1-260	698.70	12	120	334.2	0.95	0.27
1-260-265	1-260	1-265	958.84	12	120	253.84	0.72	0.22
1-265-270	1-265	1-270	281.92	8	120	162.44	1.04	0.21
1-265-355	1-355	1-265	644.45	8	120	-91.4	0.58	0.16
1-270-275	1-270	1-275	466.34	8	120	162.44	1.04	0.34
1-275-280	1-275	1-280	199.09	8	120	162.44	1.04	0.15
1-280-285	1-280	1-285	740.62	8	120	162.44	1.04	0.54
1-285-290	1-285	1-290	677.64	8	120	162.44	1.04	0.50
1-290-295	1-290	1-295	651.86	8	120	162.44	1.04	0.48
1-295-300	1-295	1-300	633.58	8	120	162.44	1.04	0.46
1-300-305	1-300	1-305	503.17	8	120	43.88	0.28	0.03
1-300-315	1-300	1-315	113.29	8	120	118.56	0.76	0.05
1-305-310	1-305	1-310	799.46	8	120	43.88	0.28	0.05
1-315-320	1-315	1-320	395.94	8	120	77.32	0.49	0.07
1-320-325	1-320	1-325	220.64	6	110	52.12	0.59	0.09
1-325-330	1-325	1-330	732.23	6	110	52.12	0.59	0.31
1-330-335	1-330	1-335	611.98	6	110	52.12	0.59	0.26
1-335-340	1-335	1-340	625.35	6	110	52.12	0.59	0.27
1-340-345	1-340	1-345	628.09	6	110	52.12	0.59	0.27
1-345-350	1-345	1-350	131.80	6	110	0	0.00	0.00
1-355-360	1-355	1-360	449.60	8	120	91.4	0.58	0.11
1-360-365	1-360	1-365	298.77	8	120	19.28	0.12	0.00
1-365-370	1-365	1-370	274.40	8	120	2	0.01	0.00
1-375-BORDER	1-375	BORDER	191.03	20	130	6,723.48	6.87	1.37
1-WWTP1-100	WRF1	1-100	119.55	24	130	7,144.36	5.07	0.40
2-100-101	2-100	2-101	260.82	8	120	0	0.00	0.00
2-101-102	2-101	2-102	521.22	8	120	0	0.00	0.00
2-102-103	2-103	2-102	841.92	8	120	17.56	0.11	0.01
2-103-105	2-103	2-105	70.22	8	120	-541.64	3.46	0.48
2-103-365	2-103	2-365	1233.10	12	120	524.08	1.49	1.10
2-105-110	2-105	2-110	945.61	12	120	-541.64	1.54	0.89
2-110-115	2-110	2-115	539.97	12	120	-541.64	1.54	0.51
2-115-117	2-115	2-117	113.87	12	120	-579.24	1.64	0.12
2-117-118	2-117	2-118	843.56	8	120	113.36	0.72	0.32

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-117-120	2-117	2-120	240.34	12	120	-705.72	2.00	0.37
2-118-119	2-118	2-119	1110.74	8	120	76.52	0.49	0.20
2-120-125	2-120	2-125	983.52	12	120	-705.72	2.00	1.52
2-125-130	2-125	2-130	559.97	12	120	-708.12	2.01	0.87
2-130-135	2-130	2-135	853.35	16	130	-708.12	1.13	0.28
2-135-136	2-135	2-136	391.50	16	130	-708.12	1.13	0.13
2-136-137	2-136	2-137	423.36	10	120	849.2	3.47	2.23
2-136-140	2-136	2-140	295.92	16	130	-1,557.32	2.49	0.42
2-140-145	2-140	2-145	1092.71	18	130	-1,557.32	1.96	0.87
2-145-150	2-145	2-150	441.06	18	130	-1,557.32	1.96	0.35
2-150-155	2-150	2-155	548.10	18	130	-2,230.92	2.81	0.85
2-155-156	2-155	2-156	960.72	12	120	0	0.00	0.00
2-155-160	2-155	2-160	1036.20	18	130	-2,230.92	2.81	1.61
2-156-157	2-156	2-157	449.63	12	120	0	0.00	0.00
2-157-158	2-157	2-158	341.84	12	120	0	0.00	0.00
2-160-165	2-160	2-165	302.10	18	130	-2,230.92	2.81	0.47
2-165-170	2-165	2-170	672.48	18	130	-2,230.92	2.81	1.05
2-170-175	2-170	2-175	869.81	18	130	-2,230.92	2.81	1.35
2-175-180	2-175	2-180	407.16	18	130	-2,230.92	2.81	0.63
2-176-180	2-176	2-180	530.29	18	130	2,230.92	2.81	0.82
2-180-185	2-176	2-185	489.53	18	130	-2,230.92	2.81	0.76
2-185-190	2-185	2-190	386.23	18	130	-2,230.92	2.81	0.60
2-190-195	2-190	2-195	808.82	18	130	-2,230.92	2.81	1.26
2-195-200	2-195	2-200	861.85	18	130	-2,230.92	2.81	1.34
2-200-205	2-200	2-205	800.26	18	130	-2,230.92	2.81	1.24
2-205-210	2-205	2-210	391.86	18	130	-2,230.92	2.81	0.61
2-210-215	2-210	2-215	875.21	18	130	-2,230.92	2.81	1.36
2-215-220	2-215	2-220	863.18	18	130	-2,230.92	2.81	1.34
2-220-225	2-220	2-225	799.09	18	130	-2,230.92	2.81	1.24
2-225-230	2-225	2-230	857.48	18	130	-2,230.92	2.81	1.33
2-230-235	2-230	2-235	810.85	18	130	-2,230.92	2.81	1.26
2-235-240	2-235	2-240	707.78	18	130	-2,230.92	2.81	1.10
2-240-245	2-240	2-245	786.41	18	130	-2,230.92	2.81	1.22
2-245-250	2-245	2-250	702.44	18	130	-2,230.92	2.81	1.09

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-250-255	2-250	2-255	991.80	18	130	-2,230.92	2.81	1.54
2-255-260	2-255	2-260	867.24	18	130	-2,390.92	3.01	1.53
2-260-265	2-260	2-265	896.29	18	130	-2,390.92	3.01	1.58
2-265-270	2-265	2-270	947.86	18	130	-2,446.92	3.09	1.75
2-270-275	2-270	2-275	945.80	18	130	-3,175.00	4.00	2.83
2-275-280	2-275	2-280	505.23	18	130	-3,175.00	4.00	1.51
2-280-WWTP1-P9_OUT	2-280	WWTP1-P9_OUT	715.68	18	130	-3,175.00	4.00	2.14
2-285-WWTP1	2-285	WRF1	115.18	18	130	-3,175.00	4.00	0.34
2-285-WWTP1-BP9_IN	2-285	WWTP1-P9_IN	75.16	18	130	3,175.00	4.00	0.22
2-365-370	2-365	2-370	498.67	12	120	524.08	1.49	0.44
2-370-375	2-370	2-375	736.72	12	120	501.6	1.42	0.60
2-375-380	2-375	2-380	843.20	12	120	484.84	1.38	0.65
2-380-381	2-380	2-381	145.36	12	120	463.68	1.32	0.10
2-381-385	2-381	2-385	793.40	12	120	463.68	1.32	0.56
2-385-405	2-385	2-405	578.31	12	120	358.32	1.02	0.25
2-390-385	2-390	2-385	764.54	8	120	-105.36	0.67	0.25
2-395-390	2-395	2-390	709.08	8	120	-73.4	0.47	0.12
2-400-395	2-400	2-395	767.72	8	120	0	0.00	0.00
2-405-410	2-405	2-410	269.14	8	120	74.32	0.47	0.05
2-405-435	2-405	2-435	699.59	12	120	284	0.81	0.20
2-410-415	2-410	2-415	403.03	8	120	74.32	0.47	0.07
2-415-420	2-415	2-420	865.13	8	120	74.32	0.47	0.15
2-420-425	2-420	2-425	901.31	8	120	74.32	0.47	0.15
2-425-430	2-425	2-430	645.25	8	120	74.32	0.47	0.11
2-435-440	2-435	2-440	835.19	12	120	277.36	0.79	0.23
2-440-445	2-440	2-445	836.05	12	120	273.4	0.78	0.22
2-445-450	2-445	2-450	712.68	12	120	273.4	0.78	0.19
2-450-455	2-450	2-455	981.33	12	120	273.4	0.78	0.26
2-455-460	2-455	2-460	495.46	12	120	272.68	0.77	0.13
2-460-465	2-460	2-465	717.54	12	120	119.2	0.34	0.04
2-465-470	2-465	2-470	708.83	12	120	119.2	0.34	0.04
2-470-475	2-470	2-475	582.82	8	120	109.88	0.70	0.21
2-475-480	2-475	2-480	637.59	8	120	109.88	0.70	0.23
2-480-485	2-480	2-485	231.68	8	120	109.88	0.70	0.08

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-485-490	2-485	2-490	494.98	8	120	87.92	0.56	0.12
2-490-495	2-490	2-495	438.22	8	120	77.8	0.50	0.08
2-495-496	2-495	2-496	508.54	8	120	77.8	0.50	0.10
2-496-500	2-496	2-500	273.78	8	120	77.8	0.50	0.05
2-500-505	2-500	2-505	384.93	8	120	77.8	0.50	0.07
2-505-510	2-505	2-510	386.63	8	120	77.8	0.50	0.07
3-090-BORDER	3-090	BORDER	66.09	24	130	-4,465.77	3.17	0.09
3-095-100	3-095	3-100	111.93	20	130	4,446.17	4.54	0.37
3-095-BP1_OUT	3-095	BP1_OUT	36.38	20	130	-4,446.17	4.54	0.12
3-100-105	3-100	3-105	709.75	20	130	4,415.65	4.51	2.34
3-105-110	3-105	3-110	339.12	20	130	4,364.13	4.46	1.09
3-110-115	3-110	3-115	343.32	20	130	4,364.13	4.46	1.11
3-115-120	3-115	3-120	770.98	20	130	4,350.93	4.44	2.47
3-120-125	3-120	3-125	830.51	20	130	4,350.93	4.44	2.66
3-125-130	3-125	3-130	428.53	20	130	4,350.93	4.44	1.37
3-130-135	3-130	3-135	448.18	20	130	4,350.93	4.44	1.44
3-135-140	3-135	3-140	554.68	20	130	4,313.85	4.41	1.75
3-140-141	3-140	3-141	254.42	20	130	4,313.85	4.41	0.80
3-141-145	3-141	3-145	542.28	20	130	5.16	0.01	0.00
3-150-155	3-150	3-155	911.45	8	120	5.16	0.03	0.00
3-155-160	3-155	3-160	978.19	8	120	0	0.00	0.00
3-160-165	3-160	3-165	692.71	8	120	0	0.00	0.00
3-165-170	3-165	3-170	446.87	8	120	0	0.00	0.00
3-170-175	3-170	3-175	296.15	8	120	0	0.00	0.00
3-175-180	3-175	3-180	757.11	6	110	0	0.00	0.00
3-180-185	3-180	3-185	803.74	6	110	0	0.00	0.00
3-185-190	3-185	3-190	538.71	6	110	0	0.00	0.00
3-190-195	3-190	3-195	954.17	6	110	0	0.00	0.00
3-200-205	3-200	3-205	583.46	12	120	-76.76	0.22	0.01
3-205-210	3-205	3-210	473.00	12	120	-76.76	0.22	0.01
3-210-215	3-210	3-215	745.46	12	120	-97.4	0.28	0.03
3-215-220	3-215	3-220	456.48	12	120	-97.4	0.28	0.02
3-220-225	3-220	3-225	728.00	12	120	-97.4	0.28	0.03
3-225-230	3-225	3-230	666.26	12	120	-110.56	0.31	0.03

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-230-235	3-230	3-235	330.59	12	120	-110.56	0.31	0.02
3-235-240	3-235	3-240	697.41	20	130	-4,308.69	4.40	2.20
3-235-250	3-235	3-250	793.74	20	130	4,198.13	4.29	2.38
3-240-245	3-240	3-245	480.80	20	130	-4,308.69	4.40	1.51
3-245-141	3-245	3-141	801.57	20	130	-4,308.69	4.40	2.52
3-250-255	3-250	3-255	946.18	20	130	4,198.13	4.29	2.84
3-255-260	3-255	3-260	173.60	20	130	4,198.13	4.29	0.52
3-260-265	3-260	3-265	223.81	20	130	4,198.13	4.29	0.67
3-265-270	3-265	3-270	477.60	20	130	4,198.13	4.29	1.43
3-270-275	3-270	3-275	632.96	20	130	4,192.65	4.28	1.89
3-275-280	3-275	3-280	565.48	20	130	4,192.65	4.28	1.69
3-280-285	3-280	3-285	501.10	20	130	4,192.65	4.28	1.50
3-285-290	3-285	3-290	652.10	20	130	4,088.61	4.18	1.86
3-285-310	3-285	3-310	625.99	8	120	90.48	0.58	0.16
3-290-295	3-290	3-295	903.43	20	130	4,062.37	4.15	2.55
3-295-300	3-295	3-300	187.71	20	130	4,036.77	4.12	0.52
3-300-305	3-300	3-305	967.57	20	130	4,028.61	4.11	2.69
3-305-355	3-305	3-355	568.18	16	130	3,922.61	6.26	4.46
3-310-315	3-310	3-315	532.30	8	120	90.48	0.58	0.13
3-320-321	3-320	3-321	570.31	8	120	-88.8	0.57	0.14
3-320-325	3-320	3-325	608.31	8	120	88.8	0.57	0.15
3-321-305	3-321	3-305	296.47	10	120	-96.64	0.39	0.03
3-325-330	3-325	3-330	481.47	8	120	52.32	0.33	0.04
3-330-335	3-330	3-335	471.40	8	120	34.08	0.22	0.02
3-335-340	3-335	3-340	144.19	4	110	0	0.00	0.00
3-340-345	3-340	3-345	297.26	4	110	0	0.00	0.00
3-345-350	3-345	3-350	714.11	4	110	0	0.00	0.00
3-355-360	3-355	3-360	954.23	16	130	3,922.61	6.26	7.49
3-360-365	3-360	3-365	105.82	16	130	3,922.61	6.26	0.83
3-365-395	3-365	3-395	798.86	12	120	1,646.54	4.67	5.91
3-370-371	3-370	3-371	325.90	8	120	0	0.00	0.00
3-370-374	3-370	3-374	262.57	16	130	-2,103.71	3.36	0.65
3-370-610	3-370	3-610	737.06	16	130	2,093.14	3.34	1.81
3-371-372	3-371	3-372	2580.46	8	120	0	0.00	0.00

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-371-377	3-371	3-377	1260.24	8	120	0	0.00	0.00
3-372-373	3-372	3-373	718.75	8	120	0	0.00	0.00
3-373-376	3-373	3-376	281.30	8	120	0	0.00	0.00
3-374-375	3-374	3-375	644.34	16	130	-2,103.71	3.36	1.59
3-375-380	3-375	3-380	798.60	16	130	-2,103.71	3.36	1.98
3-380-385	3-380	3-385	705.33	16	130	-2,109.99	3.37	1.76
3-385-390	3-385	3-390	335.72	16	130	-2,109.99	3.37	0.84
3-390-365	3-390	3-365	280.59	16	130	-2,255.11	3.60	0.79
3-395-400	3-395	3-400	608.23	12	120	1,646.54	4.67	4.50
3-395-402	3-395	3-402	1802.70	8	120	0	0.00	0.00
3-400-405	3-400	3-405	868.52	12	120	1,646.54	4.67	6.43
3-405-410	3-405	3-410	942.03	12	120	1,637.82	4.65	6.91
3-410-420	3-410	3-420	819.19	12	120	1,637.82	4.65	6.00
3-420-425	3-420	3-425	488.34	12	120	1,637.82	4.65	3.58
3-425-430	3-425	3-430	476.18	12	120	1,634.14	4.64	3.48
3-430-435	3-430	3-435	601.08	12	120	1,621.02	4.60	4.32
3-435-440	3-435	3-440	430.57	12	120	1,621.02	4.60	3.10
3-440-445	3-440	3-445	90.91	12	120	1,606.58	4.56	0.64
3-445-450	3-445	3-450	680.32	12	120	1,251.90	3.55	3.03
3-445-495	3-445	3-495	673.08	12	120	337.88	0.96	0.27
3-450-455	3-450	3-455	542.64	12	120	1,251.90	3.55	2.42
3-455-460	3-455	3-460	652.68	12	120	1,085.94	3.08	2.24
3-460-465	3-460	3-465	684.10	12	120	1,074.98	3.05	2.30
3-465-470	3-465	3-470	120.78	16	130	1,064.90	1.70	0.08
3-470-475	3-470	3-475	320.57	16	130	1,693.01	2.70	0.53
3-475-480	3-475	3-480	582.32	16	130	1,684.89	2.69	0.96
3-480-485	3-480	3-485	413.51	16	130	1,462.21	2.33	0.52
3-485-490	3-485	3-490	889.60	16	130	1,411.81	2.25	1.05
3-490-715	3-490	3-715	902.91	16	130	1,411.81	2.25	1.07
3-495-500	3-495	3-500	366.49	12	120	337.88	0.96	0.14
3-500-505	3-500	3-505	464.87	12	120	327.48	0.93	0.17
3-505-510	3-505	3-510	220.32	12	120	327.48	0.93	0.08
3-515-520	3-515	3-520	650.14	12	120	311.6	0.88	0.22
3-520-525	3-520	3-525	865.53	12	120	311.6	0.88	0.29

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-525-530	3-525	3-530	743.28	8	120	42.4	0.27	0.05
3-525-595	3-525	3-595	896.37	8	120	186.04	1.19	0.84
3-530-531	3-530	3-531	232.04	8	120	42.4	0.27	0.01
3-531-535	3-531	3-535	602.55	8	120	29.72	0.19	0.02
3-535-540	3-535	3-540	384.78	8	120	0	0.00	0.00
3-540-545	3-540	3-545	487.54	8	120	0	0.00	0.00
3-545-550	3-545	3-550	374.80	8	120	0	0.00	0.00
3-550-555	3-550	3-555	740.67	8	120	0	0.00	0.00
3-555-560	3-555	3-560	604.50	6	110	0	0.00	0.00
3-560-565	3-560	3-565	548.77	6	110	0	0.00	0.00
3-570-575	3-570	3-575	647.35	8	120	-6.52	0.04	0.00
3-575-580	3-575	3-580	684.12	8	120	-15.2	0.10	0.01
3-580-585	3-580	3-585	303.44	8	120	-17.36	0.11	0.00
3-585-590	3-585	3-590	865.50	8	120	-22.28	0.14	0.02
3-590-525	3-590	3-525	87.63	8	120	-48.12	0.31	0.01
3-595-600	3-595	3-600	713.80	8	120	186.04	1.19	0.67
3-600-605	3-600	3-605	936.18	8	120	186.04	1.19	0.88
3-610-615	3-610	3-615	625.55	16	130	2,093.14	3.34	1.53
3-615-620	3-615	3-620	556.65	16	130	2,079.82	3.32	1.35
3-620-625	3-620	3-625	702.48	16	130	2,070.42	3.30	1.69
3-625-630	3-625	3-630	505.40	12	120	2,035.14	5.77	5.54
3-630-635	3-630	3-635	1009.61	12	120	2,022.34	5.74	10.94
3-635-640	3-635	3-640	562.68	12	120	1,947.78	5.53	5.69
3-640-645	3-640	3-645	486.45	12	120	1,947.78	5.53	4.92
3-645-650	3-645	3-650	531.02	12	120	1,945.14	5.52	5.35
3-650-655	3-650	3-655	511.77	12	120	1,932.42	5.48	5.10
3-655-660	3-655	3-660	245.14	12	120	1,280.39	3.63	1.14
3-655-680	3-655	3-680	456.05	12	120	651.23	1.85	0.61
3-665-670	3-665	3-670	504.59	16	130	0	0.00	0.00
3-670-675	3-670	3-675	484.37	16	130	-26.52	0.04	0.00
3-675-625	3-675	3-625	435.14	16	130	-26.52	0.04	0.00
3-680-685	3-680	3-685	466.57	12	120	651.23	1.85	0.62
3-685-690	3-685	3-691	531.25	12	120	651.23	1.85	0.71
3-690-691	3-691	3-690	206.40	12	120	651.23	1.85	0.27

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-690-695	3-690	3-695	539.18	12	120	651.23	1.85	0.72
3-695-470	3-695	3-470	416.51	12	120	628.11	1.78	0.52
3-700-705	3-700	3-705	622.95	12	120	-1,280.39	3.63	2.89
3-705-710	3-705	3-710	804.82	12	120	-1,280.39	3.63	3.74
3-710-660	3-710	3-660	786.65	12	120	-1,280.39	3.63	3.65
3-715-720	3-715	3-720	1088.46	16	130	1,411.81	2.25	1.29
3-720-725	3-720	3-725	870.92	16	130	1,411.81	2.25	1.03
3-725-730	3-725	3-730	1405.92	16	130	1,411.81	2.25	1.66
3-730-735	3-730	3-735	1073.96	16	130	876.81	1.40	0.53
3-730-750	3-730	3-750	1346.76	12	120	0	0.00	0.00
3-735-740	3-735	3-740	861.22	16	130	876.81	1.40	0.42
3-740-745	3-740	3-745	1095.81	16	130	876.81	1.40	0.54
3-745-4-122	3-745	4-122	404.60	16	130	876.81	1.40	0.20
3-GILBERT-700	GILBERT	3-700	475.64	12	120	-1,248.23	3.54	2.11
4-100-210	4-100	4-210	2007.89	8	120	0	0.00	0.00
4-100-WWTP3-P1_OUT	4-100	WWTP3-P1_OUT	373.87	12	120	-1,024.07	2.91	1.15
4-105-100	4-105	4-100	873.40	14	120	-1,024.07	2.13	1.27
4-110-115	4-110	4-105	128.06	14	120	-1,024.07	2.13	0.19
4-115-110	4-115	4-110	2037.07	14	120	-1,024.07	2.13	2.95
4-120-115	4-120	4-115	2198.91	14	120	-1,024.07	2.13	3.19
4-120-122	4-120	4-122	446.29	14	120	1,024.07	2.13	0.65
4-122-125	4-122	4-125	407.72	14	120	1,888.88	3.94	1.84
4-130-125	4-130	4-125	39.56	12	120	-1,888.88	5.36	0.38
4-130-140	4-130	4-140	1131.43	12	120	1,888.88	5.36	10.80
4-135-130	4-135	4-130	43.23	12	120	0	0.00	0.00
4-140-150	4-140	4-150	1338.84	12	120	1,322.36	3.75	6.60
4-145-140	4-145	4-140	78.02	12	120	-29.16	0.08	0.00
4-150-155	4-150	4-155	285.19	12	120	29.52	0.08	0.00
4-150-160	4-150	4-160	328.04	12	120	1,273.60	3.61	1.51
4-160-150	4-160	4-165	525.20	12	120	1,251.32	3.55	2.34
4-165-167	4-165	4-167	417.99	12	120	1,203.80	3.41	1.73
4-166-170	4-166	4-170	907.10	12	120	1,039.68	2.95	2.87
4-167-166	4-167	4-166	773.65	12	120	1,054.68	2.99	2.51
4-170-175	4-170	4-175	819.60	12	120	993.04	2.82	2.38

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
4-175-176	4-175	4-176	860.41	12	120	942.48	2.67	2.27
4-176-185	4-176	4-185	1074.27	12	120	887.72	2.52	2.53
4-180-175	4-180	4-175	410.28	12	120	-50.56	0.14	0.00
4-185-190	4-185	4-190	577.49	12	120	750	2.13	1.00
4-190-195	4-190	4-195	59.16	12	120	750	2.13	0.10
4-190-200	4-190	4-200	64.23	12	120	0	0.00	0.00
4-195-191	4-195	4-191	77.71	12	120	750	2.13	0.13
4-205-WWTP3	4-205	WRF3	58.58	12	120	-1,024.07	2.91	0.18
4-205-WWTP3-P1_IN	4-205	WWTP3-P1_IN	48.50	12	120	1,024.07	2.91	0.15
4-210-215	4-210	4-215	3472.44	6	110	0	0.00	0.00
4-220-225	4-220	4-225	231.17	8	120	-79.36	0.51	0.04
4-225-230	4-225	4-230	307.43	8	120	-89.28	0.57	0.07
4-230-235	4-230	4-235	357.65	8	120	-94.72	0.60	0.10
4-235-240	4-235	4-240	218.03	8	120	-107.12	0.68	0.07
4-240-245	4-240	4-245	468.80	8	120	-111.72	0.71	0.17
4-245-167	4-245	4-167	1685.62	8	120	-149.12	0.95	1.05
4-245-250	4-245	4-250	202.48	8	120	27.6	0.18	0.01
4-250-251	4-250	4-251	155.55	8	120	19.8	0.13	0.00
4-251-255	4-251	4-255	207.17	8	120	-17.4	0.11	0.00
4-255-260	4-255	4-260	396.51	8	120	-153.8	0.98	0.26
4-260-265	4-260	4-265	212.42	8	120	-165.72	1.06	0.16
4-265-270	4-265	4-270	283.77	8	120	-92.73	0.59	0.07
4-265-305	4-265	4-305	626.10	8	120	-72.99	0.47	0.10
4-270-275	4-270	4-275	326.49	8	120	-134.01	0.86	0.17
4-275-280	4-275	4-280	550.55	8	120	-140.09	0.89	0.31
4-280-285	4-280	4-285	505.80	8	120	-256.72	1.64	0.86
4-285-290	4-285	4-290	694.75	8	120	213.04	1.36	0.84
4-285-300	4-285	4-300	551.09	8	120	-524.96	3.35	3.54
4-290-295	4-290	4-295	567.25	8	120	22.08	0.14	0.01
4-300-140	4-300	4-140	1173.20	8	120	-537.36	3.43	7.87
4-305-310	4-305	4-310	145.77	8	120	-85.39	0.55	0.03
4-310-280	4-310	4-280	1613.37	8	120	-91.83	0.59	0.41
BP11	BP1_IN	BP1	1.00	20	150	1,482.08	1.51	0.00
BP12	BP1	BP1_OUT	1.00	20	150	1,482.08	1.51	0.00

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
BP1_IN-BP2_IN	BP1_IN	BP2_IN	9.54	20	130	-1,482.08	1.51	0.00
BP1_OUT-BP2_OUT	BP1_OUT	BP2_OUT	8.65	20	130	-2,964.09	3.03	0.01
BP21	BP2_IN	BP2_IN	1.00	20	150	1,482.01	1.51	0.00
BP22	BP2_IN	BP2_OUT	1.00	20	150	1,482.01	1.51	0.00
BP2_IN-BP3_IN	BP2_IN	BP3_IN	9.81	20	130	-2,964.08	3.03	0.02
BP2_OUT-BP3_OUT	BP2_OUT	BP3_OUT	9.42	20	130	-1,482.08	1.51	0.00
BP31	BP3_IN	BP3_IN	1.00	20	150	1,482.09	1.51	0.00
BP32	BP3_IN	BP3_OUT	1.00	20	150	1,482.09	1.51	0.00
BP3_IN-BP4_IN	BP3_IN	BP4_IN	9.15	20	130	-4,446.17	4.54	0.03
BP3_OUT-BP4_OUT	BP3_OUT	BP4_OUT	8.62	20	130	0	0.00	0.00
BP41	BP4_IN	BP4_IN	1.00	12	150	0	0.00	0.00
BP42	BP4_IN	BP4_OUT	1.00	12	150	0	0.00	0.00
BP4_IN-3-090	BP4_IN	3-090	20.42	20	130	-4,446.17	4.54	0.07
FULLERTON11	3-510	FULLERTON1	1.00	6	150	311.6	3.54	0.01
FULLERTON12	FULLERTON1	3-515	1.00	6	150	311.6	3.54	0.01
ONTARIO1	3-145	ONTARIO	1.00	6	150	5.16	0.06	0.00
ONTARIO2	ONTARIO	3-150	1.00	6	150	5.16	0.06	0.00
WRF1-P101	WWTP1-P10_IN	WRF1-P10	1.00	12	150	0	0.00	0.00
WRF1-P102	WRF1-P10	WWTP1-P10_OUT	1.00	12	150	0	0.00	0.00
WRF1-P111	WWTP1-P11_IN	WRF1-P11	1.00	12	150	0	0.00	0.00
WRF1-P112	WRF1-P11	WWTP1-P11_OUT	1.00	12	150	0	0.00	0.00
WRF1-P121	WWTP1-P12_IN	WRF1-P12	1.00	12	150	0	0.00	0.00
WRF1-P122	WRF1-P12	WWTP1-P12_OUT	1.00	12	150	0	0.00	0.00
WRF1-P1_1	WWTP1-P1_IN	WRF1-P1	1.00	12	150	1,428.74	4.05	0.00
WRF1-P1_2	WRF1-P1	WWTP1-P1_OUT	1.00	12	150	1,428.74	4.05	0.00
WRF1-P21	WWTP1-P2_IN	WRF1-P2	1.00	12	150	1,428.76	4.05	0.00
WRF1-P22	WRF1-P2	WWTP1-P2_OUT	1.00	12	150	1,428.76	4.05	0.00
WRF1-P31	WWTP1-P3_IN	WRF1-P3	1.00	12	150	1,428.84	4.05	0.00
WRF1-P32	WRF1-P3	WWTP1-P3_OUT	1.00	12	150	1,428.84	4.05	0.00
WRF1-P41	WWTP1-P4_IN	WRF1-P4	1.00	12	150	1,429.02	4.05	0.00
WRF1-P42	WRF1-P4	WWTP1-P4_OUT	1.00	12	150	1,429.02	4.05	0.00
WRF1-P51	WWTP1-P5_IN	WRF1-P5	1.00	12	150	1,429.00	4.05	0.00
WRF1-P52	WRF1-P5	WWTP1-P5_OUT	1.00	12	150	1,429.00	4.05	0.00
WRF1-P61	WWTP1-P6_IN	WRF1-P6	1.00	12	150	0	0.00	0.00

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WRF1-P62	WRF1-P6	WWTP1-P6_OUT	1.00	12	150	0	0.00	0.00
WRF1-P71	WWTP1-P7_IN	WRF1-P7	1.00	12	150	1,587.43	4.50	0.00
WRF1-P72	WRF1-P7	WWTP1-P7_OUT	1.00	12	150	1,587.43	4.50	0.00
WRF1-P81	WWTP1-P8_IN	WRF1-P8	1.00	12	150	1,587.58	4.50	0.00
WRF1-P82	WRF1-P8	WWTP1-P8_OUT	1.00	12	150	1,587.58	4.50	0.00
WRF1-P91	WWTP1-P9_IN	WRF1-P9	1.00	12	150	0	0.00	0.00
WRF1-P92	WRF1-P9	WWTP1-P9_OUT	1.00	12	150	0	0.00	0.00
WRF3-P11	WWTP3-P1_IN	WRF3-P1	1.00	12	150	512.06	1.45	0.00
WRF3-P12	WRF3-P1	WWTP3-P1_OUT	1.00	12	150	512.06	1.45	0.00
WRF3-P21	WWTP3-P2_IN	WRF3-P2	1.00	12	150	512.02	1.45	0.00
WRF3-P22	WRF3-P2	WWTP3-P2_OUT	1.00	12	150	512.02	1.45	0.00
WRF3-P31	WWTP3-P3_IN	WRF3-P3	1.00	12	150	0	0.00	0.00
WRF3-P32	WRF3-P3	WWTP3-P3_OUT	1.00	12	150	0	0.00	0.00
WWTP1-B4_IN-BP3_IN	WWTP1-P4_IN	WWTP1-P3_IN	13.17	24	130	4,286.34	3.04	0.02
WWTP1-BP1_IN-BP5_IN	WWTP1-P4_IN	WWTP1-P5_IN	11.55	24	130	1,429.00	1.01	0.00
WWTP1-BP1_OT-BP5_OT	WWTP1-P4_OUT	WWTP1-P5_OUT	11.49	24	130	-1,429.00	1.01	0.00
WWTP1-BP2_IN-BP1_IN	WWTP1-P2_IN	WWTP1-P1_IN	13.51	24	130	1,428.74	1.01	0.00
WWTP1-BP2_OT-BP1_OT	WWTP1-P2_OUT	WWTP1-P1_OUT	11.62	24	130	-1,428.74	1.01	0.00
WWTP1-BP3_IN-BP2_IN	WWTP1-P3_IN	WWTP1-P2_IN	11.99	24	130	2,857.49	2.03	0.01
WWTP1-BP3_OT-BP2_OT	WWTP1-P3_OUT	WWTP1-P2_OUT	14.76	24	130	-2,857.49	2.03	0.01
WWTP1-BP4_OT-BP3_OT	WWTP1-P4_OUT	WWTP1-P3_OUT	13.11	24	130	-4,286.34	3.04	0.02
WWTP1-BP5_IN-BP6_IN	WWTP1-P5_IN	WWTP1-P6_IN	9.23	24	130	0	0.00	0.00
WWTP1-BP5_OT-BP6_OT	WWTP1-P5_OUT	WWTP1-P6_OUT	8.13	24	130	0	0.00	0.00
WWTP1-P10_IN-P11_IN	WWTP1-P10_IN	WWTP1-P11_IN	11.55	18	130	0	0.00	0.00
WWTP1-P10_OT-P11_OT	WWTP1-P10_OUT	WWTP1-P11_OUT	10.79	18	130	0.01	0.00	0.00
WWTP1-P11_IN-P12_IN	WWTP1-P11_IN	WWTP1-P12_IN	11.38	18	130	0	0.00	0.00
WWTP1-P11_OT-P12_OT	WWTP1-P11_OUT	WWTP1-P12_OUT	10.53	18	130	0	0.00	0.00
WWTP1-P7_IN-P8_IN	WWTP1-P7_IN	WWTP1-P8_IN	14.82	18	130	-1,587.43	2.00	0.01
WWTP1-P7_OUT-P8_OUT	WWTP1-P7_OUT	WWTP1-P8_OUT	15.36	18	130	1,587.43	2.00	0.01
WWTP1-P8_IN-P9_IN	WWTP1-P8_IN	WWTP1-P9_IN	9.42	18	130	-3,175.01	4.00	0.03
WWTP1-P8_OUT-P9_OUT	WWTP1-P8_OUT	WWTP1-P9_OUT	10.16	18	130	3,175.01	4.00	0.03
WWTP1-P9_IN-P10_IN	WWTP1-P9_IN	WWTP1-P10_IN	12.83	18	130	-0.01	0.00	0.00
WWTP1-P9_OUT-P10_OUT	WWTP1-P9_OUT	WWTP1-P10_OUT	13.66	18	130	0.01	0.00	0.00
WWTP3-P1_IN-P2_IN	WWTP3-P1_IN	WWTP3-P2_IN	29.34	12	120	512.01	1.45	0.03

Max Day Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WWTP3-P1_OUT-P2_OUT	WWTP3-P1_OUT	WWTP3-P2_OUT	29.42	12	120	-512.01	1.45	0.03
WWTP3-P2_IN-P3_IN	WWTP3-P2_IN	WWTP3-P3_IN	26.79	12	120	0	0.00	0.00
WWTP3-P2_OUT-P3_OUT	WWTP3-P2_OUT	WWTP3-P3_OUT	29.34	12	120	0	0.00	0.00

Max Day Tank Report

ID	Flow (gpm)	Elevation (ft)	Head (ft)	% Full (%)	Level (ft)
BORDER	2,257.71	988.00	1007.50	93.55	19.50
GILBERT	1,248.23	1357.50	1379.00	94.29	21.50
WRF1	-10,319.36	531.00	558.00	95.65	27.00
WRF3	-1,024.07	789.50	803.50	90.00	14.00

Max Day Pump Report

ID	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Head Gain (ft)	Status	Setting
BP1	1015.25	-3.45	209.67	1482.08	491.85	Open	1
BP2	1015.25	-3.45	209.67	1482.01	491.86	Open	1
BP3	1015.25	-3.44	209.68	1482.09	491.84	Open	1
BP4	1015.25	-3.43	209.68	0.00	0.00	Closed	0
WRF1-P1	544.00	5.79	248.39	1428.74	559.89	Open	1
WRF1-P10	544.00	5.82	208.12	0.00	0.00	Closed	0
WRF1-P11	544.00	5.82	208.12	0.00	0.00	Closed	0
WRF1-P12	544.00	5.82	208.12	0.00	0.00	Closed	0
WRF1-P2	544.00	5.79	248.39	1428.76	559.89	Open	1
WRF1-P3	544.00	5.80	248.39	1428.84	559.87	Open	1
WRF1-P4	544.00	5.81	248.38	1429.02	559.84	Open	1
WRF1-P5	544.00	5.80	248.38	1429.00	559.84	Open	1
WRF1-P6	544.00	5.81	248.38	0.00	0.00	Closed	0
WRF1-P7	544.00	5.80	208.14	1587.43	466.98	Open	1
WRF1-P8	544.00	5.81	208.14	1587.58	466.95	Open	1
WRF1-P9	544.00	5.82	208.12	0.00	0.00	Closed	0
WRF3-P1	794.00	3.97	257.68	512.06	585.53	Open	1
WRF3-P2	794.00	3.96	257.69	512.02	585.58	Open	1
WRF3-P3	794.00	3.96	257.69	0.00	0.00	Closed	0

Max Day Valve Report

ID	Diameter (in)	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Velocity (ft/s)	Headloss (ft)	Status	Setting
FULLERTON1	6	1046.02	152.73	60.00	311.60	3.54	214.00	Active	60
ONTARIO	6	875.00	263.71	70.00	5.16	0.06	447.05	Active	70

**RECYCLED WATER ANALYSIS
ARANTINE HILLS
BLUESTONE COMMUNITIES
CORONA, CA**

EXHIBIT 7: PEAK HOUR HYDRAULIC ANALYSIS – PEAKING FACTOR OF 6

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-100	0	544	557.6	5.89
1-105	0	555	1,111.92	241.32
1-110	0	556	1,109.48	239.82
1-115	0	574.69	1,106.70	230.52
1-120	0	568	1,104.67	232.54
1-125	42.24	564	1,103.03	233.56
1-130	0	556.6	1,101.24	235.99
1-135	0	564	1,098.15	231.45
1-140	0	581.35	1,095.18	222.64
1-145	0	596.5	1,092.51	214.92
1-150	0	605.9	1,089.76	209.66
1-155	0	614	1,087.01	204.96
1-160	0	619.5	1,085.68	202
1-165	0	625	1,081.17	197.66
1-170	0	650	1,074.71	184.03
1-175	0	679	1,068.65	168.83
1-180	0	709.22	1,063.62	153.56
1-185	24.24	742	1,058.39	137.09
1-190	0	740.7	1,054.56	136
1-195	0	773	1,049.22	119.68
1-200	0	779.5	1,043.26	114.29
1-205	0	781	1,039.87	112.17
1-210	0	798	1,034.31	102.4
1-215	0	825.25	1,029.56	88.53
1-220	0	852	1,023.04	74.11
1-225	0	896	1,019.00	53.3
1-230	19.5	957	1,013.65	24.55
1-235	0	616.38	1,085.66	203.34
1-240	0	652	1,084.79	187.53
1-245	18.18	667	1,084.18	180.77
1-250	0	706.88	1,083.71	163.28
1-255	25.86	728	1,083.47	154.02
1-260	120.54	782	1,082.89	130.38
1-265	0	822.7	1,082.42	112.54
1-270	0	829	1,081.99	109.62
1-275	0	817	1,081.26	114.51
1-280	0	797	1,080.95	123.04
1-285	0	733	1,079.81	150.27
1-290	0	706	1,078.76	161.52
1-295	0	683	1,077.75	171.04
1-300	0	649	1,076.76	185.35
1-305	0	627	1,076.69	194.85
1-310	65.82	586.5	1,076.58	212.35
1-315	61.86	653	1,076.67	183.57
1-320	37.8	663.24	1,076.51	179.07
1-325	0	671.79	1,076.31	175.28
1-330	0	726	1,075.65	151.5
1-335	0	771	1,075.10	131.77
1-340	0	799.35	1,074.54	119.24

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-345	78.18	783.8	1,073.97	125.73
1-350	0	786.84	1,073.97	124.41
1-355	0	827.5	1,082.08	110.31
1-360	108.18	813	1,081.84	116.49
1-365	25.92	803	1,081.83	120.82
1-370	3	791.12	1,081.83	125.96
1-375	0	978	1,008.82	13.35
1-400	0	638	1,085.16	193.75
2-100	0	773.87	991.98	94.51
2-101	0	770	991.98	96.19
2-102	26.34	744	991.98	107.45
2-103	0	717	992	119.16
2-105	0	719	993.02	118.73
2-110	0	718	994.91	119.98
2-115	56.4	715	995.99	121.75
2-117	19.68	712	996.25	123.16
2-118	55.26	719	995.58	119.84
2-119	114.78	753	995.15	104.92
2-120	0	712.3	997.03	123.37
2-125	3.6	711	1,000.25	125.33
2-130	0	707	1,002.09	127.86
2-135	0	641	1,002.68	156.72
2-136	0	613	1,002.96	168.97
2-137	1,273.80	600	998.22	172.55
2-140	0	598	1,003.84	175.85
2-145	0	587	1,005.69	181.42
2-150	1,010.40	589.91	1,006.44	180.48
2-155	0	595.7	1,008.25	178.76
2-156	0	604.52	1,008.25	174.93
2-157	0	604	1,008.25	175.16
2-158	0	611.54	1,008.25	171.89
2-160	0	593	1,011.66	181.4
2-165	0	589	1,012.65	183.57
2-170	0	586	1,014.87	185.83
2-175	0	580	1,017.73	189.67
2-176	0	586	1,020.82	188.41
2-180	0	588	1,019.07	186.78
2-185	0	584	1,022.43	189.97
2-190	0	592.6	1,023.71	186.8
2-195	0	587	1,026.37	190.38
2-200	0	581	1,029.21	194.21
2-205	0	591	1,031.84	191.02
2-210	0	592.42	1,033.13	190.96
2-215	0	596.1	1,036.02	190.62
2-220	0	601.9	1,038.86	189.33
2-225	0	598.5	1,041.49	191.95
2-230	0	594.1	1,044.32	195.08
2-235	0	584.3	1,046.99	200.48
2-240	0	563	1,049.32	210.72

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
2-245	0	567	1,051.91	210.11
2-250	0	564	1,054.22	212.41
2-255	240	582	1,057.49	206.03
2-260	0	584	1,060.74	206.57
2-265	84	575	1,064.09	211.92
2-270	1,092.12	580.1	1,067.80	211.32
2-275	0	555.6	1,073.78	224.53
2-280	0	554	1,076.98	226.61
2-285	0	544	557.27	5.75
2-365	0	766	989.68	96.92
2-370	33.72	799	988.74	82.22
2-375	25.14	838	987.47	64.76
2-380	31.74	820	986.09	71.97
2-381	0	798.32	985.87	81.27
2-385	0	761.4	984.68	96.75
2-390	47.94	768	984.15	93.66
2-395	110.1	780	983.9	88.35
2-400	0	777.3	983.9	89.52
2-405	0	738.4	984.14	106.48
2-410	0	742	984.05	104.88
2-415	0	757	983.9	98.32
2-420	0	800	983.58	79.55
2-425	0	762.98	983.26	95.45
2-430	111.48	778.27	983.02	88.72
2-435	9.96	732	983.72	109.07
2-440	5.94	722	983.24	113.19
2-445	0	710	982.77	118.19
2-450	0	704	982.36	120.62
2-455	1.08	728	981.81	109.98
2-460	230.22	728	981.53	109.86
2-465	0	776	981.45	89.02
2-470	13.98	808.07	981.36	75.09
2-475	0	800	980.92	78.39
2-480	0	764.1	980.44	93.74
2-485	32.94	771	980.27	90.68
2-490	15.18	784	980.02	84.94
2-495	0	760.59	979.85	95
2-496	0	753	979.65	98.21
2-500	0	753	979.54	98.16
2-505	0	749.7	979.39	99.52
2-510	116.7	760.8	979.23	94.65
3-090	29.4	984	1,007.37	10.13
3-095	0	1,006.63	1,522.89	223.69
3-100	45.78	991.92	1,522.38	229.85
3-105	77.28	957.95	1,519.20	243.19
3-110	0	923.51	1,517.72	257.47
3-115	19.8	918.6	1,516.23	258.95
3-120	0	886.5	1,512.89	271.42
3-125	0	879	1,509.30	273.11

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-130	0	871.75	1,507.45	275.45
3-135	55.62	872	1,505.51	274.5
3-140	0	868	1,503.16	275.21
3-141	0	865	1,502.08	276.05
3-145	0	875	1,502.08	271.71
3-150	0	875	1,036.55	70
3-155	7.74	872.5	1,036.55	71.08
3-160	0	845	1,036.55	83
3-165	0	826	1,036.55	91.23
3-170	0	813.4	1,036.55	96.69
3-175	0	814	1,036.55	96.43
3-180	0	779	1,036.55	111.6
3-185	0	758.5	1,036.55	120.48
3-190	0	743	1,036.55	127.19
3-195	0	716.72	1,036.55	138.58
3-200	115.14	1,032.27	1,493.39	199.8
3-205	0	1,042.00	1,493.42	195.6
3-210	30.96	1,042.51	1,493.45	195.39
3-215	0	1,007.00	1,493.51	210.8
3-220	0	990.05	1,493.55	218.17
3-225	19.74	965	1,493.61	229.05
3-230	0	939	1,493.68	240.34
3-235	0	928	1,493.71	245.12
3-240	0	910.58	1,496.66	253.95
3-245	0	896.1	1,498.69	261.1
3-250	0	925	1,490.56	245.06
3-255	0	925.49	1,486.80	243.22
3-260	0	926.26	1,486.11	242.58
3-265	0	935.1	1,485.22	238.37
3-270	8.22	947.35	1,483.33	232.24
3-275	0	955	1,480.82	227.84
3-280	0	966	1,478.58	222.1
3-285	20.34	982.58	1,476.60	214.06
3-290	39.36	999	1,474.16	205.89
3-295	38.4	1,045.00	1,470.85	184.52
3-300	12.24	1,053.21	1,470.17	180.67
3-305	14.04	1,085.53	1,466.69	165.16
3-310	0	962	1,476.27	222.83
3-315	135.72	941.22	1,475.99	231.72
3-320	0	1,095.60	1,466.34	160.64
3-321	11.76	1,092.00	1,466.63	162.33
3-325	54.72	1,109.00	1,466.03	154.7
3-330	27.36	1,125.00	1,465.94	147.73
3-335	51.12	1,130.45	1,465.90	145.35
3-340	0	1,137.00	1,465.90	142.51
3-345	0	1,153.00	1,465.90	135.58
3-350	0	1,191.19	1,465.90	119.03
3-355	0	1,082.00	1,461.01	164.22
3-360	0	1,088.00	1,451.46	157.49

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-365	31.44	1,088.42	1,450.41	156.85
3-370	15.84	1,220.00	1,441.15	95.83
3-371	0	1,240.83	1,441.15	86.8
3-372	0	1,220.98	1,441.15	95.4
3-373	0	1,247.86	1,441.15	83.75
3-374	0	1,209.29	1,441.94	100.81
3-375	0	1,180.00	1,443.87	114.34
3-376	0	1,262.40	1,441.15	77.45
3-377	0	1,305.68	1,441.15	58.7
3-380	9.42	1,141.00	1,446.26	132.27
3-385	0	1,107.47	1,448.39	147.72
3-390	217.68	1,095.60	1,449.41	153.3
3-395	0	1,069.54	1,442.84	161.75
3-400	0	1,093.00	1,437.08	149.09
3-402	0	1,010.28	1,442.84	187.43
3-405	13.08	1,119.80	1,428.86	133.92
3-410	0	1,127.24	1,420.06	126.88
3-420	0	1,146.00	1,412.40	115.43
3-425	5.52	1,142.00	1,407.84	115.19
3-430	19.68	1,128.00	1,403.41	119.33
3-435	0	1,124.84	1,397.93	118.33
3-440	21.66	1,129.00	1,394.01	114.83
3-445	25.2	1,129.61	1,393.20	114.21
3-450	0	1,130.39	1,390.00	112.49
3-455	248.94	1,123.00	1,387.45	114.58
3-460	16.44	1,129.95	1,385.38	110.68
3-465	15.12	1,130.00	1,383.29	109.75
3-470	0	1,130.37	1,383.21	109.56
3-475	12.18	1,128.00	1,382.55	110.3
3-480	334.02	1,116.20	1,381.36	114.9
3-485	75.6	1,102.00	1,380.78	120.79
3-490	0	1,074.92	1,379.62	132.03
3-495	0	1,089.50	1,392.63	131.35
3-500	15.6	1,086.00	1,392.33	132.73
3-505	0	1,057.00	1,391.96	145.14
3-510	23.82	1,050.37	1,391.79	147.94
3-515	0	1,046.02	1,184.48	59.99
3-520	0	1,013.49	1,184.01	73.89
3-525	52.56	974	1,183.39	90.73
3-530	0	947	1,183.29	102.39
3-531	19.02	942.65	1,183.26	104.26
3-535	44.58	931.7	1,183.22	108.98
3-540	0	911	1,183.22	117.95
3-545	0	892	1,183.22	126.19
3-550	0	876	1,183.22	133.12
3-555	0	851.71	1,183.22	143.64
3-560	0	830	1,183.22	153.05
3-565	0	814	1,183.22	159.98
3-570	9.78	968	1,183.32	93.3

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-575	13.02	974	1,183.32	90.7
3-580	3.24	973.8	1,183.33	90.79
3-585	7.38	966	1,183.34	94.17
3-590	38.76	973	1,183.37	91.16
3-595	0	977	1,181.60	88.65
3-600	0	975	1,180.18	88.9
3-605	279.06	937.8	1,178.31	104.22
3-610	0	1,198.00	1,438.97	104.41
3-615	19.98	1,198.00	1,437.12	103.61
3-620	14.1	1,123.00	1,435.50	135.41
3-625	13.14	1,238.79	1,433.48	84.36
3-630	19.2	1,242.00	1,426.92	80.13
3-635	111.84	1,239.00	1,414.02	75.84
3-640	0	1,245.00	1,407.50	70.41
3-645	3.96	1,250.00	1,401.85	65.8
3-650	19.08	1,244.30	1,395.71	65.61
3-655	1.2	1,240.92	1,389.89	64.55
3-660	0	1,246.51	1,388.97	61.73
3-665	0	1,243.00	1,433.48	82.53
3-670	39.78	1,268.25	1,433.48	71.59
3-675	0	1,256.12	1,433.48	76.85
3-680	0	1,224.43	1,388.72	71.19
3-685	0	1,203.00	1,387.51	79.95
3-690	0	1,169.94	1,385.61	93.45
3-691	0	1,182.00	1,386.14	88.45
3-695	34.68	1,146.00	1,384.21	103.22
3-700	48.24	1,337.63	1,380.65	18.64
3-705	0	1,311.00	1,382.99	31.19
3-710	0	1,281.00	1,386.02	45.5
3-715	0	1,052.20	1,378.45	141.36
3-720	0	1,050.00	1,377.04	141.71
3-725	0	1,013.04	1,375.91	157.23
3-730	535	948.55	1,374.09	184.38
3-735	0	950	1,373.48	183.49
3-740	0	934	1,372.99	190.21
3-745	0	903.66	1,372.37	203.09
3-750	0	904	1,374.09	203.69
4-100	0	793.7	1,389.41	258.12
4-105	0	801.95	1,386.76	253.4
4-110	0	798.01	1,386.37	254.94
4-115	0	836.04	1,380.18	235.77
4-120	0	861.06	1,373.50	222.04
4-122	18	891.44	1,372.14	208.29
4-125	0	910	1,369.15	198.95
4-130	0	908.69	1,368.53	199.25
4-135	0	920	1,368.53	194.35
4-140	0	923.22	1,350.94	185.33
4-145	43.74	918	1,350.94	187.59
4-150	28.86	1,018.32	1,340.64	139.66

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
4-155	44.28	1,024.21	1,340.64	137.11
4-160	33.42	1,038.00	1,338.32	130.13
4-165	71.28	1,063.52	1,334.74	117.52
4-166	22.5	1,112.00	1,328.90	93.98
4-167	0	1,072.94	1,332.12	112.3
4-170	69.96	1,122.00	1,325.25	88.07
4-175	0	1,135.66	1,322.31	80.87
4-176	82.14	1,148.14	1,319.59	74.29
4-180	75.84	1,138.00	1,322.30	79.86
4-185	206.58	1,206.37	1,316.68	47.8
4-190	0	1,228.00	1,315.69	38
4-191	750	1,214.00	1,315.45	43.96
4-195	0	1,214.00	1,315.59	44.02
4-200	0	1,214.00	1,315.69	44.06
4-205	0	792.42	803.12	4.64
4-210	0	828.94	1,389.41	242.85
4-215	0	864	1,389.41	227.66
4-220	119.04	1,108.00	1,327.40	95.06
4-225	14.88	1,101.00	1,327.49	98.14
4-230	8.16	1,089.20	1,327.65	103.32
4-235	18.6	1,073.73	1,327.85	110.11
4-240	6.9	1,064.31	1,328.01	114.26
4-245	14.7	1,047.20	1,328.37	121.83
4-250	11.7	1,040.00	1,328.30	124.92
4-251	55.8	1,030.22	1,328.25	129.14
4-255	204.6	1,023.11	1,328.23	132.21
4-260	17.88	1,010.57	1,328.51	137.76
4-265	0	1,001.89	1,328.69	141.6
4-270	61.92	990.55	1,328.77	146.55
4-275	9.12	980	1,328.99	151.22
4-280	37.2	960	1,329.42	160.07
4-285	82.8	942	1,330.66	168.41
4-290	286.44	957	1,328.88	161.14
4-295	33.12	997	1,328.86	143.8
4-300	18.6	920.83	1,336.93	180.3
4-305	18.6	996	1,328.82	144.21
4-310	9.66	990	1,328.86	146.83
BP1_IN	0	984	1,007.24	10.07
BP1_OUT	0	1,015.25	1,523.05	220.03
BP2_IN	0	984	1,007.25	10.07
BP2_OUT	0	1,015.25	1,523.07	220.04
BP3_IN	0	984	1,007.26	10.08
BP3_OUT	0	1,015.25	1,523.09	220.05
BP4_IN	0	984	1,007.28	10.09
BP4_OUT	0	1,015.25	1,523.09	220.05
WWTP1-P10_IN	0	544	556.79	5.54
WWTP1-P10_OUT	0	544	1,081.52	232.91
WWTP1-P11_IN	0	544	556.79	5.54
WWTP1-P11_OUT	0	544	1,081.52	232.91

Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
WWTP1-P12_IN	0	544	556.79	5.54
WWTP1-P12_OUT	0	544	1,081.52	232.91
WWTP1-P1_IN	0	544	557.36	5.79
WWTP1-P1_OUT	0	544	1,114.72	247.29
WWTP1-P2_IN	0	544	557.37	5.79
WWTP1-P2_OUT	0	544	1,114.72	247.29
WWTP1-P3_IN	0	544	557.37	5.79
WWTP1-P3_OUT	0	544	1,114.71	247.29
WWTP1-P4_IN	0	544	557.39	5.8
WWTP1-P4_OUT	0	544	1,114.69	247.28
WWTP1-P5_IN	0	544	557.39	5.8
WWTP1-P5_OUT	0	544	1,114.70	247.28
WWTP1-P6_IN	0	544	557.39	5.8
WWTP1-P6_OUT	0	544	1,114.70	247.28
WWTP1-P7_IN	0	544	556.77	5.53
WWTP1-P7_OUT	0	544	1,081.54	232.92
WWTP1-P8_IN	0	544	556.78	5.54
WWTP1-P8_OUT	0	544	1,081.53	232.91
WWTP1-P9_IN	0	544	556.79	5.54
WWTP1-P9_OUT	0	544	1,081.52	232.91
WWTP3-P1_IN	0	794	802.81	3.82
WWTP3-P1_OUT	0	794	1,391.82	259.04
WWTP3-P2_IN	0	792.42	802.72	4.46
WWTP3-P2_OUT	0	794	1,391.91	259.07
WWTP3-P3_IN	0	792.42	802.7	4.45
WWTP3-P3_OUT	0	794	1,391.93	259.08

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-100-WWTP1-P4_IN	1-100	WWTP1-P4_IN	61.61	24	130	7,211.41	5.11	0.21
1-105-110	1-105	1-110	725.92	24	130	7,211.41	5.11	2.44
1-105-WWTP1-BP4_OUT	1-105	WWTP1-P4_OUT	823.5	24	130	-7,211.41	5.11	2.77
1-110-115	1-110	1-115	828.1	24	130	7,211.41	5.11	2.78
1-115-120	1-115	1-120	602.76	24	130	7,211.41	5.11	2.03
1-120-125	1-120	1-125	487.15	24	130	7,211.41	5.11	1.64
1-125-130	1-125	1-130	540.48	24	130	7,169.17	5.08	1.8
1-130-135	1-130	1-135	929.44	24	130	7,169.17	5.08	3.09
1-135-140	1-135	1-140	891.61	24	130	7,169.17	5.08	2.97
1-140-145	1-140	1-145	803.96	24	130	7,169.17	5.08	2.67
1-145-150	1-145	1-150	825.52	24	130	7,169.17	5.08	2.75
1-150-155	1-150	1-155	826.97	24	130	7,169.17	5.08	2.75
1-155-160	1-155	1-160	400.46	24	130	7,169.17	5.08	1.33
1-160-165	1-160	1-165	646.23	20	130	6,623.83	6.76	4.51
1-160-235	1-160	1-235	818.27	24	130	545.34	0.39	0.02
1-165-170	1-165	1-170	924.08	20	130	6,623.83	6.76	6.45
1-170-175	1-170	1-175	868.88	20	130	6,623.83	6.76	6.07
1-175-180	1-175	1-180	720.23	20	130	6,623.83	6.76	5.03
1-180-185	1-180	1-185	749.26	20	130	6,623.83	6.76	5.23
1-185-190	1-185	1-190	552.2	20	130	6,599.59	6.74	3.83
1-190-195	1-190	1-195	770.63	20	130	6,599.59	6.74	5.34
1-195-200	1-195	1-200	858.15	20	130	6,599.59	6.74	5.95
1-200-205	1-200	1-205	489.28	20	130	6,599.59	6.74	3.39
1-205-210	1-205	1-210	801.28	20	130	6,599.59	6.74	5.56
1-210-215	1-210	1-215	685.73	20	130	6,599.59	6.74	4.76
1-215-220	1-215	1-220	940.8	20	130	6,599.59	6.74	6.52
1-220-225	1-220	1-225	582.12	20	130	6,599.59	6.74	4.04
1-225-230	1-225	1-230	771.09	20	130	6,599.59	6.74	5.35
1-230-375	1-230	1-375	700.86	20	130	6,580.09	6.72	4.83
1-235-400	1-235	1-400	519.89	12	120	545.34	1.55	0.5
1-240-245	1-240	1-245	638.53	12	120	545.34	1.55	0.61
1-240-400	1-240	1-400	382.12	12	120	-545.34	1.55	0.37
1-245-250	1-245	1-250	530.68	12	120	527.16	1.5	0.48
1-250-255	1-250	1-255	266.95	12	120	527.16	1.5	0.24

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-255-260	1-255	1-260	698.7	12	120	501.3	1.42	0.57
1-260-265	1-260	1-265	958.84	12	120	380.76	1.08	0.47
1-265-270	1-265	1-270	281.92	8	120	243.66	1.56	0.44
1-265-355	1-355	1-265	644.45	8	120	-137.1	0.88	0.34
1-270-275	1-270	1-275	466.34	8	120	243.66	1.56	0.72
1-275-280	1-275	1-280	199.09	8	120	243.66	1.56	0.31
1-280-285	1-280	1-285	740.62	8	120	243.66	1.56	1.15
1-285-290	1-285	1-290	677.64	8	120	243.66	1.56	1.05
1-290-295	1-290	1-295	651.86	8	120	243.66	1.56	1.01
1-295-300	1-295	1-300	633.58	8	120	243.66	1.56	0.98
1-300-305	1-300	1-305	503.17	8	120	65.82	0.42	0.07
1-300-315	1-300	1-315	113.29	8	120	177.84	1.14	0.1
1-305-310	1-305	1-310	799.46	8	120	65.82	0.42	0.11
1-315-320	1-315	1-320	395.94	8	120	115.98	0.74	0.16
1-320-325	1-320	1-325	220.64	6	110	78.18	0.89	0.2
1-325-330	1-325	1-330	732.23	6	110	78.18	0.89	0.66
1-330-335	1-330	1-335	611.98	6	110	78.18	0.89	0.55
1-335-340	1-335	1-340	625.35	6	110	78.18	0.89	0.56
1-340-345	1-340	1-345	628.09	6	110	78.18	0.89	0.57
1-345-350	1-345	1-350	131.8	6	110	0	0	0
1-355-360	1-355	1-360	449.6	8	120	137.1	0.88	0.24
1-360-365	1-360	1-365	298.77	8	120	28.92	0.18	0.01
1-365-370	1-365	1-370	274.4	8	120	3	0.02	0
1-375-BORDER	1-375	BORDER	191.03	20	130	6,580.09	6.72	1.32
1-WWTP1-100	WRF1	1-100	119.55	24	130	7,211.41	5.11	0.4
2-100-101	2-100	2-101	260.82	8	120	0	0	0
2-101-102	2-101	2-102	521.22	8	120	0	0	0
2-102-103	2-103	2-102	841.92	8	120	26.34	0.17	0.02
2-103-105	2-103	2-105	70.22	8	120	-812.46	5.19	1.01
2-103-365	2-103	2-365	1,233.10	12	120	786.12	2.23	2.32
2-105-110	2-105	2-110	945.61	12	120	-812.46	2.3	1.89
2-110-115	2-110	2-115	539.97	12	120	-812.46	2.3	1.08
2-115-117	2-115	2-117	113.87	12	120	-868.86	2.46	0.26
2-117-118	2-117	2-118	843.56	8	120	170.04	1.09	0.67

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-117-120	2-117	2-120	240.34	12	120	-1,058.58	3	0.79
2-118-119	2-118	2-119	1,110.74	8	120	114.78	0.73	0.43
2-120-125	2-120	2-125	983.52	12	120	-1,058.58	3	3.21
2-125-130	2-125	2-130	559.97	12	120	-1,062.18	3.01	1.84
2-130-135	2-130	2-135	853.35	16	130	-1,062.18	1.69	0.6
2-135-136	2-135	2-136	391.5	16	130	-1,062.18	1.69	0.27
2-136-137	2-136	2-137	423.36	10	120	1,273.80	5.2	4.74
2-136-140	2-136	2-140	295.92	16	130	-2,335.98	3.73	0.89
2-140-145	2-140	2-145	1,092.71	18	130	-2,335.98	2.95	1.85
2-145-150	2-145	2-150	441.06	18	130	-2,335.98	2.95	0.75
2-150-155	2-150	2-155	548.1	18	130	-3,346.38	4.22	1.81
2-155-156	2-155	2-156	960.72	12	120	0	0	0
2-155-160	2-155	2-160	1,036.20	18	130	-3,346.38	4.22	3.41
2-156-157	2-156	2-157	449.63	12	120	0	0	0
2-157-158	2-157	2-158	341.84	12	120	0	0	0
2-160-165	2-160	2-165	302.1	18	130	-3,346.38	4.22	0.99
2-165-170	2-165	2-170	672.48	18	130	-3,346.38	4.22	2.21
2-170-175	2-170	2-175	869.81	18	130	-3,346.38	4.22	2.86
2-175-180	2-175	2-180	407.16	18	130	-3,346.38	4.22	1.34
2-176-180	2-176	2-180	530.29	18	130	3,346.38	4.22	1.75
2-180-185	2-176	2-185	489.53	18	130	-3,346.38	4.22	1.61
2-185-190	2-185	2-190	386.23	18	130	-3,346.38	4.22	1.27
2-190-195	2-190	2-195	808.82	18	130	-3,346.38	4.22	2.66
2-195-200	2-195	2-200	861.85	18	130	-3,346.38	4.22	2.84
2-200-205	2-200	2-205	800.26	18	130	-3,346.38	4.22	2.64
2-205-210	2-205	2-210	391.86	18	130	-3,346.38	4.22	1.29
2-210-215	2-210	2-215	875.21	18	130	-3,346.38	4.22	2.88
2-215-220	2-215	2-220	863.18	18	130	-3,346.38	4.22	2.84
2-220-225	2-220	2-225	799.09	18	130	-3,346.38	4.22	2.63
2-225-230	2-225	2-230	857.48	18	130	-3,346.38	4.22	2.82
2-230-235	2-230	2-235	810.85	18	130	-3,346.38	4.22	2.67
2-235-240	2-235	2-240	707.78	18	130	-3,346.38	4.22	2.33
2-240-245	2-240	2-245	786.41	18	130	-3,346.38	4.22	2.59
2-245-250	2-245	2-250	702.44	18	130	-3,346.38	4.22	2.31

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-250-255	2-250	2-255	991.8	18	130	-3,346.38	4.22	3.27
2-255-260	2-255	2-260	867.24	18	130	-3,586.38	4.52	3.25
2-260-265	2-260	2-265	896.29	18	130	-3,586.38	4.52	3.36
2-265-270	2-265	2-270	947.86	18	130	-3,670.38	4.63	3.7
2-270-275	2-270	2-275	945.8	18	130	-4,762.50	6	5.99
2-275-280	2-275	2-280	505.23	18	130	-4,762.50	6	3.2
2-280-WWTP1-P9_OUT	2-280	WWTP1-P9_OUT	715.68	18	130	-4,762.50	6	4.53
2-285-WWTP1	2-285	WRF1	115.18	18	130	-4,762.50	6	0.73
2-285-WWTP1-BP9_IN	2-285	WWTP1-P9_IN	75.16	18	130	4,762.50	6	0.48
2-365-370	2-365	2-370	498.67	12	120	786.12	2.23	0.94
2-370-375	2-370	2-375	736.72	12	120	752.4	2.13	1.28
2-375-380	2-375	2-380	843.2	12	120	727.26	2.06	1.37
2-380-381	2-380	2-381	145.36	12	120	695.52	1.97	0.22
2-381-385	2-381	2-385	793.4	12	120	695.52	1.97	1.19
2-385-405	2-385	2-405	578.31	12	120	537.48	1.52	0.54
2-390-385	2-390	2-385	764.54	8	120	-158.04	1.01	0.53
2-395-390	2-395	2-390	709.08	8	120	-110.1	0.7	0.25
2-400-395	2-400	2-395	767.72	8	120	0	0	0
2-405-410	2-405	2-410	269.14	8	120	111.48	0.71	0.1
2-405-435	2-405	2-435	699.59	12	120	426	1.21	0.42
2-410-415	2-410	2-415	403.03	8	120	111.48	0.71	0.15
2-415-420	2-415	2-420	865.13	8	120	111.48	0.71	0.32
2-420-425	2-420	2-425	901.31	8	120	111.48	0.71	0.33
2-425-430	2-425	2-430	645.25	8	120	111.48	0.71	0.24
2-435-440	2-435	2-440	835.19	12	120	416.04	1.18	0.48
2-440-445	2-440	2-445	836.05	12	120	410.1	1.16	0.47
2-445-450	2-445	2-450	712.68	12	120	410.1	1.16	0.4
2-450-455	2-450	2-455	981.33	12	120	410.1	1.16	0.55
2-455-460	2-455	2-460	495.46	12	120	409.02	1.16	0.28
2-460-465	2-460	2-465	717.54	12	120	178.8	0.51	0.09
2-465-470	2-465	2-470	708.83	12	120	178.8	0.51	0.09
2-470-475	2-470	2-475	582.82	8	120	164.82	1.05	0.44
2-475-480	2-475	2-480	637.59	8	120	164.82	1.05	0.48
2-480-485	2-480	2-485	231.68	8	120	164.82	1.05	0.17

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-485-490	2-485	2-490	494.98	8	120	131.88	0.84	0.25
2-490-495	2-490	2-495	438.22	8	120	116.7	0.74	0.17
2-495-496	2-495	2-496	508.54	8	120	116.7	0.74	0.2
2-496-500	2-496	2-500	273.78	8	120	116.7	0.74	0.11
2-500-505	2-500	2-505	384.93	8	120	116.7	0.74	0.15
2-505-510	2-505	2-510	386.63	8	120	116.7	0.74	0.15
3-090-BORDER	3-090	BORDER	66.09	24	130	-5,286.43	3.75	0.13
3-095-100	3-095	3-100	111.93	20	130	5,257.03	5.37	0.51
3-095-BP1_OUT	3-095	BP1_OUT	36.38	20	130	-5,257.03	5.37	0.17
3-100-105	3-100	3-105	709.75	20	130	5,211.25	5.32	3.18
3-105-110	3-105	3-110	339.12	20	130	5,133.97	5.24	1.48
3-110-115	3-110	3-115	343.32	20	130	5,133.97	5.24	1.5
3-115-120	3-115	3-120	770.98	20	130	5,114.17	5.22	3.33
3-120-125	3-120	3-125	830.51	20	130	5,114.17	5.22	3.59
3-125-130	3-125	3-130	428.53	20	130	5,114.17	5.22	1.85
3-130-135	3-130	3-135	448.18	20	130	5,114.17	5.22	1.94
3-135-140	3-135	3-140	554.68	20	130	5,058.55	5.17	2.35
3-140-141	3-140	3-141	254.42	20	130	5,058.55	5.17	1.08
3-141-145	3-141	3-145	542.28	20	130	7.74	0.01	0
3-150-155	3-150	3-155	911.45	8	120	7.74	0.05	0
3-155-160	3-155	3-160	978.19	8	120	0	0	0
3-160-165	3-160	3-165	692.71	8	120	0	0	0
3-165-170	3-165	3-170	446.87	8	120	0	0	0
3-170-175	3-170	3-175	296.15	8	120	0	0	0
3-175-180	3-175	3-180	757.11	6	110	0	0	0
3-180-185	3-180	3-185	803.74	6	110	0	0	0
3-185-190	3-185	3-190	538.71	6	110	0	0	0
3-190-195	3-190	3-195	954.17	6	110	0	0	0
3-200-205	3-200	3-205	583.46	12	120	-115.14	0.33	0.03
3-205-210	3-205	3-210	473	12	120	-115.14	0.33	0.03
3-210-215	3-210	3-215	745.46	12	120	-146.1	0.41	0.06
3-215-220	3-215	3-220	456.48	12	120	-146.1	0.41	0.04
3-220-225	3-220	3-225	728	12	120	-146.1	0.41	0.06
3-225-230	3-225	3-230	666.26	12	120	-165.84	0.47	0.07

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-230-235	3-230	3-235	330.59	12	120	-165.84	0.47	0.03
3-235-240	3-235	3-240	697.41	20	130	-5,050.81	5.16	2.95
3-235-250	3-235	3-250	793.74	20	130	4,884.97	4.99	3.15
3-240-245	3-240	3-245	480.8	20	130	-5,050.81	5.16	2.03
3-245-141	3-245	3-141	801.57	20	130	-5,050.81	5.16	3.39
3-250-255	3-250	3-255	946.18	20	130	4,884.97	4.99	3.76
3-255-260	3-255	3-260	173.6	20	130	4,884.97	4.99	0.69
3-260-265	3-260	3-265	223.81	20	130	4,884.97	4.99	0.89
3-265-270	3-265	3-270	477.6	20	130	4,884.97	4.99	1.9
3-270-275	3-270	3-275	632.96	20	130	4,876.75	4.98	2.51
3-275-280	3-275	3-280	565.48	20	130	4,876.75	4.98	2.24
3-280-285	3-280	3-285	501.1	20	130	4,876.75	4.98	1.98
3-285-290	3-285	3-290	652.1	20	130	4,720.69	4.82	2.43
3-285-310	3-285	3-310	625.99	8	120	135.72	0.87	0.33
3-290-295	3-290	3-295	903.43	20	130	4,681.33	4.78	3.32
3-295-300	3-295	3-300	187.71	20	130	4,642.93	4.74	0.68
3-300-305	3-300	3-305	967.57	20	130	4,630.69	4.73	3.48
3-305-355	3-305	3-355	568.18	16	130	4,471.69	7.14	5.68
3-310-315	3-310	3-315	532.3	8	120	135.72	0.87	0.28
3-320-321	3-320	3-321	570.31	8	120	-133.2	0.85	0.29
3-320-325	3-320	3-325	608.31	8	120	133.2	0.85	0.31
3-321-305	3-321	3-305	296.47	10	120	-144.96	0.59	0.06
3-325-330	3-325	3-330	481.47	8	120	78.48	0.5	0.09
3-330-335	3-330	3-335	471.4	8	120	51.12	0.33	0.04
3-335-340	3-335	3-340	144.19	4	110	0	0	0
3-340-345	3-340	3-345	297.26	4	110	0	0	0
3-345-350	3-345	3-350	714.11	4	110	0	0	0
3-355-360	3-355	3-360	954.23	16	130	4,471.69	7.14	9.54
3-360-365	3-360	3-365	105.82	16	130	4,471.69	7.14	1.06
3-365-395	3-365	3-395	798.86	12	120	1,880.54	5.33	7.56
3-370-371	3-370	3-371	325.9	8	120	0	0	0
3-370-374	3-370	3-374	262.57	16	130	-2,332.61	3.72	0.79
3-370-610	3-370	3-610	737.06	16	130	2,316.77	3.7	2.18
3-371-372	3-371	3-372	2,580.46	8	120	0	0	0

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-371-377	3-371	3-377	1,260.24	8	120	0	0	0
3-372-373	3-372	3-373	718.75	8	120	0	0	0
3-373-376	3-373	3-376	281.3	8	120	0	0	0
3-374-375	3-374	3-375	644.34	16	130	-2,332.61	3.72	1.93
3-375-380	3-375	3-380	798.6	16	130	-2,332.61	3.72	2.39
3-380-385	3-380	3-385	705.33	16	130	-2,342.03	3.74	2.13
3-385-390	3-385	3-390	335.72	16	130	-2,342.03	3.74	1.01
3-390-365	3-390	3-365	280.59	16	130	-2,559.71	4.08	1
3-395-400	3-395	3-400	608.23	12	120	1,880.54	5.33	5.76
3-395-402	3-395	3-402	1,802.70	8	120	0	0	0
3-400-405	3-400	3-405	868.52	12	120	1,880.54	5.33	8.22
3-405-410	3-405	3-410	942.03	12	120	1,867.46	5.3	8.8
3-410-420	3-410	3-420	819.19	12	120	1,867.46	5.3	7.66
3-420-425	3-420	3-425	488.34	12	120	1,867.46	5.3	4.56
3-425-430	3-425	3-430	476.18	12	120	1,861.94	5.28	4.43
3-430-435	3-430	3-435	601.08	12	120	1,842.26	5.23	5.48
3-435-440	3-435	3-440	430.57	12	120	1,842.26	5.23	3.92
3-440-445	3-440	3-445	90.91	12	120	1,820.60	5.16	0.81
3-445-450	3-445	3-450	680.32	12	120	1,288.58	3.66	3.2
3-445-495	3-445	3-495	673.08	12	120	506.82	1.44	0.56
3-450-455	3-450	3-455	542.64	12	120	1,288.58	3.66	2.55
3-455-460	3-455	3-460	652.68	12	120	1,039.64	2.95	2.06
3-460-465	3-460	3-465	684.1	12	120	1,023.20	2.9	2.1
3-465-470	3-465	3-470	120.78	16	130	1,008.08	1.61	0.08
3-470-475	3-470	3-475	320.57	16	130	1,905.98	3.04	0.66
3-475-480	3-475	3-480	582.32	16	130	1,893.80	3.02	1.19
3-480-485	3-480	3-485	413.51	16	130	1,559.78	2.49	0.59
3-485-490	3-485	3-490	889.6	16	130	1,484.18	2.37	1.15
3-490-715	3-490	3-715	902.91	16	130	1,484.18	2.37	1.17
3-495-500	3-495	3-500	366.49	12	120	506.82	1.44	0.31
3-500-505	3-500	3-505	464.87	12	120	491.22	1.39	0.37
3-505-510	3-505	3-510	220.32	12	120	491.22	1.39	0.17
3-515-520	3-515	3-520	650.14	12	120	467.4	1.33	0.47
3-520-525	3-520	3-525	865.53	12	120	467.4	1.33	0.62

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-525-530	3-525	3-530	743.28	8	120	63.6	0.41	0.1
3-525-595	3-525	3-595	896.37	8	120	279.06	1.78	1.79
3-530-531	3-530	3-531	232.04	8	120	63.6	0.41	0.03
3-531-535	3-531	3-535	602.55	8	120	44.58	0.28	0.04
3-535-540	3-535	3-540	384.78	8	120	0	0	0
3-540-545	3-540	3-545	487.54	8	120	0	0	0
3-545-550	3-545	3-550	374.8	8	120	0	0	0
3-550-555	3-550	3-555	740.67	8	120	0	0	0
3-555-560	3-555	3-560	604.5	6	110	0	0	0
3-560-565	3-560	3-565	548.77	6	110	0	0	0
3-570-575	3-570	3-575	647.35	8	120	-9.78	0.06	0
3-575-580	3-575	3-580	684.12	8	120	-22.8	0.15	0.01
3-580-585	3-580	3-585	303.44	8	120	-26.04	0.17	0.01
3-585-590	3-585	3-590	865.5	8	120	-33.42	0.21	0.03
3-590-525	3-590	3-525	87.63	8	120	-72.18	0.46	0.01
3-595-600	3-595	3-600	713.8	8	120	279.06	1.78	1.42
3-600-605	3-600	3-605	936.18	8	120	279.06	1.78	1.87
3-610-615	3-610	3-615	625.55	16	130	2,316.77	3.7	1.85
3-615-620	3-615	3-620	556.65	16	130	2,296.79	3.66	1.62
3-620-625	3-620	3-625	702.48	16	130	2,282.69	3.64	2.02
3-625-630	3-625	3-630	505.4	12	120	2,229.77	6.33	6.56
3-630-635	3-630	3-635	1,009.61	12	120	2,210.57	6.27	12.9
3-635-640	3-635	3-640	562.68	12	120	2,098.73	5.95	6.53
3-640-645	3-640	3-645	486.45	12	120	2,098.73	5.95	5.64
3-645-650	3-645	3-650	531.02	12	120	2,094.77	5.94	6.14
3-650-655	3-650	3-655	511.77	12	120	2,075.69	5.89	5.82
3-655-660	3-655	3-660	245.14	12	120	1,141.90	3.24	0.92
3-655-680	3-655	3-680	456.05	12	120	932.59	2.65	1.18
3-665-670	3-665	3-670	504.59	16	130	0	0	0
3-670-675	3-670	3-675	484.37	16	130	-39.78	0.06	0
3-675-625	3-675	3-625	435.14	16	130	-39.78	0.06	0
3-680-685	3-680	3-685	466.57	12	120	932.59	2.65	1.21
3-685-690	3-685	3-691	531.25	12	120	932.59	2.65	1.37
3-690-691	3-691	3-690	206.4	12	120	932.59	2.65	0.53

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-690-695	3-690	3-695	539.18	12	120	932.59	2.65	1.39
3-695-470	3-695	3-470	416.51	12	120	897.91	2.55	1
3-700-705	3-700	3-705	622.95	12	120	-1,141.90	3.24	2.34
3-705-710	3-705	3-710	804.82	12	120	-1,141.90	3.24	3.02
3-710-660	3-710	3-660	786.65	12	120	-1,141.90	3.24	2.96
3-715-720	3-715	3-720	1,088.46	16	130	1,484.18	2.37	1.41
3-720-725	3-720	3-725	870.92	16	130	1,484.18	2.37	1.13
3-725-730	3-725	3-730	1,405.92	16	130	1,484.18	2.37	1.82
3-730-735	3-730	3-735	1,073.96	16	130	949.18	1.51	0.61
3-730-750	3-730	3-750	1,346.76	12	120	0	0	0
3-735-740	3-735	3-740	861.22	16	130	949.18	1.51	0.49
3-740-745	3-740	3-745	1,095.81	16	130	949.18	1.51	0.62
3-745-4-122	3-745	4-122	404.6	16	130	949.18	1.51	0.23
3-GILBERT-700	GILBERT	3-700	475.64	12	120	-1,093.66	3.1	1.65
4-100-210	4-100	4-210	2,007.89	8	120	0	0	0
4-100-WWTP3-P1_OUT	4-100	WWTP3-P1_OUT	373.87	12	120	-1,527.14	4.33	2.41
4-105-100	4-105	4-100	873.4	14	120	-1,527.14	3.18	2.65
4-110-115	4-110	4-105	128.06	14	120	-1,527.14	3.18	0.39
4-115-110	4-115	4-110	2,037.07	14	120	-1,527.14	3.18	6.19
4-120-115	4-120	4-115	2,198.91	14	120	-1,527.14	3.18	6.68
4-120-122	4-120	4-122	446.29	14	120	1,527.14	3.18	1.36
4-122-125	4-122	4-125	407.72	14	120	2,458.32	5.12	2.99
4-130-125	4-130	4-125	39.56	12	120	-2,458.32	6.97	0.62
4-130-140	4-130	4-140	1,131.43	12	120	2,458.32	6.97	17.59
4-135-130	4-135	4-130	43.23	12	120	0	0	0
4-140-150	4-140	4-150	1,338.84	12	120	1,680.99	4.77	10.3
4-145-140	4-145	4-140	78.02	12	120	-43.74	0.12	0
4-150-155	4-150	4-155	285.19	12	120	44.28	0.13	0
4-150-160	4-150	4-160	328.04	12	120	1,607.85	4.56	2.32
4-160-150	4-160	4-165	525.2	12	120	1,574.43	4.47	3.58
4-165-167	4-165	4-167	417.99	12	120	1,503.15	4.26	2.61
4-166-170	4-166	4-170	907.1	12	120	1,184.52	3.36	3.65
4-167-166	4-167	4-166	773.65	12	120	1,207.02	3.42	3.22
4-170-175	4-170	4-175	819.6	12	120	1,114.56	3.16	2.95

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
4-175-176	4-175	4-176	860.41	12	120	1,038.72	2.95	2.71
4-176-185	4-176	4-185	1,074.27	12	120	956.58	2.71	2.91
4-180-175	4-180	4-175	410.28	12	120	-75.84	0.22	0.01
4-185-190	4-185	4-190	577.49	12	120	750	2.13	1
4-190-195	4-190	4-195	59.16	12	120	750	2.13	0.1
4-190-200	4-190	4-200	64.23	12	120	0	0	0
4-195-191	4-195	4-191	77.71	12	120	750	2.13	0.13
4-205-WWTP3	4-205	WRF3	58.58	12	120	-1,527.14	4.33	0.38
4-205-WWTP3-P1_IN	4-205	WWTP3-P1_IN	48.5	12	120	1,527.14	4.33	0.31
4-210-215	4-210	4-215	3,472.44	6	110	0	0	0
4-220-225	4-220	4-225	231.17	8	120	-119.04	0.76	0.1
4-225-230	4-225	4-230	307.43	8	120	-133.92	0.85	0.16
4-230-235	4-230	4-235	357.65	8	120	-142.08	0.91	0.2
4-235-240	4-235	4-240	218.03	8	120	-160.68	1.03	0.16
4-240-245	4-240	4-245	468.8	8	120	-167.58	1.07	0.36
4-245-167	4-245	4-167	1,685.62	8	120	-296.13	1.89	3.75
4-245-250	4-245	4-250	202.48	8	120	113.85	0.73	0.08
4-250-251	4-250	4-251	155.55	8	120	102.15	0.65	0.05
4-251-255	4-251	4-255	207.17	8	120	46.35	0.3	0.01
4-255-260	4-255	4-260	396.51	8	120	-158.25	1.01	0.28
4-260-265	4-260	4-265	212.42	8	120	-176.13	1.12	0.18
4-265-270	4-265	4-270	283.77	8	120	-95.77	0.61	0.08
4-265-305	4-265	4-305	626.1	8	120	-80.36	0.51	0.12
4-270-275	4-270	4-275	326.49	8	120	-157.69	1.01	0.23
4-275-280	4-275	4-280	550.55	8	120	-166.81	1.06	0.42
4-280-285	4-280	4-285	505.8	8	120	-312.63	2	1.24
4-285-290	4-285	4-290	694.75	8	120	319.56	2.04	1.78
4-285-300	4-285	4-300	551.09	8	120	-714.99	4.56	6.27
4-290-295	4-290	4-295	567.25	8	120	33.12	0.21	0.02
4-300-140	4-300	4-140	1,173.20	8	120	-733.59	4.68	14
4-305-310	4-305	4-310	145.77	8	120	-98.96	0.63	0.04
4-310-280	4-310	4-280	1,613.37	8	120	-108.62	0.69	0.56
BP11	BP1_IN	BP1	1	20	150	1,314.33	1.34	0
BP12	BP1	BP1_OUT	1	20	150	1,314.33	1.34	0

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
BP1_IN-BP2_IN	BP1_IN	BP2_IN	9.54	20	130	-1,314.33	1.34	0
BP1_OUT-BP2_OUT	BP1_OUT	BP2_OUT	8.65	20	130	-3,942.70	4.03	0.02
BP21	BP2_IN	BP2	1	20	150	1,314.19	1.34	0
BP22	BP2	BP2_OUT	1	20	150	1,314.19	1.34	0
BP2_IN-BP3_IN	BP2_IN	BP3_IN	9.81	20	130	-2,628.53	2.68	0.01
BP2_OUT-BP3_OUT	BP2_OUT	BP3_OUT	9.42	20	130	-2,628.50	2.68	0.01
BP31	BP3_IN	BP3	1	20	150	1,314.20	1.34	0
BP32	BP3	BP3_OUT	1	20	150	1,314.20	1.34	0
BP3_IN-BP4_IN	BP3_IN	BP4_IN	9.15	20	130	-3,942.73	4.03	0.02
BP3_OUT-BP4_OUT	BP3_OUT	BP4_OUT	8.62	20	130	-1,314.31	1.34	0
BP41	BP4_IN	BP4	1	12	150	1,314.31	3.73	0
BP42	BP4	BP4_OUT	1	12	150	1,314.31	3.73	0
BP4_IN-3-090	BP4_IN	3-090	20.42	20	130	-5,257.03	5.37	0.09
FULLERTON11	3-510	FULLERTON1	1	6	150	467.4	5.3	0.01
FULLERTON12	FULLERTON1	3-515	1	6	150	467.4	5.3	0.01
ONTARIO1	3-145	ONTARIO	1	6	150	7.74	0.09	0
ONTARIO2	ONTARIO	3-150	1	6	150	7.74	0.09	0
WRF1-P101	WWTP1-P10_IN	WRF1-P10	1	12	150	1,190.77	3.38	0
WRF1-P102	WRF1-P10	WWTP1-P10_OUT	1	12	150	1,190.77	3.38	0
WRF1-P111	WWTP1-P11_IN	WRF1-P11	1	12	150	0	0	0
WRF1-P112	WRF1-P11	WWTP1-P11_OUT	1	12	150	0	0	0
WRF1-P121	WWTP1-P12_IN	WRF1-P12	1	12	150	0	0	0
WRF1-P122	WRF1-P12	WWTP1-P12_OUT	1	12	150	0	0	0
WRF1-P1_1	WWTP1-P1_IN	WRF1-P1	1	12	150	1,442.14	4.09	0
WRF1-P1_2	WRF1-P1	WWTP1-P1_OUT	1	12	150	1,442.14	4.09	0
WRF1-P21	WWTP1-P2_IN	WRF1-P2	1	12	150	1,442.17	4.09	0
WRF1-P22	WRF1-P2	WWTP1-P2_OUT	1	12	150	1,442.17	4.09	0
WRF1-P31	WWTP1-P3_IN	WRF1-P3	1	12	150	1,442.25	4.09	0
WRF1-P32	WRF1-P3	WWTP1-P3_OUT	1	12	150	1,442.25	4.09	0
WRF1-P41	WWTP1-P4_IN	WRF1-P4	1	12	150	1,442.44	4.09	0
WRF1-P42	WRF1-P4	WWTP1-P4_OUT	1	12	150	1,442.44	4.09	0
WRF1-P51	WWTP1-P5_IN	WRF1-P5	1	12	150	1,442.41	4.09	0
WRF1-P52	WRF1-P5	WWTP1-P5_OUT	1	12	150	1,442.41	4.09	0
WRF1-P61	WWTP1-P6_IN	WRF1-P6	1	12	150	0	0	0

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WRF1-P62	WRF1-P6	WWTP1-P6_OUT	1	12	150	0	0	0
WRF1-P71	WWTP1-P7_IN	WRF1-P7	1	12	150	1,190.31	3.38	0
WRF1-P72	WRF1-P7	WWTP1-P7_OUT	1	12	150	1,190.31	3.38	0
WRF1-P81	WWTP1-P8_IN	WRF1-P8	1	12	150	1,190.50	3.38	0
WRF1-P82	WRF1-P8	WWTP1-P8_OUT	1	12	150	1,190.50	3.38	0
WRF1-P91	WWTP1-P9_IN	WRF1-P9	1	12	150	1,190.93	3.38	0
WRF1-P92	WRF1-P9	WWTP1-P9_OUT	1	12	150	1,190.93	3.38	0
WRF3-P11	WWTP3-P1_IN	WRF3-P1	1	12	150	509.16	1.44	0
WRF3-P12	WRF3-P1	WWTP3-P1_OUT	1	12	150	509.16	1.44	0
WRF3-P21	WWTP3-P2_IN	WRF3-P2	1	12	150	509.01	1.44	0
WRF3-P22	WRF3-P2	WWTP3-P2_OUT	1	12	150	509.01	1.44	0
WRF3-P31	WWTP3-P3_IN	WRF3-P3	1	12	150	508.97	1.44	0
WRF3-P32	WRF3-P3	WWTP3-P3_OUT	1	12	150	508.97	1.44	0
WWTP1-B4_IN-BP3_IN	WWTP1-P4_IN	WWTP1-P3_IN	13.17	24	130	4,326.56	3.07	0.02
WWTP1-BP1_IN-BP5_IN	WWTP1-P4_IN	WWTP1-P5_IN	11.55	24	130	1,442.41	1.02	0
WWTP1-BP1_OT-BP5_OT	WWTP1-P4_OUT	WWTP1-P5_OUT	11.49	24	130	-1,442.41	1.02	0
WWTP1-BP2_IN-BP1_IN	WWTP1-P2_IN	WWTP1-P1_IN	13.51	24	130	1,442.14	1.02	0
WWTP1-BP2_OT-BP1_OT	WWTP1-P2_OUT	WWTP1-P1_OUT	11.62	24	130	-1,442.14	1.02	0
WWTP1-BP3_IN-BP2_IN	WWTP1-P3_IN	WWTP1-P2_IN	11.99	24	130	2,884.31	2.05	0.01
WWTP1-BP3_OT-BP2_OT	WWTP1-P3_OUT	WWTP1-P2_OUT	14.76	24	130	-2,884.31	2.05	0.01
WWTP1-BP4_OT-BP3_OT	WWTP1-P4_OUT	WWTP1-P3_OUT	13.11	24	130	-4,326.56	3.07	0.02
WWTP1-BP5_IN-BP6_IN	WWTP1-P5_IN	WWTP1-P6_IN	9.23	24	130	0	0	0
WWTP1-BP5_OT-BP6_OT	WWTP1-P5_OUT	WWTP1-P6_OUT	8.13	24	130	0	0	0
WWTP1-P10_IN-P11_IN	WWTP1-P10_IN	WWTP1-P11_IN	11.55	18	130	-0.01	0	0
WWTP1-P10_OT-P11_OT	WWTP1-P10_OUT	WWTP1-P11_OUT	10.79	18	130	0.01	0	0
WWTP1-P11_IN-P12_IN	WWTP1-P11_IN	WWTP1-P12_IN	11.38	18	130	0	0	0
WWTP1-P11_OT-P12_OT	WWTP1-P11_OUT	WWTP1-P12_OUT	10.53	18	130	0	0	0
WWTP1-P7_IN-P8_IN	WWTP1-P7_IN	WWTP1-P8_IN	14.82	18	130	-1,190.31	1.5	0.01
WWTP1-P7_OUT-P8_OUT	WWTP1-P7_OUT	WWTP1-P8_OUT	15.36	18	130	1,190.31	1.5	0.01
WWTP1-P8_IN-P9_IN	WWTP1-P8_IN	WWTP1-P9_IN	9.42	18	130	-2,380.81	3	0.02
WWTP1-P8_OUT-P9_OUT	WWTP1-P8_OUT	WWTP1-P9_OUT	10.16	18	130	2,380.81	3	0.02
WWTP1-P9_IN-P10_IN	WWTP1-P9_IN	WWTP1-P10_IN	12.83	18	130	1,190.76	1.5	0.01
WWTP1_P9_OUT-P10_OUT	WWTP1-P9_OUT	WWTP1-P10_OUT	13.66	18	130	-1,190.76	1.5	0.01
WWTP3-P1_IN-P2_IN	WWTP3-P1_IN	WWTP3-P2_IN	29.34	12	120	1,017.98	2.89	0.09

Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WWTP3-P1_OUT-P2_OUT	WWTP3-P1_OUT	WWTP3-P2_OUT	29.42	12	120	-1,017.98	2.89	0.09
WWTP3-P2_IN-P3_IN	WWTP3-P2_IN	WWTP3-P3_IN	26.79	12	120	508.97	1.44	0.02
WWTP3-P2_OUT-P3_OUT	WWTP3-P2_OUT	WWTP3-P3_OUT	29.34	12	120	-508.97	1.44	0.02

Peak Hour Tank Report

ID	Flow (gpm)	Elevation (ft)	Head (ft)	% Full (%)	Level (ft)
BORDER	1,293.66	988	1,007.50	93.55	19.5
GILBERT	1,093.66	1,357.50	1,379.00	94.29	21.5
WRF1	-11,973.91	531	558	95.65	27
WRF3	-1,527.14	789.5	803.5	90	14

Peak Hour Pump Report

ID	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Head Gain (ft)	Status	Setting
BP1	1,015.25	-3.47	220.03	1,314.33	515.81	Open	1
BP2	1,015.25	-3.47	220.04	1,314.19	515.83	Open	1
BP3	1,015.25	-3.46	220.05	1,314.20	515.83	Open	1
BP4	1,015.25	-3.45	220.05	1,314.31	515.81	Open	1
WRF1-P1	544	5.79	247.3	1,442.14	557.37	Open	1
WRF1-P10	544	5.54	232.91	1,190.77	524.74	Open	1
WRF1-P11	544	5.54	232.91	0	0	Closed	0
WRF1-P12	544	5.54	232.91	0	0	Closed	0
WRF1-P2	544	5.79	247.29	1,442.17	557.36	Open	1
WRF1-P3	544	5.79	247.29	1,442.25	557.34	Open	1
WRF1-P4	544	5.8	247.28	1,442.44	557.31	Open	1
WRF1-P5	544	5.8	247.28	1,442.41	557.31	Open	1
WRF1-P6	544	5.8	247.28	0	0	Closed	0
WRF1-P7	544	5.53	232.92	1,190.31	524.77	Open	1
WRF1-P8	544	5.54	232.91	1,190.50	524.76	Open	1
WRF1-P9	544	5.54	232.91	1,190.93	524.73	Open	1
WRF3-P1	794	3.82	259.04	509.16	589.01	Open	1
WRF3-P2	794	3.78	259.07	509.01	589.19	Open	1
WRF3-P3	794	3.77	259.08	508.97	589.24	Open	1

Peak Hour Valve Report

ID	Diameter (in)	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Velocity (ft/s)	Headloss (ft)	Status	Setting
FULLERTON1	6	1,046.02	149.82	60	467.4	5.3	207.28	Active	60
ONTARIO	6	875	271.71	70	7.74	0.09	465.53	Active	70

**RECYCLED WATER ANALYSIS
ARANTINE HILLS
BLUESTONE COMMUNITIES
CORONA, CA**

EXHIBIT 8: PHASE 1 PEAK HOUR HYDRAULIC ANALYSIS

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-100	0.00	544.00	557.60	5.89
1-105	0.00	555.00	1111.92	241.32
1-110	0.00	556.00	1109.48	239.82
1-115	0.00	574.69	1106.70	230.52
1-120	0.00	568.00	1104.67	232.54
1-125	42.24	564.00	1103.03	233.56
1-130	0.00	556.60	1101.24	235.99
1-135	0.00	564.00	1098.15	231.45
1-140	0.00	581.35	1095.18	222.64
1-145	0.00	596.50	1092.51	214.92
1-150	0.00	605.90	1089.76	209.66
1-155	0.00	614.00	1087.01	204.96
1-160	0.00	619.50	1085.68	202.00
1-165	0.00	625.00	1081.17	197.66
1-170	0.00	650.00	1074.71	184.03
1-175	0.00	679.00	1068.65	168.83
1-180	0.00	709.22	1063.62	153.56
1-185	24.24	742.00	1058.39	137.09
1-190	0.00	740.70	1054.56	136.00
1-195	0.00	773.00	1049.22	119.68
1-200	0.00	779.50	1043.26	114.29
1-205	0.00	781.00	1039.87	112.17
1-210	0.00	798.00	1034.31	102.40
1-215	0.00	825.25	1029.56	88.53
1-220	0.00	852.00	1023.04	74.11
1-225	0.00	896.00	1019.00	53.30
1-230	19.50	957.00	1013.65	24.55
1-235	0.00	616.38	1085.66	203.34
1-240	0.00	652.00	1084.79	187.53
1-245	18.18	667.00	1084.18	180.77
1-250	0.00	706.88	1083.71	163.28
1-255	25.86	728.00	1083.47	154.02
1-260	120.54	782.00	1082.89	130.38
1-265	0.00	822.70	1082.42	112.54
1-270	0.00	829.00	1081.99	109.62
1-275	0.00	817.00	1081.26	114.51
1-280	0.00	797.00	1080.95	123.04
1-285	0.00	733.00	1079.81	150.27
1-290	0.00	706.00	1078.76	161.52
1-295	0.00	683.00	1077.75	171.04
1-300	0.00	649.00	1076.76	185.35
1-305	0.00	627.00	1076.69	194.85
1-310	65.82	586.50	1076.58	212.35
1-315	61.86	653.00	1076.67	183.57
1-320	37.80	663.24	1076.51	179.07
1-325	0.00	671.79	1076.31	175.28
1-330	0.00	726.00	1075.65	151.50
1-335	0.00	771.00	1075.10	131.77
1-340	0.00	799.35	1074.54	119.24

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-345	78.18	783.80	1073.97	125.73
1-350	0.00	786.84	1073.97	124.41
1-355	0.00	827.50	1082.08	110.31
1-360	108.18	813.00	1081.84	116.49
1-365	25.92	803.00	1081.83	120.82
1-370	3.00	791.12	1081.83	125.96
1-375	0.00	978.00	1008.82	13.35
1-400	0.00	638.00	1085.16	193.75
2-100	0.00	773.87	991.98	94.51
2-101	0.00	770.00	991.98	96.19
2-102	26.34	744.00	991.98	107.45
2-103	0.00	717.00	992.00	119.16
2-105	0.00	719.00	993.02	118.73
2-110	0.00	718.00	994.91	119.98
2-115	56.40	715.00	995.99	121.75
2-117	19.68	712.00	996.25	123.16
2-118	55.26	719.00	995.58	119.84
2-119	114.78	753.00	995.15	104.92
2-120	0.00	712.30	997.03	123.37
2-125	3.60	711.00	1000.25	125.33
2-130	0.00	707.00	1002.09	127.86
2-135	0.00	641.00	1002.68	156.72
2-136	0.00	613.00	1002.96	168.97
2-137	1273.80	600.00	998.22	172.55
2-140	0.00	598.00	1003.84	175.85
2-145	0.00	587.00	1005.69	181.42
2-150	1010.40	589.91	1006.44	180.48
2-155	0.00	595.70	1008.25	178.76
2-156	0.00	604.52	1008.25	174.93
2-157	0.00	604.00	1008.25	175.16
2-158	0.00	611.54	1008.25	171.89
2-160	0.00	593.00	1011.66	181.40
2-165	0.00	589.00	1012.65	183.57
2-170	0.00	586.00	1014.87	185.83
2-175	0.00	580.00	1017.73	189.67
2-176	0.00	586.00	1020.82	188.41
2-180	0.00	588.00	1019.07	186.78
2-185	0.00	584.00	1022.43	189.97
2-190	0.00	592.60	1023.71	186.80
2-195	0.00	587.00	1026.37	190.38
2-200	0.00	581.00	1029.21	194.21
2-205	0.00	591.00	1031.84	191.02
2-210	0.00	592.42	1033.13	190.96
2-215	0.00	596.10	1036.02	190.62
2-220	0.00	601.90	1038.86	189.33
2-225	0.00	598.50	1041.49	191.95
2-230	0.00	594.10	1044.32	195.08
2-235	0.00	584.30	1046.99	200.48
2-240	0.00	563.00	1049.32	210.72

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
2-245	0.00	567.00	1051.91	210.11
2-250	0.00	564.00	1054.22	212.41
2-255	240.00	582.00	1057.49	206.03
2-260	0.00	584.00	1060.74	206.57
2-265	84.00	575.00	1064.09	211.92
2-270	1092.12	580.10	1067.80	211.32
2-275	0.00	555.60	1073.78	224.53
2-280	0.00	554.00	1076.98	226.61
2-285	0.00	544.00	557.27	5.75
2-365	0.00	766.00	989.68	96.92
2-370	33.72	799.00	988.74	82.22
2-375	25.14	838.00	987.47	64.76
2-380	31.74	820.00	986.09	71.97
2-381	0.00	798.32	985.87	81.27
2-385	0.00	761.40	984.68	96.75
2-390	47.94	768.00	984.15	93.66
2-395	110.10	780.00	983.90	88.35
2-400	0.00	777.30	983.90	89.52
2-405	0.00	738.40	984.14	106.48
2-410	0.00	742.00	984.05	104.88
2-415	0.00	757.00	983.90	98.32
2-420	0.00	800.00	983.58	79.55
2-425	0.00	762.98	983.26	95.45
2-430	111.48	778.27	983.02	88.72
2-435	9.96	732.00	983.72	109.07
2-440	5.94	722.00	983.24	113.19
2-445	0.00	710.00	982.77	118.19
2-450	0.00	704.00	982.36	120.62
2-455	1.08	728.00	981.81	109.98
2-460	230.22	728.00	981.53	109.86
2-465	0.00	776.00	981.45	89.02
2-470	13.98	808.07	981.36	75.09
2-475	0.00	800.00	980.92	78.39
2-480	0.00	764.10	980.44	93.74
2-485	32.94	771.00	980.27	90.68
2-490	15.18	784.00	980.02	84.94
2-495	0.00	760.59	979.85	95.00
2-496	0.00	753.00	979.65	98.21
2-500	0.00	753.00	979.54	98.16
2-505	0.00	749.70	979.39	99.52
2-510	116.70	760.80	979.23	94.65
3-090	29.40	984.00	1007.38	10.13
3-095	0.00	1006.63	1524.24	224.28
3-100	45.78	991.92	1523.74	230.44
3-105	77.28	957.95	1520.60	243.80
3-110	0.00	923.51	1519.14	258.09
3-115	19.80	918.60	1517.67	259.58
3-120	0.00	886.50	1514.38	272.06
3-125	0.00	879.00	1510.84	273.78

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-130	0.00	871.75	1509.01	276.12
3-135	55.62	872.00	1507.10	275.19
3-140	0.00	868.00	1504.78	275.92
3-141	0.00	865.00	1503.72	276.76
3-145	0.00	875.00	1503.72	272.42
3-150	0.00	875.00	1036.55	70.00
3-155	7.74	872.50	1036.55	71.08
3-160	0.00	845.00	1036.55	83.00
3-165	0.00	826.00	1036.55	91.23
3-170	0.00	813.40	1036.55	96.69
3-175	0.00	814.00	1036.55	96.43
3-180	0.00	779.00	1036.55	111.60
3-185	0.00	758.50	1036.55	120.48
3-190	0.00	743.00	1036.55	127.19
3-195	0.00	716.72	1036.55	138.58
3-200	115.14	1032.27	1495.14	200.56
3-205	0.00	1042.00	1495.17	196.36
3-210	30.96	1042.51	1495.20	196.15
3-215	0.00	1007.00	1495.26	211.56
3-220	0.00	990.05	1495.30	218.93
3-225	19.74	965.00	1495.36	229.81
3-230	0.00	939.00	1495.43	241.10
3-235	0.00	928.00	1495.47	245.88
3-240	0.00	910.58	1498.37	254.69
3-245	0.00	896.10	1500.38	261.83
3-250	0.00	925.00	1492.36	245.84
3-255	0.00	925.49	1488.65	244.02
3-260	0.00	926.26	1487.97	243.39
3-265	0.00	935.10	1487.10	239.18
3-270	8.22	947.35	1485.23	233.06
3-275	0.00	955.00	1482.76	228.68
3-280	0.00	966.00	1480.55	222.95
3-285	20.34	982.58	1478.59	214.92
3-290	39.36	999.00	1476.20	206.77
3-295	38.40	1045.00	1472.93	185.42
3-300	12.24	1053.21	1472.26	181.58
3-305	14.04	1085.53	1468.83	166.09
3-310	0.00	962.00	1478.26	223.70
3-315	135.72	941.22	1477.99	232.58
3-320	0.00	1095.60	1468.48	161.57
3-321	11.76	1092.00	1468.77	163.26
3-325	54.72	1109.00	1468.18	155.63
3-330	27.36	1125.00	1468.08	148.66
3-335	51.12	1130.45	1468.04	146.28
3-340	0.00	1137.00	1468.04	143.44
3-345	0.00	1153.00	1468.04	136.51
3-350	0.00	1191.19	1468.04	119.96
3-355	0.00	1082.00	1463.24	165.19
3-360	0.00	1088.00	1453.85	158.52

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-365	31.44	1088.42	1452.80	157.89
3-370	15.84	1220.00	1443.60	96.89
3-371	0.00	1240.83	1443.60	87.86
3-372	0.00	1220.98	1443.60	96.46
3-373	0.00	1247.86	1443.60	84.81
3-374	0.00	1209.29	1444.38	101.87
3-375	0.00	1180.00	1446.30	115.39
3-376	0.00	1262.40	1443.60	78.51
3-377	0.00	1305.68	1443.60	59.76
3-380	9.42	1141.00	1448.68	133.32
3-385	0.00	1107.47	1450.80	148.77
3-390	217.68	1095.60	1451.81	154.35
3-395	0.00	1069.54	1445.47	162.89
3-400	0.00	1093.00	1439.89	150.31
3-402	0.00	1010.28	1445.47	188.57
3-405	13.08	1119.80	1431.91	135.24
3-410	0.00	1127.24	1423.38	128.32
3-420	0.00	1146.00	1415.96	116.97
3-425	5.52	1142.00	1411.53	116.79
3-430	19.68	1128.00	1407.24	120.99
3-435	0.00	1124.84	1401.93	120.06
3-440	21.66	1129.00	1398.13	116.61
3-445	25.20	1129.61	1397.34	116.01
3-450	0.00	1130.39	1394.29	114.35
3-455	248.94	1123.00	1391.85	116.49
3-460	16.44	1129.95	1389.90	112.64
3-465	15.12	1130.00	1387.92	111.76
3-470	0.00	1130.37	1387.85	111.56
3-475	12.18	1128.00	1387.30	112.35
3-480	334.02	1116.20	1386.32	117.04
3-485	75.60	1102.00	1385.85	122.99
3-490	0.00	1074.92	1384.95	134.33
3-495	0.00	1089.50	1396.78	133.15
3-500	15.60	1086.00	1396.48	134.53
3-505	0.00	1057.00	1396.11	146.94
3-510	23.82	1050.37	1395.94	149.73
3-515	0.00	1046.02	1184.48	59.99
3-520	0.00	1013.49	1184.01	73.89
3-525	52.56	974.00	1183.39	90.73
3-530	0.00	947.00	1183.29	102.39
3-531	19.02	942.65	1183.26	104.26
3-535	44.58	931.70	1183.22	108.98
3-540	0.00	911.00	1183.22	117.95
3-545	0.00	892.00	1183.22	126.19
3-550	0.00	876.00	1183.22	133.12
3-555	0.00	851.71	1183.22	143.64
3-560	0.00	830.00	1183.22	153.05
3-565	0.00	814.00	1183.22	159.98
3-570	9.78	968.00	1183.32	93.30

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-575	13.02	974.00	1183.32	90.70
3-580	3.24	973.80	1183.33	90.79
3-585	7.38	966.00	1183.34	94.17
3-590	38.76	973.00	1183.37	91.16
3-595	0.00	977.00	1181.60	88.65
3-600	0.00	975.00	1180.18	88.90
3-605	279.06	937.80	1178.31	104.22
3-610	0.00	1198.00	1441.43	105.48
3-615	19.98	1198.00	1439.59	104.68
3-620	14.10	1123.00	1437.98	136.48
3-625	13.14	1238.79	1435.97	85.44
3-630	19.20	1242.00	1429.45	81.22
3-635	111.84	1239.00	1416.62	76.96
3-640	0.00	1245.00	1410.13	71.55
3-645	3.96	1250.00	1404.52	66.95
3-650	19.08	1244.30	1398.42	66.78
3-655	1.20	1240.92	1392.63	65.74
3-660	0.00	1246.51	1391.48	62.82
3-665	0.00	1243.00	1435.97	83.61
3-670	39.78	1268.25	1435.97	72.67
3-675	0.00	1256.12	1435.97	77.93
3-680	0.00	1224.43	1391.79	72.52
3-685	0.00	1203.00	1390.92	81.43
3-690	0.00	1169.94	1389.56	95.16
3-691	0.00	1182.00	1389.94	90.10
3-695	34.68	1146.00	1388.56	105.10
3-700	48.24	1337.63	1381.08	18.83
3-705	0.00	1311.00	1384.01	31.63
3-710	0.00	1281.00	1387.79	46.27
3-715	0.00	1052.20	1384.03	143.78
3-720	0.00	1050.00	1382.92	144.26
3-725	0.00	1013.04	1382.04	159.89
3-730	535.00	948.55	1380.61	187.21
3-735	0.00	950.00	1380.20	186.41
3-740	0.00	934.00	1379.88	193.20
3-745	0.00	903.66	1379.46	206.16
3-750	0.00	904.00	1380.61	206.52
4-100	0.00	793.70	1396.23	261.08
4-105	0.00	801.95	1393.63	256.37
4-110	0.00	798.01	1393.25	257.92
4-115	0.00	836.04	1387.18	238.81
4-120	0.00	861.06	1380.64	225.13
4-122	18.00	891.44	1379.31	211.39
4-125	0.00	910.00	1376.75	202.24
4-130	0.00	908.69	1376.23	202.58
4-135	0.00	920.00	1376.23	197.68
4-140	0.00	923.22	1361.20	189.78
4-145	43.74	918.00	1361.20	192.04
4-150	28.86	1018.32	1352.23	144.68

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
4-155	44.28	1024.21	1352.23	142.13
4-160	33.42	1038.00	1350.22	135.28
4-165	71.28	1063.52	1347.13	122.89
4-166	22.50	1112.00	1341.67	99.52
4-167	0.00	1072.94	1344.89	117.84
4-170	69.96	1122.00	1338.02	93.60
4-175	0.00	1135.66	1335.08	86.41
4-176	82.14	1148.14	1332.36	79.83
4-180	75.84	1138.00	1335.07	85.39
4-185	206.58	1206.37	1329.46	53.33
4-190	0.00	1228.00	1328.46	43.53
4-191	750.00	1214.00	1328.22	49.49
4-195	0.00	1214.00	1328.36	49.55
4-200	0.00	1214.00	1328.46	49.60
4-205	0.00	792.42	803.13	4.64
4-210	0.00	828.94	1396.23	245.81
4-215	0.00	864.00	1396.23	230.61
4-245	14.70	1047.20	1343.48	128.38
4-250	11.70	1040.00	1343.33	131.43
4-251	55.80	1030.22	1343.23	135.63
4-255	204.60	1023.11	1343.18	138.69
4-260	17.88	1010.57	1343.32	144.18
4-265	0.00	1001.89	1343.43	147.99
4-270	61.92	990.55	1343.47	152.92
4-275	9.12	980.00	1343.63	157.56
4-280	37.20	960.00	1343.93	166.36
4-285	82.80	942.00	1344.85	174.55
4-290	286.44	957.00	1343.40	167.43
4-300	18.60	920.83	1349.89	185.91
4-305	18.60	996.00	1343.50	150.57
4-310	9.66	990.00	1343.53	153.19
BP1_IN	0.00	984.00	1007.25	10.07
BP1_OUT	0.00	1015.25	1524.40	220.62
BP2_IN	0.00	984.00	1007.25	10.07
BP2_OUT	0.00	1015.25	1524.43	220.63
BP3_IN	0.00	984.00	1007.26	10.08
BP3_OUT	0.00	1015.25	1524.44	220.63
BP4_IN	0.00	984.00	1007.28	10.09
BP4_OUT	0.00	1015.25	1524.44	220.63
WWTP1-P10_IN	0.00	544.00	556.79	5.54
WWTP1-P10_OUT	0.00	544.00	1081.52	232.91
WWTP1-P11_IN	0.00	544.00	556.79	5.54
WWTP1-P11_OUT	0.00	544.00	1081.52	232.91
WWTP1-P12_IN	0.00	544.00	556.79	5.54
WWTP1-P12_OUT	0.00	544.00	1081.52	232.91
WWTP1-P1_IN	0.00	544.00	557.36	5.79
WWTP1-P1_OUT	0.00	544.00	1114.72	247.29
WWTP1-P2_IN	0.00	544.00	557.37	5.79
WWTP1-P2_OUT	0.00	544.00	1114.72	247.29

Phase 1 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
WWTP1-P3_IN	0.00	544.00	557.37	5.79
WWTP1-P3_OUT	0.00	544.00	1114.71	247.29
WWTP1-P4_IN	0.00	544.00	557.39	5.80
WWTP1-P4_OUT	0.00	544.00	1114.69	247.28
WWTP1-P5_IN	0.00	544.00	557.39	5.80
WWTP1-P5_OUT	0.00	544.00	1114.70	247.28
WWTP1-P6_IN	0.00	544.00	557.39	5.80
WWTP1-P6_OUT	0.00	544.00	1114.70	247.28
WWTP1-P7_IN	0.00	544.00	556.77	5.53
WWTP1-P7_OUT	0.00	544.00	1081.54	232.92
WWTP1-P8_IN	0.00	544.00	556.78	5.54
WWTP1-P8_OUT	0.00	544.00	1081.53	232.91
WWTP1-P9_IN	0.00	544.00	556.79	5.54
WWTP1-P9_OUT	0.00	544.00	1081.52	232.91
WWTP3-P1_IN	0.00	794.00	802.82	3.82
WWTP3-P1_OUT	0.00	794.00	1398.59	261.97
WWTP3-P2_IN	0.00	792.42	802.74	4.47
WWTP3-P2_OUT	0.00	794.00	1398.67	262.01
WWTP3-P3_IN	0.00	792.42	802.72	4.46
WWTP3-P3_OUT	0.00	794.00	1398.70	262.02

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-100-WWTP1-P4_IN	1-100	WWTP1-P4_IN	61.61	24	130	7211.41	5.11	0.21
1-105-110	1-105	1-110	725.92	24	130	7211.41	5.11	2.44
1-105-WWTP1-BP4_OUT	1-105	WWTP1-P4_OUT	823.50	24	130	7211.41	5.11	2.77
1-110-115	1-110	1-115	828.10	24	130	7211.41	5.11	2.78
1-115-120	1-115	1-120	602.76	24	130	7211.41	5.11	2.03
1-120-125	1-120	1-125	487.15	24	130	7211.41	5.11	1.64
1-125-130	1-125	1-130	540.48	24	130	7169.17	5.08	1.80
1-130-135	1-130	1-135	929.44	24	130	7169.17	5.08	3.09
1-135-140	1-135	1-140	891.61	24	130	7169.17	5.08	2.97
1-140-145	1-140	1-145	803.96	24	130	7169.17	5.08	2.67
1-145-150	1-145	1-150	825.52	24	130	7169.17	5.08	2.75
1-150-155	1-150	1-155	826.97	24	130	7169.17	5.08	2.75
1-155-160	1-155	1-160	400.46	24	130	7169.17	5.08	1.33
1-160-165	1-160	1-165	646.23	20	130	6623.83	6.76	4.51
1-160-235	1-160	1-235	818.27	24	130	545.34	0.39	0.02
1-165-170	1-165	1-170	924.08	20	130	6623.83	6.76	6.45
1-170-175	1-170	1-175	868.88	20	130	6623.83	6.76	6.07
1-175-180	1-175	1-180	720.23	20	130	6623.83	6.76	5.03
1-180-185	1-180	1-185	749.26	20	130	6623.83	6.76	5.23
1-185-190	1-185	1-190	552.20	20	130	6599.59	6.74	3.83
1-190-195	1-190	1-195	770.63	20	130	6599.59	6.74	5.34
1-195-200	1-195	1-200	858.15	20	130	6599.59	6.74	5.95
1-200-205	1-200	1-205	489.28	20	130	6599.59	6.74	3.39
1-205-210	1-205	1-210	801.28	20	130	6599.59	6.74	5.56
1-210-215	1-210	1-215	685.73	20	130	6599.59	6.74	4.76
1-215-220	1-215	1-220	940.80	20	130	6599.59	6.74	6.52
1-220-225	1-220	1-225	582.12	20	130	6599.59	6.74	4.04
1-225-230	1-225	1-230	771.09	20	130	6599.59	6.74	5.35
1-230-375	1-230	1-375	700.86	20	130	6580.09	6.72	4.83
1-235-400	1-235	1-400	519.89	12	120	545.34	1.55	0.50
1-240-245	1-240	1-245	638.53	12	120	545.34	1.55	0.61
1-240-400	1-240	1-400	382.12	12	120	-545.34	1.55	0.37
1-245-250	1-245	1-250	530.68	12	120	527.16	1.50	0.48

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-250-255	1-250	1-255	266.95	12	120	527.16	1.50	0.24
1-255-260	1-255	1-260	698.70	12	120	501.30	1.42	0.57
1-260-265	1-260	1-265	958.84	12	120	380.76	1.08	0.47
1-265-270	1-265	1-270	281.92	8	120	243.66	1.56	0.44
1-265-355	1-355	1-265	644.45	8	120	-137.10	0.88	0.34
1-270-275	1-270	1-275	466.34	8	120	243.66	1.56	0.72
1-275-280	1-275	1-280	199.09	8	120	243.66	1.56	0.31
1-280-285	1-280	1-285	740.62	8	120	243.66	1.56	1.15
1-285-290	1-285	1-290	677.64	8	120	243.66	1.56	1.05
1-290-295	1-290	1-295	651.86	8	120	243.66	1.56	1.01
1-295-300	1-295	1-300	633.58	8	120	243.66	1.56	0.98
1-300-305	1-300	1-305	503.17	8	120	65.82	0.42	0.07
1-300-315	1-300	1-315	113.29	8	120	177.84	1.14	0.10
1-305-310	1-305	1-310	799.46	8	120	65.82	0.42	0.11
1-315-320	1-315	1-320	395.94	8	120	115.98	0.74	0.16
1-320-325	1-320	1-325	220.64	6	110	78.18	0.89	0.20
1-325-330	1-325	1-330	732.23	6	110	78.18	0.89	0.66
1-330-335	1-330	1-335	611.98	6	110	78.18	0.89	0.55
1-335-340	1-335	1-340	625.35	6	110	78.18	0.89	0.56
1-340-345	1-340	1-345	628.09	6	110	78.18	0.89	0.57
1-345-350	1-345	1-350	131.80	6	110	0.00	0.00	0.00
1-355-360	1-355	1-360	449.60	8	120	137.10	0.88	0.24
1-360-365	1-360	1-365	298.77	8	120	28.92	0.18	0.01
1-365-370	1-365	1-370	274.40	8	120	3.00	0.02	0.00
1-375-BORDER	1-375	BORDER	191.03	20	130	6580.09	6.72	1.32
1-WWTP1-100	WRF1	1-100	119.55	24	130	7211.41	5.11	0.40
2-100-101	2-100	2-101	260.82	8	120	0.00	0.00	0.00
2-101-102	2-101	2-102	521.22	8	120	0.00	0.00	0.00
2-102-103	2-103	2-102	841.92	8	120	26.34	0.17	0.02
2-103-105	2-103	2-105	70.22	8	120	-812.46	5.19	1.01
2-103-365	2-103	2-365	1233.10	12	120	786.12	2.23	2.32
2-105-110	2-105	2-110	945.61	12	120	-812.46	2.30	1.89
2-110-115	2-110	2-115	539.97	12	120	-812.46	2.30	1.08
2-115-117	2-115	2-117	113.87	12	120	-868.86	2.46	0.26

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-117-118	2-117	2-118	843.56	8	120	170.04	1.09	0.67
2-117-120	2-117	2-120	240.34	12	120	-1058.58	3.00	0.79
2-118-119	2-118	2-119	1110.74	8	120	114.78	0.73	0.43
2-120-125	2-120	2-125	983.52	12	120	-1058.58	3.00	3.21
2-125-130	2-125	2-130	559.97	12	120	-1062.18	3.01	1.84
2-130-135	2-130	2-135	853.35	16	130	-1062.18	1.69	0.60
2-135-136	2-135	2-136	391.50	16	130	-1062.18	1.69	0.27
2-136-137	2-136	2-137	423.36	10	120	1273.80	5.20	4.74
2-136-140	2-136	2-140	295.92	16	130	-2335.98	3.73	0.89
2-140-145	2-140	2-145	1092.71	18	130	-2335.98	2.95	1.85
2-145-150	2-145	2-150	441.06	18	130	-2335.98	2.95	0.75
2-150-155	2-150	2-155	548.10	18	130	-3346.38	4.22	1.81
2-155-156	2-155	2-156	960.72	12	120	0.00	0.00	0.00
2-155-160	2-155	2-160	1036.20	18	130	-3346.38	4.22	3.41
2-156-157	2-156	2-157	449.63	12	120	0.00	0.00	0.00
2-157-158	2-157	2-158	341.84	12	120	0.00	0.00	0.00
2-160-165	2-160	2-165	302.10	18	130	-3346.38	4.22	0.99
2-165-170	2-165	2-170	672.48	18	130	-3346.38	4.22	2.21
2-170-175	2-170	2-175	869.81	18	130	-3346.38	4.22	2.86
2-175-180	2-175	2-180	407.16	18	130	-3346.38	4.22	1.34
2-176-180	2-176	2-180	530.29	18	130	3346.38	4.22	1.75
2-180-185	2-176	2-185	489.53	18	130	-3346.38	4.22	1.61
2-185-190	2-185	2-190	386.23	18	130	-3346.38	4.22	1.27
2-190-195	2-190	2-195	808.82	18	130	-3346.38	4.22	2.66
2-195-200	2-195	2-200	861.85	18	130	-3346.38	4.22	2.84
2-200-205	2-200	2-205	800.26	18	130	-3346.38	4.22	2.64
2-205-210	2-205	2-210	391.86	18	130	-3346.38	4.22	1.29
2-210-215	2-210	2-215	875.21	18	130	-3346.38	4.22	2.88
2-215-220	2-215	2-220	863.18	18	130	-3346.38	4.22	2.84
2-220-225	2-220	2-225	799.09	18	130	-3346.38	4.22	2.63
2-225-230	2-225	2-230	857.48	18	130	-3346.38	4.22	2.82
2-230-235	2-230	2-235	810.85	18	130	-3346.38	4.22	2.67
2-235-240	2-235	2-240	707.78	18	130	-3346.38	4.22	2.33
2-240-245	2-240	2-245	786.41	18	130	-3346.38	4.22	2.59

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-245-250	2-245	2-250	702.44	18	130	-3346.38	4.22	2.31
2-250-255	2-250	2-255	991.80	18	130	-3346.38	4.22	3.27
2-255-260	2-255	2-260	867.24	18	130	-3586.38	4.52	3.25
2-260-265	2-260	2-265	896.29	18	130	-3586.38	4.52	3.36
2-265-270	2-265	2-270	947.86	18	130	-3670.38	4.63	3.70
2-270-275	2-270	2-275	945.80	18	130	-4762.50	6.00	5.99
2-275-280	2-275	2-280	505.23	18	130	-4762.50	6.00	3.20
2-280-WWTP1-P9_OUT	2-280	WWTP1-P9_OUT	715.68	18	130	-4762.50	6.00	4.53
2-285-WWTP1	2-285	WRF1	115.18	18	130	-4762.50	6.00	0.73
2-285-WWTP1-BP9_IN	2-285	WWTP1-P9_IN	75.16	18	130	4762.50	6.00	0.48
2-365-370	2-365	2-370	498.67	12	120	786.12	2.23	0.94
2-370-375	2-370	2-375	736.72	12	120	752.40	2.13	1.28
2-375-380	2-375	2-380	843.20	12	120	727.26	2.06	1.37
2-380-381	2-380	2-381	145.36	12	120	695.52	1.97	0.22
2-381-385	2-381	2-385	793.40	12	120	695.52	1.97	1.19
2-385-405	2-385	2-405	578.31	12	120	537.48	1.52	0.54
2-390-385	2-390	2-385	764.54	8	120	-158.04	1.01	0.53
2-395-390	2-395	2-390	709.08	8	120	-110.10	0.70	0.25
2-400-395	2-400	2-395	767.72	8	120	0.00	0.00	0.00
2-405-410	2-405	2-410	269.14	8	120	111.48	0.71	0.10
2-405-435	2-405	2-435	699.59	12	120	426.00	1.21	0.42
2-410-415	2-410	2-415	403.03	8	120	111.48	0.71	0.15
2-415-420	2-415	2-420	865.13	8	120	111.48	0.71	0.32
2-420-425	2-420	2-425	901.31	8	120	111.48	0.71	0.33
2-425-430	2-425	2-430	645.25	8	120	111.48	0.71	0.24
2-435-440	2-435	2-440	835.19	12	120	416.04	1.18	0.48
2-440-445	2-440	2-445	836.05	12	120	410.10	1.16	0.47
2-445-450	2-445	2-450	712.68	12	120	410.10	1.16	0.40
2-450-455	2-450	2-455	981.33	12	120	410.10	1.16	0.55
2-455-460	2-455	2-460	495.46	12	120	409.02	1.16	0.28
2-460-465	2-460	2-465	717.54	12	120	178.80	0.51	0.09
2-465-470	2-465	2-470	708.83	12	120	178.80	0.51	0.09
2-470-475	2-470	2-475	582.82	8	120	164.82	1.05	0.44
2-475-480	2-475	2-480	637.59	8	120	164.82	1.05	0.48

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-480-485	2-480	2-485	231.68	8	120	164.82	1.05	0.17
2-485-490	2-485	2-490	494.98	8	120	131.88	0.84	0.25
2-490-495	2-490	2-495	438.22	8	120	116.70	0.74	0.17
2-495-496	2-495	2-496	508.54	8	120	116.70	0.74	0.20
2-496-500	2-496	2-500	273.78	8	120	116.70	0.74	0.11
2-500-505	2-500	2-505	384.93	8	120	116.70	0.74	0.15
2-505-510	2-505	2-510	386.63	8	120	116.70	0.74	0.15
3-090-BORDER	3-090	BORDER	66.09	24	130	-5248.68	3.72	0.12
3-095-100	3-095	3-100	111.93	20	130	5219.28	5.33	0.50
3-095-BP1_OUT	3-095	BP1_OUT	36.38	20	130	-5219.28	5.33	0.16
3-100-105	3-100	3-105	709.75	20	130	5173.50	5.28	3.14
3-105-110	3-105	3-110	339.12	20	130	5096.22	5.20	1.46
3-110-115	3-110	3-115	343.32	20	130	5096.22	5.20	1.48
3-115-120	3-115	3-120	770.98	20	130	5076.42	5.18	3.29
3-120-125	3-120	3-125	830.51	20	130	5076.42	5.18	3.54
3-125-130	3-125	3-130	428.53	20	130	5076.42	5.18	1.83
3-130-135	3-130	3-135	448.18	20	130	5076.42	5.18	1.91
3-135-140	3-135	3-140	554.68	20	130	5020.80	5.13	2.32
3-140-141	3-140	3-141	254.42	20	130	5020.80	5.13	1.06
3-141-145	3-141	3-145	542.28	20	130	7.74	0.01	0.00
3-150-155	3-150	3-155	911.45	8	120	7.74	0.05	0.00
3-155-160	3-155	3-160	978.19	8	120	0.00	0.00	0.00
3-160-165	3-160	3-165	692.71	8	120	0.00	0.00	0.00
3-165-170	3-165	3-170	446.87	8	120	0.00	0.00	0.00
3-170-175	3-170	3-175	296.15	8	120	0.00	0.00	0.00
3-175-180	3-175	3-180	757.11	6	110	0.00	0.00	0.00
3-180-185	3-180	3-185	803.74	6	110	0.00	0.00	0.00
3-185-190	3-185	3-190	538.71	6	110	0.00	0.00	0.00
3-190-195	3-190	3-195	954.17	6	110	0.00	0.00	0.00
3-200-205	3-200	3-205	583.46	12	120	-115.14	0.33	0.03
3-205-210	3-205	3-210	473.00	12	120	-115.14	0.33	0.03
3-210-215	3-210	3-215	745.46	12	120	-146.10	0.41	0.06
3-215-220	3-215	3-220	456.48	12	120	-146.10	0.41	0.04
3-220-225	3-220	3-225	728.00	12	120	-146.10	0.41	0.06

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-225-230	3-225	3-230	666.26	12	120	-165.84	0.47	0.07
3-230-235	3-230	3-235	330.59	12	120	-165.84	0.47	0.03
3-235-240	3-235	3-240	697.41	20	130	-5013.06	5.12	2.91
3-235-250	3-235	3-250	793.74	20	130	4847.22	4.95	3.11
3-240-245	3-240	3-245	480.80	20	130	-5013.06	5.12	2.00
3-245-141	3-245	3-141	801.57	20	130	-5013.06	5.12	3.34
3-250-255	3-250	3-255	946.18	20	130	4847.22	4.95	3.70
3-255-260	3-255	3-260	173.60	20	130	4847.22	4.95	0.68
3-260-265	3-260	3-265	223.81	20	130	4847.22	4.95	0.88
3-265-270	3-265	3-270	477.60	20	130	4847.22	4.95	1.87
3-270-275	3-270	3-275	632.96	20	130	4839.00	4.94	2.47
3-275-280	3-275	3-280	565.48	20	130	4839.00	4.94	2.21
3-280-285	3-280	3-285	501.10	20	130	4839.00	4.94	1.96
3-285-290	3-285	3-290	652.10	20	130	4682.94	4.78	2.40
3-285-310	3-285	3-310	625.99	8	120	135.72	0.87	0.33
3-290-295	3-290	3-295	903.43	20	130	4643.58	4.74	3.27
3-295-300	3-295	3-300	187.71	20	130	4605.18	4.70	0.67
3-300-305	3-300	3-305	967.57	20	130	4592.94	4.69	3.43
3-305-355	3-305	3-355	568.18	16	130	4433.94	7.08	5.59
3-310-315	3-310	3-315	532.30	8	120	135.72	0.87	0.28
3-320-321	3-320	3-321	570.31	8	120	-133.20	0.85	0.29
3-320-325	3-320	3-325	608.31	8	120	133.20	0.85	0.31
3-321-305	3-321	3-305	296.47	10	120	-144.96	0.59	0.06
3-325-330	3-325	3-330	481.47	8	120	78.48	0.50	0.09
3-330-335	3-330	3-335	471.40	8	120	51.12	0.33	0.04
3-335-340	3-335	3-340	144.19	4	110	0.00	0.00	0.00
3-340-345	3-340	3-345	297.26	4	110	0.00	0.00	0.00
3-345-350	3-345	3-350	714.11	4	110	0.00	0.00	0.00
3-355-360	3-355	3-360	954.23	16	130	4433.94	7.08	9.39
3-360-365	3-360	3-365	105.82	16	130	4433.94	7.08	1.04
3-365-395	3-365	3-395	798.86	12	120	1849.49	5.25	7.33
3-370-371	3-370	3-371	325.90	8	120	0.00	0.00	0.00
3-370-374	3-370	3-374	262.57	16	130	-2325.91	3.71	0.78
3-370-610	3-370	3-610	737.06	16	130	2310.07	3.69	2.17

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-371-372	3-371	3-372	2580.46	8	120	0.00	0.00	0.00
3-371-377	3-371	3-377	1260.24	8	120	0.00	0.00	0.00
3-372-373	3-372	3-373	718.75	8	120	0.00	0.00	0.00
3-373-376	3-373	3-376	281.30	8	120	0.00	0.00	0.00
3-374-375	3-374	3-375	644.34	16	130	-2325.91	3.71	1.92
3-375-380	3-375	3-380	798.60	16	130	-2325.91	3.71	2.38
3-380-385	3-380	3-385	705.33	16	130	-2335.33	3.73	2.12
3-385-390	3-385	3-390	335.72	16	130	-2335.33	3.73	1.01
3-390-365	3-390	3-365	280.59	16	130	-2553.01	4.07	0.99
3-395-400	3-395	3-400	608.23	12	120	1849.49	5.25	5.58
3-395-402	3-395	3-402	1802.70	8	120	0.00	0.00	0.00
3-400-405	3-400	3-405	868.52	12	120	1849.49	5.25	7.97
3-405-410	3-405	3-410	942.03	12	120	1836.41	5.21	8.54
3-410-420	3-410	3-420	819.19	12	120	1836.41	5.21	7.42
3-420-425	3-420	3-425	488.34	12	120	1836.41	5.21	4.42
3-425-430	3-425	3-430	476.18	12	120	1830.89	5.19	4.29
3-430-435	3-430	3-435	601.08	12	120	1811.21	5.14	5.31
3-435-440	3-435	3-440	430.57	12	120	1811.21	5.14	3.80
3-440-445	3-440	3-445	90.91	12	120	1789.55	5.08	0.79
3-445-450	3-445	3-450	680.32	12	120	1257.52	3.57	3.06
3-445-495	3-445	3-495	673.08	12	120	506.82	1.44	0.56
3-450-455	3-450	3-455	542.64	12	120	1257.52	3.57	2.44
3-455-460	3-455	3-460	652.68	12	120	1008.58	2.86	1.95
3-460-465	3-460	3-465	684.10	12	120	992.14	2.81	1.98
3-465-470	3-465	3-470	120.78	16	130	977.02	1.56	0.07
3-470-475	3-470	3-475	320.57	16	130	1722.16	2.75	0.55
3-475-480	3-475	3-480	582.32	16	130	1709.98	2.73	0.98
3-480-485	3-480	3-485	413.51	16	130	1375.96	2.20	0.47
3-485-490	3-485	3-490	889.60	16	130	1300.36	2.07	0.90
3-490-715	3-490	3-715	902.91	16	130	1300.36	2.07	0.92
3-495-500	3-495	3-500	366.49	12	120	506.82	1.44	0.31
3-500-505	3-500	3-505	464.87	12	120	491.22	1.39	0.37
3-505-510	3-505	3-510	220.32	12	120	491.22	1.39	0.17
3-515-520	3-515	3-520	650.14	12	120	467.40	1.33	0.47

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-520-525	3-520	3-525	865.53	12	120	467.40	1.33	0.62
3-525-530	3-525	3-530	743.28	8	120	63.60	0.41	0.10
3-525-595	3-525	3-595	896.37	8	120	279.06	1.78	1.79
3-530-531	3-530	3-531	232.04	8	120	63.60	0.41	0.03
3-531-535	3-531	3-535	602.55	8	120	44.58	0.28	0.04
3-535-540	3-535	3-540	384.78	8	120	0.00	0.00	0.00
3-540-545	3-540	3-545	487.54	8	120	0.00	0.00	0.00
3-545-550	3-545	3-550	374.80	8	120	0.00	0.00	0.00
3-550-555	3-550	3-555	740.67	8	120	0.00	0.00	0.00
3-555-560	3-555	3-560	604.50	6	110	0.00	0.00	0.00
3-560-565	3-560	3-565	548.77	6	110	0.00	0.00	0.00
3-570-575	3-570	3-575	647.35	8	120	-9.78	0.06	0.00
3-575-580	3-575	3-580	684.12	8	120	-22.80	0.15	0.01
3-580-585	3-580	3-585	303.44	8	120	-26.04	0.17	0.01
3-585-590	3-585	3-590	865.50	8	120	-33.42	0.21	0.03
3-590-525	3-590	3-525	87.63	8	120	-72.18	0.46	0.01
3-595-600	3-595	3-600	713.80	8	120	279.06	1.78	1.42
3-600-605	3-600	3-605	936.18	8	120	279.06	1.78	1.87
3-610-615	3-610	3-615	625.55	16	130	2310.07	3.69	1.84
3-615-620	3-615	3-620	556.65	16	130	2290.09	3.65	1.61
3-620-625	3-620	3-625	702.48	16	130	2275.99	3.63	2.01
3-625-630	3-625	3-630	505.40	12	120	2223.07	6.31	6.52
3-630-635	3-630	3-635	1009.61	12	120	2203.87	6.25	12.82
3-635-640	3-635	3-640	562.68	12	120	2092.03	5.93	6.49
3-640-645	3-640	3-645	486.45	12	120	2092.03	5.93	5.61
3-645-650	3-645	3-650	531.02	12	120	2088.07	5.92	6.10
3-650-655	3-650	3-655	511.77	12	120	2068.99	5.87	5.78
3-655-660	3-655	3-660	245.14	12	120	1287.97	3.65	1.15
3-655-680	3-655	3-680	456.05	12	120	779.82	2.21	0.85
3-665-670	3-665	3-670	504.59	16	130	0.00	0.00	0.00
3-670-675	3-670	3-675	484.37	16	130	-39.78	0.06	0.00
3-675-625	3-675	3-625	435.14	16	130	-39.78	0.06	0.00
3-680-685	3-680	3-685	466.57	12	120	779.82	2.21	0.87
3-685-690	3-685	3-691	531.25	12	120	779.82	2.21	0.99

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-690-691	3-691	3-690	206.40	12	120	779.82	2.21	0.38
3-690-695	3-690	3-695	539.18	12	120	779.82	2.21	1.00
3-695-470	3-695	3-470	416.51	12	120	745.14	2.11	0.71
3-700-705	3-700	3-705	622.95	12	120	-1287.97	3.65	2.93
3-705-710	3-705	3-710	804.82	12	120	-1287.97	3.65	3.78
3-710-660	3-710	3-660	786.65	12	120	-1287.97	3.65	3.69
3-715-720	3-715	3-720	1088.46	16	130	1300.36	2.07	1.11
3-720-725	3-720	3-725	870.92	16	130	1300.36	2.07	0.88
3-725-730	3-725	3-730	1405.92	16	130	1300.36	2.07	1.43
3-730-735	3-730	3-735	1073.96	16	130	765.36	1.22	0.41
3-730-750	3-730	3-750	1346.76	12	120	0.00	0.00	0.00
3-735-740	3-735	3-740	861.22	16	130	765.36	1.22	0.33
3-740-745	3-740	3-745	1095.81	16	130	765.36	1.22	0.42
3-745-4-122	3-745	4-122	404.60	16	130	765.36	1.22	0.15
3-GILBERT-700	GILBERT	3-700	475.64	12	120	-1239.73	3.52	2.08
4-100-210	4-100	4-210	2007.89	8	120	0.00	0.00	0.00
4-100-WWTP3-P1_OUT	4-100	WWTP3-P1_OUT	373.87	12	120	-1510.26	4.28	2.36
4-105-100	4-105	4-100	873.40	14	120	-1510.26	3.15	2.60
4-110-115	4-110	4-105	128.06	14	120	-1510.26	3.15	0.38
4-115-110	4-115	4-110	2037.07	14	120	-1510.26	3.15	6.06
4-120-115	4-120	4-115	2198.91	14	120	-1510.26	3.15	6.55
4-120-122	4-120	4-122	446.29	14	120	1510.26	3.15	1.33
4-122-125	4-122	4-125	407.72	14	120	2257.62	4.71	2.56
4-130-125	4-130	4-125	39.56	12	120	-2257.62	6.40	0.53
4-130-140	4-130	4-140	1131.43	12	120	2257.62	6.40	15.03
4-135-130	4-135	4-130	43.23	12	120	0.00	0.00	0.00
4-140-150	4-140	4-150	1338.84	12	120	1560.11	4.43	8.97
4-145-140	4-145	4-140	78.02	12	120	-43.74	0.12	0.00
4-150-155	4-150	4-155	285.19	12	120	44.28	0.13	0.00
4-150-160	4-150	4-160	328.04	12	120	1486.97	4.22	2.01
4-160-150	4-160	4-165	525.20	12	120	1453.55	4.12	3.09
4-165-167	4-165	4-167	417.99	12	120	1382.27	3.92	2.24
4-166-170	4-166	4-170	907.10	12	120	1184.52	3.36	3.65
4-167-166	4-167	4-166	773.65	12	120	1207.02	3.42	3.22

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
4-170-175	4-170	4-175	819.60	12	120	1114.56	3.16	2.95
4-175-176	4-175	4-176	860.41	12	120	1038.72	2.95	2.71
4-176-185	4-176	4-185	1074.27	12	120	956.58	2.71	2.91
4-180-175	4-180	4-175	410.28	12	120	-75.84	0.22	0.01
4-185-190	4-185	4-190	577.49	12	120	750.00	2.13	1.00
4-190-195	4-190	4-195	59.16	12	120	750.00	2.13	0.10
4-190-200	4-190	4-200	64.23	12	120	0.00	0.00	0.00
4-195-191	4-195	4-191	77.71	12	120	750.00	2.13	0.13
4-205-WWTP3	4-205	WRF3	58.58	12	120	-1510.26	4.28	0.37
4-205-WWTP3-P1_IN	4-205	WWTP3-P1_IN	48.50	12	120	1510.26	4.28	0.31
4-210-215	4-210	4-215	3472.44	6	110	0.00	0.00	0.00
4-245-167	4-245	4-167	1685.62	8	120	-175.25	1.12	1.42
4-245-250	4-245	4-250	202.48	8	120	160.55	1.02	0.14
4-250-251	4-250	4-251	155.55	8	120	148.85	0.95	0.10
4-251-255	4-251	4-255	207.17	8	120	93.05	0.59	0.05
4-255-260	4-255	4-260	396.51	8	120	-111.55	0.71	0.14
4-260-265	4-260	4-265	212.42	8	120	-129.43	0.83	0.10
4-265-270	4-265	4-270	283.77	8	120	-67.79	0.43	0.04
4-265-305	4-265	4-305	626.10	8	120	-61.65	0.39	0.08
4-270-275	4-270	4-275	326.49	8	120	-129.71	0.83	0.16
4-275-280	4-275	4-280	550.55	8	120	-138.83	0.89	0.30
4-280-285	4-280	4-285	505.80	8	120	-265.93	1.70	0.92
4-285-290	4-285	4-290	694.75	8	120	286.44	1.83	1.45
4-285-300	4-285	4-300	551.09	8	120	-635.17	4.05	5.04
4-300-140	4-300	4-140	1173.20	8	120	-653.77	4.17	11.31
4-305-310	4-305	4-310	145.77	8	120	-80.25	0.51	0.03
4-310-280	4-310	4-280	1613.37	8	120	-89.91	0.57	0.39
BP11	BP1_IN	BP1	1.00	20	150	1304.89	1.33	0.00
BP12	BP1	BP1_OUT	1.00	20	150	1304.89	1.33	0.00
BP1_IN-BP2_IN	BP1_IN	BP2_IN	9.54	20	130	-1304.89	1.33	0.00
BP1_OUT-BP2_OUT	BP1_OUT	BP2_OUT	8.65	20	130	-3914.39	4.00	0.02
BP21	BP2_IN	BP2	1.00	20	150	1304.76	1.33	0.00
BP22	BP2	BP2_OUT	1.00	20	150	1304.76	1.33	0.00
BP2_IN-BP3_IN	BP2_IN	BP3_IN	9.81	20	130	-2609.65	2.67	0.01

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
BP2_OUT-BP3_OUT	BP2_OUT	BP3_OUT	9.42	20	130	-2609.63	2.67	0.01
BP31	BP3_IN	BP3	1.00	20	150	1304.76	1.33	0.00
BP32	BP3	BP3_OUT	1.00	20	150	1304.76	1.33	0.00
BP3_IN-BP4_IN	BP3_IN	BP4_IN	9.15	20	130	-3914.41	4.00	0.02
BP3_OUT-BP4_OUT	BP3_OUT	BP4_OUT	8.62	20	130	-1304.87	1.33	0.00
BP41	BP4_IN	BP4	1.00	12	150	1304.87	3.70	0.00
BP42	BP4	BP4_OUT	1.00	12	150	1304.87	3.70	0.00
BP4_IN-3-090	BP4_IN	3-090	20.42	20	130	-5219.28	5.33	0.09
FULLERTON11	3-510	FULLERTON1	1.00	6	150	467.40	5.30	0.01
FULLERTON12	FULLERTON1	3-515	1.00	6	150	467.40	5.30	0.01
ONTARIO1	3-145	ONTARIO	1.00	6	150	7.74	0.09	0.00
ONTARIO2	ONTARIO	3-150	1.00	6	150	7.74	0.09	0.00
WRF1-P101	WWTP1-P10_IN	WRF1-P10	1.00	12	150	1190.77	3.38	0.00
WRF1-P102	WRF1-P10	WWTP1-P10_OUT	1.00	12	150	1190.77	3.38	0.00
WRF1-P111	WWTP1-P11_IN	WRF1-P11	1.00	12	150	0.00	0.00	0.00
WRF1-P112	WRF1-P11	WWTP1-P11_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P121	WWTP1-P12_IN	WRF1-P12	1.00	12	150	0.00	0.00	0.00
WRF1-P122	WRF1-P12	WWTP1-P12_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P1_1	WWTP1-P1_IN	WRF1-P1	1.00	12	150	1442.14	4.09	0.00
WRF1-P1_2	WRF1-P1	WWTP1-P1_OUT	1.00	12	150	1442.14	4.09	0.00
WRF1-P21	WWTP1-P2_IN	WRF1-P2	1.00	12	150	1442.17	4.09	0.00
WRF1-P22	WRF1-P2	WWTP1-P2_OUT	1.00	12	150	1442.17	4.09	0.00
WRF1-P31	WWTP1-P3_IN	WRF1-P3	1.00	12	150	1442.25	4.09	0.00
WRF1-P32	WRF1-P3	WWTP1-P3_OUT	1.00	12	150	1442.25	4.09	0.00
WRF1-P41	WWTP1-P4_IN	WRF1-P4	1.00	12	150	1442.44	4.09	0.00
WRF1-P42	WRF1-P4	WWTP1-P4_OUT	1.00	12	150	1442.44	4.09	0.00
WRF1-P51	WWTP1-P5_IN	WRF1-P5	1.00	12	150	1442.41	4.09	0.00
WRF1-P52	WRF1-P5	WWTP1-P5_OUT	1.00	12	150	1442.41	4.09	0.00
WRF1-P61	WWTP1-P6_IN	WRF1-P6	1.00	12	150	0.00	0.00	0.00
WRF1-P62	WRF1-P6	WWTP1-P6_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P71	WWTP1-P7_IN	WRF1-P7	1.00	12	150	1190.31	3.38	0.00
WRF1-P72	WRF1-P7	WWTP1-P7_OUT	1.00	12	150	1190.31	3.38	0.00
WRF1-P81	WWTP1-P8_IN	WRF1-P8	1.00	12	150	1190.50	3.38	0.00
WRF1-P82	WRF1-P8	WWTP1-P8_OUT	1.00	12	150	1190.50	3.38	0.00

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WRF1-P91	WWTP1-P9_IN	WRF1-P9	1.00	12	150	1190.93	3.38	0.00
WRF1-P92	WRF1-P9	WWTP1-P9_OUT	1.00	12	150	1190.93	3.38	0.00
WRF3-P11	WWTP3-P1_IN	WRF3-P1	1.00	12	150	503.53	1.43	0.00
WRF3-P12	WRF3-P1	WWTP3-P1_OUT	1.00	12	150	503.53	1.43	0.00
WRF3-P21	WWTP3-P2_IN	WRF3-P2	1.00	12	150	503.39	1.43	0.00
WRF3-P22	WRF3-P2	WWTP3-P2_OUT	1.00	12	150	503.39	1.43	0.00
WRF3-P31	WWTP3-P3_IN	WRF3-P3	1.00	12	150	503.35	1.43	0.00
WRF3-P32	WRF3-P3	WWTP3-P3_OUT	1.00	12	150	503.35	1.43	0.00
WWTP1-B4_IN-BP3_IN	WWTP1-P4_IN	WWTP1-P3_IN	13.17	24	130	4326.56	3.07	0.02
WWTP1-BP1_IN-BP5_IN	WWTP1-P4_IN	WWTP1-P5_IN	11.55	24	130	1442.41	1.02	0.00
WWTP1-BP1_OT-BP5_OT	WWTP1-P4_OUT	WWTP1-P5_OUT	11.49	24	130	-1442.41	1.02	0.00
WWTP1-BP2_IN-BP1_IN	WWTP1-P2_IN	WWTP1-P1_IN	13.51	24	130	1442.14	1.02	0.00
WWTP1-BP2_OT-BP1_OT	WWTP1-P2_OUT	WWTP1-P1_OUT	11.62	24	130	-1442.14	1.02	0.00
WWTP1-BP3_IN-BP2_IN	WWTP1-P3_IN	WWTP1-P2_IN	11.99	24	130	2884.31	2.05	0.01
WWTP1-BP3_OT-BP2_OT	WWTP1-P3_OUT	WWTP1-P2_OUT	14.76	24	130	-2884.31	2.05	0.01
WWTP1-BP4_OT-BP3_OT	WWTP1-P4_OUT	WWTP1-P3_OUT	13.11	24	130	-4326.56	3.07	0.02
WWTP1-BP5_IN-BP6_IN	WWTP1-P5_IN	WWTP1-P6_IN	9.23	24	130	0.00	0.00	0.00
WWTP1-BP5_OT-BP6_OT	WWTP1-P5_OUT	WWTP1-P6_OUT	8.13	24	130	0.00	0.00	0.00
WWTP1-P10_IN-P11_IN	WWTP1-P10_IN	WWTP1-P11_IN	11.55	18	130	-0.01	0.00	0.00
WWTP1-P10_OT-P11_OT	WWTP1-P10_OUT	WWTP1-P11_OUT	10.79	18	130	0.01	0.00	0.00
WWTP1-P11_IN-P12_IN	WWTP1-P11_IN	WWTP1-P12_IN	11.38	18	130	0.00	0.00	0.00
WWTP1-P11_OT-P12_OT	WWTP1-P11_OUT	WWTP1-P12_OUT	10.53	18	130	0.00	0.00	0.00
WWTP1-P7_IN-P8_IN	WWTP1-P7_IN	WWTP1-P8_IN	14.82	18	130	-1190.31	1.50	0.01
WWTP1-P7_OUT-P8_OUT	WWTP1-P7_OUT	WWTP1-P8_OUT	15.36	18	130	1190.31	1.50	0.01
WWTP1-P8_IN-P9_IN	WWTP1-P8_IN	WWTP1-P9_IN	9.42	18	130	-2380.81	3.00	0.02
WWTP1-P8_OUT-P9_OUT	WWTP1-P8_OUT	WWTP1-P9_OUT	10.16	18	130	2380.81	3.00	0.02
WWTP1-P9_IN-P10_IN	WWTP1-P9_IN	WWTP1-P10_IN	12.83	18	130	1190.76	1.50	0.01
WWTP1_P9_OUT-P10_OUT	WWTP1-P9_OUT	WWTP1-P10_OUT	13.66	18	130	-1190.76	1.50	0.01
WWTP3-P1_IN-P2_IN	WWTP3-P1_IN	WWTP3-P2_IN	29.34	12	120	1006.73	2.86	0.09
WWTP3-P1_OUT-P2_OUT	WWTP3-P1_OUT	WWTP3-P2_OUT	29.42	12	120	-1006.73	2.86	0.09
WWTP3-P2_IN-P3_IN	WWTP3-P2_IN	WWTP3-P3_IN	26.79	12	120	503.35	1.43	0.02
WWTP3-P2_OUT-P3_OUT	WWTP3-P2_OUT	WWTP3-P3_OUT	29.34	12	120	-503.35	1.43	0.02

Phase 1 Peak Hour Tank Report

ID	Flow (gpm)	Elevation (ft)	Head (ft)	% Full (%)	Level (ft)
BORDER	1,331.41	988	1,007.50	93.55	19.5
GILBERT	1,239.73	1,357.50	1,379.00	94.29	21.5
WRF1	-11,973.91	531	558	95.65	27
WRF3	-1,510.26	789.5	803.5	90	14

Phase 1 Peak Hour Pump Report

ID	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Head Gain (ft)	Status	Setting
BP1	1015.25	-3.47	220.62	1304.89	517.16	Open	1
BP2	1015.25	-3.47	220.63	1304.76	517.18	Open	1
BP3	1015.25	-3.46	220.63	1304.76	517.18	Open	1
BP4	1015.25	-3.45	220.63	1304.87	517.16	Open	1
WRF1-P1	544.00	5.79	247.30	1442.14	557.37	Open	1
WRF1-P10	544.00	5.54	232.91	1190.77	524.74	Open	1
WRF1-P11	544.00	5.54	232.91	0.00	0.00	Closed	0
WRF1-P12	544.00	5.54	232.91	0.00	0.00	Closed	0
WRF1-P2	544.00	5.79	247.29	1442.17	557.36	Open	1
WRF1-P3	544.00	5.79	247.29	1442.25	557.34	Open	1
WRF1-P4	544.00	5.80	247.28	1442.44	557.31	Open	1
WRF1-P5	544.00	5.80	247.28	1442.41	557.31	Open	1
WRF1-P6	544.00	5.80	247.28	0.00	0.00	Closed	0
WRF1-P7	544.00	5.53	232.92	1190.31	524.77	Open	1
WRF1-P8	544.00	5.54	232.91	1190.50	524.76	Open	1
WRF1-P9	544.00	5.54	232.91	1190.93	524.73	Open	1
WRF3-P1	794.00	3.82	261.97	503.53	595.76	Open	1
WRF3-P2	794.00	3.79	262.01	503.39	595.94	Open	1
WRF3-P3	794.00	3.78	262.02	503.35	595.98	Open	1

Phase 1 Peak Hour Valve Report

ID	Diameter (in)	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Velocity (ft/s)	Headloss (ft)	Status	Setting
FULLERTON1	6	1046.02	151.61	60.00	467.40	5.30	211.43	Active	60
ONTARIO	6	875.00	272.42	70.00	7.74	0.09	467.17	Active	70

**RECYCLED WATER ANALYSIS
ARANTINE HILLS
BLUESTONE COMMUNITIES
CORONA, CA**

**EXHIBIT 9: PHASE 3 PEAK HOUR HYDRAULIC ANALYSIS (INCLUSIVE OF
 PHASE 1 AND 2)**

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-100	0.00	544.00	557.60	5.89
1-105	0.00	555.00	1111.92	241.32
1-110	0.00	556.00	1109.48	239.82
1-115	0.00	574.69	1106.70	230.52
1-120	0.00	568.00	1104.67	232.54
1-125	42.24	564.00	1103.03	233.56
1-130	0.00	556.60	1101.24	235.99
1-135	0.00	564.00	1098.15	231.45
1-140	0.00	581.35	1095.18	222.64
1-145	0.00	596.50	1092.51	214.92
1-150	0.00	605.90	1089.76	209.66
1-155	0.00	614.00	1087.01	204.96
1-160	0.00	619.50	1085.68	202.00
1-165	0.00	625.00	1081.17	197.66
1-170	0.00	650.00	1074.71	184.03
1-175	0.00	679.00	1068.65	168.83
1-180	0.00	709.22	1063.62	153.56
1-185	24.24	742.00	1058.39	137.09
1-190	0.00	740.70	1054.56	136.00
1-195	0.00	773.00	1049.22	119.68
1-200	0.00	779.50	1043.26	114.29
1-205	0.00	781.00	1039.87	112.17
1-210	0.00	798.00	1034.31	102.40
1-215	0.00	825.25	1029.56	88.53
1-220	0.00	852.00	1023.04	74.11
1-225	0.00	896.00	1019.00	53.30
1-230	19.50	957.00	1013.65	24.55
1-235	0.00	616.38	1085.66	203.34
1-240	0.00	652.00	1084.79	187.53
1-245	18.18	667.00	1084.18	180.77
1-250	0.00	706.88	1083.71	163.28
1-255	25.86	728.00	1083.47	154.02
1-260	120.54	782.00	1082.89	130.38
1-265	0.00	822.70	1082.42	112.54
1-270	0.00	829.00	1081.99	109.62
1-275	0.00	817.00	1081.26	114.51
1-280	0.00	797.00	1080.95	123.04
1-285	0.00	733.00	1079.81	150.27
1-290	0.00	706.00	1078.76	161.52
1-295	0.00	683.00	1077.75	171.04
1-300	0.00	649.00	1076.76	185.35
1-305	0.00	627.00	1076.69	194.85
1-310	65.82	586.50	1076.58	212.35
1-315	61.86	653.00	1076.67	183.57
1-320	37.80	663.24	1076.51	179.07
1-325	0.00	671.79	1076.31	175.28
1-330	0.00	726.00	1075.65	151.50
1-335	0.00	771.00	1075.10	131.77
1-340	0.00	799.35	1074.54	119.24

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
1-345	78.18	783.80	1073.97	125.73
1-350	0.00	786.84	1073.97	124.41
1-355	0.00	827.50	1082.08	110.31
1-360	108.18	813.00	1081.84	116.49
1-365	25.92	803.00	1081.83	120.82
1-370	3.00	791.12	1081.83	125.96
1-375	0.00	978.00	1008.82	13.35
1-400	0.00	638.00	1085.16	193.75
2-100	0.00	773.87	991.98	94.51
2-101	0.00	770.00	991.98	96.19
2-102	26.34	744.00	991.98	107.45
2-103	0.00	717.00	992.00	119.16
2-105	0.00	719.00	993.02	118.73
2-110	0.00	718.00	994.91	119.98
2-115	56.40	715.00	995.99	121.75
2-117	19.68	712.00	996.25	123.16
2-118	55.26	719.00	995.58	119.84
2-119	114.78	753.00	995.15	104.92
2-120	0.00	712.30	997.03	123.37
2-125	3.60	711.00	1000.25	125.33
2-130	0.00	707.00	1002.09	127.86
2-135	0.00	641.00	1002.68	156.72
2-136	0.00	613.00	1002.96	168.97
2-137	1273.80	600.00	998.22	172.55
2-140	0.00	598.00	1003.84	175.85
2-145	0.00	587.00	1005.69	181.42
2-150	1010.40	589.91	1006.44	180.48
2-155	0.00	595.70	1008.25	178.76
2-156	0.00	604.52	1008.25	174.93
2-157	0.00	604.00	1008.25	175.16
2-158	0.00	611.54	1008.25	171.89
2-160	0.00	593.00	1011.66	181.40
2-165	0.00	589.00	1012.65	183.57
2-170	0.00	586.00	1014.87	185.83
2-175	0.00	580.00	1017.73	189.67
2-176	0.00	586.00	1020.82	188.41
2-180	0.00	588.00	1019.07	186.78
2-185	0.00	584.00	1022.43	189.97
2-190	0.00	592.60	1023.71	186.80
2-195	0.00	587.00	1026.37	190.38
2-200	0.00	581.00	1029.21	194.21
2-205	0.00	591.00	1031.84	191.02
2-210	0.00	592.42	1033.13	190.96
2-215	0.00	596.10	1036.02	190.62
2-220	0.00	601.90	1038.86	189.33
2-225	0.00	598.50	1041.49	191.95
2-230	0.00	594.10	1044.32	195.08
2-235	0.00	584.30	1046.99	200.48
2-240	0.00	563.00	1049.32	210.72

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
2-245	0.00	567.00	1051.91	210.11
2-250	0.00	564.00	1054.22	212.41
2-255	240.00	582.00	1057.49	206.03
2-260	0.00	584.00	1060.74	206.57
2-265	84.00	575.00	1064.09	211.92
2-270	1092.12	580.10	1067.80	211.32
2-275	0.00	555.60	1073.78	224.53
2-280	0.00	554.00	1076.98	226.61
2-285	0.00	544.00	557.27	5.75
2-365	0.00	766.00	989.68	96.92
2-370	33.72	799.00	988.74	82.22
2-375	25.14	838.00	987.47	64.76
2-380	31.74	820.00	986.09	71.97
2-381	0.00	798.32	985.87	81.27
2-385	0.00	761.40	984.68	96.75
2-390	47.94	768.00	984.15	93.66
2-395	110.10	780.00	983.90	88.35
2-400	0.00	777.30	983.90	89.52
2-405	0.00	738.40	984.14	106.48
2-410	0.00	742.00	984.05	104.88
2-415	0.00	757.00	983.90	98.32
2-420	0.00	800.00	983.58	79.55
2-425	0.00	762.98	983.26	95.45
2-430	111.48	778.27	983.02	88.72
2-435	9.96	732.00	983.72	109.07
2-440	5.94	722.00	983.24	113.19
2-445	0.00	710.00	982.77	118.19
2-450	0.00	704.00	982.36	120.62
2-455	1.08	728.00	981.81	109.98
2-460	230.22	728.00	981.53	109.86
2-465	0.00	776.00	981.45	89.02
2-470	13.98	808.07	981.36	75.09
2-475	0.00	800.00	980.92	78.39
2-480	0.00	764.10	980.44	93.74
2-485	32.94	771.00	980.27	90.68
2-490	15.18	784.00	980.02	84.94
2-495	0.00	760.59	979.85	95.00
2-496	0.00	753.00	979.65	98.21
2-500	0.00	753.00	979.54	98.16
2-505	0.00	749.70	979.39	99.52
2-510	116.70	760.80	979.23	94.65
3-090	29.40	984.00	1007.38	10.13
3-095	0.00	1006.63	1523.10	223.79
3-100	45.78	991.92	1522.60	229.94
3-105	77.28	957.95	1519.42	243.29
3-110	0.00	923.51	1517.95	257.57
3-115	19.80	918.60	1516.46	259.05
3-120	0.00	886.50	1513.13	271.52
3-125	0.00	879.00	1509.55	273.22

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-130	0.00	871.75	1507.70	275.56
3-135	55.62	872.00	1505.77	274.61
3-140	0.00	868.00	1503.42	275.33
3-141	0.00	865.00	1502.34	276.16
3-145	0.00	875.00	1502.34	271.83
3-150	0.00	875.00	1036.55	70.00
3-155	7.74	872.50	1036.55	71.08
3-160	0.00	845.00	1036.55	83.00
3-165	0.00	826.00	1036.55	91.23
3-170	0.00	813.40	1036.55	96.69
3-175	0.00	814.00	1036.55	96.43
3-180	0.00	779.00	1036.55	111.60
3-185	0.00	758.50	1036.55	120.48
3-190	0.00	743.00	1036.55	127.19
3-195	0.00	716.72	1036.55	138.58
3-200	115.14	1032.27	1493.67	199.93
3-205	0.00	1042.00	1493.71	195.72
3-210	30.96	1042.51	1493.73	195.51
3-215	0.00	1007.00	1493.79	210.93
3-220	0.00	990.05	1493.83	218.29
3-225	19.74	965.00	1493.89	229.17
3-230	0.00	939.00	1493.96	240.47
3-235	0.00	928.00	1494.00	245.25
3-240	0.00	910.58	1496.94	254.07
3-245	0.00	896.10	1498.96	261.22
3-250	0.00	925.00	1490.85	245.18
3-255	0.00	925.49	1487.10	243.35
3-260	0.00	926.26	1486.41	242.71
3-265	0.00	935.10	1485.53	238.50
3-270	8.22	947.35	1483.63	232.37
3-275	0.00	955.00	1481.13	227.97
3-280	0.00	966.00	1478.90	222.24
3-285	20.34	982.58	1476.92	214.20
3-290	39.36	999.00	1474.49	206.03
3-295	38.40	1045.00	1471.18	184.67
3-300	12.24	1053.21	1470.51	180.82
3-305	14.04	1085.53	1467.04	165.31
3-310	0.00	962.00	1476.59	222.97
3-315	135.72	941.22	1476.31	231.86
3-320	0.00	1095.60	1466.69	160.79
3-321	11.76	1092.00	1466.98	162.48
3-325	54.72	1109.00	1466.38	154.85
3-330	27.36	1125.00	1466.29	147.88
3-335	51.12	1130.45	1466.25	145.50
3-340	0.00	1137.00	1466.25	142.66
3-345	0.00	1153.00	1466.25	135.73
3-350	0.00	1191.19	1466.25	119.18
3-355	0.00	1082.00	1461.37	164.38
3-360	0.00	1088.00	1451.85	157.66

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-365	31.44	1088.42	1450.79	157.02
3-370	15.84	1220.00	1441.55	96.00
3-371	0.00	1240.83	1441.55	86.97
3-372	0.00	1220.98	1441.55	95.57
3-373	0.00	1247.86	1441.55	83.93
3-374	0.00	1209.29	1442.34	100.98
3-375	0.00	1180.00	1444.26	114.51
3-376	0.00	1262.40	1441.55	77.63
3-377	0.00	1305.68	1441.55	58.87
3-380	9.42	1141.00	1446.66	132.44
3-385	0.00	1107.47	1448.78	147.89
3-390	217.68	1095.60	1449.80	153.47
3-395	0.00	1069.54	1443.27	161.94
3-400	0.00	1093.00	1437.54	149.29
3-402	0.00	1010.28	1443.27	187.61
3-405	13.08	1119.80	1429.36	134.13
3-410	0.00	1127.24	1420.60	127.11
3-420	0.00	1146.00	1412.98	115.68
3-425	5.52	1142.00	1408.44	115.45
3-430	19.68	1128.00	1404.04	119.61
3-435	0.00	1124.84	1398.59	118.62
3-440	21.66	1129.00	1394.69	115.12
3-445	25.20	1129.61	1393.88	114.51
3-450	0.00	1130.39	1390.70	112.79
3-455	248.94	1123.00	1388.17	114.90
3-460	16.44	1129.95	1386.13	111.00
3-465	15.12	1130.00	1384.05	110.08
3-470	0.00	1130.37	1383.98	109.89
3-475	12.18	1128.00	1383.33	110.64
3-480	334.02	1116.20	1382.18	115.25
3-485	75.60	1102.00	1381.62	121.16
3-490	0.00	1074.92	1380.51	132.41
3-495	0.00	1089.50	1393.32	131.64
3-500	15.60	1086.00	1393.01	133.03
3-505	0.00	1057.00	1392.64	145.43
3-510	23.82	1050.37	1392.47	148.23
3-515	0.00	1046.02	1184.48	59.99
3-520	0.00	1013.49	1184.01	73.89
3-525	52.56	974.00	1183.39	90.73
3-530	0.00	947.00	1183.29	102.39
3-531	19.02	942.65	1183.26	104.26
3-535	44.58	931.70	1183.22	108.98
3-540	0.00	911.00	1183.22	117.95
3-545	0.00	892.00	1183.22	126.19
3-550	0.00	876.00	1183.22	133.12
3-555	0.00	851.71	1183.22	143.64
3-560	0.00	830.00	1183.22	153.05
3-565	0.00	814.00	1183.22	159.98
3-570	9.78	968.00	1183.32	93.30

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
3-575	13.02	974.00	1183.32	90.70
3-580	3.24	973.80	1183.33	90.79
3-585	7.38	966.00	1183.34	94.17
3-590	38.76	973.00	1183.37	91.16
3-595	0.00	977.00	1181.60	88.65
3-600	0.00	975.00	1180.18	88.90
3-605	279.06	937.80	1178.31	104.22
3-610	0.00	1198.00	1439.37	104.59
3-615	19.98	1198.00	1437.52	103.78
3-620	14.10	1123.00	1435.90	135.58
3-625	13.14	1238.79	1433.88	84.53
3-630	19.20	1242.00	1427.33	80.30
3-635	111.84	1239.00	1414.44	76.02
3-640	0.00	1245.00	1407.92	70.59
3-645	3.96	1250.00	1402.28	65.98
3-650	19.08	1244.30	1396.14	65.79
3-655	1.20	1240.92	1390.33	64.74
3-660	0.00	1246.51	1389.37	61.90
3-665	0.00	1243.00	1433.88	82.71
3-670	39.78	1268.25	1433.88	71.77
3-675	0.00	1256.12	1433.88	77.02
3-680	0.00	1224.43	1389.21	71.40
3-685	0.00	1203.00	1388.06	80.19
3-690	0.00	1169.94	1386.25	93.73
3-691	0.00	1182.00	1386.76	88.72
3-695	34.68	1146.00	1384.93	103.53
3-700	48.24	1337.63	1380.72	18.67
3-705	0.00	1311.00	1383.15	31.26
3-710	0.00	1281.00	1386.30	45.63
3-715	0.00	1052.20	1379.38	141.77
3-720	0.00	1050.00	1378.02	142.13
3-725	0.00	1013.04	1376.93	157.67
3-730	535.00	948.55	1375.18	184.86
3-735	0.00	950.00	1374.60	183.98
3-740	0.00	934.00	1374.14	190.71
3-745	0.00	903.66	1373.56	203.61
3-750	0.00	904.00	1375.18	204.16
4-100	0.00	793.70	1390.56	258.62
4-105	0.00	801.95	1387.91	253.90
4-110	0.00	798.01	1387.52	255.44
4-115	0.00	836.04	1381.35	236.28
4-120	0.00	861.06	1374.69	222.56
4-122	18.00	891.44	1373.34	208.81
4-125	0.00	910.00	1370.43	199.50
4-130	0.00	908.69	1369.83	199.81
4-135	0.00	920.00	1369.83	194.91
4-140	0.00	923.22	1352.67	186.08
4-145	43.74	918.00	1352.67	188.34
4-150	28.86	1018.32	1342.53	140.48

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
4-155	44.28	1024.21	1342.53	137.93
4-160	33.42	1038.00	1340.25	130.96
4-165	71.28	1063.52	1336.73	118.38
4-166	22.50	1112.00	1330.94	94.87
4-167	0.00	1072.94	1334.16	113.19
4-170	69.96	1122.00	1327.29	88.95
4-175	0.00	1135.66	1324.35	81.76
4-176	82.14	1148.14	1321.63	75.18
4-180	75.84	1138.00	1324.34	80.74
4-185	206.58	1206.37	1318.73	48.68
4-190	0.00	1228.00	1317.73	38.88
4-191	750.00	1214.00	1317.49	44.84
4-195	0.00	1214.00	1317.63	44.90
4-200	0.00	1214.00	1317.73	44.95
4-205	0.00	792.42	803.12	4.64
4-210	0.00	828.94	1390.56	243.35
4-215	0.00	864.00	1390.56	228.16
4-220	119.04	1108.00	1329.77	96.09
4-225	14.88	1101.00	1329.87	99.17
4-230	8.16	1089.20	1330.03	104.35
4-235	18.60	1073.73	1330.23	111.14
4-240	6.90	1064.31	1330.39	115.29
4-245	14.70	1047.20	1330.75	122.86
4-250	11.70	1040.00	1330.69	125.96
4-251	55.80	1030.22	1330.65	130.18
4-255	204.60	1023.11	1330.65	133.26
4-260	17.88	1010.57	1330.97	138.83
4-265	0.00	1001.89	1331.18	142.68
4-270	61.92	990.55	1331.27	147.63
4-275	9.12	980.00	1331.52	152.31
4-280	37.20	960.00	1331.99	161.18
4-285	82.80	942.00	1333.34	169.57
4-290	286.44	957.00	1331.89	162.44
4-300	18.60	920.83	1339.31	181.33
4-305	18.60	996.00	1331.32	145.30
4-310	9.66	990.00	1331.37	147.92
BP1_IN	0.00	984.00	1007.24	10.07
BP1_OUT	0.00	1015.25	1523.27	220.12
BP2_IN	0.00	984.00	1007.25	10.07
BP2_OUT	0.00	1015.25	1523.29	220.13
BP3_IN	0.00	984.00	1007.26	10.08
BP3_OUT	0.00	1015.25	1523.30	220.14
BP4_IN	0.00	984.00	1007.28	10.09
BP4_OUT	0.00	1015.25	1523.31	220.14
WWTP1-P10_IN	0.00	544.00	556.79	5.54
WWTP1-P10_OUT	0.00	544.00	1081.52	232.91
WWTP1-P11_IN	0.00	544.00	556.79	5.54
WWTP1-P11_OUT	0.00	544.00	1081.52	232.91
WWTP1-P12_IN	0.00	544.00	556.79	5.54

Phase 3 Peak Hour Junction Report

ID	Demand (gpm)	Elevation (ft)	Head (ft)	Pressure (psi)
WWTP1-P12_OUT	0.00	544.00	1081.52	232.91
WWTP1-P1_IN	0.00	544.00	557.36	5.79
WWTP1-P1_OUT	0.00	544.00	1114.72	247.29
WWTP1-P2_IN	0.00	544.00	557.37	5.79
WWTP1-P2_OUT	0.00	544.00	1114.72	247.29
WWTP1-P3_IN	0.00	544.00	557.37	5.79
WWTP1-P3_OUT	0.00	544.00	1114.71	247.29
WWTP1-P4_IN	0.00	544.00	557.39	5.80
WWTP1-P4_OUT	0.00	544.00	1114.69	247.28
WWTP1-P5_IN	0.00	544.00	557.39	5.80
WWTP1-P5_OUT	0.00	544.00	1114.70	247.28
WWTP1-P6_IN	0.00	544.00	557.39	5.80
WWTP1-P6_OUT	0.00	544.00	1114.70	247.28
WWTP1-P7_IN	0.00	544.00	556.77	5.53
WWTP1-P7_OUT	0.00	544.00	1081.54	232.92
WWTP1-P8_IN	0.00	544.00	556.78	5.54
WWTP1-P8_OUT	0.00	544.00	1081.53	232.91
WWTP1-P9_IN	0.00	544.00	556.79	5.54
WWTP1-P9_OUT	0.00	544.00	1081.52	232.91
WWTP3-P1_IN	0.00	794.00	802.81	3.82
WWTP3-P1_OUT	0.00	794.00	1392.96	259.53
WWTP3-P2_IN	0.00	792.42	802.72	4.46
WWTP3-P2_OUT	0.00	794.00	1393.05	259.57
WWTP3-P3_IN	0.00	792.42	802.70	4.46
WWTP3-P3_OUT	0.00	794.00	1393.07	259.58

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-100-WWTP1-P4_IN	1-100	WWTP1-P4_IN	61.61	24	130	7211.41	5.11	0.21
1-105-110	1-105	1-110	725.92	24	130	7211.41	5.11	2.44
1-105-WWTP1-BP4_OUT	1-105	WWTP1-P4_OUT	823.50	24	130	-7211.41	5.11	2.77
1-110-115	1-110	1-115	828.10	24	130	7211.41	5.11	2.78
1-115-120	1-115	1-120	602.76	24	130	7211.41	5.11	2.03
1-120-125	1-120	1-125	487.15	24	130	7211.41	5.11	1.64
1-125-130	1-125	1-130	540.48	24	130	7169.17	5.08	1.80
1-130-135	1-130	1-135	929.44	24	130	7169.17	5.08	3.09
1-135-140	1-135	1-140	891.61	24	130	7169.17	5.08	2.97
1-140-145	1-140	1-145	803.96	24	130	7169.17	5.08	2.67
1-145-150	1-145	1-150	825.52	24	130	7169.17	5.08	2.75
1-150-155	1-150	1-155	826.97	24	130	7169.17	5.08	2.75
1-155-160	1-155	1-160	400.46	24	130	7169.17	5.08	1.33
1-160-165	1-160	1-165	646.23	20	130	6623.83	6.76	4.51
1-160-235	1-160	1-235	818.27	24	130	545.34	0.39	0.02
1-165-170	1-165	1-170	924.08	20	130	6623.83	6.76	6.45
1-170-175	1-170	1-175	868.88	20	130	6623.83	6.76	6.07
1-175-180	1-175	1-180	720.23	20	130	6623.83	6.76	5.03
1-180-185	1-180	1-185	749.26	20	130	6623.83	6.76	5.23
1-185-190	1-185	1-190	552.20	20	130	6599.59	6.74	3.83
1-190-195	1-190	1-195	770.63	20	130	6599.59	6.74	5.34
1-195-200	1-195	1-200	858.15	20	130	6599.59	6.74	5.95
1-200-205	1-200	1-205	489.28	20	130	6599.59	6.74	3.39
1-205-210	1-205	1-210	801.28	20	130	6599.59	6.74	5.56
1-210-215	1-210	1-215	685.73	20	130	6599.59	6.74	4.76
1-215-220	1-215	1-220	940.80	20	130	6599.59	6.74	6.52
1-220-225	1-220	1-225	582.12	20	130	6599.59	6.74	4.04
1-225-230	1-225	1-230	771.09	20	130	6599.59	6.74	5.35
1-230-375	1-230	1-375	700.86	20	130	6580.09	6.72	4.83
1-235-400	1-235	1-400	519.89	12	120	545.34	1.55	0.50
1-240-245	1-240	1-245	638.53	12	120	545.34	1.55	0.61
1-240-400	1-240	1-400	382.12	12	120	-545.34	1.55	0.37
1-245-250	1-245	1-250	530.68	12	120	527.16	1.50	0.48
1-250-255	1-250	1-255	266.95	12	120	527.16	1.50	0.24

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
1-255-260	1-255	1-260	698.70	12	120	501.30	1.42	0.57
1-260-265	1-260	1-265	958.84	12	120	380.76	1.08	0.47
1-265-270	1-265	1-270	281.92	8	120	243.66	1.56	0.44
1-265-355	1-355	1-265	644.45	8	120	-137.10	0.88	0.34
1-270-275	1-270	1-275	466.34	8	120	243.66	1.56	0.72
1-275-280	1-275	1-280	199.09	8	120	243.66	1.56	0.31
1-280-285	1-280	1-285	740.62	8	120	243.66	1.56	1.15
1-285-290	1-285	1-290	677.64	8	120	243.66	1.56	1.05
1-290-295	1-290	1-295	651.86	8	120	243.66	1.56	1.01
1-295-300	1-295	1-300	633.58	8	120	243.66	1.56	0.98
1-300-305	1-300	1-305	503.17	8	120	65.82	0.42	0.07
1-300-315	1-300	1-315	113.29	8	120	177.84	1.14	0.10
1-305-310	1-305	1-310	799.46	8	120	65.82	0.42	0.11
1-315-320	1-315	1-320	395.94	8	120	115.98	0.74	0.16
1-320-325	1-320	1-325	220.64	6	110	78.18	0.89	0.20
1-325-330	1-325	1-330	732.23	6	110	78.18	0.89	0.66
1-330-335	1-330	1-335	611.98	6	110	78.18	0.89	0.55
1-335-340	1-335	1-340	625.35	6	110	78.18	0.89	0.56
1-340-345	1-340	1-345	628.09	6	110	78.18	0.89	0.57
1-345-350	1-345	1-350	131.80	6	110	0.00	0.00	0.00
1-355-360	1-355	1-360	449.60	8	120	137.10	0.88	0.24
1-360-365	1-360	1-365	298.77	8	120	28.92	0.18	0.01
1-365-370	1-365	1-370	274.40	8	120	3.00	0.02	0.00
1-375-BORDER	1-375	BORDER	191.03	20	130	6580.09	6.72	1.32
1-WWTP1-100	WRF1	1-100	119.55	24	130	7211.41	5.11	0.40
2-100-101	2-100	2-101	260.82	8	120	0.00	0.00	0.00
2-101-102	2-101	2-102	521.22	8	120	0.00	0.00	0.00
2-102-103	2-103	2-102	841.92	8	120	26.34	0.17	0.02
2-103-105	2-103	2-105	70.22	8	120	-812.46	5.19	1.01
2-103-365	2-103	2-365	1233.10	12	120	786.12	2.23	2.32
2-105-110	2-105	2-110	945.61	12	120	-812.46	2.30	1.89
2-110-115	2-110	2-115	539.97	12	120	-812.46	2.30	1.08
2-115-117	2-115	2-117	113.87	12	120	-868.86	2.46	0.26
2-117-118	2-117	2-118	843.56	8	120	170.04	1.09	0.67

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-117-120	2-117	2-120	240.34	12	120	-1058.58	3.00	0.79
2-118-119	2-118	2-119	1110.74	8	120	114.78	0.73	0.43
2-120-125	2-120	2-125	983.52	12	120	-1058.58	3.00	3.21
2-125-130	2-125	2-130	559.97	12	120	-1062.18	3.01	1.84
2-130-135	2-130	2-135	853.35	16	130	-1062.18	1.69	0.60
2-135-136	2-135	2-136	391.50	16	130	-1062.18	1.69	0.27
2-136-137	2-136	2-137	423.36	10	120	1273.80	5.20	4.74
2-136-140	2-136	2-140	295.92	16	130	-2335.98	3.73	0.89
2-140-145	2-140	2-145	1092.71	18	130	-2335.98	2.95	1.85
2-145-150	2-145	2-150	441.06	18	130	-2335.98	2.95	0.75
2-150-155	2-150	2-155	548.10	18	130	-3346.38	4.22	1.81
2-155-156	2-155	2-156	960.72	12	120	0.00	0.00	0.00
2-155-160	2-155	2-160	1036.20	18	130	-3346.38	4.22	3.41
2-156-157	2-156	2-157	449.63	12	120	0.00	0.00	0.00
2-157-158	2-157	2-158	341.84	12	120	0.00	0.00	0.00
2-160-165	2-160	2-165	302.10	18	130	-3346.38	4.22	0.99
2-165-170	2-165	2-170	672.48	18	130	-3346.38	4.22	2.21
2-170-175	2-170	2-175	869.81	18	130	-3346.38	4.22	2.86
2-175-180	2-175	2-180	407.16	18	130	-3346.38	4.22	1.34
2-176-180	2-176	2-180	530.29	18	130	3346.38	4.22	1.75
2-180-185	2-176	2-185	489.53	18	130	-3346.38	4.22	1.61
2-185-190	2-185	2-190	386.23	18	130	-3346.38	4.22	1.27
2-190-195	2-190	2-195	808.82	18	130	-3346.38	4.22	2.66
2-195-200	2-195	2-200	861.85	18	130	-3346.38	4.22	2.84
2-200-205	2-200	2-205	800.26	18	130	-3346.38	4.22	2.64
2-205-210	2-205	2-210	391.86	18	130	-3346.38	4.22	1.29
2-210-215	2-210	2-215	875.21	18	130	-3346.38	4.22	2.88
2-215-220	2-215	2-220	863.18	18	130	-3346.38	4.22	2.84
2-220-225	2-220	2-225	799.09	18	130	-3346.38	4.22	2.63
2-225-230	2-225	2-230	857.48	18	130	-3346.38	4.22	2.82
2-230-235	2-230	2-235	810.85	18	130	-3346.38	4.22	2.67
2-235-240	2-235	2-240	707.78	18	130	-3346.38	4.22	2.33
2-240-245	2-240	2-245	786.41	18	130	-3346.38	4.22	2.59
2-245-250	2-245	2-250	702.44	18	130	-3346.38	4.22	2.31

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-250-255	2-250	2-255	991.80	18	130	-3346.38	4.22	3.27
2-255-260	2-255	2-260	867.24	18	130	-3586.38	4.52	3.25
2-260-265	2-260	2-265	896.29	18	130	-3586.38	4.52	3.36
2-265-270	2-265	2-270	947.86	18	130	-3670.38	4.63	3.70
2-270-275	2-270	2-275	945.80	18	130	-4762.50	6.00	5.99
2-275-280	2-275	2-280	505.23	18	130	-4762.50	6.00	3.20
2-280-WWTP1-P9_OUT	2-280	WWTP1-P9_OUT	715.68	18	130	-4762.50	6.00	4.53
2-285-WWTP1	2-285	WRF1	115.18	18	130	-4762.50	6.00	0.73
2-285-WWTP1-BP9_IN	2-285	WWTP1-P9_IN	75.16	18	130	4762.50	6.00	0.48
2-365-370	2-365	2-370	498.67	12	120	786.12	2.23	0.94
2-370-375	2-370	2-375	736.72	12	120	752.40	2.13	1.28
2-375-380	2-375	2-380	843.20	12	120	727.26	2.06	1.37
2-380-381	2-380	2-381	145.36	12	120	695.52	1.97	0.22
2-381-385	2-381	2-385	793.40	12	120	695.52	1.97	1.19
2-385-405	2-385	2-405	578.31	12	120	537.48	1.52	0.54
2-390-385	2-390	2-385	764.54	8	120	-158.04	1.01	0.53
2-395-390	2-395	2-390	709.08	8	120	-110.10	0.70	0.25
2-400-395	2-400	2-395	767.72	8	120	0.00	0.00	0.00
2-405-410	2-405	2-410	269.14	8	120	111.48	0.71	0.10
2-405-435	2-405	2-435	699.59	12	120	426.00	1.21	0.42
2-410-415	2-410	2-415	403.03	8	120	111.48	0.71	0.15
2-415-420	2-415	2-420	865.13	8	120	111.48	0.71	0.32
2-420-425	2-420	2-425	901.31	8	120	111.48	0.71	0.33
2-425-430	2-425	2-430	645.25	8	120	111.48	0.71	0.24
2-435-440	2-435	2-440	835.19	12	120	416.04	1.18	0.48
2-440-445	2-440	2-445	836.05	12	120	410.10	1.16	0.47
2-445-450	2-445	2-450	712.68	12	120	410.10	1.16	0.40
2-450-455	2-450	2-455	981.33	12	120	410.10	1.16	0.55
2-455-460	2-455	2-460	495.46	12	120	409.02	1.16	0.28
2-460-465	2-460	2-465	717.54	12	120	178.80	0.51	0.09
2-465-470	2-465	2-470	708.83	12	120	178.80	0.51	0.09
2-470-475	2-470	2-475	582.82	8	120	164.82	1.05	0.44
2-475-480	2-475	2-480	637.59	8	120	164.82	1.05	0.48
2-480-485	2-480	2-485	231.68	8	120	164.82	1.05	0.17

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
2-485-490	2-485	2-490	494.98	8	120	131.88	0.84	0.25
2-490-495	2-490	2-495	438.22	8	120	116.70	0.74	0.17
2-495-496	2-495	2-496	508.54	8	120	116.70	0.74	0.20
2-496-500	2-496	2-500	273.78	8	120	116.70	0.74	0.11
2-500-505	2-500	2-505	384.93	8	120	116.70	0.74	0.15
2-505-510	2-505	2-510	386.63	8	120	116.70	0.74	0.15
3-090-BORDER	3-090	BORDER	66.09	24	130	-5280.33	3.74	0.12
3-095-100	3-095	3-100	111.93	20	130	5250.93	5.36	0.51
3-095-BP1_OUT	3-095	BP1_OUT	36.38	20	130	-5250.93	5.36	0.17
3-100-105	3-100	3-105	709.75	20	130	5205.15	5.32	3.17
3-105-110	3-105	3-110	339.12	20	130	5127.87	5.24	1.47
3-110-115	3-110	3-115	343.32	20	130	5127.87	5.24	1.49
3-115-120	3-115	3-120	770.98	20	130	5108.07	5.22	3.33
3-120-125	3-120	3-125	830.51	20	130	5108.07	5.22	3.58
3-125-130	3-125	3-130	428.53	20	130	5108.07	5.22	1.85
3-130-135	3-130	3-135	448.18	20	130	5108.07	5.22	1.93
3-135-140	3-135	3-140	554.68	20	130	5052.45	5.16	2.35
3-140-141	3-140	3-141	254.42	20	130	5052.45	5.16	1.08
3-141-145	3-141	3-145	542.28	20	130	7.74	0.01	0.00
3-150-155	3-150	3-155	911.45	8	120	7.74	0.05	0.00
3-155-160	3-155	3-160	978.19	8	120	0.00	0.00	0.00
3-160-165	3-160	3-165	692.71	8	120	0.00	0.00	0.00
3-165-170	3-165	3-170	446.87	8	120	0.00	0.00	0.00
3-170-175	3-170	3-175	296.15	8	120	0.00	0.00	0.00
3-175-180	3-175	3-180	757.11	6	110	0.00	0.00	0.00
3-180-185	3-180	3-185	803.74	6	110	0.00	0.00	0.00
3-185-190	3-185	3-190	538.71	6	110	0.00	0.00	0.00
3-190-195	3-190	3-195	954.17	6	110	0.00	0.00	0.00
3-200-205	3-200	3-205	583.46	12	120	-115.14	0.33	0.03
3-205-210	3-205	3-210	473.00	12	120	-115.14	0.33	0.03
3-210-215	3-210	3-215	745.46	12	120	-146.10	0.41	0.06
3-215-220	3-215	3-220	456.48	12	120	-146.10	0.41	0.04
3-220-225	3-220	3-225	728.00	12	120	-146.10	0.41	0.06
3-225-230	3-225	3-230	666.26	12	120	-165.84	0.47	0.07

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-230-235	3-230	3-235	330.59	12	120	-165.84	0.47	0.03
3-235-240	3-235	3-240	697.41	20	130	-5044.71	5.15	2.94
3-235-250	3-235	3-250	793.74	20	130	4878.87	4.98	3.15
3-240-245	3-240	3-245	480.80	20	130	-5044.71	5.15	2.03
3-245-141	3-245	3-141	801.57	20	130	-5044.71	5.15	3.38
3-250-255	3-250	3-255	946.18	20	130	4878.87	4.98	3.75
3-255-260	3-255	3-260	173.60	20	130	4878.87	4.98	0.69
3-260-265	3-260	3-265	223.81	20	130	4878.87	4.98	0.89
3-265-270	3-265	3-270	477.60	20	130	4878.87	4.98	1.89
3-270-275	3-270	3-275	632.96	20	130	4870.65	4.97	2.50
3-275-280	3-275	3-280	565.48	20	130	4870.65	4.97	2.23
3-280-285	3-280	3-285	501.10	20	130	4870.65	4.97	1.98
3-285-290	3-285	3-290	652.10	20	130	4714.59	4.81	2.43
3-285-310	3-285	3-310	625.99	8	120	135.72	0.87	0.33
3-290-295	3-290	3-295	903.43	20	130	4675.23	4.77	3.31
3-295-300	3-295	3-300	187.71	20	130	4636.83	4.74	0.68
3-300-305	3-300	3-305	967.57	20	130	4624.59	4.72	3.47
3-305-355	3-305	3-355	568.18	16	130	4465.59	7.13	5.67
3-310-315	3-310	3-315	532.30	8	120	135.72	0.87	0.28
3-320-321	3-320	3-321	570.31	8	120	-133.20	0.85	0.29
3-320-325	3-320	3-325	608.31	8	120	133.20	0.85	0.31
3-321-305	3-321	3-305	296.47	10	120	-144.96	0.59	0.06
3-325-330	3-325	3-330	481.47	8	120	78.48	0.50	0.09
3-330-335	3-330	3-335	471.40	8	120	51.12	0.33	0.04
3-335-340	3-335	3-340	144.19	4	110	0.00	0.00	0.00
3-340-345	3-340	3-345	297.26	4	110	0.00	0.00	0.00
3-345-350	3-345	3-350	714.11	4	110	0.00	0.00	0.00
3-355-360	3-355	3-360	954.23	16	130	4465.59	7.13	9.52
3-360-365	3-360	3-365	105.82	16	130	4465.59	7.13	1.06
3-365-395	3-365	3-395	798.86	12	120	1875.34	5.32	7.52
3-370-371	3-370	3-371	325.90	8	120	0.00	0.00	0.00
3-370-374	3-370	3-374	262.57	16	130	-2331.71	3.72	0.79
3-370-610	3-370	3-610	737.06	16	130	2315.87	3.70	2.18
3-371-372	3-371	3-372	2580.46	8	120	0.00	0.00	0.00

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-371-377	3-371	3-377	1260.24	8	120	0.00	0.00	0.00
3-372-373	3-372	3-373	718.75	8	120	0.00	0.00	0.00
3-373-376	3-373	3-376	281.30	8	120	0.00	0.00	0.00
3-374-375	3-374	3-375	644.34	16	130	-2331.71	3.72	1.93
3-375-380	3-375	3-380	798.60	16	130	-2331.71	3.72	2.39
3-380-385	3-380	3-385	705.33	16	130	-2341.13	3.74	2.13
3-385-390	3-385	3-390	335.72	16	130	-2341.13	3.74	1.01
3-390-365	3-390	3-365	280.59	16	130	-2558.81	4.08	1.00
3-395-400	3-395	3-400	608.23	12	120	1875.34	5.32	5.73
3-395-402	3-395	3-402	1802.70	8	120	0.00	0.00	0.00
3-400-405	3-400	3-405	868.52	12	120	1875.34	5.32	8.18
3-405-410	3-405	3-410	942.03	12	120	1862.26	5.28	8.76
3-410-420	3-410	3-420	819.19	12	120	1862.26	5.28	7.62
3-420-425	3-420	3-425	488.34	12	120	1862.26	5.28	4.54
3-425-430	3-425	3-430	476.18	12	120	1856.74	5.27	4.40
3-430-435	3-430	3-435	601.08	12	120	1837.06	5.21	5.45
3-435-440	3-435	3-440	430.57	12	120	1837.06	5.21	3.90
3-440-445	3-440	3-445	90.91	12	120	1815.40	5.15	0.81
3-445-450	3-445	3-450	680.32	12	120	1283.38	3.64	3.17
3-445-495	3-445	3-495	673.08	12	120	506.82	1.44	0.56
3-450-455	3-450	3-455	542.64	12	120	1283.38	3.64	2.53
3-455-460	3-455	3-460	652.68	12	120	1034.44	2.93	2.04
3-460-465	3-460	3-465	684.10	12	120	1018.00	2.89	2.08
3-465-470	3-465	3-470	120.78	16	130	1002.88	1.60	0.08
3-470-475	3-470	3-475	320.57	16	130	1875.70	2.99	0.64
3-475-480	3-475	3-480	582.32	16	130	1863.52	2.97	1.15
3-480-485	3-480	3-485	413.51	16	130	1529.50	2.44	0.57
3-485-490	3-485	3-490	889.60	16	130	1453.90	2.32	1.11
3-490-715	3-490	3-715	902.91	16	130	1453.90	2.32	1.13
3-495-500	3-495	3-500	366.49	12	120	506.82	1.44	0.31
3-500-505	3-500	3-505	464.87	12	120	491.22	1.39	0.37
3-505-510	3-505	3-510	220.32	12	120	491.22	1.39	0.17
3-515-520	3-515	3-520	650.14	12	120	467.40	1.33	0.47
3-520-525	3-520	3-525	865.53	12	120	467.40	1.33	0.62

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-525-530	3-525	3-530	743.28	8	120	63.60	0.41	0.10
3-525-595	3-525	3-595	896.37	8	120	279.06	1.78	1.79
3-530-531	3-530	3-531	232.04	8	120	63.60	0.41	0.03
3-531-535	3-531	3-535	602.55	8	120	44.58	0.28	0.04
3-535-540	3-535	3-540	384.78	8	120	0.00	0.00	0.00
3-540-545	3-540	3-545	487.54	8	120	0.00	0.00	0.00
3-545-550	3-545	3-550	374.80	8	120	0.00	0.00	0.00
3-550-555	3-550	3-555	740.67	8	120	0.00	0.00	0.00
3-555-560	3-555	3-560	604.50	6	110	0.00	0.00	0.00
3-560-565	3-560	3-565	548.77	6	110	0.00	0.00	0.00
3-570-575	3-570	3-575	647.35	8	120	-9.78	0.06	0.00
3-575-580	3-575	3-580	684.12	8	120	-22.80	0.15	0.01
3-580-585	3-580	3-585	303.44	8	120	-26.04	0.17	0.01
3-585-590	3-585	3-590	865.50	8	120	-33.42	0.21	0.03
3-590-525	3-590	3-525	87.63	8	120	-72.18	0.46	0.01
3-595-600	3-595	3-600	713.80	8	120	279.06	1.78	1.42
3-600-605	3-600	3-605	936.18	8	120	279.06	1.78	1.87
3-610-615	3-610	3-615	625.55	16	130	2315.87	3.70	1.85
3-615-620	3-615	3-620	556.65	16	130	2295.89	3.66	1.62
3-620-625	3-620	3-625	702.48	16	130	2281.79	3.64	2.02
3-625-630	3-625	3-630	505.40	12	120	2228.87	6.32	6.55
3-630-635	3-630	3-635	1009.61	12	120	2209.67	6.27	12.89
3-635-640	3-635	3-640	562.68	12	120	2097.83	5.95	6.52
3-640-645	3-640	3-645	486.45	12	120	2097.83	5.95	5.64
3-645-650	3-645	3-650	531.02	12	120	2093.87	5.94	6.13
3-650-655	3-650	3-655	511.77	12	120	2074.79	5.89	5.81
3-655-660	3-655	3-660	245.14	12	120	1166.09	3.31	0.96
3-655-680	3-655	3-680	456.05	12	120	907.50	2.57	1.12
3-665-670	3-665	3-670	504.59	16	130	0.00	0.00	0.00
3-670-675	3-670	3-675	484.37	16	130	-39.78	0.06	0.00
3-675-625	3-675	3-625	435.14	16	130	-39.78	0.06	0.00
3-680-685	3-680	3-685	466.57	12	120	907.50	2.57	1.15
3-685-690	3-685	3-691	531.25	12	120	907.50	2.57	1.30
3-690-691	3-691	3-690	206.40	12	120	907.50	2.57	0.51

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
3-690-695	3-690	3-695	539.18	12	120	907.50	2.57	1.32
3-695-470	3-695	3-470	416.51	12	120	872.82	2.48	0.95
3-700-705	3-700	3-705	622.95	12	120	-1166.09	3.31	2.43
3-705-710	3-705	3-710	804.82	12	120	-1166.09	3.31	3.14
3-710-660	3-710	3-660	786.65	12	120	-1166.09	3.31	3.07
3-715-720	3-715	3-720	1088.46	16	130	1453.90	2.32	1.36
3-720-725	3-720	3-725	870.92	16	130	1453.90	2.32	1.09
3-725-730	3-725	3-730	1405.92	16	130	1453.90	2.32	1.76
3-730-735	3-730	3-735	1073.96	16	130	918.90	1.47	0.57
3-730-750	3-730	3-750	1346.76	12	120	0.00	0.00	0.00
3-735-740	3-735	3-740	861.22	16	130	918.90	1.47	0.46
3-740-745	3-740	3-745	1095.81	16	130	918.90	1.47	0.58
3-745-4-122	3-745	4-122	404.60	16	130	918.90	1.47	0.22
3-GILBERT-700	GILBERT	3-700	475.64	12	120	-1117.85	3.17	1.72
4-100-210	4-100	4-210	2007.89	8	120	0.00	0.00	0.00
4-100-WWTP3-P1_OUT	4-100	WWTP3-P1_OUT	373.87	12	120	-1524.30	4.32	2.40
4-105-100	4-105	4-100	873.40	14	120	-1524.30	3.18	2.65
4-110-115	4-110	4-105	128.06	14	120	-1524.30	3.18	0.39
4-115-110	4-115	4-110	2037.07	14	120	-1524.30	3.18	6.17
4-120-115	4-120	4-115	2198.91	14	120	-1524.30	3.18	6.66
4-120-122	4-120	4-122	446.29	14	120	1524.30	3.18	1.35
4-122-125	4-122	4-125	407.72	14	120	2425.20	5.05	2.92
4-130-125	4-130	4-125	39.56	12	120	-2425.20	6.88	0.60
4-130-140	4-130	4-140	1131.43	12	120	2425.20	6.88	17.16
4-135-130	4-135	4-130	43.23	12	120	0.00	0.00	0.00
4-140-150	4-140	4-150	1338.84	12	120	1666.44	4.73	10.13
4-145-140	4-145	4-140	78.02	12	120	-43.74	0.12	0.00
4-150-155	4-150	4-155	285.19	12	120	44.28	0.13	0.00
4-150-160	4-150	4-160	328.04	12	120	1593.30	4.52	2.28
4-160-150	4-160	4-165	525.20	12	120	1559.88	4.43	3.52
4-165-167	4-165	4-167	417.99	12	120	1488.60	4.22	2.57
4-166-170	4-166	4-170	907.10	12	120	1184.52	3.36	3.65
4-167-166	4-167	4-166	773.65	12	120	1207.02	3.42	3.22
4-170-175	4-170	4-175	819.60	12	120	1114.56	3.16	2.95

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
4-175-176	4-175	4-176	860.41	12	120	1038.72	2.95	2.71
4-176-185	4-176	4-185	1074.27	12	120	956.58	2.71	2.91
4-180-175	4-180	4-175	410.28	12	120	-75.84	0.22	0.01
4-185-190	4-185	4-190	577.49	12	120	750.00	2.13	1.00
4-190-195	4-190	4-195	59.16	12	120	750.00	2.13	0.10
4-190-200	4-190	4-200	64.23	12	120	0.00	0.00	0.00
4-195-191	4-195	4-191	77.71	12	120	750.00	2.13	0.13
4-205-WWTP3	4-205	WRF3	58.58	12	120	-1524.30	4.32	0.38
4-205-WWTP3-P1_IN	4-205	WWTP3-P1_IN	48.50	12	120	1524.30	4.32	0.31
4-210-215	4-210	4-215	3472.44	6	110	0.00	0.00	0.00
4-220-225	4-220	4-225	231.17	8	120	-119.04	0.76	0.10
4-225-230	4-225	4-230	307.43	8	120	-133.92	0.85	0.16
4-230-235	4-230	4-235	357.65	8	120	-142.08	0.91	0.20
4-235-240	4-235	4-240	218.03	8	120	-160.68	1.03	0.16
4-240-245	4-240	4-245	468.80	8	120	-167.58	1.07	0.36
4-245-167	4-245	4-167	1685.62	8	120	-281.58	1.80	3.42
4-245-250	4-245	4-250	202.48	8	120	99.30	0.63	0.06
4-250-251	4-250	4-251	155.55	8	120	87.60	0.56	0.04
4-251-255	4-251	4-255	207.17	8	120	31.80	0.20	0.01
4-255-260	4-255	4-260	396.51	8	120	-172.80	1.10	0.33
4-260-265	4-260	4-265	212.42	8	120	-190.68	1.22	0.21
4-265-270	4-265	4-270	283.77	8	120	-104.48	0.67	0.09
4-265-305	4-265	4-305	626.10	8	120	-86.21	0.55	0.14
4-270-275	4-270	4-275	326.49	8	120	-166.40	1.06	0.25
4-275-280	4-275	4-280	550.55	8	120	-175.52	1.12	0.46
4-280-285	4-280	4-285	505.80	8	120	-327.18	2.09	1.35
4-285-290	4-285	4-290	694.75	8	120	286.44	1.83	1.45
4-285-300	4-285	4-300	551.09	8	120	-696.42	4.45	5.97
4-300-140	4-300	4-140	1173.20	8	120	-715.02	4.56	13.35
4-305-310	4-305	4-310	145.77	8	120	-104.81	0.67	0.05
4-310-280	4-310	4-280	1613.37	8	120	-114.47	0.73	0.62
BP11	BP1_IN	BP1	1.00	20	150	1312.81	1.34	0.00
BP12	BP1	BP1_OUT	1.00	20	150	1312.81	1.34	0.00
BP1_IN-BP2_IN	BP1_IN	BP2_IN	9.54	20	130	-1312.81	1.34	0.00

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
BP1_OUT-BP2_OUT	BP1_OUT	BP2_OUT	8.65	20	130	-3938.12	4.02	0.02
BP21	BP2_IN	BP2_OUT	1.00	20	150	1312.67	1.34	0.00
BP22	BP2_IN	BP2_OUT	1.00	20	150	1312.67	1.34	0.00
BP2_IN-BP3_IN	BP2_IN	BP3_IN	9.81	20	130	-2625.48	2.68	0.01
BP2_OUT-BP3_OUT	BP2_OUT	BP3_OUT	9.42	20	130	-2625.45	2.68	0.01
BP31	BP3_IN	BP3_OUT	1.00	20	150	1312.67	1.34	0.00
BP32	BP3_IN	BP3_OUT	1.00	20	150	1312.67	1.34	0.00
BP3_IN-BP4_IN	BP3_IN	BP4_IN	9.15	20	130	-3938.15	4.02	0.02
BP3_OUT-BP4_OUT	BP3_OUT	BP4_OUT	8.62	20	130	-1312.78	1.34	0.00
BP41	BP4_IN	BP4_OUT	1.00	12	150	1312.78	3.72	0.00
BP42	BP4_IN	BP4_OUT	1.00	12	150	1312.78	3.72	0.00
BP4_IN-3-090	BP4_IN	3-090	20.42	20	130	-5250.93	5.36	0.09
FULLERTON11	3-510	FULLERTON1	1.00	6	150	467.40	5.30	0.01
FULLERTON12	FULLERTON1	3-515	1.00	6	150	467.40	5.30	0.01
ONTARIO1	3-145	ONTARIO	1.00	6	150	7.74	0.09	0.00
ONTARIO2	ONTARIO	3-150	1.00	6	150	7.74	0.09	0.00
WRF1-P101	WWTP1-P10_IN	WRF1-P10	1.00	12	150	1190.77	3.38	0.00
WRF1-P102	WRF1-P10	WWTP1-P10_OUT	1.00	12	150	1190.77	3.38	0.00
WRF1-P111	WWTP1-P11_IN	WRF1-P11	1.00	12	150	0.00	0.00	0.00
WRF1-P112	WRF1-P11	WWTP1-P11_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P121	WWTP1-P12_IN	WRF1-P12	1.00	12	150	0.00	0.00	0.00
WRF1-P122	WRF1-P12	WWTP1-P12_OUT	1.00	12	150	0.00	0.00	0.00
WRF1-P1_1	WWTP1-P1_IN	WRF1-P1	1.00	12	150	1442.14	4.09	0.00
WRF1-P1_2	WRF1-P1	WWTP1-P1_OUT	1.00	12	150	1442.14	4.09	0.00
WRF1-P21	WWTP1-P2_IN	WRF1-P2	1.00	12	150	1442.17	4.09	0.00
WRF1-P22	WRF1-P2	WWTP1-P2_OUT	1.00	12	150	1442.17	4.09	0.00
WRF1-P31	WWTP1-P3_IN	WRF1-P3	1.00	12	150	1442.25	4.09	0.00
WRF1-P32	WRF1-P3	WWTP1-P3_OUT	1.00	12	150	1442.25	4.09	0.00
WRF1-P41	WWTP1-P4_IN	WRF1-P4	1.00	12	150	1442.44	4.09	0.00
WRF1-P42	WRF1-P4	WWTP1-P4_OUT	1.00	12	150	1442.44	4.09	0.00
WRF1-P51	WWTP1-P5_IN	WRF1-P5	1.00	12	150	1442.41	4.09	0.00
WRF1-P52	WRF1-P5	WWTP1-P5_OUT	1.00	12	150	1442.41	4.09	0.00
WRF1-P61	WWTP1-P6_IN	WRF1-P6	1.00	12	150	0.00	0.00	0.00
WRF1-P62	WRF1-P6	WWTP1-P6_OUT	1.00	12	150	0.00	0.00	0.00

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WRF1-P71	WWTP1-P7_IN	WRF1-P7	1.00	12	150	1190.31	3.38	0.00
WRF1-P72	WRF1-P7	WWTP1-P7_OUT	1.00	12	150	1190.31	3.38	0.00
WRF1-P81	WWTP1-P8_IN	WRF1-P8	1.00	12	150	1190.50	3.38	0.00
WRF1-P82	WRF1-P8	WWTP1-P8_OUT	1.00	12	150	1190.50	3.38	0.00
WRF1-P91	WWTP1-P9_IN	WRF1-P9	1.00	12	150	1190.93	3.38	0.00
WRF1-P92	WRF1-P9	WWTP1-P9_OUT	1.00	12	150	1190.93	3.38	0.00
WRF3-P11	WWTP3-P1_IN	WRF3-P1	1.00	12	150	508.21	1.44	0.00
WRF3-P12	WRF3-P1	WWTP3-P1_OUT	1.00	12	150	508.21	1.44	0.00
WRF3-P21	WWTP3-P2_IN	WRF3-P2	1.00	12	150	508.06	1.44	0.00
WRF3-P22	WRF3-P2	WWTP3-P2_OUT	1.00	12	150	508.06	1.44	0.00
WRF3-P31	WWTP3-P3_IN	WRF3-P3	1.00	12	150	508.03	1.44	0.00
WRF3-P32	WRF3-P3	WWTP3-P3_OUT	1.00	12	150	508.03	1.44	0.00
WWTP1-B4_IN-BP3_IN	WWTP1-P4_IN	WWTP1-P4_IN	13.17	24	130	4326.56	3.07	0.02
WWTP1-BP1_IN-BP5_IN	WWTP1-P4_IN	WWTP1-P5_IN	11.55	24	130	1442.41	1.02	0.00
WWTP1-BP1_OT-BP5_OT	WWTP1-P4_OUT	WWTP1-P5_OUT	11.49	24	130	-1442.41	1.02	0.00
WWTP1-BP2_IN-BP1_IN	WWTP1-P2_IN	WWTP1-P1_IN	13.51	24	130	1442.14	1.02	0.00
WWTP1-BP2_OT-BP1_OT	WWTP1-P2_OUT	WWTP1-P1_OUT	11.62	24	130	-1442.14	1.02	0.00
WWTP1-BP3_IN-BP2_IN	WWTP1-P3_IN	WWTP1-P2_IN	11.99	24	130	2884.31	2.05	0.01
WWTP1-BP3_OT-BP2_OT	WWTP1-P3_OUT	WWTP1-P2_OUT	14.76	24	130	-2884.31	2.05	0.01
WWTP1-BP4_OT-BP3_OT	WWTP1-P4_OUT	WWTP1-P3_OUT	13.11	24	130	-4326.56	3.07	0.02
WWTP1-BP5_IN-BP6_IN	WWTP1-P5_IN	WWTP1-P6_IN	9.23	24	130	0.00	0.00	0.00
WWTP1-BP5_OT-BP6_OT	WWTP1-P5_OUT	WWTP1-P6_OUT	8.13	24	130	0.00	0.00	0.00
WWTP1-P10_IN-P11_IN	WWTP1-P10_IN	WWTP1-P11_IN	11.55	18	130	-0.01	0.00	0.00
WWTP1-P10_OT-P11_OT	WWTP1-P10_OUT	WWTP1-P11_OUT	10.79	18	130	0.01	0.00	0.00
WWTP1-P11_IN-P12_IN	WWTP1-P11_IN	WWTP1-P12_IN	11.38	18	130	0.00	0.00	0.00
WWTP1-P11_OT-P12_OT	WWTP1-P11_OUT	WWTP1-P12_OUT	10.53	18	130	0.00	0.00	0.00
WWTP1-P7_IN-P8_IN	WWTP1-P7_IN	WWTP1-P8_IN	14.82	18	130	-1190.31	1.50	0.01
WWTP1-P7_OUT-P8_OUT	WWTP1-P7_OUT	WWTP1-P8_OUT	15.36	18	130	1190.31	1.50	0.01
WWTP1-P8_IN-P9_IN	WWTP1-P8_IN	WWTP1-P9_IN	9.42	18	130	-2380.81	3.00	0.02
WWTP1-P8_OUT-P9_OUT	WWTP1-P8_OUT	WWTP1-P9_OUT	10.16	18	130	2380.81	3.00	0.02
WWTP1-P9_IN-P10_IN	WWTP1-P9_IN	WWTP1-P10_IN	12.83	18	130	1190.76	1.50	0.01
WWTP1-P9_OUT-P10_OUT	WWTP1-P9_OUT	WWTP1-P10_OUT	13.66	18	130	-1190.76	1.50	0.01
WWTP3-P1_IN-P2_IN	WWTP3-P1_IN	WWTP3-P2_IN	29.34	12	120	1016.09	2.88	0.09
WWTP3-P1_OUT-P2_OUT	WWTP3-P1_OUT	WWTP3-P2_OUT	29.42	12	120	-1016.09	2.88	0.09

Phase 1 Peak Hour Pipe Report

ID	From Node	To Node	Length (ft)	Diameter (in)	Roughness	Flow (gpm)	Velocity (ft/s)	Headloss (ft)
WWTP3-P2_IN-P3_IN	WWTP3-P2_IN	WWTP3-P3_IN	26.79	12	120	508.03	1.44	0.02
WWTP3-P2_OUT-P3_OUT	WWTP3-P2_OUT	WWTP3-P3_OUT	29.34	12	120	-508.03	1.44	0.02

Phase 3 Peak Hour Tank Report

ID	Flow (gpm)	Elevation (ft)	Head (ft)	% Full (%)	Level (ft)
BORDER	1299.76	988.00	1007.50	93.55	19.50
GILBERT	1117.85	1357.50	1379.00	94.29	21.50
WRF1	-11973.91	531.00	558.00	95.65	27.00
WRF3	-1524.30	789.50	803.50	90.00	14.00

Phase 3 Peak Hour Pump Report

ID	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Head Gain (ft)	Status	Setting
BP1	1015.25	-3.47	220.12	1312.81	516.03	Open	1
BP2	1015.25	-3.47	220.13	1312.67	516.05	Open	1
BP3	1015.25	-3.46	220.14	1312.67	516.05	Open	1
BP4	1015.25	-3.45	220.14	1312.78	516.03	Open	1
WRF1-P1	544.00	5.79	247.30	1442.14	557.37	Open	1
WRF1-P10	544.00	5.54	232.91	1190.77	524.74	Open	1
WRF1-P11	544.00	5.54	232.91	0.00	0.00	Closed	0
WRF1-P12	544.00	5.54	232.91	0.00	0.00	Closed	0
WRF1-P2	544.00	5.79	247.29	1442.17	557.36	Open	1
WRF1-P3	544.00	5.79	247.29	1442.25	557.34	Open	1
WRF1-P4	544.00	5.80	247.28	1442.44	557.31	Open	1
WRF1-P5	544.00	5.80	247.28	1442.41	557.31	Open	1
WRF1-P6	544.00	5.80	247.28	0.00	0.00	Closed	0
WRF1-P7	544.00	5.53	232.92	1190.31	524.77	Open	1
WRF1-P8	544.00	5.54	232.91	1190.50	524.76	Open	1
WRF1-P9	544.00	5.54	232.91	1190.93	524.73	Open	1
WRF3-P1	794.00	3.82	259.53	508.21	590.14	Open	1
WRF3-P2	794.00	3.78	259.57	508.06	590.32	Open	1
WRF3-P3	794.00	3.77	259.58	508.03	590.37	Open	1

Phase 3 Peak Hour Valve Report

ID	Diameter (in)	Elevation (ft)	Upstream Pressure (psi)	Downstream Pressure (psi)	Flow (gpm)	Velocity (ft/s)	Headloss (ft)	Status	Setting
FULLERTON1	6	1,046.02	150.11	60	467.4	5.3	207.96	Active	60
ONTARIO	6	875	271.83	70	7.74	0.09	465.79	Active	70

**RECYCLED WATER ANALYSIS
ARANTINE HILLS
BLUESTONE COMMUNITIES
CORONA, CA**

**EXHIBIT 10: TABLE 5-PARK AVERAGE DAY DEMANDS FROM THE
RECYCLED WATER SYSTEM MODEL JULY, 2006**

The City analyzed past consumption records and estimated water usage based on acreage. A 'best demand' estimate was then created for each potential recycled water customer. These 'best demand' estimates were implemented in the hydraulic model. The customer and demand details are shown in Table 5 (Parks), Table 6 (Schools), and Table 7 (Landscape Maintenance Districts).

Table 5
Park Average Day Demands

Park	Address	Area (ac)	"Best Demand" (AFY)	"Best Demand" (gpm)	Junction ID
Brentwood Park	1646 Dawnridge	13.1	36.03	22.34	1-200
Border Park	2400 Border Ave	2.3	6.88	4.27	1-230
Serfas Club Park	2575 Green River Rd	6.7	20.66	12.81	1-260
Ridgeline Park	2850 Ridgeline	5.0	19.34	11.99	1-360
Village Park	860 Village Loop Dr	4.6	20.11	12.47	2-119
Buena Vista Neighborhood Park (Future)		10.1	30.20	18.72	2-205
Butterfield Park (Currently using RW)	1886 Butterfield Stage Dr	43.5	430.00	266.62	2-255
Parkview Park	2094 Parkview Dr	5.7	20.13	12.48	2-385
Rock Vista Park	2481 Steven Dr	8.3	32.41	20.10	2-430
Promenade Community Park	615 Richey St	18.9	56.51	35.04	2-455 / 2-460
Griffin Park	2804 Griffin WAY	13.0	46.69	28.95	2-510
Mangular Park	2200 Mangular Ave	3.3	13.74	8.52	3-120
Ontario Park	Ontario & Via Pacifica	5.2	16.57	10.27	3-135
Lincoln Park	Lincoln & Citron	5.5	15.00	9.30	3-165
Mountain Gate Park	3100 S Main St	31.9	95.76	59.38	3-360 / 3-390
Jameson Park (Future)	Foothill and Wisteria	13.1	39.16	24.28	3-455
California/Chase Neighborhood Park (Future)		5.2	15.62	9.69	3-490
Santana Park	598 Santana Wy	48.9	146.59	90.89	3-570
Citrus Park	2520 Rimpau Ave	23.8	71.40	44.27	3-600
		267.9	1132.80	702.38	

$$\text{AVERAGE AFY UNIT DEM} = \frac{1132.8 \text{ AFY}}{267.9 \text{ ACR}} = 4.23 \text{ AFY/AC}$$

*USE 5 AFY/AC FOR UNIT DEMAND
IN ARANTINE STUDY per city REQUEST